Project Delivery Models and Procurement

Integrated approach to support client business plans

Presented by Jason Kirk, P.E.
The Haskell Company

International Municipal Lawyers Association
Sunday April 10, 2022

"Post-COVID Humor"



"Hey, honey, the second monitor was one thing, but it seems like quite the slippery slope from home office to evil lair."

Credit:

THE NEW YORKER

By Brooke Bourgeois
August 19, 2020

Agenda

- Haskell Overview
- Defining Design-Build
- Comparing Delivery Methods
- Selecting a Delivery Method
- Question & Answer



Southwest WRF Capacity Upgrades
City of St. Petersburg, FL

HASKELL

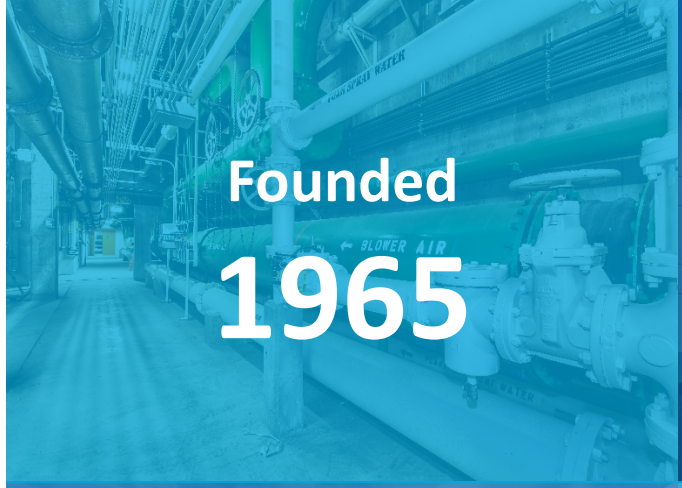
The Haskell Company

Our Vision:

We Create Things That Matter

Our Values:

- ***Team***
- ***Excellence***
- ***Service***
- ***Trust***













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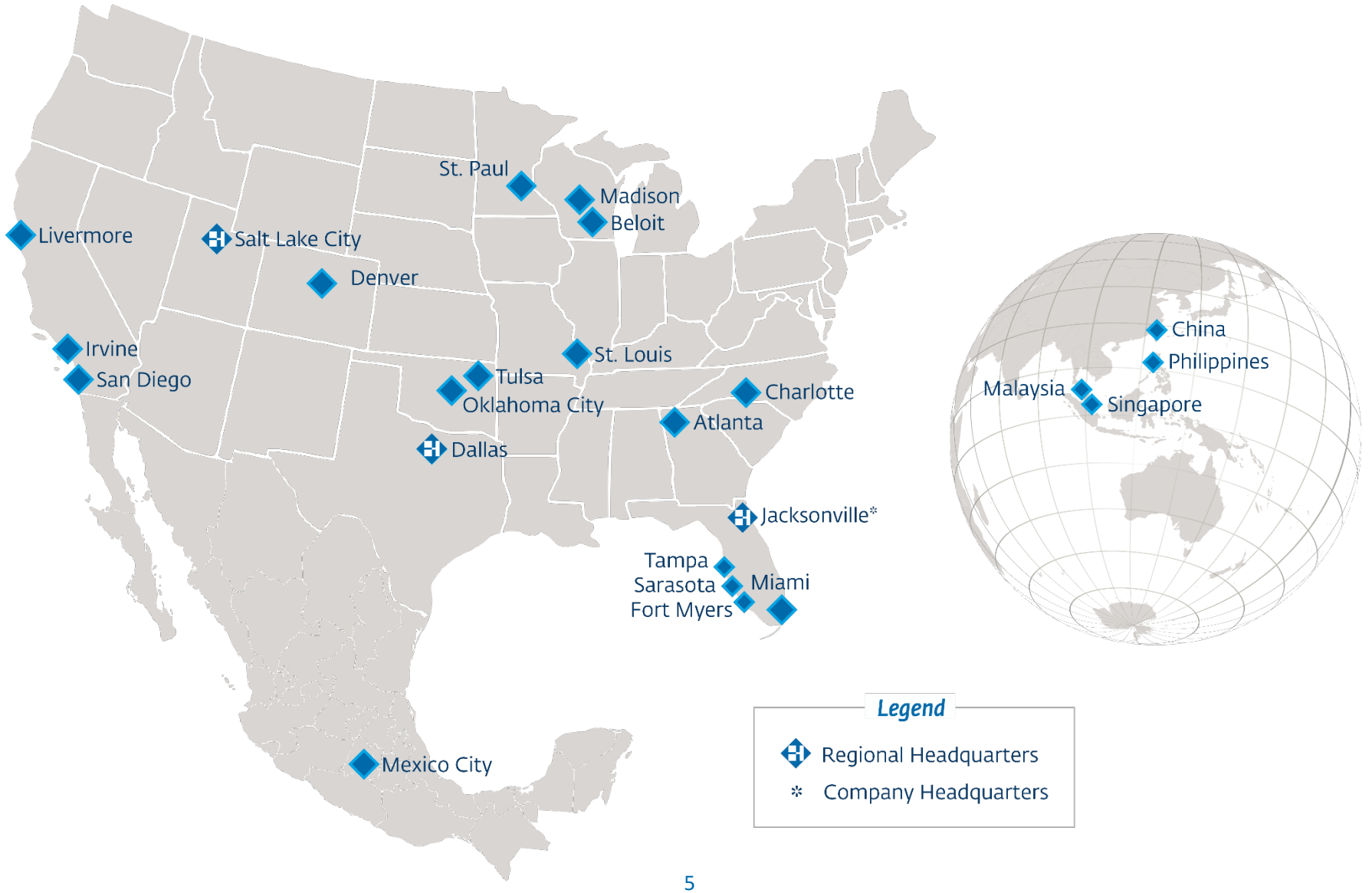
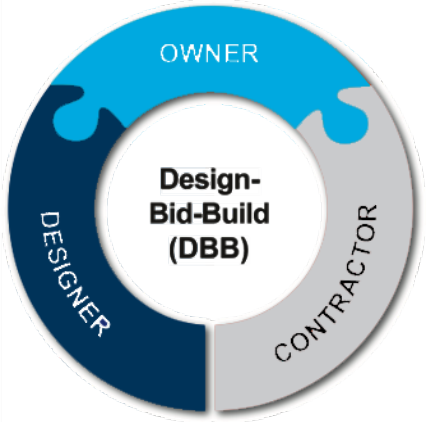
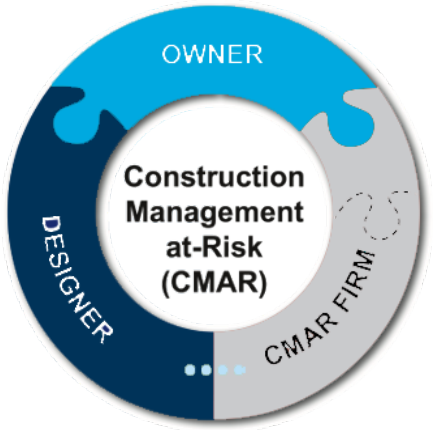
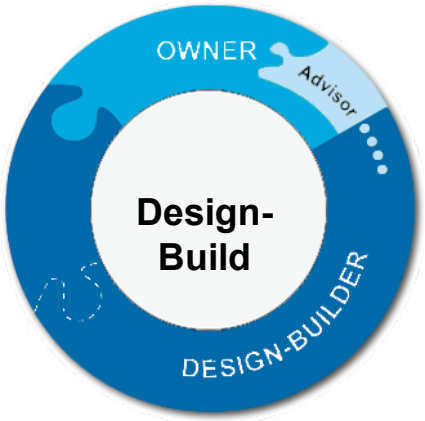


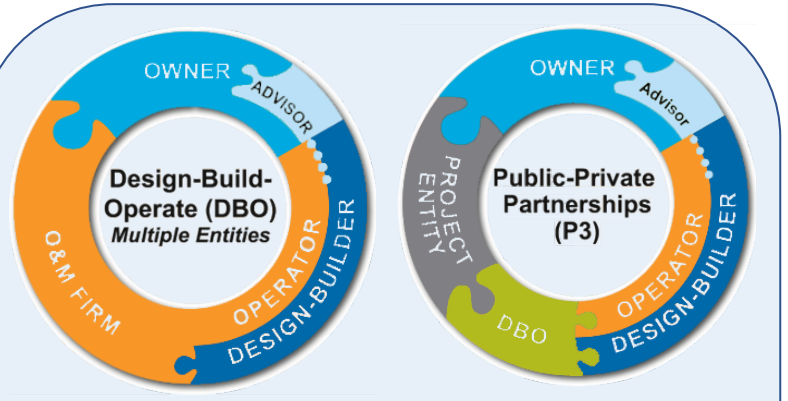
Project Delivery Methods

Traditional | **Collaborative** | **Design-Build** | **Design-Build-Operate** | **P3**









Owner

Designer

CMAR/Contractor

Contracted Amendment Price

Contractual Relationship

Contracted Amendment Price

Owner Advisor

Design Builder

O&M Firm

Design-Build Operator

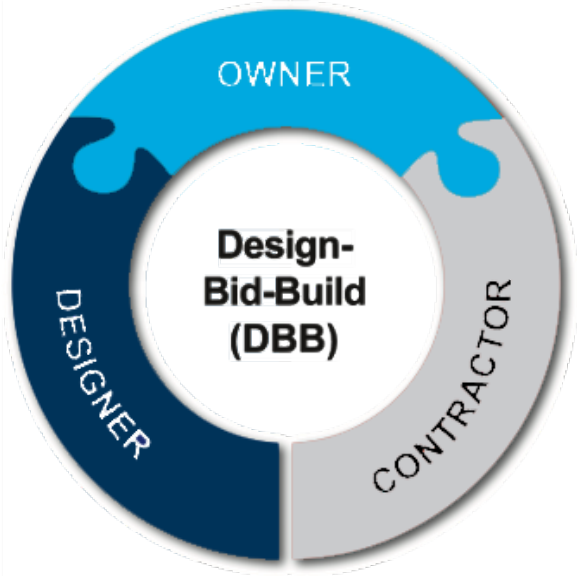
Project Entity
(also Special Purpose Entity)

…presented for context; but, outside scope of today's presentation

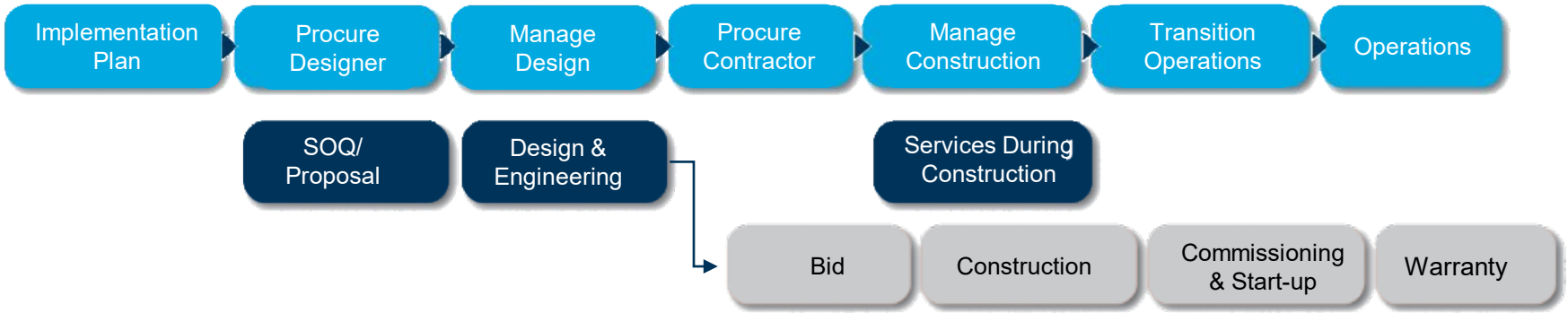
Source: Principles and Best Practices of Collaborative Delivery R.2020.01 ™
© 2017-20 Water Design-Build Council

Design-Bid-Build

Owner holds separate contracts with the designer and contractor

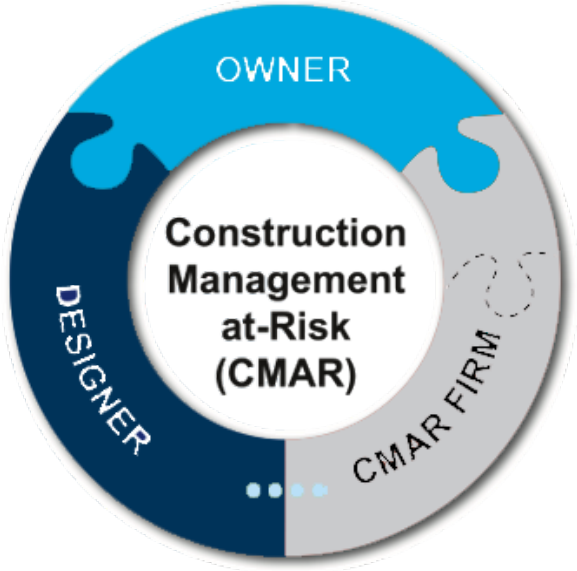


- Traditional “cast” of participants
- Widely accepted and established linear development process
- Design complete prior to bidding
- Bidding complete prior to construction

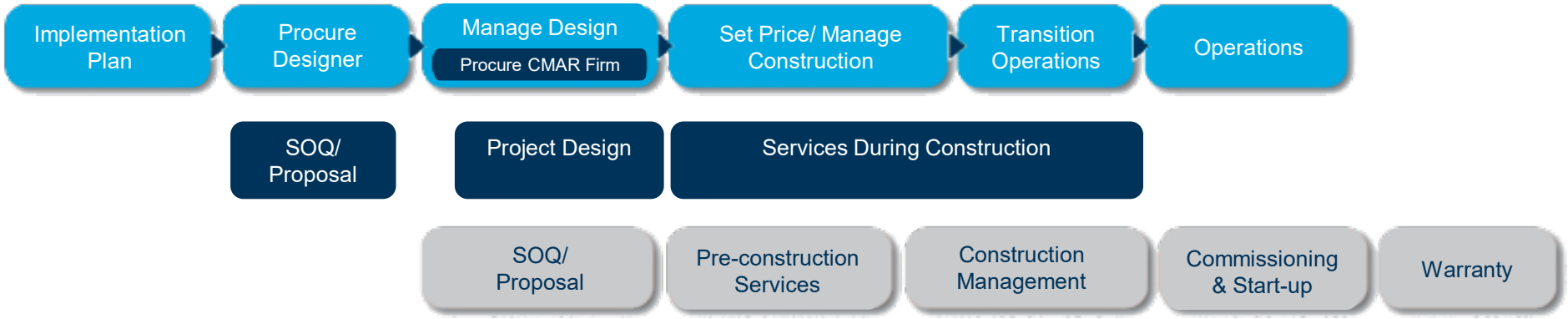


Construction Management at-Risk

Owner holds separate contracts with the designer and contractor

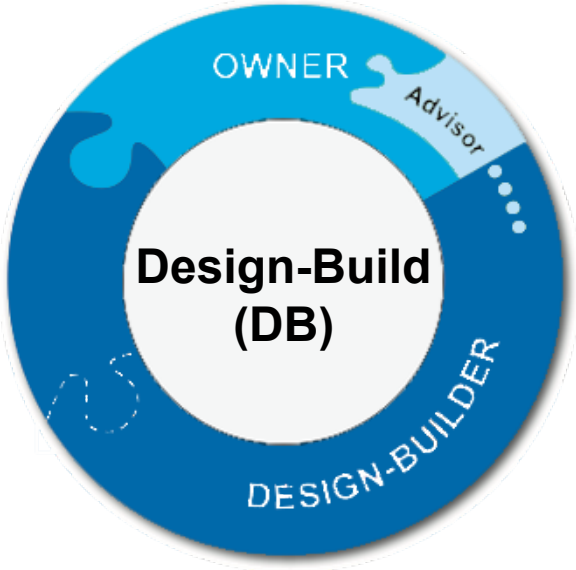


- Familiar “cast” of participants
- Opportunity for Faster delivery
- Designer selected on Quals & Tech Approach
- CMAR selected on Quals [and Fee]
- Estimate design and preconstruction in parallel

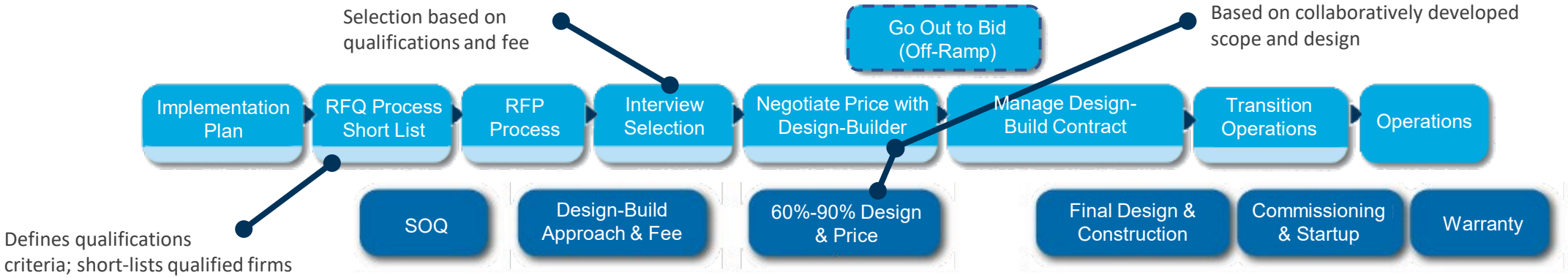


Design-Build

One entity delivers design and construction via one contract



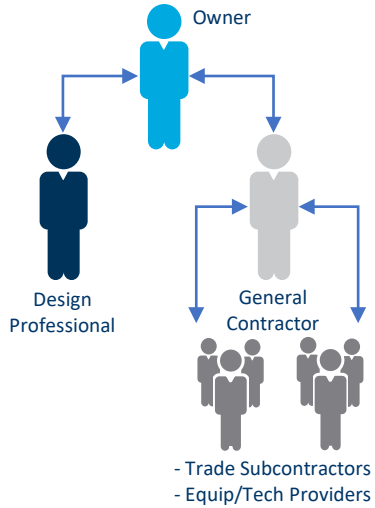
- Simplified cast of participants
- Concurrent activities reduce schedule
- Start construction before design is complete
- "Design to budget"
- Opportunity for "off-ramp"
- Progressive DB or Fixed-Price DB



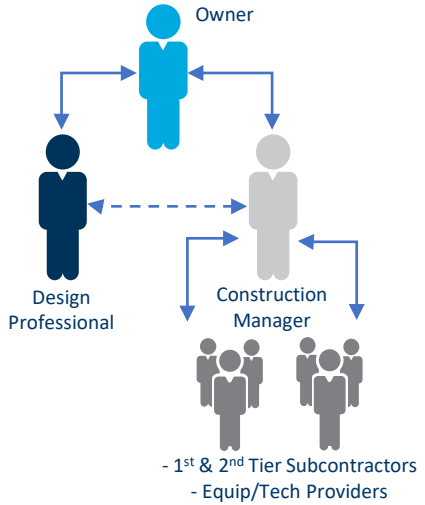
Comparing Project Delivery Methods



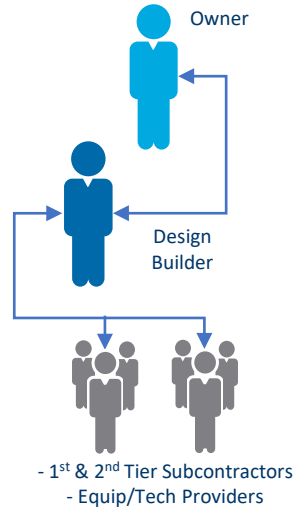
DESIGN-BID-BUILD (DBB)



CONSTRUCTION MANAGEMENT AT RISK (CMAR)



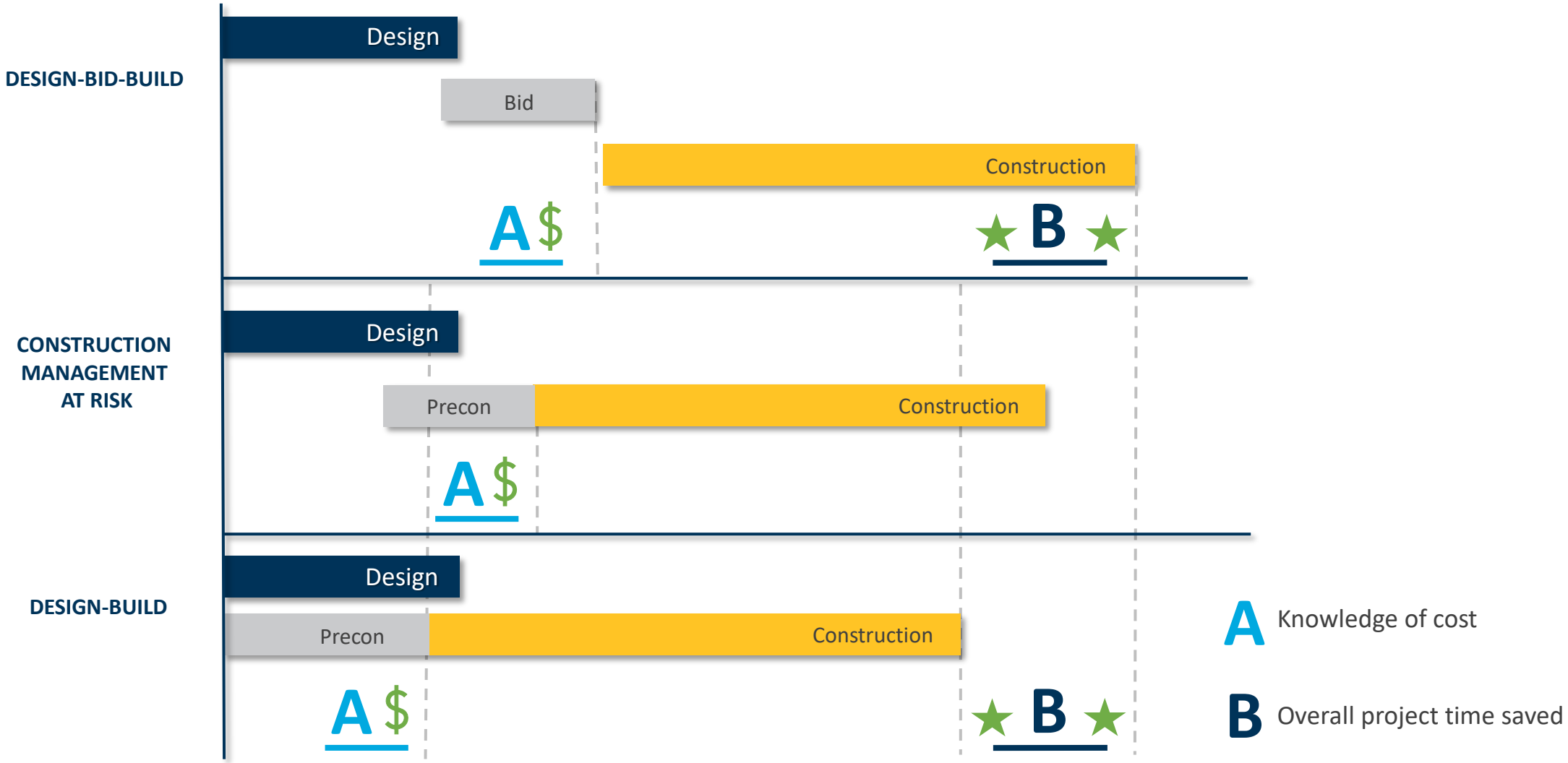
DESIGN BUILD (DB)



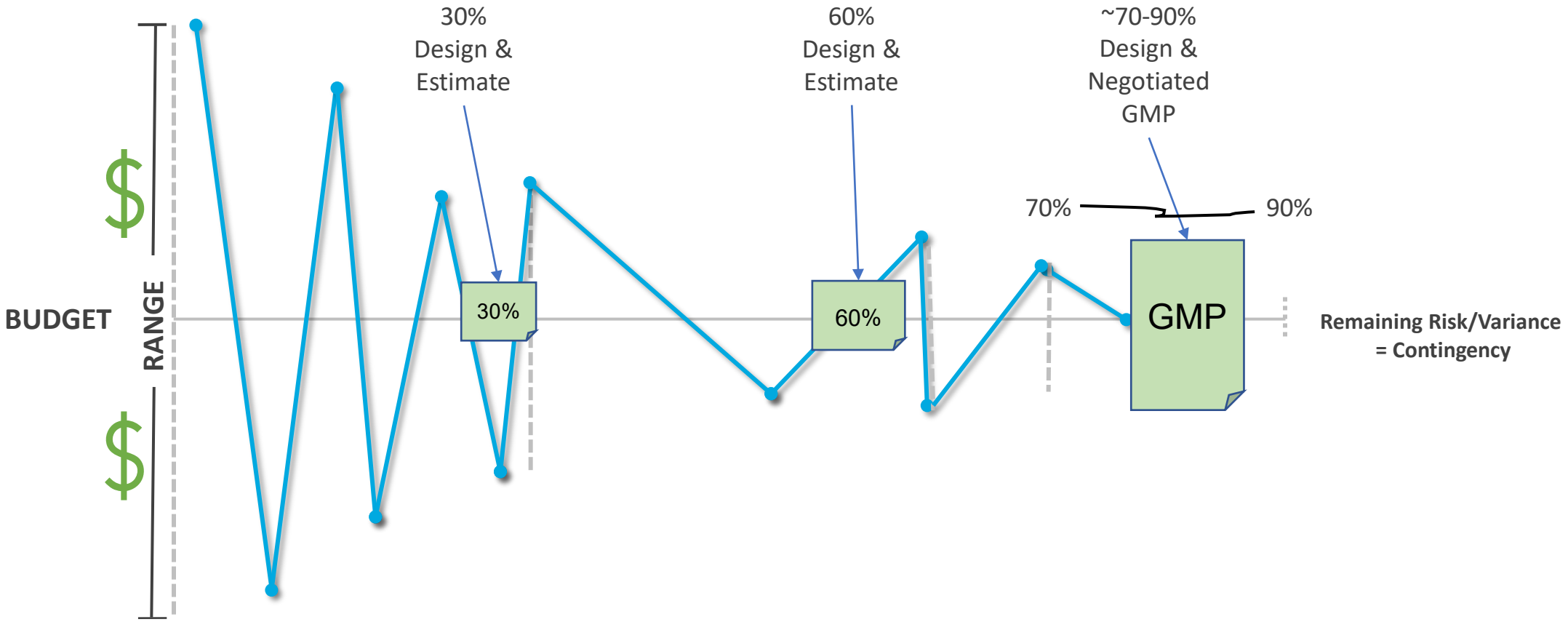
***Source:** Construction Industry Institute (CII)/Penn State research comprising 351 projects ranging from 5K to 2.5M sq. ft across varied project types and sectors.

Metric	DBB	CMAR	DB
Contract Mgt	Multiple contracts	Multiple contracts; Owner has Spearin Doctrine responsibility	Single contract; Owner shifts risk to DB
Time-to-Delivery	Generally, the longest	+/- leverages early CM involvement	33.5% faster than DBB* 23.5% faster than CMAR*
Project Cost	Known later in process	More certainty than DBB due to CM involvement	6.1% lower than DBB* 4.5% lower than CMAR*

Comparing Time-to Deliver



Value of Design-Build: Budget Certainty



● = *design decisions, value engineering options, alternatives and enhancements*

Owner Considerations

Project objectives:

- Speed-to-market
- Iterative design input
- Risk identification and project change mapping
- Know total project cost know sooner for budgeting/financing
- FAR, DFAR, other regulatory considerations

Capacity:

- Multiple contracts vs. single contract
- Timely input and feedback on iterative designs

Project knowledge:

- Identifying “unknown unknowns”

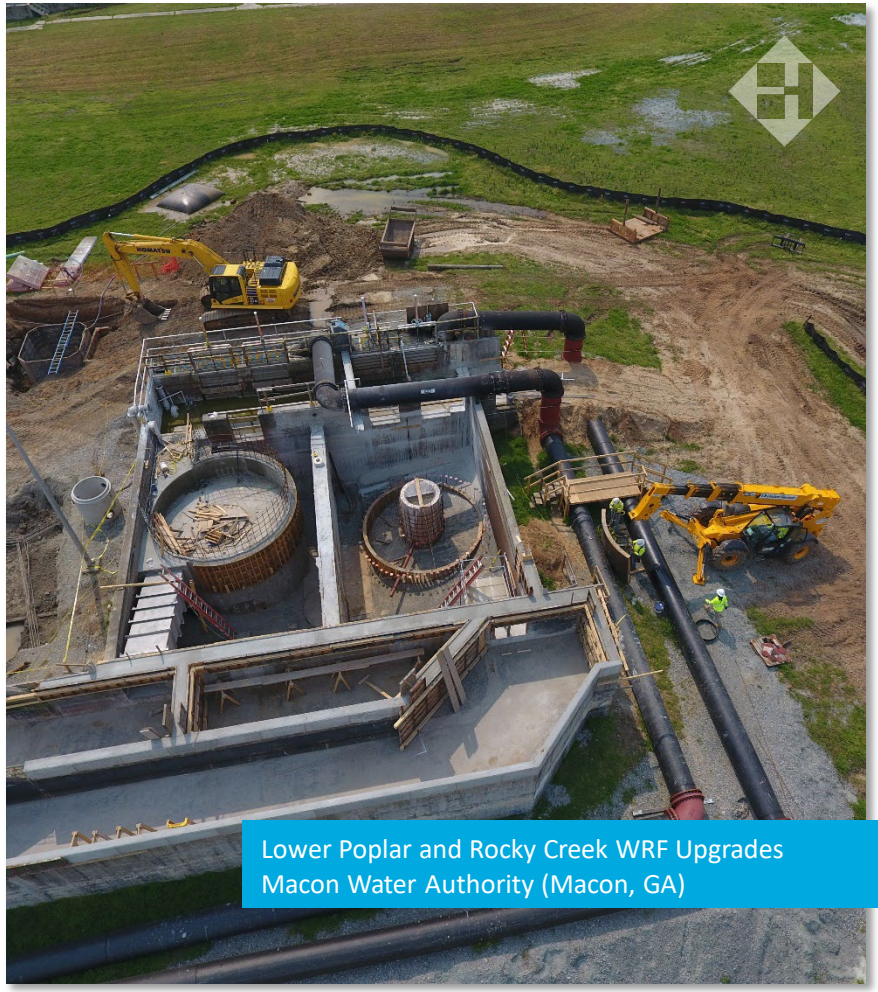


Water Reclamation Facility
Confidential Client

Owner Considerations

Evaluation criteria for “best value” vs. “low bid”

- Base proposal cost
- Scope of Work response and understanding
- Value engineering and cost reduction
- Similar project experience and staffing
- Ease of maintenance, durability, life-cycle costs
- Terms and Conditions variations
- Safety, project controls, environmental programs



Lower Poplar and Rocky Creek WRF Upgrades
Macon Water Authority (Macon, GA)

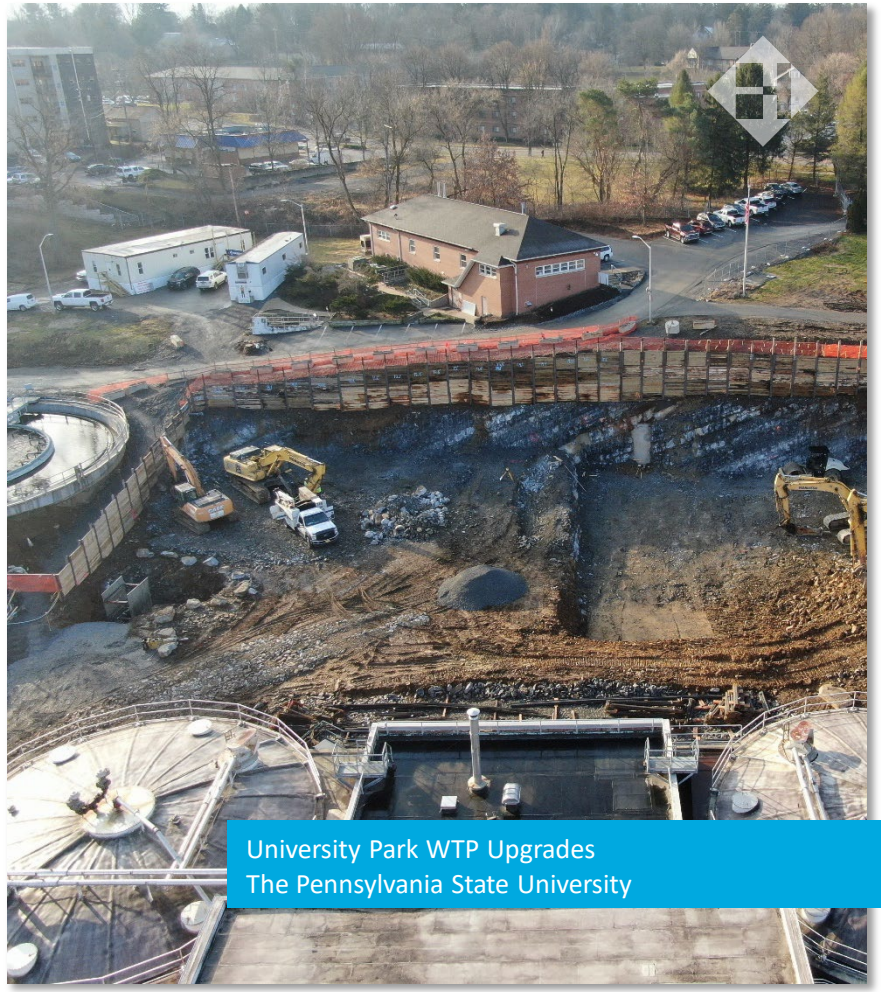
Owner Considerations

Required external approvals

- Authorities Having Jurisdiction Approvals (AHJ)
- Environmental permitting
- Easements, rights of way, eminent domain issues

Market considerations

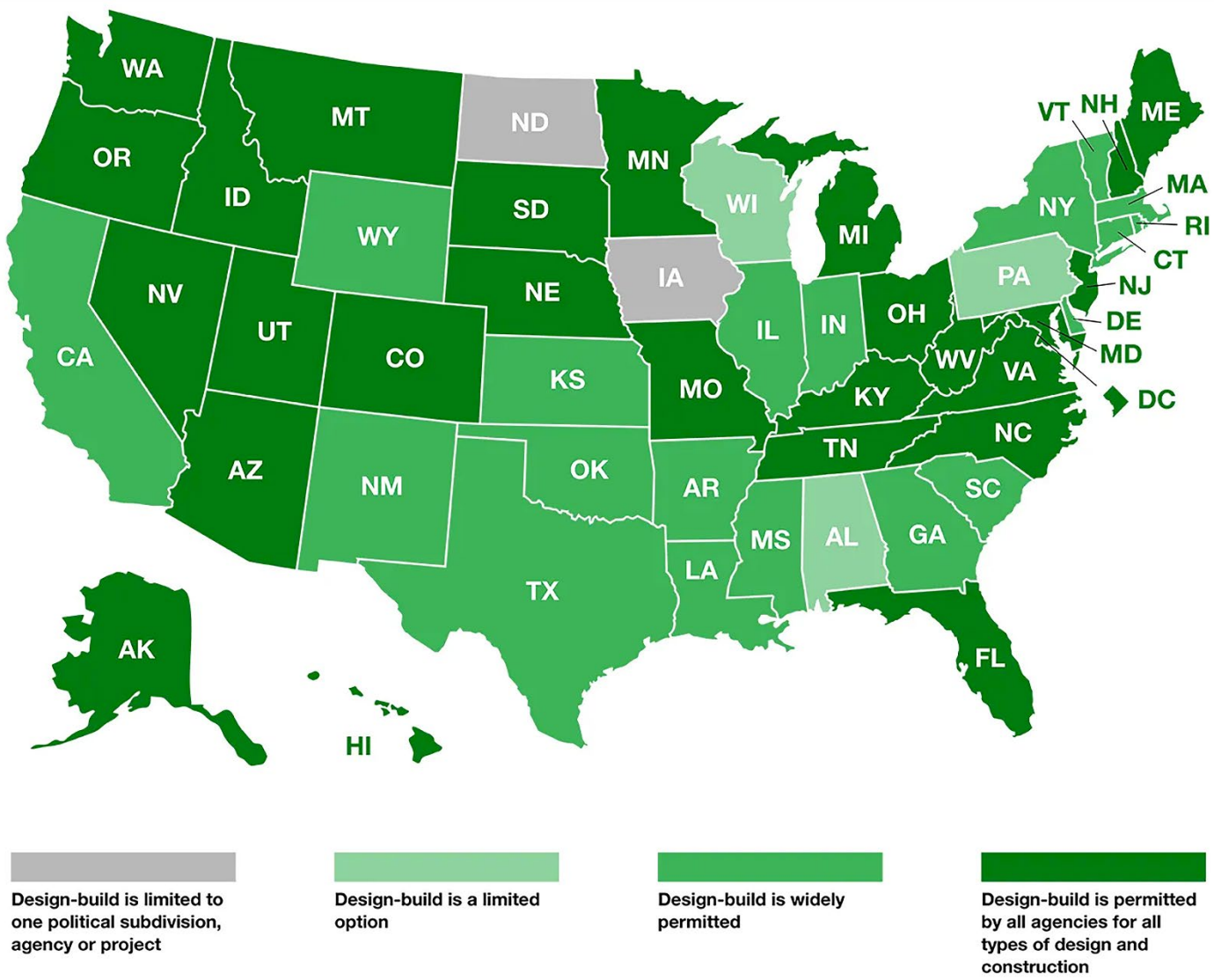
- Material cost escalations/decreases
- Labor cost escalations/decreases
- Procuring long lead items and securing critical resources
- Enduring COVID-19 protocols



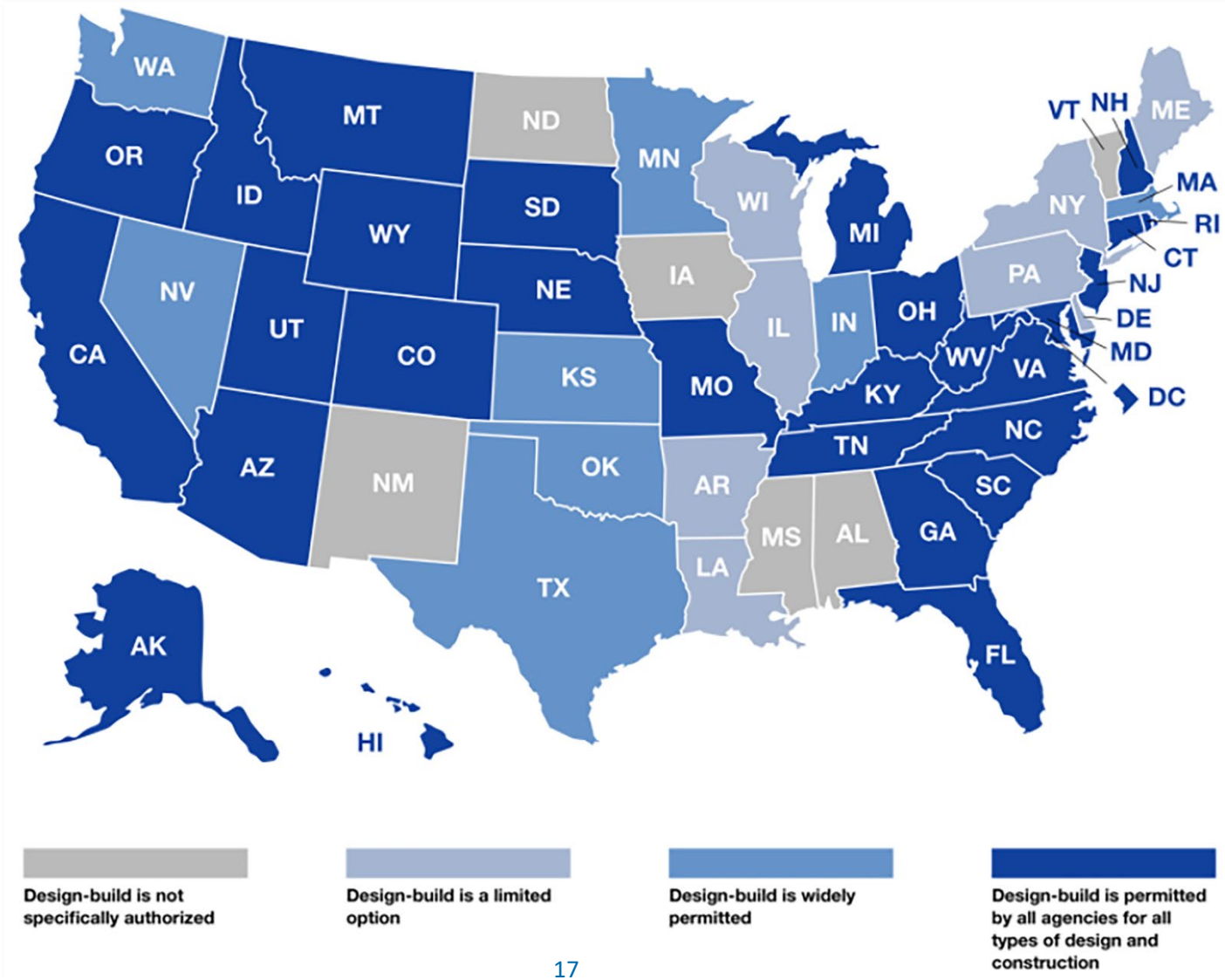
University Park WTP Upgrades
The Pennsylvania State University

Design-Build State Authorization

Source:
Design-Build Institute of America
https://dbia.org/advocacy/state/



States Granting Local Design-Build Authorization



Source:
Design-Build Institute of America
https://dbia.org/advocacy/state/

Design-Build Best Practices

- Design-Build Institute of America (DBIA) Training and Resources
  - www.dbia.org
  - https://store.dbia.org/product-category/contracts/
- Water Collaborative Delivery Association (fka WDBC)
  - https://waterdesignbuild.com/knowledge-center/research/

- *DBIA Standard Contracts*



- *Best Practice Guides*



- *DBIA Position Statements*



Design-Build Advantages



Southwest WRF Capacity Upgrades
City of St. Petersburg, FL

- Single Contract
- Faster Delivery
- Cost Certainty


Q&A
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