# GOAL-BASED RESEARCH PROGRAM STRATEGY

**MISSION of the Charles Pankow Foundation:**

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

**RESEARCH GOAL AREAS:**

**CPF will focus our research grants on two research program goal areas during 2008 – 2010.**

## RESEARCH AREA 1: Structures

**CPF Goal: Improve the quality, efficiency and value of large buildings by advancing codifiable innovations in structural components and systems.**

**Typical research purposes may include:**

- Prove the validity of, and develop design procedures documents for, new configurations and more efficient detailing of major building elements such as shear walls; beams and columns; diaphragm slabs; moment frames, and others, especially for seismic zones.
- Advance the use of performance-based design for structural systems and components
- Develop methods for more efficient prefabrication, pre-assembly, and erection of building components

## RESEARCH AREA 2: Project Teams: Tools and Practices

**CPF Goal: Improve the performance of building design and construction teams by advancing integration, collaboration, communication, and efficiency through innovative new tools and technologies, and by advancing new means and methods for project team practices.**

**Typical research purposes may include:**

**Tools:**

- Advance tools and methods in the interoperability and building information modeling arena
- Advance other technologies and tools that will solve typical problems faced by design and construction teams, such as improving the quality and utility of construction documents

**Practices:**

- Enhance the ability of project teams to develop and utilize innovation in means, materials and methods more frequently and more effectively
- Promote practices that will advance integrating design, engineering and construction
- Develop rational new approaches for managing the design process within integrated project teams, to achieve better outcomes in design-phase and construction-phase schedule, costs, and quality