

Capital Project Phases & Terms

Project Phases

The phases below are defined by the American Institute of Architects as the standard steps for an architecture project. Exhibit projects follow much the same process, although the definitions, durations, and associated costs vary between them. The precise definition for each phase also varies slightly from professional to professional and the type and scale of the project. For that reason, it's less important to know the definition of each phase than to know the sequence – that one logically follows from another. The designers should be able to clearly explain what happens and what are the deliverables and durations of each phase.

What may be most critical is the idea of **approvals** at the end of each phase. That means the client must understand *and* approve each step so subsequent steps are built on a solid foundation. Most of the phases below should end in a cost estimate so the team can proceed with confidence that what is being designed is affordable.

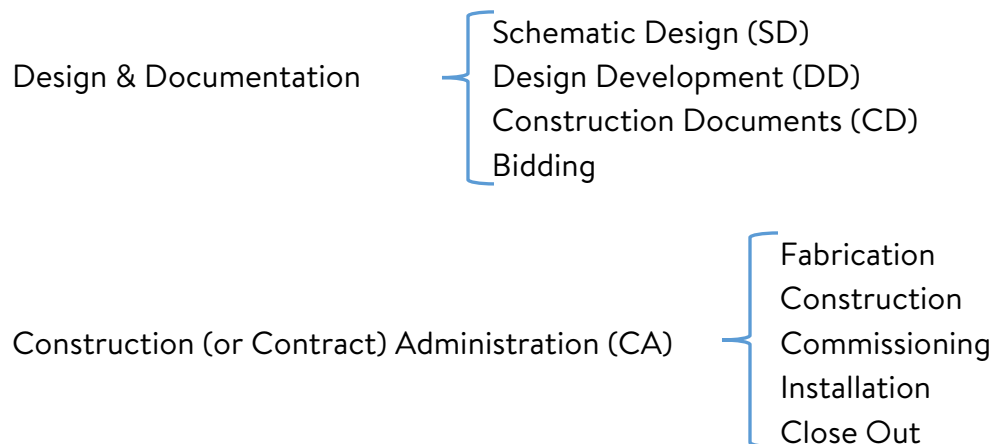
A note on the difference between architecture and exhibit phases:

The sequence of steps described below is more or less identical between the two types of projects, but the durations can be significantly different. If a project contains both a building and an exhibit, the dance between the disciplines/phases must be carefully choreographed. Close coordination is critical for a successful outcome. Having the exhibit team at the table when the architecture planning begins is extremely important, but the architecture scope typically takes more time than exhibits. That means the exhibits team may step in and out of the process, but they should remain engaged even if it means simple catch-up meetings during the times exhibit planning pauses.

“Pre-design” Services { Feasibility Study
Master Plan
Concept Design

Many documents are produced during each of the phases above, depending on the scope and size of the project, whether it's an architecture or exhibit project, or both. They may include:

- Fundraising Plan
- Economic Impact Study
- Building or Exhibit Program (regarding physical spaces)
- “Basis of Design” or “Owner’s Project Requirements”
- Zoning Analysis
- Front-end Evaluation
- Order of Magnitude Cost Estimate



Like the Pre-design phases, the Design & Documentation and Construction phases produce a library of documents. Work closely with your design team to identify what documents will be produced during each phase, how they relate to one another

Project Delivery Methods

This is how a project gets built, fabricated, and installed, distinct from how it is designed. Each method below has benefits and risks. Some funding sources dictate conditions that will limit the choices available.

Design/bid/build

Probably the most traditional method, at least over the last 75 years. The designers do their work, the design documents are given to a number of contractors or fabricators, and they submit prices in hopes of winning the job. One or more is selected and the project is built with some level of supervision by the designers. The phases outlined above remain as stated when this delivery method is used.

Design/Build

In this case, the designers are often under contract with the builder/fabricator and the whole team joins the project at the very beginning. There are firms that have both design and build capacity that will handle the entire project from feasibility study through construction.

This method, and the one described below can impact how many phases the project requires. For example, in many cases, a design/build method will not require Construction Documents and bidding phases.

Modified Design/Build

There are many permutations on the Design/Build model. The designers may be contracted directly to the client throughout the project, but the builder is brought on at the end of SD or DD and contracted separately. Another approach is that when the builder is brought on, the designer switches from being under contract to the client to contracting to the builder. However it is done, this delivery method can also impact the number and sequence of the phases. Bidding, for instance, may take place at the beginning of DD instead of after the CD phase. CD's phase may not take place as a separate phase but folded directly into the Construction phase.