

# CII BEST PRACTICES IN ACTION AT PATHFINDER

## Front-End Planning



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As a consulting organization focused on improving the global capital project industry, Pathfinder has applied various CII Best Practices through application-oriented training as well as independent project support services. In 2012 alone, Pathfinder trained over 1,500 international project practitioners in various project planning and execution topics. We also executed over 50 international project readiness assessments, independent project reviews, and project risk workshops. Both training and consulting efforts utilized CII Best Practices and tools: Front End Planning; Project Definition Rating Indices; and other CII practices such as Project Health Indicators. We see CII as THE authority in the engineering, procurement, and construction (EPC) industry Best Practices.



## Knowledge Creation

### RESEARCH COMMITTEE

With a joint team of industry representatives and leading academic researchers as members, the CII Research Committee develops and directs the CII research process. The committee holds at least four face-to-face meetings each year. At the first meeting, usually held in conjunction with the fall CII Board of Advisors (BOA) meeting, the committee implements its research topic generation process. As part of this process, committee members solicit BOA member input to help them identify and develop key engineering and construction issues confronting the capital facilities delivery industry. With the list of possible topics generated at the fall meeting, the committee meets again, usually in January, to refine the topic statements and to determine the slate of possible topics.

Once the new slate of topics has been developed, the committee again meets in tandem with the BOA, at the spring meeting. At this third meeting the committee presents the topics and asks BOA members to help prioritize them. After the BOA vote, the committee determines the year's new topics and then forms 18- to 20-member research teams from member-company nominees and the academic researchers that the committee has selected through its competitive process.

Having recently adopted a qualifications-based approach to selecting the appropriate academic researchers, (rather than a proposal-based approach), the committee requests that all interested academics submit their qualifications for particular topics in advance of the spring meeting. The committee annually initiates approximately eight new research teams, typically from three categories of research: 1) best practice/core improvement; 2) current, emerging, and future trends; and 3) people-oriented topics. These teams normally work for two years to complete the necessary research, prepare publications that document their findings, and report out at CII's annual conference.

The following seven research teams reported their findings at the 2012 CII Annual Conference:

- Craft Productivity Research Program, Phase IV (The University of Texas at Austin, University of Waterloo, and University of Kentucky)
- Methods for Dealing with Uncertainty—Applying Probabilistic Controls in Construction (University of Colorado)
- Project Management Skills of the Future (Arizona State University)
- Managing Indirect Costs (Iowa State University and Michigan State University)
- Industrial Modularization: How Maximize; How to Optimize (The University of Texas at Austin)
- Implementing Safety Leading Indicators (University of Florida and University of Colorado)
- Project Definition Rating Index (PDRI) Summary of PDRI Research (Arizona State University)

After holding their fourth face-to-face meeting at the conference—typically held at the end of July each year—the committee members and the CII research staff turn their focus to the teams that are midway through the expected two-year research cycle. In late August or early September, each of these teams participates in a committee teleconference, presenting updates on their research. Research staff members schedule meetings with individual teams to follow up on any issues identified during this teleconference. Since these teams are scheduled to present at the conference in the following year, the goal of these visits is to assess their progress and to help them develop their publications and conference presentations.