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We have focused this Spring issue of STO Insights on the topic of sustainability and wellness in the built environment for that reason. From the impact of third-party rating systems like LEED and WELL, to renovating old, inefficient buildings into new, modern spaces, to incorporating innovative systems like geothermal cooling and heating, the way we design, construct and use buildings is changing the way they impact our environment.

Design and construction go hand-in-hand when it comes to sustainability and wellness. It’s important that the construction team understands the goals of a sustainable design and keeps those in mind as we make adjustments for constructability. How we build matters, and we take that responsibility seriously. To date, we have over 130 LEED Accredited Professionals, and our team continues to earn new accreditations, like WELL and Passive House. We are founding Alliance Members of the Well Living Lab (more on page 23). And every year we report on the findings of our annual sustainability, wellness and resilience survey to ensure we understand the challenges and opportunities our clients face in building sustainable spaces.

Caring about our environment, along with the health and wellness of our employees and jobsite personnel, is directly linked to our commitment to safety in everything we do. Safety, health and environmental awareness are not just jobsite mandates we can mark on a checklist. They are inherent elements of our company culture and important factors in our everyday lives.

In this issue, we highlight some of the projects that showcase what’s possible when it comes to sustainability and wellness, and we hear from a number of industry leaders who are driving that progress. We hope it serves as a resource and inspiration for your projects as you move toward your own healthy building goals.

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This April marked the 48th anniversary of Earth Day, on which millions of people across the planet take time to act on behalf of environmental causes. In those 48 years, incredible strides have been made in how we treat, protect and preserve our environment—and our industry certainly plays a role in that.

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Which one is for you?

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With charming neighborhoods like Greenwich Village, TriBeCa and SoHo, Lower Manhattan long ago became one of Manhattan’s most sought-after residential areas. But a lesser-known district among those neighborhoods—the few blocks known as “Hudson Square” nestled between West Houston, Varick and Canal Streets—has been slower to transition. In the last few years, however, that shift has picked up steam, including a new residential tower in the works at 100 Vandam Street.

BLENDING THE OLD WITH THE NEW: 100 Vandam

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MAINTAINING HISTORY

Like most of Lower Manhattan, the neighborhood is steeped in history. Once a destination for Revolutionary War-era luminaries like George Washington, the area transitioned into a more industrial district by the late 1800s. As a result, streets are lined with generally low-profile, brick buildings established for manufacturing purposes. The upcoming 25-story tower at 100 Vandam will blend that character with modern design and amenities, says building owner and developer, Jeff Greene.

“By maintaining the original warehouse façade, the building will preserve the history and aesthetic of the area while creating a base for the modern concrete-and-glass tower that emerges above it,” he says.

This ingenious design, led by COOKFOX Architects, has also meant taking a creative approach to construction. While the six-story façade of the original building will remain, the interior core is being rebuilt to support the subsequent tower floors. This rebuilding involves bracing the exterior walls, in place with six individual bracing towers set on top of capped concrete piles. The towers each stretch 80 feet up to the top of the sixth story and tie into the building via a steel truss system at existing window openings. The entire system is designed to avoid impacts to the façade itself and the ongoing work within the walls.

“Since the towers and façade are supported through the existing window openings, we’re able to minimize the impacts to the structure and to the structural slab work going on at each level,” says Keith Mason, Pavarini McGovern project manager.

“This bracing will remain until the superstructure concrete reaches the seventh floor and then we can start façade restoration while the tower construction continues.”

As demolition, excavation and foundation work have continued, the team has maintained a vigilant eye on the façade to monitor any impacts along the way. Using vibration monitors, remote electronic monitors and optical monitoring, they report any findings on a biweekly basis, keeping attention especially on the areas of some pre-existing cracks. “We couldn’t use typical means and methods of demolition for certain areas of the building,” Mason says. “We were constantly checking to make sure there was no movement, settlement or damage to the existing structure or changes in the existing cracks.”

GARDEN VIEWS

Another area of special focus for the construction team was landscaping. As part of the project’s sustainability goals (it is targeting LEED Gold), and with little green space in the neighborhood, the design team incorporated connections to nature and vegetation wherever possible, including loggia, balcony and terrace gardens. “We designed the sky gardens as an extension of the home environment,” says Rick Cook, founding partner at COOKFOX. “They are an important feature for supporting the mental and physical well-being of residents.”

Proper irrigation and drainage, of course, are central to that success. Each individual planter is set in the concrete structure, which means its associated irrigation and drainage piping must feed through the concrete as well. “We are in the process of thoroughly coordinating the details of the piping feeding in and out of those loggia and balcony areas with the design team and responsible contractors,” Mason says. “Some of those details impact concrete reinforcement, building waterproofing and other interior elements, so that communication is crucial.”

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BUILDING LEGACY

With 100 Vandam, the Hudson Square neighborhood continues to reinforce its place in the history of the city, all while becoming a new destination for modern Lower Manhattan living. The building is also an excellent example of how to make adaptive reuse work in a sustainable, efficient manner.

“As along with the façade, we’re reusing 100-year-old wood joists as interior features and installing efficient energy and water use technologies,” says Sade Obayemi, project executive for Pavarini McGovern. “This building will be a beautiful example of blending the old with the new.”
SEAMLESSLY SUSTAINABLE: LoyaltyOne Toronto Headquarters

Design is certainly a—if not THE—driving force behind the sustainability of the built environment. But construction plays an important role as well, particularly when it comes to reusing and recycling materials and enhancing indoor air quality.

When LoyaltyOne, a leading provider of loyalty and retail data analytics programs and services, determined to pursue LEED Platinum for their new, Gensler-designed Toronto headquarters, the Govan Brown team took that responsibility to heart, doing their part to ensure the construction process supported LoyaltyOne’s sustainable vision.

UP (AND DOWN) IN THE AIR

The quality of the air in a building is one of the determining factors of its overall environmental “health” in the LEED system, along with elements like thermal comfort, daylight levels and acoustic performance. The team used low-emitting adhesives, paints and other materials, but also paid special attention to a few factors of the building itself to maintain healthy air quality levels.

LoyaltyOne’s 200,000sf new space is part of the newly built Globe and Mail Centre. The base building construction included a pressurized raised flooring system, which needed to be accommodated in the design and construction of the LoyaltyOne space. Because the raised floor acts as a supply air plenum, maintaining under-floor cleanliness is vital to ensuring healthy indoor air quality.

“We implemented a system of cutting tents to control dust at its source and installed plastic film covers over raised floor air diffusers to prevent dust migration below the raised floor system,” says Govan Brown vice president Colin Gray. “We also vacuumed the top of the floor regularly and did dust migration below the raised floor system, “ says Gray. “We also vacuumed the top of the floor regularly and did an extensive underfloor cleaning before we started installing of floor finishes.”

MOVING PARTS

As the LoyaltyOne fit-out began, the Globe and Mail Centre was still undergoing construction in lobbies and other spaces, plus tenant fit-outs were gearing up on other floors. With so much activity happening at once, the building’s elevators were a hot commodity. The Govan Brown team had to very carefully manage the schedule, making sure they made the most of the available elevator time.

The team carefully selected what they moved up through the elevator versus via cranes to best fit the schedule. Rather than try to maneuver the massive kitchen exhaust hood as specified, the team had it manufactured in two pieces to accommodate the challenging site conditions. They used a crane to lift the steel in for the atrium stairs. And to fit the large planters on the third-floor terrace, the team “shot” soil up from the ground floor into the planters, avoiding the need to rely on the elevators for all the back and forth.

“The landlord did a great job providing all of the contractors in the facility with access to book blocks of freight elevator time,” says Gray. “The key was to coordinate early and often with our subcontractors, suppliers and client stakeholders to ensure all required hoisting was booked well in advance.”

Schedule management also became critical when it came to procuring the large quantity of high-end custom millwork incorporated into Gensler’s design. The millwork packages included extensive wood slats, wood-clad stairs, widespread wood veneer and faceted wood feature walls, along with a high quantity of case work, wood doors, frames, trim, etc. To accommodate the volume of millwork, Govan Brown split the millwork scope of work into four distinct packages awarded to separate millwork firms.

“Right from the outset of the project we saw the size of the millwork package as a challenge,” Gray says. “Our team decided to avoid putting all of our eggs in one basket, so we split the millwork scope into more reasonably sized packages to spread out the risk. We ensured the scope demarcation between each package was clearly defined and managed the procurement closely to ensure we did not end up with any scope gaps. To manage consistency in finishes between firms, we designated control samples for finishes that all subcontractors were required to match. The system was well managed and executed incredibly well.”

GOING BEYOND GOLD

Ultimately, thanks to that adherence to the schedule and an incredible team effort, the space was completed on time for LoyaltyOne’s phased move-in plan and is on target to achieve the company’s LEED Platinum certification—including a 78% recycling rate for the construction process.

But the most satisfying result, says Gray, is how LoyaltyOne’s associates enjoy their new space.

“LoyaltyOne’s associates enjoy their new space. But the most satisfying result, says Gray, is how LoyaltyOne’s associates enjoy their new space. "It’s clear that LoyaltyOne’s associates have been really happy in their new space since day one. User experience is such an important measure of a well designed and built space, so seeing happy employees really validated our success on this project," says Gray.”
INVESTING IN QUALITY: IPUT’s New Dublin HQ

IPUT is Ireland’s premier commercial real estate fund, with over 5Msf of real estate under management, and the largest owner of prime commercial property in Dublin’s city centre. Following several years of growth, the company had doubled in size and needed a new office to accommodate that growth and reflect the level of quality occupiers can expect from an IPUT building.

“...We had an opportunity to move into a space that was within our portfolio,” says Niall Gaffney, IPUT chief executive. “The move to St. Stephen’s Green reflects both the ambition and personality of our business. We are authentic about promoting quality design across our estate and, in doing so, we recognise that thoughtful design will serve to improve the well-being of people.”

Designed by MCA Architects, the 6,500sf new offices include all the features and amenities of a modern workplace, from an open, bright layout to a multitude of options for formal or informal collaboration in meeting rooms, private spaces, a kitchen and cafeteria or the 25-meter balcony overlooking the green. The office’s state-of-the-art technology has also been a “game-changer” for the team, says Gaffney. “Our meeting rooms have interactive touchscreens, which is something we didn’t have before,” he says. “The level of collaboration that has afforded us has been a real bonus.”

“...We’ve taken this opportunity to demonstrate in our own office that we’re serious about how we finish out buildings, about our environmental impact, about our employees’...” says Gaffney. “We’re showing people what they get when they commit to our buildings.”

LEARNING CURVE

Because the IPUT space was one of the first in Dublin to pursue WELL, the project team had to quickly familiarize themselves with the standard and what implications it has on design and construction.

“It did take some early coordination to make sure we all understood what we were looking to achieve,” says Derek Slattery, Structure Tone project manager. “But for the most part it just meant working with a multitude of options for formal or informal collaboration in meeting rooms, private spaces, a kitchen and cafeteria or the 25-meter balcony overlooking the green. The office’s state-of-the-art technology has also been a “game-changer” for the team, says Gaffney. “Our meeting rooms have interactive touchscreens, which is something we didn’t have before,” he says. “The level of collaboration that has afforded us has been a real bonus.”

“Whether we had our office certified or not, we’d still be doing what’s right for employee wellness,” Gaffney says. “It’s not necessarily a new concept. Companies who look after their staff get the best productivity from them. People are having a bit more fun being in their space, and that’s probably the best thing about it.”
BACK AT HOME for the Boston Globe

Sixty years ago, the Boston Globe left downtown Boston to open a large newsroom and printing complex on the outskirts of the city. The workplace mirrored what was standard for a newspaper at the time—cubicles, telephones, stacks of paper and lots of beige.

With its recent move to 53 State Street, a modern, LEED Platinum office complex, the Globe is back to its downtown roots, just steps away from its original office on Boston’s “Newspaper Row.” The move isn’t simply a physical one—it marks a major shift in the mindset of traditionally print media companies as they adjust to the digital age.

“The Globe belongs downtown,” said the Globe’s editor, Brian McGrory, at the time of the move. “This move puts us in a state-of-the-art newsroom built for the Globe of today; one that is digital-minded, rather than what we were in years gone by.”

A MODERN WORKPLACE…

That focus on today—and tomorrow—was the key driver of the change, says the Globe’s Dick Bennett, one of the project managers for the move. “It was modernized first, right-size second.”

The work environment as it was had become outdated. To keep up with modern expectations and attract the best staff, Gensler helped the Globe modernize first, right-size second. “This move puts us in a state-of-the-art newsroom built for the Globe of today; one that is digital-minded, rather than what we were in years gone by.”

Moving into a new, modern workplace marked a cultural shift for the Globe.

EARLY ARRIVAL

When all was said and done, the move from old to new went smoothly. Originally facing setbacks that would move the project past its target move-in date, Bennett and the Structure Tone team were able to regroup and adjust the schedule so people could start moving in as planned.

“It went off like clockwork,” he says. “When people first got in here there was a lot of excitement about the new opportunities they had. It was a positive feeling, and it still is to this day.”

The “B” from the Globe’s former building now greets visitors at the reception desk. In all directions for monitoring breaking news.

The “news hub area” has TV screens in all directions for monitoring breaking news.

The nature of the news did require some special accommodations. For instance, the building typically throttles back the heating and air conditioning overnight while the offices are vacant. But that obviously wouldn’t work for a 24/7 news environment. Structure Tone worked with the building to build a separate chillier plant just for the Globe and connect it to the existing ductwork and building infrastructure. “When the building shuts down, the Globe system kicks in,” says Custodio.

The Globe also wanted to ensure the history of the Globe and the city itself was infused throughout the new space. Boston Globe photography lines the walls and serves as privacy glazing on glass conference-room doors and walls. The “B” from the Boston Globe’s lettering on their former building adorns the reception area, while the “G” hangs in the kitchen lounge space. Artifacts and historic newspaper covers are on display throughout the office, including an original Linotype machine used to set the Globe’s type from 1894 to 1976.

Even the staircase that leads from the main building lobby to the Globe’s second-floor entrance has history. Dating back to 1896, the staircase was closed off to the public in recent years thanks to out-of-date railing heights and other deficiencies. As part of the Globe fit-out, the project team worked to design and build a glass rail system to bring it up to code. “The history of that staircase as part of the original Boston Stock Exchange is so cool,” says Custodio. “It was such a special opportunity to be part of that history and to work with such a landmark institution like the Boston Globe.”

...WITH HISTORY AT ITS CORE

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DISRUPTING THE NORM: TaskUs San Antonio

Customer experience outsourcing firm TaskUs is disrupting the outsourcing space. And their new office in San Antonio shows just what that looks like.

TaskUs provides next-generation customer experience that powers the world’s most disruptive companies through the partnership of amazing people and innovative technology. With their new 72,000sf office in San Antonio, Texas, the company has taken the new commonplace idea of a “collaborative” workplace to a whole new level.

“They have large collaborative areas, break areas, play areas, workout areas, TV areas—you name it,” says Structure Tone Southwest regional vice president Mark Jones. “All the things companies talk about doing, TaskUs is doing them.”

Employee happiness and collaboration is, in fact, integral to the way they work. Their space is essentially a contact center, but an outsider would never know it. For instance, the production floor features wide open spaces, bench-style work stations, hot desks and common seating areas rather than cubicles. “At TaskUs, our employees come first and it’s important that our office spaces reflect this thinking,” explains TaskUs site director Claudia Bazaldua.

OLD BECOMES NEW

TaskUs is changing the way business is done, and they wanted a workplace that reflects that. The space maintains its industrial heritage, with exposed ceilings and plenty of brick, metal and terra cotta. Striking that balance of the new with the old did require some creative problem solving.

To start, the polished concrete floors put the team to the test from day one. Polished concrete floors did require some creative problem-solving. The team tackled the challenge head-on, ensuring that the floors were a smooth, polished surface that could withstand the wear and tear of daily use. They worked closely with the concrete contractor to ensure the floors were properly prepared and that the final product met the high standards of the TaskUs team.

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GROWING TOGETHER

With the building added onto over the years, so we needed a lot of additional support,” says Dale Dmitrzak, senior project manager for Structure Tone Southwest. “But combining these original features with modern touches has really created a unique look.”

THE FUTURE OF SAN ANTONIO

While TaskUs is thrilled with their new space, the City of San Antonio might be even more proud.

“When the Chamber of Commerce touts the cutting-edge office as the future of San Antonio,” says Jones. “It just goes to show the support the city has shown for the company and what they’re bringing to the local economy.”

Project Details
Size: 72,000sf
Client: TaskUs
Architect: Insite Architects, Inc.
Engineer: KCI Technologies
Owner’s Rep: Whitebox Real Estate
Services: Construction Management
Sector: Commercial
Completion: September 2017–December 2017

As part of the move, Allergan wanted to ensure employees would be happy in their new offices, so workplace amenities became a major focus. Features range from a two-story health and wellness center with golf simulator to mothers’ rooms and prayer rooms, plus a Starbucks-like coffee bar and outdoor courtyards and walking paths.

“Consolidating the offices is certainly helping Allergan operate more collaboratively and efficiently. But the move also gave them the opportunity to target the amenities that the modern workforce really wants, all on a beautiful campus where they can get outside,” says David Adams, Structure Tone account executive.

A healthy, comfortable office also means a sustainable one for Allergan. The company is targeting LEED Silver certification through such strategies as reduced water use, HVAC and lighting controls, enhanced commissioning, recycled and local materials, access to alternative forms of transportation and myriad other features.

Implementing those features in a 30-year-old building did pose some challenges, particularly since the building had not been occupied for the last several years. The operational status of the building systems and other features was a bit of an unknown, meaning Structure Tone and its team had to systematically assess and trouble-shoot systems before determining the best path forward.

The project schedule also put pressure on the team to make those decisions quickly. Allergan employees were coming from several different offices, each of which had its own lease expiration date.

“The leases really drove the move-in strategy,” says Adams. “From our own project phasing to the parking garage and roof work going on in separate projects, we had to coordinate closely with everyone and keep a tight watch on the schedule to make sure all the moving parts were moving in the right order.”

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To start, the polished concrete floors put the team to the test from day one. Polished concrete floors require grinding down the concrete to a smooth finish and then polishing it. Facing a tight 12-week schedule, the question became, “Do we build out the space and then make a mess sanding the floors, or do we grind and polish the floors on the front end and then protect them?” The team settled on the latter idea, protecting the floors throughout and having the subcontractor return to seal them.

The original floors were also a challenge. Over 100 years old, the long wood pine floors were no longer structurally sound. The team salvaged the wood and reused it for a number of accent walls, complementing the re-exposed terra cotta of the original exterior walls. In addition to the floors, the team also added all new stucco to support the 16 new rooftop air handling units required for the modernized space.

“The building had been added onto over the years, so we needed a lot of additional support,” says Dale Dmitrzak, senior project manager for Structure Tone Southwest. “But combining these original features with modern touches has really created a unique look.”

GROWING TOGETHER

Given the nature of TaskUs’ work and their tech-centric business, IT infrastructure was another necessary upgrade, essentially requiring mini data centers. Keeping all that equipment and the start-up processes in mind put added pressure on scheduling.

The security to protect that infrastructure—and the company’s processes—also became a major focus. Given the nature of their work, only authorized personnel have access to the production floor. The new office, therefore, involved a state-of-the-art thumbsprint security system.

“This was a case where our clients were the true experts and educated us on the next wave of technology, and that was refreshing,” Jones says. “Not many of our clients require security systems quite like this so we embraced the opportunity to learn.”

The team was able to put that learning to work almost immediately when TaskUs found the need to expand into two more available floors.

“When we were awarded the original project, TaskUs had the client base to fill maybe 10% of the space. By the time we had completed it, they already needed to expand. It’s amazing,” says Dmitrzak.

The Structure Tone Southwest team was able to jump right in, not only taking on the security system element this time, but also simply extending the relationship they had built with the client, the building and other members of the team to that next phase of work.

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OFFICE: ST WOODBRIDGE

OFFICE: STSW SAN ANTONIO

Project Details
Size: 440,000sf
Client: Allergan
Architect: Ginsler
MEP Engineer: Robert Director Associates
Retail: Ceramic Associates
IT: TN Technology Partners
Owner’s Rep: VIA Project Managers & Consultants
Services: Preconstruction, Construction Management
Sector: Life Sciences
Completion: October 2017
Certification: LEED Silver (pending)
SUSTAINABLE INNOVATION with Historic Preservation

When it comes to sustainability, New York City is now looking to one of the oldest institutions in the world—the Catholic church—as an innovator. As part of its nearly $200-million restoration effort, St. Patrick’s Cathedral recently updated its heating and cooling system, opting to install a 240-ton geothermal system that uses the ground’s energy to regulate building temperatures.

BELOW GROUND

During planning, the project team assessed other, more traditional options, but complications arose given the cathedral’s historic nature and limited space. “Many buildings have cooling towers on their rooftops. But at St. Patrick’s, there is no roof to hide them,” says Paul Keosayian, Structure Tone project manager. “Another idea was to build a full mechanical plant, but that quickly became cost prohibitive due to the amount of rock excavation prohibitive due to the amount of rock excavation...”

Excavation was obviously part of the process for digging the wells involved drilling several 10-inch-diameter holes south side of the cathedral to the physical plant involved. Drilling several 10-inch-diameter holes through knee walls in the crawl space every 12 feet. Once the piping was installed and electrical conduits were roughed out, the team then had to seal those openings to ensure they were secure and water tight. Needless to say, all of this work was done in very tight spaces, requiring extra safety oversight and monitoring.

TIGHT QUARTERS

Space was a defining challenge of the project since so much work was happening at once, and the geothermal system design is extremely compact. “We barely had to touch the cathedral itself since the physical plant is in a basement area,” Keosayian says. “All of the underground piping went through the gardens and crawl space areas with just a few spots where the system attaches to the building.”

“Once everything was complete and the areas were landscaped, no one would ever know there are wells in the gardens and all the other components that support them.”

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Evaluating the special confined spaces, the team drilled 10 wells, each anywhere between 600 and 2,200 feet below the ground and carefully planned around the complex maze of Manhattan’s underground infrastructure. The project team also coordinated closely with the ongoing building renovations, scheduling the drilling and associated system installations to avoid impacts to that progress.

When it comes to sustainability, New York City is now looking to one of the oldest institutions in the world—the Catholic church—as an innovator. As part of its nearly $200-million restoration effort, St. Patrick’s Cathedral recently updated its heating and cooling system, opting to install a 240-ton geothermal system that uses the ground’s energy to regulate building temperatures.

INTO THE FUTURE

The geothermal system went online in February of 2017, and the church is looking forward to the efficiencies it will bring. They are also proud of the model they provide for others looking to be more environmentally resourceful.

“We are now heating and cooling the cathedral with renewable energy, reducing our carbon footprint and making our city that much greener,” Msgr. Robert T. Ritchie, St. Patrick’s rector, noted in a message to members. “We are very grateful for this opportunity to do our part as stewards of creation.”

Above: The truck with the drilling rig drilling wells on St. Patrick’s grounds. The physical plant houses the heat exchangers, pumps and abundant piping to and from the wells.
Structure Tone’s history in London actually dates back more than 30 years—32 to be exact. In 1986, Olympia & York, a client of the Structure Tone New York office, began plans for the redevelopment of Canary Wharf, now one of London’s most prominent districts. They asked Structure Tone to help with the effort, so we did, putting down permanent roots in 1988.

From that point on, more clients with a London presence started seeking out Structure Tone’s help, and the office began securing local clients and building a local workforce. “We initially came here because a client asked us to. That is the foundation on which the London office was built,” says Dean Manning. Structure Tone International’s managing director. “But we grew from being a US-centric business to one with local expertise and credibility, which now allows us to offer the best of both worlds to local and global clients alike.”

A CULTURE OF IMPROVEMENT

The London office has always operated like a family, from supporting each other to get the job done to giving back to their community, but, as Dean Manning puts it, they can’t get complacent. “We have a culture of improvement, of doing better. It’s all very self-fulfilling and very exciting. “One way we are doing just that is by hosting regular “operational workshops” that allow everyone from supply chain vendors and subcontractors to internal staff to voice their opinions on what the company is doing well and could improve upon. “It’s helping us stay fresh and make sure our standards are up to date, consistent and transparent,” says Manning.

The company has also wholeheartedly joined in “Heart of the City,” the City of London’s Responsible Business Forum. This forum is creating a community feel across a large office by connecting floors in an open, collaborative way—vertically, instead of horizontally. The new London headquarters of both Havas Media and WE&Co.Oghy take this very approach, locating staircases in strategic places and creating an environment where people have to interact.

1988: OWNING OUR FUTURE

With such a solid foundation beneath them, STO London is honing in on what matters most to clients: how best to build their space. The team has committed to a “back to basics” approach, focusing on using digital construction and other tools to make the construction process more efficient. The group is looking to the future in other ways too, from expanding their expertise into the science & technology and education sectors to investing personally in the company through its new employee ownership model.

“Everything from sustainability and community service to workforce diversity and innovation. “All of this gives us a terrific platform and opportunity to truly become #1 in our industry to our clients, our partners and our staff. Why would you shoot for anything less?” says Manning.

CONSTRUCTION TECHNOLOGY.

When the UK government mandated the use of BIM for its projects, Structure Tone seized the opportunity to truly make advanced technology part of its culture. “Construction is an old-fashioned industry,” Manning says. “We realized we had to bring it all in-house to use those tools in a way that improves how we build.” The team has now taken this ability and pushed it past the flashy marketing-focused use toward digitizing the entire process, from takeoffs and estimating to schedule management and design coordination. “It’s really getting back to construction basics and using these tools to make projects more efficient and buildable,” says Manning.

VERTICAL VILLAGES.

The UK is one of the world’s leaders when it comes to innovative working practices like hot-desking and informal, communal working areas. The next wave in this evolution is creating a community feel across a large office by connecting floors in an open, collaborative way—vertically, instead of horizontally.

COMPLEX STAIRCASES.

Feature staircases have been a trend for years now, and the vertical village approach only raised the bar further, whether in scale, use of materials or schedule. “Staircases are our competitive advantage,” says Manning. “We’ve built every kind you can think of—spiral, elliptical, straight, kite winder, half landing stairs, scoops—in every kind of material. It’s phenomenal what has been built in just the last few years.”

MISSION CRITICAL FACILITIES.

Structural Tone was one of the first construction firms to begin building data centres in the UK in the early 1990s. By 2010, when many more firms had begun competing in the mission critical market, Structure Tone had clearly become the leader in smaller, more complex projects. “We have established a bit of a niche in this market,” Manning says. “We work with the same consultant team of engineers and specialists, and those relationships have been key to our continued mission critical work.”

COMPLEX STRUCTURAL REFURBISHMENT.

Often a large-scale fit-out project brings with it some challenging structural elements, making the project part fit-out, part new construction. From cutting through the slab for an atrium or stair and elevator core, to reshaping sections of the interior and exterior, Structure Tone’s London team has built an impressive portfolio. JP Morgan’s new 45,000 sf office, for example, essentially entailed replacing a corner of the building with a glass structure, all while the building was occupied.

IN THE KNOW

In the last three decades, Structure Tone London has become recognised experts in several specialised areas of buildable, “ says Manning. “We realized we had to bring it all in-house to use those tools in a way that improves how we build.” The team has now taken this ability and pushed it past the flashy marketing-focused use toward digitizing the entire process, from takeoffs and estimating to schedule management and design coordination. “It’s really getting back to construction basics and using these tools to make projects more efficient and buildable,” says Manning.
The Sewell family of auto dealerships in Texas has always put the customer experience at the center of their business. As they put it, “they’re aiming to build ‘customers for life’.” The company’s newest dealership in Grapevine, Texas puts that purpose on display with a building that creates an experience not only for customers, but also for associates.

Sewell BMW of Grapevine is more than a car dealership. It’s four stories and 290,000sf of showroom, collision center, autoshop and garage space, plus offices, meeting areas, children’s rooms, client and event spaces and other amenities that make this the flagship dealership for BMW America.

Achieving such an impressive vision didn’t come easy—the Structure Tone Southwest team worked with the client and design team to overcome a few construction challenges to make sure those high standards were met.

1. Soil. The project site features very expansive soil, which had implications on the extensive plumbing and piping on the site. Typically, moisture conditioning is used on the soils to manage the issue. In this case, however, the owner wanted to prepare for the absolute worst-case scenario and specified building open-air trenches for all underground piping with form boxes to maintain trench integrity and the space between the pipes and expansive soil. Because this approach was unconventional, the effort took more crew members than usual. “We had up to 30 people digging trenches, installing piping and other tasks,” says Blake Evans, Structure Tone Southwest senior project manager. “But we made sure we were all on the same page and working safely.”

2. Lead times. With several high-end finishes and special materials, the team had to plan carefully around lead times. The feature exterior sunshades, for example, is manufactured in England. Our team managed the milestone schedule to ensure construction was at the right stage for the sunshade’s arrival, and then subcontractors assembled the shipped pieces on site, keeping overall progress on schedule.

3. Vendor coordination. An auto dealership features a number of specialty services such as mechanic equipment, hazardous materials management, a car wash, etc. “The original design for each floor of the garage and showroom had the supply pipes and conduits running in the slab,” says Evans. “We had to precisely locate everything so it would fit within the equipment structure and remain hidden.” An additional challenge for routing these elements in slab was to work around the two layers of rebar, post-tensioning embeds, etc., which, in many cases, left only the minimum amount of space for the conduit and pipe.

4. Weather conditions. Compounding the previous delays were the 100 rain days over the course of the project. Working around these weather conditions required more creative thinking by the construction team when it came to scheduling and materials. For example, the team was using carton forms below the slab during construction. Made of cardboard, those forms would quickly be ruined in the rain. To avoid that issue, the team explored other materials to allow them to work more quickly during and around the rain, as well as pumped water off site as soon as they were able after and in between storms.

In addition to some unique project challenges, building the Sewell BMW dealership also added some unique features for a facility of its type. One example is the site and the building’s sustainability goals. The project is built to LEED standards, including water capture and reuse from the car wash. LED lighting throughout, trees grown on George W. Bush’s tree farm and other sustainable features. The showroom also accommodates two floors of vehicles, meaning it needed the structural stability and reinforcement of a parking garage with the aesthetic and finishes of a polished auto showroom and workplace.

Sewell BMW of Grapevine was built to be BMW’s flagship store in the US—and it shows. The large, sleek dealership has not only caught the eye of buyers, but also has garnered renewed attention by the community and local media for the auto industry, particularly in this area of North Texas. The client has been thrilled with the results, even using the space for company functions, such as a corporate BMW management meeting. The new building has significantly raised the bar for what an auto dealership can be, and both the industry and greater Dallas community are taking note.

“We doubled the typical number of on-site employees overseeing construction to ensure everything came out just as they envisioned,” says Evans. “We knew this place was special. It’s truly a one-of-a-kind car dealership.”

**Ultimate Experience: Sewell BMW of Grapevine**

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Efficient HVAC systems and sustainable building materials helped Xylem achieve LEED Gold certification, as highlighted by a full-wall artwork within the office space, showcasing company processes and other imagery. The fit-out work also included upgrading the interior and infrastructure to meet LEED Gold certification standards, updates to the HVAC system for indoor air quality to use sustainable and regionally sourced building materials. Charged with fitting out the two-story space in just 14 weeks and within a firm budget, the Pavarini team worked together with Xylem and the design team to help determine how they can meet the vision of the space within those constraints. For example, the glass specified for the “floating” central staircase was a potential budget-breaker. They originally wanted to use a type of structural glass, which would be extremely expensive, says Timothy Papps, Pavarini estimator. “They were able to find another type of glass that gave them the look they were going for but a little more affordably.”

As part of the inherently sustainable nature of the company’s work, they have developed a long-term sustainability plan that lays out measurable goals for the company’s products, operations, corporate responsibility activities and organizational culture. When time came to relocate their Rye Brook, New York headquarters, Xylem seized the opportunity to also upgrade their workplace to a sustainable, LEED Gold certified space.

TEAMWORK MAKES THE DREAM WORK

The move, 57,000sf offices blend open working space and private offices with such features as high-tech conference rooms, breakout areas and a product showcase space. Tones of white, blue and green flow throughout the entire space, echoing the company’s water-based mission and products, including full-wall artwork highlighting company processes and other imagery. The fit-out work also included upgrading the interior and infrastructure to meet LEED Gold certification standards, from updates to the HVAC system for indoor air quality to using sustainable and regionally sourced building materials. Charged with fitting out the two-story space in just 14 weeks and within a firm budget, the Pavarini team worked together with Xylem and the design team to help determine how they can meet the vision of the space within those constraints. For example, the glass specified for the “floating” central staircase was a potential budget-breaker. They originally wanted to use a type of structural glass, which would be extremely expensive, says Timothy Papps, Pavarini estimator. “We were able to find another type of glass that gave them the look they were going for but a little more affordably.”

The team put their value engineering skills to work for other features too, such as the lighting package, HVAC units and unique ceiling. “We started working with the designers on those elements on preliminary drawings,” Papps says. “We were able to get to the same effect but come in under budget. We really worked well as a team.”

Scheduling became a challenge as well, particularly thanks to an eight-week delay in getting a building permit. But the project team was able to use the delay to their advantage for preparation. “We ordered all the materials and equipment and organized the exact sequence of events so that everything was lined up and ready to go as soon as the permit came through,” says Brian Boyce, Pavarini project manager. “It takes a lot of upfront work to find out where the cables are, and then surgical precision during cutting,” says Papps. “We were able to schedule that accordingly and find the right team to maintain the design but keep it within Xylem’s budget.”

As a result, Xylem now has a modern, sustainable workplace that helps the company continue to serve its customers and communities across the globe in, as Xylem puts it, making “smarter, better use of our world’s most precious resource.”

### Project Details
- **Size:** 57,000sf
- **Client:** Xylem, Inc.
- **Architect:** America Emma Architects
- **Engineer:** Edward & Zuck (now Stantec)
- **Owner’s Rep:** OBS
- **Telecommunications:** Sykra Hennessy Group
- **Services:** Construction Management, Commercial
- **Completion:** December 2013
- **Certification:** LEED Gold

#### A CUT AHEAD

That preconstruction organization paid off when it came time to build the staircase. Understanding that they were working on a post-tensioned slab, the team purposely allotted extra time to cut the staircase slab openings. Again, the preconstruction team helped keep things on the right track, finding the subs with the right experience in that type of work. “You can’t just cut through that slab. It takes a lot of upfront work to find out where the cables are, and then surgical precision during cutting,” says Papps. “We were able to schedule that accordingly and find the right team to maintain the design but keep it within Xylem’s budget.”

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#### GIVING BACK: Hurricane Harvey Relief

Last August, Hurricane Harvey ravaged the southern United States and the Caribbean, hitting the Houston, Texas region especially hard. Reports estimate that the storm left over $125 billion of damage in its wake, tying it with Hurricane Katrina as the costliest hurricane in recorded US history, according to the National Hurricane Center.

Structure Tone Southwest’s Houston-based team, thankfully, made it through the storm safely. But employees and their families were left with hundreds of thousands of dollars in damages, ranging from ruined lawns to completely destroyed homes, cars and other property.

The Structure Tone family quickly galvanized to help our Houston colleagues. Once the storm passed, Structure Tone Southwest staff met at employees’ destroyed homes to help with demolition and clearing out debris. The company also set up a GoFundMe page for employees to contribute to, which ultimately raised over $95,000. With an added company contribution, the total recovery fund came to over $160,000, which went directly to Structure Tone employees’ recovery efforts.

“The devastation was so staggering that rebuilding seemed like an almost impossible task in the immediate wake of the storm. Without the money raised by the Structure Tone team, I really don’t know how our employees would be dealing with this. It’s made a huge difference—the response was just amazing,” says John Halpin, Structure Tone Southwest’s human resources manager.

As the Houston area approaches the one-year anniversary of the storm, recovery is still a work in progress. Contractors and other professionals are hard to come by as the entire region is rebuilding. One of Structure Tone’s Houston employees who lost everything had to wait more than three months before a contractor could even begin the renovations.

“We are renting an apartment while we renovate our house. We finally have a contractor that started last week,” he says. “I know we have a long recovery ahead, but it is wonderful to know that I have a larger family in Structure Tone to stand with me during this difficult time.”
WHAT IS THE PASSIVE HOUSE STANDARD and Why Should You Care?
By Chris Donnelly, project manager, LF Driscoll

Initiated in Europe, Passive House is a third-party sustainable building standard that has started to pick up steam in the US. Passive building involves a set of quantifiable, performance-oriented design principles. These design principles work in conjunction to, in the words of the Passive House Institute (PHI), “maximize your gains, and minimize your losses.”

There are five basic building science concepts at the core of the standard:
1. The use of high R-value insulation materials
2. A continuous, air-tight building envelope
3. High-performance windows (typically triple-pane) and doors
4. Installation of a moisture and heat recovery ventilation unit
5. Building orientation that maximizes solar gain during the heating season and minimizes the effect (typically via shading) during the cooling season

To become a certified project, performance testing is conducted under pass/fail criteria. According to PHI, these criteria are a Space Heating Demand not to exceed 15 W/ft² of net living space, a Renewable Primary Energy Demand, or the energy used for all domestic applications, which can’t exceed 0.6 air changes per hour; and select Comfort measurements related to indoor air temperature. If all testing requirements are achieved, the building receives Passive House certification.

In the overall marketplace, opportunities to bid on Passive House projects have been increasing. We are seeing more, and have already proposed, RFPs for projects trying to attain Passive House certification. Some cities and states, including New York City, have even begun to incorporate Passive House standards into building codes or municipal requirements.

For this reason, it is crucial for members of a project team to have Passive House knowledge. Estimators must understand the requirements so that trades can be bought out in an efficient and cohesive manner. Superintendents need to develop comprehensive quality control programs to perform the work correctly the first time. Project managers must plan the work and material deliveries in proper sequence so that all trades have the opportunity to correctly implement Passive House principles. Sequencing the installation correctly is imperative to a successful Passive House project, especially in regards to the continuous air-tight exterior membrane. This is all why I, a project manager, chose to become a Certified Passive House Tradesperson.

From a client perspective, employing a contractor with experience in Passive House can provide significant value-added to the construction process. According to the Passive House Institute, Passive House projects can reduce space heating and cooling energy needs by over 90% compared to a “typical” building. Formal certification does not have to be the goal; the principles of the standard still create an opportunity to deliver a higher-quality project. On its most basic level, the Passive House standard strives for a building that provides increased levels of comfort, energy efficiency, and affordability at the same time.

The results will help the industry understand the interplay of elements such as sound, lighting, temperature and air quality, and how facilities can be designed to maximize positive health habits and reduce negative influences.

“Through our work, we’re seeing first-hand the ways that the built environment passively affects those that come in contact with its elements. We are committed to the education and research provided by the Well Living Lab to the industry as a whole.”—Robert Lees, senior vice president at Structure Tone

THE WELL LIVING LAB

The Well Living Lab is the first research center to focus on how buildings affect human health and well-being. The purpose of the lab is to study these indoor environments and create healthier indoor spaces for people to work, live and play. The lab includes 5,000 sf of simulated, real-world office, home and other indoor spaces where researchers can study human subjects in those built environments.

A COLLABORATION OF DELOS AND MAYO CLINIC

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REAL-WORLD RESEARCH: WELL LIVING LAB

What’s in it for you?

Health

Performance

Stress & Resiliency

Sleep

Comfort

“The lab idea itself came from multiple discussions about what kinds of workplace wellness studies would be useful. Out of that emerged our ideas on the kind of building we needed to do that research.”—Dan Filla, Well Living Lab executive director

To learn more about Passive House and how it impacts construction projects, visit passivehouse.com

To learn more, visit welllivinglab.com

Neighbors: American Society of Interior Designers,
Institute for Healthcare Improvement,
National Wellness Institute,
National Institute for Occupational Safety and Health,
American College of Preventive Medicine,
Room to Read,
American Institute for Research

2015 The Well Living Lab was founded

2018 Edelman Award-winner for effective campaign

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23 Alliance Members, 500+ partners

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Welcome to WOWTOWN

Founded in 2002 and based in the City of Philadelphia, extreme value retailer Five Below has been growing in leaps and bounds, now with over 640 stores across the country. To keep up with their growth, the company needed a new corporate headquarters, one that would inspire employees and better reflect the company’s culture, brand and number one focus on “wowing” their customers.

As a result, “Wowtown” was born. The new 125,000sf headquarters occupies three floors of a former discount department store whose building was converted to corporate offices in 1989. The sixth and top floor of the building is Five Below’s reception area and conference center, full of meeting rooms and event spaces. The second and third floors are primarily employee work spaces, with 7,000sf dedicated to a mock store where merchants and Five Below staff can experiment with displays and store layouts. Throughout all the floors, bright colors and bold designs contrast with the historic building’s original features.

Project Details

Size: 125,000sf
Client: Five Below
Owner: Brickstone Companies
Architect: D2 Architecture
Engineer: HF Lenz
Owner’s Rep: HF Lenz
Services: Construction Management
Sector: Commercial
Completion: January 2018

WHAT LIES BELOW

The office overlooks the atrium area of the Lits Building buildings, organized into A, B and C “sections.” The A building is a concrete structure while the B building is wood framed, and the Five Below offices cross into both.

“The way the building developed over 125 years means there were some unknowns,” says Vincent Samatona, Structure Tone project manager. “So not only were we dealing with blending two entirely different building structures into one unified space, but we also had unexpected issues popping up as we opened walls and floors.”

One of the major challenges in the project entailed two separate intercommunicating stairs, one in building A and the other in building B. The concrete slab in building A is 19 inches thick and made of terra cotta arch with steel beams embedded in it. The existing beams, however, were not exactly in the expected locations. On the wood side, the mixture of wood joists and steel beams made the approach to construction a little unusual.

“We exposed it all, we had to work with the structural engineers to make sure the steel configuration worked with the stair layout,” says Samatona. “The layout had some angles we had to address too, so it took a lot of teamwork to make sure they came together correctly.”

What lies beneath

This is the passing of the baton,” said Five Below CEO Joel Anderson as he showed off the space in opening tours. “Five Below started in Philadelphia 15 years ago. The Lit Brothers were the original discount department store... and here we are 125 years later. Five Below is providing value. We exist because of value and experience.

“Once we exposed it all, we had to work with the structural engineers to make sure the steel configuration worked with the stair layout,” says Samatona. “The layout had some angles we had to address too, so it took a lot of teamwork to make sure they came together correctly.”

STRATEGIZE AND ORGANIZE

The varied building sections also made for varied floor elevations. Particularly where the concrete side met the wood side, the change in elevation called for adding steel railings and ramps to ensure the office was ADA compliant.

The renovated space shows off its history with the exposed wood structure.

The office overlooks the atrium area of the Lits Building.

HISTORY REPEATS ITSELF

Maintaining that connection to the history of the building was important to Five Below as they re designed the space as a modern workplace. The Victorian building was the original home of the Lit Brothers department store—which began as a small millinery shop in 1890 and expanded through the building into a major affordable alternative to more expensive competitors. As an affordable retailer for teenagers and preteens, Five Below was more expensive competitors. As an affordable retailer.

With the transformation complete, Sarnatona says the company’s commitment to a sustainable environment that makes people happy is evident. “Employee happiness is a key focus,” he says. “There’s reclaimed wood and salvaged materials throughout the space, lots of natural light, cool design features and a really energized vibe.”

And Five Below isn’t done yet. The company has rights to an additional 8,000sf, meaning nearly a third of the Lit Brothers complex will get the Wowtown treatment. Wow, indeed.

“They really had to have our ducks in a row so we could get the skylights in as quickly as possible while the rest of the project continued around them.”

WOW FACTOR

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WELL Done: Delos’ New York Headquarters

In just a few short years, Delos has established itself as a pioneer in creating indoor spaces that promote human health and wellness. Most notably, the company helped develop the WELL Building Standard, the first rating system to focus attention on the health of the people who live or work inside a building.

When it came time for Delos to upgrade its own offices to a larger space, it only made sense that the firm would pursue WELL Certification through the international WELL Building Institute. The new, 19,000sf space leaves no wellness stone unturned. Flexible working stations encourage movement. Lighting systems mimic circadian rhythms. Plant walls and other foliage—plus floor-to-ceiling exterior windows and an outdoor terrace—support the space’s biophilic design. A “wellness” café even provides healthy snacks for employees and visitors alike. With features and operational programs like these (plus many more), the space was officially certified as WELL Platinum this spring.

PUSHING BOUNDARIES

But Delos’ new headquarters aims beyond wellness too, targeting Living Building Challenge and LEED v4 certification to create the most sustainable environment they can.

“We really want to showcase sustainability in every regard, from the built environment itself to its effect on people. We targeted certification in the leading sustainability programs to show that all of those things can be achieved,” says Paul Scialla, Delos founder and CEO.

So many added sustainability and wellness goals really did not pose a major challenge on the construction side, says Structure Tone project manager Eileen McCarthy. “The build-out wasn’t the hard part. The building is the building, with normal construction approaches for the most part,” she says. “Making sure we had the right products and the right documentation was really where we had to get organized.”

The Living Building Challenge (LBC), for example, includes a materials “red list,” which outlines the chemicals that cannot be found in any LBC-certified space. Some of those chemicals—asbestos, lead and others—are limited in most modern construction. But some are still commonly found in typical materials, like the hexavalent chromium in certain types of sheet metal or PVC in the jacket of most cabling. Ensuring the job specified compliant materials that still met the design vision, schedule and budget added a new wrinkle to the team’s typical preconstruction and construction process.

“Generally, the construction industry is familiar with LEED. But the Living Building Challenge is still new to most of us,” says McCarthy. “Many of our subs aren’t that familiar with it, and some common building elements, like sprinkler heads, have limited options for compliant alternatives.”

To help get a handle on the many requirements, McCarthy and her project team partners—Tyler Symons from Structure Tone and Janna Wandzilak from Delos—compiled all the requirements for each rating system into one master checklist. A seven-page request-for-information form not only outlined the criteria they needed to follow as they worked with the subcontractors to purchase materials, but also left a clear paper trail of each decision.

“It would have been a mad scramble if we had to chase all that paperwork with our subs at the end of the job,” McCarthy says. “Doing it upfront kept us organized and really pinpointed where we would have to do some extra work.”

MODEL BEHAVIOR

Delos’ new space is not only a comfortable, healthy workplace for employees, but it’s also a working test lab for the methods and outcomes the company’s work fosters. Sensors are located throughout the office to collect data on air quality, acoustics, thermal lighting, steps taken up and down the staircase and myriad other factors. “We display that data right in our main lobby so everyone can see it,” says Scialla. “It’s a great way to showcase the invisible impacts.”

The office also serves, of course, as the “model home” for Delos as they meet with companies about the potential of applying WELL principles in their own spaces.

“We’re doing tons of tours for clients, prospective clients and industry partners,” Scialla says. “It’s been an incredible tool, and the feedback has been universal. Our own folks, industry folks, our clients—they love the space and all agree that this is exactly the way a workplace should be.”
RATING SYSTEMS: Which One Is for You?

Every year, Structure Tone surveys clients and partners on the state of sustainability, wellness and resilience. So far, the data shows people are a bit overwhelmed by the number of third-party rating systems on the market. With that in mind, Structure Tone’s director of sustainability, Jennifer Taranto, spoke with the leaders of four prominent rating systems to discuss the aims of their system, how these systems differ and complement each other and what trends and challenges they see ahead.

Jennifer Taranto: Why was your rating system initiated?
Mahesh Ramanujam, President & CEO, USGBC: As you mentioned, there was a lot of talk in the 1990s about “green buildings” but no credible way of independently measuring the claims. By the end of that decade, leading professionals at the BRE Trust came together to create a new system in the world. Since then, BREEAM has become the standard for green building—no program has greater cultural recognition or impact. It was as simple as establishing a simple, metric-based system.

Ramanujam: Green building rating systems are crucial to addressing the impacts of climate change and, collectively, these rating systems are working together to continue to raise the bar on our built environment. In partnership with Booz Allen, our 2015 Green Building Economic Impact Study found that, to date, green building has created millions of jobs and contributed hundreds of billions of dollars to the US economy, and that LEED was a pivotal contributor to this total impact.

Fedrizzi: The first projects to achieve certification are now releasing results based on pre- and post-occupancy surveys. This research brings to light the measurable impact and benefits of WELL Certification, such as enhanced air quality and improved employee collaboration.

Sturgeon: That the built environment sector understands that buildings must perform in order to actually make a difference to global climate change.

Taranto: What is the impact you are seeing on the built environment as a result of rating systems like yours?
Ramanujam: LEED, BREEAM and Living Building Challenge, as well as Green Star in Australia. These crosswalk documents identify opportunities to streamline the process of achieving dual certifications. Higher-performing buildings are fundamental to high-performing people.

Taranto: What is the impact you are seeing on the built environment as a result of rating systems like yours?

Ramanujam: LEED has become the industry standard for green building certification. It has established universal guidelines for the design and construction of energy-efficient, healthy, and water-efficient buildings. The LEED program has been adopted by many governments around the world, including the European Union, China, and Japan.

Taranto: What emerging industry sustainability trends excite you the most?
Sturgeon: It excites me how quickly the building product manufacturing sector is embracing healthy, transparent materials and moving towards zero energy across their entire building portfolios.

Fedrizzi: We’re just now starting to see the emergence of continuous monitoring and sensor technology, and the impact is going to be immense. Our environments are constantly changing, and these new innovations can help identify gaps and optimize our buildings and communities in real time to support our health and wellness.

Ramanujam: The emergence of data and performance as a driving force in sustainability really excites me. I like to say that data is the new natural resource.

Fedrizzi: Absolutely. Last year we released “crosswalks” with several green rating systems, including LEED, BREEAM and Living Building Challenge, as well as Green Star in Australia. These crosswalk documents identify opportunities to streamline the process of achieving dual certifications. Higher-performing buildings are fundamental to high-performing people.

Sturgeon: Yes, as Rick mentioned, we have developed crosswalks with other leading programs and are creating more so that people can choose what works best for their situation. I think an ecosystem of choice is a healthy place for the market to be.

Taranto: What do you think is the greatest threat facing the rating system industry today?
Ramanujam: I think the greatest threat facing the rating system industry today is the lack of access to data. We are creating more so that people can choose what works best for their situation. I think an ecosystem of choice is a healthy place for the market to be.

Sturgeon: That there are so many emerging trends that we need to be aware of, such as the development of continuous monitoring and sensor technology, and the impact is going to be immense.

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