

***Capital Delivery  
Programmatic and Project-level Workplan  
Q1 2025 Update***

*Board of Directors  
2/27/2025*



# Today's Agenda

- Cost workplan update
  - Programmatic opportunities
  - Project opportunities
- Next steps

**475+ opportunities are in progress**



# Cost Opportunity Workplan Update

Quarterly updates to Board

## Per Motion No. M2024-59

Develop a **workplan on the programmatic, financial, and project level measures and opportunities** the agency will pursue to **improve the agency's financial situation** and move WSLE through design **to inform** a financially sound project to be baselined, including **timelines and scale of potential benefits for each measure, and whether each measure is WSLE-specific or applies broadly to future projects.**

# Cost Workplan

# Tools, reporting, and training in place



## Dashboards and Reporting

Real time data by program and project



## Processes / Tools

New tool to track and manage all opportunities



## Training

All project teams trained on tools, processes and target savings

The screenshot displays a SharePoint site titled "ST3 Cost Savings Workplan". The main content area is a gallery view of an "Opportunity Register - Program". Each card in the gallery represents a specific opportunity, with fields for Measure ID, Name, Measure Objective, Measure Target Area, Measure Type, and Impacted and Related Projects. The cards are organized into a grid and include various filters and view options. The top navigation bar includes the Sound Transit logo, a search bar, and user information. The left sidebar shows navigation options like Home, Requests and Feedback, and Opportunity Register Tr... The right sidebar shows "Manage access" and "3 members".

Measure ID	Name	Measure Objective	Measure Target Area	Measure Type
PRG-1	Off-Site Construction, Fab, & A...	Reduce Schedule	Construction Efficiencies	Programmatic
PRG-2	Indirect Cost Reductions	Reduce Cost	Indirects	Programmatic
PRG-3	Streamline ST Requirements	Reduce Cost	Indirects	Programmatic
PRG-5	OCIP for ST3	Reduce Cost	Construction Efficiencies	Programmatic
PRG-6	Collaborative delivery	Reduce Schedule, Risk	Market Conditions	Programmatic
PRG-7	Contract packaging and delive...	Reduce Schedule, Cost	Market Conditions	Programmatic
PRG-8	Target value design	Reduce Cost	Design Optimization	Programmatic
PRG-9	Betterments (Third Party)	Reduce Cost	Indirects	Programmatic
PRG-10	Third Party MOUs	Improve Efficiency, Reduce Sc...	Indirects	Programmatic
PRG-11	Procurement Competition	Reduce Cost	Market Conditions	Programmatic
PRG-12	Site Data Acquisition	Reduce Schedule, Risk	Design Optimization	Programmatic
PRG-13	Station Kit of Parts	Reduce Cost	Design Optimization	Programmatic
PRG-14	Owner Furnished Items	Reduce cost	Market Conditions	Programmatic
PRG-15	Pre-negotiated construction e...	Reduce Cost	Market Conditions	Programmatic
PRG-16	Cost Sharing/Integrated Devel...	Reduce Cost	Market Conditions	Programmatic
PRG-17	Contract Risk Sharing with Con...	Reduce Schedule, Cost	Market Conditions	Programmatic
PRG-18	Permitting Strategy	Reduce Schedule	Indirects	Programmatic
PRG-19	Environmental Process	Reduce Schedule	Indirects	Programmatic
PRG-20	Owners Reserve Establishment	Reduce Risk	Market Conditions	Programmatic
PRG-4	Delegation of Authority	Reduce Schedule, Cost	Market Conditions	Programmatic
PRG-21	Concrete Batch Plant Ownership	Reduce Cost	Construction Efficiencies	Programmatic

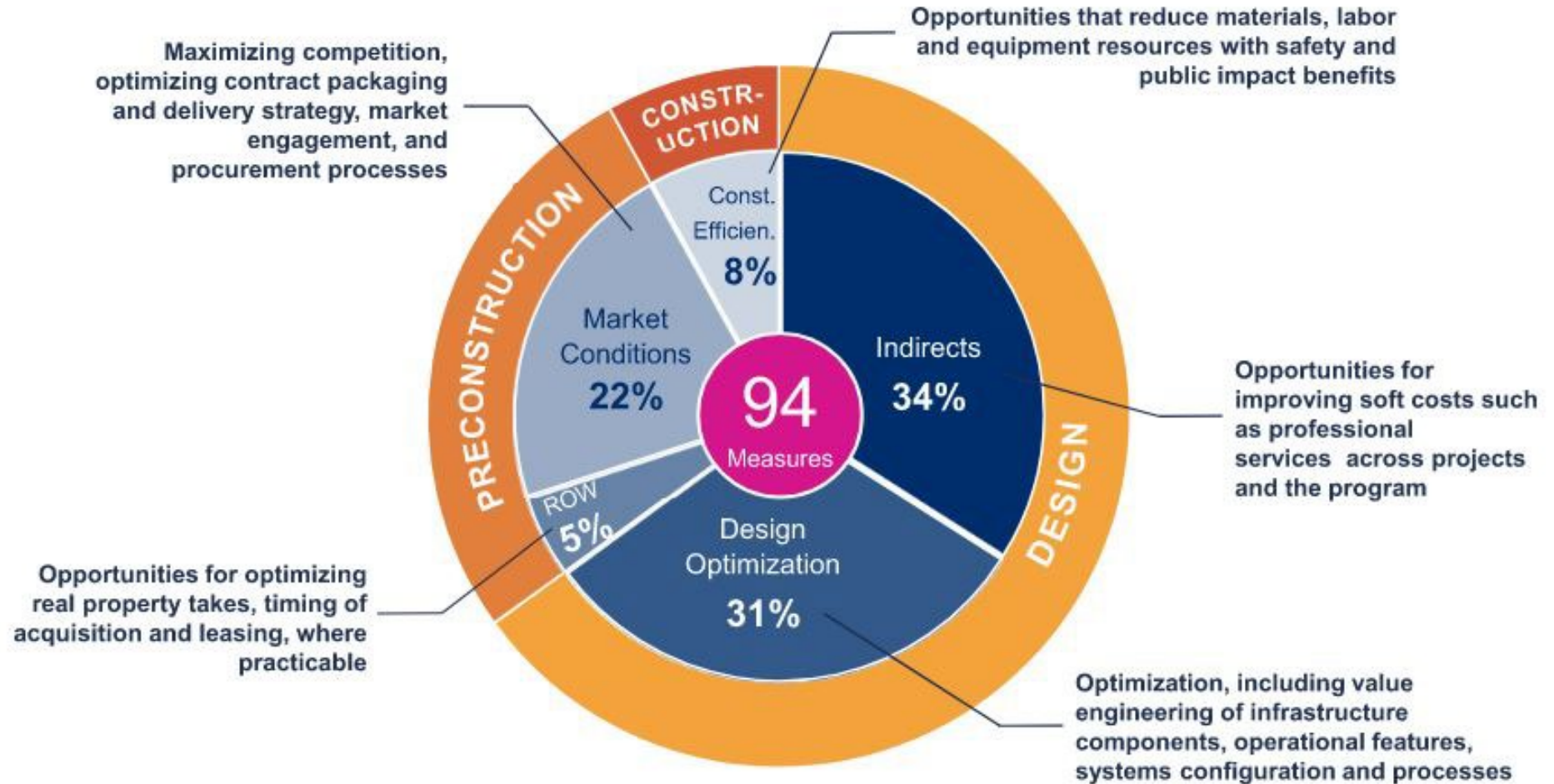
Programmatic register tracks opportunities as they move through the assessment and implementation process



# Programmatic opportunities

Programmatic

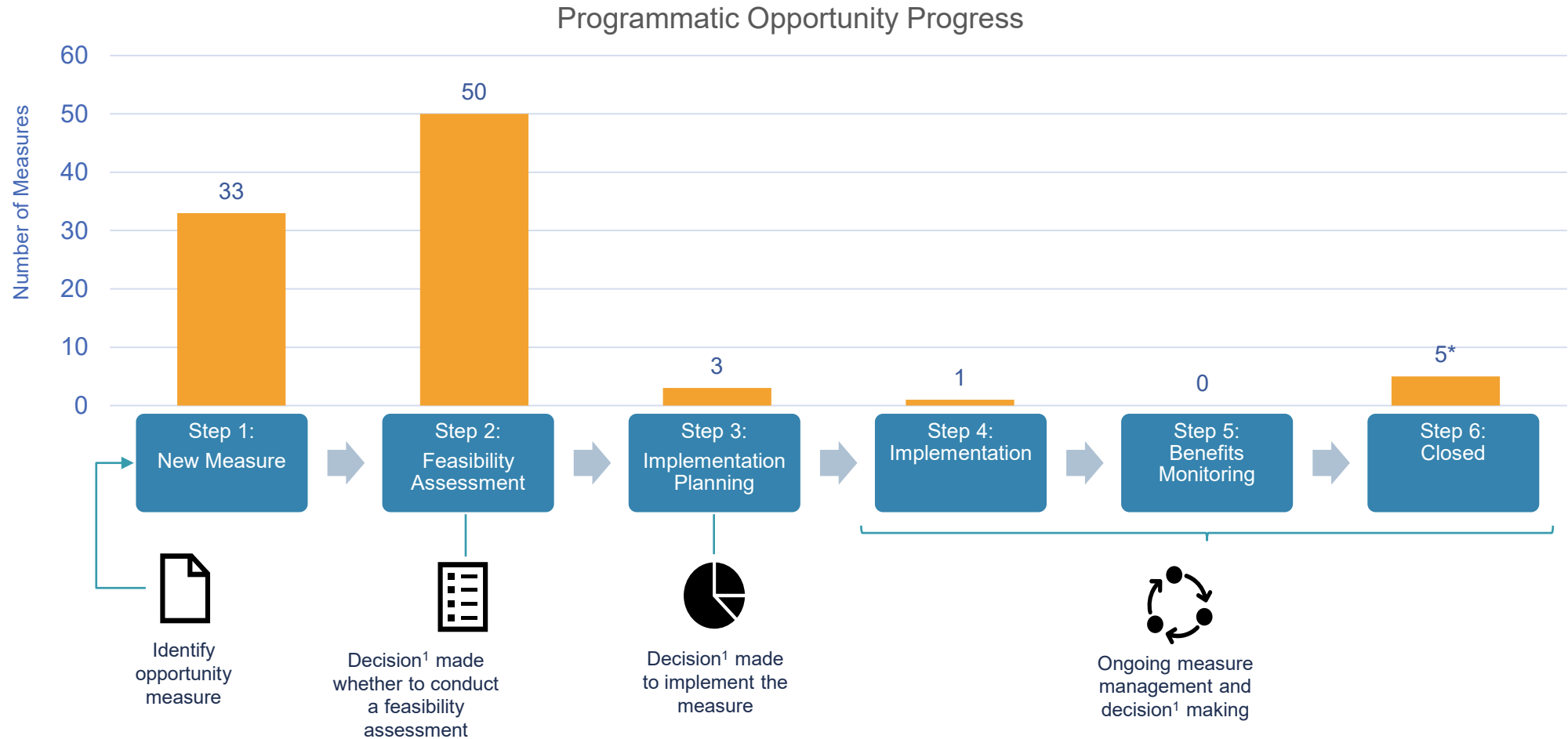
*94 programmatic opportunities under development*





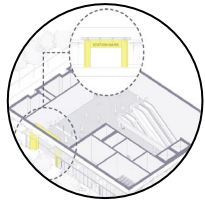
# Programmatic Opportunity Workplan

**19% of the measures are ranked as high benefit**



# Programmatic Opportunities (partial list)

## Example Opportunities (High Likelihood)



Design Optimization  
Station  
Optimization



Market Conditions  
ST Delegated  
Authority



Indirects  
Streamline  
Commissioning and  
Handover



Market Conditions  
Implement Owner  
Controlled Insurance  
Program (OCIP)

Name	Measure Target Area	Benefit Ranking	Likelihood Ranking	Measure Implementation Status
Streamline ST Requirements	Indirects	High	High	Step 1a: New Measure
Rebalancing Project Teams	Indirects	High	High	Step 1a: New Measure
<b>Efficient Final Commissioning/Handover (ATO) Process</b>	Indirects	High	High	Step 1a: New Measure
Off-Site Construction, Fab, & Assembly	Construction Efficiencies	High	High	Step 2a: Feasibility Assessment - Planned
<b>OCIP for ST3</b>	Market Conditions	High	High	Step 2a: Feasibility Assessment - Planned
Collaborative delivery	Market Conditions	High	High	Step 2a: Feasibility Assessment - Planned
Contract Risk Sharing with Contractors	Market Conditions	High	High	Step 2a: Feasibility Assessment - Planned
MATOCs	Indirects	High	High	Step 2a: Feasibility Assessment - Planned
PMIS Tool	Indirects	High	High	Step 2a: Feasibility Assessment - Planned
Project Charging only by CDD	Indirects	High	High	Step 2a: Feasibility Assessment - Planned
<b>Delegation of Authority</b>	Market Conditions	High	High	Step 2b: Feasibility Assessment - In Progress
<b>Station Programming Review</b>	Design Optimization	High	High	Step 6: Closed
Adapt ST standards requirements to align with industry benchmarks / best practices	Design Optimization	High	Medium	Step 2a: Feasibility Assessment - Planned
Station Programming Review	Design Optimization	High	Medium	Step 2a: Feasibility Assessment - Planned
Station headhouses in public ROW/spaces	Design Optimization	High	Medium	Step 2a: Feasibility Assessment - Planned
Optimize platform width	Design Optimization	High	Medium	Step 2b: Feasibility Assessment - In Progress
Utility Service Level Agreements	Market Conditions	High	Medium	Step 3: Measure implementation planning
Permitting Strategy	Indirects	High	Low	Step 2a: Feasibility Assessment - Planned
QA/QC Assessment	Indirects	Medium	High	Step 1a: New Measure
SOGR estimates	Design Optimization	Medium	High	Step 1a: New Measure
<b>Indirect Cost Reductions</b>	Indirects	Medium	High	Step 2a: Feasibility Assessment - Planned
Site Data Acquisition	Design Optimization	Medium	High	Step 2a: Feasibility Assessment - Planned
Analyze alternative parking garage delivery methods	Construction Efficiencies	Medium	High	Step 2a: Feasibility Assessment - Planned
Digital Twin	Construction Efficiencies	Medium	High	Step 6: Closed
Report Consolidation	Indirects	Medium	Medium	Step 1a: New Measure
Risk Based Estimating	Indirects	Medium	Medium	Step 1a: New Measure
Turnback Operations	Design Optimization	Medium	Medium	Step 1a: New Measure
Fleet Reliability Improvements	Design Optimization	Medium	Medium	Step 1a: New Measure
Target value design	Design Optimization	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Third Party MOUs	Indirects	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Procurement Competition	Market Conditions	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Station Kit of Parts	Design Optimization	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Owner Furnished Items	Market Conditions	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Pre-negotiated construction equipment/material Costs	Market Conditions	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Environmental Process	Indirects	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Leasing Property vs Acquiring	Right of Way	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Full ROW Acquisition design improvements	Right of Way	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Off Site Commissioning	Market Conditions	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Enhanced use of Design Technologies	Construction Efficiencies	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Infrastructure Design	Design Optimization	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Optimize use of public restrooms where needed	Design Optimization	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Optimize use of bike parking rooms	Design Optimization	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Rail Systems Kit of Parts	Design Optimization	Medium	Medium	Step 2a: Feasibility Assessment - Planned
Large Contract Splitting	Market Conditions	Medium	Medium	Step 6: Closed
Betterments (Third Party)	Indirects	Medium	Low	Step 1a: New Measure
Cost of Federal vs Non-Federal Work	Indirects	Medium	Low	Step 1a: New Measure
Optimize platform lengths	Design Optimization	Medium	Low	Step 1b: On Hold
Cost Sharing/Integrated Development	Market Conditions	Medium	Low	Step 2a: Feasibility Assessment - Planned
Owners Reserve Establishment	Market Conditions	Medium	Low	Step 2a: Feasibility Assessment - Planned
Tunnel Boring Machine Ownership	Market Conditions	Medium	Low	Step 2a: Feasibility Assessment - Planned
Commodities	Market Conditions	Medium	Low	Step 2a: Feasibility Assessment - Planned
Use side platforms where deemed necessary	Design Optimization	Medium	Low	Step 2a: Feasibility Assessment - Planned
Add turnstiles/faregates	Design Optimization	Medium	Low	Step 2a: Feasibility Assessment - Planned
Platform Edge Doors	Design Optimization	Medium	Low	Step 2a: Feasibility Assessment - Planned
Concrete Batch Plant Ownership	Construction Efficiencies	Medium	Low	Step 2b: Feasibility Assessment - In Progress
Contract packaging and delivery strategy	Market Conditions	Low	High	Step 2a: Feasibility Assessment - Planned

# Station Optimization

Seven station standard prototypes have been developed to address varying stations conditions across WSLE, BLE, EVLE and TDLE.

- Stations make up ~15% construction costs.
- Stations currently represent approximately 18% of WSLE total costs.



# Sound Transit Delegated Authority

Recommendation by the Board and the TAG to push appropriate decision making to staff

Improve delegation of authority through:

- Consistent application of authorization thresholds
- Policy predicated on project centric budget and contingency management

Return to the board with more information in 2025

## Benefits

- Reduce upfront costs (i.e. design)
- Potential for bulk purchase of materials
- Construction efficiency: Potential for off-site construction and modular construction
- Consistent passenger experience

## Benefits

- View of performance at the project level
- Reduces contractor markup (risk of delayed decisions)
- Clear accountability to staff
- Supports efficient issue resolution
- Ability to meet prompt payment goals



# Streamline Commissioning and Handover

Increase efficiency and speed to reduce pre-revenue phase

- Automating fabrication
- Using simulators for driver training and integration testing to prepare before operations begin
- Off-site commissioning such as a test lab

## Benefits

- **Schedule benefits:** reduce pre-revenue operational period.
- **Minimize site impacts** by maximizing off-site testing and training.
- **Streamline processes and training** across projects



# Implement Owner Controlled Insurance Program (OCIP)

- Implement an OCIP for ST3 to cover General Liability including builder risk, pollution liability and professional liability

## Benefits

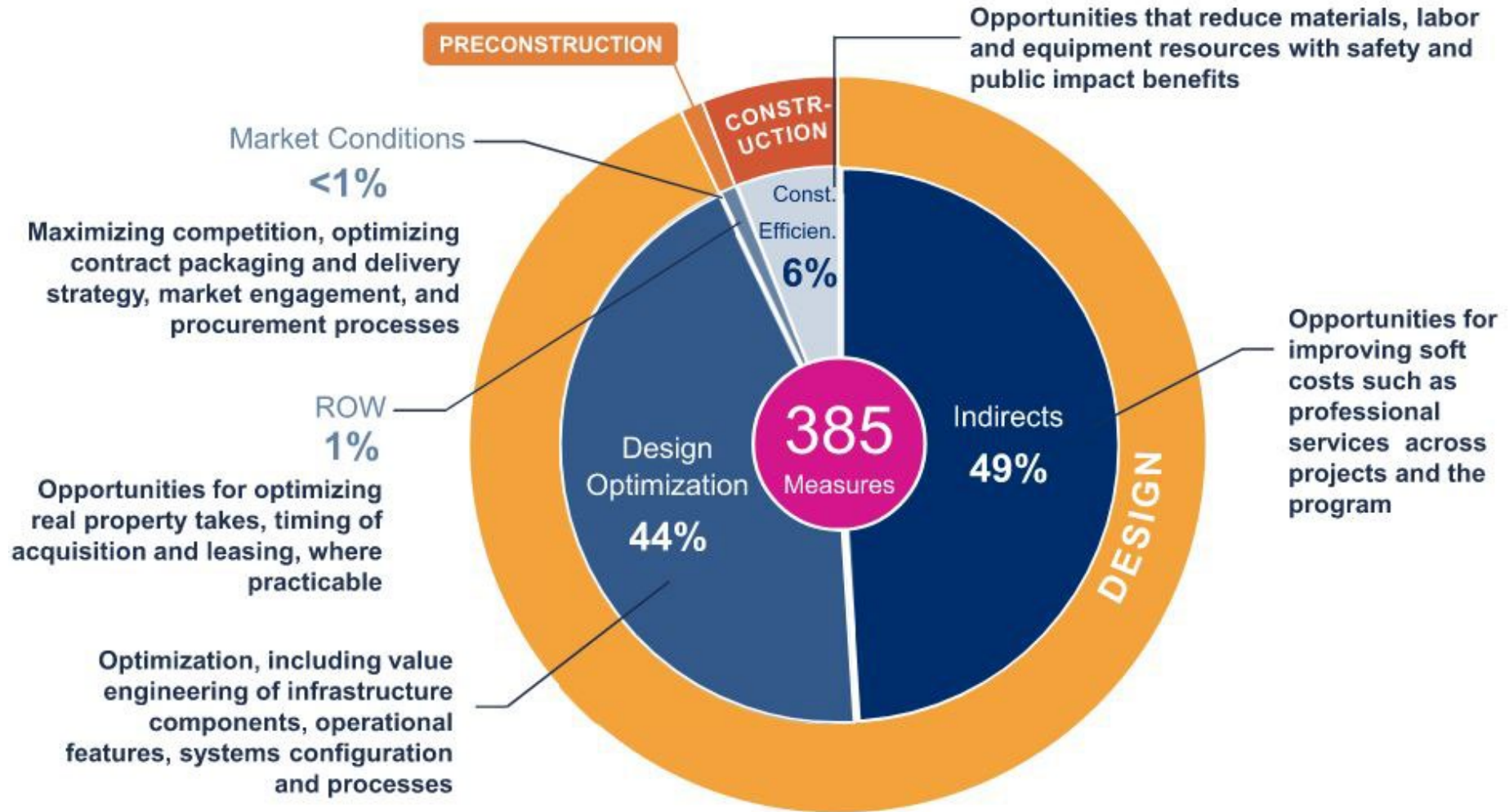
- **Cost benefits:** Potential saving for ST3 on large projects.
- **Business Benefit:** Allows greater participation by disadvantaged businesses.
- **Attract subcontractors** to pursue ST projects.

**\$25 – 35M**  
**Target Savings**



# Project opportunities

**385 project opportunities under development**

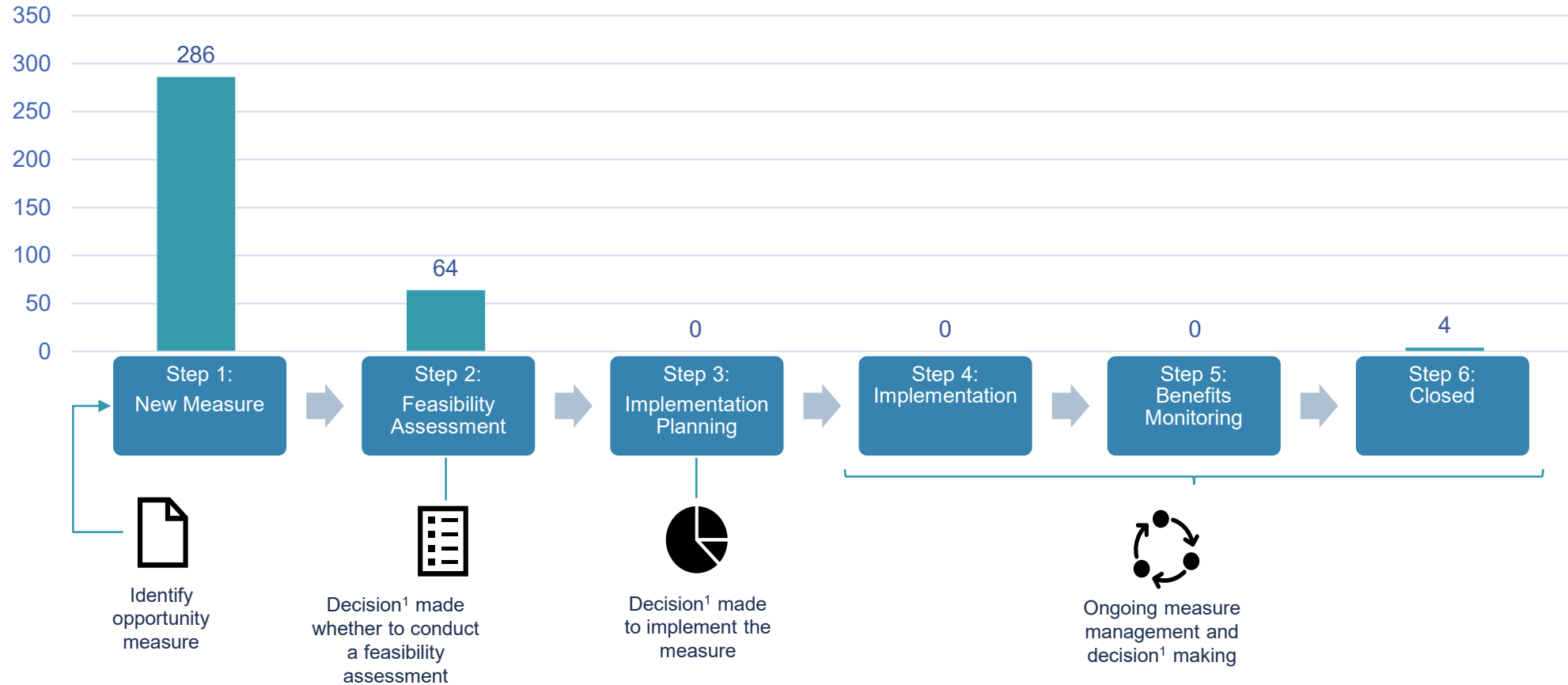




# Project Opportunity Workplan

**10% of the measures are ranked as high benefit**

Project-wide Opportunity Progress



# WSLE Project Workplan Opportunities

Three example opportunities with target savings of \$290M - \$365M

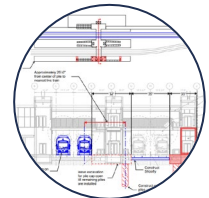
## Example Opportunities (Partial list)



### Construction Efficiencies Aerial Guideway Optimization



### Design Optimization Aerial Guideway Foundation and Ground Optimization



### Design Optimization SODO Station Optimization

Measure Name	Measure Target Area	Benefit Ranking	Likelihood Ranking	Measure Priority	Measure Implementation Status
W200 Span Optimization and Adopting of pre-cast segmental guideway construction.	Construction Efficiencies	High	High	P2 (High)	Step 6: Closed
<b>Aerial Guideway Foundations Optimization</b>	Design Optimization	Medium	High	P2 (High)	Step 2a: Feasibility Assessment - Planned
Pre-Cast Segmental Superstructure on Duwamish Cable Stayed Bridge	Construction Efficiencies	Medium	High	P3 (Medium)	Step 2a: Feasibility Assessment - Planned
Pre-Cast Segmental Superstructure on Duwamish Cable Stayed Bridge	Construction Efficiencies	Medium	High	P3 (Medium)	Step 2a: Feasibility Assessment - Planned
Raise track top of rail at AJS	Construction Efficiencies	Medium	Medium	P3 (Medium)	Step 1: New Measure
<b>Optimized Aerial Guideway Alignment</b>	Design Optimization	Medium	Medium	P3 (Medium)	Step 1: New Measure
<b>SODO Station Optimization</b>	Design Optimization	Medium	Medium	P3 (Medium)	Step 2a: Feasibility Assessment - Planned
Alaska Junction - SW Hudson Ventilation and TPSS O	Design Optimization	Medium	Medium	P3 (Medium)	Step 2a: Feasibility Assessment - Planned
LRV Storage Track Delridge vs Alaska	Design Optimization	Medium	Low	P4 (Low)	Step 1: New Measure
Tunnel Portal Optimization Avalon	Design Optimization	Medium	Low	P4 (Low)	Step 1: New Measure
Duwamish Cable Stay with Steel Modular Deck	Construction Efficiencies	Medium	Low	P3 (Medium)	Step 1: New Measure
Station Prototype Application	Design Optimization	Medium	Low	P2 (High)	Step 2a: Feasibility Assessment - Planned
Delridge Side Platform Configuration	Construction Efficiencies	Medium	Low	P4 (Low)	Step 2a: Feasibility Assessment - Planned
SODO Station Foundation Optimization	Construction Efficiencies	Medium	Low	P3 (Medium)	Step 2b: Feasibility Assessment - In Progress
Cut and Cover Station Size Reduction (Alaska Junction)	Design Optimization	Medium	Low	P3 (Medium)	Step 6: Closed
Stations Study	Design Optimization	Low	High	P2 (High)	Step 1: New Measure
Real Estate optimization	Right of Way	Low	Medium	P3 (Medium)	Step 1: New Measure
Plaza Structure Removal at Delridge	Design Optimization	Low	Medium	P3 (Medium)	Step 1: New Measure
Duwamish Cable Stay with Diamond Pylon	Construction Efficiencies	Low	Medium	P3 (Medium)	Step 1: New Measure
Pylon Foundation Optimization	Construction Efficiencies	Low	Medium	P2 (High)	Step 2a: Feasibility Assessment - Planned
Alaska Junction No 8 vs No 10	Design Optimization	Low	Medium	P3 (Medium)	Step 2a: Feasibility Assessment - Planned
Alaska Junction Entrance Consolidation	Design Optimization	Low	Low	P4 (Low)	Step 1: New Measure
SODO Station - Single Island platform	Design Optimization	Low	Low	P3 (Medium)	Step 1: New Measure
Reduced central platform width	Construction Efficiencies	Low	Low	P1 (Critical)	Step 1: New Measure
Delridge Station Optimization	Construction Efficiencies	Low	Low	P1 (Critical)	Step 2b: Feasibility Assessment - In Progress
Avalon Station Optimization	Construction Efficiencies	Low	Low	P1 (Critical)	Step 2b: Feasibility Assessment - In Progress
Alaska Junction Station Optimization	Construction Efficiencies	Low	Low	P1 (Critical)	Step 2b: Feasibility Assessment - In Progress

# WSLE opportunities over the project timeline

WE ARE HERE



	PLANNING	DESIGN VALIDATION	DESIGN DEVELOPMENT	CONSTRUCTION DOCUMENTS	PROCUREMENT	CONSTRUCTION	SERVICE STARTS
Activities	<ul style="list-style-type: none"> <li>• Alternatives Development</li> <li>• Environmental Review</li> <li>• Plan to budget</li> <li>• Cost estimate validation</li> </ul>	<ul style="list-style-type: none"> <li>• Design Optimization: confirm value engineering opportunities</li> <li>• Define ROW acquisition strategy</li> <li>• Award civil design contract</li> </ul>	<ul style="list-style-type: none"> <li>• Implement design optimizations</li> <li>• Advance ROW Acquisitions</li> <li>• Explore funding and financial capacity</li> <li>• Enter FTA EPD program</li> </ul>	<ul style="list-style-type: none"> <li>• Design optimizations incorporated and priced by contractors</li> <li>• Establish project baseline at approx. 80% design</li> </ul>	<ul style="list-style-type: none"> <li>• Procure construction contracts</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce cost through programmatic efficiencies</li> <li>• Efficient decisions - exercise delegation of authority at the project level</li> </ul>	<ul style="list-style-type: none"> <li>• Substantial Completion</li> <li>• Training</li> <li>• Asset Transfer and Management</li> </ul>
Outcomes	<ul style="list-style-type: none"> <li>• Project to be Built</li> <li>• Record of Decision</li> <li>• Prelim value engineering and program strategies list</li> </ul>	<ul style="list-style-type: none"> <li>• Value engineering opportunities confirmed</li> <li>• Present work plan and potential decisions to board</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor on board for collaborative delivery contracts</li> <li>• Board approval - EPD funding</li> </ul>	<ul style="list-style-type: none"> <li>• Complete design phase</li> <li>• Baseline project</li> </ul>	<ul style="list-style-type: none"> <li>• Board consider action for construction</li> </ul>	<ul style="list-style-type: none"> <li>• Effective use of contingencies and allowances (risk)</li> </ul>	<ul style="list-style-type: none"> <li>• Construction closeout</li> </ul>

*Programmatic and project opportunities implemented across each project phase and activity*

# WSLE opportunities during design validation

WE ARE HERE 

	PLANNING	DESIGN DEVELOPMENT	CONSTRUCTION DOCUMENTS	PROCUREMENT	CONSTRUCTION	SERVICE STARTS
Activities	<ul style="list-style-type: none"> <li>Alternatives Development</li> <li>Environmental Review</li> <li>Plan to budget</li> <li>Cost estimate validation</li> <li>Building and vetting value engineering list for next phase</li> <li>Define ROW acquisition strategy</li> </ul>	<ul style="list-style-type: none"> <li>Finalize design alternatives</li> <li>Finalize ROW positions</li> <li>Secure funding and financial capacity</li> <li>FTA EPD team</li> </ul>	<ul style="list-style-type: none"> <li>Design optimizations incorporated and priced by contractors</li> <li>Establish project baseline at approx. 80% design</li> </ul>	<ul style="list-style-type: none"> <li>Procure construction contracts</li> </ul>	<ul style="list-style-type: none"> <li>Reduce cost through programmatic efficiencies</li> <li>Efficient decisions - exercise delegation of authority at the project level</li> </ul>	<ul style="list-style-type: none"> <li>Substantial Completion</li> <li>Training</li> <li>Asset Transfer and Management</li> </ul>
Outcomes	<ul style="list-style-type: none"> <li>Project to be Built</li> <li>Record of Decision</li> <li>Prelim value engineering and program strategies list</li> </ul>	<ul style="list-style-type: none"> <li>Present workplan and potential decisions to board</li> <li>Board approval - EPD funding</li> </ul>	<ul style="list-style-type: none"> <li>Contractor on board for cooperative delivery contracts</li> </ul>	<ul style="list-style-type: none"> <li>Compete design phase</li> <li>Baseline project</li> </ul>	<ul style="list-style-type: none"> <li>Board consider action for construction</li> </ul>	<ul style="list-style-type: none"> <li>Effective use of contingencies and allowances (risk)</li> <li>Construction closeout</li> </ul>

## DESIGN VALIDATION

### ACTIVITIES

- **Design Optimization:** confirm value engineering opportunities
- Award civil design contract
- Begin ROW acquisition process

# WSLE opportunity example: Design Optimization

WE ARE HERE 

	PLANNING	DESIGN VALIDATION	DESIGN DEVELOPMENT	CONSTRUCTION	OPERATION	STARTS
Activities	<ul style="list-style-type: none"> <li>Alternatives Development</li> <li>Environmental Review</li> <li>Plan to budget</li> <li>Cost estimate validation</li> <li>Building and vetting value engineering list for next phase</li> <li>Define ROW acquisition strategy</li> </ul>	<p><b>ACTIVITIES</b></p> <ul style="list-style-type: none"> <li><b>Design Optimization:</b> confirm value engineering opportunities</li> <li>Award civil design contract</li> <li>Begin ROW acquisition process</li> </ul>	<ul style="list-style-type: none"> <li>Finalize design alternatives</li> <li>Finalize ROW positions</li> <li>Finalize funding and social capacity</li> <li>FTA EPD</li> </ul>	<p><b>OPPORTUNITIES</b></p> <p><b>Station prototype application (Programmatic)</b></p> <ul style="list-style-type: none"> <li>Vertical transport optimization</li> <li>Optimize platform widths</li> <li>Locate TPSS inside station box</li> </ul> <p><b>Aerial guideway value engineering*</b></p> <ul style="list-style-type: none"> <li>Pre-cast segmental superstructure</li> <li>Span length optimization</li> </ul> <p><b>Station Optimization*</b></p>	<p><b>Designer to validate + implement</b></p> <p><b>Duwamish bridge value engineering</b></p> <ul style="list-style-type: none"> <li>Substructure improvement</li> <li>Pylon configuration</li> <li>Pre-cast segmental superstructure</li> </ul> <p><b>Foundation optimization*</b></p> <ul style="list-style-type: none"> <li>Improving efficiencies of deep foundations</li> <li>Rationalizing ground improvement zones</li> </ul> <p><b>Tunnelling direction</b></p> <ul style="list-style-type: none"> <li>Schedule improvement</li> <li>Community benefits</li> </ul>	<ul style="list-style-type: none"> <li>Transfer and</li> <li>nt</li> </ul>
Outcomes	<ul style="list-style-type: none"> <li>Project to be Built</li> <li>Record of Decision</li> <li>Prelim value engineering and program strategies list</li> </ul>	<ul style="list-style-type: none"> <li>Present workplan and potential decisions to board</li> </ul>	<ul style="list-style-type: none"> <li>Board approval funding</li> </ul>			

WSLE Workplan Example 1  
Construction Efficiencies

# Aerial Guideway Optimization

Revises the longer spans and cast-in-place concrete construction methodology in the PE design by using precast segmental construction and optimized span arrangements.

Realizes maximum benefits when considering foundation optimization side platforms at Delridge Station and precast segmental construction at Duwamish Crossing.

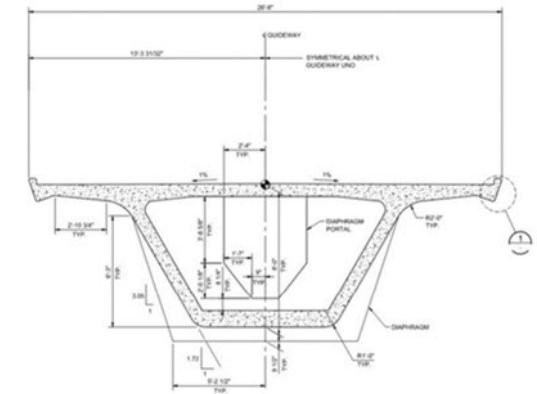


~\$60-70m

Target savings

## Benefits

- **9 months' schedule savings** for W200
- **Off-site precast segment fabrication** in controlled factory environment:
  - Minimizes construction impacts
  - Takes off critical path
  - Results in safer construction
  - Reduces the need for ground access and MOT for construction.
  - Minimizes interface time over and adjacent to sensitive areas.
- Enables **aerial guideway foundations optimization** and **potential reduction in ground improvements**



TYPICAL SECTION - DOUBLE TRACK BOX GIRDER  
SCALE: 1/2" = 1'-0"

Figure 2. Simple Span Double Track Precast Segmental Structure Section

Status: In feasibility assessment



WSLE Workplan Example 2  
Design Optimization

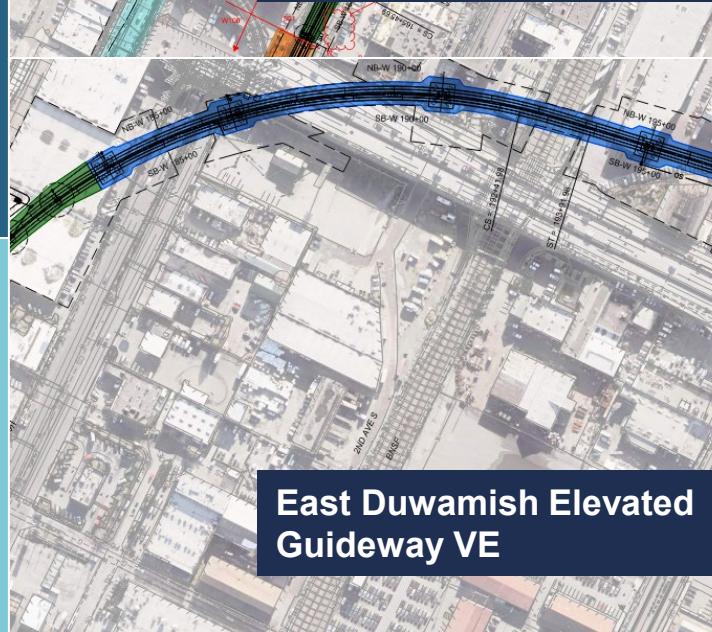
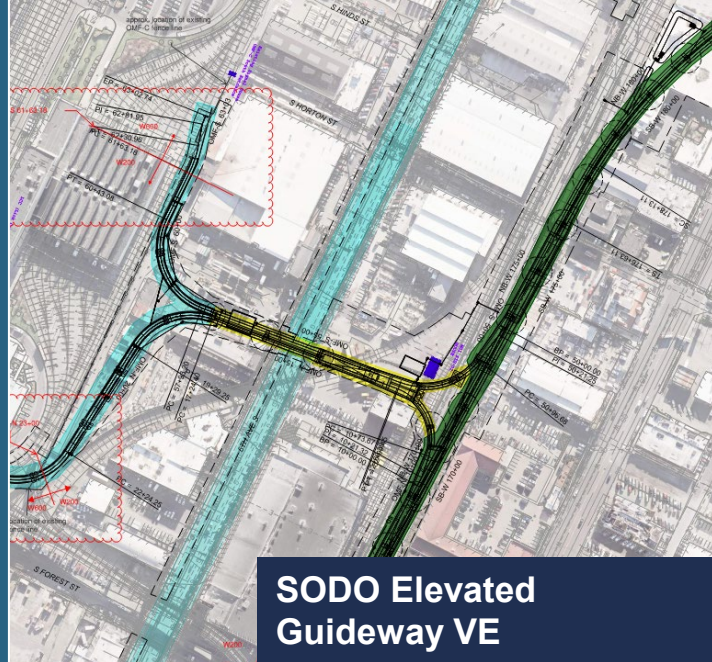
# Foundations and Ground Improvements Optimization

Optimizes foundations required for shorter spans

Target savings assume that the Aerial Guideway Optimization measure is in place.

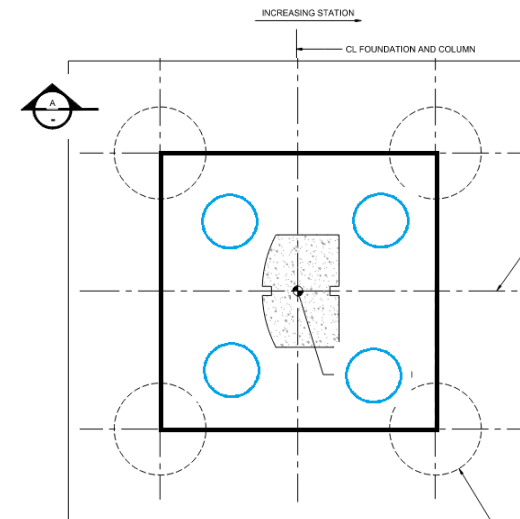
1. SODO Elevated Guideway VE
2. East Duwamish Elevated Guideway VE

**~\$100-130m** Target savings



## Benefits

- Reduces ground improvements in SODO area elevated guideway
- Reduces pile cap size and shaft group diameters in Duwamish Approach area (east of SR99)
- Provides further optimization opportunities for pile length after additional assessment of liquefaction



PLAN - PILE CAP D01 (TYPE F01)  
SCALE: 3/16" = 1'-0"

# SODO Station Optimization

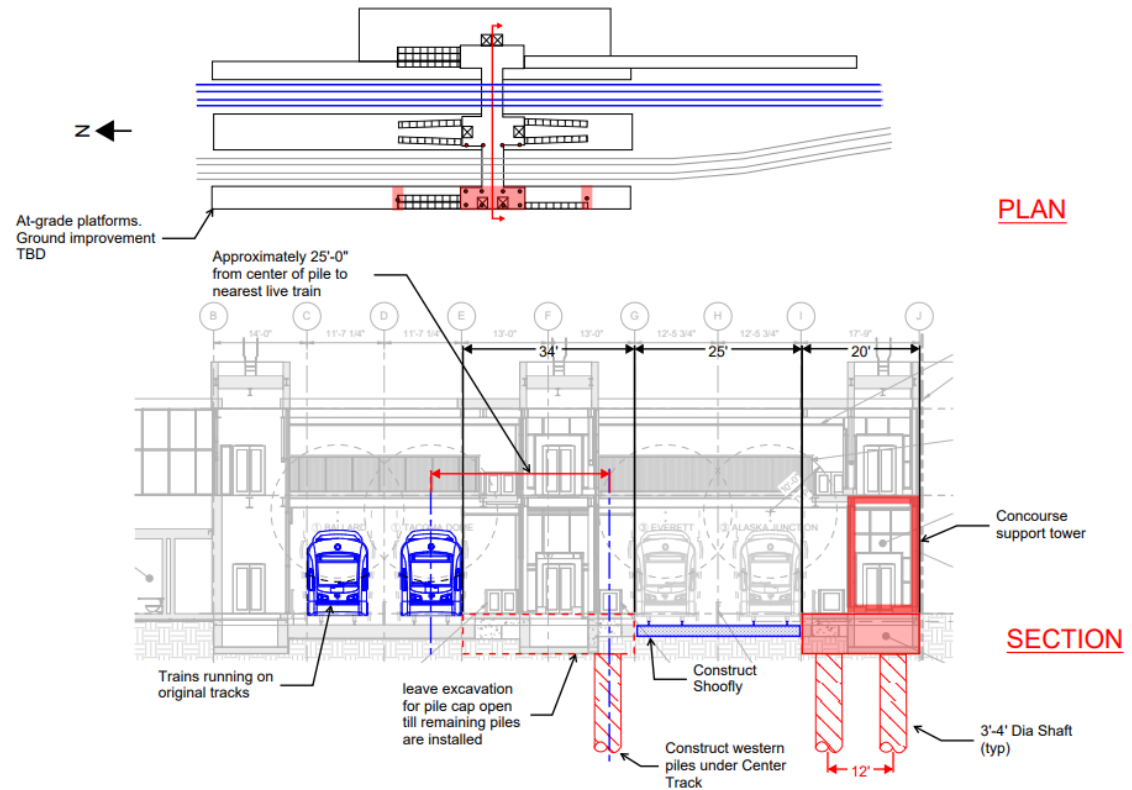
- Part of ST station standard development and optimization efforts.
- Provides cost savings from reduction in concourse level and platform footprints and vertical transportation elements.
- Reduced station footprint and VT leads to SODO Station Foundation Optimization opportunity (WSLE 28).

~\$100-130m

Target savings

## Benefits

- **Significant schedule benefit** if revised shoofly can be realized
- Ensures **safe construction** adjacent to active rail line
- Considers design of Lander and Holgate overpass bridges
- **Maintains passenger experience** from PE design



# SODO Station Foundation Optimization

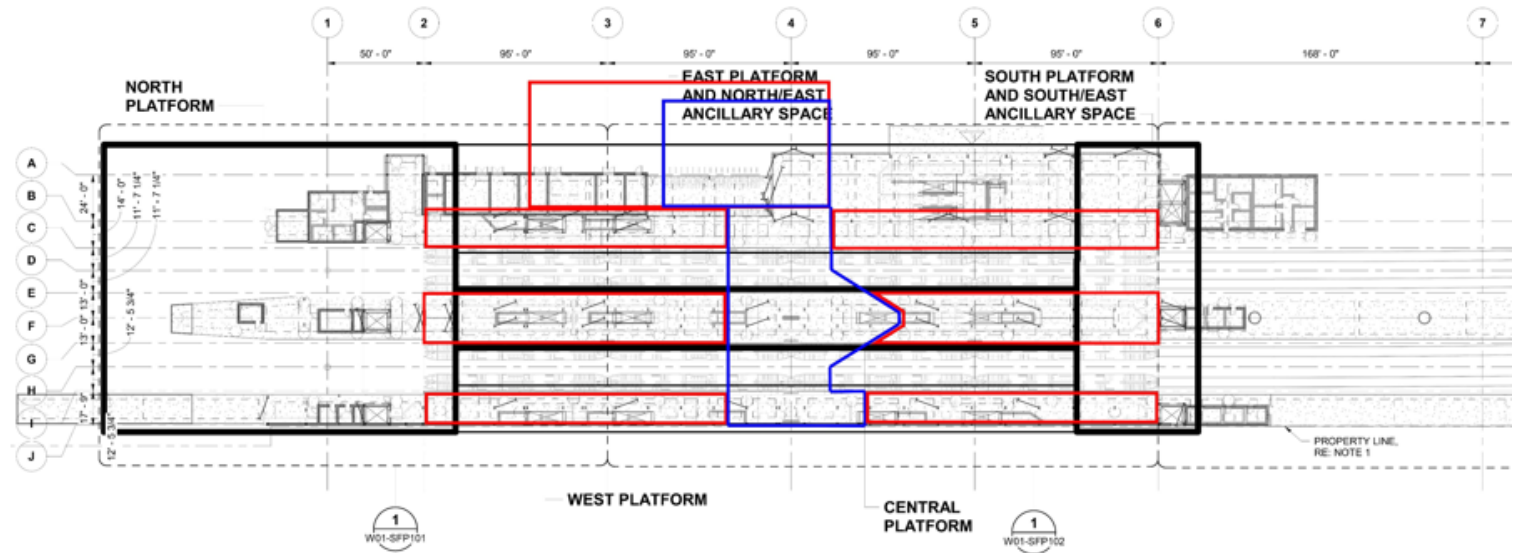
- Assumes and requires SODO Station Optimization reduced station footprint
- Reduced number of drilled shafts may further minimize temporary track. The revised concept would construct the western platform and permanent 3 Line tracks first and then shift 1 Line service directly to the permanent 3 Line tracks once complete.
- Can be combined with SODO Station Optimization to maximize cost savings

**~\$30-35m** Target savings

## Benefits

- Reduced extent of deep foundations **reduces cost and schedule**
- **Improves safety** around active rail lines

» **Shallow Foundations (Revised Station Footprint)**  
» **Deep Foundation (Revised Station Footprint)**



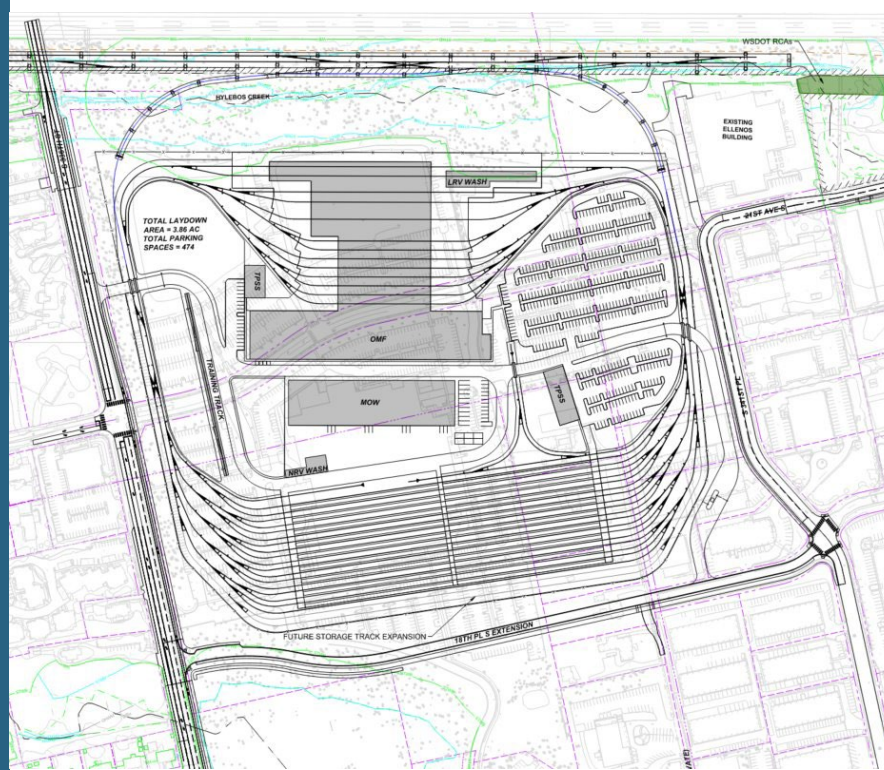
Note: Schematic representation of SODO Station footprint.

## Reduce impacts to wetlands

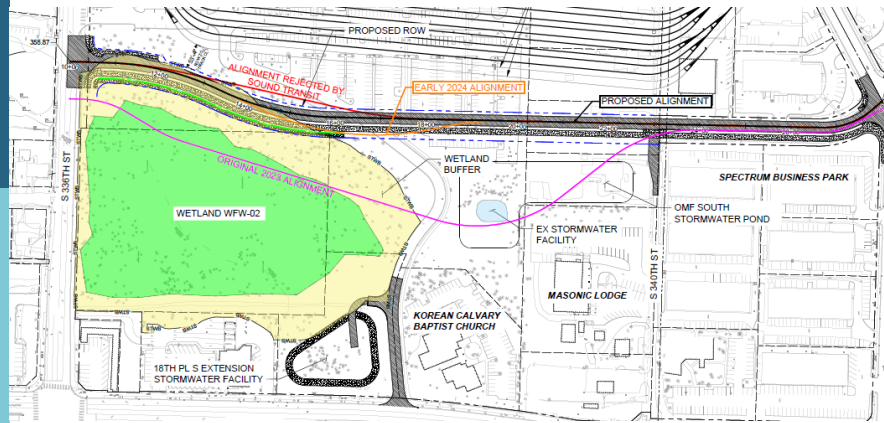
Opportunity realigned 18th Place to eliminate an acre of fill into existing wetlands, avoiding costly wetland mitigation costs.

Over \$200m in total cost saving opportunities have been validated and are being implemented.

Reduced wetland impact target savings: \$22m



## FEIS Preferred Alternative Design



## OMF Cost Savings Opportunities Approach

- Created a maintenance facility program **looking at the facilities together as a network** vs an isolated approach with unneeded duplication of scope
- **OMFN as a site adapt of OMFS**, leverage the OMFS design and consistency of approach, reducing design and implementation time
- **OMFN as an add alternate to OMFS** – leverage economy of scale, remove procurement time time and incentivize contractor performance on OMFS

# Next Steps

- **Next Update: Spring**
  - **Programmatic Opportunity Update**
  - **Financial Update**
- **Workplan quarterly updates continue in the Summer and Fall**



*Thank you.*



 [soundtransit.org](https://www.soundtransit.org)

