

Board Directed Workplan Update

Board of Directors

10/24/2024



Agenda

- *Why we are here*
- *Workplan*
- *Questions and comments*

Why we are here

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.***

Workplan Framework



Team

- Organize and identify teams - program and project
- Identify program management support services
- Project Management, Design, CMC and Contractor



Activities

- Identify and implement opportunities within cost target areas
- Quantify benefits at the project and program level
- Oversee implementation
- Measure, report, inform



Time

- Opportunities tracked across projects, phases and activities
- Multiple points to identify and implement opportunities through iterative design process
- Scheduled points to integrate opportunities

Systematic framework to implement programmatic, financial, and project level opportunities

Programmatic and project opportunity target areas

Target Area	Type of Opportunities
 Indirects	Opportunities for improving soft costs such as professional services across projects and the program
 Design Optimization	Optimization, including value engineering of infrastructure components, operational features, systems configuration and processes
 Market Conditions	Maximizing competition, optimizing contract packaging and delivery strategy, market engagement, and procurement processes
 Right of Way	Opportunities for optimizing real property takes, timing of acquisition and leasing, where practicable
 Construction Efficiencies	Opportunities that reduce materials, labor and equipment resources with safety and public impact benefits

Implement opportunities across cost saving target areas

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

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

WSLE opportunity example: Design Optimization

WE ARE HERE

PLANNING

DESIGN VALIDATION

OPPORTUNITIES

ACTIVITIES

- **Design Optimization:** confirm value engineering opportunities

- Define ROW acquisition strategy
- Award civil design contract

Station prototype application (Programmatic)

- Vertical transport optimization
- Optimize platform widths
- Locate TPSS inside station box

Aerial guideway value engineering

- Pre-cast segmental superstructure
- Span length optimization

Duwamish bridge value engineering

- Substructure improvement
- Pylon configuration
- Pre-cast segmental superstructure

Foundation optimization

- Improving efficiencies of deep foundations
- Rationalizing ground improvement zones

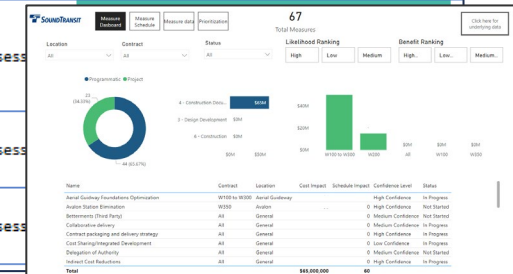
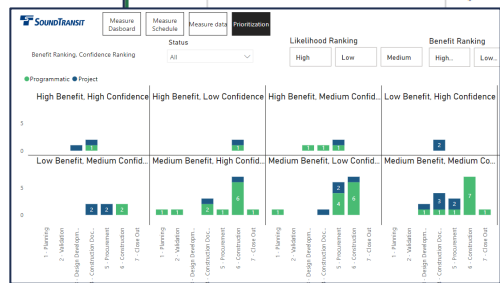
Tunnelling direction

- Schedule improvement
- Community benefits

Workplan: Opportunity performance monitoring

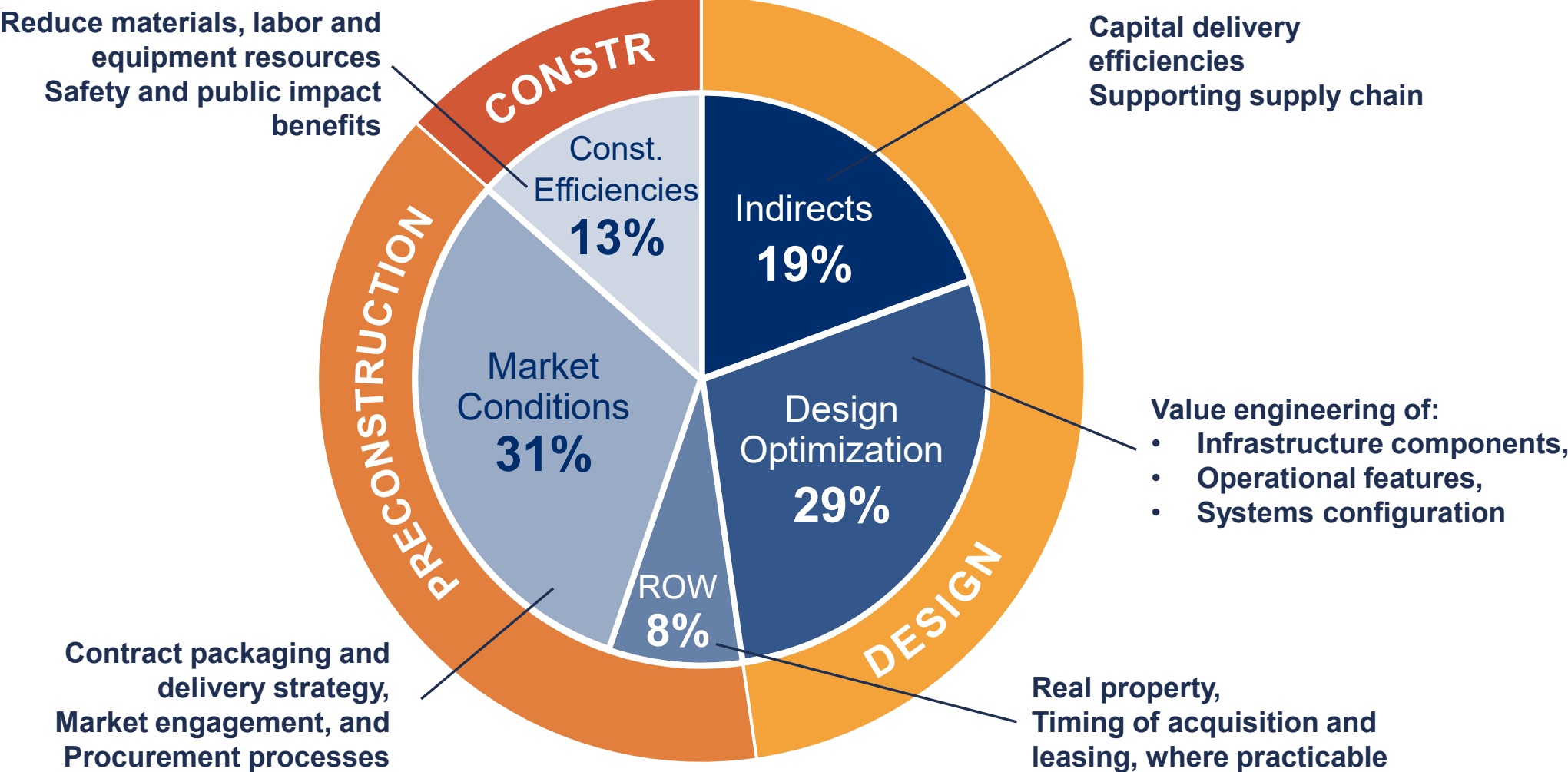
Programmatic and project opportunity dashboards

Measure ID	Name	Description	Location	Contract	Measure Objective ¹	Measure Type ²	Owner	Delegated Authority	Category	SCC	Feasibility Evaluation	Likelihood Ranking ³	Benefit Ranking ⁴	Confidence Level
19	Station Prototype Application	Application of station prototypes to WSLE stations to make stations more affordable.	General	All	Reduce Cost	Project	Joanna Perez		Design Optimization		Needs Assessment	Low	Medium	High
20	Permitting Strategy	Methods to further decrease time related to acquisition of permits, which delay start of construction.	General	All	Reduce Schedule	Programmatic			Indirects		Needs Assessment	Low	High	Low
21	Real Estate optimization	Closely reviewing the parcels required for building WSLE	General	All	Improve Efficiency, Reduce Schedule	Project	Lori Frederick		Right of Way		Needs Assessment	Medium	Low	Medium
22	W200 Span Optimization and Adopting of pre-cast segmental guideway construction.	Optimize span and frame arrangement for W200 long-span elevated guideway structures. Utilize precast segmental modular construction for all typical and long-span elevated guideway structures in W100, W200 and W300. All mainline bridge structures to form one contract to optimize the modularization of the pre-cast segments and attain the benefits from a pre-cast yard.	Aerial Guideway	W100 to W300	Reduce Schedule, Cost, Risk	Project	Marcus Moore		Construction Efficiencies		Needs Assessment	High	High	High
		Implement VE options at SODO Station. Introduce long track arrangement (bypass) to maintain operations and assist with construction sequencing. (ductability benefit). Reduce PE station size and platform and VT configuration	SODO	W100	Reduce Schedule, Cost	Project	Conrad Fawcett		Design Optimization		Needs Assessment	High	High	High
		ation of the Aerial Guideway foundations, ing the pile size and number of piles etc. Subject rming the geotechnical profile, take a ent and standardized approach to the pile 1.2 – Cable stayed bridge with pre-cast	Aerial Guideway	W100 to W300	Reduce Schedule, Cost	Project	Farhad Nourbakhsh		Design Optimization		Needs Assessment	High	High	High
		tal concrete modular box girder deck, as an tive to PE design with CIP superstructure or a alternative	Duwamish Bridge	W200	Reduce Schedule, Cost	Project	Marcus Moore		Construction Efficiencies		Needs Assessment	High	High	High

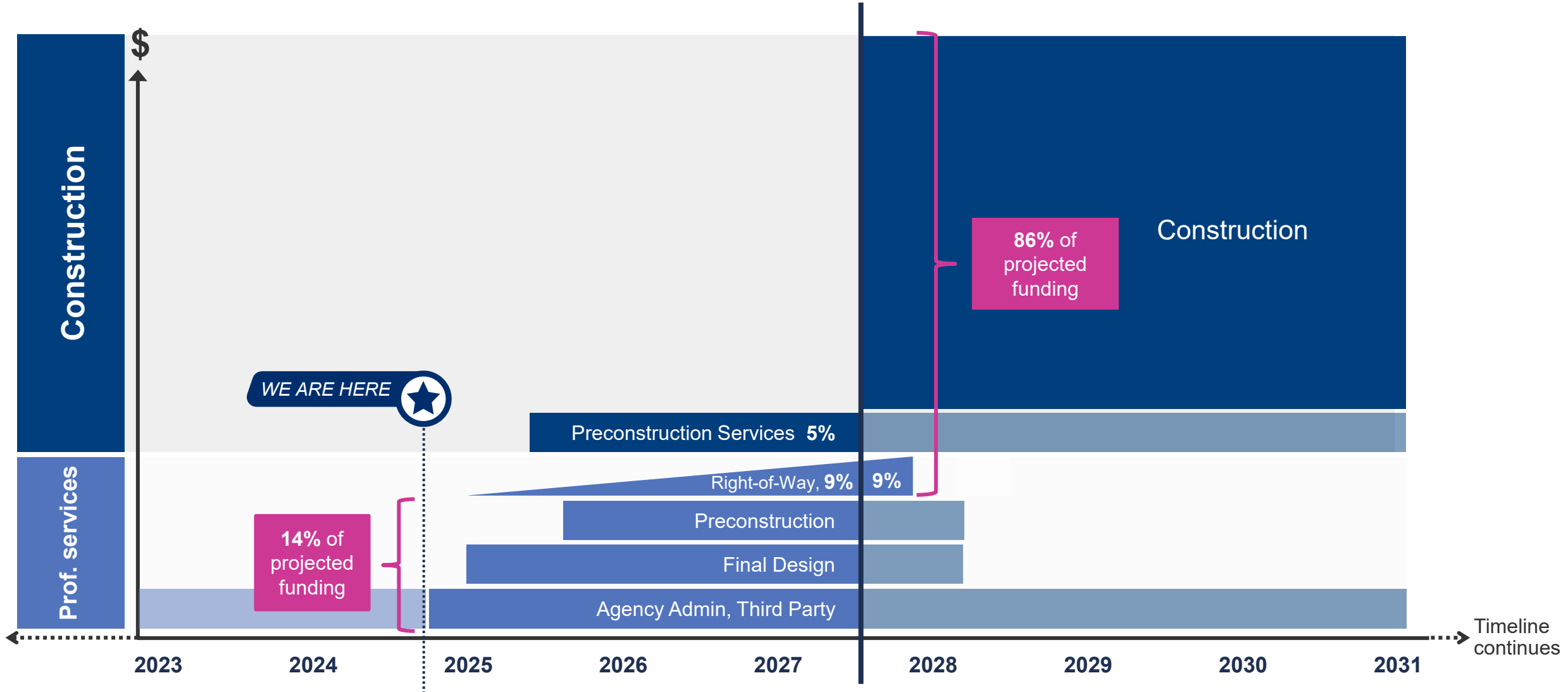


Categorizes opportunities within high – medium – low scales over time (project phases) and provides the magnitude of potential and actual benefits

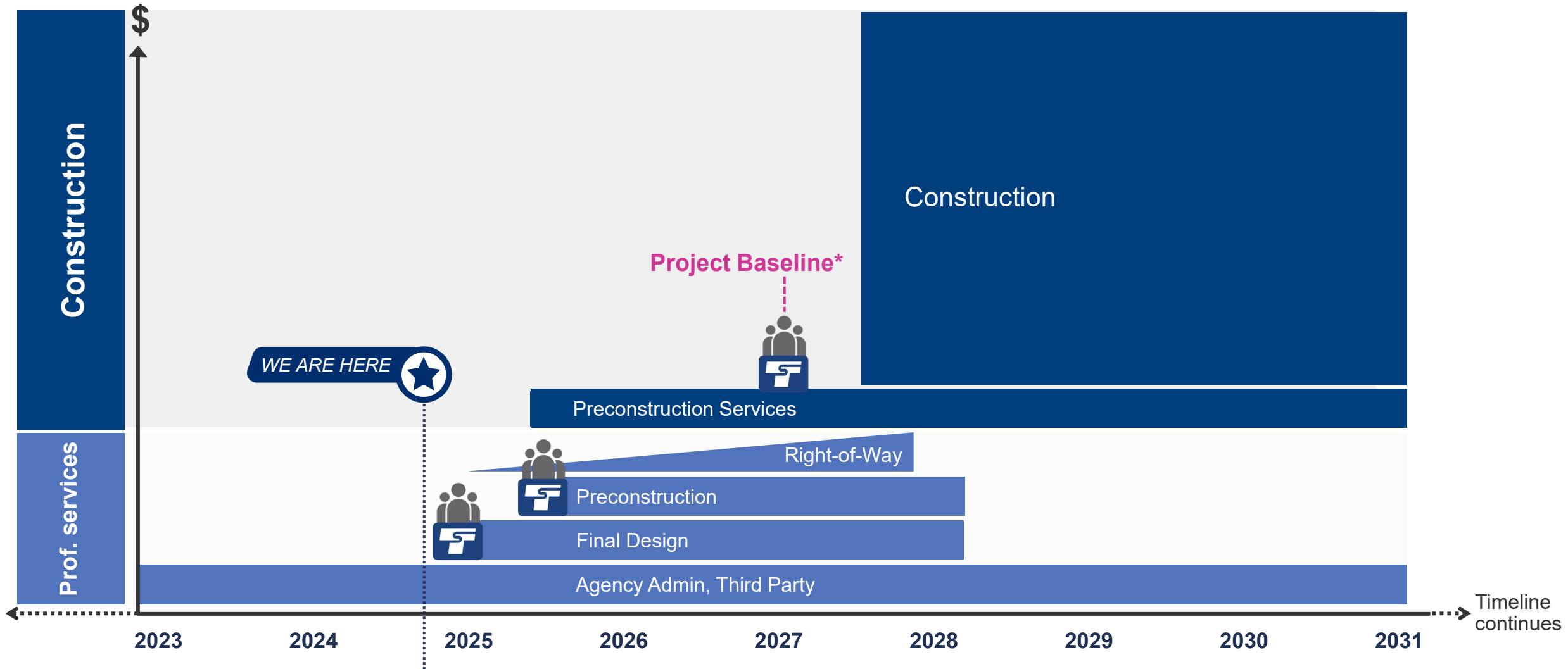
WSLE opportunities by target area and phase



WSLE funding timeline



WSLE Board funding actions



**Project Baseline: The total time-phased budget plan against which change is managed, and performance is measured, whether it be contract, project, or program level.*

Key takeaways

- Systematic framework to inform.
- Identifying and implementing opportunities and benefits across multiple target areas.
- Significant project funding investment occurs at the construction award.
- Significant opportunities (indirects, design optimization and ROW) for WSLE will be vetted as early as Q2 2025 and will continue through design.
- Financial opportunities for the project will be developed and updated as project opportunities are realized, and funding requirements change.

Finance timeline: Phase I

WE ARE HERE



	<i>MOBILIZATION</i>	<i>INITIAL ANALYSIS</i>	<i>OPTIONS EVALUATION</i>	<i>DECISIONS & IMPLEMENTATION</i>
<i>Activities</i>	<ul style="list-style-type: none"> Form cross-functional team with SMEs and financial modelers. Engage investment banking team On-board new financial consultant - Ernst & Young On-going discussion with Build America Bureau Begin modeling of financial options 	<ul style="list-style-type: none"> Present analysis to key stakeholders and Board <ul style="list-style-type: none"> Board Actions Financial Parameters Partnerships Innovative Finance Engage board for feedback on risk management throughout the program 	<ul style="list-style-type: none"> Gather feedback on high priorities from the Board and key stakeholders. Incorporate analysis from capital delivery programmatic and project level work. Implementable scenarios refined and next steps initiated. 	<ul style="list-style-type: none"> Key decisions for implementation made. Policy updates identified and put forth to Board or other governance structures. Actionable next steps, policies and processes updated.
<i>Outcomes</i>	<ul style="list-style-type: none"> Completed timeline of activities and workplan. Identified stakeholders and formed cross-functional team. Drafted project schedule with milestones. 	<ul style="list-style-type: none"> Scenarios run with analysis on range of impacts. Reasonableness of achievement and key assumptions defined. Analysis presented to Board. 	<ul style="list-style-type: none"> Analysis updated and refined. Agreed upon list of prioritized scenarios. Timeline updated and next steps initiated. 	<ul style="list-style-type: none"> Key decisions made, policies and processes updated. Assumptions updated with policies and input in long-range financial plan. Specific actions to achieve assumptions undertaken and executed on.

Finance timeline: Phase II

EARLY Q1 

	MOBILIZATION	INITIAL ANALYSIS	OPTIONS EVALUATION	DECISIONS & IMPLEMENTATION
Activities	<ul style="list-style-type: none"> Form cross-functional team with SMEs and financial modelers. Engage investment banking team On-board new financial consultant - Ernst & Young On-going discussion with Build America Bureau Begin modeling of financial options 	<ul style="list-style-type: none"> Present analysis to key stakeholders and Board <ul style="list-style-type: none"> Board Actions Financial Parameters Partnerships Innovative Finance Engage board for feedback on program risk management Based on feedback, narrow options for further analysis 	<ul style="list-style-type: none"> Gather feedback on high priorities from the Board and key stakeholders. Incorporate analysis from capital delivery programmatic and project level work. Implementable scenarios refined and next steps initiated. 	<ul style="list-style-type: none"> Key decisions for implementation made. Policy updates identified and put forth to Board or other governance structures. Actionable next steps, policies and processes updated.
Outcomes	<ul style="list-style-type: none"> Completed timeline of activities and workplan. Identified stakeholders and formed cross-functional team. Drafted project schedule with milestones. 	<ul style="list-style-type: none"> Scenarios run with analysis on range of impacts. Reasonableness of achievement and key assumptions defined. Analysis presented to Board. 	<ul style="list-style-type: none"> Analysis updated and refined. Agreed upon list of prioritized scenarios. Timeline updated and next steps initiated. 	<ul style="list-style-type: none"> Key decisions made, policies and processes updated. Assumptions updated with policies and input in long-range financial plan. Specific actions to achieve assumptions undertaken and executed on.

Finance timeline: Phase III

Q2/Q3 2025



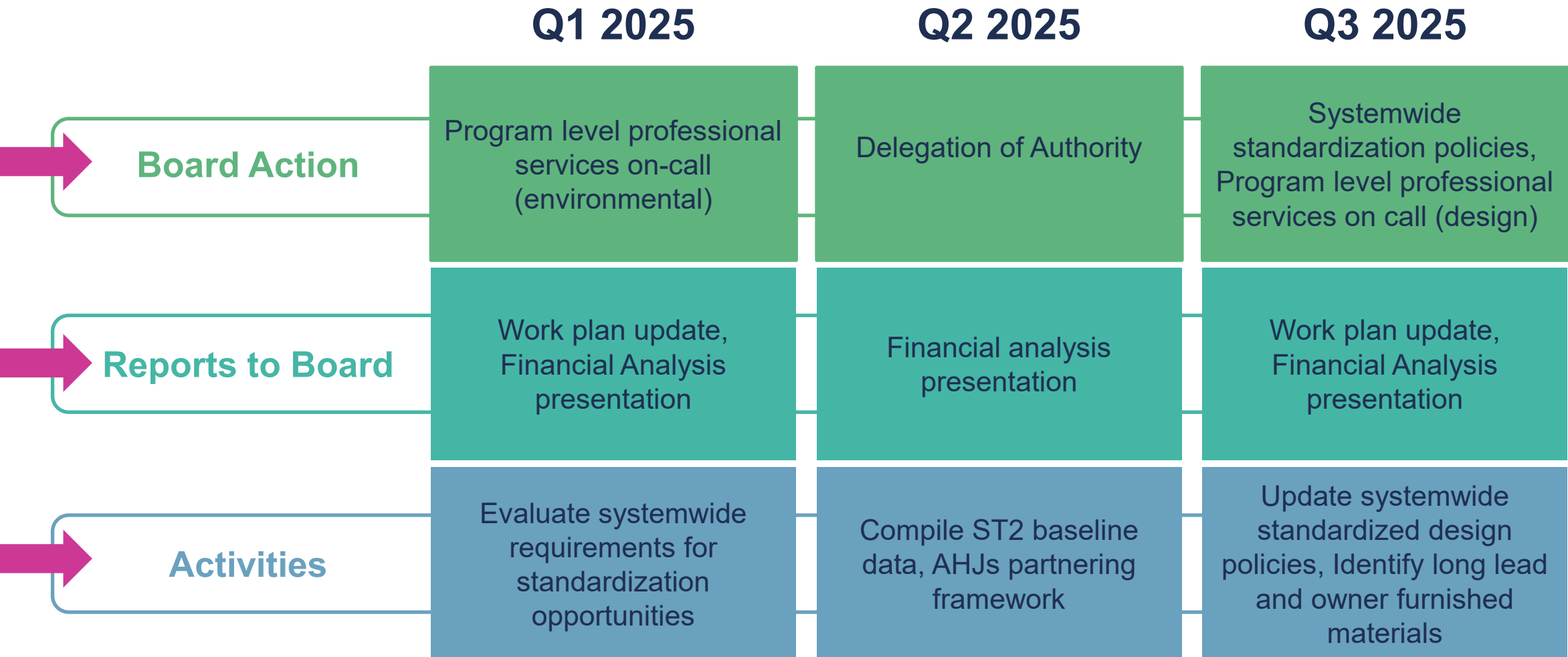
	MOBILIZATION	INITIAL ANALYSIS	OPTIONS EVALUATION	DECISIONS & IMPLEMENTATION
Activities	<ul style="list-style-type: none"> Form cross-functional team with SMEs and financial modelers. Engage investment banking team On-board new financial consultant - Ernst & Young On-going discussion with Build America Bureau Begin modeling of financial options 	<ul style="list-style-type: none"> Present analysis to key stakeholders and Board <ul style="list-style-type: none"> Board Actions Financial Parameters Partnerships Innovative Finance Engage board for feedback on program risk management Based on feedback, narrow options for further analysis 	<ul style="list-style-type: none"> Gather feedback on high priorities from the Board and key stakeholders. Incorporate analysis from capital delivery programmatic and project level work. Implementable scenarios refined and next steps initiated. 	<ul style="list-style-type: none"> Key decisions for implementation made. Policy updates identified and put forth to Board or other governance structures. Actionable next steps, policies and processes updated.
Outcomes	<ul style="list-style-type: none"> Completed timeline of activities and workplan. Identified stakeholders and formed cross-functional team. Drafted project schedule with milestones. 	<ul style="list-style-type: none"> Scenarios run with analysis on range of impacts. Reasonableness of achievement and key assumptions defined. Analysis presented to Board. 	<ul style="list-style-type: none"> Analysis updated and refined. Agreed upon list of prioritized scenarios. Timeline updated and next steps initiated. 	<ul style="list-style-type: none"> Key decisions made, policies and processes updated. Assumptions updated with policies and input in long-range financial plan. Specific actions to achieve assumptions undertaken and executed on.

Next steps: WSLE

	Q1 2025	Q2 2025	Q3 2025
Board Action	Approve Engineering design services contract	Critical Early ROW acquisition	Approve Systems design contract and Preconstruction contracts
Reports to Board	Work plan update	Financial analysis presentations	Work plan update
Activities	Comprehensive risk and value engineering assessment, Design validation and optimization	Third Party Agreements, Procure ROW	Qualitative Risk Assessment, Incorporate design optimization

Program level measures and opportunities

Next steps: programmatic



Program level measures and opportunities

Questions



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

