



# Project Delivery Methods

	Design-Bid-Build	Construction Manager/ General Contractor	Design-Build
Essential Elements	<ul style="list-style-type: none"> <li>• Traditional delivery system</li> <li>• Owner contracts separately for design and construction services</li> <li>• Bid based on complete (100%) plans and specifications</li> <li>• Owner retains high level of control and risk</li> <li>• Traditionally a unit priced contract</li> </ul>	<ul style="list-style-type: none"> <li>• Owner engages a construction manager (CM) to act as a construction advisor during the pre-construction phase and general contractor (GC) during construction</li> <li>• Selection criteria include qualifications, experience, strategic approach, and cost elements</li> </ul>	<ul style="list-style-type: none"> <li>• Combines design and construction under a single contract</li> <li>• Traditionally a lump sum contract</li> <li>• Two phase procurement               <ol style="list-style-type: none"> <li>1. Qualifications</li> <li>2. Technical/Price</li> </ol> </li> </ul>
Contractor Involvement			
Applicability	<ul style="list-style-type: none"> <li>• Projects where the owner needs to completely define the scope</li> <li>• Project scope can be best defined using prescriptive specifications</li> <li>• Significant risks or third-party issues (ROW, utility, environmental) that can be best resolved or managed by the agency</li> </ul>	<ul style="list-style-type: none"> <li>• Projects where owner requires control of scope during design</li> <li>• Project with multiple phases or contracts</li> <li>• Time or funding constraints</li> <li>• Complete or obtainable environmental documents and permits</li> </ul>	<ul style="list-style-type: none"> <li>• Projects that benefit from innovation in design and/or construction</li> <li>• Well defined project scope</li> <li>• Projects that would benefit from expedited project delivery</li> <li>• Projects having minimal public controversy or third party issues</li> </ul>
Advantages	<ul style="list-style-type: none"> <li>• Applicable to a wide range of projects</li> <li>• Well established and easily understood</li> <li>• Owner retains design control</li> <li>• Provides the lowest initial price that responsible, competitive bidders can offer</li> <li>• No legal barriers in procurement and licensing</li> </ul>	<ul style="list-style-type: none"> <li>• Allows for innovation and constructability during design through collaboration of CM</li> <li>• Reduces error, change orders, and materials overruns</li> <li>• Identifies and manages risk</li> <li>• Agency retains control over design</li> <li>• Early procurement and construction phases prior to completed design</li> </ul>	<ul style="list-style-type: none"> <li>• Potential for innovation and quality enhancement</li> <li>• Accelerate delivery by fast-tracking design and construction</li> <li>• Single point responsibility for design and construction</li> <li>• Early contractor involvement to enhance constructability of plans</li> <li>• Earlier schedule and cost certainty</li> <li>• Reduces error, change orders, and materials overruns</li> </ul>
Risks/Limitations	<ul style="list-style-type: none"> <li>• Initial low bid might not result in ultimate lowest cost or final best value</li> <li>• Higher level of inspection/testing by the agency</li> <li>• Agency bears risk of design adequacy</li> <li>• Potential adversarial relationship among the contracting parties</li> <li>• Limited opportunity to incentivize contractors to provide enhanced performance (cost, time, quality)</li> </ul>	<ul style="list-style-type: none"> <li>• Potential appearances of unfairness in sole source selection process</li> <li>• Potential for failure to agree on price and PS&amp;E sent out for bid</li> <li>• Determining appropriate level of design to take advantage of innovations.</li> <li>• Additional CM fees and independent agent during pre-construction</li> </ul>	<ul style="list-style-type: none"> <li>• Potential to reduce opportunities for small construction firms</li> <li>• Less owner control over design</li> <li>• Higher procurement costs for proposers</li> <li>• Potential to compromise quality</li> <li>• Considerable time and effort in RFQ/RFP selection process</li> </ul>
Procurement Methods	<ul style="list-style-type: none"> <li>• Qualified Low Bid</li> <li>• A+B Bidding</li> <li>• Alternate Bids</li> <li>• QA Specifications</li> <li>• Incentives/Disincentives for time and quality</li> </ul>	<ul style="list-style-type: none"> <li>• Best Value Selection</li> <li>• Performance Specifications</li> <li>• Contingency pre-negotiated</li> <li>• Incentive/Disincentive for early completion</li> </ul>	<ul style="list-style-type: none"> <li>• Best Value Selection</li> <li>• Performance Specifications</li> <li>• Incentive/Disincentive for time, quality, traffic, safety, etc.</li> </ul>