Commercial Real Estate Development WINTER 2018/2019

Development®

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NAIOP
COMMERCIAL REAL ESTATE DEVELOPMENT ASSOCIATION

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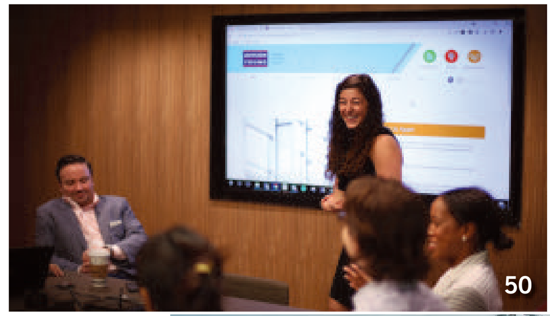

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Technology has become a crucial part of our daily lives. It is also poised to bring big changes to the brokerage industry, affecting everything from how properties are shown to how deals are done.

Caroline Guidera of Avison Young's Tysons, Virginia, office looks through the window of a new building in Arlington, Virginia. Photo by Dennis Brack.

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A Note From the Publisher

Despite Headwinds, CRE Fundamentals are Strong

FOR REAL ESTATE professionals, the New Year brings both optimism and trepidation as the seemingly endless real estate cycle wears on. Some of the steam was let out of the economy as the stock market modified in mid- to late 2018, but as a leading indicator, it behaved as it should have, pricing in expectations about rising rates and the subsequent slowdown in business activity that typically ensues. With exceptions in some markets and for some product types, real estate fundamentals are solid and are expected to remain that way, barring some unforeseen event.

The key takeaways below provide a quick overview of topics in this issue.

Stay informed,
Marc Selvitelli, CAE
Publisher

Marc Selvitelli

As digital platforms proliferate, brokers are shifting from information provider to counselor and moving toward a future in which they must be comfortable with a more transparent transactional environment (page 50).

An urban brownfield site in Perth Amboy, New Jersey, was successfully converted into a distribution facility thanks to a thorough understanding of the state's environmental regulations and a commitment to careful remediation (page 56).

A ground lease at N.C. State University enabled a private developer to construct a building designed around a state-of-the-art textile machine that also accommodates market-rate office and wet lab tenants (page 62).

Public art brings vitality to public spaces and can add iconic branding to real estate projects. However, moving or altering the art could breach artists' rights, so legal agreements must be carefully structured (page 68).

Space as a service, adaptive reuse, city tier designations and the need for expedited development approvals were just some of the topics debated by the CRE research directors convened by the NAIOP Research Foundation at CRE.Converge (page 74).

Awaited guidance about **Qualified Opportunity Zones** issued by the IRS and Treasury Department ignited investor optimism concerning real estate investment returns. However, resistance from poor communities and a potential bubble in 10 years emerged as concerns (page 12).

In offices, big data is being used to operate building systems, but most owners are not yet tracking tenants as they move about. That's due to privacy concerns and lack of clarity about what to do with the data once it is captured (page 16).

The community review process is typically couched as oppositional, with developers on one side and community members on the other. But engaging the community is not about unveiling splashy data and renderings; it's about a thoughtful campaign to earn trust (page 28).

What do parties to a CRE loan focus on? Lenders are looking for experienced sponsors, strong markets and financial safeguards, while borrowers are working on building relationships, ensuring liquidity and finding the right partner (page 36). ■

Future NAIOP Events

- **2019 Chapter Leadership and Legislative Retreat**, February 4-6, 2019, Washington, D.C.
- **National Forums Symposium 2019**, April 9-11, 2019, Vancouver, British Columbia
- **I.CON '19 West: The Industrial Conference**, June 6-7, 2019, Long Beach, California
- **I.CON '19 East: The Industrial Conference**, September 12-13, 2019, Jersey City, New Jersey
- **CRE.Converge 2019**, October 14-16, 2019, Los Angeles

Most Popular From Fall 2018

1) **"The Municipal Benefits of Urban Fulfillment Centers"** (www.naiop.org/18fulfillment, page 72).

2) **"St. John Properties: Developing with a Long View"** (www.naiop.org/18stjohnprop, page 64).

3) **"Tenants Ponder: Should I Stay or Should I Go?"** (www.naiop.org/18tenants, page 12).

4) **"The Value of Downtown Data Centers"** (www.naiop.org/18dwtndata, page 84).

5) **"How to Attract Institutional Capital Through the Development of Operating Guidelines"** (www.naiop.org/18instcapital, page 42).


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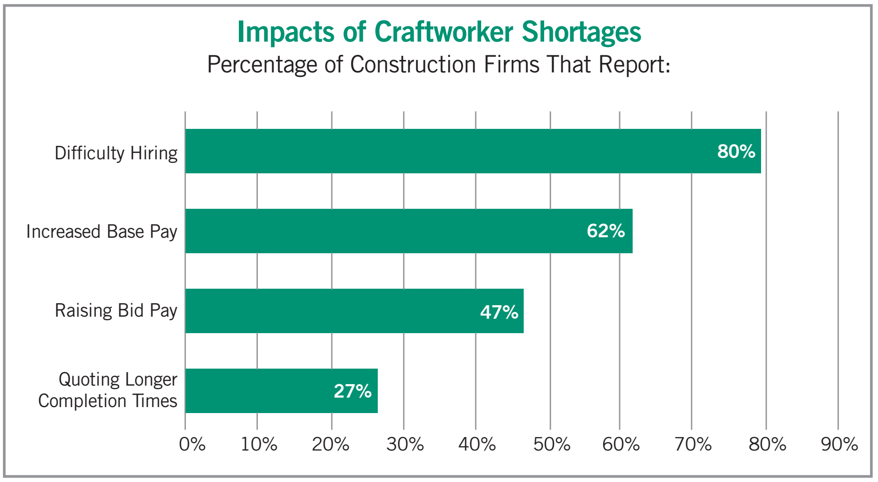
Construction Costs Outlook

Labor shortages, higher prices for materials loom larger.

By Ken Simonson, Associated General Contractors of America

A TIGHT LABOR market might sound like "old news" to most developers and property owners, but they should prepare for further jolts regarding both labor and materials, especially if they are planning new construction or renovation projects.

Indeed, JOLTS is the acronym for the monthly Job Openings and Labor Turnover Survey from the Bureau of Labor Statistics (BLS). As an indication of the growing difficulty in finding workers, the seasonally adjusted JOLTS count of openings at the end of each month topped 7 million in July for the first time in the 18-year history of the survey. Total openings have remained above that level ever since. (Seasonal adjustment is a statistical method BLS uses to remove the influence of normal holiday- or weather-related variations.)



Source: AGC Workforce Survey, August 2018

Where Are the Workers?

Job openings have become particularly acute in construction — they've more than tripled in the past six years. A major reason is that the number of unemployed workers with recent construction experience is at its lowest level since the JOLTS series began in 2000. By October, the unemployment rate for construction-related jobs was down to 3.6 percent (not seasonally adjusted). Consistent with the JOLTS data, a survey released by the Associated General Contractors of America (AGC) on August 29, 2018, found that 80 percent of the 2,552 responding construction firms reported difficulty in filling one or more hourly craft positions, while 56 percent said the same about salaried positions. The difficulty is pervasive by location and occupation. The results were very similar for all four regions of the country. For 19 out of 20 specific crafts, a majority of respondents whose firms employ that craft reported that positions were harder to fill in 2018 than in 2017.

Unfortunately, no relief appears to be in sight. While three-fourths of the firms said they intend to hire more hourly craft personnel in the next 12 months, 81 percent said they expect it will be as hard or harder to do so than it is now.

Labor Shortages Raise Costs

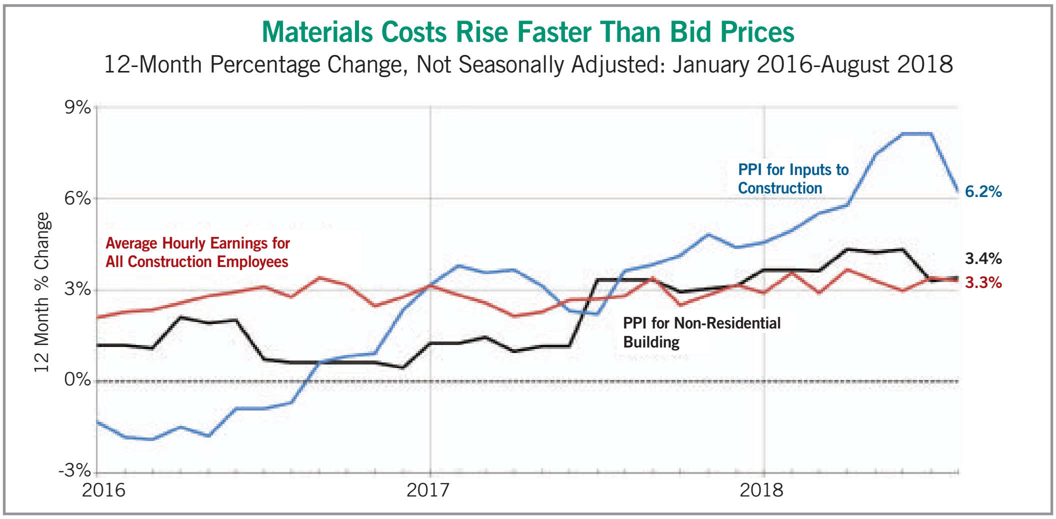
These difficulties have consequences for property owners and managers. To attract and retain craftworkers, 62 percent of the respondents said their firms increased base pay rates. Companies are also paying more in overtime to make up for the shortfall in experienced workers, and they are spending more on training. As a result, 47 percent of respondents reported putting higher prices into their bids or contracts. Meanwhile, the labor shortage is causing 27 percent of responding firms to put longer completion times into their bids or contracts.

With workforce shortages intensifying, contractors are raising pay faster than other industries in an attempt to attract and retain workers. Average hourly pay for all construction industry employees in October 2018 was $30.21. That's nearly 11 percent higher than the nonfarm private sector average, according to BLS data. The construction industry average increased 3.9 percent over the previous October, compared with a 3.1 percent rise for the overall private sector.

These wage increases do not tell the full labor cost story, however. Contractors also report that they're paying more bonuses for referral, hiring and retention; introducing or increasing benefits and travel allowances; and spending more on recruitment, training and overtime.

Prices Rise for Materials

In addition to labor-related expenses, costs for materials continue to be



Source: Bureau of Labor Statistics

a concern for contractors. From September 2017 to September 2018, the producer price index for goods and services used in all types of nonresidential construction jumped 6.2 percent, BLS reported. This was roughly double the rate of increase for this index in most of 2017. Thus, contractors that were increasing bid prices by 3 percent a year ago were more or less keeping up with the rise in costs for both direct labor and purchased inputs.

Now, however, those bids, as measured by the producer price index for new nonresidential building construction — essentially, the amount contractors say they would charge to construct several categories of new buildings — rose only 3.5 percent in the 12 months through September 2018. That barely kept pace with the increase in their direct labor costs, as measured by average hourly earnings in construction, and amounted to little over half the rise in the cost of purchased goods and services.

The implications of this cost squeeze on contractors for property owners and developers are twofold. First, contractors may become more aggressive about passing along their higher costs through explicit bid-price increases or by asking owners to share the risk of unanticipated price spikes. Second, contractors that are unable to pass through higher costs or to offset them through productivity improvements may not be able to complete promised projects.

Tariff Troubles

One source of both actual cost increases and uncertainty over future price movements is the turmoil over tariffs. As a major user of steel, the construction industry was hit early in the year by multiple steep increases in steel prices. Aluminum — important for architectural elements and signage — also jumped in price when tariffs were threatened or imposed. From September 2017 to September 2018, the producer price index for steel mill products leaped 18 percent and for aluminum mill shapes, 11 percent.

More recently, thousands of products from China have been subjected to tariffs that began at a 10 percent rate on September 24 but were projected to rise to 25 percent on January 1, 2019, if there is no breakthrough in trade negotiations before then. It will take time to see if any of these products cause construction costs to rise significantly or lead to a breakdown in the supply chain for materials.

To minimize the impact of these cost increases, property owners and developers should be prepared to work with their design professionals and contractors to seek alternative materials or supply sources. They should also remain open to ways of reducing construction labor input, perhaps through more standardization of components or architectural elements, offsite prefabrication, and providing contractors with complete and accurate plans and specifications to avoid wasteful onsite redesign and rework. ■

Ken Simonson is the chief economist for the Associated General Contractors of America.

IRS, Treasury Start to Clarify Qualified Opportunity Zone Regulations

Proposed rules for the tax incentive plan could dramatically boost real estate investment in regions that are struggling economically.

By Trey Barrineau

IN LATE OCTOBER, the Internal Revenue Service (IRS) and the Treasury Department released the first proposed rules for the Qualified Opportunity Zone tax incentive plan that aims to increase investment in economically disadvantaged areas. While a lot of questions remain unanswered about the complex program, many in the commercial real estate industry said they liked what they saw in the first round of guidance.

"The recently issued Opportunity Zone regulations were generally favorable to the commercial real estate industry and provided much-needed clarity in several key areas," said **Randy Barrus**, CPA, a partner at Baker Tilly's Washington, D.C., office. "We expect many real estate companies to quickly begin strategizing on how they will participate in Opportunity Zones while we await additional regulations that will focus on operational issues, such as the sale of an Opportunity Zone asset."

Qualified Opportunity Zones were created as part of the tax overhaul legislation that was signed into law at the end of 2017. Since then, the program has generated significant interest in the commercial real estate industry because of the potential investment opportunities it presents.

"I have spent a lot of time geeking out on Opportunity Zones as it is the topic du jour in commercial real estate," said **Jordan Angel**, senior director with HFF in San Francisco. "We are already working on a number of Opportunity Zone sites across the country from both a sales and equity-raising perspective. We have seen a huge demand for Opportunity Zone deals and overall knowledge on the subject."

What is an Opportunity Zone?

In June 2018, nearly 9,000 census tracts in 50 states, the District of Columbia and five U.S. territories were named Qualified Opportunity Zones, a designation that will last for 10 years. According to the IRS, Qualified Opportunity Zones are economically distressed areas where tax benefits will be used to increase investment and job creation across a wide range of businesses — not just commercial real estate.

Those who invest in properties or businesses within Qualified Opportunity Zones can defer most capital gains taxes until December 31, 2026.

To meet the deferral requirements, the capital gains must be invested in a Qualified Opportunity Fund (QOF) in which at least 90 percent of assets are invested in Opportunity Zone businesses or properties. The guidance issued in October by the IRS clarifies that cash can count toward the 90-percent test if it is working capital, and the election to defer or eliminate gains can be made at the entity level (partnership or corporation) or the individual level.

"These clarifications provide far more flexibility on the type of investments and type of investors that can take advantage of the program," said Barrus.

"I have spent a lot of time geeking out on Opportunity Zones as it is the topic du jour in commercial real estate. We are already working on a number of Opportunity Zone sites across the country from both a sales and equity-raising perspective. We have seen a huge demand for Opportunity Zone deals and overall knowledge on the subject."

— Jordan Angel, senior director, HFF, San Francisco

The IRS says investors who hold QOF investments for at least 10 years will be able to permanently exclude their capital gains from taxation.

Businesses should be able to find Qualified Opportunity Fund investors who will accept a less-than-normal return because of the favorable tax treatment they will receive later, said **Gerard Mildner**, director of the Center for Real Estate at Portland State University.

"The places within the zones that receive the investment will be the Goldilocks sites," he said. "They're those with stronger market fundamentals, but not too strong, so that some capital gains potential still exists."

Properties and businesses within Qualified Opportunity Zones will likely see an immediate rise in asset values, given that tax relief should drive greater demand for those sites, Mildner said. He added that it is analogous to how crop prices rise after the government announces a new agricultural program.

John McDermott, executive director, industrial practice leader with SVN Chicago Commercial, believes that the ability to exclude capital gains after 10 years is the most important provision of the Qualified Opportunity Zone program. It will do the most good for the commercial real estate industry, as well as for those who live and work in the affected areas.

"A long-term-hold mentality usually translates into better properties and

New & Noteworthy

838,000 sq. ft.

Swift Real Estate Partners recently wrapped up redevelopment of the **Rancho Vista Corporate Center** in **San Diego**. The **corporate campus** includes Class A office space plus research and development buildings totaling 838,300 square feet on 67.5 acres. The corporate campus now includes a remodeled conference center, courtyard and 15,600-square-foot café with an operable glass wall system, as well as a new indoor workout facility, activity center with basketball and volleyball courts, outdoor collaboration areas and an outdoor dining area with a stretched fabric canopy.

800,000 sq. ft.

Fashion District Philadelphia, a joint venture partnership between **Macerich** and **PREIT**, is an 800,000-square-foot **retail and entertainment development** currently under construction in downtown Philadelphia. When completed, it will span three city blocks and feature shopping, destination dining and entertainment, along with public art and cultural events. Fashion District Philadelphia is near the city's historic district and will be connected to Reading Terminal, the Pennsylvania Convention Center and SEPTA's Jefferson Station.

519,224 sq. ft.

Trammell Crow Company and partner **Artis REIT** have commenced construction on a new, Class A, 519,224-square-foot rail-served **distribution facility** in the Cedar Port Industrial Park near **Houston** for Plastic Bagging & Packaging, Inc. (PBP), an international producer of plastic bagging and provider of packaging services. Completion is scheduled for summer 2019. The facility will feature 32-foot clear-height distribution space, 60-foot speed bays, a 65-foot clear-height roof pop-up for an indoor silo, and approximately 8,000 square feet of office space. It will also contain a form, fill and seal production line capable of processing 70 tons of resin per hour.

better maintenance thereof," he said. "That's all good for the neighborhood."

A Possible Boost for the CRE Industry

Because at least 70 percent of the tangible assets of a business must be located in an Opportunity Zone, those investing in real estate could be among the primary beneficiaries of the new program, Mildner said.

"Most real estate development is done through a single-purpose LLC, shielding the investors' balance sheet from any liability," he said. "Hence, the 'asset' is typically constrained to a single site, which is then either inside a Qualified Opportunity Zone or not. With investment in an operating company, you can imagine the offices, factories, warehouses and sales outlets being in multiple buildings and multiple neighborhoods. Some of those buildings might be outside the Opportunity Zone. Hence, the 70-percent rule is more likely to become a critical constraint with that kind of investment."

> **"These clarifications provide far more flexibility on the type of investments and type of investors that can take advantage of the program."**
>
> *— Randy Barrus, CPA, Baker Tilly, Washington, D.C.*

Mildner said the tax advantages of Qualified Opportunity Zones should boost investment in commercial real estate.

"This provision creates a favored avenue for investing capital gains that have accumulated, without the 1031 exchange criteria," he said, referring to Section 1031 of the Internal Revenue Code, which lets an investor defer capital gains taxes if he or she sells a property and puts all the proceeds into a new property. "And after 10 years, there's an exit strategy with permanent exclusion of the capital gains. With 1031, the only exit strategy is death."

McDermott gave an example that illustrates the profit potential of Opportunity Zones for investors.

"I have an industrial property listed in Chicago that's $8.6 million for 264,090 square feet on 6.5 acres," he said. "Prior to the Opportunity Zone designation of the neighborhood in which the project is located, interest was not great. We now have an Opportunity Zone investor with a great track record in redeveloping industrial-to-industrial versus the popular mixed-use or loft conversions so prevalent here in Chicago. Should they move forward based on the clarifications by the IRS, they could invest a very significant amount of capital gains capital ($8.6 million), spend up to $2.6 million on the property, which it likely needs to be repurposed or re-tenanted (this assumes that the land is worth $6 million today, which it is), hold the asset for 10 years and have an exit strategy value of what may very well be over $20 million."

> **"So many of the Opportunity Zones are in underserved areas of communities, and a lot of times those areas have substantial political capital that they like to bring to the table. The idea of 'are you going to cause gentrification, are you going to displace me' is going to change the dialogue in the approvals process."**
>
> *— Mark Stapp, Arizona State University, Tempe*

Potential Downsides

While the rules for Qualified Opportunity Zones look very favorable for the commercial real estate industry, Mildner warned that they could inspire speculative behavior from many investors.

"After 10 years, there will be funds withdrawn from these zones, unless the statute stays on the books," he said. "Hence, there could be a 10-year bubble in these sites, assuming that Opportunity Zone investing is the dominant investment form in those areas."

Additionally, Angel said there are some misconceptions surrounding the Qualified Opportunity Zone designation.

"Not all of them are created equal," he said. "There are states where zones are located in areas that justify development, and the inclusion of the tax benefits will be a boost to development. There are other states where there will be limited development opportunities, and the tax incentive may actually lead to some poor real estate decisions being made."

Developers could also face organized resistance from poorer communities, said **Mark Stapp**, executive director of the Master of Real Estate Development program in the W.P. Carey School of Business at Arizona State University.

"So many of the Opportunity Zones are in underserved areas of communities, and a lot of times those areas have substantial political capital that they like to bring to the table," he said during CRE.Converge in Washington, D.C., in October 2018. "The idea of 'are you going to cause gentrification, are you going to displace us' is going to change the dialogue in the approvals process. You may find it difficult to get the necessary approvals."

Angel said areas in his home state of California that could benefit from Qualified Opportunity Zone investments include parts of Los Angeles, San Jose and Oakland. He said other U.S. markets that could see a substantial boost from Opportunity Zones include northeast Houston, Boston, Portland and Philadelphia. ■

Trey Barrineau is the managing editor of Development magazine.

New & Noteworthy

507,000 sq. ft.

Hobbs Brook Management LLC will build a new four-story, 507,000-square-foot **Class A office building** with a new parking garage within the Hobbs Brook Office Park in **Waltham, Massachusetts**. The company says the new building, which should be finished by 2021, will be the largest contiguous Class A office building along the Route 128 "technology belt" in Massachusetts and will feature office and/or research laboratory space. Hobbs Brook Management LLC will manage the facility and oversee the construction. Gensler Architects of Boston is the architect.

381,000 sq. ft.

One Paseo is a **mixed-use project** currently being developed by **Kilroy Realty** in **San Diego's Carmel Valley neighborhood**. The multi-concept development will merge 96,000 square feet of shops and restaurants, 608 residential units and 285,000 square feet of Class A office space. Popular local and national retailers and fitness studios will open their doors in early March 2019. The residential component will open in summer 2019, and the office space will be completed in 2020.

330,000 sq. ft.

Casey Brown Company recently completed **AMP&RSAND**, a 330,000-square-foot **Class A office** located in the San Diego Union-Tribune's former headquarters in the Mission Valley area of **San Diego**. The redevelopment of the 13-acre iconic campus included major overhauls of a five-story office tower and a three-story industrial/office building. Each consists of 165,000 square feet. Thirteen-foot ceilings and new oversized windows bring in natural light, while the interior design aims to create an industrial loft-style feel with exposed brick, concrete pillars and polished concrete floors. The three-story building originally held the Union-Tribune's printing plant and was built to withstand the heavy load of printing presses and other equipment.

Photo: Javier Laos Photography

Big Data in Office Buildings Holds Promise Despite Privacy Worries

Property managers are using "dynamic and multidimensional" information for operations but not yet for tenant engagement.

By Margarita Foster

A WHITE PAPER published by the NAIOP Research Foundation titled "The Office Property and Big Data Puzzle: Putting the Pieces Together" found that office building owners are capturing, storing and analyzing data to operate building systems but not to recruit and retain tenants.

Researcher **Kimberly Winson-Geideman**, Ph.D., a senior lecturer at the University of Melbourne in Parkville, Victoria, Australia, reviewed literature and questioned property professionals. While virtually all noted that security, elevators and HVAC systems have been digitally tracked, operated and optimized for years, most are exploring but not yet implementing the notion of tracking the paths people take and the places they congregate on property grounds or inside buildings.

Privacy issues emerged as the main reason tenant information is not collected, but lack of clarity about what to do with data once it is captured was also a factor.

The paper noted "it is important to understand the difference between tracking the number of people moving through a building and tracking their identities." In retail settings where an individual can access public Wi-Fi or download a shopping center app using an email address, a partial or even full identity may be captured and tracked. This practice was not found to be widespread in office buildings. ■

Get the Report
To view and download "The Office Property and Big Data Puzzle: Putting the Pieces Together," visit www.naiop.org/bigdata

The Office Property and Big Data Puzzle: Putting the Pieces Together (August 2018)

Excerpts from the Executive Summary

Big data is defined as high-volume, high-variety and high-velocity information that is produced in either structured (e.g., predictable formats such as sensor data) or unstructured (e.g., pictures, text) formats. The sheer influx of big data can be overwhelming for many companies; they often choose to sit on the data they collect with no concrete plans to use it. Therefore, some firms, particularly those without the resources to sift through large amounts of data, risk missing valuable information that could improve their bottom line and position them favorably in an increasingly competitive market.

Although much of the big data now being collected by office landlords fails to trigger any privacy issues (e.g., building systems data), disclosure and permission are advised in some instances, such as cases where a landlord is monitoring tenant movements using Wi-Fi. Because of these complex issues surrounding personal data, landlords and tenants should approach data collection with a clear understanding of privacy laws and a great deal of transparency.

In regard to office properties, big data's usefulness can be categorized into two interrelated areas: 1) how big data improves a building's operational efficiencies; and 2) how landlords can use big data effectively to attract and retain tenants. To gain a deeper perspective on this topic, the author questioned seven office property management professionals — representing a real estate services company in Minneapolis and a development company in Dallas — to find out if and how they collect and analyze big data in their buildings. Specifically, were they using big data to improve operational efficiencies, attract tenants or both?

The author's conversations with property managers confirm literature and media accounts of how the large amounts of digital data generated within office buildings are used: primarily for analyzing building systems and improving operational efficiencies. The conversations indicate that there is interest in using Wi-Fi, beacons and sensors for: 1) tracking where people go and gather in buildings to improve the type and location of amenities in office buildings; 2) allowing tenants to more efficiently track and manage their own energy use; and 3) providing building navigation through smartphones. However, privacy issues and data management are obstacles that have hindered widespread collection of tenant data.

Several critical takeaways presented in this report deserve the attention of the real estate industry in general and the office sector in particular:

- Big data sets are more than just big. They are dynamic and multidimensional and can be challenging to work with, but they promise to give greater insight into some of the fundamental questions of real estate more than anything has before.

- The concept of big data is not solely about the data; it is also about the tools created to deal with the data. The collection, storage, analysis and visualization all present unique challenges that require innovative and ongoing solutions.
- Small data is still important. Real estate markets are local: to make big data meaningful, sometimes the data need to be selected and sorted to such an extent that they are anything but big.
- Landlords and tenants must approach data collection with a clear understanding of privacy laws and a great deal of transparency. Personal information should not be collected or, at the very least, records should be anonymized. Data should be released only in the aggregate, if possible, and systems should be put in place to ensure the security of the data.
- Big data is spurring new technologies and disciplines that affect the real estate industry. For example, blockchain technology will have an increasingly larger role in data management and property transactions. The need for job positions such as data scientists, data stewards and data visualizers will continue to grow as companies take stock of their data sets. ■

New & Noteworthy

174,536 sq. ft.

Meridian Design Build recently commenced construction on the **Rockwell Logistics Center** in **Chicago**, a 174,536-square-foot **speculative multitenant industrial facility** for **Venture One Real Estate** and **USAA Real Estate Company**. Rockwell Logistics Center is being constructed on a redevelopment less than 1.5 miles from I-55 and within 5 miles of the Loop. The 32-foot clear height facility is designed to accommodate an array of tenant sizes and uses. Key features include an ESFR sprinkler system, generous truck courts and 32 onsite trailer parking stalls. The building features two drive-in doors and can accommodate up to 30 dock positions.

137,000 sq. ft.

Architectural firm **Pirie Associates** recently completed a $60 million, 137,000-square-foot **expansion at the Yale Law School** in **New Haven, Connecticut**, the first such expansion since the Sterling Law Building was completed in 1931. The adaptive reuse of 100 Tower Parkway into Baker Hall restores academic and residential life to the law school while providing students places to enjoy their downtime. Baker Hall now includes a two-story lecture theater and three-tiered student center, as well as several offices for the law school. A renovated courtyard helps bridge the 180 yards between Sterling Law Building and Baker Hall.

78,000 sq. ft.

Duke Realty Corp. broke ground in September on its new corporate headquarters in the River North at Keystone **mixed-use development** in **Indianapolis**. The new four-story, 78,000-square-foot building will serve as the national commercial real estate company's operational base. It's being developed through a partnership with PK Partners, an Indianapolis-based real estate development and investment company, on a 2.9 acre-site where a restaurant previously stood. Duke Realty's offices will occupy 73,000 square feet of space in the building, with the remaining 5,000 square feet of space to be occupied by a yet-to-be-determined restaurant. The building will meet LEED Silver certification for new construction.

Movable Office Partitions: The Great Dividers

As demand rises for adaptable office space, facilities put walls in motion.

By Audra Capas

ROWS OF SOULLESS cubicles surrounded by closed-door private offices were once common throughout corporate America. Then came open floor plans, complete with noise and distractions for employees and executives alike. Today, modern offices are morphing into "palettes of place" — spaces designed to improve worker productivity and well-being and encourage creativity and collaboration while also allowing for sufficient privacy.

This latest iteration of office design has U.S. facilities managers integrating movable partitions and architectural walls better known in construction parlance as "demountable" walls.

Office partitions and modular architectural walls are common throughout Europe. They're gaining popularity in the U.S. because they provide structure to open floor layouts, improve an interior's aesthetic appeal and, unlike drywall or sheetrock, enable multiple reconfigurations as space demands change.

At VARIDESK's global headquarters in Coppell, Texas, Haley Luter works in a private office created using the company's new QuickFlex Walls™. The panels work as free-standing partitions and can create a private conference room with an optional lockable door.

Photo courtesy of VARIDESK

Stick-Built Versus Unitized

Two main types of movable office partitions are manufactured today: stick-built and unitized.

Stick-Built Systems. These offer a high degree of customization. They usually arrive in sections to the project site and are assembled by trained technicians through a manufacturer's dealer network. Constructing a stick-built partition typically involves a ceiling- and floor-mounted structural frame, which is then fitted with interchangeable panels or tiles that can be composed of a wide range of materials — from clear glass to acoustical soundproofing. Options for personalizing these systems include slider doors, LED lighting, whiteboards, LCD displays and video conferencing technologies.

Unitized Partitions. These can either be freestanding or temporarily affixed to ceilings and floors. They are prefabricated and factory-shipped as a complete unit to the project site in easy-to-assemble parts. They can be installed quickly with minimal labor. Like stick-built partitions, unitized panels are movable and reusable, so they can be easily disassembled and reconfigured into different shapes and sizes. They come in a variety of materials and feature options such as glass, whiteboards, prewiring and mounts for TV monitors.

Innovative technologies are enabling more customization of both types of partitions. Electronically switchable smart glass lets users create instant privacy by changing the surface of clear glass to opaque or total black with the flick of a switch. Avery Dennison's Vela Dynamic Display uses polymer-dispersed liquid crystals controlled by an electrical current to turn glass partitions and walls into interactive digital displays and high-definition projection screens.

The partition market today is highly competitive, with offerings from hun-

This latest iteration of office design has U.S. facilities managers integrating movable partitions and architectural walls better known in construction parlance as "demountable" walls.

dreds of North American and European manufacturers — some with high name-brand recognition, others less well known.

A number of companies combine stick-built and unitized office partitions and architectural walls in their product lines, including Steelcase, DIRTT Environmental Solutions Ltd., KI, Transwall, Teknion, Haworth, Allsteel and Nxtwall. Others, like VARIDESK, Wausau and Infinium, offer only unitized systems.

Stick-built manufacturers tout their products' flexibility for onsite adjustments to ensure optimal fit, easy installation and portability. Makers of unitized partitions underscore their flexibility, ease of installation and cost-effectiveness compared to fixed construction. Although the initial costs of both stick-built and unitized partitions can be higher than constructing fixed drywall, manufacturers say the life cycle and eco-friendly

New & Noteworthy

75,000 sq. ft.

MBI Group, a **New York City**-based construction firm specializing in commercial and retail interior fit-outs, has completed landmark restoration at **670 Broadway,** a **commercial property** owned by **Paramount Group**. Originally designed by renowned architect George E. Harney and completed in 1900, the five-story, 75,000-square-foot red-brick building was created in the Victorian Gothic style with varying color, texture and gothic details. Approximately 11,000 square feet of retail space will occupy the ground floor; the upper levels are reserved for offices. MBI Group worked with Paramount Group and TPG Architecture to rehabilitate the building in New York's NoHo (North of Houston Street) neighborhood.

62,000 sq. ft.

Anchor Health Properties will develop **Pavilion III**, a three-story, 62,000-square-foot **medical office building** on the Doylestown Hospital campus in **Doylestown, Pennsylvania**. Pavilion III features plans for an ambulatory surgery center plus physician offices and therapy services that will be relocated from the main hospital. The facility will be located at the front of the Doylestown Hospital campus to enhance visibility and convenience for patients. It is expected to open later in 2019.

50-Plus Stories

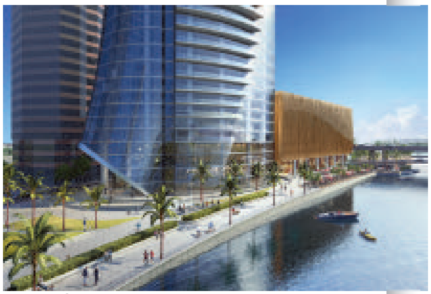


Photo: Gensler

Riverwalk Place, a 50-plus-story **mixed-use project** along the Hillsborough River in downtown **Tampa**, begins construction in early 2019. It's being developed by **Feldman Equities LLC** and **Two Roads Development**. When completed, it will be the tallest tower on Florida's Gulf Coast. Five restaurants are planned for the project's ground floor river walk. Above that will be more than 30 floors of luxury condominiums. A signature feature will be a two-story sky deck on the 20th and 21st floors. ■

Do you have a new and noteworthy project in the planning, design or construction stage that you'd like to share with fellow real estate professionals? Send a brief description and high-resolution rendering to developmentmagazine@naiop.org.

benefits of movable partitions can make them a better investment over the long term.

Meeting a Growing Demand

Grand Rapids, Michigan-based Steelcase entered this market in 1998 after purchasing the North American rights to modular office products manufactured by pioneer Clestra Hauserman, Inc. In 2005, Steelcase began designing and producing its own movable systems, setting out to create agile "palettes of place" for clients seeking to reduce their real estate costs, improve employee productivity and nurture well-being in the workplace.

"In the past five years, we've seen a huge increase in the growth of modular partitions in North America," says **Jan Carlson**, general manager of architecture marketing for Steelcase. "A lot of that is coming from demand for privacy. As real estate footprints get compressed, the need for people to have private spaces has increased."

Giving workers peace and quiet in an open office setting is one reason why Steelcase developed its Vertical Intelligent Architecture (V.I.A.) system. Flexibility is another.

"Walls have become the new work surface," Carlson explains. "In our research, we see people using vertical planes as an active surface. The ability to change that surface to make it part of the work process is key. Today, you might have a solid or glass surface in the center of one wall. You could remove that surface and replace it with a monitor shroud for managing acoustics, wiring, cabling and electrical. In the future, as displays change, you'll be able to have your computer integrated in the glass."

"A perfect example is the Microsoft hub," says **Brian McCourt**, director of architectural sales solutions for Steelcase. "Our two companies joined forces to combine Microsoft Surface devices with Steelcase's architecture and furniture so that people, technology and place coalesce into one ecosystem. We incorporated Version 1 of their hub easily into the V.I.A., and it will accommodate the next generation just as easily."

In addition to its V.I.A. system, Steelcase offers five other modular office options, including sound-proof pods that "clients can drop into a space very simply to create a private setting — one that can be moved around quickly, within a couple of hours, to a different location," McCourt says.

Steelcase's headquarters and Learning + Innovation Center in Munich, Germany, serve as real-world laboratories for testing ideas and prototypes. For example, staff are given a choice of "habitats" in which to work based on their individual styles — whether it's standing or sitting in a private office or perching in a communal lounge. Every employee, from the CEO on down, uses, evaluates and provides feedback about their product experiences to the company's R&D teams. Researchers also analyze streams of data from room-embedded sensors that track the functionality of work spaces for employees. ■

Audra Capas is the president of 5StarPR, LLC.

From Desks to Dividers: A Natural Progression

Standing-office desk entrepreneur VARIDESK, headquartered in Coppell, Texas, unveiled its new QuickFlex Walls™ system in October.

"One of our founders, who also happened to own commercial buildings in Dallas/Ft. Worth, was constantly tearing down drywall between tenant moves and having to guess what prospects might want in the reconfigured space," explained **John Moyer**, VARIDESK's vice president of strategic accounts. "Inevitably, they changed their minds, even if it was moving walls just a little. As a landlord, he saw this as wasteful and not cost-effective. When VARIDESK moved to its current headquarters, both of our co-founders already had experience using movable walls, so they brought in their own to start our space. Their inspiration soon led to development of our QuickFlex Walls. Today, everyone at VARIDESK uses these partitions – from private offices to break rooms, collaborative spaces to conference rooms."

Like Steelcase, VARIDESK's CEO and staff field-test every prototype before launch.

"We treat our 70,000-square-foot headquarters as a living, breathing showroom," says Moyer. "We can test products in the battlefield and make tweaks in real time, taking into account feedback from our employees.

"QuickFlex Walls can be installed in minutes with absolutely no special tools and are much more affordable than others in the industry — about one-third to one-half less. You could easily construct a 12-foot-by-12-foot freestanding office using 10 panels for $9,950. Because QuickFlex Walls also don't require construction permits, the labor cost is substantially less than stick-built or fixed construction."

Tim Weatherly with Mizzen+Main, a men's clothing company headquartered in Dallas, agrees.

"We chose VARIDESK partitions for their functionality, versatility and cost," he says. "Being able to assemble conference rooms and use the space efficiently has been great for us. They have a clean look and have worked for us with our open-office feel." ■

In the Ongoing Amenity War, Office Space is the New Battleground

Developers should avoid over-the-top nuclear options; instead, use smart bombs tailored to tenant needs.

By Dan Doyle, The Beach Company

AS THE WAR of amenities in commercial real estate rages on, a new tactical front has emerged: office buildings.

If the competition within multifamily amenity offerings has taught developers anything, the go-big-or-go-home mentality reigns. Whether it's a bowling alley, yoga studio, rooftop deck, golf simulator or rotating art gallery — nothing is out of the question for many of today's employers.

But with real-world budget constraints, it can be challenging to keep up with the competition. Here are three tactics for achieving victory in the modern office amenity war:

> **Imagination should be paired with practicality. Developers need to resist the temptation to offer attention-grabbing but ultimately ridiculous and budget-damaging frivolities.**

Know the Target Market

When it comes to amenity packages among developers, competition is steep, and bigger budgets don't always win the lease. Most of the time, a carefully crafted and appropriate suite of amenities will hit home with future tenants more than grandiose excesses. That's why thorough market research is crucial for understanding which amenities will appeal to the target customer.

Perhaps the most clichéd of office space amenities are those associated with tech companies, thanks to media coverage of campuses like Google's headquarters in California. When imagining a tech company's office space, visions of pingpong tables, arcade games and hammocks come to mind.

While tech giants like Facebook and Spotify have done much to reimagine the modern office space, attempts by smaller companies to copy their offerings often fall short. Furthermore, amenities that entice the average Silicon Valley type may not appeal to everyone.

In fact, many commercial real estate developers say they are seeing a resurgence in high-end amenities designed for business executives in more traditional corporate settings. These include abundant parking; concierge business services; beautiful views; on-site dining and shopping; rooftop pools and gardens with sundecks or outdoor kitchens; commercial-quality fitness centers; club rooms with private lounges and

Dan Doyle

demonstration kitchens; and corporate wine lockers.

Show Restraint

Doggie daycare? Sure. Doggie waterpark? Hold on a minute. Some ideas for amenities should not make it out of the brainstorming session.

Imagination should be paired with practicality. Developers need to resist the temptation to offer attention-grabbing but ultimately ridiculous and budget-damaging frivolities.

The goal of corporate amenities is to create work-life balance. Offer conveniences at the office that help employees reduce stress and enhance productivity.

When compiling amenity offerings for a proposal, it's important to prioritize both company goals and employee wants. A complete package will present a nuanced blend of both.

An example of purposeful amenity innovation is Zo, a mobile app that Tishman Speyer Properties LP created for its tenants. The app allows office workers to book amenities such as back-up child care, yoga, physical therapy, dry cleaning, meal delivery, ride shares and even "recreational piglet petting," as Bloomberg recently reported.

Initially introduced to employees at Rockefeller Center in New York City, Bloomberg reports that the app will eventually be extended to Tishman Speyer's entire global portfolio, which encompasses 250,000 employees.

Focus on the Big Picture

Potential tenants still care about the hallmarks of good real estate development. Location, architecture and engineering, design and property management services should not be sacrificed for the sake of a bowling alley. In other words, don't blow the budget on amenities.

Furthermore, don't completely throw out the old to make way for the new. Keep placing value on the long-standing and sought-after qualities of traditional building spaces. For example, recent research from commercial real estate advisory firm Newmark Knight Frank shows that professional and business services (PBS) added 500,000 to 600,000 jobs each year from 2014 through 2017. That bodes well for commercial office developers since this sector lends itself to more traditional office space.

Prioritizing prime building sites will always be a key development strategy for attracting corporate tenants. Currently, the workforce is undergoing a generational shift as baby boomers approach retirement and millennials mature. Consequently, perceptions of prime location are also shifting; urban core settings have supplanted the suburbs in desirability. This, of course, coincides with a shift in housing trends as more people are choosing city living over the suburbs. With this trend — prominent among millenials but also occurring in older generations looking for more walkable lifestyles — people want to live and socialize near their workplaces, and they want options. The age of isolated office parks is no more.

While respecting time-tested practices, developers also must stay abreast of industry trends and adapt to new workplace needs. For example, technologies that aid productivity and efficiency are must-haves. Workers have come to expect fast, reliable Wi-Fi and flawless cellphone service. In the modern office space, work isn't confined to one's desk, so whether on the rooftop deck or getting in a midday workout in the fitness center, employees won't stand for connection interruptions. Therefore, proper infrastructure to accommodate increasingly "connected" and "smart" workplaces must be planned at the onset of any new office development project.

The amenity arms race in commercial office development will continue. But it doesn't have to be total war. A good business development strategy should be multipronged, with an amenity package serving as one of many offerings that provides a strategic advantage over the competition. ■

Dan Doyle is senior vice president at The Beach Company in Charleston, South Carolina.

Potential tenants still care about the hallmarks of good real estate development. Location, architecture and engineering, design and property management services should not be sacrificed for the sake of a bowling alley.

The Sky's the Limit for Elevators in Today's Low- and Mid-Rise Buildings

Technological advances make the vertical journey better for tenants — and property owners.

By Jon Clarine, thyssenkrupp Elevator Americas

FOR YEARS, OWNERS of low- to mid-rise buildings were forced to deploy elevators that only met some of their needs for space efficiency and lifecycle performance. It was a costly sacrifice magnified by growing urbanization challenges. Half of the world's population now lives in cities, and urban areas are expected to grow by nearly 3 billion people by 2050. That will put significant strain on multistory buildings and the transportation systems inside them.

While the Council on Tall Buildings and Urban Habitat says the number of high-rise buildings around the world has more than tripled since 2000, mid-rise buildings represent the fastest-growing segment in the industry. These buildings, traditionally 15 stories or fewer, require modern technology solutions. This includes the elevator systems that property owners and managers rely on to safely transport tenants and visitors.

Comparing Elevator Types

Based on national averages and industry operating use standards, the annual energy consumption of a traction unit is approximately $350 versus $500 for a like hydraulic unit.

Costs	Machine Room Hydraulic	Traction MRL
Initial Cost	$76,000	$99,000
Building Costs	$6,700	$2,500
Maintenance	$101,000	$190,575
Total	$183,700	$292,075

Note: Each elevator type listed above is a three-stop, 2,500-pound capacity unit with the same interiors and settings. Total cost reflects 25 years of elevator life. Information is based on national averages.
Source: thyssenkrupp

Modern Elevator Technology Steps Up

Traction elevators, which use cables and counterweights to lift the cab, are most commonly used for mid- and high-rise applications. That's because they travel much faster and higher than hydraulic elevators, which use a pump system to push the cab through the shaft.

There are two types of traction elevators — machine room (MR) and machine room-less (MRL). Elevators with machine rooms typically include larger mechanical components for heavier duties, so they require additional space for equipment outside the shaft. This space is known as the machine room. Meanwhile, machine room-less elevators have compact equipment that can be located in the shaft. That eliminates the need for a separate machine room and gives space back to the building owner to generate more rent.

For years, traditional MRL-type mid-rise elevators were limited by speed and/or capacity restrictions due to technical drawbacks in compact shafts. Much of is related to the limitations of electric motors, but a permanent magnet AC motor now offers a more compact and powerful solution. Today, there are systems with 5,000-pound-capacity MRL elevators that can also travel up to 600 feet per minute, which was previously only attainable via very large machine-room-based traction elevator motors. New technologies are available such as polyurethane-coated belts instead of steel cables to lift the elevator cab. These belts provide longer life cycles and require smaller sheaves, which translates to smaller overhead space and shaft size in general.

Building owners also can incorporate smart technology in their elevators to move tenants and visitors more efficiently through the building while improving the rider experience. Destination dispatching technology, which aims to group passengers into elevators based on where they're going inside a building, can improve traffic handling by up to 30 percent. However, before implementing destination dispatching technology, building developers and owners must conduct traffic studies that examine how many elevators and groups are needed. This should include the number of occupants and visitors, distribution of people by floor, typical times of arrival and departure, as well as critical traffic periods.

A Better Ride for Passengers

Beyond advances in dispatching, building owners use smart technologies both connected to and apart from the Internet to make elevators more efficient for passengers and property managers. These include personalizing the look and feel of elevator interfaces, security integrations, and even content management and control for the users.

Personalized interface options can include changing background images and designs with standard preloaded images or custom imagery. Additionally, the call allocation screen design can be changed from a single-letter indicator to a wayfinder map that helps passengers find their assigned elevator, and custom labels or names can be added to the floor buttons. Building managers can also use the technology to change the arrangement and size of the floor buttons or add logos and images to them. They can even add a customizable message to touchscreens to communicate important information to tenants.

Internet of Things (IoT) technology can help building owners use predictive analytics to manage performance and adapt to tenant needs. For example, sensors embedded into new elevator systems can capture data from elevator operations such as trips and door movements. Cloud-based computers then analyze the data to target where and when maintenance is needed. That improves mechanical reliability, leading to less elevator downtime and happier tenants.

These modern elevator systems can also eliminate noise issues. In a mid-rise building such as a hotel, hospital or luxury commercial or residential building, disruptive sounds can be a big problem. Newer technologies can bring the decibel level down to as low as 50, comparable to a refrigerator running at night or a quiet conversation in a public library. Other benefits and features include auto-rescue, in which the elevator automatically moves to the first available stop to let people out if there's a power failure. ■

Jon Clarine is the vice president of product management and digitalization at thyssenkrupp Elevator Americas.

CEO on Leadership:
John M. "Jack" Schultz, CEO, Agracel, Inc.

The leader of this Effingham, Illinois, industrial development firm has found success by focusing on rural America.

By Ron Derven

Jack Schultz

FOUNDED IN 1986, Agracel, Inc. began as a farmland investment company. Through the years, its core focus changed from farmland investment to industrial development in rural America. The company has developed more than 15 million square feet of industrial space in 20 states.

Development: *Describe the size and scope of your company.*

Jack Schultz: Agracel has completed almost 200 industrial projects during the past 25 years, mostly in rural America. Virtually all of our work is with manufacturing firms focused on auto parts, plastics, metal bending and food, generating space to accommodate more than 14,000 high-paying jobs in those plants. Our focus is in the Midwest, South and Southeast, which is where most manufacturing growth is occurring today. To solidify our focus in these key markets, over the past decade we have expanded beyond our corporate office in Effingham, Illinois, and opened satellite offices in Greenville, South Carolina; Jackson, Mississippi; Nashville, Tennessee; and Columbus, Ohio. We own about 70 percent, or 10 million square feet, of what was originally developed with a "forever" mentality when it comes to ownership. We don't know of another firm that operates in our unique niche across as many states.

> "Here are three pieces of the best advice I have ever received: underpromise and overdeliver; do what you say you are going to do; and always share bad news quickly — good news will get out soon enough."
>
> *— John M. "Jack" Schultz, CEO, Agracel, Inc.*

Development: *What is your primary role as CEO?*

Schultz: Most of my time today is spent on how we transition the firm during the next decade from both a management and ownership standpoint. We established an employee stock ownership plan five years ago as part of that transition. I spend time on strategy and long-term financial management.

Development: *What are some things you have discovered that you are not very good at personally or as a company?*

Schultz: Personally, I'm not good at paying attention to the details, but fortunately we've got team members who excel in that respect. As a company, we've discovered that we don't do as well when we stray from our core competency.

Development: *What qualities do you look for when hiring senior staff?*

Schultz: It is very important to us that we have partners who are driven to excel, but are also team players. We want teammates who understand the culture and long-term nature of our work. I couldn't be prouder of the team we have assembled over the years, carefully selecting team members and then integrating them as a unified group in a deliberate manner. Our very long-term focus, a clear strategy and shared ownership has resulted in our developing a rather stable team, with over 70 percent having more than 10 years of tenure with Agracel. We seldom lose team members.

Development: *What was one of the biggest mistakes your company made?*

Schultz: Right before the Great Recession, we were approached by a local entrepreneur who wanted to duplicate the Branson, Missouri experience, a highly desirable vacation spot in the Ozark Mountains, in our small town of 12,000 residents in southern Illinois. We strayed from our core competency, raised funds from 30-plus local people and built a 1,500-seat theater. It flamed out spectacularly during the Great Recession, and all of the investors lost their investment. We systematically closed the business down, transitioned the theater into a not-for-profit and paid back the local banks that had funded construction. We didn't understand the business, strayed from our competency and paid the price.

Development: *How is your company preparing to weather the inevitable economic downturn?*

Schultz: Partially because of the unique niche we operate in, we have developed a very strict financial model that is focused on developing net worth in the long term, with limited financial downside. We only do long-term (10- to 15-year) leases, put significant equity into each project and amortize most debt for 15 to 20 years or less.

At the end of 2017, we had an eight-year weighted averaged lease term, interest rates locked in for 4.4 years and remaining debt amortized over 10½ years. Our debt was paid down to about 30 percent of fair market value, and 30 percent of our buildings were either debt-free or would be paid off by the end of their current lease terms.

One of the keys to our long-term success is the ability to keep tenants in our buildings. It is especially important because we are focused on rural America, where there are a small number of potential customers looking to lease buildings. During the past decade, including the Great Recession and its aftermath, our renewal rate has averaged 77 percent. The reason for this is high "bolt-down," which means that the equipment and processes bolted down to the floor are often of a greater value to the tenant than our buildings, and they are very expensive to move. Hence, it is much easier to renew the lease than to move into a new building.

At the end of 2017, more than half of our buildings had greater "bolt-down" value than building value, with the equipment inside worth 1.3 times the value of our buildings.

In the past year, we've added 2.1 million square feet to our portfolio. Of that, 62 percent were high "bolt-down" buildings and 15 percent were mission critical to another manufacturing plant nearby.

Development: *Looking out three to five years, what do you see that will impact the industry? What are you doing today to prepare for those challenges?*

Schultz: I wish that we could see out three to five years! We are in an incredibly disruptive period, and there are so many innovations that could impact us greatly in the future, like autonomous cars, 3-D printing, augmented reality and artificial intelligence (AI). There will be huge winners but also big losers, with some industries completely disrupted. We spend quite a bit of time and effort in trying to understand these new technologies and what their impact could be on our portfolio.

Development: *What is the best advice you have been given over the course of your career?*

Schultz: Here are three pieces of the best advice I have ever received: underpromise and overdeliver; do what you say you are going to do; and always share bad news quickly — good news will get out soon enough.

Development: *What advice would you give someone entering the commercial real estate industry today?*

Schultz: Find a niche and then become the best you can be in that niche.

Development: *Did you have any mentors early in your career? What did they teach you?*

Schultz: I had several mentors early in my career and learned a great deal from them. I also was very fortunate to get into the NAIOP National Forums when they first started. At the time, I had only done two build-to-suit projects. What I learned from those Forum members was invaluable, and I will always owe a debt to NAIOP for what that experience did to help change my life for the better.

Development: *Do you still have a mentor?*

Schultz: Yes, I do. I have several, and I meet with them regularly.

Development: *It has been a decade now since you wrote your book, "Boomtown USA," in which you examined how small towns could prosper by leveraging their resources to break through the "one company town" mindset. Are the "7½ Keys" that you offered in the book, which includes advice for small communities such as using available resources and encouraging entrepreneurialism, still relevant today?*

Schultz: I think that what we found in our research a decade ago is even more relevant today. Technology that wasn't readily available back then is pervasive today, and it is possible for a person to work and stay in touch from virtually anywhere in the world, which is very positive for rural America going forward.

Development: *How do you de-stress?*

Schultz: I love to read, and I can forget everything else when I get into a great book. ■

Ron Derven is a contributing editor for Development magazine.

The Community Review Process Takes Time, Effort and Empathy

Five things developers should do to soothe residents' concerns and fears.

By David Chilinski, FAIA, and Dave Snell, AIA, Prellwitz Chilinski Associates

IT'S IMPOSSIBLE TO overstate people's reluctance to change. While the reasons vary, a departure from the status quo is often the biggest fear. There's a longstanding preference for the familiar place and the established routine. An entire new industry — change management — has grown up around the notion of overcoming people's resistance to change.

People facing a change in the built environment of their established neighborhood often see it as a challenge with only one option — defending the status quo. Architects and development clients are in the change business. The challenge they face is recognizing the inherent human response when proposing something new, and then finding common ground by building trust and engaging the community with empathy.

Community engagement is not an approvals process. It is a campaign to earn the trust of the community, and like any campaign, it requires a strategy to succeed.

The community review process is typically considered to be oppositional, seen from different perspectives by the community and the developer. Community members often believe they need to be adversarial to ensure that they don't give away something they value. The development team often thinks they should ask for more because they will inevitably need to be reduced in scope and/or density.

However, there is an alternative to these predictable attitudes and approaches. Here are five actions to create a more collaborative outcome:

1. Redefine Purpose and Behaviors. Achieving a meaningful and mutually successful public process starts with changing the way it's viewed. Too often, development teams approach the approval process like it's a performance. They walk through a presentation of data and renderings in a public hearing or meeting without a lot of creative thought about what is in it for the community.

Community engagement is not an approvals process. It is a campaign to earn the trust of the community, and like any campaign, it requires a strategy to succeed. Building trust in a community means reaching out to adjacent landowners and local neighborhood associations on an informal basis. It requires engaging with local business leaders and elected officials to discuss the proposal and its effect on the community. Frequently, key stakeholders cannot attend project review meetings. By listening to their opinions and seeking their advice in informal face-to-face meetings, you are able to hear their valuable insights. Trust is earned by showing up and listening. People want to be heard.

2. Apply the Insights and History Lessons Learned from These Conversations. Bring what you heard and learned from the campaign into the formal community meetings. Approach that first public forum with the intent of discovering what the neighborhood needs before focusing on the plan for the site.

This dialogue, especially at the outset, should be a conversation where questions are asked and answers are heard. What are the challenges and opportunities? What is missing in the neighborhood? Green space? A grocery store? Daycare? During this question-based initial conversation, values and needs will be revealed.

A recent example of this dialogue took place in Allston, Massachusetts. Neighbors of the proposed RADIUS Apartments expressed frustration with a dangerous, busy intersection at Western Avenue, Leo Birmingham Highway and Soldiers Field Road. It provides a gateway for residents to access the Charles River. The simple act of crossing the street at this corner is seen as unsafe, especially for elders or parents with small children.

In a response to this clear communication from the neighborhood, the development team funded a traffic study for the intersection and brought together elected officials from city, state and federal agencies to focus on the problem. The team could not implement the entire solution due to its complexity, the jurisdictions involved and the multimillion-dollar cost, but the community appreciated the commitment to begin the process of fixing this longstanding problem.

Most projects will benefit from the public review process. Yes, it's often frustrating and stressful for all parties. However, the conversations contain ideas and opportunities that can make the project a better fit for the community.

3. Share the Stories. Once you are ready to present project information, express intent through stories and experiences people can relate to. For example, a citizens group might say: "We have been hearing that there is no place right now for people to socialize and gather with their neighbors. This is something we noticed and talked about as well. Incorporating a gathering place, a community destination, could benefit both the existing community and new residents." Explain how this new intervention can make a positive contribution, and share the stories and observations you heard from other residents.

4. Stay Out of the Weeds. The review process is a conversation, one held with empathy for neighbors and their issues. Stay focused on what is important to the audience. Avoid speaking in jargon and acronyms. When people raise difficult requests, listen carefully and commit to looking into solutions. Avoid an immediate debate on the merits, cost and consequences; instead, go to the next meeting and report either progress on the request or an explanation of why it would or wouldn't be feasible.

5. Be Opportunistic About Change. Development teams can be understandably reluctant to change a design in response to neighborhood concerns or suggestions. However, focusing on both the short-term considerations and long-term positive impacts might reveal opportunities for change. For example, in a neighborhood close to a large university, the community was united in a desire to increase home-ownership rates. It was discovered that the university was also interested in the same thing for its administrators, researchers, faculty and staff. Given this, it made sense to add condos to the development plan, and it was seen as a win/win by the community.

Most projects will benefit from the public review process. Yes, it's often frustrating and stressful for all parties. However, the conversations contain ideas and opportunities that can make the project a better fit for the community.

Teddy Roosevelt is credited with saying, "People don't care how much you know until they know how much you care." A new approach to community review begins with realizing how important empathy and trust are in creating a collaborative environment where great results can be accomplished. ■

David Chilinski FAIA is co-founder and president and **David Snell** AIA is a senior associate with Cambridge, Massachusetts-based PCA/Prellwitz Chilinski Associates.

An Office Building Returns to its R&D Roots

In San Diego, a unique renovation project leverages tight supply and challenges the "more space is better" concept.

By Bernard Huberman, BLT Enterprises

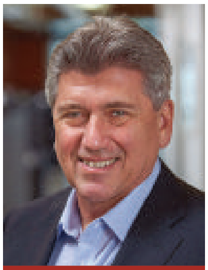
IN THE 1980s, a lot of office space was designed with the bigger-is-better mentality. That certainly appeared to be the driving thought for the former owners of a San Diego office/R&D building from that era who had converted a 54,000-square-foot property into a 77,000-square-foot, two-story office building.

BLT Enterprises acquired the property at 5454 Ruffin Road in May 2017 and saw an opportunity in the market to convert this '80s-era office property back to a sleek, modern and efficient R&D/flex space that could appeal to multiple tenants of many types.

The Do-Over

Based in part on high land costs and a trend of repurposing buildings for other uses, Southern California industrial buildings have been in increasingly short supply over the past several years, and lack of availability continues to be a challenge. For example, San Diego's Kearny Mesa submarket, where this asset is located, has one of the lowest industrial vacancy rates in the city — a mere 2.8 percent at the start of 2018.

After acquiring the property, BLT Enterprises decided that the second floor didn't fit into its design and use

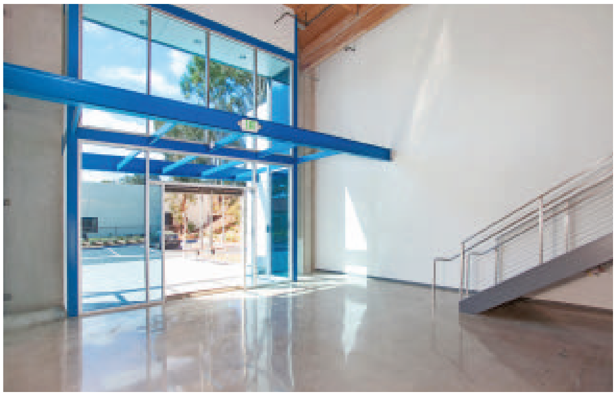


Bernard Huberman

plans. Step 1 was clear: remove it. By returning the property to its original 54,000-square-foot size, the total number of occupants was reduced and the problem of scarce parking was solved. The asset now boasts a comfortable parking ratio of 4/1,000 in its own dedicated lot.

Step 2 was to renovate the property in a way that could deliver efficiency and functionality — the two most important attributes sought by R&D/industrial tenants — while also

The renovation project at 5454 Ruffin Road in San Diego created a modern R&D/flex space from the bones of a dated 1980s-era office.



delivering an aesthetically modern and environmentally sound space. Architect Ware Malcomb was hired to design the renovation project and worked with Bycor General Contracting to complete it.

Functional upgrades include exterior improvements, a new HVAC system and a new roof membrane. A new two-story lobby, high ceilings (up to 24 feet tall in the flex area and 13 feet tall in the office area) and the addition of skylights helped create an open, fresh feel throughout the property. Additionally, two ceiling-high industrial doors were added in the rear to provide future tenants with easy access.

Energy and water efficiency was achieved through new dual-pane glazing, as well as LED lighting fixtures and drought-tolerant landscaping. Beyond these improvements, the "cool factor" was addressed with the addition of comfortable outdoor employee lunch patios, modern entryway pavers and fresh, bright accent colors.

By completing the project as a remodel, BLT Enterprises avoided the long, protracted permitting issues that the city of San Diego requires for greenfield/ground-up construction. That saved time and costs for future tenants.

Investment Pays Off

The $2 million renovation project, which was completed in April 2018, immediately attracted interest from tenants seeking high-end flex/R&D space in the region. The leasing team — **Brad Black** and **Chris Pascal** of CBRE — received many inquiries, and they began discussions and tours with several major tenants, both local and out of state.

The primary takeaway from this project is that more space is simply not always better. By reducing the building's size and taking the time to make thoughtful upgrades, an outdated office asset was repositioned as an R&D/flex space. That filled a major void in the market and attracted diverse tenants in search of a building that suits their needs. ■

Bernard Huberman is founder and president of BLT Enterprises.

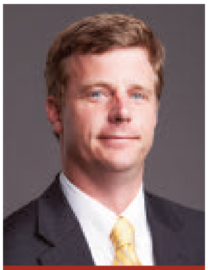
The Best Prescription for Leasing Medical Office Space

Potential tenants should consider existing medical infrastructure and proximity to other healthcare providers.

By Christopher Thames, J.H. Berry & Gilbert

ACCORDING TO RESEARCH published by the U.S. Census Bureau, 1 in 5 Americans will have reached retirement age by the year 2030, and those in the 65-and-older bracket will outnumber those under the age of 18. Pair this demographic shift with recent laws expanding access to healthcare, and it's no surprise that the Urban Land Institute projects a 19 percent increase in the demand for medical office space by 2019, requiring 64 million square feet of property.

In short, healthcare properties will soon be in high demand. Leasing medical office space, however, can be a complex process, and it differs in many ways from leasing typical office space. For example, tenants must assess a facility's proximity to other healthcare providers or businesses, evaluate a property's existing or non-existing medical infrastructure and exercise care when reviewing a leasing contract.


Christopher Thames

Who Are the Neighbors?

When first meeting clients looking for medical office space, it is important to emphasize the adage "location, location, location." In many cases, considering where the space will be located should be at the top of the list.

If a client can secure a location near other medical practices or referral sources, patients who value convenience may be attracted by the ease of scheduling and locating additional providers or specialists.

If a client can secure a location near other medical practices or referral sources, patients who value convenience may be attracted by the ease of scheduling and locating additional providers or specialists.

However, healthcare renters should consider their potential neighboring businesses as well. For example, they may not want to be close to businesses that could be viewed as contrary to the mission of a healthcare facility, such as a liquor store. It's important to be protected from objectionable businesses renting adjacent space after a lease is signed, so renters should have a clear, open conversation with the building's owner before signing an agreement.

The Value of Existing Medical Infrastructure

Typically, cost is the top consideration for any tenant, and a healthcare clinic is no exception. These facilities can generate significant expenses. From outfitting individual patient rooms with furniture and fitting X-ray equipment, to installing extra plumbing and auxiliary power, rent is far from the only cost a medical professional must consider.

Because of that, it's critical to assess a client's infrastructure expectations. If they place value on identifying a low-cost lease, tailor a search around properties that were once healthcare offices. Doing so increases the chance that an office's existing medical infrastructure can be used, lowering the build-out cost.

Despite that, location should still be a priority over leasing an already-existing medical facility. As previously discussed, patients highly value an office's proximity to other healthcare providers. Even the nicest facilities will struggle to attract business if they are not strategically located.

Before Signing the Lease

After answering a client's questions and addressing any concerns, the focus turns to carefully analyzing the leasing agreement for any noteworthy policies or statements. One crucial

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factor to look for is how the property disposes of hazardous medical waste. As the tenant transitions their practice to the new facility, it is important to understand the building owner's expectations for this process, as proper disposal of hazardous waste can be non-negotiable for a healthcare practice due to local, state and federal regulations. Many physicians contract with their own waste management services, but some larger facilities may require tenants to use a specific vendor to control who comes in and out of the building.

For healthcare professionals, identifying the best space for a medical office is no easy task. It is important to find a trusted partner that helps them understand the leasing, operational and cost nuances that even veteran medical practitioners may overlook.

Looking ahead, commercial real estate firms also must begin to understand the role that medical office space will play in the CRE industry for years to come. They should immediately begin equipping CRE professionals with information about this growing niche. ■

Christopher Thames, CCIM, CPM, is the senior vice president and chief operating officer of J.H. Berry & Gilbert, Inc.

Five Things Bankers Look for When Making CRE Loans

Be prepared to answer a long list of questions when seeking financing for a project.

By Gary Magnuson, Citizens Bank

BANKERS OFTEN ASK a lot of questions before agreeing to fund a commercial real estate project — and that has always been the case. However, asking the right questions, and understanding the answers, can lead to a successful project for all involved.

Since the most recent downturn, deals have tended to include much more equity in them than they did in the previous cycle because the industry has remained disciplined regarding leverage. Many projects financed today have at most 65 percent leverage, and in many cases less. Prior to the last recession, leverage in the 70- to 80-percent range was the norm.

Banks have also become much more attuned to the impact of a loan on bank capital and whether the deal provides a sufficient return. Compared to a decade ago, there is much greater sophistication in modeling expected losses, capital impacts and return on capital.

Many large banks have also gravitated toward projects in first-tier, heavily populated cities due to the tenant demand and liquidity available in those markets. This has impacted the capital available for projects in secondary and tertiary markets.

Here are five key factors that go into a commercial real estate funding decision and the main questions bankers ask when considering a loan:

1. **Sponsorship.** Do the sponsors have a strong track record through economic cycles? Do they have experience in the property type and geographic market? How much do they have invested in the project, i.e., "skin in the game"? How deep are their pockets, and do they have the capacity to provide more capital if needed? What prior experience does the bank have with them, and how have they behaved previously when a project encountered issues? What is the sponsor's plan — and does it make sense?
2. **Macro Strength of the Market.** What are the general economic conditions in the region? How is growth in jobs and population? Is there demand for the product (office space, apartments, hotel rooms, etc.) and what is driving this demand? Who are the large employers, and what industries are driving the local economy — what does the future look like for these companies/industries? Why are people moving there or moving out? Is it an attractive region for institutional capital?
3. **Micro Market Conditions.** What are the supply-and-demand factors for the property submarket? What are the absorption rates of new space and units? What new supply is in the pipeline and how will this affect the project? Are rents increasing, decreasing or flat? Is vacancy rising or falling? How will the project compete against other properties? Why would a prospective tenant choose this project over competing buildings? Are rent and vacancy assumptions reasonable compared to the rest of the market? What is the history of the project or building? Is the lender financing competing projects?
4. **Structure.** How leveraged is the project and how much equity (cash) does the sponsor have in the deal? What are the loan-to-value and loan-to-cost ratios? Is there sufficient cushion? What does debt service coverage look like? Is there sufficient cushion for that? Are there performance-based covenants to safeguard that the project stays on track? (These covenants can include debt service coverage or debt yield ratios, leasing progress,

Gary Magnuson

Since the most recent downturn, deals have tended to include much more equity in them than they did in the previous cycle because the industry has remained disciplined regarding leverage.

completion milestones and restrictions on distributions.) What is the term? Has space been pre-leased? Who are the tenants? Are they credit-worthy? What are the lease terms and rollover risk? Does the sponsor guarantee the loan, and to what extent? Do the guarantors have the financial ability to solve a problem should one arise? How much other debt do the sponsors guarantee? Is there construction risk? How is that mitigated? Are the sponsor and contractor experienced? What is the pricing and what are the fees — is the lender being adequately compensated for the risk?

Many large banks have also gravitated toward projects in first-tier, heavily populated cities due to the tenant demand and liquidity available in those markets. This has impacted the capital available for projects in secondary and tertiary markets.

5. **Strategic Fit and Risk Appetite.** Are the sponsor and location consistent with the bank's CRE strategy? Does the project fit the bank's plan for property and geographic diversification? Is it in a target market for the bank? Is the risk consistent with credit policies and risk appetite?

That's a long list of questions, but most are the same ones a developer or owner will be asking as well. A strategic banking partner that helps make sure a project is checking all the right boxes can serve as a trusted adviser that helps a client reach its potential. ■

Gary Magnuson is the head of commercial real estate finance for Citizens Bank.

10 Basic Mistakes Borrowers Make — and How to Avoid Them

Don't get tripped up on the path to securing a commercial real estate loan.

By J.R. Foster, Robert Louis Capital


J.R. Foster

EVEN THE MOST experienced commercial real estate professionals have made mistakes when trying to obtain a loan. Here are 10 common blunders, plus advice for avoiding them:

1. **Accepting the First Offer.** Too many borrowers put all their eggs in one basket by focusing on one lender. The old adage "when banks compete, you win" should be every borrower's mantra when seeking a commercial loan. A prudent borrower will work every angle to create the most competitive lending environment possible.

2. **Focusing Only On the Interest Rate.** The interest rate is obviously a crucial part of any loan, but focusing only on the lowest rate and nothing else makes the borrower lose sight of the bigger picture. For example, the difference between a 4 percent rate on a 20-year amortization versus a 5.25 percent rate on a 25-year amortization for a $5 million loan is only about $330 per month in favor of the 5.25-percent rate. In this case, amortization plays an important role in the amount of the monthly payment. Be mindful of all aspects of the loan structure, as borrowers often end up with a loan that is not the best fit for their goals.

3. **Not Disclosing Credit Issues.** It is imperative to come clean about all credit issues upfront. A borrower who doesn't disclose everything creates headaches that can lead to the denial of a loan. The key is communication, which helps the borrower look favorable to lenders and helps the banker craft a positive narrative that makes underwriters feel comfortable. Many loans have been completed despite significant issues with the borrower such as bankruptcies or criminal convictions.

4. **Failing to Build Banking Relationships Early.** Banking is a relationship business. The earlier borrowers meet lenders to understand how much credit is available to them, make personal connections and tell their story, the easier the process will be. Bankers are more comfortable when they can get to know borrowers before submitting a loan request, and personal rapport can help generate support in loan committee meetings.

5. **A Lack of Liquidity.** Banks are interested in collateral, security and managing risks. One way borrowers can hedge against risk is to ensure they have more than enough liquidity to make the bank feel comfortable about their financial strength and position. Understand what banks want to see on financial statements, because borrowers may need to bring on additional partners or increase their equity contribution to meet loan covenants.

6. **Allowing Too Little Time for Closing.** A common mistake borrowers make is not allowing enough time to close the loan. On purchases, borrowers should work with their brokers so the contract has time for inspections and contingencies. They should also allow at least 60 days for closing. It is better to close early than end up needing more time to complete the transaction.

A borrower who doesn't disclose everything creates headaches that can lead to the denial of a loan. The key is communication, which helps the borrower look favorable to lenders and helps the banker craft a positive narrative that makes underwriters feel comfortable.

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7. **Being Unprepared and Unresponsive.** Borrowers should have their financial documentation in order long before they apply for a loan — or even before they put a property under contract. A borrower who approaches a lender with a complete loan package in a timely manner builds confidence early in the process.

8. **Not Hiring a Proven Mortgage Broker.** A reputable mortgage broker who focuses solely on commercial loans can be a good friend. Find one with a vast network of lending relationships, knowledge of the local capital market and a proven track record of closing loans. The right mortgage professional(s) will save borrowers time, money and stress.

Banks are interested in collateral, security and managing risks. One way borrowers can hedge against risk is to ensure they have more than enough liquidity to make the bank feel comfortable about their financial strength and position.

9. **Failing to Do Homework.** Not all lenders are created equal. By doing thorough research into the local market, borrowers can quickly determine which banks are serious about lending. Nothing is worse than working with a bank that has no real intention of funding a loan. In addition to building lender relationships early on, get recommendations from trusted real estate agents, title companies, lawyers and others.

10. **Stressing Out.** Securing a loan is not an easy or quick process. The truth is that in some cases borrowers will experience rejection before they find the right bank that is comfortable with their loan request. So relax and let the process play out. ■

J.R. Foster is managing partner and president at Robert Louis Capital in Cincinnati.

The WELL Building Standard Continues to Evolve

The latest version expands on a commitment to healthy, energy-efficient buildings.

By Rachel Gutter, International WELL Building Institute

SINCE THE DEBUT of the WELL Building Standard in 2014, the program has grown to encompass nearly 1,000 registered and certified projects in 35 countries. WELL provides a platform to help support and advance human health through performance- and evidence-based approaches to the design, engineering and operation of buildings.

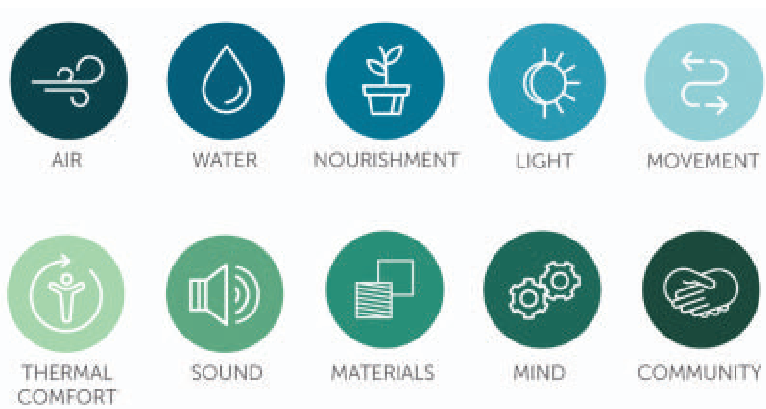
Programs such as WELL help employers leverage a healthy workplace environment to recruit and retain the best talent, reduce absenteeism and improve the happiness, satisfaction and productivity of their workers. And while many WELL projects are office spaces, other commercial real estate product types including multifamily residences, retail spaces, warehouses, academic buildings and healthcare facilities are taking part in the program, too.

Development magazine profiled the WELL standard in the Summer 2016 issue. In "Building for Wellness," author **Ed Klimek**, AIA, NCARB, partner, KSS Architects, explained that developers and building owners can obtain certification by completing "a five-step process for each project that begins with online registration and includes documentation as well as a series of on-site performance tests known as performance verification. Certification recognizes that the project has successfully documented compliance with all feature requirements and has passed performance verification."

Welcome to WELL v2

The International WELL Building Institute (IWBI) recently released WELL v2. Key areas such as design, operations and human behavior have been identified that the IWBI believes will make the second version of the standard more flexible and accessible for developers around the world. The institute says WELL v2 more clearly highlights and differentiates the standard's range of approaches for advancing human health in buildings.

Ten Concepts



WELL v2's concepts can help building owners design the healthiest spaces possible.

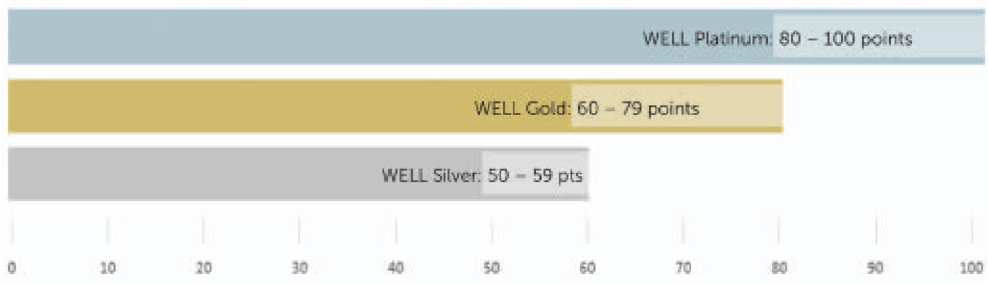
Source: International WELL Building Institute PBC. All rights reserved.

What's New in WELL v2?

Like its predecessor, WELL v2 is based on a points system. Refinements and enhancements to the ratings include:

- A new feature set with fewer preconditions and weighted optimizations. According to WELL, features "comprehensively address not only the design and operations of buildings, but also how they impact and influence human behaviors related to health and well-being." A building-wide smoking ban is an example of a feature.
- A focus on feasibility for existing buildings and commercial interiors.
- An optional early phase design and operations (D&O) review for projects wishing to earn a WELL D&O™ designation.
- A new approach to performance verification that allows projects to contract with local providers.
- A commitment to social equity through market- and sector-specific pricing and a focus on localization.
- A comprehensive and significant adjustment to pricing, including a new subscription option. ■

Points-Based Scoring



There are three tiers in WELL v2. The maximum number of points available is 100.

Source: International WELL Building Institute PBC. All rights reserved.

WELL's original seven concepts have been revised and expanded to 10: Air, Water, Nourishment, Light, Movement, Thermal Comfort, Sound, Materials, Mind and Community. There are also new customized scorecards and more wellness features to choose from. IWBI says these updates will give project teams the flexibility to pursue the features within the standard that they care about the most.

Interestingly, IWBI realized it could leverage what it learned at the building level into a rating system tailored to communities. The result is the WELL Community Standard™. It recognizes that environments within communities — both physical and social — strongly contribute to day-to-day wellness that could lead to large-scale positive impacts on human health. The community standard could also help transform the market for healthy, energy-efficient buildings.

Principles of WELL v2

According to the International WELL Building Institute, WELL v2 is founded on the following principles:

Equitable. Provides the greatest benefit to the greatest number of people, inclusive of all demographic and economic groups and with special consideration for disadvantaged or vulnerable populations.

Global. Proposes interventions that are feasible, achievable and relevant across many applications throughout the world.

Evidence-Based. Undergirded by strong, validated research yielding conclusions that can reasonably be expected to receive acceptance by the scientific community.

Technically Robust. Draws upon industry best practices and proven strategies, offering consistency in findings across the relevant field or discipline.

Customer-Focused. Defines program requirements through a dynamic process, with multiple opportunities for stakeholder engagement, and by tapping the expertise of established leaders in science, medicine, business, design and operations.

Resilient. Responds to advances in scientific knowledge and technology, continuously adapting and integrating new findings in the field. ■

Professional Certification is Growing, Too

More than 5,000 people in 72 countries have achieved WELL Accredited Professional (AP) certification. Participants include architects, designers, business leaders and wellness advocates. The WELL AP community can serve as a support network for project teams and industry professionals, creating localized and issue-specific forums and communication channels. The community has played an instrumental role in the evolution of WELL.

To support the growing number of organizations that are adopting WELL across numerous buildings, IWBI is partnering with more than a dozen global developers and corporations to create a portfolio pathway to certification that will streamline both effort and costs. A performance dashboard is being built that allows buildings and those who own, operate and occupy them to be in direct dialogue. ■

Rachel Gutter is president of the International WELL Building Institute.

The Challenge of Building in Tight Urban Spaces

Think differently and collaborate with city officials to smooth traffic issues and monitor construction activity.

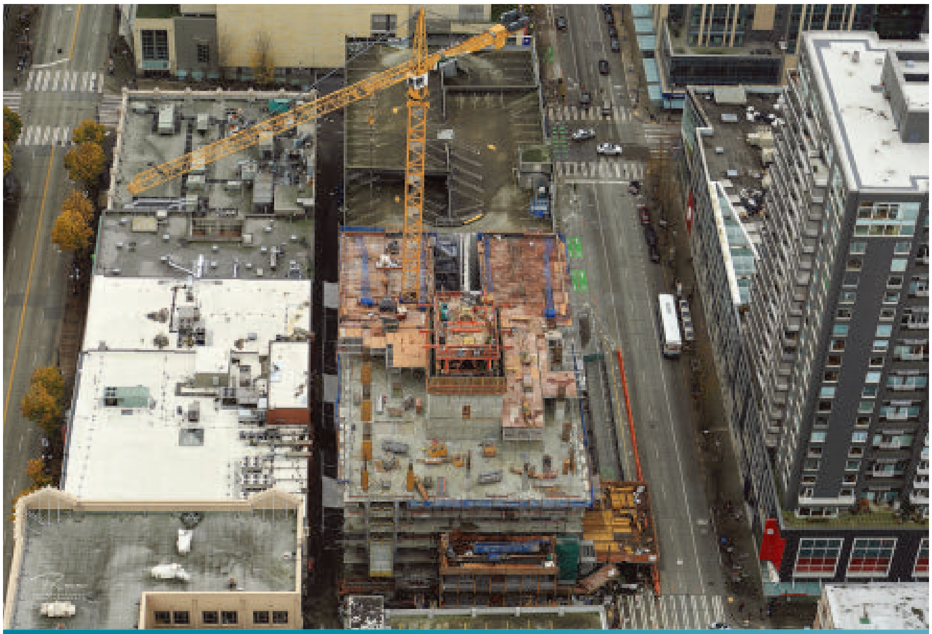
By Susan W. Kemp, Hart Crowser, Inc.

SEATTLE'S SECOND Avenue and Pike Street is one of the busiest intersections in the nation. It's in the city's downtown core near the Pike Place Market, a popular and lively tourist attraction. What's more, the area includes a dedicated bicycle lane that accommodates as many as 1,700 trips a day along Second Avenue.

During two and a half years of construction for Urban Visions' 39-story West Edge tower at Second and Pike, **Sean O'Brien**, project manager at Sellen Construction, had to collaborate closely with numerous parties to navigate this tight urban space without major delays to traffic flow.

"We had to create space where there wasn't any," he said.

One option his team explored was the possibility of using adjacent building roofs — or the top level of a parking garage — to store construction materials. (Although they ultimately didn't use this idea, O'Brien believes it could be useful on future projects.) Instead, they built unusually elaborate scaffolding, including a half-block-long, four-story structure with a roof to stage supplies.



The scaffolding structure used to help build Urban Visions' West Edge Tower in Seattle was four stories tall on Pike Street; on 2nd Avenue, it was a single large platform.

Coordination and Collaboration

They also had to coordinate deliveries efficiently, including reserving Second Avenue as a delivery corridor. On Wednesdays, up to 25 concrete trucks took up all that space, so they limited other supply deliveries (up to 20 a day) to the remaining four business days of the week.

Also, deliveries were scheduled within 15-minute windows rather than simply marked as "morning" or "afternoon." Complex deliveries such as those involving window systems — which required more space, a crane and significant care — were scheduled for Saturdays. According to O'Brien, overtime pay was worth the cost to keep construction on schedule and minimize overlapping deliveries, which would lead to traffic congestion and the inability to unload, forcing rescheduling. Saturday deliveries also freed up the crane to keep the jobsite running. Complex deliveries could take multiple hours, tying up the crane and stalling work on the site. That provided significant motivation to get things delivered quickly and smoothly.

O'Brien said he continually collaborated with various city departments to keep traffic flowing during the day and get the tower built on time.

"I talked with the representative for the Seattle Department of Transportation about his request for us to push all deliveries earlier in the day to let him know the representative from the Seattle Department of Construction & Inspections' Noise Enforcement Program didn't want early deliveries," he said. "I'd just talk to each representative about the opinions of the other arm of the city. Sometimes they'd talk to each other, and sometimes they communicated through us to see if a mutually agreeable solution could be found."

He also collaborated with the city to work out specific days and times that the construction fence could be expanded into the street to increase safety for construction workers and the public, specifically cyclists. Even then, since pedestrians and bicyclists sometimes flagrantly ignored restrictions and flaggers, the team positioned a uniformed police officer at Second and Pike, adding a second and sometimes third officer during increased deliveries and lane closures.

Using the Space, Above and Below Ground

Garry Horvitz of environmental and geotechnical engineering firm Hart Crowser says construction companies must take full advantage of every square foot of city right-of-way allowed to them. In some cases, this means putting lines of heavy concrete trucks adjacent to the structural excavation shoring system, as well as placing temporary cranes next to, or sometimes even on top of, the shoring system. Because of that, the geotechnical engineer and structural engineer must work together closely to ensure that the shoring system can accommodate the added load. They must also arrange for the added load to be placed in just the right spot to maintain safety.

High groundwater levels are another challenge in parts of Seattle. Permanent dewatering, the process by which subsurface water is removed throughout the life of a structure, is no longer an option in areas like South Lake Union because of discharge limits for Seattle's combined sewer system, which is designed to collect rainwater, sewage and industrial wastewater in the same pipe. Because of that, buildings that extend below the water table, which corresponds with the level of Lake Union, must be watertight. This can make the structure want to float upward (like a boat) if it extends too far below the water table. While this sounds astonishing, buildings are not as heavy as they seem. According to Horvitz, a rule of thumb in geotechnical engineering is that a 20-story building is only about as heavy as 20 feet of dirt.

Jeff Peterson, principal and civil engineer at Coughlin Porter Lundeen — a pioneer in building zero lot line projects in the Seattle region — worked with Horvitz to develop a watertight system that could be incorporated into the design of the foundation system.

With increasing safety and environmental requirements, property developers will need this type of ingenuity to build in tight urban spaces. It will be important to come up with new ideas to adapt to physical restrictions and communicate with municipalities to work through perceived limitations. ■

Susan W. Kemp is the marketing manager with Hart Crowser, Inc., an environmental consulting firm headquartered in Seattle.

There's Still a Need for Parking Audits

Despite technological advances, thieves can find loopholes that hurt the bottom line.

By Will Rhodin

OPERATIONAL AUDITS were once standard for parking lot owners and managers of buildings and complexes that offer paid parking. That's because patrons almost always paid cash for parking, and daily audits were necessary to make sure that all the money that was supposed to make it to the bank actually got there.

Today, with most parking fees collected via credit card and valets issuing validation tickets via license plate recognition scanners on handheld devices, many owners are under the impression that audits are no longer necessary. After all, you can't steal if there's no cash to take, right?

It might seem counterintuitive, but parking audits are more important than ever. While new payment technologies have significantly reduced theft, the problem hasn't been eliminated. Thieves are more sophisticated, and management must look deeper to prevent problems and detect them when they occur.

It might seem counterintuitive, but parking audits are more important than ever. While new payment technologies have significantly reduced theft, the problem hasn't been eliminated. Thieves are more sophisticated, and management must look deeper to prevent problems and detect them when they occur.

Many things can only be detected through an audit. These include parking management agreement compliance issues, cash deposit discrepancies, inaccurate charges, improper coupon and validation use, liability issues such as compliance with the Payment Card Industry Data Security Standard (PCI-DSS) and monthly parking access system errors. Audits are essential for today's complex parking management systems, and they must be much more nuanced than in the past to find all the potential problems.

The More Things Change …

Back when operational audits were common, parking managers checked lots while office clerks scoured through tickets and reports. Revenue control systems were scarce, and they often provided uninformative data. Most parking fees were collected in cash, and daily reporting was done by hand. Technological limits and larcenous parking attendants combined to make revenue control a real challenge.

Employee theft often starts inadvertently. An attendant forgets to turn in a $5 bill one day. No one says anything. The next week, that same attendant is short on lunch money, so he holds back some cash. Again, no one notices. Over time, though, theft can become a serious problem that affects the bottom line.

Revenue control and audit systems have come a long way in recent years. Today, the audit process is more nuanced. Theft is less common, but it hasn't been entirely eliminated. That's why management needs to look deeper to deter and detect problems.

Parking Management Agreement Compliance

Many parking management agreements contain restrictions on chargeable expenses, liability insurance costs per space, allowable percentages for payroll taxes and workers' compensation, and expense variances to budget. Audits include a contract-compliance analysis that frequently reveals deficiencies and results in parking operators repaying money to owners.

Cash Deposit Timeliness

Discrepancies between the dates that revenue is collected and when the funds hit the bank can indicate revenue malfeasance. For example, an attendant might hold back cash he has collected and use it to make his car payment, replacing that money with the next day's parking payments, and so forth. An operational audit compares daily revenue summaries, bank deposit slips and revenue reports produced by the parking access and revenue control system (PARCS) equipment. Any differences identified should be explained and promptly corrected.

continued on page 48

Transportation + Mobility

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Exception Ticket Verification

Fee computers do most of the heavy lifting to calculate rates. But what about manually adjusted rates, lost tickets, voided tickets, etc.? Is the manual adjustment approved by management? The audit process compares the exception tickets to "exception ticket logs" and to daily reports to establish each ticket's legitimacy.

Coupon and Validation Control

Some parking systems still use physical validation coupons. Are coupons sequentially numbered? Does the parking operator maintain a log of coupons sold so auditors can make sure that coupons aren't missing or dispensed out of order? These are both potential signs of theft.

Today, with most parking fees collected via credit card and valets issuing validation tickets via license plate recognition scanners on handheld devices, many owners are under the impression that audits are no longer necessary. After all, you can't steal if there's no cash to take, right?

Liability Red Flags Such as PCI-DSS Compliance

Property owners and/or parking operators risk significant liability exposure if credit card data security doesn't meet established standards. Does the PARCS vendor provide annual certification of PCI-DSS compliance? Is the (old) PARCS system properly truncating patrons' credit card numbers? A parking audit can reduce owners' and operators' exposure to these potentially serious risks.

Monthly Parking Access System Control

Auditors compare the list of "active" monthly credentials on the PARCS equipment to the cards and accounts invoiced by the parking operator. Any discrepancies should be identified and corrected. Are industry-standard control systems in place for monthly parkers? This includes anti-passback systems, which prevent users from entering a garage by tailgating someone with access credentials. If not, monthly users may take tickets on the way into the garage, dispose of such tickets and use access credentials to exit. This results in an ongoing pattern of missing "open" tickets, a major control deficiency.

Accounts Receivable Control

No one wants to hear that the 50-space monthly account that was three months in arrears skipped town without paying. Auditors bring accounts-receivable issues to light, allowing management to address funds due before they become a problem.

These are a few examples of the problems that can be addressed through parking audits. ■

Will Rhodin is a consultant with Walker Consultants.

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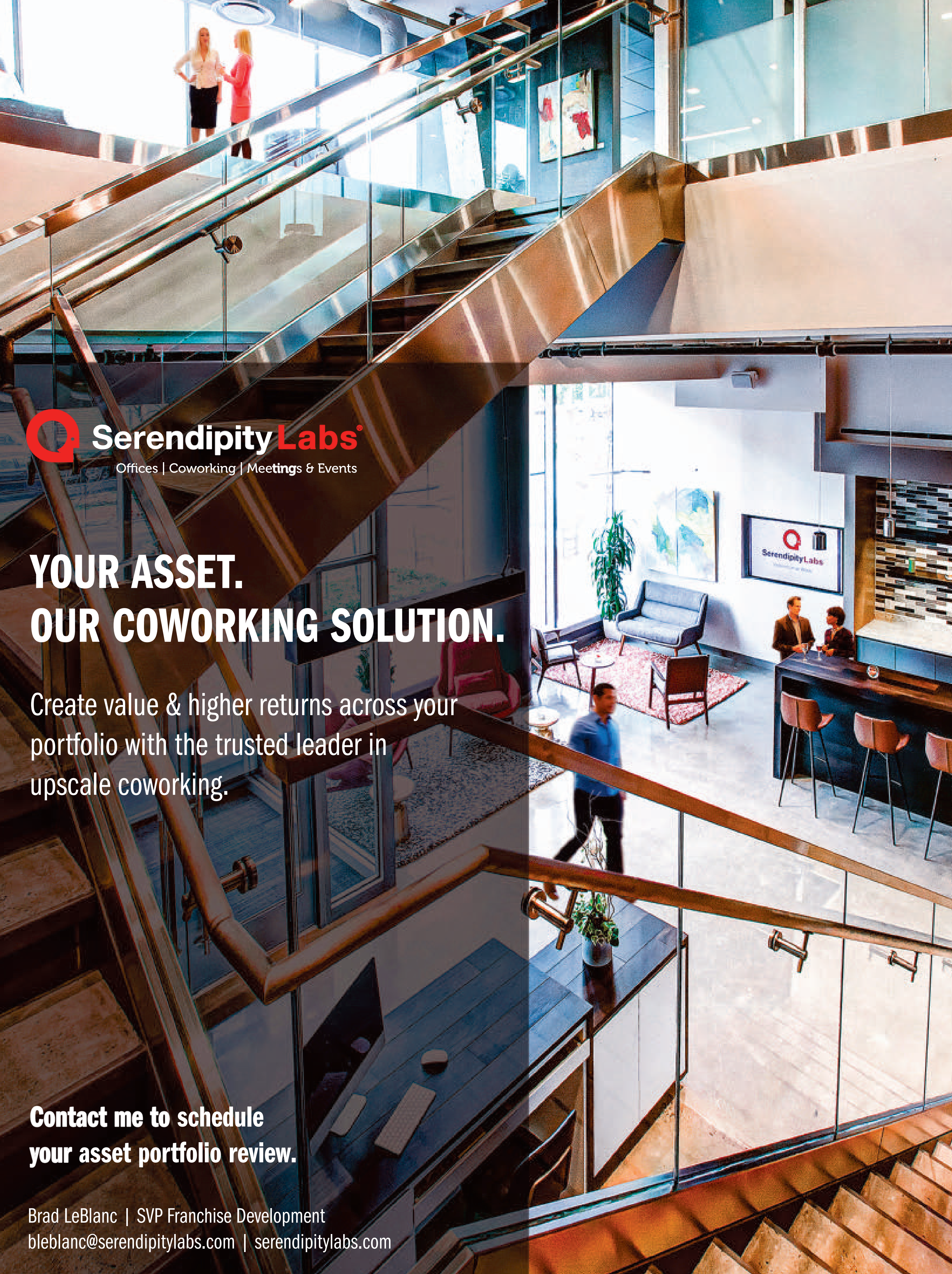
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How Technology Will Change the Brokerage Business

Many brokerage firms are preparing their employees for the future with in-house educational offerings that stress technological innovations, best practices and other relevant topics. For example, here is Avison Young human resources generalist Bethany Marinacci leading a lunch & learn session with Nicholas M. Esposito, left, principal, private equity.
Photo by Andrew Fredricks

Commercial real estate is in the midst of a digital revolution, and some of the biggest upheavals will affect professionals who work closely with property owners and tenants.

By Joan Woodard

TECHNOLOGICAL INNOVATION is accelerating in the commercial real estate space, and it has the potential to disrupt a large segment of the brokerage business.

In 2017, according to CREtech, more than $5 billion was spent on developing and implementing real estate-related technology, and there are more than 3,000 developers working on real estate software systems in the United States alone. Blockchain, artificial intelligence, machine learning and predictive analytics will change the way real estate is leased, sold, sourced and valued (see more on page 52). These technologies will improve direct interaction between property owners and tenants and challenge the very need for a broker to be involved in many lease transactions, significantly reducing commissionable activity.

The residential real estate space shows the two directions technological innovation can take. The first direction is digital technology that empowers agents. The second direction is coming along more slowly, but it is where technology displaces agents by empowering sellers and buyers to do most, if not all, the sourcing, market comparisons, showing, negotiation and processing of documentation involved in a transaction.

The "Sins" of Commission?

In commercial real estate, the commission system of compensation has always been troublesome for the property owner. Brokers play an integral role in creating an income stream for properties, but the downsides are the high transaction costs and loss of control for the property owner. Additionally, tenants rarely (if ever) have any idea the degree to which using a broker to find space and negotiate a lease has affected what they pay over the lease term. That's because the commission is almost always paid by the property owner without disclosure to the tenant.

Tenants have not been able to assess whether a broker created more value (or saved them more money) than the lawyer who drafted and negotiated the terms of the lease for an hourly fee. Brokers get a huge commission for showing space, while lawyers make significantly less for structuring an enduring contract that will guide the relationship between the landlord and the tenants for years, sometimes decades. Additionally, it's been difficult for tenants to determine if a broker was biased in the presentation of space based on a better commission from one building versus another, or biased toward property owners who pay commissions willingly versus those who resist paying the commission.

Perhaps the biggest reason property owners have problems with the commission system is that the cost of the commission is rarely aligned with the value of the work that earned the commission. Too often, full commissions are paid to brokers, even tenant representative brokers, who simply introduce a prospect. The property owner provides market comparables, prepares the letter of intent, moves through the negotiations and finalizes a lease. Complaining about the imbalance of this cost/benefit relationship to the procuring broker could result in a property being poorly presented or not presented at all in the future. Property owners have not had access to robust technology solutions that provide thorough, accurate market data or that could provide the marketing exposure needed. They have had to rely on brokers and accept that the commission was a cost of doing business.

Define Your Terms

SAS, a developer of analytics software based in Cary, North Carolina, offers these definitions for key technologies that are poised to change the commercial real estate industry:

Blockchain
"A blockchain is a type of data store that stores anything of digital value. Each new transaction is stored in a block that gets added to a chain of existing records. A typical blockchain duplicates data across an open network so all parties in the blockchain see updates simultaneously, and all updates are validated through a public verification process that ensures accuracy without the need for a central authority, like a bank."

Artificial Intelligence
"Artificial intelligence (AI) makes it possible for machines to learn from experience, adjust to new inputs and perform human-like tasks. Most AI examples that you hear about today — from chess-playing computers to self-driving cars — rely heavily on deep learning and natural language processing. Using these technologies, computers can be trained to accomplish specific tasks by processing large amounts of data and recognizing patterns in the data."

Machine Learning
"Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns and make decisions with minimal human intervention."

Predictive Analytics
"Predictive analytics is the use of data, statistical algorithms and machine learning techniques to identify the likelihood of future outcomes based on historical data. The goal is to go beyond knowing what has happened to providing a best assessment of what will happen in the future." ■

A Technological Tipping Point

Today, brokerage firms are investing in and building out their own technological solutions for more extensive data collection and compilation, marketing, space visualization, client contact-management and other competencies. The assumption has been that the current commission structure will continue to support and pay for these investments. In many cases, the technology is designed to support an existing way of doing business that will not be embraced by the client base going forward, so they could well be building out the wrong technology based on an old business model.

The independent market is investing in another set of technology solutions to support the commercial real estate industry. Many of these will be "open" databases with information available to everyone, and they'll eventually provide the type of market detail previously not available outside of research owned by brokers or expensive data provid-

The residential real estate space shows the two directions technological innovation can take. The first direction is digital technology that empowers agents. **The second direction is coming along more slowly, but it is where technology displaces agents by empowering sellers and buyers to do most, if not all, the sourcing, market comparisons, showing, negotiation and processing of documentation involved in a transaction.**

ers. They will be resources for property owners, tenants, appraisers, brokers, lenders, facility managers and others. Ultimately, they will incorporate more in-depth information on property management, maintenance, capital investment, tenant features, tenant retention, contracts, transaction costs and a lot more. And much like consumers have found more access, control, pricing power, time savings and knowledge using Amazon to buy everything from books to dog food, these commercial real estate solutions will give tenants and landlords the same advantages and minimize the need for a broker.

A commercial real estate change that's occurring as this technology is being developed is demand for "space as a service." It's powered by the growth of coworking and flexible space options. These solutions provide space quickly and for shorter terms that match a company's ability to expand and contract with business and economic cycles. Rather than a lease, tenants sign user agreements that enable them to pick from a menu of space and service options.

Technology, transparency and "space as a service" will replace commissions with fee structures that are more closely related to the actual value created or added by the unique skills that a broker brings to the transaction — if and when a broker is even needed. As a result, the role of the broker will become more respected, meaningful and valued by those who pay a fee, directly or indirectly. While the number of commercial brokers will diminish, as will the number of brokerage firms, those who remain will look and act completely differently five years from now than they do today.

Prepare for Tomorrow Today

For those developing the new technologies to thrive and for those using them to prosper, some fundamental changes in assumptions or past methodologies should be considered and acted upon:

Make Information Actionable. Soon, everyone will have access to the same details about a property, tenant, landlord or investor. Many users will feel empowered and informed, and they'll make commitments and decisions on their own. But not everyone will have the time or knowledge to draw meaningful results, applications or connections from the information. For brokers, the ability to cut through the clutter and pinpoint data relevant to potential customers will be the new value-add. Some already do this; others will need to follow suit.

Relationship Building. "Cold calling" to cultivate a potential new tenant client will be replaced by valid, meaningful, 360-degree research about tenants, potential clients, local market conditions and other factors that's shared in a compact and understandable way with a much broader audience. Future success will require inclusivity and transparency, providing more information to boost relationships rather than for transactional benefit.

Inclusive Design. The best commercial real estate technology for the future must be designed from the perspective of multiple end-users, not just the brokerage team. The technologists need to seek out the best wisdom from multiple generations of developers, property owners, investors, relocation consultants, industry groups such as NAIOP, corporate real estate managers and other industry players, not just brokers and their organizations. Commercial real estate is learned from apprenticing, exposure to multiple markets, living through multiple cycles of the market and economy, failures, losing clients, not being able to find financing, and on and on. Technologies also need to consider non-urban marketplaces and efficiencies for small tenancies and property owners. Building platforms solely based on large, urban marketplaces won't necessarily translate to the mass market. So one size will not fit all; a range of platforms will be necessary. They must meet the needs of institutional investors, individuals and small businesses, as well as everything in between.

Prepare for a Change in Accounting Standards. ASC 842 (Accounting Standards Codification), which goes into effect for publicly traded companies in 2019 and for private companies in 2020, requires businesses to include the entire rent stream of a lease as part of their reported liabilities on their balance sheet. Previously, rental obligations were only required to be summarized in the notes section of the financial report. To avoid the financial impact of this rule change, tenants will be looking for ways to reduce the rent liability, negotiating shorter lease terms or rent structures that separate out the variable portions from the fixed rents. Variable expenses, because they can't be known by nature, would not need to be included as liabilities. Shorter lease terms and/or lowered rent basis will further impact commissionable income for brokers.

No "Broker" Needed. If technology enables a tenant to source all available space in the market that meets their needs and timetables; if a robot and 3-D imagery can show those spaces to them; if they can validate market comps, learn about the property owner, get detailed building information, review the lease form and submit an offer all on their own, what is left for a broker to do? When one is needed, it will be for a much more nuanced and sophisticated skill set. Tenants and landlords will still face complicated adjustments to the financial analysis of competing options. Mathematical wizards have created models for financial analysis. They are very good, except for one thing — they cannot adjust for or acknowledge the underlying market forces of supply and demand at that moment and in the specific submarket where a transaction is being contemplated. This is when knowing the nuances of all the available data is critical and where a broker can add value.

Document Specialization. Well-crafted Letters of Intent and Requests for Proposals will become much more important for larger tenants or complex transactions. Customization and sophistication with these documents will tease out the details and nuances that really matter to a tenant and to the potential landlord. After that, the broker must perform potentially complex analyses on the unique responses that artificial intelligence cannot be expected to evaluate, because these specialized issues are qualitative and subjective.

Manufacturing Opportunity. Tenants who aren't of interest to a landlord present a market opportunity for brokers. These might be companies with a poor reputation, strained financials, a hard-to-understand business use, start-ups, or those that are atypical for the market. A broker can help them with a good business case, making a market pitch for their tenancy, and clarifying realistic expectations for options. The broker can then be an informed and credible matchmaker. This requires in-depth strategic knowledge and thinking on the part of the broker to create deals out of seemingly unrelated opportunities.

Educational Opportunity: "Brokering in the Digital Age"

A new on-demand course offered by NAIOP's Center for Education will show brokers how to apply technology in their profession. Topics to be covered in "Brokering in the Digital Age" include building stronger relationships by using social media effectively, understanding the benefits of storing relationship data in a customer-relationship management (CRM) system, learning how to build a database of deal information, and applying proven strategies to form deeper relationships with clients. The course will be available in January 2019. ■

For more information, visit www.naiop.org/Learn/Courses

Technology, transparency and "space as a service" will replace commissions with fee structures that are more closely related to the actual value created or added by the unique skills that a broker brings to the transaction — if and when a broker is even needed. As a result, the role of the broker will become more respected, meaningful and valued by those who pay a fee, directly or indirectly.

New Ways to Use Information. As existing real property assets in this rapidly changing market are repositioned and repurposed, brokers can play a role in putting teams together to envision new futures for these buildings. They can use the information found through blockchain and artificial intelligence algorithms to hypothecate when a property has or will reach the end of economic viability, as well as demographic changes that could support new uses, cost/revenue modeling, and team creation based on the verifiable past successes of each member. This kind of deal mining will reduce risks, improve deal flow and reposition what was a "broker" into a professional real estate teammate.

New Traits and Mentorship Teams. Brokers of the future will need to be selectively hired, mentored and invested in so they can create steady income streams for their firms and themselves. Compensation will come from providing sound real estate strategy on a fee-for-service basis paid by the user, rather than a commission disconnected from the value to the user. Empathy, ethics, and social and emotional intelligence, combined with a willingness to deeply learn the real estate business from multiple viewpoints, will be the traits that distinguish successful new brokers of the future.

Rethinking Training And Education

As technology shakes up the industry, brokerage firms should retool their mentorship approach to new-broker training. Fresh ideas and outside perspectives are needed now more than ever as companies recalibrate for technology-driven expertise in the hands of millennials and the next generations. Find an opinionated, successful property owner or property manager, as well as a lender in the local market, to serve on mentorship teams. The property owner/manager will provide the unvarnished feedback needed to both focus and expand training approaches.

Many people in the industry have hilarious, sad or pathetic tales of cold calls by new, untrained and certainly unprofessional brokers. Unfortunately, these poorly trained brokers can tarnish the entire commercial real estate profession. It's possible that a sincere effort on the part of the brokerage community to increase and improve its professionalism by seeking the input of those who have been paying commissions would be well received and productive.

Bringing a lender on to the mentor team provides another type of professionalism and a deeper awareness of underwriting, as well as knowledge about how to value and qualify a business or tenant prospect. Adding feedback loops would be the next important step. Brokers and property owners should have respectful discussions to dissect the pros and cons of the process each used in both successful and unsuccessful leasing efforts. This kind of qualitative and subjective discussion will benefit brokers and property owners and ultimately create a positive impact on the whole commercial real estate industry.

Adopting this expanded form of mentorship, professionalism and feedback will enhance performance and job satisfaction. It will also help ensure that the disruption of the brokerage model by commercial real estate technology won't leave one looking in the rear-view mirror — or worse, obsolete. ■

Joan Woodard is the former president and CEO of Simons & Woodard, a management, architecture and development firm based in Santa Rosa, California. With over 45 years representing property owners around the country, she has executed more than 10 million square feet of lease and sale transactions.

BridgePort I Logistics Center

The BridgePort I Logistics Center in Perth Amboy, New Jersey, was built on a brownfield site that had sat idle for decades. It is located within roughly 30 miles of New York City. Its three buildings cover approximately 1.3 million square feet. Target is the biggest tenant.
Photo courtesy of Aerial Photos of New Jersey

From Abandoned Brownfield to Active Distribution Facility

A warehouse/fulfillment complex in New Jersey shows the economic potential for infill redevelopment in places once considered environmentally unsalvageable.

By Jeffrey Milanaik, Jonathan Pozerycki and
Gabie Strbik, Bridge Development Partners

FROM 2015 TO 2017, Bridge Development Partners transformed a blighted 103-acre brownfield site in Perth Amboy, New Jersey, into an advanced logistics center that will serve the concentrated consumer base in and around New York City. Bridge overcame complex challenges ranging from environmental contamination to poor geotechnical soil conditions to create a 1.3-million-square-foot distribution facility.

The BridgePort I Logistics Center, which features three buildings with 36-foot clear height ceilings, allows for maximum dock loading, trailer parking and cross-dock layout to accommodate traditional warehouse/distribution users, as well as the operating requirements of the burgeoning e-commerce market. An abundance of parking was designed, including 707 automobile spaces and 449 tractor-trailer parking spaces. It's situated along Interstate 95 — the busiest highway in the eastern U.S. — in an area poised to draw major regional and last-mile distribution users.

The public-private collaboration behind the BridgePort I Logistics Center demonstrates the economic potential of locations that were once deemed untouchable because of environmental problems. The project accommodates hundreds of permanent jobs and cleaned up a hazardous site that had long been perceived as unsafe by the local community.

Before construction was finished, Bridge executed a long-term agreement with Target for the biggest building at the site, totaling roughly 718,500 square feet. It was one of the largest industrial leases signed in New Jersey in 2017. And in October 2017, Bridge sold the completed three-building project worth $240 million, along with the rest of its New Jersey assets, to Duke Realty as part of a larger national portfolio sale valued at $695 million.

Transforming the Site: Environmental and Soil Remediation

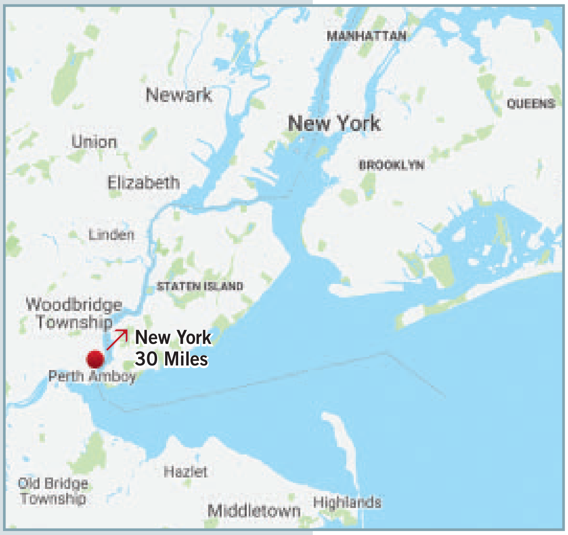
Bridge recognized that the site would be ideal for today's logistics users if it could overcome the complex environmental and geotechnical challenges that had prevented redevelopment. Led by principal and market officer **Jeff Milanaik**, Bridge's New Jersey office assembled a team that included general contractor Premier Design Build Group, Menlo Engineering Associates, SESI Engineering Consultants, Melick-Tully and Associates, Excel Environmental Consultants, and attorneys **Wanda Monahan** and **Lane Miller**.

The site was originally home to a copper smelting operation run by American Smelting and Refining Co., that closed in the late 1970s. It sat vacant since that time because it was contaminated by slag, a byproduct of the smelting process, as well as other volatile pollutants.

The previous owner of the site, Viridian Partners, started environmental remediation and identified several areas of environmental concern before Bridge acquired the property in March 2015. After Bridge identified 52 areas of concern, it remediated all the environmental issues and installed the final engineering controls and site cap.

Easy Access to a Major Market

New Jersey ranks as the third-largest industrial market in the United States by square footage, with consistent tenant demand due to the vast logistical infrastructure network of interstate highways, deep-water cargo ports, air freight and rail servicing the region. The BridgePort I Logistics Center is strategically located in one of the premier gateway industrial markets in the United States and provides unparalleled access to one of the world's most concentrated consumer bases in and around New Jersey and New York City. Bridge believed that a Class A, modern logistics campus in this location would be ideal for companies and tenants that required a last-mile solution to access the largest residential base in the country.



The BridgePort I Logistics Center in Perth Amboy has easy access to and from Route 440, which connects the New Jersey Turnpike to Staten Island and the other New York boroughs via the Outer Bridge Crossing. Tenant companies have three points of access into New York City from the site, all of which are roughly 30 miles away. The closest is the Holland Tunnel, a 26-mile trip.

Even with BridgePort I Logistics Center's existing transportation connectivity, significant redevelopment and reconstruction of High Street, which connects to Route 440, was still required to secure the viability of the project. In addition to the High Street improvements, a new traffic signal was installed at the end of the off-ramp for Route 440 and High Street. Additionally, roughly half a mile of newly updated water pipes were installed by Bridge. These were required to supply both potable uses and a new 130,000-gallon water tank for the building's Early Suppression Fast Response (ESFR) fire sprinkler system.

The public-private collaboration behind the BridgePort I Logistics Center demonstrates the economic potential of locations that were once deemed untouchable because of environmental problems. The project accommodates hundreds of permanent jobs and cleaned up a hazardous site that had long been perceived as unsafe by the local community.

Early in the project, Milanaik and his Bridge team built upon an already-established strong relationship with New Jersey Department of Environmental Protection (NJDEP) officials, particularly the Office of Brownfield Reuse. Milanaik and principal **John Porcek** have decades of combined industrial redevelopment experience in New Jersey, including work on several Environmental Protection Agency (EPA) Superfund sites. They have worked closely with the NJDEP on a number of successful projects.

The goals of Bridge and the NJDEP were aligned: to ensure that the site was environmentally safe and suitable for development. This collaborative approach helped clear the way for NJDEP/EPA approvals. Pre-existing relationships and a thorough understanding of the state's rules and regulations were key to obtaining approvals.

One of the major issues Bridge had to address was the site's poor geotechnical and soil conditions related to its proximity to the Arthur Kill waterway. Due to the high quantity of organic material deep below the surface, the site was considered unsuitable to support development without extensive soil stabilization. Today's distribution buildings require floor load-bearing capacities in excess of 750 pounds per square foot of floor area. The existing conditions would not allow more than 300 pounds per square foot, which is equal to less than 40 percent of the required capacity.

Soil stabilization can be done fairly economically over a long period of time, but the costs rise substantially under a shorter construction time frame. Bridge took the faster/more costly approach, applying three soil-engineering techniques that are often associated with road building and other complex civil engineering projects:

Surcharging. Large mounds of soils were piled on the building slabs for many months during construction, then redistributed throughout the site when the soil settlement was complete.

Dynamic Compaction. A 14-ton weight was repeatedly lifted by a crane and dropped onto the ground surface, improving the soil density.

Controlled Modulus Columns (CMCs). During construction, Bridge employed CMCs, in which concrete is poured through the hollow center of augers, filling the holes as part of the drilling process. CMCs share the load between columns and the soil around them, adding to the foundational strength, so that they don't need to be driven into the bedrock. In addition, the CMC auger minimizes the amount of soil spoils, reducing the need to dispose of potentially contaminated soil.

Using these techniques, which took several months to complete, represented about 20 percent to 25 percent of the project's total hard costs. That's roughly $15 million to $20 million, or about $12 to $15.50 per square foot.

Complex Financing

The environmental remediation and soil stabilization issues also complicated construction financing. Due to the size and complexity of the deal, Bridge and its equity partners, Banner Oak Advisors and Texas Teachers Retirement System, sought both senior and mezzanine financing. This proved more difficult than anticipated as some lenders were uncomfortable with the project's level of risk, the size of the remediation and the timing for getting it done.

To secure construction financing, Bridge looked to the expertise of CBRE vice chairman and mortgage banking veteran **Steve Roth**, as well as existing lender relationships. Bridge's successful track record as a trusted fiduciary for acquiring, remediating and redeveloping other brownfield sites into modern Class A industrial projects helped convince lenders that the challenges in Perth Amboy could be overcome. Ultimately, Bridge elected to work with Wells Fargo, which held the senior mortgage on the property, and Heitman, which supplied the mezzanine loan for the project.

Advancing Community and Economic Growth

E-commerce and third-party logistics (3PL) firms focused on fast service to consumers and stores have driven record demand for New Jersey industrial space. They seek modern buildings with high ceiling clearance and other up-to-date features to be competitive in an ever-changing delivery model. Their success depends on securing strategic locations near densely populated metropolitan areas to satisfy consumer demand for products.

From the beginning, Milanaik worked with Perth Amboy's mayor, **Wilda Diaz**, to ensure that the project would spur employment growth and stimulate the local economy through the realization of new property taxes. During the development period, roughly 300 construction jobs were created. The first tenant, Target, will employ approximately 1,500 full-time people at its facility. The retailer gave jobs to 250 people in its first round of hiring, 65 percent of whom are Perth Amboy residents. The other two buildings were expected to lease quickly, which will likely bring more than 500 additional full-time, permanent jobs to the local community. Since the sale to Duke at the end of 2017, the remaining buildings have been 100 percent leased.

To further ensure the project's financial viability, Bridge used New Jersey's Payment In Lieu of Tax (PILOT) real estate tax-abatement program. PILOT eliminates taxes for

The BridgePort I Logistics Center will provide hundreds of jobs to the Perth Amboy area, as well as more than $2.3 million in annual revenue for the city.

New Jersey Environmental Approvals Checklist

Below are the steps Bridge Development Partners went through to receive the go-ahead from the state of New Jersey to obtain occupancy permits for the BridgePort I Logistics Center site, which was built on a former brownfield:

- Construction of the project components, which serve as the site-wide environmental cap (including foundations of the buildings, paved parking lot areas and landscaped areas).
- A licensed state remediation professional (LSRP) prepared a survey figure showing where the residual contamination remained on the property (by location, type of contamination and concentration).
- Report added to the deed notice that was filed with the county clerk's office to alert the public about the residual contamination in the areas of concern (AOCs).
- Deed notice officially filed.
- LSRP completed a remedial action report documenting the complete remediation of all of the AOCs.
- LSRP submitted for the remedial action permit for soils to the New Jersey Department of Environmental Protection.
- Upon receipt of a remedial action permit, LSRP issued site-wide final approval, called a response action outcome (RAO), for the BridgePort property. ■

E-commerce and third-party logistics (3PL) firms focused on fast service to consumers and stores have driven record demand for New Jersey industrial space. **They seek modern buildings with high ceiling clearance and other up-to-date features to be competitive in an ever-changing delivery model.**

developers for a set period of time to encourage them to improve the property. Instead, the developer pays a lower "service charge" to the local government during that period. Bridge is currently paying $1.75 per square foot annually to Perth Amboy through the PILOT program. Perth Amboy is already realizing annual revenue in excess of $2.3 million in a location that had been considered unusable.

Additionally, the project's tenants can take advantage of the Grow NJ Program, which aims to increase and preserve jobs in the state. According to the New Jersey Economic Development Authority, businesses that create or retain jobs under the Grow NJ program may be eligible for tax credits ranging from $500 to $5,000 per job, per year. Bonus credits can range from $250 to $3,000 per job, per year.

These features, combined with the location, were key to attracting Target. The retailer uses the space to restock smaller-format stores that recently opened in all five New York City boroughs. These urban retail locations range in size from 12,000 square feet to 80,000 square feet; by comparison, a suburban Target store is often 150,000 square feet or more. Additionally, the logistics center will help Target refine its online sales and its "buy online, pick up in-store" service (BOPIS). ■

Jeffrey Milanaik is a principal/market officer with Bridge Development Partners, Northeast Region. **Jonathan Pozerycki** is director of development with Bridge Development Partners, Northeast Region. **Gabie Strbik** is the executive assistant/marketing coordinator with Bridge Development Partners in Chicago.

BridgePort I Logistics Center Project Summary

Location	960-1000 High Street, Perth Amboy, New Jersey
Type of Site	Infill Brownfield Redevelopment
Development Type	Ground Up Speculative Construction
Building Types	Warehouse, Distribution and e-Commerce Fullfillment Centers
Tenants	(At Time of Disposition) Target Corp. 718,200 sq. ft.
Rental Rates	$7.95 per square foot NNN
Site Dimensions	
Total acreage	103
Total Square Feet	1,292,650
Development Team	
Developer	Bridge Development Partners, LLC
Leasing Broker	CBRE
General Contractor	Premier Design Build
Civil Engineer	Menlo Engineering
Environmental Engineer	SESI Consulting Engineers
Geotechnical Engineer	Melick Tully
Environmental Consultant	Excel Environmental
Architect	Cornerstone Architects
Financial Partners	
Equity/Capital Partner	TRS ("Teachers Retirement System of Texas") and Banner Oak Capital Partners
Construction Loan	Wells Fargo
Mezzanine Loan	Heitman
Tax Incentives	PILOT - Payment In Lieu of Taxes - $1.75 PSF Starting
Timeline	
Land Acquisition	2015
Construction Commencement	2016
Remediation Commencement	Prior to 2015
Remediation Completion	2017
Disposition	Q4 2017
Final RAO received	Q1 2018
Total Project Cost	
Construction Cost	$155.5 Million
Exit Value	$240 Million

A Campus Project Packed with Extracurricular Challenges

The Center for Technology & Innovation at N.C. State University is a unique mixed-use project that combines Class A offices and laboratories with an active manufacturing space that is the home for a large machine specially designed for use in nonwoven textile research and production.
Photo courtesy of Keystone Corp.

At N.C. State University in Raleigh, a building designed around a state-of-the-art textile machine also accommodates typical office and lab tenants, but getting to the finish line wasn't easy.

By Michael Blount, Keystone Corp.

THE CENTER FOR Technology & Innovation (CTI) at N.C. State University in Raleigh, North Carolina, combines Class A offices and laboratories with an active manufacturing space. A portion of this unique mixed-use building was originally envisioned as the home for a huge, specialized machine used in nonwoven textile research and production. However, after construction commenced on the building, the machine and ground floor space were redesigned, forcing costly changes to the 107,598-square-foot facility.

That was among the design, logistical and construction challenges the development team at Keystone Corp. overcame to finish the project, which includes 45,255 square feet of high bay manufacturing space on the ground floor, two levels of market office and lab space above, and a structured parking deck.

Finding a Home for a Modern-Day Loom

N.C. State needed a building to house a very large and expensive nonwoven spunbond extruder machine for the Nonwovens Institute (NWI), the world's first accredited academic program for the interdisciplinary field of engineered fabrics. The NWI is an innovative global partnership between industry, government and academia that's affiliated with the N.C. State College of Textiles.

The machine produces fabrics composed of polymer fibers bonded together through a variety of processes on a belt production line. Nonwoven materials are cost-efficient and prevalent in disposable hygiene and healthcare products (baby diapers, surgical gowns, cleaning pads), filtration, geotextiles, carpet backing, various insulation products and much more. The industry is growing quickly and is expected to be worth nearly $35 billion by 2022, according to research firm MarketsandMarkets.

Many large producers of nonwoven fabric, such as Proctor & Gamble, Johnson & Johnson and Mohawk, rent time on this prototype machine to develop and test new nonwoven fabrics before mass-producing them in their own factories.

The machine, which is roughly 52 feet tall and 170 feet long, requires about 60 feet of clear ceiling height space above it — more than double the 26 feet of clear height in the rest of the ground floor. The towering machine rises through all levels of the building and is separated from other areas by a heavy wall designed to prevent noise, vibrations, heat, smoke and fumes produced during manufacturing from penetrating into the rest of the building. It's also where overhead cranes and other supporting infrastructure are housed.

The building requires more than 4.5 megawatts of power and 725 tons of cooling capacity to serve the machine and other occupants. CTI is connected to the campus chilled water loop that fuels an HVAC system more economically and reliably than a stand-alone chiller system.

The LEED Silver-certified building houses two other tenants — N.C. State DELTA (18,920 square feet on the second floor) and Bandwidth (40,035 square feet on the second and third floors). DELTA stands for Distance Education Learning Technology Applications. Its space is a consolidation of departments that previously occupied several smaller offices across campus. At CTI, DELTA is fit out with an open floor plan with manager offices in the core and open desk/work cube areas around the perimeter to maximize natural light.

Bandwidth, which occupies a portion of the second floor and the entire third floor, is a communications technology company that is representative of the kind of businesses that have contributed to the rapid growth in Raleigh and the Research Triangle Region during the past few years. It has a built-out open office layout that provides for "plug and play" and the reshuffling of departments without significant interruption to operations.

N.C. State's Centennial Campus was chosen as the home of the CTI facility because of its proximity to the College of Textiles. The CTI site was previously a surface parking lot that the university's long-range plan for Centennial Campus identified as a future location for a research-related building.

Located just south of the university's main campus, Centennial Campus was established in 1984 and has since grown dramatically. It features a combination of state-funded facilities as well as buildings financed through public-private partnership (P3) structures. The CTI, as well as Keystone's first building on campus (Keystone Science Center), are P3s.

Complex Elements Come Together

The mix of an active manufacturing facility with a more typical office/lab environment added significant complexity to the design effort. For example, the NWI industrial lab was planned to house both wet and dry labs, as was the speculative office/lab space in the upper levels.

Keystone had to start with the NWI space and design the remainder of the building around it, because it wasn't financially feasible from a private-development perspective as a single-tenant structure. Class A offices and flexible labs are in high demand on campus from both the university and the private sector, so speculative space was a crucial component of the project.

Those upper-level areas were designed to accommodate a 50/50 mix of office and lab tenants. The top two floors feature clear heights of 12 feet, along with stout, level floor structures to handle heavy, sensitive lab equipment and significant glass to maximize views and natural light.

The loading dock and other common elements were designed to accommodate all tenants. A 16-foot-wide service corridor allows NWI to temporarily store incoming or outgoing materials without hindering other tenants from using the dock. The service corridor connects the loading dock to a freight elevator that has 48-inch-wide doors and a 4,500-pound load capacity.

DELTA and Bandwidth will typically use the loading dock for normal office deliveries. However, this portion of the building was also designed to allow for an upper-floor tenant to receive deliveries used in labs, such as bottled gas, pharmaceutical supplies, etc.

Finally, though it seems likely that N.C. State's huge investment in this facility will make NWI a long-term tenant, Keystone had to design the ground level with enough flexibility to accommodate other uses if NWI were to move out. The two-story ceiling height can allow for an additional floor to be built in between, increasing the rentable area on the lower floors.

Zoning Complexity

As for municipal building approvals, Centennial Campus operates as an island of sorts. It is approved as a large planned development with the city of Raleigh, which has zoned the campus as primarily "Office Mixed Use" with some limitations on building height. However, the city has delegated authority for many aspects of general building plan approval to the university under N.C. State's 1994 Physical Master Plan. That document provides a long-term vision for the types of facilities that will be built on campus and focuses on integrating institutional activities into mixed-use communities.

State-owned buildings go through North Carolina's State Construction Office for permitting, while privately developed buildings go through the city. This site was already zoned for the proposed use, but because the building was on campus, Keystone was required to achieve university-level approvals in addition to typical site and building review by the city. Raleigh delegates authority for zoning-related items (setbacks, building height, transportation, etc.) and appearance (elevations, exterior materials, etc.) to the university. The city completes a plan review (as it relates to building codes), issues permits, completes inspections and grants occupancy. However, that is for private-sector buildings only; buildings constructed by the university are subject to State Construction Office permitting and inspections.

To add another layer of complexity, university-related tenants are often required to gain State Construction Office approval for their interior fit-out, which can add unplanned base building requirements even if the base building is not under state jurisdiction.

Keystone had already developed a building on campus with a mix of university and private tenants, so the company was able to navigate inspections and approvals without too many surprises.

About the Financing

The building was financed with a mix of equity from a small group of private investors and bank debt from Wells Fargo. The private investors are led by Keystone's CEO, **Pat Gavaghan**, who is a noted alumnus of N.C. State. Several years earlier, Wells Fargo was also the lender on the 78,000-square-foot Keystone Science Center, an office/lab build-

This nonwoven spunbond extruder machine occupies the first floor of the Center for Technology & Innovation. It's used by N.C. State's Nonwovens Institute (NWI), a partnership between industry, government and academia that's affiliated with the N.C. State College of Textiles. The machine, which is roughly 52 feet tall and 170 feet long, produces prototypes of fabrics that are used in a variety of consumer, medical and industrial applications.
Photo courtesy of Monica Slaney | photographie:fourseven

ing similar to the CTI that's located one block away on campus.

Two primary factors aid lender underwriting for campus projects. First, the university has sole discretion over new projects, which controls the supply of available space. Vacancy across campus has always been below 5 percent and often much lower. Second, both Keystone buildings are anchored by state entities, so there was significant pre-leasing by a credit-worthy tenant. Those factors provide stability that lenders like.

The building is owned by a Keystone-related ownership entity under a long-term ground lease with the University Endowment Fund. Keystone pays "rent" on the ground lease annually, and that rent is subject to periodic adjustments based on land valuations. Keystone plans to manage the property for as long as it owns it.

Fits and Starts

This project was unique from a construction perspective because the penalty for not delivering the building on time was much larger than just delaying rent commencement. While it was being built, there were several bumps in the road that worried all project stakeholders.

NWI was working with Reicofil, a German manufacturer of machinery used in the production of nonwoven fabrics, to design and build the nonwoven spunbond extruder. After being selected as the project developer, Keystone's design team worked collaboratively with NWI and the Reicofil group to deliver a space that would house the machine and provide the flexibility to increase the extruder's capacity if needed.

However, Keystone's private development "pace" is much different than the university's. The design and administrative approvals needed to purchase the NWI spunbond machine were finalized well after Keystone had commenced construction on the base building. That, coupled with the fluid nature of the designs for both the building and the machine, provided plenty of chances for the deal to go sideways.

Because construction began on the base building before the machine's design was complete, the company and its investors faced the possibility of paying large, unplanned base building costs to properly accommodate the extruder. Regular Skype calls and face-to-face design meetings with Reicofil revealed necessary changes to the base building due to changing machine designs.

For example, the Reicofil team told Keystone that the total expected heat load of the extruder had increased significantly, which resulted in the potential for much more HVAC capacity. Those requests came after building steel and HVAC units had been ordered and the chilled water line was put in place. The cost to add this capacity was extraordinary.

CTI Project Summary

Project Location	N.C. State's Centennial Campus Raleigh, North Carolina	
Project Name	Center for Technology & Innovation (CTI)	
Type of Site	Suburban	
Development Type	Ground Up/New Development	
Transportation Modes	Car, Truck	
Mix of Uses	Manufacturing/R&D Office	45,255 sq. ft. 58,955 sq. ft.
Parking	Surface Structured	13 Spaces 281 Spaces
Tenants		
The Nonwovens Institute (N.C. State University)		45,255 sq. ft.
N.C. State DELTA- Distance Education Learning Technology Applications		18,920 sq. ft.
Bandwidth		40,035 sq. ft.
Lease Terms	7-10 years with renewal options Combination of NNN and Full Service	
Site Dimensions and Density		
Total Acreage		2.15 acre
Total Sq. Ft. Approved (excluding parking structures)		107,598 sq. ft.
Total Built to Date		107,598 sq. ft.
Total at Buildout		107,598 sq. ft.
Development Team		
Developer		Keystone Corporation
Civil Engineering/Survey		SEPI Engineering
Architect		HagerSmith Design PA
General Contractor		Danis Construction
Leasing Broker		CBRE Raleigh
Financial Partners		
Construction Loan		Wells Fargo Bank
Equity		Private Investment Group
Timeline		
Planning Started		June 2014
Initial Plans Submitted		August 2014
Approvals Obtained		August 2015
Construction Started (Infrastructure)		August 2015
Construction Started (Buildings)		October 2015
Shell and NWI/DELTA TI Construction Complete		December 2016
Bandwidth TI Complete		September 2018
Total Project Costs		$29 million

Keystone and the university were operating within budgets, and at this point in the design stage there was always the opportunity for finger pointing and claims against the other for the responsibility to bear this added cost.

Weather Issues

Time and weather were also constant nemeses throughout the project. The design process that started in June 2014 was slow and ran into the fall. Permits weren't issued until August 2015. Starting in October 2015, heavy rains in the aftermath of Hurricane Joaquin and more unseasonably wet weather halted all site work for much of the first two months of construction. Then, early winter weather prevented completion of the site work needed to begin erection of precast concrete slabs for the parking deck. Because the weather affected most construction sites in the area, when it cleared, every project clamored to have the same subcontractor base work overtime to catch up.

The ripple effects of the weather delayed delivery of the parking structure. The base building was originally scheduled to be finished in early October 2015. It ultimately opened the last week of December. The parking deck was delayed several more weeks.

There was a silver lining to all the wet weather, however.

After Keystone made cuts that were more than 20 feet deep in portions of the slab, the finished grades were just above bedrock. A large pit under the machine that allowed for operational air flow began to fill with water as the water table rose because of all the rain. The issue wasn't detected during Keystone's initial geotechnical investigation, but because of the pooling water, Keystone decided to add an underground drainage system to ensure that water didn't intrude through the slab.

Had the issue not been noticed, Keystone likely would have incurred tremendous costs to deal with it after NWI's machine was erected.

Site Challenges

Though Centennial Campus is situated in a suburban office market, managing a construction project there is like building in an urban setting. CTI stands at the corner of Main Campus Drive and Research Drive, which is a busy intersection for bus and pedestrian traffic on campus. Keystone was required

The upper levels of the Center for Technology & Innovation are occupied by office and lab space. One tenant, Bandwidth, a communications technology company, has a built-out open office layout that features a large kitchen and dining area.
Photo courtesy of Keystone Corp.

to keep these roads open during construction, despite having to excavate down as much as 20 feet in areas adjacent to those streets. Shoring in this active area was expensive, and the general contractor had to focus intensely on safety around the site.

The grade fell by more than 40 feet across the site, but Keystone utilized the steep slope to provide the high bay space that NWI required. However, the company had to fit a large building footprint of 38,850 square feet and a parking deck of 25,375 square feet on a 2.15-acre site with limited options for circulation. The College of Textiles building that's adjacent to CTI has two loading docks, and Keystone was required to maintain full circulation for tractor trailer trucks to reach them during construction of CTI. This meant there was little flexibility for making curb cuts to accommodate egress. It also meant that Keystone had to allow clearance for those trucks to move freely under the parking deck and under the overhead bridge connecting the CTI building to the deck.

A Last-Minute Leasing Surprise

Just before base building completion, Keystone began working with a pharmaceutical company to take the space that was eventually filled by Bandwidth. That firm was in the process of gaining FDA approval for drugs used to treat various cancers. As part of this approval, the company had to show it could safely manufacture those drugs, but this highly customized manufacturing lab space had to be completed very quickly in order to maintain the approval timeline. CTI was one of the few options in the area with the laboratory capacity for such a space.

Keystone held nearly constant design meetings to expedite the construction of a drug manufacturing facility that would include fitting out a large portion of the third floor to ISO 7/8 Cleanroom lab standards. The total cost of this fit-out was expected to be more than $350 per square foot. This included moving an existing 100,000-pound HVAC unit to the roof, which the building's unique structural system could withstand. CTI was constructed with significantly more structural steel than a typical office building. It includes about 12 pounds of steel per square foot, whereas most typical office buildings are in the range of 8 to 9 pounds of steel per square foot.

Unfortunately, the drug company failed an FDA hurdle very early in construction, and all operations ceased. Its stock price sank, and Keystone had to draw on a large deposit posted by the drug company that was required upfront due to credit risks.

That deposit allowed time to re-lease the space, so Keystone began working with a large corporate tenant on campus that wanted to consolidate its R&D operations. A plan was created that provided enough room for staff and shared lab space. Financial approvals made their way through the company's North American hierarchy, but then languished in its international headquarters.

In the meantime, Keystone fully negotiated a lease and made plans for tenant-improvement construction. However, the company's CEO abruptly changed its long-term R&D strategy and abandoned the plan. Keystone was compensated for its time and out-of-pocket expenses, but it was forced to try to lease the remaining space for the third time.

Luckily, the space was in high demand, and a deal was made quickly with Bandwidth. ■

Michael Blount is executive vice president of Keystone Corp. in Raleigh. CTI was named Large Project of the Year at the 2017 NAIOP North Carolina Conference.

Pondering Public Art? Legal Concerns and Artists Rights are Part of the Palette

One of the best-known pieces of public art in the U.S. is Alexander Calder's Flamingo, which is located in the plaza in front of the Kluczynski Federal Building in Chicago. The United States General Services Administration commissioned the piece. It was unveiled in 1974.
Photo by istock.com/emrahaltinok

Developers must balance contracts, intellectual property issues, government involvement and other factors when commissioning pieces for a project.

By Stephanie Friese, Pursley Friese Torgrimson

DEVELOPERS WHO incorporate public art into commercial space find that the second-most-important person in such projects — right behind the artist — is their lawyer.

Public art has become *de rigueur* at many office buildings and mixed-use development projects because it brings vitality to public spaces. While it's difficult to prove if art increases project value, there is no doubt that the attention it draws can be a tremendous boon to branding. Art that becomes iconic establishes an identity for a development that often outshines the architecture. This is particularly true for outdoor art such as sculpture and fountains.

But developers, artists, city officials and neighborhood groups sometimes get entangled in legal issues, and lawyers are often called on to help determine the boundaries that balance the rights of stakeholders. Many of these disputes could be prevented with legal advice at the outset. While it's easy to get carried away with the aesthetics of public art, its creation is transactional. Because of that, everyone involved should be aware of their legal protections.

Ownership May Only Go So Far

Most public art disputes between the developer and the artist revolve around issues of whether the art can be moved, altered or even destroyed. Murals painted on the side of a building, for example, may not fit into a new owner's plan to redevelop a site.

This situation came up in 2013 when a property owner painted over dozens of graffiti murals at a near-vacant factory building in the New York City borough of Queens called 5 Pointz. The owner had allowed artists to paint on the building's walls over the years as he rented space to them for studios, and the art became so spectacular that it was a regular stop for tourists. He later had the century-old water meter factory demolished to make way for luxury apartments.

In early 2018, 21 artists were awarded $6.7 million by a federal court following a three-week jury trial. The judgment allocated $150,000 for each of 45 works destroyed at 5 Pointz. Oddly, the judge who calculated the award said the owner was within his rights to tear down the buildings, but he seemed aggravated that the art was whitewashed in the midst of litigation to save it and said the developer might have avoided damages if he had not acted in such haste. The 100-page decision in the case is still being debated and analyzed by the development and art communities, but one takeaway is sure: Developers could pay dearly if they violate artists' rights.

Basic intellectual property rights also can be an issue. In a case wending its way through U.S. District Court in California, a graffiti artist is suing General Motors Co. because an ad campaign for Cadillac used a Detroit parking deck that featured his painted mural as a background. The artist says GM infringed upon his copyright, and he wants part of the profits generated by the ad campaign.

While it's easy to get carried away with the aesthetics of public art, its creation is transactional. Because of that, everyone involved should be aware of their legal protections.

"Ugly" Versus the First Amendment

Outdoor art also has the problem of succumbing to the elements — inevitably it will need maintenance or restoration. Understandably, artists are prickly about changes that could be made to their work if it is cleaned up or "improved" by others. Owners may assume that after buying art they have the right to treat it as real property and do with it as they please, but artists — and sometimes the law — don't see it that way. From the viewpoint of artists, their name remains on their works, and any changes could affect their reputation.

One of the first public art cases to go to court focused on "Tilted Arc," a sculpture commissioned by the General Services Administration to be the centerpiece in the plaza in front of the Jacob K. Javits Federal Office Building in Manhattan. Artist **Richard Serra** created a 120-foot-long, 12-foot-high, 73-ton rusting steel plate, which was roundly condemned as ugly despite the artist's explanation that it was meant to be provocative. When the GSA removed it in 1989 with the intention of placing it elsewhere, Serra sued, saying that the mere act of moving a sculpture created for that specific space was destruction. He claimed violations of his First Amendment rights as well as copyright laws and sought $30 million. A court sided with the GSA, citing the artist's decision to sign over all ownership rights to the sculpture, but the case raised interesting questions about the intersection of artists' rights in public spaces where the audience — the "public" in public art — does not like it.

In another case, two artists invited to exhibit at the city hall in Pasco, Washington, sued the municipality when their prints and sculpture were barred because of nudity that city employees deemed obscene. With the help of the American Civil Liberties Union, the artists sued on free speech grounds. After the U.S. Court of Appeals for the Ninth Circuit ruled against the city of Pasco, the parties settled, with the municipality making a public apology and acknowledgment of censorship. While this case did not involve a developer, it illustrates the perils of making content-based decisions about public art.

The Moral Rights Hazard

The most important federal law in this area is the Visual Artists Rights Act (VARA), which grants moral rights to artists for works of "recognized stature." The concept of moral rights might be hard for property owners to accept because they grant artists continuing rights over works that have been sold. The idea behind moral rights is that an artist's identity remains attached forever to his or her work, and anything that diminishes the work damages the artist's reputation. VARA bars "intentional distortion, mutilation, or other modification of that work which would be prejudicial to [the artist's] honor or reputa-

The artists who created graffiti murals on a building in the New York City borough of Queens won a lawsuit after the building's owner had the structure knocked down to build apartments.
Photo by istock.com/Kirkikis

Most public art disputes between the developer and the artist revolve around issues of whether the art can be moved, altered or even destroyed. Murals painted on the side of a building, for example, may not fit into a new owner's plan to redevelop a site.

tion" and "prevents any destruction of a work of recognized stature, and any intentional or grossly negligent destruction of that work."

"Recognized stature" is one of those "know it when you see it" qualities that is not defined well in the statute or case law, but developers should assume that any art they would want associated with a building or other development would rise to that status.

However, VARA provides that these rights can be waived by the artist, and that is exactly what is required when buying or commissioning public art. A simple waiver included in the sale agreement or contract for the art negates all rights under VARA. This isn't because the sensibilities of artists should be respected or the integrity of their work maintained, but because a developer's first loyalty is the fiduciary duty owed to investors. However worthy the art, it could be disastrous for it to dictate design or financial decisions for a development.

Government May Want to Be Your Art Partner

Government involvement in public art may limit those waivers and complicate other decisions. Some cities require approval of public art, which usually means anything visible from the street. Most of these laws were passed with good intentions and were meant only to prevent patently offensive or commercial works, but they also may be asserted to dictate tastes and to ensure that art fits into the culture of a neighborhood. Inevitably, controversial works become First Amendment issues. If developers have the appetite for this kind of battle, they should push the envelope. If not, they should think carefully about the message or tone of the art and

As a practical manner, developers should move with intention when making their art decisions. Create a wide circle of advisers that includes the art community, city planners, neighborhood representatives, and, of course, legal experts.

be sure the artist's vision aligns with the developer's values.

Some cities seek to encourage public art by requiring developers to include it in projects. This usually takes the form of "percentage for art" laws that require monetary set-asides for art that are a percentage of the project's cost. In New York City, municipal-funded construction projects must spend one percent of their budgets for art. Philadelphia is credited with inventing the percentage-for-art concept, and hundreds of art projects have been created there since the law was passed in 1959. There are variations and exceptions to these programs. In some cities, the government must approve — or even commission — public art, while others are satisfied if the developer makes the investment. Cities often provide an easy way out for the faint of heart, allowing developers to donate the art percentage to a government fund that commissions art.

Since 1959, Philadelphia's local government has been a leader in developing programs that help support public art such as Robert Engman's Triune, which is located at 15th Street and South Penn Square.
Photo by istock.com/RomanBabakin

If the local ordinance provides the choice, take as much control as possible. Developers should seek art that maximizes the value of a property, and that goal is not incompatible with wanting to add to a city's visual beauty.

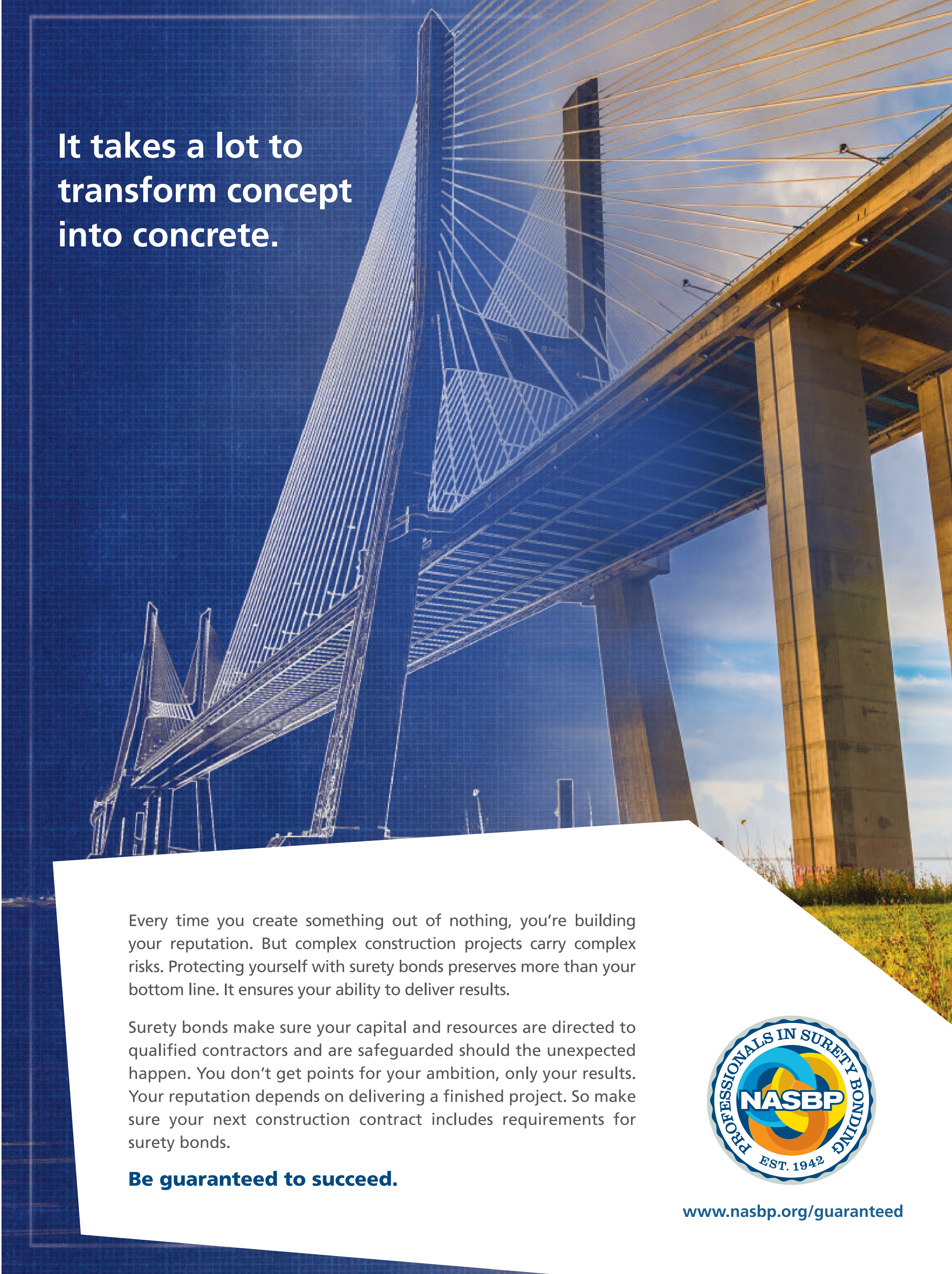
Be Deliberate and Button Down Contracts

As a practical manner, developers should move with intention when making their art decisions. Create a wide circle of advisers that includes the art community, city planners, neighborhood representatives, and, of course, legal experts. Controversy can erupt over cultural appropriation, the personal background of the artist, and perceived political or social statements, so don't get blindsided.

Absent contract waivers, the law tilts slightly toward the rights of artists. But the economic power resides with developers, and that means they should not enter into any relationship without waivers that cover a broad menu of things that can go wrong. Art is almost always a buyer's market. Developers should use that power to protect their interests. Don't let a $50,000 sculpture hold up a $50 million building.

Despite all the cautionary notes, developers should not be hesitant to embrace public art. Most of it is installed and thrives without controversy and is doing exactly what it is supposed to do — engaging the public, adding vibrancy to cityscapes and branding developments. ■

Stephanie Friese is managing partner of Pursley Friese Torgrimson in Atlanta.


It takes a lot to transform concept into concrete.
Every time you create something out of nothing, you're building your reputation. But complex construction projects carry complex risks. Protecting yourself with surety bonds preserves more than your bottom line. It ensures your ability to deliver results.
Surety bonds make sure your capital and resources are directed to qualified contractors and are safeguarded should the unexpected happen. You don't get points for your ambition, only your results. Your reputation depends on delivering a finished project. So make sure your next construction contract includes requirements for surety bonds.
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CRE Trends, Economics and More

A Wide-Ranging Conversation

NAIOP gathered national research directors in October for an in-depth discussion of industrial and office trends, city rankings, adaptive reuse and other important topics.

By Trey Barrineau

THE NAIOP RESEARCH Foundation's annual meeting of national research directors, which took place during CRE.Converge in Washington, D.C., in October 2018, brought together research directors from real estate brokerage, data and investment firms, along with NAIOP Distinguished Fellows from academia, to discuss challenges, opportunities and best practices relating to metrics, policies, transactions and products affecting the commercial real estate industry.

Industrial Outlook

To kick things off, attendees were asked to share their thoughts about what lies ahead for the industrial real estate sector. **Margarita Foster**, NAIOP's former vice president for knowledge and research, who facilitated the session, asked if the trend of converting empty big-box locations into smaller fulfillment centers has generated pushback at the municipal level.

Dave Egan, the global head of industrial and logistics research with CBRE in Chicago, said it's a definite issue in the industry, though he noted that specifics might be hard to nail down.

"I talk to developers and they say that's an issue that they have encountered broadly," he said. "I think maybe there's more of a perceived objection rather than an actual objection," he said. "The municipalities are really concerned about what the tax revenue changes will be if they reconvert to industrial development."

Aaron Ahlburn, the managing director for industrial research with JLL in El Segundo, California, said he has heard that some developers are having difficulty getting approvals.

"I think in terms of rezoning, in a lot of municipalities, it's hard to get that pushed through," he said. "It's labor-intensive to make that happen."

Ahlburn added that many communities are concerned about safety issues and noise from truck traffic that could be routed through neighborhoods after a retail location is rezoned to industrial.

At the municipal level, a lack of knowledge about these conversions might be a major reason why they are not happening at a faster pace.

"I've been in front of a bunch of economic development groups, and frankly, a lot of them have been surprised at the suggestion that you might want to take a dying retail center and turn it into industrial," Egan said. "It's a new idea to them. I think it'll get there eventually, but it's a lot further away when you actually talk to the folks who are involved in making these things happen."

Foster then asked attendees if the seemingly unstoppable rise in e-commerce means that industrial facilities are becoming the new retail in most communities across the U.S.

Dean Violagis, the vice president of research with CoStar in Washington, D.C., said e-commerce remains very attractive to investors.

"Amazon has been getting into all kinds of things lately," he said. "Obviously, Whole Foods is a pretty important thing for them. Their appetite will continue to grow, but I also think their competition, the Walmarts of the world, if they want to stay competitive, they need to be able to deliver goods to consumers just as fast. I think there's still some legs left in this."

However, **Mark Stapp** of Arizona State University does not think industrial will fully replace bricks and mortar.

"I do think that we see the relationships changing," he said. "You're not going to see retail going away simply because we have increased e-commerce."

Stapp said successful retailers will use a "bricks and clicks" strategy, referring to the integration of physical and digital presences.

Despite all the attention paid to e-commerce in recent years, it's important to remember that Americans still do most of their shopping in physical stores, said **Josh Harris** of New York University.

"A large bulk, if not a majority of the population, are still Walmart or Dollar General shoppers," he said. "Overall, true market penetration for online shopping is still in the early, early stages."

Harris said many shoppers choose stores like Walmart because those retailers tend to sell bulk goods that may not be cost-efficient to ship. That could create an opportunity for those retailers to build "bricks and clicks" distribution centers where customers use drive-through lanes to pick up large orders that were initially placed online.

"That's a huge area that hasn't really even been touched that I think is going to generate its own set of industrial demand," Harris said.

U.S. City Tier Definitions

Next, the research directors discussed labeling cities with designations such as Tier 1, Tier 2, Gateway, 24-Hour, etc. Foster said institutional investors often use these categories to identify markets that are aligned with their investment goals. She noted that there are no "official" definitions for these categories. Metro area rankings can be based on criteria as varied as population, the number of jobs or the base building inventory.

Foster noted that most professionals don't realize that city categories change all the time. For example, Nashville is becoming a Tier 1 city

Participants

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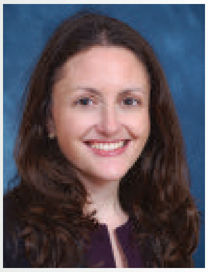

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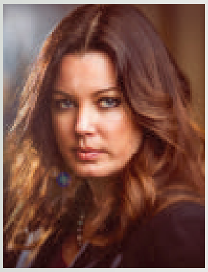

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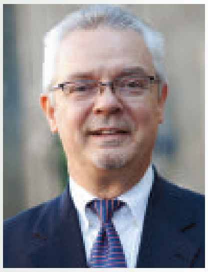

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thanks to increasing population, rising investment, a growing talent base and strong universities.

Maria Sicola, managing partner with CityStream Solutions LLC in San Diego, said city rankings are not always about population or demographics.

"It's almost like we have this incessant need to label things," she said. "And what you do in the model is you're quantifying this — 'What's the most important thing to you?' And then you rank it. It's what's important to you in the decision-making process."

John Chang, senior vice president with Marcus & Millichap, said Real Capital Analytics uses transaction activity as a dependable measure, because rankings based on population or total households might not give the best insights into a market.

"It's weird because you have a city like Detroit that has a massive population but it's generally considered a secondary market," he noted. "The measurement criteria changes all the time depending on who you're talking to, right? So it's almost arbitrary. We chose an industry standard that was credible and reliable and stuck with it."

Jodi Airhart, director of research and publications with Situs RERC in West Des Moines, Iowa, said her company has moved to putting metros in groups and sorting them by property type.

"We still rank the metros within the property types," she said. "So, while they still move around, the property type grouping adds stability to the rankings."

> **"Large cities tend to be stable.**
> That's one of the reasons why investors gravitate toward them."
>
> *— Revathi Greenwood,*
> *Americas Head of Research with Cushman & Wakefield*

When it comes to ranking cities, looking outside the commercial real estate industry for ideas can be worthwhile. For example, Harris said he recently took part in a consulting project that used Nielsen rankings of TV markets to sort cities into tiers. According to Harris, it generated actionable data that had the added benefit of being independent of investor sentiment.

"Because it's based on the size of the markets, we found that using the Nielsen rankings was surprisingly appropriate," he said. "And that was very defensible because they had to have SEC compliance and things like that. This was really useful because we could point to the Nielsen rankings as a publicly sourced document."

Stapp wondered if prioritizing Tier 1 cities for investment might be creating a false sense of security among investors and possibly generating non-systemic risk in the market.

"We could be creating a flow of capital to areas that are hyper-competitive, and we're not flowing money to areas that are easier to develop," he said. "Decisionmaking bias could be affecting institutional investors."

Robert Hartley, director of research with Colliers International in Washington, D.C., suggested that the commercial real estate industry needs to figure out a way to generate a Fortune 500-style ranking of cities for investors.

Revathi Greenwood, Americas Head of Research with Cushman & Wakefield, noted that liquidity would have to be factored into that kind of ranking.

"Large cities tend to be stable," she said. "That's one of the reasons why investor gravitate toward them."

Several attendees noted the importance of a diversified economy for city rankings. **Vivek Sah** of the University of Nevada, Las Vegas said he is currently working on an economic diversification index for the entire U.S.

"So one of the things that's really critical is how diversified the city is in terms of an economic base, and I'm working on a paper right now that basically maps each and every county in the country with a diversification index," he said. "If you have an index of diversification, then you can use that as one of the metrics to rank the cities."

Anthio Yuen, senior manager, research and strategy with GWL Realty Advisors in Vancouver, British Columbia, said one useful metric his company uses is measuring a city's relative share of jobs in each industry versus the relative share of those jobs in the entire country. The distribution of employment across sectors can shed light on which cities tend to be more diversified.

"Generally speaking, markets that are more diversified tend to perform well from a downside-risk perspective," he said.

Raymond Wong, vice president, data operations with Altus Group in Toronto, said an index that ranks global markets would be useful, too.

"We're dealing with one pension fund that said, 'Look, we just need a 5 percent return,' " he said. "They're investing in Europe. They know it might be up or down. They're investing in Asia and North America as long as the numbers are there. So they're building their portfolio and their strategy based on anticipated returns. So it's diversification of the local economy and of the country, but on a global basis as well."

Harris suggested creating market betas that would measure the risk profile of an area over time compared to an index that measures the nation as a whole.

Development Approvals Index

NAIOP is in early discussions about possibly launching a development approvals index that would rank markets on the efficiency of their approval process.

According to **C. Kat Grimsley** from George Mason University in Fairfax, Virginia, the approval process for commercial real estate development can be inefficient, protracted and risky from the developer's standpoint. For example, public hearings often leave developers struggling to appease a vocal minority. A development approvals index could rank jurisdictions across several performance metrics that can be quickly and easily compared. This would allow developers to make more fully informed decisions about expanding into new markets. It could also convey to jurisdictions how long they take to approve zoning changes or issue permits relative to other areas across the country.

While some index components would be standard measures, such as average number of days to receive basic approvals, the addition of a technology component would be unique. Grimsley noted that jurisdictions often don't use technology effectively in the approval process. Two relevant examples of technology metrics include "e-review" systems and the use of mobile applications (apps) to supplement public hearings in order to more thoroughly capture a community's sentiment.

Grimsley said the development approvals index could be comparable to the World Bank's "Ease of Doing Business" Index.

"Wouldn't it be interesting to have increased clarity about where and how development is being incentivized as a result of the influence of public sector processes?" she asked. "This could allow us as an industry to help bring parity to the approval process. For example, say you can't e-submit forms in a municipality. Something like that could influence rankings."

Yuen said NAIOP Vancouver already does something similar — a cost-of-business survey conducted in partnership with a local magazine. Municipalities with the lowest fees and quickest approvals are recognized through an awards program.

Participants *continued from page 75*

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Americas Head of Research
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Robert Hartley
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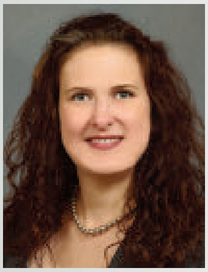

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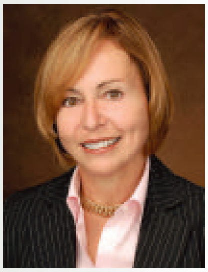

Maria Sicola
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> “Wouldn’t it be interesting to have **increased clarity about where and how development is being incentivized** as a result of the influence of public sector processes?”
>
> *— C. Kat Grimsley, George Mason University*

Yuen said municipalities in the Greater Vancouver area that have won the award frequently cite it in their business-development literature.

Some attendees pointed out that the awards could incentivize municipalities to pad their answers. To counter that, Yuen said the Vancouver NAIOP chapter uses specific protocols and research methods to verify information and address inaccuracies.

Office Space

Densification and open floor plans remain popular in office spaces, said **Jennifer LeFurgy**, NAIOP’s then-director of research. However, Harris said he is hearing anecdotally that there is some pushback against this now-longstanding trend.

“But despite that, I’ve yet to see an example of someone reverse themselves,” he said.

Andrea Cross, Americas head of office research with CBRE in San Francisco, also said she hasn’t seen examples of work spaces switching back from open plans. But she pointed out that there is a lot of interest in creating diverse work environments.

“It allows employs to have a choice on where to work,” she said. “Our office actually just moved to an open plan, and I love it. I think for the brokers it can be a little bit challenging because you’re talking about deals in an open environment, so it’s important to have enough of those private spaces where they can do their work. And then for research, it’s also good to have quiet space where we can go and nerd out over data and write reports.”

Despite the rise in work-from-home options, Harris said statistics show that demand for office space continues to grow.

“Office-using employment has grown at times at almost double the rate of the general employment growth rate factor,” said Harris. “And yet office absorption just undershoots what it should. I think companies are still very hesitant to expand and spend more money for space, but they’re hiring people. I would say historically something has to give. You can’t expect people to work in a Starbucks-like environment for so long. There’s got to be a pain point.”

The downside to the equation is that a recession could leave co-working companies like WeWork “pretty exposed,” said Harris.

“WeWork is basically a services-based hotel model,” he said. “WeWork is about flexibility. When you’re locked into a 10-year lease in a traditional office space, it’s hard for a business to plan. The flexibility you get with WeWork is extremely valuable.”

Harris said it is important for companies to have slack space in order to hire more people.

In response, Foster noted that the NAIOP Research Foundation recently published a paper, “Activating Office Building Common Spaces for Competitive Advantage,” that looked at co-working in office buildings. It showed that owners of offices like having a co-working center in their building because it serves as the flex space, so as tenants expand and contract, they can do so in that building.

Stapp wondered if what’s happening with WeWork is challenging how the commercial real estate industry deals with built space.

He noted that use of space has typically been tied to a specific place, for a specific period of time, with the space commitment sealed by a lease. He suggested that if a landlord owns 20,000 apartment units, his objective is to keep cash flow in his portfolio. The user, on the other hand, wants extreme mobility. Rather than having a lease for a defined space over a defined period of time, why not operate a portfolio that’s available to everybody? Through the use of technology, if a tenant wants to move, he or she can pick a new unit that’s available somewhere in the portfolio.

“It’s a total rethinking about how we generate revenue, how we keep people in space, how we use space, and the extreme mobility that it provides,” Stapp said.

Harris said WeWork is providing “space as a service” to businesses, a concept seconded by Stapp.

"If [a landlord] goes to a subscription mentality versus a lease mentality, and it is done within a big enough platform, [the landlord can accommodate an] incredibly mobile force that moves around," Stapp said. He noted that real estate does not do a good job of brand building, and offering amenities and services can go a long way toward doing that.

Stapp noted that Microsoft is one of the largest users of WeWork space because it gives its sales representatives extreme flexibility anywhere around the United States and the world.

"I think that's why we're seeing it is a disrupter to the traditional model, but it's not going to completely replace that need for a fixed address," he said.

Adaptive Reuse

Foster noted that adaptive reuse and renovations have really taken off in the past few years.

"I don't think I've seen as many infill projects and renovations in any other cycle," she said. "I think going forward we're going to see more of that. There's more resistance to greenfield development, and people want walkability."

Foster said the rise of adaptive reuse is partially linked to the increasing popularity of "surbs," which refers to densely populated suburban locations that look and feel like more urbanized areas.

Foster asked attendees if any of them were tracking renovations or adaptive reuse projects as a separate category from net new buildings under construction.

Hartley said Colliers tracks common-area upgrades that are generally done with tenants in place, full-blown redos in which buildings are stripped to the skeleton and completely refurbished, and adaptive reuse projects.

"I define it as a change in use of an existing asset," he said. "It's about repurposing a built space."

Hartley said tracking potential projects suitable for adaptive reuse can be difficult, but figuring out a way to do that could provide a huge benefit to the commercial real estate industry.

Stapp said a crucial aspect of adaptive reuse is to create spaces that attract talent, specifically historic buildings that have a lot of character and uniqueness. As an example, he cited Sterling Bay Capital's 2012 purchase of a multistory meat storage unit in Chicago that the company converted into office space and restaurants.

"It was full of ice," Stapp said. "They literally had to defrost the building, then see if the structure was usable."

He added that while it can be extraordinarily expensive to take an old structure and make it comply with modern building standards, the payoff can be huge.

Tariffs and Outlook

Wrapping up, Foster asked the group what in general they see on the horizon that might affect the commercial real estate industry. Tariffs, fears of inflation and rising interest rates were among the top concerns, as well as labor shortages, which several attendees said could impact the affordability of both commercial and residential properties over the long term.

On the positive side, most attendees agreed that the tax cuts signed into law at the end of 2017 appear to be stimulating the economy, and despite concerns expressed by some in the group of the possibility of a recession in 2020, there was agreement that the industry's strong fundamentals could protect it from a sharp downturn. ■

Trey Barrineau is the managing editor of Development magazine.

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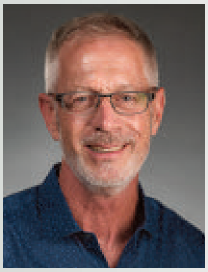

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2019 NAIOP Buyers Guide

From accountants to architects to developers, contractors, and financial sources. Whatever you need, you're likely to find it and a lot more in our annual Buyers Guide.

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Pasco Economic Development Council is the lead organization in Pasco County servicing businesses relocating and expanding in north Tampa Bay focusing on site and building selection, labor market analysis, regulatory assistance, workforce recruitment and training.

MARYLAND

City of Bowie Economic Development Office
John Henry King
jhking@cityofbowie.org
www.cityofbowie.org
15901 Excalibur Road
Bowie, MD 20716
(301) 809-3042

Bowie is one of the largest cities in Maryland. Bowie is also an excellent business location, easily reached from Washington D.C., Annapolis and Baltimore. Bowie's proximity to these major cities brings business and workforce into the area via Routes 3, 50 and 301. Bowie has more than 90 restaurants, 200 shops, and a dozen recreation opportunities. With this winning combination of location, access and amenities your business is certain to grow and succeed. The City's Economic Development Office is ready to help with your business and development location needs, whether it is current market information, introductions to key officials in the development or site location process, or just general information about business opportunities.

Frederick County Business Development & Retention
Helen Propheter
hpropheter@frederickcountymd.gov
www.discoverfrederickmd.com
12 East Church Street
Frederick, MD 21701
(301) 600-1058

The Frederick County Business Development & Retention (BDRD) Office serves as the primary contact for businesses who are interested in expanding and relocating to Frederick County. BDRD assists businesses with all facets of their projects including site selection, permitting, financial assistance and workforce issues.

NEW MEXICO

Albuquerque Economic Development, Inc.

Gary Tonjes
gary@abq.org
www.abq.org
851 University Boulevard SE,
Suite 203
Albuquerque, NM 87106
(505) 246-6202

AED's mission is to strengthen the Albuquerque metro area economy by recruiting new employers and by assisting in the retention and expansion of existing business and industry.

NEW YORK

Buffalo Urban Development Corporation (BUDC)

Peter M. Cammarata
pcammarata@buffalourbandevelopment.com
www.buffalourbandevelopment.com
95 Perry Street, Suite 404
Buffalo, NY 14203
(716) 362-8361

BUDC's mission is to support urban economic development efforts through acquisition, remediation and management of distressed properties, and to engage in real estate development activities for the purpose of attracting and/or retaining new and existing businesses to the City.

Operation Oswego County

L. Michael Treadwell
ooc@oswegocounty.org
www.oswegocounty.org
44 W. Bridge St.
Oswego, NY 13126
(315) 343-1545, (315) 343-1546

Operation Oswego County, Oswego County's designated economic development organization, provides assistance with accessing special incentive programs, financial packaging, site selection as well as specialized research and technical assistance.

PENNSYLVANIA

Westmoreland County Industrial Development Corporation

Jason Rigone
wcidc@wpa.net
www.westmorelandcountyidc.org
Fifth Floor, Suite 520
40 North Pennsylvania Avenue
Greensburg, PA 15601
(724) 830-3061

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SOUTH CAROLINA

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TEXAS

Cedar Hill Economic Development Corporation

Allison J. H. Thompson, CEcD, EDFP
allison.thompson@cedarhilltx.com
www.cedarhilledc.com
285 Uptown Blvd., Bldg 100
Cedar Hill, TX 75104
(972) 291-5132 ext.5

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Dallas Fort Worth International Airport

Carolina Roa
croa@dfwairport.com
www.dfwairport.com/landhere
P.O. Box 619428
DFW Airport, TX 75261
(972) 973-4817

With global connectivity, cost-efficient transportation, a central location, and a sophisticated infrastructure, DFW Airport is an ideal location for business. DFW Airport leases land for commercial uses such as industrial/warehouse and distribution, and office and retail development.

The Colony Economic Development Corporation

Keri Samford
edc@thecolonytx.org
www.thecolonyedc.org
6800 Main Street
The Colony, TX 75056
(972) 624-3127

The Colony is a Texas Destination for development with unique and exciting venues like Nebraska Furniture Mart anchoring the 400-acre Grandscape, Scheels (a 300,000+ square-foot sporting goods store opening in 2020) and restaurants and entertainment like Rock & Brews, Lava Cantina, Topgolf and more! Named one of the Top 20 Places to Live in the U.S. by CNN/Money Magazine. The Colony has prime space for retail, office and office flex, including mixed-use centers like The Cascades and Austin Ranch. All just 25 minutes north of Downtown Dallas and 15 minutes to DFW Airport.

VIRGINIA

Arlington Economic Development

www.ArlingtonEconomicDevelopment.com

Arlington Economic Development is dedicated to the preservation and enhancement of an economically competitive and sustainable community by providing aggressive leadership and superior services to Arlington's business, real estate development, tourism and arts and cultural communities.

Ballston Business Improvement District

www.ballstonbid.com

The Ballston Business Improvement District is 25-block neighborhood of commercial and residential properties. The BID specializes in creating a sense of place and community through public/private partnerships dedicated to the maintenance, development and promotion of the Ballston, Arlington neighborhood.

Crystal City Business Improvement District

www.crystalcity.org

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Loudoun County, Virginia Economic Development
Buddy Rizer, Executive Director
DED@Loudoun.gov
www.LoudounPossible.com
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WISCONSIN

Wisconsin Economic Development Corporation
Reed Hall
dobusiness@inwisconsin.com
www.wedc.org
201 W. Washington Avenue
Madison, WI 53703
(855) INWIBIZ

The Wisconsin Economic Development Corporation (WEDC) leads economic development efforts for the state and nurtures business growth and advancement by fostering Wisconsin's positive business climate. WEDC provides tools and resources for businesses to start, expand or relocate their operations In Wisconsin. Visit wedc.org, call 855-INWIBIZ or email dobusiness@inwisconsin.com.

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Huitt-Zollars, Inc.
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NAIOP's 2018 Developing Leaders Award Recipients Talk Tech Tools and Trends

CRE disruptors to watch include smart contracts, robotics, big data, autonomous vehicles, 3-D imaging and more.

By Marie Ruff

DURING THE NEXT decade, emerging technologies will dramatically reshape commercial real estate as we know it. Big data analytics, blockchain, autonomous vehicles and other innovations could become integral components of everyday real estate projects and transactions, according to industry experts.

NAIOP invited the seven recipients of its 2018 Developing Leaders Award to offer their outlooks on which emerging technologies they anticipate will have the greatest impact on commercial real estate. The Developing Leaders Award winners were honored in October at NAIOP's CRE.Converge 2018 in Washington, D.C., in recognition of their outstanding professional accomplishments, strong leadership and community involvement.

Kate Nolan Bryden
Vice President of Development, MRP Industrial LLC
NAIOP Maryland

"Big data and autonomous vehicles are poised to make the greatest changes to commercial real estate over the next 10 years. It seems possible that as the autonomous vehicle technology is tested and refined for both personal and commercial vehicles, parking could be treated as its own asset class or as a commodity rather than a per-building requirement. I've read that several large retailers already use big data to determine and market viable site locations — utilizing that for industrial development could help justify new or emerging areas that a traditional search might overlook, especially given the typical footprint requirements."

2018 NAIOP Chairman Jim Neyer, left, with NAIOP's 2018 Developing Leader Award recipients Christopher Drzyzga, Matt Milich, Cassie Catania-Hsu, Colleen Wevodau, Kate Nolan Bryden, Jessica Kimble and Matthew Mitchell at CRE.Converge in Washington, D.C., on October 16, 2018. At right is NAIOP President and CEO Thomas J. Bisacquino.

Cassie Catania-Hsu
Managing Director/Broker, Sun Commercial Real Estate
NAIOP Southern Nevada

"Two areas come to mind: deal process management and marketing. Any technology that enables transactions such as leasing or sales to run from anywhere in the world will help advance deals and open doors to more prospects. Additionally, new technologies in marketing will broaden the potential target market profile. Prospects will be able to view properties online and from mobile devices at any time that is convenient for them, such as the comfort of their own home, car, etc. Drone videos, 3-D imaging, virtual reality, 360-degree images and multiple listing platforms will continue to drive how properties are marketed."

Christopher Drzyzga
Vice President, Voit Real Estate Services
NAIOP SoCal

"Blockchain is going to change our entire industry. For example, 'smart contracts' will automatically verify, execute and enforce a contract while removing common risks such as unauthorized changes, fraud, server failure or non-compliance of the terms in the contract. Blockchain will impact everything from tracking and maintaining market data, the transaction process itself (LOIs, underwriting, contracts, etc.), how building systems communicate with one another and even how tenants pay rent."

Jessica Kimble
Attorney, Member, York Kimble Law, PLLC
NAIOP North Carolina Piedmont Triad

"Blockchain is most likely to have the greatest impact on the CRE industry as a whole, based on its potential to change so many different areas of commercial real estate. Emerging mapping technology also has the potential to transform several areas of the industry, including the ways in which brokers identify and market CRE, and the analysis process for investors in finding profitable deals."

Matt Milich
Director, investments, Brasa Capital Management
NAIOP SoCal

"It is hard to overestimate what a difference in our lifestyle and built environment autonomous vehicle technology will make. When Level 4 or 5 autonomous driving becomes available, I'll be able to live in North Malibu, work in Los Angeles and sleep through the drive to Salt Lake City for a family vacation. Every sector of our business will be impacted and myriad challenges will come along with the new conveniences the technology will provide."

Matthew Mitchell
Senior Vice President of Industrial, Westfield Company, Inc.
NAIOP Colorado

"Without a doubt, the largest game changer on the horizon for the distribution of consumer goods is going to be driverless trucks. When you remove the one- to two-day drive time considerations and maximum time a single driver can be on the road in a 24-hour span, distributors are going to have to create an entirely different playbook on both their need for space and where it is located."

Colleen Wevodau
Senior Manager, Baker Tilly Virchow Krause, LLP
NAIOP Northern Virginia

"Robots as they start to become highly utilized. I know in my industry we are already utilizing robotic process automation to help streamline tasks, which ultimately reduces cost and staffing time. I believe the technology will first be implemented in daily office activities and eventually will make it onto the actual development site." ■

Marie Ruff is the communications senior manager with NAIOP.

Is Your Building Energy Star Certified? Better Check Again

Changes to Portfolio Manager lower scores for thousands of commercial properties.

By Alex Ford

IMAGINE YOU wake up one morning, get ready for work and head out the door. As you're about to hop into your car, you get an email that says your five-star crash-rated vehicle is now rated three stars based on a recent survey of automobile manufacturers.

Nothing had changed since the survey was conducted. The brakes, air bags and seat belts are the same ones that helped the car earn its top safety rating when you bought it just a few years ago. Yet your vehicle is now less desirable to buyers, and its resale value plunges as a result.

Property owners across the country are facing a similar scenario after the Environmental Protection Agency (EPA) updated its Energy Star scoring models for Portfolio Manager.

What is Portfolio Manager?

Energy Star is a program administered by the EPA that promotes energy efficiency in buildings and across a range of consumer products. Two decades ago, the agency created Portfolio Manager, an online tool that allows property professionals to measure and track energy use and water consumption, as well as greenhouse gas emissions, in buildings.

A building whose energy usage is benchmarked using Portfolio Manager is assigned an Energy Star score on a scale of 1-100. The score compares the building's performance with all similar property types (office, hotel, etc.) regardless of age in the United States; a score of 80, for example, indicates that a building performs better than 80 percent of its peers. A score of 75 or higher designates a "top performer," eligible for Energy Star certification.

Rather than trying to collect consumption data from every single building in the country, EPA relies on the Commercial Buildings Energy Consumption Survey (CBECS), which is conducted roughly every four years by the U.S. Energy Information Administration (EIA). Much like a poll, the survey takes a small representative sample, which the EPA uses to establish a baseline of energy usage in buildings nationwide. The EPA then compares the real-time Portfolio Manager data to this baseline to determine how buildings participating in the Energy Star program stack up.

While EPA says it strives to regularly update its baseline data set with the latest figures, it hasn't always been possible. In 2007, there were so many design flaws and other errors in the CBECS survey that EIA decided not to publish the results that year. Because of that, the EPA reverted to the 2003 CBECS numbers for its calculations.

The latest data comes from the 2012 CBECS, which was used as the baseline for the updated 2018 scores. In practical terms, this means that the EPA's baseline sample for Portfolio Manager is using data on building energy consumption that hasn't been updated in several years.

Lower Scores All Around

When the updates went into effect in August 2018, average scores for most building types went down. This is reasonable. Better technology, stricter building codes, and evolving tenant and owner preferences are making buildings more efficient every year. And because a property's Energy Star score is a comparison with the national building stock, it stands to reason that existing scores would go down in response to the new data.

That said, the extent to which existing scores plummeted was dramatic. Overnight, a building that performed better than 85 percent of its peers was suddenly at risk of losing its Energy Star certification, even if its actual energy usage remained unchanged. Office properties were especially affected with a decrease of 12 points on average.

There are more than 34,000 Energy Star-certified properties across the country. For NAIOP members who own, operate or manage these buildings, the score changes could have significant consequences.

Energy Star certification is correlated with higher property values, as these buildings are more attractive to tenants as well as investors. They tend to command higher rental rates, are more marketable and have lower operating costs. By contrast, a building that is downgraded and loses its certification could experience a loss of interest among potential tenants and a corresponding decrease in its value, particularly in markets that place a premium on energy efficiency.

Certification is also required by the Government Services Administration (GSA), which leases around 200 million square feet of private building space. Properties that lose certification could lose government tenants when it comes time to renew leases. That could leave taxpayers on the hook for unnecessary — and costly — relocation expenses.

While the federal government says Portfolio Manager is a voluntary pro-

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gram, the scores have been incorporated into nearly 40 state and local ordinances. California, for example, passed a law in 2015 that seeks a 20-percent reduction in energy usage in buildings by 2030, and Portfolio Manager is mandated to benchmark and track progress. St. Louis, Chicago, Orlando and other cities have disclosure rules that require property owners to publicly reveal a building's Portfolio Manager score. Furthermore, some third-party certification programs such as LEED require a baseline score for eligibility. In short, the Energy Star program is woven into the fabric of regulations that affect the real estate industry.

EPA to Review Program

To its credit, EPA understands the significance of these changes. It announced in September that it is reviewing its models. Pending an outcome, the agency has temporarily suspended all new Energy Star building certifications. According to the EPA's website, the review period will help "ensure that the models are working as intended to deliver energy performance metrics that empower you to make the business case for owning and operating energy-efficient buildings," and the agency says it's open to adjusting the scoring models.

It's unclear how long the review process will take or what changes will come out of it. As the process unfolds, NAIOP is soliciting feedback from members and working with allies in the real estate community to encourage an outcome that rewards the increased upfront investment required to develop an energy-efficient built environment. ■

Alex Ford is director of federal affairs with NAIOP.

How Energy Star Scores are Calculated

According to the EPA, this is how the Energy Star Portfolio Manager score for an individual property is determined:

- A building's energy and water consumption data is entered into Portfolio Manager
- The actual source energy use intensity (a measure of the total amount of raw fuel that is required to operate a building, including delivery, transmission and production losses) is computed
- The predicted source energy use intensity is computed
- An efficiency ratio comparing the actual use with the predicted use is computed
- A score is assigned based on how the ratio compares with the national distribution ■

NAIOP represents commercial real estate developers, owners and investors of office, industrial, retail and mixed-use properties. It provides strong advocacy, education and business opportunities, and connects its members through a powerful North American network. **For more information, visit naiop.org.**

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Trey Barrineau, Managing Editor, October 8, 2018

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Looking Ahead for NAIOP and The Industry

IT'S BEEN AN exhilarating year for our industry and association. We've seen the industry continue to thrive, even as we look ahead with caution and wonder when our good luck will end. I have to admit I'm relieved that the industry has remained strong during my term as chairman. As I near the end of my tenure, I'd like to take stock and share my observations about the past year.

Jim Neyer

In this column last spring, I shared my goals as chairman. As I stated then, I view my role as a conduit of information between the chapters and NAIOP Corporate, particularly as we embarked on a strategic plan addressing the topics of talent development, advocacy and vetted knowledge for the CRE industry. I challenged the staff to help articulate the value of investment in NAIOP membership by demonstrating the tangible results of our legislative efforts and the practical knowledge offered by our research and educational materials. Additionally, I supported NAIOP's efforts to promote diversity in the industry and the association.

I'm pleased to report that we've made tremendous progress this year on these goals and others included in the strategic plan. We broadened our educational offerings, with innovative events on the "last mile" and shared workplaces; we published a practical report on big data in the office sector; and we cohosted an informative diversity roundtable with leaders from some of the CRE industry's top companies.

Of course, government affairs remains a distinguishing strength for NAIOP. Our legislative team continues to advocate for all of our members on Capitol Hill, as well as support the chapters at the state and provincial levels. NAIOP achieved a win this year with changes to existing banking regulations that unfairly targeted lending to commercial real estate (the HVCRE rules). We will likely continue to fight in the lame duck session of Congress after the election to get the technical corrections to last year's tax reform bill regarding the depreciation for leasehold improvements, now called qualified improvement property (QIP).

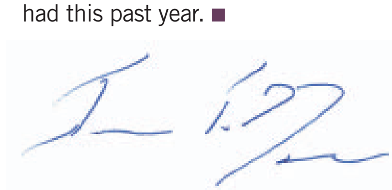
The dedication of NAIOP's government affairs team ensures that the association's agenda is front and center. That is beneficial to us all, particularly as we continue to advocate for bipartisan support for a greatly needed plan to address the nation's faltering transportation system and other infrastructure.

By the end of the year, I will have made 30 trips on behalf of NAIOP to 20 chapters, various NAIOP conferences and government advocacy events. Getting to see how each market operates has been a remarkable experience unlike

It's been one of my greatest professional honors to serve as chairman, and I'd like to offer my thanks to the executive committee, board of directors and NAIOP staff for their support along the way.

any I've had before. What will remain with me most are the countless one-on-one conversations I've shared with members during these visits. They've helped me better relate to the nearly 20,000 professionals who are active in this association. We are better for your participation, and I'm grateful to have gotten to meet so many new colleagues across our incredible chapter network.

It's been one of my greatest professional honors to serve as chairman, and I'd like to offer my thanks to the executive committee, board of directors and NAIOP staff for their support along the way. We're fortunate to be members of a forward-looking, resilient association. I'm confident that NAIOP will continue to grow and flourish under the leadership of 2019 Chairman **Greg Fuller**, and I wish for him all of the success and fun that I had this past year. ■



By **Jim Neyer,** executive vice president, real estate development, Al. Neyer, and 2018 NAIOP Chairman