

# *Project Delivery Methods at Sound Transit*

*System Expansion Committee*

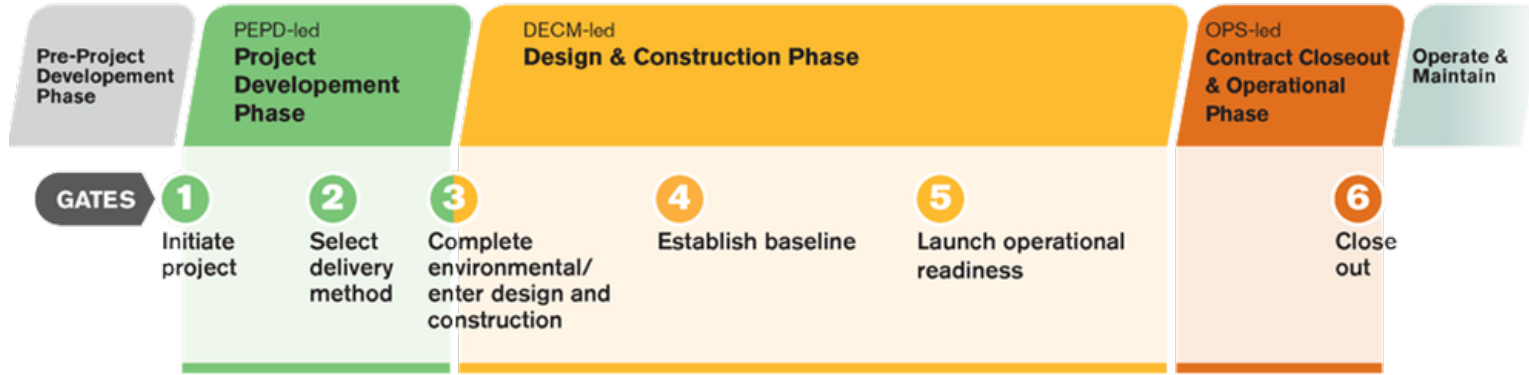
*10/13/22*

# *Why We Are Here*

## *Briefing on how we select, evaluate and deliver construction.*

1. What is a delivery method?
2. What delivery methods are available to Sound Transit?
3. How does Sound Transit select the project delivery method and what are the criteria?
4. What have we learned?

# Phases of Project Delivery



Gate 2 - How we organize, manage, and purchase final design and construction.

# *What is a Delivery Method?*

A "delivery method" is the management solution for a construction contract. The delivery method defines roles, responsibilities, timing of contractor engagement and assignment of risk.

## *Available Delivery Methods*

- Design-Bid-Build
- General Contractor/Construction Manager (GC/CM)
- Heavy Civil GC/CM
- Design-Build
- Progressive Design-Build

# *Design-Bid-Build*

## *The approach*

- Three distinct phases – design, bid, then build
- Agency has separate contracts with contractor and designer
- The “traditional” or default approach for public works agencies
- Contractor selected based on price

## *When to utilize*

- Commitments control design – prescriptive
- Seeking to create entry opportunities for new contractors
- Owner can best manage the risk

# GC/CM

## *The approach*

- Three distinct phases – design, bid, then build
- Agency has separate contracts with designer and contractor
- Contractor hired before design is completed
- Contractor best value selection
- Maximum price established during design completion

## *When to utilize*

- When contractor input is needed to finalize design
- Complex phasing, occupied or adjacent facilities, technical or specialized work (RCW 39.10)

# ***Heavy Civil GC/CM***

## ***The approach***

- The same as traditional GC/CM, except that 50 percent of the work may be negotiated and self-performed by the GC/CM

## ***When to utilize***

- The same as traditional GC/CM, except that a heavy civil contractor is specifically desired
- Heavy civil contractor needed to control and self-perform critical work components, such as structural concrete or track

# Agency Experience with GC/CM

## University Link

- University of Washington Station (U250)
- Capitol Hill Station (U240)
- ULink Systems (U830)

## Northgate Link

- Roosevelt Station (N150)
- U District Station (N140)
- Northgate Systems (N830)
- Northgate Station (N160)\*

## East Link

- Downtown Bellevue to Spring District (E335)
- Seattle to South Bellevue (E130)
- East Link Systems (E750)

## Lynnwood Link

- Northgate Station to Lynnwood Transit Center (L200)
- NE 200<sup>th</sup> St. to Lynnwood Transit Center (L300)





# *Design-Build*

## *The approach*

- The contractor provides both final design and construction solution
- The Agency does not have a direct relationship with the designer
- Contractor best value selection

## *When to utilize*

- Prescriptive requirements are minimal
- Contractor innovation will drive design and construction
- Jurisdictional partners capable of supporting phase design submissions
- Schedule opportunity to overlap design and construction

# *Progressive Design-Build*

## *The approach*

- The contractor is retained early in the life of the project
- Qualifications based selection; cost and schedule commitment is not established as part of selection process.
- Two phased agreement 1.) Preconstruction, budget level design, cost/schedule negotiation, 2.) Design and construction

## *When to utilize*

- When early contractor engagement is needed to help inform decisions on budget, schedule, quality, operability, and life cycle.
- Agency wants more direct engagement with design, while contractor still has responsibility

# Agency Experience with Design Build

## Central Link

- Maintenance of Way Building

## South Link

- Angle Lake Station, Guideway & Systems
- Angle Lake Garage

## East Link

- SR 520 to Overlake Transit Center
- Operations & Maintenance Facility: East

## Souder

- Puyallup, Sumner, Kent, Auburn Parking Garages
- Souder Yard Expansion

## Federal Way Link Extension

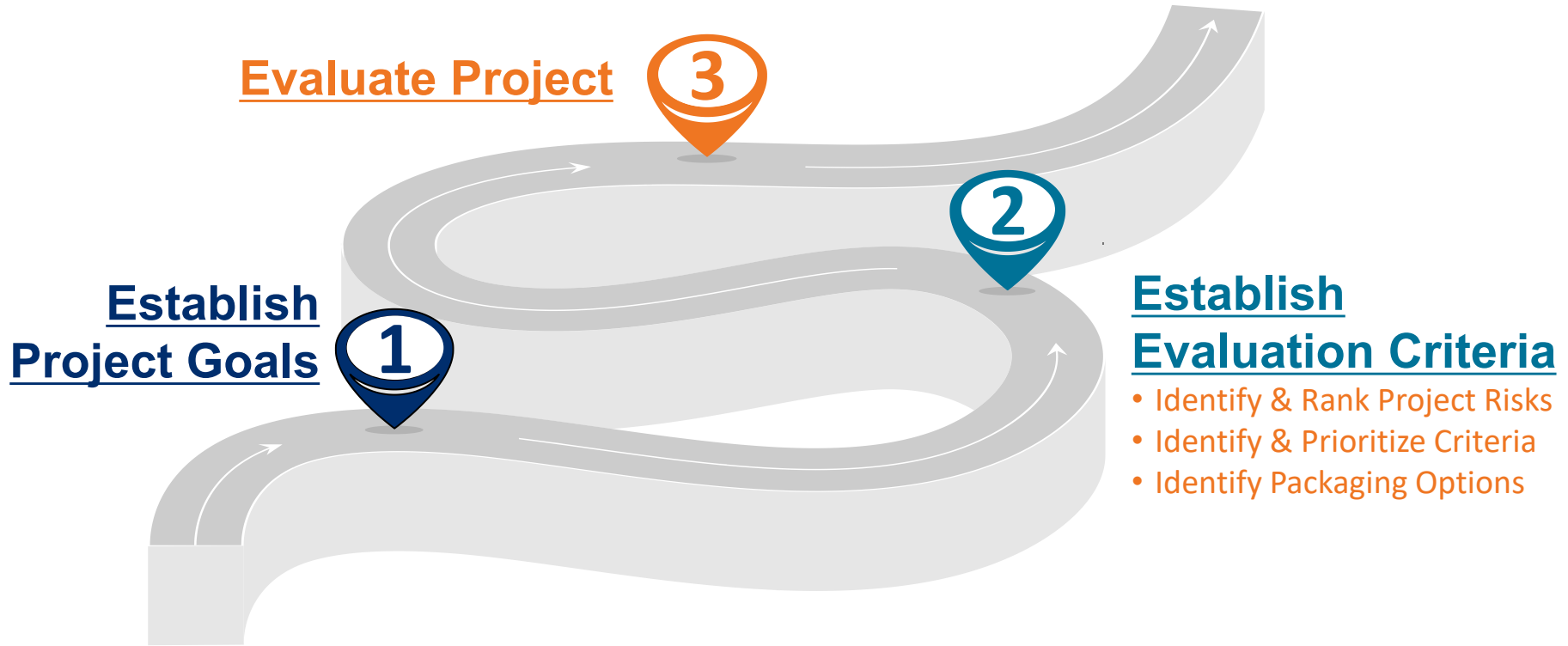
- FWLE Stations, Guideway, Systems and Garage (combined single contract)

## Redmond Link Extension

- DRLE Stations, Guideway, Systems and Garage (combined single contract)



# The Workshop Process



# Sample Criteria

- Agency Control
- Relationships
- Budget
- Schedule
- Risk
- Type of work
- Staff Qualifications
- Jurisdictional relationship and capacity
- Competing projects/market conditions
- SDBE opportunities
- Diversification of contractor pool



# *Observations from Past Experience*

## *Design-Bid-Build*

- Simplest solution with cost and schedule commitment with selection
- Traditional approach with traditional roles for Agency, designer, contractor and local partners
- The bid price is not always a reliable indicator of the Agency's final cost

# *Observations from Past Experience*

## *GC/CM*

- Successful application on U-Link and Northgate Link, as measured by schedule, budget and claims
- Best value selection provides opportunity to evaluate contractor experience and qualifications
- Scope of subcontract packages must align with the marketplace
- Realistic expectations from contractor regarding preconstruction and changes
- Terms must be fully understood and agreeable
- Heavy-civil GC/CM requires a negotiation strategy and "off-ramp" if negotiations fail

# Observations from Past Experience

## Design-Build

- Alignment with permitting authority on plan review process
- Agency can benefit from contractor solutions
- There is a threshold for prescriptive elements
- Realistically assess contractor role in quality, commissioning and certification
- Extract value from the procurement process
- Availability of designer and contractor teams
- In Progressive DB, price and schedule certainty achieved after contractor selection
- Progressive DB requires a negotiation strategy and "off-ramp" if negotiations fail



*Thank you.*



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