Survey Results focus on Project Uncertainty and Means to Address It

Last fall, the Dodge Analytics (formerly McGraw Hill) organization published a report entitled: *Managing Uncertainty and Expectations in Building Design and Construction*. This was the culmination of a months-long industry survey project co-sponsored by LCI and a number of other national trade associations, including the AIA. The project’s premise was that the process of planning, design, and construction isn’t 100% perfect, but project team members often end up arguing about unexpected project changes. Based on surveying owners, designers and contractors, the project’s stated goals included 1) generating real data about typical costs of non-negligent errors, omissions, and coordination issues; 2) setting realistic expectations, and 3) structuring budget contingencies. Finally, the study sought to generate information about best practices and tools that can improve industry performance, notably including Lean design and construction techniques. The findings identified seven top causes of project uncertainty as identified by the responding owners, architects and contractors.

The seven top causes of uncertainty included the following:

- Unforeseen Site or Construction Issues
- Owner-related Causes:
  - Owner-driven Changes to Program or Design
  - Accelerated Schedule
- Architect-related Causes:
  - Design Errors
  - Design Omissions
- Contractor-related Causes:
  - Coordination Problems
  - Contractor-caused Delays Non-aligned Cause

The study also identified seven top strategies to help mitigate these causes, again according to the responding owners, architects and contractors: Better communication among all project team members in the early stages of the project; greater leadership/involvement by the owner in all stages of design and construction; use of team-based alternatives to design-bid-build; appropriate contingency dedicated by the owner; use of BIM; shared liability across the project team; and use of Lean design and construction practices. It’s interesting to note that IPD contracting (using an integrated form of agreement to effect shared liability) and the use of Lean tools and techniques (coupled with BIM) represents a holistic approach to realizing the full benefit of all these mitigating strategies. For free access to the full study, see [analyticsstore.construction.com](http://analyticsstore.construction.com).