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Industry consolidations heat up.
Political Engagement Yields Positive Legislative Results

Despite long odds, Congress was able to pass—with strong bipartisan support—a major surface transportation and aviation bills this year that will put our members to work and help to grow the economy.

That Congress was able to accomplish this shows that we can achieve bipartisan support for infrastructure and underscores the effectiveness of sustained advocacy by ACEC members.

With the focus shifting to Election Day, political engagement becomes vital. The upcoming elections of the next U.S. president and new Congress will determine the fate of many critical industry issues, such as sustained funding solutions for transportation and water infrastructure, comprehensive tax reform and a robust energy agenda—all of which will directly affect your firm’s bottom line.

Our collective support for ACEC/PAC is now more important than ever. ACEC is working to defend lawmakers who have backed industry priorities and are now facing primary opposition, as well as new candidates who support our industry. They need our help now, which is why ACEC members need to step up now.

In our cover feature, several national political analysts and Member Firm government affairs leaders examine the election’s implications for our industry. (See page 8.) This issue also takes a look at new trends in information technology management. (See page 14.)

Finally, don’t miss our upcoming ACEC Fall Conference in Boca Raton, Fla. (Oct. 14–17), where several noted national political analysts and top industry CEOs will provide valuable insights on how to position your firm moving ahead. (See page 24.)

We look forward to seeing you in Boca!
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Power transmission has been one of the strongest engineering market sectors in recent years, and it promises to be a growth market going forward.

“We’re very bullish on this market over the next five to 10 years,” says Mike Beehler, vice president for sales and marketing in Burns & McDonnell’s Transmission and Distribution division.

Black & Veatch Senior Vice President Don Mundy goes further: “If I had to recommend a career for my grandchildren, I’d tell them to get into transmission and distribution,” he says.

Adding to the Grid
Despite the vital importance of a reliable electric grid to the U.S. economy—accounting for 41 percent of the nation’s primary energy—the current system is old and overloaded. According to the U.S. Department of Energy, approximately 70 percent of transmission lines and transformers are 25 years or older, and 60 percent of circuit breakers are more than 30 years old.

While careful not to trumpet a crisis, a recent MIT study, “The Future of the Electric Grid,” reports that “emerging challenges, if not met, could substantially degrade the system’s reliability and efficiency over the next few decades.”

The electric utility industry is taking those challenges head-on. According to the Edison Electric Institute, utilities will invest approximately $880 billion in transmission and distribution infrastructure by 2030.

Much of that investment will be in building new high-voltage transmission lines. The North American Electric Reliability Corporation (NERC) projects that approximately 30,000 circuit miles of new high-voltage (greater than 100 kV) transmission lines will be added to the existing 474,000 miles in the United States and Canada by 2021. About two-thirds of those new lines will be planned or under construction by 2015. According to NERC, 84 percent of projected new investments in the grid will be to ensure or enhance system reliability. “The system runs very reliably 99.95 percent of the time,” says Burns & McDonnell’s Beehler, “but utilities and regional operators are always seeking to improve on that.”

The renaissance of the domestic natural gas and oil industry due to hydraulic fracturing is also a big challenge to the transmission system because many of the new sources are far from the grid. To connect the oil-rich Bakken shale formation in northwestern North Dakota with one of its power plants, for example, the Basin Electric Power Cooperative plans to build a 200-mile, high-voltage transmission line starting in mid-2014.

At the same time, utilities are replacing many old coal-fired plants with more cost-competitive sources. Beehler points to Hydro-Quebec’s plans to dramatically increase the power it sells from its northern Quebec hydroelectric plants to utilities in the northeastern United States, necessitating significant transmission investments.

The national commitment to renewable energy has been and will continue to be a boon for the power transmission sector. According to NERC’s “2010 Long-Term Reliability Assessment,” 60 percent of additions to the power grid through 2019 will be made to accommodate wind and solar generation.

Helping drive that growth are the renewable portfolio standards of 29 states and the District of Columbia, which...
require utilities to obtain specified percentages of energy from designated renewable sources. In many instances, connecting to those sources—wind and solar farms—requires hundreds of miles of new long-distance, high-voltage transmission lines.

Permitting Challenges

In today’s market environment, building the transmission lines is the easy part. “The challenge is in the permitting,” says Black & Veatch’s Mundy. “And when the lines cross state lines, the difficulty goes up geometrically. Going across four state lines is 16 times harder than crossing two states.”

Unlike the routing of natural gas pipelines, over which the Federal Energy Regulatory Commission (FERC) has jurisdiction and eminent domain powers, the siting of high-voltage transmission lines requires approval by any federal agencies, state regulators, and—in some states—county or city officials. Winning these approvals takes years.

“We can build these lines in two years,” says Mundy. “Getting all the permits, however, stretches a lot of these projects out to 10 years.”

Public Service & Gas Group’s proposed Susquehanna-Roseland project will link Pennsylvania and New Jersey. The utility proposed the route in August 2008 after years of detailed study and public workshops. The project is expected to finally gain approval in January 2013.

In an effort to shorten the approvals process, FERC issued Order No. 1000 in 2011. The order requires that all power providers participate in regionwide planning for new transmission lines. It also addresses a key point of contention in the approvals process for all interstate transmission lines—how to allocate the costs among the ratepayers in the participating states. While the industry hopes the new rule will shorten the approvals process, it’s too soon to make a judgment.

For now, technological advances offer the best way around the planning/permitting bottleneck, increasing the capacity of existing lines.

“Grid modernization drives a lot of things we’re doing right now,” says Beehler. “Much of our substation work is upgrades, replacing mechanical equipment with microprocessors and installing new telecommunications systems.”

Technology advances are coming in many different areas: phasor measurement units (PMUs), which measure defining characteristics of voltages and currents at key substations, generators, and load stations; high-temperature superconductor cable technology, which shows promise in increasing the capacity of existing cables; and Flexible AC Transmission Systems, which enable more rapid and flexible control of system operations.

To take advantage of these technologies, transmission operators will have to improve their data sharing, which so far hasn’t kept up with the pace of innovation. The potential to enhance operations is substantial. In one instance, the California Independent System Operators and NERC shared synchronized PMU data and increased the capacity of the California-Oregon Intertie line by 30 percent.

Gerry Donohue is ACEC’s senior communications writer. He can be reached at gdonohue@acec.org.
Legislative Action

ACEC Achieves Major Reforms in MAP-21

The Council secured one of its top legislative priorities for the year when Congress passed and President Obama signed into law the Moving Ahead for Progress in the 21st Century Act (MAP-21), a new two-year, $105 billion surface transportation law.

“Enactment of this bill was a huge achievement in the current political and fiscal environment,” said ACEC President Dave Raymond.

MAP-21 provides state and local transportation departments with federal funding stability through September 2014. The law authorizes $40.97 billion for highway programs in F.Y. 2013 and $41.03 billion in F.Y. 2014. It also provides $10.58 billion for transit programs in 2013 and $10.7 billion in F.Y. 2014.

The law consolidates more than 100 federal highway programs by two-thirds, giving states more flexibility for allocating federal funds. The bulk of highway funding is directed toward five core programs: National Highway Performance, Surface Transportation, Highway Safety Improvement, Congestion Mitigation and Air Quality, and Transportation Alternatives.

ACEC achieved significant reforms to project delivery requirements, a major point of emphasis for lawmakers in crafting the final bill. Consistent with Council recommendations, the law integrates planning decisions into the environmental review process and expands an existing pilot project to allow any state to assume responsibility for compliance with federal environmental laws, in order to avoid duplication of effort.

MAP-21 also expands the Transportation Infrastructure Financing and Innovation Act program to leverage existing resources through public-private partnerships and other alternative financing. The law increases funding from $122 million to $750 million in F.Y. 2013 and to $1 billion in F.Y. 2014, and allows tolling for construction of new capacity on the Interstate and National Highway Systems.

The major shortcoming of the legislation is its failure to address the long-term solvency of the Highway Trust Fund for financing the nation’s surface transportation programs. The law provided a one-time transfer of $18.8 billion from the General Fund to the Highway Trust Fund to supplement existing revenues through F.Y. 2014.

“We’re going to be back at it again in the next Congress,” said Raymond. “As gas tax receipts and other transportation revenues continue to decline, it is imperative that lawmakers on both sides of the aisle and the White House get serious about a sustainable long-term funding source.”

Congress Takes Action On Tax Rates

The U.S. House and Senate have passed separate bills to stop the expiration of significant parts of the tax code at the end of December, but final action may wait until after the November election. If Congress does not act, tax rates on individual income, capital gains, dividends and estates will increase Jan. 1, 2013.

The Senate approved legislation that would extend for one year the tax rates for individuals earning less than $200,000 and families earning less than $250,000, which reflects President Obama’s principles.

ACEC is backing legislation passed by the House that would extend for one year the lower individual tax rates across the income spectrum. The Council endorsed the House bill because it addresses the impact on firms organized as S corporations, LLCs and sole proprietorships, which pay business income taxes on the individual tax returns of the firm’s owners.

It is widely expected that Congress will act by the end of December to approve a one-year extension of most or all of these provisions, in order to avoid the economic impact of a massive tax increase. This will also give Congress time to pursue comprehensive tax reform.
Corps to Implement New ACEC-Supported Small Business Subcontracting Procedure

The U.S. Army Corps of Engineers is changing the way it measures small business subcontracting goals to better define roles for small firms and open contracting opportunities for mid-sized firms.

ACEC has long advocated that small business subcontracting goals for large prime contractors be based on a percentage of the total funded contract value (PCV), as opposed to a share of subcontracted work.

Under the PCV approach being adopted by the Corps, small firms have a more clearly defined role and value in the contracting process—approximately 10 percent of the contract—while large firms have more flexibility to assemble teams, including mid-sized firms, based on project goals and strengthening qualifications. This approach also provides the agency with a clearer picture of the roles of each team member, enhancing contract administration and oversight.

“This is a win-win for firms of all sizes,” said Joan Freitag of Hanson Professional Services, Inc., and chair of ACEC’s Federal Agencies and Procurement Advocacy Committee.

ACEC Raises Concerns Over Single-Step Design-Build

The use of single-step design-build by a handful of Defense Department (DOD) agencies is coming under criticism from ACEC, which argues the process is costly for both firms and agency clients. The Council has long favored the two-step design-build process, which emphasizes a shortlist of the most qualified offerors.

ACEC has engaged the Corps of Engineers, Naval Facilities Engineering Command and the National Guard on the use of the single-step process, and is working with the Design-Build Institute of America (DBIA), the American Institute of Architects, and the Associated General Contractors in educating the agencies on the problems associated with single-step design-build. Substantial and costly upfront design work must be done during proposal preparation, while agencies must spend more time and resources reviewing a larger number of varying proposals. One DBIA study on a specific Corps project using single-step design-build found that each team spent, on average, $300,000 in uncompensated proposal costs, which, based on the number of teams, collectively totaled nearly 10 percent of the total estimated project cost.

By contrast, the standard two-step design-build process has an initial qualifications step, which identifies the three to five most qualified offerors, limiting upfront costs and encouraging more firms to compete.

Current federal procurement rules largely limit the use of single-step design-build to DOD agencies using Military Construction Corporation funds only. The National Guard has awarded a handful of single-step contracts in recent years, but has informed ACEC the agency will only use the two-step process going forward. The Navy is gathering data at ACEC’s request on its use of the single-step process. The Corps has just issued an engineering and Construction Bulletin (No. 2012-23) that limits the use of single-step design-build to projects that don’t require design products in proposals.

Congress, Administration Agree to Six-Month Budget Deal to Avoid Government Shutdown

Congressional leaders and the White House have agreed to a six-month continuing resolution that will avoid a government shutdown while funding the government at $1.047 trillion. The agreement is expected to be approved when Congress returns from the August recess in September.

ACEC, the U.S. Chamber of Commerce and other business organizations are calling on Congress and the administration to prevent the so-called “sequestration” process from taking effect, which would impose severe across-the-board spending cuts in January.

For More News

For weekly legislative news, visit ACEC’s Last Word online at www.acec.org.
By Stacy Collett

Election

Barack Obama

THE ECONOMY
Favors strong government role in boosting U.S. productivity, Wall Street reform

ENERGY
Seeks to reduce U.S. dependence on fossil fuels, increase investment in wind, solar, nuclear and biofuels

HEALTH CARE
Favors health insurance for all Americans through Patient Affordable Health Care Act

INFRASTRUCTURE
Supports enhanced federal spending on transportation and water/wastewater programs

TAX REFORM
Favors lowering corporate tax rate to 28 percent, and raising taxes on those earning more than $250,000
2012 Industry issues to play prominently in campaign debates

Mitt Romney

THE ECONOMY
Favors limited federal role in spending for economic growth

ENERGY
Supports increased domestic production of oil and natural gas

HEALTH CARE
Would seek repeal of the Affordable Health Care Act and leave health insurance decisions at the state level

INFRASTRUCTURE
Willing to fund infrastructure repair but not at the expense of increased deficit spending

TAX REFORM
Favors lowering corporate tax rate to 25 percent and reducing all individual tax rates by 20 percent
As the elections round the final turn, the future of many issues that matter most to the engineering sector hangs in the balance of who wins control of the White House and Congress.

Factors that will determine the outcome of the elections have been prime topics of debate for months among election observers. “In all likelihood, independent voters in a handful of states will pick the next president,” says Stuart Rothenberg, a noted national political analyst who will further handicap the presidential election at the upcoming ACEC Fall Conference in Boca Raton.

“And their votes are likely to be based on their views of the economy and jobs, as well as their views of President Obama’s performance and Governor Romney’s potential,” Rothenberg says.

Noted political pollster John Zogby is predicting that young voter enthusiasm will again determine the results. “Young voters 18 to 29 had the highest turnout ever in 2008, and 66 percent voted for Obama,” Zogby says. “With many of those voters now college graduates and without work, the dynamic right now is whether or not they’ll show up to vote.”

The overall mood of the 2012 electorate is also different, according to the experts. “People were angry, disappointed and frustrated in 2008,” says Rothenberg. “They are angry, disappointed and frustrated now. The difference is that Republicans got the blame then, while there is plenty of blame on both sides of the aisle to go around now.”

As a result, trying to determine what impact the presidential election will have on a particular professional sector such as the engineering industry “is like standing on multiple tectonic plates that are all simultaneously moving and shifting,” Zogby says. But several industry stakeholders agree there have already been some hints as to what can be expected.

Catch a campaign speech by President Obama or challenger Romney and it’s common to hear both candidates discuss such critical issues as the importance of infrastructure, the nation’s energy policy and the need for tax reform.

But public affairs executives at some of the nation’s top engineering firms say it’s still too soon to determine which candidate’s promises are realistic, or how the industry’s legislative priorities will be impacted by the results of the presidential election—largely due to lingering economic uncertainties and vitriolic party-line politics in Washington.

While the White House sets the vision, tone and budget for policy important to business, “the caveat is that it needs Congress to move it forward,” says Robin Black, vice president of government relations for Cambridge, Mass.-based CDM Smith, Inc. “The ability of the candidates to have a great working relationship with Congress means a lot. That will make a difference in terms of the kind of agenda and whether it will have an impact on our industry.”

The power of the White House, however, should not be underestimated, says HNTB President Paul Yarossi. “The bully pulpit of the presidency offers an unmatched opportunity to be a key advocate on any public policy issue, including infrastructure development,” he says, adding that, historically, some of our most notable presidents also have been transportation leaders.

“Thomas Jefferson promoted the development of the nation’s early canals, and Abraham Lincoln supported the construction of the transcontinental railroad,” Yarossi explains. “Dwight Eisenhower, Ronald Reagan and Bill Clinton also understood that such transportation investments provide an outstanding return, and that there needs to be a source of revenue to finance them.”

Another wild card this election season is the economy, says Ann Warner Avila, vice president and government affairs director at ARCADIS in Highlands Ranch, Colo. “There are so many variables that need to play themselves out, from the strength of business at home, including a flagging unemployment rate, to financial struggles abroad,” she says. “We haven’t really seen all those issues play out yet.”

Infrastructure Dilemma

Both candidates have said they are in favor of upgrading the nation’s infrastructure, especially when it comes to helping the economy and creating jobs, but both have so far failed to provide a clear plan for how this upgrade will be funded.

In the transportation sector, revenues from the federal gas tax are not keeping pace with increased spending levels. Congress has supplemented the Highway Trust Fund, which pays for U.S. road, bridge and mass-transit projects, with numerous transfers from the General Fund to maintain spending. But the Highway Trust Fund will face insolvency again at the end of 2014, when funds transferred under the new two-year surface transportation law run out. At that point, additional transfers or new revenues will be needed to avoid significant cuts to highway and transit programs.

Captain Paul Yarossi, President, HNTB, Inc.
### Tax Effect

Both presidential candidates agree on the need to reform U.S. tax policy, and there is a good chance that whoever wins in November will preside over some significant changes in the tax laws.

President Obama stresses tax reform as a way to achieve greater economic fairness for citizens. Romney stresses tax reform as a vehicle to spur jobs. Their views on just how such reform should be achieved are equally as divergent.

Obama favors reforming the U.S. tax code by lowering the corporate tax rate and raising the tax rate on those earning over $250,000. For those high-income households, Obama would reduce the Bush tax rates at the low end (10 percent, 15 percent and 25 percent) but raise the top two rates to 36 percent and 39.6 percent, respectively.

Romney favors reforming the U.S. tax code by lowering the tax rates on individuals and corporations. Romney says he would reduce the current Bush-era rates by 20 percent apiece, meaning that the top rate would fall to 28 percent and the bottom rate would fall to 8 percent.

Both support eliminating tax preferences.

The current top corporate tax rate is 35 percent. Most economists agree that the rate should be lowered to boost U.S. global competitiveness. Romney would lower the top rate to 25 percent and pay for it by reducing corporate tax breaks. Obama wants to lower the rate to 28 percent and also pay for it by eliminating “dozens” of business tax breaks.

Generally, the “business” attitude of the candidates follows the old saw that Republicans favor limited government and reduced taxes, while Democrats prefer big government and higher taxes, but the details are more nuanced.

“Some business leaders will give President Obama credit for the bailout of the auto industry, the stimulus and the benchmarks for cutting government spending offered in his Simpson-Bowles Task Force,” Zogby says. “Others will, of course, see him as increasing the debt to $16 trillion and calling for an end to the Bush tax cuts for those earning over $250,000.

“They will also point to banking reform legislation that put tighter strictures on banks and created more regulations. Romney will be cheered for his free market and lower business tax approach but will be scrutinized for his Bain Capital experiences.”

### Energy Policy

Obama has made it clear his intent to combat climate change caused by carbon emissions by reducing U.S. oil dependency, and

### Infrastructure

Infrastructure is in the discretionary spending bucket and always tends to be a low priority for funding,” ARCADIS’ Avila says. So far, “the attention to infrastructure overall has been very good, so you don’t want to have that go by the wayside as the election moves forward. In terms of specifics, I just don’t think the climate is right to go down that path right now, for either candidate.”

With funding still in question, many engineering executives say they would like to hear more about infrastructure funding alternatives, such as the advantages of public-private partnerships. “Given the infrastructure needs we have and the federal, state and local budget difficulties that we’re all facing, there is growing interest in more private-sector involvement,” such as helping to prioritize infrastructure needs and getting projects built faster and more efficiently, Avila says.

“Hopefully we can have more discussion on how to provide incentives at the federal level that would make it attractive for the private sector to truly work as a stakeholder and partner,” she says.
boosting clean-energy development, and he has flexed the muscles of the executive branch to sometimes bypass a querulous Congress and implement some of his energy initiatives.

Romney’s campaign plan reflects the prevailing Republican energy platform, which includes increasing oil drilling offshore and in the Arctic National Wildlife Refuge, and rolling back Environmental Protection Agency regulations on coal-fired power plants and oil refineries.

On climate change, Romney says no one really knows what is causing climate change on the planet, but he does know that “spending trillions and trillions to reduce carbon emissions is not the right course” for the United States.

The president believes that federal dollars can be used wisely to leverage private-sector spending and keep the U.S. competitive in a global race to commercialize new energy technologies.

Romney prefers that science and the free market propel the majority of research and development and investment for new energy technologies. He would end an expiring production tax credit that has helped pay for wind farms nationwide for more than two decades.

Political observers say, however, that no matter who is president, to a large extent the party that wins control of the Senate in November will determine energy policy in the near term. If Democrats retain their Senate majority and Republicans keep control of the House, either Obama or Romney would find it difficult to advance more than piecemeal portions of their respective energy agendas through Congress.

Post-Election Challenge
In the current political and economic climate, it’s difficult for private-sector firms to invest because “we’re not sure what’s coming,” Weston’s McGraw says. “Whether it’s Obama or Romney in the White House in November, it’s going to be important for either to institute policies very quickly, and to provide the entire country with a sense of certainty and direction moving forward.”

Yarossi emphasizes the need for true leadership, irrespective of the results. “There is no doubt the presidential and congressional elections are likely to impact the debate over the next multiyear transportation bill in 2014, funding of water resources projects, our air transportation system, and how we will get this done while improving the environment,” Yarossi explains. “Regardless of the outcome of the election, we need strong leadership from Republicans and Democrats so that America has an infrastructure system that stimulates economic growth and helps ensure competitiveness on the world economic stage.”

Paul Yarossi
HNTB

“Regardless of the outcome of the election, we need strong leadership from Republicans and Democrats so that America has an infrastructure system that stimulates economic growth and helps ensure competitiveness on the world economic stage.”

Stacy Collett is a business and technology writer based in Chicago.
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Globally connected information technology (IT) systems have ushered in untold opportunities for engineering firms. Ironically, the same tools and resources that promise to help engineers work smarter for clients have given rise to a host of challenges—and potential risks—that firms must overcome to succeed.

By Samuel Greengard

**Takeaways**

- IT tools that improve firm-to-client communications and project time to delivery are increasingly important.
- An influx of personal mobile devices on company networks creates security concerns for IT staff.
- Managed services, such as cloud computing, provide secure options for firms to store and manage large amounts of data.
With names such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Computer-Aided Design (CAD), and Building Information Modeling (BIM), keeping the acronyms straight is a chore all its own. Apart from equipping employees with the know-how to navigate complex systems, firms are saddled with the unenviable task of ensuring clients and project teams are comfortable with these resources, too.

It’s not easy. But in an age of business deals being won and lost because of a dropped connection, executives say having an IT infrastructure that improves firm-to-client communication and reduces project time to completion is a must.

“Technology has always been an important component for architecture, engineering and construction firms,” says Bret Tushaus, director of product marketing for enterprise software and information solutions provider Deltek. “Over the last several years, it has become critical. Today, information technology increasingly drives performance, productivity and business results.”

“Our customers tell us that it is almost a necessity to keep pace with technology in order to address the ever-increasing complexity of the projects they are working on,” says Karen Weiss, senior industry marketing manager for Autodesk, Inc., a design software provider for the A/E/C industry. “One of our customers recently completed a rail project that extends over 14 massive bridges and 180 winding tunnels, located amidst complex topography as well. For them, using advanced technology was the difference between project success and failure.”

For many firms, it’s a constant and ongoing struggle to assemble the right components and keep systems, devices and tools up to date. That challenge is made even harder by an influx of personal mobile devices—from smartphones to tablets—that employees use to file work and communicate across client and company-owned networks.

“As the volume of data grows and the complexity of IT increases, organizations must establish a clear and consistent strategy,” says Ron Gant, global director of civil transportation marketing for Bentley Systems, Inc., a software provider that caters to professional services firms. This includes everything from a firm’s global enterprise network and financial reporting software to the latest modeling and cloud computing tools and, yes, even its presence on social media such as Facebook and Twitter.

Mobility Matters
Although the fundamentals of business haven’t changed much over the years, the ability to handle projects quickly and efficiently—while managing relationships effectively—is increasingly essential for long-term success. Businesses that fall behind the IT curve risk obsolescence, even failure.

Mobile devices and collaborative software have unleashed a level of connectedness and interaction unimaginable a decade earlier. “The old days of sitting at a desk and having a workstation are gone,” says Markus Weidner, director of IT for Philadelphia-based Pennoni Associates, Inc., with 900 employees and 28 offices across the Northeast. “Workers are mobile, and IT must provide the tools to support working from anywhere, anytime,” he says.

The “bring your own device,” or BYOD, movement, in which employees and stakeholders—many of them just starting out in their careers—connect their own devices to company-owned networks, is also radically changing the nature of business and IT. A 2011 Accenture survey found that 79 percent of Gen Y workers choose where they will work based on the IT available to them and their ability to select and use their own devices.

At Black & Veatch, a $2.6 billion (2011 revenues) firm ranked No. 18 in the world for design-build firms, Senior Vice President and CIO Brad Vaughan is revamping systems to accommodate smartphones and tablets. The firm has incorporated “application virtualization,” where employees can re-create desktop tools on mobile technologies to extend its network beyond the existing firewall. That extension has created a need for new policies and security procedures—including the use of “remote wipe” applications in the event a personal device is lost or stolen. “It’s now necessary to extend our applications and platforms to workers as well as business partners and vendors,” Vaughan says.

“Technology doesn’t create standards; it is merely a way to propagate them.”

JAMES WALSH
AECOM

“Workers are mobile, and IT must provide the tools to support working from anywhere, anytime.”

MARKUS WEIDNER
PENNONI ASSOCIATES, INC.
Putting BIM to Work

Despite its obvious potential, many AEC firms have struggled to migrate to advanced Building Information Modeling (BIM) systems. Part of the problem, says Ron Gant, global director of civil transportation marketing for Bentley Systems, Inc., is that “BIM is a concept and a method, not a standard.” There’s also resistance because the technology “intimidates a lot of people,” and not everyone is trained or understands how to use these systems, says Bret Tushaus of Deltek. “It requires a different way of thinking and working. Internal teams must be more collaborative.”

With increasingly complex projects, massive volumes of data and client mandates, most firms have no choice but to adapt. “The model first environment can benefit engineering firms because it enables more accurate, accessible, and actionable insight for more informed decisions, ultimately producing better engineered projects,” says Autodesk’s Karen Weiss.

“The ability to extrapolate information from a design set and make it repeatable and reusable significantly enhances the value we provide to clients,” says AECOM CTO James Walsh. Black & Veatch has also turned to BIM to build complex 3D models and understand projects more holistically. The biggest challenge for the firm, says Black & Veatch CIO Brad Vaughan, is assembling the expertise and providing the training to use these tools effectively. “BIM has required considerable resources, but delivered significant benefits,” he says of the technology.

A growing number of firms are using tools such as Microsoft SharePoint, Microsoft Lync, Cisco WebEx and others to spur knowledge exchange between employees, contractors, clients and others. Organizations also increasingly rely on videoconferencing and Web presence tools to provide instant and dynamic online meetings over a unified communications network.

Cloud Coming

IT advances have done wonders for back-office systems, to be sure. But technology is also paying dividends on the front end, where firms make their money.

AECOM, which has 45,000 employees in 130 countries, and revenues topping $8.2 billion, has committed itself to building a robust IT infrastructure. It uses an Oracle eCore ERP platform to run its business, but employs Deltek software and Sage Accpac at smaller locations not equipped to support the firm’s primary enterprise system. It also uses Salesforce.com for customer relationship management, CAD and BIM systems, and a variety of collaboration tools.

“Technology doesn’t create standards; it is merely a way to propagate them,” says James Walsh, senior vice president and CTO for AECOM. Walsh puts much of his focus on developing internal standards for CAD, GIS and BIM technologies. But he also works with major software vendors to adapt their applications for mobile iOS and Android devices, so employees can take the technology with them in the field.

The growing complexity of managing and delivering IT services has prompted a growing number of firms to migrate to managed services, including the cloud, in which computing and storage capacity is delivered remotely over the Internet. Proponents say the technology can reduce system complexity and help trim total cost of IT ownership, including the need for periodic patches and hardware and software refreshes.

IT execs say cloud computing—including point clouds used for CPU-intensive 3D processing—enables organizations to add scalable servers and computing capacity on demand.

AECOM’s Walsh says that the cloud will play an increasingly important role in his firm’s IT strategy over time. “It’s a way to use technology resources more efficiently and make the IT department more strategic.”

Framework for Success

As firms decide between homegrown IT infrastructure, managed services or some combination of the two, executives must ask whether they have the personnel and hardware to manage systems and data internally, or whether it’s best to turn to a third party, says Bentley’s Gant. It’s also critical to understand who touches data, how they touch it and what value they add along the way.

In the end, “there is no simple way to approach IT,” says Pennon’s Weidner. “An organization has only so much capacity and a certain amount of resources to adopt new technologies. It’s essential to prioritize and determine what technologies provide the maximum value and return on investment—and put the organization’s entire weight behind an initiative.”

10 IT Best Practices

- Adopt standards-based IT systems whenever possible.
- Embrace mobility, including the use of smartphones and tablets.
- Build effective internal collaboration tools, including systems that rely on social media.
- Use managed services when and where there’s a strategic fit.
- Incorporate cloud computing into the business as it makes sense, and consider using point clouds for 3D-intensive projects.
- Migrate to BIM and incorporate it into more complex projects.
- Develop robust policies, governance and security.
- Provide adequate training, particularly in a BYOD environment.
- Establish a cross-functional committee to oversee IT and help establish a road map.
- Pilot tools, technologies and new concepts before rolling them out on a wider scale.

Need IT expertise?

Turn the page for a list of recommended IT providers.

Samuel Greengard is a business and technology writer based in West Linn, Ore.
Peer-to-Peer Recommended Information Technology Consultants

The following list includes ACEC IT Affiliate Members (in red), select Member Firms, ** Member Discount Providers** and additional IT firms recommended by ACEC Members.

CALIFORNIA

Bering Technology
Campbell
Ph: 408-764-6500
www.bering.com

Specialty: Storage solutions for broad range of projects; Packard technical and commercial computers, Apple Macintosh, and PC desktop and network servers.

Service Territory: W

Leung Lok, President
liok@bering.com

EADOC, LLC
Oakland
Ph: 510-292-9658
www.eadocsoftware.com

Specialty: Secure web-based construction project management software for facility owners and construction managers.

Service Territory: W

Eric Law, Founder & CEO
eric.law@eadocsoftware.com

FLORIDA

BST Global
Tampa
Ph: 813-886-3300
www.bstglobal.com

Specialty: Technology programs for project management and solution implementation and consulting services.

Service Territory: W

Kristyna Simpson, Principal
ksimpson@bstglobal.com

Coastal Telecommunications
Clearwater
Ph: 727-898-9899
http://coastaltelecom.net

Specialty: Custom business telephone systems, telecommunication product services and installation.

Service Territory: L

Joe Young, President
jyoung@coastaltelecom.net

IILLINOIS

Peters & Associates
Oakbrook Terrace
Ph: 630-592-6214
www.peters.com

Specialty: Designs, implements and supports Microsoft solutions and general networking technologies.

Service Territory: L

Mike Cloud, Sr. Account Manager
mike.cloud@peters.com

MASSACHUSETTS

RightPoint
Chicago
Ph: 312-920-8383
www.rightpoint.com

Specialty: Designs and builds digital marketing strategies, including user experience design, CRM and business process management.

Service Territory: N

Michael Gonzaga, Senior Technology Strategy Manager
mgonzaga@rightpoint.com

KANSAS

Systems Management Consultants
Overland Park
Ph: 913-681-1830
www.sysmgmt.com

Specialty: Financial accounting systems, electronic deliverables, federal acquisition regulations, scope creep and technology's impact on professional liability.

Service Territory: N

Mike Ingardia, President
mike@sysmgmt.com

LOUISIANA

Ener Systems
Covington
Ph: 985-877-0333
www.enersystems.com

Specialty: Technology investment consulting, computer support and network services for small-to-medium businesses.

Service Territory: L

Rene Miller, Vice President
rm@enersystems.com

MARYLAND

Plan B Technologies, Inc.
Bowie
Ph: 301-860-1006
www.planbtech.net

Specialty: Virtualization and cloud services; Microsoft solutions; security and network infrastructure; storage area networking, backup, recovery and archiving.

Service Territory: R

Brian Nelson, Account Manager
bnelson@planbtech.net

MINNESOTA

Agile Frameworks
St. Paul
Ph: 651-487-7044
www.agileframeworks.com

Specialty: Mobile applications, IT managed services, business technology consulting and strategic planning.

Service Territory: N

Michael Anders, President
michaelanders@agileframeworks.com

NEBRASKA

Tsyp Merchant Solutions
(formerly First Merchant Solutions)
Omaha
Ph: 800-354-3988
www.tsypmerchant.com

Specialty: Payment processing installation and services.

Service Territory: N

Mark Calhoun, Associate Director, Business Development
mcalhoun@tsypmerchant.com

NEW HAMPSHIRE

Newforma, Inc.
Manchester
Ph: 603-626-6212
www.newforma.com

Specialty: Project information management for architects and engineers through information modeling, integrated project delivery and contract management.

Service Territory: U.K. / Netherlands

Robert Batcheler, Executive V.P., Strategy
rbatcheler@newforma.com

NEW YORK

Point USA
Woburn
Ph: 781-935-6020
www.servicepointusa.com

Specialty: Autodesk products and training for digital services.

Service Territory: N / U.K.

Michele Wasko, Marketing Director
mwasko@servicepointusa.com

MICHIGAN

NuWave Technology Partners
Kalamazoo
Ph: 877-342-4401
www.nuwavepartners.com

Specialty: Telecommunications solutions, computer network solutions, website and software development.

Service Territory: S

Kyle Paalman, Managing Partner, V.P. Operations
kpaalman@nuwavepartners.com

MINNESOTA

Underground Imaging Technologies
West Latham
Ph: 519-763-9849
http://uli-systems.com

Specialty: 3D subsurface data, engineering and geophysical solutions for risk mitigation and underground asset management.

Service Territory: N

Laurie Karian, Director, Marketing and Corporate Communications
lkarian@uli-systems.com

NORTH CAROLINA

SITEOPS
Charlotte
Ph: 704-609-7508
www.siteops.com

Specialty: Layout software for civil engineers, architects, landscape architects and land developers.

Service Territory: N

Dapier Settlemeyer, Director, Civil Engineering
david@siteops.com

 PENNSYLVANIA

Bentley Systems, Inc.
Exton
Ph: 610-458-5000
www.bentley.com

Specialty: 2D and 3D engineering design CAD software solutions to achieve sustainable infrastructure.

Service Territory: W

Ed Mueller, Chief Marketing Officer
ed.mueller@bentley.com

Stambaugh Ness
York
Ph: 717-757-6999
www.snsb.net

Specialty: Project management, installation, integration, training and support for accounting, auditing and tax preparation software.

Service Territory: R

Chip Hayden, Director, IT Consulting Services
chayden@stambaughness.com

ТЕННЕССИЕ

Solveras, Inc.
Franklin
Ph: 615-550-9356
www.solveras.com

Specialty: Electronic payment processing through credit cards, mobile and online for all industries.

Service Territory: N

Kathleen Ervin, V.P., Marketing
kathleen.ervin@solveras.com

TEXAS

AX Global, Ltd.
San Antonio
Ph: 866-516-5999
www.axglobal.com

Specialty: IT consulting and support services; prepare server configuration to ERP ignition and provide ongoing software support.

Service Territory: W

Danny Blau, National Sales Manager
dblau@csngc.com

WISCONSIN

Deltek
Madison
Ph: 608-277-3600
www.deltek.com

Specialty: Management and decision consulting.

Service Territory: N

Patrick Vidal, Business Development
pvidal@deltek.com

Halogen Software
Toronto
Ph: 416-688-4481
www.halogensoftware.org

Specialty: Software programs for strategic talent management.

Service Territory: W

Alicia O’Brien, Segment Marketing Manager
aubrien@halogensoftware.com

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records@ncees.org
800-250-3196
Collaborative
By Darlene Bremer

Value

Enhancing professional advantage for Member Firms is focus of ACEC coalitions

Council of Professional Surveyors (COPS)
Member Firms: 120
Mission: To strengthen the business environment and image of Member Firms focusing on quality professional surveying/geospatial services in a competitive global marketplace.

Ken Brown, chair of the COPS coalition and director of geospatial services for Long Engineering in Atlanta, set a single goal for COPS in 2012: to broaden the demographics of current COPS membership by inviting ACEC Member Firms with geospatial services to join COPS this year. “There is power in numbers, and COPS gives surveyors a seat at the table concerning the numerous advocacy issues at the federal level that affect the geospatial and engineering industries,” he says.

COPS will continue to focus on developing materials designed to help create a profitable, well-run geospatial/surveying company or division. Brown also writes a periodic column for POB magazine about the business side of the geospatial industry. “The column is designed,” he says, “to create awareness of both ACEC and COPS and what each can offer to this new demographic.”

To account for anticipated membership growth from within the geospatial community, the coalition has begun establishing new committees, scheduled the release of new publications for geospatial firms and increased leadership opportunities for future members.

Council of American Mechanical and Electrical Engineers (CAMEE)
Member Firms: 75
Mission: To help members better serve their clients and run more effective, efficient and profitable businesses.

In working with the other coalitions, Robin Greenleaf, chair of CAMEE and president of Architectural Engineers, Inc., in Boston, is focused on drafting a strategic plan that will move all of the Council’s affiliate coalitions forward. “With each coalition serving a different practice sector, it’s a tremendous opportunity to combine our strengths to better serve the ACEC membership,” she says. Any strategy will be designed to enhance the specific programs each coalition offers, while keeping the individuality of each.

As part of its own strategy, CAMEE is developing new products that mechanical and electrical engineering members
will find beneficial, such as a suite of sample correspondence designed specifically for mechanical, engineering and plumbing firms and a contract supplement used to specify the details required for MEP systems in Building Information Modeling designs. “Developing practice sector-specific business products gives each coalition more value and can help increase association membership,” Greenleaf says of the project.

CAMEE leaders are focused on implementing the results of a recent membership survey conducted in the spring, including the development of new publications and education sessions that can then be turned into online seminars for future use.

**Council of American Structural Engineers (CASE)**

**Member Firms:** 161  
**Mission:** To provide a forum to improve the quality of structural engineering through enhancement of business practices, improvement of risk management and increased profitability.

“Most important is work currently being done on revamping outdated contract, guideline and toolkit documents,” says John Mercer, chair of CASE and president of Mercer Engineers, P.C., in Minot, N.D., when asked of the coalition’s primary focus this year. “We believe ACEC Member Firms that provide structural engineering services would certainly benefit from the offerings developed over the past 22 years. Having updated information will remind people of the publications’ value.”

The latest addition is the inclusion of liability insurance agents on CASE’s committees to improve the coalition’s products and to develop closer relationships with underwriters. “Additionally, we are pursuing legal reviews of our products to ensure that the terms and conditions comply with current laws and regulations,” Mercer says. The long-term goal is to have CASE toolkits, guidelines and contracts used by every structural engineering firm in the country.

CASE is also focused on relationships with other industry organizations, such as the National Council of Structural Engineering Associations (NCSEA) and the Structural Engineers Institute (SEI). CASE’s winter planning meeting will be held in conjunction with NCSEA’s Winter Institute, which offers CASE members the opportunity to fulfill continuing education requirements. “CASE will again hold its spring convocation at the Structures Congress sponsored by SEI/ASCE [American Society of Civil Engineers],” in addition to collaborating with other coalitions within ACEC to provide educational opportunities at ACEC’s spring and fall meetings,” Mercer says.

**Land Development Coalition (LDC)**

**Member Firms:** 33  
**Mission:** To strengthen the land development business environment with an emphasis on quality services in the global marketplace.

ACEC’s Land Development Coalition (LDC) maintains its focus this year on widening the membership demographic to include site/civil firms, geo-technical firms and firms that do work in the area of planning; and developing products for members around marketing, project management, quality assurance and control. The development of these products aims to make firms more competitive and profitable, and increase attention on the latest stormwater management and permitting regulations. “A broader membership base enables us to create sustainability for the group, as well as to create networking opportunities that help Member Firms understand the business practices of others from all around the country,” explains Ed Parrone, chair of LDC and president and CEO of Parrone Engineering in East Rochester, N.Y. “By working through LDC’s advocacy committee and ACEC’s government affairs department, our goal is to ensure that members are kept up to date on the ever-evolving environmental regulations on the federal, state and local levels,” Parrone says. “We have also established a LinkedIn presence to provide information to members and a forum that will assist in solving issues and addressing business and industry concerns,” Parrone explains.

**Small Firm Council (SFC)**

**Member Firms:** 140  
**Mission:** To advance the business interests of ACEC’s small firm members and provide a forum for ACEC to highlight the needs of small firms.

“Our coalition is different in that it doesn’t focus on one area of technical practice, but rather on the special business practices that affect engineering firms that are considered small,” explains Gregg Hughes, chair of SFC and founding principal of Palmetto Engineering and Consulting in Greenville, S.C.

SFC is dedicated to working with State Organizations to create state-based coalitions geared toward the needs of small firms, plus developing stronger ties with the other ACEC coalitions to support different areas of expertise. A local State Organization representative was added to SFC’s steering committee to offer direct input on developing product offerings in hopes of providing additional benefit to the Member Organizations.

“Through 2013, SFC will launch new product offerings designed specifically for small business, such as financial documentation to improve operations, required reading lists for success, and various other templates and tools,” Hughes says.
Design Professionals Coalition (DPC)

Member Firms: 55

Mission: To represent the business and government affairs interests of engineering design firms of all sizes that compete for government contracts.

With a focus on fair and open competition in the federal and state government marketplace, DPC is focused on demonstrating the advantages of outsourcing infrastructure projects to private-sector firms. “Federal and state agencies have been moving toward keeping projects in-house, and we need to make clear that in an open business climate, taxpayers will receive the best value from projects delivered by private firms,” explains Tony Bartolomeo, chair of DPC and president and CEO of Pennoni Associates in Philadelphia.

To achieve its goal, the coalition has been working with ACEC to meet with congressional delegations regarding language in legislation and appropriations bills that will maximize outsourcing of government contracts to private firms. Adds Bartolomeo, “We are talking directly to elected officials and their staffs to explain the advantages to taxpayers and to demonstrate the quality offered by private engineering firms.”

As Congress approaches the upcoming fiscal year, the coalition will continue to advocate the outsourcing of engineering design services to the greatest extent possible, as well as look for alternative funding mechanisms for future infrastructure projects. “We will also further help Member Firms identify emerging market growth opportunities at home and abroad, promote a level playing field, and address licensing transferability and transparency issues,” Bartolomeo says.

More information about ACEC’s coalitions can be found by going to www.acec.org/coalitions.

Darlene Bremer is a business and technology writer based in Solomons, Md.
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CEO Panel: Business Outlook—Energy, Water and Transportation

Patrick McCann  
CEO, Weston Solutions

Brian P. Reed  
CEO, RS&H

Jack Hand  
CEO, POWER Engineers, Inc.

CEO Panel: Positioning Your Firm for Growth

Dean Fox  
President and CEO, Atkins North America

Chris Poland  
Chairman, Degenkolb Engineers

Gregg Hughes  
Founding Principal, Palmetto Engineering & Consulting; SFC Chairman

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Registration Fees

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Room Rate (single/double)
ACEC’s room rate is $250, single/double occupancy, plus tax for the Cloister Traditional Rooms and $279, single/double occupancy, plus tax for the Tower Estate Rooms. Room reservation must be received by Sept. 12. Reservations received after this date, or after the group block sells out prior to this date, will be on a space- and rate-available basis. A deposit of one night’s stay plus tax is due at the time the reservation is made. Check-in time: 4 p.m.; checkout time: 11 a.m.

Hotel Reservations
Conference attendees should make their reservations by calling Central Reservations at 888-503-2622. When making an individual reservation, please reference “ACEC Fall Conference” to receive the discounted group rate. Registration for the Conference is required BEFORE making your hotel reservation.

Travel Information
There are three airports that serve individuals going to Boca Raton: the Fort Lauderdale/Hollywood International Airport, the Palm Beach International Airport and the Miami International Airport.

For more travel information or to register online, go to: www.acec.org.
Business Baselines
For Surveying Firms

Business management and safety risks are a critical concern for surveying firms. To help address these issues, the Council of Professional Surveyors (COPS) created their Seven Baselines for Business Practices. The seven baselines are (1) Culture; (2) Planning; (3) Education; (4) Contract Documents; (5) Policy & Procedures; (6) Communications & Correspondence; and (7) Technical Tools & Documents. Each includes worksheets and sample documents for surveyors to use in daily business operations.

In addition, COPS has released two more products:

**Baseline 5.2: Health, Safety and Training Manual** provides a good overview of some fundamental field safety procedures and includes sample forms and Tailgate Safety Topics for you to use and/or customize to the specific needs of your firm.

**Baseline 2–4: Six Month Forecasting** tool is a linked spreadsheet that provides survey managers with the ability to determine their total staffing needs by individual and classification on a month-by-month basis, based on data input for up to 10 separate ongoing projects and eight promotional or proposed projects.

All of the COPS-developed products are available at www.booksforengineers.com.

Professional Accomplishment as a Marketing Advantage

Engineering executives must develop a unique skill set that transcends the technical practice of engineering—the skill of running an engineering business. Effective management of programs, projects, personnel and budgets drive a firm’s profitability. These skills are not learned through technical education but can be acquired with experience, along with targeted training programs, such as programs offered by ACEC.

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As the industry leader in business practice education, ACEC recognizes that business acumen is critical to success, and these competencies can be extremely valuable to clients. ACEC is proud to offer its designation program—including Management Engineer, Executive Engineer and Management Professional (for those without PEs)—as a way for our members to codify their experience and use it to market their services.

Obtaining a designation or certification signals to your clients and to your employer that you have aspired to and achieved a specific professional competency.

To learn more about ACEC’s designation program, visit www.acebook.org/education/designations to apply.

Essentials of Strategic Financial Management

Effective financial management is the lifeblood of every business organization, yet many A/E professionals don’t fully understand all the complexities of their company’s financials.

Once considered merely the scorekeepers of a firm’s success, today’s financial managers must become strategists to help firms adapt to unstable markets while planning for long-term success. To do that, financial professionals must learn to use the powerful, often complex accounting tools that can help their firms achieve these goals.

ACEC’s program **Essentials of A/E Financial Management, Valuation and Transition Planning**, held Nov. 8–9, explores the impact that a volatile economy has on financial management above and beyond revenue, profits, backlog and staff size. Participants will learn to effectively extract and apply key financial measures, such as break-even overhead rate, target billing multiplier and labor utilization percentage. Attendees will also examine various performance, liquidity and leverage ratios, and how to benchmark these results to make the causal link to shareholder value—including the acceptable valuation methodologies for engineering firms—and the valuation’s relationship to internal owner transition planning.

New this year: an expanded module on financial aspects of various forms of transition planning. Visit the ACEC Education website at www.acebook.org/education/index.cfm for more information.

The ACEC Institute for Business Management provides comprehensive and accessible business management education for engineering company principals and their staffs. Visit ACEC’s online educational events calendar at www.acebook.org/calendar/index.cfm or bookstore at www.acebook.org/publications, or call 202-347-7474, ext. 338, for further information.
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Dean Fox joined Atkins North America in 2010 following its acquisition of The PBSJ Corporation. Today he is president and CEO of the Tampa, Fla.-based firm. A retired U.S. Air Force Major General with more than 34 years of service, Fox also served as Air Force Civil Engineer at Air Force Headquarters in Washington, D.C. Atkins is the world’s 11th-largest engineering and design consultancy with more than 18,000 employees, including 3,700 in North America, and was the official design engineer for the London Olympic Games.

Q. What is the primary reason you chose to become an engineer?
A. I grew up with a passion for math and the sciences, and it all seemed to come naturally to me; couple that with a love for the “outdoors,” and engineering seemed logical. It was either that or become a forest ranger, which was what my high school aptitude test results indicated!

Q. If you had not pursued a career in engineering, what other profession(s) interested you?
A. Graduating with a B.S. in civil engineering from the U.S. Air Force Academy, I would say my first profession was “the profession of arms” for my country. If my eyesight had been perfect upon graduation, I likely would have pursued being a pilot in the Air Force. My 34 years as an engineer in the Air Force wasn’t too bad for me, though—I loved every minute of it.

Q. What is the best advice you ever received?
A. Wow, tough question. Like most people, I’ve received a lot of advice over the years—some good, some not so good. I’d have to say the best tidbits of advice for me were “work hard; no one is going to do your job for you” and “don’t ever sacrifice your integrity.”

Q. What do you know now that you wish you had known 20 years ago?
A. That would be cheating, wouldn’t it? I wish I’d known which investments to pursue, of course! If I need to be serious, I wish I had fully appreciated how exciting and rewarding my career was when I was younger. Today, I look back and I wouldn’t change anything—I was so fortunate to have the right opportunities.

Q. If you were president of the United States for one day and could make one executive decision, what would it be?
A. Reduce the size of government and push work and funding to the private sector. There may be a more eloquent—and less politically divisive—way to say it, but when government is competing with the private sector for work, I think we’ve gone way beyond the essential purposes of governing. I’m just glad I never ventured into politics. It’s a tough job and you can never please everyone.

Q. What do you consider your greatest professional achievement, and why?
A. I’ve been very fortunate to have had the opportunity to pursue two careers and to work with tremendous people in both. Certainly serving as the Air Force Civil Engineer as a Major General and having functional responsibility for 60,000 engineers worldwide was a great personal achievement. But my current role with Atkins is very significant and rewarding as well. There is nothing I enjoy more than watching our employees work on exciting infrastructure projects and solving client challenges. It’s so fulfilling to be associated with such a great organization.

Q. Do you have any unique hobbies—something outside of work, maybe—that you enjoy doing?
A. I love family time and I’m a bit of a golf nut. My wife and I have three adult children who have blessed us so far with two grandchildren, and there are two more on the way this year … and still counting, we hope. Every moment with them is special for us. Friends would also tell you I head to the golf course when I can and that I’m a bit competitive. I’ve been quoted as saying “never lay up!” In real English, that means be aggressive and go for it. I guess that’s a bit of a challenge for how I think people should generally try to pattern their lives and careers.
Education Pays

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Members in the News

On The Move

Houston-based KBR announced the following appointments: David Zimmerman, group president for Australia-Asia and executive leader for regional corporate, political and regulatory relations, based in Perth; Ivor Harrington, services group president, based in Houston; Farhan Mujib, executive vice president, operations, based in the U.K.; and David Zelinski, president, Downstream business unit, based in Houston.

New York City-based Parsons Brinckerhoff (PB) named Greg Kelly global chief operating officer and Keith Zecchini global chief information officer. Both are based in New York. Clifford Eby, who succeeds Kelly as president of PB’s Americas Transportation operating company, is based in Washington, D.C.

Philadelphia-based Urban Engineers, Inc. (Urban) promoted Gerald C. O’Neill to general manager and senior vice president for transportation and facilities management services. He will be based in the company’s headquarters office.

Ane Deister joined Pasadena, Calif.-based Parsons as vice president for its environmental division and will focus on enhancing the firm’s commercial environmental business in the western region. She will be based in Sacramento, Calif. Bradley C. Barber was appointed vice president, Corporate Safety, Health & Environment. He is based in Charlotte.

Pennoni Associates promoted the following to associate vice president in its Philadelphia headquarters: Erin Bushnell, director of human resources; James Markham, transportation division manager; and Melissa Rysak, director of corporate communications. Vice presidential appointments elsewhere in the firm include Khaled Hassan, office director, based in the firm’s King of Prussia office; Larry Bankert, transportation division manager, out of the Mechanicsburg office; and Thomas Blank, office director, Monroeville office.

Scott W. Zeevaart was named a vice president of Gannett Fleming, Inc., where he is the highway business unit leader for the Transportation Division. He is based in Gannett Fleming’s corporate headquarters in Harrisburg, Pa.

Dean P. Bradley was named president of Felsburg Holt & Ullevig, succeeding Founding Principal Robert W. Felsburg, who remains chairman of the firm. Kyle A. Anderson was named executive vice president. Bradley is based at the firm’s Centennial, Colo., headquarters. Anderson, a principal since 2004, is based in Omaha and oversees firm operations of two Nebraska offices.

(L-R) Kyle Anderson, Bob Felsburg and Dean Bradley
Welcome New Member Firms

ACEC/California
Bauldry Engineering, Inc., Santa Cruz
Construction Testing Services, Inc., Pleasanton
CTL - SEE’s, Inc., Exeter
EBA Engineering, Santa Rosa
Prix Corporation, Pine Valley
RT Engineering & Associates, Inc., San Diego
TS Civil Engineering, Inc., San Jose
Western Geotechnical, Bakersfield
William A. Nailling, PLS, Valencia

ACEC/Colorado
Vision Land Consultants, Inc., Golden

ACEC/Idaho
Associated Design Group, Boise
Axiom, PLLC, Boise

ACEC/Indiana
Cash Waggener & Associates, P.C., Jasper
First Construction Consulting, Inc., Carmel
Stair Associates, Inc., Carmel

ACEC/Louisiana
APS Design and Testing, Baton Rouge
Artovia, LLC, Mandeville
Bar工作方案 & Bonura

ACEC/New Mexico
Engineers & Consultants, LLC, Metairie
Greenpoint Engineering, New Orleans

ACEC/Mississippi
Greenwood Engineering, LLC, Charleston
Wages Consulting, LLC, Ridgeland

ACEC/Missouri
AFRAM Corporation, St. Louis

ACEC/Missouri
P.H. Weis & Associates, Inc., d/b/a Weis Design Group, Ellisville
SE3 LLC, Lee’s Summit

ACEC/Nebraska
R.W. Engineering & Surveying, Inc., Omaha

ACEC/New York
Cragnolin Design Associates, Smithtown

ACEC/North Carolina
Geo Technologies, Inc., P.A., Raleigh

ACEC/Tennessee
Hethcoat and Davis, Inc., Brentwood

ACEC/Washington
DCI Engineers, Seattle

ACEC/Wisconsin
Cotter Consulting, Inc., Milwaukee

TREKK Design Group, LLC, Pembroke
Woods Engineering, PA, Wilmington

ACCEC/Tennessee
Hethcoat and Davis, Inc., Brentwood

ACEC/Washington
DCI Engineers, Seattle

ACEC/Wisconsin
Cotter Consulting, Inc., Milwaukee

J3 Engineering Group, LLC, Mequon

Calendar of Events

SEPTEMBER

10–11 Information Technology Forum 2012, Denver
10–11 Finance Forum 2012, Denver
11 Get Ready for the Green Construction Code (online seminar)
12 Standardized Contracts by States (online seminar)
18 Antiquated Structural Systems (online seminar)
19 Negotiating Better Engineering Contracts (online seminar)
27 Calculating the Right Earnings to Determine Your Firm’s Value (online seminar)

OCTOBER

2 Conceptual and Detailed Project Cost Estimating for Architects and Engineers (online seminar)
3 Social Network Analysis: Fixing Bottlenecks Across High-Functioning Teams (online seminar)
4 Workplace Wellness: Building a Foundation of Better Health (online seminar)
10 Transportation Infrastructure Financing and Innovation Act (TIFIA) (online seminar)
14–17 ACEC Fall Conference, Boca Raton, Fla.

To sign up for ACEC online seminars, go to www.acec.org/education.

Additional information on all ACEC activities is available at www.acec.org.
Mergers and Acquisitions

Industry Consolidations Heat Up

A
ter a decidedly slow start to the year, the market in that state is rebounding.

**Interstate M&A Slows:** Despite the summer uptick, domestic interstate dealmaking activity remained in a relatively defensive posture for the first half of the year, with just 56 percent of deals occurring across state lines—slightly down from the 58 percent for the same period in 2011. We consider an interstate rate above 66 percent as representative of a clear growth-oriented deal-making environment. The message here is that economic uncertainty is still a drag on our industry.

**U.S. Buyers Going Global:** The first half of 2012 saw U.S. firms announce 11 international acquisitions, on pace with last year. For 18 months, U.S. firms have been buying overseas at a greater clip than ever before. This is indicative of what we continue to hear from the largest firms in the industry—that they see overseas markets as yielding greater opportunities for growth, at least until the U.S. political and economic outlook becomes clear. Conversely, U.S. firm sales to international buyers continued to decline from the highs of 2007 and 2008. Just five U.S. firms sold to non-U.S. buyers in the first six months of the year to continue a downward trend. While overseas buyers still consider the U.S. market attractive, they see fewer robust M&A opportunities in the energy and natural resources markets of Canada, South America, Middle East and North Africa, South Africa, Australia and New Zealand.

**Publicly Traded Firms Quiet:** Domestically, fewer than one in 10 deals involved a publicly traded buyer. This represents the lowest level of activity on the part of publicly traded firms in the first half of the year since 2009. Typically, larger publicly traded firms are involved in one in five deals, or more. Globally, publicly traded firms were also underrepresented compared with historical performance. Through the end of June, publicly traded firms accounted for just north of one in four deals, the lowest totals since the first half of 2007.

**Outlook**

We anticipate the summer sizzle to continue through the second half of the year. We’re tracking deal activity in all sectors and seeing particular interest in the domestic energy and buildings (structural and MEP) segments.

**ACEC Dealmakers:** Some notable deals involving ACEC Member Firms during the second quarter included:

- **Int’l Sellers to US Firms** 14
- **US Sellers to Int’l Firms** 9
- **Total Int’l Sellers** 89

To view the most up-to-date and “live” versions of the M&A heat maps accompanying this article and to see who are the buyers and sellers in each state, go to www.morrisseygoodale.com.

**Visit the M&A Takeaway video that accompanies this article, presented by Mick Morrissey at www.MorrisseyGoodale.com/ACECMergers/SeptOct2012.**

Mick Morrissey is managing principal of Morrissey Goodale LLC, a strategy, M&A and human capital solutions firm serving the A/E/C industry. Reach him at mmorrissey@morrisseygoodale.com.
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