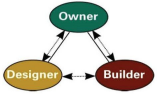

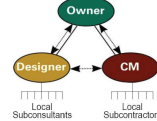

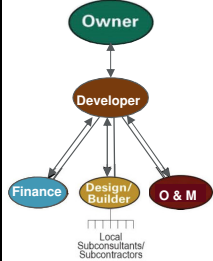


PROJECT DELIVERY MODELS



Delivery Model		Description	Advantages to Owner	Disadvantages to Owner	Investment by Owner	Bridging Consultant	Retained Risk / Design Control by Owner (Low-High)
Traditional	Design-Bid-Build (DBB) 	Traditional process used by all local governmental agencies. Designer is selected through a qualifications based process. Designer works with the Owner to define the requirements of the project using both prescriptive and performance criteria. Owner retains the risk of the accuracy of the bidding documents that are provided to the prospective contractors during the competitive bid phase.	1. Traditional process, extremely well know and used often. 2. Designer seen as Owner's advocate for the project. 3. Designer works closely with the Owner to define project requirements. 4. Pricing is competitively bid.	1. Project is awarded to the low bidder, low bidder may not be the most highly qualified. 2. Owner retains risk for design errors & omissions. 3. Longest procurement process due to linear sequencing. 4. Not able to take advantage of early constructability input or early market pricing.	Moderate	No	Highest
	Progressive Design-Build (PDB) 	Design-Build team selected through a qualifications based process, similar to traditional methods. Once selected the PDB team collaborates with the Owner on cost/schedule/scope items with the intent of entering into a LS or GMP. Owner has a single contract with both the Designer and the Contractor.	1. Simple / quick procurement process. 2. Increased participation / low proposal costs. 3. Flexibility to complete work based on available funding. 4.Owner can reject LS or GMP without significant project delays. 5. Better chance of designing to budget because of several costs estimates in the process.	1. Final costs of construction is not known at the time of contract signing. 2. Costs determined through both competitive and negotiated pricing. 3. Public education may be required related to construction cost negotiations.	Lowest	No	Low risk and high design control, because detailed project scope is defined later.
Alternative Delivery	Construction Manager At Risk (CMAR) 	Owner has separate contracts with the Designer and Contractor. Contractor is hired early in the process to take advantage of early market pricing and constructability input. Contract form can be a negotiated fee, LS, or GMP.	1. Allows Owner control of scope, features, and operational elements of the design. 2. Simple, inexpensive and quick procurement process. 3. Flexibility to complete work based on available funding. 4. Owner can reject LS or GMP without significant delays n the project. 5. Better chance of designing to budget due to multiple cost estimates in the process. 6. Potential for increased participation due to lower proposal preparation costs.	1. Loss of single-point of responsibility. 2. Owner retains the risk of design errors & omissions. 3. Cost of construction is not known at the time of initial contract signing. 4. Owner may need to facilitate collaboration between the design and construction firms. 5. Can require significantly more Owner involvement.	Low	No	Risk is still relatively high since Owner holds the designer contract separately from the construction contract.
	Lump Sum Design-Build (DB) 	Owner has a single contract with a Design and Construction entity. The Design / Builder can provide early constructability and cost estimating input during the design phases. Typically the Owner has to provide criteria documents to the proposers in order to define the scope, performance, and quality requirements of the project.	1. Owner responsibility for design is limited in performance based procurement. 2. Cost of design and construction is known at contract signing. 3. Schedule is fixed at contract signing. 4. Costs are determined through a competitive process. 5. Public acceptance is typically high with a LS award. 6. Suited for Owners who are focused on performance rather than design process or construction.	1. Procurement costs are high for all parties since significant design costs are incurred to respond to the proposal. 2. Procurement process takes substantially more time. 3. Owners may need to pay a stipend to unsuccessful teams. 4. Less efficient use of staff time because designs developed during proposal process are often not incorporated. 5. Potential for reduced participation due to high proposal costs. 6. Difficult to gauge pricing and escalation/inflation over a multi-year period.	High	Yes	Lower risk since design risk is transferred to the Design Builder.
Alternative Delivery	Public-Private Partnerships (P3) 	<p>Delivery model where both the Public and Private sectors combine resources as part of the transaction to provide a new facility. The Owner can provide real estate, or a payment guarantee as part of its contribution to the deal structure.</p> <p>Owner has a single contract with a development entity which provides design, construction, private sector financing, and long-term operations and maintenance of the proposed facility. Similar to design build in that is has a single contract, but much more complex in terms of its contract and payment structures to support the financing and O&M elements.</p> <p>A new twist in payment structures is the introduction of Performance Based Infrastructure (PBI) contracts, where the monthly payment is enhanced or reduced based on meeting predetermined performance metrics. Performance metrics are monitored by a third party.</p>	1. Owner responsibility for design is limited in performance based procurement. 2. Cost of design and construction is known at contract signing. 3. Schedule is fixed at contract signing. 4. Costs are determined through a competitive process. 5. Public acceptance is typically high with a LS award. 6. Suited for Owners who are focused on performance rather than design process or construction.	1. Procurement costs are high for all parties since significant design costs are incurred to respond to the proposal. 2. Procurement process takes substantially more time. 3. Owners may need to pay a stipend to unsuccessful teams. 4. Less efficient use of staff time because designs developed during proposal process are often not incorporated. 5. Potential for reduced participation due to high proposal costs. 6. Difficult to gauge pricing and escalation/inflation over a multi-year period.	Typically the highest Owner investment due to Bridging Consultant / Criteria Architect costs and the stipends typically paid to unsuccessful firms.	Yes	Typically the lowest retained risk by the Owner due to design and operations risks are transferred to the development team.