Guide to Integrated Design and Delivery



Guidance for Government Officials





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We are deceiving ourselves by saying that low-bid is how we deliver value, but in many ways we have been so bound by our contracts. **7**

- Mark Palmer, City of San Francisco.

Role to Play in an Integrated Approach

Code officials and planning and zoning staff may be peripherally involved with integrated projects through the permitting process. In order to balance environmental performance and their public health and safety concerns, they need to have a deep understanding of the health and safety benefits of green features. Government agencies can also act as owners interested in integrated design and delivery approaches for their public works projects. Since most jurisdictions have policies that require contracts to be awarded based on the lowest bid, policy makers have a role in reforming that legislation. Adopting state or provincial versions of the Brooks Act or following Colorado's lead by adopting legislation similar to its Integrated Delivery Method for Public Project Act would greatly help remove these barriers.

Key Points:

- Keep an open mind about the approach and remove policy barriers.
- Gain deeper understanding of how green building can positively affect health and safety.

Opportunities

Public project owners might be interested in the value, cost, and schedule benefits that private owners are reporting from using integrated design and delivery approaches. As outlined in *Integrated Project Delivery: An Owner's Perspective*, multiple owners in projects of different scales have had projects come in ahead of schedule and under budget (Ashcraft 2013). For example, Bellevue Hospital in New York was completed three months early and cost US\$30 million less than initial project estimates. Since the entire team's interests were aligned with the project goals, the outcome was more predictable, and the owner can be more confident of having gotten a project that meets its needs.

For code officials, integrated projects bring greater opportunities to provide input early and thus avoid what can sometimes devolve into adversarial relationships. When designers and builders know what potential issues they must navigate, they reduce the likelihood of being blindsided by a code issue after money and time has already been invested.

As one responsible for the public's health and welfare, officials might also find relevant the approach's potential to realize buildings that have less impact on the environment and that serve public health interests. The alignment process set out through this approach (steps 1 and 2 of this Guide) encourages the project team to think about all that a project has the capacity to achieve rather than make a checklist of a set of narrow goals. This opens the possibility for qualitative improvements. For example, the Sarah E. Goode Academy achieved LEED Gold even though it was programmed for LEED Silver (see case study, p. 63). As team members, officials can participate in setting the targets and benefit from creative and innovative input from the team.

Key Points:

- Integrated design and delivery results in reduced costs, less waste, and compressed construction schedules.
- Increased value translates into public health benefits.

Initiating an Integrated Project

Many government agencies require that construction projects engage in a competitive bidding process and select contractors based primarily on cost. Professional services, however, such as the architect's contract, are granted on a qualitative basis. This approach limits using one contract for both services unless granted by statutory authority. A committed agency might be able to find solutions to those limitations and incorporate at least some aspects of integrated design and delivery. Some alternative delivery methods, for example, might already provide one the statutory authority to incorporate IPD principles (Gehrig 2010):

- 1. **Design-Build Authority:** If an agency has design-build authority, then it is permitted to award a single contract for a contractor to design and construct the entire project. This allows the agency to bring trade contractors into design early and tie compensation to project outcomes.
- 2. California's Infrastructure Finance Act (California Code §5956): This applies only to fee-producing facilities, but gives broad authority to the agency for awarding a contract to do any combination of study, planning design, construction, development, financing, maintenance, improvements, repairs or operations. Rather than being selected based on lowest cost, teams are selected based on demonstrated competence and fees are determined by competitive negotiation.
- **3.** Lease/Lease-back: This authority only applies to school districts or community college districts. The public agency leases land to a contractor and the contractor constructs the facilities and leases the building back to the agency until payments account for the costs of the project. In this arrangement, the agency is free to select a contractor on any basis.
- **4.** Energy Service Contracts: These contracts allow public agencies to purchase electric or thermal energy, but can also apply to the renovation or construction of facilities using those services. This allows an agency to award a single contract for all phases.
- **5. Public-Private Partnerships:** These contracts give public entities the option to contract with private companies to provide certain services, which can include design and construction. These are performance-based contracts, which help encourage integration.

These options may not allow the full incorporation of integrated design and delivery principles, but they allow profit to be tied to project performance, and most give authority to do a single contract. Alternatively, in the US, a project can always apply for a variance to contracting restrictions under the rationale that the project will be a pilot project for new processes (National Association 2010). This step might ultimately be important proof of concept for regulatory or statutory reform. Some public agencies are not subject to design-bid-build restrictions at all. These sometimes include local county water districts or transportation authorities. Furthermore, some states, including Colorado and Arizona, have adopted statutes that specifically give authority for IPD projects. If these options do not apply, it is still possible to incorporate the behavioral aspects of integrated design and delivery while making use of more traditional contracts (see Edith Green–Wendell Wyatt case study, p. 57).

Public projects are sometimes restricted to design-bid-build, but there are ways around. You might find some flexibility with:

- certain agencies not subject to design-bid-build restrictions (county water districts, etc.),
- design-build,
- the Infrastructure Finance Act (CA),
- lease/lease-back, or
- energy service contracts.





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