



Alternate Contracting Methods

SDDOT/AGC Meeting – July 2024

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Contracting Methods



Current Methods – SDCL 31-5-10

- Design Bid Build (DBB) – current, primary contracting method
- Indefinite Delivery/Indefinite Quantity (IDIQ)
- Emergency Procurement

Alternate Methods

- Design Build (DB)
- Progressive Design Build (PDB)
- Construction Manager/General Contractor (CM/GC)

2021 Customer Satisfaction Survey Contractor Responses



From the contractors, "SDDOT should continue to improve the way it works with contractors." 2 of the 5 improvement opportunities from respondents to the contractor survey were:

- SDDOT should continue to find opportunities for contractors to provide input prior to letting
- SDDOT should continuously review the time requirements to complete projects to ensure they are reasonable

Potential reasons to use an Alternative Contracting Method

- Contractor involvement early
- Flexibility in updating project scope
- Opportunity for innovation
- Project complexity
- Volume of project work
- Schedule impacts
- Time savings – aggressive delivery
- Early work packages – concurrent activities
- Opportunity to manage risk
- Cost impacts
- Complexity of coordination of activities
- Availability of materials, lead time
- Constructability
- Provide opportunity for SD contractors to learn with SDDOT

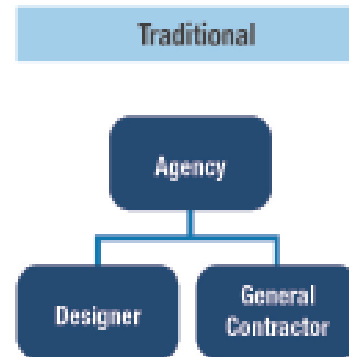
ACM's could be used on a limited basis... have available in the toolbox if a project is conducive based on a number of reasons similar to what is shown here...

Design Bid Build (DBB)

Current contracting method

Benefits

- DOT and contractors are familiar with process
- DOT maintains maximum control by specifying final product exactly
- Theoretically, design issues are worked out before advertisement
- Permitted by SCL 31-5-10
- Competitive low bids



Challenges

- DOT assumes how the project will be built, pace of construction, and therefore takes on risk.
- Contractor then takes on risk after bid opening based on assumptions by the DOT
- Not always the fastest project delivery due to separation between design and construction
- May not provide the best value to the DOT for all project circumstances or types
- Reduces opportunity for innovation and creativity by the contractor
- Does not include contractor input into the design
- Low bid can lead to change orders, disputes and claims

Design Build (DB)

- The owner contracts with a contractor/designer team to complete the design and construction of the project under a single contract.
- Award of the project is based on a combination of technical merit and lump sum bid price.
- Early designer and contractor collaboration promote innovation and construction efficiency.

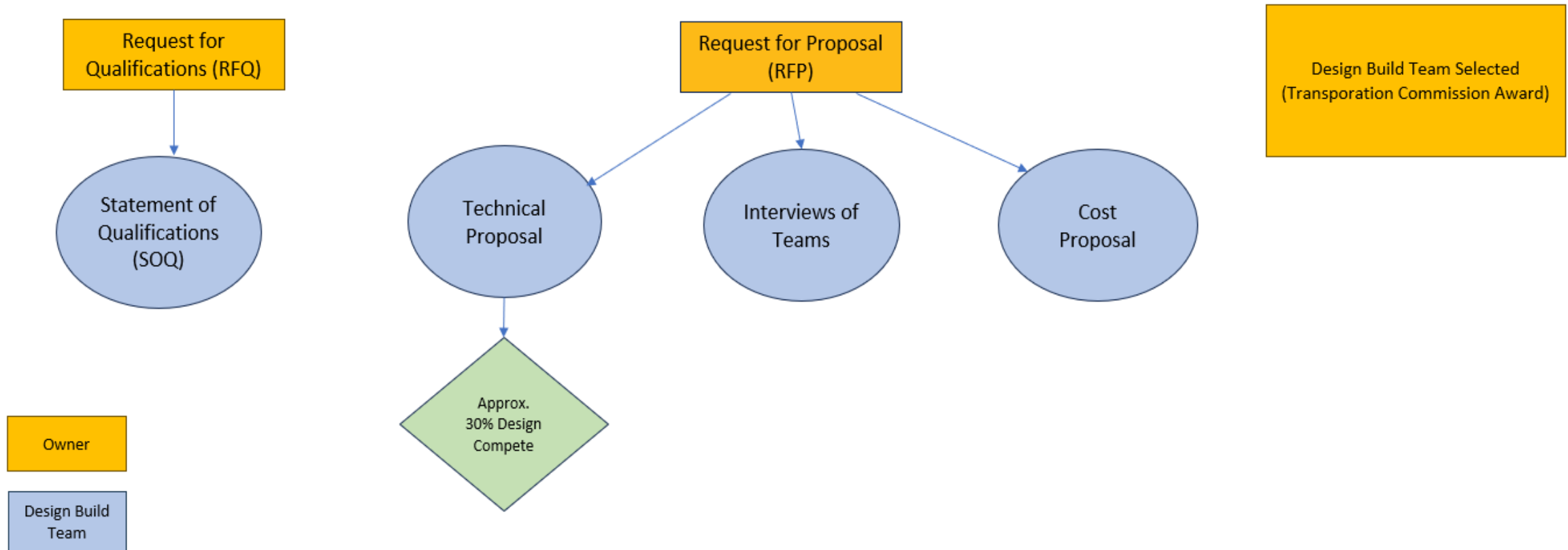
Progressive Design Build (PDB)

- The owner procures professional services on a qualification basis from a contractor/designer team to complete project design.
- Early designer and contractor collaboration promote innovation and reduce cost through early risk mitigation.
- Upon completion of the design, or individual design packages, the contractor and owner negotiate a price which is corroborated by the Independent Cost Estimator (ICE).

Construction Manager General Contractor (CM/GC)

- The owner procures professional services on a qualification basis or best value basis from a construction manager.
- Design services are contracted separately from the construction manager. The designer collaborates with the construction manager to implement innovative solutions to mitigate risk.
- Upon completion of the design, or individual design packages, the contractor and owner negotiate a price which is corroborated by the Independent Cost Estimator (ICE).

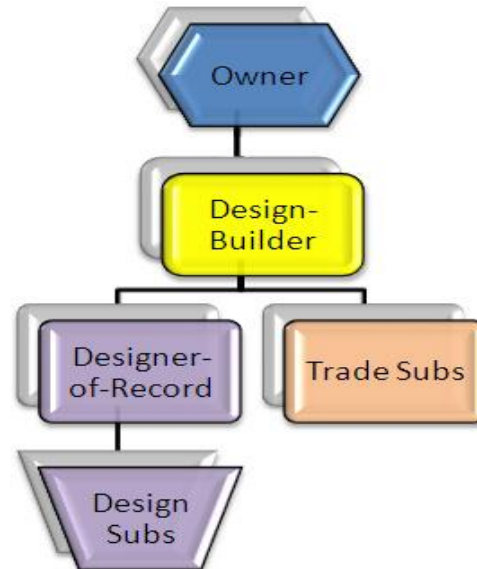
Design Build (DB) Project Delivery Procurement Process



Design Build (DB)

Benefits

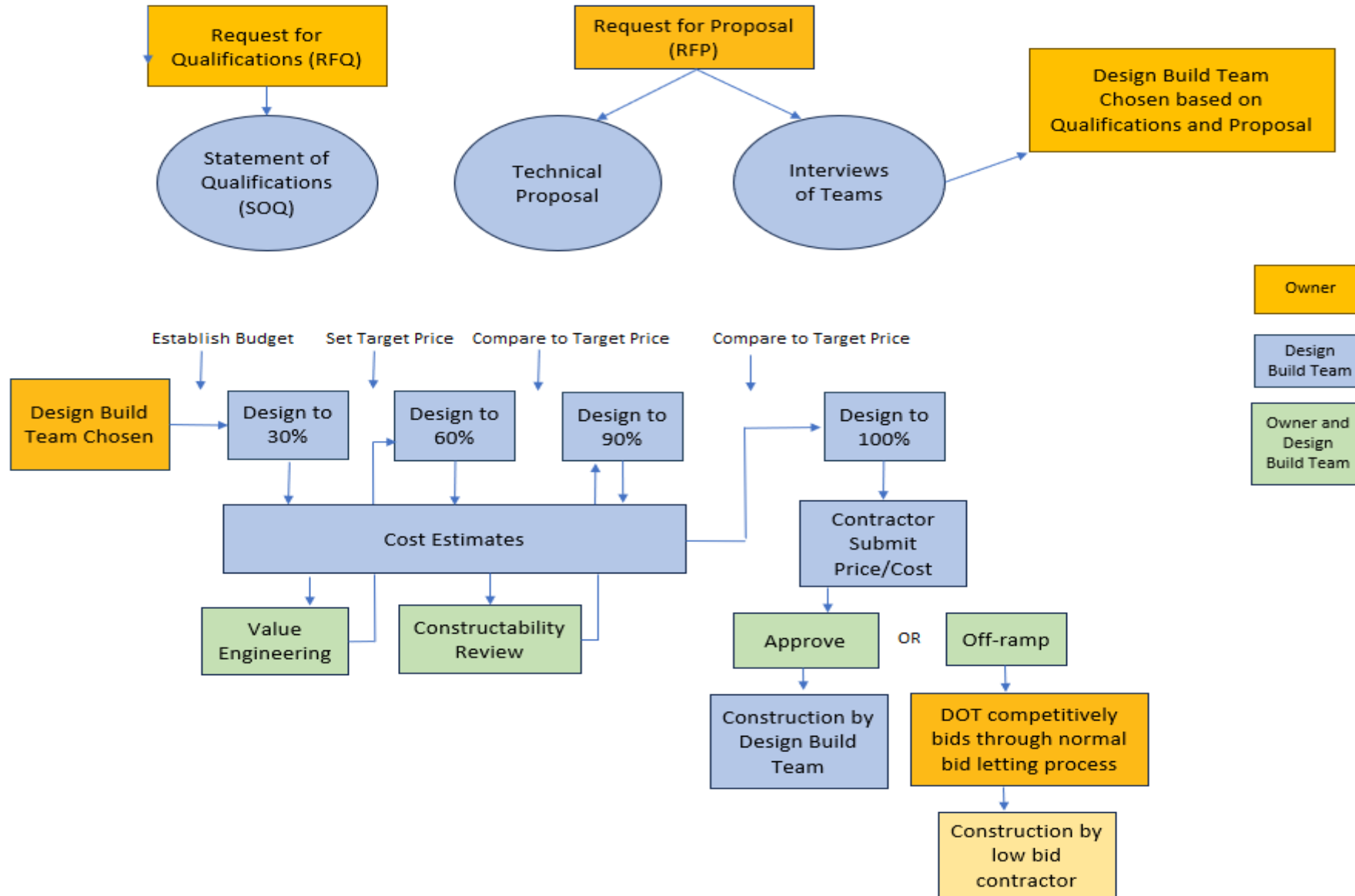
- Encourages innovation
- Maximizes contractor efficiencies
- Speeds project delivery
- May reduce DOT risk
- Useful when the DOT is faced with choosing between multiple ways to design a project
- DB with best-value procurement allows the contractor with the best solution to be awarded the project



Challenges

- DOT has reduced control
- Contractor assumes most of the risk so the cost may be higher
- Cost savings due to risk not actualized go back to contractor not DOT
- DOT and contractors may not be familiar with the process
- Selection may not be based on low bid
- The perception that since the contractor is not selected solely on price, selections may be biased
- Risk is shifted to design build team
- DB project delivery requires more planning and coordination
- Pressure on designers, relating to price, is predominant in DB lump sum contracts
- Perception that large out-of-state contractors come in and get all the work

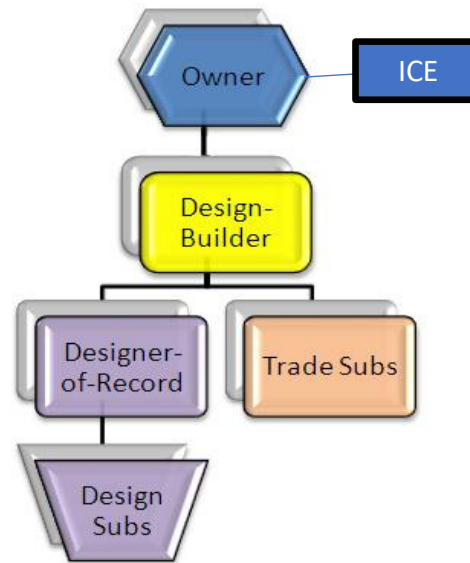
Progressive Design Build (PDB) Project Delivery Procurement Process



Progressive Design Build (PDB)

Benefits

- Early selection and collaboration with both the designer and contractor, as part of the same team
- DOT has more control/involvement/oversight in the design than with normal DB
- Procurement relying primarily on qualifications of designer/contractor and value rather than cost alone
- Inspires innovation
- Project cost and schedule development and refinement during the preconstruction phase – allows for more transparency around costs
- Design advancement and risk mitigation which improve cost and schedule accuracy
- Participation of an Independent Cost Estimator – develops independent cost estimates for the project
- Incremental progression of the project over two phases (Preconstruction and Construction)

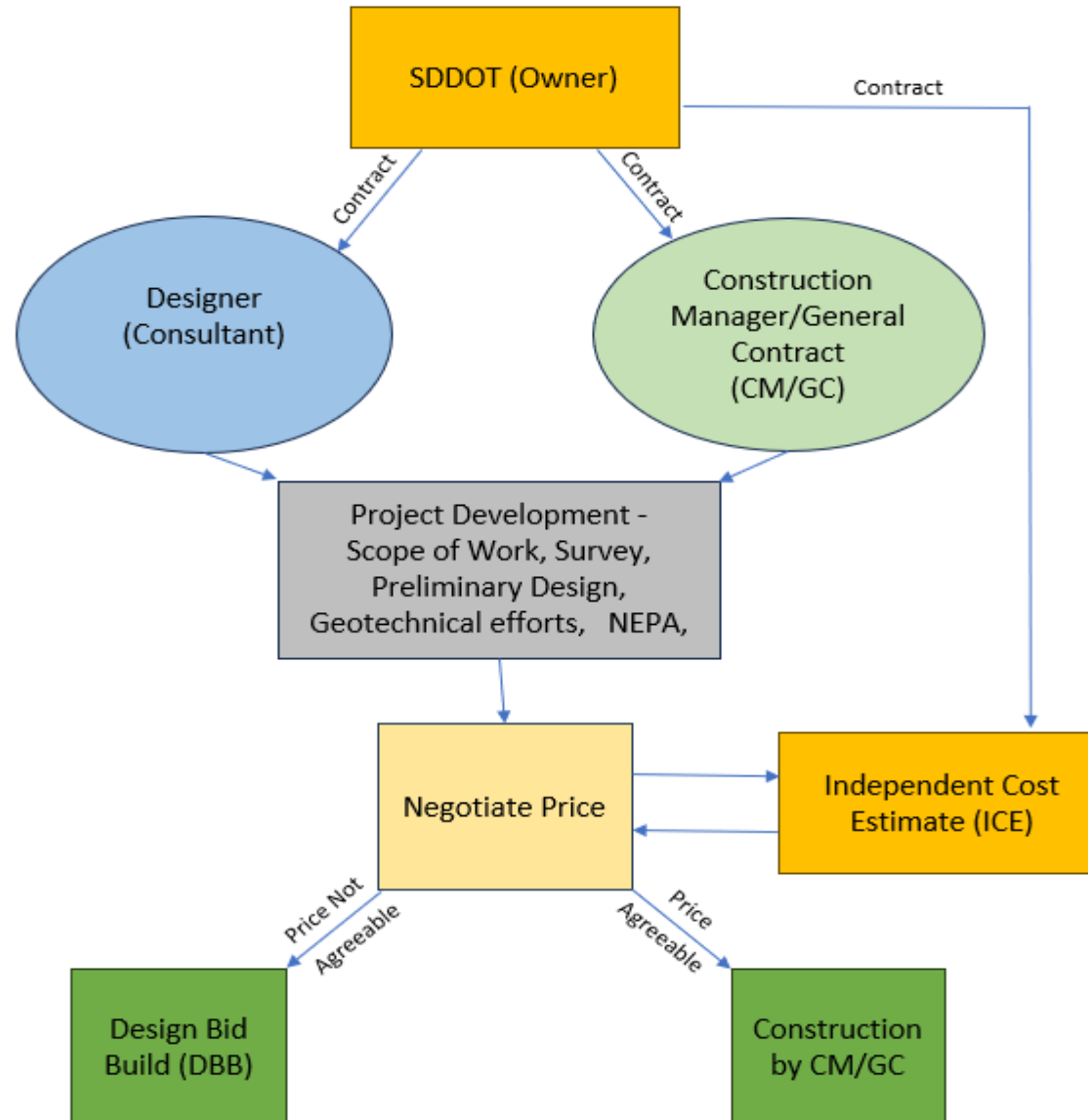


Source: FHWA

Challenges

- DOT, designers and contractors may not be familiar with the process
- Selecting designer and possibly a contractor without seeing full project costs
- Requires significant DOT involvement
- Selection is not based solely on cost
- Requires significant contractor involvement
- Perception that large out-of-state contractors come in and get all the work
- Perception that cost comparisons are difficult before and during construction

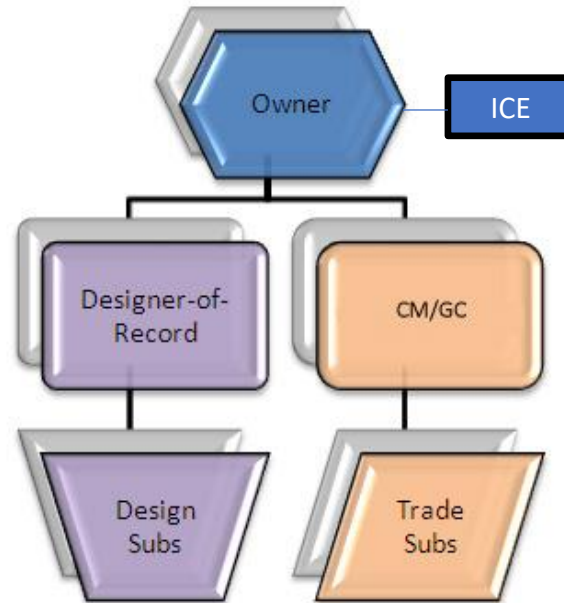
Construction Manager/General Contractor (CM/GC) Project Delivery Procurement Process



Construction Manager/General Contractor (CM/GC)

Benefits

- Contractor input from the early design phase
- Incentivizes innovation
- Offers a quick way for a construction project to progress from conception to completion
- Facilitates identification of and responses to risks
- Enables aggressive delivery
- Allows early and accurate cost estimates
- Provides the CM/GC the ability to handpick an “A” team
- Improves constructability
- Facilitates streamlined plans
- Can improve quality
- Offers early work packages
- Allows for flexibility in changing project scope
- Provides cost control
- Value engineering process is built-in, continuous



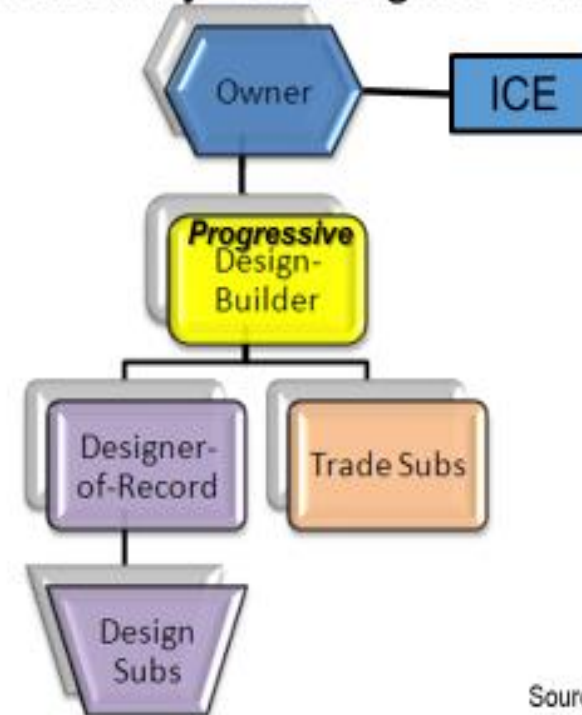
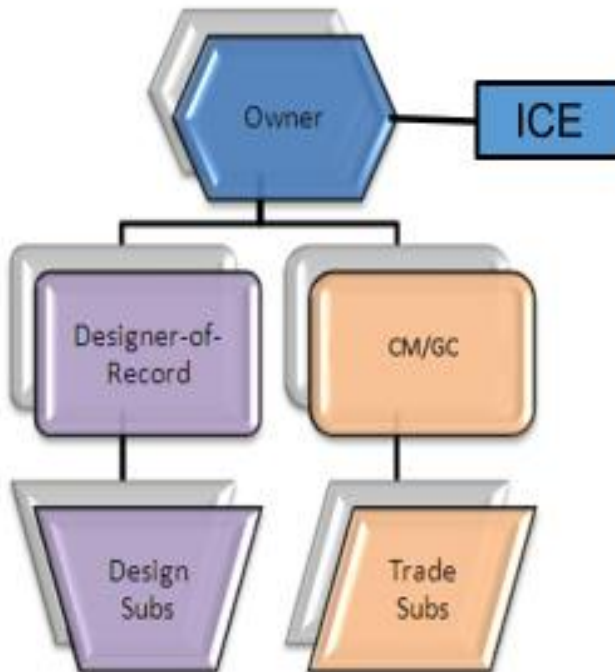
Source: FHWA

Challenges

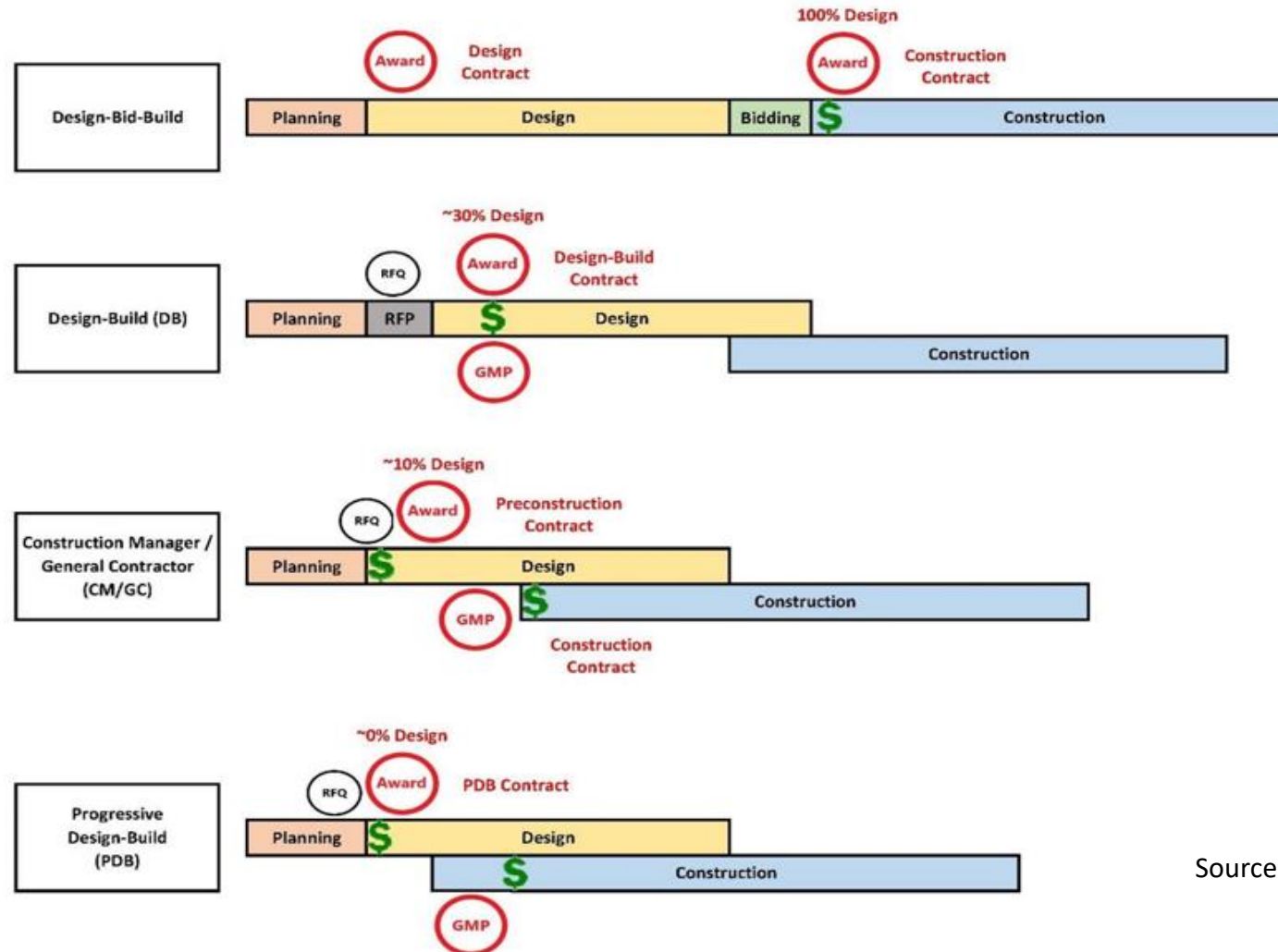
- There is a false perception that CM/GC is more expensive than DBB and DB
- DOT and CM's may not be familiar with the process
- Selection is not based solely on price
- Perception that since the contractor is not selected solely on price, selection may be biased
- Perception that large out-of-state contractors come in and get all the work

What is the difference between Progressive Design Build (PDB) and Construction Manager/General Contractor (CM/GC) contracting methods?

- Answer = the Parties of the Contract(s)
 - CM/GC = the StateDOT has **separate contracts** with Designer of Record and the Prime Contractor. The StateDOT is the “middle-man”.
 - PDB = the StateDOT has **one contract** with an entity for design & construction



Schedule Comparisons



Source: Washington State University

Discussion

Questions?

Where do we go from here?