Annual Report 2008





Building Innovation through Research

President's Letter

While 2008 was a year that brought us many challenges, Charles Pankow Foundation (CPF) experienced an impressive line-up of accomplishments.

During 2008, we awarded eight research grants totaling \$1,335,000, ranging in value from \$28,000 to \$340,000. Five grants were awarded in the strategic focus area of Project Teams; three were in the Structures focus area. Highly promising new projects include the development of the urgently needed **BIM Execution Planning Guide** and the development of the National BIM Standard for the precast concrete domain.

- 2008 also saw our first four research grant projects fully completed and their products disseminated for public access, delivering innovative new tools and design procedures to the marketplace for practitioner adoption:
- The Innovation Manual of Practice a handbook for project teams to employ
- First-ever BIM standard BIM Standard for Architectural Precast Concrete – ready for project teams to use
- Two new design procedure documents for seismicresistant, reinforced concrete structural elements

The Foundation continues to refine its grantmaking focus, adopting in 2008 a "narrower and deeper" approach. With insightful input from our Advisory Council, we developed and published a Goal-Based Research Strategy that concentrates our grantmaking in two areas, Project Team Performance Tools and Structural Systems.

We've also begun planting seeds to grow better people resources for the design-build sector. In partnership with regional DBIA leadership, CPF made a significant entry into enhancing design-build curricula and learning for construction-bound undergraduates through unique education grants to three California universities.

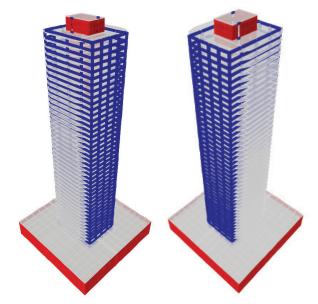
In 2008 we welcomed onto the Foundation Board of Directors a new member, Ron Klemencic, President of MKA structural engineers. We also said some farewells with our first turnover in Advisory Council membership, as three charter members retired. Five new members came on board, bringing our total to eleven. We thank each of these distinguished industry veterans for their dedication and valuable counsel.

The Foundation continued to seek out opportunities to improve the design and building process in ways that will have broad, long-lasting benefit. This motive sparked an initiative to study the widely recognized lack of effective practices for the critical processes of monitoring and verifying design by project teams. Following investigative work to define clearly the nature and elements of the research problem, CPF was well positioned launch this priority initiative in 2009.

Unfortunately, CPF did not escape the dire impacts of the national slide in the economy and in asset markets. While our endowment produced disappointing investment returns in 2008, we were pleased to have met all of our ongoing, multi-year research funding obligations and even carried into 2009 the capacity for several modest new research grant awards.

Once again, I extend heartfelt thanks to my fellow Board and Advisory Council members, as well as to our alliance partners, our industry champions and our research grantees, without whom we would not be successfully pursuing the legacy of Charles Pankow, our Founder – a relentless focus to find better ways to build.

Richard M. Kunnath, President Charles Pankow Foundation



3D figure of buildings designed under the University of California, Berkeley's research project on Performancebased Seismic Design Guidelines for Tall Buildings

Three CPF "Design-Build Bootstrap" Education Grants Awarded

A novel 2008 CPF initiative in support of design-build education was born out of conversations between national DBIA leaders and Bob Tener, the Charles Pankow Foundation Executive Director. The concept emerged to enhance college graduates' preparation for working in the design-build field by funding release time for committed faculty professors to focus on new curriculum content. Nicknamed the "Design-Build Bootstrap Grant" program, CPF identified three universities, each nominated by Industry Champion professionals in DBIA's Western Pacific Region. These nominations identified universities where the construction faculty was passionate to improve their design-build curriculum and the student learning that is gained. Three identical, \$25,000 grants went to Cal State Chico, Cal State Long Beach, and Cal State Sacramento for use by the respective faculty grantees, Professors David Shirah, Elhami Nasr, and Karen Hansen.

During 2008, each professor formulated a plan to enhance their design-build program in 2009. They planned their curriculum improvements in consultation with CPF's program consultant, Dr. Barbara Jackson of Cal Poly San Luis Obispo. Each university also engaged supportive industry advisors by working with interested, local DBIA member firms.

These CPF education grants are empowering new collaborations between the academic and practitioner communities to better student development under the DBIA rubric. Lead Industry Champion for the grant program was Kim Lum, President of Charles Pankow Builders, Ltd., the past Education Chair for DBIA-WPR. Mr. Lum described the expected outcomes of the Bootstrap Grants as, "enhancing the integrated project delivery curriculum to organically build a future generation of collaborative building team members rather than 'sell' them on the concept later."

Non-Research Grantmaking

The Foundation allocates a percentage of its annual grant awards for purposes related to Mr. Pankow's charitable and humanitarian interests during his lifetime. These interest include: giving to selected community causes; grants for education; and, support to selected construction and engineering industry associations.

2008 Research Grant Awards

In 2008, CPF awarded eight new research grants, totaling \$1,320,000 in award value, to advance innovations in structural systems and tools that will enhance project team performance.

Grantee	Research Topic	Grant
Georgia Tech	National BIM Standard for Precast Concrete	\$340,000
Penn State University	Building Information Modeling Execution Planning Guidelines	\$282,000
University of Colorado	Influence of Project Delivery Method on Achieving Sustainable, High Performance Buildings	\$200,000
University of Notre Dame	Hybrid Precast Wall Systems for Seismic Regions	\$165,000
UCLA	Large-Scale Testing of Reinforced Concrete Coupling Beams	\$150,000
University of Nebraska-Lincoln	Shallow Hollow Core Floor System for Multi-story Buildings	\$105,000
Construction Speci- fications Institute Foundation	CSI GreenFormat: Sustainable Product Reporting Guide (supplemental)	\$50,202
University of Colorado (joint with CII)	Enhancing and Expanding Innovation in the Construction Industry (Supplemental)	\$28,300

Research Reports

During 2008, Charles Pankow Foundation research grantees completed the first four research projects enabled by the Foundation's initial grants. These Project Reports are published for public access at www.spur.org/pankowreports

Project	PI/Grantee
Innovation Manual of Practice	John Gambatese/Oregon State University
Building Information Modeling (BIM) for Architectural Concrete	Charles Eastmam, et. al./ National Institute of Building Sciences
Design Procedures for Thin Shear Walls in High Seismic ZOnes	Robert Engelkirk & Jose Restrepo/University of California, San Diego
Static Testing Phase, Frame- Braced Concrete Buildings in High Seismic Zones	Robert Englekirk & Tara Hutchinson/University of California, San Diego

Board of Directors

Richard M. Kunnath President

Judy L. Vawter Vice President

Timothy P. Murphy, Esq Secretary/Chief Financial Officer

Ron Klemencic

Executive Director

Robert K. Tener, Ph.D

Advisory Council

Rebekah Gladson Associate Vice Chancellor/ Campus Architect University of California, Irvine

Thomas Gunkel

CEO/President M.A. Mortenson Company

Patrick MacLeamy Chief Executive Officer HOK

Prof. Jeffrey Russell

Chair, Department of Civil & Environmental Engineering University of Wisconsin, Madison

Joe Sanders

Senior Vice President Charles Pankow Builders

Victor Sanvido Senior Vice President Southland Industries

Ronald Skaggs Chairman HKS, Inc.

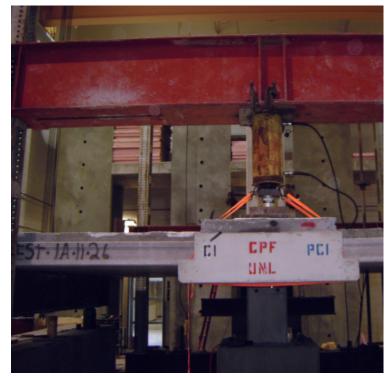
Charles Thornton

Chairman Charles N. Thornton & Co., LLC

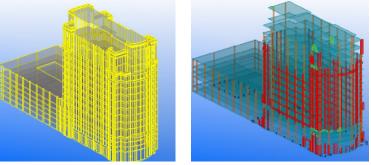
Hans Van Winkle

President, Project Management Group (Americas) Hill International, Inc.

Thomas Verti President Charles Pankow Builders



Testing of the shallow hollow core floor system at the University of Nebraska, Lincoln.



Representative models from Georgia Tech's work on the development of a National BIM Standard for Precast Concrete. Left-hand image shows IFC for Revit; right-hand image represents Tekla model.

Mission

The Charles Pankow Foundation exists to advance innovations in building design and construction, as as to provide the public with buildings of improved quality, efficiency and value.



www.pankowfoundation.org