

Updates on Project Delivery Challenges + Next Steps

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Project Delivery Framework

- Project Delivery represents more than 50% of the Agency's work
- Over the last four months we have taken a more comprehensive internal look at our approach and execution to delivery.
- This was triggered by portfolio-wide risks identified in design quality, scope creep, contract management practices, risk management/mitigation tools

Agenda

- Legacy of HB2017 on Project Delivery
- Project delivery **work plan** progress
- On time and on budget **performance**
- Where we are **missing** the mark
- Commitments to **improve** delivery
- **Next 6 months** and beyond

Why we are here today?

- Imbalance of costs vs funding on notable projects
- Portfolio-wide risks identified in design, scope creep, contract management practices, risk management and mitigation tools
- Reflections on HB2017-related commitments for portfolio delivery
- Leadership recognition that changes are needed in project delivery approach and execution
- OTC feedback and concerns raised about scope, schedule, budget discipline
- We are seeking your feedback in order to make continuous improvement

Legacy of HB2017:

Commitment to project delivery improvement

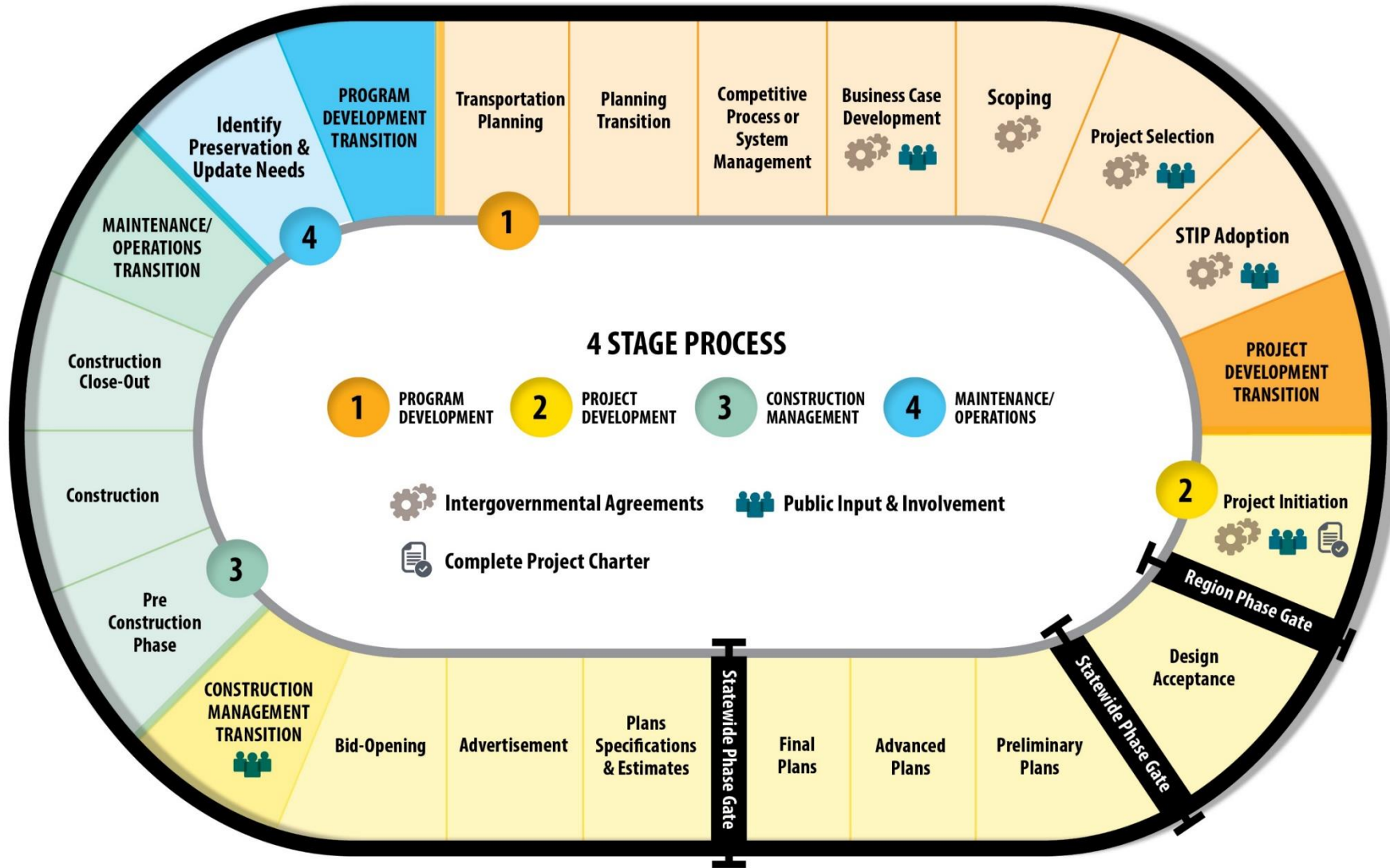
- **December 2018 OTC meeting** → Launch of Division reorganization and establishment of Statewide Project Delivery Branch
- **May 2019 OTC meeting** → Establishment of project delivery workplan
- **June 2019 OTC meeting** → STIP Rebalance

Project Delivery Progress: Outcomes Since 2019

- Added tools currently in use:
 - Constructability Reviews
 - Value Engineering Workshops
 - Cost/Risk Assessments
 - Project Delivery Controls
 - Project Charters
 - Change Management Requests
 - Design Phase Stage-Gates
- Projects are delivered on schedule more than 90% of the time.
- 90% of projects are delivered within 10% of construction contract amount.

TRANSPORTATION SYSTEM PROJECT LIFECYCLE

Project Delivery Lifecycle Changes



Project Development Programs

Constructability Reviews

One-on-One Contractor Interviews

OR 34 Van Buren Bridge

- DOWL

I-84: McCord Creek Bridge

- DEA Inc.

US30: Troutdale (Sandy River)

US 101: Gold Beach (Rogue River) Bridge

OR 22: Center Street Bridge

- DOWL

Cost Risk Assessment

Facilitation & Risk Profile Modeling

I-5 over 26th Ave

- Value Management Strategies (VMS), DEA Inc.

US 26 Outer Powell

- HDR
- Murray Smith
- Value Management Strategies

US 97 Lower Bridge Way

- Parametrix
- Kittelson & Associates
- Value Management Strategies

Newberg Dundee Bypass P2A

- DEA Inc.
- GRI
- DKS & Associates
- Murray Smith

I-84 McCord Creek Bridge

- DEA Inc.

US 97 Earl St : Colfax Ln

- Consor Engineers
- Casso Consulting
- Shannon & Wilson
- HDR

Value Engineering

Workshop Facilitation

US 101 Gold Beach Bridge

- Value Management Strategies
- HDR
- Tennis Engineering

I-205 Improvements Phase 2

- HDR, Quincy Engineering, Value Management Strategies, DOWL, DKS & Associates, CDM Smith

OR 22 Center St Bridge

- DOWL, GRI, WSP, Value Management Strategies

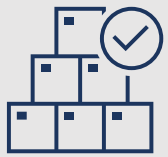
US 101: Astoria-Megler Bridge

- Animal Solutions, OSU, WDFW, ODFW, WSDOT, Cowlitz Tribe, CRITFC, Audubon Portland, NW Council, NOAA, FHWA, USACE, USDA, Willamette River Keeper

I-5 Marquam-East Burnside

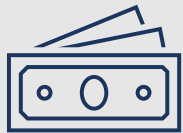
- DOWL, VMS, DEA Inc.

Scale of our portfolio: Projects constructed 2019 - 2023



325

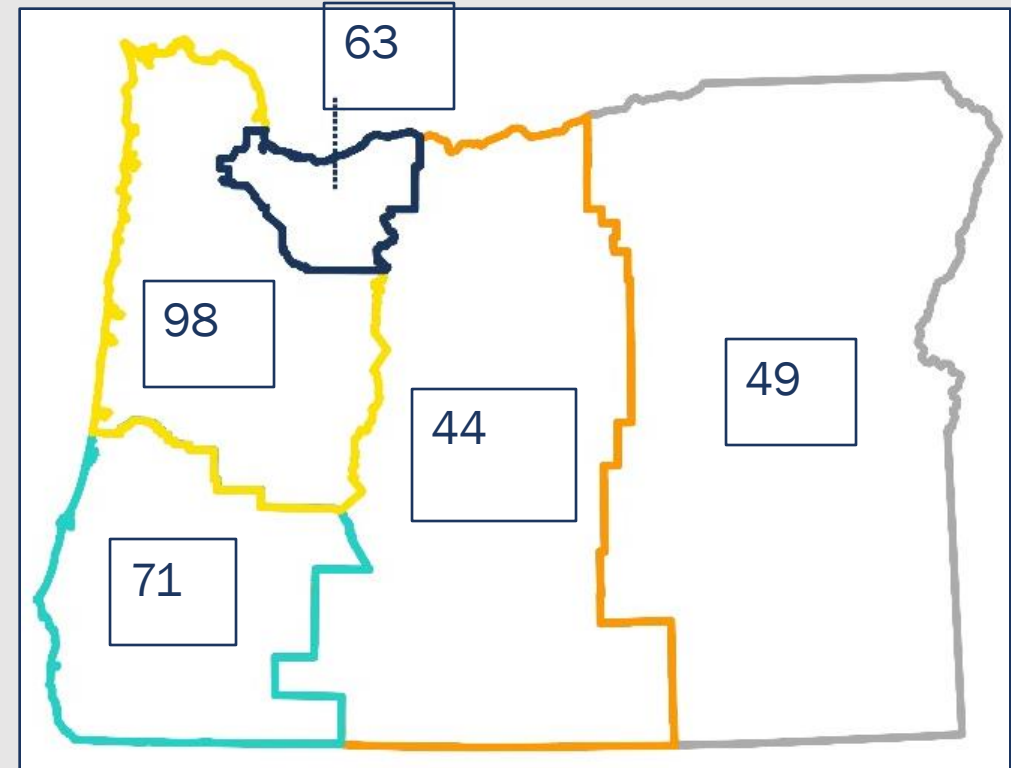
Projects constructed (25 on local system)
over three STIP cycles



\$2.15 billion

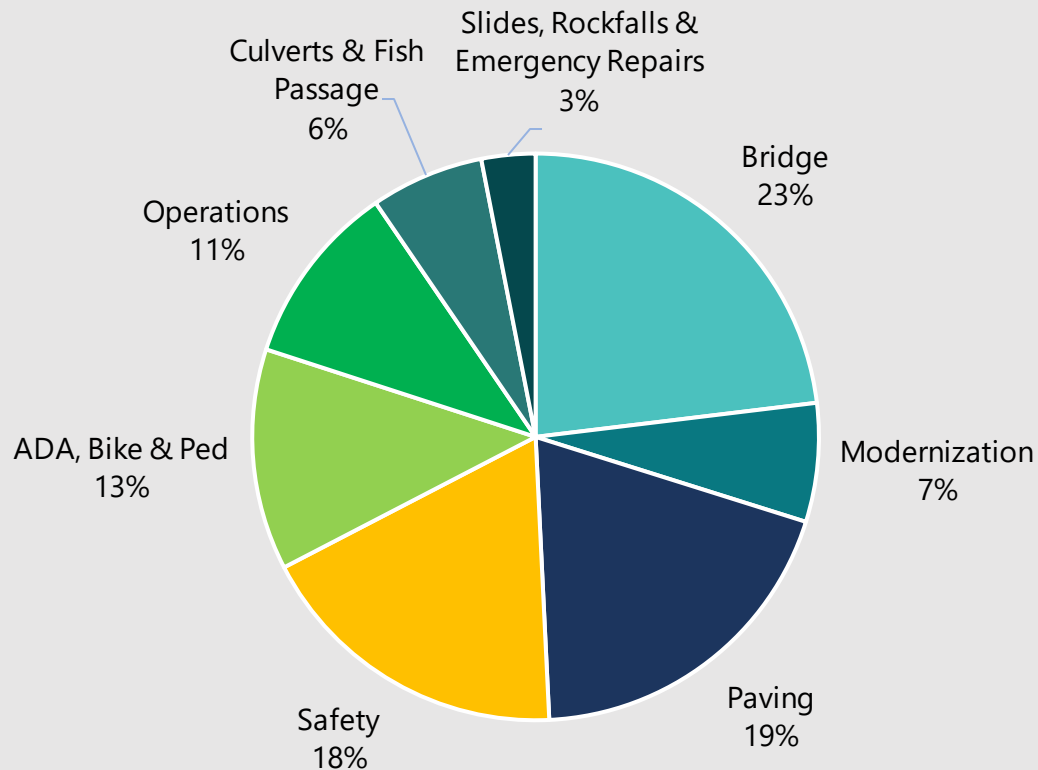
Estimated value of these project

Project breakdown by region

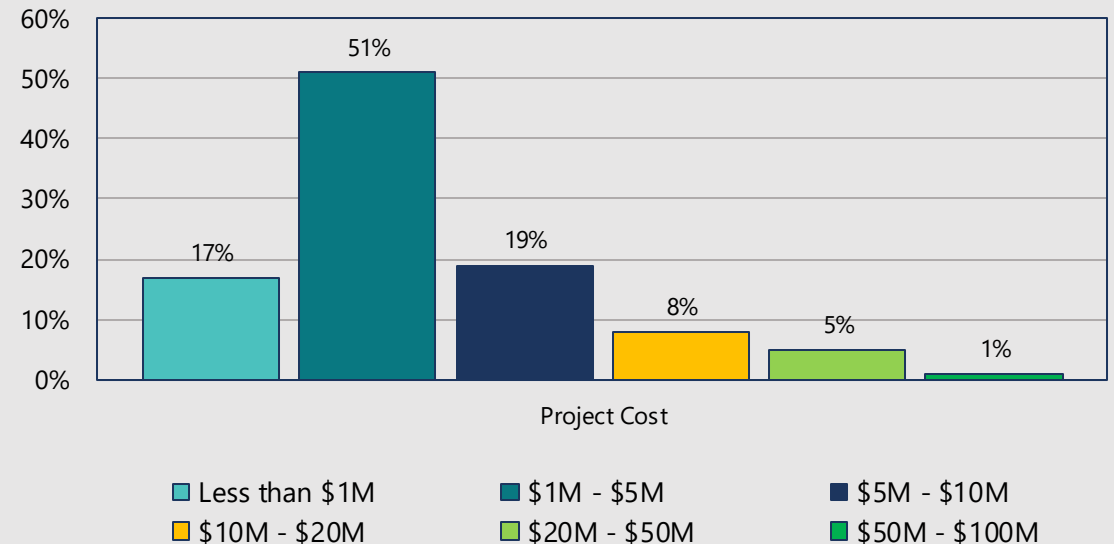


Scale of our portfolio: Projects constructed 2019 - 2023

Portfolio by Work Type

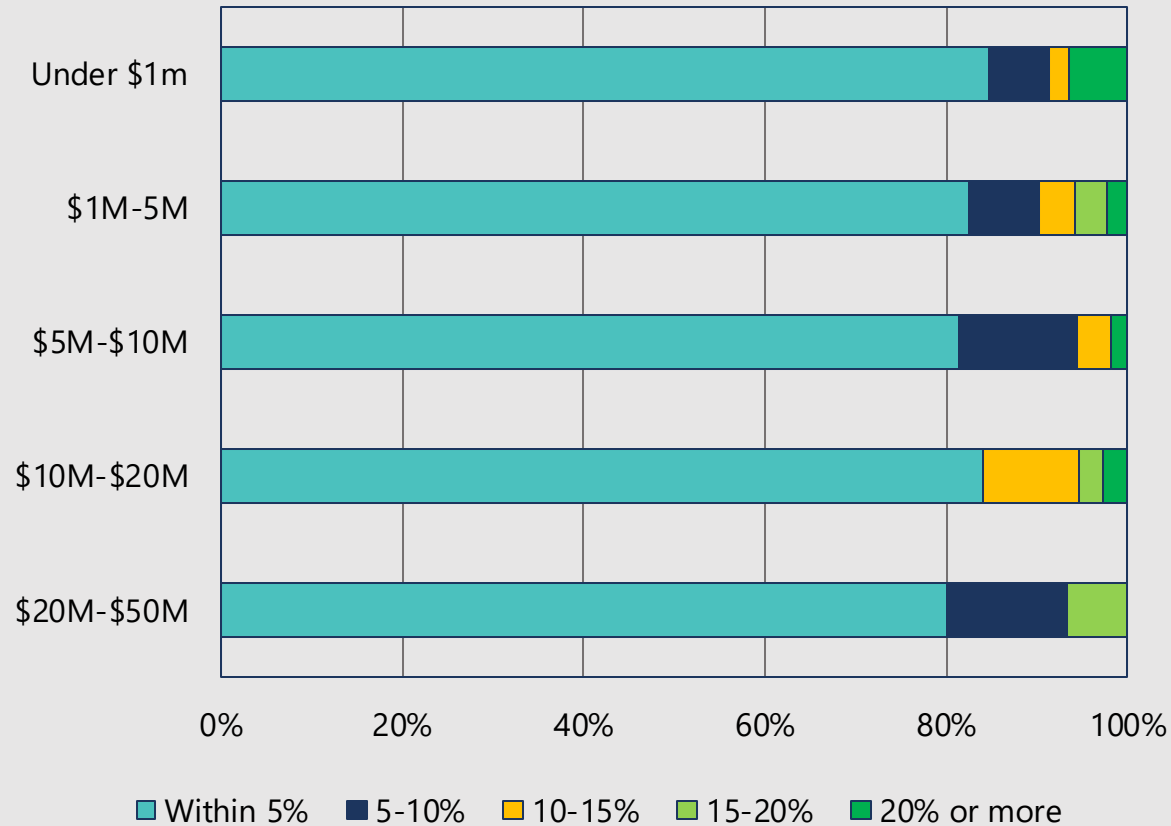


Portfolio Breakdown by Project Cost



On-Budget Construction Performance Breakdown: Budget Overage from Contract to Construction Completion

On-Budget Performance, by Project Cost



Budget	Project Count
Under \$1M	46
\$1M-5M	172
\$5M-\$10M	54
\$10M-\$20M	38
\$20M-\$50M	15
\$50M-\$100M	0
\$100M+	0
Total	325

Bridge Project Roundup: 2019-2023



75

Bridge projects constructed



23%

Total Portfolio



\$540 million

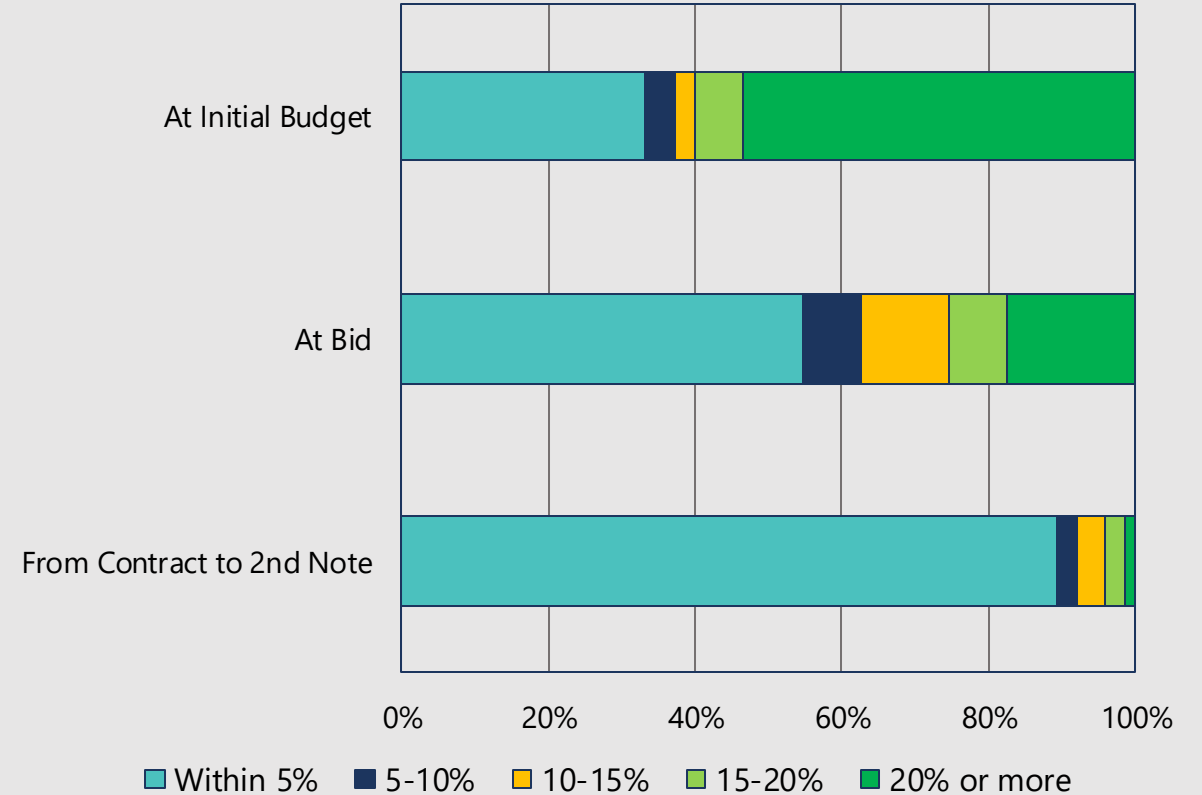
Total Project Value



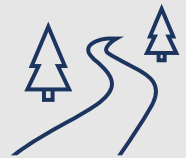
\$750K – 50M

Range in total project cost

Bridge On-Budget Performance



Paving Project Roundup: 2019-2023



63

Paving Projects constructed



19%

Total Portfolio



\$588 million

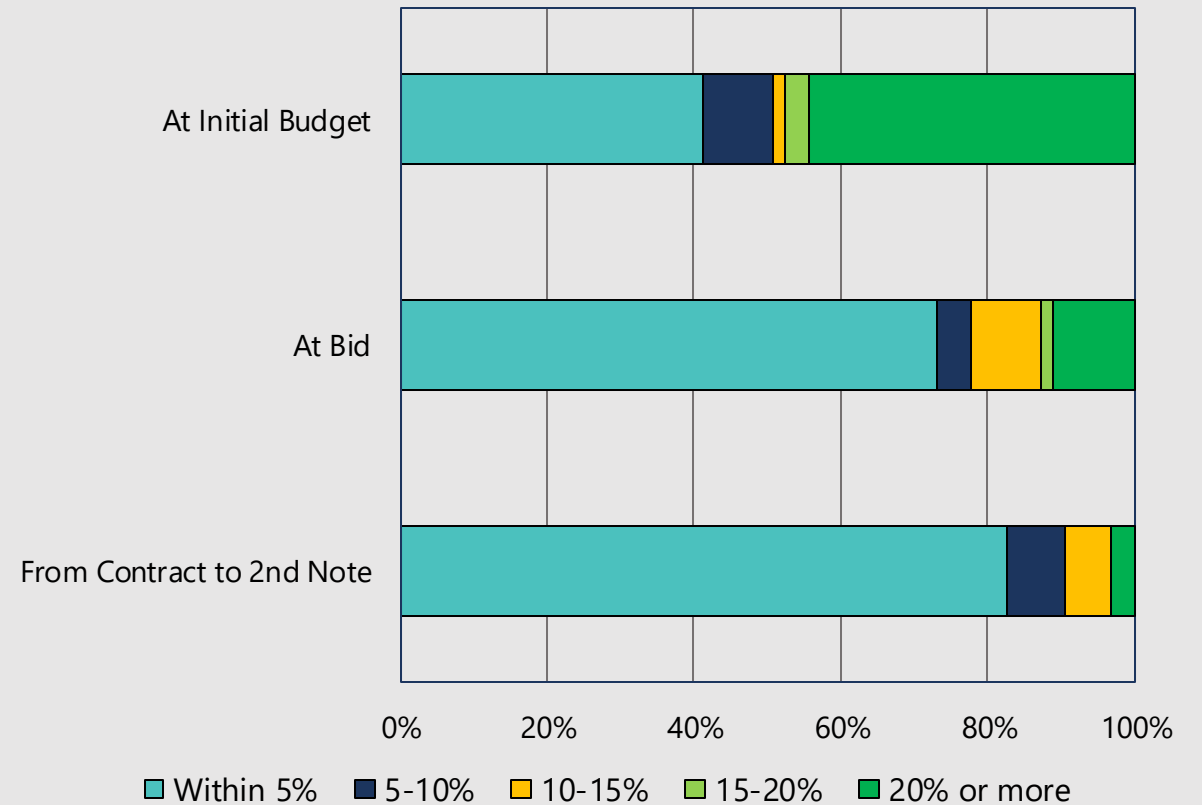
Total Project Value



\$1M – 45M

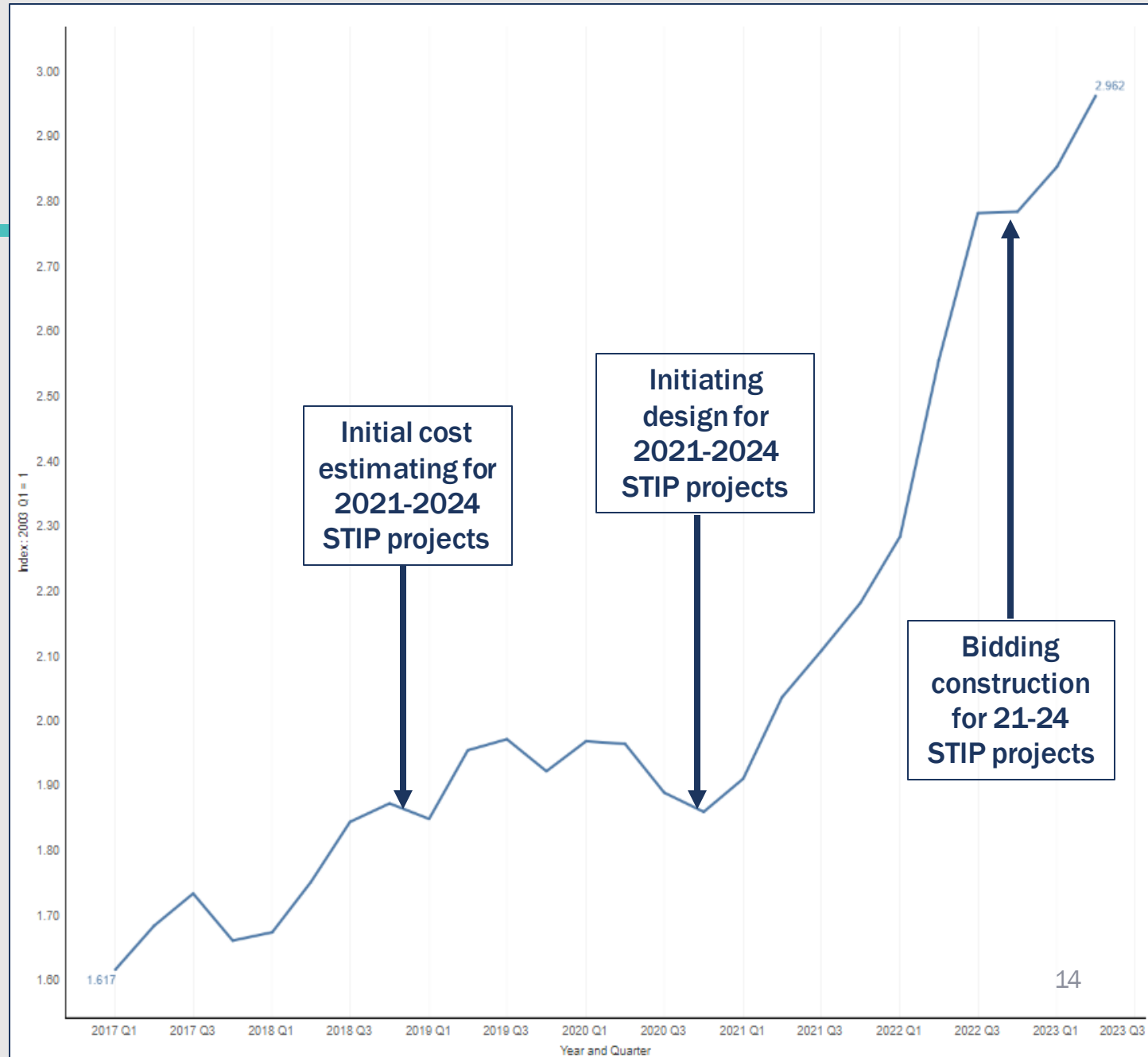
Range in total project cost

Pavement On-Budget Performance



National Trends

FHWA, National Highway
Construction Cost Index
Q4 2016 - Q3 2023



Cost increases from STIP adoption to project construction

- Added scope and funding for local program partnerships, bundled projects.
- Unanticipated conditions encountered through field investigation.
- Regulatory changes.
- Market conditions not adequately addressed by projected inflation.
- **Contingencies budgeted at STIP adoption are insufficient to address opportunities, risks, unknowns and limited site information.**

Project Delivery Challenges: Internal

- **Bridge:**

- Higher frequency of cost overruns as compared to other project types
- Risk Management
- Phasing and Constructability

- **Contract Management:**

- Multi-season projects
- Staffing, training, support
- Risk guidance

- **Risk Management:**

- Lack of adequate tools to manage budget for known construction-phase risks identified in design.

- **Accountability:**

- Insufficient measures for portfolio management – at region and program level.

- **Fund Management:**

- Frequency of scope changes and cost increases during project design phase.
- Refinement needed for STIP cost estimating practices.
- Cost management practices during design are insufficient.

Project Delivery Challenges: External

- Market conditions
- Workplace transitions
- Staff turnover – particularly in construction offices
- Fewer contractors, less competition – averaging 1.5 fewer bidders per project

Improvement Actions

Internal

- *Pause on project specific STIP amendments*
- *Project specific reviews*
- *New expectations and direction to regions and program managers*
- *Establishing portfolio tracking tools*
- *Monthly portfolio review meetings for regions and programs*
- *Aligning 24-27 STIP with anticipated cash flow and revisiting delivery strategy to address known cost exposure*
- *Establish risk-conscious approach to cost estimating and programming 27-30 STIP*
- *Developing a strategy to expand use of design-build and CMGC contracting methods*

External

- *Working with FHWA on a review of Bridge Program – design quality, delivery program, mega projects*
- *Preparing for external audit of project delivery and construction management program*
- *Contracting owner’s representative resources to support megaproject delivery*
- *Engagement with CIAC for feedback*

Action →

**Pause on project-specific
STIP amendments and
review of projects with
pending cost overruns**

Objectives:

- Ensure portfolio-wide alignment on project delivery priorities and expectations before adding funds to current projects.
- Consider alternatives to amending the project funding, to develop project specific delivery strategy in partnership between region, program and division.

Status:

In place as of January 2024 with goal of identifying path forward for each individual project by May 2024.

Action →

Portfolio management expectation setting and support

Objectives:

- Establish clear expectations and documented direction on managing portfolio of capital improvement projects within allocated budget and on time.
- Ensure the division has tools and resources in place to readily review and assess the fiscal and delivery schedule health of whole portfolio.
- Ensure division is well-versed in use of the tools to help meet delivery expectations.

Status:

Initiated in January 2024 with discussion underway on policy to address 1) projects in construction, 2) projects approaching construction, 3) projects initiating design.

Target delivery of tools and training – summer 2024.

Action →

Initiate portfolio review meetings

Objective:

- Review fiscal health and delivery schedules for region portfolios, discuss risk management and mitigation strategies to ensure projects are on track for on-time, on-budget delivery as aligned with priorities of division, agency.
- Ensure project issues and risks are elevated and addressed.

Status:

Slated to begin March 2024

Action →

External Audits of ODOT Bridge Delivery Program

Objectives:

- Evaluate and recommend improvements to statewide policies, procedures and manuals related to Bridge Program, i.e. project scope, schedule, budget, and quality, across the range of STIP project sizes, types as well as responsibilities for design and project management.
- Review systems for project selection and make recommendations on improvements
- Review standard specifications, construction contracting procedures, resources and structures, to make recommendations for improvements to construction phase delivery.

Status:

- **FHWA review** – scope of work discussion initiated in February 2024 with goal to receive recommendations from FHWA in summer or fall 2024.
- **3rd party review** to be initiated

Action →

Establish delivery strategy for 24-27 STIP to address known cost exposure

Objective:

- Ensure unified, division-wide approach to address known cost exposure for 24-27 STIP projects estimated in 2020, programmed in 2021 and slated for construction 2025-2028.

Status:

Discussions initiated in February 2024 and approach to be resolved by fall 2024

Action →

Establish alignment for cost estimating and programming strategy for 27-30 STIP

Objective:

- Provide unified, agency-wide approach to address design progression, project management efforts, construction contract management and cost-risk in estimating and programming, ensuring projects are programmed for complete delivery, from design through construction completion.

Status:

Discussions initiated in February 2024 and approach to be resolved by December 2024.

2024 Commitments

- OTC Operations Report portfolio performance snapshot
- Delivery & Operations external dashboard
- Resolution of strategy to deliver legacy projects
- Approach for 24-27 delivery – on budget, on time
- Programming strategy for 27-30 STIP to ensure on budget, on time
- FHWA audit recommendations
- Communications plan to share status updates with the OTC and others
- Establish accountability metrics in collaboration with CIAC and OTC
- Engagement with CIAC



Thank you
