

Percentage of traditional v. nontraditional project delivery methods performed by the U.S. Department of Veteran Affairs:

	Traditional	Nontraditional
1989	67%	33%
1990	61	39
1991	64	36
1992	56	44
1993	48	52
1994	41	59
1995	31	69

Non-traditional methods include fast track, joint venture, construction management, design-build, delegated and other.

8. PROS AND CONS

8.1 Pros

Most of the advantages of this method stem from its long and widespread use, from the clear roles assigned each party, and from the ability to clarify the project's design prior to construction.

- Design-bid-build's linear process is easy for owners to manage and understand.
- Owners can actively participate in the design process.
- Scheduling is straightforward, since design and construction phases are sequential rather than overlapping.
- The design-bid-build process benefits from the architect's professional responsibility to design a building of quality and to act in the owner's interest.
- Once the contractor makes a cost commitment, it is usually reliable since it is based on relatively complete design documents.
- Design and construction roles are separate and well understood, making both responsibility and liability relatively clear.
- Owners have the opportunity to review competitive bids for construction costs.
- Contractors are familiar with this process and work well under its constraints.
- Architects are more active in construction administration than in other project delivery methods, so design intentions are carried through construction.

8.2 Cons

- The cost of construction is not firmly established until design is complete. If bids run over budget, redesign, value engineering and rebidding can lead to project delays and additional design costs.
- The architect does not typically receive the benefit of the contractor's advice on constructability and cost during the design phase.
- Knowledge of some advanced construction technology found among specialty subcontractors and general contractors is not as readily available with design-bid-build.
- Too often, design-bid-build is based on the premise that architects can produce an unrealistically perfect set of construction documents. The expectable imperfections can expose the architect and the owner to claims during and after construction.
- Since most contractors compete on the basis of low bid, any gaps or alterations in the design documents have the possibility to become opportunities for contractor delay claims and change orders.
- Design-bid-build's relatively lengthy process can be unacceptable for owners under pressure from high inflation of construction costs, high financing costs, or when a building must be occupied quickly.
- Because the process is linear, a delay in any phase sets back the schedule.
- Construction delays may result in added costs to the owner and architect.
- Adversarial relationships and the potential for litigation can develop between architect and contractor due to their separate contracts with the owner and the low-bidding contractor's overriding interest in cost.



8.1 Pros

Most of the advantages of a negotiated select team stem from trust and cooperation among the architect, contractor and owner.

- Due to the trust between members of the negotiated select team, this method is relatively easy for owners to manage, providing owners with a strong sense of control.
- In this method, the team approach between architect and contractor provides the benefits of design-build, but without the contractual disadvantages. Since the owner contracts directly with both parties, they each work in the owner's best interest.
- This method is effective at delivering high quality for a defined budget. The architect benefits from the contractor's input during the design of the project, from the direct relationship with the owner and from the specific attention paid to design.
- The overall project time line is shortened because the contractor is involved from the design phase. This reduces time-consuming delay claims and change orders while making fast tracking readily possible.
- This method reduces the incidence of disputes between the project personnel. Most architects and contractors are comfortable with this method because it is commonly employed and shields them against adversarial relationships.
- This method is familiar and can be easy to manage: Overlapping the sequential phases of the project delivery system allows for scheduling a faster project; the independence of architect and contractor makes responsibility and liability fairly clear; and cost commitments from the contractor are reliable because they are based on solid knowledge of the design.

**8.2 Cons**

- Since the general contractor is not always competitively bid, owners may be concerned that they were unable to achieve the most economical price.
- If the owner elects to fast track the project, preliminary cost estimates are not based on the completed design, and subsequent design work may cause cost overruns and delays.
- The variations between the negotiated select team and design-bid-build render this method slightly more ambiguous in the following respects: Design and construction roles are interwoven; when phases are overlapped, scheduling is complicated; and when cost commitments are based on incomplete design and documentation, cost overruns can occur.
- Even with the team approach, the separate contracts may place the architect and the contractor in an adversarial relationship, especially if one fails to meet the intent of the relationship.

When Sound Tech Corporation develops a new facility for its digital sound systems manufacturing overseas, it typically selects the construction manager as advisor method of project delivery. A recent office and plant built in Madras, India, was not unusual. The company's Director of Corporate Facilities brought a construction manager on board immediately after learning of the upcoming project. The CM, who had worked in that region on other projects, then advised on the processes entailed in building there. The owner was working simultaneously with an architect to develop a design for the project, and the CM sat in on all their meetings in order to advise them of the feasibility of the design given building practices in Madras. Time and quality were far more critical to Sound Tech than budget, and these were emphasized by all participants. As the director stated: "There's a triangle of schedule, cost and quality. You get one of these for free, and you get the second at the cost of the third."



7.4 Liability and Indemnity

The CM-advisor project delivery method has some additional liability issues that do not arise with traditional project delivery systems.

- The construction manager's liability for his/her effect on design decisions or construction methods must be identified, and carefully delineated in the contracts between all parties.
- Public agencies as owners often require project delivery personnel to agree to an indemnity clause. In these cases, special contractual provisions need to be negotiated; it is recommended that all parties consult legal counsel.

7.5 Dispute Resolution

Compared to other methods of project delivery and to design-bid-build in particular, CM-advisor may have a higher incidence of disputes since the owner is contracted to three independent entities. The ability of the team to work together effectively ultimately controls the number and intensity of disputes that arise.

- The owner must maintain clear goals, define responsibilities and delineate authority in order to keep the team of professionals functioning effectively.
- Disputes can be minimized through partnering in which responsible parties mutually and formally commit to the general success of the project.
- When all parties are able to communicate well, the construction manager, as an informed advisor, may be able to help settle disputes between the owner and the other parties.
- Disputes that do arise can be handled with the standard methods of dispute resolution. Mediation and arbitration can be invoked to resolve most disputes. It is recommended that parties seek the advice of legal counsel.

■ 8. PROS AND CONS

8.1 Pros

Most of the advantages of this method arise from the added expertise that a CM-advisor provides the owner and from the use of the traditional delivery process.

- Owners with less experience and those lacking in-house construction management capabilities benefit from CM expertise. When undertaking a large or complicated project, the CM-advisor can reduce the management burden on the owner's staff.
- The addition of construction expertise during the design phase is often beneficial. For example, the development during design of an accurate schedule published with the specifications can greatly speed the construction process. Cost estimating during the design phase allows construction costs to be monitored at an early stage and allows effective value engineering.
- A CM-advisor empowered with decision-making authority and managerial responsibilities may speed the project process.
- The architect remains directly responsible to the owner, protecting the owner's interests. At the same time, the architect can benefit from the CM-advisor's input during design.
- The CM-advisor's review of the construction documents is a second level of examination that helps reduce errors or omissions in the documents. This can result in reduced costs related to change orders, delay claims during construction and litigation.

- There is no link between the CM-advisor and the contractors seeking to provide construction services. Contractors may be selected based on competitive bidding, which may save the owner money.
- The skills of the CM-advisor may allow owners to fast track some aspects of the project or to manage more prime contracts than would be possible in the absence of an advisor.
- Supervision of the construction phase by the CM-advisor can effectively reduce miscommunication and errors in the construction process.
- Like design-bid-build, this method is familiar and easy to manage: The sequential phasing allows for clarity in scheduling; the independence of architect and contractor makes responsibility and liability relatively clear; and cost commitments from the contractor are reliable because they are based on full design and documentation.

8.2 Cons

- Added levels of coordination and overlapping areas of authority can confuse traditional roles, complicate the traditional processes of design and construction, and increase the time and paperwork required to complete the project.
- The CM-advisor represents an added cost that is not present in traditional design-bid-build project delivery.
- The scrutiny of the CM-advisor, who then reports to the owner, can be counterproductive from the vantage of architect and contractor. For example, the architect may have to justify reasoned aspects of the design that the CM-advisor judges not to be cost effective.
- The activities of the CM-advisor may suppress direct communication between the owner and the architect or contractor.
- Confusion in the decision-making process caused by overlapping responsibilities between the CM-advisor and the architect or contractor may contribute to design and construction delays.
- Since there is no contractual relationship between the contractor and the CM-advisor, responsibility for problems in scheduling or coordination of certain aspects of construction may be difficult to determine. Disputes may arise that only the owner is able to resolve.
- Because each of the prime parties holds a separate contract with the owner, the potential for adversarial relationships exists, increasing the likelihood of disputes.
- Like traditional methods on which it is based, the actual construction costs are not known until the design is complete, even though costs are estimated by the CM-advisor early in the project. The linear process can engender delays due to redesign or scheduling problems that affect all subsequent phases. The time required to complete the project may be unacceptable to owners who are under pressure to occupy the building as soon as possible.
- The owner has the added cost of the CM-advisor's fees and the potentially higher fees of the architect and the contractor. These costs may be somewhat offset by reduced management demands on the owner's staff.

7.4 Liability and Indemnity

The construction manager as agent has additional liability issues relative to the CM-advisor and traditional project delivery methods.

- The CM-agent's liability must be identified and carefully delineated in the contracts between all parties. This is particularly the case for actions on behalf of the owner and for responsibility with regard to design decisions and construction methods.
- If the owner requires contracts to include hold harmless clauses in favor of the owner, then special contractual provisions need to be negotiated between all parties relating to indemnity. It is recommended that all parties consult legal counsel.

7.5 Dispute Resolution

Compared to other methods of project delivery, construction manager as agent may have a higher incidence of disputes when the owner contracts separately with each of the three primary parties. A lower incidence of disputes is likely when the owner contracts directly to the CM-agent and then, through the CM-agent, contracts with the architect and contractor.

- Disputes can be minimized through partnering in which responsible parties mutually and formally commit to the general success of the project.
- The CM-agent as a representative of the owner should be able to help mediate disputes between the owner and the architect or the contractor.
- Disputes that do arise can be handled with the standard systems of dispute resolution. Mediation and arbitration can be evoked to settle most disputes. It is recommended that parties seek the advice of legal counsel.

8. PROS AND CONS

8.1 Pros

Most of the advantages of this method arise from the added expertise that a CM-agent brings to the owner and from its use of the traditional delivery process.

- The services of a CM-agent can reduce the burden on the owner to undertake the management of a large or complicated project.
- Owners with less experience and those lacking in-house construction management skills benefit from CM expertise. The CM-agent is directly responsible to the owner, looking out for the owner's best interest.
- The CM-agent's ability to make fiscal decisions can speed the process and reduce duplicative and contradictory decisions.
- Additional construction expertise during the design phase can have positive effects on the project. The CM-agent's development of a schedule for construction included with specifications released for bid can speed the construction process. Cost estimating during the design phase allows construction costs to be monitored at an early stage.
- The CM-agent's review of construction documents for constructability is a second level of examination that helps to reduce the number of errors or omissions in the documents. This can reduce litigation as well as costs related to change orders and delay claims during construction.
- There is no link between the CM-agent and the contractors seeking to provide construction services. Contractors can be selected based on competitive bidding, which may save the owner money.

Professional Client

"When the CEO of the advertising company hired a CM-agent to work with us, it was like hiring a professional client," said the project architect for a series of projects within an existing warehouse being converted to office space. "We were doing an unusual rehab of the warehouse—making meeting rooms, executive suites, media rooms—really we were building about twelve smaller buildings within this big space. All this was too much for the CEO to manage, and he had no facilities person on staff. The CM was very competent, as it turned out, and it worked out well for us because he acted on the owner's behalf on almost everything. He could make decisions and sign checks. We actually built a small, new office building for the same CEO a couple of years later, without a CM. I thought each way had advantages: with the CM things moved more quickly and he caught some mistakes as we went along; without the CM the client was much more involved, and I think that generally makes for better buildings."



- The skills of the CM-agent allow owners to fast track some aspects of a project or to manage multiple prime contracts.
- Supervision of the construction phase by the CM-agent can effectively reduce miscommunication and errors in the construction process.
- Like design-bid-build, this method is familiar and easy to manage: The sequential phasing allows for clarity in scheduling; the independence of architect and contractor makes responsibility and liability relatively clear; bids from the contractor are more reliable because they are based on full design and documentation.

8.2 Cons

- The owner's active participation in design and construction processes is desirable.
- The role of the CM-agent suppresses direct communication between the owner and the architect or contractor.
- Overlapping areas of expertise can confuse traditional roles, complicate conventional practices and increase the time and paperwork required to complete the project.
- Fast tracking or multiple prime contracts with the owner can greatly increase the amount of paperwork and contract administration for the architect, owner and construction manager.
- The owner is likely to pay more for management and design services than in the traditional methods of project delivery. In addition, the time required to interview, select and hire an additional consultant adds to the overall time required for the project.
- Like traditional methods on which it is based, the actual construction costs with a CM-agent are not known until the design is complete, even though costs are estimated by the CM-agent early in the project. The linear process can engender delays due to redesign or scheduling problems that will affect all subsequent phases, though these are less likely than in standard delivery methods. The time required to complete the project may be unacceptable to owners who are under pressure to occupy the building as soon as possible.

7.5 Dispute Resolution

Compared to other methods of project delivery, CM-constructor may have a somewhat higher incidence of disputes between parties since the owner contracts separately with the CM-constructor and the architect. The two independent project personnel can develop adversarial relationships.

- Disputes can be minimized through partnering in which responsible parties mutually and formally commit to the general success of the project.
- Disputes that do arise can be handled with the standard systems of dispute resolution. Mediation and arbitration can be invoked to settle most disputes. It is recommended that parties seek the advice of legal counsel.

■ 8. PROS AND CONS

8.1 Pros

- Because the CM-constructor makes a cost commitment early in the project time line, the owner has a degree of security about costs not provided by other project delivery methods except design-build.
- The CM-constructor reviews the scope-of-work documents to make a cost commitment. The CM-constructor's constructability reviews provide a second level of examination that reduces errors and omissions in the documents. These two practices can reduce costs related to change orders, delay claims during construction and litigation.
- Since CM-constructors commit to deliver the project for a specified price, it is in their interest to complete the construction as soon as possible, which also serves the owner's interest.
- Owners with less experience and those lacking in-house construction management capabilities benefit from CM expertise. When undertaking a large or complicated project, the CM-constructor can reduce the management burden on the owner's staff.
- The architect works with the owner in the early design phase to establish aspects of quality and function before the CM-constructor is hired and begins cost/benefit analyses. This may contribute to the quality of the project.
- The skills of the CM-constructor should permit the project team to fast track the project or to employ multiple prime contracts.
- The CM-constructor's assumption of costing and scheduling responsibilities can be an advantage to architects lacking the expertise or personnel to carry out those tasks.
- Like design-bid-build, the independence of architect and contractor makes responsibility and liability relatively clear; scheduling is straightforward because design and construction phases are usually sequential; selecting the CM-constructor by low bid contributes to cost control for the owner.

8.2 Cons

- The management role of the CM-constructor represents an added cost that is not required in traditional design-bid-build project delivery. The time required to select an additional professional extends the overall time required for the project, and architects may increase their fees in order to cover the increased costs of extra meetings and consultations with the CM-constructor.
- Since the owner does not contract directly with prime or trade contractors, the owner may be unable to control quality in the construction process.



- Because each of the prime parties holds a separate contract with the owner, the potential for adversarial relationships exists, increasing the likelihood of disputes.
- When the CM-constructor is selected by low bid, change orders and delay claims are likely, increasing costs for the owner as well as the architect and CM-constructor.
- Since the prime or trade contractors are generally selected by low bid, they are likely to seek extra funds during construction through change orders based on claims that bid documents were incomplete.
- The linear process of this project delivery method makes it relatively lengthy, and time delays in one phase of the project delay the overall time frame. The time required to complete the project may be unacceptable to owners who are under pressure to occupy the building as soon as possible.

As used in the handbook to illustrate the relationships between parties, the term "designer" includes both architects and engineers. State licensing laws prescribe professional services that can be rendered by design professionals and should be consulted before embarking on a project.



7.5 Dispute Resolution

This method generally reduces the number of disputes since disagreements are internalized within the design-build entity. The adversarial relationships between architects and contractors in the traditional project delivery system no longer directly affect the owner, since both professionals are working in the interests of the design-builder. Good methods for internal resolution of disagreements within the design-build team ultimately contribute to a greater chance for successful project delivery.

- The standard systems of dispute resolution, mediation and arbitration, can be invoked to settle most disputes; however, their use is not well established for this project delivery method. Dispute resolution should be carefully addressed in the contract between the owner and the design-build entity.

■ 8. PROS AND CONS

8.1 Pros

- The design-builder provides a single point of responsibility for design and construction, thus minimizing the owner's risk and responsibilities. The owner purchases a complete package of services and products.
- Interactions between parties are better coordinated, which saves time. The owner receives input and approval from the end user at an earlier stage. Once the design-builder is hired, further involvement of the end user is limited, which can save time and money. Project delivery personnel may favor this method because it allows them more control over the budget and schedule. Time-consuming meetings and paperwork may be reduced when independent personnel are not involved. The documentation of design and construction can be reduced.
- The early cost commitment of design-build can be advantageous to the owner, as risk is reduced since very little capital was invested (perhaps about 5 percent of the total project budget) by the time costs are committed.
- The owner can make performance specifications (such as "this room must be capable of supporting a live load of 125 pounds per square foot") and the design-builder is required to deliver a building that meets those requirements.
- Time delays due to scheduling problems and changes in construction are substantially reduced, as are delay claims and change orders. This method can be one of the fastest project delivery systems, allowing the owner to benefit from financing opportunities and the ability to occupy the building rapidly.
- When a design competition is used to select the design-builder, the owner sees several independent proposals for the project before making a selection.
- Conflicts between project professionals are internalized within the design-build entity, and do not involve the owner.

8.2 Cons

- Compared to the traditional method, the design-build method is not well understood, can be more complex and may be less clear to owners embarking on a project. Design, scheduling and construction are interwoven, making it difficult for the owner to participate and evaluate.
- The owner may not have the time or expertise to prepare adequate preselection materials so that the advantages of design-build can be realized. Owners with less experience are likely to have difficulty utilizing this method.

- The architect does not serve directly as the owner's agent but is contracted or employed by the design-build entity, shifting the architect's allegiance away from the owner to the design-builder.
- The design-builder's cost commitment is not based on full design and documentation. Disagreements with the owner may arise over what was implied in the documents. Design changes required by the owner become change orders that carry an added cost.
- Deliberations about cost-saving strategies take place within the design-build team, which may lead to reductions in building quality without input from the owner. Short-term savings tend to outweigh long-term costs (life cycle costs, including operating and maintenance) unless very specific quality and performance standards have been defined.
- If the design-builder was selected on the basis of price alone, quality may be compromised.

8.1 Pros

- For owners unable to complete some part of the development process, such as obtaining financing for a new building, this method is effective.
- The DB-developer provides a single point of responsibility for land acquisition, financing, design and construction, thus minimizing the owner's responsibilities. The owner is purchasing a fully functional building as a package from one supplier.
- The risk to the owner is greatly reduced since the DB-developer is providing financing, land acquisition and an early cost commitment. The owner has very little capital invested in the project before construction is completed. Time is saved by an experienced design-builder who can expedite entitlements, financing and other complex processes.
- Interactions between parties are somewhat confined, which saves time. The owner receives input and approval from the end user at an earlier stage. Once the DB-developer is hired, further involvement of the end user is limited, which can save time and money. Project delivery personnel may favor this method because it allows them more control over the budget and schedule. Time-consuming meetings and paperwork may be reduced when independent personnel are not involved. Design and construction documentation can be reduced.
- The owner can make performance specifications (such as "this floor must be capable of supporting a live load of 125 pounds per square foot"), and the DB-developer is required to deliver a building that meets those requirements.
- Time delays due to scheduling problems and changes in construction are substantially reduced, as are delay claims and change orders. This method can be one of the fastest project delivery systems, particularly when the DB-developer already owns the land.
- When a design competition is used to select the DB-developer, the owner sees several independent proposals for the project before making a selection.
- Conflicts between project professionals are internalized within the design-build entity and do not involve the owner.



8.2 Cons

- If the building project is developed without owner participation, it may not meet owner expectations, placing risk on the design-builder, particularly in the post-construction period. Owners who desire direct participation in decision making throughout the design and construction process may prefer a different project delivery method.
- Compared to the traditional method, the DB-developer method is not well understood, can be more complex and may be less comfortable to owners embarking on a project. Land acquisition, financing, design, scheduling and construction are interwoven, making it difficult for the owner to participate and evaluate. Parties with experience with this method contend that the process is too complex for owners with little experience in the building industry, even though, paradoxically, this method seems tailored to their needs.

- If the original project specifications at the time of the DB-developer's selection are the only input from the owner, the finished project may not meet the owner's expectations. The owner may not have the time or expertise to prepare adequate preselection materials so that the advantages of the DB-developer method can be realized.
- The architect does not serve directly as the owner's agent but is contracted or employed by the DB-developer entity, shifting the architect's allegiance from the owner to the DB-developer.
- The DB-developer's cost commitment is not based on full design and documentation. Disagreements with the owner may arise over what was implied in the documents. Design changes required by the owner become change orders that carry an added cost.
- Deliberation about cost-saving strategies take place within the design-build team, which may lead to reductions in building quality without input from the owner. Short-term savings tend to outweigh long-term costs (life-cycle costs, including operating and maintenance) unless very specific quality and performance standards have been defined.
- If the DB-developer was selected on the basis of price alone, quality may be compromised.

- Depending on the nature of the project, the owner may require that pollution and/or environmental impairment coverage be carried by the design-build entity. The design-build entity in turn may require appropriate insurances from their subconsultants and subcontractors.
- For larger projects, owners may want to consider both a wrap-up policy for the contractor, which combines general liability and worker's compensation, and an architect/engineer project policy, which provides professional liability coverage on a project-specific basis and normally covers all the design professionals on the project. Wrap-up policies rarely include the professional liability exposure; normally it must be provided in a separate policy.

7.4 Liability and Indemnity

There is the potential for shared liability between the owner's architect and the design-build architect in this project delivery method.

- Since the architect of record is part of the design-build entity, the design-build entity shoulders most risk related to architectural services.
- In some cases, the owner requires contractual hold harmless clauses in favor of the owner and, in turn, the design-build entity may require architects and contractors to include hold harmless clauses in its favor. Such special contractual provisions need to be negotiated between all parties and can affect project costs.

7.5 Dispute Resolution

This method generally reduces the number of disputes since disagreements are internalized within the design-build entity. The adversarial relationships between architects and contractors in traditional project delivery are no longer apparent, since both professionals are working in the interests of the design-builder. Good methods for internal resolution of disagreements ultimately contribute to successful project delivery.

- Since there are two architects working separately on the project, the potential for disputes exists.
- The standard systems of dispute resolution, mediation and arbitration, can be invoked to settle most disputes. However, their use is not well documented for this project delivery method. Dispute resolution should be carefully addressed in the contract between the owner and the owner's architect as well as in the agreement between the owner and the design-build entity.

■ 8. PROS AND CONS

8.1 Pros

- Bridging takes advantage of the best aspects of two other delivery options: Like design-build, it provides a single point of responsibility for final design and construction and incorporates its efficiencies of internal operation; and like design-bid-build, owners can retain an independent architectural professional to represent their interests as design direction and standards are set.
- The owner's architect interacts directly with the owner to define the functional and aesthetic aspects of the building. The increased interaction between the owner and the owner's architect in the early phase allows for more in-depth definition of the owner's needs for the project.
- The owner obtains a highly enforceable price for the complete project early in the process without much capital outlay. Unlike standard design-build, the cost



commitment is based on scope-of-work documents drawn up by an architect, which are more complete. According to proponents, the cost commitment is obtained in about half the time for half the cash outlay as in the traditional approach.

- Time delays due to scheduling problems and changes in construction are substantially reduced, as are delay claims and change orders, because a single entity is responsible for both design and construction. This can amount to considerable cost savings.
- Construction does not begin until the construction documents are completed and approved by the owner. This gives the owner the benefit of complete understanding of the final design and full control over the quality of the product.
- Interactions between parties are somewhat compressed, which saves time. The owner receives input and approval from the end user at an earlier stage. Once the design-builder is hired, further involvement of the end user is limited, which can save time and money. Project delivery personnel may favor this method because it allows them more control over the budget and schedule.
- The owner can make performance specifications (such as “this room must be capable of supporting a live load of 125 pounds per square foot”), and the design-builder is required to deliver a building that meets those requirements.
- Conflicts between the design-build professionals are internalized within the design-build entity and do not involve the owner.

8.2 Cons

- Compared to the traditional method, the bridging method is not well understood, more complex, and may be less clear to owners embarking on a project.
- Management required of the owner is more extensive than in other methods.
- Conflicts between the owner’s architect and the design-build architect can arise, especially if the owner has failed to define the extent of the responsibilities of the owner’s architect.
- Because the design-builder arrives after preliminary design is completed, the owner’s architect does not benefit from early construction expertise.
- Work performed in the early phase determines many of the design and functional aspects of the project for which the design-build team ultimately takes responsibility (and liability) but has no opportunity for input. The design-builder may be able to blame the owner’s architect for design flaws and cost overruns.
- Unless leading the design-build team, the architect of record does not serve directly as the owner’s agent but is contracted or employed by the design-builder, shifting that architect’s responsibility away from the owner.
- Deliberations about cost-saving strategies take place within the design-build team, which may lead to reductions in building quality without input from the owner. Short-term savings tend to outweigh long-term cost-saving strategies, unless very specific quality and performance standards have been defined.
- The more advanced the early phase design, the less it resembles design-build and the more it resembles a bid project with incomplete plans.

“We’re going to bid on a project for the Navy that will follow the method they expect to require by 1997,” says a Southern California architect. “All of our drawings are computer-generated and will be put out to bid electronically. Any contractor with an account and a password can bid the job. That also means our drawings will be totally accessible; they could easily be changed on the computer. People could get an incomplete set and we’d never know it. Basically, as we understand the system now, we lose control of the drawings. The legal implications of the electronic future of this industry are staggering.”