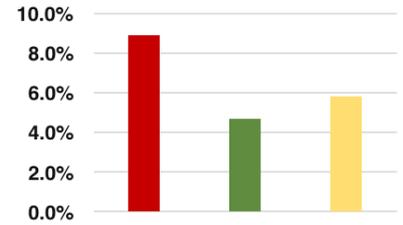


TRENDLINES

Incentive compensation



At 5.8 percent for 2016, firms' total incentive compensation spending as a percent of total payroll has slightly increased since 2010, when it was 4.7 percent, according to the 2016 *Incentive Compensation Survey*. But in 2008, before the Great Recession, incentive compensation spending as a percent of total payroll was at 8.9 percent. (Special discount to TZL subscribers: Use code **TLICS2016** to order this survey at 15 percent off on ZweigGroup.com)

FIRM INDEX

Environmental Consulting &	
Technology, Inc.....	12
ImmersaCAD.....	10
MCR Global, LLC.....	2
PWGC.....	3
Westwood Professional Services Inc.....	12

The problem with HR gatekeepers

“HR people can be a real problem when they see themselves as gatekeepers with the task of keeping bad people OUT of the organizations they work for.”



Mark Zweig

EDITORIAL

I love human resources people. Believe it or not, I was one of them once. I even authored the only hardcover book published on the topic for the A/E industry, *Human Resources Management: The Complete Guidebook for Design Firms*, published nearly three decades ago by John Wiley & Sons.

HR people can do a lot of good for their employers. They help with new employee integration, create and manage training programs, help keep employee benefits high and costs low, draft policies, and try to keep you from being sued. That said, HR people can be a real problem when they see themselves as gatekeepers with the task of keeping bad people OUT of the organizations they work for.

What I'm talking about is making HR – or rather making the wrong HR person – the first point of contact for all matters recruiting-related in your firm. When you have someone whose entire recruitment orientation revolves around keeping the bad people out versus getting more good people to come in, they will kill your growth. And that's very bad.

Growth is related to profitability. Rapidly growing firms (20 percent or more annually), are significantly more profitable than average firms (they make about 70 percent more profit). They are also better places to work because they create more new jobs for their employees.

See MARK ZWEIG, page 2

MORE COLUMNS

- M&A INSIGHTS: Why is your firm for sale? Page 5
- GENERAL COUNSEL: Toxic content Page 9
- GUEST SPEAKER: The winds of change Page 11

Don't let them get you down

Page 3



An ocean view

Page 6

BUSINESS NEWS

MCR WINS \$8.1 MILLION NATO CONTRACT **MCR Global, LLC**, a provider of integrated program management services, has been awarded a four-year contract for approximately \$8.1 million by NATO to provide key program management and technical support services to Supreme Allied Command Transformation and Allied Command Operations.

MCR will be responsible for providing a program management capability for NATO's Automated Information System and General Purpose Communications Systems. The capabilities include requirements management, engineering evaluation, change management, business change management, and program governance.

The contract includes a two-year base period and a two-year option. Support will be provided on-site at ACT headquarters in Norfolk, Virginia, and ACO headquarters in Mons, Belgium.

NATO's two strategic commands, ACT and ACO, are working jointly to develop, manage, and field a portfolio of projects under its Bi-Strategic

Commands Automated Information System program. The aim of the program management office is to improve the quality, timelines, cost-effectiveness, and interoperability of AIS services to the commands. Those services include IT modernization; the integration of logistics functions; the integration of Intel services; the provision of information assurance and cyber defense; data, voice and streaming media services; deployable communication; and a variety of command and control system integration critical to NATO missions.

"MCR is extremely proud of our work supporting NATO's vital missions. For more than two decades, MCR has provided our unique program management, technical analysis, and enterprise transformation expertise to NATO agencies. We are delighted to expand that support to NATO's two strategic commands and look forward to assisting the alliance in delivering the next generation of AIS to our forces on-time, within cost, and with the promised capability," said MCR Global's President, Paul R. Marston.

COUNTDOWN



WEEKS

Until Zweig Group's 2016 Hot Firm and A/E Industry Awards Conference!



GOOD TO KNOW

Conference registration is **OPEN!** Please visit zweiggroup.com/conference/ for more details.

MARK ZWEIG, from page 1

These HR gatekeepers kill growth for one reason. There are never enough qualified people who will jump through all the hoops they create to support a growing company. Think about it. Do you think the **BEST** people out there would be willing to give a presentation on their skills to a potential employer? It's been asked.

Or would the **BEST** people be willing to fill out a lengthy online job application and provide four references when they haven't even decided to leave their current employers? I see this regularly.

Or would the best people be willing to suffer through a 70-question phone screening interview? Seen it, even recently.

The **BEST** people – the ones you should be trying to hire – are not unemployed and desperate and dependent on you. It's the other way around. They have a million options. They want to be sold on why they should consider working for you instead of the dozens – or hundreds – or even thousands of other companies out there in this business.

Don't assume HR gatekeepers are necessarily the best way to hire people. You need HR people – particularly line staff – who are adept at making good people feel at home from the moment they speak to them on the phone through every visit they make to your office. In this way you will always have choices among good people to hire when you decide you have a need.

Don't dismiss my advice here. This is a much bigger deal than most companies realize! ▀

MARK ZWEIG is Zweig Group's founder and CEO. Contact him at mzweig@zweiggroup.com.

Take your advice from Mark Zweig to-go.

Listen to this and past editorials from *The Zweig Letter* via the free TZL Podcast on iTunes, Google Play, Stitcher, and Soundcloud.

zweiggroup.com/podcast



THE ZWEIG LETTER

1200 North College Ave.
Fayetteville, AR 72703

Mark Zweig | Publisher
mzweig@zweiggroup.com

Richard Massey | Managing Editor
rmassey@zweiggroup.com

Christina Zweig | Contributing Editor
christinaz@zweiggroup.com

Sara Parkman | Editor and Designer
sparkman@zweiggroup.com

Megan Halbert | Design Assistant
mhalbert@zweiggroup.com

Liisa Andreassen | Correspondent
landreassen@zweiggroup.com

Tel: 800-466-6275
Fax: 800-842-1560
Email: info@zweiggroup.com
Online: www.thezweigletter.com
Twitter: twitter.com/zweigletter
Blog: blog.zweiggroup.com

Published continuously since 1992 by Zweig Group, Fayetteville, Arkansas, USA. ISSN 1068-1310.

Issued weekly (48 issues/yr.). \$475 for one-year subscription, \$775 for two-year subscription.

Article reprints: For high-quality reprints, including Eprints and NXTprints, please contact The YGS Group at 717-399-1900, ext. 139, or email TheZweigLetter@TheYGSGroup.com.

© Copyright 2016, Zweig Group. All rights reserved.

PROFILE



The 265,000 square foot Amneal Pharmaceuticals Plant Expansion in Bellport, New York. PWGC designed and coordinated filings for well permits and oversaw construction of an open loop geothermal well field for interior space cooling and process cooling for the existing building and expansion. / PWGC

Don't let them get you down

New York engineer Paul Grosser wasn't afraid to make a change in 1990 when he needed one, and after 25-plus years of growth, he's still hungry for more.

By LIISA ANDREASSEN
Correspondent



Paul W. Grosser,
Founder and
President,
PWGC

Since founding **PWGC** (#2 Best Firm Environmental for 2016), a 60-person environmental and civil engineering consulting firm based in Bohemia, New York, Paul W. Grosser has served as principal on more than a thousand projects. He is a recognized authority in the fields of civil, environmental, and geological engineering, and has extensive knowledge and valuable expertise from more than 35 years in the industry.

He holds a doctorate in civil engineering from the Polytechnic Institute of New York University, in addition to undergraduate and graduate degrees from the Stevens Institute of Technology in New Jersey. From 2006 to 2010, Grosser won several Engineer of the Year awards, and in his home region of New York, is a driving force in his industry. His firm recently promoted two of its young engineers, and oversaw the construction of a major well field project on Long Island.

A CONVERSATION WITH GROSSER.

The Zweig Letter: How have you seen PWGC evolve since its founding?



THE ZWEIF LETTER August 8, 2016, ISSUE 1163

Paul Grosser: Our focus has pretty much stayed the same, but we've gone from a one-person firm operating out of a living room in 1990 to a 60-person firm with multiple locations in three states: New York, Connecticut, and Washington.

"You have to be committed. You have to be ready to jump into the deep end of the pool. It's also key to be flexible. Circumstances change and you have to be ready to change along with them."

TZL: What were your key drivers for starting the firm?

PG: I was not happy with the direction a firm I was working for was taking. I was frustrated by the transition and decided it was time to make a move – one that would also provide a lifestyle change.

TZL: Any key insights to share for others interested in starting their own business?

See Q&A, page 4

Q&A, from page 3

PG: You have to be committed. You have to be ready to jump into the deep end of the pool. It's also key to be flexible. Circumstances change and you have to be ready to change along with them.

TZL: What are your key strengths? What are the keys strengths for an effective leader?

PG: The ability to change – both personally and professionally. I love this quote from Wayne Gretzky: “I skate to where the puck is going to be, not to where it has been.”

“I try not to tell people how to do things. I find that if they have ‘skin in the game,’ they will make it work. There are days where I may be more of a micromanager, but I really try to limit those.”

TZL: How would you describe your leadership style?

PG: I try not to tell people how to do things. I find that if they have “skin in the game,” they will make it work. There are days where I may be more of a micromanager, but I really try to limit those.

TZL: To date, what has been your greatest challenge and how did you handle it?

PG: Last year, our COO left suddenly. It was a surprise to the whole company and making sure employees felt secure was key. We were in flux for about six months, but this challenge turned into an opportunity. Others stepped up. Strengths emerged and we all pulled through. In fact, we're doing better now than we did then.

TZL: What is your vision for the future of PWGC?

PG: To be an ENR 500 firm. We're already competing with top firms so I'd like to see our size double within five years. That's a healthy growth trajectory. I'd also like to see us grow geographically and perhaps add some additional service lines.

TZL: Tell me about a recent project.

PG: The 265,000 square foot Amneal Pharmaceuticals Plant Expansion in Bellport, New York, was designated a “Transformative Project” by the LI Regional Economic Development Council, which would foster regional sustainability and was projected to create 400 new local jobs, retain 752 jobs, and spur local economic growth. We were engaged by Amneal to design and coordinate filings for well permits and oversee construction of an open loop geothermal well field for interior space cooling and process cooling for the existing building and expansion. We initially performed field testing of groundwater quality to verify suitability for an open loop ground coupling, and then subsequently designed a 12-well, 3,600 gallons-per-minute capacity well system.

Groundwater hydraulic and thermal modeling was performed to demonstrate that operating the well field would

present no significant negative environmental impact on two nearby Suffolk County Water Authority well fields, to the satisfaction of the SCWA and NYSDEC. PWGC prepared engineering design and construction documents and provided a full range of construction administration and field inspection services throughout construction.

TZL: What do you feel sets your firm apart from others?

PG: We're known as the “groundwater guys.” We also have a very quick response rate. We get the job done!

TZL: Are you married? Children? Pets?

PG: I've been married for 36 years. I have three kids, two grandchildren, and a rabbit.

TZL: What's something no one knows about you?

PG: They know everything.

TZL: What's been your best vacation spot? Do you have a dream destination?

PG: Anywhere there is good fishing is fine with me. As for a dream destination, my wife would like to go to Italy to research her family roots. We did this for my family a few years back. We visited eastern Germany and then just outside of Berlin. It was very interesting.

TZL: What are you reading right now?

PG: I'm trying to get through *George H. W. Bush*. It's slow going right now.

TZL: What's the last movie you saw?

PG: We kind of binge on movies right after the holidays and try to see the ones that are up for Academy Awards. The ones that stick in my mind are *Bridge of Spies* and *Brooklyn*.

“We were in flux for about six months, but this challenge turned into an opportunity. Others stepped up. Strengths emerged and we all pulled through.”

TZL: What's the best piece of work related advice you've gotten?

PG: Don't let the bastards get you down. HA!

TZL: Who is a leader you really admire?

PG: Teddy Roosevelt. If you've never heard the “Man in the Arena” speech, you should Google it.

TZL: When you're not working, what do you enjoy doing?

PG: Fishing, running, and travel. I keep track of all the states I've run in – so far, there are 38. In order for a state to count, I have to run at least three miles.

TZL: Do you have a favorite lunch?

PG: Tropical tacos with shrimp and mango and all those other good toppings. ▀

OPINION



Why is your firm for sale?

If you figure out the answer to that all-important question on the front end, you'll have a great chance of closing on the right M&A deal.



Jamie
Claire
Kiser

M&A INSIGHTS

One of the key responsibilities of any business owner is to lead their firm on a path for solid, sustainable growth – and to be open to evolving as the market demands and opportunities arise. Steady growth can mean organic growth – expansion by developing your own resources, or inorganic growth – expansion through M&A. But in order to convince someone else to join your firm, you need to be able to clearly communicate the vision you have for what the future could be like if the firms join forces.

Failing to communicate the vision and the strategic fit is a common misstep that does not apply just to buyers. Too often, we hear sellers that do not really know what they bring to the table. It is very hard to pitch a firm to a prospective buyer when we have no idea what we are “selling.” Is it capability? Expertise? A niche? Why this particular buyer? Why are they interesting to the seller? The selling company’s CEO needs to be

“In order to convince someone else to join your firm, you need to be able to clearly communicate the vision you have for what the future could be like if the firms join forces.”

“One of the first questions that potential buyers ask us when we contact them on behalf of sellers is the motivation for the sale.”

able to effectively explain to potential buyers why the future would be better for the buyer if they combined entities. Establishing the reason for the conversation and aligning each firm on why this decision makes sense can help both sides ease the tension that inevitably comes from exposing your business to the scrutiny of an outsider, and can help keep the focus on the future, not just on the past.

See JAMIE CLAIRE KISER, page 8



SPOTLIGHT ON: Light

PROFILE



The Graves Light at the mouth of Boston Harbor is being converted into a summer home by Dave Waller, who in 2013 paid a record \$933,888 for the structure. The lighthouse was made available through a GSA auction. / Courtesy Randy Clark Photography

An ocean view

The market in lighthouses is limited, but due to the history of the structures, the challenges of renovation, and the romantic locations, there's plenty of takers.

By RICHARD MASSEY
Managing Editor

The market in historic lighthouses might be niche at best, but the ongoing sale and conveyance of these coastal properties present unique opportunities for architects, engineers, and investors who are willing to work with one-of-kind structures in challenging locations.

“It’s a ton of fun, and it’s all I can think about. It’s the adventure of a lifetime.”

Offered through the General Services Administration, the governmental agency that oversees surplus properties, the lighthouses end up in the hands of nonprofits, local governments, and

private buyers. Most become museums, but at least one – the Graves Light at the mouth of Boston Harbor – is being converted into a high-end summer home.

The program, administered under the National Historic Lighthouse Preservation Act, thus far has disposed of 121 lighthouses, with 68 going into stewardship, and 53 being sold outright to buyers for a combined \$5.7 million.

Most recently, the Southwest Ledge Lighthouse, the Greens Ledge Lighthouse, and the Penfield Reef Lighthouse, all in Connecticut, were offered up to the public via online auction. Bidding on the Chesapeake Lighthouse in Virginia concluded in July.

Located primarily along the East Coast from Maine to Florida, lighthouses have also been conveyed throughout the Great Lakes region, and in



lighthouses:

CONNECT WITH US *Zweig Group is social and posting every day!*

facebook.com/
ZweigGroup

twitter.com/
ZweigGroup

linkedin.com/company/
ZweigWhite

blog.ZweigGroup.com

vimeo.com/
ZweigGroup



The watch deck at the Graves Light will be converted into a kitchen. / Dave Waller

California and Alaska.

The record sales price for a lighthouse was \$933,888 by Boston businessman Dave Waller. He purchased the Graves Light at the mouth of Boston Harbor in 2013, and has been renovating the structure since that time. In the process of converting the structure into a summer home for him and his family, the work has consumed him.

“We have our little piece of heaven and we’re happy with it.”

“It’s a ton of fun, and it’s all I can think about,” Waller says. “It’s the adventure of a lifetime.”

The lighthouse, built between 1903 and 1905, is 113 feet tall, and when Waller is done with the renovation, it will have seven floors of space, a self-contained system for electricity and waste, and guest quarters

See LIGHTHOUSES, page 8



The Gay Head Lighthouse on Martha's Vineyard was moved back from an eroding cliff last year. The lighthouse was conveyed to the city of Aquinnah through the GSA. / Drew Kinsman, courtesy *The Martha's Vineyard Times*

JAMIE CLAIRE KISER, from page 5

One of the first questions that potential buyers ask us when we contact them on behalf of sellers is the motivation for the sale. Buyers want to understand what the seller wants – is it a retirement strategy? A growth play? Is the seller tired of the day-to-day of running the business? Do we need “big firm” resources to go from average to spectacular? The answer to this question is an important one, and one that potential buyers will assume an answer to before the first conversation. Managing the answer to that question requires some introspection, and often some coaching from a consultant or trusted advisor as well.

“That ‘big idea’ – the overarching value proposition that drove the decision to pursue M&A – can be a link that binds firms when the negotiation gets tough.”

Regardless of the firm’s current performance, unless the potential buyer can get excited about the future of the firm and the ability to add value to the buyer’s clients, employees, and capacities, you will be hard pressed to close

LIGHTHOUSES, from page 7

in an adjacent oil house. The downtown Boston skyline is visible from Graves, and the rocky outcrop on which it is built is frequently visited by seals.

The Graves project has necessitated the assembly of an all-star team of experts: architect John Chapman, structural engineer John Wathne, and marine engineer Scott Manchester.

The Graves project has necessitated the assembly of an all-star team of experts: architect John Chapman, structural engineer John Wathne, and marine engineer Scott Manchester. While life in a lighthouse might seem claustrophobic, Waller says the interior is quite comfortable, complements of his designer.

“He figured out how to carve that thing up,” Waller says.

And while the renovation has been arduous and costly, Waller has no regrets.

“We have our little piece of heaven and we’re happy with it,” he says.

A firm that has found a world of opportunity within the industry is the International Chimney Corp. out of Buffalo, New York. The company has moved five lighthouses, and has restored another 14. Oftentimes working with Expert House Movers out of Maryland, International Chimney has contracted with groups across the Eastern Seaboard beginning in the 1980s.

“Leaders of both firms need to talk constantly, respond immediately, and remember throughout the process the ‘big idea’ that got them talking in the first place.”

a deal that isn’t perceived as a “turn-around” attempt. Strategic buyers can bring an open mind to the table and can get excited about how the firms may be able to work together. But they should not be expected to fill in all the pieces themselves. Instead, buyers should be ready to answer what they do exceptionally well, how they can take that model and apply it to other companies, and why the employees and clients of the seller would be happy to be part of the buyer’s enterprise.

Leaders of both firms need to talk constantly, respond immediately, and remember throughout the process the “big idea” that got them talking in the first place. That “big idea” – the overarching value proposition that drove the decision to pursue M&A – can be a link that binds firms when the negotiation gets tough. ■

JAMIE CLAIRE KISER is Zweig Group’s director of M&A services. Contact her at jkiser@zweiggroup.com.

The firm’s pivot toward lighthouses came out of necessity. Specializing in the construction of radial brick chimneys, otherwise known as smokestacks, work started to dry up as the market changed. Rather than fold, the firm, its ranks filled with expert brick masons, turned its attention to the relocation and preservation of lighthouses.

“We were doing it before it got popular,” says Joe Jakubik, head of International Chimney’s historic preservation division.

Jakubik was part of the team that undertook one of the more celebrated jobs in the lighthouse industry – the 2015 removal of the Gay Head Light from an eroding cliff. Owned by the city of Aquinnah on Martha’s Vineyard, which gained the GSA conveyance in 2014, the lighthouse is a symbol of civic pride. At 350 tons and 60 feet of height, the 1855 lighthouse is also a monument to 19th century brick masonry. The focus of a NOVA documentary, its \$3-million relocation garnered local, state and national attention.

“The last few years have been very nice for us. It’s been pretty steady.”

“It’s impressive if you know the terrain,” says Jakubik, referring to the high cliff where Gay Head is located.

A few decades into the market, International Chimney enjoys a solid reputation, which, in turn, has translated into plenty of work. And in a country bounded by oceans on two sides and by the world’s largest gulf on a third, the lighthouse market, at least for the firms interested in that line of work, appears healthy.

“The last few years have been very nice for us,” Jakubik says. “It’s been pretty steady.” ■



Toxic content

AIA's new push for materials transparency might help the planet, but it could also put design firms up against the wall should cases go to court.



William
Quatman

GENERAL
COUNSEL

On April 8, 2016, the American Institute of Architects announced the release of its new white paper on “Materials Transparency and Risk,” part of an AIA effort to equip the entire profession with what they call “consensus-driven guidance” on the issue of toxins and other health hazards in building materials. AIA calls this “an issue of critical importance” to the profession, its suppliers and clients. “Whether in politics or in building design, transparency is an increasingly necessary element of modern life,” said AIA CEO Robert Ivy. “And when it comes to materials – the very substances of our built environment – it’s more important than ever for architects to be able to communicate openly about what they contain.”

The white paper is the product of more than a year of effort by the AIA’s Materials Knowledge Working Group, pursuant to a Position Statement approved by the AIA Board of Directors in December of 2014. In that statement, the AIA recognized that “building materials impact the environment and human health before, during and after their use,” and it encouraged architects “to promote transparency in materials’ contents and in their environmental and human health impacts.”

The white paper, *Materials transparency & risk for architects: An introduction to advancing professional*

ethics while managing professional liability risks, was created by materials specialists but is aimed at all architects. It provides a backdrop on the necessity for materials transparency and the steps architects should be taking to bring about change, promote openness, and increase collaboration between themselves, their suppliers and their clients.

This initiative has resulted in a series of published Health Product Declarations, which are product data sheets listing all of the hazardous contents of the material. The HPDs are a voluntary disclosure

See WILLIAM QUATMAN, page 10



BUSINESS NEWS

VIRTUAL REALITY COMPANY, IMMERSACAD, UNVEILS NEW WEBSITE, APP ImmersaCAD, an innovative company bringing light to the emerging platform of virtual reality, has announced the launch of its new website, and its app, now available in the Google Play Store.

With the help of Lee Martin from the University of Tennessee's College of Engineering, four classmates came together to design a virtual reality software for navigation of 3-D CAD models.

"What makes ImmersaCAD unique is that it solves the problem of motion sickness

typically associated with virtual reality through its intuitive patent-pending One-Touch Navigation system," said Martin. "Now you can explore without getting uncomfortable and fully navigate your models with ease."

ImmersaCAD targets architects, interior designers and engineers who want to experience their CAD designs and serve their clients in a compelling way. The software is made to adapt virtual reality equipment for use in architecture and engineering applications. The devices enable architects to walk through and around planned structures, rather than simply reviewing sets of drawings. The new

app – ImmersaCAD Cardboard Version 1.0 or ImmersaCAD GearVR Version 1.0 – features integrations for both the Google Cardboard and Samsung GearVR immersive displays.

"Working with ImmersaCAD is an incredible experience, and it will revolutionize how design professionals communicate their work," said Kyle Leinart, vice president of software development and a co-inventor of One-touch Navigation. "Through ImmersaCAD, designers will be able to show the emotional impact of their work instead of simply presenting a project on a piece of paper or on a 2-D screen."

WILLIAM QUATMAN, from page 9

by the manufacturer, not required by law. Some feel that if architects require an HPD for any product they specify, then the building material manufacturers and sales reps will either have to disclose the contents or risk not being specified.

If the HPD shows a toxic content, this disclosure might pressure manufacturers to change the contents, a voluntary way to get bad stuff out of building materials, even though not required by law. Some question whether this is a proper role for the AIA to take, and whether this should be driven instead by a governmental agency, like the EPA. But, the AIA is never shy about taking the lead on environmental initiatives. This time, however, many lawyers are wondering if the Institute has helped the planet but hurt their members.

As for the risks, they are obvious. When an architect specifies a material that has volatile organic compounds, say for a new elementary school, hospital or day care center, and there is a published HPD alerting of the contents, one of two theories might be argued in a lawsuit against the design firm. First, that the designer "knowingly" specified a hazardous material, thereby exposing the building occupants to a health risk, or that the architect was negligent in not checking the product's HPD before specifying it. We can only imagine the cross-examination and deposition questioning of architects in either scenario, creating a troublesome situation.

Perhaps ignorance is bliss in this case, and not knowing the content is better than having all of this information in the public domain. What is now in the public domain, however, is downright scary. As an example, the HPD for a ceiling tile lists cancer-causing contents. The question posed to the architect might be: "So, let me understand. You knew that this ceiling tile had cancer-causing components, and yet you specified its installation throughout my client's building, is that correct, sir?" These are no-win questions, to which a "yes" or "no" answer creates potential liability.

While the AIA has provided sample disclaimer language, not court-tested at this point, what about the 95 percent of contracts that do not have AIA language in them? Will the standard of care now require an architect to review all materials specified for the HPD disclosures, and only specify those that don't have a "cancer" box checked on the

form? Only time will tell, but more than a few attorneys and insurers are concerned that the AIA's planet saving motives will result in increased claims and liability for its members.

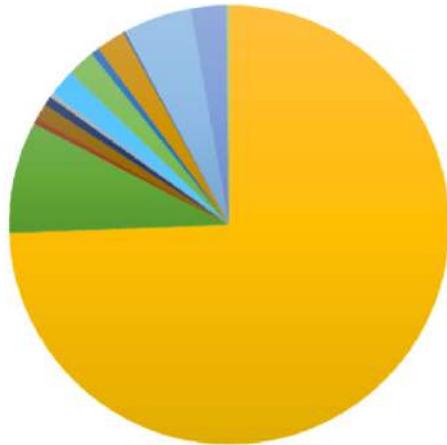
The AIA's white paper states: "While acknowledging the potential benefits of transparency, some architects and legal counselors have raised concerns about the possibility of increased exposure to legal liability coming from seeking and retaining information on product contents. One common concern is that a building occupant may claim to have been injured by a substance contained in a product, and may assert that the architect was aware of the presence of the allegedly injurious substance and had a duty to avoid specifying products containing that substance." The paper goes on to say, candidly, "With limited information about the risk of new forms of transparency information, and with legal precedent not yet established, there are legitimate concerns." The paper then goes on to discuss mitigation strategies and solutions.

The AIA Contract Documents Committee has prepared model contract language to limit the risk for architects who undertake materials transparency initiatives. The new language is in Section 20 of the AIA Guide for Amendments to AIA Owner-Architect Agreements Document B503-2007. The question is whether architects will want to use this lengthy disclaimer as a red-lined revision to the AIA forms, and whether an owner will accept it. The answer is "no" or "doubtful" to both questions.

The AIA Board's Position Statement "encourages architects to promote transparency in materials' contents and in their environmental and human health impacts." The white paper goes a step further than encouragement, calling this an "ethical imperative" and saying that this "strong urging" to AIA members is supported by the AIA Code of Ethics charge that "AIA Members should be environmentally responsible and advocate for sustainable building." Is this an area that the Jefferson Literary and Debating Society should weigh in on? Or is it too late to turn back the HPD tide? ▀

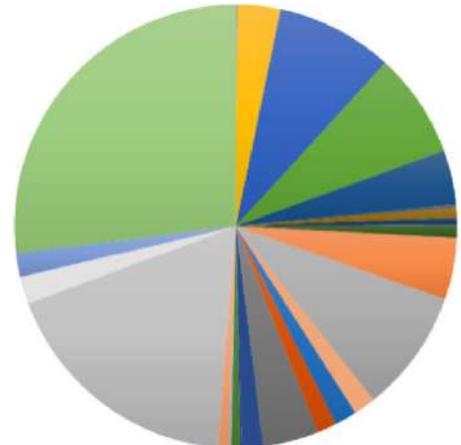
WILLIAM QUATMAN, Esq., is general counsel and senior vice president at Burns & McDonnell Engineering Co. He can be reached at bquatman@burnsmcd.com.

OPINION



COMPANY A

REVENUE SOURCE BY CLIENT SECTOR



COMPANY B

REVENUE SOURCE BY CLIENT SECTOR

The winds of change

Is your firm vulnerable, or are its revenue streams diversified enough to endure the ups and downs of politics and the economy?



**Marc
Florian**

**GUEST
SPEAKER**

The real test of an organization never comes when the wind is at its back and revenues are strong. However, these are the times when firms within the A/E industry should take a moment to assess their vulnerabilities.

Most A/E firms that I know of are doing well, and yours is probably no exception. Revenues are strong and the biggest challenge seems to be finding and retaining key staff. The wind is strong and steady. But, what if something changed and there was a sudden shift in the economy that alters spending in one of your key client sectors? Will the diversity of your firm's revenue streams enable it to easily tack and quickly alter course, or will over-weighting in a single market sector leave you drifting amid the doldrums?

Knowing exactly where your vulnerabilities exist and mitigating the risk of overdependence on a key market sector is a responsibility of senior leadership in every A/E organization. All too often, however, leadership is lulled into believing the sky will never fall, and there will always be time to plan – tomorrow. Besides, milking the cash cow client or market sector is a lot easier than building new sources of revenue. (Recall, that's how the leadership of many small environmental firms viewed the state-funded underground storage tank programs of the early 1990s, and we all know what happened to most of them.) It's hard to ever take money off the table when you're on a winning streak!

While most of you intuitively know just how vulnerable your firms are to changing markets,

sometimes visualizing your sources of revenue on a sector-by-sector basis brings the matter to a heightened sense of awareness. Take for example the two organizations above. Both are of comparable size, but one derives nearly 75 percent of its labor revenue from a single client sector. Trust me, seeing something like this in a pie-chart underscores the issue of vulnerability, and will send shivers down the spine of any self-respecting CFO!

“Sometimes visualizing your sources of revenue on a sector-by-sector basis brings the matter to a heightened sense of awareness.”

The same exercise can be used to easily visualize the vulnerabilities of individual business units or service lines within an organization. In this instance, the more work types or pieces making up the pie, the less vulnerable the unit is to sudden market fluctuation, and the more sustainable the service line is in the face of changing economies.

The point to be made here is that senior

See MARC FLORIAN, page 12



TRANSACTIONS

WESTWOOD COMPLETES ACQUISITION OF SITE CONSULTANTS, INC. Westwood Professional Services Inc. (#9 Hot Firm and #24 Best Firm Multidiscipline for 2016), announced that it completed an acquisition of Tempe, Arizona-based engineering and surveying firm, Site Consultants, Inc.

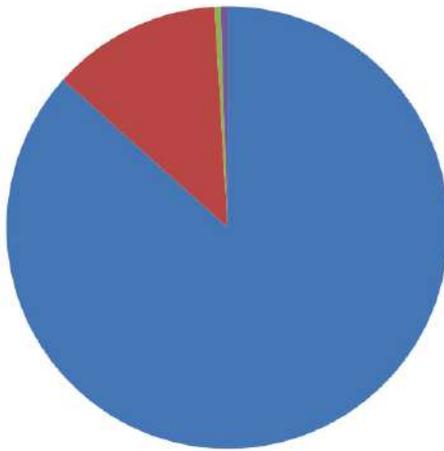
The acquisition expands Westwood's local operations and commercial and residential market presence with the addition of the well-established expertise from Site Consultants. Gary Stocker, PE, LS, president of Site Consultants notes the advantage to both firms, "Being diversified in markets and geographies,

Westwood expands our reach and increases opportunities for the Site Consultants team. At the same time, our local experience and established relationships support Westwood's efforts to expand business in the Southwest." Stocker appreciates Westwood's internal support system, "Westwood has a very strong internal corporate service team, which is a great benefit as it frees up our time to focus entirely on our clients and ensure them the best project solutions."

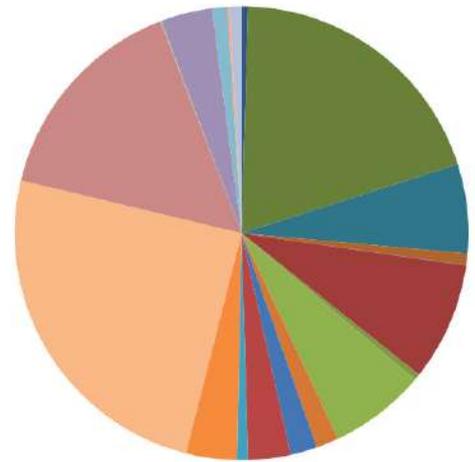
Site Consultants' vice president, Michael Caylor, PE, commented, "Adding our current impressive client base to Westwood's national

clientele is an excellent go-forward business strategy. Our management team, staff and associates are excited to provide assurance to our clients that we are better together, as one team – agile and better able to meet their growing needs."

Westwood's CEO and president, Paul Greenhagen, is excited to welcome the team as well. He says, "The group at Site Consultants values integrity and excellence in all they do, which makes them a great fit. We are very excited to work with them and are focused on providing a seamless transition for the team and their clients."



- GENERAL PERMITTING - INDUSTRIAL
- SOLID WASTE MANAGEMENT
- SOLID WASTE PERMITTING
- WASTEWATER PERMITTING/COMPLIANCE
- HYDRAULICS/HYDROLOGY
- WATER QUALITY MODELING/MONITORING
- CLIMATE ADAPTATION RELATED
- WATERSHED MGMT/MASTER PLANS
- PROGRAM MANAGEMENT SUPPORT
- SPECIAL STUDIES (MFL/TMDL, ETC)



**SERVICE LINE A
REVENUE BY WORK TYPE**

**SERVICE LINE B
REVENUE BY WORK TYPE**

MARC FLORIAN, from page 11

leadership in every A/E firm should be encouraged to view their organizations as they probably do their personal investment portfolios, and avoid becoming over-weighted in a particular sector. As any financial advisor will tell you, a balanced portfolio provides upside potential and a hedge against downside risk.

“Senior leadership in every A/E firm should be encouraged to view their organizations as they probably do their personal investment portfolios, and avoid becoming over-weighted in a particular sector.”

In the A/E industry, having a balanced portfolio requires the diversification of revenue streams across multiple service lines, and never becoming overly dependent on a single client sector. I know that it's an easy thing to say, but often difficult to put into practice – particularly when you're making money. However, consider this: Most large financial trusts are guided by policies established by

their governing bodies, which mandate just how heavily weighted their investments can be in terms of equities, bonds, cash, etc. When one of these mandates or ceilings is reached, the trusts' investment managers are required to re-balance the funds. Such policies provide a disciplined process designed to hedge the risk of overinvestment in a particular fund or sector. The operative word here is “disciplined.” Now, re-read the preceding sentences in terms of how the application of a similar concept might help drive diversification in your organization.

If your firm is doing exceptionally well in a particular market, stick with it, but consider what might happen if things suddenly changed. The sky might not fall and there might be time to plan tomorrow, but the likes of the recent “Brexit” vote and the impact it had on global markets reminds us just how sudden the impending political season could bring winds of change.

Is your firm prepared to tack, or will you be forced to stay the course? ▀

MARC FLORIAN is vice president of Environmental Consulting & Technology, Inc., a professional consulting, engineering, and scientific services organization.