

THOUGHT LEADERSHIP SERIES

MYTHVS. REALITY: EVALUATING POPULAR MISCONCEPTIONS IN COMMERCIAL REAL ESTATE

JUNE 2018



INTRODUCTION

With the changing economic and technological landscape in the U.S., there are many ideas and opinions circulating about current trends in U.S. commercial real estate. No major property type is immune from speculation. While trends are new, they tend to gain traction through the industry media, especially if they are particularly alarming or salacious (for example, the ubiquitous claim that "brick-and-mortar retail is dead!"). However, the headline often does not tell the full story, and what has become standard perception is either partially or wholly inaccurate. Trends that are present nationally may be altered or absent when examined at a local level, and metro areas large and small may tell a different story.

The myths we cover here were collected from common questions we have heard from our clients, and from concerns they have about what they are reading or seeing in the market. We believe misconceptions lead to suboptimal investment and development decisions; the purpose of this white paper is to bring clarity to the commercial real estate marketplace so our clients will be equipped to make sound decisions.

Newmark Knight Frank researchers across the U.S. collaborated to examine six popular commercial real estate myths of 2018 and determine to what extent they are anchored in reality. For each myth, we summarize the popular theory, and then address the reality with examples from three major metro markets.

At the conclusion of this study, we offer action steps for owners, investors, and tenants in light of the implications of our findings.

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KEY FINDINGS



MYTH 1

Brick-and-mortar retail is being replaced by e-commerce

REALITY

Brick-and-mortar retail remains vital, but a transformation toward experiential retail is accelerating



MYTH 2

Office design is primarily about efficiency and cost control

REALITY

Office design is about creating productive workspaces and attracting/retaining talent



MYTH 3

Foreign investors have soured on U.S. commercial real estate

REALITY

Foreign investors are becoming more cautious but are still investing significantly in U.S. commercial real estate





MYTH 4

Older, close-in industrial product is often vacant and obsolete

REALITY

Industrial locations close to major cities are highly desirable for last-mile distribution facilities



MYTH 5

Suburban office locations are no longer desirable

REALITY

Suburban office space is highly desirable to some tenant types, particularly if the space is amenity-rich



MYTH 6

Millennials are the future of multihousing demand

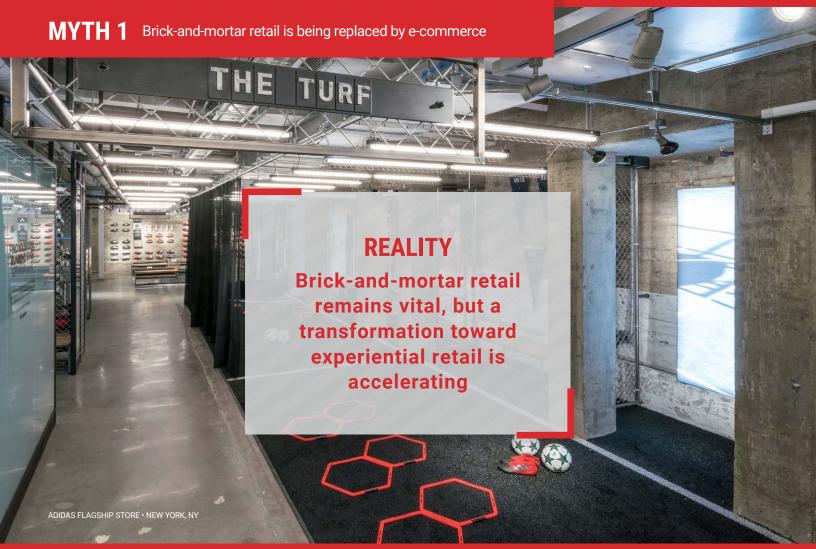
REALITY

Seniors and boomers are increasingly drawn to apartment living





In summary, there is a kernel of truth to many of these myths, which likely is how they came about in the first place. However, each notion has many exceptions—what has sometimes become accepted broadly as fact often is true only in some places or for some property types. Please read on for a detailed analysis of these six myths.



By Dain Fedora, Director of Research, Southern California

For several years, real estate headlines have barked that brick-andmortar retail is dead, a concern fueled by mass store closures among high-profile chains including Toys R Us, Sears/Kmart, J.C. Penney, and Bon-Ton. However, this is an easily disproved notion, based on the facts that in-person sales still constitute 91% of America's \$5.1 trillion retail market and approximately 4,000 more stores opened than closed during 2017.

More accurately, brick-and-mortar retail is undergoing a transformation. The U.S. has the most retail space in the world at 23.6 square feet per capita, roughly five times that of the U.K. and other European countries. The landscape has been challenging for department stores in particular, with Macy's recently announcing the closure of 100 underperforming stores out of the company's 728 locations. Most of the planned closures are in regional shopping malls, many of which have been victims of changing consumer tastes, a widening wealth gap and growth in online shopping. The list of recent store openings is heavily weighted toward discount merchandisers and convenience, and many require a different format than the real estate footprint of the stores that are closing.

The challenges facing brick-and-mortar retail often are pinned on e-commerce giant Amazon. Yes, web sales in 2017 were up 16.0% from 2016, compared with total retail sales increasing 4.8% over the same period (see the adjacent graph). Further, e-commerce is on track to have a 17% market share by 2022. However, many large chains, the malls they typically took space in, and even flagship urban stores have failed to adapt to today's consumer, who wants a unique experience. This experience can run the gamut from excellent customer service to value-buys. Apple, for instance, generates more in-person retail revenue than any other company in the world, at \$5,546 per square foot; consumers can purchase the same items on Amazon, Best Buy, or even Apple's website, but most choose to visit Apple's stores. The interactivity of an Apple store—the ability to touch and try its devices-makes visiting the store a social experience worth investing in. Among discounters, Ross Stores gives shoppers the "thrill of the hunt" by offering name-brand fashion at up to 70% off. The company had strong earnings in 2017, and does not focus on e-tailing.

Additionally, shipping costs can be steep for an e-tailer: Nearly twothirds of consumers returned at least one item this past holiday season and 27% bought items specifically with the intention to

E-COMMERCE IS GROWING FASTER, BUT BRICK-AND-MORTAR RETAIL STILL DOMINATES E-COMMERCE SALES GROWTH VS. TOTAL RETAIL SALES GROWTH **UNITED STATES**



Source: U.S. Census Bureau, NKF Research

return them later. E-commerce represents powerful convenience for consumers, but it is not a natural fit for all retail categories, especially those with high return rates. Online shopping for toys makes sense, but fashion purchases (where return rates are high) are a less efficient proposition for retailers. Similarly, brick-and-mortar retailers that are adapting their customer engagement-such as with technology -are advantaged in the marketplace. This includes smart phone integration to alert shoppers of flash sales and smart mirrors to try on clothes virtually.



MARKET REALITY: SOUTHERN CALIFORNIA

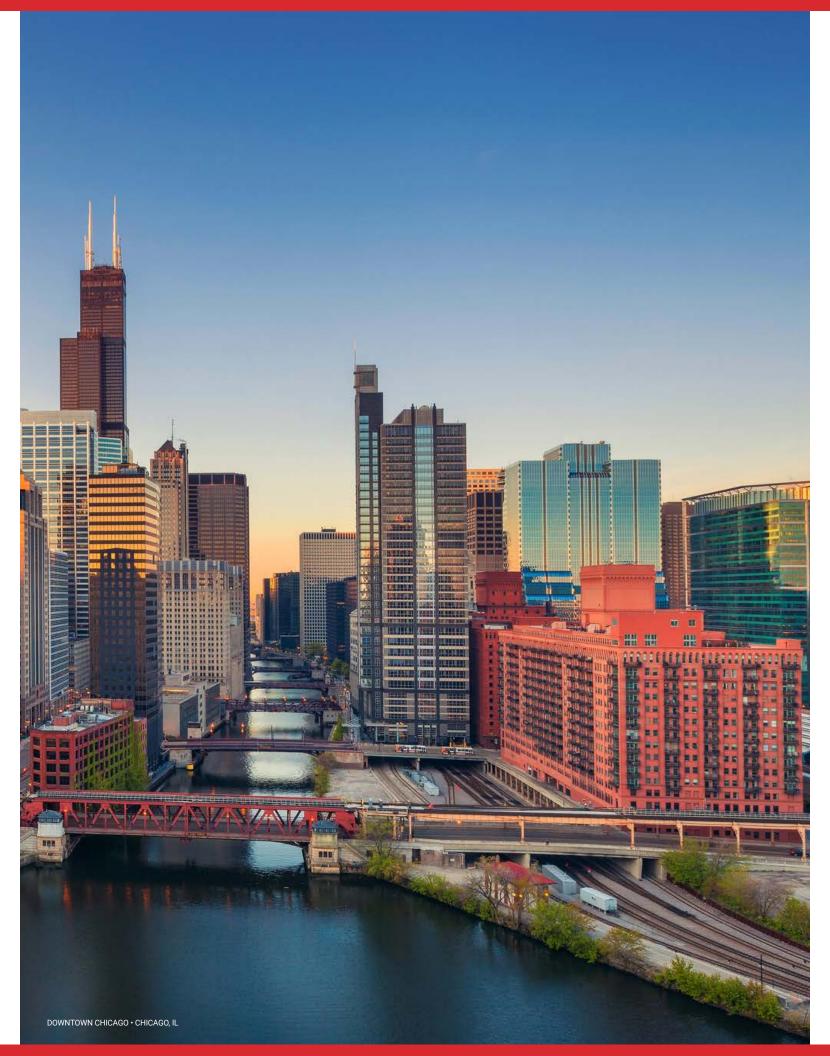
By Dain Fedora, Director of Research, Southern California

The Southern California retail market highlights how new opportunities may emerge when retailers shed space. The Paseo, an upscale outdoor mall in Pasadena, California, that covers three city blocks with office space, shops, restaurants, a movie theater, and 391 loft-style condominiums, had a big setback when Macy's and Gelson's Markets left in 2013. Fast-forward to the present and a 186room Hyatt Place hotel is under construction on Macy's former site, while the Rose, a concert and dinner venue, replaced Gelson's. The Rose has a capacity of 1,300 and features a mix of dinner seating and standing room, with two full bars and a raised VIP area. It also houses Los Angeles's first CaliBurger franchise (recently featured in global media outlets for its use of a burger-flipping robot), and a restaurant concept called the Chef's Gallery, where diners can sample food from a rotating cast of up-and-coming local chefs at various serving stations. Artists including Stone Temple Pilots, Berlin, and The Psychedelic Furs have performed at the venue. The Paseo is undergoing a \$70 million renovation and has attracted new restaurants and retailers, including H&M. It serves as an example of how retail real estate can be repurposed into mixed-use facilities incorporating experiential elements that better fit consumers' lifestyles.

MARKET REALITY: SAN FRANCISCO

By Andrea Arata, San Francisco Director of Research

Many online retailers are realizing consumers often desire a sensory experience, which is best realized in person, and thus are opening storefronts in San Francisco. While some larger online retailers like Warby Parker and Bonobos have opened locations in prestigious Union Square, smaller online retailers have chosen storefront locations in neighborhoods that are attractive to young tech workers. These smaller retailers include Everlane and Betabrand in the Mission, RILabel and Timbuk2 in Hayes Valley, UNTUCKit and Morning Lavender in Cow Hollow, and Allbirds and Shinola in Jackson Square. In each of these stores, consumers can try on clothing and accessories for the perfect fit, feel the quality and weight of the materials, and examine firsthand the workmanship in the products. In perhaps the ultimate customer sensory experience, online mattress company Casper has expanded its "Nap Tour" concept, in which trailers modeled after Japanese pod hotels travel to busy urban zones in order to physically introduce the product to consumers. Casper has opened a location in Cow Hollow where consumers are able to "book a nap."



MARKET REALITY: CHICAGO

By Amy Binstein, Research Manager

As the retail market continues to evolve, even some of the most famous retail destinations are changing. Chicago's Magnificent Mile—the city's premier commercial district—is home to upscale shops, luxury brands, and restaurants, but now is undergoing a transformation toward experiential retailing. Michigan Avenue will welcome the world's largest Starbucks Roastery in 2019. Starbucks plans to open a four-level flagship interactive roaster where customers can see rare, small-batch Reserve beans roasted, brewed, and packaged. At 43,000 square feet, the space-which was previously home to Crate & Barrel's flagship location-will also feature interactive tours, multiple brewing methods, and specialty reserve drinks in addition to specialty foods. This new format on the Magnificent Mile is a sign of consumers' desire for a touch-and-feel (or taste-and-smell) experience.



By Tamar Moy, Senior Managing Director, Workplace Strategy and Bethany Schneider, Associate Director

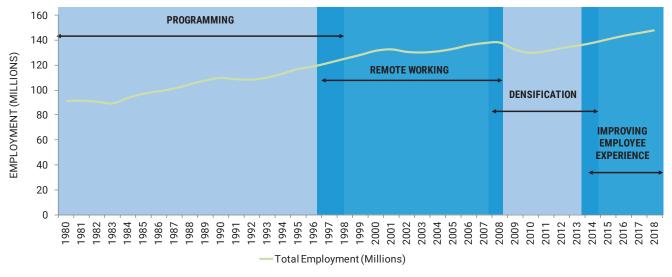
Over the past 40 years, the commercial office landscape in the United States has undergone vast changes due to social and technological advances in the workplace, and trends in workplace design have shifted with the changing needs of office tenants. During the 1980s and early 1990s, the dominant trend in workplace design was simple programming: determining how many offices and desks were graph). During this period, it was typically only tenants that occupied 100,000 square feet or more who invested any significant capital in workplace strategy. As technological advancement made working away from the office more feasible, consulting firms led the trend of allowing employees to work virtually, starting in the late 1990s. This trend caught on as technology and media companies started to make workplaces more customized, with some encouraging mobility via unassigned desks.

Then came the Great Recession in 2008, and with it, a shift toward space efficiency in the wake of the financial crisis. Companies looking to maintain staff or stay afloat sought ways to cut costs, and

with occupancy costs second only to payroll as companies' largest expense, space reduction was a logical next step. The need to cut costs in a time of financial instability coupled with huge advances in technology during this timeframe made densification—the reduction in square feet occupied per employee-an obvious solution for office-using companies across many industries. The need to densify coupled with increasing vacancy rates and stagnant to declining rents across the U.S. office market also sparked a flight to quality in the early 2010s, as companies were able to upgrade their space and still save money by occupying a smaller footprint. As office demand in there is a prevailing notion among some real estate observers that space efficiency and cost-savings continue to reign as the primary considerations in designing office space.

While it is true that many companies reduce their space footprint when signing a new lease, there are often considerations aside from cost savings at stake, such as consolidating staff into a single location or redesigning space to better serve the tenant's functions. The flight-toquality trend served as a segue into the dominant workplace trend of today: improving employee experience. Today's workplace strategy has shifted the thinking about office space, with companies seeing it as more of an asset than a cost. This is especially important for

U.S. WORKPLACE DESIGN IS EVOLVING **EMPLOYMENT AND DOMINANT WORKPLACE TRENDS** UNITED STATES



Note: Employment as of March for each year

Source: U.S Bureau of Labor Statistics, NKF Research

employee attraction and retention. With the U.S. unemployment rate at 3.8% as of May 2018—the lowest it has been in 18 years—attracting and retaining talent is of foremost importance to many companies. While the densification trend allowed companies to reduce the amount of space leased, many soon found that productivity suffered with the lack of privacy created by the popular open floor plan.

Workers requiring focus for detail-oriented tasks have struggled with the visual and audible distractions created by their neighbors. With a new focus on improving the employee experience, technology firms are leading the way in designing individual and shared spaces for focused work to balance the open, collaborative areas.



MARKET REALITY: BOSTON

By Jon Sullivan, Research Manager

Occupiers in Boston have become less cost sensitive with their real estate due to the growing realization that the role of office space extends far beyond its tangible purpose. Workspaces are being designed to better foster creativity and collaboration, create brand identity, and win the fight for talent.

A Boston-based law firm is building out a new office in Downtown, and like many of its industry counterparts, it is right-sizing. Private offices will become smaller and have more glass, and corner offices are being eliminated altogether in favor of collaboration space. The firm has consulted its junior and support staff on the fit-out and design, decisions previously reserved only for senior executives. Densification is still occurring, but these new design features are becoming more common among industries that, until recently, predominantly used isolated workspaces.

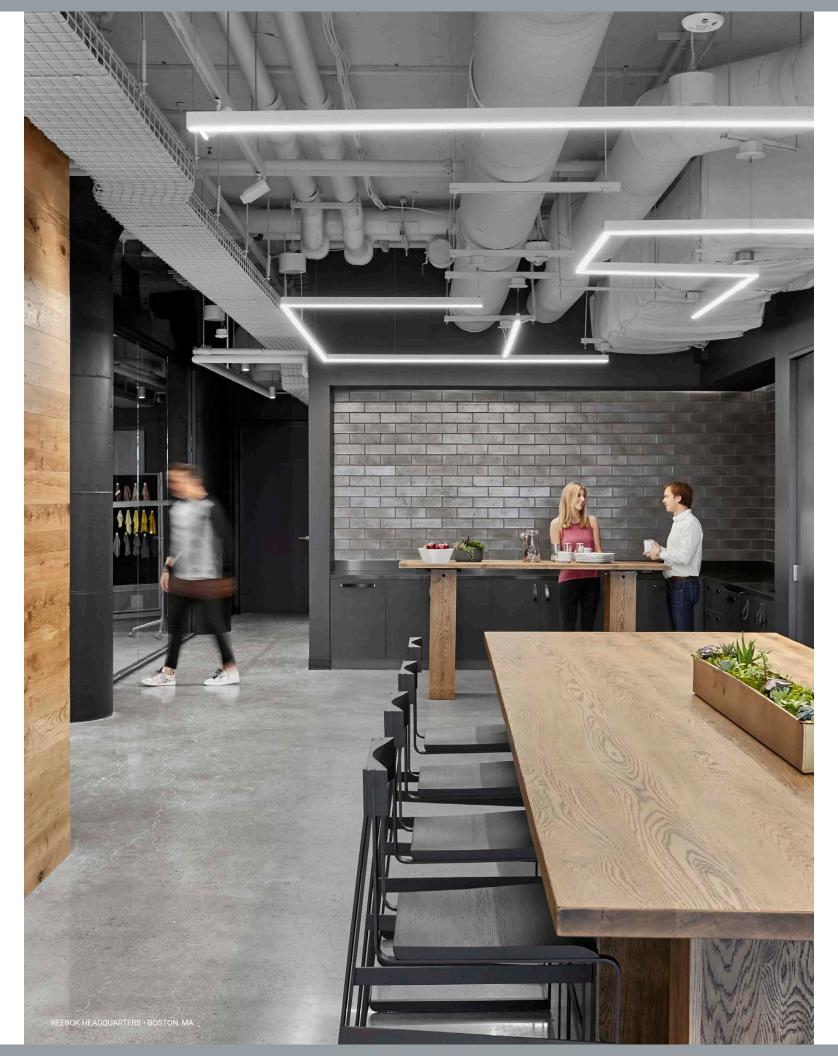
Reebok recently relocated from the suburbs to Boston's burgeoning Seaport District. In addition to office space, its new headquarters includes a two-story, ultramodern gym, design lab, retail space, public restaurant and mile-long running track. The company eliminated assigned workspaces in favor of long tables, couches, more meeting rooms, and lockers. Reebok's decision to leave the suburbs was based in part on its goal to attract young talent, with Reebok president Matt O'Toole stating the company's goal: to have a "workplace unlike any other in the city."

MARKET REALITY: NEW YORK

By Stephanie Jennings, Managing Director, National Research

Densification reigned in office design in Manhattan in the aftermath of the Great Recession, as companies sought to reduce costs. However, as the economy recovered, executives have shifted the way they think about workplaces. Today, a workplace is increasingly viewed as an asset with which to attract and retain top talent.

Crossmedia is illustrative. The international full-service communications and media planning company celebrated the new year by moving out of a five-story loft building in Chelsea and into 275 Seventh Avenue, a 730,000 square foot building in the same neighborhood. Crossmedia grew by multiples from 8,500 square feet at its prior address to 34,000 square feet in its new home, and sought to design its new office to reflect who the firm is: a progressive, forward-thinking creative media company that prides itself on integrity. The firm's new space serves to attract and retain clients and talented employees as it competes with large national and global media companies. The new workplace is an open floor plan with no



offices. It includes several lounge areas, collaborative work areas, two coffee bars, and a bar overlooking a 6,000-square-foot terrace, which is used frequently for events and activities. Amenities aim to foster collaboration while design of individual workspaces supports "heads-down" work.

MARKET REALITY: HOUSTON

By Graham Hildebrand, Director of Research and Marketing - Texas

During Houston's most recent office construction cycle, efficiency in building and floor plate design was a key driver in attracting tenants. However, as employee attraction and retention now drives much of a company's real estate needs, workspace design is the key buzzword moving forward.

United Airlines' relocation to 609 Main in the Central Business District is illustrative of this trend. The third largest airline in the world consolidated by nearly 60 percent from two separate 1980s-vintage Class A buildings into 225,000 square feet at Hines' trophy development. United developed the space at 609 Main with a focus on forward-thinking design and the retention of talented employees. Its space on floors 12 through 19 includes a tech center, collaborative space, employee gardens, a private roof deck, and personal workstations that the company modeled after business class airline seats. The amenities offered further the company's aim to be the best workplace in the city of Houston.



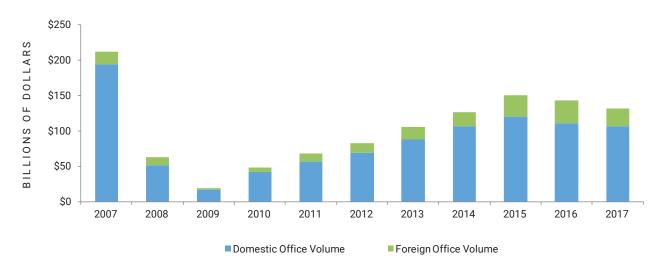
By Andrea Arata, San Francisco Director of Research

With a long run of rising prices and erratic messaging from the executive branch of the government making future U.S. economic conditions harder to forecast, there is a common sentiment in the national commercial markets that foreign investors are shying away from placing capital in American assets. In fact, foreign investment in U.S. commercial real estate was down in 2017 compared to its peak in 2016, but only slightly. The share of total U.S. volume sold to foreign investors was 22% in 2016 and 19% in 2017 (see the adjacent graph). While investors still have an abundance of available capital, fewer opportunities exist at this point in the cycle as much of the inventory has already traded. For example, in San Francisco, 56% of the office inventory over 250,000 square feet has traded in the past eight years; some of these buildings have changed ownership more than once. As a result, many of the available opportunities are in value-add space or in secondary or tertiary markets, ruling out global institutional investors that are solely seeking core product in prime investment markets. Further, any ownership considering selling now has an added burden of redeploying capital in a tight market. Rising interest rates in the U.S. compound the situation. At this later stage

in the real estate cycle, both buyers and sellers have become more cautious overall.

Another factor in the slowdown in foreign investment is the Chinese government's controls to stem outbound capital flow. Chinese rea estate investment in the U.S. fell 64% between 2016 and 2017 to \$6.00 billion, and Hong Kong investment fell 33% to \$1.6 billion over the same period. On the other hand, this change in global investment dynamics allowed for other countries to increase their investment activity. The Netherlands' year-over-year activity was up 916% to \$3.2 billion and Singapore's U.S. investment activity increased 189% to \$9.6 billion. In 2017, Canada re-established itself as a dominant foreign investor in the U.S. with \$21.0 billion in investments—a 51% year-over-year increase. Moreover, as of mid-April 2018, 21% of foreign investment in U.S. real estate debt was from South Korear investors, with Canadian and Australian investors in second and third place with 12% and 11%, respectively. In all, U.S. real estate remains an attractive option for those who can find the right opportunity Gateway markets in the U.S. remain appealing, particularly for investors with plans to hold long term, or who view the U.S. market as a safe haven relative to their home country.

FOREIGN INVESTMENT REMAINS ROBUST ANNUAL COMMERCIAL REAL ESTATE INVESTMENT SALES VOLUME UNITED STATES



Source: Data provided by Real Capital Analytics, analysis by NKF Research



MARKET REALITY: NEW YORK

By Michael Wolfson, Associate Director, Capital Markets Research

While international capital flow has slowed significantly in the form of investment sales in New York year-to-date, debt capital from foreign sources remains plentiful. During 1Q18, German banks were particularly active lenders with LBBW leading an international consortium in financing Brookfield's Five Manhattan West for \$1.15 billion, DekaBank lending \$285.0 million for 1330 Avenue of the Americas, and Deutsche Bank providing a \$335.0 million loan for 50 Murray Street. Additionally, HSBC of the United Kingdom was responsible for financing Zeckendorf and Global Holdings' 520 Park Avenue residential condominium project for \$175.0 million and ING Group of the Netherlands provided \$155.0 million to Mass Mutual's 555 West 42nd Street, a 418-unit multihousing rental.

At the center of the investment sales slowdown in New York have been capital controls imposed on Chinese firms to curb spending on trophy assets. During the current cycle, Chinese insurers in particular have been among the largest buyers of New York trophy assets, scooping up a partial interest in the GM Building, 245 Park Avenue, the Waldorf Astoria hotel, and 1095 and 1221 Avenue of the Americas. The first quarter of 2018 brought only one deal involving a Chinese buyer, for the ground lease at 7 Bryant Park for \$200.0 million. Despite this slowdown, Canadian groups such as Brookfield, Oxford Property Group, and CPP Investment Board spent over \$1.2 billion on five properties, including the Saint John's Center in Lower Manhattan.

MARKET REALITY: SEATTLE

By Joe Morris, Research Analyst

Foreign investment in Seattle real estate is down compared with record years in 2015 and 2016, but it would be wrong to assume this fact reflects the attitude of cross-border investors toward the future. Foreign investment in Seattle real estate in 2017 totaled \$1.4 billion. This is down from the \$2.7 billion and \$2.1 billion in foreign investment in 2015 and 2016, respectively, but is still 47.5% higher than the ten-year average from 2007-2016. Further, sales through first-quarter 2018 put Seattle on pace to exceed 2017 foreign investment totals. This trend supports the findings of the Association of Foreign Investors in Real Estate (AFIRE)'s 2018 Investment Survey, which ranked Seattle seventh among the organization's list of top global markets in which to invest. This marks the first year Seattle has been ranked in the global top ten.

Office properties were the most popular among foreign investors in 2017, generating \$973.5 million in sales and accounting for nearly 70% of all foreign investment in Seattle real estate. Cross-border



capital was involved in many of the high-profile Class A office building transactions in 2017. Notable among these were the Takenaka Corporation's \$268.5 million purchase of Tilt49 from Touchstone Corporation and Principal Real Estate Investors, brokered by Newmark Knight Frank. The Class A Building is long-term leased to Amazon and sold for a near-record \$924 per square foot. Other major sales to foreign capital in the past year include Union Investment's \$330.2 million purchase of Midtown21 from MetLife and Trammell Crow—also long-term leased to Amazon—and the \$286.0 million sale of Dexter Station by the joint venture of Capstone Advisors and Stockbridge to the joint venture of Commerz Real, Tristar Capital and RFR Realty.

MARKET REALITY: WASHINGTON, DC

By Alex Shirokow-Louden, Senior Research Analyst

AFIRE's 2018 Investment Survey suggests that foreign capital is more circumspect about U.S. opportunities than it was a year ago. The reasons offered for this caution abound: overall timing of the real estate cycle, interest rate hikes, and geopolitical crises, among others. AFIRE mentions Washington, DC as having slipped to 25th place amongst investors' preferred "global cities" for 2018. However, Washington still ranks fourth among U.S. cities for foreign investment and remains an attractive gateway market for foreign capital.

Concerns that the Trump Administration's "America First" foreign policy would push overseas investors to other markets have not yet materialized; investors remain bullish on the Washington area and continue to place capital here due to the market's long-term safety and the stability of returns. In 2017, total foreign office volume for the Washington metropolitan area measured \$3.61 billion, and 57% of office assets sold in the District of Columbia—the region's core—were purchased by foreign capital. First-quarter 2018 figures suggest this interest has continued: foreign office volume measured \$1.12 billion through the first quarter, with foreign capital involved in 62% of office sales within the District.

Foreign investors have shown a preference for top-quality assets in the Washington metropolitan area. 900 G Street NW sold to Spanish firm Corporación Masaveu in January for \$144 million, or \$1,278 per square foot. This was the highest per-square-foot office pricing ever recorded in Washington, DC. The Washington Building, located at 1440 New York Avenue NW, sold in January to a joint venture including German reinsurer Munich Re for \$250 million, or \$1,168 per square foot. This deal was notable not only for its sale price but for the property's prime location—just one block from the White House.



By Dain Fedora, Director of Research, Southern California

Because of the age and smaller size of most urban industrial properties, there is a pervasive notion in the market that they are unfit for modern tenants. In fact, industrial locations close to major cities are highly desirable for last-mile distribution facilities since they minimize shipping costs and quicken delivery times to the end-user. Both of those factors can be competitive differentiators.

Transportation represents 50.3% of the average distributor's overhead, while real estate costs are generally less than 5.0%. The old supply chain adage of "the greater the distance, the greater the sales, time to realize. One of Amazon's first fulfillment centers was in Campbellsville, Kentucky—a 750,000-square-foot facility that opened in 1999. With the end goal being to reach customers' doorsteps in a timely manner, a remote location drives up shipping costs, as Kentucky is more than a day's drive from many of the nation's major

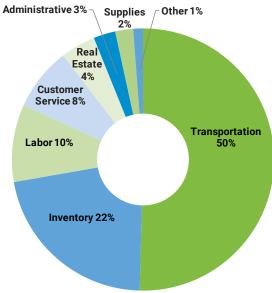
Amazon has since opened large fulfillment centers in major markets

Jersey. Now, in a move to achieve same-day delivery, the company continues to open smaller locations in densely populated markets such as San Francisco, Los Angeles, Miami, and New York. These locations average 25,000 to 350,000 square feet and generally carry the e-tailer's smaller, more popular SKUs such as household items and groceries. The buildings are often older and have functional challenges, including low ceilings, small bay depths, and insufficient loading compared to what today's modern space offers; these are worthwhile tradeoffs for being closer to consumers.

To examine the demand for close-in product, Newmark Knight Frank researched industrial space within 15 miles of the city centers of New York, Los Angeles, Chicago, Houston, and Philadelphia, which are the nation's five largest cities by population. The numbers confirm the demand for close-in industrial product in major population centers. This set of buildings had a combined vacancy rate of 4.1%, an average construction date of 1962, and an average asking rent of \$8.76 per square foot, on a triple-net basis (NNN). Compare this to the United States as a whole, where vacancy is 5.3%, the average industrial construction date is 1975, and asking rent averages \$6.67 per square foot, NNN.

TRANSPORTATION REPRESENTS HALF OF OVERHEAD COST

COST BREAKDOWN FOR THE AVERAGE DISTRIBUTOR **UNITED STATES**



Source: Area Development's 24th Annual Survey, NKF Research

Close-in product near urban centers often commands a rent premium over functional product that is farther away. This presents opportunities for infill development and redevelopment at higher rents. Some occupiers may even invest their own capital to enhance less functional buildings in appealing locations.

E-commerce spending in the U.S. is projected to grow 60% over the next five years, and consumer expectations for same-day delivery grow each year. This puts pressure on many retailers to "narrow the distance" to retain current customers and vie for new business. Amazon's hub-and-spoke model is one way to achieve this, while traditional retailers will use crowd-sourced delivery, store employees, and other creative methods to move items from their stores to consumers' doorsteps. Many retailers will also use thirdparty-logistics providers (3PLs), which can help them execute their omni-channel strategies. Going forward, expect demand for industrial space to grow as 3PLs and online start-ups continue to lease space in and around the nation's major cities, though some of those facilities will need to be modernized to accommodate ever-improving logistical requirements.

Multistory warehouses, found in land-constrained Asian markets such as Hong Kong and Tokyo, may become more common in the United States. In April 2017, Prologis began construction of a threefloor, 589,615-square-foot warehouse near downtown Seattle-the first of its kind in the country. Prologis is also exploring multistory warehouses in other cities such as New York and Los Angeles.



MARKET REALITY: CHICAGO

By Amy Binstein, Research Manager

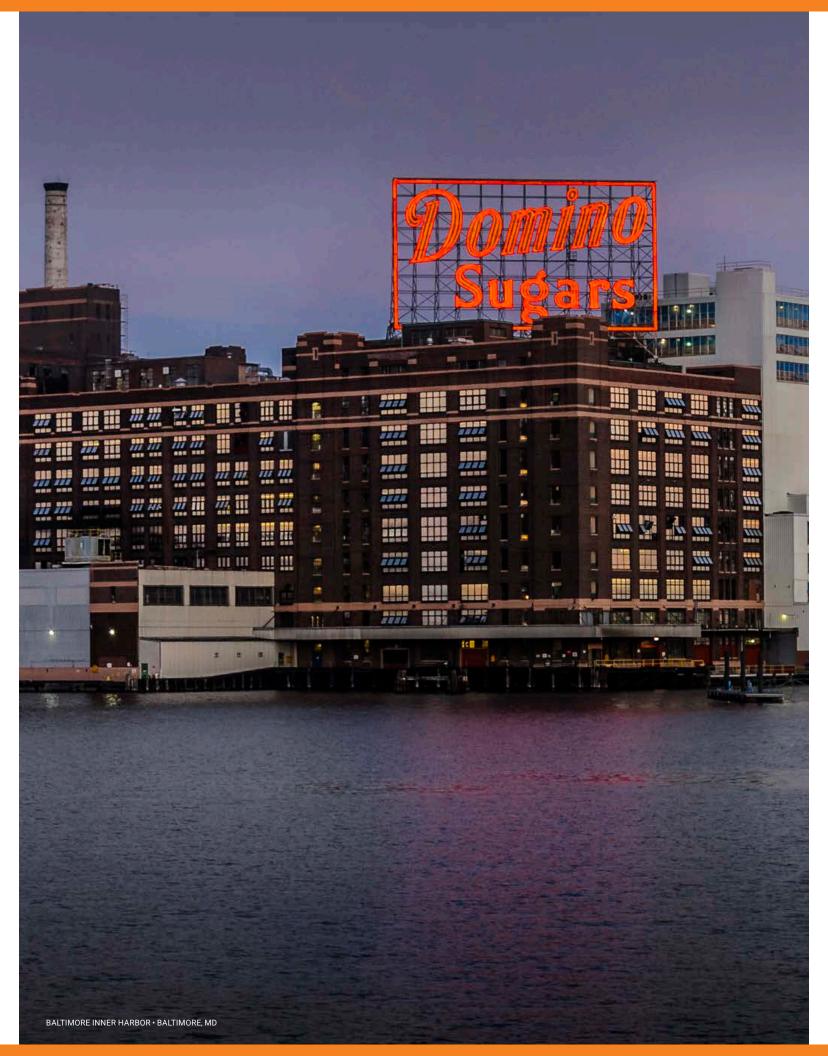
Many of Chicago's close-in industrial buildings were once considered obsolete, but have now become desirable again as last-mile fulfillment centers. With the promise of same-day or next-day delivery, these warehouses are constantly receiving shipments of mixed goods pallets from the larger distribution centers on the outskirts of the city, making it important that they are also close to major highways. In 2015, Amazon leased 150,000 square feet at 2801 S. Western Avenue, a 277,000-square-foot warehouse built in 1979. While it does not offer state-of-the-art features like some newer product, the warehouse is just a six-mile drive from Chicago's city center, and more than 1.5 million people live within a five-mile radius. In Forest Park, a western suburb of Chicago, Partners Fulfillment occupies a Class B warehouse that was built in 1975. What the building lacks in high-end features, it makes up for in location, as it is just 10 miles from Chicago, 16 miles from O'Hare Airport, and 15 miles from the Chicago UPS hub.

MARKET REALITY: BALTIMORE

By Nick Schlanger, Senior Research Analyst

Baltimore's industrial market is expanding rapidly in 2018, with 6.3 million square feet of industrial space set to deliver by the end of the year. The area has become a major Mid-Atlantic distribution hub, with tenants such as Amazon, Under Armour, and Coca-Cola opening massive distribution centers in the region. While some companies, including Amazon, have elected to move into new product outside the city, savvy institutional investors have seized upon the growing demand for rapid product delivery by purchasing older warehouse and distribution facilities that are located closer to the city center. Blackstone's recent \$1.8 billion industrial portfolio acquisition included 13 properties within ten miles of Baltimore's central business district, with an average year built of 1970.

Despite a growing construction pipeline, warehouse space with proximity to Baltimore's population centers remains limited. This scarcity has allowed older buildings-previously believed to be obsolete-to outperform newer product with regard to both rental rates and vacancy. Baltimore industrial properties built before 1980 commanded an average asking rent of \$5.44 per square foot, triple net, during the first quarter of 2018, compared to \$4.63 per square foot, triple net, for those built between 1980 and 2018. This trend holds true for vacancy as well, as properties built before 1980 had an average vacancy rate of 7.2% during the first guarter of 2018, compared to 10.8% for those built between 1980 and 2018.

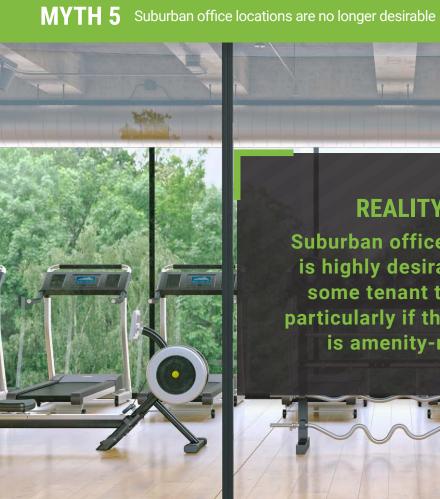


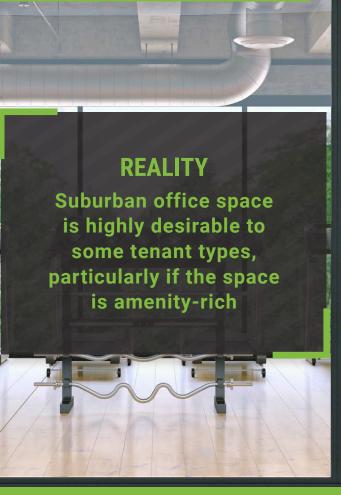
MARKET REALITY: ATLANTA

By Marianne Skorupski, Research Director, Southeast

Atlanta's population jumped to 5.9 million in 2017-up 7.9% over five years prior—and the region's real estate market has been accelerating rapidly since 2013. Atlanta's Downtown and Midtown submarkets have exploded with new development and residents, fueled by the growth of the financial, technology, and insurance sectors around Georgia Tech, and by the redevelopment of old warehouse buildings into office/retail at Ponce City and Krog Street Markets. As land prices soar in the urban setting, industrial uses tend to be excluded, as redevelopment becomes a more attractive and profitable endeavor.

However, within six miles of the North Avenue/I-75/I-85 interchange, 23.5 million square feet of industrial space remains, and demand for this product is evident: the vacancy rate for these properties is 4.4%, far below the broader market's 7.8%. Over the past year, industrial leasing demand in the city center came not from e-commerce but from industries such as film-related operations, service retailers, and home improvement companies, while leasing by e-commerce and logistics companies continued to be focused in the outer suburbs with recent large leases signed by tenants such as Amazon, ASOS, and Saddle Creek. With continued rapid growth forecasted for the region's population, it is likely that e-commerce distribution activities will increasingly move inside the Perimeter.

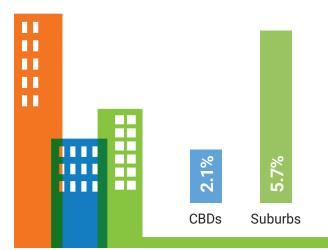


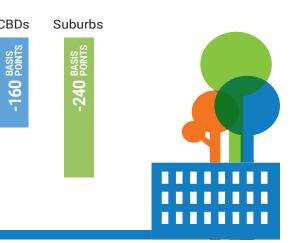




OFFICE ABSORPTION AS A PERCENT OF INVENTORY **PAST FIVE YEARS UNITED STATES**

CHANGE IN OFFICE VACANCY RATE PAST FIVE YEARS UNITED STATES





Source: NKF Research

with the changing needs of tenants, it remains a desirable option for many tenant types, most notably technology firms. This is particularly true for suburban office space that benefits from a walkable, mixeduse environment, the type of setting that has allowed many central business districts to thrive during this real estate cycle.

NATIONAL OVERVIEW

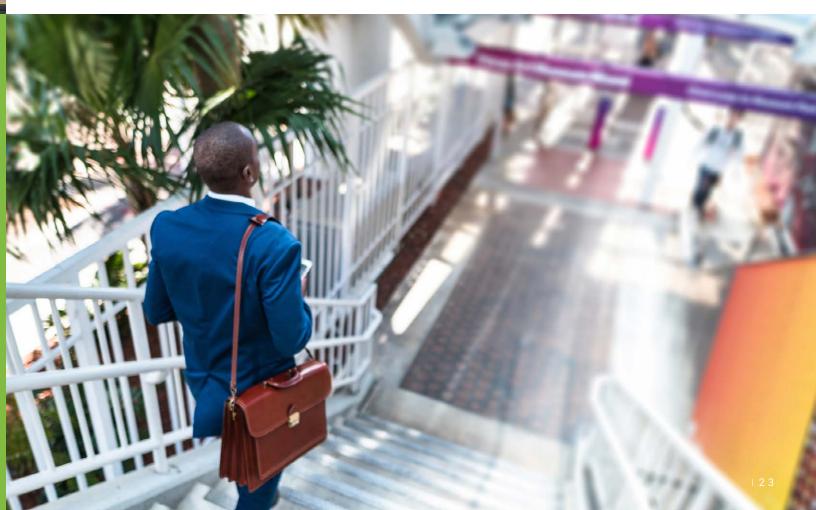
By Bethany Schneider, Associate Director

In the recovery period that has followed the Great Recession of 2007-2009, modest levels of demand resulted in a slow comeback much talk about the changing needs of today's office tenants, and The expansiveness, serenity, and security of the 1980s suburban office campus once made that environment appealing for many professional and business services firms. Now, however, walkability and activated environments are at the top of many tenants' lists of to the urban core in order to attract and retain young talent. This has led to the concern that suburban office space no longer meets the needs of today's tenants. However, many types of suburban space still maintain strong appeal.

As the needs of the modern tenant have become increasingly clear often defined as Trophy or Class A office space that is proximate to mass transit and with robust in-building amenities-older, suburban properties have been challenged to compete. However,

those suburban buildings that offer a prime location accessible to transit or easy highway access still have much to offer tenants. Much of the appeal of urban environments is the accessibility and convenience in commuting and going about daily tasks. Mixed-use, suburban environments that can replicate that ease of access and mobility remain popular with today's office tenants. Prime suburban stations-have had an influx of new construction and renovation of the existing competitive stock. In fact, 439.1 million square feet, or past five years.

than CBD conditions during that same five-year period. Since the first quarter of 2013, in the 56 major markets tracked by NKF, U.S. CBDs experienced office absorption of 31.5 million square feet, or 2.1% of inventory as of 2018. Meanwhile, suburban office markets experienced absorption of 186.6 million square feet during the same period, or 5.7% of its 2018 inventory. While the U.S. suburbs maintain a higher vacancy rate at 14.5%, versus the CBD rate of 11.5%, suburban vacancy has declined 240 basis points during the past five years, while CBD vacancy has declined only 160 basis points over the same period. While it is true that suburban space has had to evolve



MARKET REALITY: NORTHERN NEW JERSEY

By Mark Russo, Research Manager

Deep in suburban New Jersey and more than an hour's drive from Manhattan lies one of the region's most successful recent office developments. Bell Works is the adaptive reuse of the former Bell Labs facility in Holmdel, originally built in the 1950s. The property was designed by Finnish-American architect Eero Saarinen and was once home to more than 6,000 engineers and researchers. Bell Works is a 2.0-million-square-foot glass box, which is the size of the Empire State Building on its side. Somerset Development is transforming the historic campus into a miniature city with 1.2 million square feet of office space, 220,000 square feet of retail space, a 200-room hotel, and 800,000 square feet of public spaces. It contains three five-story atriums—each the size of a football field—as common area for tenants and for hosting events.

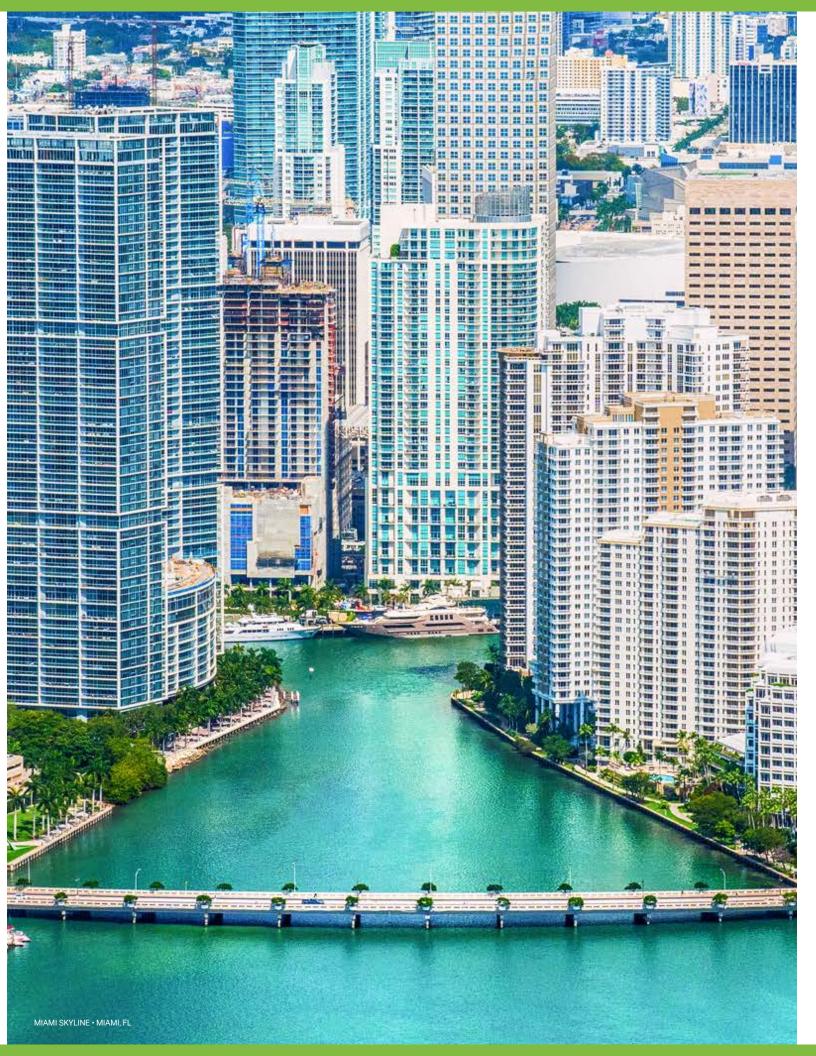
The property's extensive range of amenities and unique design have been major contributors to its success. The building aims to become a self-contained city in the suburbs with onsite restaurants, coffee shop, florist, hair salon, jeweler and even a public library. While harder to quantify, the property's history as a center of innovation, architectural significance (it is on the national register of historic places) and "cool" factor differentiate it in a suburban market dominated by commodity office buildings.

The office component, which is geared toward technology companies, is nearly 80% leased after opening in mid-2016. It is anchored by iCIMS, a 350,000-square-foot tenant that specializes in recruitment software. Other occupants include WorkWave, Spirent Communications, Jersey Central Power & Light, Nvidia, MetTel, Symbolic IO, and Acacia. Guardian Life Insurance Company leased 91,319 square feet last year to relocate its New York City-based IT division, proving that the right suburban product can attract urban tenants.

MARKET REALITY: DENVER

By Lauren Douglas, Director of Research, Colorado

Denver's office market is unique in having three core submarkets. In addition to the traditional Downtown core, two suburban submarkets—the Northwest and Southeast Suburban (SES) submarkets—are robust market leaders in terms of absorption, development, and attraction and retention of major tenants. In the period from first-quarter 2010 to first-quarter 2018, the Denver area office market absorbed a total of 9.7 million square feet. The SES submarket led, with total absorption of 3.3 million square feet, followed by the Downtown and Northwest submarkets with total absorption of 2.9 million and 1.3 million square feet, respectively.



The SES submarket is larger than the Downtown core, both in terms of geography and inventory, and is home to seven of the nine Fortune 500 companies located in Colorado. Absorption has been driven largely by corporate tenants' vigorous growth. The development pipeline has been robust, with 2.1 million square feet delivered over the past eight years, and the addition of four major corporate headquarters. The Northwest submarket is Denver's tech hub, absorbing startups that have outgrown nearby Boulder's small office market, which has little developable land. There are currently three corporate headquarters under construction, two of them for firms new to Colorado. Both Northwest and SES are desirable to employers and employees alike, offering a strong quality of life, excellent schools, excellent connectivity, and expanding housing options, along with some of the strongest population gains in the nation.

MARKET REALITY: SOUTH FLORIDA

By Eric Messer, Research Services Manager

Across the major office markets of Central and South Florida—Miami, Fort Lauderdale, Tampa, and Orlando—suburban space has attracted strong tenant demand since the beginning of 2017. In fact, net absorption has been stronger in the outlying office sectors than in the Central Business Districts during that time. The suburban markets started to pull ahead of the downtown regions in terms of demand in 2015. One major contributor to this trend was the lack of midsize to large blocks of available space in the CBDs coupled with significant increases in CBD asking rents during the last three years.

In the Southern Florida markets of Miami and Fort Lauderdale, smaller tenants have begun to relocate to the suburbs as construction, traffic and high rents make the outlying submarkets more appealing for their convenience and affordability. Vacancy in Miami's suburban markets averaged 10.0% as of the first quarter of 2018, 450 basis points lower than the CBD vacancy rate of 14.5%. Broward County illustrates this trend in its recent demand history: over the past five quarters, the outlying submarkets saw 400,000 square feet of positive absorption while supply outpaced demand for Fort Lauderdale's CBD, where absorption of negative 55,868 square feet was recorded during the same period.

The Central Florida markets of Tampa and Orlando have booming economies, and companies have limited space options in the CBD sectors since no new construction has taken place. This leaves companies looking to the suburban submarkets, which are also more affordable and convenient for their workforces' commutes. Since the start of 2017, Orlando's suburban submarkets absorbed approximately 1.0 million square feet of office space while Orlando's Downtown submarket saw only 106,000 square feet of net absorption over the same period. Tampa's CBD recorded a vacancy rate of 10.7% as of the first quarter of 2018, 130 basis points higher than the suburban markets' vacancy rate.



By Michael Wolfson, Associate Director, Capital Markets Research

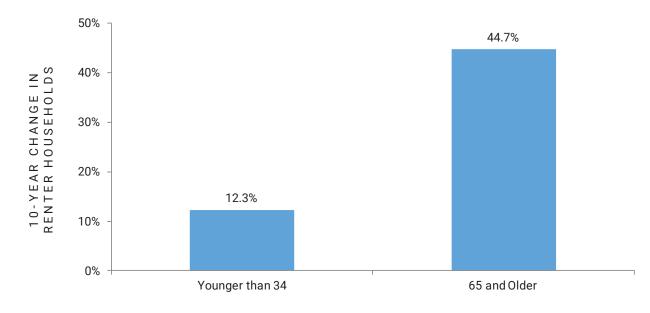
Over the past several years, millennials generally have been perceived as the key driver of multihousing rental demand. Millennials represent the largest generation in American history, and with student debt and personal choice delaying their entry into the for-sale housing market, it is little wonder that millennials are a main catalyst of apartment demand. However, following the Great Recession, baby boomers and seniors have contributed considerably to rental housing demand nationwide. According to the Census Bureau, renter households increased among all age cohorts in the last decade, with the largest gains among those 65 years and older, a cohort which increased by 44.7%. Compare this to renter households headed by those under age 34 (which are most closely aligned with millennials as of 2018), which have only seen a 12.3% increase over the same period. The baby boomer generation has increasingly been drawn to apartment living as mixed-use, walkable communities provide a welcome alternative to the expensive and physically-taxing upkeep that owning a home can require. The National Multihousing Council (NMHC) projects that the cohort of those 65 and older will grow 50.5% by 2030 and consequently will continue to be a key driver of rental unit demand in the coming years.

Although its growth in rental households is less significant, the cohort of those younger than 34 still constitutes a plurality of renters at 38.0% of all U.S. renter households, or 16.4 million. With millennials becoming more transient to take advantage of economic opportunities, transitional housing solutions such as multihousing rentals continue to offer the best value proposition and greater flexibility.

Rental households have reached an all-time high according to Pew Research, while the U.S. homeownership rate has fallen substantially from its high of 69.2% during the second quarter of 2004 to 64.2% as of the fourth quarter of 2017. While growth in the adult population alone will stimulate strong demand for multihousing rental product, a preference for renting among millennials—and a growing affection for it among baby boomers and seniors—should provide an even stronger path for rental demand in the period ahead.

SENIORS AND BOOMERS ARE KEY DRIVERS OF APARTMENT DEMAND CHANGE IN RENTER HOUSEHOLDS BY AGE GROUP

UNITED STATES | 2007-2017



AGE RANGE OF HEAD OF HOUSEHOLD

Source: U.S. Census Bureau, NKF Research



MARKET REALITY: PHILADELPHIA

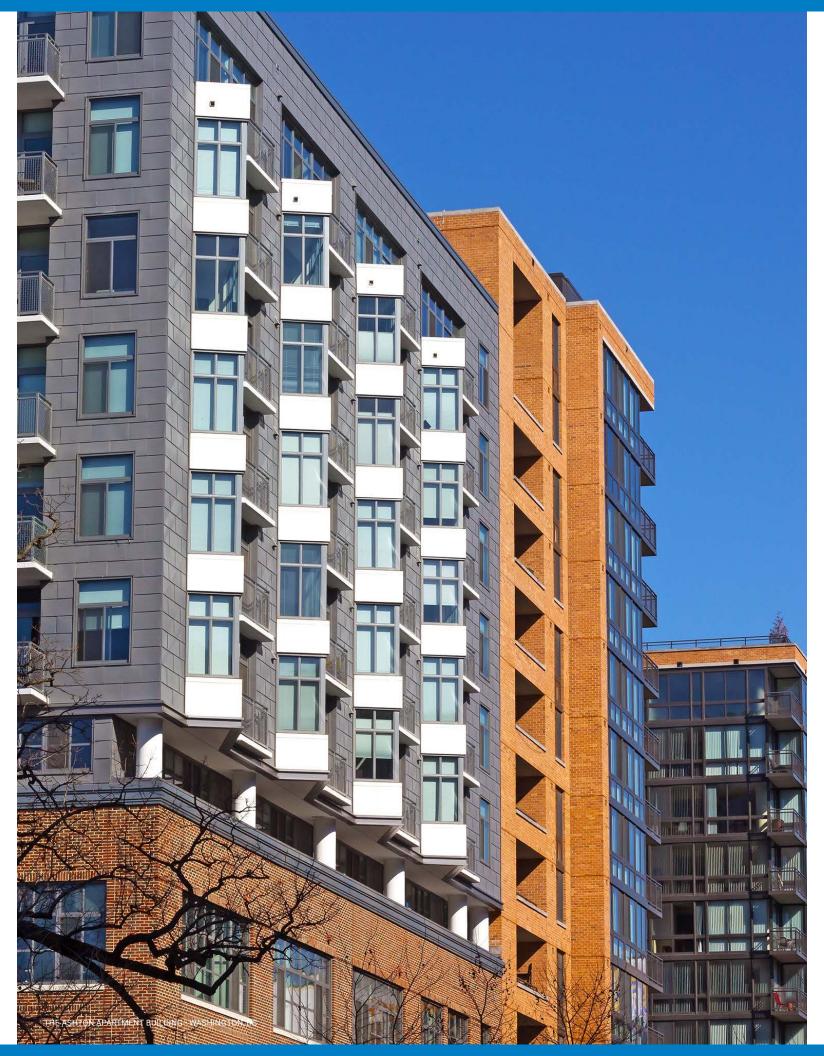
By Daniela Stundel, Research Manager

The Greater Center City district of Philadelphia is the fastest growing residential area of the city. Since 2010, 8,100 rental units delivered within the Greater Center City. The district—as defined by the Central Philadelphia Development Corporation—spans west to east from the Schuylkill River to the Delaware River, bordered by Girard Avenue to the north and Tasker Street to the south. Millennials account for 40% of Greater Center City's population, with most of them renting. According to the American Community Survey 5-Year Estimates, as of 2016 the 25- to 34-year-old demographic occupied 49.6% of the nearly 49,000 renter-occupied housing units in the district. However, millennials are not the only ones renting in Center City. Rental units occupied by the 65- to 74-year-old cohort increased a substantial 27.7% from 2011-2016. These "empty-nesters" are downsizing from their suburban homes that require effort and cost to maintain, and instead renting an apartment in Greater Center City with its expansive public transit system, growing cultural and restaurant scene, and access to top medical care. While millennials still comprise a significant majority of renters in the area, the "empty-nester" cohort is growing the fastest. Esri projects the population of 65- to 74-year -olds in Center City will increase 12.5% between 2017 and 2022, while the 25- to 34-year-old cohort is projected to rise only 2.8% over the same period. With significant growth in this "empty-nester" cohort, it is likely that its share of the rental market will rise too.

MARKET REALITY: SOUTH FLORIDA

By Eric Messer, Research Services Manager

Florida is in the midst of a shift in housing demand between two generations. While renters have been mainly millennials with most baby boomers owning a home, an evolution is underway. Multihousing developers are beginning to see some millennials abandon rental units in favor of owning homes in the suburbs. Simultaneously, baby boomers are increasingly downsizing from larger, maintenanceheavy homes in favor of luxury multihousing product near urban areas that have a live-work-play environment. While millennials are the largest generation nationally, there are as many baby boomers as millennials in Florida. The state ranked fourth among U.S. states for its aggregate millennial population (those born between 1982 and 2004), with 5.10 million persons, and third nationally for its baby boomer population, which is on par with millennials at 5.09 million persons. In addition, Miami ranks second among U.S. metros for the highest percentage of young people living with parents at 33.4%; high rents, lower wages, and a strained transportation system all present major challenges for a generation that holds significant student debt and minimal savings.



The South Florida multihousing markets have a number of luxury rentals in the pipeline, with approximately 50 high-end projects either under construction or slated to break ground soon in Miami and Fort Lauderdale. More than 9,500 luxury apartments are projected to come online in South Florida's key urban areas. Many of these projects are geared toward the older generations, as they remain out of reach financially for most millennials. Real estate professionals have begun to notice a shift in residential demographics as older millennials who are starting families are looking to buy. In Tamarac, a Fort Lauderdale suburb, millennials made up a significant portion of buyers in the 13th Floor Homes community where prices were in the low \$300,000s. The key fundamental in attracting millennials is an affordable price-point, while urban luxury rentals and high-end condominiums draw more attention from empty-nesters and baby boomers looking to downsize to a walkable, amenitized area.

MARKET REALITY: WASHINGTON, DC

By Natasha Flores, Senior Research Analyst

The Washington metro area's sturdy economy and its plethora of well-paying jobs is a draw for many. However, the region is experiencing demographic shifts in which workforce millennials, those 25-34 years old, are less inclined to settle in the area due in part to issues of affordability. While most major metro areas have continued to see an increase in millennials, the Washington area was one of two among the 15 largest metros that experienced net outmigration of this cohort from 2014 to 2016.

While the 25- to 34-year-old age cohort still makes up a plurality of renters in the Washington metro area with 30.1% of renter households, the baby boomer age cohort is growing the fastest. From 2010 to 2016, renter households with a head of household age 55-74 (the segment most closely aligned with the baby boomer generation) grew 37.4%. Over the same period, renter households aged 25-34 years increased only 13.8%.

Millennials will likely continue to be the largest share of renters in the Washington area, as many in this cohort have chosen to defer or forego homeownership altogether for various reasons, including a lack of affordable housing in the area, significant student loan debt, high home prices relative to income, and a lack of savings for a down payment. At the same time, baby boomers and empty nesters who no longer wish to maintain a large home and lawn are drawn to mixeduse, well-amenitized apartment communities. While the millennial population in the Washington area has begun to decline, the recent levels of near-record multihousing demand likely will be sustained by an increase in baby boomer renters.

ACTION STEPS FOR OWNERS, INVESTORS, AND TENANTS

MYTH 1

Brick-and-mortar retail is being replaced by e-commerce

REALITY

Brick-and-mortar retail remains vital, but a transformation toward experiential retail is accelerating

ACTION STEPS

Owners of retail space would be wise to target experiential retail tenants. These uses often require more space than a traditional format, which can help supplement some of the demand lost from traditional brick-and-mortar retailers. Examples of successful experiential formats include a range of family-friendly activities, from trampoline parks and bowling alleys to escape rooms and cooking classes.

Retail tenants should seek to provide an experience that consumers cannot get online, which can help draw customers and create a more activated retail environment. Examples include clothiers like Indochino, which is offering a custom-designed apparel experience, and Nordstrom, which offers appointments with in-store stylists. Also a model: Apple stores, which offer an opportunity to touch and test devices.

MYTH 2

Office design is primarily about efficiency and cost control

REALITY

Office design is about creating productive workspaces and attracting/retaining talent

ACTION STEPS

Office owners might consider marketing a building from the perspective of a tenant's ability to attract talent. This includes providing activated and productive common areas and supplying the cutting-edge amenities today's tenants require, particularly those that help a tenant's workers remain productive, such as on-site personal services and a strong wireless signal throughout a property.

Office tenants should be aware of the shift in how current and potential employees will perceive and use their space, allowing for both collaborative areas and spaces for private, heads-down work.

MYTH 3

Foreign investors have soured on U.S. commercial real estate

REALITY

Foreign investors are becoming more cautious but are still investing significantly in U.S. commercial real estate

ACTION STEPS

With sales volume likely having peaked over the past two years, owners seeking to sell should be realistic with pricing, as a material bid-ask spread is emerging in recent buyer-seller negotiations across the U.S. However, long-term asset holders can still do well by paying market value in today's environment, particularly given the lack of appealing alternative investments, with stocks considered overvalued and volatile.

Foreign buyers seeking value propositions might expand their focus to secondary markets where they have not invested before but where pricing is lower than in the heavily scouted gateway markets. However, be aware of market scale and depth.

MYTH 4

Older, close-in industrial product is often vacant and obsolete

REALITY

Industrial locations close to major cities are highly desirable for last-mile distribution facilities

ACTION STEPS

Savvy investors are seeking industrial product within ten miles of major urban centers, even if that product is outdated, as demand for close-in product will likely continue to grow. Tenants are focused on location and may be willing to occupy an obsolete facility if they can modernize it.

Industrial tenants whose business depends on e-commerce should consider locating closer to urban centers to capitalize on last-mile time savings. For other industrial uses, consider seeking newer, modern product on the outskirts of cities to avoid paying a premium for location.

MYTH 5

Suburban office locations are no longer desirable

REALITY

Suburban office space is highly desirable to some tenant types, particularly if the space is amenity-rich

ACTION STEPS

The smart money is pursuing suburban product in accessible and desirable suburban locations where upgrades to building common areas and in-building amenities can keep an asset current with what today's tenants are seeking and remain competitive in the broader market.

Value-conscious office tenants who desire an urban environment should consider locating in a transit-oriented, mixed-use project in the inner suburban submarkets to capitalize on the amenities and convenience these projects offer without having to pay a significant premium for CBD space.

MYTH 6

Millennials are the future of multihousing demand

REALITY

Seniors and boomers are increasingly drawn to apartment living

ACTION STEPS

Apartment buyers and developers would do well to consider future demand from multiple demographics, and not just focus on millennials. Many baby boomers require larger units that fit their furniture, or that ease their transition from single-family homes, and which have significant storage space.

The micro-units that are popular with some millennials may not appeal to other age groups, and they should be designed flexibly enough to retrofit if the market dictates changes are needed.

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