ARKANSAS CONGRESSMAN
BRUCE WESTERMAN
An Engineer’s Perspective on Policymaking
Now Insuring 100,000 ACEC Member Lives... and Counting!

Discover What More and More ACEC Member Firms Already Know: ACEC Life/Health Trust Healthcare Plans Add Value

Since 1965, the ACEC Life/Health Trust has continued to evolve as the “go-to” source for quality healthcare benefits among ACEC member firms. And this year, as we pass the 100,000 mark for member lives insured, we continue to stand as the industry’s best healthcare option.

Ask around. With so many ACEC member firms already in the program, someone you know is likely benefiting from one of our healthcare plans today.

Contact ACEC Life/Health Trust at sales@ACECLifeHealthTrust.com or call 844-259-0325 for details!
“Engineering is a great background to have to serve in Congress because engineers are taught how to solve problems, be very analytical and take some of the emotion out of the decision and concentrate on the facts.”

Congressman Bruce Westerman
“Whether I’m training a Special Forces driver in tactical roadway maneuvers, or my son how to drive, I need to know my students can hear me. I choose to train on asphalt roads because they produce less pavement-tire noise, guaranteeing I’m heard, even when my son pretends he isn’t listening. That matters.”

-Guy Frank | Tactical Driving Instructor | Dad

A QUIET RIDE
It’s just one of the ways asphalt delivers drivability.
Engineering Inc. promotes the advocacy and business interests of ACEC by offering news, legislative analysis and business practice information to member firms, clients, opinion leaders and policy makers.

The articles and editorials appearing in this magazine do not represent an official ACEC position or policy unless specifically identified as doing so.

FEATURES

14

THE DAVE RAYMOND LEGACY
Twenty years as ACEC president/CEO, Raymond and Council members reflect on the Council’s growth.

27

SECOND TIME AROUND
ACEC/PAC exceeds $1 million funding objective for second consecutive year.

43

WORLDWIDE INNOVATION
Engineering excellence on display.

48

FAR COMPLIANCE STRATEGIES
Conforming to complex federal agency contracting requirements.

53

ACROSS THE FEDERATION
ACEC/West Virginia campaign scores $1.6 billion roadbuilding win.

DEPARTMENTS

4

FROM ACEC TO YOU
Progress on infrastructure.

6

MARKET WATCH
Office construction put-in-place expected to moderate in coming years.

8

LEGISLATIVE ACTION
Administration unveils $1.5 trillion infrastructure proposal.

54

MERGERS AND ACQUISITIONS
Signs hint at robust deal-making in 2018.

57

MEMBERS IN THE NEWS
Giovenco named CEO of Bergmann Associates; Grigg named president and CEO of Fuss & O’Neill; SCI Engineering appointed Harms CEO and Harding president; Solomon named president and CEO of SAM, LLC.

60

BUSINESS INSIGHTS
Structural engineering risk management program; 33 Proven Secrets to Writing Successful Client-Centered Proposals.
Progress on Infrastructure

Details have finally been released on the President’s proposed $1.5 trillion program to rebuild the nation’s infrastructure, and while the extent of funding and final shape of the program will be debated in Congress, the good news is that a proposed plan at long last is now on the table.

We intend to work with Congress to beef up many aspects of this proposal—to shore up the Highway Trust Fund (by implementing a gas tax increase if we can get it), raise the level of direct federal funding to a much larger figure than the $200 billion provided for and maximize the use of private investment in ways that make sense.

Despite the distractions in Washington right now on many fronts, the fact is that infrastructure remains an area in which bi-partisan consensus can be reached. Getting such a bill done in the current diversion-filled political environment will be a challenge, but ACEC is all in, working closely with a broad coalition of business and labor groups.

ACEC’s “citizen lobbyists” also have a key role in this—as they have had in the recent tax reform legislation that proved so successful for us. Our upcoming Annual Convention in Washington (April 15–18) will include a major push for final passage in Congress.

Arkansas Representative Bruce Westerman—our cover interview in this issue of Engineering Inc.—brings a unique engineer’s perspective to deliberations in Congress (see page 10).

Also of special interest is a recap of ACEC/PAC’s successful 2017 fundraising campaign, with a list of all contributors (see page 27); strategies for successful FAR compliance on your government projects (see page 48), and latest on M&A and project innovation.

An outstanding lineup of business and political experts await attendees at our upcoming Annual Convention—including Secretary of Transportation Elaine Chao. The convention also features our Engineering Excellence Awards Gala—the Academy Awards of the Engineering Industry—hosted by actor/comedian Kevin Nealon (see page 5).

We look forward to seeing you there.

Sergio A. Pecori
ACEC Chairman

David A. Raymond
ACEC President & CEO
2018 ANNUAL CONVENTION and LEGISLATIVE SUMMIT

MARRIOTT WARDMAN PARK
WASHINGTON, D.C.

#ACECAnnual2018

KEYNOTE SPEAKER
The Honorable Elaine L. Chao
U.S. Secretary of Transportation

NATIONAL POLITICS IN THE AGE OF TRUMP
Steve Schmidt
Republican Political Strategist; former Deputy Assistant to President George W. Bush

Tucker Carlson
Conservative Commentator and host of Tucker Carlson Tonight on Fox News Channel

P3S – WHAT WORKS – WHAT DOESN’T
Russell McMurry
Commissioner, Georgia Department of Transportation

Bob Schillerstrom
Chairman, Illinois Tollway Board of Directors

Beverly Swaim-Staley
President & CEO, Union Station Redevelopment Corporation, Washington, D.C.

U.S. ENERGY PRIORITIES
The Honorable Paul M. Dabbar
Under Secretary, U.S. Department of Energy

U.S. ENERGY MARKETS AND CHALLENGES
Steve Edwards
Chairman & CEO, Black & Veatch

Jack Hand
Chairman, POWER Engineers

Dan Lumma
President, Kiewit Engineering

THE POLITICS OF INFRASTRUCTURE
A discussion with three prominent lawmakers, moderated by Mike Allen, Political Analyst and Co-Founder of Politico

Celebrity Master of Ceremonies, Kevin Nealon
In recent years, the office market has been one of the most robust sectors in the engineering industry. However, growth in this sector will continue at a more measured pace for the next few years.

From 2014 to 2016, construction put-in-place in the office market grew at an annual rate of 21 percent, rising from $39 billion annually to more than $67 billion annually. The pace slowed in 2017, but the sector still grew by a hefty 9 percent. According to FMI's Construction Outlook 3rd Quarter 2017, the office market sector will grow by 9 percent again in 2018, but then there will be a gradual tapering off over the next years to just 2 percent annual growth in 2021.

Two factors will contribute to that growth in the short term. First, the national office vacancy rate remains steady, around 13 percent, which suggests a stable relationship between supply and demand.

Second, job growth continues to be strong. “Job growth is the key to office developments,” says Roy Wilshire, senior vice president at Kimley-Horn in Dallas. “When you have new jobs coming into an area, that produces demand for office space.”

Looking behind those numbers, a severely bifurcated market is revealed. FMI's data shows urban markets performing well while suburban and rural markets are lagging. The downtown vacancy rate is 10.6 percent compared with the suburban rate of 14.1 percent. Furthermore since the Great Recession, the 100 largest U.S. metropolitan areas have added 6 million jobs while rural areas still have fewer jobs than in 2007.

Another indicator of the strength of urban markets in 2017, 40 percent of new office square footage came from office projects with six or more stories, which tend to be in downtown areas. During the prior peak in office construction in 2007, only 22 percent of new office square footage came from high-rises. Among urban areas, New York City and the San Francisco Bay Area stand out as both the largest and the strongest markets, followed by Washington, D.C., Dallas and Atlanta.

In 2017, 40 percent of new office square footage came from office projects with six or more stories.

**STRONG SEGMENTS**

Many of the market segments that have been strong in recent years continue to do well, including corporate relocations and data centers. “With the growth of the cloud, we’re seeing a lot of activity in data centers,” says Wilshire.

Wilshire says Kimley-Horn is also doing a lot of work in “mixed-use walkable environments” that include an office component—especially those built around transit locations.”

Angie Lee, global workplace leader at Stantec in Chicago says one of her firm’s fastest growing markets is office building repositioning. “A landlord will have a Class C or B- asset and they want to bring it up to Class B or B+ to attract the next generation of tenants,” she says. “In some instances, we take the building down to the structure for full repositioning. In others, we focus on refreshing such as upgrading the entry and lobby and adding amenities.”

The advent of shorter leases has also resulted in more work for engineering firms, says Lee. “We rarely see 15-year leases anymore. Instead it’s five to seven years. That churn has created a steadier market and is a good way to weather the cycle.”
Lee says office designs are evolving rapidly. “There’s a trend toward much more mobile, almost hospitality or homelike environment,” she says. “The Dilbert concept of everyone having their own cubicle is passing.”

A new model for office space design is emerging: “free address” (which Lee describes as being similar to Southwest Airlines’ no-assigned-seat policy). Statistically, around 40 percent of office spaces are empty on a regular basis, due to employees working at home or being on the road during the workweek. Companies are looking to cut down on that idle square footage and be smarter about how they use their real estate, which has a direct impact on their bottom line.

“Where appropriate for that organization, we will work with them to balance a ratio of headcount to seats,” she says.

Companies are investing some of those savings in improving the office environment. “They’re taking the cue from the technology sector,” she says. “Space is becoming a differentiator for recruiting and retaining the best talent.”

**COMPETITIVE SECTOR**

Both Lee and Wilshire say the office market is very competitive. “The sector is pretty commoditized,” says Lee. “Just coming in and doing a great design isn’t enough anymore.”

Stantec and Kimley-Horn promote themselves as full-service providers, handling all the design and engineering for the client from concept to completion. Stantec also has a strong architecture and interior design practice. “We spend a lot of time with our clients to first understand their business,” says Lee. “What are their business drivers and what are their motivations because they’re looking for their workplace to help support their business strategy.”

Client preferences for full-service providers have led to large, national and regional engineering firms dominating the office market, increasing the cost and difficulty of breaking into the sector. “This business is based on relationships,” says Wilshire. “In order to succeed, you need to build and maintain strong relationships with three key groups—local and national developers, brokers who help office users and architects who design offices.”

**Office Construction Put-in-Place**

<table>
<thead>
<tr>
<th>Change from prior year-current dollar basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>2016</td>
</tr>
<tr>
<td>2017</td>
</tr>
<tr>
<td>2018</td>
</tr>
<tr>
<td>2019</td>
</tr>
<tr>
<td>2020</td>
</tr>
<tr>
<td>2021</td>
</tr>
</tbody>
</table>

Source: FMI Construction Outlook 3rd Quarter 2017

Gerry Donohue is ACEC’s senior communications writer. He can be reached at gdonohue@acec.org.
n his State of the Union address, President Trump called on Congress to pass an infrastructure package that generates $1.5 trillion in total investment over 10 years. The administration's subsequent budget request identifies $200 billion in federal funds, which would be used to leverage additional state, local and private sources of funding.

The plan would allocate 50 percent of the funds to incentive grants for a wide range of eligible projects, including surface transportation, airports, maritime and inland waterways and ports, flood control, water supply, hydropower, water resources, drinking water, storm water facilities, brownfields and Superfund sites. Funding would be limited to a 20 percent federal cost share, and the selection criteria would include a “look back” period for state and local revenue measures in recent years.

Twenty-five percent of the funds would be directed to a rural investment program, including transportation, broadband, water resources, and electric generation, transmission and distribution projects. Most of the funds would be apportioned to states via a formula based on the ratios of rural highway lane miles and rural population totals, and the governor of each state would control the funds.

Ten percent would be allocated to high-risk “transformative projects” and seven percent for increases to federal credit programs such as TIFIA and WIFIA. The plan also lays out recommendations for expanded eligibility for Private Activity Bonds, additional tolling authority on interstates and other financing measures, as well as aggressive reforms to environmental review requirements to speed up project delivery.

The proposal does not address the long-term solvency of the Highway Trust Fund or additional funding through existing federal infrastructure accounts, both ACEC priorities.

“The president’s focus on infrastructure is commendable, but without real federal funding to address the huge backlog of desperately needed improvements, the president’s $1.5 trillion pledge would be no more than a mirage,” said ACEC President and CEO Dave Raymond.
Infrastructure Package Emphasizes Permit Streamlining

As part of the $1.5 trillion infrastructure package, the Trump administration has a detailed set of draft legislative principles for permit streamlining to accelerate federal reviews and approvals of projects, with the goal of removing delays in construction startups.

The principles envision a comprehensive approach across all major federal permitting agencies and infrastructure sectors, with emphasis on the National Environmental Policy Act, Clean Air Act, Clean Water Act and the National Historic Preservation Act.

The plan proposes a “one agency, one decision” approach to environmental review, greater delegation of federal authority to the states, pilot programs to test opportunities for permitting efficiencies, and a realignment of judicial authority to accelerate review of permitting decisions across infrastructure sectors.

Tax, Labor Regulatory Actions a Priority for 2018

Following passage of the Tax Cuts and Jobs Act (H.R. 1), the Department of Treasury began reviewing the law and analyzing new provisions to begin implementing regulations.

In addition to international tax code changes, Treasury officials have stated that the top two domestic priorities are the new 20 percent tax deduction for passthrough firms and the limitation on interest expense deductibility.

ACEC worked with Congress to ensure that A/E firms would have access to the 20 percent deduction.

The Department of Labor (DOL) is expected to release a new proposed overtime pay rule in 2018. A federal judge struck down the 2016 overtime pay rule in August 2017, and ACEC submitted comments on a DOL request for information to reopen the rulemaking process, expressing support for a more moderate increase in the overtime pay salary threshold. The Council expects to comment on the new proposed rule once it is issued.

In addition, ACEC and the ACEC Life/Health Trust have submitted comments on a separate DOL rule that is designed to facilitate the formation of association health plans. The Council and the Trust raised concerns about a requirement in the proposed rule that could make it harder for the Trust to offer competitive health insurance rates to firms of all sizes.

The Federal Energy Regulatory Commission has recommended approval of supply chain cyber security standards submitted by the North American Electric Reliability Corp. (NERC) late last year.

ACEC was successful in getting NERC to drop proposed contract language that would have created unreasonable liability for engineering firms in the event of a breach of utility cyber security. Original contract language recommended by the Department of Energy included prescriptive provisions that pushed liability down the supply chain to vendors such as engineering firms. The new standard incorporates a risk-based approach that limits prospective liability for A/E firms.

ACEC’s Supply Chain Cyber Security Workgroup will continue to engage in the process.
Congressman Bruce Westerman is currently serving his second term as an Arkansas representative, having first been elected in 2014. He is a member of the House Budget Committee, the Transportation and Infrastructure Committee and the Committee on Natural Resources. He also is one of the few members of Congress who are licensed professional engineers. He was named Engineer of the Year in 2013 by the Arkansas Society of Professional Engineers.

In this exclusive interview with Engineering Inc., Westerman discusses the prospects of an infrastructure bill, the economic implications of the new tax law and why his engineering background serves him well as a congressman.
ACEC: How has your training and experience as a professional engineer affected your role as a legislator?

Congressman Bruce Westerman: Engineering is a great background to have to serve in Congress because engineers are taught how to solve problems, be very analytical and take some of the emotion out of the decision and concentrate on the facts. That’s where my engineering training has been invaluable for me while serving in Congress.

ACEC: Do you think having more engineers in Congress can make a difference on legislation such as transportation and energy?

Westerman: It should be a plus. One thing I’ve noticed about Congress is that if you have expertise on an issue that comes up, you generally get an opportunity to weigh in on that issue because your colleagues respect your expertise. We’ve had some issues in the past, and the fact my colleagues knew I had an engineering background added a little more weight to my perspective.

I believe we need more engineers in elected office across the board. I talk to a lot of engineering groups and to engineering students, and I always encourage them to get involved in politics, whether they are going to run for office or not. The fact is the laws and rules propagated by those in elected office can have a lot of impact on engineering careers and what happens with the economy. It’s just important that engineers become more involved. I don’t know the exact number of engineers currently in Congress, but I do know there are two engineers who were just elected by special elections—Ron Estes, R-Kansas, and Greg Gianforte, R-Montana.

ACEC: What is the stretch from being trained as an engineer to going into public policy?

Westerman: For me it was simply taking the opportunity to get involved. The first office I ever ran for was the local school board. My engineering background worked well for me there because they were looking at a construction project and had to deal with a lot of things that come naturally to engineers—managing projects, understanding how projects flow—things that were second nature to me but a void to the rest of the board as well as the administration. I had no ambitions of serving in Congress when I ran for the school board, but from there I went to the state legislature and then to Congress.

ACEC: Do you have suggestions for engineers who are interested in getting more involved in politics, policy and legislation?

Westerman: Whether it’s a volunteer position such as serving on a school board, city council, county government or one of the volunteer organizations, there are always places engineers can get involved. I believe that anywhere an engineer chooses to become involved, they will find that their background and expertise are needed. Our church was hit by a tornado and since I’m a deacon of the church, and an engineer, they made me chairman of the rebuilding project.

As engineers we have things we can share that will benefit other people although that’s not something we always realize. But it takes being active and getting involved, something engineers should do more.

One thing my office has done on getting more engineers interested in public policy has been to start an engineering internship program. We’re doing that with the Association of Engineering Deans. John English, dean of the University of Arkansas College of Engineering, created a program to provide scholarships for students to come to Capitol Hill in the summer to intern in my office as well as with the House Transportation and Infrastructure Committee. North Carolina State has a similar program. It would be great to see those kinds of programs expanded.

ACEC: What is your prognosis for whether we’re going to get an infrastructure bill, and what do you think some of the dimensions of that bill might be?

Westerman: I have yet to meet anybody in Congress, or anybody in the administration, who doesn’t want to see an infrastructure bill. People recognize the need for infrastructure. It’s not something that’s politically motivated. You can see the deterioration of the roads, inland waterways and airports. There’s a huge demand for rural broadband, which particularly affects my district.

We know the infrastructure needs are there, the problem is how do you fund it. I know it’s one of the top priorities of the administration. We’ve already talked about it in the House Republican Conference. The big priority starting off 2018 is what we do with the infrastructure package. As a member of the House Transportation and Infrastructure Committee, I hope to bring some new ideas on how we fund infrastructure.

There’s talk about public-private partnerships, and that works great in urban areas with a lot of use demand. But in rural areas, such as my district, you probably won’t get too many public-private partnerships. We have an infrastructure funding formula that’s not relevant anymore, and when it was first put in place, there were things you could not foresee in the future, such as increased miles per gallon on vehicles and electric vehicles. We have a lot of vehicles on the road that are paying zero to use that infrastructure.

While we generally think of infrastructure as roads, we must also consider our inland waterways, which are important in transporting so much of the nation’s freight. An example is the McClellan–Kerr Arkansas River Navigation System in my district, which is in major need of repair. A tremendous amount of freight depends
on that system, and while it may often be out of sight and out of mind, just let one of those gates on the lock and dam fail. You’ll see an immediate influx of tractor-trailer rigs out on the interstate, putting more people’s safety at risk and adding to the wear and tear of the infrastructure. Everybody in our country depends on our infrastructure system.

ACEC: Do you think Congress will take up a single infrastructure bill that covers a variety of infrastructure needs such as water, transportation and communications, or do you think it will be more segmented? Also, will the Water Resources Development Act (WRDA) be included?

Westerman: As it stands now the goal is for a broad infrastructure plan. Whether WRDA will be included is still being decided. There are so many negotiations that have yet to take place. Most importantly, we need to figure out how to pay for it. I think high-speed broadband will also be in the plan, plus a lot of innovative ways to fund infrastructure. The key comes back to how much can we afford.

ACEC: As you know, Congress in late December cleared the first major tax reform bill in over 30 years. From your perspective, how will the new tax law help the economy and job growth going forward?

Westerman: I think we’re already seeing an impact from the new tax law. We’re seeing millions of employees getting bonuses from their employers as a result of the tax bill. We’re seeing companies talk about billions of dollars of investment, and I believe that’s only going to grow. The problem I see is that the economy will be growing so well that we’ll need to do a better job of training people to fill any new jobs. We have 24 million able-bodied, working-age adults sitting on the sideline right now. We need to use federal policy to motivate them even more to enter the job market. Having good jobs and a demand for labor is a key part of sustaining that economic growth.
Over the past two decades, the American Council of Engineering Companies has grown in membership and stature, and become a powerful voice on Capitol Hill, and in state capitals throughout the nation—with outgoing President/CEO Dave Raymond at the center of it all

When Dave Raymond took over leadership of the American Council of Engineering Companies in March 1999, he knew the job was right for him. He did not know he’d become a “lifer.”

“With my background in both engineering and public service, I thought my qualifications were a good fit, and the role offered me a new challenge,” says Raymond, who will retire from his post this spring after nearly two decades of service.

“I didn’t think of a time limit, but I certainly didn’t think I’d be here until retirement,” he adds.

Raymond came to the organization after 20 years in the engineering industry, with executive experience at firms around the country, including Raytheon and Enserch Corp. He’d also worked for a U.S. senator on Capitol Hill and had roles at executive branch agencies.

When he arrived at ACEC, he says, he found a “sleepy” association in need of a jump-start. But, as he got to work, Raymond became excited by the possibilities of turning the organization into what members now call a “powerhouse.”

“It was presented to me as an organization that had great potential but was not operating on all cylinders,” Raymond recalls.

“When I came here, I found that was an apt description. So, we got busy. We brought in many capable people who have performed very well, and we’ve empowered staff to do much more than they ever could before. I could see the fruits of the effort that was being put in. We were pleased and excited by the outcomes, and it was fun, as well.”
Those outcomes include membership growth, improved relations with state organizations, major legislative and regulatory wins, and one of the country’s largest political action committees, as well as world-class communications, educational programming and conferences.

“When Dave arrived, we were an organization that offered education programs to its members, and we did a reasonably good job at that, but we were not very effective as a lobbying entity,” says Terry Neimeyer, CEO at the Maryland-headquartered KCI Technologies, and chairman of ACEC from 2011 to 2012. “You go to Washington, D.C., and talk to any of the folks in power, and they know who ACEC is. That, to me, has been Dave’s biggest legacy.”

“I’ve seen a move to excellence on almost every level,” says Mary Ann Emely, ACEC’s vice president and COO, who joined the staff in 2001. “Over the years, we’ve replaced every staffer who left with a higher-qualified person. We’ve built a top-level team. Everything is being done at a much higher level than it was 15 or 20 years ago, and our members recognize that. Dave wanted to build a top-tier organization, and we’ve accomplished that.”

**BIGGER AND STRONGER**

While there’s no single metric for judging the strength of an industry association, membership levels and staff quality are good places to start. In both cases, Raymond and ACEC set new standards.

Over the past 20 years, the portion of eligible ENR Top 500 Design Firms that are ACEC members increased from 70 percent to a current 87 percent (including 90 percent of the ENR Top 100). ACEC now has more than 5,000 Member Firms, representing more than 600,000 A/E professionals.

Membership growth has reflected ACEC’s ability to demonstrate the enhanced value of the organization. “They have found us to be a hard-hitting organization working on behalf of their interests,” Raymond says.

To improve quality of staff, Raymond says he not only pushed for more competitive compensation, but also made a point of
“Since Dave took over in 1999, ACEC has gone from a more internally focused business league to a legislative powerhouse. This was a game-changing adjustment.”
— Jay J. Simson, president, ACEC/New York

“Over the last 20 years, ACEC has become a lean, mean fighting machine.”
— Eric L. Flicker, 2003–2004 ACEC chairman

“Membership value of our Council has become strengthened to the point where it is viewed as the standard to which other engineering associations throughout the world aspire.”
— Gregs Thomopulos, 2013–2014 ACEC chairman
2009–2011 FIDIC chairman

“Everything is being done at a much higher level than it was 15 or 20 years ago, and our members recognize that. Dave was the driving force on this mission. He has wanted to build a top-tier organization, and we’ve accomplished that.”
— Mary Ann Emely, ACEC vice president and COO

“Dave has made ACEC a leader in the design community and a powerful force on Capitol Hill. My members see the value of ACEC now more than ever before.”
— Alison Davis, executive director, ACEC/Oregon

“You go to Washington, D.C., and talk to any of the folks in power, and they know who ACEC is. That, to me, has been Dave’s biggest legacy.”
— Terry Neimeyer, 2011–2012 ACEC chairman

“Our stature and relevance have been enhanced on both the national and international stage. He has brought a high level of professionalism, intellect and energy.”
— Orrin B. “Mac” MacMurray, 2007–2008 ACEC chairman

“In the more than 25 years that I have been active in ACEC, I have seen Dave take ACEC from a VW bug to a finely tuned Mercedes Benz, becoming the high performance organization we see today.”
— Robin Greenleaf, 2009–2011 ACEC vice chair
Wins on Capitol Hill

Perhaps the best-known examples of ACEC achievements over the past two decades are in the government advocacy area. “Our advocacy, under the skillful leadership of Steve Hall and a top-notch lobbying and political team, has been second to none,” says Raymond. “All our programs—from advocacy to education to communications—reinforce each other, and the professional staff are quick to support each other. I am so proud to be one of them.”

Expansion and Defense of QBS—ACEC has been relentless in its advocacy of Qualifications-Based Selection (QBS). The organization successfully lobbied the Federal Highway Administration to prevent state DOTs from putting projects out to bid in “reverse auctions,” effectively defended numerous challenges to QBS, including those from the Federal Emergency Management Agency, the U.S. Forest Service and other federal agencies. ACEC has also worked effectively with its state organizations to promote and protect QBS, and commissioned a 2009 study by the University of Colorado and Georgia Tech, which highlighted the benefits of QBS in terms of reduced costs and project success.

Reducing Taxes—ACEC achieved a historic win for engineering firms in the 2017 tax reform law. The legislation lowers the corporate tax rate to 21 percent and creates a 20 percent tax deduction for passthrough firms, including S corporations, partnerships and LLCs. In the original House and Senate bills, engineering passthroughs were limited in their access to the passthrough deduction, but after ACEC’s relentless lobbying, the final bill provided engineering firms with full use of the deduction.

The New York Times, The Wall Street Journal and other national print and TV media highlighted engineering firms as big winners in the tax bill, compared to other industries, including accountants, doctors, lawyers and financiers, which did not receive full access to the 20 percent passthrough deduction.

The 2004 passage of the American Jobs Creation Act included a 9 percent tax break for domestic manufacturing companies. ACEC successfully argued that the deduction should apply to engineering firms, as well. “The manufacturers were negotiating for this benefit, and when we found out about it, we said, ‘Wait a minute, we’re in the same situation in the services industry,’” Raymond recalls. “Congress agreed with us, and they gave us the deduction, too. That wouldn’t have just happened automatically. We found the hole, and we ran through it and scored the points.”

(continued from page 17)

subsequent years, each of the Member Organizations adopted the new ACEC brand as their name and by doing so also subscribed to a potentially more effective and mutually reinforcing alignment between the national office and the state organizations.

“When I came to ACEC, relations between state organizations and the national organization were strained, and what we’ve tried to do is develop more of a family dynamic, where each part of the organization is bolstered by strengthening another part,” says Raymond. “Dave has listened to the leaders in the states,” says Alison Davis, executive director of ACEC/Oregon. “If someone has a comment
Eliminating Onerous 3 Percent Withholding—In 2006, ACEC took the lead of a broad-based repeal coalition—representing more than 100 business and industry organizations—to defeat a law requiring federal clients to withhold 3 percent of payments owed to contractors, including engineering firms.

Although the withholding requirement had been designed to combat tax evasion, ACEC successfully argued that the provision would unfairly punish firms that had done nothing wrong, and create burdensome cash flow problems for both small and large firms.

In 2011, after a long five-year battle, the law was officially repealed.

Emphasizing Contracting Out—In 2000, ACEC led the passage of the Thomas Amendment to the Water Resources Development Act that limited the ability of the U.S. Army Corps of Engineers to compete with private engineering on municipal projects. “The Corps had started to become interested in local utilities work, local school construction and other local projects not within its mission. This was a challenge to the private engineering industry, and we were successful in repelling it,” Raymond says.

The Thomas Amendment was followed up with other contracting out “wins” with state and federal agencies. However, defense of contracting out against union and agency claims that it is cheaper to do engineering work in house is a constant battle for ACEC.

In August 2016, an ACEC-commissioned New York University study—Engineering Design Costs: In-House versus Contracting Out—examined the true costs of state DOTs performing engineering design services in-house versus contracting out to private sector firms and found that savings from contracting out can be 20 percent or more. The report is now being used by State Organizations throughout the nation to educate local lawmakers of the inherent advantages of contracting out.

Prohibiting Arbitrary DOT Caps on Firm Overhead—One of ACEC’s most significant legislative accomplishments occurred in 2005 when the Council secured passage of legislation that restricted the ability of State Departments of Transportation (DOTs) to impose arbitrary caps on firm overhead. The legislation also strengthened rules governing the use of Qualifications-Based Selection on projects involving federal funds.

State DOTs are now required to follow standard procurement requirements under the Federal Acquisition Regulations for determining overhead rates, as well as the recognition of a single cognizant audit to apply for all states, thereby prohibiting the establishment of administrative or de facto caps on indirect costs. Despite strong opposition from state DOTs, ACEC convinced Congress of the merits of adopting uniform procurement rules for federally funded transportation projects to ensure compliance for both industry and government.

or a question about something, Dave takes it seriously. He’s really worked hard to make it so that we’re all working together.”

A POWERFUL ADVOCATE
In conversations with ACEC stakeholders about the most sig-
D.C., and in state capitals in a way that didn’t exist two decades ago.

“ACEC is viewed as a leader by representatives and senators,” says Neimeyer. “A decade ago, they would have just laughed at us and said, ‘Who are you?’ Now, they know who we are.”

Lawmakers also recognize ACEC as a trusted resource when it comes to engineering, says Ronald W. Brenke, executive director of ACEC/Michigan. “I now receive unsolicited calls from members of Congress in my state who would like to talk about various issues affecting our infrastructure. This did not happen 10 years ago,” he says.

“Basically, we have doubled our influence on Capitol Hill,” says Janice Burnett, executive director of ACEC/Arizona.

ACEC’s political influence is bolstered by its political action committee (ACEC/PAC), which under Raymond has grown from around $100,000 in contributions per year to a previously unthinkable $1 million—a number reached by the PAC for the past two years—and providing ACEC $2 million in spending power for each two-year congressional election cycle. ACEC/PAC now ranks in the top 3 percent of all federal PACs nationwide.

“When we got to the halfway point, to $500,000, people said, ‘We’ll never be able to raise a cent more, let’s just call it a day,’” Raymond notes, “but we said no, we’re going to reach our goal.”

“I have members who ask why we’re involved in lobbying and comment, ‘Isn’t that a dirty business?’ ‘My answer is, ‘No, it’s not a dirty business at all.’ On the contrary, it’s very American. We believe that people who have good judgment, who share our own values, should be helped. That has been the basis for our PAC.”

Steve Hall, vice president of government affairs at ACEC, who previously worked for several members of Congress, says he was
only vaguely aware of ACEC before joining the staff in 2001. “It didn’t really have a big profile. I think its members probably always understood the importance of lobbying, but probably didn’t appreciate what was possible. We put wins on the board.”

Eric L. Flicker, senior consultant at Pennoni Associates and the Council’s 2003–2004 chairman, praises the organization’s access to key legislators, the White House, and regulatory agencies and says that the group’s political influence extends beyond Washington. “This has translated to remarkable access at the state level, as well as with financial and leadership support for local issues,” he says. “ACEC understands the relationships between federal and state-and-local issues.”

Success at the state level is also due in part to ACEC’s Minuteman Fund, which supports legislative, regulatory and judicial efforts at the state level. Through a dollar-for-dollar matching program between the national organization and state Member Organizations, the fund, under Raymond, has grown from $100,000 to more than $2.5 million.

**ADDING VALUE THROUGH EDUCATION**

ACEC stakeholders say that the quality of the organization’s educational programming and annual events has also been substantially enhanced over time. Orrin B. “Mac” MacMurray, chairman of the organization from 2007 to 2008, and chairman emeritus of C&S Companies, says that ACEC’s business management education, highlighted by its Senior Executives Institute (SEI), is “unmatched in the industry.”

ACEC’s education programs featuring in-person seminars, online seminars and a host of specialized coalitions and forums are utilized each year by more than 10,000 members, representing 1,250 Member Firms.

Business Resources and Education Vice President Marie Ternieden pointed to Raymond as a key driver of the Council’s ability to provide business education that makes a difference. “The Council has developed ever-expanding and extensive educational programming, including our recent Pathways to Executive Leadership, and the growth of monthly online classes on a variety of critical and bottom-line focused business topics. We are poised for continued growth and a bright, successful future in educating the next generation of A/E business leaders.”

MacMurray noted that under Raymond, the organization’s communications and public relations efforts also has stepped up its game significantly. “When Dave arrived, the ACEC magazine was adrift and unfocused,” MacMurray says. “Today, *Engineering Inc.* is a national and international award-winning publication that’s admired and respected throughout the design and construction industry.

“Also, 20 years ago, it was rare to see ACEC quoted in the press. Now it happens all the time.”

**ANNUAL MEETINGS AND ENGINEERING EXCELLENCE AWARDS**

During Raymond’s tenure, the annual Engineering Excellence Awards became the Academy Awards of the engineering industry—blossoming from a 150-person luncheon into a major black-tie Gala Dinner hosted by Hollywood celebrities and attended by more than 750 members and dignitaries from all over the world.

Over the past six years, attendance at ACEC’s Annual Convention has increased 35 percent to over 1,500, a result that Meetings and Conventions Executive Director Michael Pramstaller attributes to vastly improved programming.

“Part of the growth is definitely due to getting nationally
renowned speakers,” Pramstaller says. Recent speakers have included historian Doris Kearns Goodwin, former CIA and NSA head Michael Hayden and oceanographer Robert Ballard.

GETTING PRESIDENT BUSH
The biggest “get” unquestionably came in 2006, when then-sitting President George W. Bush delivered a speech at the Annual Convention in Washington, D.C. “It’s very hard to get a president to come,” because everybody everywhere is inviting the president to their events,” Raymond notes. “The year we got President Bush, we worked with his staff, and they were very knowledgeable about us. His chief adviser, Karl Rove, had even visited with us at the office.”

Still, Raymond says, Bush’s participation remained in doubt for some time. Initially, the plan was for Bush to make a major infrastructure address, but the administration shifted its focus to health care. “We said, ‘Yeah, we’re all about health care, he can come here,’” Raymond says. “Then they called back and said, ‘No, he’s not going to speak about health care, so he really can’t come and see you.’” So, we asked what he wanted to speak about, and they said he wanted to give an economic address on business conditions.

“I said, ‘We’re all about business. We’re small business, we’re large business, we’re the best at business,’” Raymond recalls. “Every time they said something new, we said we were that! So, he came and gave his midterm economic address at our convention.”

The Engineering Excellence Awards became the Academy Awards of the engineering industry

At the 2010 EEA Gala, Raymond (second from right) and 2009–2010 Chairman Tim Psomas (second from left), celebrate the HDR project team for its “onions to energy” facility, which won the Grand Conceptor Award for the year’s most outstanding engineering achievement.
OVERCOMING SETBACKS
No organization can successfully sail through two decades without experiencing some turbulent seas. For ACEC, those rough waters came with the Great Recession.

“We were hit hard, but not as hard as many other organizations. Some associations went out of business because their members left,” Raymond says. “Even though our Member Firms were reducing staff and our dues income was lower, our firms were not leaving us. We did have to cut some staff, and we tried to do as much of that as possible through attrition. But, unfortunately, we did have to lay some people off, just because there was no other choice.”

Emely says Raymond didn’t arbitrarily make cuts. “He talked to the senior team and the department heads and had us make recommendations on what positions would need to go and why,” Emely recalls.

“It wasn’t forced down on us. We were part of a problem-solving team. We had to make tough decisions, and he supported us.”

Ultimately, Raymond says, ACEC emerged from the recession stronger than before. “As the economy came back, and firms hired more employees, there was an increase in dues to ACEC, as well,” he says. “We used the opportunity for hiring to improve the general competency of our staff. We’ve always hired people who were stronger than their predecessors. We’ve kept that going over a long period of time, so that now, we have a strong organization with a deep bench.”

THE LEGACY THING
By all accounts, Raymond is leaving ACEC stronger than when he arrived. For several consecutive years, independent auditors have praised ACEC’s “well-designed policies, procedures and practices.” During the 2017 audit, analysts called the association’s management “exemplary.”

“I think we have evolved into an organization that provides good value in the many areas our Member Firms consider most important,” he says. “And we’ve helped create a business environment in which our firms can thrive, whether through legislation or educational programs, to help them run a better business. I think we’ve done those things.”

It’s difficult to find anyone who disagrees. “What Dave has done is to focus single-mindedly and relentlessly on vital issues for our industry, rather than frittering away time and resources on a range of side matters. This rifle-shot focus has allowed ACEC to play above its weight class with impressive results,” says current ACEC Chairman Sergio “Satch” Pecori, who is also chairman and CEO of Hanson Professional Services. Tim Psomas, 2009–2010 ACEC Chairman and chairman emeritus at Psomas says: “I particularly appreciate his laser focus on the vital issues that have propelled the organization forward. Our strong government affairs team and our education programs are also great examples of the legacy Dave leaves at ACEC.”

“Dave has taken every aspect of ACEC and elevated it not just to the next level but even higher,” says Peter Strub, who served as 2016–2017 ACEC chairman, and is senior vice president at TranSystems Corp.

“The accomplishments during his tenure are unprecedented and undoubtedly have positioned ACEC as a leader among professional associations,” says Flicker.

“We’re going to miss him,” says Neimeyer. “He’s led ACEC to new heights.”

With Raymond’s upcoming retirement, a high-level Search Committee led by former chair Gregs Thomopulos has conducted a wide-ranging national selection process for a worthy successor. Although his act will be a tough one to follow, Raymond is convinced that “because the Council has such extraordinary staff and talented members, the new CEO will be able to get off to a strong start and take the Council to even greater heights.”

Calvin Hennick is a business, technology and travel writer based in Milton, Massachusetts.

“"We can all be proud of ACEC’s phenomenal growth and achievements—the product of countless dedicated members and talented staff. I have been blessed with an extraordinary staff, and I credit them with all of our successes.”" DAVE RAYMOND

Dave Raymond (center) with his Management Council Team, from left to right: Mike Pramstaller, executive director, meetings and conventions; Marie Ternieden; vice president, business resources and education; Steve Hall, vice president, government affairs; Melissa Thompson, executive assistant and corporate secretary; Mary Ann Emely, vice president and COO; Leo Hoch, executive director, business relations and membership; Kim Pham, CFO; Alan D. Crockett, director, communications and media; and Charles Kim, general counsel, director, policy and strategic planning.
100+ CLIENTS
IN THE AE SECTOR

EXPERIMENTAL FINANCIAL ADVISORS TO MIDDLE MARKET COMPANIES

STRATEGIC ADVISORY
- Ownership Advisory
- Executive Compensation & Benefits
- Risk Mitigation

EXECUTIVE COMPENSATION
- Consulting
- Corporate Advisor

AGILE FRAMEWORKS
- Corporate Planning
- Corporate Advisor

MCKIM & CREED
- Ownership Advisory
- Consulting
- Corporate Advisor

ALLIANT
- Ownership Advisory
- Consulting
- Corporate Advisor

SEBESTA
- Sale of the Company to NV5 Global, Inc.
- Financial Opinion

TRANSACTION OPINIONS
- Fairness Opinions
- Solvency Opinions

ECI ELECTRICAL CONSULTANTS, INC.
- Newly formed ESOP
- acquired minority interest
- Financial Opinion

SSR SMITH SECKMAN REID, INC.
- 100% ESOP Transaction
- Financial Opinion

RMC
- Sale of the Company to Woodard & Curran, Inc.
- Financial Opinion

www.chartwellfa.com
LEARN MORE BY ATTENDING OUR SESSIONS AT THE ACEC ANNUAL CONVENTION!

CFO Roundtable
Chris Staloch
Managing Director

New Tax Law Impact on Valuation
Joe Skorczewski
Principal

Advanced ESOP Topics
Ryan Graham
Principal

Sustainable Ownership
Tim Cleary
Managing Director

Chartwell is proud to be a Gold Sponsor of the ACEC 2018 Annual Convention and the Anchor Sponsor of the CFO Council’s Finance Track since 2012!
This bridge has a story.

When told and marketed just right, its story will deliver all the right business results—and help you land your next big client project.

Contact us today to learn how our content marketing experts can convert your admirers into leads, your leads into qualified prospects, and your prospects into clients.

Let’s get started.

imagination.

Specializing in content marketing for engineering and construction thought leaders

Chicago • Washington, D.C.

imaginepub.com

Contact Erin Slater at eslater@imaginepub.com
NEW POLITICAL

Heights

ACEC/PAC surpasses its million-dollar goal for the second consecutive year as more states increase PAC participation

BY STACY COLLETT
Another record-breaking year for ACEC/PAC with $1,069,204 in contributions from 2,998 participants nationwide. Disbursements in 2017 totaled $541,100, which is likely to exceed $2 million at the end of 2018, a congressional election year.

As the nation’s only political organization representing the legislative interests of engineering firms, ACEC/PAC has an essential role in the success of ACEC’s advocacy program, by supporting federal candidates on a bipartisan basis who support the engineering industry’s agenda in Congress.

That essential role was never more evident than last year.

In 2017, ACEC/PAC made its voice heard on several key issues including: killing the Department of Labor’s blacklisting and overtime pay rules; reducing A/E liability in the FERC cybersecurity rule; achieving go-ahead on pipeline projects and permitting reforms; and expanding QBS in pending FAA and water bills.

None, however, was as important as the year-end tax reform law where ACEC achieved a lowered corporate tax rate from 35 percent to 21 percent and a new 20 percent tax deduction for pass-through firms, including S corporations, partnerships and LLCs.

“These wins were made possible by an aggressive advocacy effort fueled by generous contributions to ACEC/PAC,” says ACEC President/CEO Dave Raymond.

ACEC/PAC is currently the largest PAC in the design industry and ranks in the top 3 percent among all association PACs.

ACEC/PAC National Chairman Charles Gozdziewski attributes the PAC’s steady rise in contributions to expanded leadership, longer terms for PAC champions, increased communications with Member Firms and more face-to-face meetings to share the benefits of PAC participation. The changing political landscape provides unique opportunities for ACEC to continue influencing upcoming elections and future legislation.

“There are a lot of elected officials who are retiring. These open seats are generally more expensive elections, but they’re also the most important because you have a chance to help elect a new person whom you could establish a long-term relationship with,” says Gozdziewski, who is also executive chairman of Hardesty & Hanover. “Early support is never forgotten by a candidate.”

The message is being heard and our voices are much stronger as a group than they are individually.”

As Missouri’s PAC fundraising started gaining momentum, it attracted Member Firms to an October Ryder Cup-type golf tournament against Illinois PAC Member Firms. With just hundreds of dollars to go to reach its goal, ACEC/Missouri held a raffle at its November meeting, which helped put Missouri over the top.

“Hit that goal is amazing,” says Alper. “I’m hoping that now it will be engrained in our ACEC/Missouri culture going forward. The message is being heard and our voices are much stronger as a group than they are individually.”

Other states are sure to follow in the coming year, according to Gozdziewski. “You can’t do it overnight. If we can chip away and get one or two states every year to reach their goal, that would be great.”

One example is ACEC/California, which made great progress in 2017 reaching 62 percent of its goal for the first time, and raising nearly $53,000, well over the $43,000 in PAC funds the state raised in 2016.

Another example of this is ACEC/Maine, which made its goal for the very first time in 2017 due to a strong final month push by its leadership.

ROOKIE STATE MAKES FIRST-YEAR GOAL
Rhode Island became an official PAC affiliate in October 2016 and participated in PAC fundraising for the first time in 2017. Under the leadership of Executive Director, ACEC/Rhode Island, Marcel Valois, the state made its goal with one event uniquely suited for its members.

“We wanted to do a social event that focused on PAC objectives but also that would attract a lot of younger members of firms,” Valois says. The state PAC leadership created a team bowling competition called Pins for PAC.

“We took over a bowling alley and invited all of our firms to sponsor a lane and to bring teams of their employees,” Valois says. Twenty-two firms sponsored lanes of five to six bowlers each, and each bowler contributed $25 to ACEC/PAC. “They had a great time. It provided everyone with a great networking opportunity. Most importantly, everyone contributed a modest amount to the PAC.” The Rhode Island PAC reached its first-year goal, by raising $4,300 in one evening.

Valois believes next year’s fundraising will be easier now that participants have the event on their social calendars, but PAC Cham-
pions and leadership will have to step-up its communication with PAC participants to drive more contributions.

“We’re going to have to get into the weeds a little deeper by communicating what the PAC has done, and where they’ve invested their dollars and by also building understanding of the continuous value that PAC provides them,” says Valois. “Once you find the magic formula, then it becomes motivation. Then it’s keeping the information flowing to membership so they will continue their support. If you strongly believe in the objective, it sparks motivation and leaders push it. We think that’s the magic formula for success.”

LEADERS OF THE PAC

Perennial fundraising leaders Illinois and New York were neck and neck in December 2017 vying for the title of “most funds raised by any state.” In early December, New York was $1,000 ahead, but Illinois vowed not to go down easily. Defending champion Illinois blew by its ACEC/PAC goal in the third quarter and then set its sights on topping $80,000, representing a new state and national record.

“Part of our success is holding on to the contributors that we have. But we are being more aggressive about the outreach to individual firms,” says John O’Neill, vice president and office executive for Michael Baker International, who is Illinois PAC co-Champion along with Charles “Chip” Craddock, executive vice president and COO at Clark Dietz, Inc., and Mark Harms, president of SCI Engineering, Inc. “We will establish a goal for each of our Member Firms based on their participation in the organization. We’re setting the tone—to donate at a certain level by function. Once people are part of it and feel invested in it, then they start to see the payback and it becomes easy to keep them.”

Not to be outdone, ACEC/New York also reached its $60,000 PAC goal in the third quarter but refused to stop fundraising as it raced to stay ahead of Illinois’ PAC. “It’s a friendly but intense rivalry, and it keeps us spirited,” Gozdziewski says. “I would encourage similar competitions among other states for bragging rights.”

New York PAC relies on repeatable regional events, including golf, hockey games, dinners and theater events to raise funds. “We need to have a PAC that’s sustainable and not reliant just on the PAC co-Champions,” Gozdziewski and co-Champion and AECOM Vice President Tom Cascino say. “Going forward, all these regions will know about set PAC events and put them on their calendars.”

In the end, New York edged Illinois by raising $83,923 to Illinois’ $82,370. Both states raised more than any other Member Organization in 2017 and more than any state in ACEC/PAC history.

ONE SIZE DOES NOT FIT ALL

As New York’s PAC has learned, no single fundraising formula works for each state, and events should be tailored to your region’s interests. One state took another tack with a company-by-company approach where it set fundraising targets for each company and let them help in the PAC fundraising. Regardless of the fundraising method, PAC Champions agree that creating awareness and appreciation for the work of ACEC/PAC is its most important mission.

“When it comes to legislation on issues affecting engineering firms, you want to be at the table and not on the menu,” O’Neill says, borrowing a line from ACEC President/CEO Dave Raymond. “You want to be able to positively affect the decisions in Congress being made on your behalf. You have to have the currency of conversation, and that is achieved through ACEC/PAC.”

Stacy Collett is a business and technology writer based in Chicago.
For the second consecutive year, ACEC/PAC achieved its million-dollar goal. The record-breaking PAC included nearly 30,000 donors and 42 states reaching their fundraising goals. The following is a complete listing of 2017 donors.

*Means state made its 2017 PAC goal

Bold means PAC Champion(s) for the state

Bold Underlined designates 2017 Capitol Club Member ($5,000 donor)

^ Designates 2017 Chairman’s Club Member ($2,500 donor)

+ Designates 2017 Millennium Club Member ($1,000 donor)

+ Designates $5,000 PAC-to-PAC contribution

ALABAMA
- Bruce Altstaetter+
- Bob Barnett+
- Win Bishop
- Kevin Blake
- Renee Casillas
- Daniel Deal

Alain Gallet+
- Jerry McCarley
- H. Dean McClure
- Jim Meads
- J. Kevin Mims
- Jack Morgan+
- Barry Mott
- Guy O’Connor
- Heather Page
- John Smith
- Steven Smith
- Paul Witt
- Mike Wariner
- Willem Van Hemert
- Len Story
- Matthew Stone
- David Rabe
- Donald Porter
- Chris Miller
- Nicole Knox
- Tim Grier
- Elizabeth Greer
- Floyd Damon+

ALASKA
- Duane Anderson
- Hans Arnett
- Dennis Berry
- Kyle Brennan
- Aaron Christie
- Beet Coburn

Floyd Damon+
- Elizabeth Greer
- Tim Grier
- Nicole Knox
- Dennis Linnell
- Kristi McLean
- Chris Miller
- Mark Musial
- Donald Porter
- William Preston
- David Rabie+
- Matthew Stone
- Len Story+
- Willem Van Hemert
- Mike Wariner
- Paul Witt

ARIZONA
- Oghboma Abarikwu
- John Alcorn
- James Barr
- Michael Bechtel
- Bruce Beenken
- Jennifer Bisby
- Maria Brady
- Janice Burnett+
- Anthony Cabrera
- Dawn Carrier+

Michael Chase
- Donna Chiappini
- Bill Crowley
- Timothy Crall
- Gregg Creaser
- John Derr
- Shameen Dewar
- Kent Dible
- Jeffrey Erickson
- Lauren Evans+
- William Ferris
- Becky Fly
- P. Douglas Foll+
- Uday Gandhe
- Greg Gesicki
- Chidambaran
- Gnanasambanthan
- Gregory Haggerty
- Andrew Haines
- Dan Hartig
- Mark Hartig
- Sam Heffelfinger
- Daniel Heller
- Michael Hermann
- Ron Hilgart
- Julie Leid
- Robert Lemke
- Bill Linck
- Tony Mardam
- James Martin
- Dan Marum
- Jeffrey McBride
- Douglas McCants
- Scott McKenzie
- Cliff Merza
- Douglas Moses
- Philip Noonan
- Kent Norcross
- Sergio Oliden
- Ahmad Ousai
- Ramon Padilla
- Bruce Paton
- Christopher Patton
- Doug Peters
- David Peterson+
- Benjamin Porritt
- Kevin Porter
- Pierre Pretorius
- Steven Rex

Kevin Roberts
- Michael Schiller+
- Scott Schlund
- James Schoen
- Melissa Serven
- Curtis Slager
- Andrew Smajdzinski
- Christy Smajdzinski
- Thomas Smith
- Don Tappendorf
- Chester Teaford
- Rebecca Timmer
- Stephen Todd
- Jonathan Treem
- Mark Tulung

ARKANSAS
- Steven Beam
- Dee Brown
- Mike Burns
- Angie Cooper
- Matt Crafnon
- Lane Crider
- Andy Dibble

Roger Dodds
- Dennis Ford+
- Jeffrey Geurian+
- Brad Hammond
- Byron Hicks
- Jerry Holder
- Brent Massey
- James Montgomery
- Herbert Parker
- Stephen Pawlaetz
- Mike Stengel
- Daniel Williams+
- L. Carl Yates

CALIFORNIA
- Mousa Abbasi
- Lee Abramson+
- Dawn Antonucci
- Gary Antonucci
- Roger Ball+
- Greg Bardini
- Thomas Blackburn
- Jonathan Blanchard
- Gene Bougdanos
- David Caneer
- Ryan Carlson
- Arvin Chaudhary+
- Holly Cole
- Chad Coleman
- Michael Cooper
- Mike Cooper
- Leif Coponen

Travis Deane
- Robert DeWitt
- Christopher Diaz
- Brad Dieck+
- Donald Druse

Mary Erchul
- Allen Evans
- George Fares+
- Ralph Guide
- Paul Guipril
- Paul Halbert
- Justine Height
- Thomas Holdreg+
- Ted Hopkins
- Erin Hoy
- Joseph Kaltas
- David Kennedy+
- Francis Kennedy
- Stephen Kuehn
- Paul Labin
- Randolph Leptien
- Scott Lillibridge
- David Lofus
- Keith London+
- Sam Mansour
- Thomas Martin
- Jason Matson
- Chuck McCallum
- Ryan McLean
- Jeff Meier
- John Moossazadeh
- Blake Murillo
- Andrew Nickerson
- Eric Noel
- Walter Oktosu
- Richard O’Neill+
- Jason Paul
- Lisa Pensa
- Kevin Peterson
- Chad Phillips
- Anthony Podgrave
- Bruce Presser+
- Danny Raymond
- Dana Remington
- Grant Reynolds
- Mark Rodgers
- Ayman Salama
- James Salvo
- Carole Sanders
- Robert Schlesinger
- J. Steven Schmidt
- Michael Sheehy
- Clifford Simonton
- Lawrence Simonetti
- Christopher Squires
- Brian Stewart
- Nate Strong
- Melvin Sukow

COLORADO
- Andrew Amend
- Thomas Anzia
- Jennifer Ashworth
- Allan Brown
- Matthew Brown
- Peter Carlson
- Ralph Christi
- Nancy Clanton
- A. Gray Clark
- Dave DiFulvio
- Dan Donegon
- Brad Doyle
- Charles Dywer
- Mark Eberly
- William Epp
- Scott Epstein
- Lauren Evans+
- Mary Ford
- Lisa Goodbee
- William Green
- Mark Hamous
- Michelle Hansen
- Joseph Hart
- Marvinetta Hartwig
- Tim Hayashi
- Tammy Heffron
- Richard Hepworth
- William Hoffmann
- David Hueskamp+
- Richard Hwu
- Jeff Kebriger
- Narender Kumar
- Brant Lahnter
- Shannon Lucio
- Daniel Marmath
- Peter Monroe+
- John Muscatel
- Jeremy Musson
- Brian Myers
- Steve Mykowski
- Paul Nikolai
- Steven Pawlak
- Randall Phelps
- Wyatt Popp
- Marilen Reimer
- Gayle Roberts+
- Brad Rolf
- R. Gregory Roush+
- Doug Rutledge
- Mark Schaefer
- Doug Schwenke
- Christopher Sherry
- Elizabeth Stolfa+
- Gregg Ten Eyck+
- Karlene Thomas
- Mike Under
- Ronald Vasquez
- Craig Watts
- Shai-Tai Yeh

CONNECTICUT
- Thomas Ahneman
- Jacob Argo
- Franco Balassone
- Matt Bernacki
- H. James Boice
- John Braccio
- Paul Brady+
- Richard Bray
- David Breza
- James Byrnes
- Timothy Carr
- James Cavanaugh
- Fred Clark
- Stefan DeAngelis
- Chuck Duda
- Steve Drechslar
- Rudy Franciamore
- James Fuda+
- Gerald Furrier
- Timothy Gaffey
- Scott Harley
- Zach Hellyar
- Kevin Hussain

George Jacobs
- Raymond Janeiro
- Mariusz Jedrychowski
- Dennis Jolly
- Ariel Martinez
- Jared Maxwell
- Michael McCarthy
- Paul McGuinness
- John McKenna
- Dean McLean
- Dick Miller
- Michael Oliver
- Michael Patenaude

ACEC/PAC HONOR ROLL

30 ENGINEERING INC. MARCH / APRIL 2018
FMI Capital Advisors, a subsidiary of FMI Corporation, is the leading investment banking firm exclusively serving Engineering and Construction, Infrastructure, and the Built Environment.

With over 700 transactions and an aggregate transaction value over $17 billion, no firm is more experienced or dedicated to the industry than FMI.

**Recent Transactions**

- ADI ENERGY has been acquired by Oaktree Power Opportunities Fund IV, L.P.
- RTS has merged with Integrated Efficiency Solutions to form a new holding company.
- REV has acquired Absolute Aeration, LLC under a new holding company.
- Enovity has been acquired by a portfolio company of DFW Capital Partners.
- LIN has merged with Veolia Engineering.

*Represented by FMI Capital Advisors*
Sen. Ed Markey (D-Mass.) (standing in center in dark suit) meets with ACEC/Massachusetts leaders in Boston on Dec. 15, 2017. Pictured (front row, left to right): Dawn Connelly, Green International Affiliates; Matt Card, Alfred Bensche; ACEC/Mass. President-Elect Mike Walsh, CDM Smith; ACEC/Mass. President Mike Scipione, Weston & Sampson; Filomena Maybury, WSP; and ACEC/Mass. Past-President Mark Bartlett, Stantec; (middle row, left to right) ACEC/Mass. Vice President Jen Hown, SMMA; Allison Hopkins, Tetra Tech; Robin Greenleaf, Architectural Engineers, Inc.; Joanne Linowes, Linowes Executive Development Institute; Natalia Savatic, ACEC/Mass.; ACEC/Mass. Executive Director Abbie Goodman; (back row, left to right) Gerry Preble, Beals & Thomas; Elizabeth Tyminski, ACEC/Mass.; Scott Miller, Haley and Ward; David Vivliecchia, VHB; ACEC National Senior Vice Chair Joel Goodmonson, Architectural Engineers, Inc.; Charlie Russo, SOH; Dan Tenney, Weston & Sampson; and Nick Ferzacco, Architectural Engineers, Inc.
Anderson, Felsburg, Holt & Ullevig; Tom Svoboda, Farris Engineering; and Steve Moffitt, HGM Associates.

Executive Director Jeanne McClure; ACEC/Neb. President Craig Hunter, HDR; ACEC/Neb. PAC Champion Kyle Bryan Bross
Steven Brase
Steven Bradley
William Bogert
Ken Beck
Lance Aldrich
Pattie Yount
Milton Burtke
Carrie Canning
Jeff Clausen
Fouad Daoud
Michael Davis
David Dougherty
Craig Erickson
Kyle Faille
John Gade
André Galler
Michael Geier
Eric Hendrickson
Mark Henthorn
Keith Hobson
Taylor Hopper
Greg Kanu
Mark Land
Philip Larson
James Lee
David Logemann
Shawn Lueth
Blair Metzger
David Moeller
Luke Monat
Timothy Monson
Allison Owen
George Parris
Mark Perrington
Victor Ritter
Gayle Robertson
Derek Roberts
David Scott
William Sharp
Jean Sheets
Steven Sweet
Ron Tekippe
Derek Thomas
Greg Thomopoulos
Kevin Trom
Steve Troyer
Steve Van Dyke
Jacob Young

KANSAS*
Brian Armstrong
Brad Austin
Robert Bihy
Joseph Biehler
Don Broll
Joseph Caldwell
Sterling Cramer
Michael DeMentz
Joseph Drimmel
Bradley Edmundson
Troy Eisenbraun
Ryan Fleming
Robert Gilbert
Tyler Gilisman
Jon Halbergwachs
Leslie Hamilton
Jeff Hancock
Kevin Honomichl
David Kocour
Kristen Leathers
Kenzil Lynn
Shawn McGarity
Michael McKenna
Jeff McKerrow
Matt McQuality
Tom Orazem
Leon Osbourn
Clinton Robinson
Timothy Ross
Linda Rortingenhaus
Mark Salvatore
Cory Schoffelman
Clifton Speegle
Simon Sun
Kelly Sunderland
Joe Surmeier
Robert Ulben
Brent Woollen
Richard Worrel
Rod Young

KENTUCKY*
Robert Campbell
Ben Coomes
Ben Edelen
Ben Fister
Ron Gilksen
Randall Gnaux
Clint Goodin
Brad Gregory
Mike Hansen
Harvey Helm
Robert Hench
Mark Linkenhous
Monty Maynard
Steve McDavitt
Brad Montgomery
Rob Mullins
Shannon Provance
Ben Quinn
Russell Romine
John Schneider
Randolph Scott
Robert Smallwood
Mark Snee
Shawn Washut
Karen Wood

LOUISIANA
Tunsee Arkel
Robert Boagini
Sam Brignolos
Laura Campa
Craig Campbell
Allison Catalina-Michel
Andre Cotez
Andrew Craig
David Dupre
Kurt Evans
Lisa Fernandez
Cookmeyer
Joseph Fournet

Sergio Girau
D. Brad Graff
Nathan Junius
Ralph Junius*
James Ledet
Michael McGaugh
Daniel Mobley
Anthony Munephe
Frank Nicooladi
Raymond Reaux
Kevin Rizzo
Steven Robertson
Lynne Rousell
Robert Schmidt
Jami Snel
Kenneth Smith
William Smith
Michael Songy
James Spillers
Michael Thomassie

MAINE*
Carolyn Bird
Arthur Bolduc
Timothy Boyce
Daniel Diffin
Eric Dube
Scott Graham
Lisa King
Roland Lavallee
Rick McCarthy
Owens McCullough
Dale Mitchell
John Nelson
Travis Noyes
Theresa Patten
Barry Sheff
Matthew Steele
Barry Sheff
Theresa Patten
Charles Phillips
Vince Pielie
Nigel Puntel
John Porter
Terry Potts

David Raymond
Kerry Rexroad
Daniel Riddle
Cathy Ritter
Thomas Ritter
Stuart Robinson
Ronald Roy
Robert Scafford
Eric Sender
Mark Shafer
James Shumaker
Victor Stavrousis
Manpreet Sidhu
Richard Smulowitz
Francis Smyth
Thomas Sprehe
Stephen Stumpf
Alan Strauss
Raymond Streib
Robert Summers
Stuart Taub
Dan Voelmer
Frank Wasche
Nicholas Ward
Michael Wiercinski
James Wilson
Timothy Wolfe

MASSACHUSETTS*
William Ashworth
Mark Bartlett
Sandra Brock
Linda Nollett
Comer Brochard

John Hudacek
Rob Hudson
Jerry Janetti
Joel Keels
Dana Knight
Christine Kostki
Manish Kothari
Leon Kriebel
Charles Kumi
Gregory Lang
Jennifer Lanning
Paul Lee
Marco Leglupi
Eli Livay
William Lyman
Robert Macoy
Joseph Makar
Erik Martz
Antonio Mavry
Kamau McAbee
Jeffery McBride

Sean McCoy
Gary Miller
Susan Miller
Darryn Moakley
Thomas Mohler
Ronald Moore
Derek Mostoller
Michael Myers
Terry Neimeyer
Gregg Noah
John Nolan
Kwabena Ofori-Awuah
Richard Pagnano
Harish Patel
Melinda Peters
Charles Phillips
Vince Pielie
Nigel Puntel
John Porter
Terry Potts

David Raymond
Kerry Rexroad
Daniel Riddle
Cathy Ritter
Thomas Ritter
Stuart Robinson
Ronald Roy
Robert Scafford
Eric Sender
Mark Shafer
James Shumaker
Victor Stavrousis
Manpreet Sidhu
Richard Smulowitz
Francis Smyth
Thomas Sprehe
Stephen Stumpf
Alan Strauss
Raymond Streib
Robert Summers
Stuart Taub
Dan Voelmer
Frank Wasche
Nicholas Ward
Michael Wiercinski
James Wilson
Timothy Wolfe

Congressman Don Bacon (R-Neb.) (center) with ACEC/Nebraska members during a fundraiser. Also pictured (left to right): Matt McFadden, Felsburg, Holt & Ullevig; Steve Kathol, Schemmer Associates; ACEC/Neb. Executive Director Jeanne McClure; ACEC/Neb. President Craig Hunter, HDR; ACEC/Neb. PAC Champion Kyle Anderson, Felsburg, Holt & Ullevig; Tom Svoboda, Farris Engineering; and Steve Moffitt, HGM Associates.

34 ENGINEERING INC. MARCH / APRIL 2018
ENGINEERING YOUR EXIT STRATEGY

Sell or expand your business with the help of Allen Business Advisors. With a combined 35 years of experience as commercial loan officers, we bring banking sensibility to every sale. We advise at every stage, preparing businesses for sale, maximizing their value, and helping business owners plan for their next phase of life.

SALES & ACQUISITIONS
EXIT PLANNING
HELPING INDIVIDUAL OWNERS & PARTNERS

Contact John Allen for a consultation.
781-443-4874
john@allenbusinessadvisors.com
allenbusinessadvisors.com

Boston | New York | DC
James Scoles
Shaun Shea
John Shoff
Gary Simovich
Jay Skoog
Denise Street

NEBRASKA
Kyle Anderson
Terry Atkins
Ryan Beckman
Robert Brigham
Michael Gerdes
Mike Gorman
Tyler Hevlin
Douglas Holle
Craig Hunter
Steve Kathol
Donna Kohlan
Chad Marsh
Jeanne McClure
Matt McFadden
Michael McIntosh
Stephen Moffitt
Thomas Nussallah
Eric Oertb
John Olson
Joshua Palik
Steven Parr
Leslie Peterson
Kevin Power
Nancy Pridal
Daryoush Razavian

NEVADA
Ken Ackeret
Larry Carroll
James Caviola
Michael Coley
Harshal Desai
Gregory DeSart
James Duddleston
Ruedy Edgington

NEW JERSEY
Nickitas Alexiades
Dean Angelakos
Elizabeth Archer
John Azzaro
Edward Brady
Michael Brescia
Mike Bruno
Scott Burrowes
Thomas Costello
Tom Cushman
Tom Daniscek
Joseph Danyo
Bet Haynes
Anthony DeJohn
David DeLizza
Stephen Dilts
Donato DiZuzio
Samuel Donelson
Kevin Doyle

NEW HAMPSHIRE
Mary Bousa
Todd Clark
Peter Clary
Kyle D’Urso

Richard Davve
Joseph Ducharme
Alicia Dunstan
James Errico
Gary Garfield
Martin Kennedy
Peter King
Alex Koutroubas
William Moore
Chris Mulleavoy
Akshijit Nohais
Michael Penney
Matthew Poirier

Nevada Sen. Todd Young (R-Ind.) (left), who is a member of the Committee on Commerce, Science and Transportation and the Committee on Foreign Relations, with ACEC/Indiana PAC Champion Phil Beer, USI Consultants.

STREAMLINE
FIELD OPS WITH
METAFIELD®

Metafield is the leading end-to-end solution that integrates field and lab management all-in-one cloud-based platform.

TO LEARN MORE GO TO
agileframeworks.com
800.779.1196

Confidence. Quality. Profitable Engineering™
U.S. Rep. Juan Vargas (D-Calif.) (center), who sits on the House Foreign Affairs and Agriculture Committees, at a fundraiser with ACE/Calfornia members Jay Holombo, T.Y. Lin International (left) and Jason Matson, Kimley-Horn (right).

John Tan
Richard Tangel
H. Ali Vaezi
James Weinstein

NEW MEXICO*
Reid Allan
John Andrews
William Brewster
Hal Byrd
Barbara Crockett
Christopher Croshaw
David Duffron
Michael Dexter
Peter Fant
Rebecca Fink
Eric Froberg
James Heimann
Debra Hicks
Paul Karas
Conrad Ley
Michael Malloy
David Maxwell
Derek Meier
Doug Mize
Jerry Paz
Scott Perkins
Gundar Peterson
Tod Phinney
John Brusa
Akash Bharwani
Paul Boyce
Richard Buck
Colin Buckner
Ammun Bush
M. Denise Carter
Robert Carwright
Thomas Cascino*
Joseph Celentano
Deborah Chase
Douglas Clark
Maureen Clegg
Gregory Cummings
John Cunningham
Eugene Daly
Jamie Davis
Michael De Chiara
Tina Deale
Beth DeAngelo
John Deerkoski
Mark Delor
Frank DelSignore
Anthony Depasquelle*
Terry Deutsch
Katherine DeWkett
Stephen Dobson
Thomas Duffy
Daniel Duprey
Jim Dusek
Lee Ecker
Wesley Ecker
Mark Edds
Kenneth Ellsworth
Joseph Engels
Mark Eschbach
John Evangelista
Cindy Feinberg
Richard Fisher
Donald Fletcher
Joseph Fogliata
Thomas Garrett
Robert Goosen
William Gorton
Brett Gough
Charles Gozdziewski
Paul Grosser
D. Guglielmo
Steven Hammer
Stewart Haney
Keith Harlock
Todd Hay
Heather Healy
Heather Healy
Shelly Johnston
Glen Kantalis
Mark Kastner
Dennis Kennedy
Ronald Klinezar
Mark Laistner
Michael Lamoreaux
Joseph Lanaro
Mark Lange
Christopher Latrelle
James Laurita
Michael Leonick
Michael Leydecker
Louis Licamele
Bruce Lilke
Gary Loeser*
Mike Lofrus
Jeffrey Lookup
Patrick Lynch
Orrin MacMurray*
Charles Manning
Lance Manus
Jessica Mariani
Mark Michalek
Bill McCarty
William McCormick
Christopher Cermott
James McDuff
Richard McPadden
Christopher McHugh
Thomas McLaughlin
Donald Mahon
Bernard McNelly
Joseph Menzer
Martin Meriweather
Jennifer Michnieicz
Brian Miller*
Bill Murray
Mia Nadasky
Sanjay Naik
Andrew Naras
Patrick O’Mara
Hannah O’Grady
Jim Occutt
Christopher Paulini
Fioros Papamichael
Milton Peguero
Richard Peters
Charles Pisano
Jason Pizagaro
Sanjeev Popli
Gina Potofra
Mike Randell
Linda Reardon
Brett Reynolds*Milo Riverse
John Robison
Justin Roj
Lorenzo Rotoli
Aaron Ruppers
Lee Sackett*
Roseann Schmid
Matthew Schooley
Martin Schwartzberg*
M. Kamal Shahid
Mike Shamma
C.V. Shashikumar
Ross Shepherd
Phyllis Elliks
Seth Fisher
James Fitz Morris
Travis Flutt
Spencer Franklin
Donald Gantt
Glenda Gibson
William Gilmore
Brian Gildewell*
Jamie Gregg
Evertt Gupron
Stephanie Hachem*
Christopher Haire
Grayson Hale
Billie Hansen
Gary Hartong
Tyler Highfill
Scott Hinesley*
Kathy Hoffmann
Rodney Honeycutt
Bill Hood
Meredith Houston
Craig Hyman
Todd Ireland
Montell Irvin*
Paul Jacob
John Jamison
Brian Johnson
Joseph Kelvington
Kraig Kern
Michael Krannitz
Tracy Lamb
Will Larsen
Will Letchworth
Clarence Lockamy
Wes Lowder
Lester Lowe
John Lucey
Kevin Lugo
Brian Luk
Dave Madonia
Randy Martin*

NORTH CAROLINA*
Andy Abernathy
Richard Adams
Bruce Albright*
Laurie Aresndorf
Michael Armstrong
Charles Arnold
James Arraway
T. Shawn Ausel
Debbie Barbour
Victor Barbour
Jay Barr
Julie Beauvais
NORTH CAROLINA*
Chad Becker
Robert Belisle
Mark Boggs
Lloyd Bolick
Susan Bostian
Andrew Naras
Rich Brit
Eddie Brock
Stephen Browde
Keith Brown
Collete Browne
Adam Browning
Brian Byfield
Lee Campbell
Matthew Cottrell
Shirley Church
Ron Clark
Derek Clyburn*
Sam Cullum
Joshua Dalton
Matthew Daves
John Davison
Charles Davis
Michael Davis
Jeff Dayson
Jay DeCoursey
Davis Diggs
Patrick Donaghy
Jeffrey Douglass
Steve Drumm
Tre Dugal
Robert Egan
Valerie Ekinas
Phyllis Elliot
Phyllis Elliot
Seth Fisher
James Fitz Morocco
Travis Flott
Spencer Franklin
Donald Gantt
Glenda Gibson
William Gilmore
Brian Gildewell*
Jamie Gregg
Evertt Gupron
Stephanie Hachem*
Christopher Haire
Grayson Hale
Billie Hansen
Gary Hartong
Tyler Highfill
Scott Hinesley*
Kathy Hoffmann
Rodney Honeycutt
Bill Hood
Meredith Houston
Craig Hyman
Todd Ireland
Montell Irvin*
Paul Jacob
John Jamison
Brian Johnson
Joseph Kelvington
Kraig Kern
Michael Krannitz
Tracy Lamb
Will Larsen
Will Letchworth
Clarence Lockamy
Wes Lowder
Lester Lowe
John Lucey
Kevin Lugo
Brian Luk
Dave Madonia
Randy Martin*

NORTH CAROLINA*
Chad Becker
Robert Belisle
Mark Boggs
Lloyd Bolick
Susan Bostian
Andrew Naras
Rich Brit
Eddie Brock
Stephen Browde
Keith Brown
Collete Browne
Adam Browning
Brian Byfield
Lee Campbell
Matthew Cottrell
Shirley Church
Ron Clark
Derek Clyburn*
Sam Cullum
Joshua Dalton
Matthew Daves
John Davison
Charles Davis
Michael Davis
Jeff Dayson
Jay DeCoursey
Davis Diggs
Patrick Donaghy
Jeffrey Douglass
Steve Drumm
Tre Dugal
Robert Egan
Valerie Ekinas
Phyllis Elliot
Seth Fisher
James Fitz Morocco
Travis Flott
Spencer Franklin
Donald Gantt
Glenda Gibson
William Gilmore
Brian Gildewell*
Jamie Gregg
Evertt Gupron
Stephanie Hachem*
Christopher Haire
Grayson Hale
Billie Hansen
Gary Hartong
Tyler Highfill
Scott Hinesley*
Kathy Hoffmann
Rodney Honeycutt
Bill Hood
Meredith Houston
Craig Hyman
Todd Ireland
Montell Irvin*
Paul Jacob
John Jamison
Brian Johnson
Joseph Kelvington
Kraig Kern
Michael Krannitz
Tracy Lamb
Will Larsen
Will Letchworth
Clarence Lockamy
Wes Lowder
Lester Lowe
John Lucey
Kevin Lugo
Brian Luk
Dave Madonia
Randy Martin*

NORTH CAROLINA*
Chad Becker
Robert Belisle
Mark Boggs
Lloyd Bolick
Susan Bostian
Andrew Naras
Rich Brit
Eddie Brock
Stephen Browde
Keith Brown
Collete Browne
Adam Browning
Brian Byfield
Lee Campbell
Matthew Cottrell
Shirley Church
Ron Clark
Derek Clyburn*
Sam Cullum
Joshua Dalton
Matthew Daves
John Davison
Charles Davis
Michael Davis
Jeff Dayson
Jay DeCoursey
Davis Diggs
Patrick Donaghy
Jeffrey Douglass
Steve Drumm
Tre Dugal
Robert Egan
Valerie Ekinas
Phyllis Elliot
Seth Fisher
James Fitz Morocco
Travis Flott
Spencer Franklin
Donald Gantt
Glenda Gibson
William Gilmore
Brian Gildewell*
Jamie Gregg
Evertt Gupron
Stephanie Hachem*
Christopher Haire
Grayson Hale
Billie Hansen
Gary Hartong
Tyler Highfill
Scott Hinesley*
Kathy Hoffmann
Rodney Honeycutt
Bill Hood
Meredith Houston
Craig Hyman
Todd Ireland
Montell Irvin*
Paul Jacob
John Jamison
Brian Johnson
Joseph Kelvington
Kraig Kern
Michael Krannitz
Tracy Lamb
Will Larsen
Will Letchworth
Clarence Lockamy
Wes Lowder
Lester Lowe
John Lucey
Kevin Lugo
Brian Luk
Dave Madonia
Randy Martin*

NORTH CAROLINA*
Chad Becker
Robert Belisle
Mark Boggs
Lloyd Bolick
Susan Bostian
Andrew Naras
Rich Brit
Eddie Brock
Stephen Browde
Keith Brown
Collete Browne
Adam Browning
Brian Byfield
Lee Campbell
Matthew Cottrell
Shirley Church
Ron Clark
Derek Clyburn*
Sam Cullum
Joshua Dalton
Matthew Daves
John Davison
Charles Davis
Michael Davis
Jeff Dayson
Jay DeCoursey
Davis Diggs
Patrick Donaghy
Jeffrey Douglass
Steve Drumm
Tre Dugal
Robert Egan
Valerie Ekinas
Phyllis Elliot
Seth Fisher
James Fitz Morocco
Travis Flott
Spencer Franklin
Donald Gantt
Glenda Gibson
William Gilmore
Brian Gildewell*
Jamie Gregg
Evertt Gupron
Stephanie Hachem*
Christopher Haire
Grayson Hale
Billie Hansen
Gary Hartong
Tyler Highfill
Scott Hinesley*
Kathy Hoffmann
Rodney Honeycutt
Bill Hood
Meredith Houston
Craig Hyman
Todd Ireland
Montell Irvin*
Paul Jacob
John Jamison
Brian Johnson
Joseph Kelvington
Kraig Kern
Michael Krannitz
Tracy Lamb
Will Larsen
Will Letchworth
Clarence Lockamy
Wes Lowder
Lester Lowe
John Lucey
Kevin Lugo
Brian Luk
Dave Madonia
Randy Martin*
Richard Wolfe, Debora Weatherill, LeeAnn Wheeler, Chuck Whitford, William Wilhelm, Scott Williams, Jeff Wilson, Mark Wilson, Wyatt Yelverton, Lydia Zabrycki

**NORTH DAKOTA**
- Ryan Ackerman
- Dean Anagnost
- Holly Beck
- Dan Brux
- Jeff LeDoux
- Jeffrey McElwain
- Eric Michel
- Barry Schuchard
- Jeffry Volk

**OHIO**
- Laurie Adams
- Richard Allen
- Keith Amstutz
- Michael Avellano
- Nicole Clune
- Willis Conner
- Barry Couts
- Michael Couvreur
- David Cox
- Michael Ciotola
- Kevin Carpenter
- Brad Bush
- David Ficker
- Ronald Erb
- Frank Eisenhower
- Beth Easterday
- Thomas Mosure
- Thomas Mosure
- John Menninger
- Troy Messer
- James Miller
- Marc Montgomery
- Thomas Mosure

**OKLAHOMA**
- Aaron Adkins
- Hollis Allen
- Reza Amini
- Keith Angier
- Scott Barrett
- James Benson
- Josh Black
- John Blickensderfer
- Rick Bond
- Jeremy Boswell
- Kristi Bumpas
- Todd Butler
- J. Brett Cabbiness
- Brandon Cluben
- David Cobb
- Gilbert Cobb
- Todd Cochran
- Joe Davis
- Susan Davis
- Rhonda Dudecek
- Juanda Endeson
- Paul Green
- Chad Grinstein
- Denise Hale
- Rob Haskins
- Tricia Hartley
- Jim Hemphill
- Thomas Hendrick
- Martin Hepp
- Shari Hiller
- Mike Homan
- Steven Johnson
- Shanon Koeninger
- Miroslav Korka
- Jason Langhammer
- Stacy Loeffler
- Kirsten McCullough
- Shannon McGarrah
- Janet Meshek

Jim Moore
- Kevin Moore
- Ken Morris
- Helene Murdock
- Brent Neece
- David Neuhauer
- Sam Pappas
- Karthik Radhakrishnan
- George Raymond
- Robert Rose
- Vaughn Runnnow
- Jenny Salle
- Brian Schmitt

**Brent Schniers**
- Alan Soltani
- Greg Sparks
- Jimmy Sparks
- Todd Snyder
- Adam West

**OREGON**
- Ken Ackerman
- Tina Adams
- Diego Argueta
- Michael Baker
- Brian Bayne
- Darren Beckstrand
- Jeff Bernardo
- Brent Black
- Timothy Blackwood
- Christine Boirum
- Troy Bowers
- Christopher Brehmer
- Marc Burovac
- Chris Carpenter
- Heather Catron
- Ed Chamberland
- Marshall Coba
- Peter Colley
- Gabe Crop
- Allison Davis

Kevin Denn
- Mary Erchul
- Tonya Finley
- Lawrence Fox
- Herbert Frick
- Benjamin George
- Guy Hakanson
- Lindsi Hammond
- Erica Hann
- Gerry Hedin
- Daniel Houf
- John Howorth
- Harold Keefer
- Jason Lyman
- Greg Landau
- Jon Larson
- Mark Leete
- Steve Litchfield
- Xiqin Long
- Jay Lyman
- Matt MacRostie
- Keith Martin
- Ranford McCourt
- Travis McFeron
- Michael Meyer
- Guy Neal
- Scott Nettleton
- Timothy Oliver
- Wade Osborne
- Andy Perry
- Erik Peterson
- Cindi Polyanchen
- Allison Pyrch
- Michael Reel
- Mike Reynolds

**Pennsylvania**
- Michael Bougher
- Roseline Bougher
- Craig Bryson
- Anthony Castellone
- Matthew Cummings
- Charles DiCello
- Francis Eells
- Barry Epley
- Debra Ferraro
- Eric Flicker
- Stanley Gablick
- Michael Girma
- William Gough
- Mark Greenholt
- Bill Gross
- Ernest Hanna
- Troy Holloway
- Frank Joanicke
- Kevin Johnson
- Matt Johnstone
- Brian Keaveney
- John Kweder
- Ron Ladyka
In Indianapolis last May, (left to right) Former ACEC Chair Peter Strub, TranSystems; ACEC/Indiana Secretary Shelby Swango, WSP USA; ACEC/Ind. President Cheryl Cunningham, The Etica Group; ACEC President/CEO Dave Raymond and ACEC/Ind. Vice President Mike Obergfell, USI Consultants.
U.S. Congressmen John Katko (R-N.Y.) (center left) and Sean Patrick Maloney (D-N.Y.) (center right) with ACEC/New York President Jay Simson (left) and Mark McAnany, Bergmann Associates (right) at ACEC/N.Y.’s EEA Gala.
AEC MANAGEMENT SOLUTIONS
TO TRANSFORM YOUR BUSINESS

- Strategic Business Planning
- Mergers & Acquisitions Advisory
- Executive Search
- Marketing & Business Development
- Valuation & Ownership Transition
- Leadership Development & Executive Coaching
- Lean Project Delivery & Consulting
MEMBER FIRM EXPERTISE AND CREATIVITY ON DISPLAY

INNOVATION

BY TOM KLEMENS

T.Y. LIN INTERNATIONAL
MERRICK & COMPANY
DAGHER ENGINEERING
Brisk Bridge Construction

**PROJECT:** NEW CHAMPLAIN BRIDGE
MONTREAL, QUEBEC, CANADA

**FIRM:** T.Y. LIN INTERNATIONAL
SAN FRANCISCO

Opened to traffic in 1962, Montreal’s Champlain Bridge crosses the St. Lawrence River and Seaway to provide the South Shore’s primary access to and from Montreal Island. When officials determined that the aging bridge’s deterioration was rapidly worsening, they quickly moved into replacement mode.

Using a P3 model, Infrastructure Canada selected the consortium Signature on the Saint Lawrence Group to provide a replacement bridge on an aggressive 42-month design-build schedule.

T.Y. Lin International is the lead designer on the 3.4-kilometer bridge now under construction, working as the managing partner in a joint venture with International Bridge Technologies and SNC-Lavalin. “It includes the approach spans and the 529-meter-long, cable-stayed portion of the bridge, which has a main span of 240 meters. The asymmetric, cable-stayed signature bridge features a 168-meter-high concrete tower and stay cables in an aesthetic harp arrangement.

The three-corridor design includes two three-lane corridors for vehicular traffic and a two-lane transit corridor capable of accommodating a light rail transit system. There will also be a multiuse path for pedestrians and bicyclists.

Montreal has six months of extremely cold weather each year, allowing about 21 months to construct the bridge. To accommodate this constraint, designers have used prefabricated concrete and fabricated steel wherever possible.

“We basically looked at building the bridge like we used to put something together out of Lego blocks,” says Marwan Nader, T.Y. Lin International’s lead designer for the bridge. “The concept was to make it as repetitive as possible.”

The design incorporates precast pier foundations, the top portions of which projected above the water after installation, the pier legs and elements of the tower up to the first crossbar. All use high-strength concrete to reduce the weight of each unit. The 70-meter-wide pier caps are fabricated steel.

Using precast and prefabricated components decreased the amount of work to be performed over the river, limited the need for field welding and concrete placement in very cold weather. This enabled crews to meet the demanding construction schedule despite the harsh environment.

Additionally, using composite steel and concrete in the approach structures allowed for longer spans and optimized the number of piers required. The helical ribs on the stays have been modified to limit the amount of ice accumulation. “The ribs still control wind and rain vibration,” Nader says. “But changing the geometry means the falling ice pieces are now a lot smaller, instead of being very heavy and potentially damaging to the traveling public.”

Construction on the bridge began in June 2015, and it is expected to open in December 2018. The contractor for the project is SNC-Lavalin, Dragados Canada and Flatiron Constructors Canada.
State-of-the-Art Seismic Design

PROJECT: NATIONAL BIOCONTAINMENT LABORATORY
WALLACEVILLE, UPPER HUTT
NEW ZEALAND

FIRM: MERRICK & COMPANY
GREENWOOD VILLAGE, COLORADO

The National Biocontainment Laboratory (NBL) of New Zealand has been protecting the country and its economy from existing and emergent biological risks for more than 100 years. A new 35,000-square-foot laboratory featuring state-of-the-art structural and mechanical systems is scheduled to soon go online, providing even more security for the future.

Teamed with local consultants, Merrick & Company provided planning, architectural, structural, mechanical, electrical and plumbing (MEP) design for the new facility. The firm also provided construction supervision, commissioning and certification with regulatory bodies for the NBL.

"By far, the single biggest element of risk and of innovation in this laboratory was the seismic design that went into it," says Brad Andersen, Merrick's senior vice president and project executive for the NBL.

Because New Zealand experiences frequent earthquakes—nearly 14,000 a year—the new lab is designed to survive a one in 2,500-year earthquake. To accomplish this, the Merrick team, including Dunning Thornton, structural engineers, designed the building to sit on 10 base isolators and 20 slider bearings to reduce damage and protect biocontainment during an earthquake.

"In every biocontainment-type laboratory, the big risk element is making sure that none of the dangerous pathogens can escape the building," Andersen says. "We work hard to make sure the building is very tight, seals are properly put together, air systems and mechanical systems are all properly designed and tight as can be. But once the building starts shaking, all of the good work we do to make sure that it stays tight is put at risk."

Merrick designed all MEP systems to maintain personnel and environmental safety through directional airflow control, HEPA filtration, effluent treatment and system resiliency suitable for continuous operation through any foreseeable national emergencies. All MEP systems are located on a dedicated mechanical floor to maximize maintainability while minimizing the need to disrupt programs on the floors below.

Other innovative aspects of this project include sustainability considerations. "Laboratories are a big energy user," Andersen says. "For example, you can't recirculate air because it could become contaminated. Limiting the amount of energy by modulating the air used to condition and circulate through the lab plays a big part in making a facility sustainable."

Building Information Modeling (BIM) also contributes to the long-term efficacy of the facility. Merrick developed the BIM model with a facilities management interface to automatically populate BIM data into a computerized maintenance system for all dynamic elements.
A Western Solution

PROJECT: AL JAMEA TUS SAIFIYAH NAIROBI, KENYA

FIRM: DAGHER ENGINEERING NEW YORK CITY

Al Jamea tus Saifiyah in Nairobi, Kenya, is one of four worldwide educational campuses of the Dawoodi Bohra community. The Arabic school attracts students from around the globe, creating an international learning environment.

Dagher Engineering was engaged to design the mechanical, electrical and plumbing systems for the new 700,000-square-foot campus where construction began in 2013. With the imperative of minimizing the campus’ carbon footprint, Dagher worked closely with the design architect as well as the local team of architects and engineers to gain familiarity with regional construction techniques, constraints and site limitations. That also meant not simply applying today’s standard Western approach of using machines to offset the loads with heating and cooling.

“We had to consider the annual maintenance of all the machines and the electricity cost for a standard, Western solution,” says Elias Dagher, senior principal with Dagher Engineering. “But in this location, they have daily power outages, which would mean relying on emergency generators that burn oil creating pollution.” Plus, there was the question of who would maintain and repair mechanical systems.

Taking an alternative approach, engineers applied advanced building modeling techniques to optimize the orientation of the buildings to permit passive conditioning of the indoor spaces and to maximize daylighting throughout. Solar studies facilitated the incorporation of solar thermal and photovoltaic collections for domestic hot water and electricity production, further reducing the campus’ impact on the environment.

The result is a low-maintenance, sustainable campus. Dagher Engineering used state-of-the-art computer modeling technology to revive concepts that were in common use before the rise of cheap energy and globalization. With computational fluid dynamic modeling software, Dagher engineers simulated indoor space conditions through various meteorological conditions, optimizing critical portions of the campus’ buildings to provide maximum comfort levels as well as enhanced daylight.

There also were architectural constraints related to cultural/religious elements and climatic elements. “For example, we had to be careful in locating openings for ventilation to limit line of sight access while also maximizing airflow.”

This project demonstrates that, often, the key is to use existing technology more intelligently, rather than using ever more expensive and complex solutions that rely on the installation of energy-consuming equipment and devices. Daghe’s extensive modeling studies showed that similar, if not better, results can be accomplished by carefully planning building orientation, room layouts, fenestration sizes and other facade components to optimize temperature and airflow within the buildings through passive means.

The Nairobi campus was completed April 2017, setting an example for sustainable growth in the region.

Tom Klemens is a freelance writer based near Chicago and a registered Professional Engineer in Illinois.
“The Find the Lost Dollars Business Management Training Program was exactly the type of program we needed to get our entire management team focused on profitability. The program has helped reinforce a culture of sound business practices among our management staff. I believe the training will have a positive long-term impact on our firm’s profitability, our profits are up from the year before and this program has definitely has contributed. The Find the Lost Dollars program was a great investment for our company, and has the right tools and approach to help progressive A&E firms to reach higher levels of financial success.”

- Jim Meads, P.E., President/CEO, Sain Associates, Inc.
For engineering firms that work with government agencies, adhering to FAR requirements is essential to project success.
Running into compliance issues while working on federally funded transportation projects can have dramatic implications for an engineering firm’s bottom line, including the calculation and review of overhead rates, treatment of certain cost items, and labor and compensation practices.

But compliance with the Federal Acquisition Regulation (FAR), the primary regulation that U.S. federal agencies use in their acquisition of supplies and professional services with appropriated funds, is a must if firms expect to do business with the federal government.

Because these firms must observe FAR cost accounting rules, it can also lead to delicate negotiations with state and local transportation agency clients, who often take varying views and employ an array of interpretations of these requirements.

Firms that devote appropriate attention to the necessary controls and tools for developing and applying FAR-compliant rates are likely to be more successful in managing costs, mitigating risks and maintaining profitability. This includes partnering with CPAs who are familiar with the FAR standards and participating in ACEC education and training programs on audit and accounting policies.

Understanding Costs

“Many firms believe that government accounting and contracting is only slightly different than that of commercial business. Nothing could be farther from the truth,” says Scott Hursh, managing partner of the A/E Industry Group at CPA firm Stambaugh Ness. “Beginning with senior management, the entire firm must embrace a culture of following all the rules all of the time.

“Firms that want to be successful in the government space must invest in people, processes and technology that go well beyond those needed for commercial contracting,” Hursh added. “Because not all costs routinely incurred are allowable for reimbursement on government contracts, processes must be established and people trained to differentiate between costs—including labor—that are and are not allowable.”

Under FAR, firms need to not only understand what types of costs they incur but how they are allocated and which ones are unallowable, according to Diana Strassmaier, partner at CPA firm Gross, Mendelsohn & Associates.

“In order to make that determination, firms must have a process in place to identify and account for their costs properly,” Strassmaier says. “While technology can assist with capturing the data and organizing it, firms need to understand the technology they employ, its limitations and the controls surrounding it. It’s not enough to just have technology or controls, they need to be properly set up, analyzed and constantly and consistently monitored.”

Engineering firms that do business with the government understand the importance of compliance.

“We pay close attention to the rules, requirements and certifications as to not seriously jeopardize our current and future government contracts,” says Anthony Machi, vice president of global business services at Michael Baker International.

Michael Baker does extensive work with government agencies and has a team dedicated to the intricacies of doing business with the government. “The obligations are real and the government enforces the rules,” Machi says.

To ensure that their 700 project managers working on 5,000 active projects remain compliant, Michael Baker has established ground rules of consistent policies and procedures and training for employees so that internal controls are effective. It ensures that it has an adequate accounting and timekeeping system to keep track of all related data.

Structured Risk Assessment

The government compliance group at Michael Baker has established an approach to compliance and reporting that is a structured risk assessment and mitigation approach. The group has developed an efficient mechanism for sharing the information with the various agencies for which the firm has contracts, Machi says.

“The approach includes a risk assessment and then the work we’ve performed to mitigate those risks, including a valid statistical sampling approach,” Machi says. “It’s not only a starting point, but in certain instances it may represent the majority of documentation that our auditors—both external and home state—will utilize in their work papers. We’ve had very good results with our approach.”

HNTB also is committed to compliance with the FAR Cost Principles and all applicable regulations, says Roger Seymour, audit and fiscal compliance director. “This includes implementing policies, processes and controls to ensure clients receive a fair and reasonable price for work performed,” he says.

HNTB’s business markets and compliance program spans federal, state and local projects encompassing a wide range, including civil engineering related to transportation, bridges, rail and aviation.

“Many of our contracts contain federal funding and, therefore, are subject to the FAR Cost Principles,” Seymour says. “Sound data integrity is a fundamental key to compliance. As a professional services firm, our timekeeping system provides a solid foundation for tracking the efforts expended on employees by client contracts.”

The firm is required to segregate direct and indirect costs and unallowable costs, and to consistently estimate, record and
report its costs in accordance with its disclosed cost accounting practices. “This allows us to comply with all facets of cost and pricing data requirements and the exclusion of unallowable costs from estimating and billing data,” Seymour says.

The FAR requirements are broad in nature and require disciplined approaches to minimize the risk of noncompliance, Seymour says. This includes addressing both strategic and tactical objectives to provide education to employees related to pricing, compliance and profitability; support and address client-related concerns; and tailor compliance strategies to address individual circumstances.

“There is a common misconception that FAR compliance is difficult,” says Wayne Owens, a CPA with accounting firm T. Wayne Owens & Associates, PC.

“Actually, industry standard financial management practices are the basis of FAR compliance,” Owens says. “The first step is an accounting system setup that segregates direct from indirect costs while accumulating direct costs and revenue by contract. This does not have to be an expensive industry specific software.”

A firm needs to establish policies regarding the treatment of certain costs such as the premium portion of overtime, vehicles and other equipment used on contracts and field rate accounting, Owens says.

“The biggest difference between FAR requirements and industry standard practices is the need to have a detailed accounting of indirect labor,” Owens says. “The labor accounting system must include a process where time spent on unallowable activities, such as entertainment or trade shows, is segregated from allowable overhead costs.”

Why Partnering With a CPA Firm is Vital

For engineering firms, one key to successful FAR compliance is finding the right CPA firm with which to partner to help with the process.

“I think it’s very important to begin with qualified and well-versed external CPAs and a transparent relationship with your home state auditors,” says Anthony Machi, vice president of global business services at Michael Baker International.

“We’ve found that transparency and doing the right thing right the first time are powerful enablers to getting things done in our industry,” Machi says. “By using our established process, Michael Baker continues to work closely with both our external and home state auditors to establish an efficient audit and reporting schedule.”

The firm has also seen the benefit of working with auditors that are engaged and active in the industry. “Annually, a joint subcommittee of the American Association of State Highway and Transportation Officials and ACEC gets together, and we’ve found the collaboration of the state agencies, external CPAs and consultants very valuable,” Machi says.

HNTB also relies on help from CPA firms.

“Due to evolving statutory and regulatory changes, we leverage the expertise of our CPAs to identify new and emerging compliance risks and objectives,” says Roger Seymour, audit and fiscal compliance director at HNTB.

“This allows us to efficiently and effectively manage our risk while capitalizing on their in-depth knowledge of the statutory and regulatory changes.”

Accounting firm T. Wayne Owens & Associates frequently works with engineering firms on compliance efforts.

“These relationships range from performing a FAR audit to teaching and consulting,” says Wayne Owens, firm founder. “A FAR audit is a consultative engagement for our firm,” he says. “We don’t just look at a consultant’s systems and accounting records to determine their compliance. We view this through our experience working with hundreds of firms and industry best practices assisting engineering firms with their policies and processes, so they can enhance compliance and maximize their firm revenue.”
CHALLENGES TO ADDRESS

That’s not to say firms should expect to be free of hurdles when working toward FAR compliance.

“There are a multitude of challenges, with money and time always being on the list,” Machi says. “Our firm understands the value of our investment in this area, so the most significant challenge going forward ends up being time-related.”

An increasing number of states are requiring information five months after year end, “so there is often a time crunch when completing the process of closing the books, performing our work, allowing our external auditors to perform their work and ultimately receiving a cognizant letter from our home state,” Machi says.

Another challenge is the complexity of the regulations.

“Given the technical nature of FAR, we work to create a common understanding between employees at all levels of our organization so the key principles of the program are correctly understood,” Seymour says.

This is coupled with having adequate policies, processes and business systems in place to provide a routine and systematic manner to minimize the risk of noncompliance. “Our goal is always to be a trusted business adviser at all levels of the firm by developing collaborative partnerships, based on mutual trust and open communications,” Seymour says.

Communication and consistency are among the biggest challenges, Owens says. “Once a firm establishes policies, it is important for all people involved in the proposal and contract negotiation process to understand these policies and how they affect the proposal process and charging of costs,” he says.

But any challenges are well worth the effort because lack of effective compliance can hurt firms in big ways.

“Noncompliance may result in both financial and reputational harm,” Seymour says. “Depending on the severity of noncompliance, the firm is at risk for fines, penalties, suspension and/or debarment, which could cause substantial work disruption and impact future awards of new business.”

The negative publicity of noncompliance “can have disastrous effects on business, plus certifying things fraudulently can lead to debarment,” Machi says. Outside of negative publicity events or the savings associated with an efficiently planned audit, another cost savings could be that project managers would not have to field many compliance-related questions, he says.

“Our efforts allow them to focus on their client-related deliverables and not compliance-related questions,” Machi says. “In addition, we have seen that a cognizant letter can speed up the procurement process with various states. Because a cognizant letter represents the highest level of assurance a consultant can provide to a state, having one requires no further assurances needed from auditors for work to begin on a project.”

Bob Violino is a business and technology writer based in Massapequa Park, New York.

Are you operating without an IT plan?

Don’t leave your organization at risk. Protect your data.


Using our 38 years of experience, we will listen to your organization and create an IT strategy unique to your needs.

Schedule your free 2-hour network security evaluation at www.designdata.com/risk.

Call us today!
(301) 921-6696
In an October 2017 special election, West Virginia voters approved a $1.6 billion statewide road building bond by an overwhelming 73 to 27 percent margin. That outcome was achieved, however, with a hard-fought and innovative campaign led by ACEC/West Virginia.

When newly elected Gov. Jim Justice took office in January 2017, his primary goal was rebuilding West Virginia’s crumbling infrastructure. The legislature concurred, and a special election to let voters decide the road building bond was scheduled for Oct. 7, 2017.

Two months before the special election, Justice switched from the Democratic to the Republican Party.

“The party switch definitely delayed the start of the road bond campaign and complicated the dynamics,” says ACEC/West Virginia Executive Director Michael Haid. “There was nearly a 100 percent turnover in his staff. Much of the work that had been done on the road bond suddenly came to a screeching halt.”

By the time the dust cleared, it was Labor Day, and the special election was only one month away. “We hadn’t started any public education or outreach,” says Haid. “People didn’t know there was an election or what it was about.”

However, opponents of the bond measure were already organized and had a head start distributing negative and false information—specifically how the bond would raise people’s taxes. In reality, it wouldn’t.

ACEC/West Virginia, along with other stakeholder groups—Contractors Association of West Virginia and the West Virginia Business & Industry Council—quickly joined forces on an emergency public outreach campaign.

“We began soliciting funds from engineers, contractors, corporations, law firms … everyone who does business in West Virginia. Within three weeks, we raised $500,000,” says Haid.

Twenty-five of the 34 ACEC/West Virginia Member Firms donated to the effort, and the Member Organization took the lead in the advertising campaign. “We created TV spots, radio spots, social media graphics, billboards and print ads,” says Haid. “And we put it together in a couple of days.”

The campaign ran TV and radio ads throughout the state, purchased full-page advertisements in major state newspapers, put up 25 digital billboards and targeted social media. Additionally, Rodney Holbert of Burgess & Niple in Parkersburg dressed up as the West Virginia Mountaineer and took to the curb to urge drivers to vote yes on the bond issue.

One of the challenges of the effort was funding. “We’d get $50,000 one day, then nothing the next, and then another check would come in. When we had enough, we would make supplemental ad buys,” Haid says.

There was no time or money to do adequate polling to guide their efforts in the push for voter support. “We had a hunch that the northern part of the state would be the most difficult,” says Haid, “but everything was very fluid.

“We needed to tell people what the bond would do and wouldn’t do,” says Haid. “There was a very detailed plan, down to specific roads that would be built, but the public didn’t know it.”

The governor played a key role by holding 30 town hall meetings around the state to answer questions about the bond issue. Haid spoke on behalf of ACEC/West Virginia at six of those meetings.

“The governor deserves a lot of credit,” says Haid. “The bond was his idea, and he led the charge. In one day, he held five town hall meetings. No one worked harder than he did.”

The effort paid off on Oct. 7, 2017. “I was surprised by the outcome,” says Haid. “I thought we would win, but not by such a big margin.”

Since the special election, ACEC/West Virginia Member Firms have seen a huge uptick in work.

“Work is coming out of the Department of Transportation very fast. They’re short-handed, so they’re giving us projects and work that in the past they would have done themselves,” says Haid. “All of our firms are working furiously around the clock. It’s a very exciting time for engineering in West Virginia.”
Signs Hint at Robust Deal-making in 2018

BY NICK BELITZ

Taking stock of the engineering industry in early 2018, the best course of action is, quite simply, to enjoy the ride. Last year saw robust expansion in U.S. economic activity, most easily seen in the rise in the stock market indices, with the S&P 500 up 19 percent, the Nasdaq up 28 percent and the Dow Jones Industrial Average up 25 percent for the year. The national unemployment rate is hovering around 4.1 percent, the lowest level since 2000. While U.S. economic growth clocks in at a somewhat moderate 2.5 percent for 2017, the expansion has been steady since 2009 and expectations are for growth to approach 3 percent when full-year 2017 data arrives. Focusing on just the engineering industry, the possibility of an infrastructure spending bill clearing Congress before the 2018 midterm elections raises the potential for even more optimism.

These rosy projections have buoyed expectations for the engineering industry and deal-making has already picked up as a result; Morrissey Goodale’s tracking of engineering industry deals points to an increasing pace of consolidation in 2018 over 2017. In fact, while our latest data shows the number of global transactions essentially flat over the last 12 months, U.S. deals are up 5 percent over the same time period. At a high level, the reasons for the rise in deal-making may be attributed to one or more of the following:

- The superior outlook for the U.S. economy and public- and private-sector spending on engineering and design services relative to other countries.
- An escalating competitive environment in which firms large and small are considering M&A as part of their strategic plans.
- The leadership and ownership transition challenges created by baby boomer principals seeking to retire and divest themselves of their ownership stakes.

These factors, plus more investment capital being made available for corporations via the Tax Cut and Jobs Act, have led the economic intelligentsia to call for heightened merger and acquisition activity across industries in 2018. Specifically:

- JPMorgan’s 2018 Global M&A Outlook calls for solid GDP growth in all major economies and healthy equity and debt markets to provide companies with confidence to explore M&A transactions. JPMorgan also notes M&A will figure prominently in corporate attempts to acquire technologies and capabilities to differentiate. Regarding technology driving M&A, we note a recent analog in the engineering industry—NV5’s acquisition of a California firm specializing in unmanned aerial vehicles and related technology applications.

- Deloitte’s M&A Trends 2018 calls for an acceleration of M&A activity in the current year. Deloitte’s survey of corporations and PE firms reports 68 percent of executives of U.S.-based companies and 76 percent of U.S.-based private equity firms anticipate greater deal flow during 2017, the latter point echoed by JPMorgan. This is already happening in the engineering world; note the activity of private equity firms Long Point Capital and RTC Partners in the list of deals following this column.
- PwC’s Deals Year-End Review and 2018 Outlook predicted the M&A landscape for the coming year will show companies acquiring to remain competitive in the face of new entrants and new technologies threatening to disrupt industries.

Time will tell whether the presumed deal-making wave materializes as expected this year, next year or at some point down the line. What is critical for engineering firm leaders to remember, whether as a buyer or seller, is not to get greedy when contemplating a potential transaction. We call them “transactions,” but in reality, a deal with an engineering firm is more like a marriage than buying a new asset such as a car. Engineering professionals need to not only work together once the deal is done but spend most of their waking hours in the company of the other side.

A deal that fails to consider the needs and wants of both parties is doomed to failure. Even when enjoying a bull market, good deal-makers will take time to understand the investments needed to make the match successful for all.

JANUARY 2018

ACEC member NV5 (Hollywood, Fla.) acquired Butsko Utility Design, Inc. (San Diego), a provider of utility planning and design services with annual revenues exceeding $5 million.

ACEC member Terracon Consultants (Olathe, Kan.) acquired fellow ACEC member Engineered Concepts (Greensboro, N.C.), a firm that specializes in building enclosure, structural engineering and facility investigation services.

Global MEP engineering and technology consulting firm and ACEC member Mazzetti, Inc. (San Francisco), merged with engineering and strategic energy management firm PerryCrabb (Brookhaven, Ga.). The combined entity will have more than 200 employees and will retain the Mazzetti, Inc., name.
ACEC member Salas O’Brien (San Jose, Calif.), a facility planning and design firm, merged with full-service engineering and design firm Varo Engineers (Dublin, Ohio). The expansion into Ohio adds three offices and brings Salas O’Brien’s staff count to 460.

ACEC member V3 Companies (Woodridge, Ill.) merged with Williams Creek Consulting (Indianapolis), an ecological engineering design firm specializing in the integration of infrastructure, science and technology.

A/E and environmental firm ISG (Mankato, Minn.), an ACEC member, merged with StruXure Architects (Waterloo, Iowa), an architecture and interior design firm that serves the education, government and health care markets.

ACEC member ATC Group Services, LLC (Lafayette, La.), acquired White Environmental Consulting (Anchorage, Alaska), a full-service environmental consulting firm. ATC is a provider of integrated environmental consulting and engineering services.

ACEC member King Engineering Associates, Inc. (Tampa, Fla.), acquired Crisler Troutman Tanner Consulting Engineering (Wilmington, N.C.), a civil and structural engineering firm. King Engineering operates as a portfolio company of New York-based private equity firm RTC Partners, LLC.

ACEC member TRC Cos. (Lowell, Mass.), a leader in engineering, environmental consulting and construction management services, acquired American Environmental Consultants, Inc. (Weymouth, Mass.), a hazardous materials assessment company. The deal marks TRC’s first acquisition since being sold to New Mountain Capital in 2017.

Civil engineering, surveying and environmental science firm Prairie Engineers (Columbia, Ill.) acquired McDonough-Whitlow, P.C. (Taylor Springs, Ill.), a firm that offers civil, structural, MEP, transportation and forensic engineering services. Both firms involved in the transaction are ACEC members.

ACEC member WSP (Montreal) acquired ISS Proko (Helsinki) from ISS A/S, one of the world’s leading facility services companies. ISS Proko employs 135 professionals and has expertise in construction and project management, supervision, appraisals and inspection. The deal was financed using WSP’s available cash and credit facilities.

DECEMBER 2017

ACEC member NVS (Hollywood, Fla.) acquired Skyscene (San Diego), a provider of unmanned aerial vehicle flight services. The acquisition was made entirely with cash and will be immediately accretive to NVS’s earnings.

Engineering Consulting Services (ECS) (Chantilly, Va.), an ACEC member, acquired River Valley Testing Corp. (RVT) (Green Bay, Wis.), a firm that specializes in geotechnical engineering, construction materials testing and environmental engineering. RVT will operate as part of ECS Midwest, LLC, and a member of the ECS Group of Cos.

ACEC member Olsson Associates (Lincoln, Neb.) acquired McGoodwin, Williams & Yates (Fayetteville, Ark.), a 30-person firm specializing in municipal infrastructure design.

ACEC member Woolpert (Dayton, Ohio) completed a minority recapitalization with Long Point Capital (New York), a private investment firm, to assist the A/E and geospatial firm with strategy, investments and add-on acquisitions.

Mead & Hunt (Middleton, Wis.), an ACEC member, acquired engineering and construction management firm EMR (Fenton, Mo.). The acquired firm has a staff of 30 and specializes in the food and beverage sector.

ACEC member Clapsaddle-Garber Associates (Marshalltown, Iowa) and Ryken Engineering and Land Surveying (Ackley, Iowa) have merged. Both engineering and land surveying firms combined resources to better serve their existing and new clients in central and north central Iowa.

NOVEMBER 2017

ACEC member King Engineering Associates, Inc. (Tampa, Fla.), acquired Stouten-Cramer, Inc. (Cape Coral, Fla.), a surveying firm. King Engineering also merged with Ardurra Group (Metairie, La.), an engineering and disaster recovery firm. Stouten-Cramer’s two principal owners will join 26 employee owners from King Engineering and the Ardurra Group.

Big Red Dog (Austin, Texas), an ACEC member, acquired MSP Engineering Group (Sugar Land, Texas), a six-person structural engineering firm. Big Red Dog is a civil and MEP engineering firm specializing in real estate and natural resource development projects.

Civil & Environmental Consultants, Inc. (Pittsburgh), expanded its regional capabilities in the Southwest through the cooperative transition of the Lake Havasu City, Arizona, office of Slater Hanifan Group (Las Vegas). Both firms are ACEC members.

Nick Belitz is a principal with Morrissey Goodale LLC, a management consulting firm that specializes in the A/E industry and provides strategic business planning, merger and acquisition, valuation, executive coaching, leadership development and executive search services. He can be reached at nbelitz@morrisseygoodale.com.
Take Control of Your Print Costs with Managed Print Services

Print less and save money, while eliminating the hassle of ordering supplies and maintaining equipment.

Join us at ACEC’s 2018 Spring Conference in Washington DC to find out more.
On the Move

Pietro “Pete” Giovenco has been named CEO of Rochester, New York-based Bergmann Associates. He recently served as president and COO, and will continue as company president. Giovenco succeeds Tom Mitchell, who served as CEO for 14 years, and will become executive vice president. The company also promoted George Kevgas to vice president of infrastructure for the Atlantic region. Kevgas formerly served as a project manager and rail practice leader. He is based in the Conshohocken, Pennsylvania, office.

Manchester, Connecticut-based Fuss & O’Neill named Kevin Grigg president and CEO, effective July 1, 2018. Grigg currently serves as COO and succeeds Peter Grose, who is retiring after 39 years with the firm. Grose served as CEO for the last eight years.

St. Charles, Missouri-based SCI Engineering, Inc., appointed past president Mark Harms as CEO and named Scott Harding the company president.

Austin, Texas-based SAM, LLC announced the following promotions: Christopher M. Solomon was appointed CEO and Robert E. Butler, Jr. has been named COO. Solomon was appointed president in 2015, a role he will also maintain. Butler recently served as corporate operations manager and is a principal.

St. Paul, Minnesota-based American Engineering Testing (AET) promoted Robert (Bob) Elliott to COO. He formerly served as vice president and manager of AET’s Environmental Technical Services.

Highlands Ranch, Colorado-based Arcadis appointed Justin Wright chief information officer for the North and Latin America regions. He is based in the Phoenix office.

Fairfax, Virginia-based Dewberry promoted Dan Southwick to president of the design-build practice. Southwick will also remain telecommunications market segment leader. Shepard Hockaday was promoted to senior vice president. Hockaday, formerly an associate vice president, serves as the service line leader for Dewberry’s mechanical, electrical, plumbing and structural engineering groups. Both are based in the Raleigh, North Carolina, office.

Dwayne Miller was appointed president of buildings, technology and science at Hollywood, Florida-based NV5 Global,
Jeremy Alinder joined Fargo, North Dakota-based Ulteig as vice president of finance. Following a transition period, Alinder will become CFO. Alinder’s transition to CFO allows the previous CFO Steve Maag to assume a new role focusing on enterprise risk management, compliance and legal matters. Maag served as CFO for nine years.

Pittsburgh-based Michael Baker International announced the following appointments: Cory Wilder was promoted to senior vice president and executive of the Houston office. He previously served as a senior vice president and national pipeline engineering practice lead. Laura Weis joined the company as vice president and executive of Dallas office operations and lead services in supporting infrastructure projects.

Sparks, Maryland-based KCI Technologies, Inc., announced the following promotions: Bryan Lawson was named senior vice president and construction management discipline manager. Lawson oversees the Tampa, Florida, office and is an SEI graduate. Bayne Smith was appointed senior vice president and transportation south discipline manager. Smith sits on the board of ACEC/Georgia and is based in Duluth. Erick Fry was named vice president and Duluth office manager. He serves on several ACEC/Georgia committees.

San Antonio-based Pape-Dawson Engineers, Inc., announced the following appointments: Cara Tackett was named senior vice president of water resources. Brandon O’Donald was promoted to vice president and manager of the Fort Worth office.

Retired U.S. Army Col. Bill Edwards has joined New York City-based Thornton Tomasetti as a vice president in the Denver office to lead and grow the Operational/Technical Security Services sector. The new group complements the company’s Weidlinger Protective Design practice, which provides security solutions to architects, business owners, developers and public agencies to combat natural and human-caused hazards.

Peter Rooney has joined Watertown, Massachusetts-based VHB as vice president and national practice lead for energy engineering and construction. He is based in the Hauppauge, New York, office.

New York City-based WSP USA announced the following appointments: David Bass was named vice president and North Carolina transportation client services director. He is based in the Raleigh, North Carolina, office. He formerly served as associate vice president/roadway department manager at HNTB. Kenneth Price was named vice president and complex bridge manager in the firm’s Central and Texas/Mountain regions. He is based in the Chicago office.

Kevin Thibault joined Kansas City, Missouri-based TranSystems Corp. as Southeast regional senior vice president and Florida transportation leader. He is based in the Orlando, Florida, office.
Welcome New Member Firms

ACEC/California
Advanced Civil Technologies
Santa Ana
Geo-Engineering Solutions, Inc.
San Ramon
KPW Structural Engineers, Inc.
Oakland
Mesiti-Miller Engineering, Inc.
San Francisco
Salem Engineering Group, Inc.
Fresno

ACEC/Colorado
ADA Compliance by Whiteley Consulting, LLC
Littleton
CDS Engineering Corp.
Loveland
McDowell Engineering, LLC
Eagle
R & R Engineers-Surveyors, Inc.
Denver
RJH Consultants, Inc.
Englewood
Spectrum Forensics, LLC
Englewood

ACEC/Georgia
Oasis Consulting Services
Roswell
Roberts Civil Engineering, PC
St. Simons Island
Smart Building Systems, Inc.
Decatur
The Engineering Group, Inc.
Bogart

ACEC/Idaho
White Pine, LLC, dba Praxis Land Surveying
Sandpoint

ACEC/Illinois
Engineering Solutions Team
Downers Grove
Phoenix Consulting Engineers, Ltd.
Mahomet

ACEC/Indiana
Quality Execution, Inc.
Mount Vernon

ACEC/Louisiana
Acadian Structural Solutions
Slidell
Waldemar S. Nelson and Co., Inc.
New Orleans

ACEC/Maine
Kiser & Kiser Co.
Hampden
Progress Engineering, LLC
Manchester

ACEC/Michigan
R.S. Scott Associates, Inc.
Alpena

ACEC/North Carolina
LMHT Associates
Morrisville
Sole Source Engineering, PC
Gibsonville
Stoitzus Engineering, Inc.
Kernersville

ACEC/Ohio
JHI Group, Inc.
Monroeville
Korda Engineering
Columbus
Nexus Engineering Group, LLC
Cleveland
Paul J. Ford and Co.
Columbus
SHA Engineering, LLC
Mason

ACEC/Oregon
Froelich Consulting Engineers, Inc.
Portland

ACEC/Texas
Austin-Reed Engineers, LLC
Houston
Disha Services, Inc.
Pearland
JAX Engineering, Inc.
Benbrook
KnightHawk Engineering, Inc.
Houston
L.A. Fuess Partners, Inc.
Dallas
Signature Automation, LLC
Addison
Toro Bravo Construction, LLC
Dallas
Transcend Engineers & Planners, LLC
Cypress
Westra Consultants, LLC
Arlington

ACEC/Utah
Bush and Gudgell, Inc.
St. George
Development Solutions Group, Inc.
St. George

ACEC/Virginia
Greenway Engineering, Inc.
Winchester

ACEC/Washington
Pielow Consulting
Silverdale
RHC Engineering, Inc.
Seattle

ACEC/Wisconsin
CEDP, Inc.
Madison

MARCH 2018
21 Engineer-Led Design-Build: Simple, Safe & Profitable
(online class)
22 Are You Fighting Fires Instead of Managing Your Employees
(online class)
27 Simple Incentive Compensation That Works!
(online class)
28 The Top 10 Reasons Why Companies Fall Short of Achieving Goals
(online class)

APRIL
3 Before Signing the Design Services Contract
(online class)
11 Ten Keys to Increasing Utilization in Your A&E Firm
(online class)
12 Stop Asking for Referrals!
(online class)
15-18 ACEC Annual Convention and Legislative Summit,
Washington, D.C.
18 Dare to be Different and Increase Your Win Rate
(online class)
24 Meetings That Matter
(online class)

MAY
8 Rebranding Challenge: Managing Your A/E/C Firm Through a Rebrand
(online class)
22 Six Rewarding Steps for Killer Project Profits
(online class)

JUNE
5 Identifying and Developing Your Future Business Development Leaders
(online class)

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.
Structural Engineering Risk Management Program; Retail Market Webinar

THE BUSINESS OF STRUCTURAL ENGINEERING

A proper risk management program can reduce your chances of being sued and allow you to take on riskier projects—which can generate substantial profits for your firm. Developed by the Council of American Structural Engineers, the Business of Structural Engineering educational program can help reduce your rate of claims against structural engineering projects, increase profitability and enhance management practices.

Firm principals, owners, project managers and risk managers are all encouraged to attend. Register now to help your firm balance risk management and profitability with greater confidence. This program will be held June 7–8, 2018, at the Marriott Anaheim in California.

Registration information and details can be found at http://bit.do/acec-case2018.

NEW ACEC PUBLICATION FOR A/E BUSINESS DEVELOPMENT PROFESSIONALS

ACEC’s newest publication, 33 Proven Secrets to Writing Successful Client-Centered Proposals, delivers practical, real-world advice for seller-doers, marketers and business developers who want to write more persuasive project proposals that win more work.

Written by Don Sherman and Mel Lester, this guide offers an approach to creating proposals that tell a compelling story and position your firm to win. Topics include how to differentiate your firm from the competition; ways to develop deeper, more profitable client relationships; approaches to effectively screen and target prospective clients; identify and pursue winnable opportunities—and more. It is available in both print and digital formats.

To purchase, go to: http://bit.do/acec-33secrets.

WEBINAR TO EXPLORE THE RETAIL MARKET

This April, as part of ACEC’s focus on commercial and industrial markets, a webinar will be held on the national retail sector. Topics include the “retail apocalypse” and what this means for engineering firms.

The webinar will also include an analysis of and outlook on retail construction spending, which subtypes are growing or shrinking, what makes retail clients unique and how aging indoor malls are being repurposed and renovated nationally. Recent case studies and the kinds of sites and structures retail developer and owner clients are focusing on will be featured. This is a growing market sector because the “clicks versus bricks” trend is creating new design and construction opportunities. There is projected growth in some submarkets—such as food and grocery—since by 2023 more than half of the U.S.’s 1,200 malls are expected to close or be substantially redesigned.

Register at https://www.acec.org/education/online-classes/.

CONVENIENT PROFESSIONAL DEVELOPMENT: ON-DEMAND ONLINE CLASS 10-PACKS

Most states require licensed engineers and surveyors to earn PDHs each year and file the credits with their state licensing boards. But for many A/E and surveying professionals, the time and expense of a multiday training program is a challenge, especially when renewal deadlines approach. That’s when the search begins for convenient educational offerings that can be completed online, at their convenience, to earn the required credits.

Many professionals are turning to ACEC On-Demand Online Classes. They can find quality programming on critical engineering business management topics and earn PDHs at their convenience. The popular On-Demand Online Class 10-Pack option makes continuing education even more affordable. Instead of paying $199 per individual webinar, the 10-pack rate delivers 10 webinars at just $140 per session—a $59 savings with every selection. There’s no expiration date, recordings can be chosen on the fly and the subscription is transferable among staff and offices. Each 90-minute recording carries 1.5 PDHs each year and file the credits with their state licensing board. Many states require licensed engineers and surveyors to earn PDHs each year and file the credits with their state licensing boards. But for many A/E and surveying professionals, the time and expense of a multiday training program is a challenge, especially when renewal deadlines approach. That’s when the search begins for convenient educational offerings that can be completed online, at their convenience, to earn the required credits.

For a complete listing of available topics, visit http://bit.do/acec-ondemand.

FOR MORE BUSINESS INSIGHTS

- Better Business Planning
- Factoring Executive Compensation
- Cyberattacks and Data Security
- High-Impact Proposal Writing

Go to: www.acec.org/education/webinars/

ACEC’s Business Resources and Education Department provides comprehensive and online-accessible business management education.

Visit ACEC’s online educational events calendar at www.acec.org/calendar/index.cfm or bookstore at www.acec.org/bookstore, or call 202-347-7474, ext. 324, for further information.
ENJOY THE BENEFITS OF A NEW PARTNERSHIP

EXPECT A NEW LEVEL OF RISK MANAGEMENT EXPERTISE

Greyling, a division of EPIC is the new broker & program administrator for the ACEC Business Insurance Trust

FOR MORE INFORMATION ON THE PROGRAM & NEW PARTNERSHIP

EMAIL: acecbit@greyling.com
PHONE: 833.ACECBIT (833.223.2248)
OR VISIT ACECBIT.ORG
Your engineers work hard for you.

Call to save on a health plan that works hard for them.

The American Council of Engineering Companies Life/Health Trust

For over 50 years, the ACEC Life/Health Trust has worked with firms like yours to offer the best health care plan options for engineers.

- You’ll join over 1,400 ACEC member firms participating in the Trust.
- 93% of firms renew their membership each year. That’s confidence-inspiring.
- ACEC members have access to over 120 plans and competitive rates.

If you’re not an ACEC member, you can still get a quote to see if membership is right for you.

Call 1-877-279-6544 to get a quote today or visit uhc.com/acec24 for details.