CICE: On The Road to Recovery

The Business Roundtable’s CICE Project May Be Three Years Old This Year, But There’s Still Plenty of Work To Do.

By William Wakefield

Speaking at a national conference sponsored by The Business Roundtable last November, Alden P. Yates, President of the Bechtel Group, Inc., called the Roundtable’s Construction Industry Cost Effectiveness Project (CICE) the most comprehensive effort ever undertaken to promote construction efficiency. Importantly—and accurately—he said it represents the first time identification of construction problems has not faded away.

The project’s implementation phase is now completing its third year. In an effort to find out what progress has been made, Purdue and Oregon State Universities recently conducted a nationwide survey for the Construction About the author: Bill Wakefield is Director of Engineering and Construction for FMC Corporation (a $3.5 billion manufacturer of chemicals and specialized machinery). Before joining FMC, he held various project management positions at Exxon. He is currently Chairman of the Business Roundtable Construction Committee and was formerly on the board and Chairman of the Engineering and Construction Contracting Committee of AIChE. He is a native of New Jersey and received his BME from Cornell University.

Industry Institute. The survey covered general contractors, subcontractors, construction managers, design firms, owners and educators.

It found that 36% of them are aware of CICE and that 20% have put at least some of the CICE recommendations into effect. One of the Roundtable’s CICE Task Force goals is to help raise the latter to 40% by the end of the year.

As part of the Roundtable’s implementation efforts, over one million copies of the 23 CICE reports and the Summary Report have been distributed nationwide. They cover 23 problem areas in five fields—project management, construction technology, labor effectiveness, labor supply and training, and regulations and codes. They include 223 recommendations—92 addressed to owners, 56 to contractors, 28 to contractors and owners jointly, and the rest to labor and other groups.

The recommendations apply to all types of owners whether private or public, all types of contractors whether union or open shop, all categories of construction including maintenance work, and to projects of all sizes. They represent an industry consensus of the 250 people who participated in the four-year CICE research phase and are a blueprint for action by all segments of the industry to improve construction cost effectiveness.

Some of the implementation results that have been reported to the Roundtable are impressive. Here’s what happened on a few specific projects:

• A strong owner-contractor commitment to safety and a good safety program produced $300,000 in direct savings.

• Use of modern management systems helped reduce a project’s cost by more than $5 million.

• Effective contractual arrangements led to a 30% saving.

• A cost-effective labor agreement reduced overall labor costs by 25%.

• A worker motivation program increased productivity and contributed to a saving of $1.5 million.

In these instances, as in all others, the decision to use CICE was an individual one. The Roundtable’s role is educational—promoting an understanding of CICE and the advantages that flow from its use.

The incentives for implementing the recommendations are quite strong. They can save up to $10 billion a year in construction costs. For owners, the use of CICE means many things, including better construction, more construction for the money and, for some, a stronger competitive position in the
world market. For contractors, it means more work and a more profitable business. Explaining the latter to a group of contractors recently, CICE Project Director Carroll H. Dunn said, “Your customers are looking at your cost effectiveness as never before, and more and more it is going to determine whether you get and do profitable work.”

Owners Involved . . .

A significant aspect of this development is that chief executive officers of owners around the country are taking an increasingly active interest in construction and becoming more involved in company decisions that control how their projects are built.

This is also happening within the Roundtable membership of 200 major U.S. corporations. The Roundtable Policy Committee has set up a CEO CICE Task Force that has been taking the CICE message to CEOs of non-Roundtable members in various parts of the nation. The bulk of the Roundtable’s implementation efforts, however, is carried out by the Roundtable’s Construction Committee and its CICE Task Force, which conceived the CICE project and led its research phase.

Working with them in an advisory capacity are the members of the Roundtable’s Contractors Advisory Committee. These are industry leaders, some of them have served as Chairman or President of their national contractor association.

The major elements of the Roundtable’s implementation program are:

• Several special committees that are taking the CICE message to specific industry sectors—owners, contractors and contractor associations, government agencies, professional societies, labor and the academic world.
• A Speakers Bureau whose participants have made about 200 presentations since January 1, 1983.
• A Local Construction User Council (LUC) Support Task Force and a Construction Committee-LUC Liaison Program to help the councils strengthen their operations and promote CICE understanding and use among their members,

• National conferences that are held twice a year for local council members and staff to provide an interchange of ideas between them, the Roundtable, contractors and other industry members on industry issues, including CICE.
• A CICE briefing conference for national contractor association leaders.
• Developing and making available to the industry a number of audio/
visual and slide presentations on CICE.

Complementing this activity, many national contractor associations—including AWCI—and their local chapters have set up programs to help their members understand and implement CICE.

Concurrently, many of the nearly 50 local user councils have formed CICE committees—often involving local contractors and sometimes unions—and are making CICE a part of their regular programs, workshops and conferences.

At the same time, and as a result of CICE, contractors, owners and several university representatives have formed a national research center called the Construction Industry Institute at the University of Texas at Austin. They are now working with 15 major universities on research projects that cover such areas as constructability, materials management, contractual arrangements, productivity measurement, and quality assurance and control.

Also in response to CICE, Stanford University has established a Construction Executive Program for contractor and owner representatives, and Texas A&M University has formed a Center for Construction Education which is offering short management training courses.

Union Response Mixed . . .

While all of these developments have been encouraging, there have been some disappointments. One is the inability to get any direct implementation participation by the building trades unions at the national level, apparently because of union political considerations. But indirectly the response has been reassuring. Local, special and project labor agreements are increasingly reflecting CICE recommendations, and many of the recommendations are incorporated in the union Market Recovery Program developed by the building trades unions and the National Construction Employers Council.

Overall, CICE has made a great deal of progress. But as William A. Gabig, then CICE Task Force Chairman, told contractors at the Roundtable’s briefing conference for national contractor association leaders in December, “We’ve only scratched the surface of