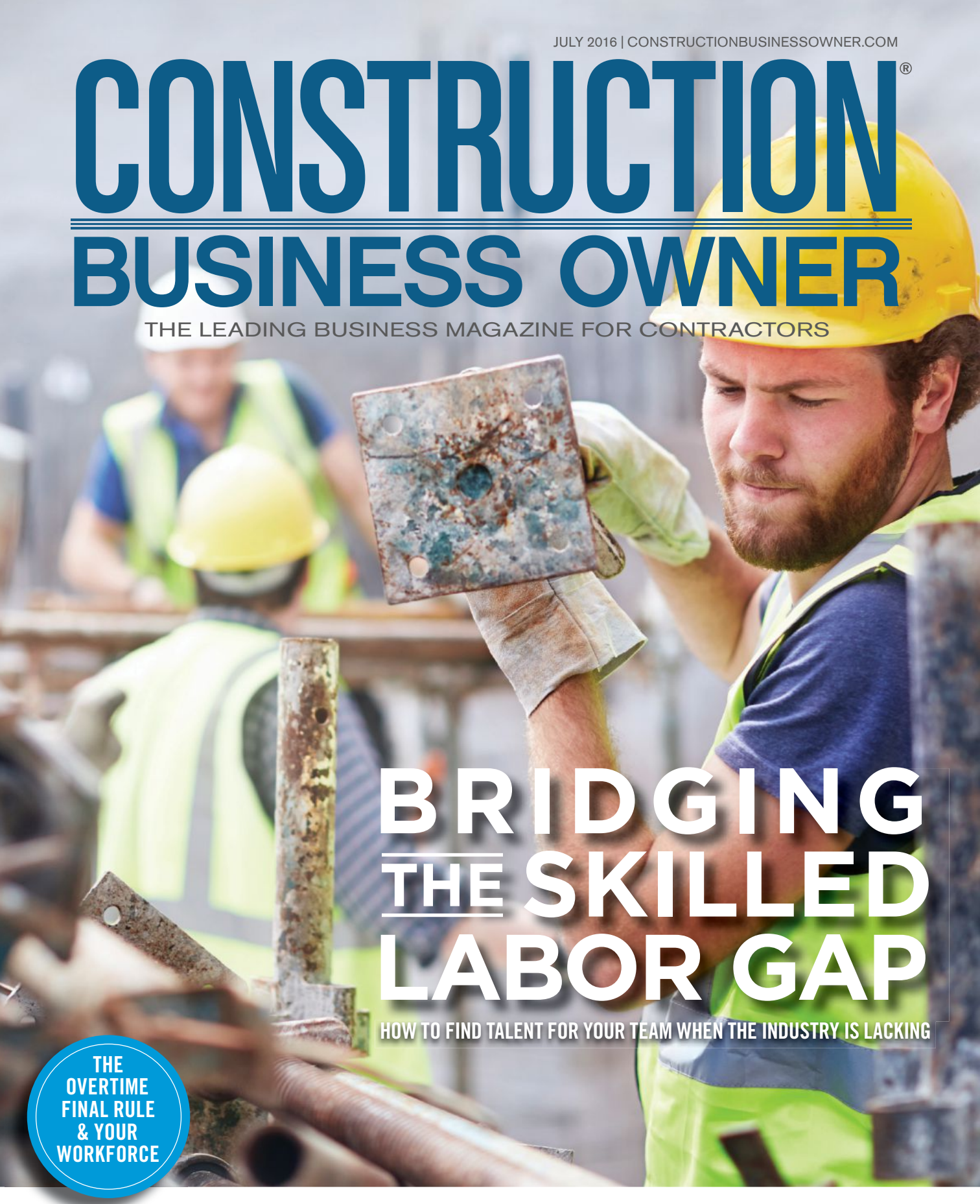
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THE LEADING BUSINESS MAGAZINE FOR CONTRACTORS



BRIDGING THE SKILLED LABOR GAP

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4192

FROM THE EDITOR | Kathy Wells

On May 18, 2016, the United States Department of Labor announced its final rule updating overtime regulations, which will automatically extend overtime pay to over 4 million workers within the first year of implementation. So what does this mean for your workforce? On page 30, Robert Coker reviews the provisions of the new overtime law and the effects it could have on your business.



Editor Kathy Wells was on-site at Komatsu in Cartersville, Georgia, last month for the launch of the D155AXi-8 RC, its radio-controlled crawler dozer with Intelligent Machine Control (IMC) technology.

With the passing of the final rule, some businesses may have to reconsider the way they operate in regard to workforce management processes. A large number of contractors continue to experience the impact from the skilled labor shortage, and many believe the final rule will compound the issue. With these concerns in mind, this month's cover series focuses on human resources and compliance. On page 28, LCPtracker Inc.'s Mark Douglas shares steps for protecting your company, workforce and subcontractors, and reviews the obligations, responsibilities and liabilities you hold when working under a prevailing wage project.

If you're struggling to rebuild a dependable team, turn to page 24 to read an article from Dexter + Chaney's John Chaney, who examines how companies have begun to turn to millennials and technology to combat the construction industry's talent shortfall. As the millennial generation continues to enter the construction workforce, business owners find they need to develop a strategy for managing this group of younger workers. On page 26, Kent Companies Inc.'s Keith Collinsworth offers a blueprint for the new generation of construction professionals with four strategies for maximizing this millennial talent coming into the workforce.

On the webinar front, *CBO* has partnered with the B2B marketing experts at Dean Houston to host a free webinar on July 28 at 1 p.m. EST, titled "Marketing B2B: 5 Best Practices." Join us for this live event, which will instruct attendees on how to create and deliver an effective B2B marketing campaign to reach your audience. Registration is free at cahabamedia.com/b2b-marketing.

Take good care,

Kathy Wells

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COVER SERIES

HR & Compliance

24 Navigating the Construction Industry's Talent Shortfall
How companies are turning to millennials & technology to bridge the skilled labor gap

26 A Blueprint for the New Generation of Construction Pros
4 strategies to maximize the millennial talent on your team

28 The Best Defense for Prevailing Wage Projects
A little planning can protect your company when the Department of Labor comes knocking



IN EVERY ISSUE

2 From the Editor

6 Industry Insight

8 Ask the Experts

45 Product Focus

48 Industry Stats

DEPARTMENTS

In the Office

10 Biz Builder
By George Hedley
Employ business systems to define tasks & avoid consistent errors

12 Project Playbook
By Gregg M. Schoppman
Make deliberate preparations for your company's next successor

14 Accounting & Finance
Why your company could potentially face a human resources audit

16 Software Solutions
The future of construction ERP software

20 Insurance Update
Top 6 market areas that are reshaping the construction insurance landscape

30 Special Report
The overtime final rule & what it means for your business

In the Field

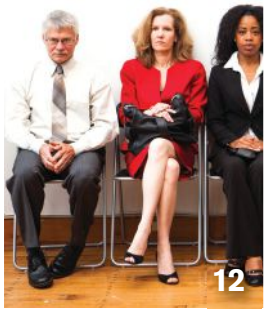
32 Equipment Matters
9 fuel management tips to help reduce contaminants & machine downtime

34 Equipment Maintenance
5 tips to keep your engine running smoothly in the summer months

36 Equipment Financing
Harness the power of accurate equipment rate calculations

40 Project Management
How sustainable operations & systems benefit your jobsite

42 Tech Support
Goals & data to help justify your telematics investment











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Steel Erectors Association of America Announces New President


Josh Cilley

Josh Cilley, president of American Steel & Precast Erectors (ASPE) and Buckner Steel & Precast Division of Buckner Companies, was inducted as president of the Steel Erectors Association of America (SEAA) in April. Cilley will serve a 2-year term. He succeeds Stephen Burkholder, president of S&R Enterprises, who was instrumental in the implementation of SEAA's Ironworker Training and Apprenticeship program. Cilley previously held board of director positions with SEAA, Associated Builders and Contractors and Triangle Chapter of the American Subcontractors Association of America. Visit seaa.net.

Heritage Industrial Services Earn the Citation of Merit Award

Heritage Industrial Services recently earned the Citation of Merit Award in this year's New Jersey 88th Annual Governor's Occupational Safety and Health Awards Program. The award was given for Heritage working throughout the year 2015 without a lost-time injury or illness. Heritage takes pride in this safety award and prioritizes safety on all projects. Heritage's strong safety record allowed the company to be approved in ISNetworld (ID# 400-223128). Visit heritageindustrialservices.com.

Flowcrete Group Appoints New President


Craig Brookes

Flowcrete Group Ltd has appointed Craig Brookes, previously Flowcrete Group's vice president and international managing director, as its new president. Flowcrete promoted Brookes to the role after former president, Mark Greaves, stepped up as president of The Euclid Group, the construction chemicals group within the multinational company, RPM International Inc. Brookes has been working at Flowcrete for 20 years. In 2000, Brookes relocated from the United Kingdom to Malaysia to establish manufacturing operations in Kuala Lumpur, building a hub for Flowcrete's operations across the Asia Pacific and Central Asia. Visit flowcreteamericas.com.

Haztek Names Principal Safety Consultant


Margaret Neville

HazTek Inc. announced the hiring of Margaret "Peg" Neville as principal safety consultant. Neville brings an extensive and diverse background as a registered environmental health specialist, principal lead instructor, floodplain specialist, mold assessor, senior scientist, asbestos operations and maintenance trainer, historic compliance auditor, environmental laboratory instructor and senior water scientist. In addition, she has published articles on environmental and historic preservation. Neville's reputation as an expert in lead extends to EPA Lead Safe Work Practices and training, OSHA Lead & Asbestos Awareness, lead inspections for commercial and public buildings, services in lead sampling (in soil, water and dust), historic preservation specifications, risk assessment, and abatement. Most recently, Neville was employed by the National Asbestos & Environmental Training Institute Inc. She also maintained her own business, Neville Environmental Solutions LLC., where she taught job readiness skills in construction. Visit haztekinc.com.

Minnich Adds to Research & Development Team


Paul Jaworski

Minnich Manufacturing recently announced that Paul Jaworski has joined the company's research and development team. Jaworski brings to Minnich 37 years of experience in concrete vibration technology innovation. He will focus on developing innovative products to meet changing concrete vibration needs. Visit minnich-mfg.com.

Buyers Products Announces Municipal Sales Manager


Patrick Fuchs

Buyers Products announced the addition of Patrick Fuchs as its municipal sales manager. Fuchs will join the sales and marketing team in the role of municipal sales and product development for fluid control and anti-ice. Fuchs' responsibilities include product development, support and sales for liquid spray, anti-ice, fluid control and municipal product lines. Prior to Buyers, Fuchs worked for the DICKEY-john Corporation. Fuchs has held positions in field testing, customer service and product management. Visit buyersproducts.com.

Curry Supply Names Regional Sales Manager

Curry Supply Company has announced that Bruce Carpenter has joined the organization as its newest regional sales manager. Carpenter comes to the company with more than 28 years of related sales and product support experience. Carpenter will be responsible for developing customer relationships and driving sales in Virginia, eastern Tennessee and central and western North Carolina. Carpenter is certified with the United States Department of Labor's Mine Safety & Health Association (MSHA). Visit currysupply.com.

Proxibid & John Deere Announce Partnership

Proxibid and John Deere announced an agreement that allows John Deere dealers to quickly and easily syndicate equipment for sale to the Proxibid and eBay marketplaces. John Deere dealers leveraging the M.A.X. (Multiple Advertising eXchange) to manage and list inventory across multiple platforms can now share listings to the Proxibid and eBay marketplaces. In February 2015, the company entered into a partnership with eBay, whereby equipment listings in the Proxibid marketplace are syndicated to the ecommerce giant's marketplace, making that inventory accessible to its 157 million global buyers. Visit proxibid.com.

Iron Planet Names Senior Vice President & CMO

IronPlanet announced that Matt Ackley has been named senior vice president and chief marketing officer. Ackley comes to IronPlanet with 25 years of technology marketing experience with companies that include eBay, Google, Marin Software and FairMarket. An engineer by training, Ackley has led development and marketing organizations for major brands. Ackley's experience in product and industry marketing, along with his strategic vision in developing alternative revenue streams, will be assets as IronPlanet continues to grow. Ackley will be responsible for all marketing and customer acquisition activities and is a member of the executive committee. In his 7-plus years at eBay, Ackley focused on revenue and demand generation, where he was the vice president of that group for 5 years. Visit ironplanet.com.

Volvo CE Appoints Global Director of External Communications



Tiffany Cheng

Tiffany Cheng has been appointed as the new global director of external communications at Volvo Construction Equipment. Based at the company's Brussels headquarters, the role encompasses print and online media relations for the business, as well as developing external communication standards and for Volvo CE. Reporting to SVP of corporate communications Bill Law, she will also take responsibility for the company's customer magazine, Spirit, as its new editor-in-chief. Cheng will move over from her current role as global director of internal communications, a position she has held since 2012. Visit volvoce.com.

ECCO Safety Group Appoints Vice President of Global Marketing

ECCO Safety Group (ESG) recently announced Kevin Chapman as vice president of global marketing. Chapman will be responsible for the expansion of ESG's digital presence, as well as overseeing long-term strategies in terms of brand and product development. As a trained mechanical engineer, Chapman brings a solid analytical approach to ESG. He comes to ESG with more than 20 years of experience in marketing, sales, product management and global management experience. Most recently, he served as vice president, head of strategy and marketing, of the Latin American region for Symantec. Chapman will be based out of ESG's Leeds office in the U.K. Visit eccogroup.com.

PCA Hires Director of Code Technology

The Portland Cement Association (PCA) has announced the hiring of Scott Campbell, Ph.D., P.E. as director of code technology. Campbell will focus on the structural provisions of national model building codes and referenced standards. He will manage analytical efforts supporting other key codes and standards activities including fire protection, energy conservation, sustainability and enhanced resiliency. A registered professional engineer, Campbell's most recent activities were concurrent as senior scientist at the College of Engineering at the University of Wisconsin in Milwaukee and president of his consulting practice, Structural Active Consulting Group. Visit cement.org.

ALL Family of Companies Names Three New Managers

The ALL Family of Companies announced the promotions of three long-term employees to managerial positions. Jude Stankov, a 21-year ALL employee, has been appointed general manager of the company's Mobile, Alabama, location. He will supervise all personnel and activities. Joshua Bacci has been appointed to general manager, ALT Sales Corp. ALT is the boom truck division of the ALL Family of Companies, handling sales and service for the company's large fleet of boom truck cranes and related equipment. Bacci has been with the company since 2006. Kristi Hesselbart has been appointed operations manager of the company's Central Rent-A-Crane branch in Elkhart, Indiana. Hesselbart has been with ALL for 18 years. She will supervise dispatch, billing and other operations-related functions. Visit allcrane.com.

Ecorithm Appointed to CABA Board of Directors

The Continental Automated Buildings Association (CABA) is pleased to welcome Ecorithm to the CABA Board of Directors. CABA is a nonprofit industry association that provides information, education and networking forums to help promote advanced technologies for the automation of homes and buildings. Ecorithm will be represented on the CABA Board by Matt Kastantin, who is vice president of business development. Kastantin leads the company's business development strategy and execution with revenue responsibility across Ecorithm's direct sales, value-added reseller and solution partner channels. Visit caba.org.

Liebherr Names General Manager of Marketing

Liebherr USA Co. announced the promotion of Ana Cabiedes-Uranga to the position of general manager of marketing. In her new role, she will be responsible for leading and facilitating the company's marketing efforts and strategy for the eight divisions that fall under the newly formed Liebherr USA Co. umbrella. Cabiedes-Uranga has over 10 years of combined marketing and management experience at Liebherr. She has also managed public relations and led large-scale projects and events. In her most recent position, she played a role in the development of strategic marketing initiatives and programs for its rapidly expanding distribution network in the U.S. Cabiedes-Uranga joined Liebherr in 2005. Visit liebherr.com.

IRMI CEO Jack Gibson Honored by the American Bar Association

The Tort Trial and Insurance Practice Section (TIPS) of the American Bar Association recently presented Jack P. Gibson with a certificate of appreciation, recognizing the 20-year collaboration between International Risk Management Institute Inc. (IRMI), and TIPS with respect to the TIPS Scholarship Program and IRMI CGL Reporter publication. Gibson is president and CEO of IRMI. The presentation was made during the Leadership in Action Luncheon at the TIPS Spring CLE Conference. IRMI's cumulative contributions will have exceeded $500,000 by the end of this year. Scholarships are awarded by a TIPS committee to attorneys who are in a place in their careers where they cannot afford the costs of attending continuing legal education programs presented by TIPS. IRMI recently introduced an updated version of CGL Reporter, renaming it as Insurance Case Finder. The database of case summaries now exceeds 7,250 cases. Visit irmi.com.

30 YEARS

Kioti Tractor celebrates 30 years in North America. Its parent company, Daedong Industrial Company Ltd., and KIOTI Tractor established their first headquarters in Wilson, North Carolina, in 1993. In 2004, KIOTI built a new North American headquarters on more than 13 acres of land in Wendell, North Carolina. Visit kioti.com.

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To submit a question, email Managing Editor Elizabeth Manning at emanning@cahabamedia.com.

Winning Federal Projects

What is the best strategy for getting involved with bidding for government contracts?



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Principal
EYP Inc.



GREGG SCHOPPMAN
Principal
FMI Corporation



SHAWN MYERS
SSG, USA
Contract Specialist
Mission & Installation Contracting
Command Center - Fort Bragg

"The short answer is: Get on someone's team! How do you do that? Most, if not all, federal government opportunities are advertised in FedBizOps (fbo.gov), where architects can find all sorts of opportunities to pursue federal government work. The federal government issues many RFPs requests for proposals (RFPs) for contracts that are "small business set-asides," which are good opportunities for small firms wishing to break into government work. Some of these are single projects, but many are also termed "indefinite delivery indefinite quantity" (IDIQ) contracts, where a firm can perform multiple "task order" projects over a period of 5 years. Other teaming opportunities for government work include "design build" work, where you join a general contractor's team for a project; or, as a small business, large architectural firms pursuing large projects often need to fulfill their small business plan requirements by hiring small consulting firms. Small architectural firms are ideal, local partners when the large firm is not located where the project is located. Government agencies will advertise "industry days," intended to be networking events for teaming opportunities. FedBizOps even has a tab entitled "vendor collaboration" to encourage this involvement.

"Most government projects are competitively bid and require a strong focus on cost control and efficiency. This is a highly competitive marketplace that requires dedicated resources and a knack for making money. If a business is going to make a strategic commitment, they should consider dedicating resources to play in this environment. There are couple of reasons:

- *Level of detail/Paperwork intensity*—There are so many more requirements than a typical commercial project.
- *Level of hierarchy*—Depending on the project and customer, a contractor may be detailing with the end user, designer of record, construction manager, inspecting agencies, etc.
- *Timelines*—People get lulled to sleep on projects like this—they see months of mobilization and forget that mobilizing means more than setting up a trailer and moving earth.

Once again, this is an effective hedging strategy, but it requires a deep understanding of the risks, patience and a perseverance on issues. There is no room for passivity. It is imperative that the entire team—internal and external trade partners—communicate and understand every aspect of the project.

"Large and small businesses interested in contracting opportunities with the army should start by registering with the System for Award Management website (sam.gov). Also, they should obtain a Data Universal Numbering System (DUNS) number for identifying their business entity and a Commercial and Government Entity (CAGE) code. Registration should be public and accurately reflect your business. Make sure to include the North American Industry Classification System (NAICS) categories in which you are working. The Mission and Installation Contracting Command actively seeks out small businesses to participate in the acquisition process as governed by federal acquisition policy. Work with the SBA to ensure your information is available on its Dynamic Small Business Search (DSBS) and is accurate and updated. Set-asides are key for a new business hoping to compete in government bids. Check eligibility for historically underutilized business zone small business and 8(a) certifications. Your SAM and DSBS profiles should match perfectly. Monitor the Federal Business Opportunities website (fbo.gov) and other websites for your local contracting offices. A list of potential opportunities could give your company insight into upcoming opportunities.

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As a professional construction BIZCOACH and industry speaker, George Hedley helps contractors increase profits, grow and get their companies to work. He is the best-selling author of "Get Your Construction Business To Grow & Profit!," which is available online at hardhatpresentations.com. Email gh@hardhatpresentations.com to sign up for his free e-newsletter, join a peer mastermind BIZGROUP, implement the BIZ-BUILDER BLUEPRINT, or get a discount for online courses at hardhatbizschool.com.

ASK GEORGE

To submit a question for George Hedley, email Managing Editor Elizabeth Manning at emanning@cahabamedia.com.

Dave owns Progressive Concrete Construction and recently called me for some help with his company. As the economy improved, his workload increased and he wasn't able to get everything done. He was too busy, out of control, couldn't get his employees to be accountable or responsible and had to constantly remind them what they needed to do. With today's added pressure to do more, faster and with less, how can you get it all done?

Dave's company had up to 10 jobs under construction at one time, and the management team had expanded to four project managers, two estimators, six people in administration and accounting, eight field superintendents, five foreman and 50 men on his concrete crew. His goal was to have a profitable, organized company run by his management team, but he had trouble delegating tasks to his workforce.

As Dave explained his routine, he said he worked with estimators on every bid, presented every proposal, attended most job meetings, was on-site for every concrete pour, reviewed progress payment invoices, approved major purchases and signed every contract and subcontract. He was involved in every aspect of the operation. Dave said it was easier to do things himself than to trust his people. His actions kept him stressed out and overworked and drove his employees crazy. He was impatient and frustrated with employees, which made it difficult to get and keep people.

FIX YOUR COMPANY

Most McDonald's restaurants host an organized operation, without the boss in front of the line directing traffic and cooking hamburgers. How do they do it without the owner constantly supervising, putting out fires and making every decision? Behind the counter there are illustrations that display how to build hamburgers and other menu items. A huge, multilocation company runs smoothly by using simple pictures and checklists of the finished product to ensure things will be done the same way every time. The illustrations define what is expected and guarantee consistent quality and performance. If McDonald's can do this, why can't Dave, and why can't you?

PRODUCE RESULTS

Written systems, guidelines and standards are the key to building an organized company. Written playbooks that show how you want things done, with checklists, pictures and systems, reduce your dependence on finding superhumans who can read your mind and work exactly the way you want them to, without constant supervision and inspection. Companies controlled by owners who hold these systems in their heads cannot grow. They get stuck at the maximum workload the owner can reasonably handle.

Systems allow companies to produce the same results every time. With written, trained systems, you won't have managers



or foremen handling decisions or installation methods differently. Systems ensure the little things are taken care of without constantly reminding your team how to properly execute a task. Systems allow you to focus on important tasks that make you the most money. Systems allow you to deliver consistent results to your bottom line, your customers and your projects.

Customers count on the same product every time. That includes production methods, meeting agendas, field operations, customer interactions, selling opportunities, transactions, finished products, services, jobs and projects. You want all of your employees, whether they are in management, estimating, supervision, administration, sales, accounting or field production, to uphold the same successful processes.

KEEP SYSTEMS SIMPLE

Excellent companies have simple systems. For example, hotel rooms always look the same when they are ready to be occupied. How do they do this? Supervisors show the housekeepers what they want by displaying a clear picture or checklist of a finished, occupant-ready room. They don't care how the final results are accomplished; only that those rooms are perfect and identical to other rooms in the hotel. This simple approach can be applied to every part of your business.

GET CONSISTENT RESULTS

Dave realized that it takes more than just hiring reliable employees to get the job done. When your business isn't organized or systemized with procedures and company standards, the results are not consistent and your company is constantly out of control, relying on you to put out fires and make every decision to keep the balls in the air. Without written systems, even the greatest employees cannot deliver consistent results. You have to show them how to accomplish what you want done.

As a concrete, tilt-up building contractor, Dave's company was having problems with proper installation of metal door frames poured into exterior concrete walls. When installed wrong, doors didn't fit correctly and would not open and close properly. Because this problem occurred often, he soon discovered that fixing bad door frames cost his company a lot of money.

After closer inspection, he realized frames were often twisted or kinked, which kept doors from swinging properly. He found out that some of his foremen were not bracing the frames rigidly enough prior to pouring wet concrete into the frame forms. Therefore, the weight of wet concrete caused the frames to bend and twist. However, Dave's real problem was relying on each foreman to individually decide how to install the door frames.

USE THE TEAM APPROACH

Dave didn't have a companywide system in place to ensure these problems wouldn't occur. The fix was simple: create a standardized, pre-pour door frame installation technique and bracing system for every crew to follow. By getting his foremen together, they developed a company standard to insure every frame was installed the right way. Once the system was implemented and trained, it saved money, time and aggravation, and it also increased reliability and quality workmanship. What recurring problems cost you tons of money and aggravation every year?

DECIDE WHERE TO BEGIN

The biggest problem with getting organized and systemized is finding the time to do it. It seems like a monumental task to organize your entire company with a detailed, written playbook of checklists, standards, comprehensive procedures and operational systems. The reality is it only takes a short time commitment to make each written system happen in your company. Set aside 1, 2 or 4 hours a week to begin systemizing your company. Start by making a list of the things you want to fix or standardize. Select the ones that cost you the most money or time. If you create 1 to 2 standard systems every month, you will have 12 to 24 systems installed by the end of the year.

Work toward creating a company "Do Manual," a playbook of systems for every important task performed. Most employees only need 10 to 20 systems, or checklists and illustrations, of how you want tasks consistently performed. These systems will eliminate most problems that ruin your bottom line, production, profits and calendar on a daily basis. **CBO**

Who Will Run Your Business When You Are Gone?

Make deliberate preparations for your company's next successor



Gregg M. Schoppman is a consultant with FMI, management consultants and investment bankers for the construction industry. Schoppman specializes in the areas of productivity and project management. He also leads FMI's project management consulting practice. Prior to joining FMI, Schoppman served as a senior project manager for a general contracting firm in central Florida. He has completed complex construction projects in the medical, pharmaceutical, office, heavy civil, industrial, manufacturing and multi-family markets. He holds a bachelor's degree and master's degree in civil engineering, as well as a master's of business administration. Schoppman has expertise in numerous contract delivery methods, as well as knowledge of many geographical markets. For more information, visit fminet.com, or contact Schoppman by email at gschoppman@fminet.com.

Procrastination is hardly a word that defines the nature of construction leaders. However, the same group of leaders that have forged the strongest construction empires procrastinate about the one element that often requires them to examine their own mortality—ownership transfer. There are many cases in which owners decide they are having too much fun to hang up the saddle. Reminiscent of the cowboys of old, going out "with their boots on" seems like an acceptable approach. On the other hand, there are plenty of leaders who want to enjoy the later years in life, but choose to kick the can down the road. Living in a reactive universe creates a lack of proactive strategy. Unfortunately, the same can that was kicked year in and year out tends to come back around sooner than you might think.

THE STRATEGIC VIEW

Strategic plans often focus outward. Finding new customers and new markets often trump dealing with immediate personnel challenges. Furthermore, talent development appears to be limited to younger or newer associates. Onboarding and education focuses on expediting growth of that newer generation to serve as a catalyst for volume growth. However, strategic planning should include the following elements:

- *Gap analyses*—As leaders move up in the organization, note which positions are vacated, leaving voids in talent.
- *Training the successor*—For the next generation leadership group, what concrete plans are being utilized to avoid large gaps?
- *Ownership transfer modeling*—How will ownership be compensated for their shares/equity? Put another way, how long will it take for the purchasers to acquire the necessary funds to make the buyout effective?
- *Management succession*—Some organizations steer toward an Employee Stock Option Plan (ESOP). While this solves the ownership transfer problem, there is still the dilemma of management succession. You will still need someone to run the business, even if the stock is handled.

The most important element to recognize is that ownership transfer/management succession should be part of the firm's strategic plan. Training is often viewed in the short term—provide skills to improve profitability, customer relations and efficiency. Instead, take the long-term approach—migrate skill development to teach people to lead the business, rather than just lead the projects.

THE TRANSITION DILEMMA

There are plenty of people who truly enjoy everything about the construction industry and their career. Ending their career not only represents an end to fun, but also a



possible mortality indication. Failing to deal with succession allows leaders to brush this critical issue under the carpet. There are countless tales of business failure due to preventable succession issues. Potential successors need to see the light at the end of a current owner's tunnel. If they don't see opportunity, they will go somewhere that will give them an opportunity. Do not let pride write a chapter in your firm's strategic plan that will only doom it in the long term.

THE FUTURE GENERATIONS

The secret to managing younger generations dominates the headlines of many business journals. One consideration that should be recognized sooner rather than later is the desire of the millennial generation and their perspectives on ownership. Regardless of age, there are plenty of talented individuals who are excellent managers, but have zero desire to be an owner. The lesson is this: educate your "high potentials" early and often on what it means to be an owner. For all of the positive aspects, there is no shortage of entanglements that owners must deal with daily that may dissuade someone else. This is something to know early on in the ownership transfer/management succession process.

MANAGEMENT DEPTH

Running a business requires so much more than just the CEO or president. Who will succeed your general superintendent? Your top senior project manager? Your controller? The gap analysis is imperative to identify operational voids that will be left with retirements and departures. What if a key leader were to go down tomorrow due to a health issue? What happens to the business? While it might seem callous to consider at the time, the business must persevere. Management succession is as important as ownership transfer.

A FAMILY AFFAIR

Family-owned businesses and construction often go hand in hand. For many leaders, it is important to maintain the sanctity of being family owned. There are many considerations to recognize when dealing with family issues, though, including:

- *Development of future owners*—It is a safe bet that leadership traits are not genetically predisposed. How will future leaders be grown? Should family members be forced to leave the fold before they assume any new role?
- *Considerations of non-family members*—Are you losing key talent because you are not willing to look for management or leadership outside of the family? Is the continual maintenance of the family name or maintaining a vibrant business for future generations more important to you?
- *Make them earn it*—Fair or not, family members always face a cynical, uphill battle, "They are only in that position because of their name." The most successful transitions usually involve family members that have spent time in the trenches. While this isn't always feasible, think about the future generations' credibility and the loyalty of the team they will eventually lead.
- *Rules of engagement*—Family roles may not be in the immediate future. This is the perfect time to develop rules around the treatment of a brother or sister or son or daughter. Rather than making case-by-case determinations, create fair and equitable rules for:
  - Ownership limits
  - Assumption of ownership
  - Voting rights
  - Extended family rules
- *Accept the brutal truth*—Sometimes the hardest part of any construction business is coming to the conclusion that a family member is not the chosen one. Sometimes it is a developmental issue that, with corrective action, can be rectified. In some cases, it is simply not the right choice. Confront the brutal truth and be proactive. Ripping the Band-Aid off over a 10-year time frame does not do any long-term good.

Ownership transfer and management succession are integrated issues every firm will deal with recurrently. In the end, every business also has the opportunity to simply close the doors when the time is right. Most leaders realize we are all custodians, keeping the seat warm for the next generation with the desire to leave a successful legacy for the second and third generations. However, the strategy and tactics must be well thought out and deliberate. **CBO**

Audits Aren't Only for Accounting

Why your company could potentially face a human resources audit

BY CYNDI MERGELE

Businesses know financial audits. They use their CPAs to examine financial transactions and statements to present an accurate account of the company's financial business transactions. However, employers should also consider a different kind of audit: a human resources (HR) audit. HR audits present an accurate account of the company's compliance with federal and state labor and employment laws and regulations.

Consider this: Even if a company employs less than 20 people, they are still subject to 23 different labor laws. With 50 people, that number increases to 29 different federal labor laws. The chances of employers being routinely audited for compliance with these laws are constantly increasing. The federal agencies charged with enforcement of these labor and employment laws have stated that their main strategic initiative is enforcement of employment laws, and, in order to do so, they must increase their audit activity of employers. Additionally, employees are more knowledgeable and better informed of their rights and may also trigger audits via complaint to an agency, such as the United States Department of Labor (DOL). These audits are time consuming, and, if violations are discovered, can cost hundreds of thousands of dollars. These can include:

- *I-9 Audits*—This involves U.S. Immigration and Customs Enforcement reviewing I-9 forms. This isn't only about hiring undocumented workers, but also about completing I-9 forms correctly and in a timely manner.
- *Wage and hour*—This involves the U.S. DOL auditing compliance with the Fair Labor Standards Act. These audits could be routine or triggered by a current or former employee complaint. These audits review that employees have been correctly classified as employees or independent contractors, ensuring that nonexempt employees are paid minimum wage and overtime for hours worked and are not subject to improper deductions from pay. Wage and Hour Division is responsible for ensuring government contractors' compliance with prevailing wage regulations (Davis Bacon and McNamara-O'Hara Service Contract Acts).
- *Retirement plans audits*—These come from the Employee Benefits Security Administration, a division of the DOL, conducting audits of qualified retirement plans (both pension and 401(k) plans). These audits are conducted to determine whether plan sponsors adhere to the plan provisions and then manage those funds as required.
- *Internal revenue service*—While these audits are all about taxes, they can also examine the misclassification of workers as independent contractors. Not properly issuing 1099 Forms and



issuing W-2s and 1099s with "bad" social security numbers can trigger an audit. Through memorandums of understanding, misclassification of workers can be shared with the DOL and state employment commissions.

- *Affordable Care Act audits*—Like independent contractor audits, compliance with the Affordable Care Act will be enforced by the Internal Revenue Service and the DOL. As employers with 50 or more employees are required to submit annual reporting (Forms 1094 and 1095), you should anticipate that audit activity will follow.
- *State Department of Transportation audits*—Businesses engaged in projects funded by the Federal Highway Administration must comply with federal work and have additional equal employment opportunity regulations with which they must comply.

First, you must understand which laws you are required to comply with based on your company's size and your industry. It is also critical to establish whether the state(s) in which you do business have state labor and employment laws with which you are required to comply. Are there annual reports you should submit to a government agency, and if you haven't submitted these reports, is there a penalty for it?

When participating in an internal HR audit, employers can identify risky areas and take action to mitigate that risk and correct potential violations. While addressing these issues may not completely protect an employer from possible penalties for violations, they do show good faith effort on the part of the employer to comply. This serves to either reduce penalties or, in some cases, allow employers to be warned of violations and avoid penalties. Like financial audits, HR audits may best be conducted by an independent third party. While audits could be conducted in-house, it is vital that the team member responsible has the knowledge and expertise to identify potential issues. Use of outside consultants will provide up-to-date compliance knowledge and assist in appropriate methods for correction. They also have no personal stake in the game. It is critical that companies review their federal, state and local employment obligations and potential risk.

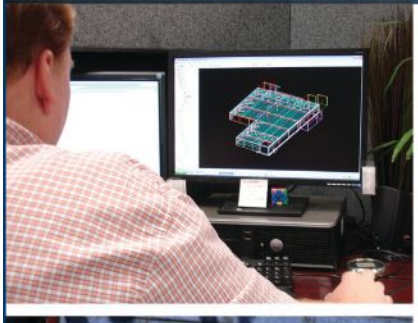
One thing is clear—employers are at higher risk now than ever before for a visit from a federal enforcement agency. In the result of enforcement, employers should be knowledgeable and prepared. **CBO**

Cyndi Mergele is a senior manager with Padgett Stratemann & Co. L.L.C. Human Resources Consulting Group. Visit padgett-cpa.com.



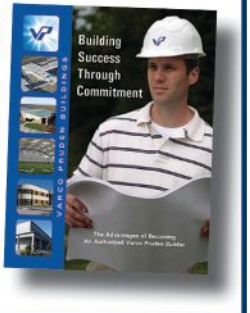
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The Future of ERP in Construction

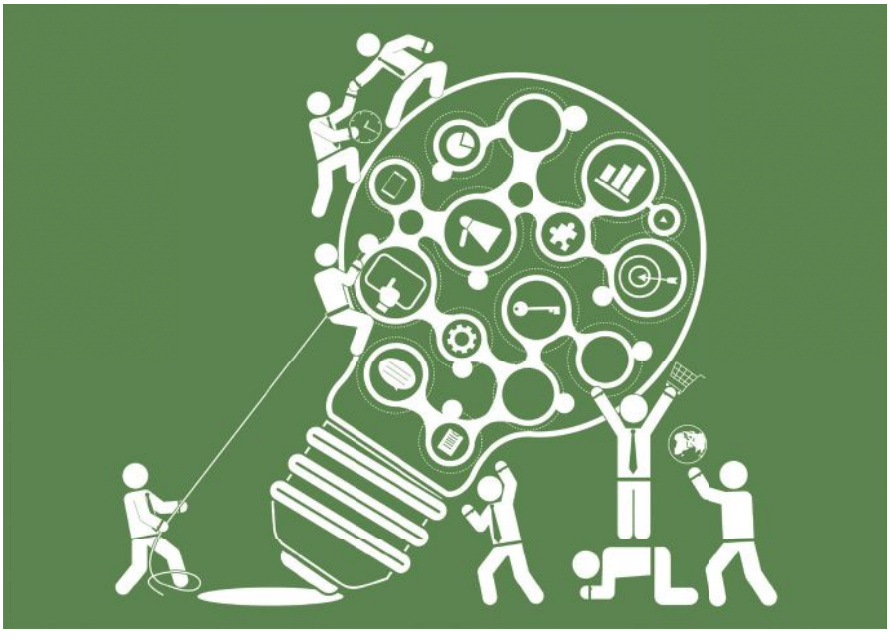
Improve your business operations by updating your current accounting software

BY CHRISTIAN BURGER

Over the next few years, construction companies are going to be evaluating one of their more substantial software applications, the accounting system (sometimes referred to as enterprise resource planning software, or ERP), for a variety of reasons. One of the more compelling reasons is the realization that the current solution is no longer evolving and growing in a positive way.

A less obvious reason could be that companies are outgrowing their current platforms. This is not necessarily because of scale, though it sometimes can be. It is fairly easy in today's construction environment to add more licenses to a system when more users need access. Instead, companies are beginning to question the fundamental assumptions of ERP. Companies are now paying more attention to what applications they want to run through ERP and how they will deliver information to their younger, more tech-savvy users.

Many construction companies have made at least two ERP transitions in the last 20 to 25 years. Sometimes it is a smooth transition from one version of an ERP solution to another from the same company. Other times, it is a more radical change from one company's product to another, including changes in the underlying platform and/or technology. But during those transitions, few questioned what the application footprint was or should be, as shown in Figure 1 on page 18.



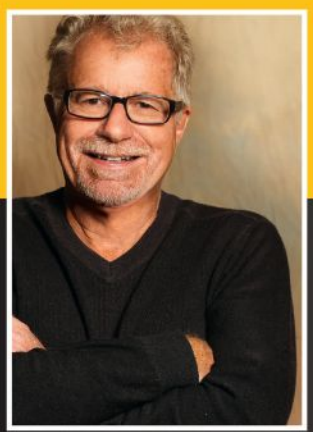
Today, there are some interesting alternatives that contractors should consider when they begin this transition process. It will still be somewhat costly and time consuming, but it does not have to be frustrating or risky. The most important objective is to execute this process for the long term and get the most value possible. The goal has to be more than just issuing payroll, producing financial statements and writing checks for accounts payable.

ERP is nearly always the book of record for job cost. During the early 2000s, many of the traditional ERP companies developed and deployed project management (PM) applications in an attempt to provide a larger integrated solution and capture more users. For a while, before mobility became the norm, they succeeded because the competitive, standalone PM solutions were either bloated with features or past their prime. For some companies, the integrated approach was transformative and got both operations and accounting on one platform. But for others, the attempt felt like forcing a square peg into a round hole.

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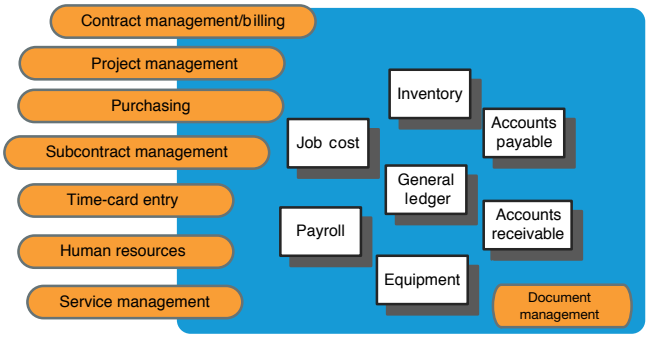


Figure 1. Traditional ERP footprint solutions

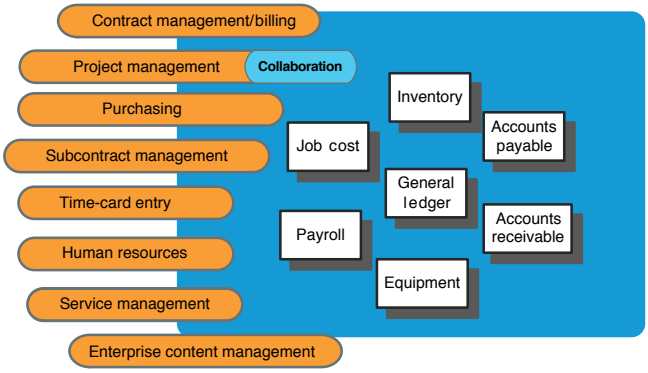


Figure 2. Best-in-class ERP footprint with solutions available from third-party developers

In the late 2000s, better point solutions specifically built for web and mobile became available, and quickly. Operations teams gravitated to these solutions in order to solve urgent field and PM problems. This was putting pressure on the ERP developers to enhance or redeploy (for mobile) their PM functions. This added to the already long list of enhancements for the platform overall. At the same time, HR, equipment and procurement demands began to increase.

Small, privately held ERP solutions will be under siege for the foreseeable future and must retool to survive. Many of them have sought outside capital and investment in an effort to keep pace, but more functions in the traditional footprint may not be enough. ERP solutions will have to take a position or direction in order to succeed. This will entail creating a narrowed market focus, changing integration strategy or opening the platform to development partners. For some, it could be a combination of the following approaches:

- *Narrow market focus*—Some will decide to focus development energy



on a narrower contractor market specialty, much the way estimating solutions did years ago. This will mean better functionality for those of that genre, but fewer features with broader appeal or to contractors in other sectors. The advantage here will be lower IT support costs because there will be less tech to manage in terms of a complex environment.

- *Better integration strategy*—Others will develop a strong core accounting application with good integration technology to enable others to bolt on best-in-class applications for specialized applications like fabrication, estimating, procurement, equipment, HR and other support functions.
- *Encourage development partners*—Still others will develop and maintain a more general-purpose ERP solution with an open platform that includes a robust integration hub of sorts. This will allow third-party developers to build and maintain third-party applications for specialized functions. This approach is like SalesForce, through which you license the core application and can then choose from dozens of secondary applications, which are built and tied into the Force database by other developers.

This all means that your ERP strategy is likely to change, or perhaps your overall IT strategy will demand a different ERP platform than the one you are on today. One question you have to ask yourself is whether you want your ERP to perform as the center of the universe that it used to be or may still be. For some, moving to a smaller but more flexible, less expensive and demanding ERP may be the answer. Those companies will buy or license those improved point solutions and tie them in to the ERP database where necessary.

For others, the large, integrated approach remains the best strategy and simply needs to be adopted better within the organization. Those companies will save cost and risk by not having to integrate with other solutions, but they are also tied to the pace and direction of that developer as they decide to bring solutions to market. **CBO**

Christian Burger is the president of Burger Consulting Group, an IT consulting firm based in Chicago, Illinois. Burger has worked within the construction industry for nearly 25 years, originally with FMI before starting his own firm in 1997. Much of his work at the firm is focusing on IT strategy and leadership for BCG clients. Burger is also involved in best practices process work during the implementation phase. Visit burgerconsulting.com.



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2016 Insurance Trends

Top 6 market areas that are reshaping the construction insurance landscape

BY JOHN CAMPBELL

As the United States construction market heats up, there is a renewed focus on improving operational efficiencies and embracing risk management strategies that could offer a meaningful financial impact.

The construction insurance market is responding positively to these efforts, rewarding owners and builders that are operating their businesses efficiently and managing their risks properly with lower insurance premiums, broader coverage and higher limits.

Still, in today's post-recession construction industry, not all trends have a positive effect on the market overall. Difficulty finding skilled labor, evolving construction delivery methods, numerous cybersecurity failures and increased litigation are creating a host of new challenges for construction insurance buyers.



1. LABOR SHORTAGE

The recession caused many construction workers to leave the industry, resulting in contractors struggling to meet labor demands. According to a survey of 1,386 companies conducted by the Associated General Contractors of America (AGC), more than 80 percent of construction companies are faced with challenges acquiring qualified workers, such as carpenters, sheet metal installers and concrete workers. Companies are also struggling to fill salaried positions, such as project managers, estimators and engineers. This shortage is having a direct impact on workers' compensation claims and premiums, since fewer workers are carrying a greater portion of the workload and newer workers are less skilled or in need of additional training.

Certain companies facing labor shortages could see losses increase on average by 30 percent, which, in turn, could result in a dollar-for-dollar increase in the workers' compensation experience modification. Additionally, these companies are also at risk of:

- Lost revenues due to increased costs
- Inability to bid on new projects due to

Attacks on employees via spear phishing, a fraudulent email that appears to come from a familiar source, increased 55% in 2015. More than half a billion records were lost or stolen due to data breaches.

experience modification rate (EMR) qualifiers
- Lost time and expense
- Project delays

2. EVOLVING CONSTRUCTION DELIVERY METHODS

Recent data from RSMeans shows the design-build delivery model has gone from being used in only a small minority of large, nonresidential construction projects to being the market leader in all types of construction projects over the last decade.

Compared to the traditional, design-bid-build contracting method, in which an owner is obliged to negotiate specific, separate contracts with multiple specialists, integration of the design and build functions under a single entity or team, fosters collaboration and increases productivity. However, the move to a design-build model has exposed more contractors to professional liability risks.

Many contractors have insurance policies that do not provide protection that is reflective of their activities and exposures, especially as it relates to design work done. This exposure remains even when the contractor subcontracts the work to another entity.

The increased use of joint ventures and the integrated project delivery method (IPD) in the construction industry are also creating some unique challenges. For example, often companies fail to list the joint venture itself as a named insured on the policy—a mistake that could lead to potential uncovered losses and a breach of contract exposures.

Regarding IPDs, a type of project agreement where all entities agree to waive their rights to subrogate or sue any other entity and all claims become part of the construction budget, many carriers will not agree to waive their rights of subrogation. This can cause a breach of contract for any entity that has agreed to be part of a project's IPD agreement but has not received a waiver from the carrier.

3. INCREASED CYBERSECURITY RISKS

As construction delivery methods evolve, general and trade contractors are staying competitive by embracing technologies, partnerships and new business arrangements that inadvertently expose their operations to a wide range of cyber risks, including hacking, social engineering, cyber extortion and data breaches. Construction firms are discovering costly cyber-related vulnerabilities daily, and this trend is likely to continue as the industry pursues growth opportunities and efficiency improvements.

According to Symantec's 2016 Internet Security Threat Report, cyberattacks targeting businesses with less than 250 employees represented 43 percent of all attacks in 2015, an indication that companies of all sizes remain at risk. Attacks on employees via spear phishing, a fraudulent email that appears to come from a familiar source and is directed at specific individuals or companies, increased 55 percent in 2015.

In addition, more than half a billion records were lost or stolen in 2015 due to data breaches. The Federal Bureau of Investigations (FBI) reports that between



October 2013 and February 2016, law enforcement agencies received reports of business email compromise scams, also known as social engineering fraud, involving 17,642 victims. According to the FBI, complaints involving these kinds of fraudulent schemes have risen in every state and 79 different countries, resulting in over $2.3 billion in losses. The costs associated with all of these events have escalated and can be financially crippling for a construction company that is not adequately protected against this type of exposure.

4. HEIGHTENED CLAIM ENVIRONMENT

Although contractors continue to improve their focus on risk management, accidents happen daily at construction sites all over the country. These events, along with many common claim types against construction companies, are inevitable. However, off-the-shelf solutions to manage these liability risks are frequently inadequate. For instance, take lawsuits alleging inferior workmanship against a contractor or subcontractor. They are among the most common construction claim types, but they can be unusually complex, given the numerous parties typically involved in a project.

In addition, many construction companies do not have a deep knowledge of their organization's claims history. Most companies need professional help analyzing claim trends that adversely impact loss experience and total cost of risk. Doing so enables management to develop a risk control plan that is based on the review, and clearly details the financial improvement to be expected through the implementation of the recommended plan.

5. ENVIRONMENTAL LIABILITIES ON THE RISE

Regulators and the courts are increasingly holding construction firms accountable for environmental mishaps, including legacy contamination of which they may not have previously known. At both the state and federal levels, aggressive enforcement of environmental protection laws and an increase in awareness over health and natural resource concerns has led to a rise in the frequency and severity of claims triggered by environmental incidents.

In particular, cleanup costs of pollution events have increased dramatically in recent decades. For example, the cost to remediate 126,000 polluted groundwater sites monitored by the U.S. federal government—due to contaminants from underground storage tanks, military installations and industrial facilities—could range from $110 billion to $127 billion. Also, as environmental legislation and case law continue to change, companies are finding it even more difficult to stay abreast of the environmental risk landscape. As such, today's construction firms have an urgent need for comprehensive environmental risk management that fully addresses their complex and evolving exposures.

6. EXPENSIVE EQUIPMENT LEADING TO COSTLY EXPOSURE

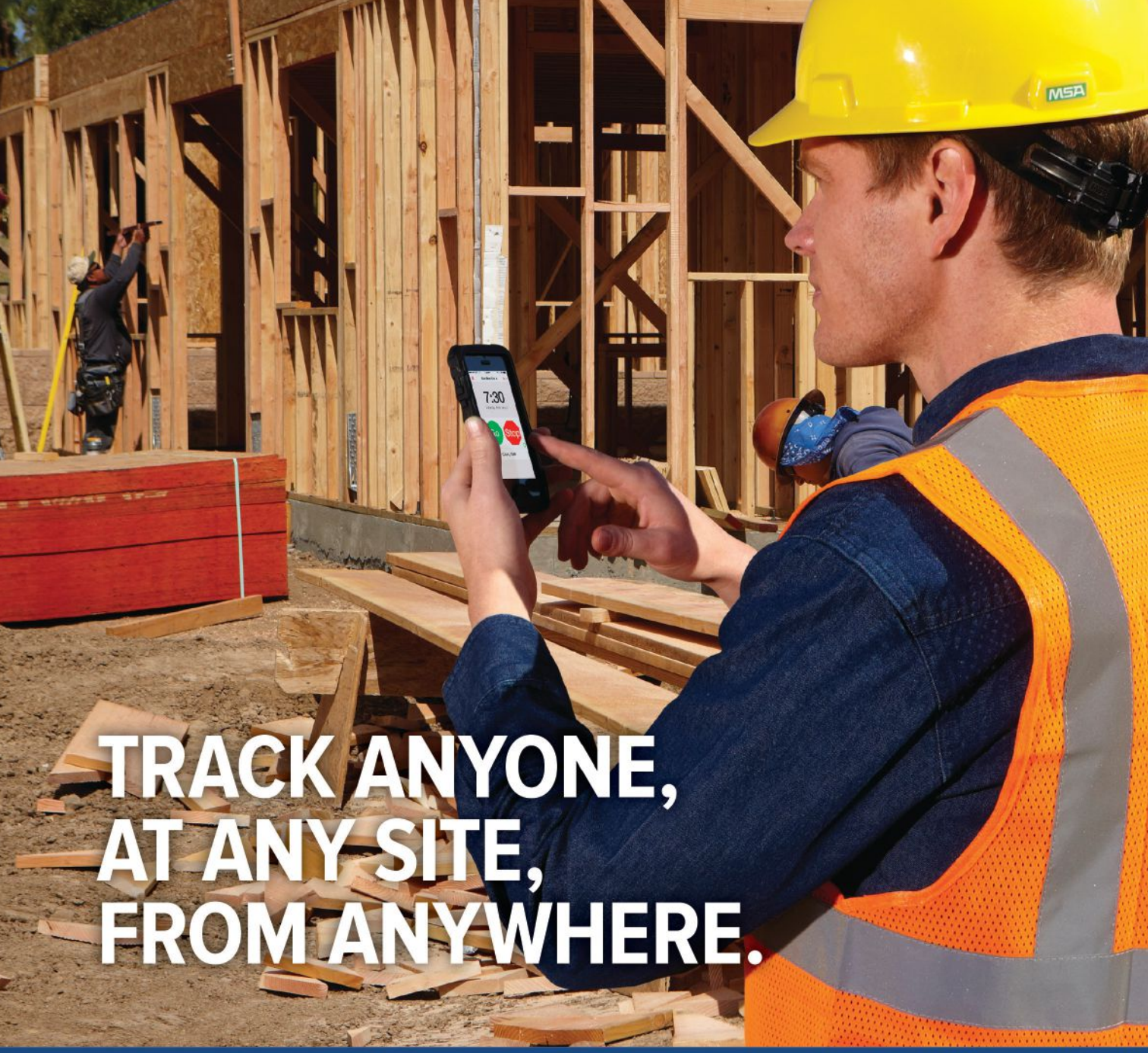
The latest generation of construction machinery, such as loaders, rollers, backhoes and cranes, boast sophisticated capabilities designed to deliver better efficiency, productivity and safety than earlier versions. However, the new capabilities have added to the costs of construction machinery and created new risk exposures as more contractors consider alternative cost-reduction strategies for the acquisition and maintenance of equipment. For example, rather than pure ownership, some contractors now prefer rental or leased equipment, which helps to free up cash while allowing them to meet their contractual obligations. One of the biggest exposures contractors face at jobsites is accidents that end up damaging expensive equipment and delaying projects. As with all the major trends impacting the construction insurance landscape, working with construction risk managers with proven industry experience is crucial. Often, it makes all the difference. **CBO**

John Campbell is USI's construction practice managing partner and also serves as the president of the company's wrap-up practice. The construction practice group leverages the USI ONE Advantage with prospects and clients across the country. To learn more about USI ONE, contact Campbell at john.campbell@usi.biz or 314-554-9754. Visit usi.biz.





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NAVIGATING THE CONSTRUCTION INDUSTRY'S TALENT SHORTFALL

How companies are turning to millennials & technology to bridge the skilled labor gap

BY JOHN CHANEY

The economy is performing well, construction projects are back in full swing and jobs are plentiful. But where are all the workers? That's a question that has been asked frequently over the last couple of years, as skilled construction laborers, project managers and subcontractors have left the industry—either retiring or moving on to other roles in order to survive the recent recession. Fewer workers are returning to the industry, and training new generations of laborers could become a daunting challenge. It has become one of key issues for the industry to address for the present-day and long-term health of companies.

HIRE YEARNING

According to a June 2015 report from the Bureau of Labor Statistics, the number of available jobs jumped significantly from the previous year, adding more than 273,000 to companies' payrolls. However, the talent pool is taking a hit as a whole generation of baby boomers—the largest segment of construction workers in the past 3 decades—has begun to retire.

Of course, the skilled labor gap wasn't necessarily unexpected. In December 2013, the Bureau of Labor Statistics pointed out in that the construction industry could face a shortage of 1.6 million skilled workers by 2022. However, what did catch some industry professionals off guard was the ancillary impact that other factors of the recession would have on the industry as a whole.

For starters, funding for a number of community colleges, technical and trade schools and industry programs with an emphasis on training also took a hit. This meant fewer and fewer future workers were getting the skills they needed before seeking employment. This has forced construction industry associations and companies to step up efforts to create, promote and fund training programs. Many companies are even taking partly trained workers and supplementing them with on-the-job training, or they are pledging to hire and train military veterans in order to fill employment gaps.

In May, the Associated Builders and Contractors (ABC) sent one of its members, Shapiro & Duncan Inc.'s Paul Tse, to Washington to testify at a congressional hearing on education and the workforce, hoping to

promote a resurgence of technical and trade schools and 2-year degree programs from community colleges.

"It is time that students, guidance counselors, educators, parents and the American public recognize the fulfilling and lucrative careers that can be achieved in construction and skilled trades," Tse said in written testimony submitted to the committee. "We must all work to remove any stigma that exists that choosing a CTE program over a traditional 4-year college is somehow 'settling.' Those 4 years I spent at Montgomery College and out in the field, I worked just as hard as students at colleges and universities."

Meanwhile, so far, the next generation of workers has not rushed to construction jobs. Those who do have a different view of their roles in the workplace and often buck traditional hiring, training, development and retention practices in the construction industry, prompting companies to adapt.

THE RISE OF THE MILLENNIALS

Last summer, Jeremy Brown, a consultant with FMI, presented a webinar on "Understanding Today's Workforce." Brown described the changing demographics of construction employment, with a focus on millennials. Brown said millennials responded much differently than what has been the typical construction industry employee—both in terms of how they sought employment and their needs once on the job.

Traditional hiring practices, such as job boards, classifieds, word of mouth and trade and technical schools with assignments or internships with construction companies, were not reaching many of today's younger workers. Instead, applying for jobs via mobile devices, networking among peers and social media are how to reach and engage with millennials. And with less emphasis on trade schools, technical certificate courses and other skill-building programs, interest from millennials in the construction trade has waned.

> Nine out of 10 job seekers will use their mobile devices during their search process.

Once on the job, millennials respond differently to their career growth paths and personal needs than the Generation Xers and baby boomers before them. "Millennials need work purpose, vision of the future and trusted leadership, whereas baby boomers that traditionally held many of the skilled construction jobs favored job stability and loyalty to and from the employer," Brown said during the webinar.

Most millennials, Brown said, need to know why something is being done. They also desire immediate and authentic feedback on their work and detailed guidance and structure on how to improve. They generally want to be involved with or kept in the loop about decisions made on a daily basis. This helps them envision a clear career path. But they also favor flexibility in the workplace and a defined balance between work and life.

This means that some construction companies are going to have to offer more to entice millennials. Moving toward more interactive, mentor-friendly working environments sooner rather than later might make the difference in attracting and keeping top talent. Yes, some complain of what they see as coddling or spoiling employees, but as long as employers are ultimately holding everyone to the same standards of work and responsibility, the end result can be a truly collaborative, energized workplace.

ADAPTING TO TECH-SAVVY JOB SEEKERS

One stereotype about millennials that few would debate is that they are tied to technology. And to attract and retain the younger workers, employers should be prepared to embrace technology.

According to the 2014 Glassdoor survey, "Rise of the Mobile Job Search," 9 out of 10 job seekers will use their mobile devices during their search process. Of those nine people, 64 percent of them will search for jobs on social media channels. Glassdoor notes that challenges are to be expected as companies adjust to new, rapidly changing behavior. Companies not investing in new technologies to enhance their hiring and human resources practices or making merely a lackluster effort will result in potential talent passing companies by. Even though it is the preferred method of millennials, "one of the biggest pain points for modern job seekers is applying to jobs via a mobile device," the Glassdoor study said. "In fact, 1 in 2 (49 percent) believe it is difficult to apply to jobs from a mobile device, and 1 in 4 are deterred from applying to a job if the company's career site or job listings are not mobile optimized."

However, software is currently available that can help companies streamline a host of processes and appeal directly to the millennial workforce. For instance, automated talent management solutions can ensure that jobs being posted make it to the areas where today's younger workforce is looking—from social media to discussion groups and networking sites.

These talent management solutions can oversee entire employee lifecycles, including recruiting, onboarding, learning, performance management, collaboration and succession planning. Not only do these software programs alleviate much of the data entry and paperwork behind the scenes, but they also appeal to millennials by engaging with them through modern technology. The construction employee pool is changing. It may be smaller at the moment, but talent is still there and it can be trained quickly if companies put the right tools and approaches in place. **CBO**

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A BLUEPRINT FOR THE NEW GENERATION OF CONSTRUCTION PROS

4 strategies to maximize the millennial talent on your team

BY KEITH COLLINSWORTH

"Kids these days". "They just don't get it." "They don't understand the meaning of hard work." Admit it; you have uttered these phrases around the office. You have looked at your new hires and wondered, "What are we getting in to?" and the inevitable, "Will they last?" You are not alone. In the past year, millennials surpassed baby boomers as the nation's largest living generation. They comprise just over one-third of the workforce, and that number is expected to grow to 50 percent by 2020. Smart business owners are planning for this shift in workforce demographics carefully. It is even more important in the construction industry because the clash between generations is seemingly more common.

Management and business roles tend to be held by baby boomers who typically began their careers in labor positions in the field. The experience of rising through the ranks by building with your own hands seems fundamentally at odds with the new multiscreen, technology-enabled generation. But it doesn't have to be. The following are four top-level strategies to effectively integrating the millennial generation into your team.

1. MOVE FROM MENTORING TO MATCHMAKING

Assigning a mentor to each new hire is a smart move, but it's time to retool the process. Traditional assumptions hold that it is the mentor's responsibility to groom the mentee. Consider changing the emphasis of your mentoring program to matchmaking. All generations of workers have a lot to learn from each other. Older workers can certainly share technical experience, interpersonal skills and in-depth business knowledge. Millennials can add value by teaching the established workforce about technology, efficiency, process improvements and more. Moreover, millennials crave feedback and face-to-face interaction. In an era of likes and web-based analytics, it's not surprising that millennials want to know exactly how well they measure up. They are used to having that information right at their fingertips. A recent FMI Millennials Survey reported nearly half of millennials want to receive feedback at least monthly, and a resounding 85 percent prefer that delivery via face-to-face interaction. Check in with your mentors, mentee frequently and assess how they are learning and improving as a result of each other's influence.

2. CONNECT OFFICE & FIELD ROLES

Gather together a group of 10 field and business office employees for a leadership breakfast. Position the gathering as a "fireside chat," or an opportunity to connect with a high-level executive in an intimate setting. The strategy to flatten your organization is an important one. Your employees, regardless of age or role, crave communication. Millennials want transparency and access. Employees who are well-informed of the organization's successes and challenges are more likely to remain fully committed to the team. The leadership breakfast also plays an important role in building connections between office and field personnel. At breakfast, address misconceptions about job roles and responsibilities and uncover ways to improve communication.

3. ISSUE CHALLENGING ASSIGNMENTS

Give millennials the opportunity to impact the bottom line. According to the FMI survey, only 28 percent of millennials feel their current organizations are making "full use" of their skills. That's a lot of untapped potential. Millennials are ambitious. They have grown up with technology at their fingertips, and they are poised to inject the construction industry with some much-needed innovation. Millennials are eager to make a big impact early in their careers. Yet, because they approach their work in a different way, their true intentions are often misconstrued as entitlement.

Don't mistake their eagerness to contribute for the expectation to leapfrog ahead without proving merit. Rather, millennials want to have a seat at the table and to feel like their voice matters. Again, consider the technology platforms that enabled their coming of age. Social media platforms serve to flatten the world in which we live; allowing everyone to have a voice and a platform and to connect with likeminded groups more easily than ever.

Millennials are seeking a career trifecta in all that they do. They want to add value to the team, make an impact on their organization and find meaning in their work. As an employer, that requires that you do two important things. Issue challenging assignments that allow them to employ problem-solving skills.

Couple these assignments with complete transparency about what the results mean to your organization. If the product of their work generates significant savings or bottom-line impact for the business, they need to know. Don't let their age fool you. When you issue assignments with true grit, your millennial workforce may surprise you with meaningful results.

4. LISTEN & OFFER FEEDBACK

Millennials are easily misconstrued as "flight risks"—ready to fly the coop when a better opportunity presents itself. After all, it has become increasingly rare among the generations following the baby boomers to find employees with track records of 10, 15 or 20 years or more with a single employer.

However, an IBM study demonstrated that millennials value stability, job security and loyalty to the firm as much as older generations do. Breed that loyalty through a two-way dialogue with your millennial employees. Ask them about the most rewarding parts of their job and about opportunities to improve communication. Share details about the company's short-term and long-term goals, and help them connect with tangible opportunities to contribute.

When you're tempted to use the phrase, "Kids these days," remember, someone probably said the same thing about your generation, too. **CBO**

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THE BEST DEFENSE IS A GOOD OFFENSE WITH PREVAILING WAGE PROJECTS

A little planning can protect your company when the Department of Labor comes knocking

BY MARK DOUGLAS

Many projects assisted with public funds or programs are subject to a myriad of federal, state and local laws and regulations among them, prevailing wage (PW) and reporting requirements. General contractors, prime or a higher-tier subcontractors working on a PW project are at risk. When undertaking a PW project, you assume PW obligations, responsibilities and liabilities. This article focuses on federal Davis-Bacon (DB) and related provisions, but state and local frameworks often mirror DB principles. So, what did you sign on for?

All employers are obligated to pay all laborers and mechanics no less than the full amount of wages contained in the applicable wage decision for the kind of work they performed, for all hours worked, including premium pay (time-and-a-half) for overtime hours. Wages must be paid no less often that once per week. All employers are responsible for maintaining accurate records of hours worked and wages paid; reporting all labor performed and wages paid; certifying/submitting payroll reports and other documents timely; and preserving payrolls and related records for no less than 3 years.

Liabilities concern your compliance and the compliance of every contractor working under you. Every penny of prevailing wages earned and any liquidated damages must be assessed. This means you not only need to watch what you are doing, you need to watch what everyone else is doing, too.

The United States Department of Labor (DOL) expects prime contractors and higher-tier subcontractors to subcontract responsibly and diligently manage subordinate contractors' PW compliance. The DOL has secured sanctions against primes who had minor or no wage violations of their own, but neglected to monitor the performance of their subs/lower-tiers. Primes must pay the full amount of back wages due plus any liquidated damages. They may also be required to enter into an agreement with the DOL to avoid debarment or other sanctions, as exhibited in the following example.

Lettire was the prime contractor on two housing projects that received ARRA (American Recovery and Reinvestment Act) assistance, requiring compliance with DB labor standards. The DOL uncovered violations resulting in approximately $1.4 million in back wages

due approximately 290 workers employed by 16 subcontractors and approximately $3,000 due to four Lettire employees. Although Lettire's violations were minor, Lettire faced 3 years of debarment from federal contracts for failure to monitor its subcontractors. Lettire avoided debarment by accepting the terms of an agreement with the DOL:

1. Guarantee payment of approximately $960,000 in current back wages due for subcontractor violations, plus its own, and guarantee payment of any future back wages.
2. Take affirmative steps to ensure compliance:
    - Hire a DOL-approved monitor to conduct compliance reviews of Lettire and its subs for 3 years, provide training to Lettire and its subs and establish a complaint hotline.
    - Review bids to ensure sufficiency to meet all contract requirements, including prevailing wages.
    - Assess prospective subcontractors' ability to comply with PW requirements.
3. Establish internal controls:
    - Utilize an electronic timekeeping/payroll submission system acceptable to DOL.
    - Assign supervisors to oversee compliance on PW projects.
    - Provide notice to each employee indicating their assigned work classification and PW.
    - Advise each employee of their right to file a complaint with DOL without retaliation.

Vigorous, proactive compliance monitoring can reduce this type of potential risk. The good news? You are in control. Make sure that agencies and bidders know you are serious about PW compliance.

- Get the terms of your contract right, especially the wage rates.
- Don't use or reuse subcontractors who don't perform. Prevailing wages and reporting are just as important as the work. You're paying for both, and you need to use subs that deliver both.
- Train all staff, in the office and on-site, on PW requirements.
- Perform self-audits for PW compliance and pay attention to details. The clearer you can make the details, the better.
- Audit every subcontractor's performance, including lower tiers.

Now that your business is covered, focus on bids and subcontracts.

- Make certain that bid documents and resulting subcontracts contain the correct wage decision and the labor clauses. Ensure that each subcontract contains the same wage decision and labor clauses so you can hold your subcontractors responsible for their actions and any lower-tiers' actions.
- Challenge bids that look too low. If you have priced out work at $250,000 and you get a bid for $175,000, that's a $75,000 difference. Maybe it's a great deal, but who or what is going to bridge that gap? Maybe they made a mistake compiling the bid? Whatever the reason, it could cost you much more than an appropriate bid.

On the jobsite, remember: it's yours, control it.

- Control and document access, and include the workforce. Establish procedures to know who is on the jobsite, why, who they work for, when they arrived and when they left. Use electronic access cards or GPS tracking or set up a sign-in/sign-out system.
- You are required to post the wage decision and DB poster at the jobsite. Make the posting conspicuous, and make information clear and accessible, so workers know what wages they are supposed to receive. Require subs to notify employees in writing of their work classification and the corresponding DB wage rate.
- Agency inspectors might visit the jobsite monthly to interview workers, observe what they are doing, ask how many hours they work and how much they are paid. Inspectors use their eyes and ears to assess labor compliance and detect noncompliance. Use your people to monitor labor performance on a daily basis.
- On-site staff need to be alert and pay attention to conversations. Inform workers that they can file a complaint with your staff anytime, with no reprisal.

The jobsite allows you to control what's going on. The office allows you to control what happens or what doesn't happen in response to what you receive or don't receive.

- Require subcontractors to provide the name, SSN and mailing address of every employee. This is not for submission to the agency, but for your own records. Remember, the agency can require that information any time. You should have it on hand.
- Don't pay any subcontractor unless the invoice (draw) includes the subcontractors' (and lower-tier subs) payrolls.
- You get subcontractor payrolls first. Take advantage of that. Spot-check payrolls for common errors and omissions. Require prompt correction of errors and timely submission of correcting documentation as a condition of any payout.
- Institute regular communication/coordination between your jobsite and office staff.
- Electronic payroll systems offer recordkeeping, streamlined payroll entry and submission and PW compliance review and corrections. The DOL encourages and sometimes requires contractors to use electronic payroll systems.

Be aggressive and be proactive. Don't wait for a PW calamity to convince you that you need to protect yourself. You might think that being proactive will cost more, and you may be right. But consider this: how much more could a massive back wage assessment cost? **CBO**

Mark Douglas is the president and CEO of LCPtracker Inc., a software service provider specializing in construction site compliance-related software. To learn more about how his software solutions can benefit your company's prevailing wage projects, visit lcptracker.com





THE NEW OVERTIME RULE
& WHAT IT MEANS FOR YOUR BUSINESS

Know how to handle these changes & properly prepare a strategy

BY ROBERT COKER

On May 18, 2016, the Department of Labor (DOL) issued a final rule that raises the minimum salary an employee has to make in order to qualify to be exempt from overtime pay from $23,660 to $47,476.

For your company, this means that any salaried employee currently on your payroll making less than the minimum threshold must now be paid overtime pay for all hours worked in excess of 40 hours per week.

The rule also raises the compensation level for highly compensated employees subject to a more minimal duties test from its previous amount of $100,000 to $134,004. This ruling goes into effect on December 1, 2016.

To better understand the impact of the new overtime rule, it helps to first understand who may currently be exempt from overtime pay. A three-part test was established by the DOL to determine if a worker is exempt from overtime pay. The employee must satisfy all of the following in order to be excluded from overtime pay:

1. The employee has a fixed salary that does not vary based on the hours or quality of his work.
2. The employee is paid at least $455 per week or $23,660 annually.
3. The employee's job responsibilities primarily consist of executive, administrative or professional duties.

Why the change, one might ask? The DOL stated that, "A basic tenet of our economy is that a hard day's work should lead to a fair day's pay." The DOL feared that this tenet was in jeopardy, and further went on to say, "Their actions will ensure that promise (tenet) is a reality for more of America's workers, too many of whom have been left working long hours for no additional pay, taking them away from their families and civic life without any extra compensation."

Put simply, the DOL's stated goals are to put more money in the pockets of more middle-class workers and to allow for more free time, if companies are not willing to pay extra overtime costs. Those in the industry who have shown opposition to the new rule have said that it would do the following:

- Not result in a higher wage for workers as intended
- Force contractors to cut workers' hours

Put simply, the DOL's state goals are to put more money in the pockets of more middle-class workers & to allow for more free time, if companies are not willing to pay extra overtime costs.

- Force employers to not only reduce worker hours, but possibly even reduce their workforce
- Reduce employee benefits
- Force employers to spend more of their proceeds on compliance instead of compensation
- Force employers to take employees off salaried status
- Deprive employees of autonomy in their work schedules (i.e. no longer be able to take a morning off to take a child to the doctor without affecting pay)
- Rob employers of needed flexibility and employees of career advancement avenues, and, in the future, it will have a disruptive effect on the construction industry as a whole, regardless of what benefits it may have to the workforce.

In response to the opposition, the DOL has stated that employers have plenty of options with the new overtime rule, including:

- Switch employees from salary to an hourly pay scale and pay time-and-a-half for overtime work. Overtime compensation can be factored into the overall hourly pay scale so that there are consistent wages.
- Raise employees' salaries for those employees whose salaries are close to the new threshold to avoid the overtime issue. The employer may build the increase into their bonuses and commissions, if applicable.
- Raise workers' salaries above the new threshold if the amounts of projected overtime will result in exceeding the minimum threshold anyway.
- Limit or redistribute workloads among existing workers so that all workers' hours do not exceed 40 hours per week.
- The employer may consider hiring additional employees to avoid or eliminate overtime hours.
- Some combination of the above.

Unless the rule is somehow modified or repealed as a result of the upcoming elections, employers are faced with difficult decisions that could potentially negatively impact their bottom lines and have been given little time to plan for the ensuing changes.

To properly prepare your company for the changes associated with the rule, work with a trusted advisor or accountant to navigate the specifics and mitigate the potential impact to your organization's bottom line. **CBO**

3 KEY PROVISIONS OF THE OVERTIME FINAL RULE

The final rule focuses primarily on updating the salary and compensation levels. Specifically, the final rule:

1. Sets the standard salary level at the 40th percentile of earnings of full-time salaried workers in the lowest-wage Census Region, currently the South ($913 per week; $47,476 annually for a full-year worker)
2. Sets the total annual compensation requirement for highly compensated employees (HCE) subject to a minimal duties test to the annual equivalent of the 90th percentile of full-time salaried workers nationally ($134,004)
3. Establishes a mechanism for automatically updating the salary and compensation levels every 3 years to maintain the levels at the above percentiles and to ensure that they continue to provide useful, effective tests for exemption.

Additionally, the final rule amends the salary basis test to allow employers to use nondiscretionary bonuses and incentive payments (including commissions) to satisfy up to 10 percent of the new standard salary level.

The effective date of the final rule is December 1, 2016. The initial increases to the standard salary level (from $455 to $913 per week) and HCE total annual compensation requirement (from $100,000 to $134,004 per year) will be effective on that date. Future automatic updates to those thresholds will occur every 3 years, beginning on January 1, 2020.

learn more

For more information, watch a general informational webinar from the DOL on the overtime final rule at www.dol.gov/whd/overtime/final2016/webinars.htm.

Robert Coker, CPA, is a CRI construction services partner who provides audit, review and compilation services to a variety of contractors and subcontractors. Coker consults with clients regarding strategies for maximizing bonding capacity, improving working capital, enhancing internal controls and maximizing tax savings. Visit cricpa.com.



How Clean Is Your Diesel Fuel?

9 fuel management tips to help reduce contaminants & machine downtime

BY JASON ARCHBOLD

Not that many years ago, compact equipment ran on diesel fuel that was inexpensive, easy to store in bulk and performed well year-round. So why did it change?

Although diesel fuel was much simpler and less sensitive to contaminants, its byproduct was targeted by clean-air officials in their effort to reduce hazardous air pollutants that were linked to chronic health conditions and harmful to the environment.

In 2010, to combat this air quality issue, the United States Environmental Protection Agency (EPA) mandated that ultra-low sulfur diesel (ULSD) become a requirement for all U.S. diesel engines. Nearly all compact equipment manufacturers now use advanced engine technologies—designed with high-pressure, common-rail (HPCR) systems and sophisticated fuel injectors—to burn cleaner fuel and comply with nonroad emission standards set by the EPA.

Fuel costs can be among the largest operational expenses for construction business owners.

It is important to follow these recommended fuel best practices to help reduce machine downtime and costly injector-plugging from water, debris and other contaminants often found in diesel fuel.



1. PURCHASE FUEL FROM THE BEST POSSIBLE SUPPLIER

Good fuel management starts with purchasing clean, dry fuel that is properly blended for the climate. You may have to pay more for clean fuel, but investing in quality fuel will give you better peace of mind, lower your fuel consumption, make fewer fuel filter changes necessary and deliver longer component life. Verify the fuel's cleanliness by asking key questions, including: "What micron level of filtration is used on your line?" and, "Is this the best fuel available for the current climate?" A good fuel distributor will provide diesel fuel that meets all of the specifications for most climates and environments.

2. CONFIRM THE FUEL'S CLOUD POINT

Diesel fuel was previously produced with sulfur levels as high as 500 parts per million (ppm). However, today's ULSD is produced with sulfur levels less than 15 ppm. This significant reduction in sulfur content was necessary to lower emissions, but the process used to remove sulfur also increases saturates, which, in turn, increases the fuel's cloud point.

Cloud point is defined as the temperature where wax begins to drop out of fuel, creating a translucent appearance. The wax forms crystals, ranging from 50 to 200

microns in size, which can quickly plug your machine's fuel filter. Ask your diesel fuel supplier to confirm the fuel's cloud point, since it is dependent on the geographic location and the time of year that fuel is intended to be used. For example, fuel available in North Dakota during September will have a different cloud point than fuel available in Texas in July.

3. PREPARE FOR COLD WEATHER

Today's diesel fuel chemistry has made it harder for diesel fuel suppliers to consistently provide fuel that performs well in cold climates. However, you can utilize cold-weather practices, including removing trapped water from your machine's fuel filter daily, maintaining a machine's battery state of charge, installing an engine block heater and choosing the best engine oil and hydraulic/hydrostatic oil for the current temperature conditions.

> Make sure every machine is filled with diesel fluid at the end of the workday to prevent potential condensation.

In addition, fill your machine a higher percentage of winter blend diesel fuel and begin using it earlier in the season. Operations in cold and northern regions should use a special winter-blend fuel—typically No. 1 and No. 2 diesel fuel—to prepare the machines for cold temperatures. It is beneficial to maintain a cold-weather kit, purchase cold-weather accessories and to follow cold-starting procedures as outlined in your machine's operation and maintenance manual. Be sure to read it thoroughly to learn about cold-starting procedures and further minimize machine downtime.

4. TEST BULK FUEL TANKS EVERY 6 MONTHS

Water and other contaminants can impact fuel chemical structure and eventually lead to pump, filter and injector problems. That is why it is important that either you or a professional diesel fuel-cleaning and inspection service test your supply tanks for water or other contaminants in your storage tank every 6 months. If you decide to test fuel, there are a variety of fuel testing and analysis kits to measure the cleanliness, percentage of water, cloud point and several other categories. Typically, small amounts of water can be removed, but if significant amounts of water or sludge are found, the entire storage tank should be drained and cleaned.

5. KEEP SUPPLY TANK FUEL FILTERS CLEAN

How do you know whether a 5- or 10-gallon plastic container is contaminant-free? To help prevent contaminants and increase the effectiveness of the machine's fuel filter, make sure any fuel entering a storage tank passes through a dispensing filter. In addition, fuel tank filters should be capped and the tank should have a 1-micron vent filter. Tank filters typically have a 10-micron-or-finer filter to filter free and emulsified water to help ensure the highest quality fuel for your equipment.

6. USE 2-MICRON FUEL FILTERS

Some fuel filters chosen for HPCR engines can trap down to 2-micron contaminants, helping remove free and emulsified water. Although no filter will remove all contaminants, using the cleanest fuel possible and using an efficient fuel filter can help minimize the amount of particles entering the machine. It is also important to consider the following best practices:

- Drain the water trap daily.
- Never prefill a new filter during installation.
- Never open fuel connections in the system upstream of the fuel filter.
- Use the manufacturer's recommended replacement fuel filter.

It is also best to purchase an extra fuel filter for every Tier 4 HPCR-engine-equipped machine and keep it on the jobsite in case contaminated fuel is used in a machine and the filter needs to be replaced on-site.

7. FILL MACHINE TANKS AT THE END OF EACH WORKDAY

HPCR engine technology generates higher fuel temperatures, and as the machine cools, condensation can form in air gaps. Make sure every machine is filled with diesel fluid at the end of the workday in order to prevent potential condensation and reduce maintenance costs.

8. ATTEND A FUEL MANAGEMENT CLINIC

Compact equipment dealers should understand how today's diesel fuel is different and how it relates to advanced engines so they can treat fuel-related issues. Your dealership may decide to host fuel management clinics to accurately relay those tips to you and your operators. Try to attend these clinics to learn more about this important topic.

9. KEEP A PREVENTIVE MAINTENANCE LOG

Finally, you and your machine operators should keep a preventive maintenance (PM) log that includes maintenance history, refill/supplier history, filter replacements and fuel particle counts. A PM plan can help reduce machine downtime and cut down on costly injector-plugging from water, debris and other contaminants found in diesel fuel. **CBO**

Jason Archbold is the marketing manager for Bobcat Company, a compact equipment division of Doosan Bobcat Inc. Archbold has nearly 20 years of marketing and analytics experience in several industries, including construction, engineering and electrical/industrial supply. Visit bobcat.com.



Preventive Maintenance for Peak Performance

5 tips to keep your engine running smoothly in the summer months

BY SCOTT MACK

As an owner and operator, you understand better than anyone how important it is to maintain the engines that keep your equipment—and your business—up and running throughout the year. This is especially true during the hot summer months, when extended hours at the jobsite can sometimes push construction equipment to the limit.

Recent advancements in technology and design have helped extend service intervals while considerably simplifying engine maintenance. But it is still important to perform some relatively simple preventive measures on a regular schedule to ensure your equipment will continue to run smoothly and efficiently for as long as possible. As you operate your equipment during the summer months, consider the following engine maintenance tips that are critical to peak performance. These best practices will help keep your engines performing at their best throughout such a demanding season.

1. GET FUEL SMART

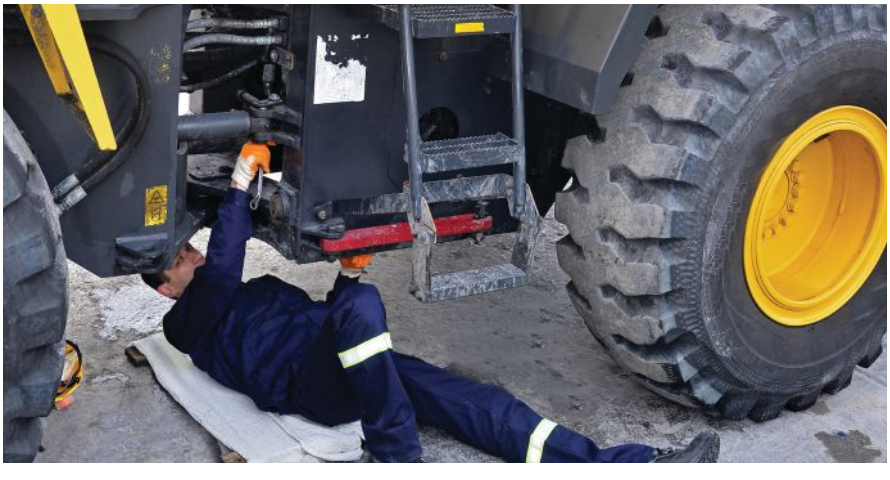
One of the easiest, quickest ways to damage gas-powered construction equipment is by using old fuel or fuel that has not been recommended for use. An effective tip is to only use fresh gas in the engine at all times. Stored fuel is likely to have broken down during the colder months—or after periods of inactivity—and can go bad in as little as 30 days. Instead, purchase gas in smaller quantities and store it in clean, sealed containers. It is also important to make sure the fuel you are using does not have too much ethanol, which causes the engine to run poorly. Most engines can only accept up to a 10 percent ethanol blend (E10). Any amount of ethanol will pull moisture from the air if not stored in a sealed container. This can cause buildup within the engine, as well as corrosion, which can prevent your equipment from functioning properly.

2. CHECK THE AIR FILTER

Industrial engines are now equipped with heavy-duty filters that are built to perform over an extended period of time. However, most filters still need to be replaced annually to continue providing optimum performance. It is especially important to remain mindful of the air filter during the warmer months when dust, dirt and debris are dryer and more likely to clog the filter faster. During the summer, be sure to check your air filter on a regular basis to ensure it is functioning correctly.

3. KEEP IT CLEAN

In addition to inspecting and replacing the air filters, the fuel filter and engine itself should be inspected regularly. A clogged fuel filter will significantly decrease the engine's fuel efficiency and performance. Be sure to follow the manufacturer's recommendations, but a good rule of thumb is to change the filter every 200 hours. Also, after each use, be sure to remove any dirt



or loose debris with compressed air, which may have accumulated on the engine during the day.

4. CHECK THE OIL

When it comes to maintaining the oil in your engines, there are two key factors to consider. First, make sure you are using the oil type and weight recommended by the manufacturer. Second, be sure to frequently check the oil level. Typically, an oil change is recommended every 100 hours or so, but equipment used several hours during the heat of each day may go through oil faster and, therefore, may need to be changed more frequently. Failure to check the oil could result in the engine overheating. Finally, it is recommended that you replace the oil filter at every other oil change, but keep in mind that severe conditions, including summer heat and extended use, may call for more frequent changes.

5. COOL IT DOWN

While oil is widely considered the lifeblood of an engine, coolant also plays a vital role in liquid-cooled engines by helping dispel heat. Without proper levels of coolant, the heat produced during equipment use has the potential to quickly cause damage. Maintaining proper levels of coolant in your engines is especially important during warm-weather conditions to avoid overheating. It is recommended that you change the coolant every 2 years or 1,000 hours, as well as inspect the cooling systems components, including the radiator, water pump and thermostat, to ensure they are free of corrosion and functioning as intended.

The overall lifespan and performance of your equipment depends on your team's commitment to maintaining it. A preventive maintenance program is the smartest way to keep your equipment powered up and ready to go, especially during the summer months. Don't skip regular maintenance, and be sure to dedicate the time necessary to regularly inspect crucial engine components. Doing so will ensure a well-maintained engine that will help keep your revenue flowing and your equipment performing during these hectic days when downtime is simply not an option. **CBO**

Scott Mack is a senior service specialist for Kohler Engines. He has been with the company for more than 25 years and specializes in the service and maintenance of gas engines in the North American market. Visit kohlerengines.com.





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Harness the Power of Accurate Equipment Rate Calculations

Examine the factors influencing your company's ownership & operator costs

BY E. VICTOR BROWN

The old adage, "If you can't measure it, you can't manage it," holds true in the construction industry, especially when it comes to equipment rates. Breaking even on equipment at the end of each year is a goal, but how many actually achieve it? More importantly, how many actually know if they are achieving it?

While setting equipment rates through recommended calculations is far from a new practice, too many companies either do not utilize it or have incomplete processes. The result is an inaccurate picture of expenses and, therefore, income, which not only adversely affects that company's bottom line, but also affects its ability to bid competitively.

According to TBR Strategies CEO Preston Ingalls, attaining that equipment rate equilibrium doesn't always happen. Many companies are either under-applying their rates or the maintenance costs are too high, for a variety of reasons.

The goal of reducing operating and ownership costs can be challenging for many companies that are looking to recover as much of that cost as possible, without becoming uncompetitive. There are many different ways to reduce those expenditures to become more efficient by ensuring more uptime, including better project manager and operator care programs. Still, there are many factors that influence



equipment rental rates. One of the leading ways to track those cost factors is through recommended calculations to determine acquisition costs, yearly operational hours and a variety of individual equipment costs.

RATE CALCULATION EXPERIENCE

For Louisiana-based Barriere Construction, its equipment division has had a strong equipment rates and reporting process that has served the company well for more than 16 years. As a heavy construction company headquartered in New Orleans, Louisiana, Barriere Construction is one of the state's largest heavy civil contractor and construction firms, with six locations across five divisions. The fourth-generation, family-owned company specializes in highway and heavy civil construction, asphalt and concrete paving. The company has won the Association for Equipment Management Professionals' Fleetmaster's Award twice for fleet management excellence. According to Barriere equipment manager Ben Tucker, an accurate equipment rate calculation can have far-reaching implications for the business overall.

"While figuring equipment rates will enable a company to break even on the equipment side, it also is fundamental to building your budget on what you should be spending on your equipment at the same time," said Tucker. "You're building a budget on how many man hours, mechanic hours, parts and what you should spend at the end of the year, so you're building your

maintenance budget as well, which is one of the critical factors of rates."

While having a proper equipment rate for job bidding is not as much a factor for a company like Barriere, it is a big factor for thousands of construction companies across the United States.

"What it comes down to is [that] you have two separate areas of costs and you want to be a low-cost producer and have the highest uptime on your equipment and the lowest rate possible so that you can get the next job," said Tucker. "When I look at my equipment, I want to break even in terms of rate charges so that I make money with it and not lose money, so you have to look at from both sides of the ownership and operator (O&O) equation."

O&O CALCULATION FACTORS

When providing some insight using the rates and reporting documentation that he created for Barriere, Tucker expounded on the data need from the ownership side and the operator side of the equipment equation. This is in addition to the basic requirements from ownership, such as original equipment costs, projected length of ownership, residual value and various taxes incurred throughout the year. Tucker also provided a more granular view with key data points that companies need to complete the picture, such as projected run-time hours for each piece of equipment and whether they will also track idle time.

"If they have a piece of equipment on the job and it's not being used, they either have to pay for it or they don't have to pay for it," said Tucker. "If they have to pay for it, then they should know what to charge for idle time, which helps to potentially lower your ownership rates, but it's all on how you want to account for your equipment and charge."

When handling the operation side of the equation, Tucker explained that it's more about knowing where the company is spending their money with fuel, for example. This can be calculated using gallon-per-hour fuel burn rate based on the meter, but it can also be calculated using a blend of the meter and recorded work rate. "It's important to check these annually, but ideally biannually to assemble each category of your fleet by equipment type in order to know what you're charging," said Tucker.

The next piece of the puzzle on the equipment side is the component costs, which come down to equipment repair time per component. Gathering and calculating this data makes it possible to break down costs per hour with the knowledge of parts costs and mechanic costs per hour.

The same holds true for the preventive maintenance (PM) side of things for each PM level.

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A 360-DEGREE VIEW

Tracking these things enables the business to know where its costs are going based on the different components of the machine and machine type. This facilitates a breakdown of where money is being and saved. "That way, you can work on where you are spending more money to find ways to decrease costs," said Tucker.

Other factors also play a part, such as residual value and whether you get guaranteed buybacks on equipment or are dependent on market prices with each classification of equipment. In addition, different job types, such as those in harsher environments, should be part of the calculations as they can affect operating costs. According to Tucker, knowing your utilization of equipment and knowing how much you use your equipment is crucial to accurately calculating rates and what the business's utilization will be in the future based on the company's job outlook. Ingalls, who regularly sees the effect on companies not accurately calculating their equipment rates, discussed how that inaccuracy is buried.

"If we don't have something pretty close to actual rates, it just means we are hiding the actual costs of running our equipment somewhere else in the profit and loss statement. When it is hidden, there is no incentive to address it," said Ingalls.

There are also the comparative standards with factors like The Blue Book Network, dealership rates and rental rates. Additional elements like recovery rate and internal economic drive are also key factors. "You may know your costs, but how much do you really need to recover from the use of the equipment," said Ingalls. "The company must have a clear picture of what they are pushing to do from a sales and estimator perspective, which means an understanding of where you want to be more competitive, where you want to reduce rental rates and where that fits in against your competitors."

The overall objective is to be as competitive as possible, so equipment rates are part of the formula for how projects are bid. Both Ingalls and Tucker made it clear that since equipment is a key part of every job, the rate must be as accurate as possible. "Performing this function correctly can make the difference in winning a job, but if you win it, this can make the job more profitable," said Tucker. "Ultimately, if you know your equipment, then you should be able to accurately calculate your rate." **CBO**

E. Victor Brown is a freelance writer specializing in technology, data and processes with an emphasis in healthcare, business, manufacturing, construction and industrial sectors. Contact him at evictb@gmail.com.

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How Sustainable Operations & Systems Benefit Your Jobsite

The key to long-term business success is going green

BY TODD GOLDMEYER

With energy prices fluctuating and the amount of natural resources depleting, going green has been a rallying cry for millions of people for the better part of a decade. But how does going green affect the construction business, and what defines green construction?

The Environmental Protection Agency (EPA) defines green construction as "any green facility or building designed to meet certain objectives, such as protecting occupant health, improving employee productivity, using energy, water and other resources more efficiently and reducing the overall impact to the environment."

For many companies, the idea of going green means constructing or retrofitting buildings that are energy efficient and have the least amount of environmental impact as possible. For you, that means incorporating green materials into your company's business plan. But making the transition from a traditional model to a more progressive one has its disadvantages—primarily, cost. However, this is a short-term loss with long-term benefits.

BENEFITS OF GOING GREEN

- *Cost savings*—The number one benefit of going green is cost savings. Whether it is adding timers to your office lights, recycling building materials or investing in alternative energy sources like solar panels, you will save money in the long run.
- *Decrease in fuel consumption*—Another benefit is maximizing your fuel efficiency. The short-term benefit is that you will have a more efficient construction fleet. Long term, you will experience an increase in revenue by completing more jobs, a decrease in the amount of additional stops during the work day and noticeable savings in fuel costs.
- *Attracting new customers*—One thing that potential new customers are looking for in a contractor is how the business takes responsibility for its impact on the environment. Making a shift to





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To see the transition of going green & how it can impact your bottom line, track your progress. Set review dates monthly or quarterly to assess progress, share insights with key stakeholders & make adjustments where necessary.

a more sustainable, environmentally responsible construction business will help give you a leg up over the competition. There are many advantages of going green for a small business, especially for the construction industry. Offering recycled building materials and installing solar panels are all popular options that consumers have been demanding more and more frequently. However, a recent survey by the National Association of Home Builders (NAHB) found that consumers are more likely to trust a construction contractor if the business implemented green initiatives as a part of company culture. So, before you begin constructing green facilities for customers, you should start by reconstructing your business.

SETTING A REALISTIC GREEN PLAN

Before making a significant shift in business operations, you will want to develop a plan. When setting a realistic "green plan" for the business, it's important to first define primary goals.

For example, if you find that your construction fleet is wasting a lot of fuel each month, then one of your goals could be to reduce fuel costs by 10 percent in the first quarter of your green plan.

Determining the important factors when setting these goals will not only keep you on track, but will also make the shift painless and easy. It's important to note that making this significant change can be difficult, so try to make the necessary changes in increments.

Start by setting benchmarks with actionable steps to reach each of your goals. Spread these action items out over the course of a year or longer. Then assign each of these steps to key staff members with manageable due dates.

3 TIPS FOR GREATER FUEL EFFICIENCY

One of the largest expenses for any construction business owner is fuel. Even if you have a small business with only a handful of work vehicles in your fleet, it's still a major investment.

However, according to the national highway traffic safety administration, businesses can save as much as $8,000 per year by ensuring fleet vehicles are fuel efficient. There are several ways that a business owner can easily and affordably go green:

1. *Optimizing your fleet's route*— If you find that you're sending your fleet to multiple stops or service calls throughout the day, you may want to consider optimizing your fleet routes.

One of the easiest ways to optimize your routes is by implementing fleet management software. Fleet management software can simplify your routing process by sending optimized routes to central dispatching.

2. *Smart dispatching*—Another way you can conserve gas while also saving time is by dispatching the closest vehicles to a worksite. You can achieve this by utilizing the fleet tracking software mentioned in the previous tip. Most tracking software comes equipped with a GPS tracking system, so you will know where your work vehicles are at all times.
3. *Emissions monitoring*—If you own or operate a fleet of vehicles, then you understand the importance of emissions monitoring. Modern vehicles are built with the EPA's approved on-board diagnostics software, known as "OBD-II." This convenient and cost-effective method helps fleet owners comply with EPA emissions regulations. Not only will you be able to more accurately monitor emissions, but you will also be alerted when your vehicles' standards change.

HOW TO MEASURE SUCCESS

The final thing to consider when making the transition to a green business is how to measure your success.

There are a lot of different ways to determine if your green program is working, but first you will want to schedule a review. The only way to know for sure if the transition to being a green construction business is making an impact on your bottom line is to track your progress.

Set review dates monthly or quarterly to assess progress, share insights with key stakeholders and make the appropriate adjustments where necessary. Once you have evaluated the progress of your newly implemented green initiatives, refine and adjust.

Continue with the ones that are working. The initiatives that haven't made an impact by the review date should be flagged as "in review." These flagged initiatives will require a more detailed evaluation or more time to create an impact. **CBO**

Todd Goldmeyer is the marketing manager at Adrian Steel Company. Adrian Steel is a manufacturer of cargo management solutions, including ladder racks, steel partitions, heavy-duty shelving and more. Established in 1953, Adrian Steel produces equipment for vans, pickup trucks and trailers. Browse Adrian Steel's vocational upfit packages for job-specific requirements. Visit adriansteel.com.





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Justifying Your Telematics Investment

6 goals to meet & the corresponding data to validate equipment decisions

BY TONY NICOLETTI

When looking to implement telematics, one of the biggest challenges is often determining where to start. Telematics tech was once very limited in scope. However, there are many iterations, and depending on your company's goals, you will need to make use of some or all of the options available.

On one end of the spectrum, telematics has become extremely simplified: units with powerful internal batteries, through metal locating capabilities and extreme portability with no external antenna or wiring. These units are ideal for smaller assets or lower value items where the locator can be quickly stowed and redeployed when the asset returns from the job. The primary function is locating, with the benefit of theft protection, reduced insurance premiums and logistical improvement.

On the other end of the spectrum, telematics has become extremely complex and data rich. Some available solutions tap directly into the machine's Controller Area Network (CAN bus) or electronic control unit (ECU) and remotely deliver a wealth of information from runtime, fuel consumption, idle time, rpm, diagnostic fault codes, temperatures, pressures and much more. Armed with this data, you can increase machine uptime, reduce service and repair costs and fully optimize your fleet mix.



As one would expect, there are a variety of options between these two telematics extremes. Some solutions deliver basic location and runtime updates, which may be all you need for a particular application, while a full remote diagnostic readout delivers the needed data in another one.

As you begin exploring telematics, the first task is to establish measureable goals for the technology, determine the data you need to drive success and then identify the initial asset types for the deployment and roadmap for rollout across the fleet. The following lists several proven goals and the corresponding data to justify the investment of telematics:

1. **Goal: Right-sizing your fleet and a decrease in fleet size of 3 to 8 percent, while maintaining the same level of work**
   Data: Running an analysis of utilization by asset type based on actual run time makes it easy to see where your fleet has an excess and where you may need to add a machine. For example, you have 30 dozers in your fleet and requests are coming in for additional

ones. A quick utilization report shows you have 15 dozers running at 80 percent utilization for the last quarter, 10 dozers at 50 percent utilization and five dozers at 20 percent utilization. The reality is that you don't need more dozers. In fact, you can shed a few to bring up the overall production of that asset class within your fleet, which also frees up the capital you had tied up in nonproductive machines. Based on this utilization analysis, you may also find it more economical to rent specific equipment as needed.

2. **Goal: Improved jobsite billing of 10 to 30 percent**
   Data: Some telematics systems will empower you to designate boundaries on their mapping software which you label as your jobsites. As assets are moved into those areas, they are assigned to the job, and as they are moved elsewhere, they are reassigned automatically without manual entry. This allows you to run jobsite reports to see how much your assets are actually working, which creates accountability. No longer can machines be hoarded on jobs while a similar asset is rented on a project down the road.
3. **Goal: Reduced equipment idling by a third, on average**
   The hour meter is one performance metric, but it doesn't differentiate between "on time," "working time" and "idling time." Fortunately for you, a proper telematics system does. The obvious benefit lies in turning off the machine when it idles excessively by implementing companywide idling goals and measuring them frequently. Reducing the idle time will dramatically cut your fuel bill in the short term and also give you a realistic usage barometer for that machine. Now, you will schedule service not off the hour meter on the machine, but the true "working time" meter on the hardware unit, which means you will reduce the number of preventive maintenance cycles (PMs) required annually. Consider a service interval at 250 hours and a machine with 30 percent idle time, equating to 75 hours of idling per service. This means that every fourth PM is due to the idling hours alone, which is not a true indicator of usage. As you reduce your idling or simply schedule service off the actual working meter, you extend the PM interval and decrease the number required.

Determine the data you need & establish measurable goals for the technology.

4. **Goal: Reduced service and repair costs of 15 to 40 percent**
   Data: Using a proper telematics solution provides a proactive service scheduling function as well as a reminder if an asset is not serviced on time, thus preventing any from falling through the cracks. The result is fewer failures and less repair costs and equipment downtime. Additionally, threatening machine health conditions, such as critical lamp statuses, temperatures and pressures transmit, in real time so corrective action may be taken to prevent a catastrophic failure. Remote access to fault codes and the diagnostic freeze frame empowers your technicians to perform an initial diagnosis without an investigative trek to the machine. Once reviewed they can ensure the right parts and tools are in their truck for a single visit to get the downed asset back up and running, while giving you the double savings of halving both the technician time and the machine downtime on the job.
5. **Goal: Insurance savings of 20 to 60 percent**
   Data: Most telematics systems also double as theft protection systems. Ask your insurer what break they will give you for theft protection. At the very least, you will be reducing your deductible exposure.
6. **Goal: Get more bids profitably**
   Data: Armed with the real utilization information from previous jobs, your estimators will now map that to future bids. Rather than estimating, they are using actual numbers from identical work to make their bids more competitive and profitable.

QUESTIONS TO FIND THE BEST FIT

A quick internet search for "telematics" or "equipment monitoring system" turns up dozens of results, so how do you select the right one for you? Here are some important factors to consider:

- *Provider background*—Now more than ever, make sure your provider has been in this business for years and has the capacity to support you through the product's life, as well as your own telematics growth. Is the product and company proven in your industry, or are you one of the first customers for your intended application?
- *Support and training*—Are you buying from the OEM, dealer, reseller or another channel? Always be sure to identify where technical support and/or training will come from, and if there is an additional charge for those functions. Is tech support phone or email based, or both? Is it available around the clock every day? Is training performed on site, webinar, tutorial videos or user guides?
- *Hidden costs*—The transponder unit will run between $200 to $1000 and quantity discounts are often available. The monthly communication is

typically between $10 to $40 per unit per month. Some providers will levy an activation fee, annual maintenance fee, multiple user fee and a software license fee.

- *Long-term contract*—Most providers require an airtime contract, extending from anywhere between 1 to 5 years, similar to a mobile phone agreement. There are a few "no contract" providers who bill month to month, giving you the option to stop service at any time.
- *Deployment coverage*—Even if you don't plan to track all your trucks, equipment, trailers and ancillary assets initially, does the provider offer an integrated system for everything? You may start with your equipment and find truck tracking to be a logical next step, or a planned one within your deployment roadmap. Will the same vendor provide all systems, or will you use multiple providers across your fleet?
- *Wireless coverage*—Do you operate in areas of acceptable cell coverage, or are some of your jobs completely off the grid? Do you work internationally? Depending on your needs, your provider may need to have a pure satellite communication product and be certified to operate in other countries.
- *Data integration*—Chances are good you have a powerful ERP or legacy software package in place already, you just need to feed it field data. How does your telematics data get into that software package? Does the provider offer API, SOAP or is a custom integration required? How much will it cost to bring your data into your ERP?
- *Data and report access*—Do you need to log on and run reports daily, weekly or monthly, or can you automate this process for email delivery? Will you or your team need a mobile optimized or app version of the software?
- *Customization*—As you grow with your telematics provider, you may require specialized data collection or reporting needs specific to your operation. Can your provider customize inputs on their hardware to meet your needs? Can reports be customized at the software level? What are the costs?
- *Data storage*—How long does your telematics provider store your data? What happens to it after that? Can you pay to have it maintained longer? **CBO**

Tony Nicoletti is a 15-year telematics expert and published author on the technology. He has implemented telematics on over $780 million of customer assets across the construction, mining, energy and industrial sectors. He is the vice president of operations and business development for DPL Telematics. Contact Nicoletti at tony@dpltel.com or visit dpltel.com.



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1 CTS12 RIP-R-STRIPPER

General Equipment Company introduced its second generation CTS12 RIP-R-STRIPPER, which offers updated features that lower maintenance and increase productivity. With a new, easier operating on/off control, the CTS12 Gen 2 is designed to enhance maneuverability, control and visibility. Its configuration allows users to operate electric-powered breakers in an upright position, which helps increase productivity while reducing strain on operators' knees and lower backs. The CTS12 Gen 2 features increased flexibility, accepting new mounting kits for the Hilti TE-1000-AVR breaker. A productivity-boosting mechanism accommodates breaker variances in mounted chisel orientation to the working surface. The new feature allows the adjustment of both wheels. This capability also helps minimize uneven tool wear and reduces operator force and fatigue when operating.
generalequip.com
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2 SYNTHETIC AIR TOOL OIL

AMSOIL Synthetic Air Tool Oil is specially formulated to provide lubricity for pneumatic equipment commonly used by automotive enthusiasts, mechanics and craftsmen. It effectively lubricates rotary and piston-type air tool bearings and motors, while managing moisture and conditioning rubber and plastic seals and O-rings. AMSOIL Synthetic Air Tool Oil helps prevent corrosion and deposits while reducing wear and extending tool life. It allows air tools to run cleanly and reliably for years.
amsoil.com
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3 DURABLE PHONE PROTECTION

ToughTested has updated its product offering more than three points of protection, around the phone and clip. Some of the newest features include: a new design for larger phones with dual layer protective cases, like LifeProof and OtterBox, heavy-duty ballistic nylon material for maximum durability and a smooth liner and bottom access hole that allows for easy removal. The case comes in three sizes: basic, 2XL and 3XL.
toughtested.com
Circle 202 on card or visit cbofreeinfo.com.

4 CASE LIGHT CLU10K

Paladin recently unveiled its Case Light CLU10K to North American markets. The light provides a max light output of 10,000 lumens, and has five light settings, including low-light traffic output and tactical strobe. The detachable head and adjustable light head angle make the product easy to maneuver on any jobsite. The light also includes the following features: a quick deployment of approximately 15 seconds, an AC converter/battery charger, a DC cord and a two-piece, 30-inch extension pole. The light weighs 17.5 pounds and is weatherproof.
paladinprotect.com
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5 70-GALLON TOOLBOX & FUEL TANK COMBO

Transfer Flow introduced a 70-gallon toolbox and fuel tank combo for 1999–2016 Ford, Ram and GM full-size, diesel trucks. The combo sits on the bedrails and has an adjustable toolbox storage box that adjusts to the depth of a short bed or long bed pickup for a custom fit. The adjustable toolbox storage area ranges from 5 ½ - 9 cubic feet. The toolbox tank is made from 14-gauge aluminized steel for strength and rust resistance. The fuel fill-neck is located inside the locking storage compartment. The 70-gallon auxiliary tank is controlled by Transfer Flow's TRAX 3 Fuel Monitoring System, which transfers fuel automatically to the OEM fuel tank at predetermined levels. It includes a dash-mounted LCD display that shows the fuel level percentages in each tank and the operational status of the fuel system.
transferflow.com
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6 NEW ADDITIONS TO SCRAPER TIRE LINE

Goodyear Tire & Rubber Company introduced three scraper tires for construction and mining/earthmoving applications. The Goodyear RT-3A (E-3) and Goodyear RT-3A+ (E-3+) are designed to offer enhanced traction in all underfoot conditions. The tires feature cool-running, radial construction; an aggressive tread pattern; a unique, geometric lug pattern for long tread life, even pressure distribution and enhanced mobility; and buttressed, self-cleaning lugs to help protect against sidewall cutting. The Goodyear RL-3J (E-3) is for high-speed use on moderate to severe underfoot conditions. It features a zigzag, centerline groove to offer superior lateral traction in high-torque applications; tapered, self-cleaning shoulder lugs for excellent forward traction; a high-tensile steel belt package for enhanced impact resistance; and more.

goodyear.com

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6

7 ALL-ELECTRIC BELT DRIVE PRESSURE WASHERS

Mi-T-M Corporation announced the HAE Series Pressure Washers. These all-electric belt drive pressure washers come standard with heat exchanger cartridges to provide consistent and efficient hot water on demand. The HAE Series Pressure Washers are hard-wired to a heat exchanger and feature an industrial 6.0 or 8.0-HP electric motor, triplex piston General pump, stainless steel and brass unloader, external downstream detergent injector and stainless steel base and frame with rubber isolators. A revolutionary cartridge design and heat exchanger supplies a 120°F to 130°F temperature rise within 3 to 5 minutes.

mitm.com

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7



8

8 FORWARD PLATE COMPACTOR

Chicago Pneumatic recently launched the MV 58A forward asphalt plate compactor. At only 150 pounds, the MV 58A is lightweight, powerful and robust. An integrated, tubeless water distribution system prevents asphalt from sticking to the plate. The machine also leaves zero tread on the asphalt. Additionally, this system eliminates regular plate and pipe cleaning to save operators time. Similar to all Chicago Pneumatic forward compaction plates, the MV 58A has a durable frame to protect crucial components. One of those components includes a strong and reliable 3-hp Honda engine. The MV 58A features a compact design and is equipped with an additional option of transport wheels.

cp.com

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9

9 D155AXI-8 RADIO CONTROL CRAWLER DOZER

Komatsu America Corp. introduced the new D155AXi-8 Radio Control dozer, Komatsu's first radio-controlled machine with intelligent Machine Control technology. For many operators, the ability to feel machine response to blade load is an important factor in effective dozing. This is naturally difficult for a radio control application where the operator is separated from the machine. The D155AXi-8 RC dozer has "intelligence" that automates operation from heavy dozing to fine grading to efficiently doze material. The D155AXi-8 RC has the ability to sense and control blade load, optimize the start of the cut and minimize track slip. Powered by a 354 HP Komatsu SAA6D140E-7, Tier 4 Final emissions certified engine, the D155AXi-8 emits 80 percent less nitrogen oxides (NOx) than its Tier 4 interim predecessor.

komatsuamerica.com

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10

10 MOBILE BALANCING SYSTEMS

Fecon has announced its new mobile balancing systems, the FMB-100 and FMB-200. The Fecon FMB100 is a cost-effective solution to the damaging vibration caused by rotor imbalance. The FMB-100 mobile balancer tells you how out of balance the rotor is (magnitude), and where adjustments are needed (phase/angle). The Fecon FMB-200 is a dynamic balancer with full spectral analysis. Not only can it walk you through the balancing process, indicating where to add weight and how much, but it also analyzes all frequencies to help troubleshoot vibrations that are not from rotor imbalance. It can tell the difference between a rotor imbalance, a failing bearing and other issues that cause damaging vibration.

fecon.com

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AG Body	100	41
ClearSpan Fabric Structures	101	47
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Dexter + Chaney	103	IBC
Everglades University	104	27
ExakTime	105	23
FieldConnect	106	47
FieldConnect	107	44
Foundation Software	108	17
GPS Insight	109	5
HardHat Presentations	110	38
Husqvarna	111	35
Isuzu Trucks	112	3
JCB	113	1
John Brown and Sons	114	44
Michelin	115	IFC
National Construction Rentals	116	22
Navistar	117	BC
Payroll4Construction.com	118	9
Schweiss Doors	119	47
Sedgwick Law	120	40
Shell Oil / Lubricants	121	18
SkyBitz Local Fleets	122	47
VP Buildings	123	15



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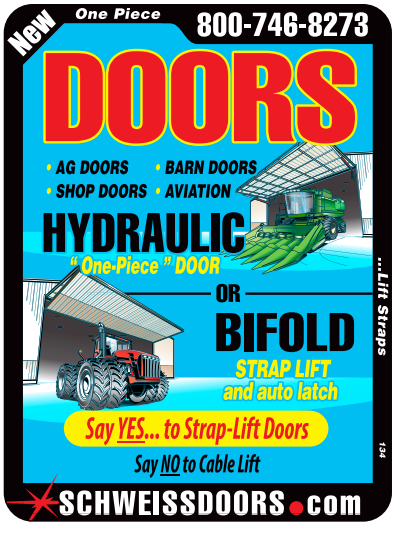
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Annual Value of Construction Put in Place

2014/2015/April 2016 Annual Rate Comparison

This chart compares the two previous years' total value of construction put in place to an annual forecast based on April 2016 figures. (Millions of dollars. Totals may not add up perfectly due to rounding.)

	2014	2015*	Apr 16
Total Private Construction	**704,483**	**827,345**	**843,145**
Residential	349,643	433,108	439,692
Nonresidential	354,840	394,237	403,453
Total Public Construction	**280,019**	**296,153**	**290,787**
Residential	5,566	5,909	6,025
Nonresidential	274,453	290,244	284,762
TOTAL Construction	**984,502**	**1,123,497**	**1,133,932**

**Seasonally Adjusted Annual Rate. Source: U.S. Census Bureau*
**2015 numbers revised for annual report*

$1,133,932

APRIL 2016 TOTAL ANNUAL VALUE OF CONSTRUCTION PUT IN PLACE

"The **strong growth in design contracts**—the strongest score for this indicator since last summer—certainly suggests that **firms will be reporting growth in billings over the next several months,**" said AIA Chief Economist Kermit Baker, Ph.D.

AIA Architectural Billings Index (ABI)

	National		*Regional - Billings				*Sectors - Billings			
Month	Billings	Inquiries	Northeast	Midwest	South	West	Multi-family Residential	Commercial/ Industrial	Institutional	Mixed
Nov-15	50.2	59.2	48.2	48.2	53.6	52.6	52.1	49.9	51.9	49.2
Dec-15	51.3	60.5	47.7	48.3	51.7	51.8	51.8	49.9	51.0	46.6
Jan-16	49.6	55.3	50.4	48.9	50.3	50.8	51.9	50.5	49.9	49.0
Feb-16	50.3	59.5	49.5	49.3	51.1	49.9	53.0	52.3	48.1	47.7
Mar-16	51.9	58.1	51.0	49.8	52.4	50.4	55.7	51.8	48.0	50.0
Apr-16	50.6	56.9	51.5	50.8	52.2	50.8	53.7	52.0	49.0	50.0

For more information on the index or to subscribe to the complete historical data going back to 1995 for your internal analysis, **please contact James Chu, director of research at the AIA, at jchu@aia.org or 202-626-8045.** The ABI presents monthly construction billings data, using a base score of 50. A score of more than 50 indicates a growth from the previous month, and a score of less than 50 indicates a contraction from the previous month. A score of 50 indicates no change. Source: The American Institute of Architects (AIA), Architecture Billings Index (ABI).

*Regional and Sectoral indexes are 3-month moving averages, due to small sample size. All data is seasonally adjusted.
**Every January the AIA research department updates the seasonal factors used to calculate the ABI, resulting in a revision of recent ABI values.



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