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 seismic-resistant, 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 Performance-based 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.”

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.

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

<table>
<thead>
<tr>
<th>Project</th>
<th>PI/Grantee</th>
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<tbody>
<tr>
<td>Innovation Manual of Practice</td>
<td>John Gambatese/Oregon State University</td>
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<tr>
<td>Building Information Modeling (BIM) for Architectural Concrete</td>
<td>Charles Eastmarn, et. al./ National Institute of Building Sciences</td>
</tr>
<tr>
<td>Design Procedures for Thin Shear Walls in High Seismic Zones</td>
<td>Robert Engelkirk &amp; Jose Restrepo/University of California, San Diego</td>
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<tr>
<td>Static Testing Phase, Frame-Braced Concrete Buildings in High Seismic Zones</td>
<td>Robert Englekirk &amp; Tara Hutchinson/University of California, San Diego</td>
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Mission
The Charles Pankow Foundation exists to advance innovations in building design and construction, as to provide the public with buildings of improved quality, efficiency and value.

www.pankowfoundation.org