



2011

U.S. Markets **Construction Overview**



MANAGEMENT CONSULTING • INVESTMENT BANKING
for the ENGINEERING and CONSTRUCTION INDUSTRY

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Section 2

Stakeholder Trends



The Great Recession has affected all firms in our industry, but in different ways and to various degrees. In this section, we examine the primary stakeholders and their particular challenges this past year and a view of what lies ahead. As our economic data continues to point toward an industry contraction different from many other recessions, leading companies are seeking ways to redefine their businesses and position their companies for the future. Now is the time for companies to refocus their direction, examine strategic opportunities or perhaps adjust operations accordingly. The recovery will be slow for most of the industry and therefore the primary goal must be to find creative ways to be successful.

Architects/Engineers/Constructors (A/E/C)

The world is changing. Everything is starting to lurch forward from a three-year standstill; yet one cannot expect to return to the pre-recession status quo. The world is different now in ways one could hardly expect, and recovery may take years. Technological, social and political changes continue at their usual breakneck pace regardless of the economy, and A/E/C firms must prepare themselves to be ever more innovative about finding work, doing work and connecting with our communities.

This article examines how the changing world will influence the following:

- The economy and finding work during the recession
- Social responsibility as a path to new work
- Culture and political impact on practice
- Effect of the current environment on people and transition
- Efficiency and productivity of firms
- Two ways that disasters can affect a business
- The impact and opportunity presented by a failing infrastructure

The economic recovery continues to be the No.1 concern of all firms, regardless of size or specialty. When asked about their top concerns

for 2010–2011, CEOs of A/E/C firms had many variations on the following topics:

- Increase backlogs
- Sustain the firm financially
- The need to build new projects will remain low
- Unavailable capital for new built projects
- Find work, get work and do work
- Potential for renewed economic decline
- Effect of tax revenues for municipal General Fund projects, including the ability of cities to borrow for bond-funded programs

*by Louis L. Marines,
Steven J. Isaacs and
Karen L. Newcombe*

The Economy and Finding Work

Economic recoveries are never a straight climb; they are a series of rolling waves, with periods of upward momentum interspersed with downward slippage. A 2010 report published by the Council on Foreign Relations compares data about trade, GDP, home prices, inflation and similar statistics from the postwar recession, the current recession and the Great Depression. This report shows not only the severity of the current economic crisis, but also the rolling nature of past recovery periods. We can expect to experience both gains and losses over at least the next year as the economy inches toward stabilization.

The challenge is not to see problems as blocking opportunities for firms, but as creating opportunities. The current economic crisis provides an opportunity for architecture and engineering firms to reengage with the public and offer solutions to their communities.

The duration of this recovery is of great concern to all. With many firms and their clients deprived of funding for their typical projects, what work can companies be doing? This question will result in a unique and likely innovative solution for every firm, and a facilitated session similar to strategic or scenario planning, including input from clients, may help organizations become more objective, responsive and focused. As might be expected, after years of working to establish qualifications as the preferred selection criteria, many clients are reverting to fee-based selection, a condition that is certainly unwelcome and will require renewed attention as the economy recovers.

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Social Responsibility as a Path to New Work

The many problems facing every community are in front of the profession, waiting to be tackled. Nick Peckham of Peckham & Wright Architects reported his firm's experience in such community engagement. After an overflow classroom burned down at a local public school, his firm proposed replacing it with an energy-efficient building instead of a portable classroom. The project became a cooperative effort among his firm, the school district and local leaders from design and construction firms. Much of the construction materials and 100% of the labor and services were donated by 150 individuals from 40 organizations. The building was LEED-certified and, as such, has become a teaching tool for the school. It uses only 45% of the power required by a standard classroom and has the lowest rate of illness and school nurse visits in the school, implying that the sustainable materials are having fewer adverse effects on students. In addition, the principal and teachers went on to make

sustainability a part of the school's curriculum and community activities. Peckham explains, "A new business model that relies on sustainability and begins with pro bono projects supporting the community is both a marketing strategy and a moral imperative." Peckham's pro bono work and innovative approach has led to a series of similar projects for the firm. Doing good leads to more work.

These opportunities are everywhere. *The Financial Times* (August 28, 2010) ran a feature article, "Architecture of Transformation," detailing how projects in both Los Angeles and London provide housing for the homeless that help people change their lives. Architecture for Humanity is known for its remarkable work around the world, notably an ongoing project to remove both the physical and cultural barriers (e.g., elevated freeways) that have artificially divided and starved what were formerly thriving communities.

Culture and Politics

All industries have been affected by the dearth of capital, but it has been particularly hard on design and construction. Stimulus funding has been slow to filter out. As reported by propublica.org, which tracks stimulus spending, weekly spending has been completed or almost completed in entitlement areas, but is still largely "in process" for the Corps of Engineers, Department of Transportation, Environmental Protection Agency, Housing and Urban Development, GSA, Department of Defense and other agencies that feed large amounts of work to the design and construction industry.

Speculation about the possible effects of the 2010 midterm elections on overall government spending is high. Many firms we hear from are deeply concerned about "ongoing reservations with capital spending and investments" and with "a federal government that is not business friendly and believes in income redistribution rather than free market capitalism." Another CEO of an engineering firm says, "Congress

continues to increase the level of uncertainty in the marketplace.” Rasmussen Reports, a public opinion polling organization, reported, “For the past year, those giving Congress good or excellent marks have remained in the narrow range of 9% to 16%, while 53% to 71% have rated its performance as poor.”

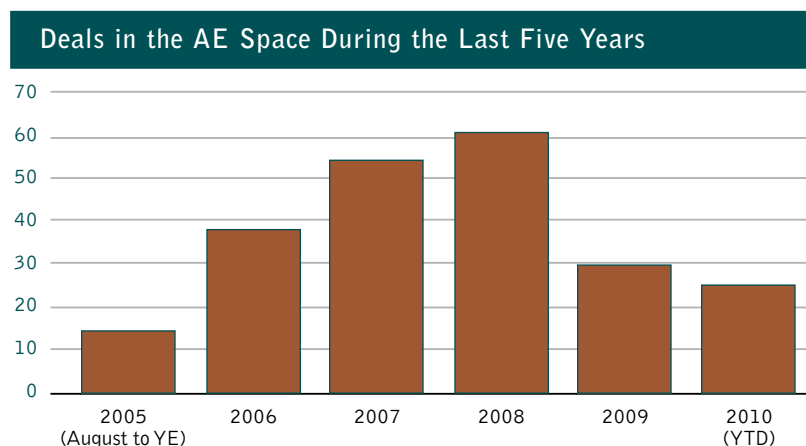
The voting public in the U.S. tends to prefer an equalized balance of power in the legislative branch, and midterm elections historically reflect that sentiment by shifting power away from the incumbent president’s party. The Democratic Party lost six seats in the Senate and 63 seats in the House of Representatives in November. This will put a damper on the Democrats’ current agenda, but whether this shift will restore business and consumer confidence and result in more robust spending or increased availability of capital for projects is extremely difficult to predict.

People and Transition

The recession has made firms face difficult decisions about bringing in a new generation of people when they have gone through layoffs for the past three years and may be struggling to keep the firm going. Remaining staff members have been under tremendous pressure during this long recession; they may fear that they also face unemployment, and such stress puts them in danger of burnout and disengagement. Firms should take steps now to increase employee engagement before the recovery gains full momentum and hiring opens up again. Feelings of general frustration can translate into movement to other firms, and losing experienced staff members from a great team is an expensive loss for a company. As one CEO remarked, “Some very good people will likely be available after staying in place for several years.” Another said, “We need to continue to be very careful with hiring but take the opportunity to strengthen our bench.” Clearly, firms will be seeking to rebuild their teams with top performers, so expect these talented staff members to be on the move.

Initiating reengagement practices before a competitor recruits your best people, possibly even your future firm leaders, is a wise investment. Demographics have not changed during the recession, and while boomers who lost their retirement investments now plan to remain in the workplace longer, the shortage of qualified architecture, engineering, science and mathematics graduates in the U.S. has not changed.

Current owners who wish to retire face the opposite problem – getting out of the firm at a time when capital is practically unavailable. Large firms are seeing this situation as an opportunity to expand into new geographic and specialty markets through acquisitions, and some midsize and smaller firms are merging to combine their abilities and geographies. According to FMI’s tracking of merger and acquisitions among architects and engineers for 2005 to date, activity hit a peak in 2008. While it was down by half that number in 2009, it has risen again in 2010 and appears that by year’s end, it may be up between 8% and 10% from 2009.



Efficiency and Productivity

Another effect of the recession is the high pressure to develop greater efficiency, improve execution and boost productivity, as reflected in dozens of best-selling business books on these topics over the past three years. In the recession of the early 1990s, businesses scrambled to gain efficiency and become more productive

through such processes as reengineering, Kaizen or continuous improvement. There were also failures as some firms cut too deeply to survive. As Tom Peters famously surmised, “You can’t shrink your way to greatness.”

Disaster Impact

One of the great lessons of the past five years is that natural and manmade catastrophes or other Black Swan events can happen at any time and potentially put your business in danger of failure or on the wrong side of your clients, the media and your community.

Hurricanes, floods, fires and earthquakes can be prepared for by developing a natural disaster contingency plan, which all companies should have in place. While natural disasters cannot be prevented, business disasters often throw off plenty of warning signs, and early action can avert them or mitigate their impact. Companies must identify and develop plans for dealing with such events.

Part of a disaster review includes identifying any processes or cultural factors that might contribute to creating such an event. Both the Space Shuttle Challenger disaster and the Deepwater Horizon oil spill had cultural issues in common: pressure from the top for immediate action, downplaying of possible consequences, ignoring warnings from experts and/or people in the trenches, cost-cutting measures taken too far and turf battles between executives.

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Questions a business should consider when creating a disaster plan include:

- What unlikely scenarios could turn into a catastrophe for our firm?
- Does our firm have a culture where warnings are ranked, investigated and action taken?
- Does the pressure of cost cutting, staying on schedule and beating the competition force us to downplay such red flags?
- Are executives’ egos affecting their judgment in ways that could harm us?

These are difficult questions, but ignoring such problems could endanger the firm.

Disasters also provide another area of opportunity for design and construction. Communities need design skills, in the broadest possible sense, for social and economic development. This is doubly true in places where disaster has struck. Haiti, less than 700 miles from Florida, will be rebuilding entire cities, towns and infrastructure for decades. Areas along our own Gulf Coast are still in recovery from Hurricane Katrina and now contend with the impact of the oil spill. These communities desperately need help in fostering economic development, and good design can be a part of this change. Funding for post-disaster recovery is often available when other sources are not.

Infrastructure

The ongoing crisis in American infrastructure desperately needs the attention of the design and construction industry. Although it is essential for the economic welfare of the U.S., we rely on systems and structures that were created during the WWII and postwar period, or even earlier. In his 2010 article “Spit, Glue and Maybe Even Chewing Gum,” Michael M. Grynman of The New York Times reported, “Hundreds of levees protect against floods in California’s 450-mile-long Central Valley, and many date back to the Gold Rush era of 1850.” He also stated that the failure at the Long Island Railroad in August 2010 was due

to the short circuit of a signaling machine installed in the 1920s, and that a scheduled replacement program was over budget and behind schedule.

This eroded infrastructure is present in every city, town, county and state in the U.S., and every piece of it presents an opportunity for A/E/C firms. Companies may have to find outside people who can help these projects transpire, such as the newspaper and local media, to highlight attention on the problem, creative financiers to put the funding together and lobbyists or community groups to get the

attention of politicians focused on the issue. We cannot wait for the federal government to step in and repair every piece of infrastructure in the country; this is an opportunity for firms to exhibit leadership and take a direct role in rebuilding our communities.

The next 20 years will present tremendous challenges to architecture, engineering and construction firms. Companies have the opportunity to use the next two years to innovate with their clients, evolve their firms and turn their attention towards neglected areas that need their considerable abilities. ■

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ABOUT FMI

FMI is the largest provider of management consulting, investment banking and research to the engineering and construction industry. We work in all segments of the industry providing clients with value-added business solutions, including:

- Strategy Development
- Market Research and Business Development
- Leadership and Talent Development
- Project and Process Improvement
- Mergers, Acquisitions and Financial Consulting

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