The 25th National Conference on Building Commissioning took place in Salt Lake City, Utah this year, hosted by the Southwest Chapter of the Building Commissioning Association (BCxA). The three-day event, themed “Past, Present, Future,” took a broad look at then (1993) and now (2017), with a deep dive into the technology, practices, and market issues that are emerging today.
Pre-Conference Activities

Events kicked off with the annual Michael R. Chelednik Memorial Golf Tournament to raise funds for the BCxA Scholarship Foundation. The BCxA’s Southeast Regional Chapter and National Capital Chapter hosted the tournament at Stonebridge Golf Course in Salt Lake City.

Revenue from this year’s fundraiser event was over $6,000!

Thank you to all who participated!
Annual BCxA Meeting and Dinner

Our Annual Meeting, the evening before the conference opening, was hosted at the Alf Engen Ski and Eccles 2002 Winter Olympics Games Museum in Park City, Utah. As you can see, the meeting was not entirely formal!

However, after a superbly selected buffet dinner, BCxA Chapter and Committee leaders shared with attendees the past year’s major accomplishments in furthering the knowledge, advocacy and membership in the commissioning profession.

President Bruce Pitts and Executive Director Liz Fischer presented awards to Chapters and individuals who have gone above and beyond to support the Association. This year, culminating in the 25th Anniversary of NCBC, was a stellar year for awards to both individuals and chapters:

“… the most memorable was the ski simulator at the museum at the Monday night BCxA meeting. Lots of fun.”
— Bryan Welsh
President’s Award

This year, three awards were presented. The recipients each have spent extraordinary personal time and effort to further the mission of the Association.

Jeff Conner, Chairman and Principal at Grumman/Butkus, is a stalwart advocate for the BCxA and commissioning practice. He served on the Board of Directors of the Building Commissioning Association from 2010 through 2015, was past chairman of the BCxA’s Professional Development Committee, and is currently serving as Chairman of the group’s International Committee, for which he has led the BCxA’s international expansion efforts since 2013.

Tim O’Neill, Commissioning Operations Manager at Welsh Commissioning Group, led the BCCB’s quest to get the CCP ANSI-accredited, including the significant challenge of learning the ISO 17024 standard and ANSI process. Tim worked countless volunteer hours with staff to review policies and procedures, develop the appropriate committees, and directed activities to ensure a successful outcome, which ultimately benefited the BCxA membership.

Bill McMullen, Business Unit Manager, Energy Solutions at Dewberry, is a former BCxA President as well as Vice President, and liaison to the Building Commissioning Certification Board. He is dedicated to advocacy for the profession and practice of commissioning. In addition to his role at Dewberry, he is instructor of Engineering Professional Development at North Carolina State University and also teaches in the AIA 2030 challenge. He has been deeply involved in achieving BCxA’s federal recognition as a strategic partner in workforce development, and the first-ever ANSI-accredited certification of commissioning providers.

“A strong memory for me was Bill McMullen being awarded the President’s Award, because of my past business relationship with Bill and recognizing how much he has given to the organization over the past few years. I guess I just enjoy celebrating good news.” – Tom Poeling
Distinguished Service Award

For the first time, the BCxA presented awards for distinguished service. Karl Stum and Diana Bjornskov each accepted an award for the completion and publication of the BCxA/APPA Building Commissioning Handbook, third edition, acknowledging the significant efforts of BCxA and APPA members who contributed to the book.

Chapter Awards

The BCxA recognizes the efforts of Chapters for performance in activities, programs and membership recruitment. Chapters are scored and evaluated in three different categories:

- Dwight Gray accepted the Shooting Star Award for the Northwest Chapter’s innovative approach to member recruitment and local involvement.
- Kevin Vander Klay accepted the Rising Star Award for the Central Chapter’s successful new program, “Tech Talks.”
- Ryan Lean accepted the Super Star Award for the Northeast Chapter, based on earned points, timely delivery of reports, and innovative meetings.

NCBC 2017
Pre-Conference Workshop

Every year NCBC is preceded by a technical half-day workshop. This year, David Sellers’ workshop, “Variable Flow Chilled Water Plants: Operating Theory and Field Opportunities,” was sold out even before the conference began.

The workshop was designed to explore variable flow chilled water plants using an interactive format that includes lecture and also uses Sketchup models, selected software, spreadsheets, and case studies to illustrate and explore design concepts, assumptions, technology advances, operations and optimization of central chilled water plants and condenser water plants. Many of the fundamental principles that were presented can be broadly applied to other types of building systems.
Opening Plenary Session

To express the theme of the conference — “Past, Present, Future” — our NCBC Conference Chairs donned the roles (and robes) of Marty McFly (“Back to the Future”) and Carnac the Magnificent (Johnny Carson Tonight Show).

Taking the audience on a ride through the history of NCBC and the practice of commissioning, Marty (aka Jesse Sycuro, PE) and Carnac (aka Lyn Gomes, PE) focused on Recognizing our Past to Solve the Challenges of the Future.

Janine Benner, now Acting Director, Oregon Department of Energy, delivered the keynote address. As the daughter of Nancy Benner, founder of NCBC and passionate advocate for building commissioning, Janine provided the perfect segue from past to future. Her own passion for public policy alignment with energy efficiency was evident in her presentation, which included global climate change, high performance buildings and zero-net energy use.
The Benner Award

In memory of Nancy Benner, the Benner Award recognizes outstanding achievement in promoting excellence and making commissioning "business as usual."

Janine Benner, Nancy’s daughter, stood with Liz Fischer to present the Benner Award to David Sellers, Senior Engineer at Facility Dynamics Engineering. Dave is a universally respected engineer and colleague, esteemed by many in their own words as a teacher, author, mentor and friend.

Dave was joined in the photo below with prior Benner Award winners.

Most memorable moment:

David Sellers winning the Benner award and ¾ of the room standing up when asked who has taken one of his classes or seen one of his presentations. — Arik Cohen

There was powerful symbolism of having Janine there. I never met Nancy Benner, and so this award (for me) was always historical leaning, celebrating “how far we have come.” — Tom Poeling

Now I look at it more as “where we are going” because the legacy lives on. — Tom Poeling

Smart Energy Analytics Campaign Awards

Dr. Kathleen Hogan, Deputy Assistant Secretary for Energy Efficiency, Office of Energy Efficiency and Renewable Energy, USDOE (right), and Dr. Jessica Granderson, Deputy for Research, Building Technology & Urban Systems Division at LBNL (center), presented awards to 2 organizations earning high energy savings through the use of EMIS – The Commonwealth of Kentucky, and Interval Data Systems, Inc.
Conference Topics

What did we talk about that was hardly imagined 25 years ago?

Automation
BECx
Certification
Cx Codes & Standards
Commoditization
Cx Beyond Office Buildings
Cx Roles for Project Design
Cx Software
Cyber-Anything
Data Analytics
Design-Phase Cx
Distributed Generation
EBCx
EMIS
Software-based FDD
Intelligent Buildings
Integrated Systems
MBCx
OCx
Rating Systems
(LEED began in 2000)
Resiliency
Security
Smart Buildings
Sustainability
Whole Building Cx
Residential & Industrial Cx

What’s changed, and where do we go from here?

“...as I reflected on the closing plenary discussion, I was struck by how hot topics and issues from a quarter century ago still concern today’s Cx stakeholders. Many of these concerns seem to stem from how many commissioning consumers seem to lack a good understanding of what commissioning is really all about. After reflecting on this, it occurs to me that these kinds of issues will always be with us. On a deep level, what we do is just hard to grasp if you don’t work intimately with integrated building systems on a regular basis. Cx advocates will always have to be teachers.”

—Kent Barber
Sample Sessions

Past, Present and Future
“Enthusiastic audience participation in the question/answer session with the presentation panel. Many opinions and perspectives of where we are as an industry.”
—Michael Della Barba, speaker, Environmental Health & Engineering

Cx for Cybersecurity
“Manufacturers of IoT devices need to focus on cyber secure design, development and deployment... [while] consumers of IoT devices must prioritize security in those devices.”
—Jason Rosselot, speaker, Director of Global Product Security, Johnson Controls

What can go wrong?
- Applied to inappropriate spaces
- Or-equal submittal not coordinated with mechanical (or shared with CxP!!)
- Crappy sequences
- Lack of coordination
- Lack of knowledge
- Lack of clear responsibility/ies
- Network latency
- Expectations not met
- Or-equal lighting & HVAC control systems
- Incomplete integration
- Incomplete Cx – design/build/post-occ

Great Debate: Automation Cx vs. Ongoing Cx
“The best outcome from my talk was having people stop me for the rest of the conference and talk about how the session brought to light the issues they deal with constantly. Knowing that it made an impact to some people is the best result I can hope for. I got this note from Ian Nelson afterwards, ‘I thought your overall message is an important one and has led me to reconsider how I’ve communicated similar points to clients in the past.’”
—Kevin Fuller, speaker, Interval Data Systems, Inc.

CxI (Commissioning Investigations): Uncovering Energy Waste, Operational Issues and Other Offenses Found Within Existing Buildings
“I love presenting at and attending NCBC. This year was particularly enjoyable as I met a number of young people who recently entered this field who are eager to learn all they can about building commissioning.”
—Ryan Stroupe, speaker, PG&E Pacific Energy Center

Playing Nice: Lighting Controls Integration
“The audience totally got it that integration between the lighting control system and BMS is rife with problems and should only be done as a last resort – there are better, less failure prone ways, to do demand controlled ventilation.”
—Lyn Gomes, speaker, KW Engineering
NCBC 2017 presentations are available online!
Readers may view all NCBC presentations under each session on NCBC agenda web pages.

Day 1: [https://www.bcxa.org/ncbc-2017/agenda/#day1](https://www.bcxa.org/ncbc-2017/agenda/#day1)
- Keynote Address
- Opening Presentations and Awards
- Commissioning Retrospective and Current Status
- Playing Nice: HVAC and Lighting Controls Integration
- Cybersecurity: Not Just an Option Anymore
- Cx Software: How to Select the Right Solution
- Commissioning the Invisible
- Critical Facility EBCx
- MBCx Detective: Finding Evidence-Based Savings with Analytics
- BIM Me Up, Scotty!
- Contracting/Commoditization: Yes, There IS a Path to Success
- Industrial Building Cx Takes Off
- MBCx Software Provider Discussion
- The Exciting and Beneficial World of Infrared Thermography

- Cx Market and Practices Research
- Codes and Standards: Features, Facts and Futures
- Is Lighting Control Out of Control?
- Great Debate: Automation Cx vs. Ongoing Cx
- Cx Future: Demand Response, Microgrids and (USGBC) PEER Certification
- Cx Investigations: Energy Waste, Operational Issues and Other Offenses
- What’s the Future of the Central Plant?
- Don’t Let This Happen to Your Building
- Utility Commissioning Program Models
- Residential Cx: High Performance at Home
- Closing Plenary
Exhibitor Event

The Exhibit Hall featured a full-day event allowing exhibitors to spend time presenting their products and services, followed by an exhibitor-sponsored evening of networking and discussion in the Exhibit Hall.

“NCBC presents us with a great opportunity to see and connect with our clients who are located all over the United States.”

— Eric Forman, Facility Grid
NCBC 2017 was brought to you by ...

The 2017 National Conference on Building Commissioning was generously funded by the following sponsors, without whom this quality event could not have taken place. We are grateful for their support and recognition of the importance of commissioning as a practice that ensures design, construction and operating performance of commercial buildings.

Your BCxA/NCBC Staff
Sheri Adams, Liz Fischer, Aimee Brown
Memorable Moments

Stepping onto the plenary stage in a turban and cloak (opening and closing sessions). Dave Sellers receiving the Benner award and the outpouring of love/admiration/happiness from the audience.
Janine Benner’s talk.
— Lyn Gomes

After attending 20 of the 25 NCBC’s, the one moment that stands out to me from this year’s NCBC was during the Opening when Liz was polling the attendees about how many NCBCs they had attended and then she asked all of the people to stand that were attending their first NCBC. The number of first year attendees was startling and heartwarming at the same time. Years from now, when I look back at NCBC-2017, I believe I will always remember that moment of pride that the next generation isn’t on the way, they are already here and anxious to learn from the best.
— Craig Hawkins

I was thrilled to see David Sellers receive the Benner Award. I know of no one more deserving, and his humble acknowledgement of the mentors that supported him during his career was truly inspirational.
— Ryan Stroupe

This year’s NCBC was a blend of everything I enjoy about the conference: excellent learning and education, connecting with friends, and expanding my comprehension of larger industry trends. From the Annual Dinner to the Closing Ceremony, NCBC 2017 was a beneficial and fun experience.
— Candice Rogers

I have been to numerous NCBCs going back as far as 2001, and concur with the comment I heard from a University Owner who was in attendance, this year was one of the best and most professional NCBC conferences ever with extremely high quality presentations … I see an outcome of the conference as a transformation to a new deeper level of expert sessions with a sharing of deep technical knowledge as a great opportunity for the entire commissioning industry to learn from, both young and old.
— John Villani

I was sitting at the table behind David Sellers when he received the Benner Award. While Liz read the long list of Dave’s achievement, I was watching David and Karl Stum sitting side by side in front of me. Dave said something to Karl and then Karl leaned over to reply. Later Karl told me that Dave did not recognize his own resume. He was truly surprised which, in itself, explains exactly who David Sellers is.
— Treasa Sweek

Of course, the most memorable moment was accepting the award from Dr. Hogan for Outstanding Monitoring Based Commissioning…but my favorite quote from the conference was from Janine Benner who said, “A building that works as expected should be business as usual.” It’s a simple but powerful statement that echoes everything we’ve been trying to accomplish for the life of our company.
— Kevin Fuller

NCBC 2018

NCBC 2018 is scheduled for Nashville, Tennessee, October 15-17. Annual events will include the BCxA Scholarship Foundation golf tournament, BCxA special workshops, and the always-stimulating BCxA annual dinner, along with two full days of learning, sharing, teaching, and networking.

Mark your calendars and stay tuned! Call for Presentations starts January 2018!