



IMPACTS OF PRE-PROJECT INVESTMENT & QUALITY OF DOCUMENTS ON PROJECT DELIVERY EFFICIENCIES

FACT SHEET

Significant levels of schedule delay and cost escalation during the construction of major public and private projects are often the reality in Canada. To assist the industry and project owners to work collaboratively to achieve effective and efficient reductions in schedule delays and cost escalation, a number of associations led by the Construction and Design Alliance of Ontario (CDAO) commissioned a comprehensive, three-year study: *Impacts of Pre-Project Investment & Quality of Documents on Project Delivery Efficiencies*.

The study included a literature review, online survey and in-person interviews. The nationwide online survey, distributed in both English and French, featured four different and yet congruent sets of questions to owners, design consultants, general contractors (GC), and subcontractors (Subs). Throughout the report, architects and engineers (A/E) are referenced as the dominant design consultant groups participating in the survey. However, the findings are applicable to all design disciplines.

Concluding in 2021, the study was based on recent and project-specific data and focused on the relationship between project delivery efficiencies and project owners' investment in upfront pre-planning on design and consulting services.

SIGNIFICANT FINDINGS

The CDAO study identified the important role of the project owner's commitment to upfront investment during the pre-project planning and design stages on the quality of design documents and subsequent construction project performance. Research has shown that an error that costs \$100 to address during pre-planning could cost \$1,000 to address during the design phase and \$10,000 during construction.

The study also confirmed a direct and positive correlation between the amount of time and investment that owners spent in pre-planning – and the quality of design documents in terms of completeness and suitability of purpose. The study found:

- *Owners and stakeholders should spend more time and effort to ensure they adequately scope the project before going to market.*



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- *There is a need for commitment on the part of owners to allow the time and budget for design reviews, checks, and verifications to be undertaken throughout each phase of the design process.*
- *The survey confirmed that design document quality issues are rooted in issues of inadequate time provided, inadequate fees, and inadequate information about existing conditions.*

The study demonstrates that significant opportunities exist for better collaboration and communication among owners, designers, general contractors, and subcontractors, which will improve design document quality and construction productivity.

Members of the CDAO

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