



# ***Project Delivery Performance Improvement***

Report to the  
Oregon Transportation Commission

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## ***Purpose***

- Describe project delivery process and measures
- Identify strategies to improve the project delivery process
- Extend OTIA productivity gains to regular STIP program
- Identify strategies to deliver another large program



## ***Schedule***

Overview

Planning

Design (kick off through Design  
Acceptance Phase)

Design (Design Acceptance Phase  
through Plans, Specifications & Estimates)

Bid & Award

Construction

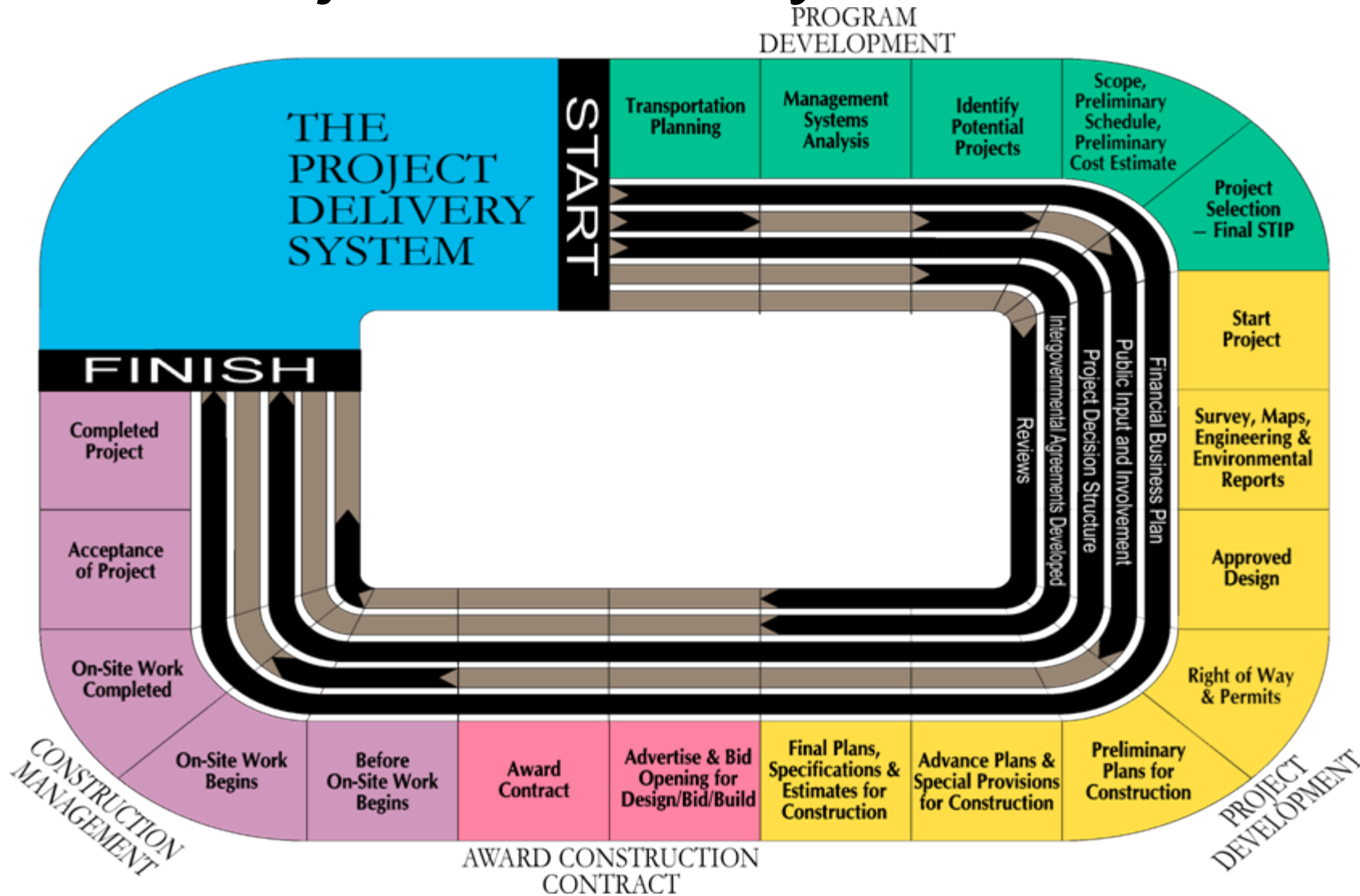


## ***Overview***

- Project lifecycle
- Major project delivery components
- Descriptive statistics
- Highway Division Approach
- Set stage for remaining presentations



# Project Delivery Process





# Duration of each phase

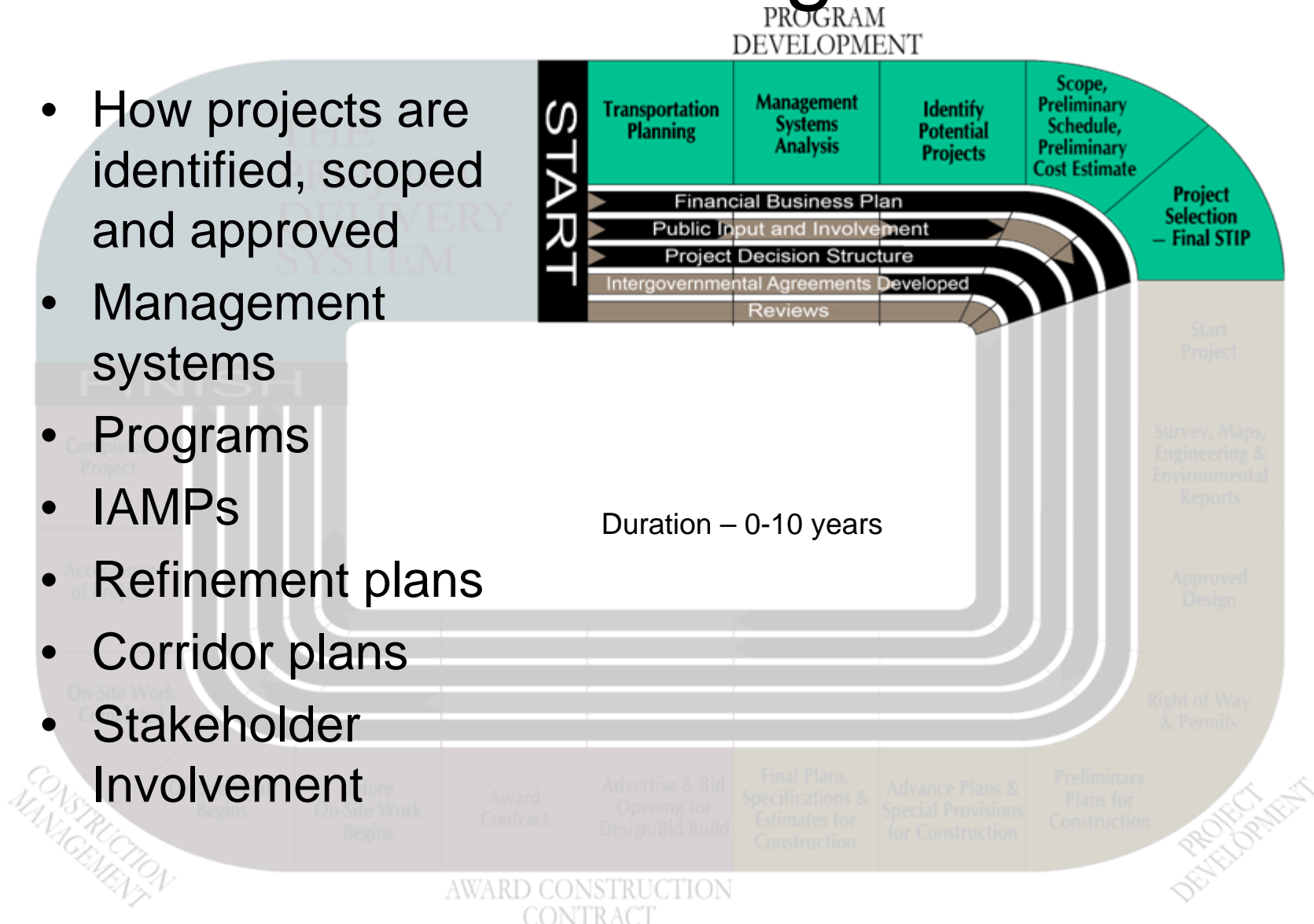
- Plan: 0-10 years
- Design: 3 months - 10 years
- Build: 6 months - 4 years
- Operate/Maintain: 10-100+ years

Preservation projects, low duration is for pave-only



# Planning

- How projects are identified, scoped and approved
- Management systems
- Programs
- IAMPs
- Refinement plans
- Corridor plans
- Stakeholder Involvement

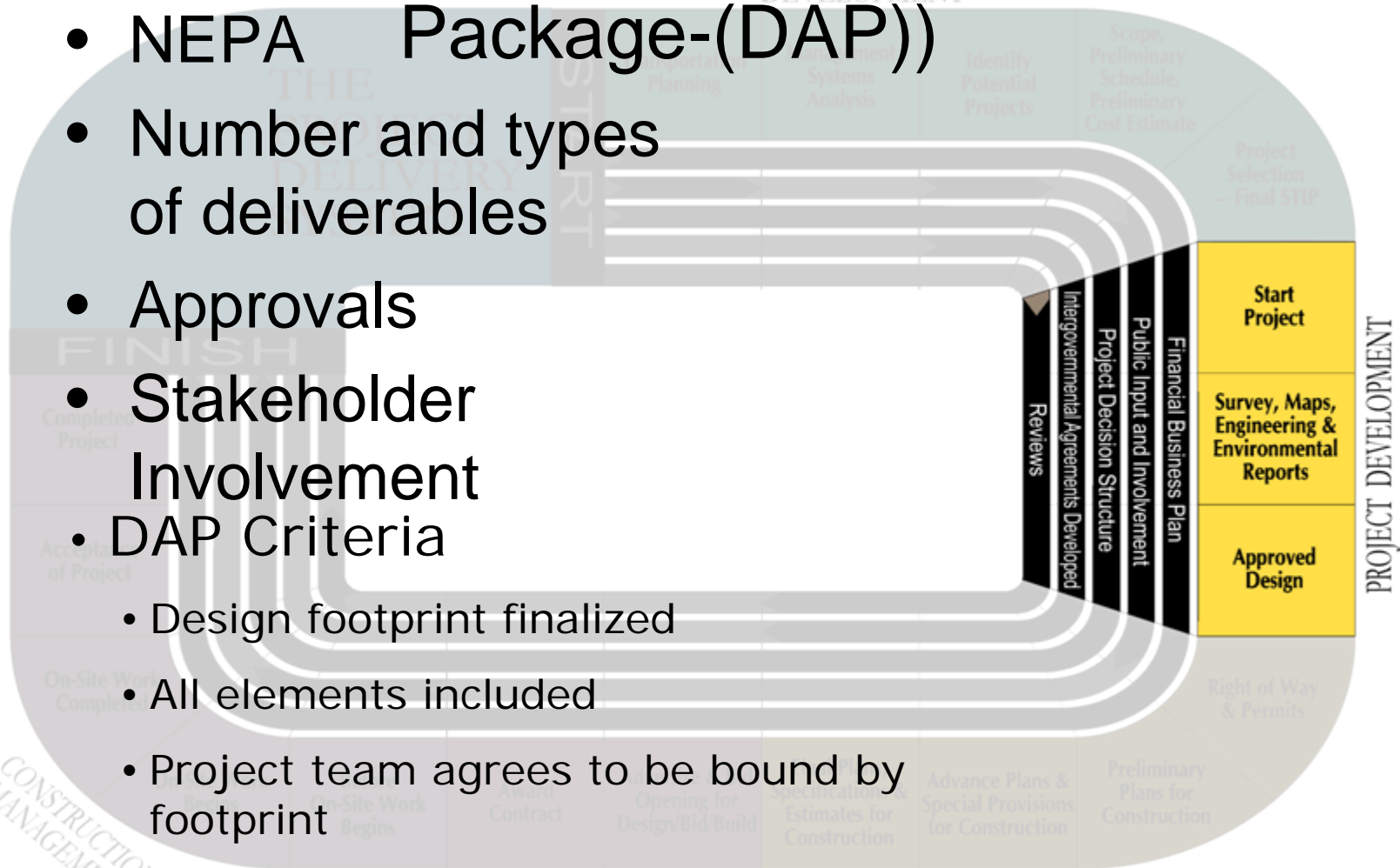




# Design

(Kick-off through Design Acceptance

- NEPA Package-(DAP))
- Number and types of deliverables
- Approvals
- Stakeholder Involvement
- DAP Criteria
  - Design footprint finalized
  - All elements included
  - Project team agrees to be bound by footprint
  - Area Manager, Tech Center Manager certify

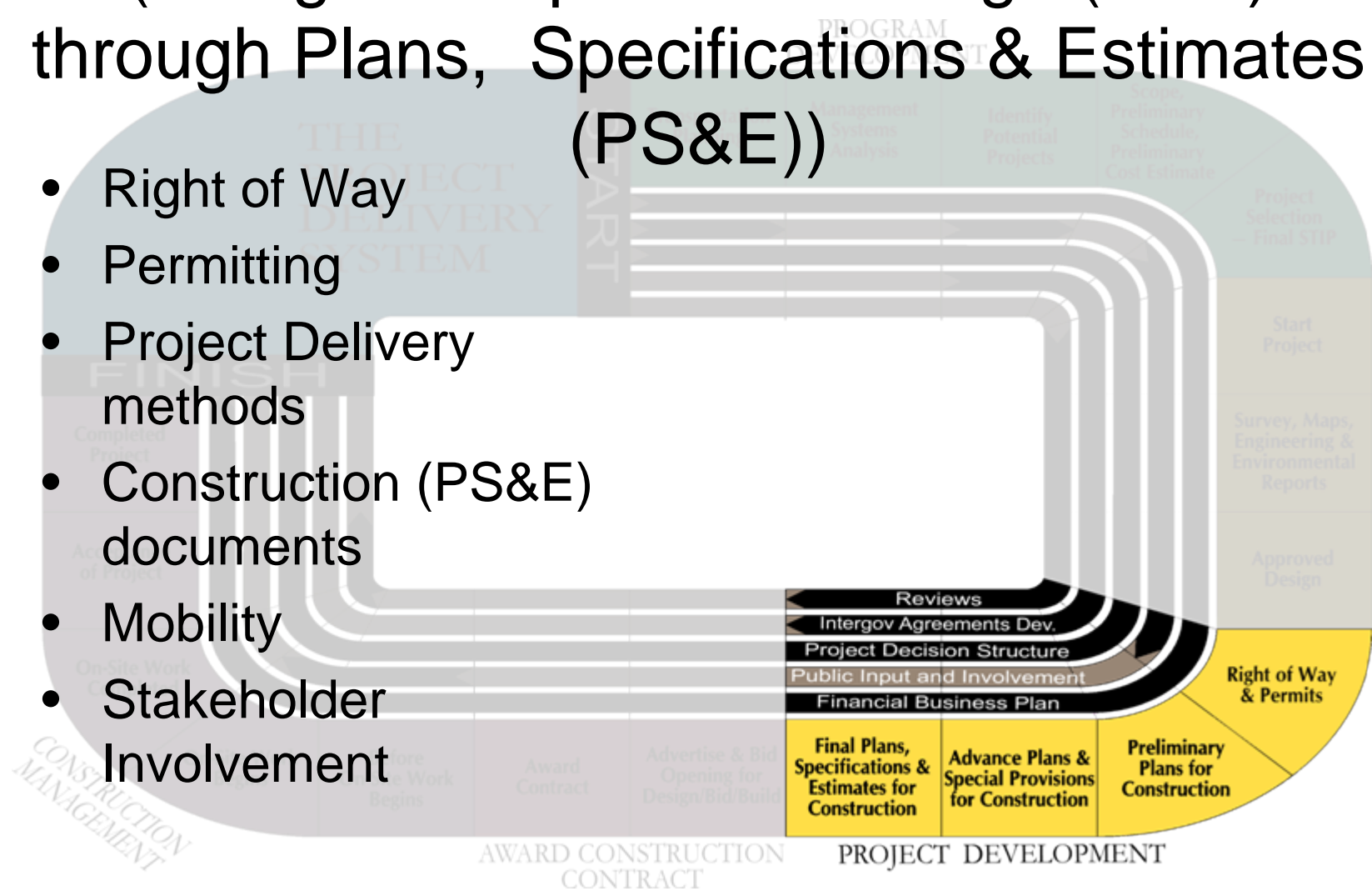




# Design

(Design Acceptance Package (DAP) through Plans, Specifications & Estimates (PS&E))

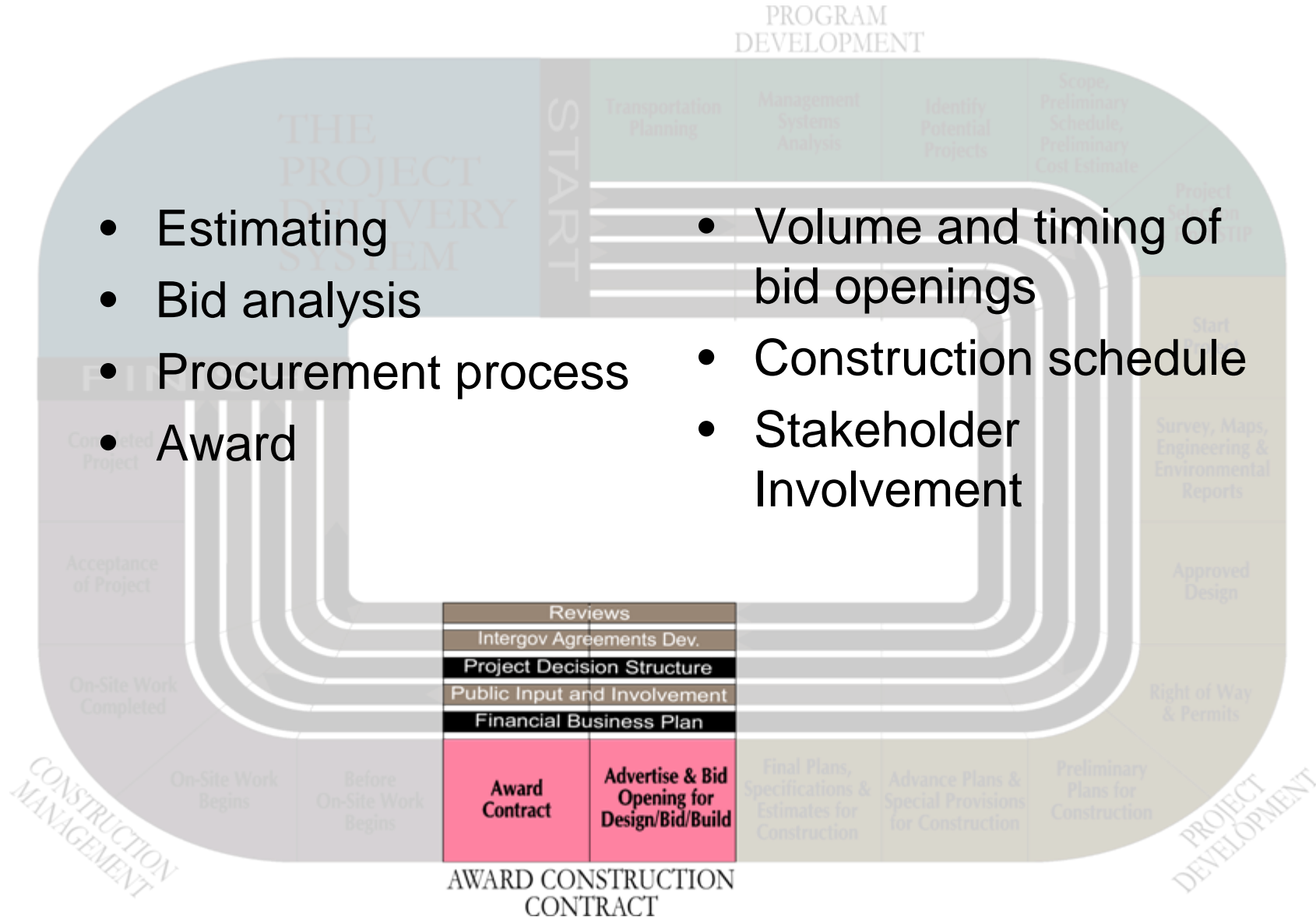
- Right of Way
- Permitting
- Project Delivery methods
- Construction (PS&E) documents
- Mobility
- Stakeholder Involvement





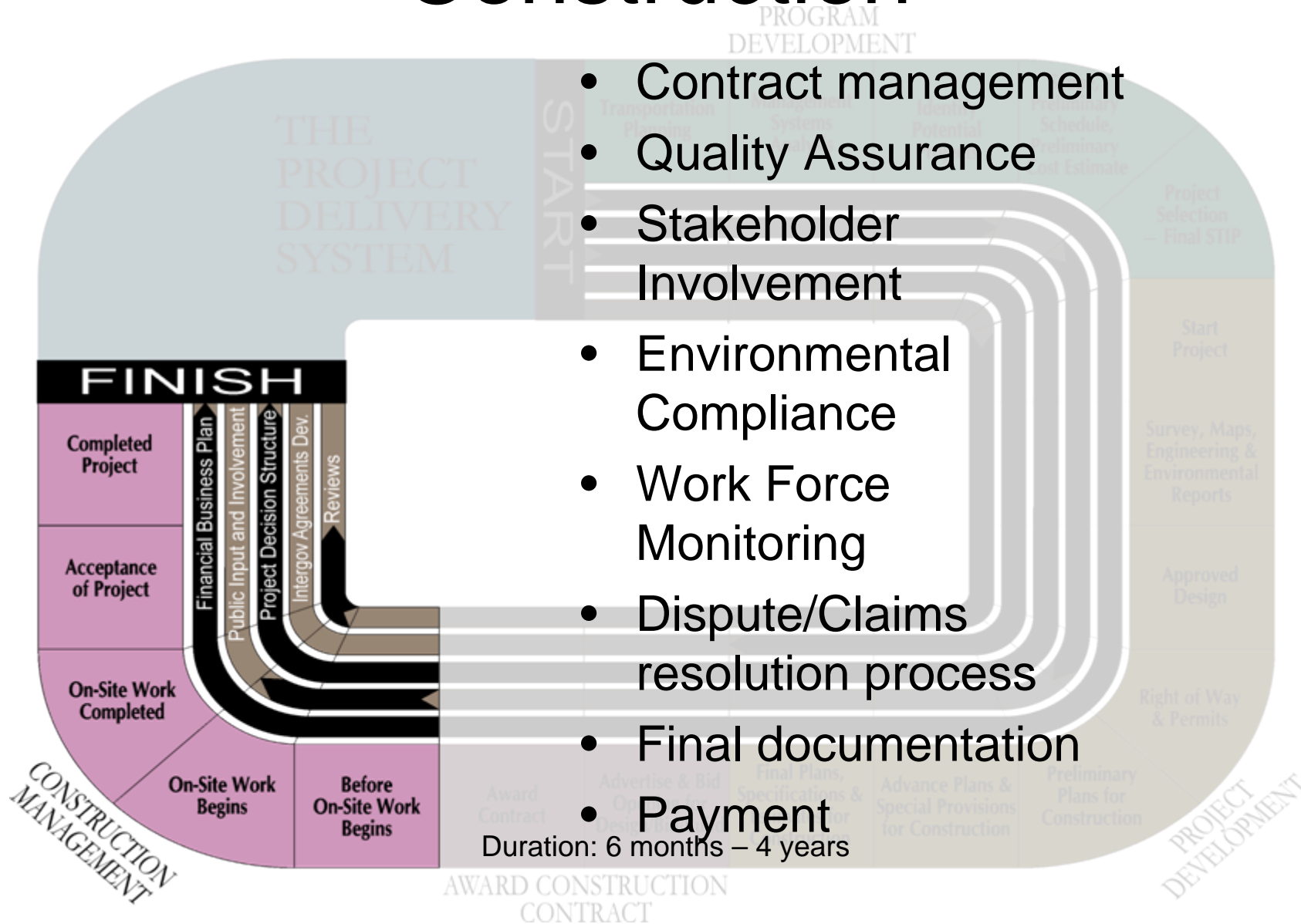
# Bid & Award

- Estimating
- Bid analysis
- Procurement process
- Award
- Volume and timing of bid openings
- Construction schedule
- Stakeholder Involvement



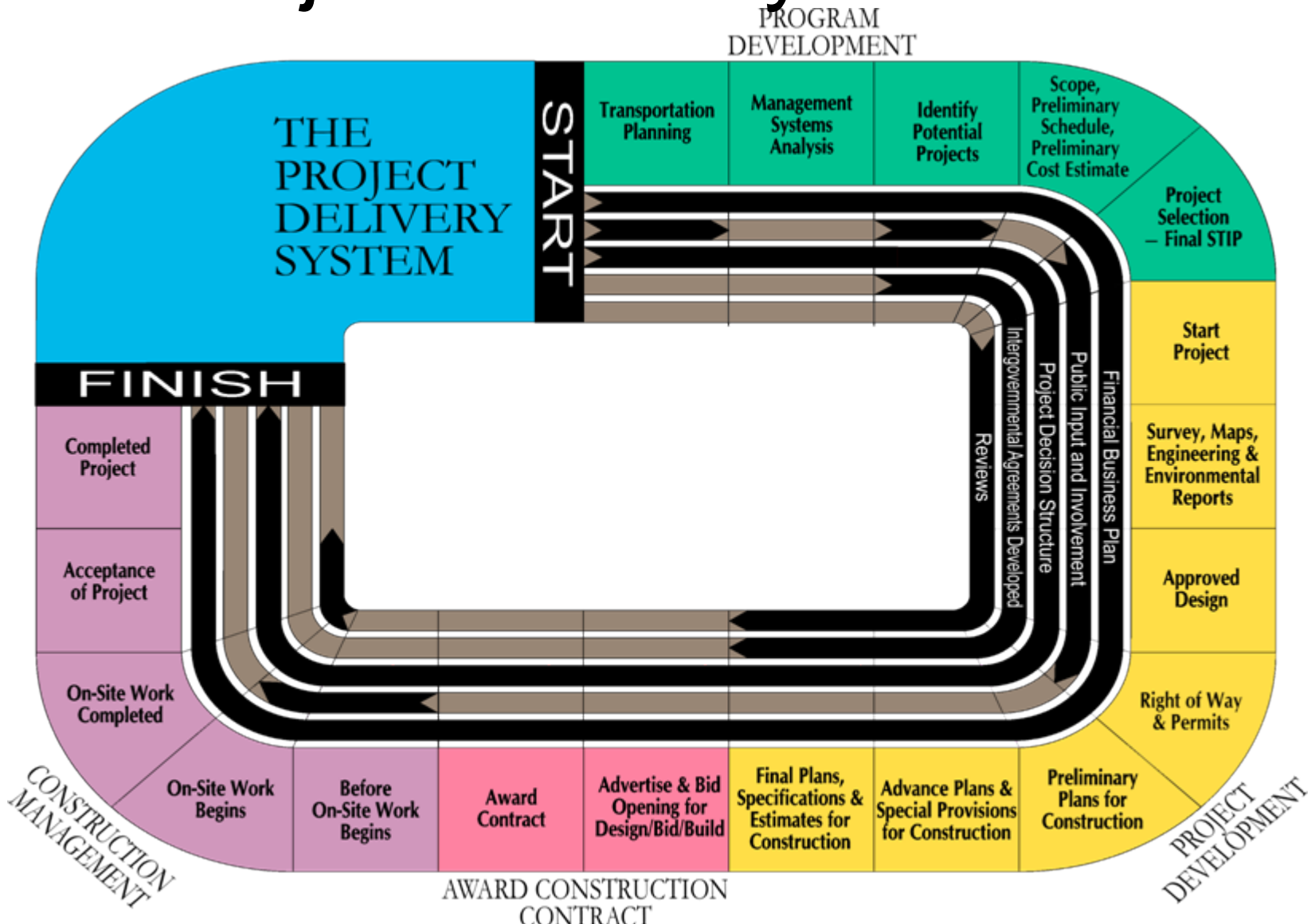


# Construction





# Project Delivery Process





## Key components for each presentation

- Major themes (process drivers) especially as they relate to project duration Federal requirements, NEPA, Uniform Relocation Act, local and stakeholder involvement
- Decision process specific to phase
- Risks specific to phase
- Stakeholder involvement specific to phase



## Key components for each presentation (continued)

- What does success look like?
- Internal and external performance measures?
- Where have we made improvements (OTIA and other initiatives)?
- Where do we need improvements?
- Where do we have strategies?



# Highway Division Project Delivery Current STIP

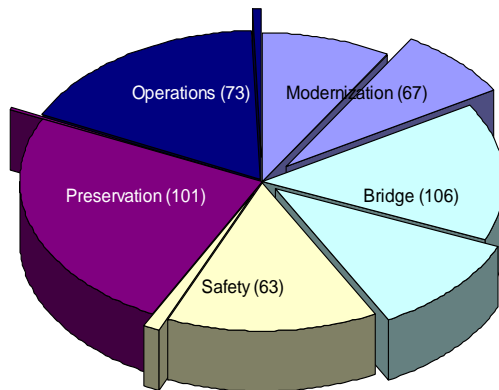
- Scope: 410 projects
- Schedule: 4 years
- Program Amount: \$1.6 Billion

~ Includes OTIA, construction expected, only primary work types

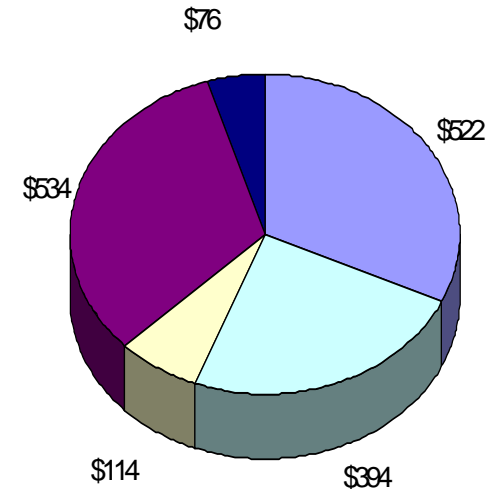


# Primary work types count & volume

# of projects by work type



Amount in Millions



Note: Pie slices which have been pulled out represent OTIA and Earmarks.

■ Modernization Projects ■ Bridge Projects ■ Safety Projects ■ Preservation Projects ■ Operations Projects



# Why is the work type important?

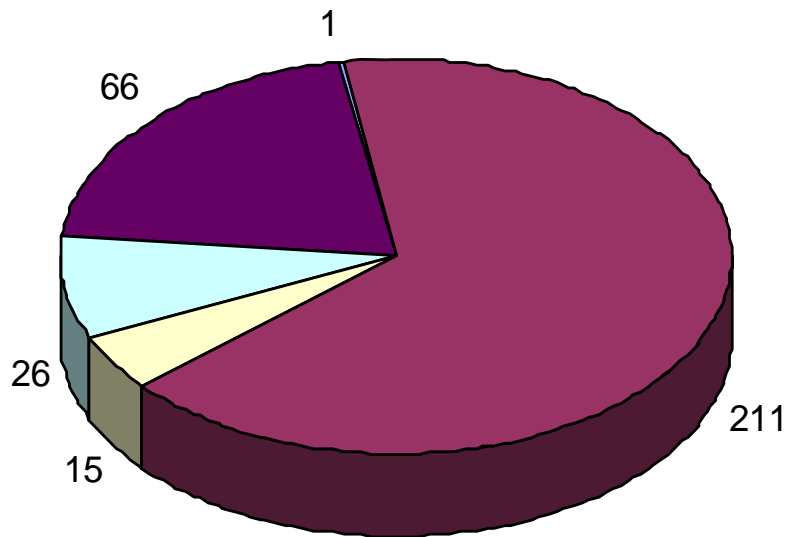
- Modernization and bridge projects take more time
- Greater complexity in design, more tasks to design

A **modernization** project can typically take a year or more in design than a preservation project, all other things being equal.

**BUT** – we have fewer of them



# Environmental classification



- Class 1 Environmental Impact Statement
- Class 2 Categorical Exclusion
- Class 3 Environmental Assessment
- Programmatic Exclusion
- Undetermined



# Why is environmental class important?

Class 1 and Class 3 projects require a significant amount of study and many tasks before a preferred concept design can be selected and detailed design work can proceed.

A **Class 1 and Class 3** full project can add 3-5 years and FONSI's can add 2-3 years.

**BUT** – we have fewer of them



# Right of Way

- Right of way required 187 projects
- Right of way not required 132 projects

Why is Right of Way important?

Right of way is expensive to acquire, and can add one to two years to the project duration

AND – most project require some right of way

Note: State system



# Other factors impacting project duration

- Project location
  - Projects in urban locations have more stakeholders (e.g. city government, neighborhoods)
  - Require great care in design and in construction planning (get in, get it done, get out)
- Stakeholder involvement
  - State & local elected officials, local & regional governments, ACTs, ERTs
  - Nine state agencies, eighteen federal agencies, 9 federal recognized tribes
  - Citizen groups and individual citizens, business organizations



# Highway Division Philosophy

The right project at the right time at  
the right cost in the right way

The right way means do it right the *first* time, avoid rework, minimize adverse impacts to business, residents, freight haulers, the traveling public and the environment. The right way requires us to be risk-conscious, process-oriented.



# Summary

- Project Phases
- Common Issues
- STIP Composition
- Variation in project duration



# Discussion