## JAREI

BEST PRACTICES SHARED VALUE ADDED dialogues



## YOUR PARTNER

for due diligence, asset optimization, and bringing projects to life.

- **Building Engineering & Assessments**
- Construction & Development Services
- W **Environmental Consulting & Remediation**
- **Energy & Sustainability Consulting**





#### **CEO**

Zoe Hughes

#### **Head of Programming**

Sanyu Kyeyune

#### **Meeting Director**

IvyLee Rosario

#### **Editorial Director**

Wanching Leong

#### **Design Director**

Julie Foster

#### For more information about NAREIM, contact:

Zoe Hughes zhughes@nareim.org 917-355-3957 99 Wall Street #1340 New York, NY 10005

#### Disclaimer

No statement in this magazine is to be construed as or constitutes investment, legal, accounting, or tax advice, or a recommendation to buy or sell securities. While every effort has been made to ensure the accuracy of the information in this magazine, the publisher and contributors accept no responsibility for the accuracy of the content in this magazine and you should not rely upon the information provided herein. NAREIM is not liable for any loss or damage caused by a reader's reliance on the information contained in this magazine and readers are advised to do their own independent research and to consult their own independent investment, legal, accounting, and tax advisers before making any investment decision. Readers should also be aware that external contributors may represent firms that have a financial interest in the companies and/or securities mentioned in their contributions herein and/or may serve as an officer, director, or employee of the companies, or an affiliate thereof, mentioned in their contributions. Neither this publication nor any part of it may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without the prior permission of the publisher, NAREIM.

© 2022 NAREIM. All Rights Reserved.

**2** From the CEO

#### ROUNDTABLE

4



### Decelerate now. Slowdown ahead

Inflation, supply chain challenges and geopolitical conflicts present significant challenges for everyone, but as research heads Sabrina Unger at American Realty Advisors, Albina Reydman at Lendlease, Lee Menifee at PGIM Real Estate and Chris Caton at Prologis discuss, one of the biggest concerns facing commercial real estate is the deceleration in demand, and the subsequent risk of repricing.

#### **12**

#### **ESG** data

### How to get utility data from tenants

NAREIM speaks with Michael Daschle of *Brookfield Properties* and Lisa Stanley of *OSCRE International* about how collecting utilities data from tenants can be a benefit for them and for the greater good, and why the industry needs to come together in the sharing of data to better inform decision-making.

#### **LEADERSHIP**

16

#### Generalists vs. specialists

Jason Kern, Cortland

#### 24

#### A new model for equality

Mack Major, 1RACE and Gene Dibble, IV, Uncommon Impact Solutions

#### ASSET MANAGEMENT

20



### Q&A: Industrial in a recession

David Egan of *Stockbridge* dives into how the sector performs in a recession and future opportunities.

#### 28

#### New tools to nowcast rents

Michael Clawar, Altus Group, Eric Draeger, Berkshire Residential Investments, Rachel Levy, Altus Group and Gleb Nechayev, Berkshire Residential Investments

#### 36

## The case for Class B apartment investment

Donald Hall and Dan Manware, Nuveen Real Estate

#### 44

## The age-restricted apartment opportunity

Tim Wang and Julia Laumont, Clarion Partners

#### SUSTAINABILITY

**32** 



## Accelerating sustainability by upskilling employees

Helen Gurfel,

CBRE Investment Management

#### **DATA STRATEGY**

40



#### Getting asset data right

Nate Benton and Josh McCullough, Partner Engineering and Science, Inc.

www.nareim.org

#### FROM THE CEO



Zoe Hughes, CEO

ow do we better use data? It is a question posed throughout this issue of *Dialogues* as members and the industry work to be proactive investors using real estate data, rather than just reactive managers of information.

When we talk data, we are not just talking about the tech needs of a business or proptech solutions. We are looking at data through the lens of buying, selling, asset management, tenant engagement, investment research, DEI, ESG and more. Technology and data are no longer siloed functions — they touch every facet of the business.

Berkshire Residential Investments uses AI to backtest high-frequency data (such as the Zillow data highlighted). By using data science tools and models, they can better assess fair market rent values and respond as facts on the ground change (see page 28).

Data is also front and center when discussing ESG and net zero with tenants. Brookfield's Michael Daschle and the industry association, OSCRE, discuss their work in collecting utility data from tenants, a task tenants don't always share with the same enthusiasm as landlords (see page 12).

And of course, data is critical to research, as our roundtable participants American Realty, Lendlease, PGIM and Prologis tell us how they are thinking about the economy, inflation and geopolitics — and assessing the repricing that is about to take place.

For the firms' heads of research there was universal agreement that repricing will be more pronounced over the next six to 18 months, even given the fact there is a lot of embedded growth remaining in assets.

Lagging was a key word for the firms.

Albina Reydman at Lendlease said there was so much inflation "already built in that the headline rate almost matters less than our response to it." The fear was overcorrection by central banks, turning what Lee Menifee at PGIM said could turn a pesky issue of inflation into a pervasive one.

There is a legitimate question of whether inflation really impacts the business of investment management. As Chris Caton at Prologis, aptly said: "As a large owner of real estate, we are perfectly happy to see replacement costs go up."

The challenge, Chris continued, was the "clear pause in the repricing of risk in the financial markets." It is something everyone is monitoring closely. Data by data by data.





As a national, multidisciplinary AEC consulting firm, Marx|Okubo works on behalf of real estate owners and investors at every stage of the property lifecycle—and in changing market conditions—to ensure building/asset health and project success through vigilant risk mitigation. With us in your corner, you have documented assurance you're making the most informed property-related investment decisions and positively impacting lives with optimal buildings.

- Owner's Representation
- Property Condition Assessment
- · Project Management
- Constructability Reviews
- · Repair | Reconstruction
- Facility Condition Assessment
- Construction Loan Monitoring
- Accessibility
- Building Enclosure
- Fire | Life Safety

- Mechanical | Electrical | Plumbing
- Resiliency
- Structural Engineering
- Sustainability
- ASAP®-Automated Structure Alert Program

MARXOKUBO.COM







## Decelerate NOW. Slowdown ahead

Inflation, supply chain challenges and geopolitical conflicts present significant challenges for everyone, but as research heads Sabrina Unger at American Realty Advisors, Albina Reydman at Lendlease, Lee Menifee at PGIM Real Estate, and Chris Caton at Prologis discuss, one of the biggest concerns facing commercial real estate is the deceleration in demand, and the subsequent risk of repricing.

Transaction markets are already pricing in lower valuations, but that is expected to become more pronounced over the next six to 18 months, according to the researchers. As a result, the focus for real estate investment managers has to be on long-term drivers of growth or 'change agents' — education, demographics, sustainability and technology — with a deep focus on the needs of the tenant.



By Zoe Hughes



ROUNDTABLE

#### **PARTICIPANTS**



**Chris Caton** 

Managing Director, Head of Global Strategy and Analytics, Prologis

Chris is responsible for the research, advanced analytics and valuations capabilities at Prologis. These teams create and interpret industry data; identify and project emerging trends; and communicate and develop tools to drive business strategy. Prior to Prologis, Chris held various real estate research and strategy roles at Morgan Stanley and, before that, CBRE.



Lee Menifee

Managing Director, Head of Americas Investment Research, PGIM Real Estate

Lee is responsible for leading PGIM Real Estate's research efforts and overseeing the research teams that support PGIM Real Estate's investment management activities in the US and Latin America. He is a member of the US and Latin America Investment Committees. Before joining PGIM Real Estate, Lee led American Realty Advisors' research capability, supporting portfolio, asset management, acquisitions and marketing functions.



**Albina Reydman** 

Head of US Research, Lendlease

Albina provides leadership and management oversight in developing and implementing Lendlease's research framework in the Americas region. She has established and standardized analytics and reporting to ensure a proactive, data-driven and strategic approach across Lendlease's development and investment management platforms. Albina joined Lendlease from the Market Analytics/Portfolio Strategy team at CoStar Group.



Sabrina Unger

Managing Director, Head of Research & Strategy, American Realty Advisors

Sabrina is responsible for leading the firm's research initiatives and working closely with the firm's Investment and Portfolio Management teams in developing investment analysis in support of new acquisitions and strategy implementation. She is also a member of the firm's Investment Committee. Prior to joining ARA, Sabrina was a member of the Global Research team at Invesco Real Estate.



iven the current state of affairs, what is top of your mind? How are you thinking about your research and the investment strategies your research informs your firms?

**Chris Caton, Prologis:** As a logistics real estate company, we are acutely focused on the structural changes happening in the industry, many of which were accelerated by the Covid-19 pandemic. One is the future of retail and the change in shopping habits as customers globally move from in-store to online. The other is the future of supply chains and change in fulfilment requirements, including the need for more resiliency.

For an owner of logistics real estate, the change is positive. In the top 30 markets in the US, a typical year for demand

growth is 200 million to 225 million square feet (msf). It was 400[msf] in 2021. This year, we are on pace for nearly 400[msf], so demand is running roughly double its historical average as these structural trends translate to real market activity. The vacancy rate in those 30 markets is 3%, whereas the typical functional range is 6[%] to 9[%]. Rents have spiked in a durable way.

**Lee Menifee, PGIM Real Estate:** We have a lot of embedded growth in our real estate assets as well. If rents stood still, we would see continued growth and rising income for the next few years. But what worries me is that there are a lot of lagging factors in the system — specifically, rising interest rates and inflation, and the risk that inflation now becomes pervasive rather than pesky, with central bank reactions that follow.

This is another way of saying I am less worried on the property income side and more worried that, as expectations of income growth come down from double digits to single digits, we will see much lower returns over the next six to 18 months.

**Sabrina Unger, American Realty Advisors:** To Lee's point, when we talk about lag, we believe we still have six to 12 months' worth of inflationary pressures to work through the system. We envision that creates the potential for a lot of slowdown on the macroeconomic growth side that we are focused on monitoring.

The other thing that keeps me up at night is the politicization of our asset class. There is a lot of pushback against multifamily and for-rent single-family residential, purpose-built and otherwise. Affordability is a key issue, and local jurisdictions and communities are beginning to look more and more at things like rent control. Institutional ownership is viewed as a negative. I think that creates a challenge in these sectors where we are seeing strong investor appetite. What could be described as NIMBYism [not in my backyard] against developers adding new stock is really a headwind for residential. When it becomes harder to develop, less development occurs. Studies have shown time after time that rent control and restrictive regulations often end up worsening prospects for renters. Rather than protecting renters, it exacerbates affordability.

**Albina Reydman, Lendlease:** We are all concerned about economic momentum but, when you really dig into it, there are just a few core issues that are influencing a lot of what is going on. For example, supply chain issues that began years ago are still a concern for us, especially for specialized products on projects underway. Now we have the conflict in Ukraine and tensions in China which could prolong that further.

Chris mentioned the very low vacancy rates in industrial. Life science may be the industry where vacancy rates are even tighter than that. In Boston, the vacancy rate is sub-2%, and that has created outsized rent growth. We bought a development site in Boston during the pandemic last year, and I can say that we are now expecting rents to be 30% to 40% higher than our original underwriting. As there has been significant embedded growth, we are also having to stay disciplined as we are looking at new deals and understanding what is going on globally in terms of geopolitical and macroeconomic risks.

#### THE COMING SLOWDOWN

What are you expecting on inflation and what are the challenges for you as you look to the current inflationary environment?

**LM:** A lot of inflation is coming through via cost-push inflation, as well as through the war in Ukraine and the supply chain. Our view is that the supply chain bottleneck is easing, but as energy and food are two huge contributors to inflation, the outlook for Europe is more troublesome than the outlook for the US, which is less affected and is self-sufficient in both energy and food.

Much of the reported inflation is going to occur no matter what. For example, housing and shelter costs have about an 18-month lag between when they go up and when they show up in the inflation rate. Measured inflation is going to be high, but we are not necessarily concerned with that number because that is a measurement issue rather than an actual underlying problem. Having said that, these measurement issues matter because policymakers have to respond to those measured numbers.

Therefore, our expectation is that inflation probably is less pervasive than the Federal Reserve Bank forward curves indicate. Financial markets are implying that inflation is going to be a receding problem as soon as early next year. That is all contingent on a relatively sanguine geopolitical outlook, which could yet change. The good news is that inflation should be less of an issue next year. The bad news is underlying real estate demand is likely to be less than it has been over the last few decades.

**AR:** I completely agree, Lee. There is so much inflation already built in that the headline rate almost matters less than our response to it. I am most concerned with the central bank response globally and whether they overcorrect. It is very hard, I think at this point, for them to separate out how much of this is the product of lagging indicators, and how

We still have six to 12 months' worth of inflationary pressures to work through the system. We envision that creates the potential for a lot of slowdown on the macroeconomic growth side. 77

#### ROUNDTABLE

much are things completely out of central bank control. Raising rates further may not solve the issue of commodity price volatility caused by geopolitical conflict, but it may slow down the economy too quickly.

This is something we are hearing across all of our regions. Lendlease is an Australia-based company; Australia has not had a real recession in 30 years, and they are also concerned that rate hikes might trigger one. Fortunately, for a global business that develops, builds and manages across multiple asset classes, challenges for one arm of the business can be opportunities for another.

**CC:** We also have to ask ourselves as real estate investment managers, in what ways does the inflationary outlook impact our view of our business? There are at least three channels: one is required returns, two would be replacement costs and the third would be implications for the macroeconomy. Given the events which took place over the summer, the third scenario around inflation being a negative macro has been discounted to where the probability is very low.

As a large owner of real estate, we are perfectly happy to see replacement costs go up. The fact that it costs 20% more to replace buildings is a positive. In addition, the supply chain for building a building has been really challenged, and access to scarce building products separates winners from losers. We have been pre-buying steel, for example. By locking in pricing and commitments on commodities and other products, we are essentially getting ahead of cost inflation.

I would also say that there is a clear pause in the repricing of risk in the financial markets, including real estate. It is really about picking the right opportunities at the right price at the right returns.

**SU:** Naturally we are focusing on what the current inflationary environment means for real estate investment strategies, but I would add that we think through not only the next 12 to 18 months, but the next 10 to 20 years. Real estate is a longerhold asset class. For our firm's investment strategies, we identify key trends, what we have dubbed 'change agents,' that are forces that may not be proven with data today, but that we can envision fundamentally changing future demand patterns in a way that will create material under- and outperformance. These factors fall neatly into either a technology bucket, a demographic bucket or an environmental bucket.

When you start to pinpoint these forces, they all seem to point to lower demand and lower growth. Looking at longterm structural components of the domestic economy, we see productivity growth not offsetting a lack of population growth. As a result, we do not believe inflation gets entrenched at its current levels, but we should assume it may settle at a rate marginally higher than where we were last cycle.

#### **FORWARD STRATEGIES**

When you are underwriting some of that lower growth, what does that mean in terms of property types or strategy?

**SU:** We are leaning into areas that are supported by our change agent hypotheses — for-rent residential, industrial and select specialty sectors like self-storage. That said, we are being very prudent in the growth assumptions, especially regarding new acquisitions. We would love to be surprised to the upside, but it really comes down to being appropriately conservative. I come back to this point of discipline in our underwriting, of not thinking that the current growth environment can last forever.

**LM:** Compared to six months ago, the outlook appears worse than what we were planning for and maybe materially so. There are two things happening now. The first is repricing. The outlook for occupier demand is weaker and that is occurring across all property types. It is not necessarily a decline in demand, but rather a deceleration that raises the risk of repricing. We have already seen that in transactions markets. Some of the higher frequency indices that we look at already say values have come down on a transaction basis in those sectors. The second is the pressure from higher base interest rates means that the valuation of private real estate relative to other asset classes, has gone from being pretty inexpensive, as recently as the beginning of 2022, to pretty expensive based on those metrics.

Over the next six to 12 months, we need to focus on the long-term drivers of growth, by property type and then by geography. Specifically, a focus on education — the human capital that is going to drive real estate values over the longer term and investing in markets with high-quality human capital — is going to be the most powerful risk mitigator in this environment.

Then there is transformation. Sabrina and I may use different words for saying the same thing, but we have a similar focus on demographics, decarbonization and digitalization. Those are also the overlying themes as we think about which geographies and which property types are best positioned.

## Given the economic and geopolitical outlook, where do you want to steer capital?

**LM:** We are looking for a combination of an absolute level of growth and the quality of that growth. The key distinction for many investors has been Gateway versus Sunbelt. We no longer think that is the distinction; rather we expect to see a real divergence in performance within those two categories. For example, Austin, Denver and Raleigh will screen very well from a human capital perspective; we think they will do better in the future and, at a minimum, hold on to the very significant gains that they have had over the last couple of years.

**SU:** We have a robust methodology tailored for each product type that we use for market selection. We are looking at the things Lee is talking about: human capital, the quality of folks moving in, their income levels, the types of jobs that are expanding in certain metropolitan areas and the companies expanding there. For for-rent residential, it is home price appreciation relative to the trajectory of rent growth. We then go more granular, to the submarket level, in order to profile and identify turning points in local submarkets.

In terms of market selection, we like the outlook for Austin. We also have looked at San Antonio as a more cost-conscious tag along to that strategy. We like central Florida, as well as certain markets in the South and West, but there are also some of the more traditional markets along the coast that we actually think can do reasonably well. Boston would be top of the list.

**AR:** We are both a developer and an investment manager, and the vast majority of our portfolio are assets that we have developed. For that reason, we are highly selective in what opportunities we pursue, and we are following trends we find attractive long term more so than maybe a nimbler investor who does not function on that five- to 10-year development horizon. Because of that, we have a very rich understanding of market dynamics.

For years, we struggled to buy land in Boston to build multifamily because assets were trading under the assumption that they would be developed as a life science property. Now there is a pipeline of 20-plus million square feet of life science space that is going to get delivered over the next five to 10 years, but developers have not been progressing multifamily sites. There are going to be a lot of very highly paid workers entering the market and not much institutional multifamily

supply. That gives us a lot of conviction in Boston and other similar markets where residential has been priced out by other asset classes.

**CC:** Over the last decade, never has more alpha been generated than by being focused on logistics real estate and being focused on the high-barrier and major markets on the coasts. That will not change over the intermediate term. We are overweight on coastal United States and then equally on other places that have high barriers in economically dynamic markets, such as the UK, Northern Europe, Tokyo, Osaka and coastal China.

#### **FORESIGHT DIRECTION**

Where else does commercial real estate need to be paying attention?

**CC:** What it means to be an owner and developer of logistics real estate has changed over the last decade. I will highlight three things. The first is customer-centricity. We have a chief customer officer who heads a team to partner with logistics real estate users to help them think about their network, growth and build-outs. We also have a standard lease that we say is the shortest lease in logistics real estate. These come from a mindset of prioritizing and partnering with the customer, which will ultimately attract and retain them through cycles.

The second is technological innovation, whether it is automation or new business models. We have a venture arm, Prologis Ventures, where we invest in supply chain start-ups focused on best-in-class solutions. These companies also create opportunities to reinvent our business.

The third is sustainability. In the US, we are the third largest provider of solar, which is a feature that is becoming more front and center as we partner with our customers to improve their own sustainability performance. Earlier this year, we committed to a net zero pathway by 2040 across our entire value chain.

**AR:** We are very committed to ESG. The property sector is responsible for about 40% of all greenhouse gas emissions and, as we both develop and build, we are starting to see people actually allocate money around that. We delivered the first all-CLT (cross-laminated timber) hotel in 2016 and we are

#### **ROUNDTABLE**

#### For work and for pleasure

#### What are you reading or watching both professionally and personally?

**Albina Reydman:** I am just finishing up a book called *St. Marks is Dead* by Ada Calhoun. It highlights how every couple of decades going back all the way to Peter Stuyvesant, each generation claims that the spirit of St. Marks Place in the East Village is dead, yet somehow the street just reinvents itself. It is very inspiring as we are thinking about creating places that will thrive for generations to come.

**Chris Caton:** I am reading business books: *Working Backwards*, *Good to Great*, *Built to Last*. I think once you are good to great, you want to be built to last. And then *Only the Paranoid Survive* is one that is probably 30 years old and is still true today. In terms of watching, I will admit to being hooked on the F1 show on Netflix called *Drive to Survive*.

**Sabrina Unger:** We are doing a lot of thought leadership on demographics and the potential impacts on real estate by generational change, so I am rereading *What to Expect When No One's Expecting* by Jonathan Last. For fun, I have been enjoying reading snippets of *New Yorkers: A City and Its People in Our Time* by Craig Taylor whenever I am on the train. It is the same author who wrote *Londoners*. I am not ashamed to admit I am re-watching *The Office* for the umpteenth time.

**Lee Menifee:** I have been following *Barry* on HBO Max. In terms of what I have been reading for work, I am reading about what I think is the most important thing in real estate right now, which is the changing regulatory environment and, in particular, housing. I have on my desk *Arbitrary Lines* and *From the Ground Up*. From the narrow perspective of a real estate investor, we could say supply constraints are good, but those constraints have been affecting the overall economy and demand for all types of real estate. I am spending a lot of time on them and I hope to understand them better.

continuing to invest in CLT. We are actively investing in green concrete and lower-carbon steel.

We can quantify the environmental side of ESG pretty well. Now we are working on improving how we quantify the social side. We have invested in a team that is figuring out how we can track engagement on the programming we are doing. How can we make sure that we are actually hiring people from the local community? How can we make sure that the climate resiliency projects we are doing are actually having the impact that we want them to have? It has been an investment because there are not any external social sustainability raters to our satisfaction, so we have been tracking it ourselves.

**SU:** I would love to see the industry evolve to bifurcate passive versus active social impact and to be able to measure that. Of the ESG, social is the hardest to measure as it stands — where 'E' and 'G' are pretty standard, everyone's 'social' is different. As an example, we are currently in fundraising for a dedicated essential housing fund to serve what we describe as the 'missing middle' — renters by need who are squeezed between affording a house and limited rental options. This is a strategy that we feel is an active social solution.

There is a huge gap in the middle where millions of households here in the US cannot afford Class A apartments, do not qualify for subsidized housing, and are left with very little choice. They are often in neighborhoods that are transit deserts, lacking access to quality infrastructure and far from jobs. We are working to solve that problem actively by owning and maintaining properties that fit the profile of the middle-income worker, but also delivering new product that is priced for those people.

I would like to see our industry lean more into active social solutions that can demonstrate the benefits achieved to investors. We look at 'doing well by doing good' — producing attractive performance while serving the communities in which we are investing. Executing on ideas, measuring the social good and incentivizing investors to want to be a part of that solution is where I would like to see the commercial real estate industry go next.

**LM:** We are focused on reducing the number of key performance indicators that we produce. I do think we need to distinguish between the table stakes and the areas that we have a lot of discretion over. You have to decide what is important and what is your return on investment (ROI); that is not a limitless set of possibilities. There are things that you need to prioritize.

From a research perspective, the most important thing that my team can do is identify where we have the maximum impact, in terms of both measured impact as well as the ROI that comes from that. We are still at the early stages of quantifying that ROI. •

## Your partner in commercial real estate investment management

AppFolio Investment Management is a commercial real estate investment management software that enhances your investor experiences and simplifies your investment operations.



A modernized Investor Portal that helps you stay ahead of changing investor expectations and personalizes your investor experiences at scale.

A streamlined workflow that automates your internal investment operations while adding an extra layer of accuracy and security.

A single source of truth that fuels thoughtful transparency for your teams and your investors.

We proudly partner with customers of all sizes, asset classes, structures, and goals. On average, customers that have used AppFolio for over a year have seen a 34% growth in their total Equity Under Management.\*

\*Source: Study of AppFolio Customers from June 1, 2020 to June 1, 2021

"Our returns are more favorable than market returns because we can quickly execute, and that is because we use AppFolio Investment Management to maximize operation and minimize cost."

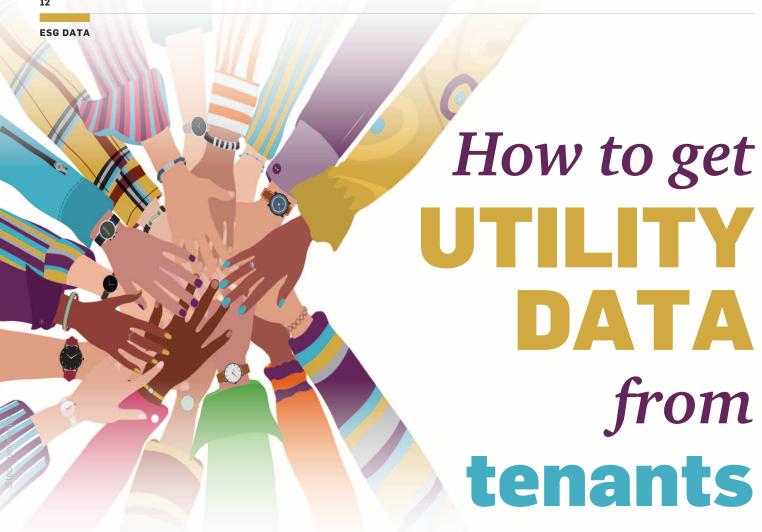


RICKY FLANDEZ
Winstar Properties

appfolio Investment Management

Learn more at appfolio investment management.com or contact us at 877.235.4869 or info@appfolioinvestmentmanagement.com





As the real estate industry searches for solutions to meet net zero goals, greater participation needs to come from a key player — the tenant. A significant amount of energy consumption in buildings — 65% to 70% — is driven by tenants. Landlords and owners need greater partnership and engagement with tenants for carbon emission reduction strategies to succeed.

NAREIM speaks with Michael Daschle of Brookfield Properties and Lisa Stanley of OSCRE International about how collecting utilities data from tenants can be a benefit for them and for the greater good, and why the industry needs to come together in the sharing of data to better inform decision-making.



**Michael Daschle** is SVP of Sustainability for Brookfield Properties, running the ESG strategy for the New York City office and national renewable energy procurement strategy for the US.



**Lisa Stanley** is the CEO of OSCRE International, a nonprofit corporate member organization focused on development and implementation of real estate data standards.

What are the key goals for Brookfield when you look to ESG when it comes to utilities?

**Michael Daschle, Brookfield Properties:** On the 'E' front, we think of it as mitigating our impact on the environment from the operations of our buildings and achieving our decarbonization goals. We joined the Net Zero Asset Managers Initiative in 2021 and, by joining, Brookfield Asset Management committed to achieving net zero carbon by 2050 or sooner, in alignment with the Paris Climate Accord targets of reducing temperature increase below 1.5 degrees Celsius.

Within Brookfield Properties specifically, we are targeting, by 2030, a 50% absolute reduction in emissions relative to a 2019 baseline. That covers Scopes 1, 2 and 3. We are making sure that every property has a decarbonization path aligned with that goal.

Getting to a 50% net zero reduction by 2030, especially for Scope 1 and 2 in seven years, is challenging. What are the milestones to get to that 50%?

**MD:** We have a prioritized hierarchy of approaches throughout this strategy. First and foremost are energy conservation and efficiency measures at the properties themselves. The second part of the conservation and consumption side is partnering with tenants to make sure that they are also working on that same effort. There is both an education and a data sharing component; so much of that is critically important, because tenants drive 65% to 70% of the energy consumption in our properties. If we want to reduce the amount we are consuming, we have to have their buy-in and participation.

Step two for the properties, wherever applicable, is to do onsite renewable energy installations. Some markets are easier than others. For example, our office properties in Washington, DC and many of our retail and logistics properties across the US have already started installing solar on rooftops.

It is more challenging to do onsite renewable installations in New York. Instead, we take advantage of a transaction method that is available in New York where you can directly contract with a renewable energy provider as a retail consumer. Our first deal to make use of this transaction structure was for One Manhattan West, one of our new flagship office properties in Manhattan. We signed a five-year agreement with Brookfield Renewable — an affiliate company within Brookfield Asset Management — to purchase 100% of the property's electricity requirements from in-state

hydropower facilities. Because of the renewable power source, we reduced the building's carbon emissions associated with electricity to zero, and the whole building reduced its overall carbon emissions by over 80%.

We intend to replicate this strategy throughout the properties in our portfolio where we can do direct contracts. We prefer having contracts tied to specific generating facilities, and ideally we can have 24/7 coverage of renewable supply relative to our consumption at that particular property.

Lisa, 65% to 70% of an entire building's energy use is down to its tenants. We need to do better and get better at data sharing and data collection. What is OSCRE trying to do and solve for?

Lisa Stanley, OSCRE International: Coming out of the pandemic, the public had a growing awareness of ESG and real estate's impact on humans and the environment. There is a compelling need for building owners, occupiers and investors in real estate to more actively communicate with each other, to share data, and to get to the point where there is an increased awareness of the need for data standards in the industry that enables data exchange across platforms. We at OSCRE view ourselves as the convener not the controller of the conversation. Our Environmental Data Standards Project involves a variety of participants from the investment management side, as well as corporate owners, occupiers and external business partners to find common ground.

#### **GETTING TENANT DATA**

Do tenants understand how they are using energy or what energy they are using? And what challenge does that pose for an investment manager?

**MD:** The market is not consistent in terms of what is submetered and what the landlord is actually able to see. In New York, we are fortunate that the market standard is every floor within an office space is submetered.

Being able to see usage patterns across floors is great from a billing perspective, but where it gets more challenging is being able to communicate to a tenant and go beyond being able to say, "You use this much energy month over month." Can we attribute electricity consumption to specific building systems? Can we tie it to certain times of use and correlate with

**ESG DATA** 

occupancy, with seasonality? These types of insights come from a layer of intelligence on top of the raw data. That is one piece of it.

The other piece is from the grid side. We have outdated data from the grid in terms of the real-time energy mix of our electricity. In New York, for example, if you were to use two-year-old data, that data precedes the closure of Indian Point, which is one of the nuclear facilities in New York that provided a significant amount of emissions-free power to the New York grid. So already you are not relying on accurate data for your emissions calculations.

We like to partner with software companies that contract with service providers that are able to access the grid mix more accurately on a 24/7 basis, to inform our usage and our tenants' usage.

If you are able to get data from tenants, it adds depth to your analysis. What are the benefits for tenants, and, on the flip side, what is the pushback?

**MD:** There are two primary benefits. One is cost savings. For office, we built a tool where we can take tenant electricity consumption data and break it out by location, down to how much electricity is used on each floor. Using this data, we can benchmark any tenant's usage relative to other tenants in that property, and even to other similar tenants throughout our portfolio. We can rank the highest aggregate electricity users throughout each property and cross reference that with the highest intensity users at that property. And that allows us to target the top energy consumers at that property and start a discussion with them. We can show them the data and discuss ways of reducing usage and saving on costs.

The second side of it is we help our tenants achieve their own ESG and sustainability-related goals. Many of the sophisticated ones have known for a long time that their occupancy of these office buildings is driving their own emissions. In this case, those would be the tenant Scope 2 emissions which will filter through to their own ESG and SEC reporting, and their own greenhouse gas emissions reduction targets. We are able to help them achieve their targets through better data and better clarity of those usage patterns over time.

The resistance we are getting is from tenants who are less sensitive about the impact of the reductions they are able to achieve on the utilities line item within their office space budget. Relative to their overall corporate budget, a lease or occupancy expense may be a small percentage. The utilities line item of that occupancy cost is not necessarily going to swing the needle for

## Please define Scope 1, 2 and 3 carbon emissions. Why is it critical to get all of the data?

Michael Daschle: Scope 1 is onsite combustion of fossil fuels—natural gas boilers, fuel oil used for heating, etc. Some companies also have vehicle fleets that would be included within that category. Scope 2 is indirect emissions—emissions associated with purchased electricity and steam. From our perspective, that would be utility grid electricity, the energy we are buying directly from renewable providers and the district steam that we are using primarily for heating in our properties. Scope 3 is all indirect emissions that we do not have direct control over. We are categorizing tenant emissions as Scope 3 throughout our portfolio, and that includes emissions associated with supply chain as well, such as materials that we are purchasing and the indirect emissions associated with waste hauling and vehicle travel.

their overall cost, so they may not be as motivated to potentially disrupt their space for a modest amount of savings.

On the emissions reporting and sustainability goals side, where we often run into resistance is one of varying degrees of sophistication on the tenant side. In some cases, tenants are so far ahead that they have actually already bought energy credits and have no interest in paying extra for renewable electricity we are going to buy.

#### **CHALLENGES IN COLLECTING TENANT DATA**

#### What challenges are you facing in collecting data?

**MD:** We are giving our tenants data about consumption that is associated with their utility billing. What is missing, and what is continuing to be missing from that conversation, is how a tenant is using electricity within their space. One of the things we have done to study usage is setting up a digital twin, where we started mapping every single piece of equipment as a traceable asset within the digital twin. That is a very challenging thing to set up from the start, because you have to convince them to share information they previously have never been incentivized to do.

**LS:** It is a new level of data sharing and coordination that is needed. From OSCRE's perspective, we recognize that there is a need for tenant data to be able to be shared across the entire asset life cycle. As we look at this sharing of data, the tenants

need it because increasingly they have to include this information in their annual report, and SEC reporting requirements for public companies will be released soon.

The second part of it is the growing awareness of the impact that real estate has on the environment. Real estate is the leading economic indicator in most developed countries, from construction through real estate activity in the marketplace. Bringing people together in a platform-agnostic approach is compelling to exchange data and to then use it to inform decisions. It is not advocating on the part of any particular software platform or vendor, but rather, let us focus on the terms, definitions and interoperability that can enable organizations to become better corporate stewards of the environment.

The goal of OSCRE is to foster common ground between investment managers, building and property managers, and external vendors to exchange information needed to improve outcomes. As Michael said, data has been collected, but there has not been a significant attempt to improve accuracy, consistency and transparency of the data across platforms to inform decisions and achieve better outcomes.

#### How do we actually get the data?

**MD:** We have to have person-to-person engagement with the right people at the tenant level. We find from that level of engagement that we can learn how the space is actually used. One of the things that we have found is per the traditional lease, we owe during certain hours of business operations a specific amount of cooling and air to a space regardless of how many people are actually in it. We find out after some of these discussions that during that period where we are supposed to be providing heating or cooling and ventilation air, that there may be two people on the four floors that we are supposed to be providing this heat and air to. The tenant is paying for that.

Is there a way we can monitor in more real time who is actually using the space, and how they are using it? We are not going to get that usage insight unless we are engaging with the tenant and finding out how they are using it. The other piece is simple things like day lighting, automatic lighting, plug load management and energy-efficiency equipment.

The age of the tenant's build-out makes a huge difference. Updating older spaces can yield significant utility cost savings and the tenant can enhance the experience of every single person in the office. That is a win-win for both parties, because the landlord gets more efficient space and lease terms, and the tenant gets better quality and more energy-efficient space.

#### A PATHWAY TO ESG AND SUSTAINABILITY

Has there been a shift among tenants thinking about office space post-Covid-19?

**MD:** There is certainly a shift in how people are using their office space. We have seen many companies wanting to preserve the budgets that they have available for their space, but they are realizing that they are not using space as efficiently as they could be. So, they are trading up to a more energy efficient, higher class building to entice employees to come back to the office. Even though the space may be smaller, the tenants use it differently now that they may not need as much. It allows them to maintain the same budget and upgrade their experience.

Real estate owners are realizing that there is a huge benefit that can be gained by exceeding mandated reporting requirements. At Brookfield, we buy every property under the context of a net zero pathway. It is not required of us, but it is driving a massive impact — we are starting to get buy-in from other tenants and businesses who want to align with that. We have tenants who are selecting our properties because they are going to be renewably powered and so have a pathway within these properties to achieve their own ESG and sustainability goals.

LS: It is not an issue with easy answers. It involves a high level of corporate responsibility and the tone at the top of organizations is extremely important, whether you are talking about the tenant side, the owner side or the investment side. The commitment of resources is not just financial — it is the human capital and building the skill to match the will to become better stewards of the environment. That is where OSCRE can have a meaningful role going forward. ◆

The Environmental Data Standards Project as OSCRE continues to work collaboratively to design the digital future for real estate. We need leaders who will share perspectives on their challenges and cultivate solutions on one of the most critical challenges facing our industry today — better data to capture real estate's impact on the environment. Every real estate investment firm faces pressure to drive efficiency and environmental performance for all their stakeholders.

## Generalists vs. specialists



While vertically integrated operators do not grab the same headlines and attention as do large, diversified generalist allocators, these sector specialists offer investors depth of knowledge, nimbleness and consistency.

hich of the following characterizations would sound more appealing to an investor: 'a mile wide and an inch deep' or 'an inch wide and a mile deep?' The answer is not always obvious. Specialization has clear advantages and benefits. Some people put all their eggs into one basket, striving to master a niche endeavor, dedicating all resources and energies to one narrow pursuit without distraction. Others choose to spread their efforts across numerous undertakings and pastimes, content to be good, but not great, in many areas.

Is it better to develop unmatched skills in a more obscure specialty (for example, an ace reliever in baseball, a celebrated pastry chef at fine dining restaurants, a beloved but typecast character actor), or is it preferable to be a five-tool player, a chef de cuisine or a leading man/woman, even if you never achieve the heights of your profession, such as the league MVP, a Michelin star or an Oscar? The specialist runs the risk of being pigeonholed, whereas the generalist may end up being a highly competent jack-of-all-trades, but master of none.

#### Two operational models

The real estate investment management business has evolved along similar lines. The jack-of-all-trades equivalent is the large, diversified allocator that offers investors exposure to multiple property types and geographies, usually benchmarked against a diversified index or peer returns. They outsource leasing, property management, development and value-add renovation work to third-party managers, agents and operators. They tend to be incubated within large private equity firms, investment banks, insurance companies or real estate brokerage companies.

The equivalent of the specialist is the vertically integrated operator which tends to focus on a single property type and controls all aspects of the real estate investment and asset management value chain in-house. They tend to have grown up as founder-driven private developers and operators, and tend to be as passionate about their chosen property type as they are knowledgeable.

Allocators have dominated the industry in terms of capital aggregation and are unlikely to relinquish that crown anytime soon. The best of the class have

By Jason Kern, Cortland

**LEADERSHIP** 



demonstrated over time that they have the market wisdom to make smart portfolio bets across a variety of property types and geographies, and the ability to skillfully underwrite, structure and finance transactions at the highest level. Theoretically, they have the flexibility to shift exposures between sectors at different points in the cycle, although that can sometimes prove challenging given the illiquidity of real assets and the tendency for market sentiment to shift in lockstep with economic trends.

With success and growth come the benefits of scale. The largest managers can be models of operational and financial efficiency, especially those that delegate much of the portfolio management, asset management and/or development management activities to operating partners. With no need to directly employ thousands of leasing agents, property managers, designers, architects, procurement officers and construction specialists, these firms can operate with AUM and revenue per head ratios that would make any operator jealous. Scale also can afford the ability to invest meaningfully in state-of-the-art support functions such as ESG teams,

data scientists and engineers, research groups, capital raising and marketing teams, and legal and compliance groups.

#### The rise of the operator

'If you want it done right, do it yourself' would be an apt mantra for many of the operators in today's real estate investment management business. With vertically integrated firms, it is their own employees providing customer service as they interact directly with residents or tenants. It is both a blessing and a curse in that it is these employees designing and building space, providing maintenance services, setting rents and negotiating leases; there is no third party to blame for poor customer service, faulty execution, or underwhelming NOI or IRR performance. But, ultimately, there is the opportunity to implement true consistency and differentiation in branding, service and design across a portfolio.

Private developers and value-add managers typically grew up 'smiling and dialing' for capital to fund one-off projects from friends and family. When they reached some scale, they moved on to family offices and, subsequently, formed joint ventures (JV) with sophisticated institutional investors and generalist allocators looking to outsource expertise in their target property types. To allocators, operators bring deep levels of specific market knowledge and relationships in their chosen milieu, as well as granular execution capabilities that are nearly impossible to replicate in a generalist's platform.

Gradually, these operators grew weary of smiling and dialing and also saw that much of the fruits of their labors were generating attractive fee streams for their allocator JV partners.

This caused some to begin to try to go straight to the source and launch their own sector-specific funds. Some operators have succeeded greatly, but all have learned that along with the holy grail of fully discretionary, commingled fund capital comes new institutional requirements and challenges, ranging from registering with the Securities and **Exchange Commission as investment** advisers and complying with regulations, to learning to navigate the consultant and limited partner (LP) universes. Many new vertically integrated operators are now looking to institutionalize their organization and their capital base.

With challenges in recent years besetting the retail and then the office sectors — historically the two most heavily invested sectors for institutional investors — allocators in particular have sought enhanced deal flow from operators with 'boots on the ground' in chosen sectors, further spurring the rapid growth of residential and industrial operators with institutional fund offerings.

#### The investors' view

One of the tectonic shifts in the private real estate landscape that has happened in recent years is the 'barbellization' of investor appetites. This has led to increasingly large and diversified allocators at one end of the barbell and a new breed of increasingly institutionalized operator investment managers at the other end. Anecdotally, it has been said for some time that institutional investors preferred to invest either with category-killer generalist allocators or with smaller, focused, vertically integrated operators — theoretically leaving out smaller generalists.

**LEADERSHIP** 

#### **Cortland's experience**

In the multifamily sector in which we operate, having the luxury of being able to fully control our brand and the consistent roll out of resident-targeted technologies, community and amenity programs, as well as sustainability initiatives across a large portfolio, without relying on varying approaches and degrees of quality across a range of third parties cannot be overstated.

Returning to the 'inch wide, mile deep' analogy, being an operator focused on a sector — especially as we increase scale — affords firms such as ours a market presence, depth of knowledge and nimble execution capabilities that are hard to replicate. We believe we have a competitive advantage when we own and manage close to 50 apartment buildings in a single market, as Cortland does in Dallas-Fort Worth, and have a team of locally based investment, operations and construction professionals responsible for managing all of those assets, as well as sourcing and underwriting new value-add and core-plus acquisition opportunities.

As we have built proprietary rent growth models for every market we target and have intimate, first-hand local knowledge of the costs of operating and renovating assets, we believe that our integrated underwriting process allows us to underwrite any asset in our markets across the country with a high degree of granularity, precision and speed. Given the efficiency and the level of conviction around the assumptions that we input into any underwriting — not relying on the seller's, the selling broker's or even a partner's views — we have been able to find attractive investments at all points of the cycle, even staying very active during the early days of Covid-19.

We have also built a network of joint venture partners over the years, including many of the aforementioned who's who of the largest and most respected allocators, with whom we partner on complex development projects, large assets that strain our funds' concentrations to single assets or markets, or large portfolios or privatizations that are simply too big for a specialist to swallow. These partner relationships and the yin and yang of what they bring to the table across a consistent track record of successful investments demonstrate that, far from being polar opposites or rivals on the far ends of the barbell, allocators and operators are able to work harmoniously to deliver the best of what each model can provide to the full range of investors in the market today.

For decades, public REIT investors voted with their capital in preference of single property type, internally managed and vertically integrated real estate managers. They were skeptical that any manager could simultaneously be best in class at acquiring and managing office buildings, retail malls, residential communities and industrial warehouses.

The story on the private real estate fund manager side has been the exact

opposite, with the largest aggregators of capital having diverse portfolios worldwide. These juggernauts have benefitted from ever-increasing scale; balance sheet strength; institutional and retail capital distribution networks; and strategic relationships with banks, lawyers and other service providers. They have also attracted and developed some of the best intellectual capital in the industry, all leading to sustainably strong investment performance.

There will always be the need for generalist allocators with a bird's-eye view to provide all things to all people for their LPs. However, with increasing investor sophistication and willingness to choose sharpshooters in desired verticals, making specific commitments to these operators is one way investors can more actively manage their own property type and geographic exposure as they see fit.

Often, investing with specialists in the sectors that match investors' specific risk/return appetites is likely the only way to achieve an actual zero allocation to the sectors they wish to avoid. Such funds tend to appeal to the consultant community, which often finds, analyzes and recommends emerging managers with deep and specific expertise, instead of recommending diversified managers.

Given the increasing focus on fee leakage, it is also advantageous for investors to go directly with an operator and pay them market value-add fund or development fees, without the material additional layer of acquisition, asset management and/or incentive fees that an allocator must layer on top.

Moreover, the laser focus of operators means they tend to have fewer allocation issues between overlapping capital sources, which can be a source of angst for some investors.

At the end of the day, what matters most is delivering returns to investors, and so it remains incumbent upon operator investment managers to fully capitalize on the competitive advantages and efficiencies that their specialization and focus affords them. •

**Jason Kern** is President of Investment Management at Cortland.





Peer-to-peer networking
Business and organizational best practices
& benchmarking
Candid conversations in a safe space

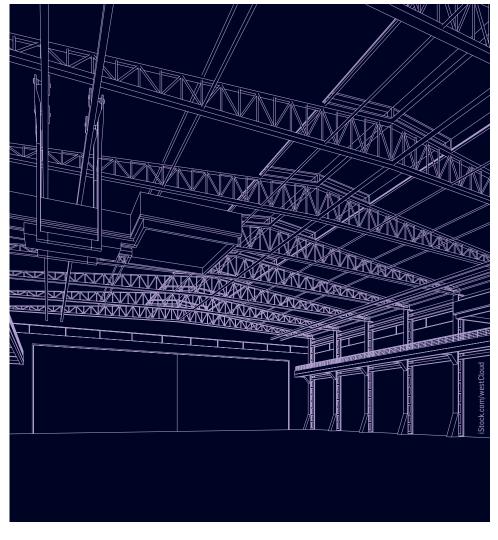
NAREIM represents managers with more than \$2.6tn of gross AUM, but we are deliberately a small association. You want candid conversations and idea sharing among peers in your departmental group. You want to know how best to grow and scale your business. You want to know how your peers are doing the same.

NAREIM is the place where those conversations take place.

www.nareim.org

**ASSET MANAGEMENT** 

## QQA INDUSTRIAL INACession



Recent market turbulence has left investors with questions about what this moment means for the industrial sector. Its dramatic evolution over the past few cycles largely the result of rapid e-commerce growth — offers several lessons and opportunities that can insulate the sector from total disruption. David **Egan of Stockbridge** dives into how the sector performs in a recession and future opportunities.

### How does industrial typically fare in a recession?

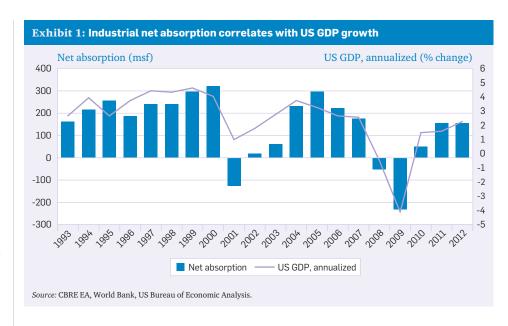
Industrial, as an asset class, tends to track closely with the economic cycle. As the economy slows, demand will typically follow, often lagging a quarter or two. Looking back at data over the past few decades, we can see a tight correlation between GDP and demand (see Exhibit 1).

This cyclical trend has typically been most evident within warehouse, especially big box. Demand in this space is largely tied to consumer consumption.

A shift happened in 2012 when e-commerce erupted and really took hold. Faced with delayed shipments to consumers around the holidays, Amazon made the leap to take their entire delivery process in-house and, with that, changed the very nature of its business from price-oriented to become inherently service-oriented. This move is what ultimately drove broad e-commerce adoption.

According to CBRE Research, the e-commerce share of total retail sales roughly tripled from 3.8% in 2009 to 11.3% at the end of 2019. The pandemic also caused a dramatic change in consumer behavior, which drove e-commerce to comprise 16.1% of total retail sales in 2020. With the onset of Covid-19, the on-demand economy broke; it became crucial for suppliers to store excess inventory within warehouses and big-box spaces for 'just-in-case' situations like ports shutting down and ongoing delays.

Due to e-commerce and changing consumer expectations for speed of service, the amount of real estate needed to fulfill this rapid movement of goods has greatly exceeded what economic trends suggest. CBRE data shows that since 2013, users have



Due to e-commerce and changing consumer expectations for speed of service, the amount of real estate needed to fulfill this rapid movement of goods has greatly exceeded what economic trends suggest. 77

absorbed an annual average of 115 million square feet more than GDP has predicted. However, as the growth of e-commerce has not yet plateaued, we expect user demand will outpace the typical demand generated by economic output, largely due to e-commerce growth and inventory needs.

What we have experienced historically tells us we are likely to see a slowdown in the sector, though it will be less directly related to economic turmoil. Eventually, e-commerce supply chains will be largely developed, so the need for massive and rapid growth will decrease, resulting in demand drivers returning to more typical

factors, such as GDP, employment and production.

## What can we learn from previous cycles?

People often think of industrial in a holistic sense, but viewing the sector this way can be counterproductive and often dangerous. The sector is a collection of different types of properties, with different uses, in a wide variety of markets. Factors that affect one property type or market may have little or even the opposite effect on another. Understanding what those differences are is critical in times of disruption.

We can also learn a lot from previous cycles in terms of supply versus demand. In any downturn or recession, supply indicates how much the cycle really fluctuates. It is crucial to track supply rather than demand and to understand what the components of supply really are. 77

To conduct a thorough analysis of the sector, it is important to examine the market fundamentals first and foremost since the key fundamentals — vacancy, rental growth and new supply — will always lead the way and offer insights as to what may be coming. Viewing the market and product type in a much more granular way results in far more potential opportunities.

Following the Global Financial Crisis (GFC) in 2009, industrial was largely viewed on a grand scale. Many shared the belief that the entire sector was struggling, and, as a result, missed out on opportune investments. Low vacancy markets like Southern California, the Bay Area and New Jersey, were either only slightly affected by the downturn or bounced back significantly quicker than others. While other markets collapsed, demand in these markets remained stable and infill locations outperformed. While big-box new development was a cause for concern, the low vacancy rate coupled with rebounding demand, made the recovery in these markets swift. Any investment thesis that ignored the general panic and negative headlines around the GFC would have performed exceptionally well — this is certainly an important consideration today.

We can also learn a lot from previous cycles in terms of supply versus

demand. In any downturn or recession, supply indicates how much the cycle really fluctuates. It is crucial to track supply rather than demand and to understand what the components of supply really are.

### Why track supply over demand?

Supply is the biggest indicator of the overall health of the sector. Historically, the addition of new supply causes problems in a downturn. This time around, we could see this again.

Based on previous cycles, we will likely see a few quarters of negative absorption, but demand should stabilize quickly. Looking back over the past 40 years, less than 10% of quarterly net absorption totals were negative, so even in an economic downcycle, we will see net absorption turn positive quickly.

However, in the current slowdown, new projects under construction total roughly 600 million square feet of warehouse space and will deliver regardless of economic conditions. Depending on the level of construction, this could ultimately lead to elevated vacancies and slumping rents, even as broader economic conditions improve.

This new supply can have a much more significant and adverse impact on

certain markets and property types than others. This is especially the case for large format warehouses in markets that do not have natural barriers to expansion. In an effort to drum up demand, developers tend to expand beyond areas of robust demand like established submarkets or corridors. This can take place in any market, but it is especially risky in locations where land expansion is easy.

The Inland Empire is an interesting example of a market with natural barriers to expansion. Developers are trying to push out, but the surrounding mountains result in significantly fewer projects further out from the core. According to CBRE, the Inland Empire leads the nation with 60% year-over-year rent growth for big-box facilities, due to a vacancy rate of 1% and robust demand. The region has more than 25 million square feet of big-box development underway. Of this total, 39 projects average 18 miles from the core, compared with 34 projects averaging 13 miles away in 2017. Because the mountains prevent expansion, there is little to no development beyond 25 miles of the core. This is the type of market dynamic that provides insulation against recession. While the Inland Empire may be the most extreme example of this, there are others across

<sup>1</sup> Peter Grant, Amazon Slowdown Sends Shivers Through Red-Hot Warehouse Sector, Wall Street Journal, May 31, 2022.

What we will likely see in a recession is that the more niche or specialized properties, such as outdoor storage and cold storage, are going to be much more resilient to market turmoil. However, the ability to replace that infill or highly specialized facility space is much lower due to how supply constrained the sector is. 77

the country that are similar — Seattle, New Jersey, Long Island and Boston for example.

Developers have focused on big-box spaces over the past cycle because they are bolstered by manufacturing, e-commerce and distribution sectors, and demand for this type has been steady. However, in recent years, user demand has expanded and spread to lower coverage, supply-chain-oriented industrial along with smaller infill locations aimed at the last mile.

As e-commerce growth has continued, industrial outdoor storage (IOS) properties have served as a central step in the flow of goods and services in the modern supply chain. IOS and other similar, smaller format industrial properties have several characteristics that discourage overbuilding and, in turn, oversupply, contributing to their attractiveness as investments despite market volatility.

## Which industrial properties are likely to do well in a recession?

What we will likely see in a recession is that the more niche or specialized properties, such as outdoor storage and cold storage, are going to be much more resilient to market turmoil. However, the ability to replace that infill or highly specialized facility

space is much lower due to how supply-constrained the sector is. The availability of new product and the need for these niche property types is not going away any time soon.

Demand has typically been driven by local economic activity and population growth, which attract tenants focused on distribution activities, equipment leasing and storage. Another component of this demand is driven by the path of goods movement, because of IOS's exposure to trucking and transportation activities. Given e-commerce growth prior to the pandemic, and rapid acceleration since, the demand for industrial space in general, and infill IOS properties specifically, has drastically increased. Infill product tends to be much closer to the consumer. If you give that up, you are putting your relationship with your customer on the line and ultimately risking your chance to get that lastmile location back in the future.

This mindset is slightly different from what is often talked about on the business side of things. Understanding user motivation is an entirely different angle. It is easy to focus on markets and vacancy rates, but focusing on why the users are there in the first place is the key to identifying opportunities.

## What should managers look out for and what opportunities are there to be exploited in a tough market?

Surrounding any recession is a general sense of fear and uncertainty, but understanding the user and market fundamentals is of first and foremost importance.

A current example is the noise surrounding the Amazon pullback headlines. <sup>1</sup> To the extent this happens, there will likely be a slight disruption in microlocations, but a minimal impact on the markets overall. In my opinion, the reaction has been wildly disproportionate. The fundamentals in many markets tell us that, even with a large user like Amazon slowing down and construction continuing, the amount of new or vacant supply will not meet demand and will still drive rent growth. The trends may be slower for rent growth, but there will still be growth, nonetheless.

Understanding why users are where they are and why they are making the decisions they are making to meet their end user is critical. Investing where the user is more durable will result in long-term vitality.

**David Egan** is a Senior Vice President, Portfolio Management at Stockbridge.

## Anew model for EQUALITY

An ESG-forward, impact-oriented platform established to provide workforce housing, logistics buildings and mixed-use facilities, 1RACE aims to offer novel funding solutions and provide opportunities to marginalized communities.

he events of 2020 catalyzed by the death of George Floyd, the increased broad corporate interest in racial equity and ESG, and subsequent mainstreaming of the Black Lives Matter movement are a clarion call for businesses and organizations to improve outcomes for all stakeholders. Due to commercial real estate's unique position — quite literally on the ground — the industry ought to be a leader in diversity, equity and inclusion (DEI) in supporting and building stronger, more equal communities.

Healthy people living and working in healthy buildings lead to healthy communities. ESG, in addition to helping investors invest in climate-change-friendly businesses and sectors, offers a framework for real estate firms to further DEI initiatives in creating robust and sustainable community health. All of this can and should be achieved without sacrificing, and in fact lead to, healthy returns for investors.

#### A new mission

Investor and strategist Saafir Rabb saw an opportunity to form a new real estate

platform that marries ESG-driven impact objectives with the three largest drivers of commercial real estate demand so far this decade: logistics, multifamily housing and mixed-use facilities (office and retail).

Rabb partnered with Murad Siam, a longtime business partner and cofounder/co-CEO of IDS Real Estate Group, to form 1RACE as a joint venture with IDS. An institutional investment manager with \$5 billion in assets under management, IDS gives 1RACE institutional backing and an established track record to see through their vision.

1RACE's vision is centered on an equitable approach incorporating marginalized communities in the execution of solvent commercial real estate projects at every level. Through its partnership with IDS, the firm has a goal to achieve greater societal parity and true inclusion of marginalized communities by hiring employees and incorporating resources intended to benefit these communities.

The firm launched in 2021, offering development, construction, property management and consulting services focused primarily on value-add and opportunistic investments. 1RACE also

By Mack Major, 1RACE and Gene Dibble, IV, Uncommon Impact Solutions identifies financial access points such as investors, associations, government entities and structured funds capable of investing equity, debt, credit enhancement and/or providing subsidies for 1RACE's managed services.

1RACE's approach serves to further address equity and inclusion in the commercial real estate sector by identifying, working through and demonstrating templates that prove that focusing on inclusion need not work at cross-purposes with earning healthy returns.

Effectively implemented, their approach will eliminate or greatly minimize structural barriers to entry that have previously challenged commercial real estate firms focusing on marginalized communities in the pursuit of achieving success.

#### **Learning from past experiences**

Prior to founding 1RACE, Rabb and Siam were approached by existing clients to serve as development managers for national retail expansion projects that aimed to use brokers and contractors from marginalized communities. Qualified vendors from these communities, however, were in frustratingly short supply within the targeted markets. Rabb and Siam also encountered other challenges, including weak or nonexistent relations between the institutions and top players within marginalized communities, and economic risk/return profile targets that outpriced the very communities they were focused on serving. Due to these problems, the expansion projects could not proceed as planned.

These experiences laid bare some of the structural challenges impeding equity in commercial real estate. Rabb and Siam knew that in order to address these problems, they would need to take Contributing to the lack of diversity within the commercial real estate industry are long-standing barriers to entry for new investors and first-time funds.

a step back and design novel solutions that would provide them with the tools necessary to break down the barriers faced by qualified vendors from marginalized communities, as well as improve access to institutional resources that they and likely many others had faced. And so 1RACE began.

## A real estate chicken-and-egg problem

Contributing to the lack of diversity within the commercial real estate industry are long-standing barriers to entry for new investors and first-time funds; these challenges are exacerbated for diverse firms. However, ESG goals and objectives have moved the needle forward by creating incentives for corporations, mainstream investors, philanthropic and financial institutions to target and support growth of commercial real estate funds with racial equity as a social impact objective. Organizations are committing large amounts of capital toward supporting equity in the US. For pension funds, ESG-targeted corporations and diversity-oriented emerging funds, 1RACE believes there is a robust market for capital allocation organized around the firm's core competencies and its ambition to expand the participation of

marginalized communities in the commercial real estate sector.

However, the traditional requirement of an investment track record, or a level of 'skin in the game,' is a significant barrier to entry for marginalized and often underrepresented groups. It is not uncommon for capital holders to require at least three years' worth of financial statements, as well as evidence of performance over a similar time period. This requirement disproportionately impacts minority communities, which not only lack opportunities to participate and thus the requisite experience, but also the connections necessary to succeed. The result has been a large amount of capital directed to a small group of managers or the same established participants.

There are also occasions when external investors require a personal guarantee for an organization seeking capital at an early stage in its life cycle. This, too, can be difficult for entrepreneurs from marginalized communities to obtain, increasing the number of hurdles they have to clear.

This is an ESG and DEI chicken-and-egg problem: investors from marginalized groups want to invest but are often challenged, due to a lack of experience and guarantees that can only come from having landed a series of projects in the first place. By organizing a structure in cooperation with an established commercial real estate platform, 1RACE mitigates the normal risk associated with firms lacking the experience to service capital-seeking ESG compliance and investment in marginalized communities.

#### The impact bond solution

A further solution to the funding problem for firms focusing on the

#### **LEADERSHIP**

#### **TIDE** in action



Following a devastating fire in the building that housed the Embassy of Cameroon in Washington, DC in the 2000s, Saafir Rabb led the full restoration of the badly damaged building to a mixed-use facility housing the consular affairs office as well as a guest house. More than 80% of the project's labor force consisted of workers reintegrating into society and recovering addicts. Additionally, 75% of the labor used to carry out the restoration of an apartment building in Baltimore that Rabb acquired consisted of recovering addicts and workers from the immediate surrounding area. Going forward, 1RACE aims for 30% TIDE compliance on its projects.

inclusion of marginalized communities may lie in impact-first funds and blended financing. 1RACE is exploring the use of social impact bonds and development impact bonds (DIBs) which serve as a finance utility with measurable impact, the first of its kind for the commercial real estate industry. Impact bonds are results-based contracts that bring private capital to meet the demands of targeted outcomes. Applied to commercial real estate, DIBs targeting outcomes like expanded jobs within marginalized communities or home ownership help mitigate the risk for new firms, ensuring returns and results by design.

Risk capital for funding such projects is raised from a variety of sources, such as corporations and large investors with ESG goals along with first-time investors (including underrepresented investors). The bonds are usually repaid by public or philanthropic institutions once the impact is achieved, or topped up with a financial return once impact targets are met or exceeded. Issued by some of the world's most prominent organizations, the bonds will be leveraged to attract commitments from philanthropic contributions in a way that de-risks the outcomes and provides impact measured by third-party evaluators. 1RACE's impact bonds will be managed by BrightCap Ventures' Larry Biehl, a member of its Investment Committee.

1RACE aims to be a leader at the forefront of innovative finance structures in commercial real estate to help scale inclusivity and equality in the industry. Through these new financial products and a strong commitment to marginalized communities, 1RACE is exploring financing structures that open the door to critical tools like credit enhancements, tax incentives and other programmatic benefits that work to eliminate roadblocks that challenge ESG compliance regarding marginalized communities.

#### **Success indicators**

With certain projects, 1RACE will use what it calls the Target Impact Driver for Equity (TIDE) indicator. TIDE measures the deliberate inclusion in projects of people who are either recovering from addiction or returning from prison.

1RACE's own staff comes from a variety of communities and backgrounds in the US and the world. Additionally, to address the gap in resources and knowledge within marginalized groups across the commercial real estate industry, the

firm has a program to hire, train and pay people from these communities to learn how to execute and deliver high-profile and high-quality projects.

In addition to TIDE, 1RACE will employ indicators to measure success along the way. These indicators are agnostic of the type of real estate developed and measurement will take place at different steps with iterations as needed. In fact, 1RACE hopes its progress advances six of the UN's Sustainable Development Goals, covering poverty, health, decent work, industry and infrastructure, reduced inequalities, and sustainable cities and communities. Key measurements and progress of the phases of 1RACE's work will be featured in annual reports and outreach.

#### A call to action

1RACE sees a future in which the concept of competition and community works across differences to bring fresh talent and disciplined creativity to commercial real estate. It believes its approach moves the industry forward in a more equal way and encourages others to do so, too. Rabb also has higher aims: a paradigm shift across the industry — when equality is achieved, real and impactful change will benefit communities everywhere without sacrificing investor returns. Accomplishing this requires a movement of like-minded people and organizations. If you or your organization are interested in working with 1RACE, please reach us at contact@1racellc.com. ◆

**Mack Major** is Chief Operating Officer of 1RACE and **Gene Dibble, IV** is Chief Impact Officer of Uncommon Impact Studios.



## Benchmarking research



## Global Management Survey

**Released in September** 

Produced in collaboration with Ferguson Partners, INREV and ANREV

Covers more than 65 individual data points, including:

- Revenue: Capital raising and net and gross AUM growth, new commitment trends, investor concentration ratios, dry powder and subs lines.
- Organizational metrics: Headcount growth, employee per \$1bn AUM, employee breakdowns per function, per function and seniority, valuation policies, functional group trends.
- Financial metrics: YOY financial performance, EBITDA (pre- and post-bonus) margins, bonus pools, revenue and expense breakdowns.
- Fund/Account T&Cs: Target returns, fees, carried interest, co-investments.
- Governance: Composition of executive committees, board of directors, management and investment committees, SEC registration.



## **Defined Contribution Survey**

Released in September

Produced in collaboration with Defined Contribution Real Estate Council and Ferguson Partners

This report covers:

- Scale and growth of DC offerings and the management of DC real estate vehicles.
- Breakdown of trends, including AUM growth and DC real estate capital flows.
- Organizational resources used and planned in supporting DC real estate strategies.



## Compensation Survey

**Released in October** 

Produced in collaboration with Ferguson Partners

More than 150 individual position compensation reports, including functions within:

Executive management, accounting (corporate, portfolio/fund, property), asset management, capital markets, corporate marketing and communications, due diligence, engineering, environmental, finance, human resources, investor relations, capital raising, leasing, legal and compliance, portfolio management, property management, risk management, technology, transactions, valuations, debt and REIT securities.



#### DEI Survey

Released in December

Produced in collaboration with ANREV, Ferguson Partners, INREV, NCREIF, PREA, REALPAC and ULI

First corporate benchmark for DEI metrics and best practices in commercial real estate globally. Covers more than 140 pages of individual data points, including:

- Employee demographics: Gender and ethnicity composition by seniority and job functions.
- Best practice metrics: Relating to the implementation of DEI strategies and initiatives across investment management organizations, including issues relating to ownership & staffing, accountability, tracking & measurement, retention & recruitment, external partnerships and activities, pay equity & transparency.

For more information, please visit www.nareim.org

## New tools to Nowcast rents

Using data science to understand how underlying market trends impact performance can help investors identify underperformers as well as locations with high potential rents, allowing for faster decision-making and better investment returns.

By Michael Clawar, Altus Group, Eric Draeger, Berkshire Residential Investments, Rachel Levy, Altus Group and Gleb Nechayev, Berkshire Residential Investments

eal estate investing is often referred to as a long-distance race as owners typically hold assets over several years. However, a property's rent levels at acquisition and right after (the next three to six months) can be as critical to investment returns as rent growth over the rest of the holding period. Consider a hypothetical acquisition of an apartment property with rents 15% or more below market: over a five-year period, it could generate the same investment returns as another property charging fair market rents due to much faster rent growth. There is good reason for the expression that one usually makes, or loses, money on a buy rather than a sale.

Despite recent advancements in technology and available data, accurately estimating 'fair' current rent levels by measuring and explaining market shifts on a typical acquisition timeline remains more art than science. That said, a good model or algorithm can go a long way in taking the guesswork out of underwriting both current rent levels and near-term changes. With greater availability of both high-frequency data at the microlocation level and modeling techniques, data

science can enable more precise measuring, predicting and forecasting of rents. These models tie together property characteristics with economic and demographic factors to 'nowcast' and forecast rent growth for specific asset classes or even hyperlocal geographies. With explainable AI (XAI), models formerly considered black boxes can give interpretable results to investors, helping explain why certain properties or markets have stronger growth potential.<sup>1</sup>

Investors armed with data science tools can be more confident in projecting asset pricing, revenues and returns over the holding period. Moreover, they can adjust forecasts in real time, rather than waiting for third-party data providers to catch up. The key is that these modeling tools allow investors to recalibrate as the market environment and available data evolve. As facts on the ground change, these models can reveal underlying trends faster than it takes for market consensus to catch up.

In this article, we explore the results of one promising data science model called random forest to nowcast 2022 rents on the zip-code level and identify areas with higher growth potential in

**ASSET MANAGEMENT** 

- Explainable AI (XAI) is artificial intelligence with interpretable results. For a recent example of interpretable machine learning in real estate, see Felix Lorenz, Jonas Willwersch, Marcelo Cajias and Franz Fuerst, Interpretable machine learning for real estate market analysis, Real Estate Economics, 2022, May 31.
- Methodology: Zillow Observed Rent Index (ZORI).
- <sup>3</sup> Specifically, each 'tree' is based on a random subset of the available ZIP codes and modeling features. The 'forest' combines these relatively weak individual predictors into what is generally found to be a strong and robust model less prone to data mining.
- <sup>4</sup> Zillow Home Value Index Methodology, 2019 Revision: Getting Under the Hood.
- 5 ZIP code level data from Stratodem Analytics/Altus Group.
- <sup>6</sup> The hold-out set on which the model is evaluated is also referred as the 'test' set, while the model is estimated on the 'training' part of the full data. This separation helps identify whether the model is overfitted.

the residential market. We found that this approach highlights performance opportunities and provides a greater understanding of while home values are a strong predictor of near-term rent growth, incorporating economic and demographic fundamentals significantly improves accuracy when nowcasting fair market rent levels. This modeling approach could potentially be applied to additional asset types.

## Random forest model for nowcasting

For our nowcasting approach, we utilized a random forest model to predict the latest 2022 Zillow Observed Rent Index (ZORI). ZORI, a smoothed, repeat-rent index measuring the typical observed market rent rate across a given region, is computed using the mean of listed rents that fall into the 40<sup>th</sup> to 60<sup>th</sup> percentile range for all homes and apartments within a given zip code.<sup>2</sup> For our study, we chose all US zip codes with complete data between 2015 and 2022.

A random forest model pools predictions from multiple tree-based models and considers the diversity of those outcomes to make a final informed decision.<sup>3</sup> In addition to the Zillow Home Value Index (ZHVI), we enhanced the model with several demographic and economic variables, including median renter income, net migration rate, rental affordability (a household income to rent ratio), economic employment diversity and labor market health.<sup>5</sup> Although other types of models could have been utilized to predict rent levels, we chose the random forest algorithm for this nowcasting exercise as it can handle both continuous and categorical variables.

The results of the random forest model are represented in the scatterplot

A random forest model pools predictions from multiple tree-based models and considers the diversity of those outcomes to make a final informed decision. 77

in Exhibit 1, reflecting zip codes and their actual rents versus predicted value of the ZORI. On a holdout set of 476 zip codes, the model predicted the ZORI with a high degree of accuracy, representing an R<sup>2</sup> score (a model performance metric ranging from 0 to 1) of 0.77 (Exhibit 2).<sup>6</sup> While home values

were the most significant predictor of zip code rent levels, additional economic and demographic factors significantly improved model performance from an R<sup>2</sup> of 0.64. With the inclusion of economic and demographic factors, the median absolute error decreased from 12.8% to 8.9%.

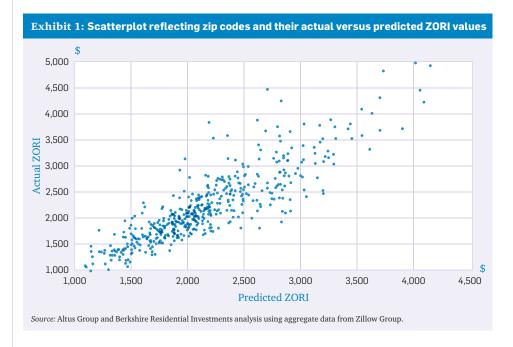


Exhibit 2: The random forest model predicted the ZORI with an R <sup>2</sup> score of 0.77							
	ZHVI as only predictor		ZHVI + eco/demo factors				
	Training set	Test set	Training set	Test set			
Observations (number of zip codes)	1,900	476	1,900	476			
$R^2$	0.67	0.64	0.93	0.77			
Median absolute error (%)	10.8%	12.8%	5.3%	8.9%			
Source: Altus Group and Berkshire Residential Investments.							

Exhibit 3: Backtest results found underpriced zip codes outperforming overpriced zip codes					
2015 nowcast model: 5-year growth by residual group					
Residual (Actual minus Predicted)	Average rent growth, Jan 2015–Dec 2019				
-15% or less	30.7%				
-15% to -5%	25.2%				
-5% to 5%	22.4%				
5% to 15%	18.1%				
15% or more	16.5%				
Source: Altus Group and Berkshire Residential Investments.					

#### **Utilizing nowcast results**

With the nowcast approach, the goal is not to achieve perfect accuracy for the random forest model as this would imply that all market rents are already accurately priced. Instead, a model that has a thorough understanding of how underlying market trends impact property performance can help investors gain insight into how certain areas will play out in the long run and identify both underperformers and, importantly, locations with high potential rents.

Backtesting the same factors as predictors on 2015 ZORI data, we find that rent growth for 'underpriced' zip codes outperformed 'overpriced' zip codes by 14.2% over the next five-year period (Exhibit 3). For the zip codes that

Source: Altus Group and Berkshire Residential Investments.

the model predicted 2015 rent levels to be 15% higher than its actual value, suggesting that rents were underpriced by the model's standards, actual rent growth by 2019 averaged 30.7%. For the zip codes where the model predicted rent levels to be 15% lower than their actual value, suggesting rents may be overpriced, the 5-year growth rate turned out to be only 16.5%.

Assessing residuals from the June 2022 prediction, we can similarly gain insight into which zip codes have potential for higher rent levels and a strong propensity to outperform widely expected revenue growth within the next year. Exhibit 4 shows the top five zip codes where the actual rent levels are tangibly lower relative to where the

model expects them to be given their specific location's home price levels and economic and demographic features. The model can assess thousands of locations around the nation to identify areas with the most upside, as well as downside, potential for rents. This can help guide both site selection and underwriting; in this case, going well beyond what traditional forecasting platforms offer now.

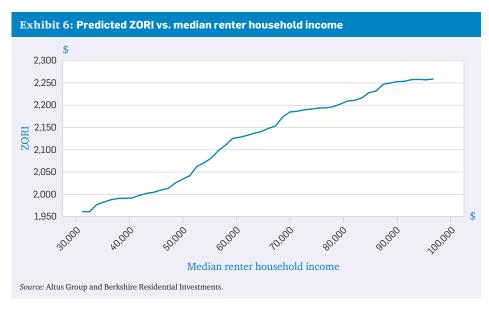
## Interpreting the model's predictive impact

Many machine learning models are black boxes, consuming information and creating outputs through processes too complex for human understanding. Explainable AI (XAI), or interpretable machine learning models, is a critical approach for commercial real estate investors to understand the factors contributing to predictions.

One simple example comes from partial dependence plots (PDPs), which show the relationship between the target variable (in our case, ZORI) and one or more input features (for example, ZHVI) controlling for all the other factors. Exhibits 5 through 7 are three PDPs for the strongest predictors in our nowcast model based on relative impact to rents: ZVHI, median renter household income in the zip code and a dummy variable for whether the zip code is in the Southeast division of the US. We see strong, positive, nonlinear relationships for home values and renter income. With ZHVI, for example, once typical home values in the zip code exceed \$925,000, predicted ZORI jumps noticeably from \$2,500 to \$3,000. As a result, two zip codes on either side of this cutoff point may have very different pricing dynamics.

Exhibi	Exhibit 4: Top underpriced zip codes based on the nowcast model						
2022 nowcast model: Five lowest residuals by zip code							
Zip code	Market	Actual – 2022 ZORI	Predicted – 2022 ZORI	Residual			
75201	Dallas-Fort Worth, TX	\$2,105	\$2,657	-20.8%			
34683	Tampa, FL	\$1,767	\$2,211	-20.1%			
78746	Austin, TX	\$1,993	\$2,460	-19.0%			
92663	Los Angeles-Long Beach-Anaheim, CA	\$2,397	\$2,910	-17.6%			
20015	Washington, DC	\$2,297	\$2,740	-16.2%			



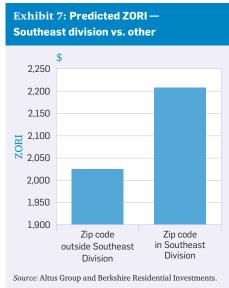


The Southeast division flag has a more straightforward interpretation: after controlling for economic and demographic factors, the Southeast division today has \$184 higher rents than non-Southeast divisions.

#### **Conclusion**

With the improvement in high-frequency

data widely available today, data science models and analytical tools can be employed to assist with the challenge of assessing fair market rent values and higher growth opportunities. Investors need confidence in pricing and forecasting models, supported by backtesting and explainable AI. While we find that underpriced zip codes from 2015 significantly outperformed over the following five-



year period, other work in time series machine learning supports separating near-term and longer-term forecasting.

Although home price data is a principal factor in these models, it is not sufficient to identify true investment opportunities in today's market. We also find that economic and demographic fundamentals materially impact model and hypothetical investment performance. As a result, investors will gain insight on underlying market trends and the impact on rent levels before the market catches up and comes to a consensus on fair rent levels, allowing for faster decision-making and the potential for better investment returns. •

Michael Clawar is Vice President –
Data Science at Altus Group,
Eric Draeger is Chief Investment
Officer at Berkshire Residential
Investments, Rachel Levy is Data
Scientist at Altus Group, and
Gleb Nechayev is Head of Research
at Berkshire Residential Investments.

# ACCELERATING sustainability by upskilling EMPLOYEES

With people at the heart of CBRE Investment Management's sustainability vision, the company has launched a series of programs for employees to increase their sustainability knowledge and engagement across the organization.

By Helen Gurfel, CBRE Investment Management n our strong commitment to be a sustainability leader, CBRE Investment Management (CBRE IM) is aiming to integrate sustainability across the firm's investment process, corporate culture and day-to-day operations. This commitment is reflected in our Sustainability Vision: to lead the transition to a sustainable future.

After an extensive materiality and stakeholder assessment, we identified three key sustainability focus areas: climate, people and influence. These focus areas are fundamental to our own business and are key to driving long-term outperformance in the real assets portfolios we manage.

 Climate. We aim to address climaterelated risks and opportunities by focusing on delivering net zero carbon

performance and physical resilience. We are implementing actions to achieve net zero operational carbon by 2040 for our directly managed, long-term core investments and net zero carbon by 2050 across all assets under management. This includes a focus on energy and resource efficiency, electrification and renewable energy. For our corporate offices, we aim to achieve carbon reduction in line with Science Based Targets initiative (SBTi) criteria which provides a pathway for companies and financial institutions to reduce greenhouse gas (GHG) emissions — by 2035 or sooner. Our commitment to establishing targets in line with the SBTi is ongoing.

- People. People are at the heart of our strategy, with each stakeholder group playing an important role.
  - Tenants. Millions of people use our assets every day, and we strive to help improve their social and physical well-being.
  - Employees. We understand that diversity of ideas, approaches, perspectives and backgrounds drives not only innovation, but also successful outcomes, which is why we champion diversity, equity and inclusion.
  - Investors/Clients. We have a fiduciary responsibility to millions of individuals who entrust us with their pensions and other funds, and we want to act responsibly on their behalf to mitigate risk, as well as preserve and grow their capital.
- Influence. We are committed to engaging and positively influencing our stakeholders. This requires stewardship and an ability to drive positive outcomes across our operating partners, underlying

In our Sustainability
Knowledge Hub, we have
curated content and
training on widely used
external sustainability
certificates and
benchmark tools.

managers and investee companies. When done right this can create a multiplier effect for change.

To have sustainability truly integrated into the fabric of how we invest and operate, our employee base across our offices in 20 countries must be educated, knowledgeable and able to embed sustainability in all investment strategies, business planning and stakeholder engagement. We need both fluency and consistency in supporting our vision; therefore, we have looked for interesting ways to upskill and elevate sustainability knowledge across our organization.

Our roadmap began with an engagement initiative targeting our employees. We launched an internal Sustainability Knowledge Hub, which collates a range of content and educational materials to accommodate various learning styles and knowledge levels. The Sustainability Knowledge Hub is available to all 1,000 CBRE IM employees worldwide via the corporate intranet.

#### **Tools and resources**

In our Sustainability Knowledge Hub, we have curated content and training on widely used external sustainability certificates and benchmark tools (e.g., BREEAM, LEED, WELL, GRESB), international standards and frameworks

(e.g., TCFD, PRI, UN Global Compact, Universal Declaration for Human Rights), and regulatory frameworks and compliance (e.g., SFDR, anti-bribery and corruption laws). The Sustainability Knowledge Hub also houses internally developed tools and training, such as a tool we use to assess asset-level sustainability risk in preparation for investment committees and asset management tools that help identify asset improvement opportunities.

Our organization is also a hive of innovation. Our teams collaborate to continually develop new programs, processes and tools; for example, we recently launched programs to focus on implementing on-site renewable energy, facilitate tenant and property management engagement, and to track sustainability metrics in a systematic way.

#### **Stickerbook**

Within this hub, we also launched a gamified upskilling and engagement platform called Stickerbook. It was created to simplify sustainability learning, drive awareness of strategic sustainability issues and reward positive action. The process is simple: employees throughout our organization are encouraged to learn about sustainability by watching short videos which inspire positive changes. They are awarded stickers for learning.

To optimize engagement with Stickerbook, we created an internal competition with a cash prize awarded to the office that earned the most stickers per capita to invest in local sustainability initiatives. Our Warsaw office won the inaugural competition, with every staff member completing every sticker.

We initially curated 30 videos, or vignettes. The content mostly came from

SUSTAINABILITY

a tremendous success. It engaged our global workforce to increase their sustainability knowledge not just relative to our business — there is also content dedicated to actions employees can take to improve sustainability in their personal lives.

CBRE IM's sustainability leaders, nonprofits and third-party sustainability organizations. Some participants also have created and submitted additional educational content for consideration.

Stickerbook has been a tremendous success. It engaged our global workforce to increase their sustainability knowledge not just relative to our business — there is also content dedicated to actions employees can take to improve sustainability in their personal lives. This type of education can help embed a mindset outside of work that can have a meaningful multiplier effect.

There will be more chapters in the Stickerbook story in the future, and, as sustainability market drivers evolve, we will add new stickers to provide more learning opportunities.

#### **Webinar series**

We have introduced an ongoing series of live sustainability-focused webinars for staff who want to engage and participate with colleagues across our organization. These webinars are available globally for

Stickerbook: CBRE IM's gamified upskilling platform to increase employee engagement



all CBRE IM staff on both internal and external sustainability issues, and we have had a number of guest speakers from our wider network discuss a range of topics, from the impact of air quality on health to driving well-being within the workplace. Replays are available ondemand for all of our employees.

#### Sustainability Ambassador Program

We have also launched an internal Sustainability Ambassadors Program to help embed sustainability throughout the CBRE IM platform by integrating knowledge across functions, sectors and countries/regions. These Ambassadors are not necessarily sustainability specialists, but individuals who are motivated to champion sustainability action. They act as conduits for engagement and two-way communication with the core sustainability team. Their role includes cascading down new strategies, tools and processes to the respective program, sector and local teams, as

well as informing the sustainability team and relevant sustainability committees of local needs and opportunities. Our pilot cohort started in September and comprises about 7% of our global workforce.

With assets that equate to the scale of an average-size city, we at CBRE IM are cognizant of our significant responsibility and opportunity to drive positive change among our employees, stakeholders and communities. Together, the strategies we have implemented thus far as part of our Sustainability Vision have raised the bar of sustainability knowledge and engagement within our organization. We continue to look for new and innovative ways to support our aspiration to continue fostering a corporate culture which positions climate, people and influence at the heart of our sustainable investment strategies.

**Helen Gurfel** is Head of Sustainability & Innovation at CBRE Investment Management.



It's FREE! Delivered to your inbox daily. Sign up at www.irei.com/subscribe

Our Real Estate Newsline delivers the day's top stories on the institutional real estate market, including news on commitments, fundraising, transactions, research reports and people.



# The case for Class B APARTMENT INVESTMENT

Traditionally an underserved segment of the housing market, Class B apartments — underpinned by strong fundamentals and outsized demand — are an attractive investment opportunity, one potentially more compelling than high-end Class A units.

lass B apartments are a step below Class A in terms of amenities, location and building quality. For these reasons, Class B units are more affordable with rents near \$1,700 per month compared to \$2,200 per month for Class A units. Although these properties may not be as aesthetically pleasing as their more upscale counterparts, for investors the modest Class B apartment subsector has outperformed Class A for the last decade. Structurally undersupplied with resilient demand from renters, this subsector is poised for continued outperformance in both the short and long term.

### Strong and resilient demand

Demand for apartments of all quality levels has increased on an annual basis every quarter since 2000, not once

By Donald Hall and Dan Manware, Nuveen Real Estate

- RealPage, July 2022.
- CoStar Advisory Services, July 2022.
- <sup>3</sup> RealPage, July 2022.

turning negative. Although demand has been reliably positive, not many expected record levels amid the Covid-19 pandemic. Apartment absorption reached a record of 301,000 units in 2020, which then quickly doubled in 2021 with 663,000 units absorbed nationwide. Initially, this demand was largely spurred on by the decoupling of roommates. Stuck at home, renters needed additional space to work remotely, and many had record bank account balances due to savings from reduced travel, a pause on student loan payments, federal stimulus checks and raises from employers. Although this level of demand growth may not be sustainable, the wave of new demand brought occupancies up to record levels, setting the stage for strong rent growth.

The pandemic highlighted the need for essential workers, and many Class B renters — many of whom are essential workers — found their jobs in high demand. As a result, incomes for this segment of renters rose 26% from March 2020 to June 2022, above the 21%

now facing the most significantly skewed rent versus buy calculation in years, in favor of renting. This dynamic will further support demand for rental housing over the next few years, particularly for Class B apartments, which are more likely to be rented by necessity rather than choice.

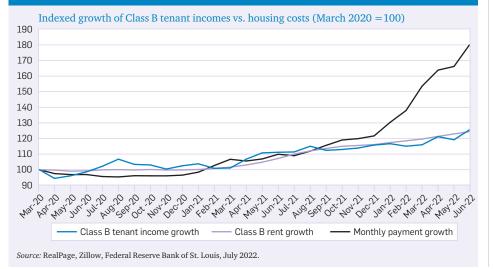
income growth of Class A renters. However, this increase was not quite enough for most Class B renters to jump to Class A units, as rents for Class A units rose 17% over the same period. For Class B units, rents outperformed for investors as rents increased 24% — above Class A rent growth but still slightly below the income gains of Class B renters. As a result, while Class B investors enjoyed record gains, this renter cohort's rent-to-income ratio remained essentially unchanged despite record rent growth.

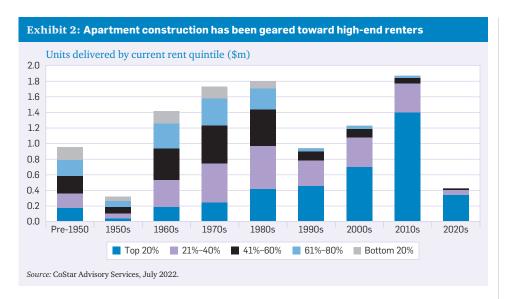
Meanwhile, due to above-average home price appreciation and rising interest rates, the mortgage payment for a mid-level home purchase has increased 81% over the same time period, diverging from rent and income growth in early Fall of 2021 (see Exhibit 1). Potential buyers are now facing the most significantly skewed rent versus buy calculation in years, in favor of renting. This dynamic will further support demand for rental housing over the next few years, particularly for Class B apartments, which are more likely to be rented by necessity rather than choice.

### **Limited new supply**

There is a fundamental mismatch in the availability of housing supply and tenant demand across the country. New supply has largely been concentrated in the Class A segment of the market, as a result of limited land availability and high construction costs. With expensive land and materials, constructing units that fetch higher rents can sometimes be the only way for a developer to turn a profit.

Nearly 40% of all existing units and 63% of units currently under construction require tenant incomes greater than \$100,000 per year.<sup>2</sup> However, 85% of renter households earn below \$100,000 per year and the average annual income for Class B renters is \$71,000 per year,<sup>3</sup> further exacerbating the issue and demonstrating the need for more affordable renter options.



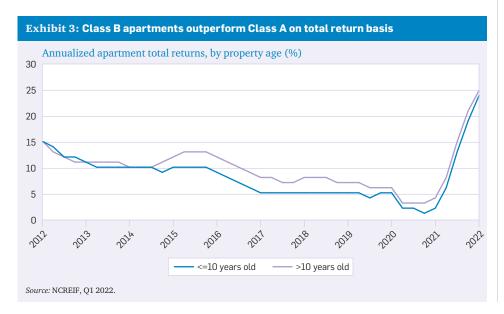


To illustrate this another way, over twothirds of the units delivered this millennium have asking rents in the top 20% of all units (see Exhibit 2). Less than 30% of new apartment supply is geared toward Class B renters.

### **Investment performance**

While focusing on luxury units may have made sense economically for developers,

these higher quality properties have not been strong performers for owners. Effective rents for Class B apartments have outstripped Class A in 83 of 120 months over the last decade as measured by RealPage, and average growth is 90 basis points (bps) higher — 5.3% versus 4.4%. Class B occupancies have outperformed Class A in 100 of 120 months; the average Class B occupancy is 40bps higher than Class A (see Exhibit 3).



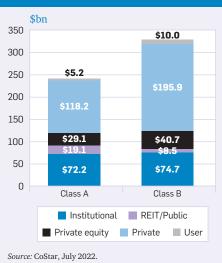
The Covid-19 pandemic has further highlighted the resilience of the Class B sector. Analyzing data from Nuveen Real Estate's 68,000 apartment units, Class B apartments outperformed Class A properties throughout the pandemic in terms of rents, occupancies, net operating income (NOI) growth and total returns. While these more recent statistics are skewed by the prevalence of Class A units in dense urban areas which saw an exodus of people amid the pandemic, it also highlights the stickier demand from Class B renters.

## Large and broad-based opportunity set

Nationally, there are about twice as many Class B units than Class A units -7.1 million versus 3.4 million, according to CoStar. With a larger number of units, investment volumes are also larger for the Class B subsector. Although institutional transaction volumes within Class B represent a similar dollar amount as in Class A, these well-capitalized buyers represent a smaller percentage — about one-fifth of Class B transactions compared to one-third of Class A transactions (see Exhibit 4). Class B assets are more likely to be privately owned, representing an opportunity for larger institutional buyers to improve assets and operations through scale and institutional sophistication.

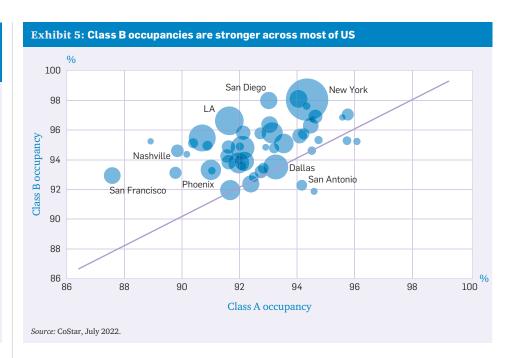
As of writing in August 2022, inflation is at a 40-year high and the future is uncertain. Investors are attempting to work out where to place their bets, and many are asking if apartments are a good inflation hedge. In past cycles, apartments have generally been a good inflation hedge due to the short-term nature of





apartment leases and thus the ability to pass along increased expenses in the form of rent increases.

However, this is only the case where market conditions are promising for rent growth. Across the US, the conditions for continued rent growth are largely favorable. Of the largest 50 apartment markets in the US, 45 markets have occupancy rates above their long-term equilibrium. And of those same 50 markets, the Class B segment is tighter than the Class A segment in 45 of those 50 markets. With significantly less construction of Class B units underway relative to Class A, and with stronger current occupancies, Class B housing is better positioned to have rent growth keep up with inflation over the next few years (see Exhibit 5). We believe there are opportunities in markets across the country, but our primary focus remains the Sunbelt region where in-migration and job growth are the strongest.



### **Risks and conclusions**

We are seeing some moderation of demand and rent growth in the US market, although we would note both are elevated relative to historical averages and are simply down from record peaks. Elevated construction within the sector is likely to weigh a bit on fundamentals in the short term, although our base case is still for above-average rent growth over the next few years. We believe that rent growth and occupancy rates within the Class B subsector will be particularly resilient.

If consumers become meaningfully pinched, we could see an increase in the numbers of renters rekindling relationships with former roommates or moving back home, thereby softening demand for apartment rentals. While this could impact demand on the margins, we also expect to see far fewer renters becoming homeowners given elevated interest rates and increased market uncertainty.

The greatest risk in the short term is to capital values, given increased interest

rates and low cap rates within the sector. Our research team's quantitative modeling and feedback from our acquisition teams both suggest that apartment cap rates have already nudged out by 25bps to 50bps throughout H1 2022. However, due to record gains in market rents over the last year, there is strong embedded growth in NOI as tenants renew leases at new market rents. These NOI increases seem poised to largely offset expected cap rate expansion. As the apartment market's own history would suggest, losses to capital values typically bounce back quickly. Given the subsector's healthy fundamentals and resilient demand, we believe there are compelling investment opportunities in Class B apartments. •

**Donald Hall** is the Head of Research for the Americas and **Dan Manware** is a Director of Research for the Americas at Nuveen Real Estate.

**DATA STRATEGY** 

## asset data RIGHT



Proper and systematic collection and management of asset data can improve decision-making and have a significant impact on bottom lines.

By Nate Benton and Josh McCullough, Partner Engineering and Science, Inc. icture this scenario: A refrigerator in a research lab, one of many on a campus full of research labs and refrigerators. Each refrigerator has a routine scheduled maintenance in place. However, this particular appliance was overlooked in the maintenance schedule and failed unexpectedly. This fridge was a missing data point in the database of operational assets to be maintained. Unfortunately, it contained a quarter of a million dollars' worth of vaccine product.

How much could one missing or inaccurate data point cost you?

Data is the building block of financial projections, capital planning and operating budgets. Using data, real estate investment and asset managers establish baselines from which to track and demonstrate growth. With accurate property data in the right format, managers can then implement proactive management strategies, leverage economies of scale, reduce risk and improve reporting. Arguably, the success

of any real estate investment — and certainly the measurement of that success — depends on the quality of its data. However, we find that few managers prioritize the collection and management of data at their properties.

### **Defining asset data collection**

In the context of building science, asset data refers to information collected about physical buildings or operational systems and components. Any piece of equipment or building component that requires preventive or routine maintenance, or has significant replacement cost, is an 'asset.' Examples of assets include mechanical, electrical or plumbing systems or components; building envelope components such as roof systems or windows; life safety systems; operational equipment; and elevators. (In this context, 'asset' does not refer to the building itself.) Asset data collection and management



(ADCM) is the gathering, compilation and organization of asset data to support organizational goals.

### Mistakes and misconceptions in ADCM

Collecting accurate and complete asset data is complicated, particularly for large portfolios or complex asset classes like healthcare, data centers, research facilities, or manufacturing and/or logistics facilities. Challenges include knowing which assets to include in the data collection effort, which parameters to gather for each asset, and how to efficiently collect and organize data. Frequently, managers make the following mistakes:

 Assign data collection to maintenance staff. Without recognizing the time and skill required to collect quality data, many managers assign the task to their onsite maintenance engineers. While the onsite engineers are undoubtedly most familiar with the assets at their

### How much is good data worth?

One of the richest returns from quality data collection and management comes in the form of proactive management or predictive maintenance.

Proactive asset management reduces maintenance costs and allows managers to strategically plan for capital expenditures. Take roofing, for example. A portfolio of 10 manufacturing buildings, all constructed in the late 1990s, will require 10 roof replacements as the roofs age out. The proactive manager collects relevant data about each roof, such as roof type, condition, expected useful life and property location. The manager uses this data to project remaining useful life for each roof, and ensures maximum roof life through consistent, routine maintenance. Rather than wait for tenants to complain about leaks, the manager develops a strategic plan for replacement: either replacing all 10 roofs at once and negotiating a volume discount with suppliers and contractors; replacing in phases to diffuse the impact on the budget; or replacing according to the projected hold period for maximum return upon sale of the portfolio.

While routine site maintenance may seem mundane, overlooked maintenance can result in grave exposure. Recently, our team assessed a high-profile office complex that housed a national bank and its trading floor. During the technology assessment, assessors identified two previously unaccounted-for fiber optic cables. The purpose of the cables was to provide redundancy for the connectivity of the trading floor — to keep it online if the primary connection failed. Until this assessment, the site manager was unaware that they existed, much less whether they were functional.

This missing data point in the technology inventory of the building exposed the building owner to huge financial risk: if the trading floor became non-operational due to building system failure, the building owner was liable for the lost value of all the trading that could not be completed during the failure. How much is the routine testing of those cables worth to the building owner?

44 With accurate property data in the right format, managers can then implement proactive management strategies, leverage economies of scale, reduce risk and improve reporting. 17

sites, they are not necessarily trained to catalogue them and manage large data sets. Furthermore, onsite maintenance staff may not have time to devote to a data collection effort, resulting in a slow, prolonged and/or incomplete process. Ideally, data should be collected by a team of

- trained data specialists equipped with proper field collection devices.
- Gather existing data from various sources or stages. Between acquisition due diligence records, purchasing records and existing maintenance records, a significant portion of the asset data at a site may

### **DATA STRATEGY**

already exist. However, compiling data from existing records usually results in incomplete and inconsistent data. Often it is more efficient to start from scratch than to validate and supplement an existing data set.

• Fail to apply standardized naming and hierarchies. From one site to the next, maintenance staff may refer to equipment with different names — for example, is it a packaged unit, rooftop unit or RTU? Inconsistencies in terminology and data organization make it difficult to aggregate data and compare data between properties or analyze financials at the portfolio level.

We often receive requests from frustrated managers who have made one or more of these mistakes in their first attempt to collect asset data.

### **Best practices for ACDM**

The implementation of a few best practices can ensure a smooth ADCM project.

- *Purpose first*. The most important step in any ACDM effort is to establish a clear purpose before beginning. Asset data serves many purposes, at many different levels. The purpose of a data collection effort determines the scope, including which assets will be covered and which data points collected. (See 'The question of scope' section below.) Purpose also determines the delivery format of the data; that is, raw data for importing into an existing software platform or a custom dashboard for viewing and manipulating data in different ways.
- Standardized hierarchies.
   Consistent naming and categorization of assets ensures a useful data set. ASTM E1557-09

- offers a standard hierarchy called Uniformat II. Using a standardized hierarchy like Uniformat II saves time and ensures consistency between sites and field collectors.
- Pilot sites. When implementing an ADCM program for a portfolio, start the process with a pilot site. This allows project owners to review results from an initial site to ensure the data set will meet their needs. The list of in-scope versus out-ofscope assets can be refined, key parameters can be confirmed, and the data format can be finalized.
- Data cleaning. Data is only valuable
  if it is clean and consistent. Every
  line item must be reviewed for
  standardization and formatting
  before delivery.
- Barcoding/QR coding. While field assessors are gathering data, they should place a QR code or barcode sticker on each asset to permit faster and more accurate transfer of information in the future.
- Engage an experienced third-party consultant. Few firms have sufficient staff or expertise to efficiently

execute a data collection project inhouse. Engaging a qualified thirdparty consultant expedites the inventory process and ensures delivery of a clean data set. Beyond providing man-hours for field collection, a consultant can offer perspective on the best delivery method and additional applications for data collection.

### The question of scope

The larger and more detailed the collection effort, the more time and investment required; therefore, appropriate scoping is important to ensure that desired outcomes can be reached without wasting time and money. Basic scopes include assets that are critical to operations, life safety and indoor environmental quality, and usually capture make, model, serial number, capacity, age, photos and tags for routine preventative maintenance. Beyond those basics, scopes diverge based on purpose. Exhibit 1 provides some examples of how projects might be scoped for different purposes.

Goal	Additional ADCM scope		
Improve property maintenance planning and scheduling, automate work assignments through implementation of a computerized maintenance management system (CMMS)	<ul> <li>Placement of QR codes or barcode stickers</li> <li>Application of location hierarchy (building, floor, zone, room number, etc.)</li> <li>Mapping of asset locations on floorplans</li> </ul>		
Track condition of rooftop equipment serving net- leased buildings	<ul> <li>Apply detailed multi-point condition scoring</li> <li>Identify equipment deficiencies</li> <li>Check air filters</li> <li>Geolocate assets</li> </ul>		
Refined capital planning for a portfolio of properties to take advantage of economies of scale	Map each asset according to Uniformat II classification system or client's own schema     Incorporate criticality ratings (common for hospitals and industrial production facilities)     Automate remaining useful life based on age and library of end user licenses     Gather adequate data to support automated costing using industry standard cost data		

### ESG and asset data

Beyond the obvious demands of deploying capital on behalf of impact funds or corporate investors with sustainability criteria, there are numerous benefits of collecting data on the efficiency, sustainability or resiliency of a property during the due diligence phase.

First, it makes sense to collect ESG-related data while assessors are already at the property and while sellers are motivated to be forthcoming with property data. It also allows for early identification and implementation of low-cost improvements during onboarding, potentially keeping portfolios 'green.'

If due diligence reveals ESG improvement opportunities that require capital expenditures, they can be incorporated into the capital plan, and systems nearing end of useful life can be slated for efficiency upgrades upon replacement. A comprehensive asset inventory can also be mined for energy-efficiency opportunities in the future.

Finally, by collecting data upon acquisition or as early as possible thereafter, managers will have the earliest possible baseline from which to measure improvements. Setting the baseline early can then allow managers to demonstrate improvement over the hold period.

### Putting the data to work

Once a complete, accurate data set has been compiled, it must be delivered in a way that supports project objectives. Managers must be able to sort, view, analyze and visualize data for effective decision-making. To this end, dashboarding is often the ideal method of data delivery.

Better than a table, such as those in a facility condition assessment, a dashboard offers the flexibility of data to be viewed by various criteria. For example, the manager of a portfolio of manufacturing sites can view all the units in individual buildings, then sort units by condition to see which will require replacement over the year, or project spend over five years. Perhaps they want to view only air handling units that require replacement on the West Coast, so they can negotiate a volume discount with a supplier. Perhaps they want to sort units by make, to compare performance. Perhaps one department within an

organization will use this data for capital planning, another department will use it to feed into a CMMS system, and another department will use it to plan efficiency upgrades to meet ESG goals. With dashboard delivery, custom views can be created for various user types; one well-scoped, well-executed data collection effort can support multiple initiatives within an organization.

For some, the end goal of data collection is to support ongoing asset or property management. For these applications, there are plenty of software options on the market: enterprise asset management (EAM) systems; integrated workplace management systems (IWMS); computerized maintenance management system (CMMS); Argus and related systems; proprietary systems, etc. Before committing to a system, managers should carefully consider how they intend to use the data. Too many firms buy a platform

first, then attempt to collect the data to 'populate' the application and wind up with a system that is expensive and cumbersome.

The ongoing success of an ADCM program is incumbent upon the commitment of the organization to use and maintain the dashboard or system they have chosen. Given the range of users within a commercial real estate organization, the responsibility of the ADCM program may be assigned to a company-wide program manager, local or specialized asset managers, or a software management company. Typically, and ideally, maintenance of the data and platform falls to a team of these individuals.

### Conclusion

For managers, the nitty-gritty of collecting and managing asset data may be a low priority. However, for large portfolios consisting of properties with high criticality and complexity, as well as buildings with aging equipment and infrastructure, a qualitative ADCM program can have tremendous impact on the bottom line. Virtually any investment goal requires the collection and tracking of data, as well as credible data to report to investors. An investment in data collection can pay dividends in the form of more strategic and accurate capital planning and better decision-making at both the asset and portfolio level. •

Nate Benton is Managing Director of Mechanical, Engineering and Plumbing Solutions, and Josh McCullough is Program Manager of ADCM at Partner Engineering and Science, Inc.

## The age-restricted APARTMENT OPPORTUNITY

Institutional-investor interest has grown in a more upscale, niche residential housing segment called 'active adult,' geared toward healthy 55-plus-year olds seeking a carefree lifestyle and community-oriented design.

By Tim Wang and Julia Laumont, Clarion Partners ge-restricted apartments appear to be an increasingly compelling investment opportunity within the residential real estate market. The age-restricted segment, also referred to as '55+,' is positioned between traditional multifamily apartments and senior housing on the housing spectrum, targeting the healthiest and youngest of the senior population.

Typically, age-restricted properties are lower rise and located outside of major cities, many in the Sunbelt. In recent years, this segment has emerged as a strong-performing sector and is attracting greater institutional-investor interest. The strong demographic tailwind of the baby boomer generation, now aged 58 to 76, is likely to provide robust demand well into the 2030s for various types of age-restricted rental apartments.

In recent years, many soon-to-be or fully retired Americans have opted for a higher-end niche within the agerestricted format called 'active adult,' which offers residents a low maintenance, carefree lifestyle and community-oriented living (see Exhibit 1). Compared to an average agerestricted property, active adult

Both average age-restricted rent growth and occupancy trends have surpassed those of traditional multifamily over the past decade. The segment is also significantly undersupplied relative to the scale of potential senior renters.

apartments tend to have superior amenities as well as built-in social and recreational programming, but generally exclude routine healthcare, food and housekeeping services, which are more typical of purpose-built senior housing.

The robust demand seen within the larger age-restricted apartment housing market is demonstrated by the strength of the segment's property-level fundamentals. Both average age-restricted rent growth and occupancy trends have surpassed those of traditional multifamily over the past decade. The segment is also significantly undersupplied relative to the scale of potential senior renters. Given these dynamics, we believe there is an attractive and sizeable opportunity for institutional investors in the years ahead.

### **Attractive demand drivers**

The baby boomers, the largest generation in US history, continue to reshape the housing market. Powerful demographic and real estate supply/demand factors are expected to drive ongoing demand for agerestricted apartments.

### **Demographics**

• The age-restricted multifamily segment serves the 55+ population, at 100 million people now comprising almost one-third of the country's population. The senior, or 65+, segment in particular is growing roughly seven times faster than the nation as a whole, and is expected to make up 20% of the US population by 2025 (see Exhibit 2).

Exhibit 1: Characteristics of traditional multifamily, active adult and senior housing segments						
	Multifamily	Age restricted (AR): Active adult (AA)	Independent living (IL)	Assisted living (AL)	Nursing care (NC)	
Average age	20s-60s	Low-mid 70s	Mid-80s	High-80s	High-80s/90+	
Services/amenities	Housing	Offers social and sports activities/programs + a la carte dining	Includes housing, meals, transport + housekeeping	IL services + nursing	AL services + skilled nursing/memory care	
Typical rent (per month)	Varies; US average is \$1,875	10%–40% premium over traditional multifamily	\$4,000	\$5,000+	\$8,000	
Average length of stay (# of years)	1.5	4–6	2.5	2	<2	

Note: The highlighted active adult format is a higher-end subtype in the larger age-restricted apartment category. Independent living, assisted living and nursing care are types of senior housing. The five categories here generally range by age, level of services and amenities, cost, and length of stay. Rents and timeframes provided are approximate.

Source: CBRE-EA, NIC, Clarion Partners Investment Research, June 2022.

- <sup>1</sup> Moody's Analytics, June 2022. Note: Calculation based on 2010 to 2019.
- Moody's Analytics. June 2022. Note: Data is as of January 2022.
- More seniors are living longer and healthier lives, extending the span before full-time care from family or assisted living is needed. In 2022, the oldest baby boomers turn 76. The lowto mid-70s age range is often when turnkey living arrangements, with more emphasis on built-in community and social activities which age-restricted apartments can offer, become a higher priority. Age-restricted rents are typically higher than traditional multifamily due to some additional amenities, but are often lower than independent living or assisted living facilities, which are more intensive to operate and have lower margins.
- The age-restricted segment also has less turnover — a typical stay ranges between four and six years, which offers owners a steadier income stream. Seniors tend to have the highest net worth of all age cohorts and often live off ample investments, savings and social security, underscoring the durability of this tenant base.

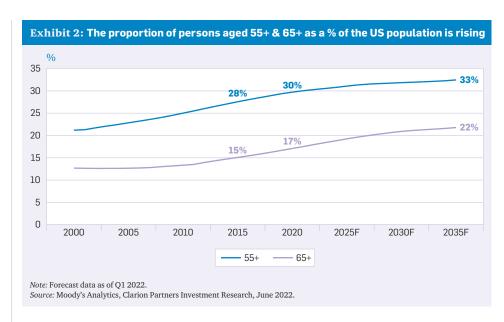
### Real estate supply/demand

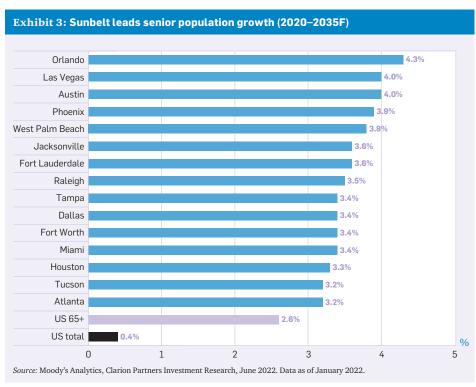
The 56-million-person senior population has been the fastest growing renter household cohort since 2010. According to research agency Moody's, the senior population is expected to grow by another 16 million by 2030; there will continue to be many more renters in this group.<sup>1</sup>

We believe there will be a significant mismatch between growth in senior renter households and the existing stock of purpose-built age-restricted facilities.

### **Most compelling opportunities**

We favor an age-restricted investment strategy that includes acquiring stabilized assets and new development





alongside an experienced operating partner. Product and location strategy should focus on:

1. Markets with the highest senior population growth. Sunbelt states

Florida, Nevada, Arizona, Texas and North Carolina are expected to have the fastestgrowing age 65+ population.<sup>2</sup> (See Exhibit 3)

### **Example 1: Avenida Cool Springs, Franklin, Tennessee**

Franklin/Cool Springs in Williamson County, Nashville's high-growth, marquee submarket, is the fastest growing area within the Nashville metropolitan statistical area (MSA). Its population has increased 72% since 2000, underpinned by growing health care, public and private hospitals, and tech sectors.





The Avenida Cool Springs property is

located 10 minutes from Historic Downtown Franklin, one of the largest retail trade districts in Nashville, featuring award-winning antique shops, brick-and-mortar gift and bookstores, boutiques, art galleries, upscale restaurants, a Whole Foods and more. The area is a unique community that combines upscale suburban living and historic Southern charm with over 1,800 acres of park space. These factors contribute to a high quality of life, resulting in Franklin/Cool Springs being ranked the healthiest and wealthiest county in Tennessee. With nearly 13 million square feet of Class A office space, Franklin's incomes averaged nearly \$150.000 in 2020.

The property houses 142 units catered to the active adult 55+ segment. Property amenities include two interior courtyards, an outdoor pool and spa, on-site bistro/cafe, pet park, fitness center and yoga studio. Staff at the property offer residents wellness-inspired activities year-round.

### **Example 2: Everleigh Halcyon Village, Alpharetta, Georgia**

Located in a premier Atlanta suburb, Alpharetta in Forsyth County has long drawn an affluent demographic seeking beautiful homes, great schools, a neighborly vibe, country clubs, pastoral beauty and easy living. Known as the 'Technology City of the South,' Alpharetta is home to over 700 technology companies and over one-quarter of metro Atlanta's top 25 tech employers. Alpharetta is the sixth fastest growing city in the nation, with population growth of 19% from 2010 to 2021. The submarket has the seventh highest median household income in Georgia; within a 3-mile radius of the property, the average household income is \$142,000 and average home value is \$448,000.

Everleigh Halcyon Village is located within the Halcyon Village, a next generation mixed-use development, offering a variety of upscale dining, retail and entertainment amenities. There are 160 units for the active adult 55+ segment, where the average resident age is 67 years old. The property is a best-in-class asset with superior, condo-quality interior finishes with high barriers to entry. Amenities include a bocce and putting green, a library, a wine room and a fitness center. Everleigh Halcyon Village commands a 30% rental premium to conventional multifamily, and 45% rental discount to comparable independent living properties.







3 Ihid

As the population is rapidly aging, high-quality age-restricted communities are becoming an increasingly important niche of multifamily housing.

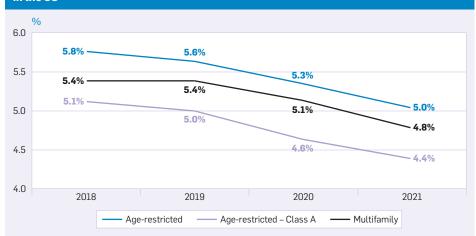
- 2. Underserved areas in *proximity to large employment hubs and residential neighborhoods* in urban fringe/suburbs/exurbs serving 'baby chasers' those boomers who want to be near family.<sup>3</sup>
- 3. Formats offering social and recreational programs for more independent and single seniors, such as active adult, which have done especially well.
- **4.** And *luxury product in resort areas* in warmer climates in the South and West regions.

While Class A age-restricted units now price well above multifamily (in the range of 10% to 40%), a sign of robust demand for high-quality product, there may also be a scalable opportunity in lower- to mid-tier price point age-restricted communities given the anticipated growth in the senior population, along with the ongoing housing affordability challenges nationwide.

### Fit for a CRE portfolio?

As the population is rapidly aging, highquality age-restricted communities are becoming an increasingly important

Exhibit 4: Cap rates for age-restricted has performed better than traditional multifamily in the US



Note: Annual data based on all transactions \$2.5 million and above. Annual cap rates are the average of each quarter and Class A is based on top quartile of assets in the data set. Age-restricted refers to any multifamily apartment complex or manufactured housing communities where residents are required to be a certain age (usually age 55 or higher). These usually have few to no special amenities or resident care provided, and may be known as retirement communities, congregate living or senior apartments. Source: Real Capital Analytics, Clarion Partners Investment Research, June 2022.

niche of multifamily housing. The segment currently has little large-scale institutional ownership. Developers and operators of age-restricted communities are actively marketing active adult product to appeal to baby boomers, emphasizing an active lifestyle and a greater attention to community space.

The below characteristics of the agerestricted segment are especially attractive to institutional investors. It is generally viewed as being:

- A less operationally intensive format than senior housing.
- More recession-resistant given that it has higher retention rates than traditional multifamily.
- Serving a more affluent tenancy (especially in the active adult segment), with tenants not as tied to the job market.
- Well-priced relative to traditional multifamily; age-restricted apartment cap rates have been trending down with multifamily for years. Class A age-restricted apartments are now

- more competitively priced than multifamily, but age-restricted generally trades at prices comparable to traditional multifamily, even though rent growth and occupancy have been superior in recent years (see Exhibit 4).
- A competitive yield play; highquality age-restricted core returns and development yields may potentially be higher than traditional multifamily.

Based on the recent strength of agerestricted occupancy trends and rent gains and a very favorable demographic story, we believe that the long-term potential of this high-growth commercial real estate segment represents an attractive investment opportunity.

**Tim Wang,** PhD is Head of Investment Research and **Julia Laumont** is Vice President, Research & Strategy at Clarion Partners.

## Learn how leading GPs scale their operations and deliver better outcomes for investors



Read now:







## Institutional. But far from typical. The statement of the statement of

Actively investing in commercial real estate for 145 years, we understand the importance of perspective. With 80+ senior professionals who average 24 years of experience, and more than 200 locally based real estate professionals in 11 regional offices, we deliver debt and equity portfolio solutions to help meet your needs.

Discover real estate investment strategies at investments.metlife.com/real-estate

\*As of September 30, 2021. At estimated fair value. Represents the value of all commercial mortgage loans and real estate equity managed by MIM, presented on the basis of gross market value. All investments involve risk, including possible loss of principal; no guarantee is made that investments will be profitable. This material is for informational purposes only, and does not constitute investment advice or an offer to buy or sell any security, financial instrument or service. Securities products are sold by MetLife Investments Securities, LLC, a FINRA member firm and member of SIPC. L1020008718[exp1022][All States] © 2022 METLIFE, INC.

