



Collaboratory for Research on Global Projects (CRGP)

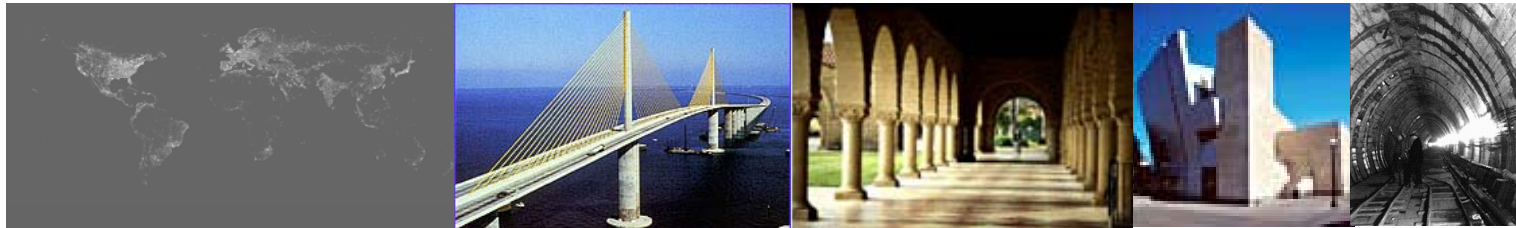
CRGP Update and Program Overview

<http://crgp.stanford.edu>



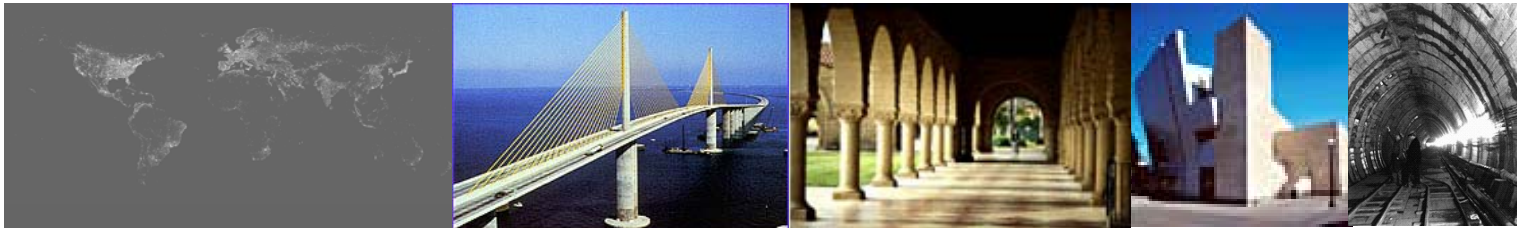
Built Environment Industry Perspective

- Architecture, Engineering and Construction (AEC) create fixed, physical wealth of nations (“built environment”)
- Fixed, physical assets comprise over 50% of world’s wealth
- Fixed capital facilities consume ~ 50% of energy
- Fixed capital facilities “hidden partners” in all businesses until things go wrong



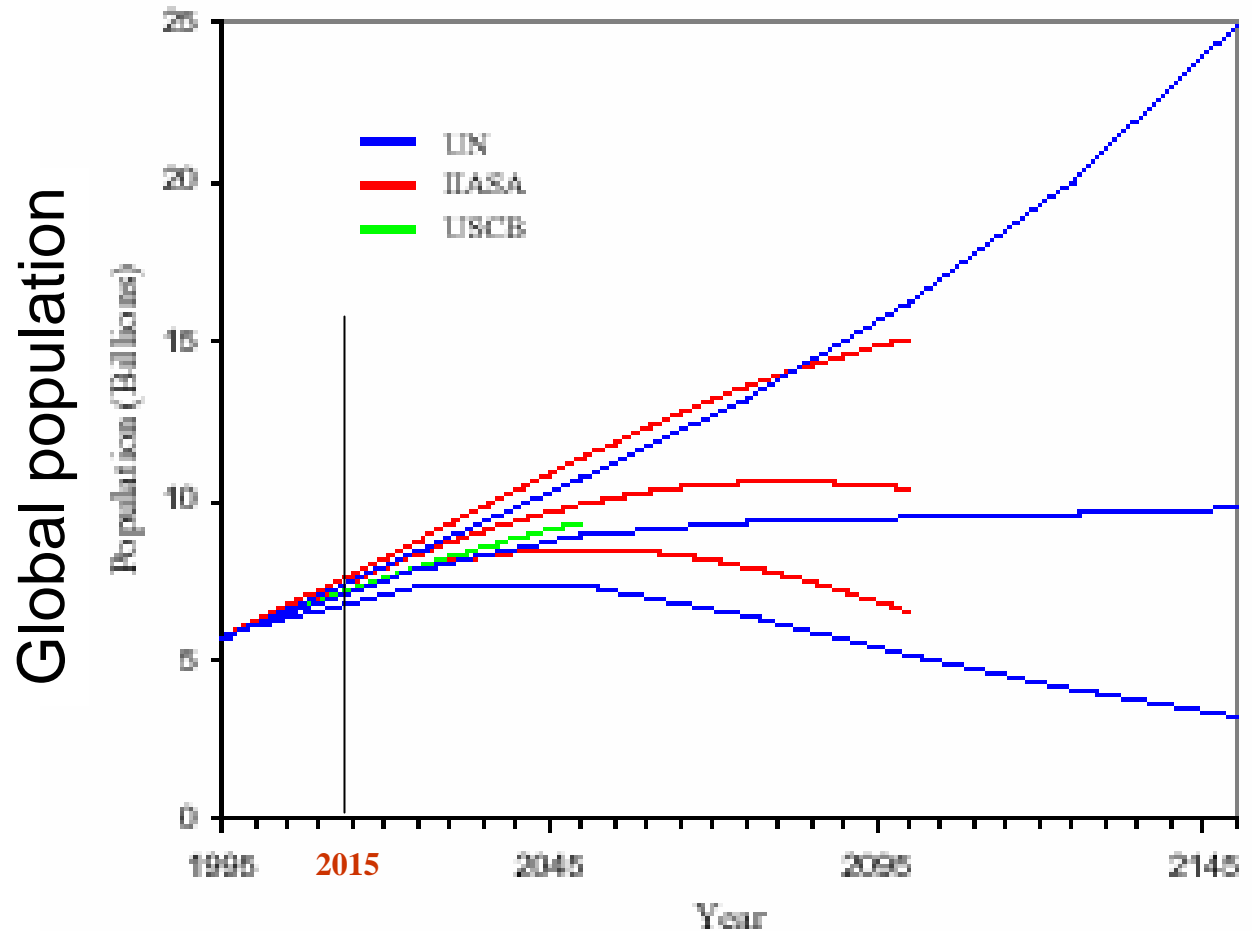
Built Environment Industry Perspective

- Increasing need for new/replacement fixed assets in developing/developed countries
 - ▶ Global “Equity” — aspirations of developing countries
 - ▶ Increased urbanization in developing countries
 - ▶ Deterioration of infrastructure in developed countries
- Environmental clearance processes and “sustainability” becoming major challenge in new developments



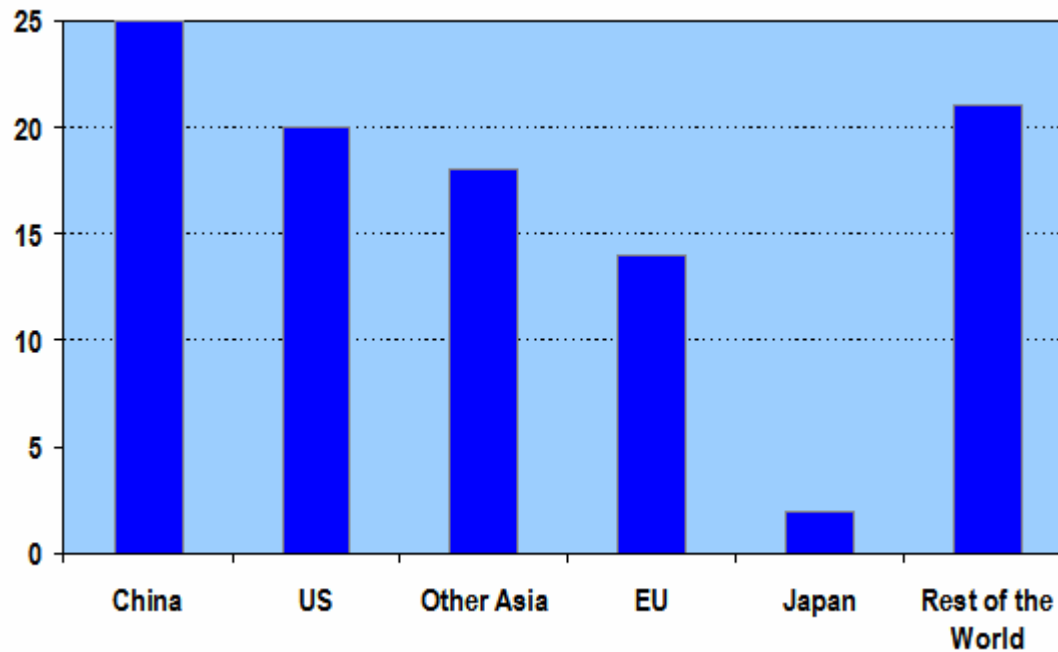


1B new people need new homes & infrastructure in next decade!



■ Source: UN

New infrastructure to support unprecedented growth in global wealth!

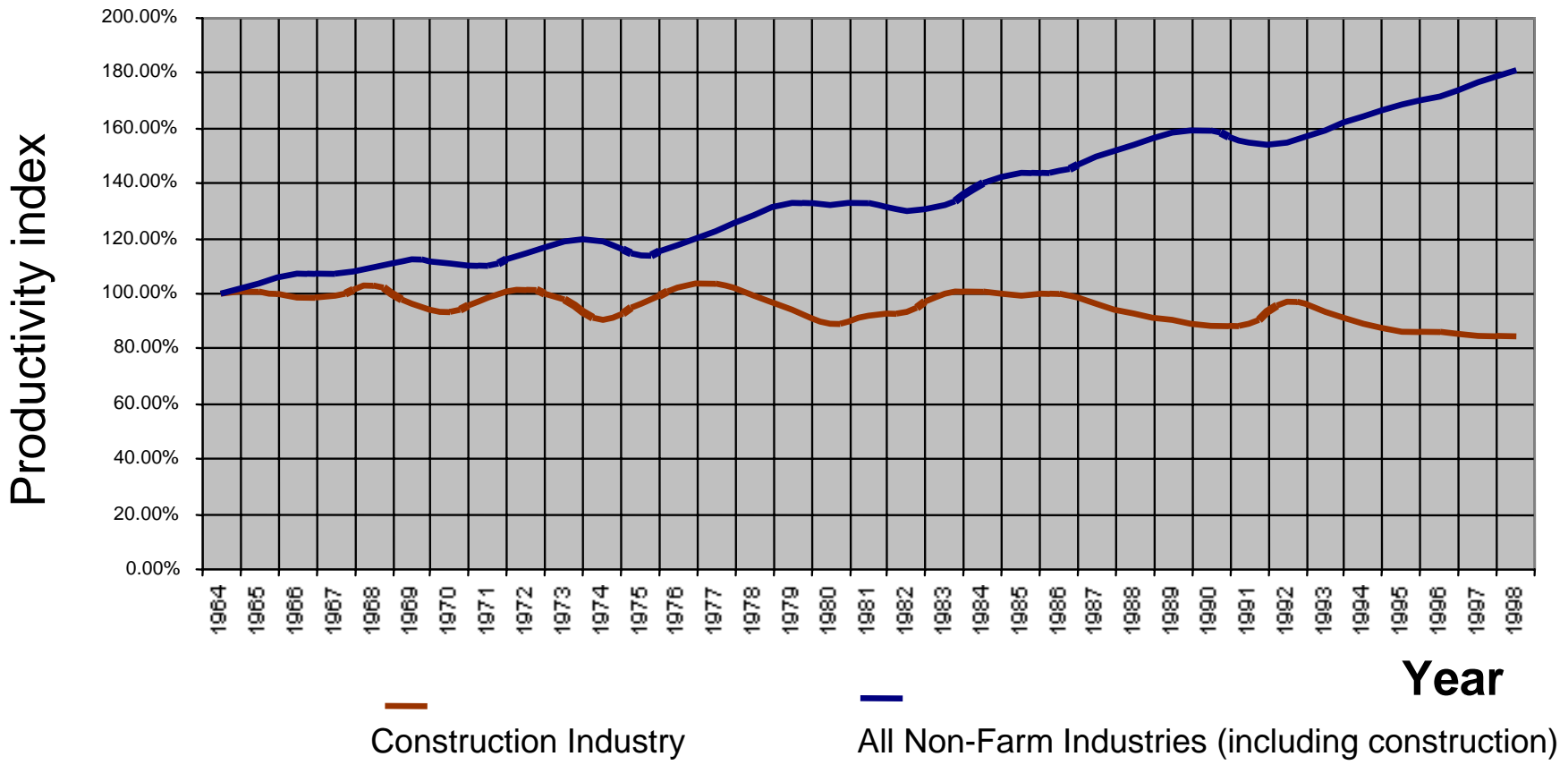


- Share of Global GDP Growth, 1995-2002
- Source: *Economist*



B.E. Industry Problem: Productivity (1964-1998)

(Constant \$ of contracts / workhours of hourly workers)



Sources: US Bureau of Labor Statistics, US Dept. of Commerce

Built Environment Research at Stanford

- **CRGP**—*Collaboratory for Research on Global Projects*
 - ▶ Founded in 2003 with research focus on understanding the impact of institutional issues on global projects
 - ▶ Collaboration between CEE and Social Sciences
 - ▶ Global Collaboratory partners in Finland, China, India, Malaysia, South Africa, Brazil, etc.
 - ▶ Impact practice through methods, tools, policy changes
- **CIFE**—*Center for Integrated Facility Engineering*
 - ▶ Founded in 1988 to with research focus on emerging IT and technology applications to AEC industry practice
 - ▶ Collaboration between CEE and CS
 - ▶ Current emphasis on visualization, integration and automation
 - ▶ Impact practice through new methods and tools

CRGP Vision/Missions

- New research initiative to better understand impact of institutions on Global Project execution
- New collaborative forum for interactions between practitioners and leading researchers from multiple disciplines (Engineering, Social Science, Economics, Law, Business)
- Leading-edge knowledge base and practical tools for Global Project applications
- New breed of young professionals who are “global-project savvy”

Faculty and Staff

- Management Staff
 - ▶ *Raymond E. Levitt*, Director
 - ▶ *Julie Kim*, Executive Director
- Core Faculty
 - ▶ *Raymond E. Levitt*, Professor of Civil & Environmental Engineering
 - ▶ *W. Richard Scott*, Professor Emeritus of Sociology
 - ▶ *Douglass North*, Senior Fellow, Hoover Institute; Luce Professor of Law and Liberty, Dept. of Economics, Washington University, St. Louis (*Nobel Laureate in Economics*)
 - ▶ *Yan Jin*, Visiting Associate Professor of Civil and Environmental Engineering, Associate Professor of Mechanical Engineering, USC
 - ▶ *Stephen R. Barley*, Charles M. Pigott Prof. of Mgt. Science & Engineering
 - ▶ *Avner Greif*, Bowman Family Prof. in Humanities & Sciences, Dept. of Economics
- Research Staff
 - ▶ *Marc Ramsey*, Senior Research Programmer



CRGP Affiliate Program

- **Direction of the Center**
 - ▶ Executive Steering Committee
 - ▶ Technical Advisory Committee
- **Education and Training**
 - ▶ Summer Program
 - ▶ Conferences
 - ▶ Executive Briefing
- **Collaboration**
 - ▶ Faculty Visits to Member Offices
 - ▶ Visiting Fellows
 - ▶ Design Charettes/Roundtables
 - ▶ On-line Membership Bulletin
- **Access to Cutting Edge Research**
 - ▶ Prototype Software
 - ▶ Password-protected Website—ongoing work
 - ▶ Technical Reports
 - ▶ Video Tapes
- **Facilitated Recruiting**

Summer Program Overview

- Representative CRGP-Industry Collaboration
 - ▶ General Counsels Roundtable (*Coudert Brothers*)
 - ▶ GPS (*Tekes/VTT/HSE/HUT*)
- On-going CRGP Research Activities
 - ▶ Identifying Institutional Costs (*Ashwin Mahalingam*)
 - ▶ Strategies to Succeed on Global Projects (*Ryan Orr*)
 - ▶ Innovation Diffusion (*John Taylor*)
 - ▶ Generating Trust in Global Project Team (*Dana Gavrieli*)
 - ▶ Project Organizational Simulation (*Tamaki Horii*)
 - ▶ Project Optimization (*Bijan KHosraviani*)



Summer Program Overview

- Executive Briefings Sessions
 - ▶ Infrastructure Security and Emerging Institutional Requirements
 - Container Supply Chain, Port, Airport
 - ▶ Infrastructure Development in Emerging Economies
 - ADB, USAID, RCI
- Feedback Sessions
 - ▶ Summer Program Content/Proceedings
 - ▶ CRGP Future Research Direction



The “Culture”

“Alert, Rapt Farer On the Edge”

Source: *“The Monk’s Life, Buddha’s Advice to Sariputra,”*
E. M. Hare’s translation of Sutta Nipata from
Woven Cadences of Early Buddhists (1944)



The Monk Hat

“Alert” – Can’t fall asleep or daydream

“Rapt” – Captive & engaged (no cell phones)

“On the Edge” – Ok to be wild; welcome crazy ideas

The Riddle

*“How can you drop an egg
three feet without breaking it?”*

Source: Randy Komisar, “The Monk and the Riddle,” Harvard Business School Press, 2000