Asset Management Program Update

Community Oversight Panel

6/11/2025



Why we are here

- To provide an overview regarding updates to the agency's Enterprise Resource Planning (ERP) and Enterprise Asset Management (EAM) Systems
- To provide an update on current activities, initiatives and future plans in addressing asset conditions

Introductions

- Stephanie Ratko Director, Business Transformation
- Vivian dela Rosa Director, Enterprise Asset Management
- Vivian Wei Deputy Director, Transit Assets



Initial Questions from COP

- 1. "Please update us on the status of the asset management system. Have you released an RFP for the software and system integrators?"
- 2. "Can you summarize the capabilities you will request in the new system. In particular, what planning functionality will it have? I'm wondering about things like:
 - a. Forecasting of deterioration of bridges, track, power cabling and equipment, etc.
 - b. Cost of near-term and long-term renewal needs financial planning and programming."
- 3. "Have you done quantitative research on the rate of deterioration and the rate at which new renewal needs arise, based on all the data you have been collecting?
 - a. If so, can you report on the results. Or if not, when do you plan to do this?"



ERP/EAM Transformation Program Overview

Sound Transit is replacing and tightly integrating the agency's Enterprise Resource Planning (ERP) and Enterprise Asset Management (EAM) systems.



Enterprise Asset Management (EAM) System

Critical business information system

- Foundation for asset management and stewardship functions
- Creates and tracks work orders to make sure maintenance gets done on time
- Connects people, processes, and technology together
- Ensure assets are in good working condition so they last longer and provide better value
- Examples of assets are equipment, facilities, infrastructure, rolling stock



Enterprise Resource Planning (ERP) System

Critical business information system

- Foundation for finance, HR, payroll and purchasing functions
- Everyone works from the same, current information
- Each person sees only what they need for their job
- Automates business rules for smooth workflow

Program Activities

- Agency mobilization: 2023-2024
- Procured strategy consultants: 2023
- Roadmap & implementation planning project: 2024-2025
- Data preparation & migration planning project: 2025
- Chart of Accounts redesign project: 2025
- Reports cataloging project: 2025
- Procure ERP and EAM systems and implementors: 2025

EAMS System Replacement Improvements

System Functions



Expected Outcomes

- Boost public trust
- Streamline maintenance processes
- Improve tools and equipment use
- Advance maintenance methods
- Inventory optimization
- Better support oversight and management of critical resources

ERP System Replacement Improvements

System Functions



Expected Outcomes

- Boost public trust
- Drive operational efficiency
- Improve operations and finance transparency
- Enhance data-driven decision making
- Automate manual business processes
- Streamline payroll processing

Program Stakeholders

- All Sound Transit Departments
- King County Metro

Activities include:

- Collaboration on future-state vision
- Gathering comprehensive RFP requirements across functions
- Engaging Change Champions to drive transformation through targeted communications and focused training initiatives

Next Steps

 Request additional budget for implementation of both ERP and EAM systems replacements in the 2026 budget process.

System implementations: 2026-2029

Asset Management

Update on current activities, initiatives and future plans in addressing asset conditions



Asset Management Division Verticals

Enterprise Asset Management Asset Management Engineering

Facilities & Systems Maintenance

Rolling Stock

Infrastructure

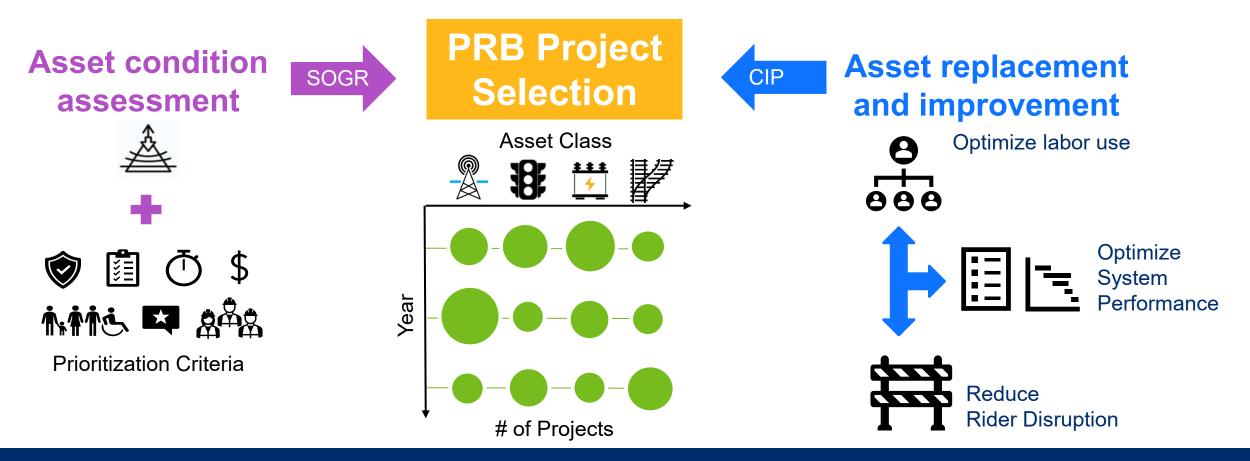
Transit Technology

FTA Asset Category	FTA Asset Class	ST Asset Class						
Equipment	General Equipment	Art, Safety Equipment, Furniture & Fixtures, Small & Attractive						
	Maintenance / Construction							
	Non-revenue vehicles	Non-Revenue Vehicles						
Facilities	Parking Facility	Electrical, Elevators, Escalators, Fire Alarm & Detection,						
	Passenger Facility	Fire Suppression, HVAC, Plumbing, Site/Property, Facility Structure, Stormwater						
	Administration Facility							
	Maintenance Facility							
Infrastructure	Communication & Control	Access Control, CCTV, Communications, Computer & Servers, Passenger Information, Radio, SCADA & BMS, Network						
	Guideway	Bridges, Tunnel, ROW Structures, Track						
	Intangible	Intangible, Software						
	Land	Land						
	Power	OCS, TPSS						
	Revenue Collection	Fare Collection						
	Tunnel Support	Emergency Ventilation System						
	Vehicle Control & Signaling	Signal						
Rolling Stock	Bus	Bus						
	Railcars	Light Rail Vehicle (LRV), Communter Rail Vehicle (CRV)						



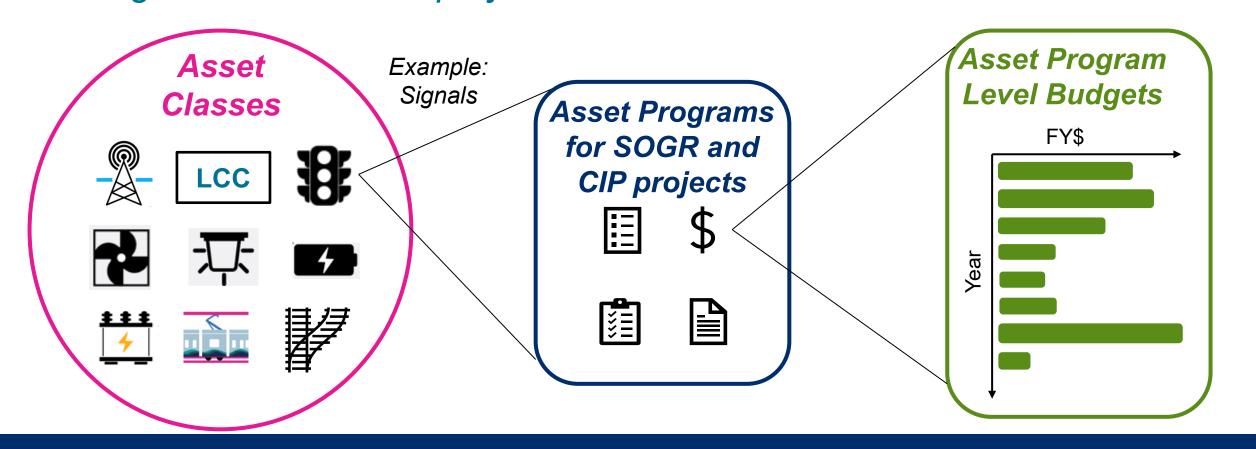
New Asset Based Service Project Prioritization

Asset program budgets are informed by the assets condition assessments and by replacement and improvement requests to the Project Review Board



New Asset-Based Budgeting Model

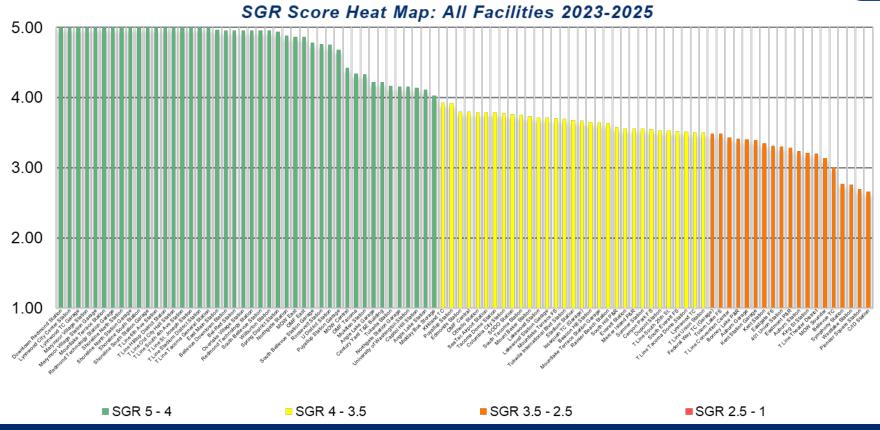
Each asset class, or group of assets has an Asset Program and based on its approved service projects budgets, the asset owner can better manage related service projects



FACILITIES, PEDESTRIAN BRIDGES AND GARAGES

- Continuous collection of condition assessment data for over 100 facilities
- Structural assessments conducted on a regular cycle:
 - Pedestrian bridges: every 5 years
 - Parking garages: every 3 years



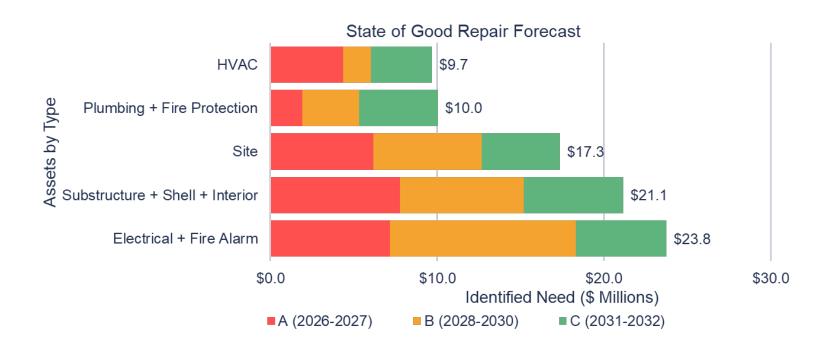


2023-2025 SGR Score Average: Weighted Condition Rating: 4.08

6-YEAR FACILITY RENEWAL-NEEDS FORECAST

Forecasted facility renewal needs by asset class from 2026 to 2032





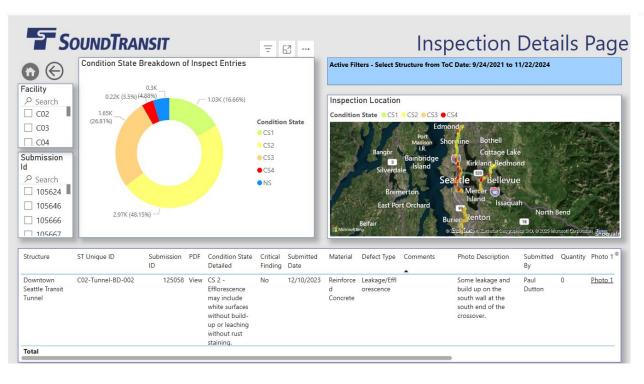
^{*} Excludes vertical conveyance as it is managed under a separate program, but condition is still factored into State of Good Repair scoring and forecasting.



BRIDGE and TUNNEL

- Developed and published a structural inspection standard to ensure consistent condition assessment of critical infrastructure assets
- Ensured timely inspections, prioritized defect repairs, and implemented corrective actions to maintain safety and reliability



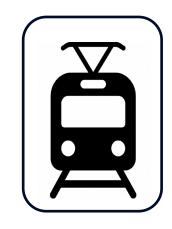




LIGHT RAIL VEHICLES

Conducted preliminary analysis on average deterioration rates based on data collected on **Feb 2025**

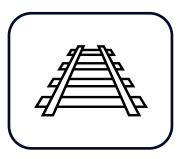
		2007 ST1's					2011 ST1's						
SubGroup	Element	Excellent	Good	Fair	Marginal	Worn	Avg Condition	Excellent	Good	Fair	Marginal	Worn	Avg Condition
Roof	Brake Resistors	0%	0%	84%	16%	0%	3.18	0%	0%	100%	0%	0%	3.20
	Inverters	0%	0%	100%	0%	0%	3.38	0%	0%	100%	0%	0%	3.44
	APSE	0%	0%	84%	16%	0%	3.26	0%	0%	100%	0%	0%	3.42
	HVAC	0%	0%	100%	0%	0%	3.55	0%	0%	100%	0%	0%	3.60
	Pantograph	0%	0%	100%	0%	0%	3.63	0%	0%	100%	0%	0%	3.63
	HSCB	0%	4%	84%	12%	0%	3.24	0%	0%	95%	5%	0%	3.18
	Lightning Arrestor	0%	0%	100%	0%	0%	3.65	0%	0%	100%	0%	0%	3.68
	Air Compressor	0%	32%	68%	0%	0%	3.79	0%	5%	95%	0%	0%	3.64
	Line Choke	0%	0%	100%	0%	0%	3.66	0%	0%	100%	0%	0%	3.51
Trucks	Axles	0%	3%	89%	8%	0%	3.23	0%	2%	98%	0%	0%	3.25
	Traction Motor	0%	0%	100%	0%	0%	3.49	0%	1%	99%	0%	0%	3.46
	Gear Box	0%	0%	100%	0%	0%	3.50	0%	0%	100%	0%	0%	3.45
	Caliper	0%	0%	60%	29%	0%	3.11	0%	0%	46%	43%	0%	3.03
	Coupler	0%	0%	50%	50%	0%	3.01	0%	0%	43%	58%	0%	2.98
	EHU	0%	0%	68%	32%	0%	3.11	0%	0%	45%	55%	0%	3.01
Cab Exterior	Cabs A & B	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
Car Body	Skin	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
Cab Interiors	Panel	0%	71%	29%	0%	0%	3.86	0%	51%	49%	0%	0%	3.76
	Master Controller	0%	0%	88%	12%	0%	3.17	0%	0%	100%	0%	0%	3.22
	TOD	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
	MMI	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
	Breaker Panel	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
	Radio	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
	Windows	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
Passenger Area Seats		0%	0%	100%	0%	0%	3.00	0%	0%	100%	0%	0%	3.00
	Windows	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
	Doors	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
PIS	Interior Destination Signs	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
	Exterior Destination Signs	0%	100%	0%	0%	0%	4.00	0%	100%	0%	0%	0%	4.00
Cameras	Cameras	0%	99%	0%	0%	1%	3.95	0%	100%	0%	0%	0%	4.00
Average of Overall Fleet Condition							3.63						3.61

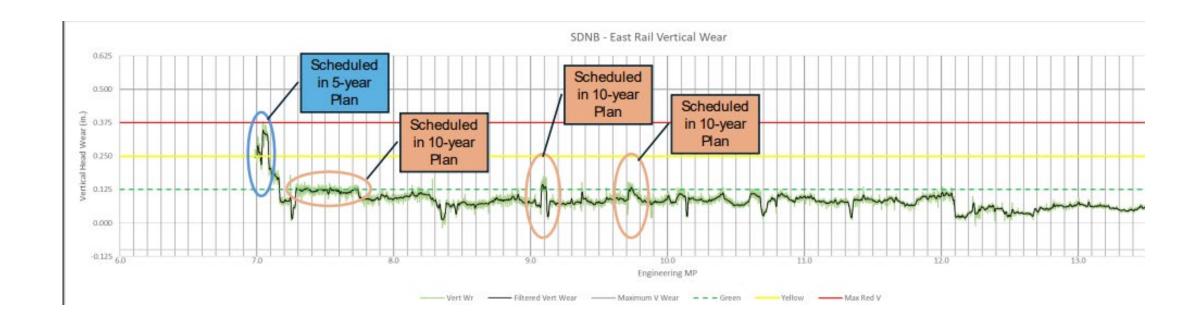




TRACK

- Established a Track SOGR (State of Good Repair) framework using useful life benchmarks and inspection data
- Ongoing accumulation of inspection and condition data to support future modeling





NEXT STEPS

- Roadmap developed to advance capability in analyzing asset deterioration and forecasting renewal needs
- Focused on maturing three core task areas
- 2025 priorities:
 - 1. Traction Electrification (TPSS)
 - 2. Overhead Catenary System (OCS)
 - 3. Track
 - 4. Electrical Systems

Task Area 1:

Capability 1: Comprehensive Asset Inventory



Task Area 2:

Capability 2: Asset Health Assessment

Capability 3: Risk Based

Prioritization



Task Area 3:

Capability 4: SOGR Analysis Improvements

Capability 5: Asset to Project Mapping



Thank you.



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