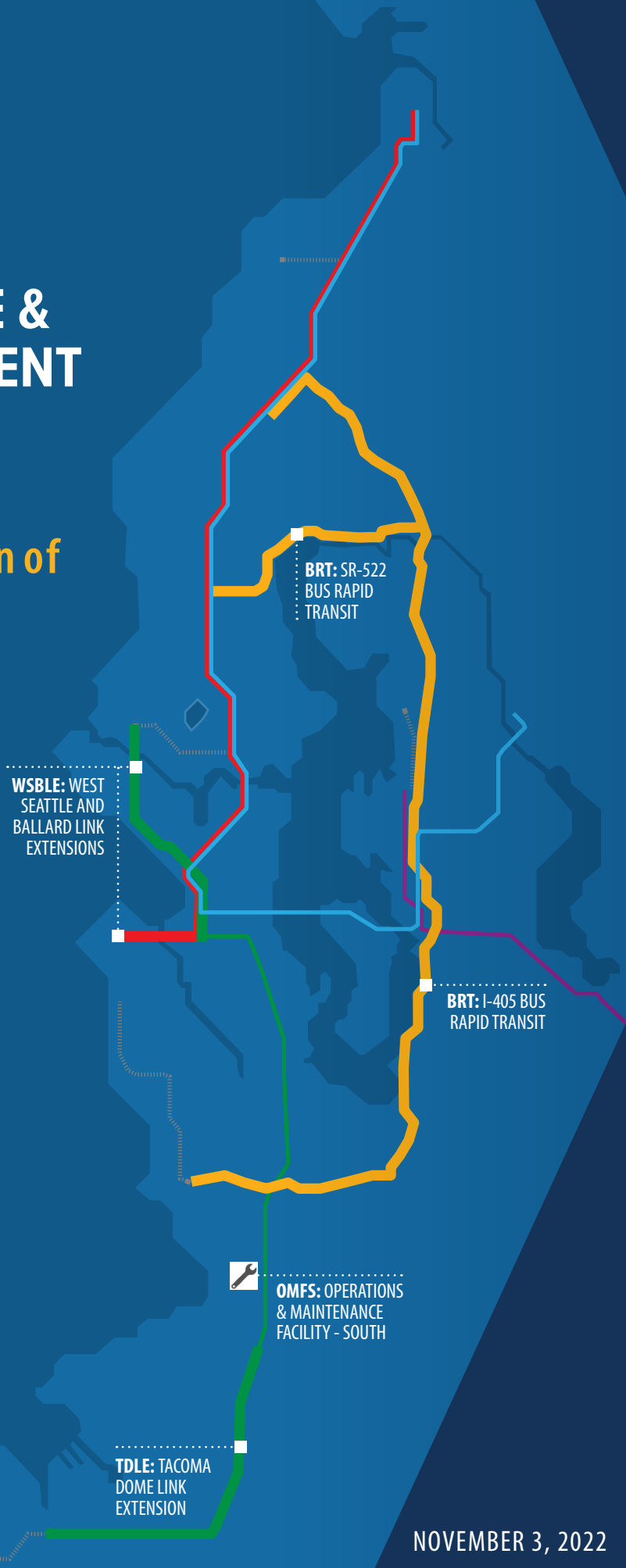




SOUNDTRANSIT

ST3 COST ESTIMATE & GENERAL ASSESSMENT SERVICES

TASK 6: Assessment of Agency's Implementation of Recommendations



WSBLE: WEST SEATTLE AND BALLARD LINK EXTENSIONS

BRT: SR-522 BUS RAPID TRANSIT

BRT: I-405 BUS RAPID TRANSIT

OMFS: OPERATIONS & MAINTENANCE FACILITY - SOUTH

TDLE: TACOMA DOME LINK EXTENSION

PREPARED BY
Triunity, Inc.

TRIUNITY

NOVEMBER 3, 2022

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Report Draft Issue Date: October 6, 2022

Report Final Issue Date: November 3, 2022

1.0 – Introduction

In 2021, with direction from the Sound Transit Board of Directors (Board), Triunity completed a programmatic assessment of project cost estimates, cost estimating, and management methodologies employed for the ST3 Program. The results of these assessments were summarized in the following three task reports that were delivered to the Board:

- **Task 1:** Review, analyze, and prepare an independent assessment of the cost estimate trends for specific ST3 capital projects (April 2021). [Task 1 Report.](#)
- **Task 2:** Programmatic review and analysis of the agency's cost estimating methodology used to develop the ST3 construction and real estate estimates (June 2021). [Task 2 Report.](#)
- **Task 3:** Review of and recommendations for the management methodology (September 2021). [Task 3 Report.](#)

As part of each task, Triunity provided specific recommendations for a total of fifty-five (55) recommendations across the 3 reports. In November of 2021, Sound Transit Deputy CEO provided the Board with a memorandum summarizing the specific actions the Agency is taking to respond to these recommendations and how and when they are intended to be implemented,

From August to October of 2022, Triunity performed an independent assessment of the Agency's implementation of these recommendations as part of Task 6 of this contract. This report summarizes our approach and this assessment.

2.0 – Approach

The purpose of this Task 6 assessment is to review the agency's progress on implementation of fifty-five (55) recommendations that were developed and assess impact to see if completed work meets the initial intent of the recommendation. This assessment was completed by meeting with key Sound Transit staff involved in the implementation of these recommendations and reviewing relevant Sound Transit policies and procedures, reporting, or other associated documentation. Triunity met with representatives from Design, Engineering & Construction Management (DECM), Portfolio Services Office (PSO) and leadership from the West Seattle and Ballard Link Extensions (WSBLE) project team.

Each recommendation and implementation were reviewed and determined to be in one of the following three categories and are summarized in **Appendix A**:

1. Completed Work – meets the intent of the recommendation (green rows in Appendix A)
2. In Progress (blue rows in Appendix A)
3. Planned – not yet started (yellow rows in Appendix A)

In some cases, ST staff has determined that a recommendation isn't applicable as initially written. A further explanation for this will be provided in Section 4.0.

3.0 – Assessment of Agency's Implementation of Recommendations

ST leadership and staff have proactively and effectively worked to implement specific action in response to our earlier recommendations. A summary of the current status of the agency's implementation of these recommendations is as follows:

1. 29 items (53%) are complete.
2. 19 items (34%) are in progress.
3. 7 items (13%) are planned but not started.

Based on current projections from Sound Transit staff, it is expected that 70% of all items will be completed by the end of this year and 100% by the end of 2023.

4.0 – Observations and Discussions

Program Management

In some instances, Sound Transit staff has considered these recommendations and determined that the recommended action isn't always appropriate or applicable to the Agency or ST3 Program. For example, in the Task 3 report, we recommended that the Agency employ a Program Director or Program Management Team to serve as a single source of accountability to the Board and executive leadership for ST3. In 2021, the Agency was undergoing a reorganization as part of the Design for Growth initiative and was standing up the new Portfolio Services Office (PSO). Based on these organizational changes, executive leadership has determined that a Program Director is not warranted at this time, as this function is being served collectively by the Deputy CEO and Chief Systems Officer along with the Executive Directors of PSO, PEPD, DECM and Operations. We believe this approach is appropriate because it formalizes the single point (or team) of accountability.

Cost Estimate Ranges

In Task 2, we recommended that Sound Transit use estimate ranges for projects in early planning as a communication tool, due to the level of uncertainty associated with early project development. The WSBLE team has implemented this and estimate ranges were recently published with the Draft Environmental Impact Statement (DEIS) dated January 2022 (see Figure 4.1).

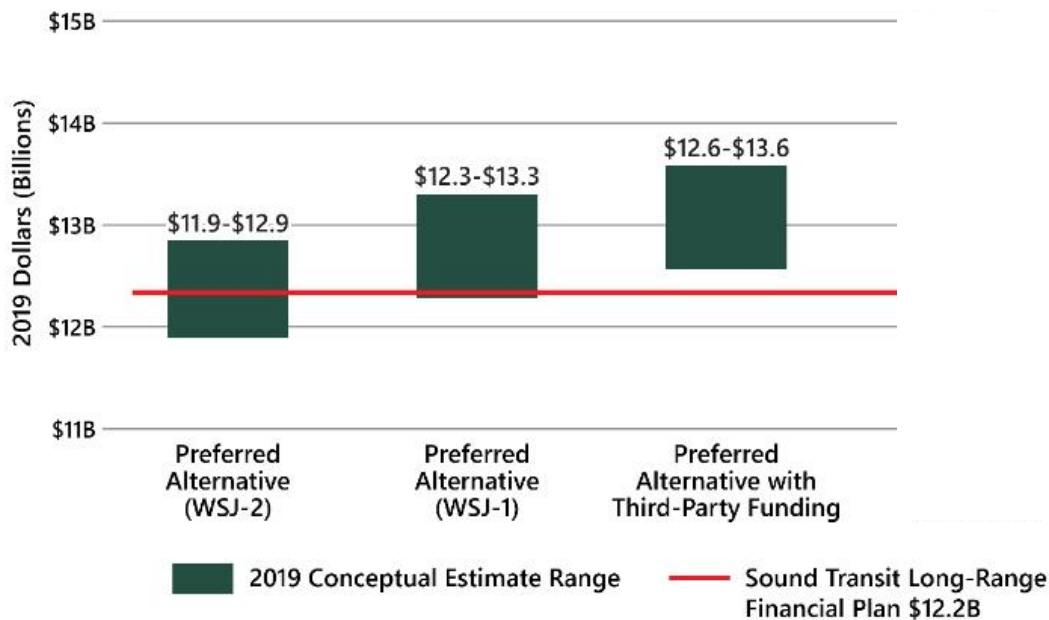


Figure 4.1 – WSBLE Cost Estimate Ranges from the DEIS

Additionally, PCPP-02 Cost Estimating was updated last December and includes requirements that estimates prepared for pre-baselined projects, must be reported as a range in addition to the deterministic value. Furthermore, these ranges must be developed based on a Quantitative Risk Analysis model.

Right of Way

During our earlier assessments, we identified opportunities for improvement related to estimating right of way costs and engagement of real property staff in early planning efforts. Based on our recent discussions with Sound Transit staff, it is clear that good progress is being made in this area and it is expected this will result in more accurate cost estimates related to right of way and timely acquisition of necessary property. Where possible, plans for potential early acquisition of critical parcels are underway. A key position within the real property group was filled in the past year and new tools have been developed to improve tracking and projecting real estate trends by sector and county (see Figure 4.2).

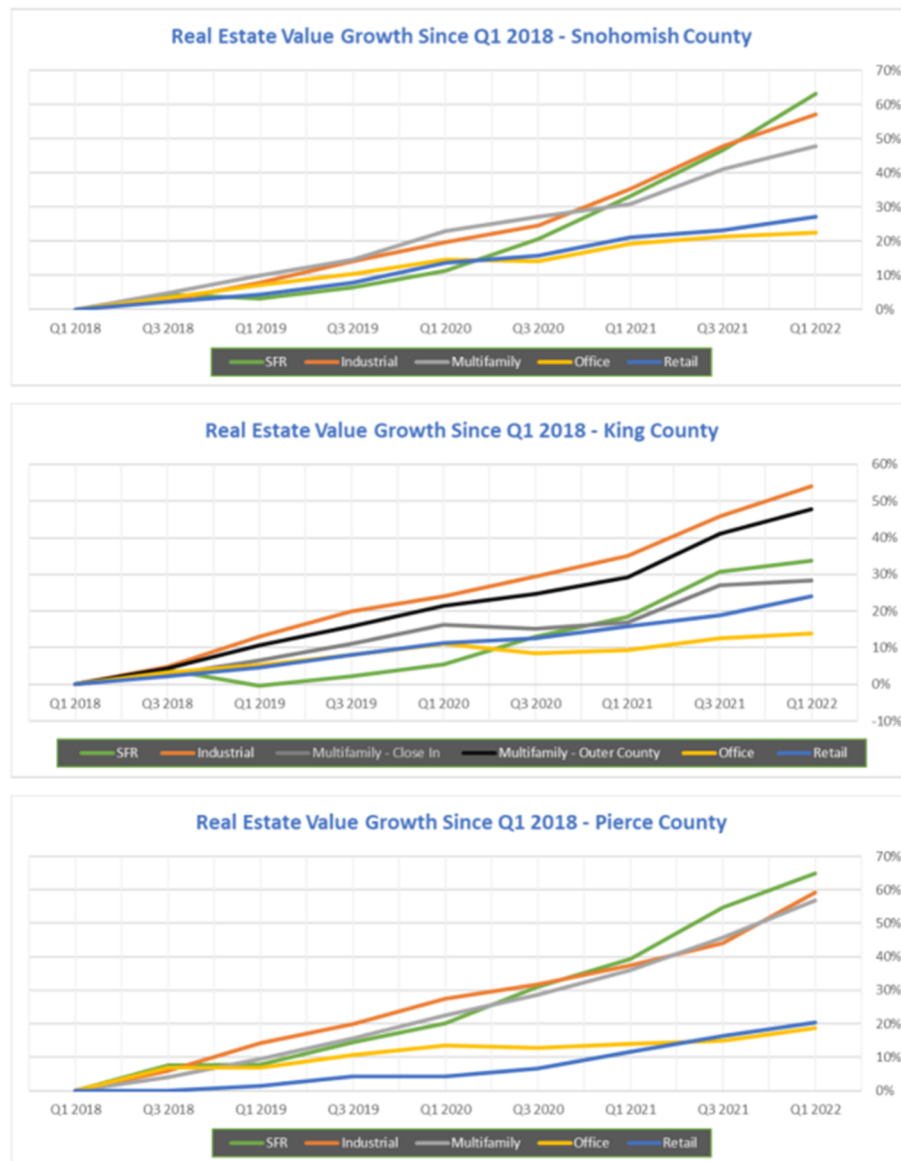


Figure 4.2 – Real Property Cost Estimate – Sector Adjustment Index by County

PSO and Reporting

The Portfolio Services Office (PSO) now serves as the single source of truth on scope, schedule and budget for the entire ST3 Program and has made substantial progress in developing the inaugural Annual Program Review (see Figure 4.3) which was first published in April 2022. This Annual Program Review is intended to provide the Board, Agency Leadership and stakeholders with a holistic understanding of the status of the ST3 Program considering affordability, project readiness, and other key metrics and enables project teams and leadership to make timely decisions and adjustments as needed.



Figure 4.3 – Annual Program Review Report

In September of 2022, the Agency launched a new Project Performance Tracker (see Figure 4.4) which is a dashboard tool that can be used to track all ST3 projects opening dates, completion status and risks (budget, schedule, and contingency). A request to add trending arrows is already being incorporated in the Tracker to indicate the direction of any change from the previous month. This Tracker that is accessible on any sized device (form fitted for small screens when necessary), is available at the following link: <https://www.soundtransit.org/system-expansion/building-system/project-performance-tracker>.

Project Performance Tracker					Data Quality
Latest report date	Report date	Project	Corridor	Legend	
August 2022	Aug 2022	All	All	<p>Budget risk The difference between project's current cost estimate and 2022 Finance Plan.</p> <ul style="list-style-type: none"> Green circle: On or under budget Yellow triangle: 0-10% over budget Red diamond: More than 10% over budget <p>Schedule risk (to next milestone) An indication of if the project is on track as it moves through the planning phase toward construction.</p> <ul style="list-style-type: none"> Green circle: On or ahead of schedule Yellow triangle: Next milestone delayed by 1-3 months Red diamond: Next milestone delayed by 4+ months <p>Schedule risk (to delivery date) An indication of if the project is on track to be in service per the Board-identified Target Schedule.</p> <ul style="list-style-type: none"> Green circle: On or ahead of schedule Yellow triangle: Opening 1-6 months behind schedule Red diamond: Opening 6+ months behind schedule <p>(*) New financial resources needed to achieve Target Schedules for Everett Link, Issaquah LRP, Tacoma Community College Extension, and Smith Cove-Ballard.</p>	
Projects in planning					
As of	Project	Budget risk	Schedule risk (to next milestone)	Schedule risk (to delivery date)	
Aug 2022	Auburn Station Parking & Access Improvement	▲	▲	▲	
Aug 2022	Bus Base North	●	▲	▲	
Aug 2022	Everett Link Extension	●	▲	▲	
Aug 2022	I-405 Stride BRT	●	▲	▲	
Aug 2022	Kent Station Parking & Access Improvement	●	▲	▲	
Aug 2022	Lakewood Station Access Improvement	●	▲	▲	
Aug 2022	Link Operations & Maintenance Facility: North	●	▲	▲	
Aug 2022	Link Operations & Maintenance Facility: South	●	▲	▲	
Aug 2022	North Corridor Maintenance of Way	●	▲	▲	
Aug 2022	Series 3 Light Rail Vehicles	●	▲	▲	
Aug 2022	Souder South Capacity Expansion Program	●	▲	▲	
Aug 2022	South Tacoma Access Improvement	●	▲	▲	
Aug 2022	SR 522/NE 145th Stride BRT	●	▲	▲	

Figure 4.4 – Project Performance Tracker

The PSO is leading a comprehensive and programmatic effort to update Policies & Procedures, and Engineering Standards & Requirements. These are being updated to reflect the current organizational structure and incorporate refinements in cost estimating methodology, risk management and other earlier lessons learned. Sound Transit Staff have developed a Standards & Requirements Dashboard where progress, tasks and schedules are being tracked for completing these updates. A schedule for updating all the Program Control's Policies and Procedures (PCPP) was provided by the PSO with all updates scheduled for completion by Q3 of 2023.

Conclusion

ST3 represents one of the most ambitious transit programs in the country and the Agency remains committed to implementing strategic priorities and making continuous improvements. In some instances, Sound Transit staff were already working to address opportunities for improvement that were aligned with the Triunity recommendations such as the launching of PSO and the early involvement of the Real Property group on ST3 projects. Through the Realignment process that culminated in Board Resolution No. R2021-05 and with direction from the Board and executive leadership, Sound Transit staff has prioritized and productively worked to implement improvements addressing the Triunity recommendations. The Triunity team expects that the tools and processes being developed and implemented by staff will prove beneficial to the Agency for years to come, reducing the risk of large-scale changes to cost estimates, project scopes & schedules and the overall program.

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APPENDIX A

Table of Recommendations, Status and Findings

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APPENDIX A
Table of Recommendations, Status and Findings

TASK # - REC #	RECOMMENDATION	STAFF ACTION(S)	DEPARTMENT ACCOUNTABLE / RESPONSIBLE FOR IMPLEMENTATION	TRIUNITY ASSESSMENT FINDINGS (OCTOBER 2022)
1-1	"Recommend further investigation into bridge type assumptions for aerial guideway as a possible savings to the [WSBLE] project" (p. 3).	Include further investigation as part of Preliminary Engineering scope for West Seattle & Ballard Link Extension (WSBLE) and Tacoma Dome Link Extension (TDLE) projects.	PEPD	In Progress
1-2	"Recommend further investigation into...sitetwork/ground conditions and tunneling as areas of potential cost increases" for the WSBLE project (p. 3).	Include further investigation as part of Preliminary Engineering scope for WSBLE project.	PEPD	Planned - Not Started. ST Staff confirms this will be addressed in PE Scope for WSBLE.
1-3	"The Assessment Team recommends that the ST design team address the findings of this report and revise the [WSBLE] cost estimate, as necessary. While ranges will be explored in more detail during the methodology report, the design team should consider providing future revised estimates as a range of values for each project" (p. 3).	Cost estimate ranges will be provided for all project cost estimates moving forward for all pre-baselined projects. Duplicate with recommendation #2-11.	PSO	Complete - work meets the initial intent of the recommendation. Estimate ranges provided in DEIS for WSBLE. Requirements for reporting estimate ranges is included in revised Cost Estimating PCPP.
1-4	"It is possible that the existing central control center will not be able to accommodate the [multiple] expansions. If that is the case, TDLE's estimate should reflect a portion of this expansion cost" (p. 4).	Staff have assessed the need for a new, larger Link control center (LCC) to accommodate the ST3 Link system build-out. Budget for a new LCC and other miscellaneous support facilities was added (in 2025-2035) to the ST financial plan during the Board's realignment action. This will be a new project.	OPERATION, PSO, PEPD	Complete - work meets the initial intent of the recommendation.
1-5	"Recommend further investigation into ground conditions along the alignment as this appears to be the [OMF South] project's largest risk, particularly at Midway Landfill" (p. 4).	Include further investigation of ground conditions in the Preliminary Engineering phase of work for OMF South. Duplicate with recommendation #1-14.	PEPD	Complete - no longer applicable.
1-6	"Recommend further investigation into...another risk...(which is) the [OMF South] building cost for Heavy Maintenance Facility" (p. 4).	Sufficient cost for heavy maintenance facilities is reflected in the current estimate. A bottoms-up cost estimate is scoped to be complete at the end of Preliminary Engineering to verify or adjust the current estimate.	PEPD	In Progress
1-7	Recommend "a bottoms-up estimate be performed [for Bus Base North] utilizing the latest design and site investigation information" (p. 4).	A bottoms-up estimate is currently scheduled for completion following 30% design.	PEPD	Planned - Not Started.
1-8	"Recommend a more transparent way to assess indirect costs... (i.e. temporary facilities and other indirect costs during construction)" (p. 11).	An existing detailed breakdown is available to show how each Unit Cost Library assembly item developed from Labor, Materials, Equipment, Subcontractor, and Indirect markups. ST will add similar detail to the remaining lump sum items.	PSO	In Progress

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1-9	<p>The Assessment Team performed an analysis of cost savings for Preferred Alternative (PA) 201 (Elevated), which is elevated in West Seattle and Ballard, and Preferred Alternative 202 (Tunnel), which is tunneling in West Seattle and Ballard, and the results are as follows:</p> <ul style="list-style-type: none"> • "WSDOT I-Girders in lieu of standard Precast Segmental Box Girder: <ul style="list-style-type: none"> • For PA 201 (elevated): Savings of \$200-\$210M • For PA 202 (tunnel): Savings of \$105-\$115M • "WSDOT Precast Tub Girders in lieu of standard Precast Segmental Box Girder: <ul style="list-style-type: none"> • For PA 201 (elevated): Savings of \$170-\$175M • For PA 202 (tunnel): Savings of \$80-\$85M" (p. 11-12) 	<p>Include further investigation as part of Preliminary Engineering scope for WSBLE project. •</p>	PEPD	Planned - Not Started. ST Staff confirms this will be addressed in PE Scope for WSBLE.
1-10	<p>The Assessment Team analyzed discrepancies related to long-span bridges. "Based on the analysis from the Assessment Team, the missing items should be included in the current estimate and the results are as follows:</p> <ul style="list-style-type: none"> • "For PA 201 (elevated): Addition of \$70-\$75M is • "For PA 202 (tunnel): Addition of \$30-\$35M" (p. 12) 	<p>Include further investigation as part of Preliminary Engineering scope for WSBLE project.</p>	PEPD	Planned - Not Started. ST Staff confirms this will be addressed in PE Scope for WSBLE.
1-11	<p>The Assessment Team performed the [WSBLE] tunneling analysis and...the results are as follows:</p> <ul style="list-style-type: none"> • "For PA 201 (elevated): Addition of \$170-\$175M • "For PA 202 (tunnel): Addition \$180-\$185M" (p. 12) 	<p>Include further investigation as part of Preliminary Engineering scope for WSBLE project.</p>	PEPD	Planned - Not Started. ST Staff confirms this will be addressed in PE Scope for WSBLE.
1-12	<p>The Assessment Team recommends that [additional ground improvement items] be added, and the results are as follows:</p> <ul style="list-style-type: none"> • "For PA 201 (elevated): Addition of \$80-\$85M • "For PA 202 (tunnel): Addition of \$75-\$80M" (p. 12). 	<p>Include further investigation as part of Preliminary Engineering scope for WSBLE project.</p>	PEPD	Planned - Not Started. ST Staff confirms this will be addressed in PE Scope for WSBLE.
1-13	<p>The landfill is "possibly a higher risk area [and ST] may want to include more than the allowed Medium Risk in the historically industrial areas [for major removal of landfill material for the OMF South project]. Design analysis or pot-holing studies for any potential risks at the Interbay Landfill site and vicinity would be recommend [sic] in identifying contamination" (p. 15).</p>	<p>Potholing will be included in the scope for the Preliminary Engineering phase of work, based on the Preferred Alternative identified by the Board.</p>	PEPD	Complete - no longer applicable. Landfill site no longer being considered as part of PE. Not currently advancing design at landfill site. Landfill site was published as alternative in DEIS and will not advance.
1-14	<p>Recommend further investigation into ground conditions along the alignment as this appears to be [the] largest risk" for WSBLE and OMF South (p. 22 and 28).</p>	<p>Further investigation of ground conditions will occur in the Preliminary Engineering phase of work. Duplicate with Recommendations #1-2 and #1-5.</p>	PEPD	Planned - Not Started. ST Staff confirms this will be addressed in PE Scope for WSBLE.
1-15	<p>"Assessment Team recommends a review of the communications backbone unit cost scope of work and the interface to the guideway unit costs as it relates to the [WSBLE] ductbank" (p. 20).</p>	<p>Confirm the appropriate amount of unit costs for both communication backbone and guideway.</p>	PSO	In Progress
1-16	<p>"Recommend analyzing the confidence of adhering to the [ground] settlement requirements for either the hybrid or full excavation operations" for OMF South at the landfill site (p. 29).</p>	<p>Current standard for settlement is conservative. Will need quality control and construction management to ensure that each layer of fill material meets or exceeds compaction requirements.</p>	PEPD	Complete - no longer applicable. Landfill site no longer being considered as part of PE. Not currently advancing design at landfill site. Landfill site was published as alternative in DEIS and will not advance.

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1-17	Explore whether "...WSDOT has wetland/mitigation bank in the neighborhood [of OMF South] that can be used" (p. 32).		PEPD	In Progress
1-18	"The current approach to fiber connectivity is to use adjacent WSDOT infrastructure. A deeper look into the site interfaces between ST and WSDOT facilities is encouraged to define the fiber optic scope of work more and to limit project risk" (p. 40).	Currently, ST is refining systems and communications requirements to inform fiber needs.	PEPD	Complete - work meets the initial intent of the recommendation. This has been reviewed by the Stride design team and WSDOT fiber concept no longer feasible.
1-19	"Recommend \$500K - \$1M be carried for wetland mitigation" for Bus Base North (p. 43).	The project's revised cost estimate of \$290M includes this recommendation.	PEPD	Complete - work meets the initial intent of the recommendation.
2-1	Integrate input from PSO's programmatic level design team on decisions involving substantial cost and document and discuss these decisions with future projects.	ST understands this recommendation to mean that decisions made during design that could impact the cost estimate should be communicated to all impacted parties sooner than later. Staff will memorialize this expectation for project leaders in documents including but not limited to an agency-wide and/or project-specific project management manual, engineering procedure(s), and training program that will clarify roles and responsibilities.	PSO, PEPD, DECM	In Progress
2-2	Be transparent with what is included in the unit price in form or assemblies.	Staff will add additional clarity and transparency in the unit cost library, specifically to the Environmental Mitigation Lump Sum assemblies.	PSO	In Progress
2-3	Estimate actual severance damages for a given parcel using qualified appraisers.	Staff will complete appraisals to supplement the ROW cost estimating process.	DECM	Complete - work meets the initial intent of the recommendation.
2-4	Use standard valuation techniques with individual properties in lieu of uniform adjustment factors.	Staff will incorporate the appraisal cost estimating method, no longer using the "adjustment factor" method. This will include an update to the estimating process and procedure.	DECM	Complete - work meets the initial intent of the recommendation.
2-5	Real Property has ultimate responsibility for ROW estimating including at early phases.	The timing of Real Property involvement in cost estimating has historically varied by project. Moving forward, Real Property staff will provide the final review of the ROW cost estimate. ST will document this expectation in internal procedures.	DECM	In Progress
2-6	Develop standard reporting format for Annual Program Evaluation for communication with leadership and program stakeholders.	Develop and execute Annual Program Review to inform Board decision-making. Similar to Board direction in R2021-05.	PSO	Complete - work meets the initial intent of the recommendation.

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2-7	Include in Project Management Plans requirements for workshops with Operations to improve early cost estimates.	Incorporate this guideline in internal documents including but not limited to an agency-wide and/or project-specific project management manual, engineering procedure(s), and training program that will include roles and responsibilities.	PSO; PEPD	In Progress
2-8	Incorporate constructability impacts into ROW analysis.	Temporary Construction Easements (TCEs) estimates were previously lumped into contingency. Moving forward, staff will separate that item in the cost estimates.	DECM	Complete - work meets the initial intent of the recommendation.
2-9	Limit ROW contingency to actual unknowns.	For all future estimates, the ROW Contingency will only reflect the 30% contingency, the other categories will be split into component parts (e.g. Administration, Temporary Construction Easements, Relocations).	PSO	Complete - work meets the initial intent of the recommendation.
2-10	From preliminary stages, develop and maintain a fully developed risk register with associated cost implications.	zs	PSO	Complete - work meets the initial intent of the recommendation.
2-11	Use estimate ranges as communication tool in early planning.	Estimates will be incorporated into project cost estimates that are developed prior to baseline. This is underway for WSBLE and TDLE cost estimates. Duplicate with recommendation #1-3.	PSO	Complete - work meets the initial intent of the recommendation. Estimate ranges provided in DEIS for WSBLE. Requirements for reporting estimate ranges is included in revised Cost Estimating PCPP.
2-12	Use 1%*-1.5% annually for contingency for changes to code, federal guideline, and federal administration changes for such changes over and beyond escalation.	Staff will review and separate the contingencies from other elements of the cost estimates.	PSO	In Progress
2-13	Use Early Acquisition for Real Property.	Real Property encourages use of early acquisitions when possible as they help level the appraisal workload while also providing more time to appraise complicated acquisitions and acquire properties. ST will continue to seek early acquisitions whenever and wherever possible and when approved by the Federal Transit Administration (FTA).	DECM	Complete - work meets the initial intent of the recommendation. Early acquisition plan under development by WSBLE and ST Real Estate Team and will be presented to Board and FTA for approval.
2-14	Put special efforts into the analysis of the high value acquisitions in order to thoroughly understand the relevant issues—both the causes of the issues and their financial impacts.	ST recently employed this on WSBLE and OMF South and will consider this on other projects when appropriate.	DECM	Complete - work meets the initial intent of the recommendation (ref. 9/22 meeting with ST Real Property).
2-15	Perform Value Engineering exercises (i.e., workshops) to compare locations and types of project improvements and construction methods related to ROW impacts and costs.	Staff recently employed this to a limited extent on WSBLE. Staff will also work to involve Real Property staff in very early planning for each project to identify land-related fatal flaws in design, which will be documented in project team expectations such as the project management playbook, unified internal governance framework, etc.	PSO, DECM	Complete - work meets the initial intent of the recommendation.
3-1	Update, streamline, or eliminate all Program Control Policies and Procedures (PCPP) for optimization and to reflect the new organizational structure.	Project Controls staff is working in collaboration with respective departments to update all PCPPs with internal stakeholder input.	PSO	In Progress

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3-2	Update or streamline the Design Criteria Manual and Standard Specifications where feasible to incorporate the latest operational requirements.	Targeted completion to align with ST3 program in order to impact WSBL, TDLE, BRT, EVLE, etc. The changes will not be completed in time to be used in NE 130 th given that project's near-term timeline with LLE construction. Lessons learned are implemented across the program as identified and prioritized for implementation on the system expansion program. This effort includes developing station standardization.	PSO	In Progress
3-3	Seek input from outside sister agencies, consultants, and contractors on new policies and procedures.	Staff will continue to engage with industry peers and experts, and expand engagement, as we develop the project management playbook, unify our internal governance framework, and leverage industry best practices in our cost savings efforts. Additionally, staff will be interested to see the ad-hoc technical advisory group's recommendations to accelerate the system expansion program, and stand ready to implement those recommendations.	PSO	In Progress
3-4	Develop dashboard reporting for all ST3 system expansion projects to communicate scope, schedule, budget, and risk with ST leadership and Board. Examples from LA Metro can be found at: https://mtadash.mtmetrofacilities.com/	Develop a program performance dashboard that transparently shows program performance against defined metrics. Phase 1: Initial version for distribution.	PSO	Complete - work meets the initial intent of the recommendation.
3-5	For each ST3 system expansion project, perform independent review of latest cost estimates, risk identification, and probabilistic modeling (described in Appendix C). Consistently apply to projects in early planning (less than 15% design).	FCPP-02 refers project teams to use subject matter experts and independent reviews of cost estimates; staff will work with project teams to follow through on this expectation for every project. ST is currently evaluating proposals for issuing contract(s) for these independent reviews for the ST3 program. Staff will work internally to ensure adequate funding for this work.	PSO	In Progress
3-6	All program reporting to ST leadership and the Board on scope, schedule, budget, and risk should be reported through PSO Project Controls metrics and reporting materials (dashboard reporting) with leading indicators for project performance, to be reviewed regularly with agency executive leadership and the Board.	Include this recommendation as part of the effort to achieve recommendation #3-4.	PSO	In Progress
3-7	Utilize a single Project Director for the lifecycle of a project with a project director triangle supporting planning, design/construction, and operations. This individual should have planning, design & construction and operational experience to include practical, technical, managerial, and political expertise needed to guide these long-term projects.	Underway for BRT program; use lessons learned from this pilot for other projects.	PEPD, PSO, DECM, Ops	Complete - work meets the initial intent of the recommendation.
3-8	Employ Program Director, Program Management Team of Function responsible for the entire ST3 Program to serve as single source of accountability to the Board and executive leadership for the program.	Staff are implementing this recommendation differently than Triunity articulated. By restructuring the organization in 2019-2020 via Design for Growth, ST believes we are meeting the intent of this recommendation, which will need time to fully actualize the outcomes. We are therefore hesitant to make another major organizational change so soon after the recent changes, for the time being.	PSO, PEPD, DECM, and Operations with the Chief System Officer (DCEO)	Complete - work meets the initial intent of the recommendation.
3-9	Coordinate Board acceptance of a Preferred Alternative with any third-party funding agreements.	As part of implementing the System Expansion Implementation Plan, project teams work with stakeholders and the Board to identify/confirm the preferred alternative as soon as possible in the process. Staff will continue this practice for all projects.	PEPD	Complete - work meets the initial intent of the recommendation.
3-10	Implement any accepted modifications from VE studies (structure types, station locations, construction sequencing, staging, etc.). Evaluate for consistency with environmental approvals.	Underway, staff will continue to coordinate between PSO, PEPD, DECM, and Operations to implement these modifications.	PSO	In Progress

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3-11	Complete evaluation of project risk-based validated cost estimates for each remaining ST3 project alternative currently under consideration to aid in selection of preferred alternatives.	Staff revised PCPP-13 to clarify that each phase in early planning must include a Quantitative Risk Assessment to help inform the cost estimate.	PSO	Complete - work meets the initial intent of the recommendation
3-12	Memorialize project permitting plan with the local jurisdiction for the ST3 projects as early as possible.	Continue ongoing joint efforts with authorities having jurisdiction (AHJ) to develop Preliminary Permitting Plan for WSBL. Staff is working on developing early permitting plans for other ST3 projects.	PEPD, DECM	Complete - work meets the initial intent of the recommendation.
3-13	Allocate funding for a permitting manager (and assign) for the jurisdictions associated with the various ST3 projects.	Continue to fund AHJ permitting staff as part of staffing agreements for WSBL project. ST provides funding for designated representatives to support jurisdictional staff and help advance project elements.	PEPD	Complete - work meets the initial intent of the recommendation.
3-14	Complete an early acquisition plan for each ST3 project and deploy all available resources in pursuit of early acquisitions including seeking any necessary approvals from the Board and FTA.	Staff will submit potential early acquisitions for Board and FTA consideration in Phase 3 for each project. Internal coordination is ongoing between PEPD and Real Property for other projects beyond WSBL. For future projects, staff will involve Real Property staff in very early planning to help identify potential early acquisitions.	DECM	In Progress
3-15	Ensure adequate Real Property staff resources are in place to support timely acquisition of real property (including early acquisitions) for the ST3 Program. This includes additional staff and support consultants with ROW expertise.	Real Property will continue to utilize existing on-call consultant contracts to support this recommendation.	DECM	Complete - work meets the initial intent of the recommendation.
3-16	ST executive leadership should solidify and communicate Agency wide PSO's role and mission.	PSO refined its purpose, vision, mission, and long-term goals in 2021 and is sharing that internally. Staff will use agency-wide and targeted communications from executive leaders to reinforce PSO's purpose and authority. HR led an effort to assess impacted staff in 2021; PSO and HR leadership will collaborate in 2022 to design a survey to assess how PSO is being incorporated into the broader agency.	PSO	Complete - work meets the initial intent of the recommendation. Refer to PSO memo dated 2/1/22.
3-17	Consider implementation of the team alignment process for ST3 Program (focused on goals and clarity of roles, responsibilities, communications and working relationships) as described in Appendix C.	Beginning with the Design for Growth initiative, staff have been clarifying and continue to clarify roles and responsibilities through a number of internal structure documents. We will continue to monitor progress towards this improved alignment through 2022.	DCEO in close coordination with PSO, PEPD, DECM, Operations, and Passenger Experience	Complete - work meets the initial intent of the recommendation.
3-18	Update and develop risk mitigation matrix for each ST3 project including assignment of ST staff for each risk mitigation item.	The previous risk mitigation procedure required assigning a Risk Owner and Risk Manager to each risk; the new PCPP-13 now also includes a Project Team Owner.	PSO	Complete - work meets the initial intent of the recommendation.
3-19	Develop a risk allocation matrix for ST3 projects that summarizes risks being assumed by Sound Transit and those being assigned to other parties, particularly contractors. Identify responsible staff for management and mitigation of each individual risk item and regularly monitor and report on status.	Staff revised PCPP-13 and the latest Risk Register to include this requirement.	PSO	Complete - work meets the initial intent of the recommendation.

APPENDIX A
Table of Recommendations, Status and Findings

TASK # - REC #	RECOMMENDATION	STAFF ACTION(S)	DEPARTMENT ACCOUNTABLE / RESPONSIBLE FOR IMPLEMENTATION	TRIUNITY ASSESSMENT FINDINGS (OCTOBER 2022)
3-20	Streamline CCB to optimize efficiencies and remove redundancies with the Phase Gate process and clarify decision-making.	Staff are developing a unified governance framework that streamlines multiple venues and decision points. This streamlining will include a relationship between the framework and the new program performance dashboard and other reporting. There will be a multi-phase approach to achieving this.	PSO	In Progress
3-21	Maximize change authority financial thresholds delegated to Project Directors to improve ST3 program management.	Staff will collaborate to analyze project director thresholds and incorporate changes as the framework for our unified internal governance structure is developed.	PSO	In Progress
END OF TABLE				