Commercial Real Estate Development

WINTER 2022/2023

Development®

IDEAS | ISSUES | TRENDS

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California and Utah
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Family Office

RSF PORTFOLIO
Multicity, MA
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INTERCHANGE
North Las Vegas, NV
683,431 SF
Sold on behalf of:
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NORFLEET KANSAS CITY
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702,000 SF
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AHF PORTFOLIO SALE LEASEBACK
Multistate
1,021,541 SF
Sold on behalf of:
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50 & 100 RANDOLPH DRIVE
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Sold on behalf of:
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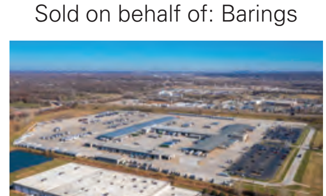
246,640 SF
Sold on behalf of:
Capstone

BELLINGHAM DISTRIBUTION CENTER
Bellingham, MA
345,000 SF
Sold on behalf of: Barings

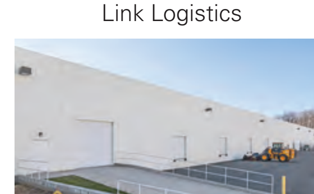
BELTWAY+ INDUSTRIAL PORTFOLIO
Baltimore-Washington Corridor
484,959 SF
Sold on behalf of:
Link Logistics

178 BAUER
Oakland, NJ
191,240 SF
Sold on behalf of:
A Private Seller

CGI PORTFOLIO SALE LEASEBACK
Multistate
555,795 SF
Sold on behalf of:
CGI Manufacturing



9410 WOODEND RD
Edwardsville, KS
274, 970 SF
Sold on behalf of:
TKC KCY, LLC



RESERVE BUSINESS CENTER
Gaithersburg, MD
200,080 SF
Sold on behalf of:
Kinsley Properties

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Development® Winter 2022/2023

Two Union Square in Seattle, a 56-story office tower that opened in 1989, received a major upgrade in 2019.

COLUMNS

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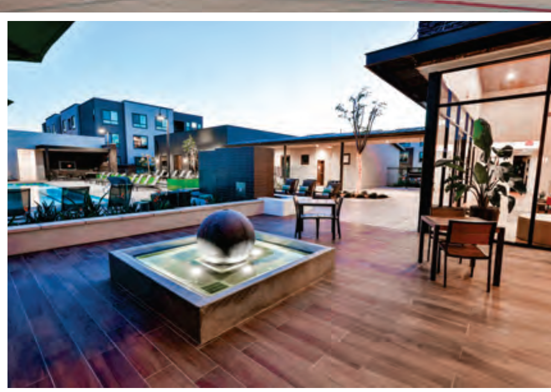

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A Note From the Editor

What's Old is New Again

As 2022 ends and the economy remains uncertain, we know it is more important than ever to think creatively. We are seeing more new ways of looking at old ideas. The office is not dead; it will be undergoing transformation, whether it be through the addition of top-notch amenities or the redistribution of workspace. In this issue, several articles explore the challenges the office sector is facing, including how these buildings can "age gracefully" and be repositioned to serve current needs.


Jennifer LeFurgy

As e-commerce continues to evolve, last-mile facilities could have significant impacts on transportation networks in cities. Meanwhile, in Lower Manhattan, the old Fulton Fish Market building has been creatively reimagined as a glistening dining and market space.

Happy Holidays and Wishing You the Best in the New Year,
Jennifer LeFurgy, Ph.D.
Editor-in-Chief

Future NAIOP Events

- **Chapter Leadership and Legislative Retreat 2023**, January 30-February 1, 2023, Washington, D.C.
- **I.CON West 2023**, March 8-9, 2023, Long Beach, California
- **National Forums Symposium**, May 17-19, 2023, Boston
- **I.CON East 2023**, June 7-8, 2023, Jersey City, New Jersey

For the most current information on upcoming NAIOP events, both virtual and in-person, visit naiop.org/Events-and-Sponsorship

Most Popular From Fall 2022

1. **"Granite Properties: Creating Spaces Where People Thrive"** (naiop.org/22spaces), page 62
2. **"From Salt Storage Facility to Concert Venue"** (naiop.org/22salt), page 72
3. **"The Activity-Focused Workplace: A Fresh Way to Work"** (naiop.org/22office), page 80
4. **"Key Elements for Creating a Technologically Equipped Hybrid Office"** (naiop.org/22hybridoffice), page 38
5. **"C-PACE Financing Finds Solid Footing in the Capital Stack"** (naiop.org/22cpace), page 18

In Brief

Notable facts and figures on the state of the commercial real estate industry, culled from media reports and other sources.

INDUSTRY OUTLOOK

48% **Percentage of commercial real estate chief financial officers (CFOs) who said they expect revenue to decline in 2023** because of an economic downturn and actions related to climate regulations, according to the Deloitte Center for Financial Services' 2023 Commercial Real Estate Outlook, a global survey of 450 CFOs of major CRE companies.

77% **Percentage of commercial real estate industry survey respondents who said that environmental, social and governance (ESG) efforts are affecting investor pools and real estate projects.** The report was compiled by consulting firm Wipfli LLP in its "Real Estate Industry Outlook 2022 Research Report."

OFFICE

3 **The number of days that Apple employees must report to their offices.** The policy began in September. According to CNBC, "Apple employees will be asked to go into their offices on Tuesday and Thursday. Individual teams will pick an additional third day for in-person work."

90% **Percentage of companies saying they will require employees to return to the office at least part of the week in 2023**, according to a September survey from Resume Builder. Around 20% of survey respondents said they would fire workers who do not want to come back.

23% **Percentage of office assets held by private real estate funds**, down from 34% three years ago, according to an index from the National Council of Real Estate Investment Fiduciaries.

40% **Percentage drop in leased office space in Manhattan** from September 2022 to October 2022, according to Colliers research. It's the lowest monthly total since May 2021, but is not necessarily a cause for concern, according to Colliers' **Franklin Wallach**. "Leasing activity can absolutely change by a large degree in any given month, and one or two large deals always have the potential to move the needle," he told Commercial Observer in November. "It's difficult to draw any sort of long-term conclusions, [but] you can certainly point to the lack of those large deals for the numbers seen this month."

LIFE SCIENCES

$564 **The average sale price per square foot for lab space** nationwide in the first half of 2022. It's a record high, according to research from Newmark.

LOGISTICS

842,219 **The number of TEUs (20-foot equivalent units) moved by the Port of New York and New Jersey in September 2022**, the second straight month that the East Coast port ranked No. 1 in the nation in volume of material moved, beating the Port of Long Beach (741,824 TEUs) and the Port of Los Angeles (709,873 TEUs).

$45 **The amount that Port Houston began charging** on December 1 for each day that a shipping container isn't moved out of the terminal after eight days. The effort is an attempt to reduce dwell times at the port, which have increased in the face of major increases in shipping volumes.

PROPTECH

$13.8 Billion **The amount of money invested globally in proptech by venture capitalists in 2021**, according to research from Statista. In 2020, the figure was just $6.6 billion ■

Economic Contraction May Not Ease Construction's Labor Problems

A shortage of workers is forcing builders to pay higher wages.

By Ken Simonson

While pundits may disagree whether the economy has been, or will soon be, in recession, there is little doubt that homebuilding is headed for a dive and that many developer-financed projects are vulnerable to postponement or cancellation. That might suggest other contractors should have an easier time finding workers. But the evidence so far doesn't support such a rosy scenario.

The Bureau of Labor Statistics (BLS) reports each month on employment in five categories of construction businesses: residential and nonresidential building and specialty trade contractors, along with heavy and civil engineering construction firms. While there are different skill mixes among all the firm types, the essential difference is between the two residential segments and the three nonresidential groups.

As the chart below shows, job losses in the first two months of the pandemic — March and April 2020 — were similarly catastrophic: 14% to 16% declines in both groups of construction firms and in the overall nonfarm payroll sector. Once stop-work and stay-at-home directives eased, construction employment rebounded more strongly than other industries in May 2020.

From then on, single- and multifamily builders and remodelers added employees at a steady clip, even after other housing indicators began to slip in the summer of 2022. By last September, residential construction firms had topped the February 2022 employment level by 200,000 or 6.7%, one of the largest gains of any sector.

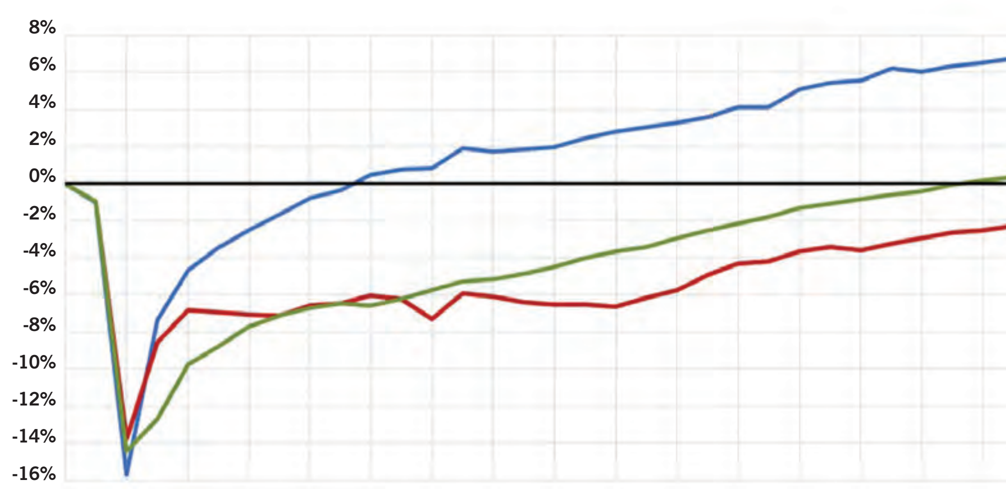
In contrast, nonresidential construction employment stalled for 14 months before beginning to grow again in August 2021. Since then, the sector has added jobs at roughly the same rate as the overall economy, but nonresidential employment in September 2022 remained 105,000 or 2.3% below its February 2020 level.

That may seem to imply there are plenty of former construction workers who might be available to hire back

continued on page 10

Total Nonfarm and Construction Employment, February 2020-August 2022

cumulative change (seasonally adjusted)



Change Since February 2020

	Number	Percent
Residential Construction	200,000	6.7%
Total Nonfarm	514,000	0.3%
Nonresidential Construction	-105,000	-2.3%

Source: Bureau of Labor Statistics, current employment statistics, www.bls.gov/ces/

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While the overall unemployment rate is also at a near-record low and many industries report difficulty filling positions, construction faces additional challenges. Because many jobs are physically demanding, require working in all types of weather, with fixed hours, and sometimes remote locations, the industry has always paid a premium to attract hourly craft workers.

continued from page 8

now that demand is growing again. But the unemployment rate tells a different story: in September, the rate for individuals with construction experience who hadn't worked for pay in the previous four weeks and were actively looking for employment was just 3.4%, the second-lowest rate in the 23-year history of the series.

While the overall unemployment rate is also at a near-record low and many industries report difficulty filling positions, construction faces additional challenges. Because many jobs are physically demanding, require working in all types of weather, with fixed hours, and sometimes remote locations, the industry has always paid a premium to attract hourly craft workers. These workers, along with some office workers, are what BLS calls production and nonsupervisory employees.

From 2000 through 2019, hourly earnings for such workers in construction consistently averaged 20% to 23% more than across the entire private sector. But once the pandemic struck, formerly low-wage industries such as fast food, warehousing and delivery services bumped their starting pay from near the federal minimum of $7.25 per hour to as much as $19 per hour. The construction "premium" shrank to 16% or 17%.

In addition, many more employers were able to offer remote, hybrid or flexible locations and hours, features that onsite construction jobs can't match and that became more attractive for workers with medical conditions, childcare or other family responsibilities. To attract more workers, it appears likely that construction firms will have to boost average pay even more than the 6.8% increase that occurred between September 2021 and September 2022.

Property owners and developers thus should expect that costs for construction and renovation or remodeling projects will soon reflect much higher labor costs than they have experienced over the past 15 years of modest wage increases. Once steeper wage gains become the norm, a return to more modest increases may take a long time. ■

Ken Simonson is the chief economist with the Associated General Contractors of America. He can be reached at ken.simonson@agc.org.

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What the Widening Talent Gap Means for Today's Business Leaders

New approaches are required to attract and retain outstanding workers.

By Bret Swango, Colliers

The competition for top talent is not letting up in the U.S. Demographic growth trends, generational shifts, lack of relevant training and cultural views on work continue to widen the talent gap. In August, the U.S. Bureau of Labor Statistics (BLS) revealed there were 10.7 million job openings and a record margin of five million between the number of available jobs and unemployed workers. This gap remains at a near multi-decade peak, and there are still nearly two job openings for every unemployed person.

Even amid historic inflation rates and market instability, results from Deloitte's June 2022 survey of CEOs show that this labor shortage remains a top concern among business leaders. Likewise, McKinsey found that nine out of 10 executives and managers say their organizations either face skill gaps already or expect gaps to develop within the next five years. The widening talent gap provides opportunities to target emerging and untapped labor pools to make more informed real estate and location strategy decisions.

By targeting emerging and untapped labor pools, the talent gap could help developers make more informed real estate and location strategy decisions.

Key Drivers of the Talent Gap

Several factors are spurring the growing divide between open positions and those who can fill them. Some of these changes have long been forecasted, such as the large generational shifts, but some sprang up due to the workplace transformations that took place with the onset of COVID-19.

Even amid historic inflation rates and market instability, results from Deloitte's June 2022 survey of CEOs show that this labor shortage remains a top concern among business leaders. Likewise, McKinsey found that nine out of 10 executives and managers say their organizations either face skill gaps already or expect gaps to develop within the next five years.

According to a 2012 report from the Social Security Administration, 10,000 baby boomers reach retirement age every day, with a much smaller portion of Gen Xers in the population to replace them. The U.S. birth rate has consistently fallen in recent years, and there were 1.53 million more people born between the years 1952-1961 than 1992-2001, according to a 24/7 Wall St. review of data from the Centers for Disease Control and Prevention's National Vital Statistics System.

In addition to shifting demographics, there is an overall decline in labor force participation. In 2021, the U.S. Department of Labor reported that

Another contributing factor to the talent gap is the rate of digital transformation outpacing the growth in technical talent, and thus a higher demand for those who are experts in all things digital from marketing, cloud computing, and data security and analytics.

more than 47 million Americans left their jobs as the marketplace experienced "The Great Resignation."

Data from the U.S. Census Bureau shows business license applications are up about 50% from pre-pandemic levels as labor pool participants have elected to start their own businesses. Now, organizations are competing with their former top talent, who are leaving to start their own ventures amid the high level of disruption and opportunity in newer markets such as social media, e-commerce, freelance platforms and more.

Another factor contributing to the talent gap is the rate of digital transformation outpacing the growth in technical talent. This creates higher demand for experts in all things digital, including marketing, cloud computing, and data security and analytics. According to Deloitte, 74% of CEOs reported that their companies

New & Noteworthy

7.1 million sq. ft.

Rooker has begun construction on a new 797-acre **Class-A industrial development** near **Savannah, Georgia**. **The Seaport 16 Trade Center** can accommodate up to 7.1 million square feet of industrial space in 10 buildings. In 2023, the developer expects to complete construction on Building 1, an 868,160-square-foot speculative building that is expandable to 1.6 million square feet. Seaport 16 Trade Center is located 25 miles from the Port of Savannah.

1 million sq. ft.

Stream will develop the **Portside Logistics Center** in **Baytown, Texas**. The **industrial property** will provide strategic access to Port Houston's two container terminals. The facility will offer multiple configurations with an expandable 760,000-square-foot cross-dock building and a flexible 260,000-square-foot front-load building with a 40-foot clear height and 36-foot clear height, respectively. Both buildings will offer spec office space, LED warehouse lights, a white-boxed interior warehouse, and fully fenced and secured truck courts.

900,000 sq. ft.

Meta, formerly the Facebook company, is investing $800 million to create a **hyperscale data center** in **Temple, Texas**. The new facility, which will total approximately 900,000 square feet when completed, will support approximately 100 operational jobs in the community. Meta's data centers use 32% less energy, have achieved net zero carbon emissions, are LEED Gold level certified and are 80% more water-efficient on average than the industry standard.

Regionally, the South and Midwest have the highest job-openings percentages and have seen the greatest growth in job openings. Affordable, second-tier markets such as Jacksonville, Tampa, Cincinnati and Charlotte were all major population gainers in post-COVID migration trends and were big contributors to job growth in those regions.

are undergoing or preparing for a large-scale digital transformation as demand grows for white-collar jobs in professional and business services, finance, and information.

Labor Market Trends

Examining key labor market trends reveals a lot of information about current talent gaps. According to the BLS, white-collar occupations have pushed job openings higher over the prior year, with 2.8 million openings due to digital transformations. While there is still a significant shortage of blue-collar workers, labor constraints are shifting up the value chain. Companies are turning to technological solutions, such as artificial intelligence and automation, to build immunity to the manpower deficiencies felt in the months following the onset of the pandemic. The information industry saw a 70% increase in job openings over the prior year, and financial services saw a spike of 52%.

Blue-collar occupations have seen the largest drop in the job-openings rate. This is largely driven by a decline in manufacturing and trade, transport, and utilities positions from historic levels in 2021, though the market remains tight.

Despite these differences between blue- and white-collar jobs, every industry has a job-openings rate above 4%, and all but three have seen an increase in the job-openings percentage over the past year. Education and health services, business and professional services and trade, transportation and utilities account for more than half of all openings.

Regionally, the South and Midwest have the highest job-openings percentages and have seen the greatest growth in job openings. Affordable, second-tier markets such as Jacksonville, Tampa, Cincinnati and Charlotte were all major population gainers in post-COVID migration trends and were big contributors to job growth in those regions.

Adopting New Talent Growth Strategies

Business leaders recognize that finding and recruiting top talent in these unprecedented market conditions requires new approaches to successfully mitigate shortages and bridge the workforce gap.

Flexibility continues to be critical in the post-COVID landscape, and more organizations are striving to provide additional options in work times and locations for employees. Hybrid or flexible work schedules give employees enhanced lifestyle benefits, such as more time in the day to maintain the home, complete yard work or cook. Removing some of life's frictions outside of the office can boost satisfaction in the workplace.

Increasing employee engagement through training and skill building, as well as cultivating diversity in the workforce, are new focus areas for many companies looking to fill skill gaps. Employer brand activations for enhanced training and engagement could include providing onsite training, starting/expanding training programs to help improve the skills of new hires, hiring external workforce (temps/independent contractors) to help with the workload, increasing compensation, and improving retention efforts for current employees. A survey from Fortune reported that 70% of employees who receive digital skills training say they are more engaged at work, and 60% say they are more likely to stay in their jobs.

According to Salesforce, three out of four workers do not have the digital skills needed by businesses, yet only 28% are participating in training programs today. This leaves a lot of room for companies to grow their training implementations and requirements with employees.

Bolstering the Talent Pipeline: The Three C's

While the past two and a half years have been rife with unpredictability and volatility, one certainty is that the talent gap is not going to swing back anytime soon. In this time of tightening labor availability, cultivating a robust talent pipeline is a key pillar of future operating success.

One way to bolster future talent is by applying the principle of the "Three C's," which is a feedback loop between companies, communities and colleges. The symbiotic relationship of these institutions and the integration between educators, students, communities and companies can transform an area's job market.

The Three C's is a data-driven approach used by colleges and communities to understand in-demand skills and fill the gap between existing skill supply and demand. Life sciences and technology, probably the two most human-capital-intensive industries on the planet, illustrate the Three C's in action. For example, Boston's thriving life sciences sector is the direct result of the research and development happening in nearby world-renowned institutions, such as Harvard and MIT. On the West Coast, tech's synergetic connectivity between educators, entrepreneurs and employers in Silicon Valley and nearby Stanford serve as a model for the power of this ecosystem.

The communities, colleges and companies that can adopt and adapt these critical partnerships fastest will thrive in this hyper-dynamic environment. Areas with advanced workforce development programs, such as Texas, Arizona and Ohio, are also reaping these benefits.

With the potential of a recessionary period looming on the horizon, those who not only try to mitigate this widening talent gap but also proactively look to close it will build a level of resilience that will leave them well-positioned to weather any storms. ■

Bret Swango is senior vice president, workforce analytics and location strategy for Colliers. Additional contributions from Colliers staffers **Chris Zlocki**, head of client experience, occupier services and **Kellen Staats**, client experience analyst, occupier services.

New & Noteworthy

757,000 sq. ft.

Trammell Crow Company recently unveiled plans to develop **The Labs at Belward**, a **life science campus** in the **Shady Grove area of Montgomery County, Maryland**. The facility, located at the Belward Campus of The Johns Hopkins University, will initially include 757,000 square feet of lab, research and discovery space across three buildings. The project has the potential to grow to approximately 1.6 million square feet across seven buildings.

640,000 sq. ft.

Atlanta Property Group is transforming **Palisades**, a 640,000-square-foot, four-building **office project** in **Atlanta's Central Perimeter submarket**, into a development that will feature a 1-megawatt solar plant that will be the largest solar plant in a multitenant office property in the Southeast. The plant plus numerous other sustainable investments will make Palisades' carbon footprint approximately 40% lower than typical office properties in Atlanta.

302,300 sq. ft.

The Opus Group is developing **River Road Logistics**, a 302,300-square-foot **speculative industrial building** on a nearly 40-acre site in **Council Bluffs, Iowa**. The development is located near the interchanges of Interstate 29 and Interstate 80. The building will feature 34 dock doors expandable to 75, two drive-in doors expandable to four, 50 dedicated trailer parking stalls, 225 vehicle parking stalls and 32-foot clear heights.

An Expanding Role for Public Art

Creative expression can build a positive connection to a project for tenants and end users.

By Ron Heckmann

After a long period dominated by COVID-19's social distancing, which led to a renewed appreciation of the outdoors, commercial real estate owners and developers, and the cities in which they operate, are looking at public art in new ways. The longtime strategy of maximizing the art spend to achieve project goals is adding new layers: Strong community engagement and storytelling that better connects the commercial real estate to users, shoppers and visitors, and a differentiating amenity for branding and attracting knowledge workers in post-pandemic return-to-office efforts.

Project sponsors have already been incorporating public art into their marketing efforts to fill up office and mixed-use projects. For example, Mack-Cali REIT promoted "Ziggy," a distinctive public art display by **Hou de Sousa**, as one of many attractions in re-starting its 4 million-square-foot Harborside project in New Jersey.

"The repositioning of Harborside aligns well with our tenants' return to work," said **Edward Guiltinan**, Mack-Cali's senior vice president of leasing, in a release. "In addition to providing first-class office space, we are fortunate to be able to offer wide-ranging amenities and outdoor space for our tenants to enjoy."

Gordon Huether Studio

"Glass Forest" is an installation by public art designer Gordon Huether at TIAA-CREF headquarters in Charlotte, North Carolina.

Site-specific art incorporated into the architecture and public spaces creates opportunities for community dialogue, shared cultural experiences and civic engagement. Whether driven by percent-for-art requirements, local public dollars or a developer's own commitment to the arts, public art can accomplish multiple goals and enhance values with proper planning and design.

Site-specific art incorporated into the architecture and public spaces creates opportunities for community dialogue, shared cultural experiences and civic engagement. Whether driven by percent-for-art requirements, local public dollars or a developer's own commitment to the arts, public art can accomplish multiple goals and enhance values with proper planning and design.

Community Connection

In the crucial step of community outreach and constituent research for public art, developers and designers can engage diverse interests and groups so that the development creates artwork that appeals to a broad local audience. And a diverse, inclusive approach to outreach can support pre-development goals such as entitlements or secondary redevelopment projects.

"One of the most rewarding ways to add meaning to outdoor spaces is by incorporating art features," said **Casey Case**, president of Gates + Associates, a landscape architecture

In the crucial step of community outreach and constituent research for public art, developers and designers can engage diverse interests and groups so that the development creates artwork that appeals to a broad local audience. And a diverse, inclusive approach to outreach can support pre-development goals such as entitlements or secondary redevelopment projects.

and urban planning firm. "Developers and tenants in adjacent commercial real estate projects also benefit from public art that is educational about the property and enhances the dwell time of shoppers and visitors."

Gates worked with artist **Gordon Huether** on his design of "River of Light and Mountain Range" at John Muir Medical Center in Walnut Creek, California. It incorporates the hospital's namesake, who appreciated the state's natural beauty, and echoes nature's role in health and wellness. At the same time, the football-field-long installation frames the entrance to the hospital and supports wayfinding.

Art for Storytelling and Social Engagement

Public art can also tell a deeper story about a project or community that informs as it also entertains and engages

New & Noteworthy

157,000 sq. ft.

VanTrust Real Estate recently broke ground on Phase I of the 150-acre **Peoria Logistics Park**, which will consist of up to eight buildings. The project is the largest **Class A industrial park** ever developed in the **Peoria, Arizona, submarket**. The first phase features a 157,000-square-foot distribution center for a Fortune 500 company, which is expected to open in early 2023.

90,000 sq. ft.

Real estate investment and development firm **BH3 Management** has begun work on **Design 38**, a new nine-story, 90,000-square-foot **retail, showroom and office development** in **Miami**. Design 38 aims to meet the demand of users seeking retail, showroom or office space but who don't necessarily need ground-floor locations and would like to avoid the higher rents associated with them. Additionally, BH3 will accept cryptocurrency as an option for lease payments.

58,000 sq. ft.

The PAE Living Building has opened its doors in **Portland, Oregon**. Designed by **ZGF Architects**, the five-story, 58,000-square-foot **mixed-use building** is the first developer-driven and largest commercial urban Living Building in the world. Created in 2006, the Living Building Challenge (LBC) is the most stringent green building certification process that exists today. Project teams must meet seven key performance areas, known as Petals, that address every aspect of design, construction and operations.

How to Make Art Stand Out

According to public art designer Gordon Huether, who has completed hundreds of installations for developers, cities and institutions, the best results occur when he's brought into the early stages of a real estate project.

"In my work, there's no greater joy than creating an installation that meets business objectives and also later seeing how it grabs people who pause to take a look, or think and discuss what it says to them," he said. "Site-specific art has such strong drawing power, and it can be welcoming and engaging for people returning to the workplace or coming back to their favorite shopping or dining destinations."

Among Huether's recent commercial real estate assignments are "Silver Lantern," a signature branding installation evoking the spark of innovation in Silicon Valley for Jay Paul Company's newest office park; "Infinity," a 60-foot curved Corten steel identity piece for the new Stanly Ranch Auberge Resort near San Francisco; and "Glass Forest" at TIAA-CREF headquarters in Charlotte, North Carolina.

Huether offers these tips for optimizing public art:

- Incorporate the public art planning at the inception of development/design to integrate the mission and objectives.
- If possible, work with an artist or art partner who can tailor a concept without it being overly defined. Flexibility is key.
- Get clarity on capabilities and team responsibilities, such as fully aligning the artist with the project sponsor, architects and others.
- Plan for design-build-installation vs. hiring a concept that isn't buildable or is hard to maintain. ■

If planned well, public art's objectives can span the needs of the project, the development, the community and more.

passersby. Last year, the town of Midland, Ontario, near Toronto, installed the 25-foot-tall "Sown," designed by local artists **Camille Myles** and **Holly Archer**. The five circular pillars topped by an organic shape of faceted, reflective steel capture the rich local history in logging, shipping, the railway, agriculture and manufacturing, while also reflecting its early indigenous roots and the growth and diversity of the community today.

If planned well, public art's objectives can span the needs of the project, the development, the community and more. **Toni Sikes**, CEO of public-art facilitator CODAworx, says public art is increasingly seen as a way to connect people and cultures amid social change.

"Beautifying public spaces is only one purpose for making art, which can also serve as a symbol of a cause, be a reminder of the past, or alter our reality," she said. "This ability art has to transmit stories should not be underestimated. It influences our cultures, how we think about our societies, and the directions movements take." ■

Ron Heckmann is a marketing consultant and writer/journalist for the commercial real estate industry.

New Appellate Case Could Have an Immediate Impact on Construction Disputes

Ruling in Massachusetts on prompt-pay statutes comes amid skyrocketing costs for labor and materials.

By Brian Maloney and Chad Wissinger, Dentons Cohen & Grigsby P.C.

Construction litigators have seen long periods of time when owners and developers could resolve disputes with contractors during, or immediately after, the completion of a project. Affordable building materials, reasonable hourly wages, easy access to funds at low interest rates and incoming tenants with excellent financials (or white-hot residential demand for condominiums, houses, etc.) made it easy to resolve all but the largest disputes. Everyone was making good money, and even significant change orders could be viewed as rounding errors if they kept a project on track to get space to market.

Unfortunately, 2022 and 2023 are shaping up to be years like no others, and significant claims could spike as a result. Many contractors will soon realize that they may be working on their last major project for some time, and owners and developers will lose access to low-interest funding and be asked to pay strikingly elevated prices for virtually everything associated with construction. With that in mind, developers should pay close attention to a recent appellate court decision in Massachusetts regarding prompt-pay statutes and construction projects.

Many contractors will soon realize that they may be working on their last major project for some time, and owners and developers will lose access to low-interest funding and be asked to pay strikingly elevated prices for virtually everything associated with construction.

Soaring Costs

The National Association of Home Builders recently reported that material prices had increased more than 33% since the start of the pandemic. At the same time, the prices for services used in the building trades, such as transportation and warehousing, have increased 39% since March 2020.

To compound these trends, the Federal Reserve has been aggressively hiking interest rates in recent months to battle inflation, which is at its highest level in 40 years. Loans that were quoted at 3% several months ago now exceed 6% and could climb higher in the coming months. Major financial institutions are no longer willing to commit to the final interest rate on pending loans until the week of closing. The added cost of new money will make it considerably harder to resolve disputes.

In the industrial sector, Amazon CEO **Andy Jassy** recently announced that his company is "no longer chasing

New & Noteworthy

53,000 sq. ft.

Anchor Health Properties is developing a 53,000-square-foot **medical office building** in **Hudson, Ohio**, in collaboration with **Western Reserve Hospital**. A mix of primary and specialty care services will be offered, including endocrinology, medical weight loss, gastroenterology, orthopedics, lab and imaging, ophthalmology, rheumatology, primary care, infusion and podiatry. The facility will use natural light, wood accents and warm colors to create a calming and welcoming patient environment.

34,364 sq. ft.

Watershed Development Group is constructing **Sixth and Chicon**, a 34,364-square-foot **multifamily project** in **Austin, Texas**. The complex, designed by Mark Odom Studio with construction by Cadence McShane Construction and engineering by Civilitude Planning & Engineering, will feature 60 micro-housing apartments, close to urban amenities and public transportation. The average size for each apartment is 355 square feet, with units ranging from 252 square feet to 465 square feet.

8,000 sq. ft.

Washington University School of Medicine in **St. Louis** recently completed a new **mass spectrometry center** designed by **KWK Architects**. The new facility features 8,000 square feet for new instruments, sample preparation, computational analysis and training of medical students, post doctorates and fellows. Mass spectrometry is an analytical laboratory technique used to separate the components of a sample by their mass and electrical charge. ■

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.

physical or staffing capacity," and the makings are in place for a shakeout in the key warehousing sector. The massive building campaign by Amazon and several national warehouse developers almost singlehandedly kept industrial construction afloat through the pandemic — despite inflationary and wage pressure. However, Amazon's pullback on several projects, coupled with its announcement that it will likely sublease many locations, will slow the expansion of this market segment for the foreseeable future.

Meanwhile, office holdings in the U.S. could collectively lose $500 billion in value during the next decade, according to a study by the NYU Stern School of Business and the Columbia University Graduate School of Business. Their findings are based on assumptions regarding current work-at-home rates and structural losses from the nonrenewal of leased space, particularly in Class B and C buildings.

Against this backdrop of a rapidly changing construction landscape, many states have updated their versions of prompt-pay statutes, generally to the benefit of contractors.

Many states have prompt-pay statutes, which are designed to punish parties who fail to pay construction contractors within a specified period of time.

Because of this, developers are looking to convert offices to other uses. However, major building renovations, particularly full-blown use conversions, can be expensive, claims-intensive, schedule-eating monsters. Between the significant price increases that will surely not reverse themselves in the short term, the loss of low-interest capital and the market's need to switch its focus from easier to more complex projects, all indicators point to more claims in the near term.

Prompt-Pay Statutes in the Spotlight

Against this backdrop of a rapidly changing construction landscape, many states have updated their versions of prompt-pay statutes, generally to the benefit of contractors.

In 2018, the Pennsylvania legislature passed several amendments to the Pennsylvania Contractor and Subcontractor Payment Act (CASPA). Included in those amendments is a requirement for owners who want to withhold payment from a contractor to "notify the contractor of the deficiency item by a written explanation of its good-faith reason within 14 calendar days of the date that the invoice is received." Moreover, "failure to comply . . . shall constitute a waiver of the basis to withhold payment and necessitate payment of the contractor in full for the invoice."

Although no Pennsylvania appellate court has yet interpreted this portion of the statute, there have been private arbitrations where owner/developers were forced to pay significant additional sums in penalties and interest because of the failure to comply with these provisions. And now, the Appeals Court of Massachusetts recently issued an

The Massachusetts Prompt Payment Act includes a provision stating that owners must approve or reject applications for payment within "15 days after submission." The law goes on to state that "an application for a periodic progress payment which is neither approved nor rejected within the time period shall be deemed to be approved unless it is rejected before the date payment is due."

opinion strictly interpreting a similar Massachusetts statute.

The Massachusetts Prompt Payment Act includes a provision stating that owners must approve or reject applications for payment within "15 days after submission." The law goes on to state that "an application for a periodic progress payment which is neither approved nor rejected within the time period shall be deemed to be approved unless it is rejected before the date payment is due." Any rejection of an application for payment must be in writing and must "include an explanation of the factual and contractual basis for the rejection and shall be certified as made in good faith."

In Tocci Building Corporation v. IRIV Partners, LLC, decided in June, the court strictly applied this requirement of the Massachusetts Prompt Payment Act. The court methodically discussed seven applications for payment and the written responses, if any, provided to each by the owner. The court determined that each response did not comply with the requirements of the Prompt Payment Act, primarily because the owner did not provide "an explanation of the factual and contractual basis for the rejection."

Even for the one response that the court noted arguably included an explanation of the factual and contractual basis for the rejection, it still held that the response did not comply with the Prompt Payment Act because it did not include an explicit certification that the withholding was made in good faith.

The procedural posture of the Tocci case is also noteworthy because the Appeals Court of Massachusetts upheld the trial court's granting of partial summary judgment even while the owner had pending counterclaims for "breach of contract, breach of the implied covenant of good faith and fair dealing, negligent misrepresentation, fraud, negligence, unfair and deceptive conduct . . ., breach of contract as a third-party beneficiary . . ., and breach of express warranty" while alleging that the contractor "performed defective work, failed to perform contractually required work, and submitted fraudulent payment applications."

The court in the Tocci case set the owner's counterclaims aside, stating that "to allow the [owner] to retain the moneys wrongfully withheld in violation of the statute until the final resolution of their postcompletion contract action would eviscerate the scheme for prompt payment or rejection-and-resolution created by the Legislature." The court did clarify that "we do not hold, that the [owner's] claims for breach of contract have been waived by their failure to include them in a proper rejection under the statute. They may bring . . . any and all claims they have for breach of contract against [the contractor], and they may recoup any money they may be owed."

Finally, the court closed by offering this advice to owners, which may also be good advice to owners attempting to comply with the latest amendments to CASPA: "If an owner does not wish to make a periodic payment pending resolution of a dispute because it believes it will not in the end owe the money, it must file a prompt rejection in compliance with the statute."

For developers involved in current construction projects who believe that a potential dispute is more likely than a few months ago, it is strongly advised that they review this case, and the corresponding prompt-pay requirements in the jurisdiction where their projects are located, to avoid waiving rights that cannot be regained through ordinary litigation after the fact.

In addition to Pennsylvania and Massachusetts, other states with similar prompt-payment statutes include Alabama, Arizona, California, Delaware, Illinois, Kansas, Louisiana, Minnesota, Montana, Nevada, New Jersey, New York, Oregon, South Carolina, Utah and Vermont. ■

Brian Maloney and **Chad Wissinger** are shareholders in the Pittsburgh office of Dentons Cohen & Grigsby P.C.

Repurposed Shipping Containers Offer Unique Advantages for the Right Projects

Flexibility, affordability and durability are among the factors behind their growing use.

By Tom Gresham

George Runkle has worked on repurposed shipping-container construction projects since 2007, and he's seen the market experience a marked change in recent years. Attracted to the containers' durability and the accelerated timelines associated with using them in construction, more developers are incorporating them into a variety of projects, he said.

"It's really gotten busy," said Runkle, founder of Runkle Consulting, which provides structural engineering services.

Alan Scott, director of sustainability – building science solutions for Intertek, said the repurposing of shipping containers in construction largely was a fringe phenomenon until recent years.

"In the late '90s and early 2000s, there was some use of new purpose-built container structures for pharmaceutical manufacturing and other industrial uses because they were quick to build and easy to transport and deploy," Scott said. "Some of the first notable repurposing projects were low-scale (one- to two-level) assemblies for retail and recreational projects. We are now seeing larger-scale, full-building developments, repurposed containers that are retrofitted and built-out offsite and then [transported and stacked] onsite."

Today, containers are used for an array of commercial projects. Scott said these can range from the quick deployment of temporary or permanent single-story auxiliary structures, including storage, office expansion, manufacturing, equipment enclosures and other support structures, to larger projects such as low/mid-rise apartments, retail shops, hotels and a variety of commercial office structures.

Trinity Buoy Wharf is an arts and cultural center in London that includes several workspaces and offices built out of shipping containers.

For those considering containers for a project, there are some crucial challenges and opportunities to understand about a construction method that is becoming less and less unorthodox.

Speed and Longevity

Speed of construction is among the key advantages of repurposed shipping containers.

"We can put a shipping container building up much faster than doing conventional construction and spend minimal time on site," Runkle said.

In today's development climate, Scott said the speed of construction with repurposed shipping containers and other modular construction is particularly attractive as developers focus on getting a building up and generating income sooner. Container projects require a smaller crew — invaluable during the current labor shortage — with fewer logistical delays than other projects.

"Similar to new, purpose-built modular construction, repurposed container structures reduce construction schedules and the cost and disruption of construction on urban sites," he said. "They have the added advantage of a ready-made structure, avoiding building the stout modular box from scratch."

Formidable resilience to the elements is among the biggest strengths of container buildings once they are in place, Runkle said.

In today's development climate, Scott said the speed of construction with repurposed shipping containers and other modular construction is particularly attractive as developers focus on getting a building up and generating income sooner. Container projects require a smaller crew — invaluable during the current labor shortage — with fewer logistical delays than other projects.

"A shipping container building can take an unbelievable amount of abuse during storm events," he said. "They are excellent for coastal construction because of this, and inland they can better stand up to storm events such as tornadoes."

The vast majority of shipping containers are made from corten steel, which resists rust and is highly weldable.

Runkle said shipping container buildings do not degrade over time the way wood frame buildings do, so they better maintain their value.

"Fifty years from now, the building structurally is going to be as good as it was on Day 1," he said.

Containers also hold advantages over concrete and steel construction approaches.

"Unlike wood framing, a shipping container building doesn't rot, get infested with termites, and doesn't lose strength over time like wood does," Runkle said. "It's easier than concrete construction, and cheaper than conventional steel construction."

In addition, Scott said repurposing existing materials — the containers — for structural elements rather than creating new materials makes for more environmentally friendly construction, leading to less waste and proving appealing to developers with an eye on sustainability.

Making the Design Work

Aesthetically, Runkle said shipping container projects fit best in "older, industrial-type neighborhoods." On all the projects Runkle has worked on, the containers were left exposed rather than covered or hidden in some way, he said. Unique costs associated with container projects are the need for skilled welders and a crane to set the containers in place.

A key design challenge is maintaining the structural integrity of the boxes, which typically are eight feet wide with lengths ranging from 10 to 40 feet. Runkle said the narrow width of the containers can "constrain what you're doing," making it difficult to create large open spaces without costly modifications. In particular, there are limitations on how many holes can be cut in the long sides of the container, as well as how large they are — limiting the flexibility of the interior design.

When containers can be lined up side by side and doorways or other openings can be easily aligned to connect adjacent boxes, "it's fairly straightforward," Scott said. However, "if you're wanting to make an open office or large suite or something with a lot of lateral communication between the modules, it's more difficult to cut those size holes when you're looking at a taller structure. It might take some extra steps to reinforce the box, and depending upon how much you have to do, that's where it might tip it into, 'Oh, I might as well just build this from scratch rather than trying to retrofit a box.' "

In addition, Runkle said architects largely are limited to stacking containers "the same way they are stacked in storage."

"The more adventurous you get with the architecture, the more expensive and difficult the structural modifications get to be," he said. "You can't get artistic with the architecture without drastically increasing costs."

Accessing the Containers

In general, Scott said, shipping containers are "a low-cost, readily available commodity." That availability, of course, can fluctuate — along with prices. Runkle said larger projects often require wrangling containers from multiple providers. Most sources will not have enough containers for the project, he said, and those that do will prefer to hold some for other clients.

Scott and Runkle noted that it was very difficult to find containers during the height of the pandemic-fueled supply chain crisis, and Runkle said he saw prices for a 40-foot container reach approximately $7,500 at one especially challenging time in the market. In contrast, he said prices ranged between $2,900 and $3,200 in September 2022.

"It's an up-and-down market," Runkle said. "It varies with the time of year, and it varies with the economy."

Both Runkle and Scott believe the economics of labor and construction schedules will continue to favor container use in construction, and Scott believes surplus shipping containers should remain plentiful and affordable when supply chain conditions are "typical."

"The ability should be there to tap them for construction," he said. ■

Tom Gresham is a freelance writer based in Richmond, Virginia.

Challenges Abound When Transforming Office to Residential

Zoning changes, design constraints and financing are among the hurdles.

By Lindsey Postula and Maria Fuentes, Gray Reed

What can be done with another sparsely occupied 600,000-square-foot office building? Transforming a lackluster office property into a residential haven seems like an obvious solution. However, without planning, patience and capital, it may not be a success.

In a post-pandemic world, it's easy to attribute the oversupply of office property to an increased desire to work from home. The rise of Zoom, Teams, WebEx and comparable platforms permit workers to collaborate from anywhere. However, The Wall Street Journal reported in August 2022 that the so-called "U.S. office glut" has been building since changes to the tax code in 1981 that allowed for quicker depreciation of commercial property. The same article also attributed the oversupply of office buildings to decades of low interest rates and even some false demand created by WeWork and similar coworking companies.

Legal and Business Considerations

Before transitioning a property to residential use, an owner's initial consideration should be the overall vision for the property and how the residential component will affect other existing and future uses of the building and how it will fit within the larger community. For example, if the addition of residential materially increases the overall occupancy of the project, that may drive up the value and success of the property's retail components. On the other hand, the addition of residential use (which may include unruly guests, wayward pets or owners in swim apparel) may drive away existing office tenants who no longer perceive the building to be suitable for professionals.

Redesigning an office building to transform it into residential use can be challenging on many levels.

A change in property use is not an easy or low-cost undertaking. Layers of legal considerations must be carefully examined. An owner will have to reopen many diligence questions surrounding the property that arise following an acquisition: zoning, use, legal compliance, environmental conditions and others. These questions can be further complicated by the passage of time and the encumbrances and leases related to the property's existing office use.

One obvious challenge is zoning. Depending on the breadth of the property's existing zoning and use classifications, the office building owner may have to apply for a change in zoning, meet with city planners and go through appropriate public hearings to change the property's zoning classification. Depending on the jurisdiction, the nature of the property and the concerns of surrounding property owners, this process could take weeks or months. Even if the municipality has no zoning, there may be restrictive covenants that prohibit residential use or make conversions from office to residential difficult. The process of

Before transitioning a property to residential use, an owner's initial consideration should be the overall vision for the property and how the residential component will affect other existing and future uses of the building and how it will fit within the larger community.

modifying restrictive covenants may require many third-party consents and can be much more challenging than a change in zoning.

On the diligence front, an owner will also need to consider whether a change in use is feasible based on the design of the building and compliance with certain laws, including local ordinances and federal laws such as the Americans With Disabilities Act. Additionally, some existing offices may not make for desirable living spaces. For example, they may lack adequate natural light or open floorplans. Addressing these issues could require a much more extensive and costly remodeling effort to attract residents than the simple interior modifications that office owners may envision. The owner may also face challenges related to environmental conditions, such as asbestos remediation.

Limitations regarding the physical structure of an existing property are not the only potential hurdles for office owners. They also may have to engage in significant modifications to their business structure as well, including potentially amending their governing documents and existing services agreements to bring in new partners, capital or key personnel to facilitate the change in business direction. Depending on whether the owner will sell residential units, it may be necessary to establish a condominium regime. Although the costs associated with these changes may not be as high as those incurred to physically alter the existing property, they still represent an initial outlay that must be adequately budgeted before commencing work.

Economic Challenges

Any large-scale office space conversion and renovation project is likely to require a significant injection of cash. If an owner needs to acquire additional capital, doing so may be difficult in the near term.

Businesses today are operating in a fundamentally different capital landscape than at the beginning of the year. In the current lending climate, office building owners are unlikely to find loans from institutional lenders on terms anywhere near as favorable as those they could expect to obtain a few months ago. At the start of 2022, the applicable federal annual long-term interest rate was 1.81%. That rate was set at 3.92% for November and is likely to keep climbing thanks to the Federal Reserve's efforts to combat inflation. If an office owner is unable or unwilling to take on additional debt, they may have to rely on outside investors who are willing to buy into the new residential business venture. However, as economic uncertainty continues cast a pall over potential equity investors, it may become increasingly difficult to find new partners who are willing to buy into an existing business or new joint ventures.

The pace of any office transformation will also be affected by the duration and terms of any existing office leases. If the office space is largely vacant, this may not be a major obstacle. However, even a few existing tenants may be able to tie up the property and thwart an owner's plans. For example, if a major renovation of a vacant space on one floor of a building would require contractors to access space on another floor occupied by a current tenant (e.g., to install pipes, vents or other necessary building systems), the presence of the existing tenant could delay the entire project until the tenant's current lease expires or the terms are renegotiated.

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Final Thoughts

The legal hurdles, financing and existing obligations to current tenants can all work against an owner's ability to plan, budget and commence the project. Unpredictability in the labor market and ongoing supply chain problems can also work to frustrate a planned conversion project. So, while office building owners may be eager to transform unoccupied office space into profitable residential spaces as soon as possible, the actual process of seeing those plans through can be far more complicated and costly than they may anticipate. The success of converting existing structures into new residential spaces will largely hinge on whether owners are able to bring sufficient capital and expertise to bear on the project. ■

Lindsey Postula is a partner in Gray Reed's Houston office. **Maria Fuentes** is an associate in Gray Reed's Houston real estate practice group.

Managing Water Damage Risk Involves Planning, Diligence

Maintenance and mitigation techniques are crucial to help keep insurance premiums low.

By Chris Della Mora, HUB International

Water damage claims due to infrastructure failures are now costing the insurance industry more per year than natural disasters. According to research by Zurich North America, in 2021, water damage was the leading cause of property loss in offices and other commercial structures. Additionally, the company noted that 57% of all the claims it processes each year are for water damage.

And while record-breaking flooding or dramatic storm damages might grab the headlines, increases in insurance costs typically arise from much more mundane sources: leaks, burst pipes and appliance failures.

Water damage should be high on every commercial real estate owner's list of concerns, especially since improvements to plumbing infrastructure or the implementation of a water risk mitigation plan may directly impact the cost of renewal.

Water damage should be high on every commercial real estate owner's list of concerns, especially since improvements to plumbing infrastructure or the implementation of a water risk mitigation plan may directly impact the cost of renewal.

Plumbing systems are a major source of water damage and flooding in all kinds of commercial buildings.

Commercial real estate owners must take steps to learn about their existing plumbing systems, understand their risks and set up a plan. Otherwise, there may be serious consequences.

Understand the Risks

No matter what type of building, water is a threat. In multi-unit buildings, improperly installed newer plumbing systems are just as great a risk as aging pipes. And while standard insurance policies don't cover flooding, the average loss from a commercial water damage claim is not a trivial sum: according to research from Chubb, it was $89,000 in 2019.

A single flood is not necessarily catastrophic from an insurance perspective. However, repetitive claims for similar incidents indicate a worrying trend. Insurers will look suspiciously at a property with multiple claims for water damage, and they may dramatically increase insurance premiums, raise the property deductibles, add flood sublimits or possibly deny coverage outright.

Minimize the Risk

When it comes to building-wide issues, such as the state of the plumbing system, the building owners or property managers are ultimately responsible. The primary loss exposure for rental properties is damage to the tenants' contents and improvements. Many property owners will require tenants to carry full rental coverage to transfer a portion of a loss from the owner's insurance to the tenant's insurance. It will also protect other tenants in a multi-unit complex in case a loss from one unit causes damage to another unit (such as water coming through the ceiling of an apartment complex).

However, transferring risk through insurance is only one aspect of risk mitigation, and is the last line of defense. It is more beneficial for the client to invest in pre-loss mitigation strategies, which will help to reduce the likelihood of a loss, as well as reduce the cost of coverage. There are specific ways to lower the risk of water damage and reduce insurance premiums:

- **Consider updating the systems.** Learn about the different types of plumbing systems and understand what is in the building that is being insured. It may be necessary to replace the entire system, or only certain fittings or pipes.
- **Develop a water damage mitigation plan.** Build a relationship with an expert now, before help is needed. Interview several water-remediation experts to find someone trustworthy, and keep their contact information handy. Call the expert immediately upon noticing a problem. Use a template to create a simple Domestic Water Emergency Response Plan (DWERP). This involves identifying the risks, assigning key personnel to take charge, developing a communication plan to share information, creating procedures to shut down equipment and processes in a safe manner, and training staff.
- **Schedule routine inspections.** Regular checkups are the best way to avoid water issues. When experts regularly inspect a building, it is possible to avoid several issues completely. Perform regular maintenance on plumbing infrastructure, especially as part of an insurance renewal application. The inspector should look for leaks and sewer pipe backup, as well as confirm that sinks and tubs are draining properly and that the water pressure is calibrated correctly.
- **Inspect equipment.** A secondary part of those inspections includes checking up on any equipment. A huge number of claims come from damaged equipment — but inspecting the equipment regularly can keep problems away. Whether the equipment is old or new, it's important to schedule inspections and regularly monitor each piece of equipment.
- **Increase the deductible.** If proactive attention hasn't reduced premiums deeply enough, it may be worth considering a policy with a higher deductible. This strategy doesn't work for everyone, as it leaves the owner responsible for a larger amount of claim costs, but it also might lead to a lower premium. This is recommended for well-maintained buildings only.

There's nothing worse than trying to stay afloat once disaster hits. Don't wait for a flood before learning about the state of a property's plumbing system. Learning about and preparing for the worst can reduce risk and keep it lower in the future. ■

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No matter what type of building, water is a threat. In multi-unit buildings, improperly installed newer plumbing systems are just as great a risk as aging pipes. And while standard insurance policies don't cover flooding, the average insurance claim for water damage is not a trivial sum: according to research from Chubb, it was $89,000 in 2019.

Chris Della Mora is a senior risk engineer at HUB International's Risk Services Division. He specializes in property risk mitigation techniques for large industrial, commercial and real estate clients.

"Worth Repeating"

Sound bites from NAIOP's CRE.Converge, held October 10-12 in Chicago

(for more insights, see page 74):

Former CNBC Chief Economist Marci Rossell makes a point during her keynote address at NAIOP's CRE.Converge in Chicago in October.

"Our industry does a lot of good by creating jobs, helping businesses grow, and being active members of local communities. We need to consistently remind various stakeholders of the value NAIOP provides. I hope I can count on you to join me in that effort." — ***Kim Snyder***, *president, U.S. West Region, Prologis, and NAIOP's 2023 chair*

"One of the things that Chicago and Illinois want to do is to raise Chicago's profile as a major life sciences market. We possess all the key demand drivers for life sciences to be highly successful here, with the exception of an adequate supply of Class A lab space. We're definitely creating our own submarket here." — ***Dr. Suzet McKinney***, *director of life sciences, Sterling Bay*

"In terms of pure office space... I'm guessing it will settle down to where the necessary footprint will probably be about 75% of the pre-pandemic norm." — ***Marci Rossell***, *former CNBC chief economist*

"It's a team mentality. It's truly listening first to what the community wants and kind of designing the project around it." — ***Matt Moroney***, *president and COO, Wangard Partners*

"The key for us is having visibility to data, doubling-down on supply chain visibility, and having the ability to be flexible and act." — ***Jennifer McNeill***, *vice president, True Value Company*

"The [conversion of a former corporate campus into a logistics site] went through a lengthy public process. We had seven different public hearings, and all kinds of traffic and noise studies. Hundreds of people showed up to talk about it, because you're replacing a longstanding corporate neighbor with tractor-trailers." — ***Tim Walsh***, *chief investment officer, Dermody Properties*

"We're in new territory. Over the near term, there's going to be some deep pain in the office sector. The restaurants and bars are full, but the offices are empty." — ***Craig Robinson***, *chief growth officer, Industrious*

"Don't ever let anyone own your data; don't let anyone take your data if they fold up. You need a way to be able to retrieve that information." — ***Ben Grippi***, *head of strategic real estate technology, The RMR Group*

"The supply chain is going to change. I'm not saying everything is going to be made in North America. But [companies] are trying to reduce their exposure." — ***Adam Roth***, *executive vice president, NAI Hoffman*

"There's nothing as precious as the social connection of humans together in the room. It can never be replaced. We all do better wrestling with challenging issues face-to-face." — ***Keith Ferrazzi***, *best-selling author; founder and chairman of Ferrazzi Greenlight*

"When we talk about integrated systems and all these things that are possible, the biggest problem isn't that the technology can't do what it's supposed to do. The biggest problem is figuring out how to get us to change our way of thinking." — ***Mike Steep***, *executive director, Stanford Engineering Center for Disruptive Technology and Digital Cities*

"ESG is a scary acronym, and that's why people don't want to give us much information. Letting them know where we're starting and where we're trying to get to has helped." — ***Lindy Schrik***, *director of ESG, CenterPoint Properties*

"Whatever the Fed does … let's get to that point sooner than later, because I think that will start to make it a little bit easier for everyone to start making rational decisions again. If this is drawn out a long time, I think it creates more risk across the macroenvironment." — ***Peter Schultz***, *executive vice president – East region, First Industrial Realty Trust, Inc.*

"Don't think about what talent you need, but what talent you are supplying back into the community, to keep that flywheel moving. That's the ongoing life force in the community: incremental skills, building from entry level to middle and upper level." — ***Steve Johnson***, *chief people and compliance officer, Bluecrew* ■

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CEO on Leadership: Peter J. Cocoziello

The founder and CEO of Advance Realty Investors in Bedminster, New Jersey, shares the lessons he's learned in his 40-plus years in the industry.

By Ron Derven

Peter J. Cocoziello

"My personal mission is to live, to love, to learn and to leave a legacy. It is about the hope of making the world a better place before I exit. I prioritize daily and to this day, I keep a piece of paper in my pocket that's got five or six important objectives that I need to accomplish. It's amazing to realize that if you remain focused and concentrate on your major goals, they are likely to come true. I work on these objectives every day."

— Peter J. Cocoziello, founder and CEO, Advance Realty Investors

Development: *What attracted you to a career in commercial real estate?*

Peter J. Cocoziello: After graduating from Penn State University as a finance major, my ambition was to pursue a job on Wall Street. With very few positions available, I made the decision to go into commercial banking. As a lender, you are a constant analyst in market trends and financial positioning of businesses. This proved to be worthwhile, and, in the process, I obtained knowledge of real estate investment trusts (REITs). In the mid-1970s, we were providing back-up lines of credit to REITs. When the commercial paper market was decimated, all these lines were taken down, and we ended up with a substantial portfolio of distressed debt. After three years in banking, I was offered an opportunity to work with an advisory firm to help banks analyze and dispose of these assets. In this new position, I traveled nationally — learning how these transactions were completed, and taking part in many syndications and sophisticated restructures. After four years of traveling more than 350,000 miles annually, I made the decision to break out on my own and started Advance.

Development: *How did you start Advance Realty Investors?*

Cocoziello: I wanted to develop a 14,000-square-foot office building and only had a $5,000 land deposit. The purchase of the land was contingent on getting site approval. I didn't have the money to close on the land, but I did have a relationship with a man I worked with at the bank. He operated a business and was looking for office space. That's where building relationships comes into play. He helped me and in turn became my partner in the building. I was able to secure a construction loan and began building the project. The contractor hired was my business partner's friend. While under construction, we learned that there were massive flaws in the foundation. My partner said we had to tear down the foundation and start over. Our problems didn't end there. The contractor on the job suffered a heart attack and was unable to continue the project. That's when I left my job and became a contractor/developer. The project was finally completed and the building was rented. I had a building and a cash flow of $9,000 a year, plus a $5,000 management fee. I said to myself, "If I could do this 10 times — no matter how difficult it was — I could make $150,000 a year." That was a lot of money, and that is what I set my sights on — a realistic goal.

Development: *When you started the business in the late 1970s, interest rates were around 21%. How did you survive those times with a new business?*

Cocoziello: In the late 1970s and early 1980s, the real estate industry was hit with a huge downturn. It was a crazy time, and no one was lending money. If you had loans at that time, 20%-21% was the floating rate. Times like those make you humble. More importantly, it taught me how to structure my time and transactions to maximize cash and stay in existence while still trying to build an organization with people.

continued on page 32

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Development: *You survived and went on to build a multi-billion-dollar company. To what do you attribute your many years of success?*

Cocoziello: Developing my own personal mission statement and guiding principles. My personal mission is to live, to love, to learn and to leave a legacy. It is about the hope of making the world a better place before I exit. I prioritize daily and to this day, I keep a piece of paper in my pocket that's got five or six important objectives that I need to accomplish. It's amazing to realize that if you remain focused and concentrate on your major goals, they are likely to come true. I work on these objectives every day. Additionally, the real key is integrity. After all, my word is my reputation, and my reputation was built on transparency, honesty and respect.

Development: *What does leadership mean to you?*

Cocoziello: Leadership starts with a purpose. I need to make sure that my actions align with my mission and values. If I do that, I create the most happiness. When leading others, I know what my engagement rules are, and I always look for mutual trust and respect. As a leader, you can't just talk the talk; you must walk the walk and support others in their success.

Development: *What is your primary role as CEO at Advance Realty Investors today?*

Cocoziello: My primary role is vision and strategy. I operate the company using OKRs [objectives and key results], and I set those objectives and key results using my experience from many years in the business. The other part of my job is mentoring and supporting others in client relationships.

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

"Leadership starts with a purpose. I need to make sure that my actions align with my mission and values. If I do that, I create the most happiness. When leading others, I know what my engagement rules are, and I always look for mutual trust and respect. As a leader, you can't just talk the talk; you must walk the walk and support others in their success."

— Peter J. Cocoziello, founder and CEO, Advance Realty Investors

Cocoziello: I look at how people establish their values and how they look at life. I like to test that. "OK, these are your values. Demonstrate to me what actions you have taken to make sure that you are utilizing your time efficiently." The most important thing with a new hire is to match the candidate's skill set with the culture of the company.

Development: *You have a reputation among peers as a leader who has developed trust with clients, communities, business partners and your own employees. How do you as a leader accomplish this and maintain it?*

Cocoziello: Mutual respect and trust. At Advance, we need to constantly be brutally honest with each other, and we need to make sure we have common goals and that we act with integrity. We embrace change and adapt quickly. I share our beliefs with investors and others so that we create common goals. I share our objectives with clients so that we know and they know what drives us and determines our success. We must meet those goals, and we are accountable to each other for results.

Development: *You have successfully brought the next generation into the business. Do you have any advice for others who wish to bring their family members into a business?*

Cocoziello: People often underestimate how much work it is to integrate family members into the business. It doesn't start the day they decide that they want to work for the company. My three sons wanted to be in the business. There were many discussions about our family values, and we even looked at a family constitution. That is how we would engage with each other. We then looked at how we would have the best chance of success. It came down to education and experience. My sons had the privilege of Ivy League educations for their undergraduate degrees. I felt it was important for them to be out of school five years, earn a master's degree and have some work experience before the company would hire them. As they came into the business, each had a different skill set. This allowed them to work in different areas of the company and collaborate very effectively with one another and the rest of the team.

Development: *How do you resolve internal conflicts or mistakes at the company?*

Cocoziello: I look at the space between stimulus and response, which is intelligence. That is, when we have a bad situation or an issue within the company, we can say, "OK, I know what the results are. What did we do from an intellectual capacity to make the decision that we did?" That starts a discussion, and the goal is to create a learning experience so that we don't make the same mistake twice.

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

Cocoziello: The best advice I received was from a former NAIOP president, **Frank Visceglia** of Federal Business Centers in New Jersey. We worked together on projects at NAIOP's New Jersey chapter. He said to me one day, "Peter, you are working like an animal, you have 10 projects going and you are constantly running. What you need to think about is doing three or four projects well with more of your own capital. Then you will be able to control your own destiny better." At first, I rejected the advice because I needed to bring in more fees. But I ultimately took his advice and have used it consistently over the years. I ask myself if we are controlling our own destiny or not. If we are not, can we understand the repercussions of not doing so? I have always used that advice as a benchmark test in making significant decisions.

Development: *What crucial lessons have you learned during the time you have been in the business?*

Cocoziello: The greatest lesson I have learned — once again from Frank — is to never be overextended. And being overextended is not just about money; it's also about your skills and time. You must control being overextended in a way that aligns with the mission and plan of the business, as well as your personal life.

Development: *How do you like to de-stress during your off hours?*

Cocoziello: I have a very supportive wife of 42 years. We just took a three-week journey to Italy and on that trip, we talked about how great it is to be at this stage of our life and to have the kind of close relationship that we maintain. I have a cliché that I use for my leisure time — the 40-40-40 Club. I want to ski 40 days a year, I want to shoot and hunt 40 days a year and I want to play 40 rounds of golf a year. We spend time with family and friends and never take our life for granted. ■

Ron Derven is a contributing editor to Development magazine.

From Broker to Developer: The Challenges (and Rewards) of a Major Career Transition

Commercial real estate leaders discuss how they climbed the ladder to the upper reaches of the profession.

By Trey Barrineau

First in a series.

Many successful commercial real estate developers began their careers as brokers, but what does it take to make that transiton?

According to several professionals who have moved from broker to developer, it's not for everyone. It requires a combination of ambition, expertise, people skills and perhaps most importantly, patience. Development magazine asked these experts to share advice that might help those who want to follow a similar path in the commercial real estate industry.

Personality, Knowledge and Experience

First, it's important to have personality traits that could be useful in many other industries. According to **Jonathan Tratt,** principal for Tratt Properties, LLC, a development and investment company based in Phoenix, these include "ambition, desire, drive, stick-to-itiveness, detail orientation, control orientation, vision and the ability to hold people accountable."


Tratt

Next, it's vital to learn as much as possible about all aspects of commercial real estate, but without being too focused on any one area.

"I have a friend who calls himself a 'general specialist,' and that phrase provides a good framework for thinking about the skills required for a development career," said **Lewis Agnew**, president of Charles Hawkins Co., in Nashville. "You need to know a little about a lot, without being an expert in any one area."


Agnew

Agnew said deep practical knowledge of finance, construction and human nature shapes the day-to-day, roll-up-the-sleeves work of commercial real estate.

When it comes to finance, Agnew said a basic understanding of investments, financial modeling and capital markets is crucial. It's also important to understand the physical asset — whether it's raw land or a finished building. Next there's the construction process and everything that goes into it: design, permitting, grading, construction and maintenance once a project is completed. Finally, there is the human element of deals — salesmanship, marketing, and the complex web of relationships with tenants, landlords, politicians and the public.

"After all, developments fail if there are no tenants or buyers paying you back," Agnew said.

University-level degree programs in real estate or courses offered by trade associations such as NAIOP can provide essential education and credentials. However, those interviewed for this article made it clear that there is no substitute for years of real-world experience in commercial real estate.

"I would much prefer a streetwise and experienced broker with a specific commercial specialty, rather than an overeducated and underexperienced MBA or Ph.D. in any field of training," Tratt said. "It's similar to how it is important to earn 'shoe leather' credentials in the beginning of a brokerage career by cold-calling prospects and experiencing rejection, obstacles, or being put off or ignored. Ideally, you should work for a development company and/or apprentice to gain exposure, experience and hands-on knowledge."

Agnew noted that it's possible to become a prosperous developer without graduating from college.

"The funny thing about development is that you can be wildly successful without any formal training," he said.

Examples include **Harry Macklowe**, founder of Macklowe Properties in New York City, who bounced around three colleges before dropping out to become a broker, and **R. Donahue Peebles**, founder of the Peebles Corporation, who dropped out of Rutgers as a freshman to become a real estate appraiser and sales agent. Today, he's one of the wealthiest African-American developers in the country.

"To develop these skills, you can read a lot, you can go back to school, or you

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can learn by trial and error," Agnew said. "If you go for the trial-and-error method, make sure you ask lots of questions, and find or hire good advisors and partners."

That said, Agnew also believes that the best way to improve the odds of success in the industry is through formal education. In his case, he studied civil engineering as an undergraduate and practiced it for a few years before moving into real estate. And while that course of study was important for developing his understanding of buildings and construction, it didn't give him any experience with finance or brokerage.

Agnew went back to college to pursue an MBA with a real estate concentration so he could understand those aspects of the industry. As a student, he interned with a local real estate developer and realized that he had found the right career path. But he still lacked that hands-on industry experience.

His first job after graduation? Working as a broker and cold-calling warehouses 45 minutes outside of Nashville.

"Starting a career in brokerage or property management can be a great foundation for entering the development profession," he said.

Greg Fuller, president and COO of Granite Properties in Dallas (NAIOP's 2022 Developer of the Year), said working as a broker early in his career piqued his interest in becoming a developer.


Fuller

"Development is very experiential, and that takes time," he said. "A broker must have the desire to be more involved than just facilitating a transaction. For me, it was an interest in build-to-suits for my clients when existing properties were not available to meet their needs. After working on 10 or so as a broker, my desire to be involved in development and ownership grew."

The Pros and Cons

In May 2020, **Rob Chandler** and **Jeff Barbles** of Lone Star Partners in Vail, Colorado, took part in a discussion on YouTube with **Matt Cors** of Crexi, a commercial real estate property marketing and deal management platform, about what it takes to go from broker to developer. In the video, they shared some of the advantages and disadvantages of making the transition:

ADVANTAGES

- Potential to greatly increase income
- The ability to create and build properties
- More free time
- Greater control over professional future

DISADVANTAGES

- Loss of regular, reliable and consistent paychecks
- Large upfront and ongoing costs
- Setbacks can be bigger and much more costly
- All service providers (architects, engineers, contractors, lawyers, etc.) must be managed by the developer
- Developers can spend up to 90% of their time raising money from investors

To view the discussion, visit www.youtube.com/watch?v=WiiFCOgH3hI ■

Rewards Beyond the Paycheck

According to Salary.com, the annual base pay for U.S. commercial real estate brokers in 2022 ranges from $55,171 to $81,573, though commissions and bonuses can push those numbers much higher. Developers, on the other hand, have the potential to make significantly more than that in annual compensation. However, it can take years to reach that level.

"Brokers, especially good ones, might make a lot less money — for a long time — if they make this transition," Agnew said. "There is also the possibility of losing money — which is not the same as 'only' making less money."

Agnew said it's essential for those looking to make this transition to have a clear understanding of their risk tolerance and personality traits.

"Good developers understand risk and risk management, and the ones who survive multiple cycles learn how to spend less than they make," he said.

For those who successfully move from broker to developer, the rewards can be satisfying on many levels — as well as beneficial to local communities.

"After successfully completing my first building in 2000, I was very pleased with the financial outcome, and I thoroughly enjoyed the multifaceted job and creative process of literally making something from nothing," Tratt said. "The development business is challenging, rewarding and creative. It is a business that can create wealth, increase economic activity and boost employment. I am very fortunate to have made the transition some 20 years ago, and I encourage others to do the same." ■

Trey Barrineau is managing editor of publications for NAIOP.

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Clean Indoor Air at the Office Can Reduce Risks from Viruses and Increase Productivity

COVID-19 fuels a drive to improve indoor air quality as more office workers return to their buildings.

By Greg Fuller, Granite Properties

Improving indoor air quality to reduce contaminants will play a major role in helping to get workers to come back to the office.

As more people return to the office and masks are coming off, clean indoor air will be key to helping everyone stay safe from COVID-19 and other viruses. Most scientists now concur that COVID-19 is airborne, meaning it spreads via microscopic aerosols floating in the indoor air. To fight airborne diseases, many office buildings have added enhanced ventilation and filtration systems to continuously purify the air. This is similar to commercial airliners, where the air is refreshed every three minutes.

The Standards Have Changed

For more than a year, the U.S. Centers for Disease Control and the World Health Organization claimed that COVID-19 was not airborne but transmitted via larger droplets produced by coughing, sneezing, talking or exhaling that would quickly fall to the ground. They recommended frequent hand washing and staying six feet away from others. But scientists eventually discovered that COVID-19 is mainly transmitted indoors as an aerosol. These aerosols quickly dissolve outdoors but can float around in indoor air for a few hours. That means it's possible to be exposed to COVID-19 in an indoor, unventilated space, by someone who is a lot further than six feet away. The scientific recommendations included improved ventilation and filtration to allow aerosols to disperse.

While the medical community and scientists debated, many owners of office buildings decided to take action. They increased ventilation and installed filtration systems and added ultraviolet lighting in their HVAC systems to fight infectious aerosols. (Ultraviolet lights have been proven to destroy or deactivate a wide range of pathogens.) They stepped up sanitation measures and enhanced outdoor workspaces to allow people to work in fresh air. These measures create a much healthier work environment, reducing the risk of not only COVID-19 and other respiratory diseases but also the dangers posed by pollutants and allergens.

According to the U.S. Environmental Protection Agency (EPA), indoor air pollutants are often two to five times higher than outdoor levels. This is concerning when Americans, on average, spend 90% of their time indoors. Pollutants can cause health problems, and many studies have shown a link between chronic illness and decreased productivity.

This partially explains the rise in corporate wellness programs. The International Foundation of Employee Benefit Plans found that 66% of employers offering wellness efforts reported increased productivity. In addition, a study by Harvard and Syracuse Universities found improved indoor air can enhance cognitive performance.

Certifications and Government Actions

The pandemic also accelerated the focus on environmental, social and governance (ESG) criteria. A people-first approach, representing the S in ESG, includes a healthy work environment that boosts wellness and productivity. Comparable with green building certifications such as LEED, there are third-party healthy building certification systems focused on promoting health and well-being in the built environment. These organizations, including the International WELL Building Institute (IWBI) and Fitwel, have seen a surge in registrations.

The EPA's Clean Air in Buildings Challenge

In March 2022, the U.S. Environmental Protection Agency released the Clean Air in Buildings Challenge, which aims to improve indoor air quality in buildings and reduce the airborne spread of viruses and other contaminants. Here are the recommendations from the challenge:

1. Create an action plan for clean indoor air that assesses indoor air quality, plans for upgrades and improvements, and includes HVAC inspections and maintenance.

2. Optimize fresh air ventilation by bringing in and circulating clean outdoor air.

3. Enhance air filtration and cleaning using the central HVAC system and in-room air cleaning devices.

4. Get your community engaged in the action plan by communicating with building occupants to increase awareness, commitment and participation in improving indoor air quality and health outcomes. ■

Office workers want to know what their building owners are doing to provide a healthy and safe work environment. Third-party certifications communicate those health and safety efforts.

Ensuring that clean indoor air stays at the forefront, the Biden administration recently launched the Clean Air in Buildings Challenge, which encourages building owners to improve indoor air quality and protect public health. According to a document published in March by the EPA, building owners can use funds from the American Rescue Plan and the Bipartisan Infrastructure Law to help pay for indoor air quality improvements such as portable air cleaners and ultraviolet germicidal irradiation systems.

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) also provides recommendations for reducing exposure to airborne contaminants. They include increasing the filter rating on the air handlers from MERV-8 to MERV-13 or higher. (MERV, or Minimum Efficiency Reporting Value, measures a filter's ability to capture microscopic particles. The higher the MREV rating, the better the filter performs at trapping germs, pollen, dust and mold.)

If building owners prioritize indoor air quality, the office can be an extremely safe and productive place. Should something like COVID-19 happen again, these facilities will be ahead of the curve when it comes to minimizing future workplace disruptions. ■

Greg Fuller is president and COO of Granite Properties, a commercial real estate investment, development and management company, and a former NAIOP chair.

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A Summer of Travel Turbulence

How hotels and airlines are navigating the post-COVID revival.

By Ermengarde Jabir, Ph.D., Moody's Analytics CRE

The pandemic has affected every aspect of the travel industry during the past 18-plus months. Airlines experienced turbulence not seen in decades, with thousands of flights delayed or cancelled during one of the busiest summers on record. Shifting labor supply and demand dynamics are partly to blame, brought on by inflationary pressure and prolonged depressed demand for air travel due to a two-year travel hiatus spurred by COVID-19 concerns.

Airline Labor Shortages

All aspects of air travel are facing labor shortages. Aviation requires a lot of skilled laborers, such as pilots and mechanics, who cannot be easily replaced because their jobs require extensive training and demonstrable skill. Pilots, for example, are seeking higher pay at a time when airlines gave many senior pilots early retirement packages as flights were grounded in early 2020. Many pilots are also moving to cargo companies, which provide better compensation packages (with the added benefit of not having to contend with unruly passengers). According to estimates from management consulting firm Oliver Wyman, North America is short approximately 8,000 pilots — roughly 11% of the total workforce — and that number is expected to grow to about 30,000 by 2032. All these factors mean airlines are struggling to organize staff for essential operations, and they may not have the backup crews necessary to allow flight operations to run smoothly.

Impact on Hotels

Persistent skilled labor shortages are driving flight cancellations left and right, and airlines are voluntarily reducing the number of scheduled flights to circumvent cancellations without the requisite backup crews in place. This directly impacts where hotels experience heightened growth and demand, even in the historically busy summer travel season.

Despite the lifting of travel restrictions at the start of the summer season, the trend to vacation at drivable destinations that started in 2020 and continued in 2021 has persisted into 2022 for two reasons: travelers want to avoid suffering through delays and cancellations at the airport, and they're grappling with higher prices due to fewer scheduled flights and two years' worth of pent-up demand.

These factors have led travelers to turn to drivable destinations despite higher gas prices. Consequently, many hotels that rely on leisure travelers who fly to destinations have not realized their full occupancy potential. Meanwhile, drivable vacation destinations from major metro areas (e.g., Massachusetts, Rhode Island, New Jersey and other areas close to New York City) boosted occupancies and revenue per available room (RevPAR) once again this summer, although not for COVID-related reasons.

Moody's Analytics CRE hotel data reveals that drivable destinations received a boost from the summer's air travel chaos. Myrtle Beach, Virginia Beach, Daytona Beach and Fort Myers all ranked in the top 10 metros for RevPAR growth in July 2022, ranging from 7.8% to 19.5%.

This trend was also present on the West Coast, as San Diego and Anaheim (home of Disneyland) also ranked in the top 10 in July. These two metros

Table 1

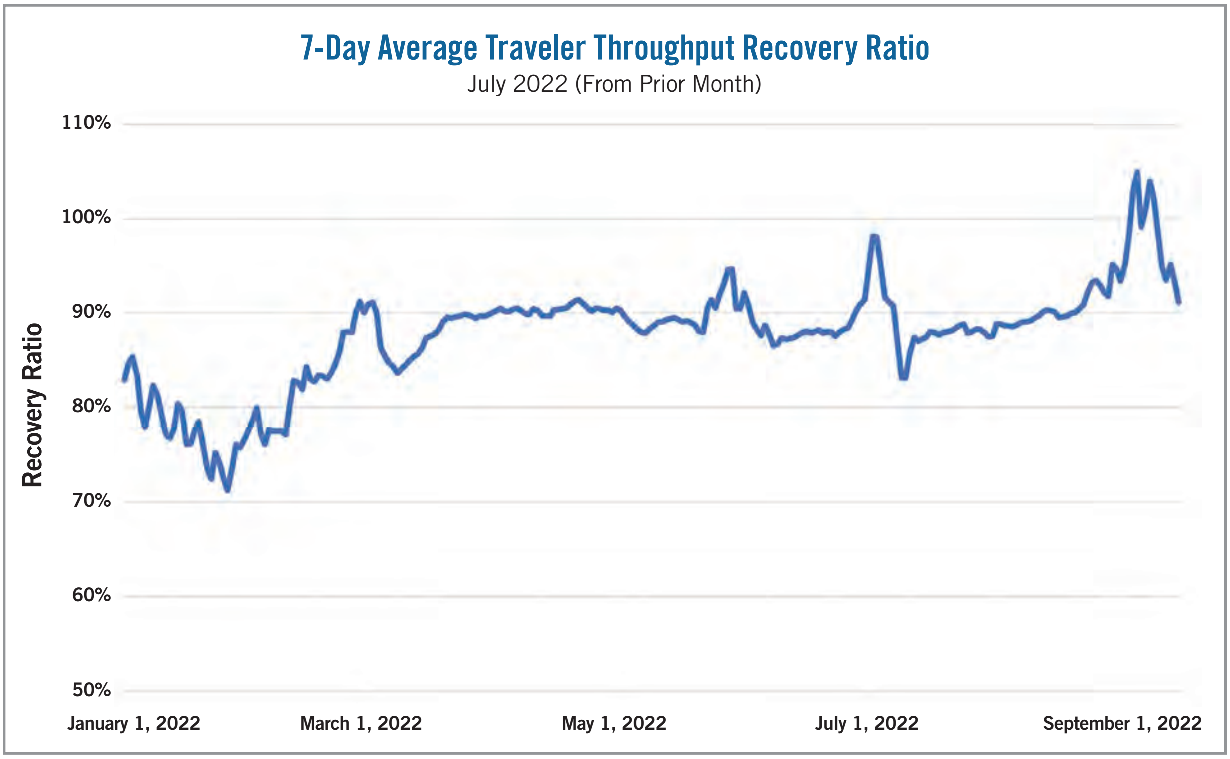
RevPAR and Occupancy Growth
July 2022 (From Prior Month)

Market	RevPAR Growth	Occupancy Growth
Myrtle Beach	19.5%	7.1%
Oahu	18.4%	9.5%
San Diego	17.8%	1.5%
Virginia Beach	13.6%	2.0%
Albany	11.3%	4.8%
Daytona Beach	10.3%	3.2%
Fort Myers	7.8%	7.2%
Anaheim	7.6%	0.9%
Cincinnati	7.0%	0.3%
Sacramento	7.0%	-0.2%

Source: Moody's Analytics CRE

Despite the lifting of travel restrictions at the start of the summer season, the trend to vacation at drivable destinations that started in 2020 and continued in 2021 has persisted into 2022 for two reasons: travelers want to avoid suffering through delays and cancellations at the airport, and they're grappling with higher prices due to fewer scheduled flights and two years' worth of pent-up demand.

Figure 1



Source: Moody's Analytics CRE

followed a similar pattern observed on the East Coast, with San Diego ranking in the top 10 for the second quarter of 2022 and Anaheim falling slightly short, coming in at 11th.

There is one noticeable exception — Oahu, Hawaii. In July, the metro posted an 18.4% increase in RevPAR from the previous month. That means that travelers were eager to visit despite higher average daily room rates and the possibility of air travel disruptions. Leisure travelers appear undaunted by logistical upheaval, and nowhere has this been more evident than in the latest TSA traveler throughput figures.

While the traveler recovery ratio (as measured by the number of travelers on a given month and day this year compared to 2019 based on TSA passenger throughput data) has held around the 90% mark for much of 2022, the end of summer and Labor Day weekend travel pushed the ratio past 100% for the first time ever, indicating that there were more travelers on that given day than in any year prior. The ratio has since declined closer to the 90% threshold once again due to the seasonality of leisure travel as well as the sluggish recovery in business travel. Nonetheless, this summer's traveler numbers are an extremely promising sign for the hotel sector: more passengers than ever traveling by plane translates to elevated hotel occupancy along with the willingness to pay higher daily room rates.

In fact, even as the labor market remains tight, and undoubtedly so for the skilled labor needed for air travel to function smoothly, it appears that travelers remain undeterred, at least for the foreseeable future.

How long will these prospects last, especially in an environment of elevated inflation, remains to be seen. ■

Ermengarde Jabir, Ph.D., is senior economist with Moody's Analytics CRE.

While the traveler recovery ratio (as measured by the number of travelers on a given month and day this year compared to 2019 based on TSA passenger throughput data) has held around the 90% mark for much of 2022, the end of summer and Labor Day weekend travel pushed the ratio past 100% for the first time ever, indicating that there were more travelers on that given day than in any year prior.

All-Electric Buildings are Powering Up

Tenant demand, along with newer building codes, are energizing this construction trend.

By Alice Devine

Alongside Highway 101, which curves along San Francisco Bay, the soft lights of 300 Kansas Street will illuminate its 4,500-square-foot rooftop garden. The greenery belies the engineering-oriented advanced research and development space that sits below. Electricity will power the rooftop lights, and indeed, the entire 150,000-square-foot, six-story building. As one of the first all-electric, zero-carbon, core-and-shell buildings in the city, 300 Kansas will pursue cutting-edge technology, like the innovative tenants it hopes to attract. Even though many jurisdictions now require electrification for new construction, technology and price parity have evolved, suggesting that environmental goals justify investment.

Rendering by Steelblue

300 Kansas in San Francisco will be one of the city's first all-electric, zero-carbon, core-and-shell buildings. It is designed to attract advanced manufacturing and R&D uses.

Legislation and Sustainability Decisions

From Seattle to New York City, jurisdictions have enacted laws and building codes that encourage — and in many cases require — electrification rather than the use of fossil fuels. San Francisco, for instance, has an ordinance that specifies that "all new buildings, both residential and non-residential … must be all-electric" for indoor and outdoor space, including water heating, cooking and clothes-drying systems.

While the decision to make 300 Kansas Street all-electric preceded such legislation, it appears ownership made a prescient choice. **Ethan McCall**, vice president at Spear Street Capital, says its decision was predicated on "a culmination of input across stakeholders — from tenants and their sustainability goals to lenders and investors and their increasing attention to ESG matters."

From Seattle to New York City, jurisdictions have enacted laws and building codes that encourage — and in many cases require — electrification rather than the use of fossil fuels.

In addition, being zero-carbon was a market differentiator. McCall referenced another Spear Street Capital building in Seattle, one whose sustainable attributes garnered an increase in allowable floor area ratio from local authorities. Upon the building's sale to a foreign investor, the press release highlighted the sustainable qualities of the property, rather than its location or tenant roster. That experience, according to McCall, illustrated the types of buildings many investors want to own.

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Despite potential future sale profits, McCall estimates that the all-electric features of 300 Kansas did not pose any significant construction premium. Even if it did, McCall claims that "the reality is that the cost attributed to sustainable building is outweighed by the benefits of delivering the type of building our tenants want." In fact, for the talent-hungry technology and biomedical firms that drive growth in the region, McCall believes that "rent is of lesser importance when these companies think about employee recruitment or retention." Further, McCall notes that the ability to "speak cogently about sustainability goals" aids in employee recruitment.

For commercial buildings, electrification pertains mostly to heating, venting and air conditioning systems. Heat pumps are the typical replacement for old-school natural gas boilers.

All-Electric Technology

For commercial buildings, electrification pertains mostly to heating, venting and air conditioning systems. Heat pumps are the typical replacement for old-school natural gas boilers. Electrified heat pumps have dual capacity — they can expel heat from a building's interior or pull it indoors, offering both heating and cooling options from the same equipment. For all-electric new construction, developers also forgo expenses such as natural gas lines and meters.

While heat pump equipment is more expensive than a traditional boiler, its operational costs are lower over time and reduce emissions. The key is proper equipment sizing, advises **Stet Sanborn** of SMITHGROUP, who conducts education classes for local energy provider Pacific Gas & Electric (PG&E). In order to "buy as little heat pump as needed," Sanborn recommends choosing for building size, climate, temperature distribution and load profile. The heat pumps at 300 Kansas, in conjunction with a variable refrigerant flow system, are designed to use 23% less energy than industry standard, according to engineer **Stephen Scaife** of PAE.

In addition to this modern air circulation system, 300 Kansas has other features that allow for efficient energy consumption. Architects faced the glass curtainwall to the cooler north and specified a rainscreen for the other building exposures. The building's sawtooth window line feature, reminiscent of industrial corrugated iron, is less exposed to the exterior. Underground, a garage will have more than 20 electric charging stations. For those who don't use cars, bike racks and showers will be available. Finally, the building will offer electrical capacity of up to 20 watts per square foot for tenant power needs. That capacity allows engineers to create medical devices, robotics or autonomous machinery.

Renewable Energy Sources

Of course, conversion from fossil-fueled equipment to electrical is sustainable only to the extent of its energy source. 300 Kansas will purchase electricity from a renewable-energy "community choice aggregate" program. In partnership with PG&E, an array of providers will guarantee that purchased energy can be completely derived from solar or wind. PG&E then delivers the clean energy via its transmission and distribution system. The price premium for such renewable power is $0.005 per kilowatt hour, according to CleanPowerSF, the program entity for San Francisco.

All states, however, are not created equal. Energy can come from nuclear power, wind, solar, natural gas, coal and hydroelectric. In sunny California, approximately 38% of the state's power is derived from solar, according to non-profit tracker Choose Energy's mid-2022 report, which uses data from the U.S. Energy Information Administration. The state of Kansas, for instance, derives 40% of its power from wind, while its neighbor Missouri gets only 7% from wind, according to the same report. Smaller states such as Delaware and Rhode Island obtain 88% of their energy from natural gas. And Texas — the nation's largest energy producer — generates significant energy from both wind and natural gas. As buildings convert to all-electric systems, the decision regarding energy source becomes as important as its systems.

Renewable and clean energy sources have achieved near parity relative to gas and coal prices. The world's largest investment bank, Lazard, recently published a study showing that "the cost of renewable technologies continues to decline globally, albeit at a slowing pace, reflecting reductions in capital costs, increased competition as the sector continues to mature and continued improvements in scale and technology." Specifically, wind and solar options provide the most cost-competitive alternatives to gas when it comes to installation. While landlords may bear the capital expense of building or retrofitting a building to all-electric, tenants often bear the ongoing utility expense in the form of triple-net leases. Thus, the cost of electrical supply remains meaningful to both owners and occupants of real property.

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DANIELLE BROWN

Chief Information Officer, Whirlpool Corporation

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Reason for Concern?

One could argue that an all-electric building might create reliability issues or price vulnerability. For the arid West, wildfires and spiking temperatures can strain the power grid. In summer 2022, a heatwave so burdened the electricity infrastructure that the California Governor's Office of Emergency Services sent an emergency text message to all state residents with a cellphone: "Conserve energy now to protect public health and safety. Extreme heat is straining the state energy grid." Even properties that power themselves — such as Stanford University with its solar-powered 1,100-acre campus — are reliant on the state power grid for electrical distribution.

To prepare for potential blackouts, 300 Kansas will rely on diesel generators for short-term emergency back-up power. Owners note that all-electric buildings face the same vulnerability as other structures in blackouts, simply because so much of a commercial building is reliant on power, all-electric or not.

So, what about possible soaring electrical prices? No energy source is immune to price spikes. In fact, sustainability advocates such as the International Energy Agency, whose members include 38 countries, argue that emergency measures in the face of such rising prices "should be implemented in such a way that they do not worsen the investment environment for low-carbon energy sources and technologies." In some ways, all-electric buildings act as a hedge against soaring energy prices that are derived from a reliance on natural gas or coal rather than from renewable and on-site electric sources. ■

Alice Devine lectures at UC Berkeley's Haas School of Business and is the award-winning author of "Suite Deal, the Smart Landlord's Guide to Leasing."

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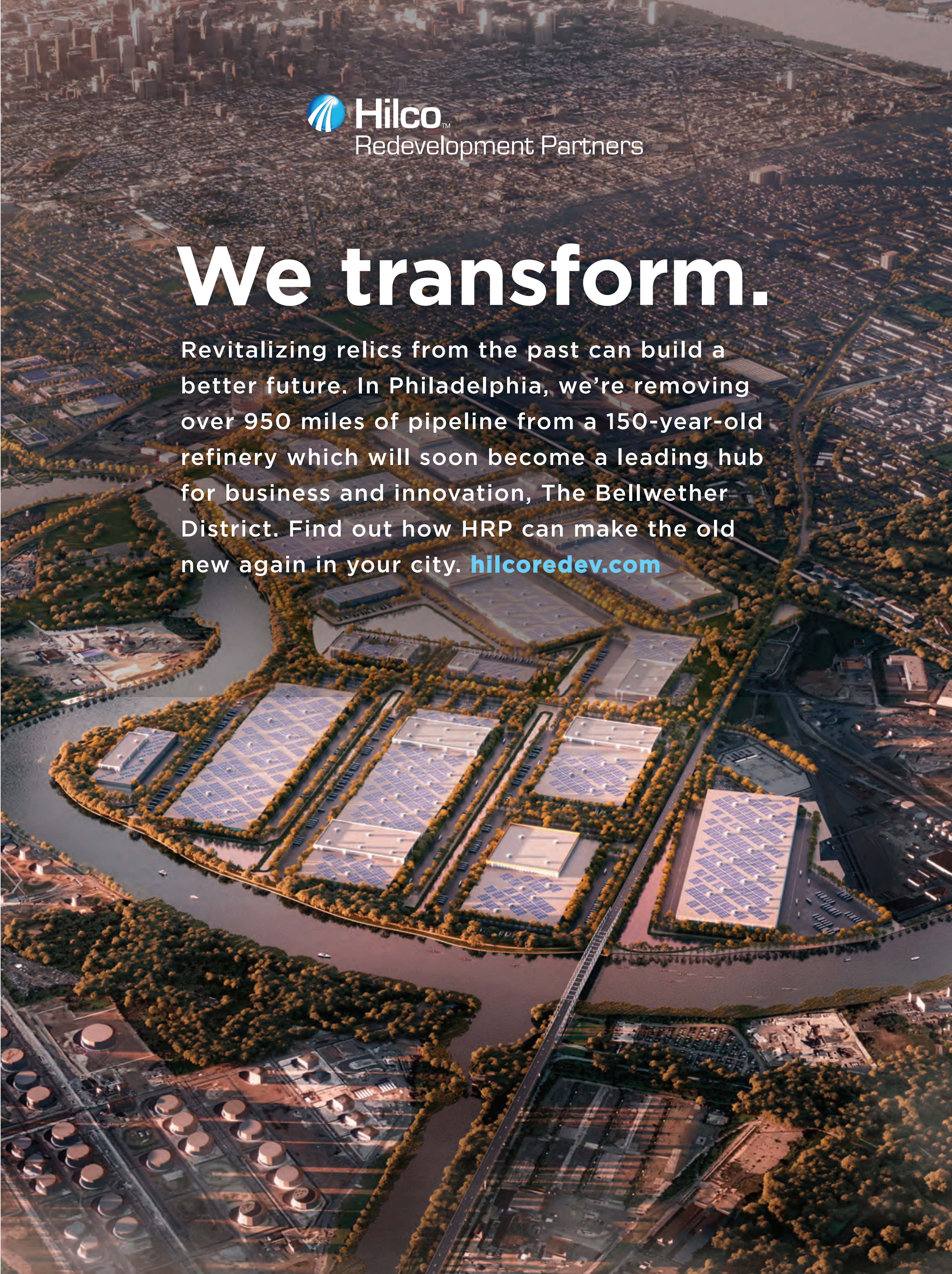
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Putting Some Real Money Behind Transportation

The Bipartisan Infrastructure Law could help improve the movement of products through supply chains.

By Robert Dunphy

The Bipartisan Infrastructure Law signed by President **Joe Biden** in November 2021 will "rebuild America's roads, bridges and rails and strengthen supply chains by making long-overdue improvements for our nation's ports, airports, rail, and roads," according to a White House statement. The $1.2 trillion deal aims to bring long-promised investments to the critical public infrastructure and private networks that undergird the economy. In addition to improving personal travel, it will improve the movement of goods, a critical aspect of the transportation system that gained a new appreciation from the public during and after the COVID-19 pandemic.

The U.S. freight transportation network moves raw materials, intermediate goods and finished products through a complex multimodal system involving more than four million miles of roads, 140,000 miles of freight railways, 25,000 miles of navigable waterways, more than 5,000 public airports, and a vast network of pipelines. In 2017, the Federal Highway Administration estimated that 19.7 billion tons of freight, valued at $18.9 trillion, was shipped within the U.S. However, pandemic-related shipping problems demonstrated that freight challenges are greater than simply alleviating logjams on roads or around ports.

Supply Chains

The public became acutely aware of the complex networks needed to get items from manufacturers to their doors during the early days of the pandemic. Many manufacturers shut down, and many consumer goods were suddenly scarce on store shelves. As the economy reopened, online ordering ballooned, and trucks, ships and planes were filled up. This created some high-visibility logjams, especially in ports.

The $1.2 trillion Bipartisan Infrastructure Law that went into effect in November 2021 includes $70 billion to build and improve the nation's highways and bridges.

A Supply Chain Disruption Task Force led by the secretaries of the U.S. Departments of Agriculture, Commerce and Transportation examined these interconnected webs of businesses, workers, infrastructure processes and practices that underlie the sourcing, manufacturing and transportation of goods, which in the past have been largely invisible to consumers. One of the problems the task force identified is the offshoring of manufacturing to reduce production costs, which can create problems for shipping. "Reshoring" of manufacturing is part of the solution, and it is a likely prospect for 70% of manufacturers surveyed by the Thomas Industrial Survey in March 2020.

The $1.2 trillion deal aims to bring long-promised investments to the critical public infrastructure and private networks that undergird the economy. In addition to improving personal travel, it will improve the movement of goods, a critical aspect of the transportation system that gained a new appreciation from the public during and after the COVID-19 pandemic.

Improving infrastructure is endorsed as a high priority by 59% of Americans, according to an AP-NORC poll in July 2021 — perhaps a surprising endorsement for a seemingly technical issue. Improving infrastructure has been a long-time priority for the nation's engineering and public policy groups and builders but had not gained widespread political support.

Congestion More Impactful for Freight

Although reducing automobile traffic congestion has greater political appeal, it could be argued that expediting freight has a greater impact on the economy. A 2020 study by the Metropolitan Council, a regional planning organization for the seven-county Twin Cities region of Minnesota, examined the effects of congestion in that area. It found that the combination of extra fuel consumption, wages for truck drivers sitting in traffic, larger delivery fleets, more truck drivers, higher inventory costs and investments in enhanced transportation logistics generated more than $200 million in costs that were passed on to consumers. These costs could rise more given the dramatic increase in same-day or next-day small-parcel delivery offered by major retailers and grocery stores.

In 2020, the cost of truck congestion nationally was estimated at $11.3 billion in wasted time and fuel, according to the Texas Transportation Institute. Additionally, a primary reason truckers quit is the frustration of dealing with traffic, schedule inconsistencies and delays. The more time drivers spend in traffic, the less they make per hour, and the less free time they have.

Addressing 'Alarming Conditions' in Chicago

Metropolitan Chicago is the nation's premier freight hub, connecting 25% of all freight trains and 50% of all intermodal trains in the U.S. Trucks account for about one in seven vehicles on Illinois' interstate highways, with some carrying more than 30,000 trucks each day. Chicago O'Hare International Airport is one of the nation's largest and fastest-growing air-cargo hubs, while the region has access to the Great Lakes and Mississippi River maritime systems. It is one of the nation's largest industrial markets, with approximately 1.1 billion square feet of industrial development, and industries that rely on the frequent shipment of goods represent more than one-quarter of all jobs in the region and add more than $158 billion per year to the regional economy.

Despite the importance of the region for freight and passenger travel, neglect of infrastructure and inadequate funding in Illinois and metro Chicago created alarming conditions for the state's transportation network by 2018, and similar conditions in capital needs for education and public service agencies. This led the state to create a historic Rebuild Illinois funding plan in June 2019 to make $45 billion worth of investments in roads, bridges and railroads over the next six years, as well as investments in universities, early childhood centers and state facilities.

The timing was fortuitous, since this capital funding program will be enhanced by an estimated $16 billion from the Bipartisan Funding Act for roads, bridges, transit, airports and a new electric vehicle program. It is estimated that the new federal funds will increase total funding for roads and bridges in Illinois by 21% and funding for public transit systems by 26% in the first year, a welcome boost to a needed program. ■

A Major Boost for Transportation Funding

More than a trillion dollars in spending sounds like a lot of money for infrastructure, but in fact the nation already spends a great deal on infrastructure, and only $550 billion is for new funding. Most of the legislation recognizes existing funding for a total of $1.2 trillion. The increase in funding for the Bipartisan Infrastructure Act over the next five years is:

- $70 billion for highways and bridges — a 43% increase
- $18.2 billion for transit, a 42% increase
- $13.2 billion for passenger rail, a quadrupling of federal support.

The nation's transportation network is funded by a range of public and private investment for highways, railroads and airlines, so federal funds must be seamlessly integrated into other programs.

Implementation and Beyond

It might seem that final approval for such a massive infrastructure program reflects a successful conclusion, but it is just the beginning of an extended effort. The challenge now shifts to implementation and, beyond that, a lasting commitment to maintaining and adjusting infrastructure networks to serve demand.

Implementation involves many partners. Since the federal government owns or operates almost no infrastructure itself, it will be essential to work with state and local governments and the private sector. Most of the funding goes to support existing state and local transportation programs, which are populated by projects that have been vetted, facilitating permitting and project development. The federal government could leverage its funding and regulations to influence state and local investments as well as the private sector. Truck parking, for example, is identified as a critical link in goods movement, but it is provided by the private sector and state departments of transportation. The federal government hopes to encourage additional capacity through State Freight Plans required under the infrastructure law.

Using private investment to leverage government funds. According to the Bipartisan Policy Center, this new federal program could be a big boost to the nascent public-private partnerships (P3s) spending, which are currently only 1% to 2% of infrastructure spending in the U.S., compared to 5% to 20% in other developed countries.

Improving infrastructure is endorsed as a high priority by 59% of Americans, according to an AP-NORC poll in July 2021 — perhaps a surprising endorsement for a seemingly technical issue. Improving infrastructure has been a long-time priority for the nation's engineering and public policy groups and builders but had not gained widespread political support.

Establishing an ongoing program. The Infrastructure Investment and Jobs Act relies on funding from a variety of sources, which the American Association of State Highway Officials noted does not supply "a long-term, sustainable revenue solution for the Highway Trust Fund." As the buying power of a fixed gas tax declines and a larger share of the fleet becomes powered by batteries, this could become an urgent need. The consensus in the transportation community is that such a program could be funded through highway use fees or taxes per mile driven, policies that haven't gained substantial political support from either party. ■

Robert Dunphy is a transportation consultant and an adjunct professor in Georgetown University's Real Estate Program. He is an Emeritus Member of the Transportation Research Board.

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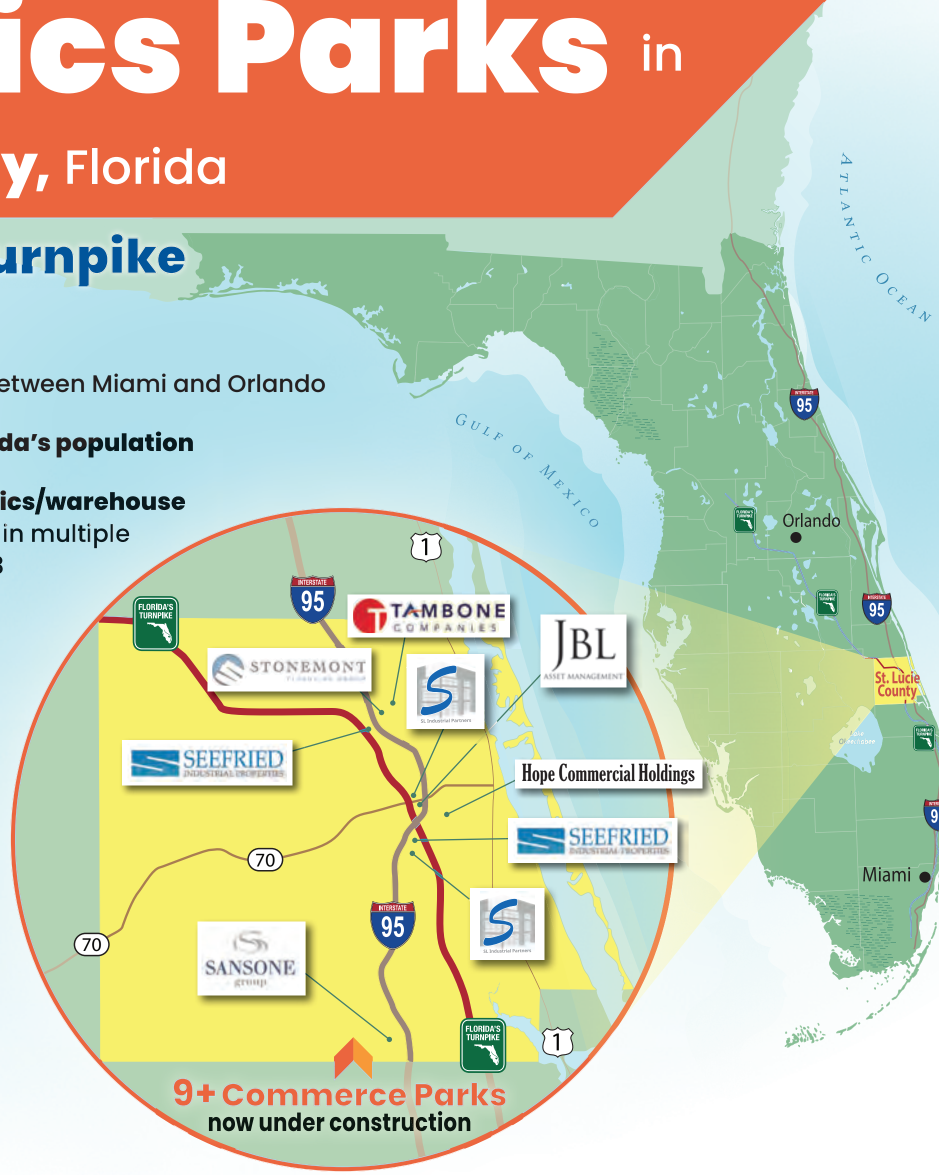

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Aging Office Buildings

At Two Union Square in Seattle, the lobby was transformed from a utilitarian space into a place that is much more attractive to tenants and the general public.

Are Having a Midlife Crisis

Here's how to reinvent these properties for a new era.

Photo courtesy of NBBJ

At a Glance

- Around 68% of U.S. office space was built before 2000, according to JLL research.
- Renewing and repositioning older offices can greatly boost value and potential.
- It is important to think beyond predictable amenities and lobby remodels.

By Andrea Vanecko, Eric Phillips and Lisa Stewart

The term "midlife crisis" often sparks negative connotations: an impractical sportscar or a drastic makeover. However, midlife can also be a time for reinvention and positive change.

The latter is certainly true for the current midlife crisis within the real estate industry. The large stock of aging office buildings — according to JLL data, 68% of national inventory in the U.S. was built before 2000, and more than 70% of space in many gateway cities is more than 30 years old — is certainly due for a makeover. Many of these properties are teetering on the edge of obsolescence due to antiquated systems, dated features and a lack of curb appeal. Additionally, a recent study from researchers at the NYU Stern School of Business and Columbia University Graduate School of Business projects that the

Photo courtesy of NBBJ

Another view of the lobby at Two Union Square in Seattle. A total of 86,000 square feet of public space in the building was refreshed in 2019.

impacts of remote work and aging spaces could lead U.S. office buildings to lose $500 billion in value by 2029.

Notably, older office towers must compete with new, modern, Class A office buildings. Buildings delivered since 2015 command a 43% rent premium and have lower vacancy rates relative to older assets, according to JLL research.

The commercial real estate industry has an opportunity to transform these properties — and to do so in a way that can be more sustainable and faster than building new. Existing towers often occupy central locations in cities and downtowns, making them even more desirable when the right attributes and amenities are present.

What's more, repositioning aging buildings can help attract top-tier talent and tenants. But to do so, developers must think beyond "check-the-box" amenities like conference rooms and fitness centers to alter the longevity of the asset — for example, high-quality design, transit access, environmental, social and governance (ESG) considerations related to environmental sustainability, and unique food and beverage options for a truly dynamic experience. When done correctly, repositioning can transform these seemingly unappealing relics of a bygone era into socially vibrant, pedestrian-friendly spaces for dis-

The large stock of aging office buildings — according to JLL data, 68% of national inventory in the U.S. was built before 2000, and more than 70% of space in many gateway cities is more than 30 years old — is certainly due for a makeover. **Many of these properties are teetering on the edge of obsolescence due to antiquated systems, dated features and a lack of curb appeal.**

Seattle's Two Union Square, a 56-story office tower that first opened in 1989, as seen in 2017. NBBJ repositioned the property in 2019 with amenities that are "centered on the human experience," according to ArchDaily.

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covery, exploration and community-building — all while reducing their carbon footprints.

Recently, NBBJ and JLL partnered on a study titled "A Perfect Storm," which analyzed a large range of new and aging high-rise properties in metropolitan areas to analyze which buildings are best suited for renewal, then crunched the numbers to get a clear picture of the return on investment. The findings highlight the significant ways that renewal and repositioning can dramatically increase an older building's value and potential. For example, starting now and repositioning an existing building in phases through 2030 can increase the market rate by 120% and extend its useful life to 100+ years, not to mention reduce vacancies. There are several key strategies identified in the study that companies can implement — either incrementally or all at once.

Reimagine the Ground Plane

Downtowns have been nine-to-five destinations for years. However, when the pandemic forced many office workers to stay home, these areas suffered disproportionately. Now, as offices bring people back — with new parameters around flexibility and schedule — the shift from nine-to-five to 24/7 activation is more relevant than ever before. Tenants and landlords want the same thing: full, vibrant offices. Because of this, owners seek to make these spaces "worth the commute," and they partner with companies who can achieve that goal and increase the value of their assets.

Key to this idea is introducing a mix of environments that support 24/7 accessibility, access to public spaces, engagement, discovery, productivity and respite, all of which can be baked into the diverse landscape that anchors the ground floors of dynamic, mixed-use properties. This can be done on a variety of scales, from weaving several properties together to create a lush network of indoor/outdoor spaces, to enabling access to nature and

The Terrell Building in 2010 prior to its repositioning. The building is named for Mary Church Terrell, a civil rights activist who was refused service at a lunch counter in the 1950s when the building was a Hecht's department store.

Library of Congress, Prints & Photographs Division, photograph by Carol M. Highsmith [LC-DIG-highsm-10082]

community activity through the entire podium of the building, to leveraging successful neighborhood retailers to introduce a sense of pride and entrepreneurial spirit.

For example, NBBJ's recent renewal of the 56-story Two Union Square office tower in Seattle, which opened in 1989, transformed the building's lobbies from mere passageways into destinations that are more welcoming to tenants and the public, who can move around the entire perimeter to find places to work and meet up.

In downtown Washington, D.C., NBBJ hired its experience design studio, ESI Design, to create an integrated 1,700-square-foot motion-activated LED display that is built into the walls of the lobby of Terrell Place, a 624,000-square-foot historic office building that was once a Hecht's department store. The display, which is activated by motion sensors, has won numerous design award since it was unveiled in 2016.

Reposition Office Floors for Residential Use

The theme of community doesn't need to stop at the ground floor.

What's more, repositioning aging buildings can help attract top-tier talent and tenants. But to do so, developers must think beyond "check-the-box" amenities like conference rooms and fitness centers to alter the longevity of the asset — for example, high-quality design, transit access, environmental, social and governance (ESG) considerations related to environmental sustainability, and unique food and beverage options for a truly dynamic experience.

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Photo courtesy of NBBJ

At Terrell Place in Washington, D.C., the lobby is filled with a 1,700-square-foot interactive LED display built into the walls that reacts to motion.

Instead, expand the mixed-use concept up vertically into the tower. One way to do this is by repositioning existing office floorplates into residential floors. Leverage prefabricated, built-in, flexible modules to reduce waste, optimize efficiency and create a "luxury" experience that is accessible to all, or adjust existing office floorplates to make them more desirable. For example, move the exterior glazed wall of the apartments in by five to six feet and use the added space as an exterior patio, or increase the amount of natural light into units by stacking the space vertically, putting a master bedroom suite in an upper loft. Introduce a work lounge on every other floor, giving residents an opportunity to "step away" when they work from home.

With hybrid work now the norm, developers must also think about how to accommodate a population that now requires work and living space. One-bedroom apartments with dens are becoming one of the fastest-growing categories — people want the ability to work from home, but they also crave separation between their work and living space. Coworking spaces on residential floors take this idea one step further, providing an office-like environment and the ability to get away from the apartment for a change of scenery or a more social experience.

Rethink Garages and Alleyways

As fewer people commute to the office every day, and we look to the future of transportation, spaces like garages and alleyways may become

Photo courtesy of NBBJ

Another view of the lobby at Terrell Place, an office and retail complex in downtown Washington, D.C. In addition to the motion-activated LED displays in the lobby and corridor areas, ambient sounds such as music and nature tones play through hidden speakers that are built into the walls and ceilings.

less necessary. Rather than "throw-away spaces," garages can be repurposed for community engagement and alternative energy.

For example, a data center installed in underused parking levels can provide waste heat that can be harvested for productive uses. Or, to replace revenue previously generated by parking structures, a garage can be repurposed as a theater or entertainment venue to host traveling exhibits and films, and support young, regional talent. Likewise, alleys can be viewed as active, urban backyards, appealing to diverse age groups, subcultures and interests. Examples include installing a climbing wall to leverage vertical space as cities densify, or creating a biker's café at an existing monthly garage exit.

Repurpose the Roof

Urban rooftops have traditionally been used to house building mechanicals. However, as the footprint needed for this type of equipment has decreased, these areas can now be leveraged for tenant gardens, social decks and shared views for all residents, transforming a functional space into a lush, attractive environmental workhorse. Residents can take advantage of this protected "backyard" through hands-on activations such as communal firepits and barbecues, a tinkering shed, or gardening spaces

The theme of community doesn't need to stop at the ground floor. Instead, expand the mixed-use concept up vertically into the tower. One way to do this is by repositioning existing office floorplates into residential floors. **Leverage prefabricated, built-in, flexible modules to reduce waste, optimize efficiency and create a "luxury" experience that is accessible to all, or adjust existing office floorplates to make them more desirable.**

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that build community and encourage well-being.

A lush, landscaped roof provides everyone with outside air, natural light and great views, all through the smart, economical use of space. The ground-floor level of a property and the roof can also work synergistically, supporting one another through shared or complimentary programming — for example, a rooftop play area for community-level day care, or a garden to host community programming like horticulture therapy or cooking classes. Finally, leveraging rooftop space also provides an energy opportunity through photovoltaic panels, which can generate approximately 15% to 20% of a building's annual electricity consumption.

Replace Antiquated Building Systems

Commercial tower enclosures from the mid to latter 20th century are aging and wearing out, designed and built for a different set of owner and environmental criteria than those of today. Luckily, there are many options for refreshing these buildings, including replacing obsolete components, increasing durability, lowering energy use, improving interior thermal comfort and boosting air quality. And one of the most successful ways that landlords can partner with tenants is through ESG initiatives. The office is a primary place for meaningful sustainability efforts, and many employees expect the organizations they work for to make good environmental decisions.

Starting with the building's exterior, a new modular cladding system is both economical and environmentally sound, and adding high-performance glazing frames can further reduce energy use and increase the longevity of the building's structure. A new, redundant water-management system can reduce the risk of water leaks, and heat pumps at the roof can produce heating and cooling while eliminating cooling-tower water usage and reducing energy consumption. Switching to floor-by-floor outside air handling units and chilled beams or radiant panels reduces the depth of services on typical floor plates and frees up the mezzanine level for other uses. (According to Air Conditioning, Heating and Refrigeration News, a chilled beam is "an air distribution device with an integral coil that may be installed within a space in order to provide sensible cooling and heating." The U.S. Department of Energy defines radiant panels as devices that are "usually made of aluminum and can be heated with either electricity or with tubing that carries hot water.")

Bringing it All Together

By reframing thinking beyond predictable amenities and lobby remodels, it is possible to successfully reposition aging buildings. While any building can be remade, certain factors make an office tower more desirable for repositioning — for example, its location, a more generous site (featuring a plaza or setbacks, unlike most current new builds), shallower floor plates, high ceilings and mid- to high-rise design, which lends itself better to multi-purposing. Without these key components, the assets are simply market-dependent investments, and teardown is sometimes the best option.

Repositioning is also about protecting the fabric of communities through thoughtful preservation. The advantages of thinking more widely about repositioning efforts go beyond the building itself, touching the surrounding neighborhoods and communities. Whether acting incrementally to slow the decline of the asset or precipitating a steep change in building value, start by anticipating the needs of urban environments, creating a future-facing strategy with options, and investing incrementally toward a holistic vision.

By reinvesting in these aging properties, it is possible to create dynamic new environments for living and working, and to breathe new life into urban downtowns in an efficient, cost-effective and environmentally responsible way. There are 3.5 billion square feet of powerful catalysts that are readily available resources — what are we waiting for? ■

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How E-Commerce Affects Urban Industrial Lands and Transportation Systems

Consumers have exhibited strong demand for goods that can be delivered rapidly and inexpensively. The challenge is figuring out the best way to optimize this.

Quick-delivery services could have a significant impact on streets, curbs and parking in cities.

At a Glance

- E-commerce is changing operations for supply chains and goods distribution.
- First mile, middle mile and last mile are the three stages of e-commerce delivery.
- Curbs and sidewalks are crucial congestion points for e-commerce delivery.

By Eric Aderneck and Russell Whitehead

The closure of many retail stores that started in spring 2020 due to the COVID-19 pandemic rapidly accelerated the growth trajectory of e-commerce. But how does this structural shift in consumption patterns impact industrial lands and transportation systems in cities?

Based on a new study completed for the Metro Vancouver Regional District by Colliers' Strategy & Consulting Group, this article outlines how the rapid growth in e-commerce is affecting urban logistics systems, particularly land uses and transportation modes. Informed by a literature review, stakeholder interviews and case studies, it summarizes the latest e-commerce trends and issues, with suggestions for land use and transportation planning that municipalities, agencies, operators and developers should consider.

E-commerce is rapidly changing how supply chains and goods shipping are managed. Traditionally, transportation stages entailed the movement of goods from a warehouse/distribution center (where goods are stored) to a fulfillment center (operated by a third-party handler) and eventually to a store. The rise of e-commerce and direct-to-consumer delivery has added demand to the industrial real estate market, urban freight corridors and curbside delivery spaces. In some places, this has also led to "dark stores" — retail facilities that resemble a conventional store, but instead house goods for online order fulfillment.

For decades, retail was an industry that could schedule fulfillment seasonally. Orders with manufacturers were placed months in advance, goods were shipped in bulk, then

Modern e-commerce logistics facilities typically use three times more labor than traditional warehouses.

sorted and distributed to stores. With the advent of e-commerce, much of the inventory ordering is done directly by consumers, resulting in more sporadic, unpredictable ordering patterns. This complicates the fulfillment process.

To mitigate delivery issues and prevent delays, distributors are storing more ready-to-ship products in distribution centers and warehouses, resulting in increased demand for industrial real estate. When a layer of rapid delivery is applied, it becomes crucial to have products available close to dense urban centers where consumer demand resides.

Urban areas often have complex, dynamic networks of transportation corridors and land uses. E-commerce activities that aim to give customers faster deliveries are disrupting these systems, and the amount of consumer goods flowing through cities is straining supply chains and logistics networks. In many cases, vehicle congestion is increasing, along with conflicts over street and curb space.

Satisfying Consumer Expectations

Consumers are demanding fast, cheap deliveries. Larger operators like Amazon that set consumer expectations can increase the reliability of their supply chains, while smaller actors must find their own innovative and nimble delivery solutions. This increasingly includes a mix of elements such as e-cargo bikes, gig workers and distribution hubs.

Generally, the delivery of e-commerce goods to consumers can be broken down into three stages: first mile, middle mile and last mile.

First mile. When consumer goods arrive in a region, their first stage of transportation is known as the "first mile." Traditionally, goods arriving by sea, rail, truck or air are transported to warehouses, then to retail stores for purchase.

Middle mile. This stage of the transport system entails the movement of goods from a warehouse/distribution center to a fulfillment center or retail store. This leg of the journey moves the product closer to the end destination, without delivering it to the customer. The definition of the middle mile is expanding with the rise of e-commerce and expectations of rapid home delivery. This has evolved in recent years to be more urbanized, with new route options from warehouses to microhub fulfillment (dark stores) or distribution centers, as well as from one store to another to fulfill "click-and-collect" orders.

Last mile. The last mile is delivery to the end consumer. When ordered online, delivery is typically completed by corporate operators or gig-delivery workers via courier vans, e-cargo bikes or other means.

Methods of optimizing these stages are a point of distinction between large retailers/distributors (such as Amazon or Walmart) and smaller ones. Larger operators can introduce economies of scale, such as company-owned truck fleets, resulting in competitive advantages that are expected to endure.

In all cases, goods are being delivered via public infrastructure such as roads and sidewalks. A major challenge for the modern economy is how to use and share this infrastructure efficiently.

Operational Impacts and Implications

Curbs and sidewalks have emerged as major congestion points for the rise of e-commerce. Delivery companies need ample and immediate access to the curb to unload quickly. This demand for curb space conflicts with conventional uses such as parking, cycling, transit and garbage collection.

Much like the congestion and conflicts sparked by ride-hailing, e-commerce delivery is creating a much greater need for comprehensive loading and parking strategies.

In response, more municipalities and parcel delivery companies are exploring cargo bikes and e-cargo bikes as last-mile delivery services. The potential benefits of switching from traditional delivery vehicles to cargo bikes include lower emissions, less vehicle congestion and better access to dense urban areas.

However, while individual cargo bikes take up less space than vans, they have a substantially lighter load capacity. With fewer parcels being delivered on each route, the cost per unit is significantly higher. E-cargo bike fleets may help alleviate these issues, as they can more easily be implemented as an alternative or supplement to traditional vans and trucks.

Bicycles could help expedite last-mile deliveries in dense urban areas. However, they are limited in the amount of goods they can transport.

Drone delivery and self-driving vehicles, while much discussed, are not immediately feasible in most contexts. However, in the longer term, they may be solutions to the labor and congestion issues that many cities face.

Municipal land use plans once dictated the location of industrial and logistics activities, but new innovations are being led by e-commerce firms. With ever-growing consumer demand for quick delivery, com-panies want to be as close to their consumers as possible. Innovative operators are trying to fit into urban locations through solutions such as shipping containers in parking lots, dark stores or logistics hotels, which are purpose-built facilities that consolidate multiple logistics-related uses and companies in order to offer more efficient and cost-effective operations.

Due to the high demand for urban industrial space, some companies are also splitting their supply chain operations into different locations throughout a city-region. One example is IKEA, which started opening smaller retail locations within some city centers while maintaining their suburban stores as fulfillment centers.

The building height requirements for e-commerce warehousing and distribution centers are increasing due to the taller racking required to store goods. The higher the racking, the more items that a building can hold for later delivery to consumers. Many newer industrial buildings in suburban locations have ceiling heights of 36 feet or higher, whereas older buildings are as low as 12 feet. The redevelopment of older industrial districts can increase their capacity and make them more marketable to a wider variety of tenants.

Cities only have a finite amount of land. As the demand for urban space close to customers and the workforce drives up rents, smaller industrial users that can't compete are forced to peripheral locations. This challenging market is favor-

Automation in e-commerce fulfillment facilities could reduce labor requirements by up to five times, but it is currently too expensive for all but the largest operators.

ing large distributors who can pay for coveted locations. As some traditional industrial uses are driven further away from the urban core, workers are forced to travel further distances to these relocated jobs, also impacting the transportation network.

Key Themes and Findings

The research and stakeholder informational interviews identified several key issues.

• From a retailer perspective, curbside-management strategies help to improve the efficiency of deliveries. Time spent finding parking is time lost. As a result, many drivers are illegally parking. Municipalities need to consider this when developing curb-management and street-parking policies.

• E-commerce delivery places significantly more demand on curb space than other new services such as ride hailing. This is due to the additional time required for delivery personnel to access the building, and in some cases travel to an upper floor.

• Current traffic data can be inaccurate and unreliable for future predictions. This is because of the difficulty in distinguishing between background traffic and "invisible freight" gig-delivery workers in private automobiles.

• The logistics industry is trending toward larger vehicles to reduce labor requirements, which may reduce the amount of traffic but means larger trucks on the streets.

• Mass transit stations are excellent locations for microfulfillment hubs and parcel pick-up boxes.

• Parcel boxes in both multifamily and commercial buildings reduce the time required to complete a delivery. In addition to reducing curb demand, these boxes have the added benefit of reducing parcel theft.

• Greater adoption of cargo bikes requires specific modifications to current transportation infrastructure. Standard bike lanes are generally not wide enough to accommodate cargo bikes. Wider lanes and additional buffers are needed to facilitate cargo bike delivery. Furthermore, there is often a lack of parking options. Dedicated courier/delivery bike parking could improve efficiency, particularly during summer months when bike racks fill up.

• As a result of consumer expectations of rapid delivery, significantly more middle-mile shipping is occurring with partially filled trucks. This leads to lower overall utilization of truck cargo space, more deliveries per truck, more traffic and more pollution.

• The consolidation of goods, or group shipping, is one of the most effective methods of reducing carbon emissions. Rather than a van making several deliveries during

Relevant Research

In May 2022, the **NAIOP Research Foundation** published a report, "New Places and New Spaces for E-commerce Distribution," that examines three trends related to the convergence of industrial and retail real estate: the conversion of shopping centers to distribution centers, adding distribution uses to existing retail buildings, and the development of mixed-use properties that include both distribution and retail. The author, **Dustin C. Read**, Ph.D./JD, director of the Master of Real Estate Development Program at Clemson University, conducted secondary research and interviewed developers, investors, architects, analysts and other commercial real estate professionals to identify the opportunities and risks associated with each strategy.

To view and download the report, visit: naiop.org/Research-and-Publications/Reports/New-Places-and-New-Spaces-for-E-commerce-Distribution a week to the same street, consolidation could result in multiple packages all delivered on one day. However, this eliminates "within 15 minutes" or even next-day delivery promises.

• Some consumers are willing to pay more or wait longer for a more sustainable delivery method. Providing carbon-footprint details for each delivery could influence consumer behavior and have a positive environmental impact.

• E-commerce warehouses typically use three times more labor than traditional warehouses. Automation could reduce labor requirements by up to five times, but it is a significant investment that is currently only possible for large operators.

• One of the most frequent comments made by developers, agents and logistics managers is that the process for rezoning and development needs to be accelerated. In many cases, zoning provisions are inflexible and don't keep up with new uses coming to market. This requires a rezoning process that is often lengthy, expensive and resource intensive.

Recommendations

While the long-term impacts of the pandemic on the uptake in e-commerce are difficult to accurately project, the trends outlined in this article are expected to continue. As a result, here are some recommendations that municipalities, agencies and operators could consider.

Curb-management policies. The first step is to create up-to-date, citywide inventories of loading zones, curbs and congestion points. Expanded data can inform city strategies and local plans to address the increase in demand for curbside space.

Parcel pick-up boxes in both multifamily and commercial buildings can cut the time required to complete a delivery and reduce parcel theft.

Designated delivery areas. Curbside delivery areas adjacent to multifamily buildings help mitigate parking flow interruptions and double parking. These areas need to be location-specific rather than applied as a blanket solution.

Microdistribution hubs. The integration of small, local hubs into a variety of developments, including high-density commercial, residential and transit-oriented communities. Pilot projects should include the possibility of permanent integration if successful. This would generally require temporary-use permits and flexible zoning.

Flexible zoning. The more flexible the zoning, the more resilient a city can be when mitigating and absorbing emerging trends, while still retaining the primary intended use of the lands. Data collection can provide ongoing monitoring of the success of new pilot programs.

Population proximity. Aligning densification of the anticipated population growth and opportunities for sustainable distribution methods are a crucial consideration for updating land use plans and policies. Municipalities should be proactively reviewing policies, especially for emerging trends such as e-commerce and ridesharing, to ensure that they are current with business needs.

Alternative land uses. Municipalities should explore opportunities to introduce industrial uses, such as urban logistics, to commercial areas, especially where these uses can offer dense employment opportunities connected with transit. In some cases, traditional brick-and-mortar shops could house multiple stages of the e-commerce supply chain in addition to retail. This includes processing in-store pick-ups and online returns, without compromising neighborhood vibrancy. ■

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The Tin Building:
A Fish Market Morphs

At the Tin Building on Manhattan's Lower East Side, visitors are greeted by an expansive display of fresh seafood in the first-floor market.

into a Dining Destination

All Photography by Nicole Franzen

An adaptive-reuse project in Manhattan rejuvenates a landmark that had fallen upon hard times.

At a Glance

- Manhattan's Tin Building began life as a wooden fish market on the East River in 1869.
- Fires and flooding through the years left the landmark severely damaged.
- It recently reopened as a high-end dining and shopping spot after a $194.6 million renovation.

By Anthony Paletta

Manhattan's Tin Building, which has primarily been used as a seafood market, has made several moves during its long life as a commercial building. The Fulton Fishmongers Association first built a wooden market south of the current site along the East River in 1869, then another around the present location near the Brooklyn Bridge in 1894. The current Tin Building was constructed in 1907 and directly modeled on the 1869 version. In its latest incarnation, it has been reconstructed six feet higher and 32 feet east of that original site.

Time was not exactly kind to the structure. There was a massive fire in 1995, and government refrigeration requirements eventually forced the market to move north to the Bronx in 2005, leaving the Tin Building empty and in a shambles. Flooding from Hurricane Sandy in 2012 further damaged the facility. However, after nearly a decade of planning and work, it has been transformed into a high-end destination for dining and drink, as well as a consumer-oriented gourmet seafood and grocery market. At 53,000 square feet, it's the largest enterprise launched by celebrity chef **Jean-Georges Vongerichten**. It opened in late September, the product of $194.6 million in investment.

The Howard Hughes Corporation, which acquired a 100-year ground lease for the site in 2016, found that it wasn't merely a case of the building being structurally unstable. Its foundation was as well, as the pier it's located on had rotted through.

"You couldn't even walk on the site safely," said **Andrea Teixera**, associate principal at SHoP Architects, who worked on the reconstruction of the building.

Additionally, the Tin Building is located within the city's South Street Seaport Historic District, so the rebuilding effort had to comport with its original form as much as possible.

Getting to Work

The first step when work began in August 2017 was taking the building apart to reconstruct the pier; the next problem was that they couldn't actually rebuild it on its original plot. Federal Emergency Management Agency (FEMA) flood standards required that the building be raised higher than the 100-year floodplain, which was five feet above its existing height (another foot was added for safety purposes). That sounds simple, but not with FDR Drive located directly above the building's canopy.

The solution was to move the building 32 feet east, shifting its footprint onto the site of several former storage sheds that were neither useful nor landmarked.

"In an ideal world, we would not move a historical building," Teixera said. "Unless you could take the FDR out, this is the best you could do."

There were multiple benefits to this relocation. It restored a plaza space in front of the building that had been eliminated when FDR Drive was constructed in 1955, providing the building some breathing room and removing its entrance from the shadow of the elevated freeway. It also enabled SHoP Architects to fill in a missing piece of its East River Waterfront Plan, a multi-stage project that first launched in 2004 with the aim of knitting together the waterfront area from the Financial District through the South Street Seaport to the neighborhoods of the Lower East Side.

The exterior of the Tin Building with the Brooklyn Bridge visible in the background.

The dismantling of the structure revealed that it was in much worse condition than imagined.

"There was barely any usable material in the building," Teixera said.

This was not a property venerated as historic throughout its life. It was a briny fish market whose maintenance had been minimal. Most of the wood elements were rotten; all metal was rusted to some extent. None of the existing columns could safely support the new building; some could be used to support the canopy and in non-structural functions. Those that were of any possible use were stored in crates, tagged and documented.

The New York Landmarks Preservation Commission, which had to approve all stages of the project relating to its exterior, recommends preserving original elements as much as possible, but sometimes that isn't viable.

"What you want to do is to preserve the building as much as you can," Teixera said. "It's not just the building itself, it's about preserving the appearance of the building."

SHoP placed original cast iron columns at the front of the building and several inside. Other cast iron columns were replicated. Engineering has made quite a few advances since 1907, which enabled a far freer internal structure than the prior

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The House of the Red Pearl is a Chinese-themed full-service restaurant.

column-laden layout, Teixera said.

"The superstructure respected the grid that was in place but worked with bigger spans," she said.

A close study of the building revealed some odd discoveries. For example, windows on the building weren't uniformly placed, and some columns weren't straight (and may never have been).

The building was already unusual; there aren't many neoclassical corrugated tin buildings, and the undulating surface that lent the building its name was re-created out of painted aluminum. The entablature, cornice, pilasters and canopy brackets were also carefully replicated. Building directly on the water led to material choices that reduced the harm of saltwater exposure. Signage was also modeled closely on historical models. Tongue-and-groove wooden floors and ceilings were re-created.

Inside the building, elements above the ground floor weren't identified as historic, providing a bit more room for maneuvering.

SHoP also added mechanical systems on top of the building and a limited louvered facade to conceal them. They had considered

A dramatic installation of a school of fish by artist Michael Murphy hangs from the ceiling.

adding some sort of roof deck atop the structure, but the Landmarks Preservation Commission wouldn't allow it.

There was another mechanical wrinkle: utilities couldn't be run through the ground because there is no ground; the building essentially rests on a platform. Everything had to enter horizontally from the shore under the pier and then turn up.

A Piece of the Puzzle

The Howard Hughes Corporation has made a variety of investments in the South Street Seaport district, revamping Pier 17 into a mixed-use complex containing dining, event space, an ESPN studio and a summer concert venue, and it is currently developing a mixed-use residential and office tower at 250 Water Street. The Tin Building was a literal gap between the historic district and Pier 17.

The South Street Seaport has been underutilized in recent decades. Despite being one of the oldest portions of Manhattan and an objectively charming streetscape, for many years it was mainly an underperforming tourist attraction. **Saul Scherl**, president of the New York tri-state region for the Howard Hughes Corporation, recalled going there in the 1990s.

"There were a lot of 'I love New York' T-shirts and snowglobes, and that even struggled for a while," he said. "It lost its luster even for tourists."

That's been changing in recent years thanks in considerable part to Howard Hughes' efforts. In addition to Pier 17, other recent arrivals nearby range from a movie theater to offices for fashion designer **Alexander Wang**, a McNally Jackson bookshop, restauranteur **David Chang**'s relocated Momofuku Ssäm Bar, and more.

The Tin Building was a missing piece of the puzzle.

"It's a historic building but also a connection between the old and new," Scherl said.

Birth of a Dining Destination

A market hall came to mind quickly as a use. This would not only provide an amenity to the neighborhood and fill a gap, but also echo the historical use of the building.

Vongerichten rapidly became involved, Scherl said.

"We were talking to a lot of different interested parties, and we just had a natural fit with Jean-Georges," he said. "Frankly, he was the most responsive and the most dynamic in the conversations we had about what we wanted to create there."

The building was already unusual; there aren't many neoclassical corrugated tin buildings, and the undulating surface that lent the building its name was re-created out of painted aluminum. The entablature, cornice, pilasters and canopy brackets were also carefully replicated.

T. Brasserie is a Parisian bistro. It's one of six casual restaurants, six proper restaurants, four bars and several retailers at the Tin Building.

Food halls have become popular and almost commonplace. Scherl and Vongerichten sought to create something that stood out from other offerings in New York. Scherl explained their goal was "to figure out how we can provide something that you don't see elsewhere in New York."

Scherl's aim was to attract any visitors who might be interested, but with a particular eye on the city's residents.

"For me, it's about getting New Yorkers back to the seaport," he said. "How do we make it for New Yorkers as well as for tourists? That's been the struggle the last seven years, to figure out the programming to make sure we get New Yorkers back."

Scherl and Vongerichten traveled to Spain, Italy and London to identify elements in market halls that they wanted to replicate in the Tin Building.

They fixed upon an animating concept, which Scherl calls "culinary theater." The multiple levels feature a pinwheel of design elements. For example, artwork resembling a suspended school of fish, which


The Spoiled Parrot is a colorful, whimsical candy store.

take the look of either a whale or squid depending on your vantage, sets the tone.

The original plan was to create a market on the first floor and restaurants and bars on the second, but this was changed to distribute a mix of elements on both floors to ensure a steady stream of foot traffic through the entire structure.

"The market is at the core of the whole building," Scherl said.

The fish counter is the first thing visitors see, and other elements revolve around it. These include six casual restaurants, six proper restaurants, four bars and several retailers.

Knitting Together the Design Elements

Vongerichten had a long history with the old Fulton Fish Market.

"The Fulton Fish Market was one of the first places I visited when I came to New York City in 1986 and has continued to be a consistent part of my New York culinary inspiration ever since," he said. "It has been surreal to have the opportunity to bring back such an iconic New York staple in a new way while ensuring that we continue the legacy of that one-of-a-kind experience and sense of discovery the market once inspired."

He also had ideas about how to assemble the space.

"Jean-Georges really was critical in figuring out what was going to be next to each other," Scherl said. "He really thought a lot about that. The beer stand would go in between the taco and the pizza and pasta. That wasn't chance -- it was really thought out. We weren't going to put the vegan restaurant next to the beer."

Robin Standefer and **Stephen Alesch** of Roman and Williams, the interior designers, worked to craft the interior, which is a world away from fish-market drab or the industrial aesthetic that characterizes many recent food halls. The various restaurants and shops are deliberately designed quite differently — but with an eye to larger harmony. Verdigris-tile radius-corner archways demarcate restaurant spaces without walling them off from view. Ceilings are distinctive for numerous spaces. There are exposed ducts and concrete floors but also marble, brass and tamboured wood.

The result is an aesthetic that's part ferry terminal, part ocean liner lounge. There's an art nouveau look in French bistro T. Brasserie, charred cedarboard wood in sushi and sake bar Shikku, and Chinoiserie wallpaper, velvet banquettes and lanterns in the Chinese-inspired House of the Red Pearl. A candy shop bursts with color or "voltage," a term Roman and Williams used repeatedly in reference to the project. There's also The Tasting Studio, a broadcast studio for cooking videos and podcasts that doubles as a dining and reception space.

According to **Yvonne Choy**, senior associate at Cass Calder Smith Architects, the architect of record on the project, all sorts of practical elements had to be threaded through the building to make this work.

"The interior layout was developed from both the language of the historic Tin Building as well as from a preliminary program provided from the outset," she said. "Along with Howard Hughes, Jean-Georges and the design teams, each program evolved across the three floors to accommodate operational needs

The Tin Building - Project Summary

Project Location	Manhattan
Project Name	The Tin Building
Type of Site	Urban
Development Type	Redevelopment, Adaptive Reuse, Mixed Use
Transportation Modes	Car, Transit, Pedestrian
Mix of Uses	Retail/Restaurant
Site Dimensions	53,000 square feet
Number of Floors	Three floors First floor is 21,000 square feet Second and third are roughly 16,000 square feet each
Development Team	
Developer	Howard Hughes Corporation
Project Architect	SHoP Architects (Core and Shell)
Architect of Record	Mancini Duffy
Surveying and Geotechnical Services	Langan Engineering
Interior Designer	Roman & Williams
Interior Architect	Cass Calder Smith Architecture & Interiors
General Contractor	Plaza Construction
Financial Partners	Funded 100% by Howard Hughes Corporation
Timeline	
Land Acquisition	January 2017
Submitted Initial Plans	August 2016
Phase I Completed	October 2016
Project Complete	June 2022
Total Project Costs	$194.6 million ■

while arranging all the venues to fit and to achieve the best guest experience."

Figuring out the layout is one task; fitting in necessary support elements is another. "Back of the house" is complicated when there is no back to the house (nor a basement): three sides of the building, including the two longer ones, are public-facing, and the entire third floor is a commissary kitchen.

"The kitchens and the guest-facing spaces are intricately woven together so that the infrastructural elements are out in the open but also out of sight," Choy said. "The top floor does house the bulk of the kitchen, storage and employee spaces, but there are also eight smaller kitchens on the other two floors that are not visible to the public."

Some of this juggling is visible and clever; ductwork repeatedly doubles as a canvas for signs.

Scherl noted that there are still challenges, particularly regarding storage space.

"The good thing is we're on a pier and we're on the water," he said. "The bad thing is we have very limited storage. If you go to most of these market halls, you can go into the basement and have all your refrigeration and all your storage down there. Unfortunately. we have no basement."

Some office space within the building is being studied for possible conversion to storage.

Built for Versatility

Scherl stresses that the Tin Building is intentionally a work in progress.

"There is no final mix," he said. "The opening mix is changing every day we're looking at it, and we're seeing what sells and also what New Yorkers want."

They're keen to explore an assortment of seasonal programming that's designed to comport with other efforts nearby, from ice skating to summer concerts.

The Tin Building's explicit aim is to accommodate a wide range of diners and shoppers and adapt to seek to keep them all happy.

"People who are coming to experience the market hall are different from people coming to eat at the restaurants," Scherl said.

Pandemic circumstances helped a bit with this focus.

"In some respects, COVID helped us bring New Yorkers back because tourism wasn't around, so we had an opportunity to market to New Yorkers and focus on that," Scherl said.

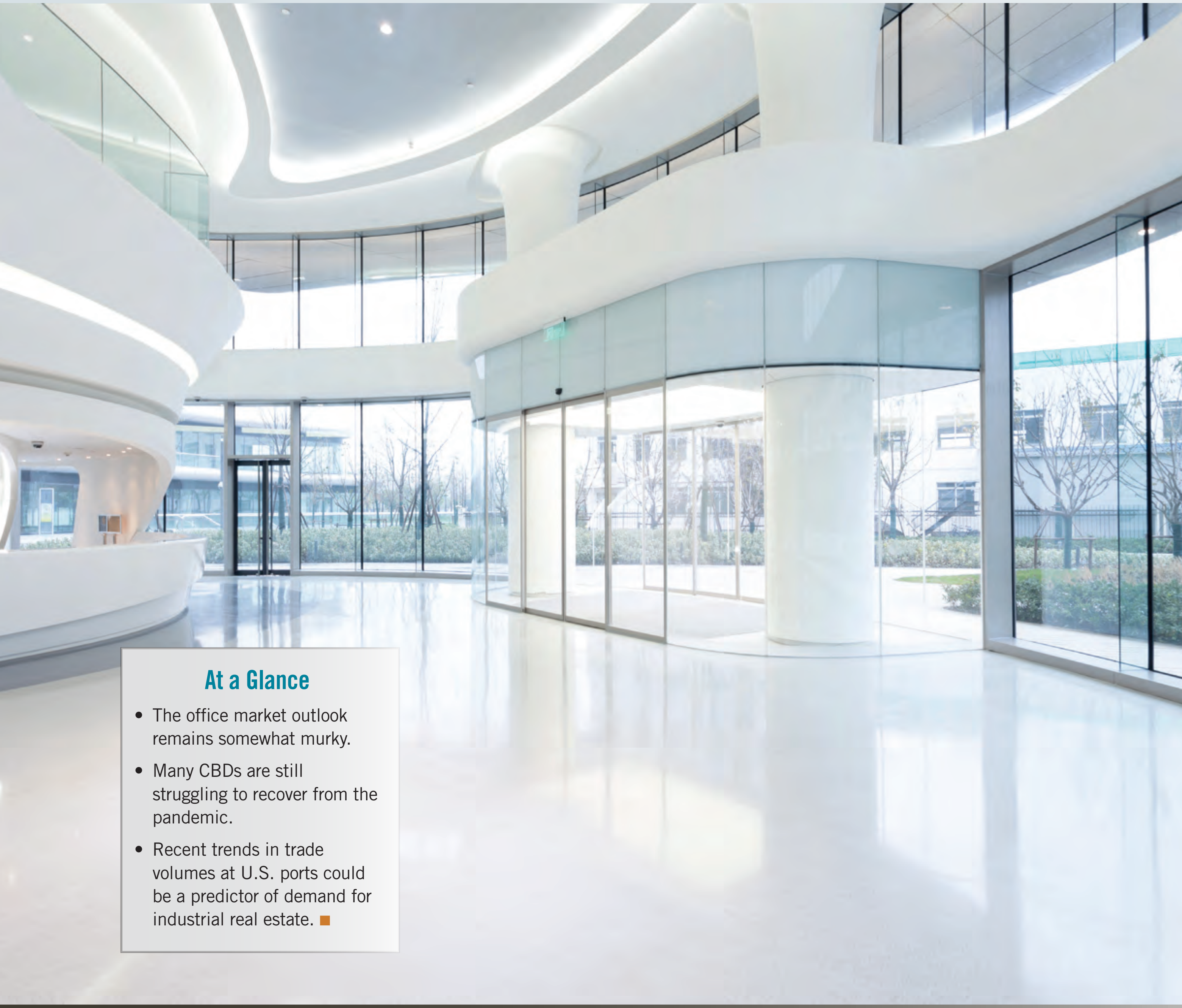
Scherl noted that the growing residential base of Lower Manhattan was obviously in mind, and that office workers have been a visible presence at lunch and after work. One goal achieved so far is that there is a steady flow of customers at all times, "not just on the beautiful days."

The ownership team has been active in marketing the Tin Building to New York City by running ads throughout Manhattan, in Brooklyn and in Queens.

On a wall at the Tin Building, a **Herman Melville** quotation from "Moby-Dick" proclaims "Right and left, the streets take you waterward." And at this reborn historical market, the options are rather greater than Ishmael's choice of cod or clam chowder. ■

Anthony Paletta is a freelance writer based in New York.

What Lies Ahead for Commercial Real Estate?



At a Glance

- The office market outlook remains somewhat murky.
- Many CBDs are still struggling to recover from the pandemic.
- Recent trends in trade volumes at U.S. ports could be a predictor of demand for industrial real estate.

The office sector in North America remains stuck in a state of limbo more than two years after the start of the COVID-19 pandemic.

NAIOP brought together national research directors and academics to discuss the return to the office, the future of industrial and other topics.

By Trey Barrineau

The NAIOP Research Foundation held its National Research Directors Meeting in October during CRE.Converge in Chicago. The discussion, led by **Shawn Moura**, Ph.D, NAIOP's director of research, focused on the outlook for office and industrial properties amid a rapidly changing economic climate. The meeting featured some of the NAIOP Research Foundation's Distinguished Fellows as well as research directors from national real estate brokerage, data and investment firms.

Office Outlook

Nearly three years after the COVID-19 pandemic closed businesses and forced millions into remote work, the office sector remains somewhat in a state of limbo, according to participants in the panel discussion.

Dean Violagis, vice president of research with Costar who is based in Washington, D.C., noted that while newer, well-leased office properties are still a safe investment, Class C properties are not faring well.

"In Washington, I'm seeing a lot of people buying buildings and converting them to other uses like multifamily, which is a good thing," he said. "Cities need more housing. The question is, is it always going to be profitable? Because that's not an easy task. But clearly, the office sector is feeling some pain. There's a tremendous amount of subleased space. It keeps going up, and it has an impact on the market."

Stephen Newbold, director of national office research with Colliers, said the office market is facing a lack of clarity on both the leasing and investment sides.

"People are stepping back from making decisions right now," he said. "Many of them are less comfortable with office in their investment portfolio. Some investors are reassessing their office exposure. We're not seeing repricing yet, but we are seeing some properties being taken off the market, or leveraged acquisitions becoming more of a challenge to underwrite because of rising interest rates."

According to Newbold, for the 12-month period from mid-2021 to mid-2022, national vacancy has tracked around 15%. (Research shows that the record high was 16.3% during the height of the Global Financial Crisis.)

"Absorption has come back, albeit at a modest level" he said. "The 150-million-square-foot loss we had during the COVID period is back to slightly net positive by about 15 million square feet over the past 12 months."

However, Newbold is concerned about sublease space as well. He said it started to drop in the second half of 2021, but it's ratcheted back up, and it's currently just shy of 220 million square feet, a record level.

"Recent leasing activity provides evidence that large occupiers are downsizing their office space," he

Participants

NAIOP Research Foundation National Research Directors and Distinguished Fellows


Aaron Ahlburn, Avison Young


John Chang, Marcus & Millichap


Matt Dolly, Transwestern


Brian Harper, Avison Young


Clifford A. Lipscomb, Ph.D., MRICS, Bartow Street Capital


Stephen Newbold, Colliers


Carlos Ortea, The Davis Companies


Amanda Ortiz, Colliers


Mirle Rabinowitz-Bussell, University of California-San Diego


Drew Richardson, Primera Companies, Inc.


Steig Seaward, Colliers


Mark Stapp, Arizona State University


Dean Violagis, Costar


Raymond Wong, Altus Group

said. "However, unless there is an imminent lease expiration, firms may delay decisions until there is greater clarity on the outlook for business and the economy."

For example, Newbold said Yelp, driven by an increase in remote work, cut its office space in San Francisco from 160,800 square feet to 53,600 square feet.

"If you look across the major central business districts (CBDs), asking rents for Class A sublease space are about 30% to 35% less than for direct space," he said. "Whether it's through sublease space or tenant downsizing, I expect more space to be added to availability. You can't repurpose all that space to other uses such as multifamily or life sciences."

Drew Richardson, director of leasing and property management with Primera LLC in Plano, Texas, and a NAIOP Research Foundation Governor, said he believes many companies will reduce their space commitments when their leases expire.

"If they signed a five-year lease or a six-year lease in late 2019 and they've got to survive that, by the time the cycle goes back around, they may exit or sublease unused space," he said. "They may be waiting the lease out just to keep the

A lack of foot traffic and retail activity related to remote work is having a negative effect on central business districts. San Francisco has been one of the most impacted major cities.

employees there. There's going to be a lot of that as companies adjust to the future of the office."

Newbold agreed, citing a recent Colliers survey in which roughly half of the respondents indicated that they would want a shorter lease when renewing or relocating.

Hybrid Work and CBDs

The pandemic may have permanently altered attendance requirements for office workers, which could have far-reaching implications for both office markets and the health of central business districts.

Previously, most white-collar employees were in the office five days a week. Today, that number is expected to range from two to three days a week. However, **Raymond Wong**, vice president of data operations with the Altus Group in Toronto, said different demographic groups may have different definitions of the "perfect" number of days in the office.

"In the last 18 months, there was growth in the tech sector and life sciences that took up some of that space, especially life sciences in the suburbs," he said. "But you've got to look at demographics. People of a certain age do not prefer to go back to the office, such as those whose careers are near the end or those who are early in their career. As for the mentality that you must be in the office to advance your career or to bump into the senior managers, well, some of the senior managers aren't there. Commute times also play a factor in the larger urban markets. Traveling two to three hours to and from work is just not that desirable anymore."

Most panelists agreed that hybrid work is here to stay — at least for the foreseeable future.

"Whether it's three days in and two days out, I think most office occupiers of scale are saying they're going to adopt some level of hybrid work, but many are still defining the details," Newbold said, adding that smaller businesses are seeing a higher share of employees back in the office.

Carlos Ortea, director of research with The Davis Companies, said it's important to differentiate between office markets in Sunbelt cities and gateway cities.

"South Florida is one of the top-performing office markets right now, but I don't know how long that will last," he said. "Markets like Charlotte or Raleigh or Texas appear to have some strong employment drivers for the return to the office."

Many gateway cities, on the other hand, are still seeing high vacancy rates for office properties. According to JLL's U.S. Office Outlook for the third quarter of 2022, cities such as Chicago, San Francisco, Boston and Washington, D.C., all have office vacancy rates approaching or exceeding 20%. Empty offices greatly reduce foot traffic and spending at nearby retail establishments and restaurants. That, in turn, has led to an increase in the perception that vacant streets in many CBDs are unsafe or more vulnerable to crime.

"It's interesting to think about the effect on all the services that were created to support all those workers in the CBDs," said **Mark Stapp**, executive director of the Masters of Real Estate Development program at Arizona State University. "Urban retail in places where office workers are not returning is dying because of this lack of demand and foot traffic, and that exacerbates this issue of safety and crime, because there are fewer people and fewer eyeballs on the street. Activity is a basic crime deterrent."

A University of California, Berkeley study of downtown activity in major cities from March to May 2022 based on cellphone location data showed that many are seeing less than half of the foot traffic they saw before the pandemic. San Francisco is at just 31% of pre-pandemic levels.

Stapp noted that while crime in CBDs has always been a fact of life, it's been exacerbated by social media and the ubiquitous presence of cellphone video cameras.

"Negative perceptions can now be perpetuated so much faster," he said. "This then begins to play out in people's decision-making, then it becomes a self-fulfilling prophecy. Suddenly, downtown doesn't look occupied. You've got vacant storefronts, and fewer people working in the stores. It's not good for those places that have historically been the gateway cities."

Ports and Industrial Growth

Aaron Ahlburn and **Brian Harper** of Avison Young gave a presentation based on their research brief "Seeing Past the Pandemic: Industrial Demand and U.S. Seaports," which was published by the NAIOP Research Foundation in March 2022.

According to the brief, there is a direct correlation between higher trade volumes at U.S. ports and strong growth in industrial space absorption within those coastal markets. Additionally, smaller markets near recently expanded ports have seen the strongest relative growth in demand for industrial space.

Ahlburn and Harper's presentation examined how supply chain disruptions are affecting the outlook for industrial space near U.S. ports.

According to Harper, Avison Young's director of data science, the research brief used about 10 years' worth of data to try to understand the relationship between industrial vacancies and asset performance and activity in shipping and ports before, during and after the COVID-19 pandemic.

A major source of data was internet-connected devices such as phones and tablets. The researchers located the loading area in each port on Google Maps and geofenced it to track every internet-connected device coming and going into that area. The data was aggregated and anonymized but very granular, and it allowed for precise geolocation.

"What we learned is that the first trip is not long," Harper said. "That trip is happening 10 miles from the port."

He added that the trips were often only 500 feet to a rail connection. The other trips went to warehouses relatively close by.

"All of the goods that come into the ports of Los Angeles and Long Beach are going to affect the local real estate ecosystem directly and strongly," Harper said. "As the traffic in the port increases, as more trucks come out of there and need somewhere to put their containers, that's going to strongly affect industrial vacancy."

Harper said that the economic geography of a market has a major impact on the movement of goods arriving at ports. For example, the Port of New York and New Jersey is older and much more densely

Research Brief: 'Seeing Past the Pandemic'


NAIOP RESEARCH FOUNDATION

Research Brief

Seeing Past the Pandemic: Industrial Demand and U.S. Seaports

Key Findings

Historical Overview

Port Activity

In light of recent port congestion and supply chain issues, the NAIOP Research Foundation commissioned "Seeing Past the Pandemic: Industrial Demand and U.S. Seaports." This research brief, authored by Avison Young data experts **Aaron Ahlburn** and **Brian Harper**, explores how closely industrial demand is tied to trends in port activity.

Specifically, it examines major U.S. port activity, truck traffic and industrial space absorption, finding that changes in import volume substantially affect occupancy in port markets. While the current port congestion may not last, the decline in recent trade volumes at many ports has the potential to hurt industrial demand in areas near coastal markets. ■

To view and download the report, naiop.org/Research-and-Publications/Research-Reports

A recent brief from the NAIOP Research Foundation shows that there is a direct correlation between higher trade volumes at U.S. ports and strong growth in industrial space absorption within those coastal markets.

developed than Los Angeles/Long Beach. Harper and Ahlburn's data showed that 60% of trips there were within 10 miles.

However, in ports such as Houston, cargo is shipped much further.

"If you are an industrial owner and you want to know what's happening at the port, it's the stuff that's really close by," Harper said. "But if you look at someplace like Houston, it's the opposite. Houston is sprawling."

According to Ahlburn, Avison Young's innovation lead for global logistics, many "exogenous factors" developed in the months since the report came out that couldn't be built into any type of model or forecasting. These include the huge run-up in fuel prices, the highest inflation in 40 years and the Federal Reserve's interest-raising efforts to try to slow price increases.

"In terms of consumer spending, what's happening with goods and commodity pricing eventually impacts demand in industrial real estate," he said. "Will that put pressure on discretionary spending by consumers, and what will be the impact on overall demand for space going forward?"

The overall rise in consumer prices has sent the personal savings rate back below pre-pandemic levels. That has an impact on overall demand going forward.

"If this persists, combined with other factors, it could impact industrial real estate demand in a negative fashion over the near term," Ahlburn said. "Warehouse capacity has been at or near full utilization, and demand is perceived to be trailing off. You're now seeing some of that acute correction."

Harper and Ahlburn said that U.S. industrial vacancy was steady from the second quarter to the third quarter, but it will be important to monitor how that changes over time, given the current levels of speculative development.

"Net absorption is still positive, but not at the levels we'd seen in prior quarters," he said.

Violagis suggested that Amazon's recent decision to sublet between 10 million and 30 million square feet of industrial space could be causing the net absorption numbers to drop.

"You're going to get a holiday push, but a lot of retailers already have their inventory because they booked it earlier this year," said **Matt Dolly**, Transwestern's national industrial research leader. "Once inventories are unloaded, maybe some of these warehouses will be empty if consumer demand goes down."

Amanda Ortiz, director of national industrial research with Colliers, said other major retailers are still playing catch-up.

"Amazon giving back space just leaves more of an opportunity for other e-commerce companies or retailers who deal with e-commerce to grow," she said.

While a soft September for cargo volumes at West Coast ports may be caused by factors that could range from zero-COVID policies in China to lingering dockworker labor negotiations and persistent inflation shifting consumer buying patterns, the ports of Los Angeles and Long Beach are still on pace to have very strong inbound shipping volumes in 2022. California State Transportation Agency (CalSTA) just announced a new spending program as well, which will help fund several projects at the ports.

Harper noted that industrial development near the ports of Los Angeles and Long Beach is at maximum capacity, which has led to growth in East Coast ports. Savannah, Georgia, in particular, has seen tremendous growth.

"It's really fascinating to look at the long-term effect on Savannah," he said. "You look at 20 years ago, industrial vacancies there were like 20% to 25%. What you have then is a massive growth in inventory that's getting absorbed. You're really seeing this shipping market that didn't really exist at that scale coming online. It's made people optimistic to build there. People made big bets and they paid off."

It's not just Savannah, though, as Dolly pointed out.

"Charleston has set record cargo levels for 15 consecutive months," he said. "Other southeastern ports have been growing, too."

In a blog post from late September, Dolly noted that the Port of Virginia saw cargo volumes increase 14.7% from fiscal-year 2021, which was the previous record year. And Dolly said the Port of Miami is coming off its busiest year, and cargo is anticipated to increase.

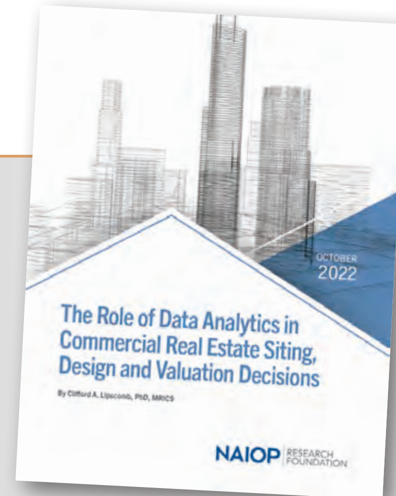
"A nearshoring trend continues to accelerate, and Florida ports are ideally situated if manufacturing shifts from the Eastern Hemisphere to areas like Mexico and Latin America," Dolly wrote in the blog post.

Clifford A. Lipscomb, Ph.D., MRICS, of Bartow Street Capital, pointed out that inland ports in the Southeast have helped play a crucial role in the growth of cargo shipments to the region. For example, Georgia and South Carolina both have two inland ports.

"When those containers come off the ship in Savannah, they're going farther than 500 feet," he said. "Inland ports reduce truck congestion at the Ports of Savannah and Brunswick and reduce overall truck VMTs (vehicle miles traveled)." ■

Trey Barrineau is the managing editor of publications for NAIOP.

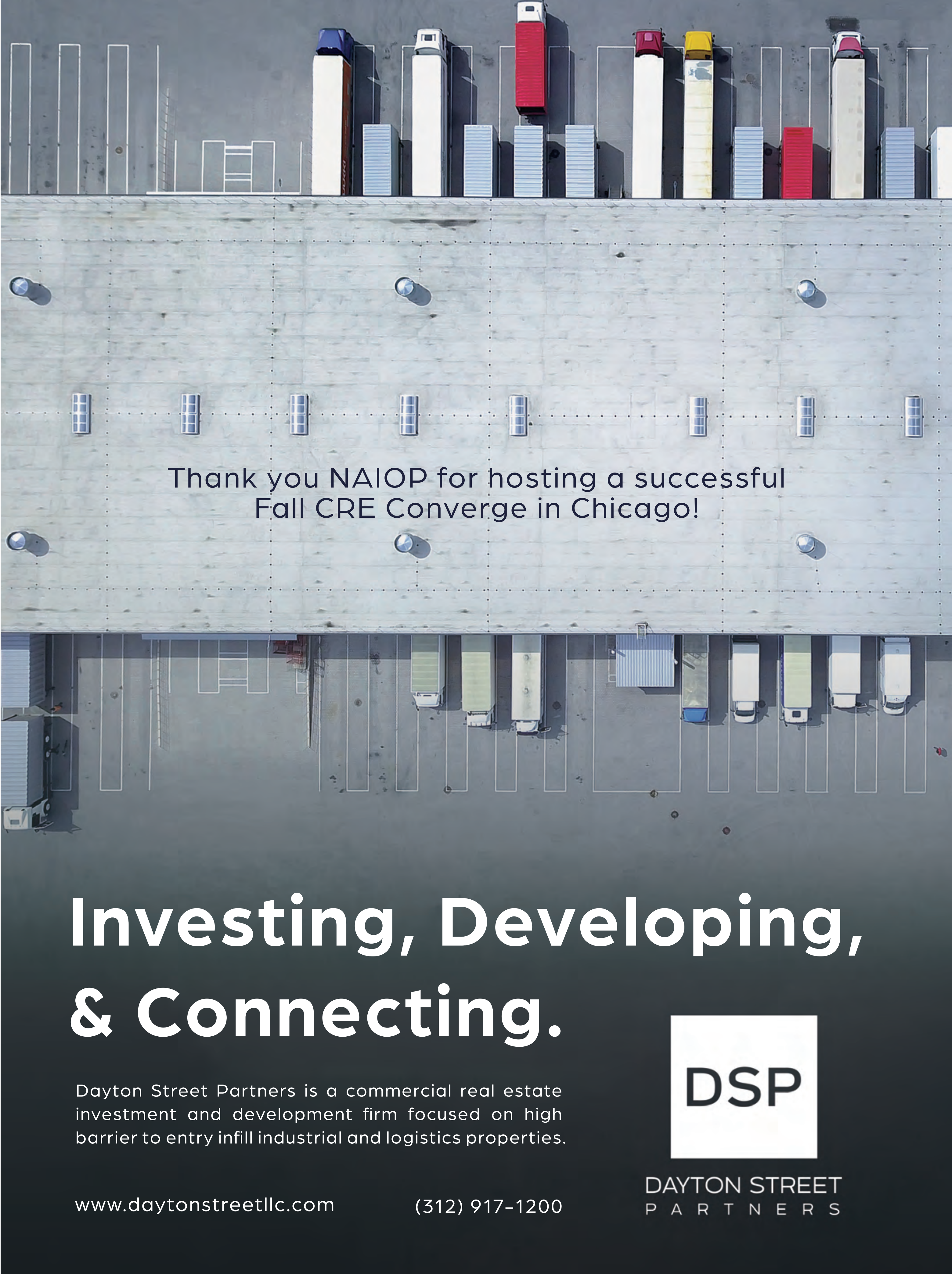
Report: 'The Role of Data Analytics in CRE'



Data analytics play an important role in information technologies and their interaction with the physical world. The commercial real estate industry has focused primarily on data analytics applications for property management and building operations, but analytics can also inform development decisions.

To gain a sense of how CRE firms are using advanced data analytics, the NAIOP Research Foundation commissioned a new report, "The Role of Data Analytics in Commercial Real Estate Siting, Design and Valuation Decisions," authored by **Clifford A. Lipscomb**, Ph.D., MRICS, to examine applications in site selection, design and valuation for commercial buildings. ■

To view and download the report, visit www.naiop.org/Research-and-Publications/Research-Reports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Commercial Real Estate Benefits from Inflation Reduction Act's Climate Change Incentives

The bill expands tax breaks for energy-efficiency improvements in buildings.

By Aquiles Suarez

This August, long-stalled negotiations over President **Joe Biden**'s original $3.5 trillion Build Back Better program concluded with Senate Democrats agreeing to pass a $1.7 trillion budget reconciliation they dubbed the Inflation Reduction Act of 2022. Much of the ensuing commentary derided the bill as actually doing little to reduce inflation. But one thing is demonstrably true: the Inflation Reduction Act (IRA) represents the largest federal investment ever to fight climate change. It includes $369 billion in new programs, as well as new and expanded tax incentives to help in that effort.

The Inflation Recovery Act expands use of the Section 48 Investment Tax Credit, which can be applied to eligible investments such as solar installations.

Proponents of the legislation claim it will reduce the nation's carbon footprint by 40% by 2030, measured against 2005 levels. Other estimates of carbon emission reductions range from 24% to 42%. Incentives in the bill for the commercial and residential real estate industries are expected to help the building sector make major contributions to that reduction. The key provisions of the IRA for the commercial real estate sector include a revised and expanded Energy Efficient Commercial Buildings Tax Deduction (Section 179D); the Section 48 investment tax credit (ITC); and a tax credit for the installation of electric vehicle charging stations (Section 30C).

Section 179D

The legislation changes the Section 179D tax incentive to make it more usable and valuable for commercial real estate owners and developers. Congress established the tax deduction in the Energy Policy Act of 2005 as an incentive for building owners to implement energy-saving measures and improvements in their developments. Prior to the IRA's passage, Section 179D allowed owners to deduct $1.80 per square foot for buildings that reduced their energy consumption by at least 50% when compared to a building that meets standards set by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

Proponents of the legislation claim it will reduce the nation's carbon footprint by 40% by 2030, measured against 2005 levels. Other estimates of carbon emission reductions range from 24% to 42%. Incentives in the bill for the commercial and residential real estate industries are expected to help the building sector make major contributions to that reduction.

The problem with the Section 179D incentive was that in many cases, the tax benefit was not sufficient for a developer or building owner to incorporate more costly energy-efficiency improvements into their building design. In addition, because it is structured as a deduction from taxable income, real estate investment trusts (REITs), which by law are required to disburse most of their profits to shareholders, were limited in their ability to use Section 179D.

Finally, because the energy-efficiency savings needed for a building to qualify for the deduction are measured against

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ASHRAE energy codes that themselves require greater levels of energy efficiency, many existing older buildings that could be retrofitted to reduce their energy usage still would not qualify for the deduction to any meaningful financial extent. Since approximately 75% of buildings in the United States were built before the year 2000, this means that potential energy savings, and therefore large reductions in greenhouse gas emissions associated with the built environment, were not adequately incentivized through the Section 179D deduction.

To some extent, the IRA addressed the concerns with Section 179D, but it also adds a component that could work against its larger goal of dealing with climate change. The bill expands the deduction from $1.80 per square foot to a sliding scale ranging from $2.50 to $5.00 per square foot depending on the energy efficiencies achieved over the baseline of current ASHRAE standards. For existing buildings, however, energy-efficiency gains would be measured against the energy baseline of the individual building. As a result, retrofits of existing buildings that could markedly increase their energy efficiency are more likely to be eligible for a Section 179D tax benefit than under prior law.

In addition, the IRA includes a provision that allows a REIT to reduce its earnings and profits by the amount of the Section 179D deduction in the year the energy improvements are made. This would result in an immediate financial benefit to the REIT's shareholders. However, the positive changes to the Section 179D come with a catch: the higher benefits apply only to owners who pay workers prevailing-wage rates for their jurisdictions. Those who do not get a maximum benefit of $1.00 per square foot, a reduction from the $1.80 per square foot under prior law. Arguably, the

With more local jurisdictions requiring the addition of electric vehicle (EV) charging stations in commercial buildings, continuation of Section 30C, the federal tax incentive offsetting the cost of these installations, is an important consideration for the real estate industry.

prevailing-wage requirements would make energy-efficiency improvements and retrofits in certain areas more expensive, undermining the financial benefit of the incentive and reducing its appeal.

Sections 48 and 30C

Apart from the beneficial changes made to the Section 179D program, the IRA also expands potential uses of the Section 48 Investment Tax Credit (ITC) for real property developments. The ITC can be used to offset taxable income, and eligible investments include such things as solar installations and geothermal heat pumps. The IRA adds expenses connected with improved energy storage, including thermal energy storage, as well as dynamic glass, biogas and other energy-efficiency-related investments. Like Section 179D, the ITC is also a sliding scale, with increasing value tied to non-energy-efficiency factors such as payment of prevailing wages, whether the project meets "made in the U.S.A." statutory requirements, and whether the project is in certain locations such as brownfield sites.

With more local jurisdictions requiring the addition of electric vehicle (EV) charging stations in commercial buildings, continuation of Section 30C, the federal tax incentive offsetting the cost of these installations, is an important consideration for the real estate industry. The IRA extends the 30C tax credit for EV charging stations through 2032. The credit is capped at $100,000 per station, and it is transferable to a third party by an owner who may have insufficient tax liability to make use of it. The transferability of the credit should expand its reach, but the IRA also imposes significant new geographic limitations on where EV stations must be located to be eligible for the maximum benefit. These include certain low-income census tracts and rural areas.

The Power of Incentives

The real estate industry has made great strides in reducing the energy usage of commercial structures, which has lessened the built environment's greenhouse gas emissions. Voluntary government programs, such as the Energy Star program administered by the Environmental Protection Agency (EPA), and Portfolio Manager, its online tool used to track energy and water consumption in buildings, have been important elements in helping the industry advance its own goals on energy usage and greenhouse gas reductions. Buildings that meet certain EPA criteria for energy efficiency are deemed "Energy Star certified," making them more attractive to tenants and investors.

Undoubtedly, the largely incentives-based approaches included in the IRA, including changes designed to make energy-efficiency retrofits of existing structures more likely, will accelerate the current trend in the industry toward improved energy usage and reduced greenhouse gas emissions. ■

Aquiles Suarez is the senior vice president for government affairs for NAIOP.

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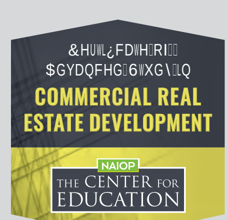

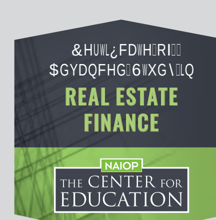

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NAIOP THE CENTER FOR EDUCATION

Chapter Profile: NAIOP Edmonton

This growing Canadian city sits at the heart of a major energy-producing region.

By Trey Barrineau

With a population of more than 1 million, Edmonton, Alberta, is Canada's fifth-largest city. It is a major hub for Canada's oil and gas industry, which produces more than 4.6 million barrels of crude oil per day. The surge of jobs in the energy sector has helped the city's population grow by more than 9.5% during the past five years.

Edmonton is also a crucial part of Canada's commercial real estate segment. According to "Economic Impacts of Commercial Real Estate in Canada, 2022 Edition," published by the NAIOP Research Foundation, commercial real estate in Edmonton contributed $5.5 billion to Canada's national GDP in 2021, including $2.2 billion in wages and salaries. (For more, see page 90.)

> **"Edmonton's commercial real estate market is recovering from the COVID-19 pandemic, with a resurgence in both interprovincial and international migration underpinning growth. Alberta continues to attract investments and new residents because of its competitive business environment and low cost of living, coupled with strong job growth and high median incomes."**
>
> *— Anand Pye, executive director, NAIOP Edmonton*

Anand Pye, executive director of NAIOP Edmonton, recently spoke to Development magazine about CRE trends in the Edmonton region.

Development: *How are the market conditions for member companies in Edmonton?*

Edmonton's commercial real estate market is recovering from the COVID-19 pandemic, with a resurgence in both interprovincial and international migration underpinning growth. Alberta continues to attract investments and new residents because of its competitive business environment and low cost of living, coupled with strong job growth and high median incomes. (According to Statistics Canada, Edmonton's unemployment rate was at 4.9% in July, the lowest since 2015.) Edmonton's commercial real estate sector has also seen a significant inflow of out-of-province capital seeking higher risk-adjusted yields relative to those found in Ontario and British Columbia. These capital flows have kept pricing for high-quality industrial and multifamily assets stable.

Development: *What are the challenges you're facing in either the business or regulatory climate in your area?*

The recent rise in both interest rates and construction costs has tempered transaction and development activity to a degree. Supply chain issues continue to persist, which affects project delivery timelines and makes project budgeting a challenge. The resurgence of activity in Alberta's oil and gas sector, as well as a lack of in-migration during the COVID-19 pandemic, means access to labor continues to be a challenge for developers and tenants.

Edmonton's taxation policies have pushed some commercial development to adjacent municipalities. Countering this, the city imposed a five-year property tax rebate grant on new residential projects started within the city core. New municipal councils in the Edmonton region have led to some uncertainty in land-use and development policy. However, we see this as an excellent opportunity for NAIOP to demonstrate the importance of commercial real estate, and new non-residential property taxes, to these new legislators.

Edmonton is surrounded by low-tax municipalities. To remain competitive, NAIOP Edmonton is working with the city to find ways to attract new industrial development. One of the main areas we continue to work on is permit timelines. Having the certainty to obtain all permits in a timely manner is key in the decision-making process. Given the delays that developers are facing throughout the entire project cycle, we believe that Edmonton needs to continue to commit resources to expediting permits and creating more certainty around timelines.

Development: *What are the big opportunities in commercial real estate in your area right now?*

Large-format industrial continues to be an area of growth in the market. Edmonton is emerging as a significant

Commercial real estate in Edmonton, Canada's fifth-largest city, contributed $5.5 billion to Canada's national GDP in 2021, including $2.2 billion in wages and salaries.

distribution hub, occupying a strategic inland location relative to the expanding Port of Prince Rupert in British Columbia, which offers the shortest shipping times between Asia and Chicago. An increase in spending on oil and gas supplies and services has also improved the fundamentals for energy-related tenancies. The industrial sector continues to see a positive correlation between inflation and lease rates.

The Edmonton International Airport recently announced that it will build a 2,000-acre international cargo-handling hub adjacent to the airport. This is expected to activate more industrial development in south Edmonton/Leduc/Nisku.

Despite almost 24 months of limited in-migration to the region, multifamily development has been strong throughout the pandemic. Much of this has been supported by developers being able to access loans through the Canada Mortgage and Housing Corporation's MLI Select program, which offers up to 95% loan to cost and 50-year amortization periods. The end of pandemic-related travel restrictions has seen apartment vacancy rates drop significantly in all unit types, from high-end apartment to workforce housing.

Development: *What are some of your legislative priorities?*

As of October, NAIOP Edmonton's advocacy committee has split into three separate committees, each with their own members and mandates.

The Industrial Committee is working with Edmonton to open up new industrial land in the city through major investments to make areas more accessible, as well as a new industrial cost-sharing infrastructure program to get other industrial land to market sooner. Making sure that investments are made in areas with a high property tax return for municipalities is a goal of NAIOP overall, and these investments will make our region even more attractive to large new tenants.

The Retail and Mixed-Use Committee is working hard on the new Edmonton zoning bylaw, which will streamline zones, make them easier to use, and put them more in line with the mix of uses and density desired by both developers and the city. This group is also working with the provincial and federal government to make sure that the new federal-provincial childcare agreement allows existing private daycares under construction to open.

Finally, NAIOP Edmonton is proud to be a founding member of the Edmonton Downtown Recovery Coalition, which is represented by some of our major members as well as more than 20 community leaders and non-profit organizations (Pye serves as co-chair). The group launched publicly in September and has been advocating for the past year on measurable improvements to safety and security; cleanliness and maintenance; and transformational projects and unique offerings downtown.

Early wins include the Edmonton/NAIOP Downtown Lighting Program, where the city will match private investments in lighting the public realm. This $1 million pilot program is expected to improve safety and create jobs.

“NAIOP Edmonton is considering working alongside RECA (Alberta’s regulatory body for the real estate industry) and local post-secondary institutions to help provide programs to new entrants into the industry. NAIOP Edmonton is in an excellent position to lead these kinds of programs because our members can provide real-life case studies and insights from active developments.”

— Anand Pye, executive director, NAIOP Edmonton

Development: *Education is an important part of NAIOP’s mission. Have there been recent educational sessions specific to your chapter recently?*

NAIOP Edmonton is considering working alongside RECA (Alberta’s regulatory body for the real estate industry) and local post-secondary institutions to help provide programs to new entrants into the industry. NAIOP Edmonton is in an excellent position to lead these kinds of programs because our members can provide real-life case studies and insights from active developments. This program is in the early stages, and conversations are ongoing.

We are also looking forward to bringing back our popular case study competition, which allows university students to pitch development plans for a real site, judged by the actual owners of the development. Before the pandemic, this competition grew every year, with bigger events and more real-world subject matter experts. It is now open to universities outside of Alberta, and we look forward to announcing the competing universities, and the site, in January.

We are also restarting our university mentorship program in conjunction with the University of Alberta Real Estate Club. This program pairs mentors from our Developing Leaders board with mentees from the university — allowing for the transfer of knowledge and experiences from mid-career professionals to students who are just starting out. ■

Trey Barrineau is the managing editor of publications for NAIOP.

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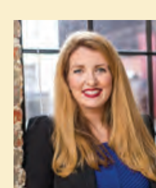

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2022-2023
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Report Examines Economic Contributions of Commercial Real Estate in Canada

Industry supports a million jobs and billions in contributions to the country's GDP.

By Shawn Moura, Ph.D.

The commercial real estate industry plays a prominent role in the Canadian economy, contributing to economic growth, creating jobs and providing homes, workspaces and places for shopping, dining and recreation. In 2021, the CRE industry added $148.4 billion to Canada's GDP and created and supported one million Canadian jobs, making the industry's contribution to the Canadian economy roughly equivalent to the country's oil and gas sector.

The NAIOP Research Foundation commissioned the "Economic Impacts of Commercial Real Estate in Canada" to evaluate the economic, employment and wage contributions of the industry across Canada and in selected provinces and urban areas. The report, authored by Altus Group Economic Consulting, examines the economic activity generated in 2021 by new office, industrial, retail and multifamily construction, as well as by commercial brokerage and property management and landlord operations. The authors drew from data published by Statistics Canada, Altus Group and a range of additional secondary sources to quantify economic activity in each subsector. The report also provides a summary of economic and industry trends across Canada and in the individual provinces.

2021 found the CRE industry in Canada in a state of transition as the economy emerged from the effects of the COVID-19 pandemic, growing 4.7% in 2021 with continued growth of 3.8% expected in 2022. The pandemic negatively affected the value of Class B and C office buildings and some categories of retail space while increasing demand for distribution space. Overall, the value of commercial real estate transactions grew substantially in 2021 when compared with depressed transaction values in 2020.

The economic recovery has been supported by government stimulus, growth in automation, a rebound in Canada's oil and gas sector, easing pandemic restrictions, and supply chain improvements. The pandemic recession and recovery has been experienced differently by the four provinces profiled in the report (Quebec, Ontario, Alberta and British Columbia).

The economic recovery has been supported by government stimulus, growth in automation, a rebound in Canada's oil and gas sector, easing pandemic restrictions, and supply chain improvements.

Ontario, the largest province by population and in the total value of its commercial real estate, experienced near-average economic growth in 2021, but Toronto's economy declined more in 2020 and has experienced a slower recovery than the rest of the country. This is in part due to the city's greater reliance on immigration and temporary workers, both of which were disrupted by the pandemic.

Alberta's economy is heavily influenced by trends in the oil and gas sector, which crashed in 2020 but has since led a recovery in the province's economy, which grew 5.1% in 2021.

British Columbia, which has enjoyed above-average population growth, experienced the strongest economic growth of Canada's 10 provinces, rising 6.2% in 2021.

Although the CRE industry has experienced a recovery in activity alongside the broader Canadian economy, the authors note that high inflation, rising interest rates and the long-term effects of the pandemic (such as decreased office space utilization) present risks for commercial real estate. Nonetheless, despite challenges that may lie ahead, the CRE industry will continue to be a major contributor to the Canadian economy. ■

Shawn Moura, Ph.D., is research director at NAIOP.

Get the Report

To view and download "Economic Impacts of Commercial Real Estate in Canada," visit: naiop.org/Research-and-Publications/Research-Reports ■

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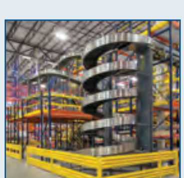
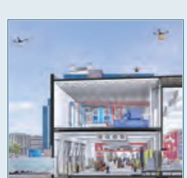

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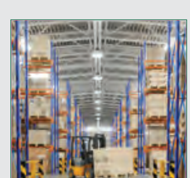

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Intentional Networking, Short-term Goals and Active Leadership

Advice from the winners of the 2022 Developing Leaders Awards, which honor outstanding young professionals.

By Marie Ruff

NAIOP's members under the age of 35 form a sizable portion — roughly a third — of the association's 20,000-strong membership.

While some of these Developing Leaders are new to commercial real estate, others are already making their marks in this competitive industry as leaders in their NAIOP chapters, in their companies and in their communities.

Each year, NAIOP recognizes a select number of young professionals for their outstanding professional accomplishments, strong leadership and significant community involvement with the Developing Leaders Award. In 2022, seven recipients were honored in October during NAIOP's CRE.Converge conference in Chicago.

These award recipients shared best practices and advice for Developing Leaders who are just starting out in their careers.

> **"Don't be afraid to ask questions, no matter how trivial. We're wired to keep learning, and there's no faster way than to learn from the experience of others."**
>
> *— Sagar Rathie, Managing Director, Commercial Office/Mixed-Use, Crescent Communities, NAIOP Charlotte*

Gregory Boler Jr.
Managing Director,
East Region Investments,
Bridge Logistics Properties
NAIOP Georgia

"One piece of advice I would give is to try to set your career goals in three- to five-year increments. Allow for those goals to be focused around obtaining three to five tangible skillsets and experiences to add to your utility belt. For example, if you're an analyst and have become proficient in that area, maybe there is an opportunity to take on additional responsibilities in supporting construction or leasing efforts. This can also be exposure to different property types, which is important as well. Ultimately, you will have to pick a lane to go narrow and deep in, but you will be a lot more valuable to the team with your accumulated skillsets."

McKenzie Darr
Development Manager,
The Wolff Company
NAIOP Washington State

"I would advise Developing Leaders who are starting out in their careers to join a committee at their local NAIOP chapter. Consistent, active participation in a committee will help you build a network of people who know both you and your work ethic. Taking a leadership role in a committee can also significantly increase your visibility in the broader real estate community."

Shawn Jaenson
Senior Vice President,
Kidder Mathews NAIOP Northern Nevada

"Find a mentor who is willing to share their experiences with you — and when you're around them, be a sponge. Absorb every bit of knowledge that you can and don't assume you know more than them, or that you've found a better way to do things. They have made many mistakes, and likely enjoyed many successes, all of which will allow you to walk down a groomed path, whereas the egotistical will struggle to make their own."

Nicholas Kitaeff
Senior Department Director,
Confluent Development
NAIOP Colorado

"I strongly encourage aspiring Developing Leaders to promote and develop the careers of fellow young professionals through intentional networking and mentoring programs that educate and enhance their trajectories. Becoming a member of an association, nonprofit or a networking group is the start, but what makes a real impact are genuine connections and providing a 360-degree ecosystem of impactful and sustainable mentorship for young professionals who need guidance in navigating their path and achieving their goals."

James Kline
Senior Director, JLL Capital Markets
NAIOP SoCal

"As it relates to real estate, in the first few years of your career, you want to put yourself in a position to get absolutely as many repetitions as possible on transactions. That has been something that has truly helped position me for success in my career."

Sal Perdomo
Director of Acquisitions and Development, Titan Development
NAIOP New Mexico

"Stay hungry and don't be afraid to get involved wherever you are able. As a young professional just starting out in your career, there is so much you can gain by being in the same room as older professionals. This provides the opportunity to absorb conversations, be added to a project team, or even be provided with a career-changing opportunity that you would not have been afforded otherwise. It's easy to shy away, but having presence and engagement is the first step to endless opportunity."

Sagar Rathie
Managing Director, Commercial Office/Mixed-Use, Crescent Communities
NAIOP Charlotte

"Don't be afraid to ask questions, no matter how trivial. We're wired to keep learning, and there's no faster way than to learn from the experience of others. You will quickly find most people are willing to share their insights, so all it takes is getting out of your comfort zone and reaching out. Just be sure to offer the same for others around you."

Marie Ruff is senior communications manager for NAIOP. ■

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Current and past issues are available online and are mobile-responsive for those who want to read Development magazine on-the-go.

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Jennifer LeFurgy, Editor-in-Chief, September 30, 2022

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What a Year It Has Been

As my term as chair ends, I wanted to reflect on all we've experienced this year and where I see the association heading.

From the beginning, we all expected that 2022 was going to be a rebuilding year for the economy as well as for our businesses as we returned to a new sense of normalcy following COVID. However, I don't think anyone imagined "rebuilding" would also include at NAIOP, where we celebrated the retirements of longtime executives and welcomed a new CFO and CEO on July 1.

Jeff Milanaik

This transition involved significant input from numerous volunteers and led to valuable conversations with chapter leaders and board members on the organization's future. I am proud of what we accomplished, and I believe that NAIOP is positioned for even greater success because of everyone's efforts.

This is my fourth real estate cycle, and I consistently share with the younger professionals at my company that it's organizations like NAIOP that will help us get through this current bout of economic uncertainty. Our education, exposure to economists and thought leaders, and research give us access to real-time information that will help us make good decisions daily.

At the beginning of 2022, I shared my goals as chair, and I'm pleased that much progress has been made on several fronts.

The first is our expanding commitments to ESG and DEI. Across the industry, we're seeing significant strides in both,

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thanks to global mindfulness and the rising generation of employees and tenants who have strong expectations regarding these efforts.

Specific to DEI, NAIOP is playing a key role in a cross-collaboration of real estate organizations that are developing a database to connect diverse-owned businesses with CRE companies.

The second is a major legislative win for commercial real estate earlier this fall. Our federal legislative team worked hard to protect the industry in the Inflation Reduction Act, which initially targeted CRE by altering the tax treatment of carried interests.

Ultimately, carried interest changes were removed from the bill. I'd like to recognize Senior Vice President for Government Affairs **Aquiles Suarez** for his leadership, as well our NAIOP Arizona chapter, led by Chapter Executive **Suzanne McKinney**, for their efforts working with Senator **Kyrsten Sinema**, D-Arizona, who played a key role in the legislation.

In closing, I want to acknowledge and thank each of you for your support this year. As I've traveled to visit 16 chapters, it's been a tremendous honor to meet and hear from so many of you.

Kim Snyder, president, U.S. West Region for Prologis, our 2023 chair, will no doubt take NAIOP to new levels, and the association will be in good hands under his leadership. ■

Jeff Milanaik, Partner, Northeast Region –
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