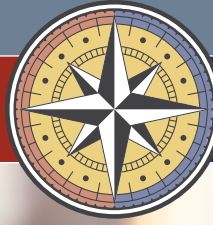


THE

CONTRACTOR'S



COMPASS

Women in Construction and Data Collection





AssuredPartners
CONSTRUCTION



Wrap-Up Insurance Programs can create Coverage and Premium issues with your Traditional Insurance program, therefore it is imperative to review all Wrap-Up documents before signing the Contract and enrolling in the Program.

1

Does your traditional Insurance Program comply with the Wrap Up Insurance requirements for "off-site" activities?

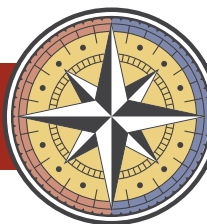
2

Has your Wrap-Up Insurance / Bid Credit been correctly calculated?

3

Who is responsible for payment of WC & GL Insurance Wrap-Up program deductibles and have you factored this into your Bid?

THE CONTRACTOR'S COMPASS



EDITORIAL PURPOSE

The Contractor's Compass is the monthly educational journal of the Foundation of the American Subcontractors Association, Inc. (FASA) and part of FASA's Contractors' Knowledge Network. FASA was established in 1987 as a 501(c)(3) tax-exempt entity to support research, education and public awareness.

Through its Contractors' Knowledge Network, FASA is committed to forging and exploring the critical issues shaping subcontractors and specialty trade contractors in the construction industry. The journal is designed to equip construction subcontractors with the ideas, tools and tactics they need to thrive.

The views expressed by contributors to *The Contractor's Compass* do not necessarily represent the opinions of FASA or the American Subcontractors Association, Inc. (ASA).

MISSION

To educate and equip subcontractors and suppliers with the education and resources they need to thrive in the construction industry. Additionally, FASA raises awareness about issues critical to and about construction in the United States.

SUBSCRIPTIONS

The Contractor's Compass is a free monthly publication for ASA members and nonmembers. For questions about subscribing, please contact communications@asa-hq.com.

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EDITORIAL SUBMISSIONS

Contributing authors are encouraged to submit a brief abstract of their article idea before providing a full-length feature article. Feature articles should be no longer than 1,500 words and comply with The Associated Press style guidelines. Article submissions become the property of ASA and FASA. The editor reserves the right to edit all accepted editorial submissions for length, style, clarity, spelling and punctuation. Send abstracts and submissions for *The Contractor's Compass* to communications@asa-hq.com.

ABOUT ASA

ASA is a nonprofit trade association of union and non-union subcontractors and suppliers. Through a nationwide network of local and state ASA associations, members receive information and education on relevant business issues and work together to protect their rights as an integral part of the construction team. For more information about becoming an ASA member, contact ASA at 1004 Duke St., Alexandria, VA 22314-3588, (703) 684-3450, membership@asa-hq.com, or visit the ASA Web site, www.asaonline.com.

LAYOUT

Angela M Roe
angelamroe@gmail.com

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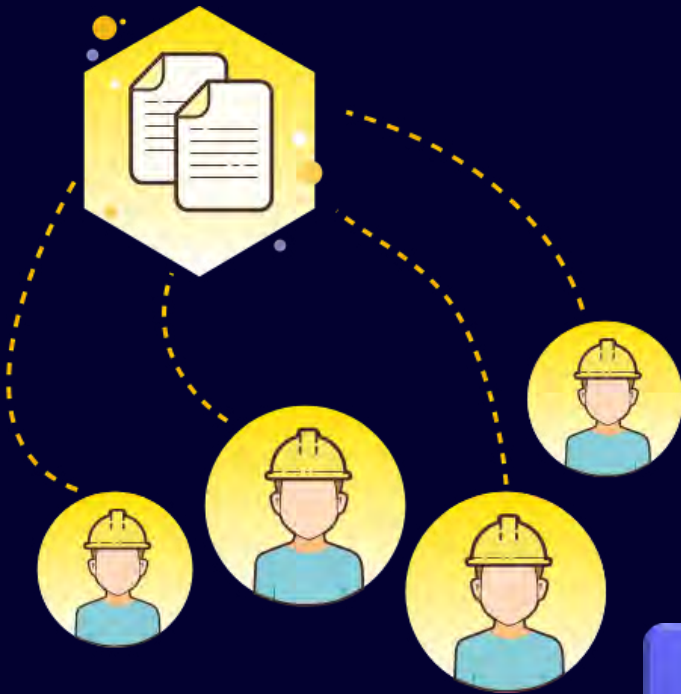
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TIRED OF **ENDLESS** QUALIFICATION FORMS?

As risk management becomes more prevalent, subcontractors are often forced to fill lengthy forms for a chance to win the project



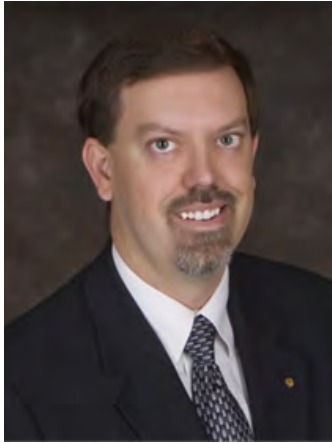
COMPASS is the first tool built for subcontractors to efficiently and securely satisfy General Contractor prequalification requirements using one standard form (1Form), updated once a year.

To support moving the industry to a universal qualification form, sign up for the petition below

<https://forms.gle/CKoejWC7jCJowvPt9>



PRESIDENT'S LETTER



Dear Readers —

I'm ecstatic to say...ASA's annual conference, SUBExcel, was all it was cracked up to be, and then some. The energy level was amazing. If you **didn't** join us in Florida a couple weeks ago, please call someone and get his or her impression. We will be getting the photos and videos together and will send you links to view. And, make sure to mark your calendar for next year—March 8–11, 2023, in Ft. Worth, Texas!

The leadership presentations by the Afterburners were first class. To have combat fighter pilots share lessons learned in their training and combat deployments was both interesting and provided real-world tools to make us better subcontractors. And, as always, the peer-to-peer networking was top-notch. I left SUBExcel with a pocket full of contacts to follow up with in the next few weeks. It was great to be back in person to celebrate at the awards night, the finest in our industry.

As I'm sure you know, March is our annual focus on women in construction. In this issue, we have two articles that clarify where we are. In specific areas of the country, in certain companies, women are making their mark and creating a positive impact. But nationally, we still have a long way to go. This month's *Contractor's Compass* also focuses on technology and data. Protect yourselves from hackers, using technology to your advantage.

And of course, don't pass up our "Always Something Awesome" feature this month, which details a win in Virginia for the Pay if Paid contract clause, and the hard work and power of teamwork to succeed.

While winter is still causing havoc throughout much of the U.S., we are joyed and buoyed by the camaraderie at SUBExcel—as well as the daffodils, tulips, and other signs of spring that are poking their green tips through the brown of winter.

As always, it has been my pleasure to serve as the ASA 2021/2022 Nation President. We build America!!

Sincerely,

Brian K. Carroll

ASA President 2021-2022



CONTRACTOR COMMUNITY

U.S. Department of Transportation Awards \$450 Million in Grant Funding for Port-Related Projects

On Wednesday, February 23, 2022, the U.S. Transportation Department awarded \$450 million in grants for port-related projects to bolster capacity and improve the movement of goods as the U.S. economy continues to be affected by congested supply chains. Applicants must show that their projects would improve the movement of goods through ports and comply with Biden administration goals on issues such as climate change, racial and gender equity and policies to promote building and buying domestically. Applications are due May 16th, with awards expected

to be announced in the fall. This is the largest ever investment in the Port Infrastructure Development Program, nearly double last year's investment. Currently, \$100 billion in awards from the Bipartisan Infrastructure Law has been announced with about \$50 billion distributed through a program for states to deploy themselves.

ASA DC Metro Supports: No "Pay if Paid" In Virginia for One Year

Congratulations to Ike Casey and ASA DC Metro Chapter for their advocacy efforts in support of legislation to make "pay if paid" clauses in your subcontracts on Virginia construction not enforceable if it passes the full House of Delegates. To date, the legislation passed the

House Committee on General Laws, and getting through this committee is a major hurdle that assures final passage. Per Ike, "Chad Gill with **Concrete** again did a great job explaining the issue, and William Roberts with **JE Liesfeld** did a majority of the work to get legislators on board."

Per Ike, "there is no law in DC or MD that expresses exactly what we are trying to do in Virginia. DC Code 27-137 is pretty close, but not explicit. Conditions of payment may not waive the right of the sub to file mechanics lien or sue on bond. MD Code 9-113 specifically mentions Condition Payment will not prevent collection from other sources such as an owner or bond." Read more in this month's Always Something Awesome segment.

A Congressional Welcome to the 2022 SUBExcel

Sens. Rubio (R-FL) and Scott (R-FL), along with Rep. Steube (R-FL), welcomed the 2022 SUBExcel in Miramar Beach, FL. SUBExcel is the annual national convention of the American Subcontractors Association (ASA), a trade association representing construction subcontractors, specialty trade contractors and suppliers. At this year's SUBExcel, ASA's Government Relations Committee highlighted their legislative priorities including:

- Workforce Development
 - Apprenticeship Funding Opportunities
 - Prevent the Misclassification of Employees as Independent Contractors
- Federal Tax Reform
 - Make the Pass-Through Deduction Permanent to Ensure Certainty and Predictability
 - Maximize the Value and Integrity of the New Deduction for Pass-Through Businesses
 - Repeal the Estate Tax
 - Repeal the Alternative Minimum Tax
 - Make Remaining Tax Extenders Permanent
- Contracting Reform
 - Establish a statute of repose for federal construction projects
 - Ensure payment protections for construction subcontractors and suppliers performing federal construction under Public-Private Partnerships
 - Prohibit the utilization of reverse auctions for the procurement of construction contracts
 - Improve the design-build construction process
 - Ensure responsible contractors are given priority in the bidding process of federal contracts

ASA Honors the Life of Jesse Pickett Jr.

1925 – 2022



It is with sadness that we share that Jesse Malcolm Pickett Jr, ASA President from 1986-1987, passed away on February 13th, 2022 at his home in Dallas, TX. He lived to the beautiful age of 96 years, and his family shares that he passed peacefully and without pain.

Active in his industry, he was a Past President of the Iron League of Chicago, Past President of Northeastern Subcontractors Association, Past President of American Subcontractors Association (Washington, D.C.), and Past President of ASA Foundation (Washington, D.C.). He was nominated for 'Contractor of the Year' award in 1988, by Engineering News-Record. Appointed by his Congressman, he was a Delegate to the White House Conference on Small Business in 1986, and received ASA's John H. Hampshire Award in 1989. He served as Elder, Trustee, and Deacon in several Presbyterian Churches. Jesse was a Master Mason, and member of Hella Shrine in Garland.

Jesse's full obituary can be found at <https://www.dignitymemorial.com/obituaries/10585696>

It's always something **AWESOME**

No Pay-if-Paid in Virginia

by Ike Casey, ASAMW

There's really no limit to what a group of subcontractors can accomplish if they are committed and willing to take the time. ASA of Metro Washington was able to influence passage of legislation that makes "pay if paid" clauses in subcontracts unenforceable. Although those in trade association management like to take credit when bills like this pass, it is really the motivation and commitment of subcontractors that really allow for important changes like this in our industry.

As many of you know, passing a state bill takes much behind the scenes and sometimes years of effort. Here's a brief history of how ASA Metro Washington (ASAMW) - with a lot of help from others - helped make the Pay if Paid clauses in subcontracts unenforceable in Virginia.

While much anticipated, the Virginia Senate (29-10) and House of Delegates



(91-9) passed a bill essentially barring straight pay-if-paid clauses in construction contracts between general contractors and subcontractors (**SB550**). At this point we're waiting for Governor Youngkin's signature. How did this happen?

In 2019 Bill Paris with **Net100** asked a Republican Senator to introduce a pay if paid (PiP) bill. It was drafted and we met with her staff, but it did not go anywhere. I told Bill it was a "heavy lift" for ASAMW on its own to pursue such legislation.

In early 2022 Patty Peterson told us about a group of subs in Richmond who were meeting with **AGC** of VA to draft a PiP bill. That is when Ike Casey met

virtually with a group of subcontractors in Richmond and ASAMW got on board.

From that point on ASAMW and **ACE** (Alliance for Construction Excellence) supported the efforts of **RAMCA** - a Richmond area association of utility, heavy and highway contractors and other Richmond subcontractors. They got the bill introduced in both the House and Senate, even though the AGC of VA opposed it.

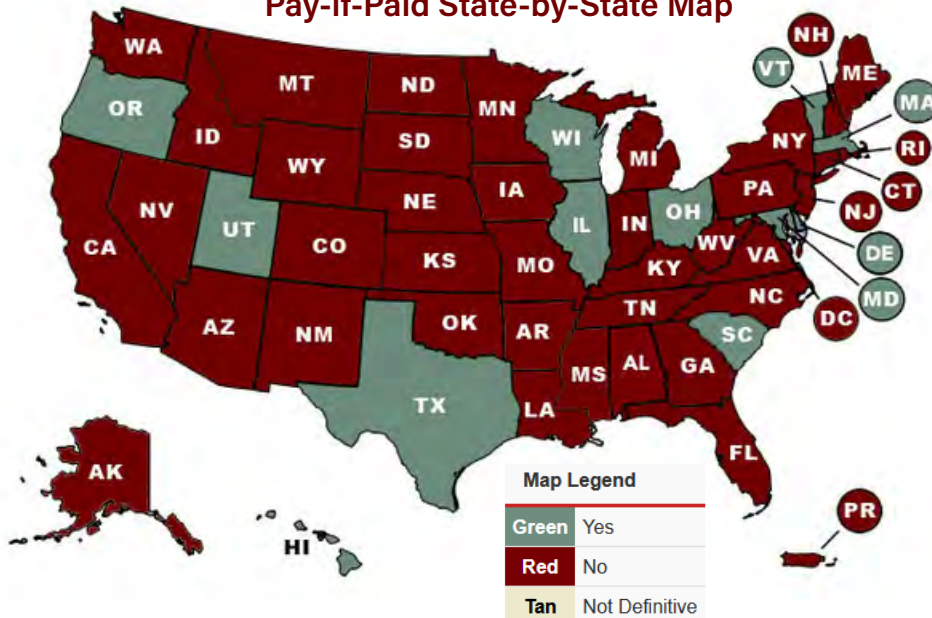
Hearings were held in a Senate committee and then in two House committees. Chad Gill with **Concrete**, and others, used their experience to provide valuable testimony explaining the need for this legislation.

It got to the finish line and **ABC of VA** stepped in to provide their support as well. In the final analysis, their suggestions were positive and it passed the House.

So you see from this story it was the subcontractors working together to bring about this change. That is what a trade association is set up to do, but progress still boils down to committed subcontractor members. Not enough can be said about a group of subcontractors who know what they want and go after it. ASAMW and ACE are proud to have supported their efforts.

Should this legislation get signed as it stands, all parties to the construction contracting process will need to have their contracts reviewed by **experienced construction counsel** to assure compliance with the new law. So stay tuned, we'll keep our members posted.

Pay-if-Paid State-by-State Map





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Frank Matz

President, Central Air & Heating Service

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PROCORE





Contractors: Beware of E-mail Hackers Seeking to Snag Payments

by Zachary Rosenberg, Lang & Klain, P.C

For a business of any size, a single hack could threaten the entire company. Precautionary measures can help protect you from financial calamity.



Would you leave your office unlocked at night? Would you leave the key to your cash drawer in the drawer's lock? Of course not. We know to keep our brick-and-mortar offices secure from would-be thieves. But what about the *cyber* door – the door that opens to all of your e-mails, bank and routing numbers? How confident are you that you locked that door?

Hacking is a growing problem across all industries, but contractors in particular are prime targets for computer hackers looking to make a quick buck, and even a momentary lapse can cause devastating consequences.

For many hackers, it is a low-risk, high-reward situation. One successful hack could yield a tax-free payment of tens of thousands of dollars or more, leaving the victims to foot the bill.

One common scheme works like this:

1. The hacker gains control of an e-mail account for the target company (the "hacked contractor"). This can be as simple as searching the dark web for leaked passwords, using "brute force" to guess the password, using a virus to infiltrate a computer, or sending a phishing e-mail.
2. The hacker looks through the hacked e-mail account to determine when the hacked contractor is going to receive payment from, for example, the project owner. The hacker also determines which employees at the hacked contractor are normally cc'd on e-mails regarding payment or the project in general.
3. The hacker creates a fake domain that, at a glance, looks just like the domain name for the hacked contractor. For example, if the website for the hacked contractor was hackedcontracting.com, the hacker might register the domain name "hackedcontr**ct**ating.com." At a glance, a reader might not notice that, in the phony domain name, the "a" and "c" were transposed.
4. The hacker then sets up fake e-mail accounts with the misspelled domain. If, for example, mike@hackedcontractors.com, juan@hackedcontractors.com, and sophie@hackedcontractors.com are always cc'd on e-mails regarding the project, but the hacker has hacked only into Mike's e-mail account. The hacker would set up e-mail accounts with the fake domain for Juan and Sophie (i.e., juan@hackedcontr**ct**ators.com, and sophie@hackedcontr**ct**ators.com).
5. Upon identifying a potential payment, the hacker sets up a series of rules in Mike's account, just like the ones that filter out spam or send messages from certain people to specific folders in an inbox. But these rules divert messages to and from the project owner into a hidden folder that may be stored in the cloud or on an e-mail server that never syncs to Mike's phone or computer. If he doesn't know what to look for and doesn't go looking for it, Mike will not know this has happened, at least not for a while.
6. The hacker then sends to the project owner an e-mail from Mike's e-mail

account stating that, perhaps for tax reasons or because the company changed banks, the hacked contractor's payment information changed, and the payment should be made via wire transfer to a new account. The hacker will cc the fake e-mail accounts for Juan and Sophie. Glancing at the e-mail, the owner thinks everything is fine, because it seems to include all the right people (although, in reality, Juan and Sophie were not cc'd).

7. If the owner is suspicious but tries to verify the content of the e-mail by replying to it, or even sending a separate e-mail to Mike asking if he was hacked, the hacker, using the rules he set up, will intercept that message and respond that the message is legitimate. Mike has no idea that these e-mails have been exchanged. In many cases, the hacker will also change Mike's e-mail signature block so that the phone numbers listed are redirected to the hacker. Thus, even if the owner calls Mike to verify the wire instructions, they may call the hacker, who in turn will verify the e-mail.
8. The owner will then send the payment based on the hacker's wire instructions, and the hacker will have the money. It is extremely difficult, if not impossible, to undo the completed transfer.

A clever hacker may not even need to hack into an email account. It may be enough to simply create an email account like mike@hackedcontractors.com and, without ever gaining access to an e-mail system, trick someone into responding.

The entire transaction could happen in a matter of minutes, depending on how quickly the owner sends payment. However, it could take days for the victims to realize anything is wrong. Fraudsters know that banks and companies are aware of these schemes and need time for funds to clear and be moved somewhere else before the scheme is detected. In the example above, the hacker can create

a fake e-mail account that looks like the owner's e-mail address and notify the contractor that payment is coming in a week. Not suspecting anything is wrong, it is not until a week or more later that the contractor asks, "Where is the money?" and the scheme comes unraveled. By then, it's too late for the bank to do anything.

Who is to blame in this situation? The hacked contractor, for not taking proper precautions with its e-mail system? The owner, who fell for an e-mail directing payment to a bank account? Everyone, for not checking the spelling of e-mail addresses?

The law is unsettled, but federal courts that have looked at this issue generally undertake a lengthy and detailed analysis of who was in the best position to identify the fraud and prevent it. Depending on the circumstances, it could go either way.

With no good answers, and time-consuming and expensive lawsuits sorting out who should have known what and when, a dispute is, at best, going to end in a settlement for pennies on the dollar, a lot of hurt feelings, and even burned bridges or devastated businesses.

Don't be the next victim.

Precautions

There are a number of things you can do to minimize the risks from this type of hack:

- Always use strong passwords.
- Never use the same password for more than one website or e-mail account. Some web browsers, computers, and cell phones can create and save strong passwords for you, so you do not have to remember them.
- Change your password regularly.
- Use, and require your employees to use, two-factor authentication for their e-mails.
- Be on the lookout for suspicious e-mails, and always call to verify changed payment instructions. But

remember to call a phone number saved to your phone or from the signature block of an old e-mail that you know is legitimate.

- Always call to verify wire instructions that ask you to send money to a bank in a state or country other than where the project is located.
- Protect yourself with carefully drafted contracts and subcontracts to minimize your risks from these kinds of hacks.
- Draft contracts that make clear who is responsible for verifying payment instructions.
- If all else fails, require wiring instruction to be sent via certified, overnight mail. A short delay in payment is better than no payment at all.

Some of these precautions may take time and effort – but that is the point. The more work a would-be fraudster has to do, the more likely they may be to give up on you and move on to their next target.

These good cyber habits are the 21st-century equivalent of a good deadbolt, alarm system, and lock on the cash drawer. Extra steps to verify payment instructions and log into your computer are inconvenient, but they are far preferable to losing a payment that cannot be recovered.

With a little time and practice, following these precautions can become as routine as locking the office door and setting the alarm.

About the Author



Zach Rosenberg is a litigation attorney at **Lang & Klain, P.C.**, a Phoenix construction law and commercial litigation firm. He is a former judicial clerk at the

Arizona Court of Appeals and practices commercial litigation and construction law.



Three Things That Are Most Overlooked While Planning AI Projects

by Mark Marone, Dale Carnegie Training

AI Obstacles

How may your artificial intelligence (AI) or other technology project impact your corporate culture and client experience?

1. While AI is transforming the workplace and the business environment, the unintended consequences of technology can backfire, both internally and externally.
2. Negative experiences with AI can cause companies to lose their customers and damage their corporate culture.
3. To get the benefits of AI and maintain a healthy corporate culture, organizations need to take deliberate steps to prepare the workplace and think through potential impacts as part of the planning process.

Your organization is eager to put AI to work – you have good data, a legitimate business problem to solve and the resources you need to do it. What are potential obstacles?

In a recent survey by Dale Carnegie & Associates, 76% of U.S. respondents at the level of Director or higher said they were at least moderately worried about the potential impact of AI on their organization's corporate culture.

- Technology, in general, has a history of inflicting unintended consequences. Take the simple example of interactive voice response (IVR) menus that began replacing live receptionists at many businesses decades ago. Instead of talking immediately with a person, callers are given an automated greeting that routes them through options on the keypad or through voice recognition.
- IVR systems were intended to reduce costs, help callers find answers to routine questions, and provide a self-service option for common tasks. Additionally, they would direct callers to the right person or department for more complex issues.

What happened? Customers of many businesses were frustrated at having to

listen to irrelevant information, having their responses misinterpreted by the voice recognition software, and wasting time. Many began "zeroing out" (pressing "0" or selecting a response that took them to a human agent), defeating the whole purpose of the system.

The business need was there, the technology existed to solve the problem, but there was a mismatch between the experience that customers expected and what they got. The result: customers defected. Studies (Purdue University, Interactions Group) found that 63%-83% stopped using a product or service after a bad interaction with an IVR.

The decisions company leaders make shape the organization's culture, especially when it comes to decisions around which technology to implement (including AI). The good news is, you can learn from others as you plan your next AI project.

Three ideas that should be top of mind as you are planning to integrate AI:

1. Educate your employees.

AI can sound scary, especially for those who know little about it. Create awareness of how AI is being used successfully elsewhere to create confidence for future projects. Our survey demonstrated a strong correlation between people's level of familiarity with AI and how positive their expectations were for its future impact.

2. Consider the potential impact on the CX (customer experience) and EX (employee experience) you want to deliver.

If you are using AI to personalize a customer experience, then be sure to consider how your customers think about privacy issues. Are you considering AI to monitor and improve productivity? Then ask, how will employees interpret that? What impact will it have on trust and morale? Go beyond the question, "Can we solve this problem with AI?" to also ask, "Should we?"

3. Take steps to protect the power of a strong corporate culture

A positive, adaptable, and flexible company culture helps organizations more successfully tackle change initiatives of every kind. And any AI project, regardless of size or purpose, is going to bring change to your workplace.

What's left for humans?

As we embark on "The AI Revolution," with all the potential it promises, keep in mind that it will be up to humans to continue to provide the creativity, good judgment, and social intelligence to make it work.

Check out the [ASA course site](#) for further info.

About the Editor

Robert Graves, MBA, is a Dale Carnegie Certified Trainer for Rick Gallegos and Associates. His focus is Relationship Sales and Customer Service. He is the author of "Making More Money with Technology." He often speaks on the evolution of Marketing, Sales, and Service. Robert can be reached at robert.graves@dalecarnegie.com or call/text 813-966-3058.

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How Tech and Data Improve Construction Practices and Processes

by Alyssa McElrone, Manufacture/ViZZ Technologies

The challenges brought on by the COVID-19 pandemic has required the construction industry to turn to digital tools to successfully adapt to the crisis and maintain productivity. This disruption has boosted construction's use of technology and adoption. In an industry historically known for its low productivity growth rates, only **1% growth annually** over the last two decades worldwide, this is a shift that is very much needed.

During a recent Know it All **podcast**, Jason Barber, former VP of Industry Solutions & Strategy at ViZZ Technologies, and Nate Tockerman, Partner Manager at **Procore**, discussed the importance of adopting technology to help improve productivity and empower better decision making. They also shared insights on how data can help construction companies improve best practices and processes.

Let's dive into some of their top pieces of advice for construction companies.

Productivity Requires Buy-In from Everyone

Productivity touches all stakeholders and requires multiple eyes and inputs to understand what's happening across the business.

Information capturing is a critical part of driving productivity as it helps teams know exactly where the project is, including what's been manufactured, where materials are, and more. It's critical for all departments to keep information updated in order to provide a complete picture.

On that same token, it's important to have alignment on what information is being tracked, terminology being used and who is responsible for updating – otherwise, you might have a classic case of data overload and disparate formats that are difficult to navigate. Teams must create standard tracking formats with

timely, accurate information so a clear picture emerges.

Construction technology is a great way to make sure that data is structured in a way that provides easy access to real-time analytics.

Unite the Office and Field

There's long been a divide between the two groups working on a construction project. While the office team might be focused on hitting production milestones and ensuring they remain profitable, the field team is much more focused on the speed and quality of their work. They have a sense of pride in their work and craftsmanship. As we've learned, the field really drives productivity for a project, so ensuring that they have the tools, information and material to be successful should always be top-of-mind.

"I feel like the most successful projects I've worked on are the ones where we treated the foreman or the field supervisor as the end customer. That is who we were serving as the office – from the engineering standpoint, architects, owners – up and down the supply chain," said Barber.

It's important that the office understands how to unlock the potential of the field team and identify what goals resonate with them.

It's Time to Prefab

Prefab and offsite construction remain the way forward for those companies looking to deliver projects in a timely and safe manner. This means that 30% to 50% of the install is done offsite beforehand. When teams are just managing the final install on the jobsite, it can eliminate a lot of the typical challenges.

"If you're not planning on prefabricating, being more efficient, saving those 30% hours, being safer and lowering your EMR, more competitive in your labor

insurances – if that's not all baked into your empirical data on how you're going to build, then numbers that you're sending out the door are going to be wildly different than your competition," Tockerman said.

Companies are beginning to identify a strategy for which components of a project they always prefab, and they have goals to continually increase this list. Gaining this consistency ensures that projects are better planned and executed.

The Plan Is Everything

For any company looking to optimize productivity by adopting new technologies and processes, it's critical that they first establish a structured plan that aligns with their business objectives and goals. With this, they can determine where their effort will start and continue to add more elements as they become comfortable and efficient.

Adopting this kind of change management process is critical and key for success.

"There should be somebody that is dedicated to the change management process and has their eye on that prize," explained Tockerman.

About the Author



Alyssa McElrone is Marketing Director for Manufacture by ViZZ Technologies. Alyssa leads all external marketing, communications and internal marketing efforts

*for the company. This article was originally published in January 2022 on Procore's **blog**.*



FEATURE

Women in Construction Week: How to Foster an Inclusive Workplace Environment

by Elissa Arms, Raken



Every March, the National Association of Women in Construction (NAWIC) hosts Women in Construction Week, a special celebration of—and for—women in the industry. While NAWIC [works throughout the year](#) providing professional development, networking opportunities, and more for its members, Women in Construction Week shines a spotlight on women contractors and business owners and aims to inspire others to pursue their own careers in trade fields.

In honor of this year's theme, Envision Equity, we're examining ways construction leadership can do their part to welcome women to the construction workforce and build a supportive environment for all employees.

Why should your construction business focus on inclusivity?

The construction industry is one of the fastest growing industries in the world. However, according to the U.S. Bureau of Labor, as of 2022 only **10.9% of the construction workforce are women**.

As more women are entering into traditionally male-dominated fields, it's natural that construction companies would want to take advantage of this untapped resource, especially in a competitive job market. Excluding

women from the hiring process would mean cutting the pool of potential candidates by half. You may miss out on the chance to hire the most skilled, motivated person for the job.

It's one thing to have the right mindset about wanting to hire more women, it's another thing entirely to make sure your workplace culture is inviting to them. How can you make sure your company can attract and keep top talent, including women?

How to build an inclusive workplace for women in construction

Start with job listings.

When creating job listings for open positions at your company, be sure to avoid using gendered language. For example, if you're describing job

responsibilities for a Field Engineer, do not say something like, "He will contribute to quality control." Instead, try this: "This position will contribute to quality control."

You should also make sure to mention your company's commitment to diversity & inclusion somewhere in the job description. This will let women candidates know you'll consider their applications seriously.

Prioritize fairness when reviewing applications.

You want to hire an employee because of what they'll bring to the position, not just because they help you meet a certain quota.

Instead of signaling out applications from women candidates, consider a blind review process. Having a third party remove names from resumes before they are presented to a hiring manager can level the playing field for everyone.

Not only will this help new women employees feel secure they were hired for their qualifications, it will demonstrate to your existing staff that you are committed to equality.

Pay women equally.

This advice should be a no-brainer. If a woman is doing the same job as a male employee with similar experience, she should be paid the same amount.

Eliminating the pay gap is a surefire way to make your company an equal environment for women workers.

Educate your employees.

Your team likely continues growing their professional skills in areas directly related to the job. Why not offer diversity and inclusion training?

There are many online and in-person training courses that focus on workplace inclusivity. Schedule some time for your employees to take a class or listen to a webinar. They'll learn how subtle language and behavioral cues can inadvertently cause stress, anxiety and



Image by Vicki White from Pixabay

discomfort. You can even tackle the subject in toolbox talks to reinforce what was learned in formal training.

Often small changes in the way managers interact with their direct reports, or the way employees interact with each other, will make a big difference in making women employees feel appreciated and welcomed in the field or office. And those changes start with education.

Ask questions.

Whether it's in a meeting or on the jobsite, don't hesitate to ask a woman employee questions about a project or for her assessment of an important issue. Managers should also check in periodically, providing a clear, open line of communication.

Women workers may be less inclined than their male counterparts to speak

up out of fear expressing any criticisms or differing opinions will have a negative impact on how they are perceived at the company. Reaching out first will give them an opportunity to be heard and demonstrate that you value their knowledge and input.

Provide growth opportunities.

Offering continued education helps retain employees in general. Encouraging women staff members to take advantage of professional development opportunities you financially support is another great way to demonstrate your commitment to growing their skills in the industry.

As a company leader, you can also familiarize yourself with the [educational resources for women in construction](#) available on the NAWIC website. Get your women employees involved with NAWIC or a mentoring program and help them build their own community of support.

Stay committed to including women in the workforce.

Inclusivity is not a number-based goal. You don't reach a specific number of women workers and stop worrying about inclusion.

But, with commitment, you can build a company environment that welcomes women into the world of construction, and your team will be stronger because of it.

About the Author

*Elissa Arms is a content writer at **Raken**, the cloud-based software built to connect the field to the office. Raken helps boost productivity and visibility with real-time field data and documentation — all while streamlining workflows such as daily reporting, time tracking, and safety management.*



Women in Construction: We've Come a Long Way, But Have a Long Way to Go

by Kara Lewandowski, McCarthy Building Companies

Think about the impression that's made when a young girl's mother loves to work with power tools and together they build fun projects on the weekends. And when considering her college major talks with her dad about getting a degree in engineering and he encourages her non-traditional ambitions. When she graduates with a degree in engineering, she is one of only four women out of a group of 50 students in construction.

These experiences can have a profound influence not only on shaping a young girl's interest in construction, but also preparing her for a career in

a traditionally male industry. I know because it is my story.

Women in Construction Week in March reminds all women in construction of our shared responsibility to do whatever we can to introduce young girls to the world of opportunities available to them in construction, where every day is different and tangible results are built to last.

Exposure is the key. We need to talk with our daughters, nieces and the girls who live next door. We need to participate in career days at local

schools and actively participate at STEM career events. We need to encourage girls to build with Legos and play with dump trucks. And we need to get the message across that whether girls like designing, creating art, writing, math, solving problems, working on computers, interacting with people or using their hands – the construction industry will allow them to be the best they can be.

My own 15-year career roadmap is a good example. After getting my foot in the door as an intern working on heavy civil/highway work, I have also managed work as a MEP superintendent



and assistant project manager. But what really grabbed my attention was the emergence of 3D coordination and the use of building information modeling (BIM) to streamline and improve coordination efforts throughout the lifecycle of the project. Today I'm loving my career as a Virtual Design and Construction (VDC) manager where my most recent project is a new 17-story inpatient tower for Barnes Jewish Hospital in downtown St. Louis.

I've been fortunate to serve many different roles on projects throughout my career, and I want to break down the myth that there are limited opportunities for women in construction. Our industry needs great people, regardless of gender, race, age or any other characteristics. Women can and do perform any role on a project that grabs their interest. It's not about what you look like, it is the passion, enthusiasm, expertise and drive that you bring to the role that's important.

One of my colleagues, Beth Barton, a carpenter foreman, has a different story. Growing up on a hog farm in rural Missouri, she always enjoyed working with her hands. When she made the decision to become a carpenter, she was the only woman in a class of 200 at the local union apprenticeship program. Thanks to lots of support and her determination, she achieved her goal, and today she is one of the construction trade's strongest advocates.

Beth sees her role as an opportunity to show other young women that construction can be a terrific, rewarding career option. From 2008 until 2021 she served as a founding member and president of the Missouri Women in Trades (www.MOWIT.org) organization, which helps women succeed in the industry by serving as a support group to cope with challenges, as well as to learn ways to advance in their careers.

The positive attitude, experience, and energy that she brings to the jobsite every day has garnered her the respect and admiration of the entire team. She is great to work with and I am excited to get to spend the next few years learning from her.

Valuing Women in Construction

Despite many advances, the construction industry is still challenged to attract women. Even before today's current labor shortage, many companies understood that diversity of backgrounds, experiences and opinions contribute to success both on the construction site and behind the scenes.

Women currently make up just nine percent of the U.S. construction workforce, which is one of the reasons McCarthy committed several years ago to ensuring that number continues to rise. To equip female employees for long-term success, the company developed a two-year career development program, McCarthy Partnership for Women, a national employee resource group that supports a diverse and inclusive work environment within the company.

The Partnership is focused on providing women new to the company with personal and professional development opportunities. The curriculum includes strategic communication, negotiation, decision-making and other topics that help women be more effective in their jobs.

Throughout McCarthy, there's strong support toward driving diversity of perspectives to help deliver even better results for our clients and provide a rewarding culture for our employees.

Dispelling Construction Myths

All too frequently, women avoid considering construction careers because they have an inaccurate perception of the industry as a rough, tough, good-old-boy profession. The way TV portrays construction is not accurate at all. Folks in the field take a lot of pride in the work that they do, and there's a real community that extends all the way to the office.

When starting a career in construction there is no expectation that you already know how to build, the expectation is that you know how to learn and that you are excited, willing, and able to dive in and start figuring it out.

A really important skill is the ability to listen, to take in a whole lot of information from different sources, sort through it, and collaborate as a team to develop a plan and a vision for going forward. The higher you advance in the field, the more interpersonal "soft" skills are needed to be successful. And as in any industry, the key to success depends on the ability to plan, communicate and engage your team in the process, helping everyone work towards the ultimate goal. Many women are unaware of how much management of data, interpersonal communication and consensus-building are required in this industry, and statistically speaking women often excel in these areas.

Dispelling these construction myths is key to attracting more females to the profession because once on board, women find out that it can be a really exciting profession with so many opportunities, and no two days are ever the same, which is one of the things that I love the most.

At the end of the day, construction is a career path that is open to anyone and everyone.

About the Author



Kara Lewandowski, Manager, Virtual Design and Construction for McCarthy Building Companies since August 2020 (with McCarthy since Oct. 2015), also has prior

experience as a project superintendent, assistant project manager, and field/office engineer. McCarthy Building Companies, which is 100 percent employee-owned, is the oldest privately held national construction company in the nation, and has approximately 5,000 salaried employees and craft professionals. More information about the company is available online at www.mccarthy.com.



Women Have Been Marginalized in the Building Trades. The Infrastructure Bill Could Change That.

by Caroline Preston, *The Hechinger Report*

Lupe Trejo has spent much of the pandemic counting herself fortunate.

Trejo, a mother of six who lives near Washington, D.C., worked in retail and restaurants for years before starting a steamfitter apprenticeship in 2017.

When the pandemic hit, Trejo, who is Latina, watched many of her former colleagues lose jobs as the restaurants they worked in went dark. But Trejo's work helping to build a **\$3 billion expansion** to a semiconductor plant barely paused, while her pay climbed, to \$34.95 an hour, as she entered the fifth and final year of her apprenticeship.



The infrastructure bill could create an opportunity to bring more women and people of color into the building trades. Credit: Sarah Garland



Lupe Trejo entered a steamfitter apprenticeship in 2017. In her union, only about 1 percent of members are women, she said. Credit: Image provided by Lupe Trejo

"I'm able to put food on the table without any assistance from the welfare system," said Trejo. "I'm able to pay bills on time, to purchase a vehicle from a dealership, and I've been approved for a home mortgage."

But very few women – and even fewer women of color – enter and thrive in the

building trades as Trejo is doing. Fewer than **11 percent** of payroll employees in construction are female, and when it comes to the industry's non-office jobs that require working with tools, the share is even smaller, **4 percent**. Meanwhile, nearly **89 percent** of construction employees are white (including some Hispanic people). In Trejo's union, women make up just 1 percent of members, and women of color even fewer, she said.

The infrastructure bill passed last November represents an historic opportunity to change those numbers, advocates say. The \$1 trillion infrastructure bill would create **hundreds of thousands** of jobs, if not **millions**, repairing roads, ports and bridges, electrifying the power grid, replacing aged pipes and expanding high-speed Internet. The **framework** for President Biden's \$1.75 trillion **domestic spending bill** released last week includes nearly **\$30 billion in workforce training and other investments** that tradeswomen and workforce experts say could help recruit, train and retain women and people of color, who've been

marginalized by sexism and racism within the construction industry.

Hostility to women, along with opaque pathways into the trades that favor friends, brothers, in-laws and other relatives (known as the "FBI"), have combined to drive down the number of women and people of color. Even amid a **severe shortage of skilled trades workers** that has left employers scrambling to fill openings, the barriers to entry for women remain high.

Fewer than 11 percent of payroll employees in construction are female, and when it comes to the industry's non-office jobs that require working with tools, the share is even smaller, 4 percent. Meanwhile, nearly 89 percent of construction employees are white.

"The only way that our country can leverage the investments made under an infrastructure deal is by making sure women and people of color have access to, and are able to have success in, jobs that are going to be created under that package," said Katie Spiker, managing director of government affairs with the National Skills Coalition, a nonprofit policy group.

"It's the only way businesses will be able to meet the demand that this kind of investment creates," she added, "especially given the challenge businesses were having in finding skilled workers ahead of the crisis, which is also exacerbated. It's also the only way we are going to reach an actual inclusive economic recovery."

As the building trades face a "silver tsunami" of retirements, many infrastructure jobs (most of which are in construction) are already going vacant. According to a September 2021 **study** by the National League of Cities, more

Hegewisch, a senior research fellow at the nonprofit Institute for Women's Policy Research. Meanwhile, construction was **one of just two industries** in which the number of women workers increased since February 2020, she said.

And yet, many employers remain reluctant to hire or advance women.

"Back in the early 2000s, I used to tell people we were stuck in the early '60s, and I'm not sure how much more we've progressed," said Ali O'Neill, who runs a construction company near Portland, Oregon, with her husband. "There tends to be a culture where those men want

to do something else.' "

Indeed, attrition is high across the board for apprenticeships, but it's **particularly** high **for women**, and **remains** a key reason why the number of tradeswomen has barely budged over decades. (There's no single national figure on attrition, but studies have consistently shown that it's higher for women; **one study found** that 70 percent of female carpenter apprentices left their programs, compared to 53 percent of men.)

"We are seeing an increase in interest," said Meg Vasey, a former electrician who



Pre-apprenticeship programs like those run by Oregon Tradeswomen help prepare women for the trades. Credit: Image provided by Oregon Tradeswomen

than 30 percent of infrastructure jobs are hard to fill, meaning it takes longer than expected to fill them, and 32 percent of manager positions in infrastructure are open for more than 45 days.

In part because of the high numbers of infrastructure workers retiring – an **estimated 2.7 million** over the past decade – some employers appear to be more open to recruiting women now than they were in the past. Women's share of construction trades jobs increased from about 3 percent to 4 percent over the past five or so years, according to Ariane

their job sites to be a little bit of a boys' club, and maybe they are willing to tolerate one or two women if they stay quiet and don't cause a fuss, but they don't want to see a job site that has 50 percent women."

That culture discourages not only female workers, but also men who might ally with women to transform the trades, O'Neill said. The macho, insiders-only atmosphere "also alienates some of the white male allies who are just like, 'This is an awful work environment; I'm going

runs Tradeswomen Inc., an advocacy group in Oakland, California. "We are still really struggling with the retention numbers."

While President Biden's infrastructure **proposal** called for \$100 billion in workforce training, that money was left out of the Senate version of the bill. So, too, was an **amendment** sponsored by Senator Kirsten Gillibrand (D-NY) that would have set a goal that 15 percent of labor hours on projects be completed by apprentices, along with support for

training and child care and requirements for respectful workplaces.

While President Biden's "Build Back Better" domestic spending bill appears to be dead, he did mention parts of it (expanded child tax credit, implementing universal Pre-K, creating more affordable healthcare) in his State of the Union address on March 1. The lack of child care often makes a career in the trades, with its demanding, irregular hours, a non-starter for women.

Tradeswomen groups are also calling for updates to and greater enforcement of existing rules, such as a decades-old

individuals that advocate for females in the trades.

Ashbrook and others also point to pockets of success in diversifying the trades. In Oregon, **8 percent** of apprentices are female, twice the national average. The state allocates one half of one percent of its federal transportation dollars to preparing women and people of color for highway construction jobs, a funding model that could be replicated elsewhere.

Oregon Tradeswomen, a Portland nonprofit, runs a program to encourage workers to speak up against bullying and harassment, as well as a pre-apprenticeship program to recruit and prepare women for construction. Groups like this, which try to boost women from low-wage jobs into the well-paid, unionized work of construction, could be expanded with federal dollars.

Kelly Kupcak, executive director of Oregon Tradeswomen, said the organization has seen a surge in interest during the pandemic from workers fleeing fields like hospitality, restaurants and retail. Amanda Tzeo is one.

Tzeo completed the group's pre-apprenticeship program this past summer. Like many young people, she had set off for college – in her case, Portland State – before realizing it wasn't for her and dropping out. At her high school in Beaverton, Oregon, "they never talked about the trades," she said. "They were really adamant about college."

After leaving Portland State, she found work at Jamba Juice, earning \$13 an hour. Then she had a daughter in March 2020 and decided to stay home for a time. "It wasn't worth being away from her, missing out on her growth, for \$13 an hour," she said. But being an electrician would give her the chance to support her family while doing work she enjoys, Tzeo said.

Trejo, the steamfitter, has found ways around the child care challenges that stop many women from entering the trades. With her apprenticeship wages, she is able to pay a salary to her mother, who lives with the family, to help care for her and her husband's kids.

Trejo's first two years of the apprenticeship, she worked almost

entirely with men. It wasn't until her third year that she began to run across more women on job sites. But she and the 40 or so females in her union of roughly 4,000 people have also connected via a women's committee they formed two years ago to support one another and intervene in cases of harassment or bullying.

Trejo turned to the committee when she wanted support asking her supervisors to release her from work on time so she wouldn't run late to her apprenticeship class. The rules and power dynamics of apprenticeships are complicated, she said, and the committee "takes away the discomfort of having to approach someone yourself."

Since Trejo started in the trade five years ago, the rate of retirements has picked up, she said. It used to be that one or two workers retired each month; now it's closer to 10. That turnover, combined with new trades jobs generated by the infrastructure bill, could finally knock the door open to women. Said Trejo: "It's definitely more welcoming among the newer generation."



Oregon Tradeswomen is one of a handful of groups around the country that work to bring more women into the building trades. Credit: Image provided by Oregon Tradeswomen

order that federal contractors strive to ensure that 6.9 percent of work hours on projects be completed by women.

"The percentages of people of color and women are going up and there's a greater attention to equity, but we definitely need the federal government's attention to bring that all to scale," said Connie Ashbrook, co-chair of the National Taskforce on Tradeswomen's Issues, a coalition of groups and

About the Author

*Caroline Preston is a senior editor who edits and writes stories on K-12 and higher education. She previously worked as a features editor with Al Jazeera America's digital team and a senior reporter with The Chronicle of Philanthropy. Her writing has appeared in publications including NBC News, The New York Times, The Washington Post and Wired.com, while stories she has edited or written have been honored by the Data Journalism Awards, the Education Writers Association, the Online News Association and others. Preston holds a bachelor's degree in history from Brown University and a master's degree from Columbia University's Graduate School of Journalism. This story about **women in construction** trades was produced by **The Hechinger Report**, a nonprofit, independent news organization focused on inequality and innovation in education. Sign up for our **higher education newsletter**. This article was originally published in **November 2021**, and has been updated by the author.*

Upcoming Webinars

WEDNESDAY, APR 13, 2022 | 12:00 - 1:00 PM (EDT)

Killer Contracts: Don't Sell Your Soul to the Sea Witch



An overview of the most problematic terms currently trending in subcontract agreements and suggestions on how to best modify and negotiate changes.

Presented by: Bethany Beck

Bethany Beck is Board Certified in Construction Law by the Texas Board of Legal Specialization and practices as a Partner with Sanderford & Carroll, PC. She advocates for clients both inside and outside the courtroom to address disputes in a manner tailored to each client's individual needs and goals. Bethany handles

disputes in state courts, federal courts, and arbitration, in addition to advising clients on contract terms and negotiations. She is a graduate of the University of Texas at Austin as well as Baylor Law School. In addition to her legal practice, Bethany enjoys presenting seminars to construction-related trade groups as an educational resource for the industry. Bethany has regularly been asked to speak at the State Bar Annual Construction Law Conference in March of each year, is on the Editorial Board for the Construction Law Journal and is a Council Member for the Construction Section of the State Bar of Texas, in addition to being the current National Chair for the ASA Attorney's Council.

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TUESDAY, MAY 10, 2022 | 12:00 - 1:00 PM (EDT)

Enabling Success—Creating Alignment Between Field and Office



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Did you know that owners of construction projects pay a premium of 20% according to an industry study. Even during the pandemic ConsensusDocs contracts, which ASA actively participates and supports, have continued to innovate to help improve your business results. This webinar will provide you some of the top issues that you should look for in all your contracts as well as some new trends that need to be addressed contractually to help protect your business and help it thrive. You will learn: How ConsensusDocs standard construction contracts, and specifically the ConsensusDocs 750 Standard Subcontract differs from "original" subcontracts as well as the AIA A401 Subcontract. Learn how to spot some of the most important provisions in your contract and strategies for negotiating them. Learn how you can benefit from the latest trends in the industry such as prefabrication and design-assist and how ConsensusDocs has published off-the-

shelf contract standards that solves how to address these issues contractually.

Presented by: Brian Perlberg, Esq.

CM-Lean Executive Director and Senior Counsel for ConsensusDocs; Senior Counsel to AGC of America Brian Perlberg serves as the Executive Director & Senior Counsel for ConsensusDocs, a coalition of 40 leading construction organizations. He also serves as AGC's in-house attorney for construction law and contract matters. Mr. Perlberg serves on the ABA Forum on the Construction Law Steering Committee for the Contract Documents; Executive Committee for the Arbitration Association of America (AAA) National Dispute Resolution Committee, and the Board for Construction SuperConference. He was recently recognized as a top legal voice by ENR magazine and recognized by Who's Who Legal for Construction. He is the only construction attorney to achieve a CM-Lean credential. Previously, Mr. Perlberg served as General Counsel at the Design-Build Institute of America (DBIA).

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