Newmark Knight Frank

THOUGHT LEADERSHIP SERIES

THE FUTURE OF COMMERCIAL REAL ESTATE:

12 TRENDS FOR 2020 AND BEYOND

FEBRUARY 2020

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TRENDS THAT WILL SHAPE THE U.S. COMMERCIAL REAL ESTATE MARKET IN 2020 AND BEYOND

The commercial real estate world is constantly evolving, thanks in part to the continued integration of technology at all levels of the industry and across all property types. More than ten years into a slow but steady expansion cycle, the national commercial real estate markets are sturdy, and cautious optimism persists.

Of course, investor challenges persist as well, brought about by generational changes, evolving occupier demands, and increasing specialization of product types. As we enter a new decade, we examine 12 trends that are likely to shape the national commercial real estate markets in 2020 and beyond, and offer action steps investors and tenants can take to capitalize on new opportunities.

01

TECHNOLOGY IS RESHAPING INDUSTRIAL SPACE

By Andrea Arata, Director of Research, San Francisco, CA

New technologies such as artificial intelligence, machine learning, advanced manufacturing, robotics, and drones are transforming every link in the supply chain. According to PitchBook, venture capital firms invested approximately $19.3 billion in supply chain technology in 2018, setting a record for the industry. While 2019 did not top that record, it was another strong year. International Data Corporation reports that of the $37.5 billion spent on artificial intelligence and machine learning in 2019, sales process recommendation and automation accounts for 25%. This investment makes sense when one considers a study from Boston Consulting Group found that advanced technology and analytics from machine learning, artificial intelligence, and robotic process automation can reduce industry back office operations costs by up to 40%. What are the implications of these changes regarding commercial real estate needs?

Changes in the supply chain result in changes in industrial space. A number of new companies have emerged to capitalize on upgraded technology in the industrial real estate sector. These include companies like Flexe in Seattle and Stord in Atlanta, which have developed online national marketplaces for warehousing-on-demand, changing the way distributors plan for inventory space needs, especially those with seasonal fluctuation. There are now robotics-as-a-service companies, such as RightHand Robotics in Somerville, Massachusetts, which provides short-term integrated robotic piece-picking solutions to help with order fulfillment. Enterprise supply chain management company Faire operates an online wholesale marketplace of thousands of makers, allowing local retailers to curate inventory with the same efficiencies as their large-box competitors.

In addition to these new companies, autonomous vehicles are transforming the movement of goods in shipyards, docks and warehouses. The trend of the expanding distribution center is now also moving upward, as more efficient sorting and picking technology has allowed distribution centers to build higher. The number of distribution facilities with ceiling heights of at least 40 feet has increased materially since 2017, as illustrated in the adjacent chart.

These new companies that cater to improving the supply chain will not only change the way other companies acquire space (in the case of Flexe and Stord), they are also beginning to shape new markets as they themselves grow. For example, while San Francisco's industrial stock has not traditionally been considered a significant product type, demand for Class A industrial space in San Francisco has skyrocketed over the past three years, growing from fewer than 50,000 square feet of requirements in the market at the start of 2017 to more than 1.7 million square feet of requirements by the end of 2019. Over the past three years, asking rents for Class A industrial space have grown 35.9%. In response, 1.1 million square feet of Class A industrial space has been developed or renovated in that time, and another 1.0 million square feet is proposed over the next three years. As these new companies seek to revolutionize industrial space and continue to expand, we should expect to see increased demand for Class A industrial space in other markets as well.

Sources: Boston Consulting Group, CoStar, International Data Corporation, NKF Research, PitchBook

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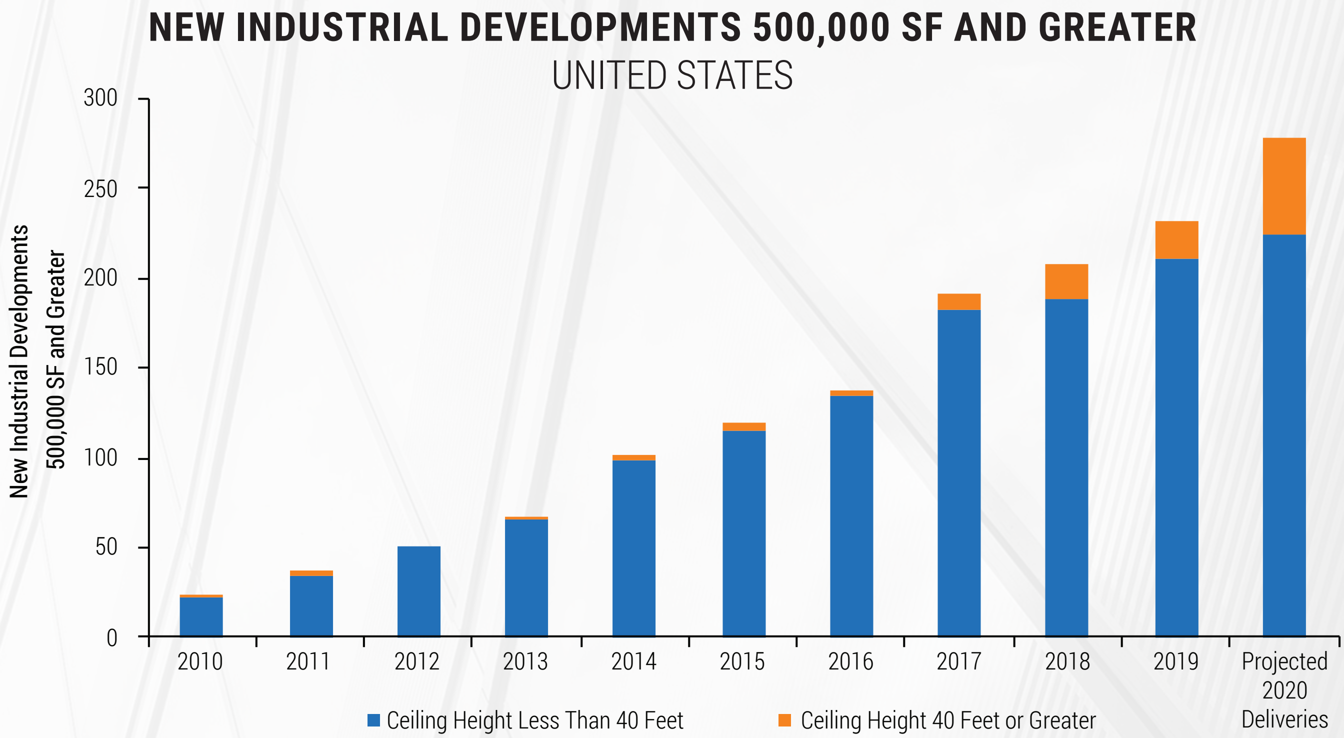
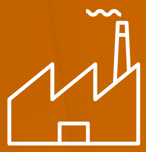


Source: CoStar, NKF Research



KEY CONCLUSION

New companies that cater to improving the supply chain will not only change the way other companies acquire industrial space, they are also beginning to shape new markets as they themselves grow. As these new companies seek to revolutionize industrial space and continue to expand, we should expect to see increased demand for Class A industrial space in markets across the U.S.

02

LIFE SCIENCES INDUSTRY MOMENTUM WILL DRIVE DEMAND FOR SPECIALIZED REAL ESTATE

By Lisa DeNight, Research Manager, Philadelphia, PA

The life sciences sector is expanding nationally at a rigorous rate due to technological advancement, capital investment, and a growing older population desiring innovative healthcare solutions. Between 2017 and 2018, industry employment grew at a rate double that of national employment, and preliminary numbers from the Bureau of Labor Statistics indicate even greater employment growth in the first half of 2019, as illustrated in the adjacent chart.

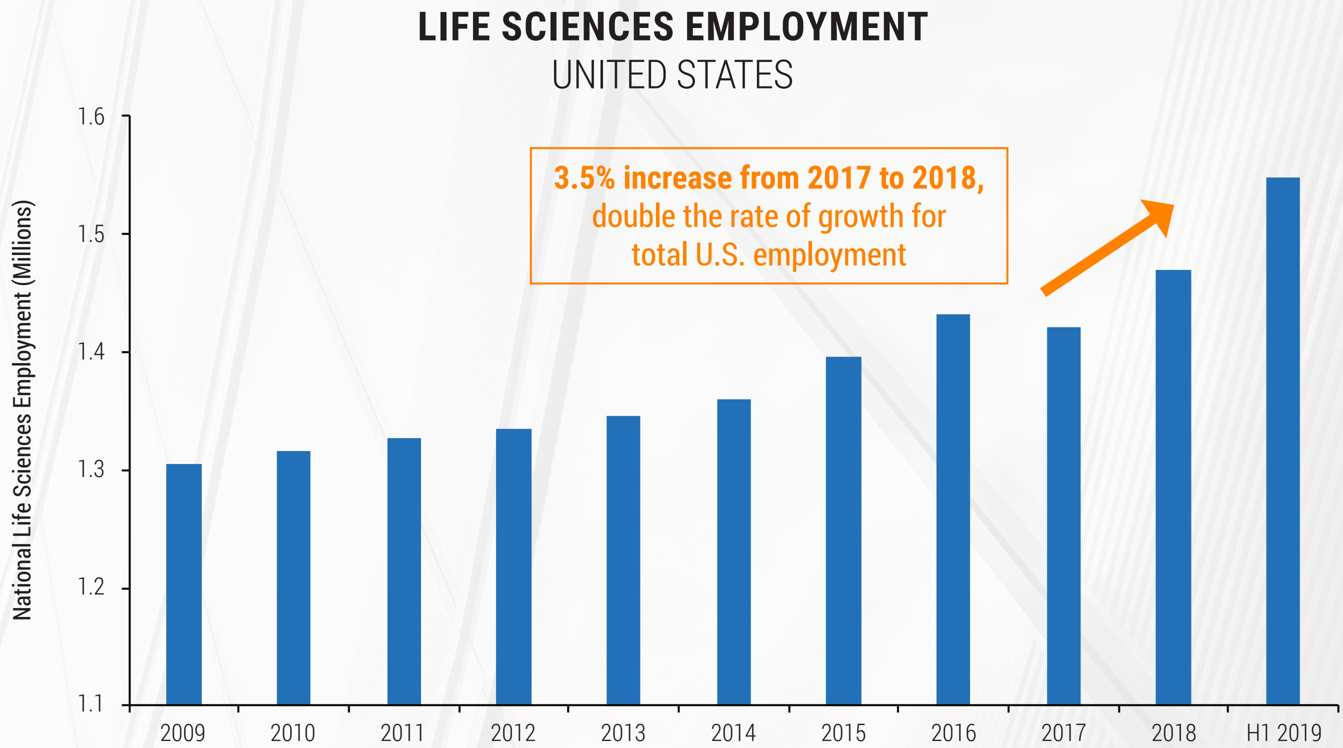
As the industry grows, so does the need for highly-specialized space to facilitate research and development and also production. While Boston and the Bay Area hold the country's largest life sciences talent pools and lab inventory, the war for talent and a diversity of innovation occurring within the industry are causing other life sciences hubs to emerge.

Philadelphia is one such emerging market. The region's pharmaceutical manufacturing legacy yielded a robust existing lab inventory and talent concentration, and the pipeline of new workers coming from its many colleges and hospitals creates a fertile ecosystem for future growth. Recently, companies borne from this nexus of "eds and meds" have developed groundbreaking gene and cell therapies, elevating Philadelphia on the national stage: an increasing number of companies based in top life sciences hubs have made commitments in Philadelphia, and developers expanded the proposed life sciences pipeline to 2.9 million square feet in 2019.

A challenge facing the life sciences industry nationwide, but especially in Boston and the Bay Area, is a lack of advanced manufacturing and lab space; development cannot keep pace with demand to the extent that the vacancy rate in the most desirable life sciences markets is perennially below 5%, sometimes well below. Simply put, more life sciences space is needed. To that end, developers and asset owners may consider redevelopment plays for older properties.

Investors considering alternative assets such as life sciences properties for portfolio diversification may attain stronger yields than those offered by traditional office or industrial acquisitions. Owners of life sciences product are predominantly specialized, but the sector is drawing new investors and overall sales volume is growing: $4.2 billion in R&D property sales closed in 2019, an 18.3% increase over 2018's volume. Finally, the industry's growth—and tightness in core markets—should catalyze tenants to explore emerging markets marked by excellent "eds and meds" institutions and access to capital, revealing cost savings and newfound talent pools.

Sources: National Institutes of Health, NKF Research, Real Capital Analytics, U.S. Bureau of Labor Statistics



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

KEY CONCLUSION

As the life sciences industry grows, so does the need for highly-specialized space to facilitate research and development and also production. Investors considering alternative assets such as life sciences properties for portfolio diversification may attain stronger yields than those offered by traditional office or industrial acquisitions.

03

MEDICAL RETAIL IS A FAST-GROWING MARKET SEGMENT

By Mark Russo, Research Manager, Northern New Jersey

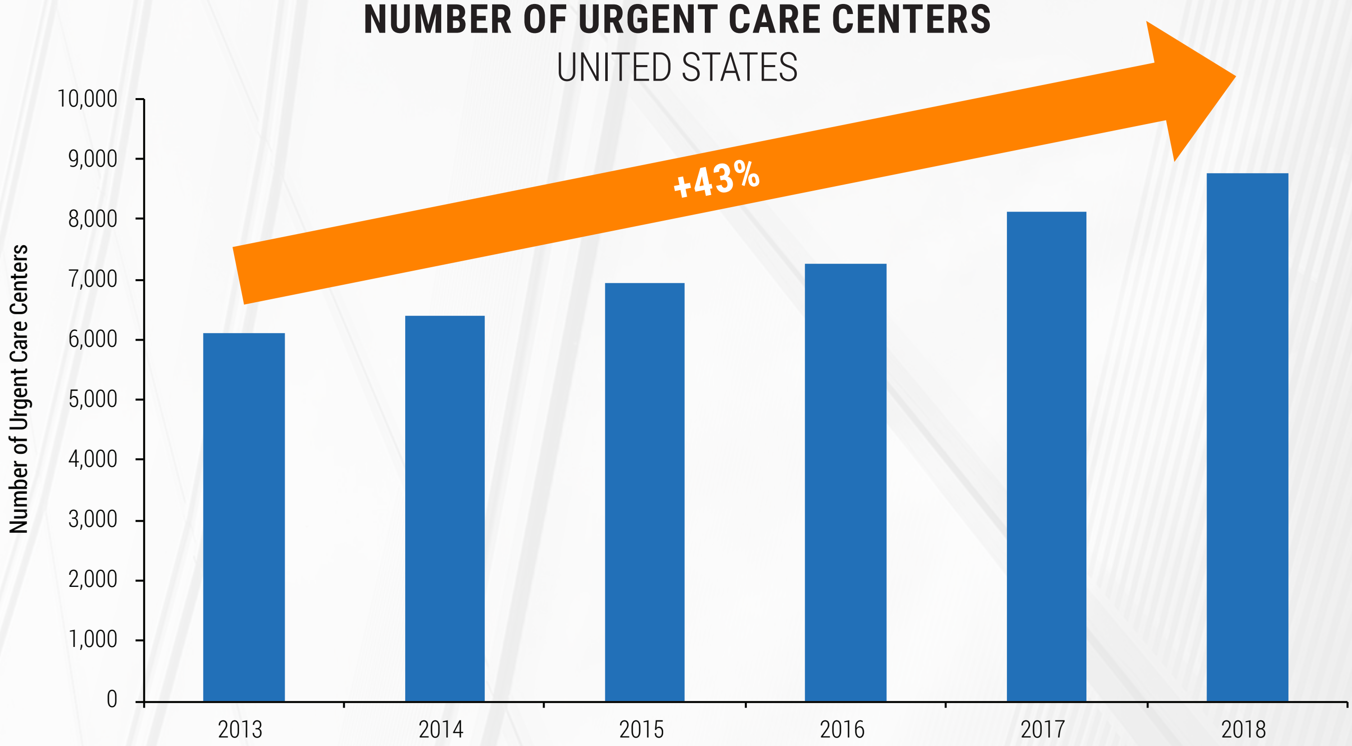
Medical service providers have been expanding rapidly into retail spaces including malls, shopping centers and urban storefronts. Common medical retail tenants include urgent care centers, dentists, physical therapy providers, dialysis clinics and eye care centers. The primary driver of this trend is the desire to create a convenient experience for the patient/consumer as retail developments tend to offer high visibility, ample parking and central locations near residential populations. The growth of medical retail has paralleled a steep rise in consumer spending on healthcare, which has grown by 20% over the past five years. In comparison, household expenditures on apparel—a retail mainstay—increased by just 8% over the same period.

Urgent care centers in particular have seen dramatic growth in recent years, with the number of locations across the U.S. increasing by 43% since 2013, as illustrated in the adjacent chart. Many of these providers are located inside chain drug stores. For example, MinuteClinic operates more than 1,100 locations within CVS Pharmacy and Target stores. Other urgent care centers lease their own retail spaces. CityMD, a leading urgent care provider in the New York metro area, started with a single location in 2010 and has since expanded to 120 locations in the Tri-state area, including 27 storefronts in Manhattan as well as both in-line and pad sites in premier suburban shopping centers.

For asset owners, medical retail offers an additional source of demand for retail real estate. However, it can be challenging to accommodate some medical retail tenants, as they may need expanded utilities or complex equipment, translating to costlier build-outs. Certain uses may also require a zoning variance. Additionally, not all healthcare providers are as well-suited for retail developments, including specialists (e.g. surgeons and cardiologists) which tend to depend on referrals and cluster near hospitals. When vetting prospective tenants, property owners may wish to focus on medical occupiers that will draw shoppers to their centers and create synergy with neighboring tenants.

Sources: International Council of Shopping Centers, NAIOP Commercial Real Estate Development Association, NKF Research, Urgent Care Association of America, U.S. Bureau of Labor Statistics

NUMBER OF URGENT CARE CENTERS
UNITED STATES



Source: NKF Research, Urgent Care Association of America

KEY CONCLUSION

Medical service providers have been expanding rapidly into retail spaces including malls, shopping centers and urban storefronts. The primary driver of this trend is creating a convenient experience for the patient/consumer as retail developments tend to offer high visibility, ample parking and central locations near residential populations.

04

THE RISE OF COWORKING HAS CONTRIBUTED TO A DECLINE IN TRADITIONAL SMALL OFFICE LEASES

By Bethany Schneider, Director, Research, Washington, DC

Over the past five years, the coworking and flexible office sector has expanded rapidly across most major U.S. metro areas, more than doubling its share of office inventory in major cities like San Francisco, New York, Boston and Chicago. This growth was largely driven by office tenants' interest in the flexibility, design, and amenities offered by the coworking and flexible office space sector. While some major corporations have gravitated to the enterprise model and assigned their office needs to flexible office providers such as Knotel, in general, the target market for coworking providers has been the small-to-medium size tenants who take desks in a shared office environment.

What this has meant for the traditional direct office market is that the volume of transactions from tenants smaller than 10,000 square feet has decreased as coworking has grown more popular. Tenants now have the option to utilize coworking and flexible office space providers rather than transacting directly with an asset owner. In fact, the average number of direct-with-owner transactions smaller than 10,000 square feet in the 12 largest U.S. metro areas has declined every year since 2016, as illustrated in the adjacent chart.

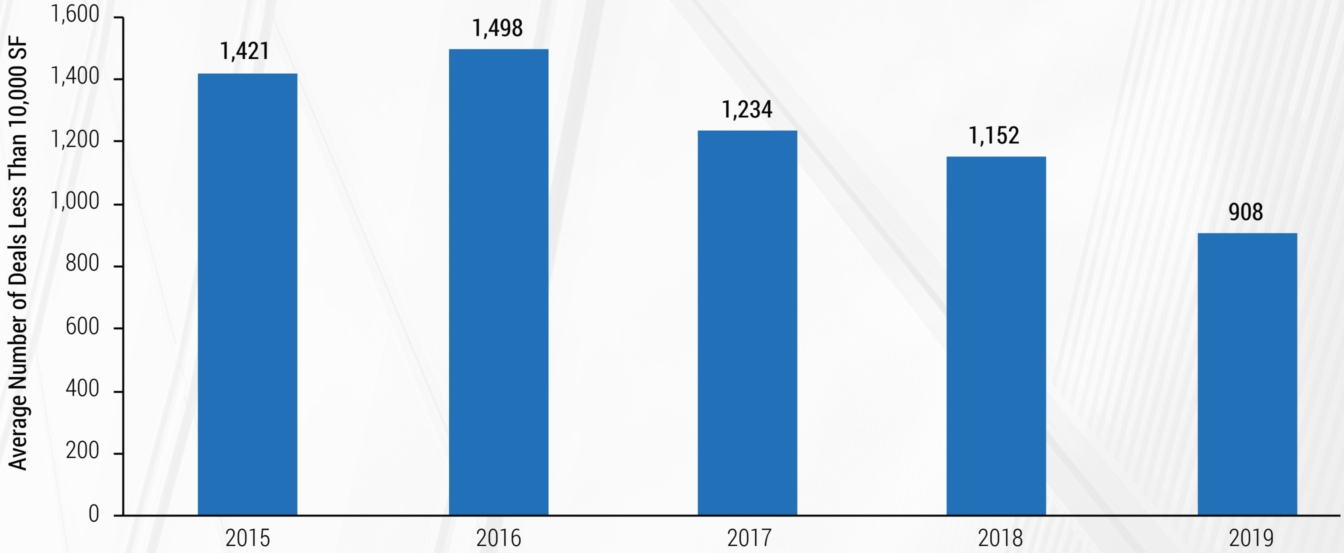
The trend of declining small deal volume is especially prevalent in the city centers, where coworking and flexible office space is most concentrated. For example, in the District of Columbia, coworking and flexible office space grew from 0.8% of office inventory in 2016 to 1.6% of inventory in 2019. Over this same time period, the number of transactions smaller than 10,000 square feet declined from 159 in 2016 to 136 in 2019.

While the decline in smaller deal volume is undoubtedly a challenge for traditional asset owners, it may have reached an inflection point. The explosive growth of the coworking sector cooled significantly with the news of WeWork's failed IPO in the fall of 2019. With WeWork being the largest provider by a significant margin, its turmoil had a dampening effect on growth in the sector, including for other providers. One possible repercussion of this slowing activity is a rejuvenation of the direct-to-owner small lease market. Instead of WeWork and other coworking providers capturing so many of these deals, perhaps asset owners will regain traction in this space, seizing new opportunities. In fact, another trend that has resulted from the growth of the coworking sector is asset owners creating their own flexible space and amenities programs in order to compete in this space. With slowing growth in the coworking and flexible office sector overall and an increase in asset owners offering their own coworking-style programs, those owners may be ready to recapture a larger share of the smaller tenant volume in the coming years.

Sources: CompStak, NKF Research

AVERAGE NUMBER OF TRANSACTIONS LESS THAN 10,000 SQUARE FEET IN TRADITIONAL OFFICE SPACE

12 LARGEST U.S. METRO AREAS



Note: Traditional office space refers to transactions directly with an asset owner, and not through a coworking or flexible office space provider.

Source: CompStak, NKF Research

KEY CONCLUSION

As coworking has grown more popular, the volume of transactions from tenants smaller than 10,000 square feet in the traditional direct office market has decreased. While the decline in smaller deal volume is undoubtedly a challenge for traditional asset owners, it may have reached an inflection point due to slowing growth in the coworking and flexible office space sector. One possible repercussion of this slowing activity is a rejuvenation of the direct-to-owner small lease market.

05

FASTER DELIVERIES BLUR THE LINES OF INDUSTRIAL AND RETAIL

By Dain Fedora, Research Director, Los Angeles, CA

Consumer expectations for swifter deliveries are prompting e-commerce operators, whether they are pure-play or traditional retailers, to adapt accordingly. How an operator achieves this is contingent on its real estate portfolio. Amazon wants free one-day shipping for its Prime subscribers and continues to expand its hub-and-spoke model of large fulfillment centers and smaller locations near urban centers. In some cases, it is cannibalizing demand for retail space. A former shopping mall in Euclid, Ohio, for instance, is now an 857,000-square-foot fulfillment center on a site within 60 miles of 3.4 million consumers, close to major highways and near several bus stops (which are useful for low-income warehouse workers). Amazon also has partnerships with Kohl's and GNC Health Mart for in-person parcel returns and pickups.

Walmart is utilizing both its warehouses and stores. Walmart stores are within ten miles of 90% of the U.S. population, and the company vowed next-day delivery on more than 200,000 items to 75% of American consumers as of the end of 2019. To achieve this, it employed strategies such as curbside pickups at its stores, employee home deliveries, and conversions of former Sam's Club locations to fulfillment centers. Target, meanwhile, has rolled out same-day delivery in several markets after integrating the Shipt app.

Both Walmart and Target often use their stores as distribution points, which highlights the growing importance of stockroom operations, the bridge to a traditional retailer's warehouses and its physical storefronts. The stockroom replenishes a store's inventory but also houses packages for in-store pickup and home delivery; the same applies to returns. This has led to the "industrialization" of stores for many traditional retailers, a necessary strategy since U.S. consumer e-commerce sales jumped by 98.6% from 2013–2018, vastly exceeding overall retail sales growth of 18.6% over the same period.

Older, close-in industrial product near urban centers often commands rent premiums over functional space that is farther away, a trend highlighted in the NKF white paper titled *Myth vs. Reality: Evaluating Popular Misconceptions in Commercial Real Estate*. This presents opportunities for infill development and redevelopment at higher rents. More retail conversions to industrial are also likely in good, land-constrained locations. Fulfillment centers, meanwhile, will continue to appeal to property investors since large occupiers often invest capital to automate their operations; chances of a tenant staying are thus more favorable when its lease is up for renewal.

Sources: CNBC, CoStar, NKF Research, UBS Securities, UPS *Pulse of the Online Shopper* (2017), U.S. Census Bureau, The Verge, *Wall Street Journal, Washington Post*

U.S. CONSUMER E-COMMERCE SALES JUMPED BY **98.6%** FROM 2013–2018,

VASTLY EXCEEDING OVERALL RETAIL SALES GROWTH OF **18.6%** OVER THE SAME PERIOD

Source: NKF Research, U.S. Census Bureau

KEY CONCLUSION

Older, close-in industrial product near urban centers often commands rent premiums over functional space that is farther away. This presents opportunities for infill development and redevelopment at higher rents.

06

MULTIFAMILY INVESTORS ARE GRAVITATING TOWARD SECONDARY MARKETS

By Sean Marmora, Research Analyst, New York, NY

Over the past several years, the share of U.S. multifamily investment into secondary markets has grown significantly, topping 65% each year since 2016, as illustrated in the adjacent chart. Higher costs of living in supply-constrained primary markets such as Boston, Chicago, Los Angeles, New York, San Francisco and Washington D.C. have led to migration of individuals and corporations into secondary markets. Emerging markets are benefitting from this trend. Strong total returns and robust employment growth in markets such as Dallas, Phoenix and Raleigh-Durham have attracted significant levels of institutional multifamily investment. According to Moody's Analytics, in 2019 alone, 154,000 people are projected to leave the six major markets, following over 522,000 departures between 2016–2018. Conversely, high growth markets such as Dallas (45,100), Phoenix, (76,000), and Raleigh-Durham (28,200) are expected to see a substantial influx of new residents, many of whom will be renters.

A lower cost of living, lack of state income tax, and numerous corporate relocations are all factors that have boosted Dallas to the top U.S. market in terms of percentage employment growth, with a 3.4% increase in the 12 months ending December 2019. This rapid growth has also caused an increase in demand for multifamily housing. Compared to the average annual multifamily demand in Dallas over the past five years, demand has increased by 11.5% to 22,436 units in the past 12 months. Over the same span, capital invested into the multifamily sector in Dallas totaled $10.7 billion, up 9.3% from the previous 12-month period. The Dallas metro has attracted several big healthcare names from primary markets. Examples include McKesson from San Francisco and Steward Health Care from Boston. It has also attracted firms from other industries, with tenants such as JP Morgan, Liberty Mutual, and Toyota committing to large expansions in the market. Most recently, Charles Schwab was reported to be leaving San Francisco for Dallas upon merging with TD Ameritrade.

Phoenix has more than doubled the average U.S. multifamily total return of 5.4%, with an average 12.6% return on investment over the past 12 months. Multifamily demand vastly outpaces supply in Phoenix. The market also offers a relatively high average yield and nation-leading rent growth of 8.0%. It has become a haven for corporate back-offices and tech firms looking to move from California for lower operating costs. Companies like State Farm, Progressive, and USAA are set to add or expand offices in Phoenix, providing even more of a boost for the multifamily market.

In Raleigh-Durham, a rapidly growing number of healthcare and life sciences jobs are attracting highly educated millennials to the area. In the first half of 2019, the local healthcare industry grew by over triple that of the national average, according to Moody's Analytics. Even large tech companies are adding Raleigh-Durham to their list of possible locations, as seen by Xerox's choice to open its fourth Center of Excellence in nearby Cary, bypassing New York and Connecticut and bringing 600 new jobs to the market. Multifamily investors have acted on these trends and have achieved an above-average annual rental growth of 4.4% in Raleigh-Durham over the past 12 months.

Some prudent investors are taking advantage of these trends by limiting or selling their holdings in the six major markets and reallocating significant portions of their investments to emerging markets. For the foreseeable future, transient renters-by-circumstance will have less incentive to stay in expensive markets now that quality employment opportunities can be found across the country.

Sources: Moody's Analytics, NCREIF, NKF Research, Real Capital Analytics, RealPage

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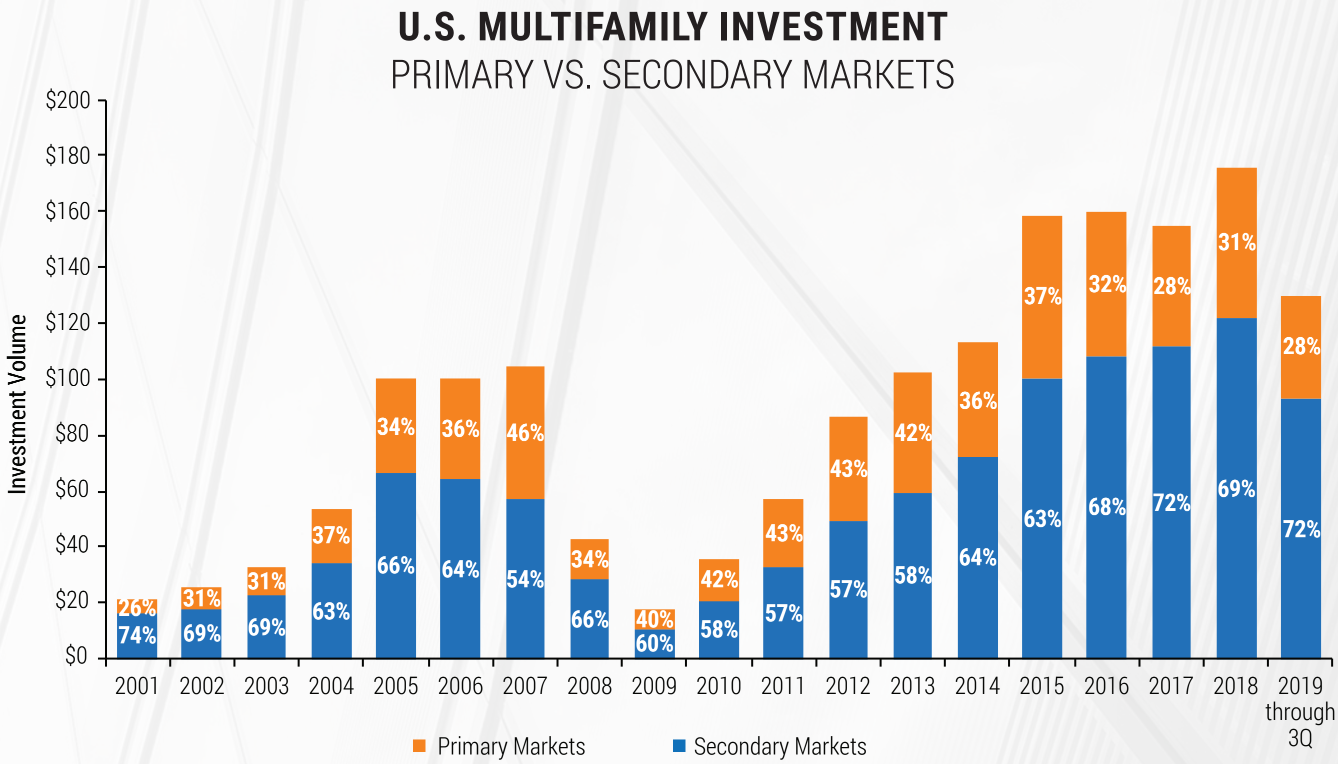


Source: NKF Research, Real Capital Analytics

KEY CONCLUSION

Over the past several years, the share of U.S. multifamily investment into secondary markets has grown significantly, topping 65% each year since 2016. Higher costs of living in supply-constrained primary markets have led to migration of individuals and corporations into secondary markets. Transient renters-by-circumstance may have less incentive to stay in expensive markets now that quality employment opportunities can be found across the country.

07

RISING CONSTRUCTION COSTS CORRELATE TO INCREASE IN TENANT IMPROVEMENT ALLOWANCES

By Elizabeth Berthelette, Research Director, Boston, MA

During the current expansion cycle, a combination of robust demand for new space and escalating pricing for labor and materials has put upward pressure on construction costs across the U.S. According to *Engineering News-Record's* Building Cost Index (BCI), costs increased nearly 30% between 2009 and 2019 and are sitting at almost a 20-year high. Over the past few years, the combination of a shortage of qualified skilled laborers and restrictive trade policy has dramatically increased the cost to build. Similar trends can be found among many of the nation's largest office markets, with higher-than-average pricing growth found in dense, coastal markets like New York, Boston and San Francisco.

Office owners use tenant improvement allowances (TIAs) to partially or fully compensate tenants for the cost to build out their space. Depending on the market and the transaction, TIAs can fluctuate significantly. Still, it stands to reason that as the cost to build increases, asset owners need to offer more in TIAs. While supply and demand fundamentals and robust new construction in most major markets have also influenced TIAs, rapid growth in these allowances over the past decade remains highly correlated to escalations in construction costs. Drilling down to nine key office markets, *Engineering News-Record's* local BCI and NKF Research's TIA data resulted in correlation coefficients ranging from 0.80 to 0.98—indicating a strong relationship.

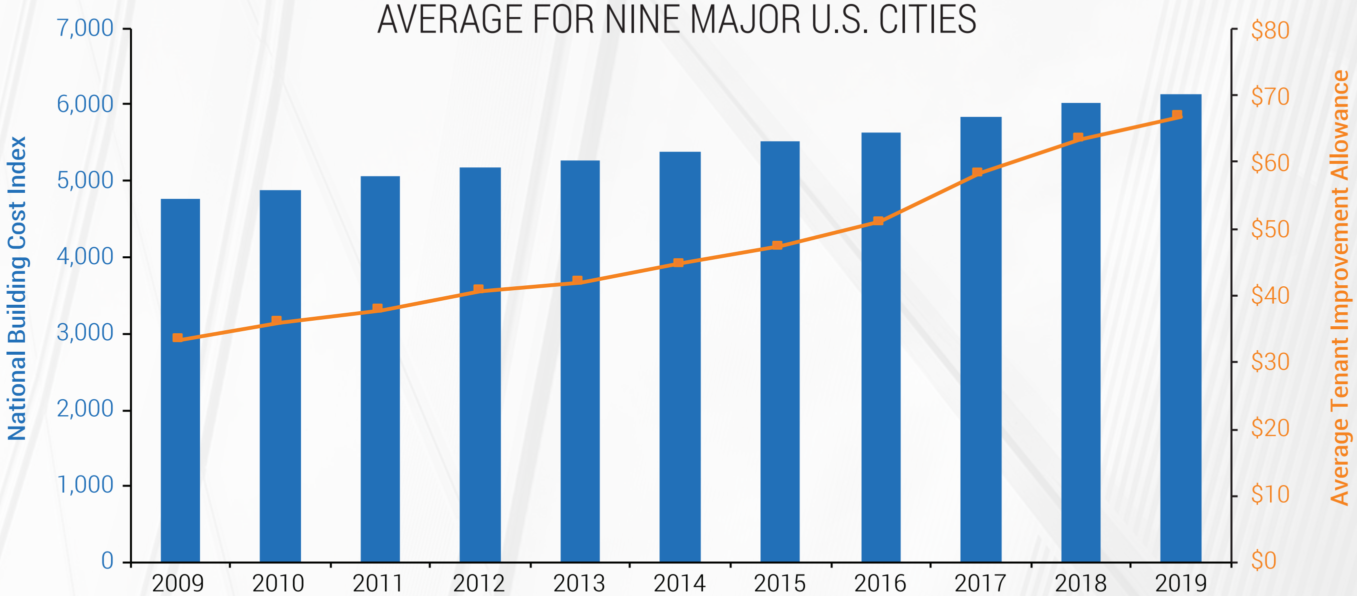
While most markets continue to see steady increases in TIAs, Boston and San Francisco have begun to deviate from this trend. Despite consistently higher costs to build in both markets, office TIAs have declined in recent quarters. This is largely a result of tight market fundamentals. San Francisco maintains the lowest vacancy rate in the U.S., at just 3.2% as of the end of 2019. Vacancy rates in Boston's CBD and Cambridge submarkets are also well below average. With asset owners maintaining a clear upper hand and new construction leases leveling off in San Francisco, TIAs in these metros are lower now than they were a year ago.

Continued labor shortages, increasing material costs, and new construction will likely keep TIAs on their upward trajectory for most U.S. markets; however, tenants will more likely need to pay out-of-pocket for fit-out costs. This is particularly true in markets with limited availability.

Sources: *Engineering News-Record*, NKF Research

NATIONAL BUILDING COST INDEX VS. AVERAGE TENANT IMPROVEMENT ALLOWANCE

AVERAGE FOR NINE MAJOR U.S. CITIES



Note: Analysis based on costs in nine major U.S. cities: Baltimore, Boston, Chicago, Dallas, Denver, Los Angeles, New York, Philadelphia and San Francisco

Source*: Engineering News-Record,* NKF Research

KEY CONCLUSION

Over the past few years, the combination of a shortage of qualified skilled laborers and restrictive trade policy has dramatically increased the cost of new construction. While supply and demand fundamentals and robust new construction in most major markets have also influenced tenant improvement allowances, rapid growth in these allowances over the past decade remains highly correlated to escalations in construction costs.

08

GROWTH OF FOOD AND BEVERAGE E-COMMERCE IS INCREASING DEMAND FOR COLD STORAGE

By Eric Messer, Research Manager, South Florida

U.S. consumers spent approximately $587 billion via e-commerce in 2019, a 14% increase from the amount spent in 2018. The fastest growing e-commerce categories continue to be food and beverage, consumer goods, health, and beauty. While Amazon holds onto its market share dominance, other companies like Walmart are making a strong push to gain traction in this segment of the retail market. Online shopping's growth in scope and range over the past two decades has impacted industrial real estate trends via an increase in demand for space for the refrigeration and cold-storage segment. Rising e-commerce sales and a growing demand for online grocery shopping has shifted how investors and landlords prepare for the evolving needs of companies that are in the "last-mile distribution" sector.

Notably, Florida has recently seen the completion of 16 large warehousing centers of more than 500,000 square feet each. Since 2014, ten million square feet of Florida's new industrial inventory has been in the form of mega-distribution facilities, with more than half coming from four Amazon Distribution Centers and one Walmart warehousing facility. E-commerce is driving the demand for large distribution hubs strategically located near densely populated regions throughout the U.S. Refrigeration and cold storage needs have increased as food and beverage companies and other non-durable goods retailers require more cooler space.

For example, Florida produce and specialty foods distributor Mr. Greens Produce recently relocated to a new facility, expanding its footprint from 65,000 to 160,000 square feet. In South Florida, food and beverage companies leased over 3.1 million square feet in the five-year period from 2015–2019. This is more than triple the 1 million square feet leased from 2010 through 2014, as shown in the adjacent graph.

As e-commerce and online grocery sales accelerate, retailers and food distributors will need larger distribution hubs with enhanced cold storage functionality to scale up "last-mile delivery" capabilities for their customers. Most notably, the average size of South Florida warehouses delivered between 2010 and 2019 increased 85% from deliveries in the prior ten-year period. Allowing for quick and speedy transport of non-durable goods will require more cooler and refrigeration space and increase buildout costs for developers. Large fulfillment centers are increasingly breaking ground as developers look for available warehouse facilities and land in proximity to ports and interstate highways, particularly in gateway markets. Investors who had the foresight to purchase such properties are achieving strong returns from industrial sales—in some cases, more than doubling the pricing from the previous expansion cycle.

Sources: emarketer, NKF Research

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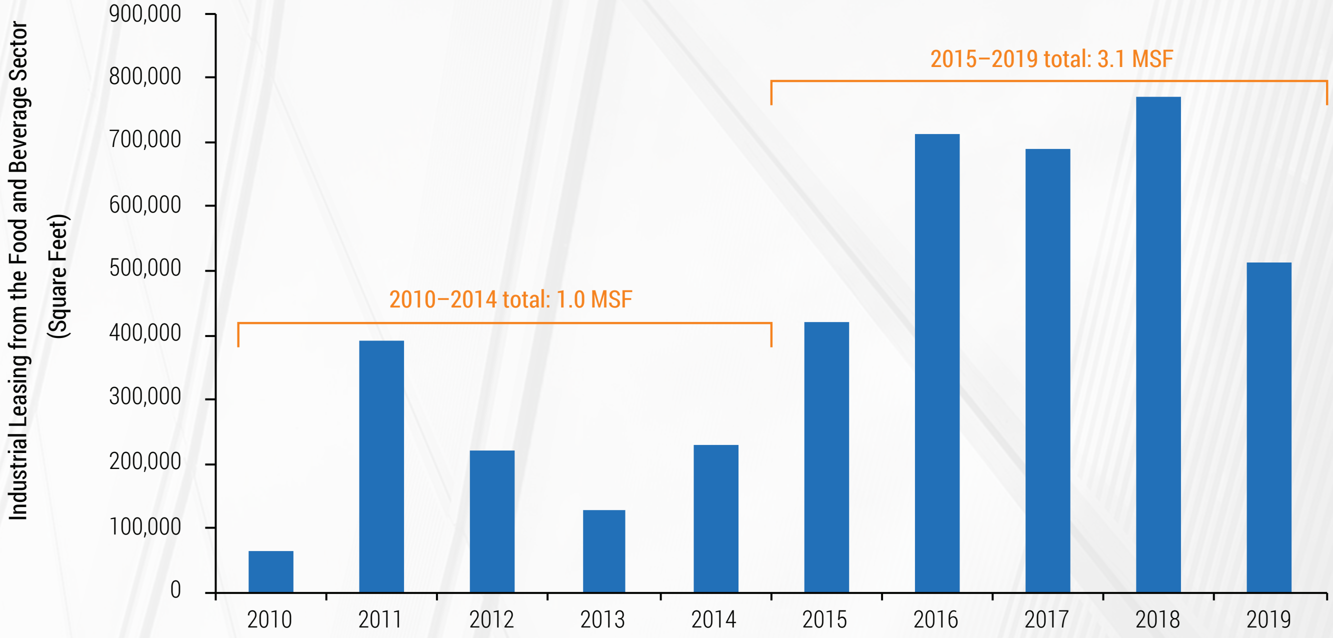
INDUSTRIAL LEASING FROM THE FOOD AND BEVERAGE SECTOR
SOUTH FLORIDA



Source: NKF Research

KEY CONCLUSION

As e-commerce and online grocery sales accelerate, retailers and food distributors will need larger distribution hubs with enhanced cold storage functionality to scale up “last-mile delivery” capabilities for their customers. Large fulfillment centers are increasingly breaking ground as developers look for available warehouse facilities and land in proximity to ports and interstate highways, particularly in gateway markets.

09

BABY BOOMERS ARE ENHANCING DEMAND FOR MULTIFAMILY UNITS

By Amy Binstein, Research Manager, Chicago, IL

The number of Americans aged 65 and older is projected to nearly double from 52 million in 2018 to 95 million by 2060. Many baby boomers are showing a preference for renting in urban areas as they enter retirement. In fact, according to property management software service TenantCloud, one third of current rental applications in urban areas are for renters over the age of 60. Many of these baby boomers are deciding to cash out and downsize from their large homes. Additional draws include less home maintenance, lower costs, age-friendly layouts and increased amenities.

Apartment demand from baby boomers has been particularly high in urban areas with warmer climates. From 2007 to 2017, seven of the top 10 markets with the largest increase in renters over the age of 60 were in the Sun Belt states of Arizona, Florida and Texas. Some cities outside of the Sun Belt are seeing a similar trend. In Chicago, approximately 3,500 suburban and 3,800 downtown apartment units delivered in 2019, many of which are targeting baby boomers during the lease-up period. For example, in Lake Forest, a northern suburb, Chicago-based Focus Development delivered the 111-unit Kelmscott Park Apartments in 2018; 77 percent of its residents are over the age of 45.

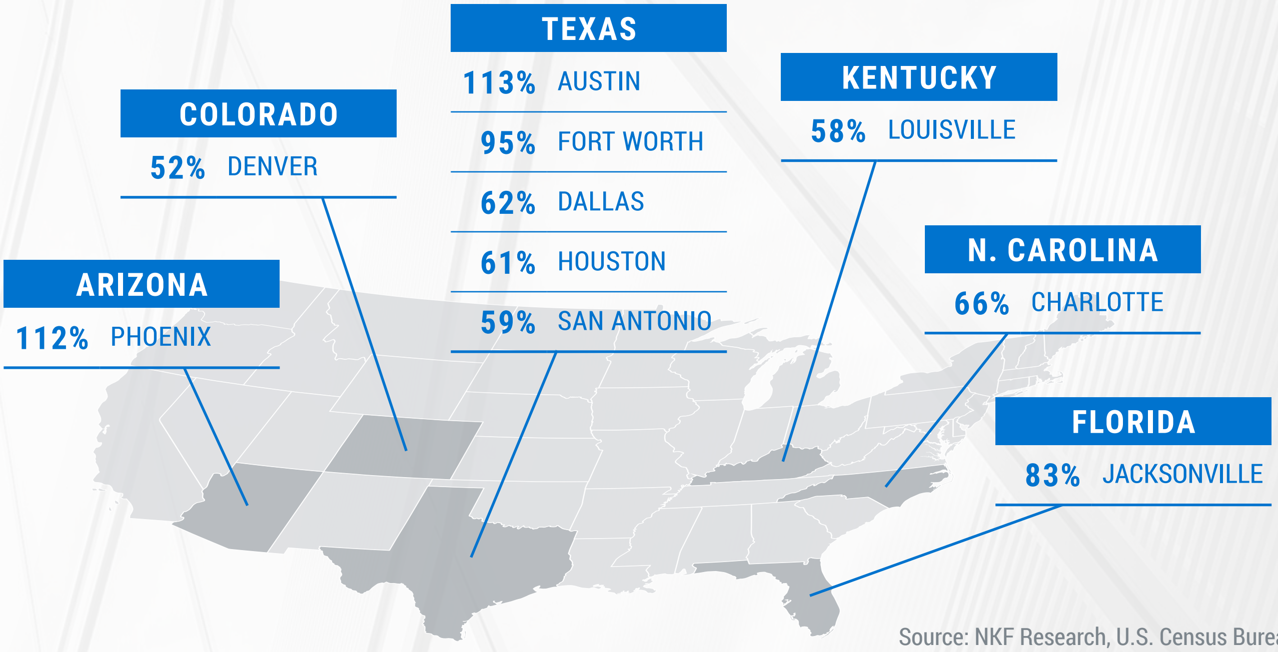
Besides being a growing source of demand, baby boomers also are changing the standards for apartments. They are seeking apartments with larger floor plans and more generous dimensions to allow for mobility aids. They also seek plentiful closets and storage plus high-end finishes—features they have grown accustomed to in their previous homes. Some developers are even adding extra sound insulation in windows and walls to cut down on noise from other units.

The U.S. multifamily market has been a strong choice for investors in this cycle. In addition to the steady demand from millennials—a traditional apartment demographic—demand from baby boomers will continue for years, as seniors are one of the fastest growing demographic groups. Baby boomers represent a good target renter group for asset owners as they are less "rent burdened" than other tenant groups, given they have had more time to build wealth. In addition, turnover is lower, as this group is less likely to experience dramatic lifestyle events, such as marriage and job changes.

Sources: CoStar, *Crain's Chicago*, NKF Research, PEW Research, TenantCloud, U.S. Census Bureau, *U.S. News & World Report*

CITIES WITH THE LARGEST INCREASE IN RENTERS OVER THE AGE OF 60

2007–2017



Source: NKF Research, U.S. Census Bureau

KEY CONCLUSION

Many baby boomers are showing a preference for renting in urban areas as they enter retirement. Multifamily demand from baby boomers will continue for years, as seniors are one of the fastest growing demographic groups—the number of Americans aged 65 and older is projected to nearly double by 2060. Baby boomers represent a good target renter group for asset owners as they are less “rent burdened” than other tenant groups, given they have had more time to build wealth.

THE TECHNOLOGY SECTOR IS DRIVING CREATIVITY IN OFFICE DESIGN

By Lauren Douglas, Director of Research, Denver, CO

Technology has grown explosively over the past few decades and has become ubiquitous in our professional and personal lives. Tech is a potent economic engine—it is a fast-growing, high-wage, office-occupying sector. According to CompTIA's *Cyberstates 2019* report, tech employment reached an estimated 11.8 million workers in 2018, or 7.6% of the overall U.S. workforce. Looking ahead, the technical workforce is projected to increase by 13.2% between 2016 and 2026. Further, tech workers are well-compensated. Their national median salary as of 2018 was $81,907, nearly double the overall median of $42,700. Tech firms are targeting millennials by locating in central business districts and often eschewing traditional office towers for more collaborative, highly-amenitized space. Their typical high-growth mode dictates a need for flexible lease terms and scalability. Thus, tech's economic clout has initiated a shift, from office space as a static product to a dynamic, space-as-a-service (SPaaS) model, which aims to facilitate creativity, productivity and talent attraction and retention.

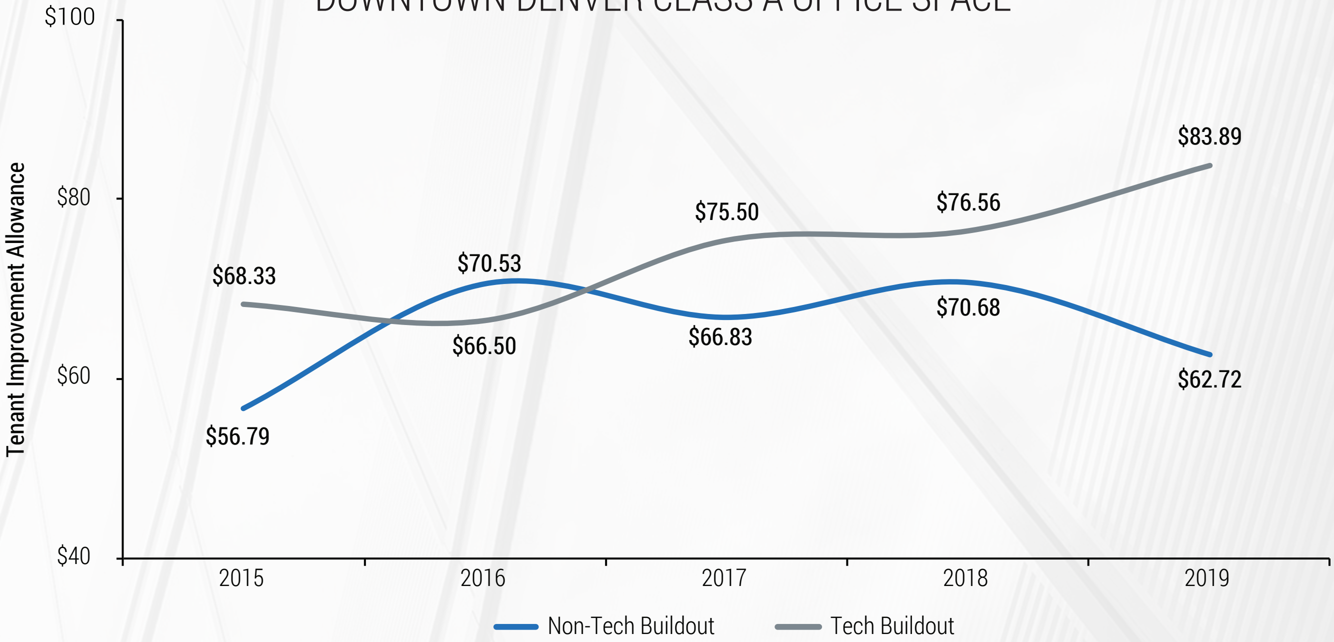
Denver serves as a good example of the economic and real estate impact of the technology industry. Denver boasts a highly educated workforce, a high concentration of millennials, and world-class research universities, all of which have created a fertile environment for tech start-ups. Growth is being driven by organic expansion and also by firms relocating to Denver or opening satellite offices. More than 20 Silicon Valley-based tech companies recently have opened offices in Denver, and the Downtown Denver Partnership reported that 120 tech firms were formed in 2018 in Downtown Denver alone. In the past two years, the technology sector accounted for 36% of office space absorption, or approximately 1.4 million square feet, and tech firms now occupy almost 11% of Downtown Denver's office space. The collaborative, amenitized buildouts that have become the tech standard command higher-than-average tenant improvement allowances, as illustrated in the adjacent chart. Tenants can seize on this advantage in lease negotiations.

Asset owners can secure a competitive advantage in attracting tech tenants by early adoption of the SPaaS model. Also, some asset owners may choose to build out, lease and manage in-house coworking suites. Tech tenants can anticipate competition for space in the most desirable neighborhoods and buildings, so they should plan well in advance for relocations and expansions. The built environment, both in terms of carefully-selected locations and curated space, has become a company's most potent recruitment and retention tool.

Sources: CompTIA, Downtown Denver Partnership, NKF Research

TENANT IMPROVEMENT ALLOWANCE: TECH VS. NON-TECH BUILDOUT

DOWNTOWN DENVER CLASS A OFFICE SPACE



Note: Analysis includes new leases greater than 5,000 SF with five-year term or greater

Source: NKF Research

KEY CONCLUSION

Tech firms are targeting millennials by locating in central business districts and often eschewing traditional office towers for more collaborative, highly-amenitized space. Their typical high-growth mode dictates a need for flexible lease terms and scalability. The built environment, both in terms of carefully-selected locations and curated space, has become a company's most potent recruitment and retention tool.

11

NEW HOTEL BRANDS AND CONCEPTS ARE EMERGING IN A COMPETITIVE MARKET

By Marianne Skorupski, Director of Research and Marketing, Atlanta, GA

Over the past decade, the U.S. hospitality industry has seen robust growth as business and leisure travel increased and put upward pressure on room and occupancy rates. The competition to attract travelers has intensified; hotels are having to do more to stand out. Advancements in technology are allowing hotel operators to offer more options for clients via seamless back-end collaborations among brands under one umbrella. Some trends that have recently become commonplace include digital guest experiences, local guest experience opportunities, sustainability, augmented and virtual reality, and smart hotels.

This competition is resulting in new concepts and brands designed to appeal to a variety of travelers. These new products provide an opportunity for major hotel chains to have brands at each price point to further build and streamline brand loyalty. This can present challenges, though, as brands work to attract one segment of traveler without alienating others. Some hotel chains are creating new concepts from scratch, while others, like Wyndham Worldwide, are purchasing new brands to complement their existing portfolios.

Atlanta has the nation's seventh-largest hotel inventory with more than 100,000 hotel rooms and offers a good example of how the hospitality industry is evolving. Over the ten-year period from 2009 to 2018, the region's occupancy level grew from 53.0% to 70.1%, which was above the national occupancy rate of 66.2%. An increase in the number of conventions and high-profile sporting events in Atlanta has resulted in new demand for luxury hotels. Construction of new hotels has boomed over the past five years, coinciding with Atlanta experiencing some of the nation's largest increases in population and job creation. Much of this growth has been driven by hotel brands that are new to both the Atlanta market and to the U.S.

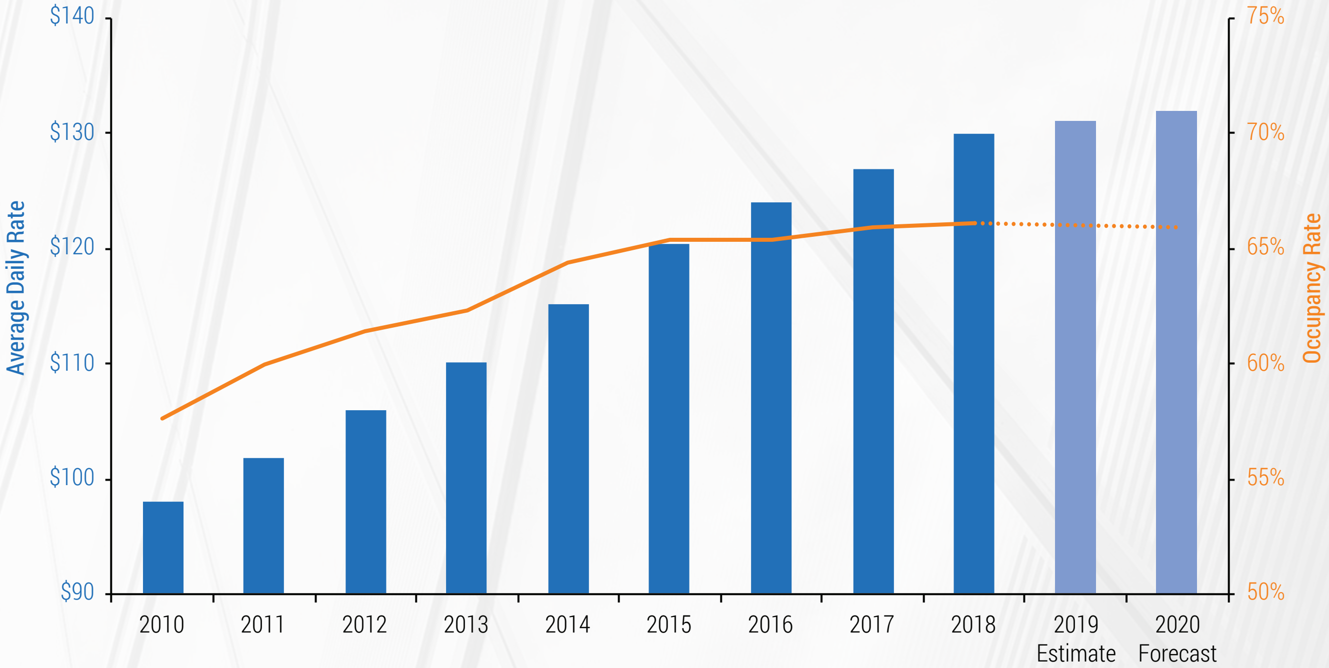
Examples of new Atlanta hotels include a range of concepts:

- Atlanta's first Nobu Hotel is under construction at Phipps Plaza, replacing a former Belk mall anchor with the new hotel and an office tower.
- Downtown, Hilton announced the newest hotel for the Georgia World Congress Center, a premier destination for conventions in Atlanta. To be built on the former site of Georgia Dome, the Signia Hilton hotel will be tailored to business travelers with a focus on wellness, culinary experiences and meeting and event spaces. This will be one of the first Signia hotels built in the United States.
- As a result of the sporting events at Mercedes-Benz Stadium and State Farm Arena, the Reverb by Hard Rock hotel is slated to open in early 2020. This is the city's first Hard Rock hotel and it sits in an area of Downtown near the Gulch, which is poised to undergo a multi-decade redevelopment.

Current forecasts for a national downturn or recession in the next two years are mixed. However, historical evidence suggests economic downturns have a short-term impact on the hospitality industry. It will be important for operators and owners of hotel properties to remain flexible and in touch with their consumers, to be able to quickly adapt to changing demands. Given the amount of new construction underway, demand analysis at a market and submarket level will be necessary to control new supply, and the particular brand and concept need to be carefully matched to the target market.

Sources: *Atlanta Business Chronicle*, Atlanta Convention and Visitors Bureau, Deloitte *2019 U.S. Travel and Hospitality Outlook*, Hilton Hotels, NKF Research, PwC *Hospitality Directions U.S.*, Smith Travel Research

AVERAGE DAILY RATE AND OCCUPANCY RATE TRENDS
U.S. HOSPITALITY MARKET



Source: NKF Research, PwC *Hospitality Directions U.S.*

KEY CONCLUSION

The U.S. hospitality industry has seen robust growth as business and leisure travel increased and put upward pressure on room and occupancy rates. This competition is resulting in new concepts and brands designed to appeal to a variety of travelers. Going forward, it will be important for operators and owners of hotel properties to remain flexible and in touch with their consumers, to be able to quickly adapt to changing demands.

OFFICE AND MULTIFAMILY DEVELOPMENT ARE INCREASINGLY INTERTWINED

By Matthew Orgovan, Research and Marketing Manager, Cleveland, OH

Office or multifamily development—which should come first? Ultimately, it depends on the history and vitality of a metropolitan area, though having a core job center is a key driver of multifamily demand in most cities. However, these two asset classes have evolved into a symbiotic relationship in which each has become at least semi-dependent on the other.

For example, in Cleveland, office conversions were the catalyst that helped kick off the multifamily development resurgence the CBD and nearby neighborhoods have experienced over the past several years. Initially, new multifamily construction was too risky in an unproven market. The only way Cleveland could make conversions work was for city leaders to collaborate with low-occupancy Class B and C office building owners who would sell at a low price and use historic tax credits for full or partial conversions to residential product. The thought was that a downtown residential population was necessary for the overall future of the CBD.

Fast forward to 2020, where a multifamily construction mini-boom in the CBD and adjacent trendy neighborhoods of Cleveland has largely been driven by proximity to jobs downtown, as well as a workforce segment desiring to live in active, vibrant, amenity-rich communities. This comes after conversions have removed nearly four million square feet of office space from Downtown Cleveland thus far. Now, the increase in high-paying white-collar jobs supports the development of new, luxury multifamily projects.

For context, nationally, the office construction pipeline totaled 90.0 million square feet as of the end of 2019. New, efficient trophy projects are desirable, yet deliveries outpaced absorption during 2019. On the other hand, new multifamily supply totaled 246,779 units in 2019, while demand reached 249,721 units, outpacing new supply by nearly 3,000 units. National annual occupancy has grown to 95.8%—the highest level this cycle—paced by a strong economy and favorable demographic trends. Nationally, both office and multifamily have performed fairly well, though multifamily has been a top performer in this cycle both nationally and in Cleveland.

Since this symbiotic relationship is so intertwined, developers of both new office and new multifamily assets will need to look at each metropolitan area on a case-by-case basis. In Cleveland, where the office vacancy rate is above 21% in the CBD, new office construction has given way to upgrades in tired buildings and multifamily demand is strong. In other cities across the United States, especially where an urban core has been established and nurtured, developing new office space to cater to firms wishing to expand their presence in the city and leverage the nearby workforce is a trend likely to continue in 2020—even as suburban locations have begun to compete more effectively for workers and residents.

Sources: CoStar, NKF Multifamily Capital Markets Group, NKF Research, RealPage

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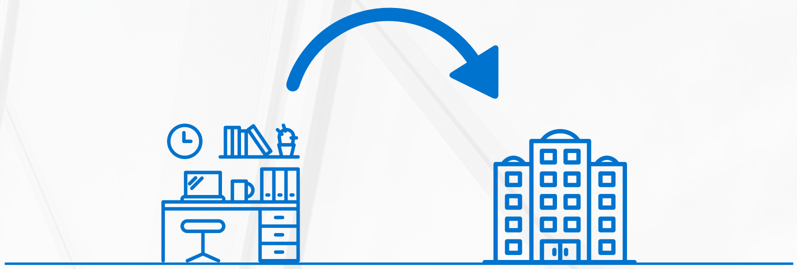

SINCE 2013, **3.9 MILLION SQUARE FEET** OF OFFICE SPACE IN CLEVELAND HAS BEEN REMOVED FROM INVENTORY FOR CONVERSION TO RESIDENTIAL AND OTHER USES

Source: NKF Research

KEY CONCLUSION

Office and multifamily asset types have evolved into a symbiotic relationship in which each has become at least semi-dependent on the other. Nationally, multifamily has been a top performer in this cycle. In cities where an urban core has been established and nurtured, developing new office space to cater to firms wishing to expand their presence in the city and leverage the nearby workforce is a trend likely to continue in 2020.

THE FUTURE OF COMMERCIAL REAL ESTATE:
12 TRENDS FOR 2020 AND BEYOND

Technology is Reshaping Industrial Space

New companies that cater to improving the supply chain will not only change the way other companies acquire industrial space, they are also beginning to shape new markets as they themselves grow. As these new companies seek to revolutionize industrial space and continue to expand, we should expect to see increased demand for Class A industrial space in markets across the U.S.

01

Life Sciences Industry Momentum Will Drive Demand for Specialized Real Estate

As the life sciences industry grows, so does the need for highly-specialized space to facilitate research and development and also production. Investors considering alternative assets such as life sciences properties for portfolio diversification may attain stronger yields than those offered by traditional office or industrial acquisitions.

02

Medical Retail is a Fast-Growing Market Segment

Medical service providers have been expanding rapidly into retail spaces including malls, shopping centers and urban storefronts. The primary driver of this trend is creating a convenient experience for the patient/consumer as retail developments tend to offer high visibility, ample parking and central locations near residential populations.

03

The Rise of Coworking has Contributed to a Decline in Traditional Small Office Leases

As coworking has grown more popular, the volume of transactions from tenants smaller than 10,000 square feet in the traditional direct office market has decreased. While the decline in smaller deal volume is undoubtedly a challenge for traditional asset owners, it may have reached an inflection point due to slowing growth in the coworking and flexible office space sector. One possible repercussion of this slowing activity is a rejuvenation of the direct-to-owner small lease market.

04

Faster Deliveries Blur the Lines of Industrial and Retail

Older, close-in industrial product near urban centers often commands rent premiums over functional space that is farther away. This presents opportunities for infill development and redevelopment at higher rents.

05

Multifamily Investors are Gravitating Toward Secondary Markets

Over the past several years, the share of U.S. multifamily investment into secondary markets has grown significantly, topping 65% each year since 2016. Higher costs of living in supply-constrained primary markets have led to migration of individuals and corporations into secondary markets. Transient renters-by-circumstance may have less incentive to stay in expensive markets now that quality employment opportunities can be found across the country.

06

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KEY CONCLUSIONS AND ACTION STEPS

Rising Construction Costs Correlate to Increase in Tenant Improvement Allowances

Over the past few years, the combination of a shortage of qualified skilled laborers and restrictive trade policy has dramatically increased the cost of new construction. While supply and demand fundamentals and robust new construction in most major markets have also influenced tenant improvement allowances, rapid growth in these allowances over the past decade remains highly correlated to escalations in construction costs.

07

Growth of Food and Beverage E-Commerce is Increasing Demand for Cold Storage

As e-commerce and online grocery sales accelerate, retailers and food distributors will need larger distribution hubs with enhanced cold storage functionality to scale up "last-mile delivery" capabilities for their customers. Large fulfillment centers are increasingly breaking ground as developers look for available warehouse facilities and land in proximity to ports and interstate highways, particularly in gateway markets.

08

Baby Boomers are Enhancing Demand for Multifamily Units

Many baby boomers are showing a preference for renting in urban areas as they enter retirement. Multifamily demand from baby boomers will continue for years, as seniors are one of the fastest growing demographic groups—the number of Americans aged 65 and older is projected to nearly double by 2060. Baby boomers represent a good target renter group for asset owners as they are less "rent burdened" than other tenant groups, given they have had more time to build wealth.

09

The Technology Sector is Driving Creativity in Office Design

Tech firms are targeting millennials by locating in central business districts and often eschewing traditional office towers for more collaborative, highly-amenitized space. Their typical high-growth mode dictates a need for flexible lease terms and scalability. The built environment, both in terms of carefully-selected locations and curated space, has become a company's most potent recruitment and retention tool.

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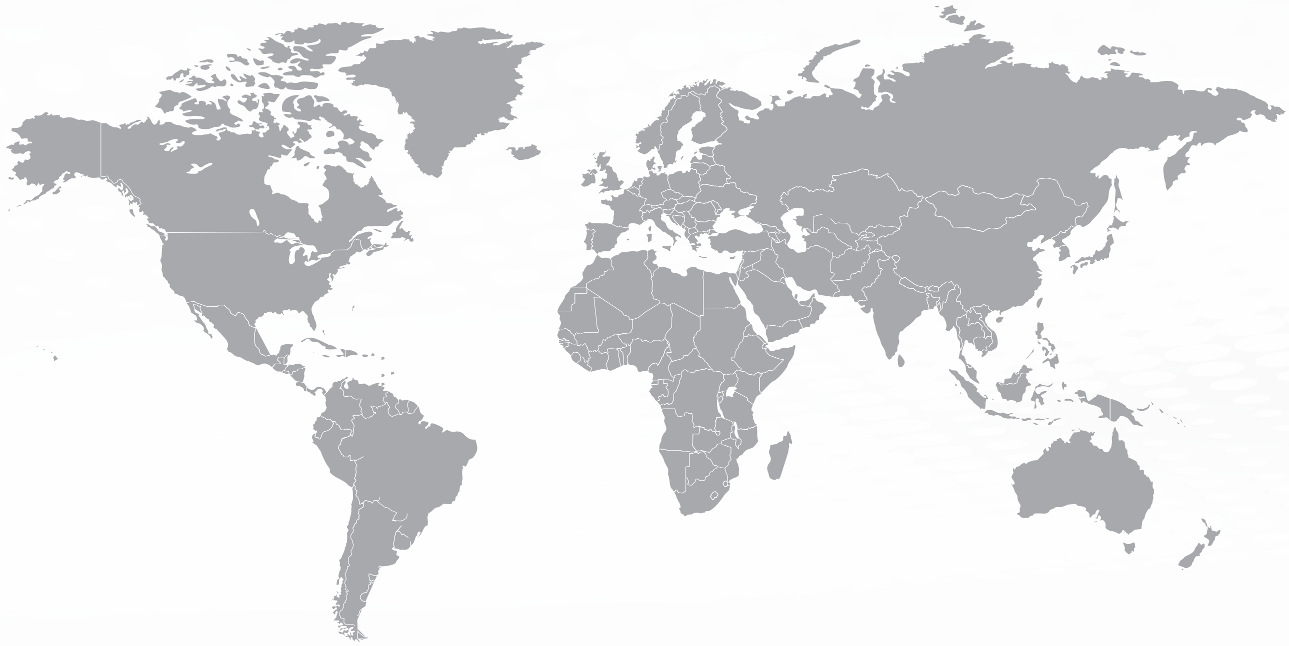
12



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