



2013 ANNUAL REPORT

LEADERSHIP

RESEARCH

COLLABORATION

IMPROVEMENT

CONSTRUCTION
INDUSTRY

3



YEARS





CELEBRATING 30 YEARS

The Construction Industry Institute, based at The University of Texas at Austin, is a consortium of more than 130 leading owner, engineering-contractor, and supplier organizations from both the public and private arenas. These organizations work together to enhance the business effectiveness and sustainability of the capital facility life cycle through CII research, educational initiatives, and industry alliances. A research organization creating a wealth of expert knowledge and practical information, CII provides vital leadership to the engineering and construction industry.

PURPOSE

The purpose of CII is to measurably improve capital delivery through the cooperative effort of owners, contractors, and academics.

VISION

CII is a leader in the construction industry, renowned for creating research-based knowledge and best practices that measurably improve the safety, cost, schedule, quality, and sustainability of capital projects.

The increased business success CII member organizations experience prompts participating industry leaders to make breakthroughs in the life cycle value of capital facilities.

MISSION

CII creates global, competitive, and market advantages for its members through its research-based, member-driven creation, dissemination, assessment, and management of industry knowledge and CII Best Practices. High use of these best practices gives members a decisive industry edge. Member organizations and their employees cooperatively engage with leading academics to generate CII knowledge; this unprecedented partnering of industry and academia creates the perfect forum for investigating the most significant opportunities for industry improvement. Member companies, their employees, academics, and the industry at large are improved through this collaborative effort.



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CORE KNOWLEDGE PROCESSES

Having begun in 1983 with 28 charter members who shared the CII vision, the Institute is now recognized in the engineering and construction industry as the knowledge leader for project success. CII has four core knowledge processes: creation, dissemination, assessment, and management.

Knowledge Creation: CII research teams—groups that include academic investigators and employees of both owner and contractor organizations—generate best practices and breakthroughs for the construction industry. CII Benchmarking & Metrics processes create additional knowledge, producing ongoing applied research that establishes industry norms for construction performance.

Knowledge Dissemination: Knowledge created by CII is disseminated to Institute members and to other organizations and individuals in the engineering and construction industry. CII distributes this knowledge through research publications, implementation guides, educational materials, workshops, and conferences.

Knowledge Assessment: CII Benchmarking & Metrics collects, analyzes, and assesses the impact of CII knowledge as it is initially implemented and integrated into member organizations' work processes. Once proven

through member benchmarking, this knowledge is incorporated into the capital project work processes of the industry at large.

Knowledge Management: Since 1983, CII has produced nearly 700 research documents and hundreds of other presentations and publications. Knowledge management adds value to CII by organizing and facilitating access to CII's extensive body of knowledge. By establishing communities of practice—virtual interest groups that dynamically share and learn knowledge—CII Knowledge Management further advances the Institute's mission.

Through these knowledge processes, CII advances human knowledge and fulfills its mission of enhancing the business effectiveness, sustainability, and global competitiveness of CII members.



REMARKS FROM THE CHAIRMAN



As the outgoing Chair of CII, I closed the November Board of Advisors (BOA) meeting with a review of my goals for 2013 and the progress the organization has made towards them. The great news is that CII continues to set the standard for how to improve the construction industry through research, with the collaboration of owners, contractors, and academics. It is important for the organization to continue to focus on the implementation of our strategic plan; and I am pleased to be able to report meaningful progress in several key areas.

CII has taken deliberate steps to work with organizations outside the U.S.—the Construction Owners Association of Alberta (COAA) and the European Construction Institute (ECI)—to leverage our footprint and connect internationally. At the November BOA meeting, the Research Committee furthered our move to leverage our practices globally by soliciting research topics from outside the U.S.

In addition to attracting owners and contractors from outside the U.S., CII continues to focus on diversification into other industries in construction. CII has targeted efforts relevant to owners and contractors in health care, mining, and power industries. As a result, the Institute has seen its membership grow in these industries.

Another important focus was to ensure that we listened to our members. In 2013, we focused on making access to the CII Body of Knowledge easier and faster. Through the help of many member organizations, we now have a road map developed to improve in this area.

The 2013 CII Annual Conference had record attendance, with more than 700 participants. Judging from the feedback, it was one of the best ever. I want to offer a special thanks to the Annual Conference Committee, led by Keith Manning of Zachry, for doing an outstanding job with the 2013 conference.

This past year we also used the Strategic Communications Committee (SCC) to strengthen our response to our communications needs, particularly the need for better connections between standing committees. By creating alignment among all CII standing committees, the SCC has improved its ability to communicate the CII mission and value proposition.

As 2013 comes to an end, it is my great pleasure to report that CII membership is at an all-time high, and that CII has more active research teams working now than ever before. The research topics scheduled for next year's annual conference look to be impressive and innovative. I want to encourage CII members to get their next generation of leaders to attend the CII Next-Generation Leaders Forum, during the 2014 Annual Conference. At this event, they can learn from industry leaders and network among their peers. And, of course, I urge you to make plans to attend the 2014 CII Annual Conference in Indianapolis.

In closing, I would like to give credit to Wayne Crew and his entire staff at CII for their excellent work. Wayne is an amazing leader and executive, and because of his leadership, CII has grown and prospered—even through the economic downturn. CII has a remarkable staff of professionals, all sharing a common goal of continuous performance improvement.

With CII, you get more out your membership than you put into it. I encourage every member to get more involved and to help CII continue to make a difference in capital project delivery.

Thank you,
Glenn Gilkey
Executive Vice President, Human Resources and Administration
Fluor Corporation

CHAIR'S 2013 GOALS AND OBJECTIVES

Grow CII

- Resource and implement the Strategic Plan.
- Address globalization.
- Diversify into additional industries.
- Be member-driven.

Improve Member Experience

- Use the Strategic Communications Committee.

- Improve communication within CII committees.
- Simplify access to and retrieval of information from the CII site.

Deliver Operational Excellence

- Stay focused and fiscally accountable.
- Be agile to adjust to market changes.
- Be efficient.

REMARKS FROM THE DIRECTOR

This year marked CII's 30th anniversary, and it would be an understatement to describe it as busy and exciting. The annual conference, chaired by Keith Manning of Zachry, was chock-full of content, and history was made as attendance exceeded a record-breaking 700 participants. While the 2013 Annual Conference was both productive and fun, this year's event in Indianapolis—scheduled on July 21-23 and chaired by Rex Phillips of Eli Lilly—promises to be even better.

In 2013, CII's research efforts continued in high gear as six research teams reported out at the annual conference, nine teams were launched, and nine additional teams progressed through the mid-point of their research process. Another nine new teams are set to be launched in the spring of 2014. One metric tracked to indicate the relevance and usefulness of CII's research program is the percentage of member companies participating on research teams—today that score stands at 70 percent. While this is a good score, more of you can gain value from your membership by participating on a research team. Therefore, I encourage each of you in 2014 to examine your opportunities and seize this added value in your CII membership. In addition, I would like to extend a hearty “thank you” to the CII Research Committee (RC). As the research program has ramped up, the committee has stepped up not only to ensure that relevant and important research topics are being pursued, but also that the research process remains sound and the quality of CII publications and resources is unsurpassed.

I want to highlight two new initiatives in 2013 that merit mention: 1) the Knowledge Base Restructuring and Integration Project and 2) the 10-10 Performance Assessment Program. CII's Knowledge Base, developed from over 180 research projects, consists of almost 700 research publications. Additionally, it includes countless publications and presentations from classes, annual conferences, and workshops. CII members have reported that finding and retrieving information from the knowledge structure is sometimes difficult and time-consuming. In order to remedy this issue, the Knowledge Base Steering Committee (KBSC) has been engaging with CII members to research and visualize a new knowledge structure, wherein practitioners can easily zero in on the research findings they need. The next step of the project will occur in 2014, when the Knowledge Management

Committee (KMC) and the KBSC will build a pilot of this new structure, to test two practice areas. Following a successful pilot, the next effort is to disassemble, tag, and reassemble CII's Body of Knowledge into a new structure—a monumental undertaking. The completion of this initiative will take CII a couple of years, but once it is online, it will allow better access to CII research findings, exactly when and where needed. I want to thank the KMC for their efforts and for adding this project on to their already numerous committee goals.

Launched at the 2013 Annual Conference, CII's second new initiative is the 10-10 Performance Assessment program—a result of a recent observation made by CII's Performance Assessment Committee (PAC). CII's traditional benchmarking program, while still valuable, does not meet senior leadership's need for higher-level output and input metrics. Consequently, the PAC led the design of the 10-10 Program, which uses a survey that generates 10 input measures and 10 output measures. Poor performance in any one of the input measures (leading indicators) has proven to result in an overall decrease of project performance, as measured by the output metrics (lagging indicators). I believe it will transform traditional retrospective measures into real performance assessment. I also visualize a future where the 10-10 program, integrated with the new knowledge base, will become a diagnostic tool for continuous improvement throughout the capital projects delivery cycle. A big “thank you” goes out to the Performance Assessment Committee for their vision and design of this innovative program.

I could go on about the accomplishments of all elements of the Institute, although I think it best for you to read about them in this report. Many thanks to each of the many contributors. As you read, reflect on the many successes of CII in 2013. Then close your eyes and imagine 2014 and beyond; CII will be here, continuing to create the knowledge you need to enable your organizations to successfully accomplish strategies for improved safety, cost, schedule, and quality of your capital projects. Thank you for your efforts and contributions to CII.

Regards,
Wayne Crew, P.E.
CII Director



CII'S 138 MEMBERS

OWNERS

Abbott	General Electric Company	Reliance Industries Limited (RIL)
Air Products and Chemicals, Inc.	General Motors Company	SABIC - Saudi Basic Industries Corporation
Ameren Corporation	GlaxoSmithKline	Sasol Technology
American Transmission Company LLC	Global Infrastructure Partners	Shell Global Solutions US Inc.
Anglo American	Huntsman Corporation	Smithsonian Institution
Anheuser-Busch InBev	Intel Corporation	Southern Company
Aramco Services Company	International Paper	Statoil ASA
ArcelorMittal	Irving Oil Limited	SunCoke Energy
Architect of the Capitol	Kaiser Permanente	Teck Resources Limited
BP America, Inc.	Koch Industries, Inc.	Tennessee Valley Authority
Cameco Corporation	Linde North America	TransCanada Corporation
Cargill, Inc.	LyondellBasell	U.S. Army Corps of Engineers
Chevron	Marathon Petroleum Corporation	U.S. Department of Commerce/NIST/EL
CITGO Petroleum Corporation	National Aeronautics & Space Administration	U.S. Department of Defense/Tricare Management Activity
ConocoPhillips	NOVA Chemicals Corporation	U.S. Department of Energy
Consolidated Edison Company of New York	Occidental Petroleum Corporation	U.S. Department of Health & Human Services
The Dow Chemical Company	Ontario Power Generation	U.S. Department of State
DTE Energy	Petroleo Brasileiro S/A - Petrobras	U.S. Department of Veterans Affairs
DuPont	Petroleos Mexicanos	U.S. General Services Administration
Eastman Chemical Company	Petroliaam Nasional Berhad	Vale S.A.
Ecopetrol S.A.	Phillips 66	The Williams Companies, Inc.
Eli Lilly and Company	Praxair, Inc.	
Eskom Holdings SOC Limited	The Procter & Gamble Company	
ExxonMobil Corporation	Public Service Electric & Gas Company	

CONTRACTORS

Alstom Power Inc.	Gross Mechanical Contractors, Inc.	Pathfinder LLC
AMEC, Inc.	GS Engineering & Construction Corporation	POWER Engineers, Inc.
Audubon Engineering Company, LP	Hargrove Engineers + Constructors	Quality Execution, Inc.
AZCO INC.	Hatch	Richard Industrial Group
Baker Concrete Construction Inc.	Hilti Corporation	The Robins & Morton Group
Barton Malow Company	IHI E&C International Corporation	S&B Engineers and Constructors, Ltd.
Bechtel Group, Inc.	IHS	SBM Offshore
Bentley Systems Inc.	Industrial Contractors Skanska	SKEC USA, Inc.
Bilfinger Industrial Services Inc.	International Rivers Consulting, LLC	SNC-Lavalin Inc.
Black & Veatch	Jacobs	Technip
Burns & McDonnell	JMJ Associates LLC	Tenova
CB&I	JV Driver Projects Inc.	TOYO-SETAL Engenharia Ltda.
CCC Group, Inc.	KBR	URS Corporation
CDI Engineering Solutions	Kiewit Corporation	Victaulic Company
CH2M HILL	Kvaerner North American Construction, Inc.	Walbridge
Coreworx Inc.	Lauren Engineers & Constructors, Inc.	Wanzek Construction, Inc.
CSA Central, Inc.	Leidos Constructors, LLC	Wilhelm Construction, Inc.
Day & Zimmermann	Matrix Service Company	Willbros United States Holdings, Inc.
Dresser-Rand Company	McCarthy Building Companies, Inc.	Wood Group Mustang
Emerson Process Management	McDermott International, Inc.	WorleyParsons
eProject Management, LLC	Midwest Steel, Inc.	Yates Construction
Faithful+Gould	Parsons	Zachry Holdings, Inc.
Fluor Corporation		Zurich
Foster Wheeler USA Corporation		<i>As of December 31, 2013</i>

KNOWLEDGE CREATION

RESEARCH COMMITTEE

A joint team of industry representatives and leading academic researchers, the CII Research Committee develops and guides the CII research process. The committee operates on a yearly four-meeting cycle, scheduling teleconferences in between meetings when necessary. The goal at the first meeting—usually held in conjunction with the Fall CII Board of Advisors (BOA) meeting—is to generate new research topics. To do this, committee members conduct roundtable discussions with BOA members, asking them to identify key engineering and construction issues confronting the capital facilities delivery industry. With the list of potential topic statements generated at the fall meeting, the committee holds its second meeting, usually in January, to refine the topic statements and to develop the slate of potential topics. Once the new topic slate has been formulated, the committee comes together for its third meeting—this time in tandem with the Spring BOA meeting. At this meeting, the committee presents the new topics and asks BOA members to help prioritize them. After the BOA vote, the committee determines the year's new topics and then forms 20- to 22-member research teams from member-company nominees and the academic researchers that the committee has selected through its competitive process.

Using a qualifications-based approach to selecting the appropriate academic researchers, the committee solicits the qualifications of all interested academics 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 teams will be presenting at the 2014 CII Annual Conference:

- True Impact of Late Deliverables at the Construction Site (University of Texas at Austin)
- Using Near Miss Reporting to Enhance Safety Performance (Georgia Tech)
- Interface Management (University of Waterloo; University of Michigan)
- Managing a Portfolio of Projects-Metrics for Improvement (Georgia Tech; University of Florida; Northeastern University)
- Sustainability Practices and Metrics for the Construction Phase of Capital Projects (The University of Texas at Austin)
- Quantitative Measurement of PM Competencies (University of Wisconsin-Madison; University of Michigan)
- Mitigating Threats of Counterfeit Materials in the Capital Projects Industry (Florida International University; Vanderbilt University; Purdue University)
- Achieving Zero Rework through Effective Supplier Quality Practices (San Diego State University; University of Arkansas).

As these teams entered their second year of research in June of 2013, CII launched a record nine new teams. The Research Committee and research staff also held virtual meetings in July and August with these new teams to assess progress on their proposal development. (As part of the Research Committee's efforts to improve the CII research process, all research team academics and industry members are asked to jointly develop their respective research proposals during the summer months following the team launch.) After the July and August meetings, the committee held a virtual meeting in the early Fall to approve each new team's proposal.



KNOWLEDGE CREATION

RESEARCH COMMITTEE (CONT.)

The following six research teams reported their findings at the 2013 CII Annual Conference:

- Construction Productivity Program—Phase V (The University of Texas at Austin, University of Waterloo, and The University of Kentucky)
- Improving the Accuracy of Project Outcome Predictions (University of Alabama, Arizona State University)
- Knowledge Transfer from the Near-Retirement Generation to the Next Generation (The University of Texas at Austin)
- Strategies for HSE Hazard Recognition (University of Colorado, Virginia Tech)
- Deploying Best Practices in Unfamiliar Countries (Virginia Tech)
- Workforce Planning—From Design through Execution (The University of Texas at Austin).

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 then 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.

The current group of these teams will present their findings at the 2015 CII Annual Conference. They are as follows:

- Improving Engineering and Procurement Alignment and Coordination with Construction
- Successful Delivery of Fast-track Projects
- Best Practices for Commissioning and Start-up
- Creating Standards for Industry-wide Quality Metrics
- PDRI Tool for Small Projects
- Successful Delivery of Mega-projects
- Instantaneous Project Control Systems
- Safety Performance through Operational Discipline
- Is There a Demographic Craft Labor Cliff That Will Affect Project Performance?

The Research Committee was pleased in 2013 to observe the benefits of the changes it initiated in 2011 to the CII research process. Having focused committee and CII research staff efforts on quality improvement, the committee was gratified to get positive feedback on the research produced by the first set of teams to work under the new process—both from the Product Review Board and from CII Annual Conference participants. With well-matched academics, more time for research, and greater internal alignment, these teams produced excellent materials for publication, earlier and with quicker approvals than ever. While CII stands confident in its unique approach to research and its ability to deliver valuable applied research findings to industry, the committee will continue its efforts to enhance member value and strengthen CII's ability to advance the industry.



ACADEMIC COMMITTEE

The Academic Committee (AC) continues to serve as CII's primary forum for the academic community. Its duties include the following:

- designating subject matter experts to provide input to the research process
- identifying and grooming new academic researchers for success at CII
- helping to ensure that CII research is competently performed within the classic research framework
- offering insights for new directions for CII research
- integrating CII research and products into university curriculums.

In 2013, Paul Goodrum of the University of Colorado finished his term as chair of the committee, and W. Edward Back of the University of Alabama assumed the post. After the tremendous loss of the committee's vice-chair, CII veteran researcher Jimmie Hinze, late in 2013, Carlos Caldas of The University of Texas at Austin was nominated for and accepted the position.

With these new officers in place, the committee once again sponsored the poster competition at the 2013 CII Annual Conference in Orlando. This annual contest benefits everyone involved: it gives graduate students working at schools that do not receive CII funding exposure to the CII research model; it gives students at schools that receive CII funding but who themselves are not working on CII-funded research a chance to present their work; and it gives conference participants the chance to see valuable non-CII-sponsored research.

The 2013 competition attracted a record number of poster submissions, of which 10 were selected for conference presentation. There was a tie for first place this year, with recognition going to Rebecca Macdonald of the University of Alabama and Eric Marks of the Georgia Institute of Technology. MacDonald's poster was titled, "Strategy for Mitigating Material Price Risk," and Marks' poster was titled, "Mobile 3D Mapping of Large Infrastructure Projects Using Unmanned Aerial Vehicles (UAV) Systems."

The AC was also proud to sponsor Dr. E. Sarah Slaughter as its featured plenary speaker at the annual conference. Dr. Slaughter is President and founder of the Built Environment Coalition. Prior to her current position, she was the Associate Director for Buildings and Infrastructure in the MIT Energy Initiative (MITEI), coordinating research across MIT focused on improving the built environment. Her presentation was titled, "Regional Planning for Sustainability and Disaster Resilience." Dr. Slaughter also led a series of implementation sessions on the same topic.

The committee also began promoting awareness of CII-sponsored research by organizing a specific CII research track for the upcoming 2014 American Society of Civil Engineers



Construction Research Congress. This event will be held at the Georgia Institute of Technology in Atlanta, Georgia. Another important accomplishment in 2013 was the development of a new "Academic Index." This is a metric developed by Paul Goodrum of the University of Colorado, in coordination with CII, to assess the overall quality and experience of academic researchers interested in performing CII research.

In support of CII's ongoing effort to reach out to the academic community, the Academic Committee again conducted three webinars in 2013 to educate interested researchers. The first one was titled, *How to Participate in CII*, and the second was called, *The New CII RFQ & Proposal Process*. The first two webinars explained the CII research cycle and the recent change from a proposal-based RFP process to a qualifications-based (RFQ) approach to selecting researchers. The third one, titled, *How to Successfully Execute a CII Project*, targeted the newer academics selected for CII research teams.

In 2013, the AC proposed a new stipend program to the CII Executive Committee, to help subsidize the travel of young academics (and others with no previous CII research experience) to the CII Annual Conference. The proposal was approved, and the CII Research Committee welcomed four new scholars to the 2013 CII Annual Conference. The 2013 honorees were Mounir El Asmir from Arizona State University, Amr Ahmed Kandil from Purdue University, Mani Goparvar-Fard from the University of Illinois, and Yelda Turken from Iowa State University.

KNOWLEDGE DISSEMINATION



IMPLEMENTATION STRATEGY COMMITTEE

To fulfill its mission of promoting the implementation of CII knowledge and work processes, the Implementation Strategy Committee (ISC) supports the CII strategic plan through its initiatives in close coordination with the CII Executive Committee and other committees

Each year, the ISC conducts two Performance Improvement Workshops (PIW)—one in the spring and one in the fall—to enable members to hone their CII Best Practice implementation skills and to learn about new CII products. In 2013, the spring PIW was held in Indianapolis, Indiana and the fall workshop took place in Houston, Texas. Both were highly successful, delivering great value to a combined attendance of 156 participants.

At the close of each workshop, the ISC offers four-hour optional courses for attendees. At the spring workshop, Dr. W. Edward Back of the University of Alabama taught Project Change Management and at the fall workshop, Global Procurement and Materials Management by Dr. Carlos H. Caldas of The University of Texas at Austin.

In addition to developing and conducting the PIWs, the ISC provides mentoring on request to CII Implementation Champions. The committee also facilitates the CII Implementation website that details CII implementation planning, notifies members of upcoming ISC events, gives contact information for ISC support, and provides website links to products and conference presentations.

In 2013, three individual committee members contributed articles featuring CII Practices to the quarterly CII e-Newsletter:

- The Implementation Planning Model by Paul Chinowsky of University of Colorado
- The importance of Planning for Startup and exploring CII's published research on Advanced Work Packaging by Bill Beck of WorleyParsons
- Implementing the Project Health Indicator by Greg Kanteres of Eastman Chemical

The ISC delivered a presentation at the 2013 CII Annual Conference titled “Changing the Implementation Climate.” This presentation allowed attendees to see how, even in highly competitive environments, corporate commitment enables implementation of CII research and drives performance at CII owner and contractor member organizations. In particular, the panel explored how Lauren Engineers and Constructors’ recognizes opportunities to improve value delivery to clients beyond industry expectations—with mutual benefit—by addressing four key elements of leadership behaviors: organizational trustworthiness, transparency, accountability, and unity. The audience also had an opportunity to preview the latest ISC research findings.

To further benefit implementers of CII practices, the committee also oversees two key online resources:

- The Implementation Tool Box—an online resource that provides implementation guidance
- The Implementation Assistant—a tool that allows users to create implementation plans based on the guidance of Implementation Resource 246-2, *The Implementation Planning Model: Steps to Success*.

Managers of implementation initiatives that use the Implementation Assistant can monitor the progress of their efforts. With the tool, implementers can initiate and track implementation plans, establish milestones, and use metrics for effective implementation.

In 2013, the ISC sponsored Research Team IS31 *Vision to Action*. The research effort explores how organizations move a vision for improved performance into action. The team is scheduled to report out at the 2014 CII Annual Conference.

Yearly, the ISC reaches out to all CII research teams by offering them an opportunity to collect information at ISC events and by assisting in the validation of implementation resources. In addition, the ISC identified four outstanding implementers from CII member organization for special recognition at the CII annual conference.

KNOWLEDGE DISSEMINATION

PROFESSIONAL DEVELOPMENT COMMITTEE

The mission of the Professional Development Committee (PDC) is to provide continuing professional development opportunities for member company employees. The committee enables implementation of CII research, plans future educational opportunities for CII members, evaluates trends in industry education, and develops new educational vehicles. The committee executes its mission in close coordination with other committees, especially the Executive Committee, to insure support of CII strategic objectives.

At the beginning of 2013, CII held its seventh offering of the highly rated CII Executive Leadership Program, jointly run by CII and the McCombs School of Business at The University of Texas at Austin. The program—a two-week, in-residence, educational experience—provides in-depth knowledge on a range of leadership skills necessary for the top capital facilities positions of the future.

CII also collaborated with the McCombs School of Business to offer a custom professional development program for Ecopetrol S.A. The Ecopetrol International Project Management Program, now in its second year, is designed to ensure the development of managerial skills of project professionals at Ecopetrol S.A.

In addition to its classroom-based programs, the committee oversees the CII online education program. The current online curriculum covers CII Best Practices on:

- Alignment of Project Objectives
- Constructability
- Partnering
- Planning for Startup
- Pre-Project Planning
- Safety
- Scope Control

Late in 2013 development of a new series of online courses began that will expand the curriculum with several sessions on construction safety.

The PDC's 2013 CII Annual Conference presentation was titled "Nail a Speech – Launch a Career," which explained how an engaging speech or presentation can have a dramatic, positive impact on the audience and the speaker's career. The presenter demonstrated the critical elements of effectively constructing and delivering a speech or presentation in any environment. The PDC also held its fourth offering of two four-hour instructor-led courses in conjunction with the 2013 CII Annual Conference in Orlando, Florida. Dr. G. Edward Gibson, Jr., of Arizona State University taught the Project Definition Rating Index (PDRI) for Infrastructure course before the conference and Dr. W. Edward Back of the University of Alabama taught the Project Change Management course at its conclusion.

The seventh offering of the CII Best Practices course took place during the 2013 fall semester. The interactive course, offered to graduate students in civil engineering and construction management, was held at The University of Texas at Austin with a broadcast to twelve other universities. Each fall, CII staff and senior leaders from CII member organizations serve as course lecturers, offering students insights into the workings of the engineering and construction industry.

During 2013, the PDC developed and successfully presented five web seminar series:

- a one-part series on PDRI Facilitation
- a two-part series on Front End Planning
- a two-part series on Constructability

Each seminar included a live Q&A session, and was well received by participants.

The PDC continues to sponsor the Best Practices–Best Practitioners Alliance, a collaboration of the Construction Management Association of America (CMAA) and CII. Now in its fourth year, this alliance is dedicated to improving construction performance and outcomes. In 2013, based on CMAA's adoption of the CII Best Practices into its Standards of Practice, the PDC endorsed the CMAA's Certified Construction Manager credential as value adding in the execution of capital projects.

Other PDC yearly deliverables include oversight of continuing education course offerings, the award of professional development hours, the Registered Education Provider program, the Professional Development Continuum, and production and updates of education modules.



KNOWLEDGE ASSESSMENT

PERFORMANCE ASSESSMENT COMMITTEE

The CII Performance Assessment Committee (PAC) and staff regularly obtain, analyze, and disseminate quantitative information regarding members' project performance. In 2013, the CII Performance Assessment Program surpassed 2,300 projects in its database, exceeding over \$300 Billion of cumulative capital project investment since 1995.

At the CII 2013 Annual Conference in Orlando, Florida, the committee launched the CII 10-10 Program and Performance Assessment Campaign with the goal of having each CII member company contribute 10 phase-projects by the end of April 2014. While complementary to CII's General Benchmarking Program, the 10-10 Program represents a completely different approach to the assessment of capital project performance. Research conducted at CII since 2009 concluded that new methods of project assessment were needed that were simple and which were focused on delivering high-level, yet impactful, results throughout a project's planning and development.

The 10-10 Program derived its name from its use of 10 leading indicators and 10 outcome measures in reporting the performance of each phase of a project. The measures are obtained by anonymously surveying each member of a project management team regarding their performance, practice use, team dynamics, and organizational relationships. Using simple statement-based questions, the 10 leading indicators obtained throughout a project's development can warn senior management of impending problems. Importantly, the diagnostic capability of these measures may aid in the development of corrective action plans and the potential implementation of CII research and tools. Finally, the leading indicators are paired with 10 industry-specific, capacity-based outcome measures that are used to provide certainty that the project is proceeding on target.

The 10-10 Program is at the forefront of project performance assessment in the capital projects industry and serves as the basis for CII's expansion of performance assessment globally. By the end of 2013, the committee was actively involved in establishing Performance Assessment Laboratories (PAL) in eight different countries. In each of these countries, the 10-10 Program was selected as the initial way for local companies to begin assessing their projects' performance. As the companies' collective experience expands, the PAC intends to include CII's General Benchmarking Program in each PAL to gather project performance data during closeout. Over time, these initiatives will work together to provide CII members with unparalleled insight regarding the performance of any phase or project measure for any type of project anywhere in the world.

Other CII Performance Assessment Program achievements in 2013 include:

- Completed the first round of the National Healthcare Facilities Benchmarking Program— nearly 100 projects were entered and a comprehensive summary report was written and delivered to participating organizations. The U.S. Department of Defense / TMA and the U.S. Department of Veterans Affairs funded this effort.
- Delivered an interim report for Phase II of capital project benchmarking in the Canadian Oil Sands through funding from the Construction Owners Association of Alberta (COAA) and the Natural Sciences and Engineering Research Council of Canada (NSERC). This work was done in partnership with CII's Performance Assessment Laboratory located at the Schulich School of Engineering at the University of Calgary.
- Conducted research for the performance assessment of onshore oil and gas production facilities in Russia for CII member TNK-BP (Rosneft).
- Developed a performance assessment program for the benchmarking of gas processing plant facilities, which will launch in early 2014 through funding from Shell Canada.
- Established a Performance Assessment Laboratory for members of "Project Norway" at the Norwegian University of Science and Technology in Trondheim, Norway.
- Began work with the Procurement Executives Group (PEG) to assess the performance of the procurement function at the project and corporate level using CII's 10-10 Program.
- Produced a study on construction safety measures for Procter & Gamble.
- Conducted the 2013 CII Performance Assessment Workshop (PAW) in June in Memphis, Tennessee — approximately 80 people participated.
- Published CII's annual safety report, three journal articles, and one conference proceeding.
- Supervised four Ph.D. students at the University of Texas at Austin.
- Graduated one Ph.D. candidate at the University of Texas at Austin.
- Produced 12 data requests for CII member organizations and research teams.

Benchmarking Associates Training

During 2013, three training sessions for CII Benchmarking Associates (BA) were held for the member employees responsible for entering project data into the CII Performance Assessment System. Host cities included Austin, Texas (CII), Memphis, Tennessee (PAW), and Birmingham, Alabama (Yates Construction).

It is clear that a strong Performance Assessment Program remains important to CII's continued efforts to improve project performance outcomes. Aside from producing reports for individual projects, CII's Performance Assessment staff conducts extensive research funded by external grants and produces data and analyses, utilized by many CII research teams.

KNOWLEDGE MANAGEMENT

KNOWLEDGE MANAGEMENT COMMITTEE

The purpose of the Knowledge Management Committee (KMC) is to maintain and add value to CII's body of knowledge, and to establish and support the CII Communities of Practice.

CII members leverage collective industry wisdom through the CII Knowledge Structure—CII's systematic online categorization of its research products. The committee manages and maintains the structure and is responsible for approving all changes, including the placement of new products and archiving outdated products. The knowledge structure categorizes research publications into knowledge areas, and further subdivides them into best practices, other practices, and information topics.

In an effort to maintain and add value to CII's body of knowledge, the KMC:

- reviews research products on a periodic basis to determine relevance
- slots new research products into the Knowledge Structure
- refreshes best practices that require updating
- identifies and validates emerging best practices, and
- recommends research topics to the Research Committee

In 2013, the KMC continued utilization of the Knowledge Management System (KMS)—an online tool developed by the committee to help its members more efficiently and effectively conduct product reviews to keep CII's body of knowledge relevant. Because reviews are conducted online by product family, productivity is greatly enhanced. In 2013, the committee performed 24 reviews. In addition, over 40 new research publications were added to the Knowledge Structure.

The Risk Management Integration Team, launched by the KMC in late 2012, continued its work to refresh the Integrated Project Risk Assessment (IPRA) tool, IR 181-2, which was completed and published in December. An over-arching special publication (SP 181-3) was drafted to provide the industry with a broad perspective and guidance on the overall risk management process. This will be completed and published in 2014.

The Knowledge Base Steering Committee, also launched in 2012, continued work on a needs analysis and methodology of how to improve CII's knowledge base and create more member value through conducting numerous focus groups and interviews with member companies. The purpose for this study is to provide:

- greater flexibility and ease on how information is accessed
- more sophisticated search capability
- greater integration of the CII knowledge material
- more concise summaries of CII knowledge content
- greater cross reference capability and linking of CII material
- ability to search by key words and alternate terms, and
- alignment with 10-10 input measures

A restructuring and integration pilot will be conducted with KMC members in early 2014, along with scoping a content management and visualization solution.

Communities of Practice

The KMC expanded CII's Communities of Practice (COPs) — groups whose members share a passion for a topic or practice area. The COP program provides a virtual environment in which members can deepen their knowledge and understanding of a topic through ongoing collaboration and knowledge sharing. At the beginning of 2013, CII's already established COPs addressed safety, sustainability, globalization, information management, front end planning, next-generation leaders, risk management, quality management, federal facilities delivery, modularization, and performance assessment. By year-end, the KMC had launched one new community, the Project Controls COP. This addition brought the total from 11 to 12 COPs with overall participation of 325 members from 93 member companies.

A highlight during the 30th Anniversary Conference, held in Orlando, was the Next-Generation Leaders Forum, sponsored by CII and the Next-Generation Leaders COP. More than 100 members attended this second annual CII event featuring Dr. Gaylen Paulson, Associate Dean and Director of Texas Executive Education, McCombs School of Business at The University of Texas at Austin. Dr. Paulson's presentation, "Creative Solutions to Complex Problems," focused on defining a problem and evaluating the best solution or alternative(s), as well as how to better communicate and sell an idea internally. The forum received very high ratings and will continue at the 2014 Annual Conference in Indianapolis.

The Next-Generation Leaders COP also sponsored a plenary session to update the membership on their initiatives and activities. A display area attracted 20 new recruits to our COPs. The KMC also sponsored the third annual COP Leadership Forum, held during the annual conference. COP leaders provided insight into their progress, deliverables, and lessons learned, as well as ideas for continuous improvement. This successful knowledge sharing event will be repeated at the 2014 Annual Conference.



SPECIAL COMMITTEES

STRATEGIC COMMUNICATIONS COMMITTEE

The Strategic Communications Committee (SCC) has the following goals: support the purpose, vision, and mission of CII through communications; improve the quality, consistency, and alignment of communication between core process groups and standing committees to deliver more value to CII members; maintain and promote CII's brand and industry leadership; and maximize communication channels to expand CII's audience and membership.

The SCC 2013 deliverables included the following:

- CII Ambassador Toolkit, including the new "Why CII?" brochure
- CII Communications and Branding Guidelines
- Launch of social media on Facebook, LinkedIn, Twitter, and a CII YouTube Channel
- Key messages for 2013 CII Annual Conference (leadership, research, collaboration, improvement).

CII Ambassador Toolkit

The CII Ambassador Toolkit developed by the SCC, in conjunction with the Membership Engagement Committee, is an online resource to support the identification and recruitment of new member prospects. It also provides CII member organizations with internal communications tools for promoting awareness of CII. This toolkit—located under "Resources" on *myCII*—consists of five promotional pieces, including the "Why CII?" brochure. This new recruiting brochure highlights the value of a CII membership with a list of benefits and member testimonials.

The CII Ambassador Toolkit includes the following:

- "Why CII?" Brochure
- CII Elevator Speech
- CII Overview Presentation
- CII Annual Report
- CII 30-Year Anniversary Video.

MEMBERSHIP ENGAGEMENT COMMITTEE

The mission of the Membership Engagement Committee (MEC) is to develop and implement strategies and resources to recruit and promote the early engagement of new members, assure the continuing participation of current members, monitor member value and satisfaction, and when appropriate, recommend termination of membership.

CII continued its growth in 2013, reaching 138 members by year's end, and was balanced between owners and contractors. Member retention remained steady at 95 percent.

CII Communications and Branding Guidelines

The SCC developed the CII Communications and Branding Guidelines to help members and CII staff plan and develop all of CII's communications. The goal is to maintain a strong brand identity through any communication piece that carries the CII name.

Launch of Social Media

In the spring of 2013, the SCC launched CII's presence on three social media platforms: Facebook, LinkedIn, and Twitter. The sites saw tremendous growth over the year, reaching over 100 followers per platform. A social media team (the CII "street team") participated during the 2013 annual conference, posting "tweets" about conference speakers, sessions, and other events. In the fall of 2013, CII launched a YouTube channel to host CII's promotional videos and to build a library of videos in the near future.

2013 Annual Conference Key Messages

The SCC developed key messages for the CII 2013 Annual Conference based on the theme, Celebrating 30 Years: Leadership, Research, Collaboration, Improvement. The messages were prominently displayed on the CII home page during 2013.

In addition, the SCC implemented its communications plan, which included publishing CII's 2012 Annual Report, the quarterly eNews, and various e-blasts announcing CII events and key initiatives. The SCC continued to expand media relations to increase coverage of CII research and the 30-year anniversary conference. The committee also completed the official registration of CII's marks (i.e., logo, secondary logo, and tagline), and worked with the Performance Assessment Committee on Health Care Benchmarking Metrics and the 10-10 Program Communications Campaign.

The MEC holds monthly Board of Advisors (BOA) Awareness Webinars to acquaint new members and update existing members on particular topics. Topics range from in-depth reviews of core knowledge processes to research team staffing preparations. A special orientation for new BOA members is held before each BOA meeting (in both the fall and spring) to acquaint them with their role and provide a comprehensive overview of the organization.

The Membership Engagement Committee emphasizes the need for a strong internal CII team to derive the most benefit from CII membership.

SPECIAL COMMITTEES

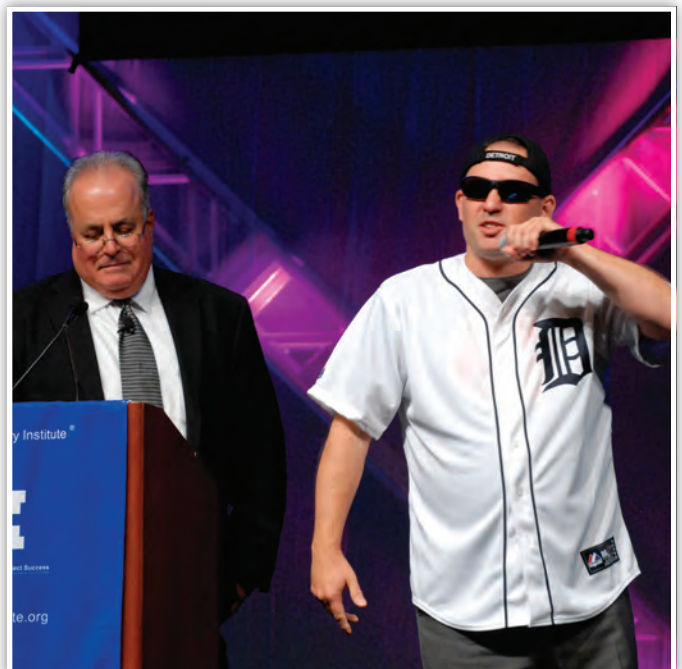
ANNUAL CONFERENCE

The 2013 CII Annual Conference was held in Orlando, Florida this summer and broke all previous attendance records attracting more than 700 executives. The conference theme—Celebrating 30 Years: Leadership, Research, Collaboration, Improvement—highlighted the major accomplishments of CII with an opening video of CII over the last 30 years and a closing video featuring reflections from founding CII Director Richard L. Tucker to the current CII Director Wayne Crew. Keith Manning, Executive Vice President of Zachry Holdings, Inc., served as the conference chair.

CII research team members presented new findings with many ready-to-use implementation tools. Keynote speakers included John Engel, Chairman and Chief Executive Officer of WESCO International, Inc.; Jim Gallogly, Chief Executive Officer of LyondellBasell; Sara Johnson, Senior Research Director of Global Economics, IHS Global Insight, Inc.; and, Stephen R. Knowles, President of Wood Group Mustang. Joseph A. Ahearn, Vice Chairman of CH2M HILL (retired) and E. Sarah Slaughter, President & Executive Director of the Built Environment Coalition were featured speakers.

CII continues to support the education and training of the industry's next generation by inviting guest speakers of organizations who are engaging today's youth. Bryan Burke, Vice Chairman of the ACE Mentor Program of Frederick, Kristina Nguyen of Bechtel, and Carol A. Ritz of Bechtel presented the benefits of being a sponsor of the ACE Mentor Program of America. Two trades-oriented mentoring programs, The National Center for Construction Education and Research (NCCER) and SkillsUSA, provided a joint presentation highlighting Kaila O'Farrell, National Region One Vice President, Holley Thomas, a Certified Structural Welder with KBR, and Ashley Webel, a Certified Welding Inspector with RoMan Engineering Services. NCCER also brought virtual welding and crane simulators for a conference display, to allow attendees to have a hands-on experience with state-of-the-art training tools. Other student research efforts included a poster session from engineering programs from universities across North America presenting non-CII funded research.

CII's top two awards were presented at the end of the conference. The Richard L. Tucker Leadership & Service Award was presented to Jesus de la Garza, Vecellio Professor of Virginia Tech. The Carroll H. Dunn Award of Excellence was presented to Jesus (J. J.) Suarez, Chairman, President & CEO of CSA Central, Inc.



LEADERSHIP

CII is the premier organization in construction project delivery research, driven by leaders in industry and academia who together improve project safety and portfolio outcomes.

RESEARCH

Thirty years of results-driven CII research have provided the construction industry with the body of knowledge to maximize outcomes from owner and contractor project delivery systems.

COLLABORATION

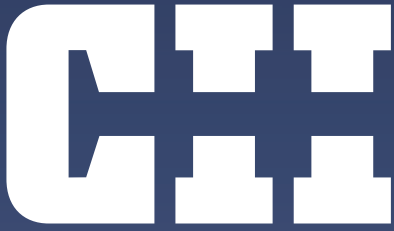
CII member participants work together to power every effort of the institute. Collaboration brings professional development opportunities and unites leaders across all industry sectors.

IMPROVEMENT

CII advances the construction industry with implementation tools, professional development opportunities, and performance assessment to promote continuous improvement.







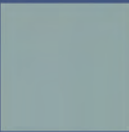
The Knowledge Leader for Project Success

Owners • Contractors • Academics



KNOWLEDGE creation

Research to define industry norms, best practices, and breakthroughs.



great moments IN CII HISTORY

DECEMBER
1983

The first meeting of the **CII Board of Advisors** funds seven critical research topics. Board members volunteer to lead and to staff task forces with their personnel.

AUGUST
1985

First CII Annual Conference attracts 221 attendees from 109 companies, universities government agencies to **Keystone, Colorado**. CII presents its most prestigious award, named honor of Lieutenant General (Ret.) Carroll H. Dunn.

The Construction Industry Institute formally chartered.

Twenty-eight major owner and contractor organizations establish the CII headquarters at The University of Texas at Austin under the direction of Dr. Richard L. Tucker.

OCTOBER
1983

The Implementation Committee established as a CII standing committee to promote and facilitate effective implementation of CII research findings.

DECEMBER
1984

CII releases publication

1-1, CII
3-1, Co
5-1, Imp
Ty
P
6-1, Pro
6-2, Sc
8-1, Ev

JULY
1986

Dissemination of findings through publications, education modules, virtual education, courses, and workshops.

KNOWLEDGE dissemination

AUGUST
1987

The 1987 CII **Chairman of the Board of Advisors** challenges each member organization to implement at least one CII research finding and recommendation during the coming year.

AUGUST
1991

CII releases its first education module – Optimizing Project Schedules.

JANUARY
1993

Benchmarking & Metrics Committee established as a CII standing committee.

Process Industry Practices consortium established as a separately funded element of CII to develop cooperative engineering standards for common elements of process industry facilities.

Issues the first task force research findings:

• Design Effectiveness Impact on the Construction Industry
• Constructability: A Primer
• Impact of Various Construction Contract Types and Clauses on Project Performance
• Project Control for Engineering
• Scope Definition and Control
• Evaluation of Design Effectiveness

Board of Advisors establishes three goals to be accomplished by 2000:

- Reduce recordable injuries by 25 percent
- Reduce total project costs by 20 percent
- Reduce project schedules by 20 percent

Education Committee established as a CII standing committee to develop CII education modules and deliver classes utilizing them.

APRIL
1990

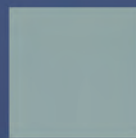
NOVEMBER
1992

Celebrat

LEADERSHIP RESEARCH

KNOWLEDGE assessment

Assessment of the impact
of CII practices through
benchmarking.



AUGUST
1997

Breakthrough Strategy Committee established as a CII standing committee.

Distribution of CII's publication library via compact disc begins.

NOVEMBER
1998

Implementation Champion Workshops (now Performance Improvement Workshops) initiated to develop effective implementation resources within each participating member organization.

NOVEMBER
1999

Benchmarking & Metrics Committee introduces **CII Project Central**.

CII deploys the **CII Knowledge Structure**.

JUNE
2000

CII educational content made available as **online courses**.

JUNE
2004

Research assessment surveys identify a need for **industry-specific benchmarking studies**.

CII grows to 93 members.

CII membership reaches 80.

CII enters the Internet age with the **launch of its first Web site**.

Implementation Strategy Committee creates the **CII Implementation Champions Program** and the **CII Implementation Model**.

Knowledge Management Committee established as a CII standing committee.

FIATECH consortium established as a separately funded element of CII to focus on development of the Fully Integrated and Automated Project Process for capital projects.

CII adds Products Online to its offerings, providing 24/7 access to CII knowledge from any location in the world.

CII and McCombs Business University at Austin develop **CII Executive Leadership Program**.

APRIL
1997

JULY
1998

APRIL
1999

FEBRUARY
2000

NOVEMBER
2001

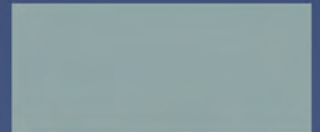
JANUARY
2006

Celebrating 30 Years

TH COLLABORATION IMPROVEMENT

Organization and assessment of CII's ever-expanding body of knowledge, and oversight of CII Communities of Practice.

KNOWLEDGE
management



AUGUST
2006

CII Academic Committee established as a CII standing committee.

JUNE
2007

Web Seminars introduced to meet the growing demand for expanded knowledge of CII research findings.

AUGUST
2008

CII celebrates its 25th Anniversary with its Annual Conference's return to Keystone, Colorado.

JUNE
2010

Performance Assessment System launched.

JULY
2011

First **COP Leadership Forum** held.

DECEMBER
2012

First **Performance Improvement Workshop** held in Brazil.

CII membership reaches 132, a new record.

and the
ombs School of
ess at The
sity of Texas
tin partner to
p the annual
Executive Leadership
am.

The CII Knowledge Management Committee unveils **CII Communities of Practice for safety, sustainability, and globalization.**

CII's education effort transitions to the **CII Professional Development Continuum.**

CII membership climbs to 106.

Online Implementation Assistant launched.

Research process improvements (defined by Research Committee) implemented.

Nine research teams launched, largest launch in CII history.

Cumulative **Executive Leadership Program** attendance reaches 48 companies and 156 attendees.

MARCH
2007

FEBRUARY
2008

OCTOBER
2009

FEBRUARY
2011

MAY
2012

JANUARY
2013

CII DIRECTORS



Richard Tucker
1983 – 1998



Ken Eickmann
1998 – 2003



Hans Van Winkle
2003 – 2006



Wayne Crew
2006 – Present

PROCESS INDUSTRY PRACTICES

Process Industry Practices is entering its twenty-first year of operation and continues to grow and succeed. Over the past year our lists of member and subscriber companies have grown to 122 owner/operator and contractor companies regularly utilizing our harmonized PIP Practices. With an additional 21 PIP Licensees, we remain a well-recognized industry consortium. As the global reach of our members, subscribers, and licensees grows, we continue to see the use of our practices extending beyond the process industry.

PIP is an independently funded organization operating under the CII umbrella. Our success is a direct result of our member companies applying key resources in support of nearly 600 PIP Practices in now ten engineering disciplines. Developing PIP Practices involves harmonizing member companies' internal standards. The content of these practices are applicable to the needs of numerous process industry non-members and to those in related industries around the world. Once again, we have seen enthusiastic participation and support of member company volunteers and management. This results in our continuing progress to regularly update and revise our practices, develop new approved practices, and continue to increase industry awareness, acceptance, and use of them.

Member-driven initiatives in 2013 included the continuation of our work to identify opportunities to make PIP Practices more globally applicable: a pipeline systems function team is developing piping practices related to ASME B31.4 and B31.8 codes for gas/liquid transmission and distribution piping systems; and a new team is developing plans for practices to address the special needs of hygienic process piping systems. We also

added a key improvement to our website to give members on-line access to archived published practices and key supporting documents for use in their development. In addition, our strategic plan was updated and published at the end of 2013.

In 2013, we began to expand participation opportunities with significant approved funding. In addition to our funding of CII Research Team 307, "Mitigating Threats of Counterfeit Materials in the Capital Projects Industry," PIP resources also actively participated on this research effort. The PIP Steering Team approved a total of \$250,000 funding for an Endowed Presidential Scholarship in our name for the Cockrell School of Engineering. Another \$250,000 was approved to support and to have naming rights for one small project lab in the new Engineering Education and Research Center (EERC) building planned at The University of Texas at Austin (UT)—details for these contributions are still being finalized with the university. These are important opportunities for us to ensure broader awareness of PIP and to enhance our relationship with CII and UT.

Quarterly discipline-specific implementation workshops continued throughout 2013. Workshop topics included the Machinery Function and the Pipeline Function teams, team building, and one on PIP metrics. These workshops continue to provide excellent forums for sharing implementation success stories. PIP Members also continue to report they achieve considerably greater savings by implementing our practices than by developing and maintaining their own internal standards. These networking opportunities and knowledge management sharing of non-proprietary information are recognized as another key benefit to PIP Members.



PROCESS INDUSTRY PRACTICES

MEMBERS — OWNERS

3M Company	ConocoPhillips	Huntsman Corporation	PESRM (Philadelphia Energy Solutions R&M)
Aera Energy LLC	Devon Energy Corporation	INEOS Olefins & Polymers USA	Phillips 66 Company
Aramco Services Company	E.I. DuPont de Nemours & Co., Inc.	Lubrizol Corp.	REC Silicon
Archer Daniels Midland Company	Eastman Chemical Company	LyondellBasell	Rentech, Inc.
Arkema Inc.	Evonik Corporation	Mallinckrodt	Saudi Basic Industries Corporation - SABIC
Ascend Performance Materials	Flint Hills Resources, LP	Momentive Specialty Chemicals, Inc.	Sekisui Specialty Chemicals America LLC
Axiall Corporation	FMC Corporation	Monsanto Company	Tesoro Corporation
BP Energy	Grupo Petromex - GPT	Mosaic Fertilizer LLC	UOP LLC
Celanese Ltd.	Hess Corporation	Occidental Oil & Gas Corporation	Western Refining
Chemtura Corporation	Hess Energy Marketing, LLC	Pasadena Refining System, Inc.	Zeon Chemicals L.P.
Chevron Corporation	HollyFrontier		
CITGO Corporation	Honeywell		

MEMBERS — CONTRACTORS

Ambitech Engineering Corporation	CDI Corporation	Jacobs Engineering	Samsung Engineering America Inc
Audubon Engineering Operations	CH2M HILL	KBR	SK E&C USA Inc
BE&K (a KBR company)	Chart Energy & Chemicals, Inc.	Leidos	SNC-Lavalin Engineers & Constructors, Inc.
Bechtel Corporation	Chemtex International	Merrick & Company	TAS Energy
Brinderson LP	ENGlobal Engineering, Inc.	Middough Inc.	TECHNIP USA
Burns & McDonnell	Fluor	OnQuest	URS Corporation
Burrow Global LLC	GE Energy	Preferred Engineering	WorleyParsons Ltd.
CB&I	IHI E&C International Corporation	Ref-Chem	
		S & B Engineers and Constructors, Ltd.	

SUBSCRIBERS

Agrium Inc.	Jotun Paints Inc.	PlusPetrol S.A.	The Sherwin-Williams Company
Arizona Chemical Company	Koch Industries Inc	Praxair	Tengizchevroil (TCO)
Bahrain Petroleum Company - BAPCO	Kraton Polymers	Phoenix Park Gas Processors Limited	The University of Texas at Austin Department of Utilities and Energy Management
BHPBilliton Nickel West	L-Con Engineers & Constructors	Rockwood Lithium Inc.	Valero Corporate Services Company
Braskem, PP Americas, Inc.	Lloyd Engineering, Inc.	Roquette America Inc.	Velocys Inc.
Chevron Phillips Chemical Company, LP	M & H	Roxtec International AB	The Williams Companies
Coffeyville Resources Refining & Marketing LLC	Marafiq	Sasol Technology	Willbros Engineers, LLC
Engineering for the Petroleum & Process Industries (ENPPI)	North West Redwater Partnership	Seadrift Coke L.P.	Wood Group Mustang
Furmanite Technical Solutions	Nuclear Fuel Services Inc.	SGCEnergia SGPS	Woodson Engineering LLC
Indorama Ventures PCI	NuStar Logistics, L.P.	Silver Eagle Refining	
James Construction Group LLC	ONEOK, Inc.	Sinclair Oil Corporation	
	OXEA Corporation	Stapan Company	
	Petroleum Company of Trinidad and Tobago Ltd.	Sumitomo Chemical Company, Ltd.	

LICENSEES

API	IEEE	National Insulation Association	Texas A&M University - Corpus Christi
ASME	IHS	Palomar College	ThomasNet
Autodesk	Intergraph	South Central Louisiana Technical College (SCLTC)	Thomson Reuters / Techstreet
Aveva	ISA	St. Paul Technical College	University of North Dakota
Bentley Systems, Inc.	Lee College	SAI Global	
Codeware	National Institute of Building Sciences		

FIATECH

Fiotech is a global industry consortium of capital project stakeholders from both the private and public sectors, approaching 100 members and industry alliances. Fiotech functions as a collective research and development group, with more emphasis on development. The broad aggregated expertise and consolidated resources of our members enables us to effectively identify and adopt innovative systems, technologies, and practices. We lead the way in providing productivity improvement solutions through developing new technologies and innovative solutions for critical challenges that drive the future of the capital projects industry.

The year 2013 was a highly successful for Fiotech. Member participation and outreach was strong with over 500 industry leaders participating in our spring annual conference and our fall members meeting. Participants from our annual conference described it as one of the most informative events in the industry. Fiotech's approach for these meetings is to focus on new technology advances and innovations in work approaches for the industry.

In 2013, Fiotech members led over 20 highly diverse projects spanning the capital project lifecycle. Through these projects, Fiotech members are advancing industry-leading solutions while minimizing their individual costs and risks. In addition to delivering on this robust and high value portfolio of industry

leading projects, our members also provided leadership to develop a long-range of programs for continued growth and development of the organization.

The development of an updated strategic plan is part of Fiotech's long-range programs. The Fiotech Board of Advisors assembled a team to develop a renewed strategic plan that would provide key strategies with established targets and performance measures. The Fiotech Three-Year Strategic Plan—presented to the entire membership at the fall members meeting—received great feedback and member input. The plan, available on our website (<http://fiotech.org/>), represents the efforts of many contributors, including the Strategic Direction Committee, the Board of Advisors, the Roadmap Team, the Membership Committee, the Project Management Committee, and Fiotech staff.

Following the development of the Strategic Plan, the business case for participating in Fiotech was refined and rewritten in a document titled, "Join Fiotech and Shape the Future." This document is available on our website and highlights Fiotech's mission, activities, and describes the synergies and values Fiotech brings to the industry.

Fiotech is excited about 2014, as member involvement continues to increase; projects are becoming more innovative, and additional staff is helping us better serve our mission.



FIATECH 2013 MEMBERS & PARTNERS

AIA Building Connections
 American Institute of Steel Construction
 ARC Advisory Group
 Areva
 Arizona State University
 ARX
 Atlas RFID Solutions
 Autodesk
 AVEVA
 Avolve Software
 Bechtel
 Beijing DMS Software
 Bentley Systems
 Black & Veatch
 building SMART alliance
 Carnegie Mellon University
 CCT
 CH2M HILL
 CIB
 Clemson University
 Consolidated Contractors Company
 Construction Industry Institute
 Construction Opportunities in Mobile IT
 Continental Automated Buildings
 Association
 Coreworx, Inc.
 CSRF - Construction Sciences Research
 Foundation
 Dassault Systemes
 Department of Veterans Affairs
 The Dow Chemical Company
 DevonWay

Drexel University
 Emerson Process Management
 Electric Power Research Institute
 ExxonMobil
 Fluor
 Georgia Institute of Technology
 HAL
 Hatch
 Hydraulic Institute
 Intellwave Technologies
 Intergraph
 International Code Council
 Iowa State University
 iRing User Group
 Jacobs
 Kaiser Permanente
 King Fahd University
 Korea Advanced Institute of Standards
 and Technology
 Korea Institute of Construction &
 Transportation Technology Evaluation
 and Planning
 Lidar News
 Loughborough University
 Madcad
 McLaren Software
 Mechanical Contractors Association of
 Chicago
 MIMOSA

Myongji University
 National Academy of Construction
 National Center for Manufacturing
 Sciences
 National Institute of Standards &
 Technology
 Noumenon
 Omni-ID
 OnTrack Engineering
 The Open O&M Initiative
 Oracle
 Panprojects
 PCA
 PIP
 S&B Engineers & Constructors
 Siemens
 Solibri
 SPAR Europe
 Systemation Solutions
 Target
 Tecgraf-PUC/Rio
 Texas A&M University
 The University of Texas at Austin
 Thomas Industrial Networks
 Trimble
 University of Alberta
 University of Illinois at Urbana-Champaign
 University of Michigan
 University of Salford
 University of Washington
 University of Waterloo
 VNIIAES
 Wipro
 WorleyParsons
 Zachry



CII AWARDS

CARROLL H. DUNN AWARD OF EXCELLENCE

The Carol H. Dunn Award of Excellence is the highest recognition bestowed by the Construction Industry Institute. The award, established in 1985, bears the name of the original recipient, the late Lt. Gen. Carroll H. Dunn, U.S. Army. The purpose of the award is to recognize an individual who has had singular and notable responsibility for significant advancements in improving the construction industry.



J.J. Suárez

The 2013 Carroll H. Dunn Award of Excellence was presented to J.J. Suárez. Suarez is the twenty-seventh recipient of this award, joining a distinguished line of unique individuals who have shown the highest degree of personal dedication to improving cost, schedule, and safety of capital projects. Suárez sees his 26-year membership in the Institute as central to the growth and health of his business, particularly

in terms of the implementation of best practices and the professional development of his employees. He was the 2007 Chairman of CII and, over the years, has led or been a member of several CII committees, including the Executive and Benchmarking Committees. He was also a member of Research Team 36, Quality Performance Measurements, and contributed to research teams investigating partnering and team building.

TUCKER AWARD AND OTHER CII AWARDS

In addition to the Carroll H. Dunn award, the Construction Industry Institute recognized excellence among its members and academics by presenting the following awards in 2013:

Richard L. Tucker Leadership & Service Award

This award recognizes an individual who has contributed significantly to the advancement of the CII mission and to the success of CII as an organization.



Jesús M. de la Garza was recognized as the tenth recipient of the Richard L. Tucker Leadership & Service Award. Dr. de la Garza's career-long contributions to the CII mission and his 27 years of insightful research and enthusiastic leadership make him more than deserving of this honor. He credits his involvement in CII with his selection for service in other industry organizations,

which include two National Research Council bodies: the Board on Infrastructure and the Constructed Environment, and the Defense Materials Manufacturing and Infrastructure Committee. In 2010, he was elected to the National Academy of Construction, and is a member of two of its committees. He also serves on the Construction Managers Association of America Board of Directors and is Vice-chair of the organization's academic council.

2013 Recipients of the Distinguished Service Award

This award recognizes individuals who have generously contributed their name and talents to the advancement of the CII mission.

Presented at the Spring 2013 CII Board of Advisors meeting

- James B. Gibson
- Jonathan D. Pitcher

Presented at the Fall 2013 CII Board of Advisors meeting

- Glenn Doran
- Aivars Krumins
- Cindy Richartz
- Dave Wolfson

CII Benchmarking User Awards

Kaiser Permanente was named the winner of the 2013 CII Benchmarking User Awards in the owner category. **Burns & McDonnell** was named the winner of the CII's Benchmarking User award in the contractor category. Both companies have impressive, sustained performance assessment programs within their organizations.

Outstanding CII Implementer Award

This award recognizes a significant contribution to enhancing the implementation of CII Best Practices and research findings.

The Construction Industry Institute selected **Mike Davidson** of Ontario Power Generation, **Dan Groeger** of URS Corporation, and **Richard Gunn** of TransCanada Corporations as recipients of the CII Outstanding Implementer Award. The ISC chooses the recipients and recognizes them at the 2013 CII Annual Conference.

CII Curriculum Partner Program Award

To encourage the use of CII research in academia, the PDC honors the Curriculum Partner Program Award to higher education programs that have incorporated published CII resources into their curricula over the previous calendar year.

CII recognized the **Construction Engineering and Project Management (CEPM) Program** in the Department of Civil, Architectural, and Environmental Engineering at The University of Texas at Austin as the award recipient.

Since 1983, CEPM faculty members have conducted CII research, regularly taught CII-related courses, presented at CII events, and participated on CII committees and in CII communities of practice (COPs). CEPM's curriculum consists of a range of graduate courses for which students develop their own interest-based studies. Faculty members teach CII materials so that students get the most up-to-date industry knowledge, incorporating the shared experience of industry veterans, along with case study data, to enhance the learning process.

CII Distinguished Professor Award

The distinguished professor award recognizes full-time or adjunct faculty who incorporate published CII research findings into the courses they teach.

Dr. John D. Borcharding, The University of Texas at Austin

Dr. Borcharding is Adjunct Professor in civil engineering at The University of Texas at Austin. In his consulting work, he regularly teaches on topics relevant to executives in the energy and construction industries. His primary teaching experience is in construction engineering project management, and he has conducted more than 40 productivity improvement programs on construction projects.

Dr. John E. "JT" Taylor, Virginia Tech

Dr. Taylor is as an associate professor at Virginia Tech in the Vecellio Construction Engineering and Management Program, and a principal faculty member in the Myers-Lawson School of Construction. Taylor focuses on the industry dynamics associated with information systems integration, industry globalization, workforce virtualization, and energy conservation in buildings.

Outstanding CII Researcher

Dr. Jimmie W. Hinze, The University of Florida

Dr. Hinze was honored with the Outstanding CII Researcher Award for his work on Research Team (RT) 284, Beyond Zero: Utilizing Safety Leading Indicators. In bestowing this honor, Hinze was recognized for his innovative insight into the value of leading indicators not only as static contractual requirements, but also as measurable performance metrics at the heart of the project's continuous improvement plan for safety. Before joining RT 284, Hinze worked on the following CII research teams: RT 101, Design for Safety; RT 160, Making Zero Accidents a Reality; RT 190, Owners' Role in Safety; RT 216, Target Safety; and RT 269, Real-time Pro-active Safety.

Outstanding CII Instructor

Jesús M. de la Garza, Virginia Tech

Dr. de la Garza is the holder of the Vecellio Professorship in Construction Engineering and Management at Virginia Tech, and leads the Center for Highway Asset Management Programs, which conducts research in support of the Virginia Department of Transportation. He has been involved in CII activities since 1986 as a researcher and as a leader on committees and in communities of practice. Through his involvement, he has forged a key link between the academic world and the engineering world—having been instrumental to Virginia Tech's incorporation of CII information into its curriculum. He believes that research-based teaching methods and practical applications ensure a steady and understandable transfer of knowledge to each up-and-coming generation of engineers.



CII FINANCIALS

Sources and Uses of CII Resources in (\$000)

		Net
BEGINNING BALANCE		
Carried Forward from 2012	1,192	
Balance Forward	655	
Reserve	1,000	2,847
SOURCES		
<u>Membership Dues</u>		5,072
<u>Product Sales:</u>		
Revenue	168	
Production & Sales Expense	(229)	(61)
<u>Other Sources</u>		18
<u>TOTAL SOURCES</u>		<u>5,029</u>
USES		
<u>Programs:</u>		
Research	2,839	
Implementation	302	
Professional Development	201	
Best Practices Program	57	
Knowledge Management	149	
Benchmarking & Metrics	784	
Executive Leadership Program	290	
Breakthrough	17	
Benchmarking & Metrics Revenue	(393)	
Other Program Revenue	(855)	3,392
<u>Conferences:</u>		
Annual Conference	1,250	
Attendance Fees	(1,017)	233
<u>Supporting Activities:</u>		
Support of Members & Director's Groups	631	
Academic Committee	20	
Other Activities	78	
Supporting Activity Revenue	(157)	572
<u>Information Systems</u>		197
<u>General Expense:</u>		
Administration	405	
Other Activities	325	730
TOTAL USES		<u>5,124</u>
NET		(95)
ENDING BALANCE		<u>2,752</u>

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IN MEMORIAM

Dr. Jimmie W. Hinze

Outstanding CII Researcher, 2003, 2013

Academic Committee Member, 2012 – 2013

Safety Community of Practice, 2007 – 2013

CII Research Teams:

- RT 101, Design for Safety
- RT 160, Making Zero Accidents a Reality
- RT 190, Owners' Role in Safety
- RT 216, Target Safety
- RT 269, Real-time Pro-active Safety
- RT 284, Driving to Zero with Safety Leading Indicators
- RT 301, Using Near Miss Reporting to Enhance Safety Performance.

Lt. General (R) John "Jack" W. Morris II

Carroll H. Dunn Award of Excellence, 1996



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