2021 United States | Canada

EMERGING TRENDS IN REAL ESTATE®

Emerging Trends in Real Estate® 2021

A publication from:

Emerging Trends in Real Estate®

2021

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Recommended bibliographic listing:

PwC and the Urban Land Institute: *Emerging Trends in Real Estate® 2021*. Washington, D.C.: PwC and the Urban Land Institute, 2020.

ISBN: 978-0-87420-464-3

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Notice to Readers

Emerging Trends in Real Estate® is a trends and forecast publication now in its 42nd edition, and is one of the most highly regarded and widely read forecast reports in the real estate industry. *Emerging Trends in Real Estate® 2021*, undertaken jointly by PwC and the Urban Land Institute, provides an outlook on real estate investment and development trends, real estate finance and capital markets, property sectors, metropolitan areas, and other real estate issues throughout the United States and Canada.

Emerging Trends in Real Estate® 2021 reflects the views of individuals who completed surveys or were interviewed as a part of the research process for this report. The views expressed herein, including all comments appearing in quotes, are obtained exclusively from these surveys and interviews and do not express the opinions of either PwC or ULI. Interviewees and survey participants represent a wide range of industry experts, including investors, fund managers, developers, property companies, lenders, brokers, advisers, and consultants. ULI and PwC researchers personally interviewed 1,350 individuals, and survey responses were received from more than 1,600 individuals, whose company affiliations are broken down below:

Private property owner or commercial/multifamily real estate developer:	38%
Real estate advisory or service firm:	17%
Private-equity real estate investor:	12%
Investment manager/adviser:	11%
Bank and other lenders:	9%
Homebuilder or residential land developer:	7%
Equity REIT or publicly listed real estate property company:	3%
Private REIT or nontraded real estate property company:	1%
Other entity:	2%

Throughout this publication, the views of interviewees and/or survey respondents have been presented as direct quotations from the participant without name-specific attribution to any particular participant. A list of the interview participants in this year's study who chose to be identified appears at the end of this report, but it should be noted that all interviewees are given the option to remain anonymous regarding their participation. In several cases, quotes contained herein were obtained from interviewees who are not listed in the back of this report. Readers are cautioned not to attempt to attribute any quote to a specific individual or company.

To all who helped, the Urban Land Institute and PwC extend sincere thanks for sharing valuable time and expertise. Without the involvement of these many individuals, this report would not have been possible.

Dealing with Certain Uncertainties

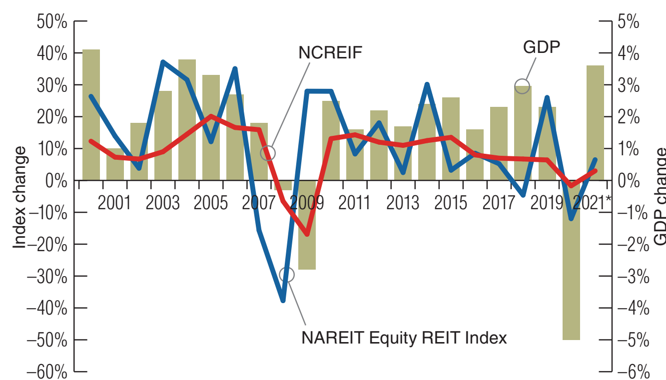
"There are a bunch of things that will change at the margin. And changes at the margin can have huge impacts on the use of real estate."

The eruption and rapid spread of COVID-19 in early 2020 and continuing through October 2020 and assuredly beyond was one of the most drastic shocks that the vast majority of the globe will ever live through. More so than any other catastrophe or world war, the novel coronavirus affected and continues to affect virtually every person in every country in the world. With a global infected population close to 35 million and a death count exceeding 1 million as of early October, the magnitude of suffering is immense.

There have been several other comparable global events over the past century. The Spanish flu pandemic of 1918–1920, World War I, the Great Depression, and World War II are all described in terms of pre- and post-event, with widespread societal, economic, and political changes separating the before and after times. The global financial crisis (GFC) was certainly widespread and severe, but it did not come close to the levels of suffering wrought by the first four tragedies. The terrorist attacks on September 11, 2001, were momentous, but the impacts were felt mainly in the United States. The fifth global tragedy of the past 102 years, the COVID-19 pandemic appears poised to affect almost all aspects of our lives, including the use of real estate, for many decades.

So far in 2020, real estate has been broadly affected by COVID-19, mostly—but not universally—in a negative way. In fact, properties with a public use component (e.g., offices, retail, apartments, hotels, sports and entertainment venues) have been singled out as potential spreading locations for the novel coronavirus and have been at times and in some states either shut down and/or have had use restrictions imposed. The fact that these new regulations have varied by state has made the response all the more difficult. On the other hand, logistics facilities and data centers are generally thriving.

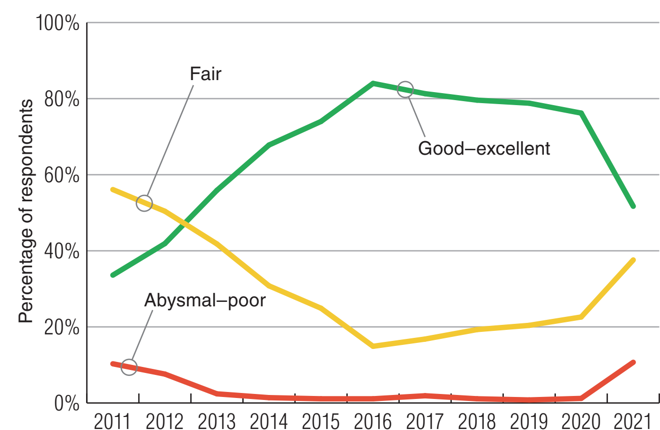
Exhibit 1-1 **U.S. Real Estate Returns and Economic Growth**



Sources: NCREIF; NAREIT; Bureau of Economic Analysis/U.S. Department of Commerce; PwC Investor Survey.

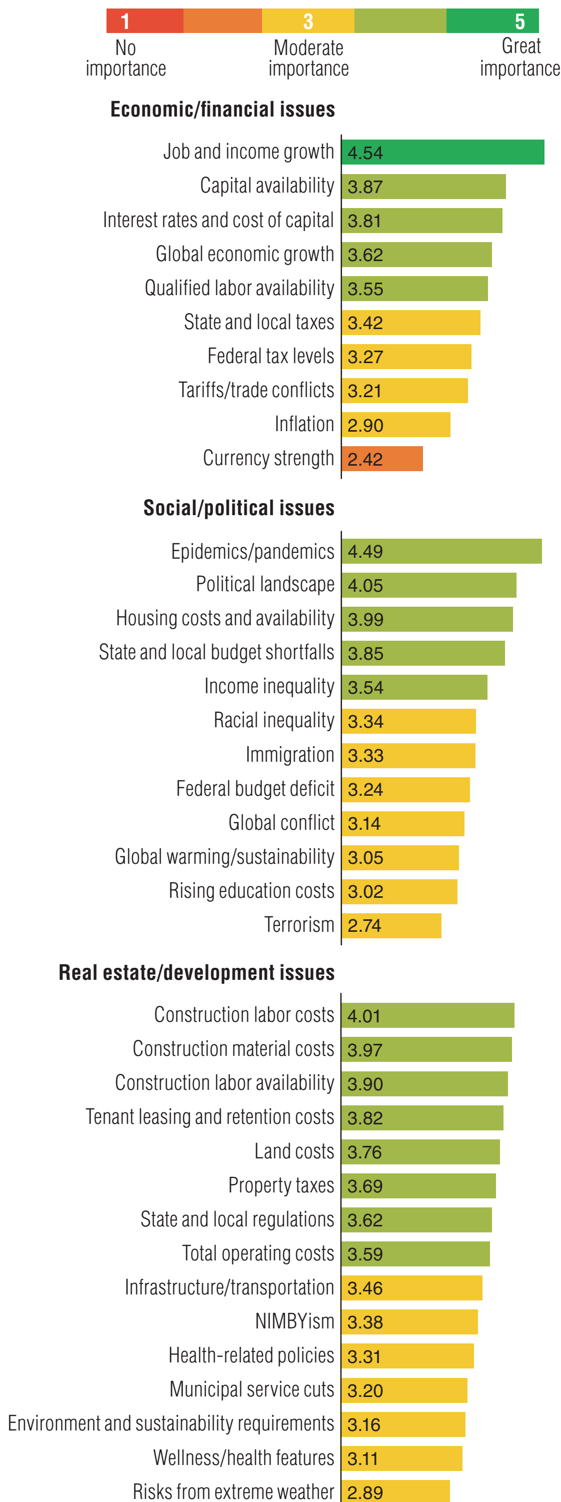
*NCREIF/NAREIT and GDP projections for 2020 and 2021 are based on the ULI Real Estate Economic Forecast released in October 2020.

Exhibit 1-2 **Firm Profitability Prospects for 2021**



Source: *Emerging Trends in Real Estate* surveys.

Exhibit 1-3 **Importance of Issues for Real Estate in 2021**

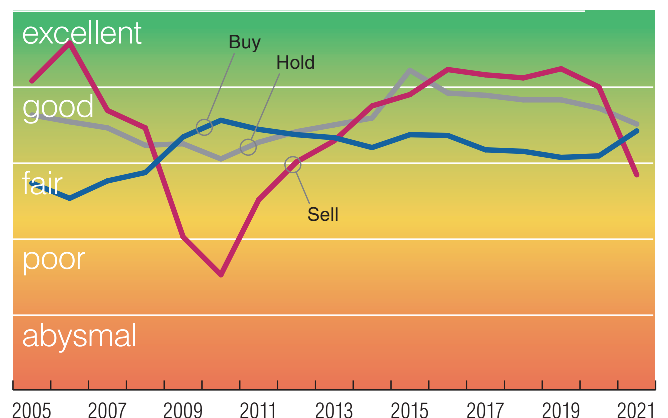


Source: *Emerging Trends in Real Estate 2021* survey.

The challenge for this year's version of the *Emerging Trends in Real Estate*® report is to start the process of discerning the trends that COVID-19 has instigated and their long-term potential, while still in the early days of the pandemic. Real estate participants like to use American baseball as a way to judge the progression of any trend. Coming out of the GFC, *Emerging Trends* and the rest of the real estate community were avid users of this baseball analogy. Eventually, predicting the current inning became old news as we settled into a long growth period. But once again, we are back in the game. For most, we are still in the first or second inning of COVID-19. Those who follow baseball know that the early innings are often a very poor predictor of the eventual outcome of any game, let alone a new disease as lethal and little known as COVID-19.

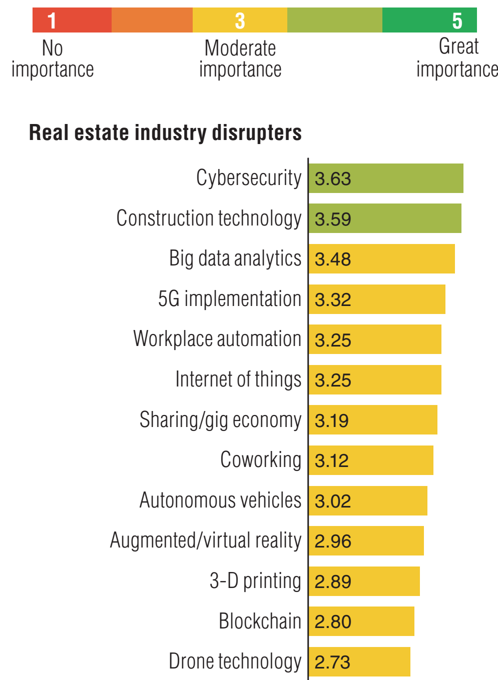
Yet plan ahead we must, and like all prior versions of the *Emerging Trends* report, the input of the ULI faithful has been both crucial to our views and heartwarming since so many of you were interested in wanting to help the industry get through this. Using Zoom meetings, the *Emerging Trends* team interviewed over 550 industry participants, mostly in your homes, although a few have returned to the office. Local district councils held focus group meetings with almost 700 of their members and outside experts. And some 1,600 ULI members filled out one of the most comprehensive online surveys in real estate (and possibly any other field). For the in-person interviews this year, we made a concerted effort to broaden the participants in terms of age, gender and ethnicity. Overall, the ULI membership was tremendously helpful in forming the views and trends herein.

Exhibit 1-4 **Emerging Trends Barometer 2021**



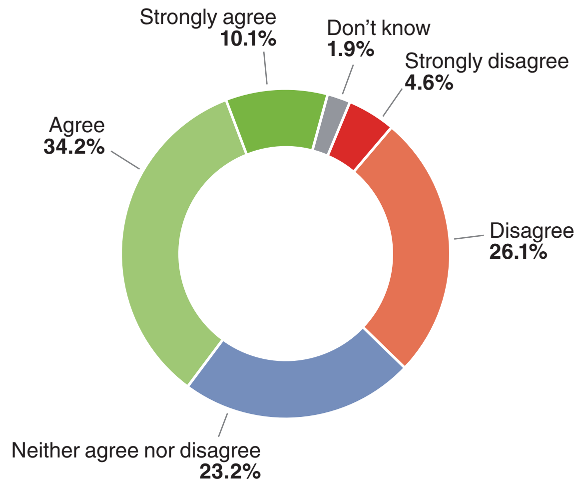
Source: *Emerging Trends in Real Estate* surveys.
Note: Based on U.S. respondents only.

Exhibit 1-5 **Importance of Disrupters for Real Estate in 2021**



Source: *Emerging Trends in Real Estate 2021* survey.

Exhibit 1-6 **I Am Confident Making Long-Term Strategic Real Estate Decisions in Today's Environment**



Source: *Emerging Trends in Real Estate 2021* survey.

One of the most oft-mentioned themes that we heard was that COVID-19 did not create new trends but accelerated those that were already underway. Some of those turbo-charged trends were mentioned in prior versions of the report, but some were not. While we agree with the overall theme of acceleration, our take is a little more nuanced. COVID-19 did accelerate many existing trends, but at varying rates as well as in some new directions. It also spawned some new trends, while stopping other existing trends dead in their tracks.

Many of the trends that COVID-19 boosted rose to the level of a top-10 trend for this year's *Emerging Trends* report. Those will be fully examined later in this chapter.

Also interesting are the trends that were slowed or stopped by the coronavirus. As shown below, one of the biggest trends that lost momentum due to COVID-19 is the rising appeal of big cities. After decades of revitalization and population growth, many of the largest U.S. cities have been hit the hardest as tourism, use of office buildings, mass transit ridership, and live entertainment have been curtailed. Some residents (with much debate as to how many) decamped to second homes or to live with parents or other relatives, leaving quieter streets and commercial establishments behind.

While large cities are likely to struggle (with both their fiscal viability and private-sector activity) for several years, the COVID-induced pause in their appeal is not likely to be permanent. Almost all the interviewees believe that the gateway markets of Boston, Los Angeles, New York City, San Francisco, and Washington (and other locales, particularly the 18-hour cities discussed in chapter 2 will eventually regain their broad appeal and vivacity (some say they never lost it) due to their dominance in entertainment, finance, technology, and education. The next three to five years could be difficult as demographics favor suburban locations, and restrictions on public transit, office and retail/restaurant density, and live entertainment—and individuals' concerns about them—make big-city life less appealing. But, like many of the changes that have occurred due to the pandemic, the ultimate impact on the desirability of large cities will be on the margin. Some companies and residents will choose smaller cities or the suburbs, but, in response, cities will likely creatively adapt, perhaps adding more green space and outdoor activities, and continue to improve livability to retaining and attracting residents who continue to value an urban lifestyle.

COVID-19's Impact on Key Trends

Accelerated by COVID-19	Stopped or slowed by COVID-19 (for now)
• Work from home • Move to Sun Belt states • Suburban migration • Public open space • Retail sector transformation • Importance of redundant supply chains • Proptech shift to WFH and building safety • Municipal/state fiscal issues • Safety/health concerns in buildings • Affordable housing crisis • Concerns about racial equity • Federal deficit • Bikes and scooters	• Appeal of CBDs/density • In-person conferences and meetings • Experiential retail • Leisure travel/tourism • Business travel • Mass transit use • Apartment amenity wars • Tourist-oriented retail • Live entertainment • University towns • Student housing • Global supply chains

1. Are We Home Yet?

- Starting in March 2020, rolling COVID-19 regulations forced many office-using companies to implement work from home (WFH) policies for their non-essential workers. WFH has been around for years but had been slow to catch on.

- The WFH experiment has gone better than most managers and employees had expected, since new teleconference tools and advanced information technology systems have allowed for effective communication and collaboration (so far).

- The pause on in-office activity continues (as of late September 2020), longer than anyone had imagined possible, and the ensuing debate about the future of WFH and the impact on office demand exposed two camps of thought:

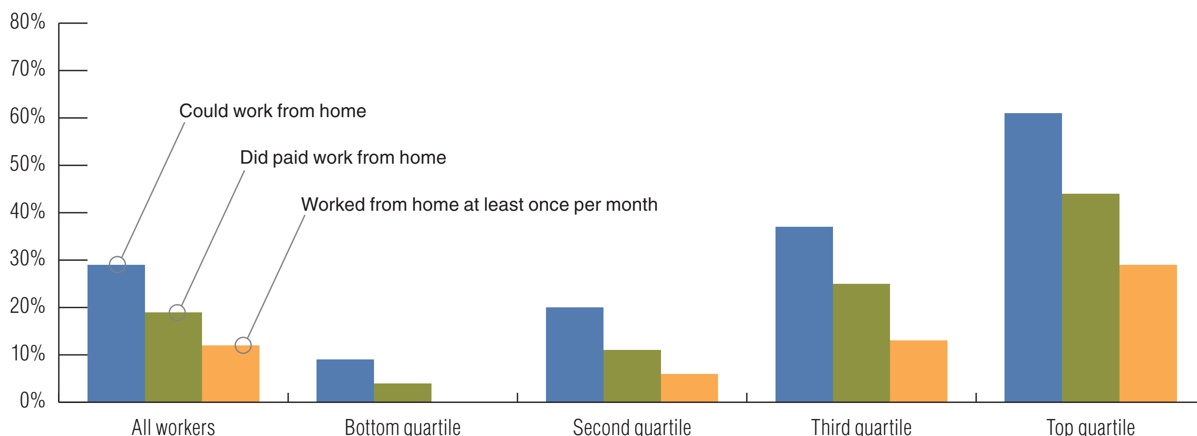
  - WFH can be productive and collaborative, potentially allowing companies to reduce office footprints; and

  - In-person workplaces are critical for company culture, innovation, onboarding of new employees, and training. Plus, WFH may be a challenge for younger and lower-income workers due to space and connectivity issues at home.

- The two camps actually are not far apart in how they view changes in office use ahead.

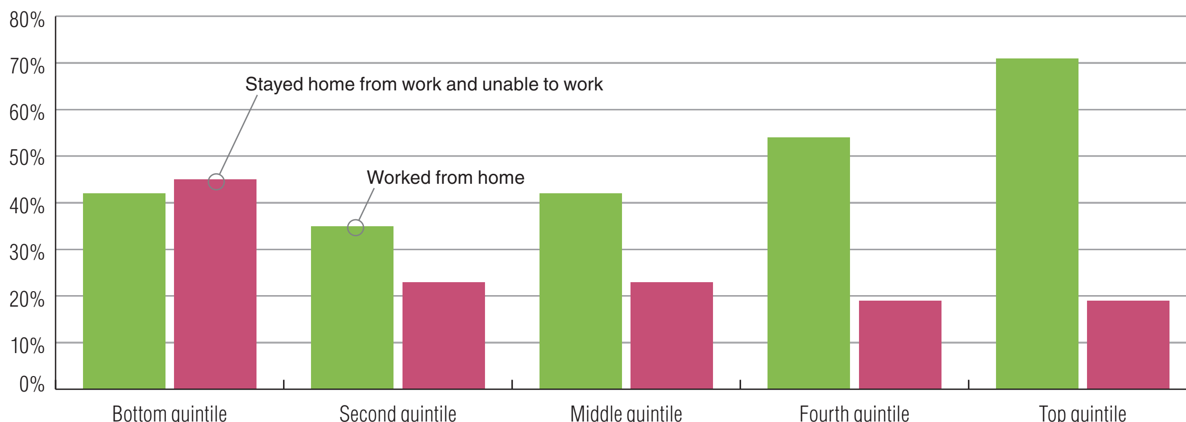
Companies and employees have been talking about telecommuting and WFH for decades. During the 1980s, futurists were predicting a shift to telecommuting and that homes would take on a heightened economic, health, and educational role. In 1989, management guru Peter Drucker declared that commuting to an office would become obsolete. In reality, the adoption of WFH was slow and uneven before the onset of the COVID-19 pandemic. The general lack of trust by employers that workers could consistently be productive at home and that employers could verify that work was actually getting done, as well as the lack of widely available high-speed internet, contributed to the slow adoption of widespread WFH before 2010. More recently, some well-reported attempts to implement widescale WFH programs by IBM (started in 2017, ended in 2020) and Yahoo (banned WFH in 2013) were reversed when they observed that their company culture and innovation had suffered.

Exhibit 1-7 **Prevalence of Work from Home in 2017–2018 by Earnings Quartile**



Sources: U.S. Bureau of Labor Statistics; Brookings Institution.

Exhibit 1-8 **Working from Home during Pandemic, by Income**



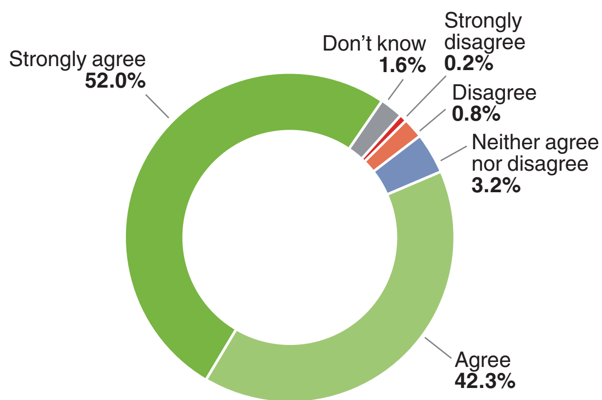
Source: Brookings Institution's Reeves and Rothwell analysis of Gallup Panel data.

The forced shutdown of many offices due to COVID-19 has dramatically changed views about the pros and cons of working from home or some other remote location. The extensive use of Zoom, WebEx, and other online meeting platforms has shown that many office-using businesses can communicate effectively and be productive in a virtual environment. Many *Emerging Trends* interviewees came to the same conclusion as one real estate executive did: "I just never realized how productive this could be." Furthermore, the time saved by not commuting—an average 227 hours each year—has been well received by many. That is certainly not surprising since it is the equivalent of 28 days that could be dedicated to work or leisure.

Still, a number of interviewees expressed concerns about WFH's impact on collaboration, innovation, onboarding, training, and company culture. One CEO observed that "people can't rise in an organization in a remote-only setting." A few firms, notably Amazon, have affirmed their strategy of having the vast majority of their workforce back in offices as soon as it is safe to do so.

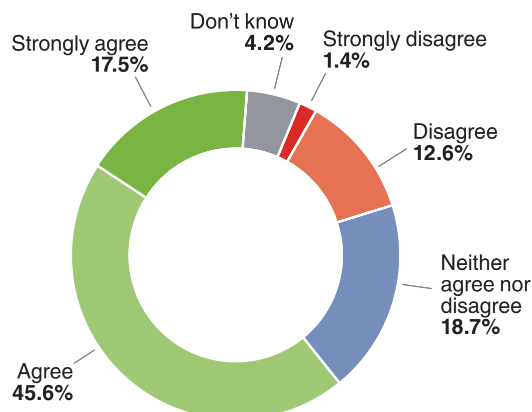
Companies that plan to go back to a pre-COVID office setup may face short- or medium-term complications when they start to reopen. Many younger employees and some families have left for less dense and less expensive locations and may need time to relocate back to the place of employment. Some workers

Exhibit 1-9 **In the Future, More Companies Will Choose to Allow Employees to Work Remotely at Least Part of the Time**



Source: *Emerging Trends in Real Estate 2021* survey.

Exhibit 1-10 **To Meet Social Distancing Requirements, Office Tenants Will Require More Square Feet per Worker than Pre-COVID 19 Levels**



Source: *Emerging Trends in Real Estate 2021* survey.

have purchased or rented houses in communities further out and may balk at the notion of resuming a daily commute. Some employees, particularly older ones or those with health issues, may have ongoing concerns about the safety of commuting by public transit or being in an office, particularly if vaccine participation is lower than expected. To assist with the transition, WFH could be used strategically to reduce density in offices in order to decrease chances of transmission, with workers coming into offices on assigned days or in staggered shifts. Although the timing of reopening will vary by market, many companies do not plan to reopen their offices until early or mid-2021, and will likely need to offer employees flexibility as they reopen.

Looking beyond the pandemic to the future use of office space, over 90 percent of the *Emerging Trends* survey respondents agree that "in the future, more companies will choose to allow employees to work remotely at least part of the time." More than a few companies have already announced more permanent flexibility—actually, a new fluidity—regarding the location and nature of the workplace. These new plans range from one or two days a week to full-time WFH, depending on function. Tech companies have led the charge in such long-term strategies, although a few have indicated that full-time WFH may come with possibly lower compensation for those working or relocating outside of headquarters cities.

Office space is a significant expense that companies are generally looking to optimize and often reduce. Over the past decade, they have accomplished this by shrinking the space per worker through the use of bench seating (coupled with more meeting and common space). There was already pushback on this shrinkage of space dedicated per worker pre-COVID, and space per employee will likely increase post-COVID due to the newly ingrained, but expected to be long-lasting, health concerns. As one office developer noted, "I don't think the 'crammed-in-open spaces' continues, but that shift was already happening." *Emerging Trends* survey respondents now agree with this sentiment—63 percent note that to meet social distancing recommendations, office tenants will require more square feet per worker than pre-COVID levels.

However, many office tenants will use WFH to shrink their footprints as a cost-saving measure, as well as an employee benefit. The overall impact on total office demand is unclear, with experts' forecasts ranging from minimal impact (WFH reductions offset by lower density) to an overall decline in office space demand of 10 to 15 percent. An institutional investor echoed the uncertainty, "[The] future of office demand is the most challenging to predict. Many technology companies are going fully remote, while other companies still see a need for physical space." While some companies are making long-term pronouncements about office strategy, it is not clear whether a likely decline in rents is factored into their thinking.

WFH may lead to different models of how companies lease and use office space. Some companies may move from a consolidated model to a hub-and-spoke system with satellite offices in suburban areas. At the margin, this favors suburban markets over central business districts (CBDs). REI, the outdoor equipment company based in Seattle, made news recently by putting its newly complete headquarters building up for sale, while announcing that its future "headquarters" would span multiple locations across the region. In larger metropolitan areas, transit-oriented suburban nodes that are also accessible by car may have more appeal; to compete, 1980s- and 1990s-style suburban office parks may have to beef up amenities to attract tenants. At least through mid-2021, "suburban office is now in your house," as few companies are making final decisions about future office locations due to uncertainty about the virus as well as the optimal long-term office strategy.

WFH is not preferred or ideal for all employees and raises important cultural and social equity issues. Younger employees may prefer working in an office due to a better learning environment and business and social connection opportunities. One respondent commented that "the effectiveness of video communications seems to diminish over time." Younger and lower-income employees may be less likely to have adequate space to work from home, and the Pew Research Center found that low-income employees are less likely than higher-income employees to have fast internet connections at home.

Once a vaccine for COVID-19 is widely available, companies will have many factors to consider when weighing the significant shift from the workplace to home, and vice versa. The COVID-19 WFH experiment has shown that working from home is better than most people had thought and could be an option for some jobs and a low-cost "workplace" amenity. Some of those companies will decide to make meaningful reductions in their office footprint in order to reduce costs. On the other hand, the belief is strong among our interviewees that offices provide an amenity-rich environment that fosters communication, creativity, and collaboration that cannot easily be replicated in a workforce entirely ensconced in their homes.

History suggests that offices will remain the dominant location for most white-collar employment, but the pandemic has taught us that there is a definite new variation now in the mix. As an institutional equity investor commented, "There seems to be almost an optimal productivity situation where working in the

2. The Great American Move

A significant single-family-housing market trend emanating from the COVID-19 pandemic is "the Great American Move." People (and businesses) are moving in all sorts of ways—to different geographies, from denser cities to the suburbs, from an apartment to a home, and, for some, back "home" to live with family members. There is no better evidence of the Great American Move than the booming single-family-housing markets—especially in the more attainably priced areas of the United States. Some observers argue that large events, like a pandemic, do not create new trends but rather accelerate existing ones. That certainly seems to be the case with housing today. The "move" was occurring prior to the pandemic, already spurred by geographic, demographic, and consumer shifts in the United States.

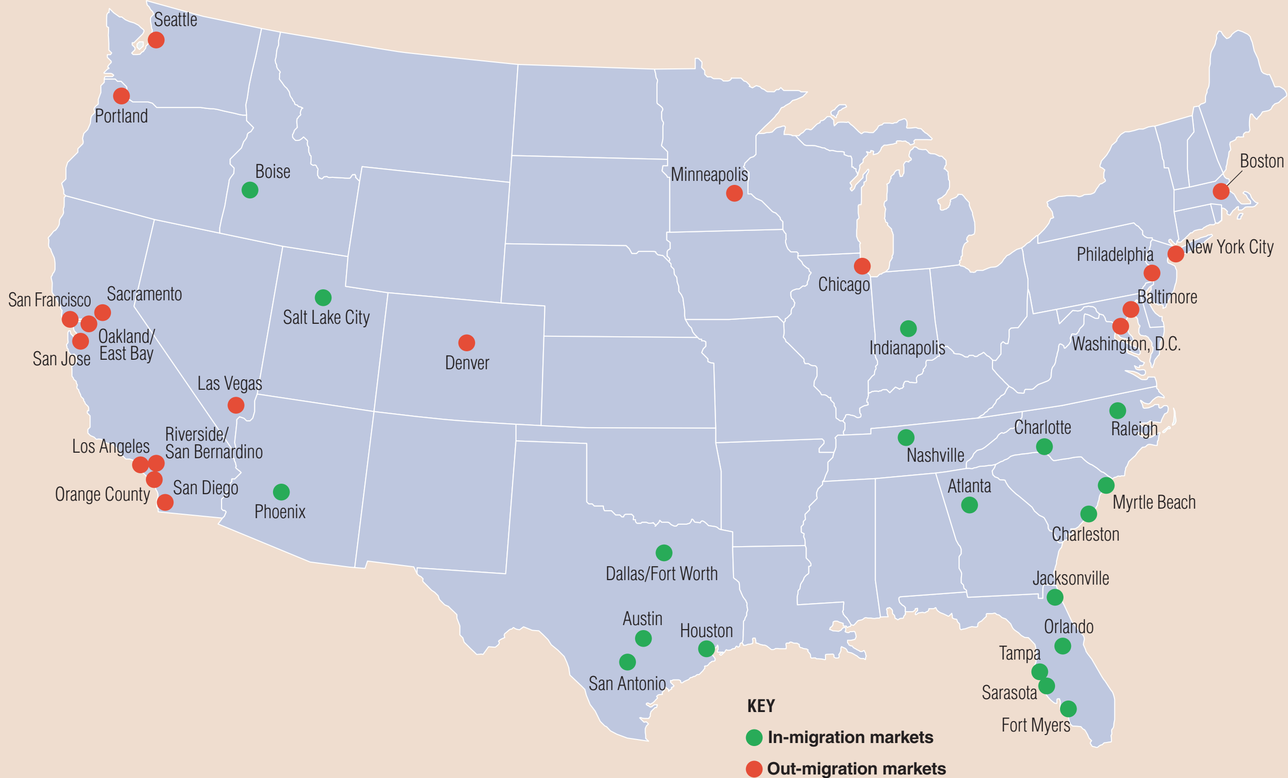
Geographic Shifts

Since the COVID-19 crisis began, the markets that offered a good combination of economic diversity and relative housing affordability, along with less exposure to industries affected by COVID-19 (such as leisure and hospitality), outperformed. Over the long term, COVID-19 fears will ease, but the other influencing factors will remain. Those regions of the country with the best job growth and the most attainably priced homes will prevail as destinations for homebuyers.

Despite the negative impact of COVID-19 on the economy, the housing market experienced a V-shaped recovery primarily due to historically low interest rates, the importance and value placed on "home" reinforced by the pandemic, and strong housing market conditions pre-COVID, which led to pent-up demand for homes. Some U.S. markets that are among the best performing in the United States in early 2020 (pre-pandemic), and likely to remain so as the nation recovers from the recession, fall into two categories:

- **Boom markets.** The Austin, Phoenix, Salt Lake City, and Tampa metro areas have less exposure to the industries most affected by COVID-19 and are also affordable mar-

Homebuyers on the Move: U-Haul Migration Patterns



Source: John Burns Real Estate Consulting analysis of pricing data pulled from uhaul.com.
Note: In-migration markets are those where it costs more to bring a U-Haul vehicle into that city than to take one out. The premium to bring in vehicles implies that more people are moving in than leaving.

kets with pro-growth governments. In September 2020 research by John Burns Real Estate Consulting (JBREC), these markets garnered "very strong" ratings—meaning high demand and rapid price appreciation.

- **New boomtowns.** Charlotte, Denver, Dallas, Nashville, Portland, and Seattle are six favorite boomtowns, attracting far more than their share of smart young workers. These markets are already starting to recover from massive job losses due to COVID, and JBREC rates most of these housing markets as "strong."

Another way to look at geographic shifts is to study U-Haul statistics as a proxy for in-migration. In-migration markets are those where the cost to bring a U-Haul into that city is higher than to take one out. In summer 2020, U-Haul premiums were high in the affordable West (Phoenix, Salt Lake City, Las Vegas, Boise, and Portland), all of which were experiencing—and continue to experience—a surge in California buyers, some of whom have been greenlighted to work from home permanently.

The affordable South also is benefiting. The Burns Housing Survey reported a 94 percent year-over-year increase in net sales in Florida in August 2020 (a typically slow month for home sales). Charlotte, Raleigh, and Atlanta also have benefited from in-migration.

Demographic Shifts

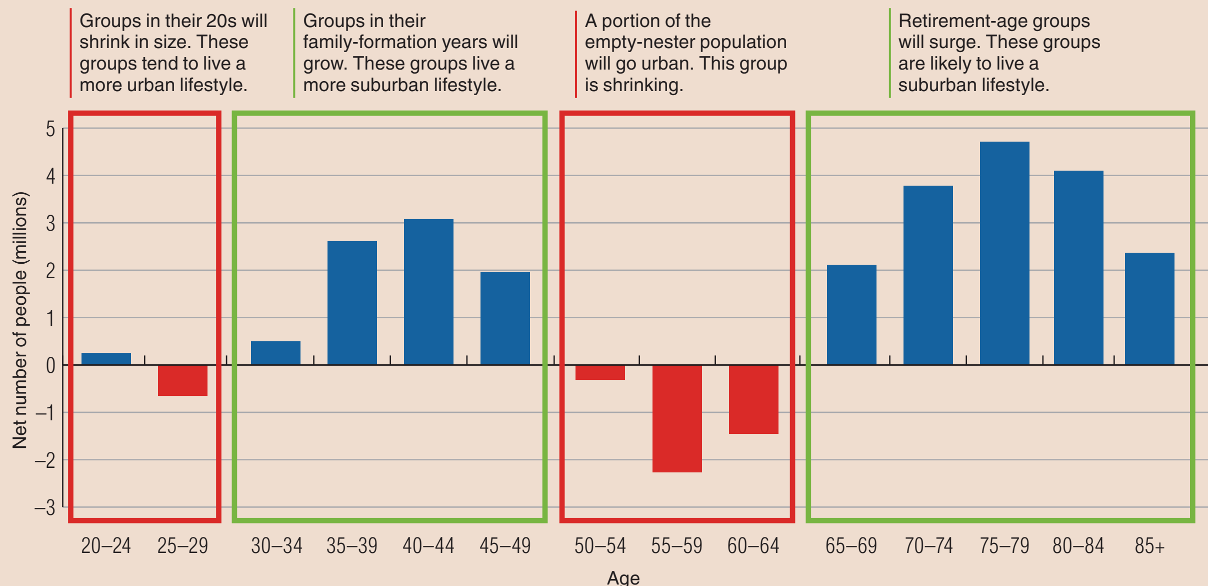
JBREC has been forecasting suburban growth—largely a function of the country's aging population—for years. When population growth in the United States between 2020 and 2030 is analyzed, the results indicate strong suburban demand, since young professionals and empty nesters will decline in numbers, and both groups have historically chosen urban living. Between 2020 and 2030:

- The population of young professionals (aged 20–29) will decline by 0.4 million.
- The population in family formation years (aged 30–49) will grow by 8.4 million.
- The empty nester population will shrink by 4.03 million.
- The retiree population will grow by 17.1 million.

The massive increase in people entering their family formation years indicates strong demand for the suburbs over the next decade:

- First-time buyers are most likely to be living in dense apartments that lack "social distancing" opportunities, they do not have a home to sell, and they are comfortable with new technology that includes viewing products and services

Change in Adult Population by Age, 2020–2030



Sources: John Burns Real Estate Consulting LLC; U.S. Census Bureau.

online. One in four couples in their mid-20s to mid-30s is dual income and college educated, allowing them to skip the true entry-level stage of homebuying and purchase a first home more akin to a move-up home, even if they are still carrying student debt.

- Young and growing families may be more motivated than ever to upgrade to a new home. This family segment will be a boon to the nearly 80 percent share of household growth that we expect will be captured by the suburbs (or surban™ markets) in the years to come, bringing with them a desire for more urban-like conveniences.

Homebuilders across the United States indicate strong demand from family homebuyers who:

- Have been wanting to buy for some time;
- Are cooped up in a living situation they do not like;
- Have little fear of losing their job soon; and
- Are more focused on low payments than on price appreciation.

Retiree buyers are often less inclined to purchase than other homebuying segments during a recession, and they initially paused as the nation moved toward "stay at home." As time has passed during the pandemic, however, and with the stock market performing well during the summer months of 2020, retiree buyers have demonstrated that they are willing to buy, even willing to pay more for inventory homes so they can move quickly. The trend has been the same for second-home buyers in places like the Coastal Carolinas and Naples, Florida.

Consumer Shifts

In April 2020, JBREC started tracking key consumer shifts prevalent prior to, but accelerated by, the COVID-19 crisis that will have an impact on housing demand going forward.

The first of these shifts is the emphasis on health and wellness. While healthy and sustainable living has been among the fastest-growing trends in homebuilding and community design in recent years, the current pandemic has moved that trend into high speed, with particular emphasis on the home. Demand will increase for more smart-home technology, more touchless controls on sinks, motion sensor lights, and voice commands. New homes have a clear advantage over resale homes in this space. In addition, seamless transitions into outdoor space, fresh air, open spaces, and oversized windows to bring in natural light are all in high demand.

Working from home and schooling from home will likely be additional key consumer shifts, since new homebuyers will seek quiet, private space with good access to technology when buying a new home. Living multigenerationally also will rise to the forefront of many homebuyer preferences as builders across the country report higher demand for homes with separate living areas and kitchens and private entrances. Multigenerational space is perfect for an aging parent or an adult child.

Geographic, demographic, and consumer shifts will continue to shape housing industry demand over the next decade. The pandemic has accelerated many of these trends and elevated the importance of "home" across the United States.

—John Burns Real Estate Consulting

office three or four days a week and then remotely one or two days a week is actually more productive than working in the office five days a week or being out of the office all five days of the week; we're discussing greater flexibility around working remotely." As companies seek the best solution for them and their workforce, the impact on the office sector will be closely watched.

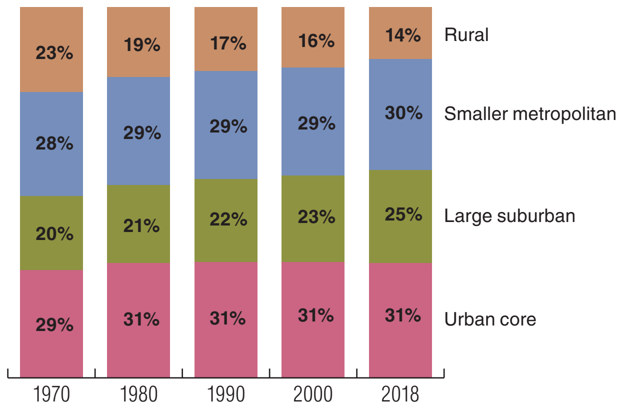
3. Reinventing Cities Post-COVID

- The decades-long renaissance of U.S. cities will likely slow over the next five to 10 years, as the response to COVID-19 tips the scales in favor of lower-density suburbs and larger and more affordable homes. Further, central cities could face relatively more severe COVID-related fiscal challenges than suburban areas.

- Cities have started to adapt to COVID-19 restrictions with creative solutions such as street dining and designating more public space for nonvehicular use. Building on decades of recognition of the value of parks and green space, and the need for lower-cost housing and quality schools, further innovation is both likely and necessary to provide these and other amenities that are often more widely available in suburbs.

- The trend of suburban locations offering urban amenities is familiar. What we may be looking at now is the trend of the

Exhibit 1-11 **Share of U.S. Population Living in Suburban Counties of Large Metro Areas**



Source: *Prior to COVID-19, Urban Core Counties in the U.S. Were Gaining Vitality on Key Measures*. Pew Research Center, Washington, D.C. July 29, 2020.

Notes: County categories are based on the National Center for Health Statistics' Urban-Rural Classification Scheme for Counties. A county's classification remains fixed over the decades. "Smaller metropolitan" refers to counties in metro areas with fewer than 1 million residents.

center city increasing suburban benefits while continuing to capitalize on its role as the center for finance, culture, and government.

America's urban renaissance of the past few decades has been transformative for cities large and small across the United States. Led by baby boomers initially but taken up full throttle by generation X and millennials, center-city neighborhoods and close-in suburbs have blossomed into attractive places to live and even raise families. Multiple factors supported the overall interest in living in such places—the shift to experiences over possessions, improved public transportation, the desire for a smaller environmental footprint, and falling crime rates, among others. This renaissance has played out differently across the country, depending on size and historical development patterns, but cities ranging from Columbus to Minneapolis to San Diego have benefited. Employers seized on this trend, and many companies moved from suburban campuses to center cities over the past decade. Cities responded to this interest by rezoning former industrial areas for mixed use, improving parks and green space, encouraging bike and scooter share programs, and implementing many other quality-of-life efforts.

Still, central-city population growth rates have been slowing since 2011, while suburban population growth rates have been steadier. The slowdown coincides with the leading edge of the millennial generation turning 30. The slowdown is not limited to faster-growing markets, or gateway cities. The slowdown is playing out in both Snow Belt and Sun Belt states, although the overall growth rates are much smaller in Snow Belt markets.

Center-city growth rates are likely to continue to stay low as COVID-19 accelerates the dynamics discussed in two previous emerging trends—"Are We Home Yet?" and "The Great American Move." Together, they describe the ongoing shift to suburbs and smaller cities. This continued shift is being facilitated by the success of the work-from-home experiment. The ability to work from home, even part-time, is providing the opportunity for employees to live further away from city-based jobs while avoiding or reducing the cost and stress of long commutes. Millennials will continue to form the bulk of this demographic shift to suburbs, but they are likely to be joined by other generations. Baby boomers and generation X workers also are seeing the benefits of more flexible work arrangements. This is accelerating the decision to move to planned retirement destinations earlier than expected.

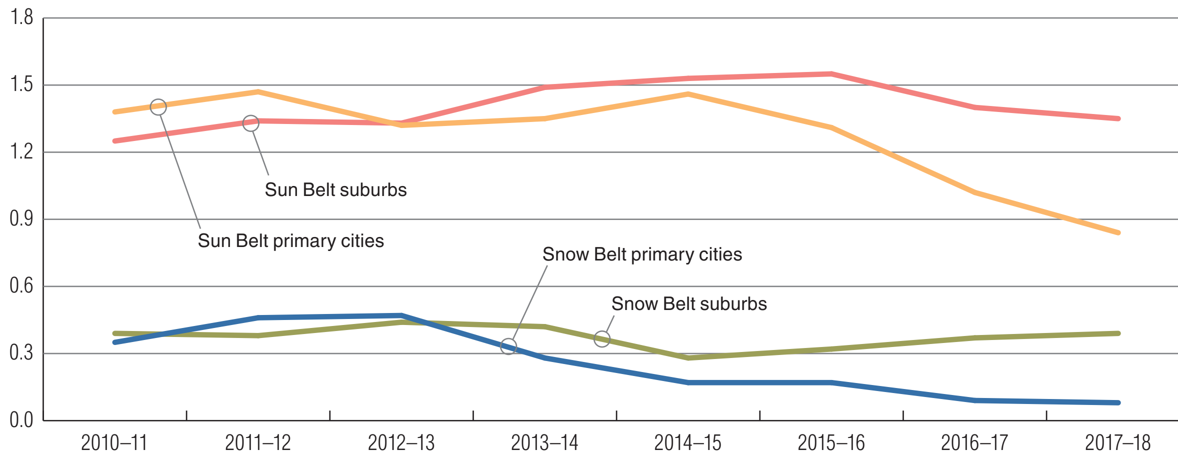
Generation Z is expected to follow previous generations, with a large segment of that cohort gravitating to urban areas for the same reasons—the vitality and excitement of the city, greener lifestyles (e.g., fewer cars), and interesting opportunities—even if WFH is a greater option. City living provides a wide range of cool commute options (walk, scooter, bike, transit, rideshare) even when that commute is infrequent. But that cohort is smaller at 67 million than the 72 million millennials, so real estate demand in center cities may slow. Generation Z may have different requirements for where and what they want in a residence. Also, WFH could influence the amenities required (think: home office). Transitioning from one generation to another will likely not be a wholesale swap.

What Can Cities Do?

While demographics and COVID-generated new habits may tilt in favor of suburban markets over the next decade, cities are not likely to stand still as their tax bases erode. Many cities (and some suburbs) have responded to COVID-based indoor restrictions on restaurants by allocating sidewalk and even street space for outdoor dining. With less traffic, cities have expanded or created new bike and pedestrian ways. Many have been very well used since biking and walking are current substitutes for public transit in some cases. New York City recently made permanent the program that allows restaurants to use streets, sidewalks, and public spaces. Other locales are likely to follow suit for dining and other open space–oriented programs.

COVID-19 will provide cities an incentive to reimagine virtually all their public spaces. The New York–based regional head of a major real estate services firm posited that, "[We] need to rethink

Exhibit 1-12 **Primary City versus Suburb Growth—Large Metro Areas in Snow and Sun Belts**



Source: William H. Frey, Brookings Metropolitan Policy Program.

Note: Primary cities are consistent with a Brookings typology that includes the metropolitan area's largest city and up to two additional cities with populations exceeding 100,000.

the public realm—streets, sidewalks, open space. Residential buildings should have loading areas and not use sidewalks. [We should] rethink bike storage on streets/sidewalks. Sidewalks are burdened and too small. [We have to] rethink and rezone all retail space—much of it is no longer relevant."

Cities can be creative in providing new and better open space. The head of a national landscape architecture firm commented, "All the money that's going to be spent in either re-creating or rebuilding bridges and other infrastructure will also include open-space enhancements. So [instead of] just putting back the bridge, [cities can] put back a bridge with an open space and maybe a stair and an overlook. Infrastructure that's original from the 1950s and 1960s is going to be completely reimagined now. It's infrastructure with landscape and open space." A great example is the Los Angeles River that winds through that city. "The L.A. River is the quintessential infrastructure of a single-purpose project to convey water. Now it's going to have multiple purposes: nature, people, health and wellness, and safety of moving stormwater through the city. Infrastructure just can't be single purpose," noted the same design leader.

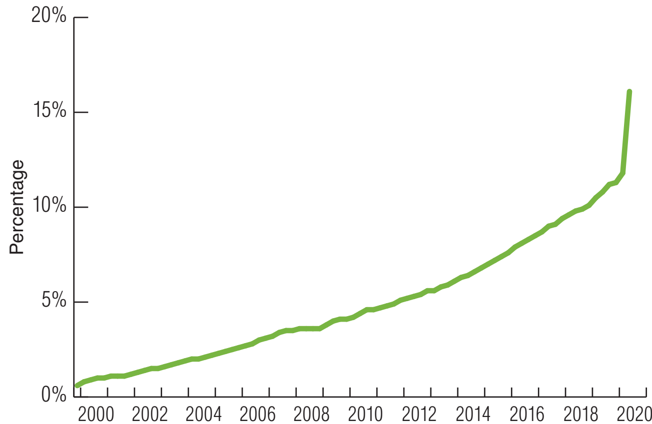
While suburbs may outshine center cities for the next decade, few are predicting the outright demise of center cities. Growth in urban areas will be slower than over the past decade, and possibly flat, as demographics and COVID-influenced choices favor the suburbs. At the same time, gateway markets such as Boston, Los Angeles, New York City, San Francisco, and Washington, D.C., will remain the financial, cultural, technology, and government capitals of the United States and even the world. Smaller and midsized downtowns such as Des Moines, Knoxville, Greenville, and Portland, Maine, will continue to develop into lively, diverse, and affordable destinations. Cities will creatively address the public realm and continue to improve livability, spurred on in part by the very factors that are particular to suburban life. The trend of suburban locations offering urban amenities is familiar. What we may be looking at now is the trend of the center city increasing more suburban benefits.

4. Accelerating the Retail Transformation

- The retail property sector must right-size and reinvent. Retailers and shopping centers were already struggling before COVID-19, and now conditions threaten to worsen materially as the pandemic and its economic fallout accelerate the pace and magnitude of preexisting issues.
- Nonetheless, people still purchase the vast majority of their retail products and services in stores, and some current setbacks will prove to be only temporary once it is safe to shop, socialize, and recreate.
- The industry, however, faces a painful shakeout as millions of small businesses and familiar national brands shutter their doors, shrinking the ranks of tenants for shopping centers and driving down occupancy and rents.

"Stores still matter." That is the conclusion of the head of retail research for a global brokerage firm, whose words succinctly capture the views of industry leaders. Even with the many challenges that COVID-19 poses for consumers and retailers, we

Exhibit 1-13 **E-Commerce Retail Sales as a Percentage of Total Sales**



Source: U.S. Census Bureau.

still purchase the overwhelming share of our retail goods and services in stores, and that share is bound to rise again once it is safe for people to resume their normal routines. The vast majority of stores and shopping centers will not only survive but thrive—after some painful times and tough adjustments. "We still need plenty of space," says a REIT analyst.

Still, profound changes are in the offing, with countless stores closing for good and landlords grappling with how to preserve viable shopping centers or resurrect dying ones. The next few years promise to be "retail's great transition period," as one asset manager calls it. Many of the issues are not new: an oversupply of retail space, much of it either obsolete or ill-conceived; a profusion of tired retail brands; and weak consumer demand due to anemic income growth and spending patterns shifting away from the types of products and services sold in stores. All this, plus e-commerce has been capturing an ever-greater share of retail spending. With all these challenges, it is no wonder that retail ranked last in investment prospects among the six major commercial property types for the fourth consecutive year.

Thus, despite tailwinds from a relatively strong economy over the last several years, retailers have been failing or otherwise closing stores at rates normally seen only during recessions. Shopping center owners have been forced to demolish or convert vacant space to nonretail uses. All these issues predate the pandemic, but the disease and the resulting economic fallout have magnified these problems. As the CEO of a tenant-focused retail advisory firm noted, COVID-19 "is an accelerator for things that were in place previously"—a frequent refrain among our interviewees.

The physical retail sector certainly is going to be smaller in the future. As the research leader for a leading shopping center REIT says: "We are seeing acceleration of the right-sizing of the retail industry, particularly in the mall space." Department stores will endure perhaps the greatest carnage. Since peaking in 2000, department store sales have declined 40 percent while sales at the large discounters (i.e., warehouse clubs and superstores) have more than tripled. Virtually every department store chain is struggling and shuttering stores, particularly the traditional midpriced brands that have anchored most malls in the United States. Also floundering are the apparel and accessory shops that have made up the biggest share of malls' in-line shops and rent rolls. With their markets squeezed by discounters, fast fashion, and online retailers, these mall pillars are rapidly closing stores or going out of business altogether.

COVID-19 is only accelerating store closures. The pandemic has been especially hard on restaurants and entertainment, ironically perhaps the best-performing industry segment in recent years. Indeed, most retail businesses that depend on social interaction have seen significant declines in revenue due to either government restrictions on how they operate or consumer reluctance to patronize physical stores in order to stay safe—or just to save money during uncertain times.

But the falloff in sales extends much further than just food and entertainment. Most retail lines—outside of grocers, drugstores, and home improvement—have experienced significant sales erosion to e-commerce. Wary of contracting the disease, or prevented from shopping in person due to mobility restrictions or forced store closures, consumers have had to do more of their shopping online for more types of goods than before the pandemic. Much of the shift will prove temporary and will revert back to physical retailers—especially restaurants and entertainment—once shoppers feel comfortable venturing out to stores and cafés. But the pendulum is unlikely to swing all the way back to pre-pandemic levels now that so many more consumers have been exposed to the ease of shopping online.

Moreover, retail sales are almost sure to fall again this autumn with the expiration of various federal income support programs that had been propping up consumer spending. Joblessness is still at historic levels, and millions of gig workers have experienced sharp income losses. Though overall retail sales this summer have returned to their pre-pandemic levels, that spending cannot be sustained absent additional government interventions. In any case, sales in physical stores are generally still well below prior levels.

Innumerable retailers will not survive. Outside of malls and power centers, the retail sector is dominated by "mom and pop" stores, typically thinly capitalized small businesses that cannot survive extended interruptions in revenue. Most were unable to tap the federal government's pandemic assistance programs, leaving them with insufficient resources to pay their employees and venders. With no reasonable prospects that business will return to prior levels anytime soon, a great number of the "temporary" closures ultimately will become permanent.

Landlords will be left with vast amounts of vacant space. The ultimate business failure rate for small businesses will not be known for some time but could exceed 20 percent. Along with announced major chain closures and bankruptcies, that could amount to another billion square feet of space coming back to landlords—coming on top of several hundred million square feet emptied already.

The pain will not be spread evenly. In the increasingly "hot or not" retail landscape, sales were never better for the strongest brands, and rents and occupancy levels never higher for the best centers—at least until the pandemic. The pandemic recession will force rent resets and raise vacancies pretty much everywhere, but the top brands will take advantage of the lower rents to upgrade their locations, while the premier malls will leverage any empty space to improve their tenant rosters.

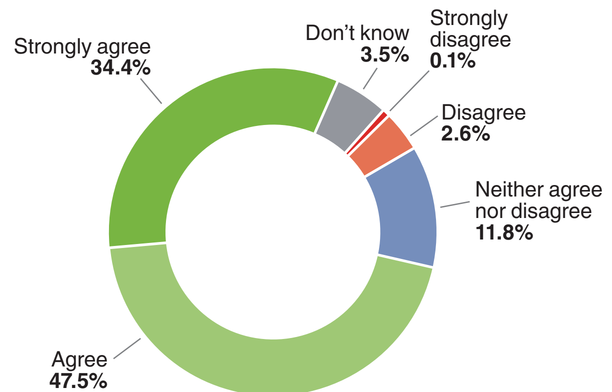
Meanwhile, underperforming centers will need to adapt, converting some space to complementary uses to create more dynamic centers. Lastly, the most obsolete centers will finally need to retire dreams of recovery and instead find an entirely new life for the site. For many dead malls, conversion to a distribution center to service remaining physical and online retailers may make sense, though some communities will resist the loss of their community gathering spot, the additional truck traffic, and the loss of critical sales tax revenue associated with these conversions; onerous lease restrictions can further limit conversion opportunities if there are still operating stores.

The old adage that "change brings opportunity" has never been more apt.

5. From Just-in-Time to Just-in-Case

- The structural factors propelling growth in the logistics real estate industry have accelerated post-COVID.
- With an increased emphasis on risk management and supply chain resilience, supply chain strategies are shifting from "just-in-time" to "just-in-case."

Exhibit 1-14 **COVID-19 Will Hasten the Need for Increased Focus on Supply Chain Resilience**

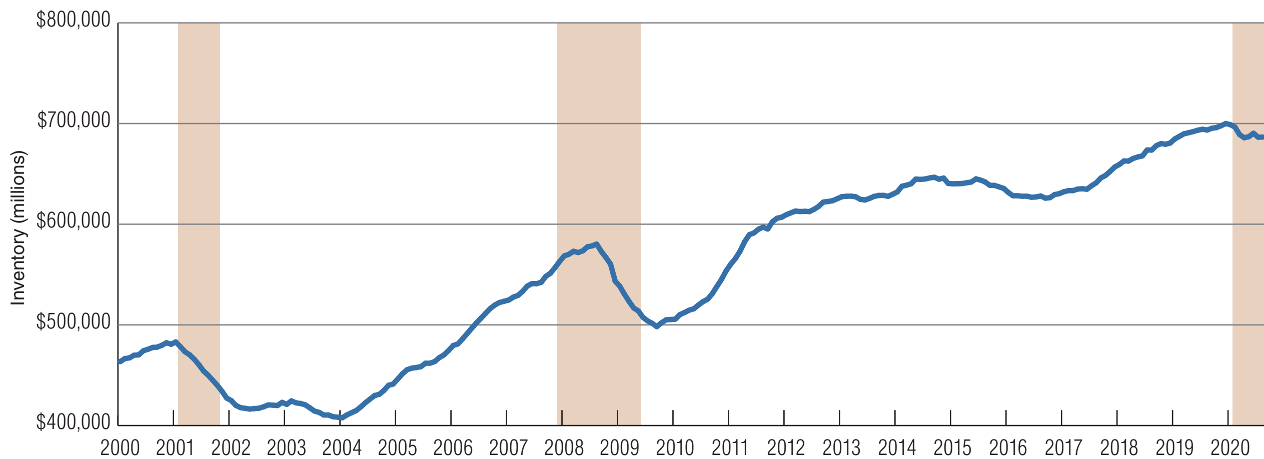


Source: *Emerging Trends in Real Estate 2021* survey.

In recent years, relative and absolute return outperformance of logistics real estate has been underpinned by multiple structural drivers. COVID-19 accelerated these structural drivers, which include e-commerce, speed-to-consumer supply chain strategies, and logistics users' adoption of high-throughput modern logistics facilities. The pandemic emphasized the role of supply chains as a competitive advantage. Retailers that were not prepared lost sales revenue opportunities. Prevalent stock-outs highlighted the Achilles' heel of lean supply chain theory (or "just-in-time" strategies). Risk management has come to the forefront of supply chain strategies, with an emphasis on preparedness. This preparedness includes holding higher inventory, diversifying sales channels, and having optionality in production nodes—engendering "just-in-case" strategies.

Logistics users' adoption of just-in-case strategies seems poised to accelerate beyond COVID-19. Aside from carrying higher inventory levels to reduce the impact of supply chain disruptions, niche opportunities to nearshore operations in certain sectors are increasingly present along the Mexican border. The re-shoring of operations—returning production away from emerging markets to domestic markets—is in many instances a cost-prohibitive challenge without government assistance. Production and upstream supply chain operations of most consumer-oriented goods will likely remain in Asia, due to its proximity to the largest consumer market in the world, with 2 billion middle-class consumers in the region, and still growing. At the same time, labor cost differentials between Asia and North America/Europe remain wide.

Exhibit 1-15 **Total Manufacturer Inventories**



Source: U.S. Census Bureau.

Another path to supply chain resilience, multinational corporations have begun to establish new regional facilities closer to end consumers in the last five years. This model balances the most attractive features of just-in-time and just-in-case logistics. Regionalizing production accommodates speedy delivery of customized, made-to-order goods favored by just-in-time logistics. Regionalizing production can also reduce risk. Businesses in high-technology sectors (e.g., aerospace, industrial goods, medical, electronics) may follow the path established by automotive companies over the last 20 years by establishing three quasi-independent platforms (intra-USMCA [United States, Mexico, and Canada], Asia, and Europe) to serve consumers within each region.

New and accelerated consumer growth could follow nearshoring opportunities. Locations will (still) be of utmost importance: near or en route to well-established consumer bases, with access to reliable and well-developed infrastructure, and in areas with ample skilled labor and strong governance.

6. Location, Location, Safety

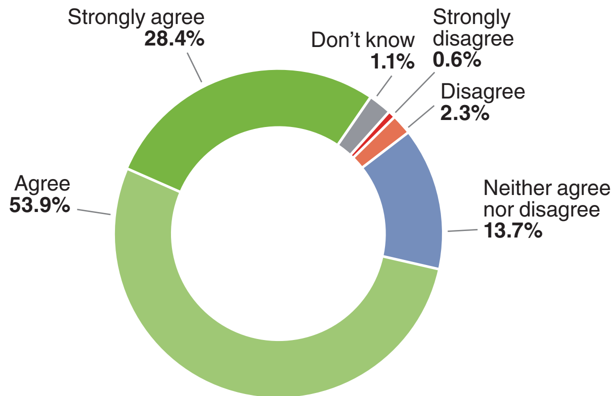
- According to current thinking, COVID-19 can be transmitted much more easily in indoor spaces than in outdoor spaces.
- Real estate is, by definition, an indoor space—offices, stores, restaurants, hotels, and entertainment venues are mainly enclosed with conditioned air. Building owners will be called on to reduce the likelihood of indoor transmission through redesigned spaces, cleaner surfaces, more effective air filtration, lower density, and other techniques.
- Property technology, or proptech, will take the lead in managing indoor safety and in informing users and customers about ongoing safety procedures and status.

Safety in buildings, as it relates to health, is likely to become a must-have and critical differentiator in the wake of COVID-19. Making substantive health safety changes may be the first challenge, requiring both upfront capital costs and ongoing operating costs. Convincing companies, workers, customers, and guests that office buildings, retail stores, restaurants, and other public-use facilities are safe is another challenge—a tall order, but one that the real estate industry must solve.

As of mid-October 2020, commercial real estate in the United States has largely reopened for business, although some states have barred some uses and/or imposed restrictions such as limited capacity and/or mask use. A few states, such as California, have imposed regional restrictions based on COVID-19 prevalence.

Even though office buildings, retail establishments, and restaurants have reopened, it has not meant that employees, shoppers, and diners have returned at a pace even close to pre-COVID levels. Employers have been hesitant to require workers to come back to the office if they do not feel that they will be safe, particularly if work from home is still a viable option. The Downtown DC Business Improvement District reported that 95 percent of the downtown's 167,000 workers were working from home this summer, leaving only 8,800 workers reporting to their respective offices. Safety concerns are also keeping shoppers and diners from returning in full force to stores and restaurants.

Exhibit 1-16 **Health and Well-Being Will Become More Important Factors across All Sectors of Real Estate**



Source: *Emerging Trends in Real Estate 2021* survey.

OpenTable, a San Francisco–based online restaurant-reservation service company, reported that about 80 percent of U.S. restaurants were open as of the end of September 2020, but for those that are operating, seated diners were down 41 percent from a year ago for the entire month. While store foot traffic counts are increasing, many consumers are still using e-commerce, delivery, and takeout options.

Feeling safe is critical to getting traffic and occupancy levels back to where they were before March 2020. This is even more important for specialized uses such as gyms, movie theaters, and live-event venues—not to mention the hospitality industry's dependence on people feeling comfortable traveling. The development of a proven and safe vaccine will certainly be a significant step in real estate use.

While the need to meet new higher standards of cleanliness and safety for all types of public-access structures, as well as transit, may seem like something that is necessary only before a vaccine is identified, an increased interest in preventing the spread of future viruses—including, but not limited to, the seasonal flu—is likely to be on the minds of the public in the future. A university real estate educational professional noted that "[COVID-19] will lead to improved public health of real estate, e.g., cleaner buildings, but there also needs to be an appropriate information response. Proptech can be that vehicle to provide more info on building health."

The increased focus on health safety is expected to lead to new services and technologies that provide cleaner buildings/indoor air, sensors, touchless entry, and so on. A developer with an office building underway in the Pacific Northwest has reconfigured it to "have basically touchless everything—lobby doors, elevators, and bathroom doors. In some of these areas, we are having to create the technology, including a mobile app that opens all doors. And we're using 100 percent outside air with ultraviolet treatment."

New buildings with advanced HVAC systems and touchless technology will likely be at an advantage over older properties. (A possible exception: older buildings with operable windows.) More fresh air in buildings may be healthier but could create conflicts with environmental goals, particularly the goal of less energy consumption. A national mixed-use developer noted, "Some of the [health improvements to HVAC systems] are at odds with environmental sustainability standards." Building owners in New York City expressed concern about this as they begin to implement changes to comply with Local Law 97, a recently passed green building measure.

Technology and other new approaches may also be used to alter behavior. Smartphone apps could track and remind employees and customers of the need for social distancing. A development company executive explained how his firm has hired a medical doctor with infectious disease experience to spearhead office remobilization plans. Based on the doctor's input, the company will assist tenants in creating and adhering to health protocols, addressing everything from foot traffic to elevator use to the number and proper location of sanitizing stations.

Prior to COVID-19, proptech companies developed numerous tools to improve the leasing process. COVID-19 has accelerated this trend. A major apartment landlord has reported, "The pandemic changed how people lease apartments. Online tours and processes are now preferable, and while some reversion to in-person tours may occur, we believe that online interaction will be acceptable in most cases. This will open the door for creating leasing hubs that contain collections of nearby property, enabling greater efficiency. Reluctance to adopt technology is a key challenge, and COVID has been an opportunity to change that."

Improvements in health safety will often require both new investments by landlords and higher operating costs. The need for providing health safety in the built environment has happened in such an accelerated time frame that the market is still exploring what will be needed and what it will ultimately cost. Initial indications are that the upfront investments and ongoing operating costs will not pose a major burden, although older buildings may face more challenges. A developer noted that for a building underway, "Our estimate as to what that's going to cost us is somewhere around 1 to 2 percent of our total develop-

ment budget. So, it's not outrageously high, and if it can come in for somewhere in that range, it's worth it." Owners, landlords, and tenants will need to weigh what protocols they will need to undertake against the ultimate value proposition of having a space that is competitive in the market.

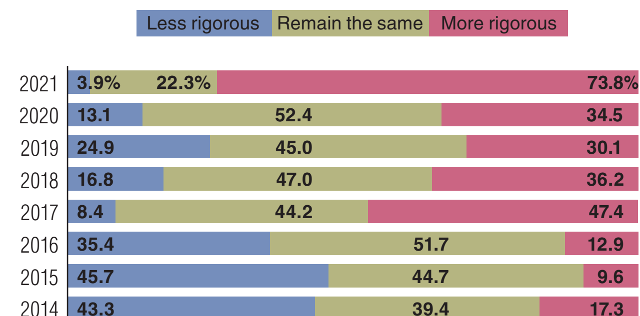
All in all, a greater emphasis on safety and wellness will change the way that buildings are designed and operated. "Smart building owners are going to want to say our building has the cleanest air quality," observed the CEO of a real estate data company. In the end, the reduced transmission of all diseases—not just COVID-19 and subsequent coronaviruses—will be well worth the investment.

7. The Economy Stumbles (and the Real Estate Sector Hangs On)

- COVID-19 caused a historic decline in gross domestic product (GDP) and jobs in the second quarter of 2020 due to an equally historic rolling government-ordered shutdown of all non-essential business activity and stay-at-home orders
- The federal government stepped in to prevent a cataclysmic economic decline through trillions of dollars' worth of business, employee, and consumer support plus unprecedented fiscal actions.
- Business restrictions were gradually lifted on a state-by-state basis throughout the summer, and the economy is responding. About half of the 22 million lost jobs have been restored as of August 2020. It will likely be 2022 before U.S. GDP gets back to its 2019 cyclical peak.
- After effectively seizing up in March and April 2020, U.S. real estate capital markets started functioning in early to mid-summer, albeit at a slow pace.
- There are numerous concerns about the economy post-COVID including long-term unemployment in some sectors. Total U.S. public debt has exceeded annual GDP for the first time since World War II, and unintended consequences such as higher inflation and slower economic growth could arise.
- The range of potential economic outcomes is unusually wide given the unknown course of the pandemic and potential vaccines and treatments.

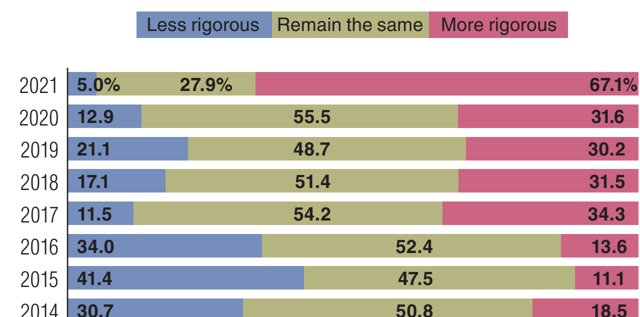
COVID-19 hit the U.S. economy fast and hard in early 2020. In a brief five-week period spanning March and April, the United States lost more than the 22.4 million jobs added in the 11 years

Exhibit 1-17 **Debt Underwriting Standards Forecast for the United States**



Source: *Emerging Trends in Real Estate* surveys.
Note: Based on U.S. respondents only.

Exhibit 1-18 **Equity Underwriting Standards Forecast for the United States**

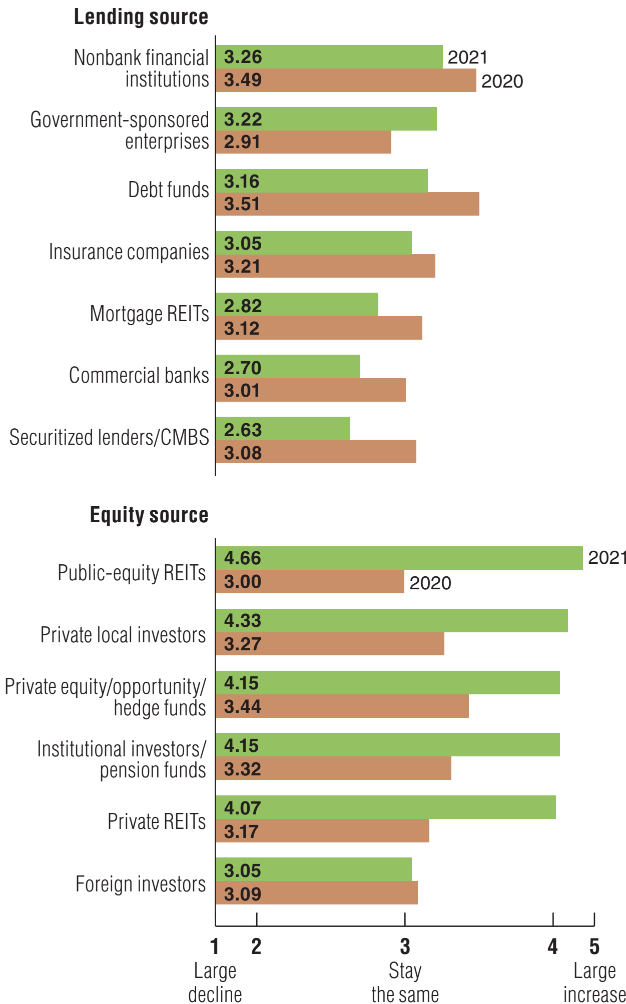


Source: *Emerging Trends in Real Estate* surveys.
Note: Based on U.S. respondents only.

since the Great Recession. COVID-19 also caused the biggest quarterly drop in GDP in U.S. history in the second quarter—32.9 percent on an annualized basis—led by a 24 percent decline in consumer spending. With widespread shutdowns in travel and non-essential business activity, the United States joined the rest of the world in pulling out all the stops to "flatten the curve" of infection.

Given the bleak economic statistics coming out almost daily at that time, Washington responded with unprecedented spending packages, monetary stimuli, and near-zero interest rates. The Coronavirus Aid, Relief, and Economic Security (CARES) Act provided over $2 trillion for workers, businesses, and local governments. The bill gave an additional $600 per week to those receiving state unemployment benefits and provided loans to businesses that kept employees on the payroll. The Federal Reserve allocated up to $2.3 trillion to support financial

Exhibit 1-19 **Availability of Capital for Real Estate, 2021 versus 2020**

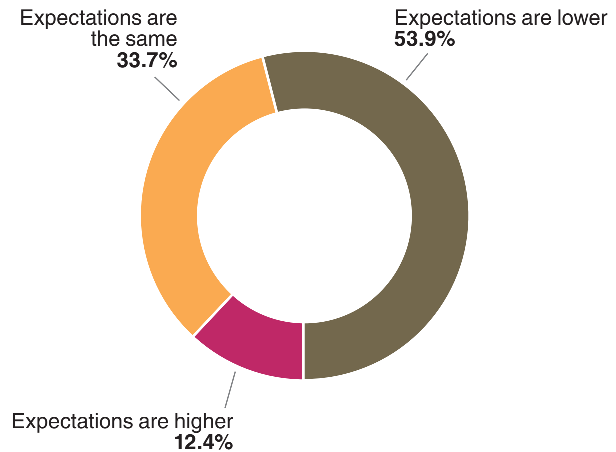


Source: *Emerging Trends in Real Estate* surveys.

Note: Based on U.S. respondents only.

markets, and state and local governments through direct lending, securities purchases, and numerous other actions. A REIT CEO commented, "The Fed has done a phenomenal job of preventing damage. After a very brief credit freeze in March, the Fed has continued to pump massive liquidity into the system." A number of the economic supports put in place by the CARES Act have now expired. While the economy has shown signs of recovery, there is concern that due to the unabated spread of the virus, another stimulus package is needed. Congress and the White House have been negotiating an additional package, but as of the writing of this report no agreement has been reached.

Exhibit 1-20 **How Profitability Outlook Has Changed, 2021 versus 2020**



Source: *Emerging Trends in Real Estate 2021* survey.

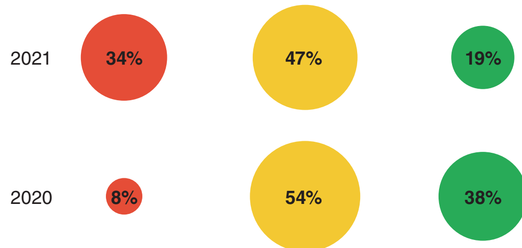
Washington's intervention tactics are generally working well through late summer 2020. Nonfarm employment has risen every month since bottoming in April and is expected to continue on an upward trajectory, barring a rise in infections that leads to new lockdowns and restrictions.

- The latest Congressional Budget Office (CBO) forecast (July) of real GDP for the third quarter of 2020 is 17.0 percent, one of the strongest quarters on record. The CBO's forecast for calendar year 2020 is –5.6 percent, rebounding to 4.9 percent in 2021.
- The U.S. unemployment rate fell to 7.9 percent in September after peaking at 13.0 percent in May. It had been at a cyclical low of 3.8 percent in February.
- IHS Markit projects that overall U.S. jobs will fall by 5.7 percent in 2020 but climb back by 5.2 percent in 2021. Total employment will not reach the pre-COVID peak until 2022. Average job growth from 2020 to 2025 is pegged at 2.2 percent, slightly ahead of the 2010–2019 pace of 2.0 percent.

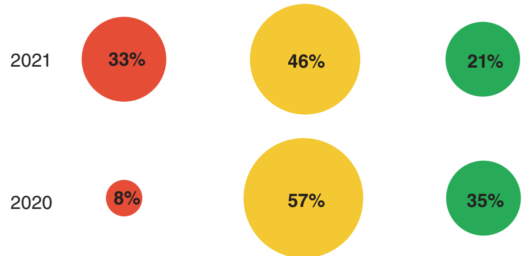
The big drop in GDP in 2020 will likely lead to a slow-growth decade, as discussed in last year's *Emerging Trends*. The CBO forecasts U.S. GDP to average 1.7 percent from 2020 to 2030, down from the 1.9 percent 10-year forecast of a year ago. The Fed's announcement of low base rates through 2023 will also keep real estate borrowing rates low. A real estate executive at a major bank noted, "I don't personally think that there's a high

Exhibit 1-21 **Real Estate Capital Market Balance Forecast, 2021 versus 2020**

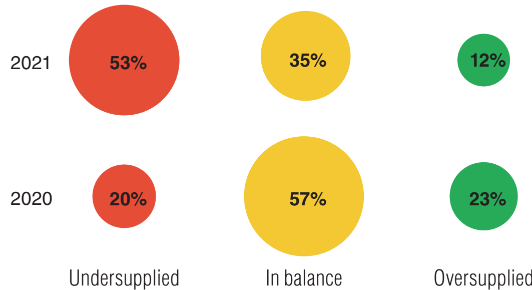
Debt capital for acquisitions



Debt capital for refinancing



Debt capital for development/redevelopment



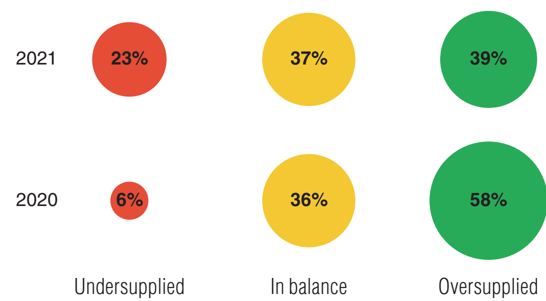
Source: *Emerging Trends in Real Estate* surveys.
Note: Based on U.S. respondents only.

probability of the 10-year ramping up to 2 percent. I never thought I'd say ramping up to 2 percent—that's the world we're in."

After a steep sell-off in the early days of the pandemic, U.S. stock markets (the S&P 500 fell more than 30 percent following its late February peak) and the major indexes are close to pre-COVID highs as of mid-September. The rebound in U.S. stock markets further enforces the sense that the recovery is uneven, with many workers in industries such as airlines and hospitality looking at long periods of unemployment. On the positive side, tech is in great demand, with increasing needs for e-retail and communication infrastructure. "There will be a continued divide between Main Street and Wall Street; financial markets will continue to function/be fine because the Fed is willing to use any tools at its disposal," according to a private-equity investor.

Exhibit 1-22 **Real Estate Capital Market Balance Forecast, 2021 versus 2020**

Equity capital for investing



Source: *Emerging Trends in Real Estate* surveys.
Note: Based on U.S. respondents only.

After an understandable pause immediately following COVID-related shutdowns and market volatility in March and April, real estate capital markets returned to some level of normalcy by the middle of summer. "Major money banks are not in the lending business," noted a real estate private-equity pro, but other lenders, such as regional banks, took advantage of very low interest rates and resumed transactions. "Financing is doable, but tight," according to an opportunity fund executive. Real estate transactions in the United States have slowed by 36 percent year to date through August 2020 (compared with same period in 2019), according to Real Capital Analytics. The clear majority of survey respondents expects debt for acquisitions and refinancing to be in balance or oversupplied in 2021, while 53 percent think that development/redevelopment debt will be undersupplied next year.

There are big questions about future real estate prices, with potential differences by property type and market. Sectors such as industrial and multifamily that have been less disrupted by the recession may see little impact on asset prices. The retail sector, where loan delinquencies have spiked, could see the biggest price corrections. A neighborhood shopping center owner said, "We marked down the value of our properties in the first quarter by 15 percent. We didn't think it made sense to wait." It is unclear whether the large amounts of dry powder raised over the past few years plus new funds will find the deep bargains they seek, although a West Coast–based developer/manager thinks that "there are a lot of distressed opportunities right now, especially for hotels and retail."

Public real estate securities point to the widely varying impacts of COVID-19 on different property types. Overall, REITs fell more than the tech-dominated broader equity market and more than private real estate (albeit with limited price visibility). As shown below, there have been clear winners (industrial, data centers, single-family homes) and losers (lodging, retail) through August. The range of returns by sector is far greater than normally seen over an eight-month period, which speaks to the power of COVID-19 to rearrange the economic landscape.

There are many risks to the current outlook—both for the economy and the real estate sector. One private-equity investor noted that "the range of outcomes has never been wider." Government regulators, economic forecasters, and capital markets all assume an effective vaccine and a return to normal in 2021. "[We] need a vaccine by 1Q21 or it will be a much different world. Real estate can't last that long," commented an investment banker/proptech investor. While most *Emerging Trends* participants believe that the economy and real estate market will likely recover from the coronavirus over the next year, the world is facing a challenge unlike any faced over the past century.

Even with a vaccine, many are concerned about the long-term impact of the very high debt-to-GDP ratio—the U.S. aggregate debt level has surpassed annual GDP for the first time since World War II. Both higher inflation and slower long-term growth were cited as credible risks.

The failure to rein in COVID-19 over the next year could lead to another downturn, possibly a long-lasting one. The Great Depression created a large group of unemployed workers that persisted for over a decade. Real estate income and values could suffer greatly in that scenario.

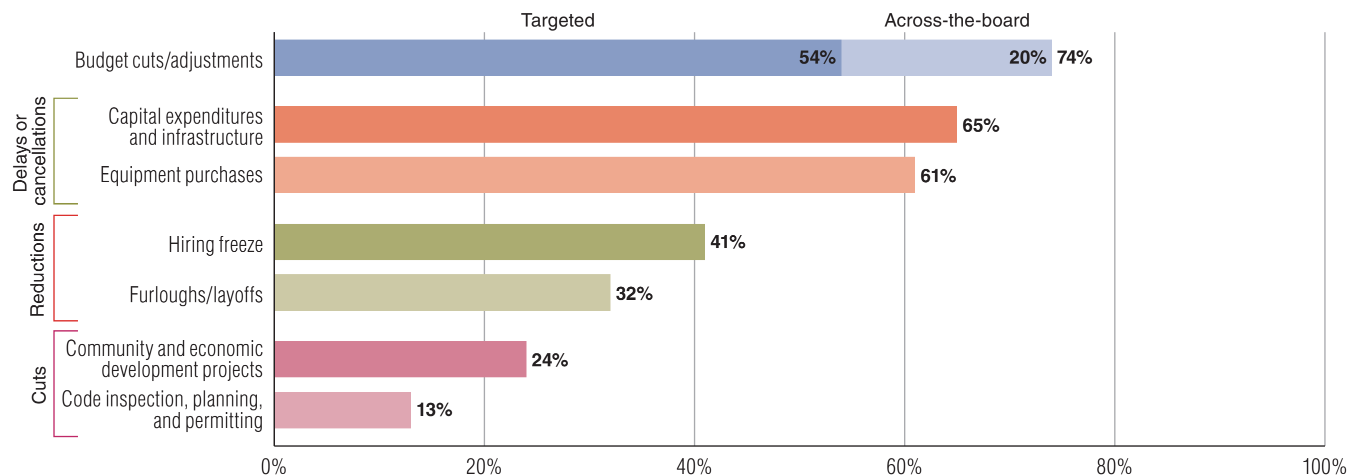
The pandemic-induced recession may, in the aggregate, be relatively short-lived. Economic and employment growth is positive, but that may not be the full story. After the economy works through the initial pain of this recession, the current, and possibly the long-term, implications are likely to be uneven across industries, metro areas, and property sectors. The economy may well settle into moderate year-to-year growth over the rest of the decade, but the real estate market will find itself looking at a growing number of uncertainties beginning in 2021.

8. The Great Fiscal Challenge

- COVID-19 has greatly reduced state and local government tax revenues, while adding new costs related to health and safety.
- Absent a major relief package from Washington, governments will be forced to raise taxes and/or reduce services, infrastructure, and employment. Both actions have a direct and negative impact on real estate.
- Cities large and small in all parts of the United States will face fiscal challenges for years to come. The real estate

Exhibit 1-23 **COVID-19's Effect on U.S. Municipal Budgets**

Municipalities across the United States and Puerto Rico say that they will have to take these actions:



Source: National League of Cities.

Note: This graph is based on data from a survey conducted June 8–16, 2020, by the National League of Cities. A total of 1,117 cities, towns, and villages from all 50 states, the District of Columbia, and Puerto Rico provided information.

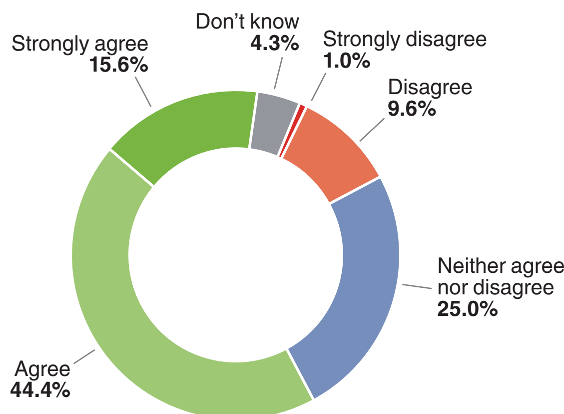
industry has an opportunity for and a vested interest in proactively and creatively engaging with local communities to provide needed services and infrastructure.

COVID-related shutdowns and restrictions have wreaked havoc on state and local finances. Fiscal revenue from travel, leisure, and tourism (hotel, restaurant, retail, rental cars) has declined precipitously along with income tax revenue in many states and cities. The pandemic is on pace to hit cities' finances as hard as or harder than the Great Recession, per the National League of Cities (NLC). Almost all cities are required to balance their budgets, and at this rate they will have no choice but to cut, delay, or cancel projects, programs, and purchases, as well as reduce staffing.

The real estate community is watching this trend with trepidation. "This is an area of huge concern. Lower tax collections combined with unfunded pensions, higher effective tax, and loss of wealthy taxpayers will put a lot of strain on cities," commented a banker from the U.S. Northeast. Long-term revenue declines will affect all government services but could be particularly impactful on infrastructure investments, a critical need that *Emerging Trends* has highlighted for many years. As of August 2020, 65 percent of cities were considering delaying or canceling infrastructure projects due to COVID-19.

There has been some help from Washington, but it has been uneven and generally insufficient. According to the NLC, "[T]he $2 trillion CARES Act promised local government funding, [but] only 36 cities of more than 19,000 nationally [met the] population requirement of 500,000 or more residents. In many states, no

Exhibit 1-24 **A City Leadership's Response to COVID-19 Will Be Incorporated into Future Investment Decision-Making**



Source: *Emerging Trends in Real Estate 2021* survey.

city or town received CARES Act funding." As of late September, there has been no progress in providing additional fiscal relief, since Congress has not been able to agree on a second major stimulus bill.

The three main sources of municipal revenue—sales, income, and property taxes—have been affected by COVID-19 at varying rates, as shown below. Sales taxes have dropped almost immediately because of bars, restaurants, and non-essential retail that were fully or partially shut down. Income taxes have started to decline, but at a slower pace, since layoffs were less severe among higher-income employees than among lower-paid workers. Real estate taxes, generally the largest source of local government revenue, are likely to decline over the next few years as hotels and shopping centers (and potentially offices) lose tenants and value. Overall, the NLC estimates that FY 2021 general revenues will be 13 percent lower than in FY 2020.

The larger gateway markets, such as Los Angeles, New York City, San Francisco, and Washington, D.C., plus tourism destinations such as Las Vegas and Honolulu, have seen immediate revenue declines as business and leisure travel has fallen off dramatically. The Brookings Institution has warned that cities in Ohio—which rely heavily on income taxes—are at greater than average risk, since layoffs have cut income tax receipts.

There may likely be attempts to raise income taxes (where allowed), particularly on higher-earning residents, but that could exacerbate the revenue decline. Despite the large income and wealth gap in the United States, top-income households often pay a very high percentage of state and local taxes. (In New York City, 1 percent of households account for over 40 percent of city income tax collections.) Higher income tax rates may be counterproductive if those taxpayers move to low- or no-tax states. Raising commercial property taxes may also push businesses to look at lower-rate suburban markets or relocate out of a metro area. The ongoing movement to low-cost markets and suburbs is discussed in two previous trends, "The Great American Move" and "Reinventing Cities Post COVID"; higher taxes would likely contribute to that trend.

Other taxes will also be looked at for potential revenue. A retail developer/owner commented that "I am extremely worried that municipalities are going to pivot to retail sales tax in a time when retailers cannot take on any additional burden and the consumer can't bear more expense right now. A lot of municipalities will wind up lowering overall sales if not careful."

The real estate industry has always had a significant vested interest in the fiscal health of cities and states. All properties

suffer if services decline and infrastructure is not maintained or built. COVID-related disruptions will be exacerbated if public safety, sanitation, and transportation services are curtailed. School funding is crucial for both long-term economic competitiveness as well as social equity. The next few years will be very difficult ones for many state and local governments, particularly if there is no assistance from Washington. Already, transit systems across the United States, including those in Boston, New York City, San Francisco, and Washington, D.C., have announced major cutbacks in service, some of which are permanent.

The real estate industry can play an important role in addressing the upcoming fiscal crisis. In the past, cities have worked with the private sector in developing infrastructure and some services. Public/private partnerships have successfully built road projects in California, North Carolina, Virginia, and other states; Chicago and Philadelphia have privatized dozens of services in order to cut costs. With local finances likely to be constrained for some time, the real estate sector has an opportunity for and a vested interest in creatively working with local governments to help grow economic activity and repair fiscal health.

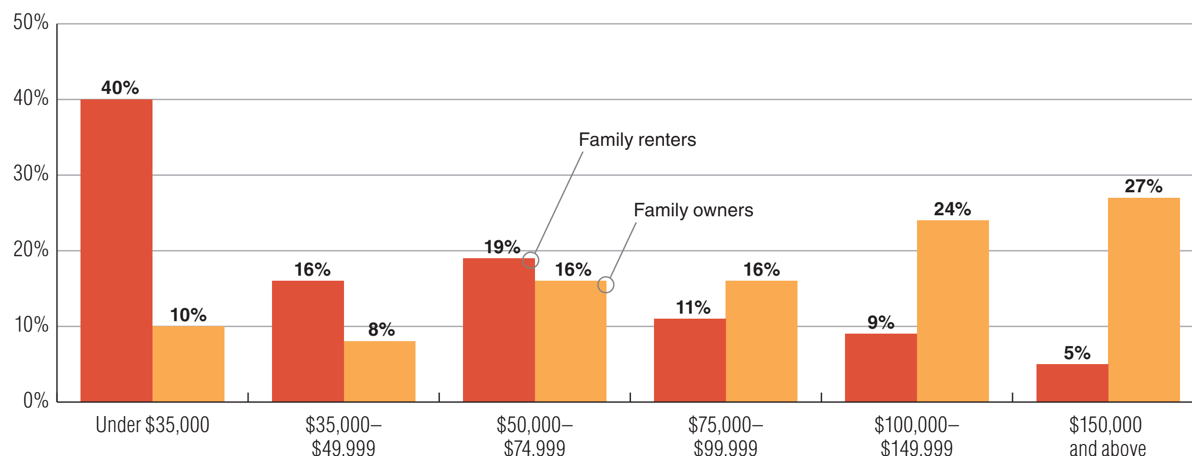
9. Affordable Housing Crisis Likely to Explode without Intervention

- Years of underfunding and a lack of attention have created a housing availability and affordability crisis throughout the United States. Though particularly acute in the major gateway markets, the problem exists in most markets.
- The COVID-19 crisis has swelled the number of unemployed low-income workers, many of whom will struggle to afford rent until those low-paying jobs are restored.
- Federal and local eviction moritoriums have delayed a spike in evictions and additional homelessness until 2021 (which could get extended), but a significant ramp-up in federal, state, and local housing programs is needed to evert a potential social and humanitarian disaster.

Just before the COVID-19 pandemic, in late 2019, Harvard University's Joint Center for Housing Studies reported, "Both the number and share of cost-burdened renters are again on the rise, especially among middle-income households." This is despite a decade of an increasing number of jobs and rising incomes and a surge in new apartment supply after the global financial crisis. The problem for low- and moderate-income renters is that their incomes have grown more slowly than the U.S. average, and new supply of rental units has targeted high-income "renter by choice" households. The federal minimum wage has remained unchanged at $7.25 per hour since 2009, although some cities and states have set higher levels.

High-cost (relative to income) and inferior-quality rental housing has been linked to numerous negative social outcomes, including worse health, decreased life expectancy, inferior education, and lower incomes. There also is a racial aspect to these disparities—in 2018 (the most recent available data at publication) 31 percent of Black renter households were severely burdened (i.e., their housing costs exceed 50 percent of income), compared with 21 percent for White renter households. The current

Exhibit 1-25 **Income Distribution of U.S. Family Households by Renters and Owners, 2018**



Sources: U.S. Census Bureau; 2018 American Community Survey 1-Year Estimates; RCLCO.

lottery system that assigns limited housing aid to a lucky few makes little sense given the widespread need.

Massive job losses caused by the COVID-19 pandemic have disproportionately affected lower-income households, since layoffs have been more acute for low- and moderate-income workers in the leisure, hospitality, and retail sectors than for higher-paid employees. While apartment landlords have reported collection rates exceeding 90 percent through August 2020 due to the Payroll Protection Program (PPP) and expanded unemployment insurance programs, the reduction of those programs is likely to cause a spike in missed payments. When the national eviction moratorium expires at the end of 2020, a wave of evictions and homelessness could be set in motion. This would be a major humanitarian issue that may also exacerbate the social unrest that has escalated in 2020. There also are concerns that lenders may foreclose on small-scale owners of affordable properties who are not collecting enough rent to pay their mortgage, possibly leading to a decline in the number of available affordable units.

"I do see this tsunami of rental evictions on its way," noted a not-for-profit housing developer.

With state and local governments facing significant revenue declines, experts agree that only the federal government has the wherewithal to provide programs and resources to address this dire problem. Expansion of the Low Income Housing Tax Credit (LIHTC) and the Section 8 voucher program is needed immediately—only 40 percent of eligible households currently receive some form of assistance. Among longer-term solutions, housing experts point to the need to reduce local regulations and red tape in order to bring down costs and implement or expand inclusionary zoning.

Affordable housing experts are not optimistic about a major increase in federal funding. Congress could make rental assistance available to all who qualify, although that is unlikely due to high costs. Banning discrimination based on a renter's source of income, particularly vouchers, would be impactful and allow families to move to neighborhoods with better schools and services. This could be transformative in terms of health and long-term earning power. Several affordable housing developers interviewed for *Emerging Trends* observed that discrimination against voucher holders is widespread.

The conversion of surplus hospitality, office, and retail space to residential uses could help, but it is often technically challenging. In addition, programs are not in place, nor is there much expertise in this area. Industry observers believe that in the few instances where it can work, conversions will likely be too limited in scale to make a difference. Last year's *Emerging Trends in Real Estate®* report pointed to the increase in statewide apartment rent controls, particularly in New York, California, and Oregon. While the COVID-19 pandemic may take the pressure off rents in the short term, the need for these new rent laws is symptomatic of the underlying problem: not enough supply.

Finding solutions to housing availability and affordability in the United States will be very difficult and require many more resources from both public and private sources than are available now. But that is no reason not to push hard. A lender to the low-income housing sector urged the real estate community to heed the words of the late professional tennis player Arthur Ashe: "Start where you are. Use what you have. Do what you can."

10. From Moment to Movement: Racial and Social Equity

- The year 2020 may have marked a tipping point in national support for greater racial equality. How this translates into long term change in the real estate sector remains to be seen.

- *Emerging Trends* interviewees and survey respondents strongly believe that the real estate industry, including senior management and board representation, should look much more like the overall population.

- The real estate industry has contributed to de jure and de facto segregation over the past century, participating in redlining and discrimination on a broad basis. There is now a call for the industry to address this past wrongdoing by targeting investment in minority neighborhoods and providing more housing and employment opportunities in currently majority-white locales.

- There are relatively few real estate companies owned by persons of color. Efforts to increase the level of investment in and with developers, investors, and investment managers of color should be a priority.

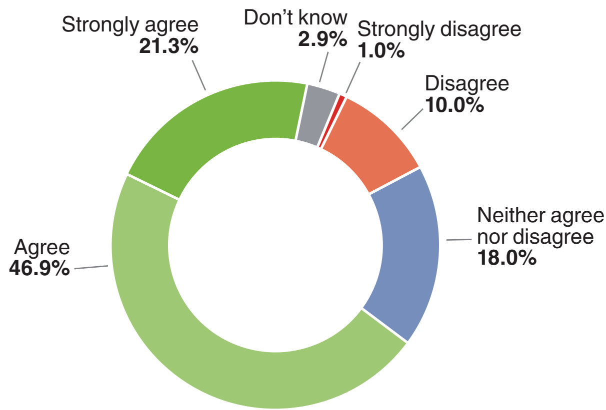
Systemic racism and bias have been longtime components of American life, both before and after the Civil Rights Act of 1964. For decades, racism and bias have resulted in inequitable racial outcomes in factors ranging from income, wealth, health, and life expectancy, receiving little attention in Washington and state legislatures. Black and other people of color have lived with and suffered from this racism, made worse by police brutality and other government and private actions. But in 2020, video-

recorded acts of injustice and brutality, widespread protests, and use of social media have led to a broader awareness and sense of responsibility on the part of many non-Black individuals and communities.

At this point in time, *Emerging Trends* survey respondents offered a candid assessment of their own industry: only 25 percent of respondents to the 2021 *Emerging Trends* survey agreed with the statement "I believe that the real estate industry understands how past policies and practices may have contributed to systemic racism," indicating the importance of continued outreach and education. However, survey respondents believe that their industry has the ability to address racism in the United States: over 70 percent of survey respondents agreed or strongly agreed that "[t]he real estate industry can address and help end systemic racism."

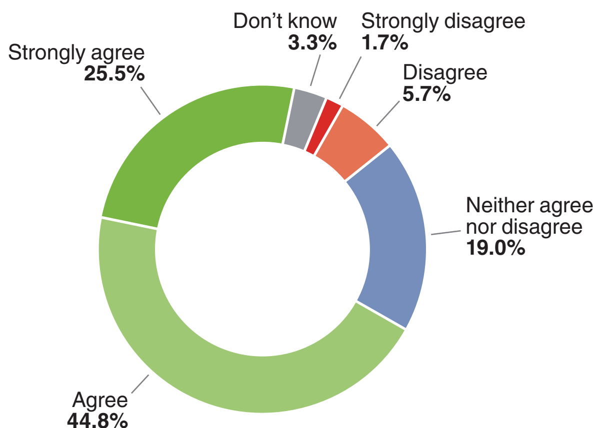
A major national developer noted: "We all have a responsibility to be actively working on advancing racial equality. We need to be as intentional as possible about identifying talent, broaden-

Exhibit 1-26 **I Am Confident I Have a Good Understanding of What Constitutes Systemic Racism**



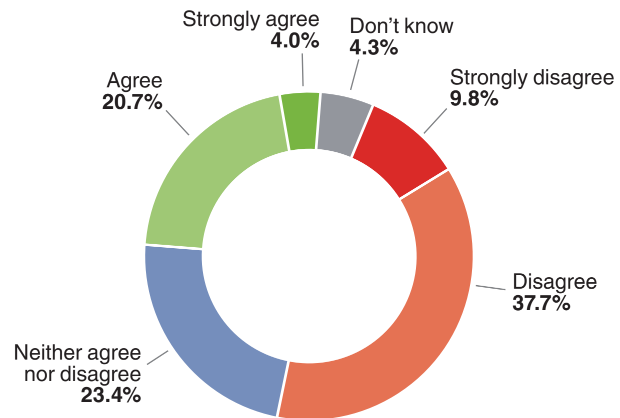
Source: *Emerging Trends in Real Estate 2021* survey.

Exhibit 1-27 **The Real Estate Industry Can Address and Help End Systemic Racism**



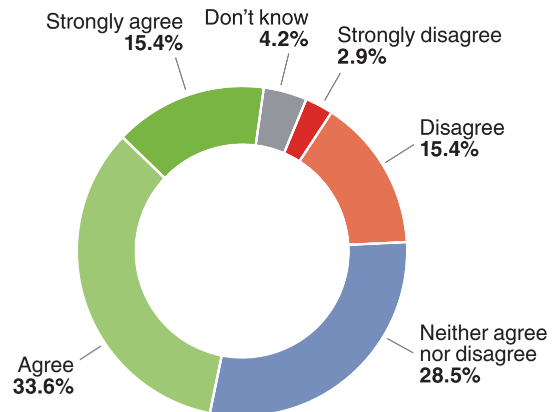
Source: *Emerging Trends in Real Estate 2021* survey.

Exhibit 1-28 **I Believe That the Real Estate Industry Understands How Past Policies and Practices May Have Contributed to Systemic Racism**



Source: *Emerging Trends in Real Estate 2021* survey.

Exhibit 1-29 **The Organization I Work for Has an Operational Plan in Place to Address Systemic Racism**



Source: *Emerging Trends in Real Estate 2021* survey.

Climate Risk and Migration

The devastating 2020 wildfire season in the U.S. West and numerous hurricanes posing threats to the U.S. Southeast have led to heightened awareness of the impacts of climate change. One theme of conversation developing among policymakers and the business community has been the potential for climate-change-inspired migration in the United States and internationally.

Multiple large wildfires and coronavirus illness this summer and fall meant that firefighting resources were stretched to the limit across the West, with usually successful intrastate mutual aid agreements sometimes unfulfilled. Similarly, there was not enough shelter—temporary or permanent—to house the hundreds of thousands fleeing the flames and hazardous air quality in multiple states. "Wildfire issues are not localized anymore," said one California city leader, raising the larger question of how the real estate industry responds to intensifying climate impacts when there is a confluence of events and/or more than one city or one state experiences a calamity.

With many professionals able to work remotely due to the COVID-19 pandemic, questions also emerged about whether this post-disaster migration would be temporary or permanent, echoing discussions about Americans' increasing interest in suburban and rural living during the pandemic.

Migration after climate disasters in the United States is well documented. After Hurricane Katrina in 2005, nearly 400,000 people were displaced from New Orleans, with many moving to Baton Rouge, Houston, and Atlanta. Hurricane Maria in 2017 led to an exodus from Puerto Rico, with many Puerto Ricans migrating to Orlando, South Florida, and New York City. The U.S. Census Bureau estimated that 130,000 of these individuals—or about 4 percent of the island's population—left permanently. In 2019 alone, 900,000 Americans were displaced due to weather-related disasters, contributing to the global count of nearly 25 million individuals.

Released in September 2020, new climate models envisioned migration patterns in the United States in response to warming temperatures. Analyses considered how rainfall patterns could lead agriculture and desirable temperate climates to shift northward and illustrated how the compounding effects of extreme heat and rising humidity could lead to dangerous conditions in the U.S. South. Models also illustrated the degradation of coastlines attributable to sea-level rise. Considering these issues together, the modeling saw potential for substantial migration and economic losses in the decades ahead, particularly given the extent of development along the coastlines and in the arid Southwest. Another sea-level-rise-focused study completed in 2020 anticipated that a potential 13 million people could be directly affected by flooding by 2100 in a high-sea-level-rise scenario.

Meanwhile, some cities are beginning to position themselves as potentially attractive havens for climate migrants. The 2018 Green Cincinnati Plan predicts that "many businesses seek to ensure continuity of operations, and may consider relocating from disaster-prone locations to relatively safe locations like Cincinnati. This will provide economic opportunities if Cincinnati is prepared to market itself to these businesses." The mayor of Buffalo, New York, also recently declared the city to be a "climate refuge."

Real estate investment managers and institutional investors, facing rising insurance and mitigation costs in addition to a heightened awareness of the impact of climate change, increasingly recognize climate risk as a core issue. While climate migration remains a newer topic, some real estate investors are beginning to consider climate risk at the market or city level as well as at the asset level, as explored by ULI and Heitman in *Climate Risk and Real Estate: Emerging Practices for Market Assessment*. A growing number of investors are looking to develop indicators to better assess these risks. Some investors interviewed also noted that they are beginning to assess a city's resilience strategy, including existing and planned infrastructure and resilience policy, in order to benchmark these efforts against measures of vulnerability to climate events. Analytical tools measuring market-level vulnerability are still nascent, but the increased recognition of migration potential may drive further interest, technological innovation, and integration into investment processes.

—ULI Urban Resilience program: uli.org/urbanresilience

ing the number of schools we recruit from, broadening the pool of candidates we recruit from, to grow the diversity of our team and really mentor and develop that team. From our perspective, part of our industry's responsibility is to be super-intentional around growing the opportunities in our businesses for people of color and as well as women."

The benefits and value of diversity in the workplace are recognized by many companies, including some real estate enterprises. A 2020 consulting firm study argues that post-COVID, "the business case for gender and ethnic diversity in top teams is stronger than ever. Since we first published *Why Diversity Matters* in 2015, the likelihood of diverse companies outperforming industry peers on profitability has increased significantly." A senior African American institutional real estate executive pointed out that "diverse teams perform better. Diversity isn't for me, it's for you." Others pointed out that, since the majority of the U.S. population by 2045 will be people of color, corporations, including real estate organizations, will need to hire from this market, as well as sell to this market as decision-makers become more diverse.

Generally, though, the real estate industry has thus far done a poor job of recruiting and/or retaining a diverse workforce. "Progress in racial diversity has been slow overall and [has] potentially regressed. Those of us who have risen to senior levels in the industry have typically benefited from having strong sponsorship within our firms after gaining exposure and access through groups such as the Toigo Foundation [whose mission is to build diverse organizations in finance and beyond] and Sponsors for Educational Opportunity, SEO [whose mission is to provide young people from underserved and underrepresented communities with access to superior educational and career opportunities]. Even then, it's disappointing that we are often seen as the 'exceptions.' There's a huge amount of educated Black talent out there. The industry simply isn't putting in the work to find it, and nurture it, and retain it," noted a senior Black real estate executive.

Interviewees agreed that the solutions—outreach, education, internships, mentoring, promoting—are not easy, but a large majority agreed that the real estate workforce should look more like the overall demographic makeup of the U.S. population.

Many firms are recognizing that they must incorporate more systematic, business-led approaches to improving diversity and inclusion. These approaches include an understanding of baseline metrics that can contribute to more informed and deliberate targets.

A number of industry organizations have been focused on diversity and inclusion work for decades, addressing the continuum of what must be done, from early to secondary school exposure, to senior executive promotion, retention, and deal-making. In addition to Toigo, established in 1989, and SEO, established in 1963, others include the following:

- REEC, Real Estate Executive Council, an organization of senior African American professionals in the real estate industry (2003);
- REAP, Real Estate Associate Program, a multicity organization that promotes "diversity, equity, and inclusion in the commercial real estate industry" (1998);
- Project Destined, which exposes inner-city youth to real estate, in partnership with local high schools, colleges, and universities (2016); and
- AAREP, African American Real Estate Professionals DC Foundation, a Washington, D.C., organization that seeks to "facilitate economic parity through real estate" (1995).

Major industry groups such as the Urban Land Institute and the Pension Real Estate Association (PREA) are partnering with these organizations as part of their own initiatives to address the lack of diversity in real estate. For example, REAP, REEC, and ULI are working together to provide a feeder for ULI product councils looking to increase diversity. REEC has recently started to incorporate ULI's UrbanPlan into its REEX summer camp curriculum. The PREA Foundation has partnered with SEO to create a real estate training program for qualified Black, Hispanic, and Native American undergraduates.

In addition to the makeup of the workforce, the real estate industry bears responsibility for the segregated nature of many U.S. cities. Homebuilders and real estate agents, along with lenders and government, have been a part of the systemic redlining of neighborhoods over the past century, at the same time denying minorities access to many majority-white neighborhoods.

Many interviewees suggested that the real estate industry could be more proactive in creating and supporting neighborhoods that are racially and socioeconomically integrated, and reversing the impact of de jure segregation, as well as investing more in areas that have been overlooked and that have suffered from perpetual and deliberate disinvestment. Institutional investors are increasing commitments to "impact investing," and real estate investments that address racial inequality are a key target.

Some companies have embraced social justice issues in their business model. One reported that "during this period [COVID-19], there has been an acceleration from our [apartment] tenants for sustainability and social justice. We have 'leaned in' with tenants to have a lasting dialogue over social injustice, and this has been significant in terms of retention and our tenants being committed to where they live really reflecting their values. We see that people are caring more about these values than ever before."

As communities and the real estate industry respond to COVID-related and other (climate change, housing affordability) challenges over the next decade, neither should lose sight of the importance of advancing racial and social equality at the same time. The goal is to create a more just society as well as a better-performing economy. Providing high-quality education for all is a key to future success everywhere. Increased investments in disadvantaged areas and African American real estate companies is essential. The identification and dismantling of practices and policies within the industry that have created and sustained inequality is critical. This is a great opportunity for the real estate community to be part of the solution, no longer a contributor to the problem.

The 2020 Wildfires and Implications for Real Estate

Bigger, hotter, and more frequent wildfires are causing an increasing amount of infrastructure destruction, economic hardship, and trauma across the United States. The occurrence of wildfires, the scale of their consequences, and how they have changed in recent decades are directly related to current climate and development trends as well as to historical land management strategies.

A Record-Breaking Start to Wildfire Season

According to the National Interagency Fire Center, the 2020 wildfire season in the U.S. West began early and quickly reached historic proportions, with devastating impacts for communities. By the beginning of September, 100 large wildfires were burning in 12 states. These wildfires are remarkable in the scale of their destruction and because many of them occurred in or near developed areas.

In September 2020, the Bobcat Fire burned less than 25 miles from Los Angeles. Oregon evacuated more than half a million people—about 10 percent of its population—across the state, including communities just east of Portland threatened by wildfires.

During August and September, Portland, Seattle, San Francisco, and Los Angeles each temporarily had the worst air quality in the world because of wildfire smoke, which also turned skies an apocalyptic shade of orange for several days. Smoke traveled thousands of miles and reached Midwest and Mid-Atlantic states, raising fears about how the poor air quality could worsen COVID-19 susceptibility and health outcomes.

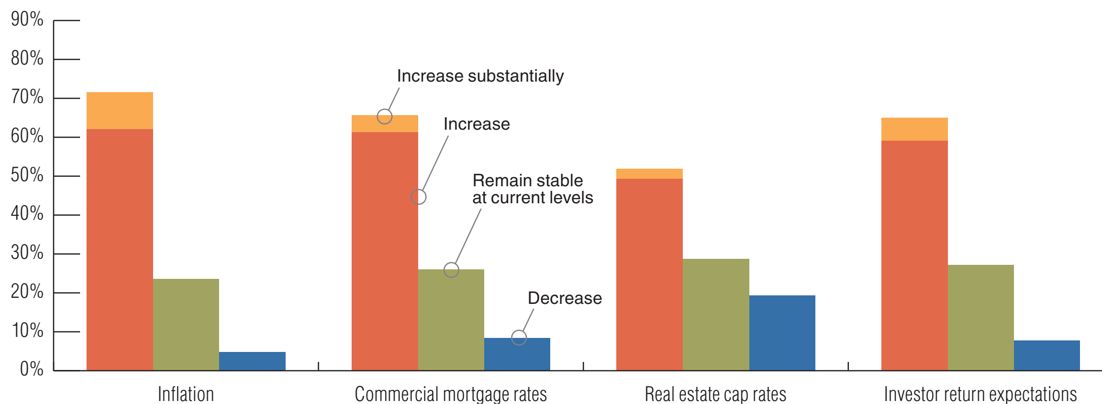
The large-scale impacts of the early-2020 fires escalated concerns that had already come to national attention due to the catastrophic events of the three previous years. "The 2017 North Bay Fires disaster was really a housing disaster. Almost 6,000 homes were destroyed," says the CEO of an affordable housing development firm. In 2018, utility companies increased the use of power shutoffs (a long-established technique to prevent electrical equipment from sparking wildfires in high-risk conditions). And in 2019, the "first climate change bankruptcy" filings occurred—that of Merced Property & Casualty due to claims from the Camp Fire, which occurred in 2018, and that of Pacific Gas & Electric (PG&E) after one of its transmission lines sparked that disaster.

In recent years, homeowner's insurance rates have increased or policies have been dropped because of wildfires in Washington, Montana, Colorado, Oklahoma, and especially California. After the 2017 and 2018 wildfire seasons, homeowner's insurance rates in California increased 50 percent more in wildfire zones than elsewhere, and insurers have eliminated at least 340,000 policies in fire-prone areas throughout the state, according to the *High Country News*. In 2019, California issued a temporary one-year ban prohibiting insurers from dropping policies on homes in high-risk areas.

Trends in Wildfires, Real Estate, and Land Use

The causes of and resilience strategies for wildfires are closely related to the affordability crisis in the United States. Rising land and housing costs in urban areas—as well as consumer desire to live in natural areas—have led to home-

Exhibit 1-30 **Anticipated Changes in Commercial Mortgage Rates, Inflation, Cap Rates, and Expected Returns, Next Five Years**



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on U.S. respondents only.

buying and development in less pricy areas that are at extreme risk from wildfire, putting more people and infrastructure at risk. When wildfire evacuations and disasters do occur, they increase the demand for housing in already short supply—a particular challenge for those with lower incomes or place-based livelihoods that are inaccessible during fires. Balancing these economic and development realities against constituent needs during and after wildfires, local governments are struggling to prioritize the increasing decision-making pressures and costs associated with wildfire prevention, suppression, and adaptation.

Furthermore, climate change is extending the fire season and making the conditions for destructive, less predictable fires more likely to occur. By midcentury, the annual area burned by wildfires in the United States could increase two to six times from the present due to climate change, as reported in the Fourth National Climate Assessment. Federal land management policy for much of the 20th century—to suppress all fires as quickly as possible—allowed vegetative fuels to accumulate and is also helping cause today's bigger and more intense fires. In the long term, wildfires also complicate the achievement of sustainability goals because the transition from fossil fuels to electrification increases dependence on transmission infrastructure that can ignite wildfires.

Resilience Solutions

Increasingly aware that infrastructure and people in high-risk areas are almost certain to be threatened by wildfire, the real estate industry is focused on preparing for that eventuality.

The managing director of a large-scale development has led this approach in Boise, Idaho, reasoning that "it's not a question of if wildfires are going to burn. All the land here burned at one time or another. We just have to minimize that risk."

In wildfire-prone areas, real estate developers are protecting new housing and commercial buildings by minimizing on-site sources of ignition, hardening structures against embers and flames, and consolidating buildings while conserving open space as buffer zones to protect developed areas. Many developers actively participate in or support nationally recognized wildfire resilience certifications such as Firewise USA as part of maintaining and educating tenants about fire-safe landscaping.

While federal- and state-level resources are critical to managing wildfires on a national scale, local municipalities and/or counties have control over the land use and development patterns in high-risk wildland/urban interface (WUI, pronounced "WOO-ee") areas. Local governments are considering wildfire hazards in comprehensive planning, enacting enhanced building codes and standards for at-risk areas, and funding wildfire suppression and response efforts. Mitigating wildfire risks while achieving sustainability and quality-of-life goals, such as reducing greenhouse gas emissions and increasing housing opportunity and affordability, is an aspiration of and challenge for many public leaders.

—ULI Urban Resilience program: uli.org/urbanresilience

Markets to Watch

"The pandemic has been an equalizer; our focus is on identifying the markets that will lead in the next normal."

The real estate industry is equal parts local, regional, and national. While many companies and practitioners are laser focused on their own community or perhaps region, there also is a national real estate community made up of large developers, institutional investors (both public and private), financers, and service providers. There is continuous interaction between these two groups, sometimes referred to as local sharpshooters and national players.

For 18 years, *Emerging Trends* has surveyed ULI members and asked them to evaluate the investment and development prospects of what has grown to be a list of 80 real estate markets across the United States. The survey results reflect the viewpoints of a diverse group of real estate participants, ranging from advisory firms to homebuilders to mixed-use developers to pension funds to large Wall Street financial institutions.

Based on local economic and local real estate conditions, as well as national trends, markets ascend and descend in participants' evaluations from year to year and from cycle to cycle. Investors, developers, and other real estate professionals continually ask questions such as: Are rents likely to exceed inflation over a hold period? Is there upside as a community attracts or grows new companies? Is there affordable land so that new office or housing developments can provide a reasonable profit? Will banks and other lenders provide debt capital? How will a market perform under different climate change scenarios?

The year 2021 also adds a new and very impactful consideration: how has COVID-19 affected and how will it affect the demand for and use of real estate in each community? A number of COVID-influenced themes (Sun Belt migration, suburban appeal, racial equity, health and safety) are covered in depth in chapter 1. This section brings together all those trends plus basic market factors such as supply and demand, capital flows, and downside risk in the form of ordinal rankings of the 80 markets tracked by *Emerging Trends*. After reviewing how COVID-19 has shifted the city rankings, we walk through the various categories and subcategories of markets.

COVID-19 Giveth and Taketh

As discussed in chapter 1, COVID-19 is one of the biggest health, economic, and society-changing events of the past century. The long-term impact on local markets has been hard to pin down, since hot spots and infected areas have spiked and waned since the pandemic started in early 2020. As of early October 2020, infections and fatalities are still running at high rates in various but shifting parts of the United States. Work on vaccines is underway, but the timing and impact of those are still unclear. The survey results herein are based on views and sentiments as gauged in August/September, as close as possible to publication.

Looking at the markets moving up in the overall real estate prospects rankings, the suburban markets tracked in the survey have gained the most over the past year. Suburban-dominated markets that survey respondents are looking at more favorably for 2021 include Long Island, Northern New Jersey, Westchester/Fairfield, and the Inland Empire. (It could be a coincidence, but many of this year's New York–based interviewees were best reached in the Hamptons area of Long Island.) Rounding out this picture are the Washington, D.C., suburbs, with the Maryland suburbs moving up 14 spots and Northern Virginia moving up just six places but ranked highly at eighth in overall prospects. These results are somewhat skewed, but still likely illustrative, since suburban markets were broken out only in New York, Los Angeles, and Washington, D.C. Future versions

U.S. Markets to Watch

Exhibit 2-1 **Overall Real Estate Prospects**

Rank	Market
1	Raleigh/Durham
2	Austin
3	Nashville
4	Dallas/Fort Worth
5	Charlotte
6	Tampa/St. Petersburg
7	Salt Lake City
8	Washington, DC–Northern VA
9	Boston
10	Long Island
11	Atlanta
12	San Antonio
13	Denver
14	Northern New Jersey
15	Phoenix
16	Cape Coral/Fort Myers/Naples
17	Inland Empire
18	Orange County
19	Boise
20	Washington, DC–MD suburbs
21	Indianapolis
22	Philadelphia
23	Charleston
24	Orlando
25	Columbus
26	Greenville, SC
27	West Palm Beach
28	Los Angeles
29	Jacksonville
30	Miami
31	San Diego
32	San Jose
33	Fort Lauderdale
34	Seattle
35	Madison
36	Oakland/East Bay
37	Washington, DC–District
38	Jersey City
39	Minneapolis
40	New York–Brooklyn
41	Kansas City, MO
42	Omaha
43	New York–other boroughs
44	Chicago
45	Westchester, NY/Fairfield, CT
46	Pittsburgh
47	Tacoma
48	Tucson
49	Cincinnati
50	Richmond
51	Portland, ME
52	Houston
53	Milwaukee
54	Birmingham
55	Sacramento
56	St. Louis
57	Deltona/Daytona
58	Detroit
59	Spokane, WA/Coeur d'Alene, ID
60	San Francisco
61	Virginia Beach/Norfolk
62	Tallahassee
63	Des Moines
64	Albuquerque
65	New York–Manhattan
66	Portland, OR
67	Gainesville
68	Las Vegas
69	Honolulu
70	Cleveland
71	Chattanooga
72	Hartford
73	Oklahoma City
74	Louisville
75	Knoxville
76	Baltimore
77	Memphis
78	Providence
78	Buffalo
80	New Orleans

Source: *Emerging Trends in Real Estate 2021* survey.

Exhibit 2-2 **Homebuilding Prospects**

Rank	Market
1	Raleigh/Durham
2	Austin
3	Dallas/Fort Worth
4	Jacksonville
5	Tampa/St. Petersburg
6	San Antonio
7	Boise
8	Atlanta
9	Denver
10	Nashville
11	Charlotte
12	Cape Coral/Fort Myers/Naples
13	Richmond
14	Greenville, SC
15	Orange County
16	Orlando
17	West Palm Beach
18	Salt Lake City
19	Washington, DC–Northern VA
20	Charleston
21	Miami
22	Long Island
23	Columbus
24	San Diego
25	Kansas City, MO
26	Phoenix
27	Washington, DC–MD suburbs
28	Houston
29	Boston
30	Fort Lauderdale
31	Philadelphia
32	Madison
33	Northern New Jersey
34	Inland Empire
35	Tallahassee
36	Indianapolis
37	Seattle
38	Cincinnati
39	Westchester, NY/Fairfield, CT
40	Washington, DC–District
41	Chattanooga
42	Louisville
43	Tacoma
44	Des Moines
45	Birmingham
46	Minneapolis
47	Knoxville
48	Albuquerque
49	Spokane, WA/Coeur d'Alene, ID
50	San Jose
51	Milwaukee
52	Oklahoma City
53	Virginia Beach/Norfolk
53	Sacramento
55	Oakland/East Bay
56	Deltona/Daytona
57	Tucson
58	New York–other boroughs
59	Baltimore
59	Omaha
61	Pittsburgh
62	Memphis
63	Los Angeles
64	Portland, OR
65	Gainesville
66	Detroit
67	Providence
68	Hartford
69	Honolulu
70	Chicago
71	Portland, ME
72	New York–Brooklyn
73	St. Louis
74	Las Vegas
74	San Francisco
76	Jersey City
76	Buffalo
78	New Orleans
79	Cleveland
80	New York–Manhattan

Source: *Emerging Trends in Real Estate 2021* survey.

Key: More than 1 standard deviation above mean | +/– 1 standard deviation of mean | More than 1 standard deviation below mean

Mean

of *Emerging Trends* may look at more suburban markets separate from center cities.

Other markets with higher rankings compared with a year ago include Cape Coral/Fort Myers/Naples, a retirement/second-home magnet, and boutique/affordable markets such as Omaha, Boise, Tucson, Greenville, and Madison.

Newton's third law postulates that for every action in nature, there is an equal and opposite reaction. Real estate market sentiment seems to follow suit as many markets fell sharply in the overall ranking. Several factors seem to be at play. The expensive cities of San Francisco and New York fell in ranking as many millennials (and apparently developers and investors) started to consider less expensive areas. Other cities that saw a decrease in the outlook for investment and development for 2021 are Brooklyn, Portland, Louisville, and Seattle. The latter three markets were the sites of some of the most vigorous protests (and counter protests) over police brutality and racial equity—a possible reason for their lower rankings. Of course, there is a reasonable debate about whether these big shifts are permanent or temporary—and if temporary, how long they will last.

Grouping the Markets

The groupings for this year include both time-tested and new categories, continuing to evolve last year's initial fresh look at the 80 markets we review. As noted last year, perhaps, more than traditional divisions, these new groupings may further our understanding of the intricacies that exist in each market and how emerging trends may affect each of them in a unique fashion.

The four major categories include magnets, the establishment markets, niche markets, and backbone markets. Those four categories are further broken into 12 subcategories, as shown below.

Magnets

Almost all the markets in the magnet category are growing more quickly than the U.S. average. In a sense, they are magnets for both people and companies.

Super Sun Belt markets are still affordable for businesses and residents, even while these powerhouse economies have attracted—and will continue to attract—a wide range of businesses. All are among the top 10 fastest-growing cities in the United States. With 16 percent of the *Emerging Trends* universe's population, the Super Sun Belt markets will generate 28 percent of its new jobs between 2019 and 2025. Two Sun Belt markets, Dallas/Fort Worth and Tampa, are ranked in the top 10 for overall real estate prospects, reflecting the draw of markets in this category.

Focus group participants in the other Super Sun Belt markets provided the following insights: "Atlanta has the third-highest percentage of college-educated workers in the U.S. and

***Emerging Trends 2021* Market Categories**

Major Groups	Subgroups	Markets	
Magnets	Super Sun Belt	Atlanta **Dallas/Fort Worth** Houston	Phoenix San Antonio **Tampa/St. Petersburg**
	18-Hour Cities	**Austin** **Charlotte** Denver Minneapolis **Nashville**	Portland, OR **Raleigh/Durham** **Salt Lake City** San Diego Seattle
	The Sunshine State	Fort Lauderdale Jacksonville	Miami West Palm Beach
The Establishment	Multitalented Metro Areas	**Boston** Chicago Los Angeles	New York–Brooklyn New York–Manhattan Philadelphia
	Specialized Economies	Oakland/East Bay San Francisco	San Jose Washington, DC–District
	Suburbs Ascending	Inland Empire Jersey City **Long Island** New York–other boroughs Northern New Jersey	Orange County Westchester, NY/Fairfield, CT Washington, DC–MD suburbs **Washington, DC–Northern VA**

continued next page

***Emerging Trends 2021* Market Categories**

Major Groups	Subgroups	Markets	
Niche	Boutique Markets	Boise Chattanooga Des Moines Greenville, SC	Knoxville Omaha Portland, ME Richmond
	Eds and Meds	Baltimore Columbus Gainesville Madison	Memphis Pittsburgh Tallahassee
	Visitor and Convention Centers	Cape Coral/Fort Myers/Naples Charleston Deltona/Daytona Honolulu	Las Vegas New Orleans Orlando Virginia Beach/Norfolk
Backbone Markets	The Affordable West	Albuquerque Sacramento Spokane, WA/Coeur d'Alene, ID	Tacoma Tucson
	Determined Competitors	Birmingham Indianapolis Kansas City, MO	Louisville Oklahoma City
	Reinventing	Buffalo Cincinnati Cleveland Detroit	Hartford Milwaukee Providence St. Louis

Note: The 10 highest-ranked markets in the *Emerging Trends in Real Estate 2021* survey (overall real estate prospects) are in bold.

the highest concentration of colleges and universities in the Southeast"; San Antonio's advantages include its "low cost of living, high quality of life, and opportunity for business growth"; capital markets are moving in Phoenix's favor: "The Phoenix market has started to attract the attention of large institutional investors."

Houston has fallen in the rankings over the last two years, coinciding with falling energy prices. Despite this lukewarm review this year, Houston is forecast to generate the fourth most jobs in the United States between 2019 and 2025, after creating the second most jobs in the country since 2010.

The 18-Hour Cities. This category is an *Emerging Trends* classic that still works for a select number of medium-sized cities, although COVID-19 has temporarily slowed both daytime and nighttime activity in many of them. The 18-hour cities are popular in-migration destinations due to lifestyle, culture, and employment opportunities. They are not necessarily inexpensive markets but are more affordable than the establishment markets, from which they draw many newcomers. The dynamic economies of these markets continue to make them popular with developers and investors for 2021—as illustrated by the five of the 10 highest-ranked markets in overall real estate prospects that fall into this category: Austin, Charlotte, Nashville, Raleigh/Durham, and Salt Lake City.

While a number of the 18-hour cities are located in the U.S. South, the characteristics that define an 18-hour city are found in a more geographically diverse set of markets. The other 18-hour-city markets of Denver, Minneapolis/St. Paul, Portland (Oregon), San Diego, and Seattle all have active downtowns and urban-like suburban nodes. The following comment was made about Seattle, but it applies broadly: "Seattle benefits by not being a mega city. It is a midsized city with some big-city attributes, such as sports teams, food and arts, and access to outdoors."

The Sunshine State. This grouping includes the South Florida metro areas of Miami, Fort Lauderdale, and West Palm Beach, plus the northern Florida city of Jacksonville. These four East Coast Florida markets have substantial and varied economic bases. Job growth in all four locales has been and is forecast to be well above the U.S. average, and the three South Florida markets have science, technology, engineering, and mathematics (STEM) scores almost double the U.S. average. South Florida does face some challenges related to climate change, however. The focus group in this market noted that "pre-COVID, hospitality investors were concerned with climate resilience in Southeast Florida," a statement that likely applies to other property types. Participants also noted that "South and Central Florida should benefit in the long term from the Virgin & Brightline Train plus transit-oriented development [TOD] stations."

Exhibit 2-3 **Local Market Perspective: Investor Demand**

Weak | | Average | | Strong

Market	Rating	Market	Rating
Austin	4.47	Deltona/Daytona	3.33
Dallas/Fort Worth	4.33	Madison	3.33
Nashville	4.15	Indianapolis	3.31
Charlotte	4.12	Jacksonville	3.30
Boston	4.04	Orlando	3.22
Raleigh/Durham	4.00	Portland, OR	3.19
Atlanta	3.98	Chicago	3.17
Denver	3.97	Portland, ME	3.14
Long Island	3.89	Tacoma	3.14
Seattle	3.84	Sacramento	3.14
Inland Empire	3.79	Birmingham	3.13
Fort Lauderdale	3.79	Richmond	3.13
Washington, DC–Northern VA	3.79	Houston	3.10
San Jose	3.77	Tallahassee	3.00
Orange County	3.76	Spokane, WA/Coeur d'Alene, ID	3.00
Cape Coral/Fort Myers/Naples	3.75	Omaha	3.00
Los Angeles	3.73	Gainesville	2.95
Phoenix	3.73	Virginia Beach/Norfolk	2.93
Salt Lake City	3.72	Cincinnati	2.93
Charleston	3.72	Kansas City, MO	2.92
San Diego	3.70	Tucson	2.89
Tampa/St. Petersburg	3.70	Pittsburgh	2.88
New York–Brooklyn	3.68	Las Vegas	2.88
Washington, DC–District	3.67	Des Moines	2.83
Jersey City	3.64	Chattanooga	2.75
West Palm Beach	3.57	Honolulu	2.75
Philadelphia	3.56	Oklahoma City	2.73
Northern New Jersey	3.56	St. Louis	2.70
Washington, DC–MD suburbs	3.56	Louisville	2.67
Greenville, SC	3.55	Cleveland	2.63
San Francisco	3.53	Hartford	2.60
Boise	3.52	Baltimore	2.55
New York–other boroughs	3.50	Providence	2.50
Columbus	3.50	Knoxville	2.50
Oakland/East Bay	3.49	Albuquerque	2.47
Miami	3.48	Memphis	2.47
San Antonio	3.42	Milwaukee	2.44
Minneapolis	3.41	Buffalo	2.38
New York–Manhattan	3.39	New Orleans	2.38
Westchester, NY/Fairfield, CT	3.33	Detroit	2.33

Source: *Emerging Trends in Real Estate 2021* survey.
Note: Ratings reflect perspective of local market participants.

Exhibit 2-4 **Local Market Perspective: Development/ Redevelopment Opportunities**

Weak | | Average | | Strong

Market	Rating	Market	Rating
Raleigh/Durham	4.03	Washington, DC–District	3.20
Charlotte	3.89	Oakland/East Bay	3.20
Northern New Jersey	3.76	West Palm Beach	3.19
Austin	3.75	Charleston	3.16
Phoenix	3.73	Indianapolis	3.15
Inland Empire	3.73	Greenville, SC	3.13
New York–Brooklyn	3.72	Sacramento	3.09
Nashville	3.71	Tucson	3.05
Dallas/Fort Worth	3.71	Washington, DC–MD suburbs	3.04
Tampa/St. Petersburg	3.65	Las Vegas	3.04
Salt Lake City	3.64	Baltimore	3.00
San Antonio	3.63	Buffalo	3.00
Atlanta	3.61	New York–Manhattan	3.00
Long Island	3.59	Pittsburgh	3.00
Jersey City	3.57	Birmingham	3.00
New York–other boroughs	3.57	Richmond	3.00
Boise	3.56	Chicago	3.00
Orange County	3.55	Detroit	3.00
Philadelphia	3.54	St. Louis	3.00
Denver	3.51	Cincinnati	2.93
Columbus	3.47	Virginia Beach/Norfolk	2.92
San Jose	3.46	Honolulu	2.90
Boston	3.44	Portland, OR	2.89
Washington, DC–Northern VA	3.44	Milwaukee	2.89
Minneapolis	3.44	San Francisco	2.88
Seattle	3.39	Gainesville	2.84
Jacksonville	3.39	Albuquerque	2.84
San Diego	3.39	Des Moines	2.83
Orlando	3.35	Madison	2.83
Kansas City, MO	3.33	Deltona/Daytona	2.82
Cape Coral/Fort Myers/Naples	3.31	Omaha	2.80
Houston	3.30	Tallahassee	2.79
Hartford	3.30	Cleveland	2.75
Los Angeles	3.30	Chattanooga	2.73
Portland, ME	3.29	Providence	2.67
Westchester, NY/Fairfield, CT	3.25	Louisville	2.58
Fort Lauderdale	3.23	Memphis	2.50
Miami	3.21	Oklahoma City	2.47
Spokane, WA/Coeur d'Alene, ID	3.21	New Orleans	2.46
Tacoma	3.21	Knoxville	2.33

Source: *Emerging Trends in Real Estate 2021* survey.
Note: Ratings reflect perspective of local market participants.

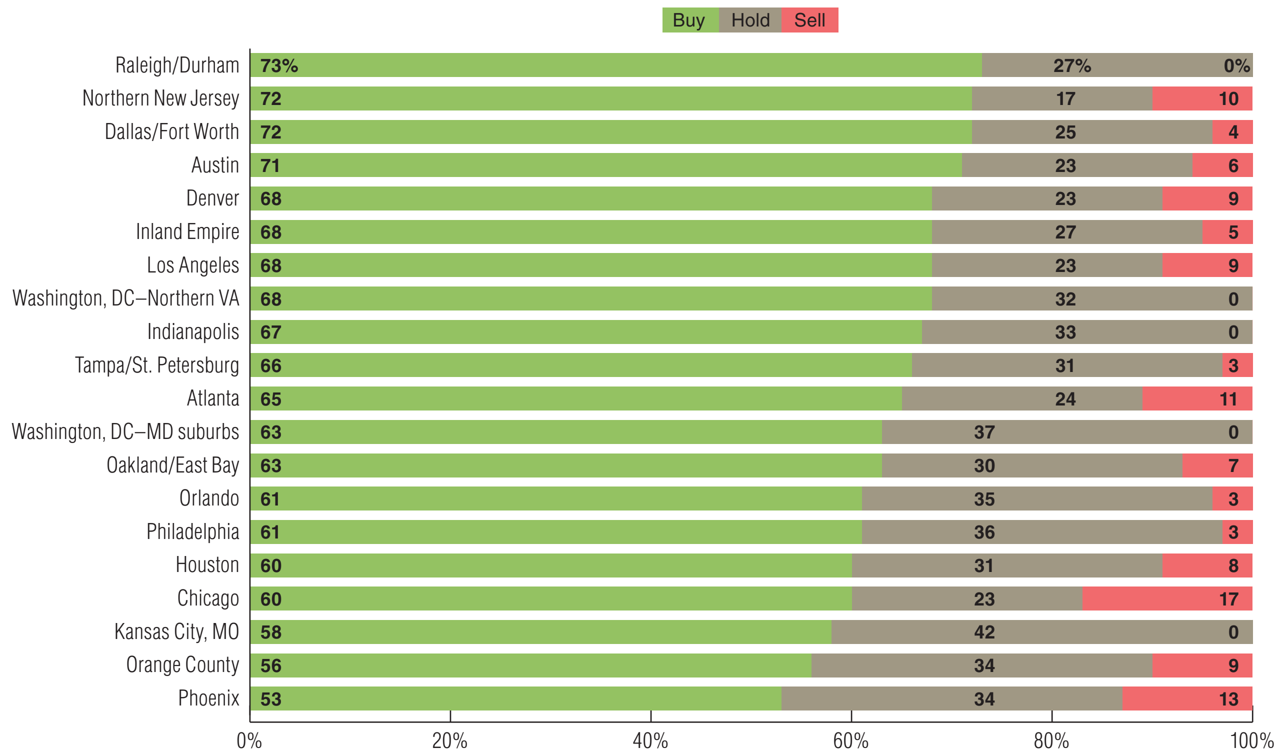
The Establishment

The metro areas of Boston, Chicago, Los Angeles, New York, Philadelphia, the Bay Area (Oakland, San Francisco, and San Jose), and Washington, D.C., have been among the country's biggest and most influential cities for over a century. Although Dallas and Houston have caught up population-wise, these "established" markets are economic, government, and cultural powerhouses and have provided real estate investment and development/redevelopment opportunities for quite some time.

Multitalented Metro Areas. Although all the establishment cities are large and economically diverse, some are more diverse than others, specifically the multitalented metro areas of Boston, Chicago, Los Angeles, New York, and Philadelphia. The diversification lines that separate these cities from the next group (specialized economies) are admittedly fine. For example, many consider Boston to be a tech market, and it is indeed a leader in biotech, but Boston is also a leader in education and health care and has a big finance sector.

Boston is the only multitalented metro area to be among the 10 highest-ranked markets this year, likely due to unique mix of industries. Despite higher-than-average business and housing costs, Boston has relatively good growth prospects—forecast population and job growth is just below the U.S. average and well ahead of comparable East Coast cities. Boston gets high marks for governance by the focus group in this market: "The leadership in Boston and Massachusetts and the ability for different parties and levels of government to work together continue to make Boston an attractive market." The Boston area has seven of the top 50 *U.S. News & World Report* universities, the most in any one city in the United States. Many of the participants think that Boston's history and character are a strong asset. "Boston will continue to draw people who want to live here . . . and not just because of the jobs. It feels like a real place." Looking ahead, the redevelopment of "Suffolk Downs in East Boston will provide thousands of housing units in a live/work/play environment, just a few miles from downtown."

Exhibit 2-5 **U.S. Industrial Property Buy/Hold/Sell Recommendations**



Source: *Emerging Trends in Real Estate 2021* survey.

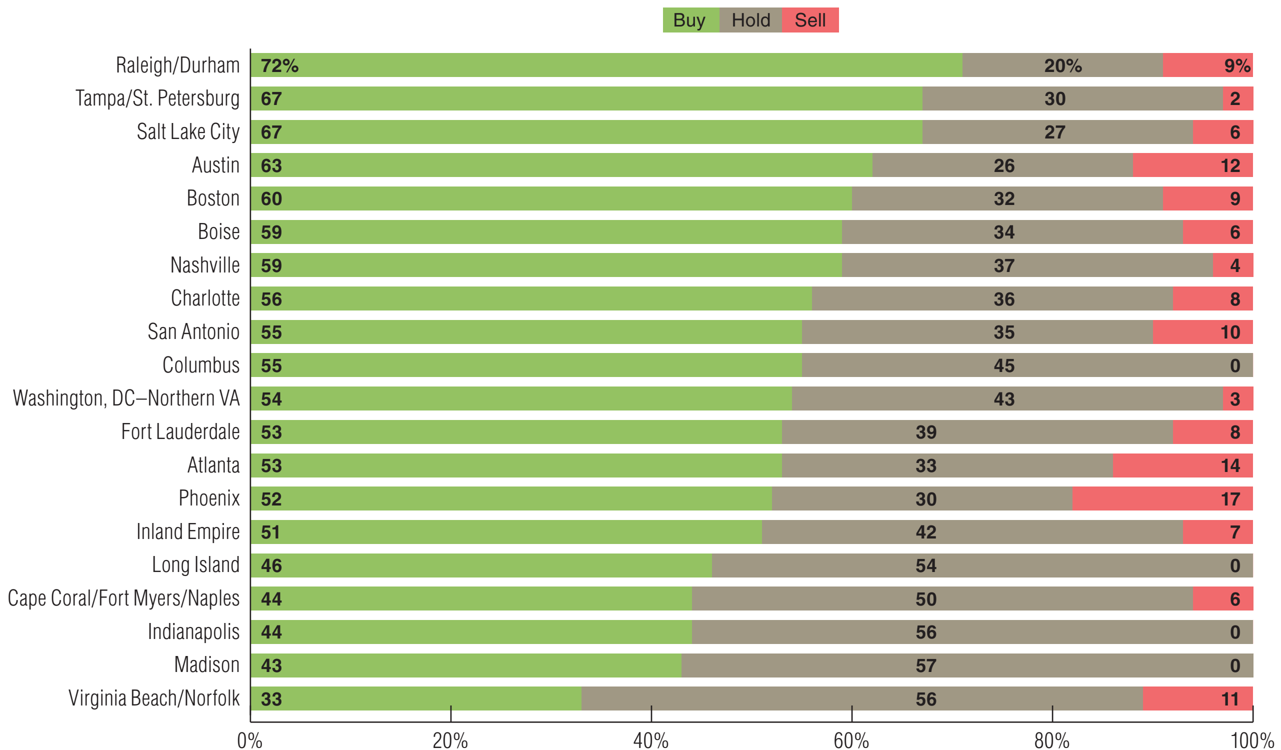
Note: Cities listed are the top 20 rated for investment in the industrial sector; cities are ordered according to the percentage of "buy" recommendations.

The other multitalented cities (Chicago, Los Angeles, New York City, and Philadelphia) are large and diverse enough so that development and redevelopment opportunities abound even though top-line growth rates are low. Chicago's sluggish metro-wide population growth belies a thriving housing market in and around the Loop, with neighborhoods such as Logan Square, Ukrainian Village, and Wicker Park adding new apartments and residents. The Chicago CBD and the West Loop continue to draw companies from the suburbs and surrounding states. Los Angeles's entertainment and media sectors continue to expand and diversify. Building out an extensive transit network will, as the local focus group noted, create "suburban areas that can cater to the changing workforce patterns with walkable amenities and connectivity into urban centers—e.g., El Segundo, Culver City." L.A. ranked seventh as an industrial market—the port of L.A./Long Beach and building out the last-mile delivery network are powerful demand drivers.

New York City was hit hard and early by COVID-19 but has fared well relative to the rest of the country since early summer 2020. Still, local ULI members are bullish on New York over the long term. New York "has faced challenges before; global cities have always come back." In August, Facebook affirmed its belief in New York City as a tech center by leasing the entire office component of the Farley building, part of the Penn Station expansion. Philadelphia is the most affordable of the established markets, with greater housing affordability than the United States as a whole. Philadelphia's strong universities are taking a more active role in growing businesses and retaining students after graduation. For example, the University of Pennsylvania's Innovation Works is turning a former corporate R&D facility into a mix of offices, labs, and production space.

Specialized Economies. This grouping includes the closely linked markets of Oakland, San Francisco, and San Jose, considered the technology leaders of the United States and the

Exhibit 2-6 **U.S. Multifamily Property Buy/Hold/Sell Recommendations**



Source: *Emerging Trends in Real Estate 2021* survey.

Note: Cities listed are the top 20 rated for investment in the multifamily sector; cities are ordered according to the percentage of "buy" recommendations.

world, while Washington, D.C., is the leading government market globally. The STEM location quotients (the ratio of the percentage of the local employment base that is STEM employment to the U.S. percentage) of the three Bay Area markets are 1.8, 2.2, and 3.3, respectively, with San Jose the clear national leader in tech concentration. Washington, D.C., has a respectable STEM score of 1.5, but with over 140,000 federal government jobs, the District is clearly a government town. All four of these specialized economies have high housing costs, which could slow but not derail growth. Bay Area focus group participants point to a "housing affordability crisis that is further challenged by people seeing multifamily as undesirable [NIMBYism]."

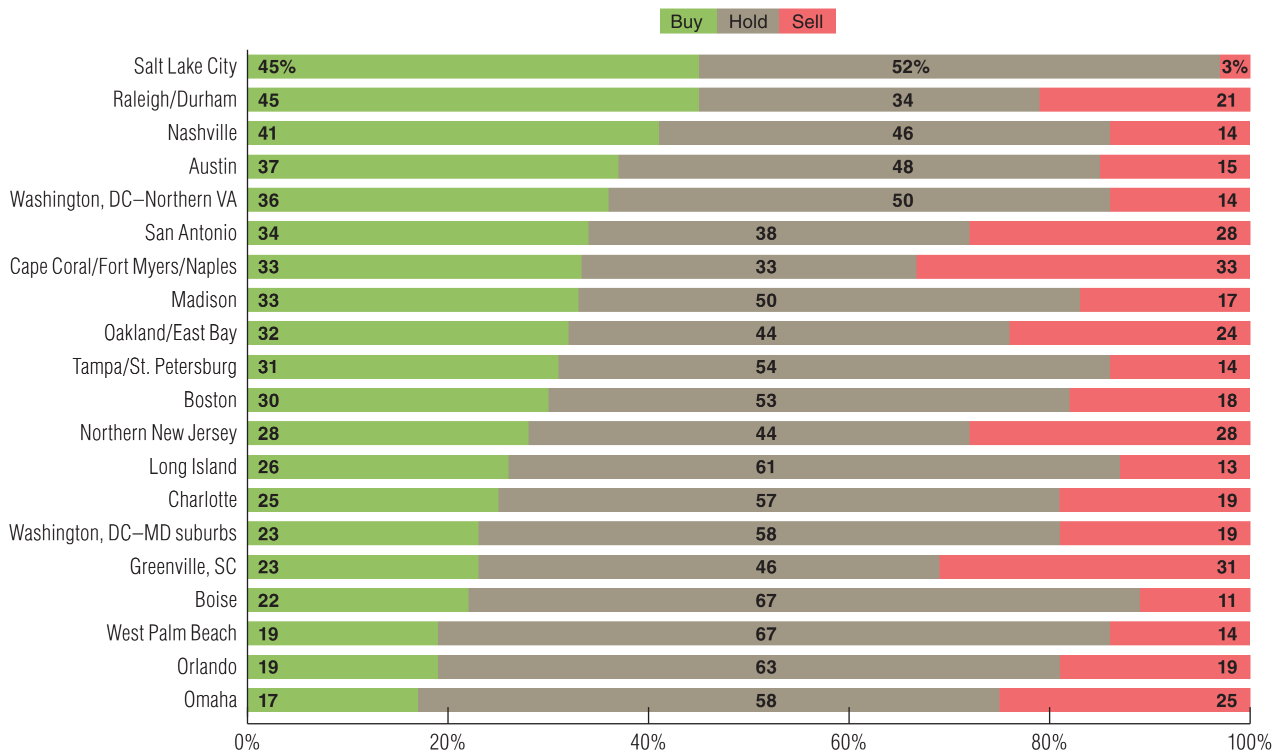
Suburbs Ascending. This group includes the markets that serve as suburbs to Los Angeles, New York City, and Washington, D.C. As with other categories, a suburban designation is not cut and dried. Many of these markets are or contain metropolitan statistical areas (MSAs) or divisions in their own right: Northern New Jersey (Newark, NJ–PA Metropolitan Division), Inland Empire (Riverside–San Bernardino–Ontario, CA MSA), and Suburban Maryland (Frederick–Gaithersburg–Rockvile, MD Metopolitan Division).

Almost all these suburban markets have moved up in the ranking of overall real estate prospects compared with last year, gaining favor in 2020 likely due to the COVID-influenced desire for more public and private space. The exceptions are Orange County and other boroughs of New York (whose rankings essentially remained the same).

Northern Virginia and Long Island not only moved up but also cracked the top 10.

Long Island is one of the biggest surprises of this year's ranking. Long Island has been in an aging, slow-growth mode for many years, but that may change as families consider trading New York City for Nassau and Suffolk counties. Financial markets also have taken note: investor demand, a component of the overall score, has shot up to the ninth rank (compared with 51st last year), and the market was ranked 14th in development/redevelopment opportunities (compared with 75th last year).

Exhibit 2-7 **U.S. Office Property Buy/Hold/Sell Recommendations**



Source: *Emerging Trends in Real Estate 2021* survey.

Note: Cities listed are the top 20 rated for investment in the office sector; cities are ordered according to the percentage of "buy" recommendations.

Emerging Trends survey participants may be ahead of economic forecasters who have not yet factored in rising suburban appeal. We would not be surprised to see those forecasts revised upward over the next year.

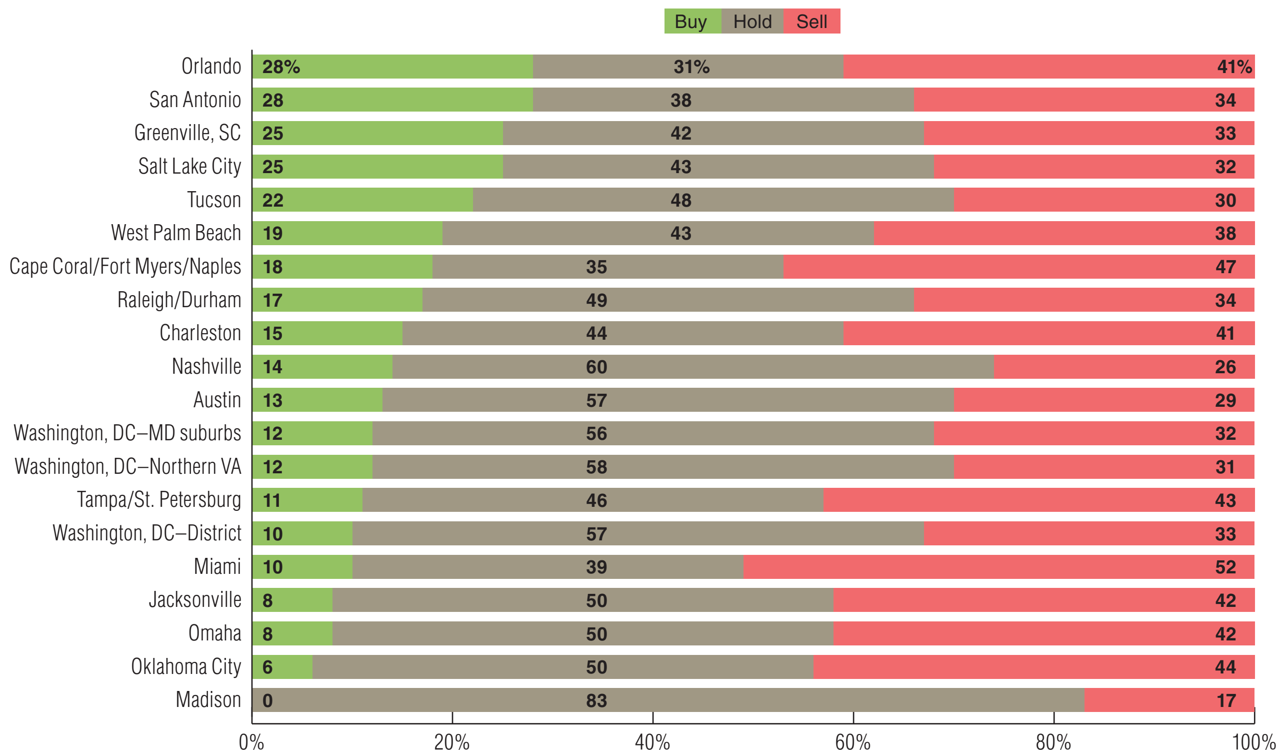
The Virginia suburbs of Washington, D.C., have often ranked in the top quintile in past years, so its move up the top 10 markets for overall real estate prospects is not a complete surprise. State and local governments are continuing to improve the area's infrastructure. Over the past year, Northern Virginia has moved forward with expanding Metrorail to Dulles International Airport and beyond (opening in 2021), announced a replacement/expansion of the American Legion Memorial Bridge (a notorious choke point on the Potomac River connection to Maryland), and started the planning to greatly expand regional rail capacity and routes.

Niche Markets

Niche markets may not be as large or economically diverse as the multitalented markets segment, but often have a dominant economic driver that supports stable economic growth. Boutique markets are smaller cities with innovative or unique developments that coordinate well with their economic and demographic profiles. "Eds and meds" is an oft-used term to describe areas with sizable education and/or health care facilities. Finally, visitor and convention center markets focus on tourism, conventions, and, in some cases, the retirement and second-home market.

Boutique Markets. These are smaller markets with lively downtowns; diversity in leisure, cultural, and natural/outdoor amenities; and stable economic bases that withstood the COVID-19 downturn better than many markets. Altogether, along with their lower cost of living and cost of doing business, they offer something for everyone. Boise, Chattanooga, Des Moines, Greenville, Knoxville, Omaha, Portland (Maine), and Richmond have populations between 600,000 and 1.3 million. All have positive in-migration, an indication of the appeal of these towns. Expressing a sentiment that likely applies to many or all of the boutique markets, the focus group of Boise real estate profes-

Exhibit 2-8 **U.S. Retail Property Buy/Hold/Sell Recommendations**



Source: *Emerging Trends in Real Estate 2021* survey.

Note: Cities listed are the top 20 rated for investment in the retail sector; cities are ordered according to the percentage of "buy" recommendations.

sionals noted that “real estate is still comparatively undervalued, so there is significant upside for newcomers.”

Eds and Meds. Pre-COVID, “eds and meds” was shorthand for an ideal combination of stability (large universities) and growth (health care). COVID-19 has certainly put a wrinkle in this strategy, although the importance of education and the need for health care are likely to resume rising. The key question is how much of both will shift to an online remote format? In the meantime, this category includes markets with a strong base of major universities and/or highly ranked health care systems: Baltimore, Columbus, Gainesville, Madison, Memphis, Pittsburgh, and Tallahassee. Each of the college towns above has one or more *U.S. News & World Report* top 100 universities, while Memphis has St. Jude Children’s Research Hospital, the top-ranked children’s specialty hospital in the United States. Cities in the eds and meds category often have other economic strengths. Pittsburgh has a concentration of tech and bioscience, while the Baltimore focus group participants noted that their market has “one of the few deep-water ports in the country that can handle Panamax ships.”

Convention and Visitor Centers. These are visitor markets (and some retirement/second-home markets) with large tourism and leisure sectors. Markets in this category include Cape Coral/Fort Myers/Naples, Charleston, Daytona Beach, Honolulu, Las Vegas, New Orleans, Orlando, and Virginia Beach/Norfolk. All have significantly more tourism employment (relative to market size) that the U.S. average, with Las Vegas the most tourism-dependent market in the country. All these markets are facing challenges from COVID-related restrictions, with those that rely on air travel generally faring worse. Most of these leisure-travel-focused markets could see faster improvement post-COVID due to pent-up demand from consumers. Consumers eager to travel once they feel safe may drive the rebound in this segment. Consumer demand, however, may reveal shifts in product preferences due to lingering health concerns (e.g., extended-stay versus full-service hotels), as discussed in chapter 3. There are more questions about future business meetings and conventions, which may affect Las Vegas and other convention-oriented cities. Decisions around large group meetings and conventions will likely be more dependent on the development of an effective vaccine and treatment protocols. Battered corporate budgets also may influence business travel decisions beyond 2021.

Backbone Markets

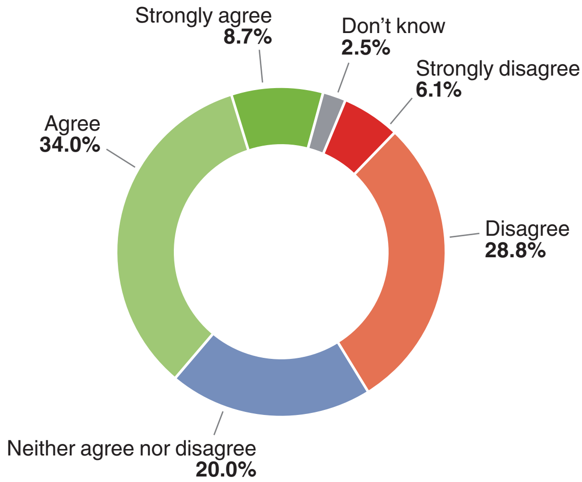
Not all markets rank high in national surveys, but many are interesting and enjoyable places to live and work, with targeted opportunities for investment and development/redevelopment. We have labeled these backbone markets—some 18 cities comprising more than 32 million residents. Although they are generally slower-growth markets, they are also among the most affordable markets in the United States in terms of housing and business costs.

The Affordable West. Not everyone in the U.S. West can afford Los Angeles, the San Francisco Bay area, or San Diego. Fortunately, there are a number of midsized cities that are very good places to live and are very affordable compared with those larger West Coast markets. These include Albuquerque; Sacramento; Spokane, WA/Coeur d’Alene, ID; Tacoma; and Tucson. Major projects in these markets, such as the infill Sacramento Railyards noted by the focus group, are illustrative of these markets’ vitality. “The Railyards is a huge game-changer—Kasier’s flagship hospital project will be sited there as well as an MLS Stadium.”

Determined Competitors. Determined competitors are diverse markets that are having success in reinvigorating their downtowns and neighborhoods. These markets tend to be strong ancillary locations in their regions. Birmingham; Indianapolis; Kansas City, MO; Louisville; and Oklahoma City are all very affordable with a favorable quality of life. Indianapolis is illustrative, with the local focus group participants describing the market as “stable, easy to do business, and affordable, with lots of business migration from Illinois.” The Kansas City focus group pointed to that market’s regional position, a “two-day truck drive to 88 percent of the U.S. population.”

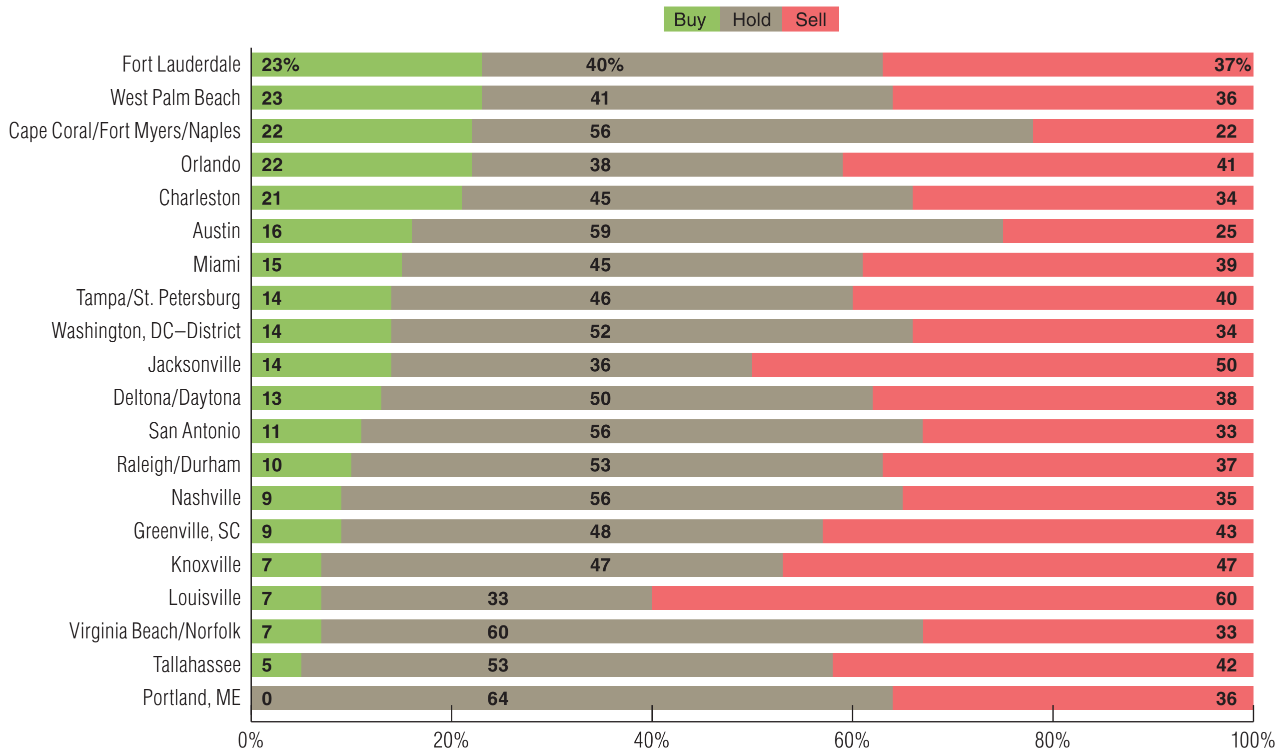
Reinventing. Reinventing markets include Buffalo, Cincinnati, Cleveland, Detroit, Hartford, Milwaukee, Providence, and St. Louis. These are eastern and midwestern cities that are in the process of updating their economic base, often from a manufacturing focus to a more sustainable mix of education, health care, and technology. The Cleveland Clinic is one of the top hospitals in the world, and focus group participants in that market noted that “health care tech is growing in Cleveland.” Participants in the St. Louis focus groups noted that “unique opportunities in process include the new headquarters for the National Geospatial-Intelligence Agency [NGA], the tech/entrepreneurial scene that is getting national recognition, as well as the new MLS Stadium.”

Exhibit 2-9 **Businesses and Residents Will Move Away from Areas with Higher Density**



Source: *Emerging Trends in Real Estate 2021* survey.

Exhibit 2-10 **U.S. Hotel Property Buy/Hold/Sell Recommendations**



Source: *Emerging Trends in Real Estate 2021* survey.

Note: Cities listed are the top 20 rated for investment in the hotel sector; cities are ordered according to the percentage of "buy" recommendations.

Exhibit 2-11 **Local Market Perspective: Local Public and Private Investment**

Weak | | Average | | Strong

Market	Score	Market	Score
Dallas/Fort Worth	3.76	Buffalo	3.08
Charlotte	3.70	Westchester, NY/Fairfield, CT	3.08
Austin	3.61	New York–other boroughs	3.07
Denver	3.61	Pittsburgh	3.06
Salt Lake City	3.60	Minneapolis	3.06
Columbus	3.60	New York–Manhattan	3.00
Phoenix	3.51	Richmond	3.00
Kansas City, MO	3.50	Virginia Beach/Norfolk	3.00
Tampa/St. Petersburg	3.48	Sacramento	3.00
Indianapolis	3.46	Des Moines	3.00
Boston	3.46	Omaha	3.00
Washington, DC–District	3.44	San Francisco	2.98
Washington, DC–Northern VA	3.44	Charleston	2.97
Nashville	3.43	Las Vegas	2.96
Atlanta	3.43	Tucson	2.94
Long Island	3.41	Birmingham	2.93
Houston	3.40	Deltona/Daytona	2.91
Greenville, SC	3.38	Portland, ME	2.86
Boise	3.38	Tacoma	2.86
San Antonio	3.36	Spokane, WA/Coeur d'Alene, ID	2.85
Raleigh/Durham	3.34	Cincinnati	2.85
New York–Brooklyn	3.33	Gainesville	2.83
Northern New Jersey	3.31	Portland, OR	2.83
Inland Empire	3.31	Honolulu	2.81
Orange County	3.30	Hartford	2.80
San Diego	3.30	Oklahoma City	2.80
Cape Coral/Fort Myers/Naples	3.27	Tallahassee	2.79
San Jose	3.24	Oakland/East Bay	2.77
Jersey City	3.19	Detroit	2.75
Miami	3.19	Baltimore	2.72
Seattle	3.18	St. Louis	2.70
Jacksonville	3.17	Providence	2.67
Washington, DC–MD suburbs	3.17	Knoxville	2.58
Madison	3.17	Louisville	2.58
Philadelphia	3.16	Chicago	2.55
Orlando	3.16	New Orleans	2.54
West Palm Beach	3.14	Albuquerque	2.53
Fort Lauderdale	3.12	Cleveland	2.50
Los Angeles	3.10	Memphis	2.43
Chattanooga	3.09	Milwaukee	2.33

Source: *Emerging Trends in Real Estate 2021* survey.

Note: Ratings reflect perspective of local market participants.

Exhibit 2-12 **Local Market Perspective: Availability of Debt and Equity Capital**

Weak | | Average | | Strong

Market	Score	Market	Score
Austin	4.25	Orlando	3.41
Dallas/Fort Worth	4.18	Jacksonville	3.40
Nashville	4.10	Greenville, SC	3.39
Boston	4.08	Kansas City, MO	3.33
Charlotte	3.97	Pittsburgh	3.31
Long Island	3.88	Richmond	3.29
New York–Manhattan	3.87	Portland, OR	3.27
Washington, DC–Northern VA	3.85	Houston	3.21
Atlanta	3.84	Boise	3.20
Northern New Jersey	3.82	Omaha	3.20
Raleigh/Durham	3.82	Madison	3.17
Washington, DC–District	3.80	Gainesville	3.16
New York–Brooklyn	3.78	Virginia Beach/Norfolk	3.14
Denver	3.76	Hartford	3.10
Los Angeles	3.76	Sacramento	3.09
Philadelphia	3.75	Tallahassee	3.07
San Jose	3.74	Deltona/Daytona	3.00
Phoenix	3.74	Las Vegas	3.00
San Diego	3.70	Tacoma	3.00
Inland Empire	3.70	Birmingham	2.93
Orange County	3.69	Memphis	2.93
Jersey City	3.67	Knoxville	2.92
Seattle	3.67	St. Louis	2.90
Columbus	3.67	Baltimore	2.86
Salt Lake City	3.64	Portland, ME	2.86
Chicago	3.59	Cincinnati	2.86
San Francisco	3.59	Tucson	2.84
Tampa/St. Petersburg	3.58	Des Moines	2.83
New York–other boroughs	3.57	Louisville	2.75
Cape Coral/Fort Myers/Naples	3.56	Honolulu	2.75
Oakland/East Bay	3.55	Oklahoma City	2.73
Washington, DC–MD suburbs	3.52	Spokane, WA/Coeur d'Alene, ID	2.67
Fort Lauderdale	3.52	Chattanooga	2.64
Westchester, NY/Fairfield, CT	3.50	Cleveland	2.63
Charleston	3.50	Buffalo	2.58
Indianapolis	3.50	New Orleans	2.46
Minneapolis	3.50	Milwaukee	2.44
San Antonio	3.48	Albuquerque	2.42
Miami	3.46	Detroit	2.42
West Palm Beach	3.41	Providence	2.33

Source: *Emerging Trends in Real Estate 2021* survey.

Note: Ratings reflect perspective of local market participants.

Exhibit 2-13 **Local Market Perspective: Local Economy**

Weak		Average		Strong

Market	Rating	Market	Rating
Austin	4.22	Jersey City	3.23
Dallas/Fort Worth	4.20	Miami	3.23
Raleigh/Durham	4.11	Oakland/East Bay	3.22
Nashville	3.97	Northern New Jersey	3.21
Charlotte	3.93	Richmond	3.16
Washington, DC–Northern VA	3.86	Portland, ME	3.14
Denver	3.86	Spokane, WA/Coeur d'Alene, ID	3.13
Boise	3.79	Tacoma	3.13
Boston	3.75	New York–other boroughs	3.12
Washington, DC–District	3.74	Pittsburgh	3.12
Tampa/St. Petersburg	3.69	New York–Brooklyn	3.10
San Antonio	3.69	Portland, OR	3.10
Salt Lake City	3.68	Tucson	3.09
Phoenix	3.67	Tallahassee	3.06
Long Island	3.61	Virginia Beach/Norfolk	3.06
Atlanta	3.60	San Francisco	3.04
Seattle	3.57	Westchester, NY/Fairfield, CT	3.00
Cape Coral/Fort Myers/Naples	3.56	Chattanooga	3.00
Inland Empire	3.56	Houston	2.98
Columbus	3.56	Orlando	2.97
Washington, DC–MD suburbs	3.55	Birmingham	2.94
Charleston	3.55	Knoxville	2.93
Indianapolis	3.53	Chicago	2.91
Orange County	3.52	Gainesville	2.90
Jacksonville	3.50	Louisville	2.86
San Diego	3.48	St. Louis	2.85
Greenville, SC	3.48	Hartford	2.82
San Jose	3.45	Albuquerque	2.82
Minneapolis	3.45	Buffalo	2.79
Madison	3.44	Milwaukee	2.73
Fort Lauderdale	3.43	Memphis	2.65
Philadelphia	3.42	New York–Manhattan	2.63
West Palm Beach	3.40	Oklahoma City	2.60
Deltona/Daytona	3.38	Cleveland	2.60
Omaha	3.38	Providence	2.57
Des Moines	3.33	Baltimore	2.48
Kansas City, MO	3.33	Las Vegas	2.48
Sacramento	3.24	Detroit	2.47
Cincinnati	3.24	Honolulu	2.25
Los Angeles	3.23	New Orleans	2.19

Source: *Emerging Trends in Real Estate 2021* survey.

Note: Ratings reflect perspective of local market participants.

Exhibit 2-14 **Economy**

	2021 population			Population distribution (% of total population)				Business costs					2021 total employment		Industry location quotient**			
Market	Total (millions)	5-year annual projected % change	5-year projected annual net migration (000s)	Ages 0–24	Ages 25–44	Ages 45–64	Ages 65 and older	2021 real GMP per capita	Real GMP per capita 5-year projected annual % change	Real per capita income	Real per capita income 5-year projected annual % change	Cost of doing business*	Total (000s)	5-year annual projected % change	STEM	Office-using	Goods-producing	Tourism
United States	**332.66**	**0.7**	**1,162.9**	**31%**	**28%**	**25%**	**17%**	**$56,326**	**2.4**	**$51,440**	**0.4**	**100**	**127,362**	**2.2%**	**1.0**	**1.0**	**1.0**	**1.0**
Albuquerque	0.93	0.7	4.5	31%	27%	24%	18%	$40,327	2.1	$45,273	0.9	97.6	397	1.8%	1.1	1.0	0.8	1.0
Atlanta	6.16	1.2	90.2	33%	29%	25%	13%	$58,198	3.4	$52,051	1.3	95.9	2,845	3.0%	1.2	1.2	0.8	1.0
Austin	2.35	2.1	45.0	35%	31%	22%	12%	$59,361	1.8	$55,589	1.3	101.1	1,128	3.2%	1.8	1.1	0.9	1.1
Baltimore	2.80	0.2	-1.7	30%	27%	26%	17%	$65,080	3.4	$56,787	1.8	107.0	1,400	2.1%	1.4	1.1	0.8	0.9
Birmingham	1.16	0.3	4.0	31%	27%	26%	17%	$50,730	3.0	$56,093	1.1	88.2	550	2.0%	0.8	1.0	1.0	0.9
Boise	0.79	1.8	6.5	33%	28%	24%	16%	$41,728	2.7	$47,449	1.3	93.8	350	2.9%	1.1	1.0	1.2	1.0
Boston	4.89	0.3	12.0	29%	28%	26%	17%	$81,255	4.1	$65,677	2.2	115.8	2,614	3.1%	1.7	1.2	0.8	0.9
Buffalo	1.12	-0.5	-4.8	28%	25%	27%	20%	$49,666	3.8	$48,927	1.9	97.6	519	2.3%	0.8	0.9	1.0	1.0
Cape Coral/Fort Myers/ Naples	1.19	0.6	30.4	25%	22%	25%	27%	$36,332	2.4	$63,705	0.5	98.5	443	2.9%	0.5	0.9	1.1	1.5
Charleston	0.83	1.3	8.6	31%	28%	25%	16%	$46,040	2.9	$50,938	0.9	96.8	370	3.0%	1.0	0.9	1.0	1.2
Charlotte	2.69	1.3	58.2	32%	28%	26%	15%	$54,905	3.3	$53,438	1.5	94.3	1,225	3.6%	1.1	1.2	1.1	1.1
Chattanooga	0.57	0.6	5.8	29%	25%	26%	19%	$49,027	2.0	$50,740	1.3	89.6	274	1.2%	0.7	0.8	1.3	1.0
Chicago	9.43	0.0	-31.1	31%	28%	26%	16%	$64,071	3.1	$57,707	1.6	103.0	4,636	2.0%	0.9	1.2	1.0	0.9
Cincinnati	2.21	0.3	3.8	32%	26%	25%	16%	$55,924	3.2	$58,399	1.6	91.8	1,091	2.2%	1.0	1.1	1.2	1.0
Cleveland	2.04	0.0	-7.4	28%	25%	27%	20%	$55,875	3.5	$57,146	1.6	91.9	1,014	2.3%	1.0	1.0	1.2	0.9
Columbus	2.16	0.7	11.3	33%	29%	24%	14%	$52,451	3.4	$53,532	1.7	93.6	1,089	2.6%	1.2	1.2	0.8	0.9
Dallas/Fort Worth	7.87	1.4	91.1	35%	29%	24%	12%	$60,355	1.9	$52,934	1.3	98.6	3,790	2.5%	1.2	1.2	1.0	1.0
Deltona /Daytona	0.68	1.1	20.3	26%	22%	27%	25%	$26,843	2.4	$43,276	0.3	98.0	209	1.9%	0.4	0.7	1.0	1.5
Denver	3.03	1.1	19.8	30%	31%	24%	14%	$65,141	2.7	$59,147	1.3	107.8	1,523	2.6%	1.5	1.2	0.9	1.0
Des Moines	0.68	1.2	7.5	34%	29%	24%	13%	$64,345	2.8	$56,555	1.2	94.5	371	2.5%	1.1	1.4	0.9	0.9
Detroit	4.32	-0.1	-6.6	29%	26%	27%	18%	$49,331	4.5	$52,580	2.2	96.2	1,856	3.1%	1.5	1.2	1.3	0.9
Fort Lauderdale	1.96	0.8	28.7	27%	28%	27%	19%	$47,668	3.6	$44,258	1.0	111.8	835	3.4%	1.4	1.2	0.7	1.0
Gainesville	0.29	0.2	3.7	37%	25%	21%	16%	$44,974	3.1	$46,696	1.5	96.4	150	1.8%	1.0	0.7	0.5	1.0
Greenville, SC	0.94	0.7	9.9	31%	25%	25%	18%	$43,121	2.6	$47,202	1.0	91.1	433	2.3%	0.9	1.0	1.4	1.0
Hartford	1.20	0.0	0.4	29%	24%	27%	19%	$73,850	2.7	$60,128	1.8	104.0	631	1.4%	1.3	1.1	1.1	0.8
Honolulu	0.97	0.0	-0.3	30%	28%	23%	19%	$58,029	3.3	$46,227	1.4	136.3	445	2.0%	0.8	0.9	0.6	1.4
Houston	7.24	1.5	70.0	35%	30%	24%	12%	$58,143	2.9	$51,448	1.2	101.4	3,089	2.3%	1.1	1.0	1.3	0.9
Indianapolis	2.12	1.0	10.6	33%	28%	25%	15%	$59,178	2.7	$57,217	1.2	91.9	1,087	2.2%	1.1	1.1	1.0	0.9
Inland Empire	4.75	1.3	-9.1	35%	28%	23%	14%	$34,578	2.7	$36,757	1.3	108.3	1,534	2.9%	0.5	0.6	1.1	1.0
Jacksonville	1.61	1.2	23.6	30%	27%	26%	17%	$45,239	2.8	$50,255	1.1	97.9	726	3.1%	0.8	1.2	0.8	1.1
Jersey City	0.68	0.5	-0.9	30%	33%	24%	12%	$64,180	4.4	$50,979	2.8	121.3	272	3.0%	1.0	1.4	0.4	0.7
Kansas City, MO	2.19	0.6	-0.6	32%	28%	25%	16%	$55,525	2.5	$56,015	1.3	94.0	1,085	1.8%	1.2	1.2	0.9	0.9
Knoxville	0.90	0.6	7.0	29%	25%	26%	19%	$44,167	2.7	$49,563	1.1	89.7	410	1.8%	0.9	1.0	1.1	1.0
Las Vegas	2.33	1.3	49.5	31%	29%	25%	15%	$43,710	3.4	$45,240	1.1	100.4	974	4.0%	0.5	1.0	0.7	2.6
Long Island	2.81	-0.3	-4.3	28%	25%	28%	19%	$52,582	4.4	$59,812	2.1	123.9	1,230	2.6%	1.8	0.8	0.9	0.9
Los Angeles	10.00	0.0	-14.9	29%	30%	26%	15%	$68,779	3.2	$51,715	1.6	117.6	4,432	1.8%	0.9	1.0	0.9	1.1
Louisville	1.31	0.6	4.8	30%	27%	26%	17%	$47,966	2.8	$52,938	1.3	90.0	640	2.3%	0.8	0.9	1.3	0.9
Madison	0.67	0.7	1.0	33%	27%	25%	16%	$68,013	3.2	$58,587	1.4	96.7	388	3.0%	1.7	0.9	1.0	0.9
Memphis	1.36	0.5	3.4	33%	28%	25%	14%	$50,082	2.7	$50,062	1.3	91.1	652	1.9%	0.6	0.9	0.8	1.0

Sources: IHS Markit forecast; U.S. Census Bureau; U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics.
*Cost of doing business: national average = 100.
**Industry location quotient measures industry employment concentration by market—metro industry employment as a percentage of metro total, divided by national industry employment as a percentage of national total.

Exhibit 2-14 **Economy**

	2021 population			Population distribution (% of total population)				Business costs						2021 total employment		Industry location quotient**			
Market	Total (millions)	5-year annual projected % change	5-year projected annual net migration (000s)	Ages 0–24	Ages 25–44	Ages 45–64	Ages 65 and older	2021 real GMP per capita	Real GMP per capita 5-year projected annual % change	Real per capita income	Real per capita income 5-year projected annual % change	Cost of doing business*		Total (000s)	5-year annual projected % change	STEM	Office-using	Goods-producing	Tourism
United States	**332.66**	**0.7**	**1,162.9**	**31%**	**28%**	**25%**	**17%**	**$56,326**	**2.4**	**$51,440**	**0.4**	**100**		**127,362**	**2.2%**	**1.0**	**1.0**	**1.0**	**1.0**
Miami	2.72	0.5	28.6	28%	28%	26%	18%	$52,206	3.3	$44,769	0.9	111.8		1,189	2.8%	1.3	1.1	0.6	1.1
Milwaukee	1.57	0.0	-1.7	31%	27%	25%	17%	$57,817	3.1	$58,642	1.6	95.6		851	1.9%	1.0	1.0	1.3	0.8
Minneapolis/St. Paul	3.71	0.7	19.0	31%	28%	25%	15%	$62,459	3.0	$58,937	1.6	100.9		1,961	2.4%	1.3	1.1	1.1	0.8
Nashville	2.01	1.1	16.5	32%	29%	25%	14%	$59,637	3.1	$58,512	1.3	95.9		1,044	2.8%	0.9	1.1	1.0	1.1
New Orleans	1.27	0.1	1.9	30%	28%	25%	17%	$53,735	3.0	$59,812	2.1	94.7		545	2.3%	0.6	0.9	0.9	1.4
New York–Brooklyn	2.53	-0.2	-11.1	31%	31%	24%	14%	$33,214	4.2	$39,669	0.6	128.3		756	2.9%	1.9	0.6	0.5	0.7
New York–Manhattan	1.62	-0.1	-1.7	24%	37%	23%	17%	$359,640	4.8	$149,710	3.5	131.0		2,391	3.1%	1.4	1.9	0.2	1.1
New York–other boroughs	4.10	-0.2	-5.5	30%	29%	25%	15%	$33,503	4.0	$34,551	0.3	126.4		1,105	2.7%	0.4	0.5	0.6	0.7
Northern New Jersey	3.94	0.2	-2.8	29%	25%	27%	19%	$57,880	3.9	$55,098	1.8	111.2		1,714	2.7%	1.2	0.9	0.9	1.1
Oakland/East Bay	2.86	0.7	9.4	29%	29%	26%	16%	$70,920	3.5	$58,044	1.4	120.5		1,137	2.6%	1.1	1.1	0.8	0.8
Oklahoma City	1.44	0.8	4.1	35%	28%	23%	15%	$53,031	2.4	$51,014	1.1	91.2		659	1.5%	1.0	1.0	1.1	0.9
Omaha	0.97	0.8	2.7	35%	28%	23%	14%	$58,784	2.0	$61,175	1.3	93.7		508	1.5%	1.0	0.9	1.0	1.0
Orange County	3.19	0.5	-5.7	29%	29%	26%	17%	$69,248	3.4	$57,036	1.8	116.8		1,596	2.6%	1.1	1.1	1.0	0.9
Orlando	2.67	1.5	71.4	31%	29%	24%	15%	$46,316	3.5	$42,217	1.2	100.8		1,317	4.2%	0.8	1.3	1.2	1.2
Philadelphia	6.11	0.2	-3.1	30%	27%	26%	17%	$64,069	3.5	$59,324	1.7	106.6		2,864	2.3%	1.1	1.2	0.8	1.8
Phoenix	5.11	1.4	95.0	32%	28%	23%	17%	$46,208	3.0	$45,870	1.1	98.9		2,201	3.0%	1.1	1.2	0.7	1.3
Pittsburgh	2.31	-0.1	4.3	26%	25%	28%	22%	$57,970	3.5	$60,140	1.7	97.6		1,128	2.1%	1.1	1.1	0.8	0.8
Portland, ME	0.54	0.4	1.1	25%	25%	28%	21%	$50,314	3.2	$53,927	1.4	104.9		278	2.4%	1.0	1.2	1.0	1.0
Portland, OR	2.53	0.8	18.3	29%	30%	25%	16%	$59,137	3.0	$53,440	1.4	102.1		1,190	2.8%	1.4	1.0	1.0	0.9
Providence	1.63	0.1	0.7	29%	26%	27%	18%	$46,084	3.4	$51,840	1.5	103.3		701	2.4%	0.9	1.0	1.0	1.1
Raleigh/Durham	2.72	0.5	66.9	32%	27%	25%	15%	$56,470	3.5	$53,427	1.4	97.9		1,231	3.7%	1.6	0.7	1.0	1.0
Richmond	1.33	0.6	5.8	30%	27%	26%	17%	$57,213	2.0	$57,934	1.1	95.7		690	1.7%	1.0	1.0	1.3	0.9
Sacramento	2.41	1.1	8.8	32%	28%	25%	16%	$53,465	3.0	$36,757	1.3	104.5		1,003	2.6%	1.1	0.9	1.0	1.0
Salt Lake City	1.26	1.1	3.0	36%	30%	22%	12%	$67,258	2.5	$52,225	1.5	97.8		759	2.2%	1.3	1.0	1.0	1.0
San Antonio	2.62	1.4	24.8	34%	28%	24%	14%	$46,004	1.6	$50,900	1.2	93.6		1,085	2.4%	0.8	1.2	0.8	0.9
San Diego	3.37	0.6	2.7	31%	29%	24%	15%	$64,884	3.3	$47,569	1.1	119.9		1,470	2.4%	1.5	0.9	0.8	1.0
San Francisco	1.65	0.2	6.0	25%	32%	26%	17%	$169,197	4.4	$51,549	1.7	131.0		1,130	2.7%	1.9	1.2	1.1	0.8
San Jose	2.00	0.7	2.9	31%	29%	25%	15%	$164,900	3.4	$97,200	2.7	133.6		1,127	2.4%	3.3	1.1	0.8	1.2
Seattle	3.13	0.8	25.0	29%	32%	25%	14%	$100,675	3.3	$81,800	2.6	113.2		1,697	2.8%	1.9	1.1	1.0	1.2
Spokane, WA/Coeur d'Alene, ID	0.77	1.0	5.9	30%	26%	25%	19%	$42,563	2.7	$45,275	0.7	96.6		316	2.8%	0.7	1.6	0.6	1.1
St. Louis	2.80	0.1	0.8	30%	26%	26%	18%	$53,884	2.5	$60,043	1.2	92.2		1,375	1.4%	1.0	1.2	1.5	0.9
Tacoma	0.92	1.1	6.4	32%	29%	24%	15%	$40,701	2.4	$44,531	0.9	106.8		322	2.7%	1.4	1.0	1.2	0.9
Tallahassee	0.39	0.7	4.8	37%	26%	23%	15%	$39,376	2.7	$45,022	1.4	95.6		188	2.0%	1.1	0.8	1.1	0.9
Tampa/St. Petersburg	3.26	1.0	55.4	27%	26%	26%	21%	$41,688	3.0	$45,987	1.1	101.0		1,380	2.9%	0.9	1.0	1.0	1.0
Tucson	1.06	0.6	14.5	30%	24%	24%	22%	$37,928	2.5	$46,362	0.8	95.3		396	1.8%	1.2	0.8	0.5	1.0
Virginia Beach/Norfolk	1.74	0.4	3.7	32%	26%	25%	17%	$51,835	1.8	$51,639	1.2	97.5		806	1.4%	1.1	1.3	0.8	1.1
Washington, DC–District	0.71	0.5	0.5	29%	38%	21%	12%	$174,956	2.6	$68,503	1.2	122.3		795	1.5%	1.3	0.9	0.9	1.1
Washington, DC–MD suburbs	1.27	0.4	5.9	32%	28%	26%	14%	$46,806	2.7	$44,278	1.3	116.4		487	1.5%	1.4	1.2	0.2	0.9
Washington, DC–Northern VA	3.07	1.0	8.4	31%	31%	25%	13%	$70,043	3.7	$62,289	1.7	119.2		1,531	2.5%	1.9	0.9	0.9	1.0
Westchester, NY/Fairfield, CT	1.91	-0.1	-2.9	29%	26%	27%	18%	$74,985	3.9	$91,420	1.8	122.5		811	2.3%	1.0	1.1	0.8	0.9
West Palm Beach	1.52	1.0	43.4	25%	24%	25%	26%	$45,560	3.1	$69,942	0.5	121.7		622	3.1%	1.3	1.7	0.4	0.9

Exhibit 2-15 **Housing**

	Households		Median home prices				2021 single-family home metrics as % of previous cycle peak				Multifamily metrics	
Market	2021 total (000s)	5-year projected annual % change	2020 price	2019–2020 % change	2020 as % of previous cycle peak	Housing Opportunity Index*	Permits	Starts	Completions	Walk Score	Rent/cost of ownership**	Rent as % of household income
United States	**125,619.1**	**0.8**	**$300,000**	**7.1**	**135**	**59.6**	**1.0**	**0.9**	**0.7**	**54**	**0.87**	**29.5**
Albuquerque	368.9	1.0	$238,000	3.0	120	69.6	0.6	0.6	0.4	43	0.73	16.3
Atlanta	2,272.9	1.4	$267,000	9.0	156	69.6	0.9	0.8	0.5	49	0.94	19.8
Austin	819.3	2.3	$335,000	3.7	182	59.3	1.4	1.3	1.1	40	0.74	16.5
Baltimore	1,079.2	0.5	$310,000	13.1	109	73.7	1.1	1.1	0.8	69	0.85	16.6
Birmingham	458.2	0.4	$206,000	8.4	125	75.5	0.6	0.6	0.5	35	0.92	16.9
Boise	281.0	1.9	$364,000	10.0	177	40.2	1.7	1.7	1.2	40	0.62	19.7
Boston	1,876.8	0.6	$500,000	4.2	122	45.5	1.2	1.0	0.9	81	0.86	25.6
Buffalo	490.3	-0.1	$160,000	14.3	156	81.8	0.7	0.6	0.6	68	1.22	16.4
Cape Coral/Fort Myers/ Naples	491.6	2.0	$240,000	4.3	67	62.5	1.6	1.4	0.7	38	1.06	24.2
Charleston	322.5	1.7	$298,000	8.4	139	64.9	1.0	1.0	0.8	40	0.80	19.3
Charlotte	1,016.2	1.5	$280,000	10.7	180	70.4	0.8	0.8	0.7	26	0.62	13.5
Chattanooga	224.5	0.8	$200,000	0.5	118	81.0	1.0	1.0	0.7	29	1.16	20.9
Chicago	3,648.7	0.4	$270,000	5.9	98	60.3	0.5	0.5	0.4	78	0.73	15.0
Cincinnati	877.6	0.5	$185,000	6.9	127	83.5	0.9	0.8	0.7	50	1.47	20.6
Cleveland	881.9	0.3	$155,000	10.7	111	81.1	0.8	0.7	0.8	60	1.17	15.6
Columbus	842.3	1.1	$234,000	6.3	156	70.8	1.3	1.3	1.2	41	0.83	15.0
Dallas/Fort Worth	2,807.6	1.6	$322,000	3.7	214	49.9	1.3	1.2	0.9	46	0.73	17.7
Deltona /Daytona	291.4	1.3	$223,000	2.8	111	69.1	1.9	1.8	1.1	37	0.97	21.7
Denver	1,177.5	1.4	$435,000	5.4	174	57.1	1.7	1.7	1.1	61	0.66	18.7
Des Moines	262.5	1.6	$226,000	10.0	151	69.7	1.2	1.2	1.2	45	0.65	19.7
Detroit	1,750.0	0.3	$215,300	3.6	116	68.9	1.6	1.5	1.1	55	0.73	22.7
Fort Lauderdale	749.7	1.0	$285,000	5.5	77	50.5	1.6	1.5	0.8	59	1.12	29.1
Gainesville	112.0	0.6	$196,000	6.8	85	77.2	1.0	1.0	0.7	34	1.08	19.9
Greenville, SC	365.2	1.0	$235,000	6.0	153	77.4	1.0	1.0	0.9	41	0.82	16.8
Hartford	474.7	0.3	$230,000	2.4	88	80.6	0.6	0.5	0.3	71	1.09	16.8
Honolulu	308.5	0.3	$620,000	6.4	97	36.3	0.8	0.7	0.5	64	0.54	21.7
Houston	669.3	0.7	$256,000	14.0	168	59.5	1.0	0.9	0.8	49	0.83	17.7
Indianapolis	611.2	1.5	$195,000	9.1	159	85.8	1.2	1.1	1.0	30	0.93	14.5
Inland Empire	1,445.5	1.5	$399,000	5.0	99	32.9	1.1	1.1	0.6	41	0.76	26.3
Jacksonville	609.6	1.4	$240,000	9.7	112	72.2	1.6	1.5	1.1	27	0.91	19.0
Jersey City	266.8	0.8	$480,000	–2.0	125	31.4	1.1	0.9	0.8	87	1.06	40.3
Kansas City, MO	858.3	0.7	$259,000	14.6	167	72.3	0.9	0.9	0.7	34	0.75	14.8
Knoxville	357.1	0.8	$220,000	5.2	141	77.1	1.0	0.9	0.7	31	0.83	16.2
Las Vegas	876.8	1.7	$305,000	3.2	96	56.9	0.8	0.8	0.6	41	0.69	19.5
Long Island	962.5	0.3	$460,000	14.1	97	53.5	1.1	0.9	0.7	95	0.99	23.2
Los Angeles	4,405.9	0.3	$640,000	11.2	111	10.8	0.9	0.9	0.8	67	0.58	32.0
Louisville	526.8	0.9	$199,000	6.1	145	78.7	0.8	0.8	0.7	33	0.89	15.0
Madison	281.8	0.8	$295,000	19.3	130	73.5	1.0	1.0	1.0	49	0.81	15.6
Memphis	524.3	0.8	$210,000	7.6	148	65.1	0.8	0.8	0.5	37	0.82	16.6
Miami	969.9	0.8	$325,000	5.4	85	26.4	0.9	0.8	0.5	79	0.98	36.3

Sources: HIS Markit forecast; U.S. Census Bureau; walkscore.com; CoStar; U.S. Bureau of Economic Analysis.
*The National Association of Home Builders (NAHB)/Wells Fargo Housing Opportunity Index is the share of homes sold that would have been affordable to households earning the median income.
**Market apartment rent divided by the median mortgage payment, including estimated taxes, insurance, and maintenance.

Exhibit 2-15 **Housing**

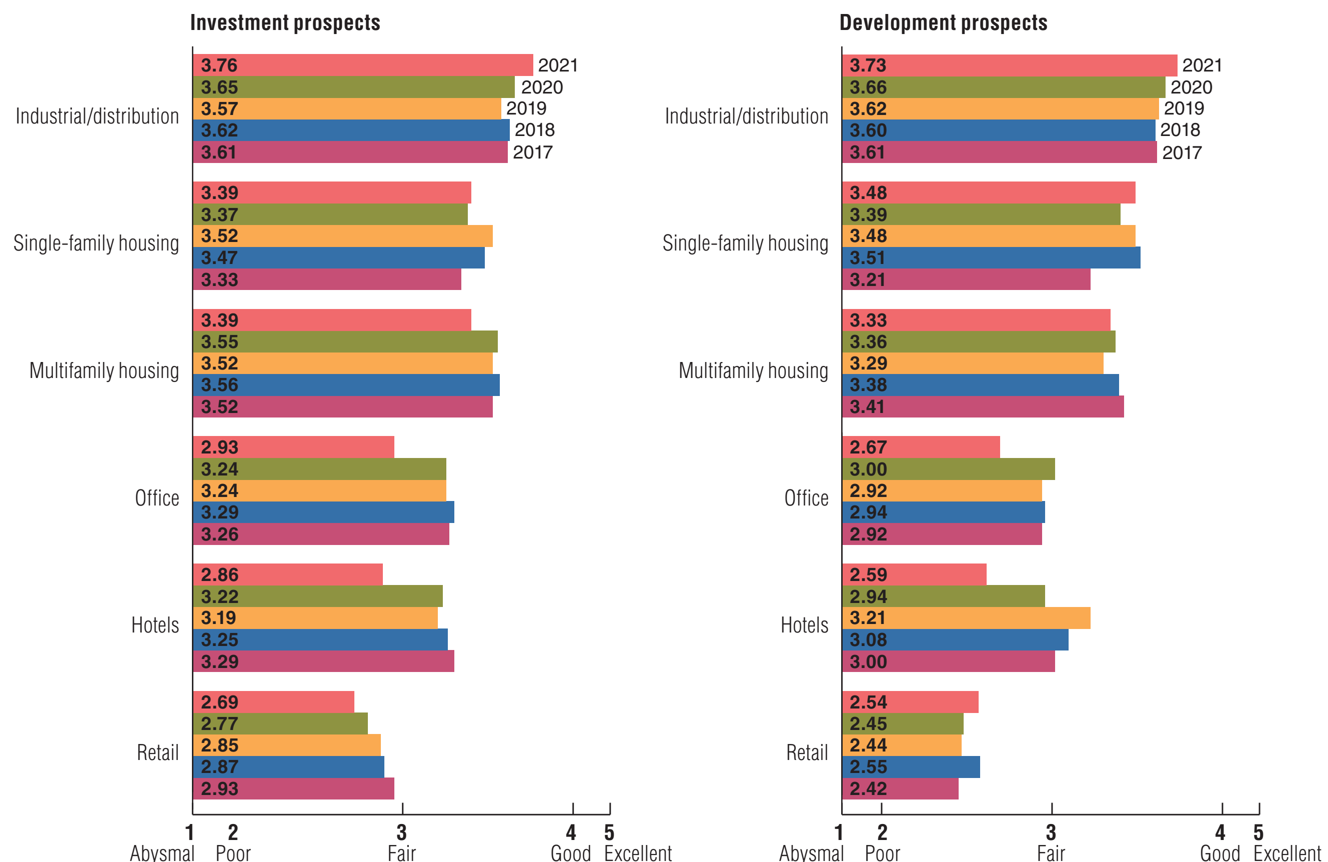
	Households		Median home prices				2021 single-family home metrics as % of previous cycle peak				Multifamily metrics	
Market	2021 total (000s)	5-year projected annual % change	2020 price	2019–2020 % change	2020 as % of previous cycle peak	Housing Opportunity Index*	Permits	Starts	Completions	Walk Score	Rent/cost of ownership**	Rent as % of household income
United States	**125,619.1**	**0.8**	**$300,000**	**7.1**	**135**	**59.6**	**1.0**	**0.9**	**0.7**	**54**	**0.87**	**29.5**
Milwaukee	648.7	0.3	$216,000	7.3	98	73.8	0.9	0.9	0.8	62	0.99	16.7
Minneapolis/St. Paul	1,432.5	0.8	$295,000	2.9	127	78.4	1.2	1.2	1.1	69	0.84	15.7
Nashville	769.1	1.4	$360,000	6.7	195	51.4	1.3	1.3	1.0	28	0.68	19.3
New Orleans	962.5	0.3	$234,200	4.3	136	70.3	1.1	0.9	0.7	58	0.71	21.0
New York–Brooklyn	962.9	0.4	$480,000	–2.0	84	31.4	1.1	0.9	0.8	89	1.02	38.7
New York–Manhattan	810.9	0.4	$480,000	–2.0	43	31.4	1.1	0.9	0.8	97	1.48	56.3
New York–other boroughs	1,483.9	0.3	$480,000	–2.0	103	31.4	1.1	0.9	0.8	78	0.83	31.7
Northern New Jersey	1,456.1	0.5	$380,000	5.5	93	47.7	0.7	0.6	0.5	33	0.82	20.0
Oakland/East Bay	1,021.7	1.0	$735,000	6.3	102	25.7	1.1	1.1	0.8	80	0.57	23.6
Oklahoma City	552.2	1.0	$170,000	8.8	128	80.2	1.1	1.1	0.9	72	0.90	13.4
Omaha	376.0	1.0	$218,400	10.9	158	72.9	0.8	0.8	0.8	33	0.66	17.8
Orange County	1,062.5	0.7	$760,000	2.7	107	13.4	1.8	1.9	1.5	45	0.52	25.4
Orlando	976.9	1.7	$275,000	21.0	102	54.8	1.4	1.3	0.8	54	0.90	23.8
Philadelphia	2,374.1	0.4	$225,000	10.5	96	60.3	1.0	0.8	0.7	42	1.18	26.6
Phoenix	1,873.4	1.7	$304,000	–7.7	114	64.8	1.1	1.1	0.8	42	0.77	19.6
Pittsburgh	1,039.1	0.2	$155,000	10.5	119	87.3	0.5	0.5	0.4	79	1.36	16.6
Portland, ME	233.1	0.7	$305,000	2.0	104	69.6	1.1	0.9	0.8	41	0.89	19.7
Portland, OR	1,000.5	1.2	$408,000	9.0	167	48.7	0.9	1.0	0.8	62	0.64	18.6
Providence	636.6	0.3	$290,000	4.5	99	64.9	0.9	0.7	0.5	61	0.98	21.5
Raleigh/Durham	1,049.9	1.5	$328,000	7.3	182	68.7	0.8	0.8	0.8	53	0.66	15.1
Richmond	509.4	1.0	$279,000	9.3	120	76.0	0.8	0.8	0.7	65	0.81	16.6
Sacramento	1,445.5	1.5	$399,000	5.0	106	32.9	1.4	1.4	1.1	79	0.72	24.8
Salt Lake City	856.6	1.2	$381,000	5.1	164	58.0	1.3	1.3	0.9	30	0.49	13.9
San Antonio	428.6	1.5	$248,000	3.8	162	58.9	1.0	0.9	0.7	51	0.93	21.0
San Diego	873.6	1.7	$594,000	0.0	99	20.1	1.3	1.3	1.0	47	0.34	14.1
San Francisco	1,175.4	0.9	$1,400,000	3.1	157	8.5	0.5	0.6	0.6	57	0.26	16.9
San Jose	646.6	0.6	$1,105,000	3.4	132	16.2	1.2	1.3	1.1	38	0.48	24.7
Seattle	675.7	0.9	$572,000	7.5	139	41.2	0.8	0.8	0.6	51	0.86	28.5
Spokane, WA/Coeur d'Alene, ID	302.8	1.3	$275,000	9.2	130	69.1	2.0	2.0	1.3	86	0.73	16.8
St. Louis	1,158.2	0.4	$165,000	7.0	112	86.9	0.7	0.7	0.6	51	1.13	14.7
Tacoma	349.7	1.5	$390,000	8.9	129	50.3	0.9	0.9	0.7	73	0.62	17.3
Tallahassee	152.0	1.0	$195,000	14.8	108	79.2	0.6	0.6	0.5	48	0.99	17.3
Tampa/St. Petersburg	1,296.5	1.2	$240,000	9.3	107	63.6	1.8	1.7	1.1	65	1.02	23.1
Tucson	430.6	0.8	$235,000	8.8	96	70.5	0.9	0.9	0.6	32	0.70	15.8
Virginia Beach/Norfolk	669.3	0.7	$251,000	5.5	103	76.1	0.9	0.9	0.7	50	0.89	17.7
Washington, DC–District	309.8	0.6	$422,000	7.1	93	67.1	0.9	0.9	0.7	42	0.93	21.5
Washington, DC–MD suburbs	452.5	0.7	$430,000	9.6	106	71.4	1.1	1.1	1.0	77	0.73	16.1
Washington, DC–Northern VA	1,121.5	1.3	$422,000	7.1	94	67.1	0.9	0.9	0.7	69	0.89	20.6
Westchester, NY/Fairfield, CT	702.0	0.2	$494,600	7.1	95	58.9	0.8	0.9	0.8	68	0.69	28.5
West Palm Beach	611.2	1.5	$300,000	11.0	80	55.3	2.2	2.0	1.2	60	1.07	26.7

Property Type Outlook

"Is it an acceleration of trends, or is it a deflection to a different direction?"

As we think about whether COVID-19 has accelerated or reversed key real estate trends, a look at the various property types shows that it has done both. At the extremes, the rise of e-commerce and a certain shift away from physical stores have accelerated while the move to add common-area amenities to apartment buildings and hotels and compress square footage per employee has halted. Whether these shifts are permanent or temporary or rising, falling, or changing is discussed by property type in this chapter.

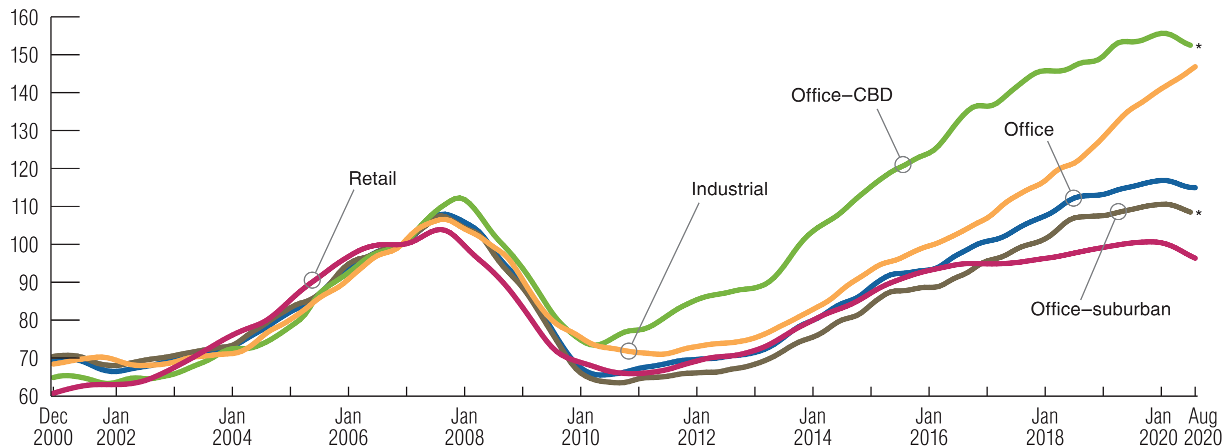
Exhibit 3-1 **Prospects for Major Commercial Property Types, 2017–2021**



Source: *Emerging Trends in Real Estate* surveys.

Note: Based on U.S. respondents only.

Exhibit 3-2 **Commercial Property Price Index, by Sector**



Source: Real Capital Analytics.

*Data for office—CBD and office-suburban—are through July 2020; data for industrial, office and retail are through August 2020.

Perhaps the biggest change from a year ago is the ability of the real estate industry to feel comfortable about the future state of each property type. Over the past decades, the evolution of each property type has been slow and measured. Industrial buildings have higher ceilings and more truck parking than 20 years ago but are mostly unchanged. New office buildings may have larger windows and destination-based elevators, but a cubicle in a new building is very similar to one in a vintage structure from the 1970s. Buildings are built to last 50 years or more and—until this year—developers and investors were in the main confident about their usability and financial viability over that time frame.

COVID-19 has kicked real estate certainty to the ground. Confidence in future demand for and use of retail space, office buildings, apartments, and other mainstays of property has dropped significantly. Economists call this phenomenon "Knightian uncertainty." Named after famed University of Chicago professor Frank Knight, Knightian uncertainty refers to the lack of quantifiable information about an outcome. This is in contrast to risk, where there is quantifiable data (vacancy rates, rents, returns) that (we believe) provides guidance regarding the future.

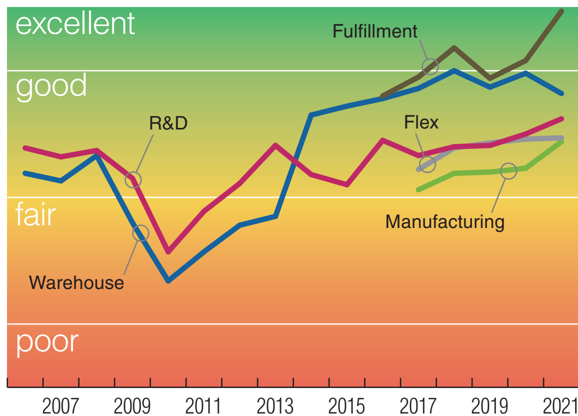
The list of factors for which we have little or no quantifiable information is a long one: the long-term impacts of COVID-19, the viability and timing of a vaccine, the participation rate in a future vaccine program, and the parameters of herd immunity are a few. New areas of real estate uncertainty include fundamental challenges such as how we use office space in the future, the future of travel and large gatherings, and the role of stores. Professor Knight and his colleagues were concerned about the distorting effects of uncertainty on human behavior, acknowledging that in the absence of quantifiable information, human beings rely on other factors (e.g., personal experiences and past practices) to guide their decisions.

Despite the uncertainty that COVID-19 has promulgated, investors and developers still form views about the market and their business prospects. This willingness to think and plan ahead shows up in the *Emerging Trends* interviews and survey results. As we talked with hundreds of real estate professionals for this year's *Emerging Trends* report, we asked them to assume that an effective vaccine would be available and widely accepted over the next year or two. We think that is the best way to think about the future of real estate. But we would be the first to admit that there is no data to support this assumption—only (Knightian) uncertainty about some elements of the future.

Industrial/Logistics

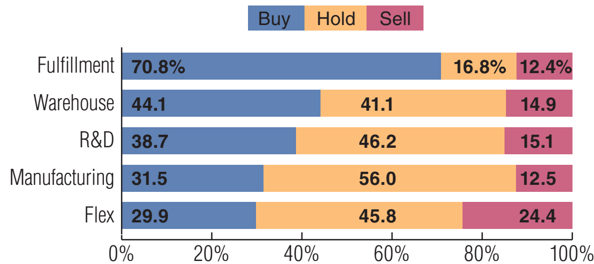
In recent years, relative and absolute return outperformance of logistics real estate has been underpinned by multiple structural drivers. These long-term demand catalysts include e-commerce, speed-to-consumer supply chain strategies, and customer adoption of high-throughput modern logistics facilities. COVID-19 not only validated the value proposition offered by these established structural demand drivers, it also accelerated their growth trajectory and provided a buoy amid cyclical economic crosscurrents.

Exhibit 3-3 **Industrial/Distribution Investment Prospect Trends**



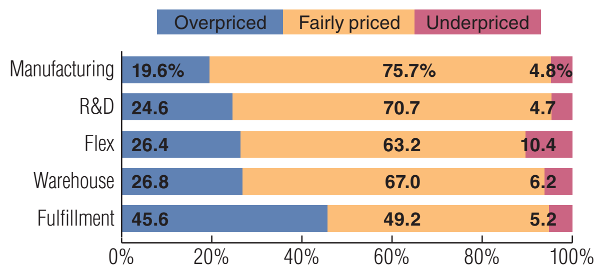
Source: *Emerging Trends in Real Estate* surveys.

Industrial/Distribution Buy/Hold/Sell Recommendations



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on U.S. respondents only.

Opinion of Current Industrial Pricing



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on U.S. respondents only.

Demand: COVID-19 Is Accelerating Structural Demand Tailwinds

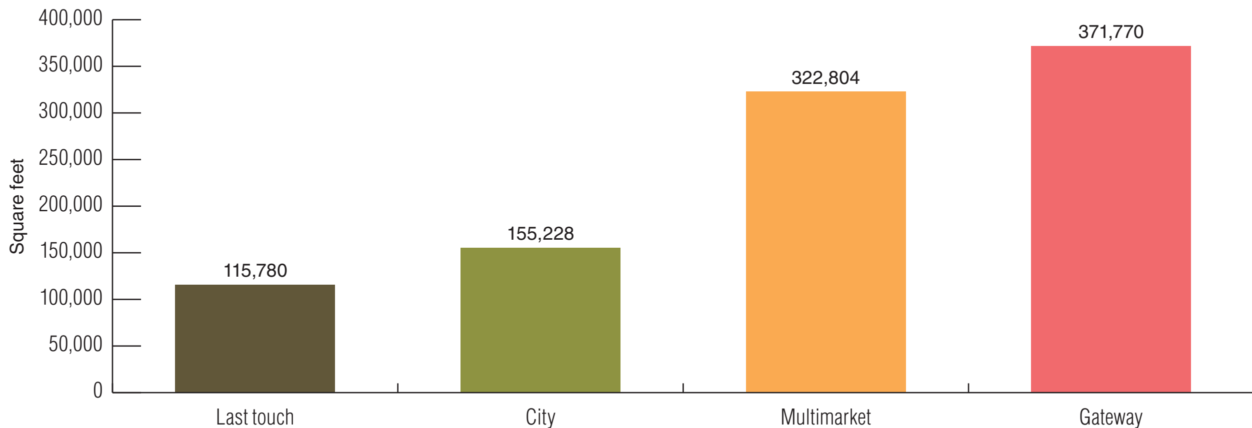
The logistics operating environment entered 2020 in a position of strength. The national market vacancy was near its historic low of 4.6 percent. The largest and most infill consumer markets, such as Los Angeles County and New York/New Jersey, were experiencing a prolonged and severe scarcity of available space, with market vacancy closer to 2 percent. This operating dynamic was vastly different than the prior-cycle peak, when market vacancy entered the global financial crisis with a 7.4 percent national vacancy rate.

E-commerce, food and beverage, and an immediate need for short-term space for third-party logistics (3PL)/apparel customers buoyed leasing activity in the early stages of the COVID-19 pandemic. Increased incidence of blank sailings (i.e., when a carrier cancels a scheduled sailing) and closed brick-and-mortar retail stores translated to a need for short-term space. Leasing activity for large-box bulk distribution facilities was particularly strong. On the other hand, Orlando and Houston faced especially acute headwinds in light of challenges to the convention and energy sectors. Demand began to intensify by late May, led by lower-cost markets near major population centers such as Pennsylvania and by multimarket hubs in the U.S. Southwest. Indeed, net absorption during the first half of 2020 was the strongest on record in Pennsylvania. Taken together, net absorption is on pace to reach 160 million square feet by the end of 2020.

Online spending took a step up in the first half of 2020 and is expected to increase by $125 billion to $150 billion in 2020 due to the effects of COVID-19. Pure-play e-commerce and omnichannel retailers that have accelerated their business plans have pulled forward demand and created a competitive edge for post-pandemic sales growth. Logistics users are also reconsidering the normal rate of inventory carry within their supply chain, a reconsideration that is an emerging catalyst for logistics demand going forward. Lean manufacturing theory generally perceives inventory as waste, leveraging data and technology to move goods to consumers using a just-in-time model for optimized efficiency. However, as logistics customers increasingly recognize that their supply chain is the lifeblood of their revenue streams in a time of potential serious disruption, just-in-case supply chain strategies such as higher inventory carry (aided by lower interest rates) are expected to be adopted going forward. The combination of stronger e-commerce demand and higher inventory carry from COVID-19 may increase logistics demand by 400 million square feet over the next couple of years, according to Prologis Research.

Challenges stemming from COVID-19 are driving operational cost spikes throughout supply chains. An enhanced focus on worker safety initiatives, including spacing out workers, adjusting shift sizes, and conducting deep cleanings of facilities, presents near-term operational costs. Transportation costs also reacted quickly to COVID-19. In 2019, U.S. imports from China dropped by 16 percent to the lowest level since 2013 as customers shifted suppliers in certain sectors to alternative markets such as Vietnam. Faced with the COVID-19 uncertainty, many U.S. customers immediately shifted course and focused

Exhibit 3-4 **Average Industrial/Logistics Building Size by Category**



Sources: U.S. Census Bureau; ESRI; Prologis Research.

Data Centers: Integral to Our Connected Lives

If society's dependence on technology and the internet was not already apparent, the recent global pandemic forcing hundreds of millions of people to work from home has undoubtedly silenced any skeptics. Further proof can be found during a casual visit to any American's home, which contains an average of eight connected devices per person (a number that is expected to grow). Surprisingly, most people rarely stop to think about where the data they access "lives." (Spoiler alert: it is in a data center.)

To truly understand how a data center works, it is worth taking a step back to better understand how the internet functions. The internet is not floating around in a cloud or beamed down from satellites; it is actually a network of physical fiber-optic cables that connect the world and allow us to communicate. Since the internet is tangible, it means that everything we consume on our connected devices must live somewhere. Now enter the data center. Anytime you access something on the internet, you are actually sending a signal from your device that travels across a fiber cable and eventually dead-ends into a data center. The data center then sends back the information you requested, and you see it on your screen.

A data center looks like a typical industrial or office building from the outside, but inside it is full of computer servers that store data (e.g., Facebook photos, Outlook emails, websites, and so on). Unlike some architecturally stunning apartment and office buildings, you are unlikely to find a flashy-looking data center, which makes sense given that data centers store sensitive information that needs to be protected. In addition, to keep thousands of computer servers running 24 hours a day, you need a significant investment in cooling equipment and backup power sources (in case the power grid temporarily goes down), which can push total construction costs for data center projects to over $1,000 per square foot.

Data centers are spread around the globe and, depending on how specific data are used, locations can be in city centers or remote outskirts. The largest and most important data center market in the world is Northern Virginia, just outside the nation's capital. According to suburban Loudoun County, Virginia, the market is home to more than 18 million square feet of data center space, which handles over 70 percent of the world's internet traffic. Where a specific data center is located depends on two primary factors:

- **Cost:** Powering all those computers is a costly endeavor, so access to cheap power is crucial. In addition, being able to have multiple fiber cables meeting in one location helps reduce transport costs.
- **Latency:** A fancy word to measure the time it takes data to travel from one point to another. Just like traveling in a car, different destinations can take different amounts of time to travel to. The same holds true for data. An example would be someone in the United States reading this article from his or her computer. Since this article lives in a data center somewhere in the United States, it loads instantly

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on longstanding supplier relationships, many of which were in China. Although U.S. imports remain at depressed levels, U.S. imports from China have accelerated. Maritime shipping costs to the U.S. West Coast ports increased by nearly 120 percent year-over-year as a result. Demand for buffer stock in gateway and multimarket distribution hubs such as the Inland Empire, North Las Vegas, Phoenix, and Reno remained steady.

Supply: Development Activity Is Not Responding to Customer Needs

The development cycle continues to advance, albeit at a slower pace and reduced volume. Speculative development starts fell by 30 percent in the second quarter of 2020. The combination of construction site shutdowns in a handful of markets in the early months of the pandemic (e.g., Pennsylvania, San Francisco Bay area), construction worker safety issues, material sourcing, and developer hesitancy to start new projects extended delivery schedules by about two to four months for projects underway, and will curtail anticipated deliveries in 2021.

A disconnect between development activity and customer need for space exists, particularly in higher-barrier infill locations where market vacancy remains low and where potential warehouse talent is more plentiful. Nearly half of the developments started over the last four quarters were concentrated in six low-barrier markets and submarkets of Inland Empire–East, Houston, Dallas, Chicago, Pennsylvania, and Atlanta. Seemingly isolated pockets of supply risk are present, as is the case in Houston. Higher replacement costs, as projects accommodate smart building, Leadership in Energy and Environmental Design (LEED), and talent retention features on increasingly costly infill land should govern supply over the long term. Overall, projected completions are on pace to reach 250 million square feet in 2020.

Vacancy and Rents: Normalizing Off Historic Performance in Recent Years

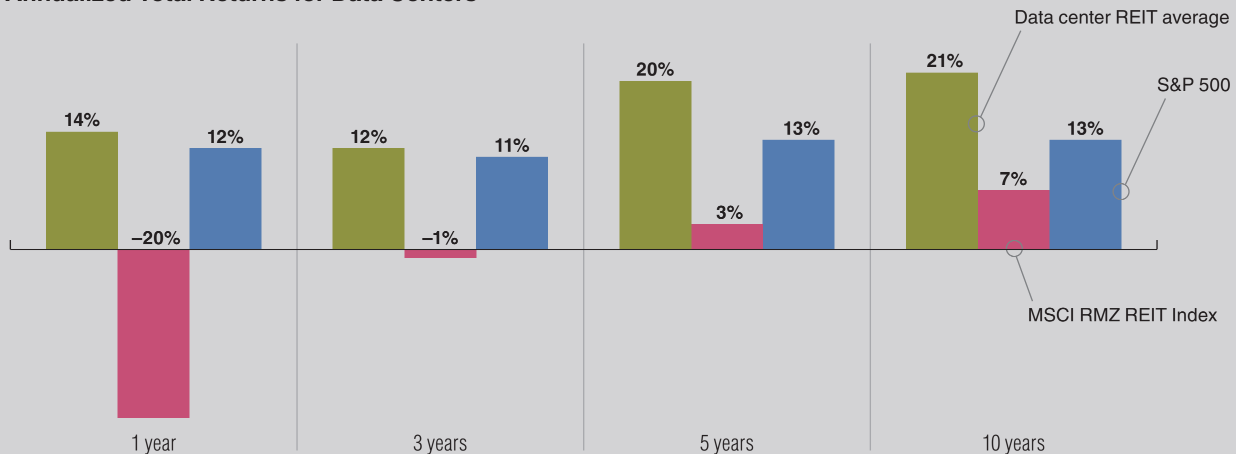
The combination of 160 million square feet of demand and 250 million square feet of anticipated completions would drive the national vacancy rate to 5 percent by year-end. Market taking rents declined by 1.4 percent in the second quarter, effectively

when the link is clicked upon. But let's say that someone in Africa wants to read this article; he or she may experience a delay of one or two seconds since the data has to travel around the globe. A delay of a second or two may not seem like much, but when you are dealing with an important transaction, like a stock trade, it can dramatically affect your execution price.

Data centers are a crucial component that allows the world to connect, conduct business, and store information. While relatively unknown among most private-market investors, in the public market, investors have bid up the prices of data center REIT stocks for years. The sector has outperformed both the S&P 500 Index and broad MSCI U.S. REIT Index (RMZ) by a sizable margin over every period. Fortunately, favorable demand tailwinds—largely driven by cloud computing and mobile data use—suggest that the data center sector has plenty of years of growth ahead.

—Green Street Advisors

Annualized Total Returns for Data Centers



Source: Bloomberg, data as of September 2020.

Note: Data center REIT average is an equal-weighted basket of COR, CONE, DLR, EQIX, and QTS. RMZ REIT Index is composed of equity REITs, including large-, mid-, and small-cap securities.

giving back the realized market rental growth achieved in the first quarter. The technical driver of the decline in market rental rates equated to about one additional month of free rent on a five-year lease. As the challenges stemming from COVID-19 dissipate, coupled with lower anticipated supply in 2021 and intensifying structural demand drivers, market rental growth is poised to strengthen in 2021, led by high-barrier Last Touch® locations that facilitate same-day delivery.

Outlook: From Just-in-Time to Just-in-Case

Customer adoption of just-in-case strategies seems poised to accelerate beyond COVID-19. Aside from carrying higher inventory levels to reduce the impact of any feasible supply

Self-Storage Delivers Durable Performance through the Health Crisis; Pandemic Slows Construction Wave, Reining-In Supply Risk

Self-storage sector entered health crisis on strong footing. A decade of robust job and household creation, together with population mobility and lifestyle changes, particularly by the millennial generation, bolstered space demand. The robust demand drivers also fueled a three-year record wave of self-storage construction, creating pockets of oversupply in some markets. Competition from new properties in lease-up moderated rent growth over that same time span, but the growing customer base has sustained the positive long-term outlook. Beginning in March, as the pandemic rapidly transformed society, self-storage properties maintained favorable operations and rent collections, underscoring the sector's reputation as a recession-resistant property type.

Sector demonstrates durability through the health crisis. While the pandemic created headwinds for most commercial property types, self-storage demand was modestly bolstered. The early closure of colleges, the need for a home workspace, the doubling up of some households, heightened relocations to different cities, and increased physical distancing at restaurants and businesses all fueled storage needs and reduced the average U.S. self-storage vacancy rate by 230 basis points in the second quarter. Operators have been reluctant to raise monthly payments since the onset of the pandemic, however, tapering rent growth. Rent collections have generally remained stable but may face additional pressure in the coming months as the support of federal stimulus fades. The one-time $1,200 stimulus check delivered earlier this year along with expanded federal unemployment benefits generated a short-term boost to households' disposable income, but still-elevated unemployment levels may soon begin to weigh on performance.

Pandemic accelerates the adoption of self-storage technology. Classified as essential, most self-storage facilities remained open during the shutdowns, with operators implementing new procedures and technology to protect customers and employees. Physical distancing requirements pushed major operators to accelerate their adoption of digital rental

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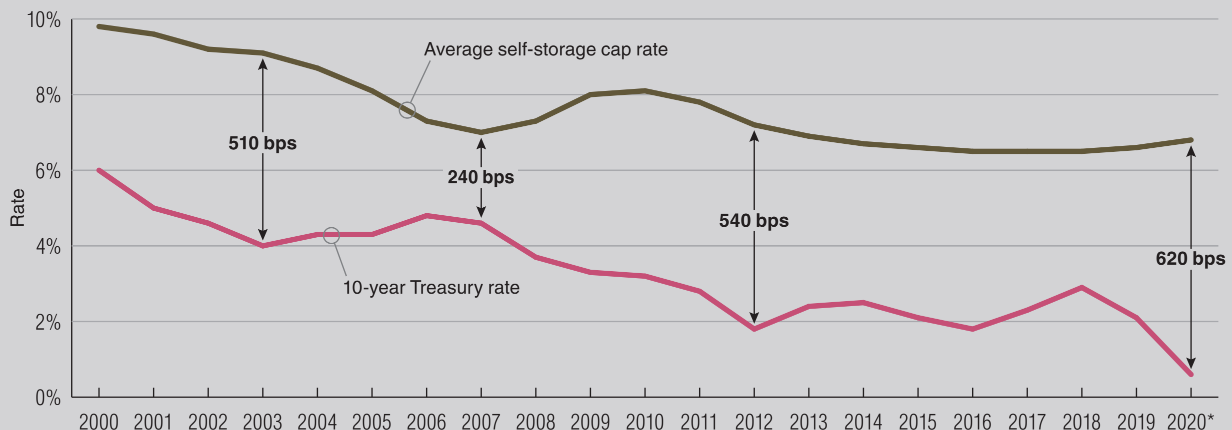
Self-Storage Yield Premiums



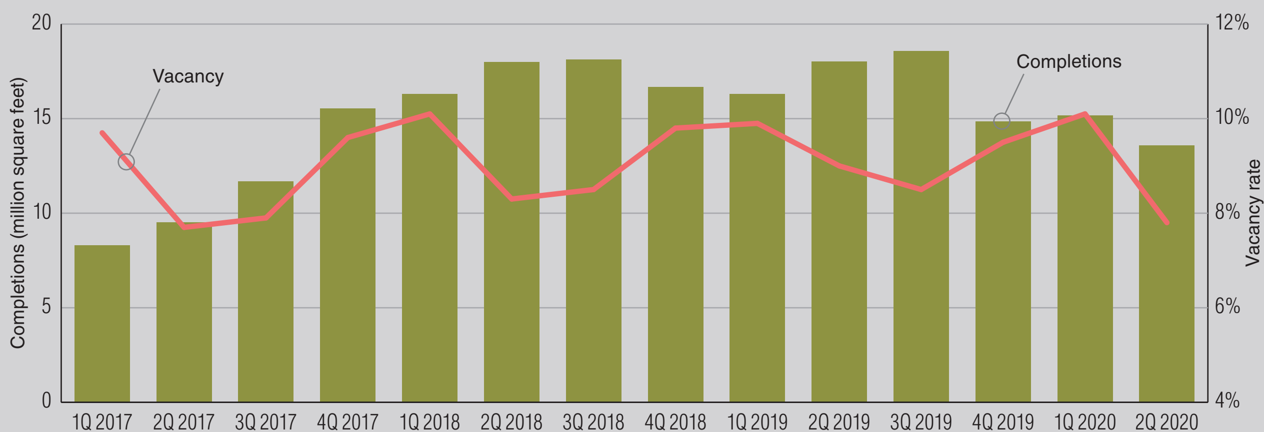
Sources: Marcus & Millichap Research Services; CoStar Group Inc.; Federal Reserve.

Notes: Includes sales $1 million and greater. bps = basis points.

*2020 cap rate is trailing 12-month average through second quarter.

chain disruptions, niche opportunities to nearshore operations in certain sectors are increasingly present along the border. Re-shoring operations—returning production away from emerging markets to domestic markets—is a cost-prohibitive challenge. Production and movement of most consumer-oriented goods seem poised to remain in Asia, due to its proximity to the largest consumer market in the world, with 2 billion middle-class consumers in the region, a base that is still to grow. At the same time, labor rate differentials between Asia and North America/Europe remain wide.

Self-Storage Completions and Vacancy



Sources: Marcus & Millichap Research Services; Union RealTime; Yardi Matrix.

platforms and automated access systems, enabling customers to rent and enter properties without direct personal contact with staff. While these trends were already in progress before the health crisis, their adoption has accelerated significantly.

Health crisis tempers the wave of construction. The strong performance of self-storage properties drew the attention of numerous developers, sparking a wave of construction that grew the total stock by more than 10 percent between 2017 and 2019. Despite this large volume of new space, vacancy rates remained range-bound in the mid–9 percent range. The pipeline of new additions had already begun to taper before the onset of the health crisis, but the additional constraints on construction caused by COVID-19 have further lessened the flow of new units. While the diminished 2020 development pipeline remains a positive, the benefit from delayed development will likely be offset by slower leasing velocity. Stabilized assets will likely see a nominal effect, but new facilities still in lease-up face a more challenging short-term outlook.

Self-storage investment sales activity aligns with the market. Uncertainty and logistical complications substantially reduced self-storage transaction velocity in the second quarter of 2020, along with all other commercial property types. Self-storage's durability during the pandemic together with its countercyclical drivers, including household consolidation and a rising number of relocations, has reinforced investor interest. Looking forward, favorable self-storage investment drivers including a flight to safety, record-low interest rates, and strong capital availability will underpin sales activity. While pockets of concern exist, particularly in metro areas with significant new inventory in lease-up and cities still under severe lockdown risk due to elevated COVID-19 contagion, sales activity is expected to revive. Some opportunistic acquisitions of troubled new facilities will likely emerge before a full recovery supported by a medical solution to the pandemic manifests.

Long-term drivers remain favorable. Once a medical solution to the coronavirus becomes widely available, the economy should deliver a relatively strong recovery. If job creation reignites, self-storage space demand should strengthen. Numerous headwinds remain and unanticipated shocks may create an uneven performance and transactional climate over the short term, but the abating supply risk is expected to offer self-storage additional long-term momentum.

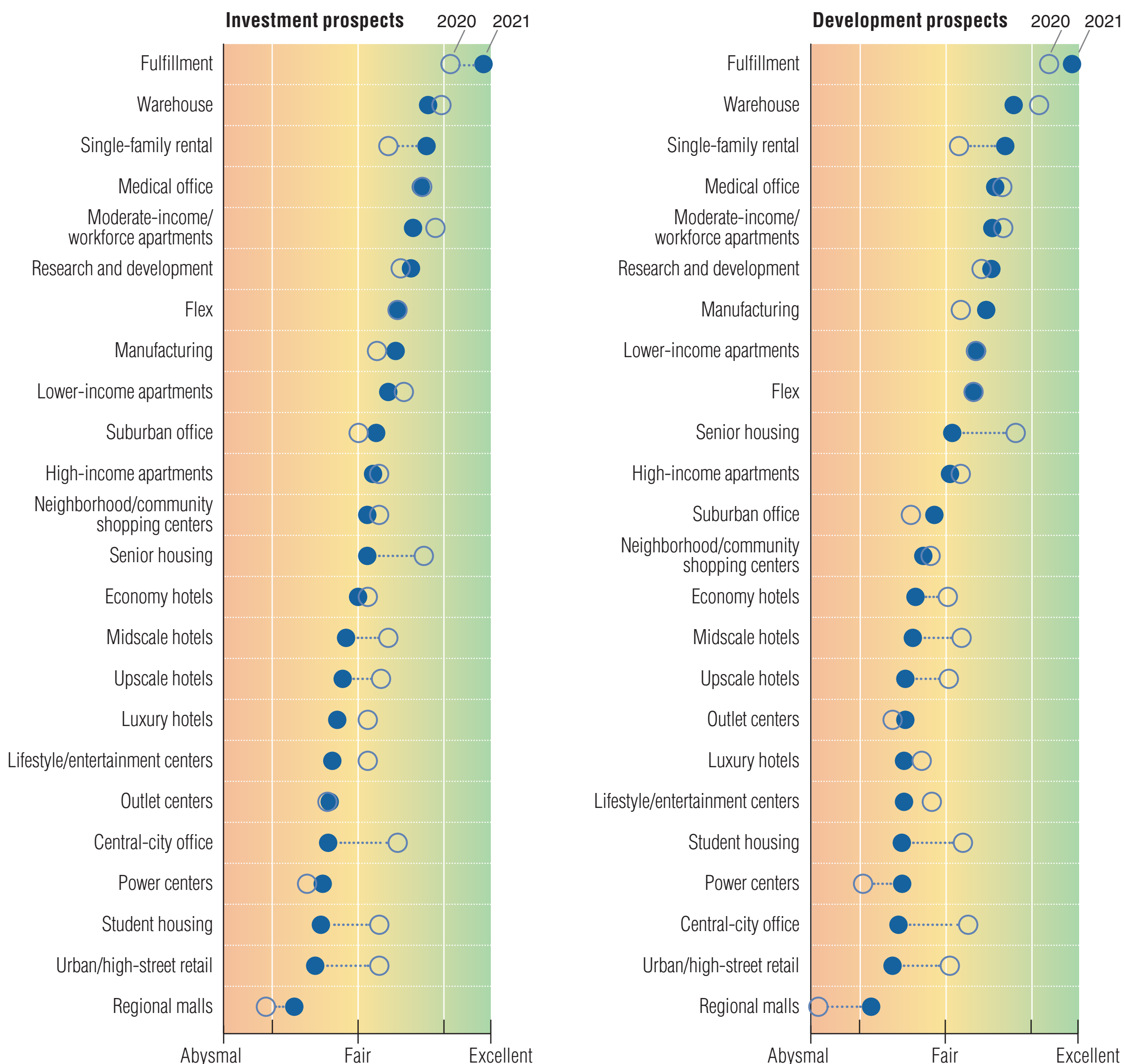
—Marcus & Millichap

On the other hand, an increasing incidence of activity for nearshoring operations—multinational corporations establishing new regional facilities closer to end consumers—began to take root in the last five years. This model balances the most attractive features of just-in-time and just-in-case logistics. Regionalizing production accommodates speedy delivery of customized made-to-order goods favored by just-in-time logistics. Regionalizing production can also reduce risk. Customers in high-technology sectors (e.g., aerospace, industrial goods, medical, electronics) may follow the path established by automotive companies over the last 20 years by establishing three quasi-independent platforms (intra-USMCA [United States, Mexico, and Canada], Asia, and Europe) to serve consumers within each region.

Warehouse Labor Pain Points Evolving

Before COVID-19, the two most commonly cited customer pain points were space availability and talent retention. Talent

Exhibit 3-5 **Prospects for Commercial/Multifamily Subsectors in 2020 and 2021**



Source: *Emerging Trends in Real Estate* surveys.

Note: Based on U.S. respondents only.

turnover in labor-intensive sectors is both costly and high—often reaching 200 percent in a normal year. Customer adoption of talent retention strategies to reduce turnover included a focus on facility location (e.g., proximity to affordable housing and transportation), building amenities (e.g., lighting, athletic space, break rooms), and operational offerings (e.g., food service). Despite the elevated unemployment rate, talent remains a key priority—albeit now viewed through a different lens. Talent wellness investments accelerated by COVID-19 will remain a valuable and competitive advantage and act as a catalyst for replacement cost and market rental growth going forward.

Mall Conversions to Logistics Use Is a Limited Opportunity

Prologis Research estimates that mall conversions could amount to 10 million to 20 million square feet over the next decade (1 million to 2 million square feet per year) in institutional-grade markets. Mall conversions are complex undertakings and present rezoning challenges, often including community opposition and complicated reciprocal easement agreements (REAs) to control access and development rights. Anchor tenant leases often add investment challenges, too, since allowing the anchor tenant to capture value creation can create negotiating difficulty across equity and debt holders.

ESG Initiatives Are Increasingly Important to Logistics Customers and Institutional Capital Partners

Environmental and sustainability initiatives became a fundamental priority for both logistics real estate customers and owners in recent years and will continue to rise in importance. For customers, a heightened focus on their carbon footprint across the entire supply chain is more common. Building features (e.g., alternative energy, LEED certification) as well as the impact of the operational platform (e.g., transportation partnerships) are rising in importance. Sustainability advantages offered by e-commerce are attractive to capital partners, since the consolidation of goods transportation into delivery fleets reduces carbon emissions relative to individual point-to-point trips by consumer vehicles to brick-and-mortar retail locations.

Investment Outlook: Relative Outperformance, Although Location Strategies Should Distinguish Performance in Time

Capital interest continues to recognize the compelling growth opportunity present in logistics real estate, as well as the relative advantages versus other real estate asset classes. According to the Pension Real Estate Association's Consensus Forecast Survey, forecast average annual total returns for industrial between 2020 and 2024 are expected to materially outperform apartment, office, and retail assets by 160 basis points, 280 basis points, and 510 basis points, respectively.

Deal flow has remained relatively limited since COVID-19 took hold, but recent prime transactions in institutional-grade markets either reaffirm pre-COVID pricing or, in some cases, point toward further cap rate compression. Signs of new equity sources for logistics real estate are emerging, with more competition in the bid offerings process, adding durability to pricing. Debt markets continue to favor logistics real estate, too. Although CMBS has not fully recovered, insurance appetite remains healthy and at pre-COVID spreads. A cautious outlook is warranted, but, given lower base rates and strong capital interest, cap rates for modern-grade product in core markets could inch downward. Looking ahead, as cap rates approach normalized levels, location strategies should increasingly distinguish performance within the sector through appreciation returns.

Single-Family's Far-from-Foreseeable Future

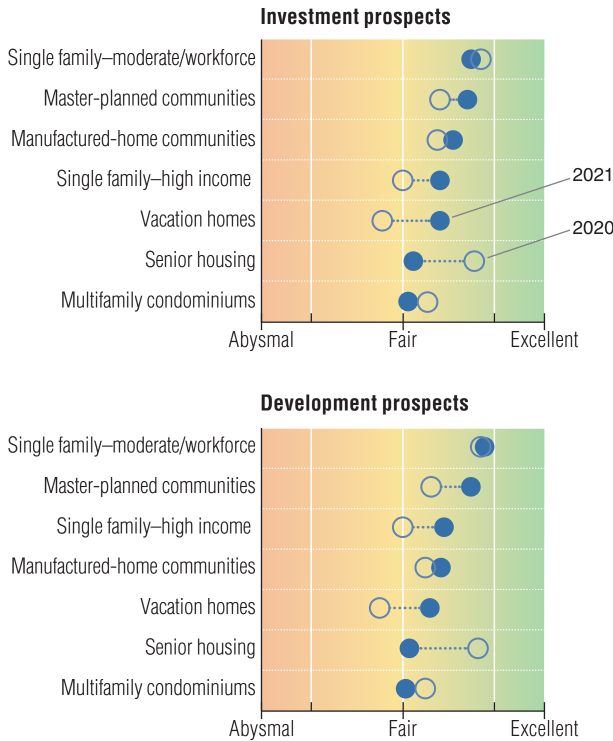
While new-build single-family housing activity did better by far than key stakeholders might have hoped through the middle part of 2020, they remained uneasy. It is almost as if they sensed that they had suddenly been suspended in an alternate, time-warped universe. Why this grave feeling of doubt matters is that trillions of dollars' worth of past, present, and future investment is ever, urgently, at play in their world. They have got to de-risk it, heat-seek return, and smooth a path for growth—all as a single, unavoidable, nerve-racking question forces itself on everyone in the game.

Is their good fortune—as welcome as it may be—a fad or a real trend?

Fads come, get big fast, and then vanish. Trends time-release as patient drivers of society, culture, and identity, laying hold to time that sweeps across cycles, through event disruptions, and beyond horizons.

So, single-family real estate and construction strategists, operators, capital sources, partners in the new, single-family construction market—which is it? Fad or trend? Midway through 2020, and in the "early innings" of COVID-19 and its ultimate impact on homebuilders' world as they know it, that challenge question glares. Or is it a trick question, where neither answer is wrong or right? When has fear—normally a paralyzer—ever acted at such scale as a macro catalyst of new-home buyer motivation?

Exhibit 3-6 **Prospects for Residential Property Types in 2020 and 2021**



Source: *Emerging Trends in Real Estate* surveys.
Note: Based on U.S. respondents only.

Hanging in the balance could be a grand, dizzying swing—to the plus or minus—of hundreds of thousands of new single-family home permits and starts in the next 12 to 36 months. In this murky delta of unknowns—specifically tied to an artificially engineered economic backdrop versus an "actual," level-set economy left to its own, unsupported mechanisms—lie hundreds of billions of dollars of invested capital, not to mention the viability of many thousands of small, medium-sized, and enterprise-level organizations, and untold numbers of livelihoods whose futures the crises profoundly obscure.

Did Single-Family New Construction Dodge a Bullet?

For the moment, single-family homebuilders and their investor-developer partners got a foxhole prayer's reprieve in the form of a swift, massive intervention by Uncle Sam. Federal Reserve stimulus and Capitol Hill largesse concluded that, after all, U.S. households are "too big to fail." They buffered Wall Street, entire business sectors, and most of America's breadwinners from the more dire consequence of the disease and its economic toll.

What qualifies as a trend may rely to a material extent on the nation's megaforce policy action plan, its resolve, and its durability. Monthly payments—whether for mortgages or rents—have, at least temporarily, been effectively postponed for those whose jobs vanished due to COVID-19. Every capital structure composed of normal models of behavior and performance related to the input of monthly payments is in limbo. Will Uncle Sam float the boat of the economy until it regains its own mechanisms for buoyancy? Can it last?

Have the Stars Aligned?

Curiously, horrific news on the health and livelihood front may actually work to brighten the tidings and prospects of homebuilders. A midyear gust of demand momentum, particularly in new-housing's hot-market hubs in America's "smile states"—a crescent-shaped curve that goes from the Pacific Northwest, down the West Coast, across the Southwest to Florida and up the East Coast—has swelled across all new-home community buyer segments. Will this fear-fueled "flight from downtown" demand for new, single-family, suburban homes with backyards last? Will that momentum carry single-family new construction's ecosystem through and beyond the whipsawing, turbulence of COVID-19 and its collateral damages? Can the housing bounce-back's V-shaped center hold? Or will the V look more like a K—benefiting the few, the secure, and the well-to-do, and leaving behind the many, the vulnerable, and the financially burdened?

Conditions as they are widely appreciated support hope. Those who vouch for an upside scenario cite a nine-year fever line that plots undersupply of new single-family units as a percentage of the nation's growing population and households. The result: scarcity is the most significant near-term driver of housing activity.

In addition, demographic destiny powers a strong tailwind. Population bulges among millennials in their mid-30s—many of whom have postponed marrying and having children—and baby boomers in their 60s have reached only the midpoint of a full decade's worth of sweeping demand. This bodes well for builders' evolved, more inclusive 55-plus communities, integrated into age-diverse, extended-family-friendly master plans. Furthermore, only now reaching their peak income trajectories, members of generation X have been redefining the live/work/play/eat/sleep design and engineering canvas, as they have chosen and built their "forever" homes. And, almost unnoticed, the leading edge of the 72 million–strong generation Z has crossed a milestone, turning 23 this year.

Another entrenched single-family-market-favoring macro trend with pan-cyclical traction is an impetus to move outward.

Migration from downtowns to walkable suburban and exurban new communities has been a glacially persistent, 21st-century population pattern. Furthermore, technology's exponential effects—transforming the present and future of work, how and where it happens, and the value it produces—albeit evident in nuanced signs during the past few years, finally crossed an inflection point after the pandemic declared itself. From now onward, talented new-economy workers enjoy freer rein to work from anywhere, opening secondary and tertiary "destination" markets to new residential growth.

Add the rocket-fuel accelerant of historically attractive mortgage rates—the likes of which homebuying borrowers may never see again—and the run starts to look sustainable.

Then, of course, there is a downside scenario. This darker outlook views early-innings sales momentum as a momentary involuntary "dead-cat bounce"—attributable equally to pent-up and pull-forward demand. "We haven't yet felt the full brunt of the collapse in our economy," said the chief executive officer of a top-15-ranked multiregional homebuilding firm. "We've gotten big affirmation in this environment that what we sell—single-family new homes—is very valuable, but until we fully recognize the impact on the real economy, past all the temporary rescue measures, we don't know whether the wherewithal will match up to what people say they want to buy."

Whether the outlook for 2021–2022 and beyond appears luminous or ominous comes down to beliefs in both the deep, real economy's essential resilience and the bounty of the U.S. Treasury. To most, fundamental demand drivers look bumpy, choppy, iffy, and scary at best.

Single-Family Housing as a Recovery Engine

The 800-pound gorilla question of the moment is this: Will single-family new construction and development emerge as real estate investment's "safe haven" in a global economy rocked by pandemic, political risk, international trade disputes, and social upheaval? Its close corollary is this: Has the American dream of new-home ownership regained footing as the surest bet for return of yield on capital investment?

To get a grip on these questions, it is important to track back to phenomena that sprang from the throes of the highly contagious infectious disease. One was humanity's most powerful motivator, fear—namely, fear of other human beings being too close for comfort. This caused people in dense, vertical, urban areas to feel that maybe the downtown life was too scary. Two kindred vibrations emerged under this pandemic-fueled incubus of dread. One was an increased scarcity of homes for potential resale. People who might have listed existing homes for sale were loath to do so during a time when hosting open houses felt—for the past few months—tantamount to inviting a contagious disease through the front door. So, listings during the first half of 2020 declined.

Second, months of sheltering in place and working from home gave many working adults something they had never had before: time—24 hours a day, seven days a week with all household members sharing space—at home. Time itself, then, became a stimulus. Time spent at home—working or not—has emerged as one of COVID-19's wild-card forces, tripping thoughts to motivations, tripping interest to pursuit, and tripping new-home purchases into a higher gear.

In late March, new-home searches, virtual tours, contactless orders, and curbside, socially distanced tech-enabled settlements proliferated. Quickly, through the lens of 20/20 hindsight, industry executives mapped it all as bound to happen, meant to be.

Uncle Sam, animal spirits, biological clocks, and strategic timing around price segmentation at the lower, entry-level tiers of the market all figure as the stars that have aligned. Conventional wisdom calls for a solid run ahead for the broad ecosystem of new single-family construction players. "We've got a cautious approach, but we're absolutely in the land market, buying lots because we've been selling out much quicker than we could have imagined," said the CEO of a top-five-ranked homebuilder.

How Supply Triggered Demand

From late January to early March, such a scenario would have sounded absurd. But, in the deafening silence of an economy tripped into manual sleep mode, homebuilders got a critical break, even as entire business and industry sectors—travel, entertainment, retail, restaurants, tourism, business meetings, and so on—ground into enforced stasis. Federal agencies declared home construction "essential work." This allowed work-in-process homes and communities to continue under construction, through completion, and to sale. Compared with a dreaded alternative, builders happily dealt with supply chain snags and logistical challenges. They quickly added technologies to help manage exposure to COVID-19, as building, marketing, and selling continued. Once they got the "essential services" green light, they grabbed the competitive upper hand.

Their selling technologies—harvesting all the recent years' ideas of a more seamless, friction-free, technology- and data-enabled homebuyer's journey—cut over in almost no time to next-generation platforms. Overnight, prospective buyers

could—during their newfound hours of lockdowns and sheltering in place—tour new homes and communities virtually, schedule appointments for in-person tours, qualify online for and secure financing, and conduct socially distanced curbside settlements with nary a hitch in the process.

As it became evident that new homes—ones never lived in, located in new-home communities largely consisting of properties with backyards, more square footage, new room air comfort and quality and water purification systems, and new flexible floor plans—were coming on line and were easier to buy using personal technologies, real estate had its Cinderella story. "At some point, fear as a motivation will evolve and become 'desire,'" said one equity research analyst at one of the top homebuilding and building product manufacturers. "The question remains whether the bad news part of the story that's currently spurring demand will continue once the shock of COVID begins to fade."

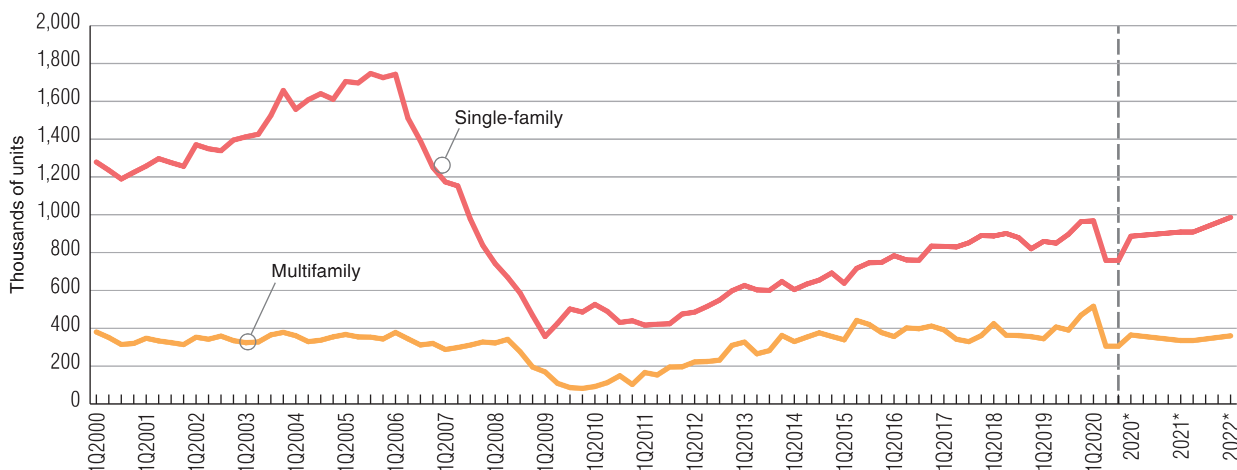
Adaptive Living

A few forces that have clearly garnered attention as "next normal" drivers should remain prominent in investment, planning, design, and engineering commitments of both human and capital resources. COVID-19's onset completed a pivot in how homes are both built and valued. In the minds of homebuyers, baseline requirements have risen. Now, people expect an array of services integrated into a system—a solution that blends working, eating, sleeping, and playing.

Three subtrends exist within the homes-as-a-solution macro trend, and have begun to be seen as "keepers" in the early innings of the pandemic.

- The Work-from-Home 2020s:
  - The Brookings Institution cites work from home (WFH) as a trend that goes back a decade. Still, new-home design has begun to pivot dramatically toward more integrated live/work/play balances in the indoor/outdoor living solutions that are evolving.
  - Impacts on design and functionality mean new performance levels around adaptive-responsive flex space and nimbleness options, greater square footage, roomy backyards, and secured, rich data connectivity.
  - Accessory dwelling units (ADUs) become more appealing than ever, both as a property valuation—and affordability—strategy, and as a home-as-a-solution, work-from-home tactic.
  - Engineering and design non-negotiables now include healthy-home functionality, including indoor air quality, room air comfort, and water filtering and purity.
- Demographics and Destiny in the 2020s:

Exhibit 3-7 **Single- and Multifamily Housing Starts, 2000–2022**



Sources: U.S. Census Bureau; National Association of Home Builders forecast.

Note: Figures are seasonally adjusted annual rate through the second quarter of 2020.

* End-of-year projections as of September 9, 2020.

  - A millennials-on-the-move tipping point occurs. Postponement of family formation ends, and early-to-mid-30-somethings embrace the job of birthing a next generation. Detached, single-family suburban-community sanctuary takes on sharper appeal.
  - Baby boomers—a 75 million–strong population segment now fully into the 55-plus customer segment—want technologies that amplify purer air and water quality, room comfort, and sound, as well as connectivity to family, friends, and adventure.
  - Generation Z is on the rise as the next generation of adults, the oldest of whom turned 23 this year. Connected, intelligent, responsive, and nimble functionality and design—all priced at an attainable, entry-level price point—becomes the "solution" that first-time homebuyers begin to expect.
  - Racial justice, social and economic mobility, and inclusion become opportunity areas in the new frontier of market-rate homebuilders, investors, and architects. Will they overcome the barriers of cost to extend their models as a societal repair phenomenon?
- The New Geography of the 2020s:
  - Suburban versus urban migration trends are shifting, under the pall of the pandemic.
  - Secondary and tertiary real estate markets may get a work-from-anywhere boost.
  - K–12 school district–driven valuations may fluctuate if COVID-19 impacts linger.

The Takeaway: Day One

After a brief maelstrom of anguish, grief, uncertainty, vague menace, and righteous anger, something stirred, pulsed, glimmered, and took on a life of its own in mid-2020. It was a market moving. It was unmistakable. New houses sparkled with new value.

That moment, a proxy for white-collar America's collective unconscious—a phenomenon that Nobel Prize–winning economist Robert Shiller calls "animal spirits"—kicked into high gear. Seemingly quite magically, people—with wherewithal—all across the land woke up feeling that it was a good idea to buy a house. Not just any house, a new house, in a new place, with more room and healthier indoor air, where no one had lived, where one could live, work from home, shelter in place with family members, and hunker down—safely—for whatever would come next.

A place for day one of a new chapter for single-family real estate's business leaders.

Beyond the throes of COVID-19 and its impacts on the economy and society, two big questions for the single-family market-rate real estate and construction business community remain.

The first one is: Can and will the industry expand the number of homebuyers by developing product that is more affordable, more attainable, and more accessible, or will it choose to continue to serve a shrinking number of people who can afford ever more expensive homes and communities?

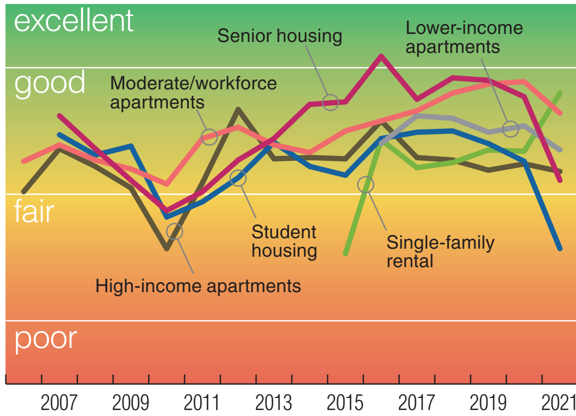
The other question is actually a related set of challenges—a social, economic, and strategic issue for real estate professionals: Can housing repair a broken society? Can housing be a solution? Infrastructure? A health care model? With COVID-19 came day one of a new chapter for new, single-family-home investment, development, and construction.

How Multifamily Will Rebound: Here's What the Smart Money Says

A 10-year, trillion-dollar-plus bull run for market-rate multifamily rental housing development and construction—an era of empire-building delta-force exuberance; 3.1 million–plus new rental units; and transformative community development—is now over.

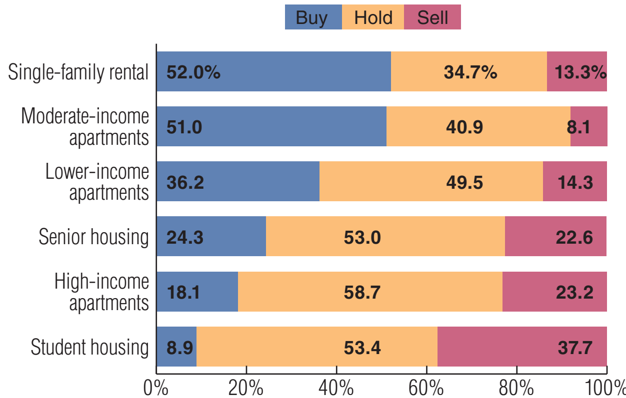
During that decade, builders, developers, investors, and their partners of the multifamily sector's 3 million or so properties of five units or more came out of their shells as real estate residential landlords. They emerged as experience-economy consumer enterprises. They learned—with a big assist from demographic and economic mojo—to put a bigger dollar delta between their own costs and rent collections on their units. Better consumer focus brought dividends—a deeper, broader addressable universe of prospective customers: renters by choice. They expected the decade to come—if politically trickier at a local level—at least to mirror the one just past in prosperity, demand growth, and continued business improvement fueled by new technologies.

Exhibit 3-8 **Apartment Investment Prospect Trends**



Source: *Emerging Trends in Real Estate* surveys.

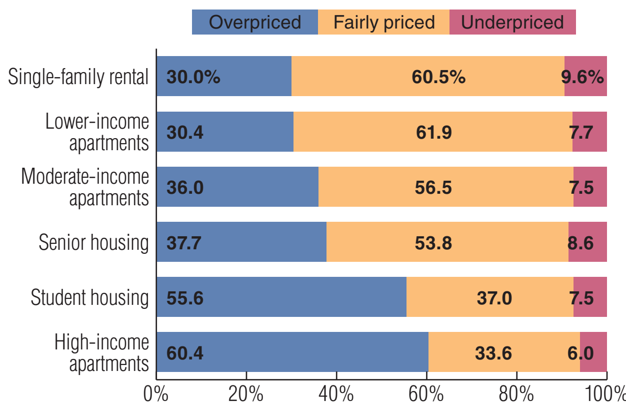
Apartment Buy/Hold/Sell Recommendations



Source: *Emerging Trends in Real Estate 2021* survey.

Note: Based on U.S. respondents only.

Opinion of Current Apartment Pricing



Source: *Emerging Trends in Real Estate 2021* survey.

Note: Based on U.S. respondents only.

The decade to come—they expected—would address the business's biggest, most chronic challenge: meaningful affordability. In other words, access to good, safe, healthy, secure shelter for more Americans would be an achievable goal by 2030.

The pandemic and concurrent economic shock destabilized the multifamily sector's utterly basic measure of worth. Destabilization of millions of households' capacity to pay rent creates a world of pain for businesses built on predictability models of that single input.

Clearly, the nature of demand remains, unaltered. In sheer numbers of people, at least three adult generational cohorts, births, and household formation patterns that press against supply of rental communities still apply. Moreover, those fundamentals still suggest a compelling, supportive near-, mid-, and longer-term market hypothesis for more geographically diverse and more attainably priced multifamily development. Still, structural drivers now—for the duration it is impossible to calculate—await a new next chapter. What is disrupted is any semblance of predictability, which materially undercuts the nature of value in the world of multifamily rental community development.

Federal fiscal and monetary policy stopgaps that kicked into rapid DEFCON 5, all-points-alert effect—from Capitol Hill to Wall Street to Main Street to kitchen tables—stanched a cataclysmic national meltdown with an enormous safety net. Uncle Sam has lent society its sole source of predictability. This grand bargain keeps financial markets functioning despite the obvious gaping wounds of sky-high unemployment, wrecked business sectors, and structural questions as to what's viable—and what's not—in the economy in the mid-term and longer-term future.

And after three-quarters of a year of turbulent ups and downs—keen expectations and dashed hopes—people, businesses, and communities have only begun to take stock that they may have little choice but to learn to live with the specter of health, economic, and social upheaval as the new status quo.

The 2020s That Should Have Been

What might likely have taken place at a confidence-inspiring pace over the next 10 years would be no fewer than another 3.25 million–plus multifamily rental unit deliveries by 2030. Developers, building on both tailwinds and canny strategic expansion among rent-by-choice households, looked confidently at tackling a next big challenge: an expanded customer pool. Communities at lower rent tiers—with greater access and attainability in a bigger, more income-diverse, and more socially diverse universe—seemed doable.

Senior Housing: An Update

The effects of the global COVID-19 pandemic have been pervasive for virtually all commercial real estate in the United States—some more positively, such as for industrial, and others less so, such as hotels and retail. The impact on senior housing and nursing care has also been less favorable since the virus has affected the elderly disproportionately. The distinction between nursing care/skilled nursing and senior housing is especially important in this context, however, since the frailest elderly are often patients of skilled nursing's higher-acuity setting with around-the-clock nursing attention, and it has been these elderly patients with significant preexisting conditions who have seen the highest rates of COVID-19 incidence and fatalities.

Partially as a result, according to data from the NIC MAP® Data Service, the occupancy rate for skilled-nursing properties fell 6.5 percentage points from the first quarter to 80.2 percent in the second quarter of 2020, significantly more than the 2.8 percentage point drop in senior housing properties broadly to 84.9 percent; and, when the aggregate senior housing category is broken down into its subcategories, the 3.2 percentage point decline seen in assisted living properties to 82.1 percent and the 2.4 percentage point decline in independent living properties to 87.4 percent.

Similarly, and like all commercial real estate (CRE), the pandemic has also caused enormous uncertainty regarding its impact on senior housing values, pricing, and cap rates, with sales transaction volumes down sharply and pricing transparency opaque. And like other CRE sectors, investment returns and, in particular, appreciation returns fell into the negative territory in the second quarter of 2020, according to the National Council of Real Estate Investment Fiduciaries (NCREIF).

Most operators of senior housing lost potential new revenue in the early months of the pandemic, as they enacted self-imposed moratoriums against new resident move-ins to prevent infection within their properties. At the same time, operators faced rising costs due to the purchase and use of personal protective equipment (PPE); higher staffing costs related to hero pay, sick time, and the use of temporary agency help; and the procurement of COVID-19 tests for staff and residents. Some operators offset these rising costs by deferring other expenditures such as planned capital expenditures (capex), and others were able to use portions of the Paycheck Protection Program (PPP) to offset a portion of these costs, but all operators have needed to be careful to protect their bottom lines.

At this point, the outlook for the sector is tied to the path of the pandemic, its infection and penetration rate within properties, and the impact of the pandemic on broad economic growth. The economy took a quick but disastrous hit in the second quarter of 2020, with a 32.9 percent drop in annualized gross domestic product (GDP) growth, accompanied by a surge in initial unemployment insurance claims at one point to nose-bleedingly high levels of more than 6.9 million persons in one week. As of early September 2020, 26 million American workers were still getting some form of unemployment insurance assistance.

Ratio of Adult Caregivers to Those over 80 Years Old

Year	Ratio
2019	7 to 1
2030	5 to 1
2050	3 to 1

Sources: U.S. Census Bureau; NIC MAP Data Service.

Notes: Adult caregivers are those ages 45 to 64. Declining ratio is due to declining fertility rates among baby boomers relative to previous generations, and the shift of baby boomers from giving care to receiving care. Separately, higher divorce rates among baby boomers are resulting in single persons without caregivers.

The impact of the economy on demand for the senior housing sector is complex, with exogenous influencing effects emanating from the level of interest rates, housing market conditions, broad consumer confidence in the economy, stock market performance, job growth, the unemployment rate, and household wealth. But the sector will also be affected by consumer sentiment toward the sector itself and the perceived risks versus benefits of living in a congregate setting. Headline risk—the perception that living in a senior housing property is fraught with risk—has proved itself to be real in some instances.

Recognizing this, many senior housing operators have been positioning themselves and will continue to position themselves as a safe, hospitable, and fully staffed place to live for seniors. With best-in-class practices being developed for infection control, sanitation, contingency planning, and visitation protocols, the pre-COVID value proposition of senior housing will again be able to take center stage. And from a resident's or an adult child's point of view, foremost among these benefits are personal care, health care, socialization, diet, exercise, medical care plan adherence, and safety.

From an investor's point of view, the sector still offers a compelling investment thesis. The pre-COVID challenges facing the sector have largely receded. These included robust development pipelines and labor shortages. With banks being more discriminate in their lending activities and with rising levels of unemployed workers, these challenges have dissipated at least to some degree in many markets.

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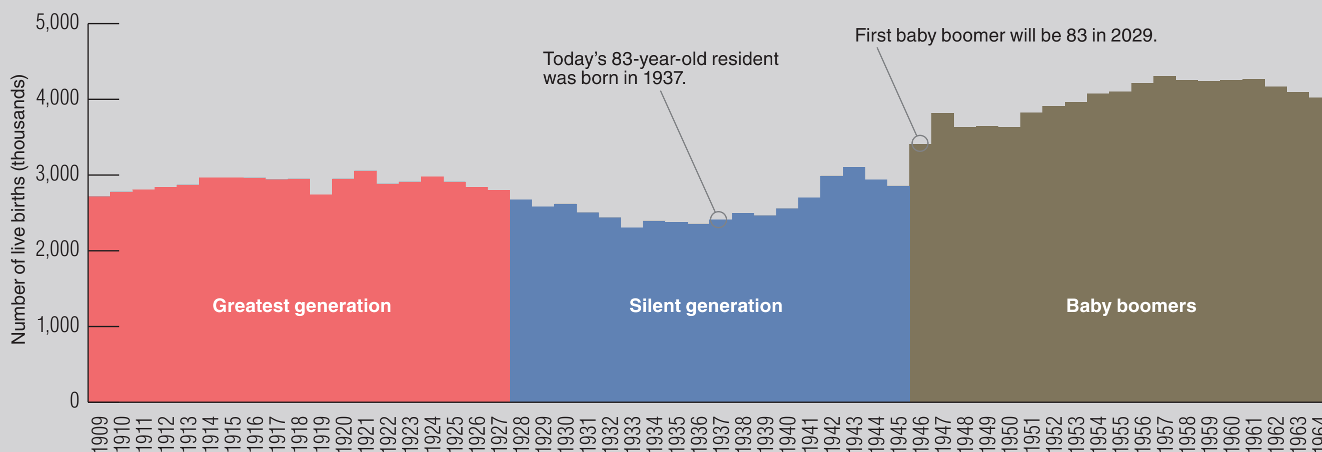
Demographics Are Destiny: Number of Live Births, 1909–1964



Sources: U.S. Census Bureau; NIC MAP Data Service.

The existing COVID-19 challenges are being managed as the reality for many operators, who have shifted from the paradigm of a sprint to that of a marathon—although it is notably a marathon without a finish line. Systemic programs and protocols are being implemented by operators to recognize that the new normal will not revert to the old normal, and that the new normal is here now and will continue to evolve. Flexibility, responsiveness, and readiness are new standards for successful operators.

The underlying fundamentals and drivers of senior housing remain in place. First, the demographics alone support the growing need for care and housing for seniors. Today, there are seven adult children aged 45 to 64 to care for every senior over the age of 80. By 2030, this ratio shrinks to 4:1, and, by 2050, it becomes 3:1. The existence of fewer caregivers suggests that community-based congregate settings will be needed more than ever. Furthermore, the long-awaited surge in baby boomers as residents of senior housing is that much closer, with the oldest baby boomer born in 1946 to be age 83 (typical age of a resident to move into senior housing) in 2029. And, for those operators and investors that cater to a younger baby boomer in active adult housing, the opportunity is now. Second, with nearly two of every three properties built before 2000, the inventory of senior housing properties is relatively old, and often a property refresh is needed for design, functionality, and efficiency. And, as obsolescence increases, new supply is needed at least in some markets. Moreover, COVID may have accelerated obsolescence as building design is moving front and center for improved safety and health outcomes. Third, senior housing is increasingly recognized as a critical part of the solution for population health management and health care cost containment—a growing social, economic, and political reality.

Moreover, the need for care and housing is especially acute for middle-income seniors. NIC's *Forgotten Middle* study highlighted that point, with only 46 percent of middle-income seniors capable of affording senior housing and care by 2029. It is likely that, as a result of the pandemic and the secondary impact it has had on the economy, more Americans than ever will slip into the forgotten middle income cohort, making the need for affordable care and housing ever more pressing.

Finally, the investment thesis for senior housing includes the diversification benefits it offers to a portfolio because the sector continues to have a "needs-based" demand characteristic that will ultimately provide a floor for occupancy rates and will provide a degree of counter cyclicality as compared to other property types. This will be especially important in the coming months as other sectors such as retail and hotels remain challenged. And lastly, as capital flows into the sector rise, transaction volumes and pricing will have support, especially with the knowledge that multiple exit strategies exist.

Taken in its entirety, senior housing investing continues to offer intriguing opportunities but not without challenges. For some, it will be a time for dispositions. For some, a time for consolidation and mergers. For others, it will be time to develop safe, best-in-class buildings that can readily protect residents from germ-laden air particles. And for some investors with capital, holding money on the sidelines may be a good near-term strategy as a growing number of distressed deals need capital infusion, recapitalizations, and new partners.

—National Investment Center for Seniors Housing & Care (NIC)

Still, things—namely, factors that figure essentially into the calculus of multifamily business modeling, valuation, transaction, property and portfolio management, and net operating income—have gone virtually dark. Capital investment without predictable rental payments becomes less alchemy and more outright game of chance. Seated squarely on Uncle Sam's shoulders as a bandage proxy for household wherewithal, households—minus emergency rent forbearance, forgiveness, unemployment checks, and eviction moratoriums—loom as a financial domino-effect rout in the making.

"We think there's plenty of capital, both debt and equity," says the chief executive officer of a multifamily business group. "But capital investors and lenders are being much more selective now, and I don't blame them. They're stepping back and saying, 'We're going to wait it out for a little bit.'"

The current state of limbo obscures a heaven-or-hell outcome for jobs, income, and business losses. Are they temporary, permanent, or somewhere in between? Irrational forces, aberrant events, and unimagined consequences have been set in motion. None of these forces has much to do with normalized supply and demand changes, consumer behavioral norm evolution, or even the transformative effects of technology, data, and machine learning on society, business, and placemaking. What they do have to do with is money. "What we saw was anything that started in late 2019 and very, very early 2020 has moved ahead, and the banks have been very cooperative," says the chief executive officer of a multifamily trade group. "But everything else has been pretty much put on hold."

And in that limbo, there is a dizzy feeling of neither here nor there.

One CEO of a multiregional multifamily portfolio of properties put it this way: "COVID-19 overshadows everything else." To him, it is fruitless to think about what lies ahead until people achieve a different relationship with COVID—one that involves greater understanding, better treatment options, and, one hopes, an effective preventative measure. Another public-company CEO in multifamily strategy said, "You look at this whole thing, and the decision tree always runs through the lens of the question, 'Do you have a vaccine?' And, until you get a vaccine, you're going to be dealing with an extremely fluid situation."

It should come as no surprise that emerging trends in multifamily housing have been untethered. All time seems to have dissolved into a single riddle we construct as now.

The Pandemic's Power to Disrupt

"We enjoyed a run of unabated improving fundamentals, ability to finance transactions, new markets—all because our customers were stable, growing, prospering with a growing, vibrant economy, record-low unemployment, growing incomes, etc.," said the CEO of a top-10 multifamily REIT, developer, and property owner. "None of that resembles where we are now. Everyone who's in a business, who says he or she has a customer [to whom] they're trying to offer a service, the world's a different place."

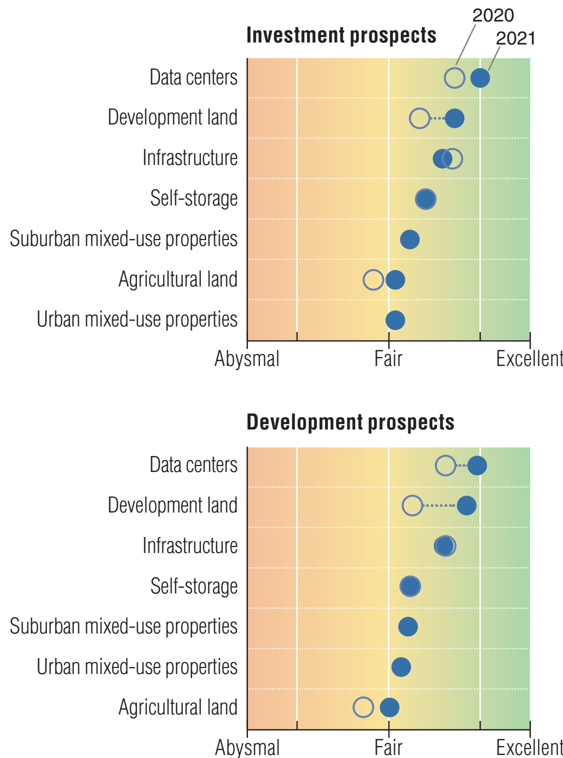
Effectively, potential capital investment that otherwise would have poured into the next three to five years of a multifamily expansion has seized up. An economic collapse, by itself, would not have caused such paralysis. The infectious disease health crisis plays a starring role here. Here's how.

As COVID-19 struck and coursed with astonishing speed through the economy's central nervous system, government rescue measures—the scope of which was unprecedented—hit Wall Street markets, banks, businesses large and small, and households, both for sale and for rent, with a single, persuasive message: "We've got this." COVID-19's potentially apocalyptic macroeconomic whipsaw, offset by Uncle Sam, allowed developers to persevere during all stages of battle with the virus. Shovel-ready projects continued to get a green light as "essential activities," blessed by the Feds.

Furthermore, a hastily concocted lockdown punchbowl blended aggressive Central Bank easing and massive debt purchases with legislative clout under the Coronavirus Aid, Relief, and Economic Security (CARES) Act—a $1 trillion emergency law enacted to fund business and household rescue finance programs. Extraordinary business and household rescue measures averted the very worst of imaginable social and economic scenarios—and set the clock ticking. How long? How willing and how able? "The part I can't quite get my head around it is [what happens to valuations], for what I refer to as the high-density, vertical cities that rely on public transportation," said a strategic-level executive at one of the top merger-and-acquisition advisory firms in the multifamily space. Capitalization rates—a formula derived from rent revenues minus expenses divided by property value—he said, are in flux, which is why deal flow has stalled.

Prevailing sentiment is that this is temporary. At a high level, multifamily development continues to stand out as a bastion of safe-haven investment and yield. One multifamily enterprise chief executive looks ahead, into the second quarter of 2021,

Exhibit 3-9 **Prospects for Niche and Multiuse Property Types in 2020 and 2021**



Source: *Emerging Trends in Real Estate* surveys.
Note: Based on U.S. respondents only.

before a "normal recession" emerges, with characteristics based on a post prop-up economy level set. "Which industries, which geographies, which households are left in a more permanent hole by what's happened, and what will be the plan to dig out of that hole to set the next recovery cycle in motion?" That is probably when deal flow will resume.

Few doubt that the 2020–2025 and 2020–2030 fundamentals are still rock-solid for market-rate developers. Many of our experts look at the end of the third quarter of 2020, through the balance of the year as a black hole that stands between Uncle Sam's massive rescue efforts this year, and an economy that can stand on its own two feet in the indefinite future.

Vertical Vertigo?

Among the pandemic impacts that multifamily property owners, developers, and deal-makers are most keen to decipher—and detect whether they are temporary, permanent, or somewhere in between—are those relating to high-density, vertical community "elevator" living. Urban evacuation anecdotes have become all the rage, taking on a life as headline risk. But will the virus and its aftermath inflict lasting damage to a widely held, well-entrenched belief that thriving, sustainable, high-density vertical communities play an essential, growing role in the future?

"When I look at how my 10-year perspective may have changed, I'd say that part of it has changed marginally, which is people are going to be able to work remotely at much greater rates," a senior-level capital advisory executive said. Does the COVID-19 era usher in a new near- and mid-term heyday for low-rise and garden apartment–style communities in suburban rings and secondary and tertiary markets? Larger players with deeper capital pockets are jockeying for opportunistic acquisitions like these, to "go where the puck is going to go." Those opportunistic tactics are getting a boost from both fear of exposure and work-from-anywhere motivators.

Design within Reach . . . of Anywhere

The amenity wars of the 2010s—the chic and trendy rooftop pools; the spacious, natural-lit fitness centers; the social/work/refreshment zones, and so on—will likely pivot during a more cautious, socially distanced, mask-wearing era. Multifamily experts are abuzz about the 2020s becoming a new battleground for safe and remote work, play, fitness, food, coffee, and health space. According to one property management strategist, "Apartments as healthy homes becomes a selling point, or else." She envisions—in the next batch of vertical community designs in the three-to-five-year horizon—extra bedrooms becoming, more intentionally, home offices, and the likelihood that demand for larger unit sizes—two- and three-bedroom units—may grow. Also, she views technology's impact on renters' leasing, living, and overall relationship with contact- and friction-free self-service-oriented experience as accelerating exponentially.

Where people of all generations—from the newly minted adults of generation Z to retirement-aged baby boomers still chasing the dream—choose to live may change post-pandemic. In sizzling downtowns—New York City, Los Angeles, San Francisco, Boston, Seattle, Houston, Miami, Chicago, Dallas, Denver, and Washington, D.C.—a long-tail development pipeline continues. Their financial- and cultural-center magnetism may have taken a quick hit in the near term. Still, says a multifamily capital advisory executive, "There's only one Broadway. There's only one Michigan Avenue. In San Francisco, there's only one Powell Street. There's always kind of an ebb and flow. But they're not going away." At the same time, tertiary markets—such as lifestyle destinations where work-from-anywhere policies and practices allow people to live where they really want to—have shone with a new luster.

Student Housing Story: Back to School—Even If Classes Are Virtual

The approach of the fall 2020 academic year brought with it more questions than ever before due to the COVID-19 outbreak. Would schools be opening, and if so, what would plans for a return to campus look like? How would operators shift their approach during the always-frantic turn season? And lastly, would students who had committed to the fall 2020 semester even follow through with those plans?

Answers have not come easily. A handful of schools, for instance, announced plans to reopen with in-person classes, only to shift back to virtual learning after COVID-19 outbreaks during the first weeks of the semester. With so many variables, the prudent approach to discussing fall 2020 student housing market trends is to analyze the knowns and the unknowns.

Here are five things we know about fall 2020.

Most schools announced plans for at least a partial return to campus for fall 2020. Most university administrators signaled their intention to reopen campuses, and many called for a hybrid approach to classes that allows for some remote learning accompanied by some in-person instruction. That news came as a relief for owners and operators, since fully remote learning would have been yet another challenge for off-campus operators.

Fall 2020 student housing market performance was trending ahead of the prior year. Through March 2020, national pre-lease velocity was 150 basis points ahead of March 2019. And the annual change in effective asking rents was on par with the previous year.

The onset of the COVID-19 pandemic caused performance to slow as uncertainty mounted. As of August 2020, nationwide pre-lease velocity sat at just 88 percent, or 3 percent below last year's mark. Fall 2019 already had the weakest final occupancy rate for any year in the previous decade (91 percent), so the sudden slowdown was unquestionably significant. Meanwhile, the annual change in effective asking rents through August 2020 was just 1.2 percent.

New supply pressure has mounted over the past decade, but fall 2020 construction eased a bit. A still-maturing sector, most purpose-built, privately owned student housing product was erected in the past decade. As that decade progressed, new supply pressure increased as more product hit the market. But fall 2020 offered a slight reprieve as the scheduled completions decreased, even before the beginning of the COVID-19 crisis.

Performance varies a lot from place to place. Although this is nothing new, each school has to deal with unique supply/demand fundamentals each year. The dichotomy between the haves and have-nots on a campus-by-campus basis continued in fall 2020. Some schools were effectively full as early as April. Schools where students are less certain that campus will remain open for the full school year are struggling to fill beds, resulting in annual rent cuts as deep as 8 percent.

From the "knowns" perspective then, pre-leasing activity through March suggested that 2020 would be another steady year for student housing. But COVID-19 was understandably a massive shock to the industry. Now, it appears more likely that fall 2020 will see decade-low performance.

A number of things still are not known about fall 2020 and beyond. But here are five key unknowns for both fall 2020 and the near term.

Campus plans can—and likely will—shift throughout the semester. As of late August, many schools were starting to bring students back to campus. But that has not been without hiccups. Perhaps the most prominent example has been the University of North Carolina–Chapel Hill campus. The COVID-19 outbreak in the first week of the semester has caused administrators to cease on-campus classes, and students living in on-campus housing were asked to move out and seek alternative housing. It is almost a foregone conclusion that similar challenges will pop up at other schools during the coming weeks.

There are a lot of potential outcomes for enrollment growth in the next few years. Enrollment growth was already beginning to taper off from its mid-2010s decade peak at core, investment-grade universities. In the next few years, counterbalancing effects will be at play that will determine the pace of enrollment growth. Some of those include the following:

- **An increasing 18- to 24-year-old population.** The 18- to 24-year-old population is continuing to grow, which is good news for enrollment growth. But that growth is slowing as the millennial population boom that informed

continued next page

much of the late-2000s and early-2010s enrollment boom is in the rearview mirror. The 18- to 24-year-old population cohort is forecast to average 30.4 million over the next five years, below the 20.5 million average of the previous five years.

- **A recession-driven enrollment increase.** Historically speaking, recessions drove enrollment increases. Those weak economic periods allowed students to delay entering the workforce and also provided a window of opportunity for younger workers to retrain and extend their education. But so far, the current recession has been largely concentrated in the service sector. That has mostly affected those in the workforce who have fewer financial resources to pay for college or take on student loans. As a result, there may be a modest boost to enrollment due to the recession, but it will be a far cry from the spike seen during the Great Recession.

- **The volatile international enrollment picture.** As other nations keep a keen eye on the U.S. coronavirus response, there may be travel and visa impacts that affect international enrollment. Early signs of such a trend popped up in mid-July when U.S. Immigration and Customs Enforcement altered plans for students enrolling at campuses that were offering 100 percent online plans due to COVID-19. Although those restrictions have since changed, uncertainty over future policy changes can have a very real impact on international enrollment.

The cumulative effect of new supply may constrain performance in subsequent years. A sizable block of beds delivering in a year can hinder performance the following year. Big completion volumes over multiple years can potentially tank performance for many years. Strong enrollment growth and construction levels well below the 2010s decade norm will be needed to reverse the softening performance trend experienced at some of the nation's overbuilt schools. For schools that are not overbuilt, construction will still need to remain at manageable levels to prevent those campuses from also becoming overbuilt.

Investor activity may shift in response to the pandemic. Last year, we wrote that investors continued looking at student housing as a viable investment alternative. While that may still be true in the coming years, the industry's performance in the wake of COVID-19 will likely dictate the degree to which the industry remains a viable investment alternative.

As the industry matures, lessons will be learned along the way. Every investment sector changes and evolves through time, and that is especially true for sectors like student housing that are still in their infancy. As the student housing industry continues to evolve, new lessons will be learned along the way—the speed, magnitude, and direction of such changes being the trickiest components to nail down.

—RealPage

Out of left field, as real estate experts grapple with questions about the future of office and commercial space, adaptive use—the repurposing of existing commercial, retail, institutional, and industrial real estate—has risen from the clutches of the pandemic as a potential "next big thing" opportunity in residential development.

Multifamily Policy Turning Point

At the same time, policy and the regulatory environment have become fraught with both political-will challenges and severe bandwidth limitations. The latter looms as a direct consequence of the toll on local tax and fee revenues of economic lockdowns that came with COVID-19. Many municipalities will need to cut deep into the muscle of their operational bodies to cut costs in line with their coffers. This will impair and add timing risk to permitting, entitlements, planning decisions, and site inspections, jeopardizing development business planning.

In addition, the lens of conscience and consciousness—sharpened by the stark light of the pandemic and its disproportionate blows to the most vulnerable members of society—may possibly cut through wedge issues around one of multifamily development's crucial challenges: housing affordability. "That ability to pay [rent] is going to be called into question," said the CEO of a multifamily enterprise whose core customer is at the lower end of the market-rate spectrum. "Our industry needs to respond and figure out ways to deliver product that perhaps is less amenitized and more basic, but provides security and doesn't demand as large a percentage of each household income to cover the rent." Imminent grim impacts on America's vulnerable populations will hit closer and closer to home. The pandemic's lens could favorably alter the conversation. For instance, in light of the likely need for a New Deal–style work, training, and economic vitalization megaprogram, might housing—especially multifamily rental communities for working-class families and individuals—qualify as infrastructure?

Another critical question—no less nuanced and no less important—is America's social and cultural moment of truth regarding engrained racial bias. Operationally and strategically, multifamily business enterprises—whose customer bases encompass a widely diverse population in terms of heritage, economic means, race, and creed—mostly recognize that they will need to change and improve if they are to hold an equity, inclusion, and diversity mirror to the customers they purport to serve. Leaders of those enterprises acknowledge that grave challenges vis-à-vis social justice are now part of their mission, vision, strategy, and purpose, affecting talent, operations, and customer-facing interests.

"We've started reaching out to underprivileged neighborhoods, and have begun bringing people from those communities in the door for training. This initiative helps the unemployment in those neighborhoods, issue number one, because they are not trained individuals. It also helps with our diversity and inclusion initiatives, particularly where you can't necessarily get that sort of diversity in traditional career fair and university settings. So, I think it's an investment over the long haul. If you start out now, you're building a really strong diverse, inclusive, productive environment and you're helping to solve for the talent shortage as well."

The Gorilla-in-the-Room Dilemma: An Opportunity

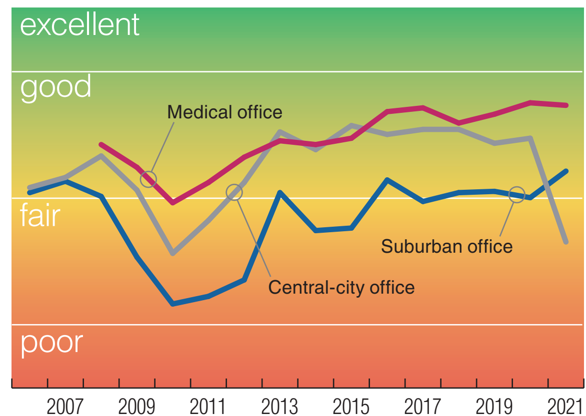
Even with the jury still out on how deeply the pandemic may wound multifamily rental housing businesses, a spark flickers in the heavy, boundless gloom. The touchstone trend of the 2020s for multifamily players will be solving—with brilliant, consumer-centric, technologically enabled, data-fueled value chains—the challenge that eluded them throughout the entirety of the 2010s: affordability. Housing as a solution—for people, for communities, and for societal repair—is one of the preeminent business opportunity areas of the decade ahead.

Can market-rate, for-profit multifamily development, ownership, and property management manage materials, processes, technology, talent, and dollars to expand the market for renters, rather than profit off of a shrinking total universe? The sector will have to—because what has up to now been urgent has become even more dire.

Office

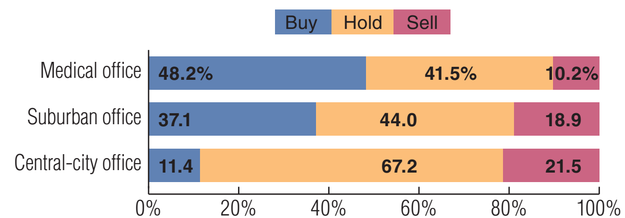
The COVID-19 pandemic introduced a significant disruption to the U.S. office market in early 2020 as strict shelter-in-place mandates rolled through the country beginning in March. While unemployment rates skyrocketed, particularly for those working in the leisure and hospitality sectors, the pandemic displaced much of the ongoing work that had been taking place in offices. That work shifted to primary residences, but also to second homes and, starting several months into the pandemic, workers' new homes, both in and outside original metropolitan areas. The pandemic and the dramatic change of workplace were still in place at the time this report was completed eight months later. If this shift sticks post-pandemic, even if just on the margin, and even for just some locations and types of occupiers, it may affect the office sector in many markets. Even those who view the long-term growth of the labor force as the optimistic, long-term underpinning of demand, note, as one investment manager

Exhibit 3-10 **Office Investment Prospect Trends**



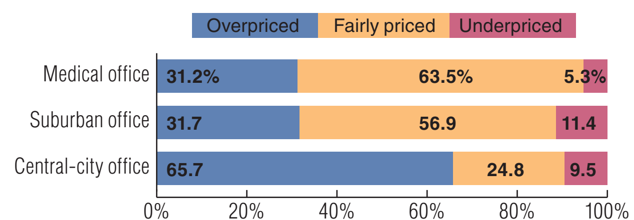
Source: *Emerging Trends in Real Estate* surveys.

Office Buy/Hold/Sell Recommendations



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on U.S. respondents only.

Opinion of Current Office Pricing



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on U.S. respondents only.

did, "Pre-pandemic, I don't think anybody was questioning the future of office. And now I think it's a legitimate question to be discussing."

There are indications that, at least for some companies, a shift in work location of some kind—not necessarily just to workers' homes—will be the path ahead. Other companies are still weighing the wide range of critical considerations involved for each individual organization. It should be noted that experiences in Asia during multiple pandemics indicate that such arrangements proved to be temporary, although those experiences were relatively short-lived and less extensive. There is much to juggle and account for, from health and safety concerns to commuting patterns and building configurations, as well as long-term leases and talent training, recruitment, and retention.

Medical Office Positioned for Steady Growth in Wake of Pandemic; Long-Term Drivers Sustain Positive Outlook

Health services demand on the rise. Aging baby boomers and the steady growth of health care spending will support long-term medical office space demand, particularly as the sector decentralizes. To locate closer to patients and reduce operating costs, health professionals have been migrating from hospital campus locations to purpose-built outpatient facilities. This shift will bolster demand for off-campus medical office facilities while enhancing the financial strength of the service providers.

Aging population to fuel growth. Over the next 10 years, the number of people age 65 and older will grow by more than 30 percent, steadily lifting the need for medical services. Americans in this age cohort visit the physician's office nearly six times per year on average, much more frequently than younger people do. Between 2008 and 2018, spending on clinical services grew by an annual average of 6.3 percent, outpacing expenditures on hospital services, which rose 5.1 percent per year over the same span. The expansion of private and public health insurance has played an important role, with the uninsured U.S. population now below 9 percent, half the level of 2010.

Health crisis weighs on the medical sector. The COVID-19 pandemic limited access to medical services through much of the second quarter of 2020, placing financial pressure on medical office tenants. Restrictions on surgeries and the voluntary delay of routine visits to doctors' offices, dentists, and dermatologists choked revenue streams and considerably shrank health care margins. The financial impact will place short-term pressure on tenants to reduce expenses and potentially reconsider space requirements. However, most procedures were just delayed rather than canceled, and many medical professionals are working extended hours to meet pent-up medical needs.

Doctors go digital. The use of virtual care and telehealth has skyrocketed, more than doubling since the onset of the pan-

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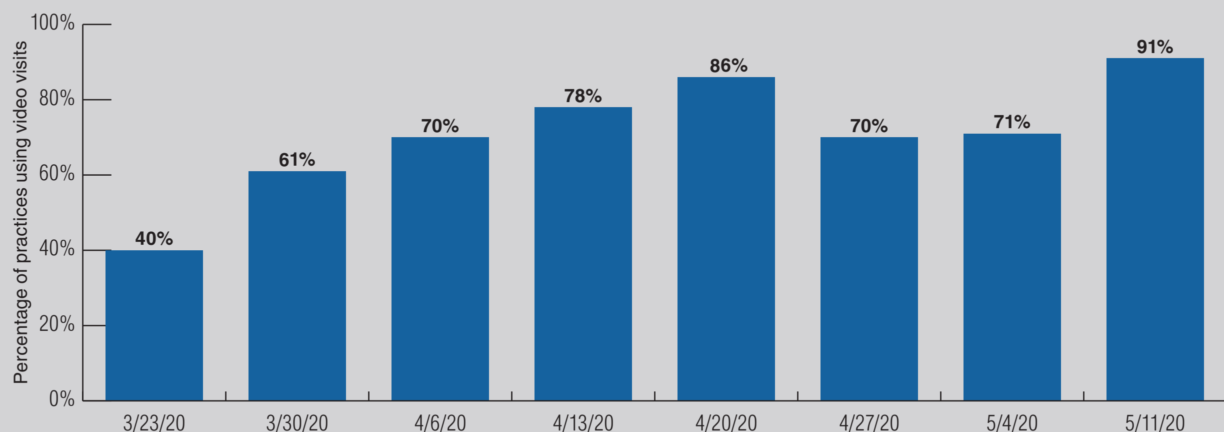
Growth in Primary Care Offices Using Video Visits



Sources: Marcus & Millichap Research Services; Primary Care Collaborative; Larry A. Green Center.

The Great American "Work from Home" Experiment

In the face of a global pandemic, priorities quickly changed in 2020. Building owners' primary focus became implementing improved health and safety protocols so that workers would feel comfortable returning to the office. But how many will return? What will they need to be both safe and productive? The industry's thoughts on these dynamics, and how they will affect total demand for office space, are quickly evolving.

Overall, 92 percent of *Emerging Trends* survey respondents felt that some changes implemented as a result of COVID-19 will become permanent even after we have an effective vaccine/treatment protocol. Some believe that long-term WFH trends will create permanent downward pressure on office demand going forward. Others think that open offices were already proving to cramp productivity, so the need to redress that and a need for social distancing will further increase square foot-

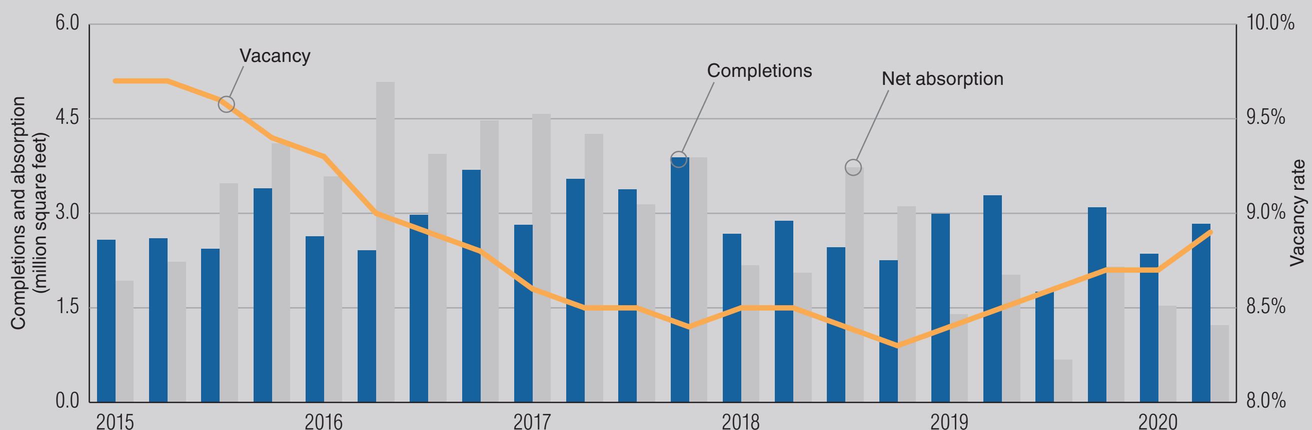
demic as doctors leverage technology to meet their patients' medical needs while minimizing the risks of COVID-19 transmission. However, many medications cannot be prescribed online, and inconsistent federal and state regulatory issues complicate health insurers' ability to provide coverage. As a result, the need for in-person visits, labs, and imaging will sustain demand for medical office space. Ultimately, the use of virtual care will help increase access to health care but will not substantively erode the need for medical office space.

Development pipeline remains heavy. Medical office vacancy reached a cycle-low 8.3 percent at the end of 2018 but has since risen due to elevated construction levels. More than 2.8 million square feet were delivered in the second quarter of 2020 despite a construction slowdown due to the pandemic. On a national basis, vacancy climbed 20 basis points in the second quarter to 8.9 percent, a sharp contrast with the 13.6 percent vacancy rate for traditional office space. Rent growth maintained its upward trajectory, rising by 9 percent over the last year to a second-quarter average of $25.22 per square foot. Numerous development projects will be shelved for the short term, limiting competition from new supply, but construction will likely reaccelerate once a medical solution to the pandemic emerges.

Investor activity slows during the health crisis. Medical office transaction activity fared modestly better than most other property types in the second quarter, though velocity fell by nearly half. Logistics hurdles and a tighter financing climate slowed investor activity, but the sector should regain traction through the remainder of the year as investors adapt to the new normal. The key pricing factors during the health crisis are the tenant's credit and lease term. Leases backed by a major health organization with an extended remaining lease term can trade at cap rates on par with pre-pandemic levels. However, weaker and shorter leases may trade at a discount and off-campus assets typically price at a lower price than the sector average. In general, investors remain confident in the medical office outlook, particularly assets backed by large health systems and high-credit tenants. Looking forward, once a health solution to the COVID-19 pandemic becomes widely available, asset valuations should realign with the positive health care and medical office demand outlook.

—Marcus & Millichap

Medical Office Supply and Demand



Sources: Costar Group Inc.; Marcus & Millichap.

age per worker and offset any WFH trends. Sixty-three percent of *Emerging Trends* survey respondents felt that office tenants will require more square feet per worker than what was required pre-COVID.

Despite numerous natural disasters, previous pandemics, new technology, and even terrorist attacks, office buildings have been a key part of human productivity for quite some time. Why? Office buildings have been more than a place to work. *Emerging Trends* interviewees frequently cited the importance of centralized workplaces in establishing corporate culture, brands, training, and mentorship programs. During the most recent real estate cycle, the quality of office amenities became a prime tool in the recruitment of talent. As an investment manager observed, "There are plenty of functions that you don't have to be in an office for, but for the social-animal stuff it is pretty important. Corporate culture and working collaboratively are less possible when you're working remotely." Still, remote work was already an option, at least in higher-paying jobs, and many employees worked away from the office at least one day per week pre-COVID (e.g., for travel and out-of-office meetings). Work from home is not new, but the real question is: Will the acceleration of this trend due to the pandemic stick? *Emerging Trends* survey respondents clearly think that it will. Over 94 percent of respondents agree with the statement, "In the future, more companies will allow more employees to work remotely."

Offices have also played another important role. People have gone to work to be more productive and expected their employers to optimize workplaces accordingly. At least pre-pandemic, employees in workplaces designed for high performance indicated a preference to work in the office rather than at home, while the reverse is true for employees in low-performance workplaces. And, pre-pandemic, many employees wished that their employer would focus on making the workplace more productive rather than increasing other amenities. This includes privacy and quiet spaces, blocking noise, providing ergonomic furniture, conference room booking, and privacy screens for computers. In an early pandemic lockdown survey, results showed that despite their technological preparedness, younger workers place particular value on the office environment since they are more likely to find working from home stressful, be less likely to know what is expected of them, and experience greater feelings of disconnection from culture and organizational goals. It is yet to be seen whether employers have since been able to improve communication and engagement for employees outside the office going forward.

If WFH could be as productive as working in the office, that would save workers on average 227 hours of commuting each year—that is 28 lost days of productivity, which is time that could be dedicated to work or leisure. An institutional equity investor commented, "Our research team has done some work—and there seems to be almost an optimal productivity situation where working in the office three or four days a week and then remotely one or two days a week is actually more productive than working in the office five days a week or being out of the office all five days of the week, so we're discussing greater flexibility around working remotely."

A number of surveys have been conducted on optimal WFH arrangements, with a wide range of perspectives thus far. One thing that surveys seem to agree on is that WFH works better for some people than others, particularly favoring highly educated/higher-income and older workers. The type of job matters as well. Workplace effectiveness by location varies the least for professional and technical jobs, whereas administrative and support staff are most effective with three days in the office. WFH arrangements also assume connectivity—high-speed internet access varies both by geography and income level, a potential impediment for some workers.

More than a few companies have made big post-COVID bets on WFH productivity theories. At one extreme, U.S. retail and outdoor recreation services corporation REI put its newly built corporate headquarters in Bellevue, Washington, on the market, citing a goal to have a satellite-type office configuration that would "lean into remote working as an engrained, supported, and normalized model that could also allow employees to work outside the region." At the other extreme, Facebook committed to 730,000 square feet of office space in New York in August 2020 despite acknowledging that it will allow many workers to work from home. Microsoft signed for a similar amount of space in Atlanta and Washington, D.C. Other prominent tech companies have not set any end to WFH options, and/or are letting (some) workers move to remote locations (but with less pay).

Going Forward: When and Where?

As of late summer 2020, estimates for a full return to offices vary widely from year-end 2020 to 2021 to longer time periods.

Impact of Public Transit. Public transit is clearly a concern. While it has not been tied to any superspreader events, ridership remained down significantly as of August 2020. Looking ahead, *Emerging Trends* interviewees note that transit-oriented markets such as coastal CBDs in New York, San Francisco, D.C., Boston, Seattle as well as Chicago and Philadelphia are not designed to handle large volumes of cars in place of well-developed public transit systems. While long-term trends are yet to evolve, in the near term, transit dependence may affect the

speed at which these markets reopen. However, many of these markets are top job creators and continue to have low vacancy rates. As stated by one investor, "While enthusiasm may change by market, our strategy is still to invest in the top buildings in the best submarkets. These are the buildings and markets that can attract and retain talent."

Changing Submarkets. Several interviewees advised watching changing submarket trends, particularly in expensive markets. As some firms put expansion plans on hold (e.g., Pinterest in San Francisco), investors are cautiously watching these markets and favoring less expensive markets and/or submarkets that are in the path of long-term growth. One stated, "In general, we would favor the east side of Seattle where employees live rather than the CBD." Urbanized suburbs have many CBD amenities but also have car access as well as transit access. These submarkets may be easier to open up in the near term and continue to be attractive in the long term. One chief investment officer stated, "We were already investing in these markets pre-COVID. We identify submarkets that create jobs. These may be CBD or suburban submarkets. For suburbs, we watch for vibrant infill suburban markets that provide culture, restaurants, shopping, and experiential live/work/play areas that will continue to exist. We also watch for the city's ability to support growth in terms of their bond ratings and tax structures. In the near term, these suburbs are more car accessible and have more low-rise buildings, which are less impacted by the pandemic than high-rise, transit-oriented buildings."

Suburban versus Urban. Suburban office investors also highlight the fact that the suburbs were already the largest office market with the most absorbed square feet of class A space in the last 10 years as well as in 2019 and postulate that the pandemic may accelerate suburban outperformance. Of ULI survey respondents, 43 percent felt that businesses and residents will move away from areas with higher density post-COVID. Suburban office buildings account for about two-thirds of occupied office space and are also closer to office workers' homes and offer lifestyle and school choices to the largest population segment, the millennials, who are in the family formation stage of life. Suburban office markets can also offer lower-cost space while in key submarkets that still offer nearby amenities. Said the CEO of an investment management company, "People are now betting on suburban office, driven by the fact that millennials are moving out of urban cores for locations where they can get housing." In fact, suburban office rose significantly in the *Emerging Trends* survey this year, ranking 10th of 24 potential subproperty types in terms of investment prospects, up from a ranking of 21 a year ago, while central-city office fell from a ranking of 8 a year ago to 20 this year. Similarly, suburban office rose in the rankings of development prospects from 20 a year ago to 12 this year, while central-city office fell from a rank of 8 to 22 this year. However, both office sectors were recommended as buys or holds, with suburban ranking as more fairly priced with more potential for buy opportunities than central-city office.

Top on the list of attractive investment markets, as noted by *Emerging Trends* survey respondents, are areas such as Salt Lake City, Raleigh-Durham, Nashville, and Austin. These markets offer growing and educated job bases, and some walkable urban submarkets, but unlike their larger coastal brethren, they have lower housing and business costs, which create attractive lifestyles. Office nodes in these markets can also be accessed more easily via car—an attractive attribute, at least in the short term.

Investment Fundamentals. The pandemic has created a number of unexpected disruptions for the office market, including uncertainty regarding the volume and timing of future leasing as well as the role of office buildings in public health. These changes may drive physical changes as well as changes in how properties are used. That uncertainty is currently spilling into the investment market. The unanswered question of when workers will return to the office and how many people will return created large bid-ask spreads for office properties and reduced sales volumes in the second quarter of 2020, although several interviewees cited liquid markets for high-quality properties that are well leased. While bank underwriting standards have become more restrictive, regional banks have opportunities to gain market share as large banks step back. Tighter lending standards are also slowing speculative construction, an appropriate move in times of uncertainty.

It is yet to be seen which markets will be the first to recover from the pandemic. At present, most businesses are cautiously evaluating leasing plans and will need to have some confidence in a prolonged economic recovery post-pandemic before making big bets on new space. Interviewees cited a number of instances in which firms extended leasing periods rather than making decisions to move, as well as potentially more sublease space coming on the market. The net impact of offices' new role in health policies is yet to evolve as the balance between giving employees appropriate space versus possibly having fewer employees in the office at one time plays out.

This evolving balance and its impact on total office demand will be closely watched. Various possible outcomes depend not only on how many companies may go completely remote, and the size of those companies, but also on the number of companies that provide a mix of WFH and in-office options, their size, the extent to which employees are ever in the office at the same

A Day in the Life of an Office Worker, Post-COVID

In the future, office buildings are likely to look and operate much differently. In the near term, a number of interviewees cited establishing relationships with health care providers and using professional health agency guidance to create return-to-office guidelines. These include factors such as flexible hours (staggered shifts or extended hours) and worksites (remote working), discouragement of shared desks and telephones, improved filtering and UV lights in HVAC systems, and physical barriers (e.g., sneeze guards). Tenants state that stricter policies are needed about coming to the office sick, increased office cleaning, increased social distancing, and reduction of shared workspaces to make them feel better about coming to the office. They would also like increased opportunities to work from home (WFH). Fifty-eight percent are agreeable to infrared temperature screening.

In the longer term, a look at current and developing technology gives us some idea of how offices will play a bigger part in public health. Whether people return to the office in full or WFH at least part-time, here is what your day could look like:

You wake up and take your vital signs through your mobile device. Your daily health screening is sent to your employer by the device. You decide to work out at home today, so you hop on your Peloton and plug into your virtual class. After a shower, you check into the workplace command center app and find out that two of the 12 people who were working in the northeast section of the floor where your group usually works have come down with a fever. The integrated building management system (BMS) redirects you to work on the northwest side of the floor today, which has space open. The BMS will automatically adjust air flow and temperature. You are not too worried since the building has a highly efficient HVAC system with UV sanitization as do the elevators. Two people from your group decided to work from home today.

You stop at a coffee kiosk and pick up your special-order morning coffee from the automated barista and enter the office building through a facial recognition door that is dedicated to your company through a facial recognition security system. The touchless elevator takes you to your floor. At your assigned desk, padded sneeze guards provide some privacy as well as noise canceling. After working at your desk for the morning, you stop in the kitchen to pick up a packaged food order that you had ordered earlier and grab a glass of water through the touchless appliances. Before heading back to your desk, you stop at the bathroom, which has all touchless sinks and toilets, floor-to-ceiling partitions, and self-cleaning toilets. The Somatic cleaning robot has just left, leaving the bathroom sparkling clean. The hand dryer has UV and air purifying blowers. You check your hands on the PathSpot to see whether any pathogens remain on your hands.

You check your mobile device after lunch to see which conference room was reserved for your group meeting. The two people working from home are attending the meeting via Beekast, which allows you to poll the group on a few topics and also transcribes notes. The tech group has installed multiple layers of cybersecurity programs to keep your meetings and data safe. All conference rooms have self-cleaning handles. You log in a question for the human resources department through its app after the meeting and then head down to the first-floor meeting rooms, which are generally used for meetings with outside visitors. One salesperson who is based in the same city will be attending the meeting. A second person will be attending as a 3-D Avatar hologram. Normally, you use Microsoft's Altspace Virtual Reality Platform, but the salesperson chose to use the hologram for this meeting. On the way back, you stop by a client's office through a different elevator bank that uses a hologram keyboard.

—Eigen10 Advisors

time, and how social distancing requirements may affect space per worker.

Office employment—that is, the types of jobs that traditionally fill office space—is expected to rise by only 0.7 percent per year on average over the next decade. Traditional forecasts would have looked at the projected growth in office employment and used a square-foot-per-worker factor to determine future demand. The office demand model is likely to be more complicated after COVID-19. Office demand will now be dictated by the number of workers who will be in the office each day, how much space will be required to allow them to be productive and still meet any health safety concerns, and whether companies will reduce their existing real estate footprints as they move to more remote work models or choose to use flexible office space to meet fluctuating space needs. Despite an expected level of uncertainty, both interviewees and survey respondents remained optimistic, citing office as a hold or buy. With the uncertainty reflected in the public markets—office REIT prices remained 27 percent lower than year-end 2019 levels as of

August 2020—one institutional equity investor noted, “We would not be buyers of office at pre-COVID values, but . . . we would be an investor in office if valuations provided value.”

Let’s Not Forget . . .

While the pandemic is clearly top of mind, we must not forget other long-term factors that will affect office performance. Environmental, social, and governance (ESG) continues to develop in terms of processes and measurements. Climate change issues, recently exemplified by an abundance of fires in the U.S. West and hurricanes in the U.S. Southeast, continue to pressure insurance rates. The president of a global investment firm mentioned, “We are getting more strategic about exploding insurance costs and generally expect tenants to get more savvy about location decisions.” The pandemic also highlighted the need for office buildings to have a greater role in public health processes as well as security risks brought about by social unrest, particularly in certain localities.

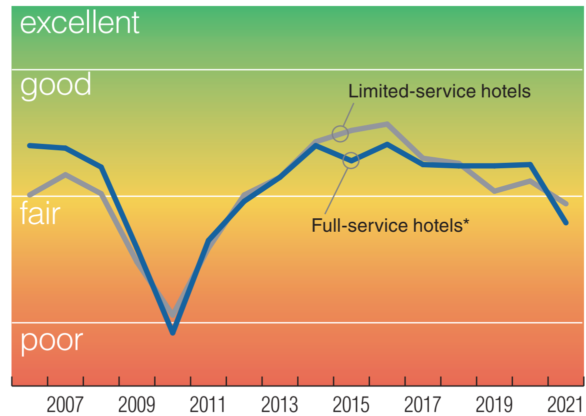
Significant opportunities to operate and manage buildings more efficiently are ahead as well. Hundreds of proptech firms are focusing on creating systems to gather, organize, and use data to reduce costs, identify risks, and more proactively operate buildings; identify appropriate investment strategies; and better serve tenants. One technology executive commented, “It will be nimble companies, not necessarily the largest, [that] will create more efficient and forward-looking investment companies going forward. Some large companies can have multiple layers of people and teams who have to approve things as well as large, complex, and lengthy implementation processes which can make them less nimble.”

Overall, the WFH experiment has given us some solid data points upon which to base future decisions. Innovative companies have the opportunity to develop processes to support both remote and in-office work environments that maximize worker productivity and well-being. The outcome could result in healthier buildings with higher worker productivity, flexibility, and satisfaction.

Hotels

An array of factors have contributed to the prolonged downturn in the lodging sector: slow government response to COVID-19, insufficient testing, and declining consumer confidence in the second quarter of 2020 following a resurgence in virus cases. Despite the belief that therapeutics and a vaccine could trigger the start of a sustained recovery, hotel industry leaders interviewed fear that a return to 2019 operating levels will take

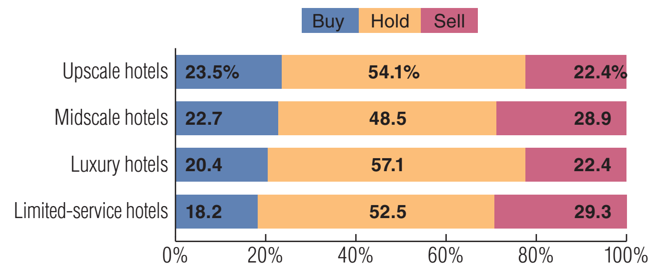
Exhibit 3-11 **Hotel Investment Prospect Trends**



Source: *Emerging Trends in Real Estate* surveys.

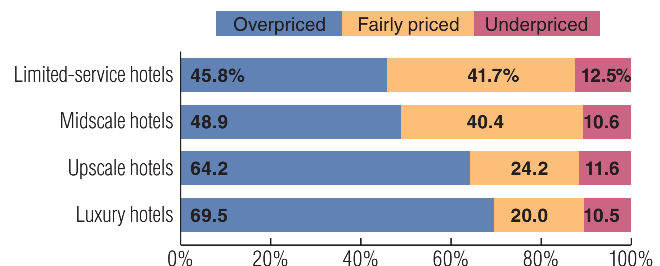
*Starting in 2017, results are the average of investment prospects for three categories—luxury, upscale, and midscale hotels. Previous years’ results are based on investment prospects for a single category—full-service hotels.

Hotel Buy/Hold/Sell Recommendations



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on U.S. respondents only.

Opinion of Current Hotel Pricing



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on U.S. respondents only.

several years, affecting hotel properties beyond current financial reserves and any existing or future fiscal aid packages.

U.S. hotel performance has shown an uneven rebound by market, with performance corresponding with spikes in COVID-19

cases, pushing any return to 2019 fundamentals well into 2024. Following the post–Labor Day tapering of hotel demand from summer leisure highs, industry leaders fear another wave of reclosures, as businesses push office reopenings well into 2021, delaying the resumption of business travel and group demand that typically compensates for a slowdown in leisure travel after Labor Day. Hotel owners reported adjusting their projections weekly and reducing forecasts for the balance of 2020.

Initial government aid has burned off and uncertainty surrounding future demand continues. Airlines and hotels sought further federal assistance to prevent massive foreclosures; however, attempts to revise or replenish federal aid programs remained in a political quagmire due to the partisan political landscape.

Capital Markets and Transactions

Capital markets around the hotel market are understandably in turmoil. As three- to six-month forbearance agreements (debt-service deferrals) began to expire in September and financial reserves are being depleted, the hospitality industry faced an unprecedented wave in foreclosures, overwhelming special servicers and banking groups. Early on, lenders resisted receivership. Owners with historically superior performing assets attracted rescue capital or became private-equity targets; nevertheless, continued delays in federal CMBS relief or adaptations to restrictive main street lending requirements may cause thousands of permanent hotel property closures.

As lingering pre-pandemic trades closed in the early months of the economic downturn, any remaining transaction activity reached historic lows in the second quarter of 2020. The drop in hotel property transactions was largely due to large bid-ask spreads, limited debt available for hospitality-related real estate, and continued economic uncertainty. Owners looking to sell assets to reduce leverage were trading at 15 to 40 percent discounts from pre-pandemic values, depending on levels of distress, a trend that will likely continue to expand as pandemic-related pain deepens.

Hotel owners/investors with diversified portfolios, favorable balance sheets, and strong banking relationships can continue to do deals, albeit with more costly capital. Meanwhile, disciplined institutional investors are walking away from noncore or capital-intensive hotel assets, while simultaneously raising opportunistic funds for investment in the lodging sector. As a result, rescue capital and loan sales in the lodging sector depend on a thesis for future ownership of the underlying assets.

Contingent on continued improvement in operating fundamentals and occupancies reaching pre-debt breakeven levels (40 to 50 percent occupancy), transaction activity is anticipated to begin to increase as we enter the first half of 2021, assuming a viable vaccine becomes widely available.

Future Changes to Owner and Investor Mind-sets

The lodging sector, faced with a precipitous and unprecedented drop in demand, was proactive and disciplined in swiftly enacting austerity measures. These measures include massive furloughs in line with temporary closures. As the United States began reopening, owners strategically reopened on a market and departmental basis; however, staffing continues to remain well below pre-pandemic levels, as properties continue to await the crucial business and group travel customer's return.

New legislative restrictions, more costly cleaning protocols, and last-minute-demand booking patterns have increased breakeven hotel occupancy thresholds. Entering the fall months, as average occupancy levels continued to remain below 50 percent, some of these staffing reductions became permanent, as brands and operators cooperated to achieve more lasting cost efficiencies and greater flexibility in light of continued uncertainty and stymied federal aid.

With labor being the highest operating cost for hotels, owners have sought greater efficiencies and flexibility by introducing more variable components to their cost model. Although cleaning requirements have become more stringent, a portion of the corresponding increase in costs is offset by eliminating daily housekeeping where possible. Although there has been strong opposition from organized labor to this change in housekeeping protocol, these reductions could yield permanent savings post-pandemic.

To help owners preserve cash, brands moved quickly to relax standards. Some owners used this period as an opportunity to transition from brand-managed to franchise agreements giving them management flexibility, while other owners took advantage of a prolonged facility closure to accelerate renovations and reposition their properties.

The top 25 hotel markets, which had enjoyed a prolonged period of prominence as desirable urban and convention destinations, now find themselves the most negatively affected by the pandemic. Headline risk as a result of a surge in cases, closed office buildings, and continued delays in the return of corporate and group travel have all been headwinds to any recovery in the top markets. Further pressure from organized labor, costly tax increases, new legislative protocols, and reduced foreign

investment will have long-term implications on supply, rendering some markets less attractive to investors and developers. As a result, both existing and certain hotels under construction in high-density markets may end up being repurposed to alternative uses, including office, multifamily, and assisted living, or permanently closed.

Future Changes to Brand and Operator Mind-sets

Brands have historically had a strong voice during times of uncertainty. Implementing and enforcing cleanliness guidelines is seen as critical to both guests and owners with regard to driving sales as we enter recovery; this could have potential lasting implications on the viability of independent hotels and result in increasing portfolio and brand consolidation.

Both brands and third-party operators rapidly reduced management ranks to grapple with a sudden drop in their fees. This move may yield greater efficiencies, but the implications for owner/brand relations are uncertain. The reduced headcounts may limit response times to meet owner requests.

In response to the economic shutdown, hotel sales teams initially adapted by creatively renting properties as temporary office space, mid- to long-term housing for first responders, and overflow university student housing. As the anticipated recovery for group travel demand pushes into the second half of 2021 and sparse summer (outdoor) wedding demand wanes, operators considered temporarily repurposing ballrooms as overflow classrooms, dining halls, fitness centers, showrooms, warehousing, and other uses requiring additional space to meet social distancing guidelines.

In many cases, on-site food and beverage offerings were already in need of an overhaul before the pandemic, given lower levels of profitability and evolving customer preferences. In the short term, brands and operators are redesigning existing spaces to allow for increased outdoor dining, grab-and-go options, and adapted service-only buffets. Over the long term, however, in-house dining will increasingly be leased out to established restaurateurs, and catering to third-party caterers. In addition, higher costs and restrictions on staffing flexibility in labor contracts for hotel food and beverage outlets may further push these third-party leases.

As technology solutions that drive greater cost efficiencies move from advantageous to essential, brands have made rapid strides in fully automating the check-in process. Technology has allowed for faster check-ins and redistributed labor from the front desk to other currently understaffed areas.

In the short term, guests have demonstrated an appreciation of and a willingness to pay a premium for heightened cleanliness and safety. The question as we advance is whether the elimination of daily housekeeping, reduced full-service dining, increased customer-facing technologies, and a prolonged period of leisure transient demand with flexible booking policies will have a profound impact on the full-service hotel model's viability and value proposition. These changes could force brands, operators, and owners to collaborate on transitioning previously fixed costs to a more variable and efficient model. In the long term, brands will need to think creatively about how these limited resources can be repurposed for more significant customer-facing value creation, particularly at full-service and luxury properties.

Changes to the Customer Mind-set

Most hotel investors believe that people still want to travel and that the travel industry could benefit from pent-up demand. Despite any anticipated travel demand rebound, the pandemic and resultant economic upheaval could have substantial long-term effects on hotel customer preferences, product design, and interindustry dependents.

Before the pandemic, many new or newly renovated select-service hotels were approaching full-service product pricing levels. They had reached this level with a more commoditized product, and substantial cost efficiencies and greater agility. This narrowing gap has been exacerbated in the COVID-19 environment, as full-service and select-service hotels compete for the same leisure customers seeking lower-cost stays, and drive-to destinations outstrip the traditional top-25 markets. Nevertheless, this change in geographic preferences is expected to be temporary, as spikes in cases eventually subside and travel restrictions are eased.

The pandemic has also caused a shift in product preferences. In the COVID-19 landscape, consumers seeking reduced touchpoints and alternative outdoor entertainment are giving new life to properties such as extended-stay, direct-entry rooms, and sprawling golf resort products that previously had been considered outdated and lacking social appeal. Whether this is a short-term trend in a predominantly leisure demand environment or a persisting movement remains to be seen, particularly given the cost implications of reversing efficiencies gained through higher density.

Some hotel investors previously bemoaned potential reversals in environmental initiatives, such as reducing the use of single-use plastics during food service. But, another outcome of the pandemic has been heightened awareness around other ESG

issues, such as the importance of social equity, public health, national parks, and access to education. The hospitality industry feels that these issues will have a more significant impact on corporate decision-making and influence both the hotel customer and investor mind-set.

Which of these changes in mind-set are permanent and which will fade remains uncertain, as priorities shift with time and convenience. As this economic downturn draws on, the likelihood of permanent changes to industry fundamentals continues to increase. Nevertheless, hotel owners, operators, and brands continue to be cautious about making significant changes in a shifting, pandemic-induced economic landscape that result in costly mistakes.

Retail

The retail property sector was already struggling on the eve of the pandemic—and now conditions threaten to get much, much worse. "If it wasn't a retail apocalypse before now, then this might be the real thing," concludes the lead U.S. retail real estate analyst at a global brokerage firm.

Despite a decade of sustained—if moderate—economic growth, vacancies have been rising for several years as retailers close stores at a recession-like pace. An ever-greater share of shopping has been moving from physical stores to online retailers, and more and more space in shopping centers is occupied by nonretail uses. All this was happening before the pandemic, which the experts we consulted believe will hasten the pace and magnitude of change.

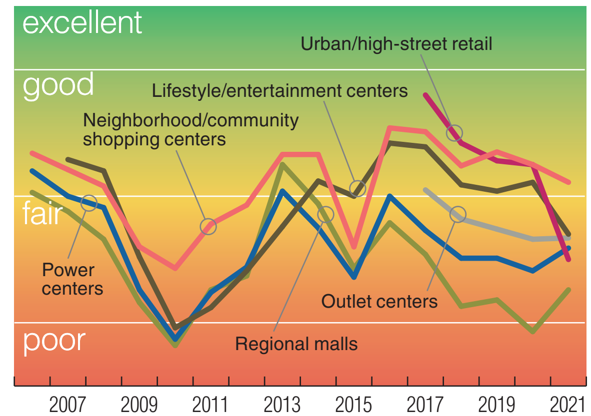
To be sure, the retail sector is used to change. Driven by continual shifts in fashion and consumer preferences, demographics, retailer innovation, and commerce technology, retail has always been the most dynamic property sector. Brands rise and fall, shopping patterns evolve, and retailers adapt. The process of "creative destruction" never ceases.

The Initial Fallout

But this downturn will be different, qualitatively and especially quantitatively, as the pandemic hits both retailers and consumers.

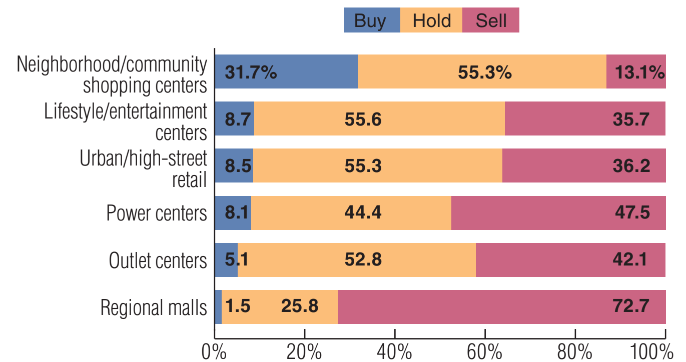
Tens of millions of retailers were forced to abruptly close their doors when the pandemic mushroomed in March. Many have yet to reopen or reopened only briefly, even where they are allowed to operate. As of this writing (in mid-September), public health orders remain in effect for many types of stores and services in much of the United States, particularly for businesses that require close personal contact such as salons, bars,

Exhibit 3-12 **Retail Investment Prospect Trends**



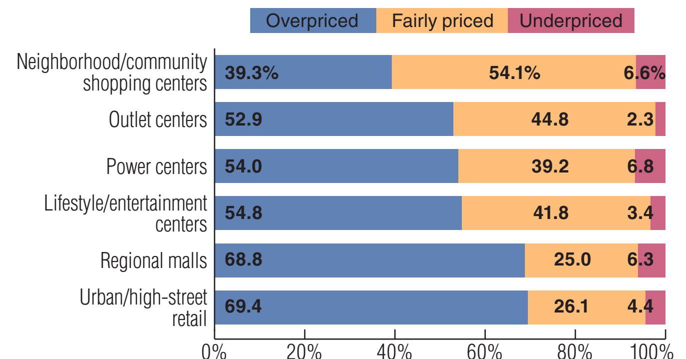
Source: *Emerging Trends in Real Estate* surveys.

Retail Buy/Hold/Sell Recommendations



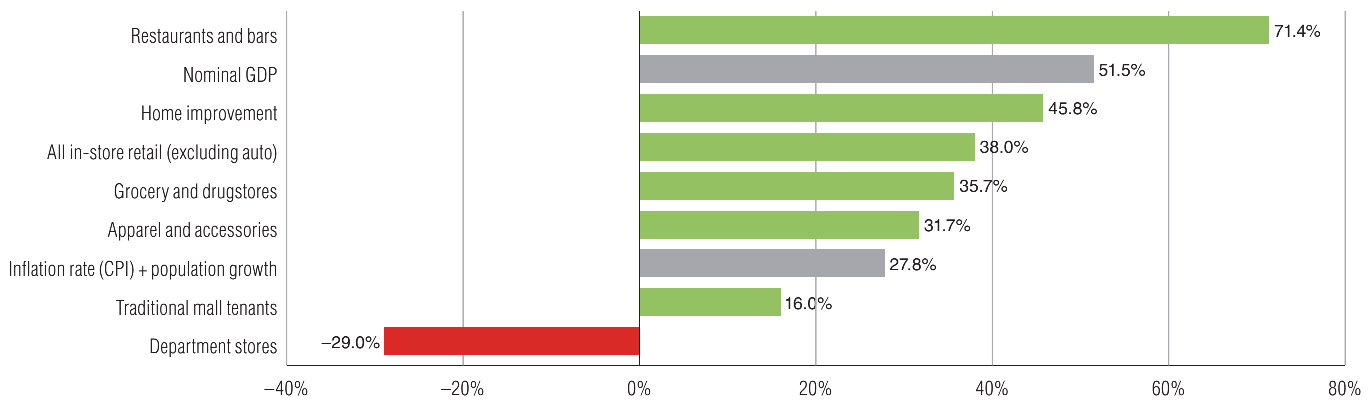
Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on U.S. respondents only.

Opinion of Current Retail Pricing



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on U.S. respondents only.

Exhibit 3-13 **Retail Sales by Store Type: Percentage Change since Great Recession (2Q 2009 to 4Q 2019)**



Sources: U.S. Census Bureau; U.S. Bureau of Labor Statistics; Nelson Economics.

gyms, and most forms of indoor entertainment. The timing to relax these restrictions will vary by state and locality, but they are already devastating the finances of retailers and restaurateurs—and their landlords.

With little or no revenue coming in, many—perhaps most—retailers are not paying full rent. Numerous retail chains—which tend to have greater access to working capital—have nonetheless elected to withhold rent, especially where they cannot reopen.

Households are feeling their own pain and altering their shopping patterns—to save money, to stay safe, or to otherwise adapt to life during a pandemic. Millions of workers have lost their jobs, and millions more are earning less, forcing sharp cutbacks. Affluent households, despite their greater financial resources, have cut their spending even more. And even more retail spending has moved online, first because of mobility restrictions and store closings, and then just to be safe, depriving stores of essential revenue.

A Gathering Storm before COVID-19 . . .

These are the ingredients for the most sweeping changes to the retail property sector in modern times. Many retailers will not survive; many shopping centers will close or be converted to other uses. But the coronavirus cannot shoulder all of the blame, since many of the sector's problems are not new.

The United States is significantly over-retailed, with far more space per capita than in any other country. Compounding this oversupply has been relatively weak consumer demand due to stagnating income growth that has lagged economic growth. Plus, households have been reallocating their consumption away from the types of goods traditionally sold in shopping centers. Americans are devoting more of their funds to health care, housing, and recreation, and relatively less to apparel, furnishings, and other retail goods.

These shifts reflect not just finances but also changing demographics: aging baby boomers have accumulated most of the big-ticket items they need and so are spending more time and money on experiences like travel and buying less "stuff" in stores. Meanwhile, their children and grandchildren are saddled with greater debt loads and more expensive housing, limiting their discretionary spending.

Finally, physical retailers have been losing market share to online sellers. More than a quarter of what might be called "core retail" sales (excluding retail categories[1] that consumers did not frequently purchase online) are now transacted through e-commerce channels—a nearly threefold rise from the end of the last recession. Little wonder then that sales turnover in shopping centers has been weak, particularly in malls, trailing GDP growth.

Facing such weak consumer demand, retailers have been closing stores at a rate normally seen only during severe recessions—despite a relatively robust economy. Retailers announced more than 5,800 closures in 2018, jumping to over 9,300 in 2019. Rising retail bankruptcies account for only part of the story. Of greater importance, retail chains are downsizing their store counts and closing underperforming stores as they prioritize "four-wall" profitability over market share.

1 All retail sales excluding groceries, drugs, building materials, motor vehicles and parts, and gasoline, as well as miscellaneous nonretail products.

COVID-19 has magnified all these trends. Most notably, more people are shopping online for more things. Many people have recently tried online grocery shopping for the first time. Fear of contracting COVID-19 in stores has also "broadened the reach of e-commerce to people who probably were a little bit sheepish about using their devices to shop," notes one tenant adviser.

Nonetheless, this level of online spending is not sustainable. The shopping experience proved frustrating to many consumers, especially for groceries, since retailers did not have the infrastructure in place to accommodate such a dramatic rise in online sales. And surveys show that consumers are eager to return to stores for most of their shopping—once it is safe.

For their part, "retailers can't afford to deliver everything," according to the head of retail capital markets at a leading brokerage firm, particularly for low-margin products like groceries. Doing online sales right requires significant capital investment, although curbside pickup might be a more affordable option for consumers and retailers alike. In the end, "the pendulum will swing back, but not to the level that it was before," says one leading retail researcher.

An Unprecedented Shakeout

Perhaps the most consequential economic outcome from the pandemic will be the vast number of small businesses—among them many retailers—that will not outlive this recession. Public health restrictions will not last forever. Eventually, a vaccine will be discovered and distributed. Eventually, consumers will feel safe enough to venture out to restaurants and salons. And after so much deprivation, there will be pent-up demand for all sorts of goods and services.

But consumer demand almost certainly will not snap back to where it was. The recovery will take time. After the global financial crisis (GFC), retail sales took 2.5 years to return to their pre-recession peak; for mall-oriented retailers,[2] income loss in this pandemic recession, the delay might be even longer.

While overall retail sales did exceed pre-pandemic levels by July, sales in physical stores—and especially mall tenants—have not yet regained their former sales since much of the recent sales gains were captured by online retailers. In any case, this recovery is most likely to prove transitory unless the federal government steps in soon to replace the income-support programs that were propping up consumer spending but have since expired.

In the meantime, millions of retailers will not survive. The retail sector is dominated by small business tenants, who typically cannot survive more than a few months without their normal revenue. More than half of retail establishments have fewer than 20 employees; a third have fewer than five workers. Many are family businesses with modest savings and limited access to conventional capital sources, and small businesses mostly missed out on the government assistance programs, which seem likely to lapse in any case.

In the "fog of war," no one can accurately forecast the ultimate business failure rate, but one analyst calculates that with "a small business failure rate of just 20 percent—which is quite conservative—a billion square feet of space could be coming back to market by the time we're all done." Add to that major chain closures, Chapter 11 bankruptcies, and some reasonable share of Chapter 7 bankruptcies and retailers on bankruptcy watch lists, and "there could be 2 billion at risk"—or roughly one-sixth of the roughly 12 billion square feet of space in the United States.

Getting Past COVID-19

Our retail experts also expect the economic fallout from COVID-19 to increase the shifts to both value retailers and luxury while squeezing the middle, especially department stores. One knowledgeable source believes that "literally every single department store chain in North America now has either filed [for] bankruptcy or [is] on the bankruptcy watch lists of the major credit agencies." Not all will go under, but some will, and others will contract. Few are likely to be the force they once were. Similarly, midpriced apparel and accessory shops—long mall mainstays—now fill the lists of store closures and retail bankruptcies.

Another issue for the retail sector has been the near-total pause in retail activities that depend on social interaction: entertainment, food, and experiential retail. These were among the rare strong performers over the past few years and were seen as the salvation for mundane retail centers, but they have been hit hardest of any retail type by the pandemic and its aftermath.

However, our experts uniformly view these setbacks to be only temporary. Demand should return once consumers feel safe in terms of both their health and financial security. As with grocery delivery, our experts do not believe that the prepared-food delivery model is feasible in most localities—too expensive, not scalable, and in any case an imperfect substitute for on-site restaurant meals.

2 Essentially "core retail" sales as defined above but excluding discounters and superstores that typically do not locate in traditional malls.

Destination retail also is seeing a major decline as both personal and business travel has plunged to levels not seen in decades. Fine dining and luxury retailers especially depend on the deep pockets of tourists and business travelers, particularly international travelers. Here, too, expectations are for a strong recovery—eventually—but destination retail seems likely to be sidelined for a while.

In the meantime, households are showing a heightened interest in shopping locally. This shift likely arose due to mobility restrictions and the exigencies of staying safe while shopping, but also seems to reflect consumer desires to support their community and local minority businesses.

Adapt or Convert?

The closing of so many retailers will leave a vast void of unmet consumer demand, creating a trove of opportunities for new or surviving businesses. But replacing the departed retailers will take time since the savings of many potential small business owners will be depleted and lenders to new businesses may be more risk averse. One small positive for physical retailing: more digitally native brands will be looking to expand their bricks-and-mortar presence to better reach their customers and to balance rising online marketing costs, though the footprint of these tenants has been limited to date.

So, vacancies are sure to swell to historic levels while rents will crater, but not all centers will suffer equally. The retail sector has been increasingly split into winners and losers. Truly dominant centers are thriving at the expense of those with inferior locations and tenant mixes, which account for an outsized share of vacant retail space. This bifurcation trend seems sure to intensify post-COVID.

The long-expected downsizing of the mall sector seems sure to gain momentum. A majority of the nation's 1,200 or so malls will need to covert to other uses, according to several experts we consulted, but those that survive should come out even stronger, after adapting and enduring their own set of challenges. True class A malls—estimated to number 150 to 300 top-quality malls—will likely avoid most of the fallout from the shrinking ranks of department stores and apparel retailers, and the coming rent resets should facilitate a further flight to quality that will favor class A malls.

Obsolete or dead class C and D malls, constituting perhaps half of all malls, face the toughest choices. Many are centrally located in their region but have lost their market and might have a future as last-mile or distribution centers. A recent survey from CBRE found "59 such [last-mile conversions] that have either been completed, proposed, or are underway since 2017," more than double the count early in 2019. Amazon reportedly is considering taking over Sears and JCPenney stores for use as distribution hubs.

While these ideas have merit, the case for conversion might be overstated. For one thing, retail typically commands among the highest rents and values while industrial's rents and values are among the lowest, so the economics of conversion may not pencil for owners. Moreover, local governments may resist losing what had been a community gathering place, along with retail sales tax revenue and jobs. And "municipalities don't want to clog up their primary commercial thoroughfares with 18-wheelers," as one analyst put it.

In between are the class B malls—still functional but losing market share and cachet—which have perhaps the most interesting opportunities to upgrade through selective conversion of vacant or obsolete space to create more sustainable mixed-use centers. Experts we consulted offered a range of possibilities: suburban mall locations often work well for apartments and hotels, which offer reciprocal amenities with retail. Fortress-like department stores are amenable for conversion to hospitals and acute-care facilities where privacy is valued and customer-facing space is not important. Offices can also be successfully integrated into malls, though their future seems less certain now.

Similarly, neighborhood and community centers will have some work to do replacing their defunct tenants. But so long as grocery stores and drugstores remain their traditional anchor draw—which seems likely given the broad disenchantment with the delivery model—these centers should regain their footing as market conditions improve.

Finally, it seems that the sheen is coming off of high-street retail space, since many chains have soured on high-profile flagship stores. Retailers can no longer justify the stratospheric rents on money-losing stores, particularly given less costly options to build their brands via social media. The pandemic's disproportionate impact on central business districts, and the hit to destination retailing generally, have further eroded the appeal of high-street retail. Indeed, this segment saw the greatest decline in investor interest of any retail type in our survey.

Where does all this leave the potential for future development? Once again, retail ranked last in our survey among the six major commercial property types for development potential, as well as for investment prospects. Builders we spoke with plan to scale back their development pipelines and reduce the retail components of mixed-use projects. With so much surplus retail space

already, few pure ground-up shopping center projects are likely to go forward in the near term, though opportunities are more likely to emerge in growing population centers in the South and West, according to our survey.

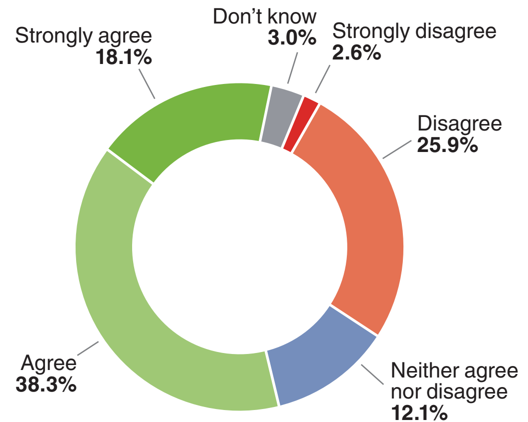
In This Together?

One topic on the minds of industry participants is the changing dynamics between landlords and tenants. Power has shifted to tenants in recent years as retailers go bust or just close stores, leaving more space vacant and providing tenants with more options for their stores. But this dynamic has blown up under COVID-19 as both landlords and tenants struggle to survive. With few reasonable prospects for landing new retailers if their current tenants leave, landlords are doing all they can to ensure that their tenants stay in business, even those currently with limited means or no capacity at all to pay rent.

The result is part dance and part frantic search for solutions in what one analyst refers to as a "partnership in pain," but another calls simply a "tug of war." A common approach involves moving from longer-term, fixed-rent leases to more flexible percentage-rent deals. These deals can be critical for retailers generating a small fraction of prior revenue. Greater transparency and reciprocity are essential, but the industry still has no easy answers for some thorny issues involving how to account for online sales and returns.

Percentage-rent deals can be seen as a form of landlords indirectly investing in their tenants. But in these desperate times, some major owners are going further and directly buying tenants. The motivation for these deals is clear, but some question whether landlords truly have the acumen of venture capitalists to identify worthy retailers and then the bandwidth to operate them effectively.

Exhibit 3-14 **Business Travel and Large-Group Industry Meetings Will Not Return to Pre-COVID-19 Levels**



Source: *Emerging Trends in Real Estate 2021* survey.

The Next Few Years

The next few years will be tough. Countless stores will shut their doors; many shopping centers will close or be converted to other uses. As summarized by one prominent REIT analyst, "the retail real estate business has to right-size and has to reinvent. But that doesn't mean it's going away by a long shot." Said another: "We're definitely going to come out of this smaller. . . but we still need plenty of space."

Once the economy fully reopens and it is safe to shop and socialize and recreate, we will still purchase the vast majority of our products in stores. And services, which account for a rising share of retail space, by definition must be consumed on site and in person. As one analyst concludes, "stores still matter."

Emerging Trends in Canadian Real Estate

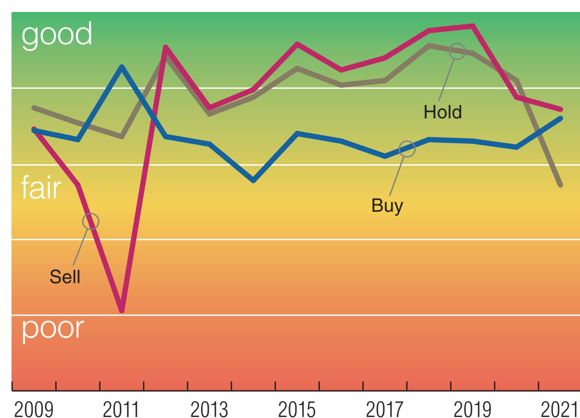
Resilience and opportunity amid accelerated change.

"Our mission . . . is to find potential where no one else even looks. So with COVID-19, we were able to use this time as an opportunity to see how we can pivot our business and emerge stronger."

If there was a common theme in our interviews this year, it was uncertainty. We found diverging views on several important issues, ranging from a potential uptick in suburbanization to long-term shifts in office vacancies due to remote working.

Another theme that is consistent across much of the industry is the accelerated pace of change as preexisting trends evolve or gather speed and new patterns emerge. Last year's discussion about "beds and sheds" as best bets is even more apt today and looking ahead to 2021. People continue to focus on the quality and flexibility of their living space. The faster growth of e-commerce shines a brighter light on warehousing and last-mile delivery. Deepening struggles for brick-and-mortar retail predate the pandemic and have been amplified as a result, but we are seeing a divide within this asset class as the outlook brightens for properties oriented toward people's basic needs, like grocery-anchored shopping centers. Office properties have entered a new phase, with ongoing questions about the return to the workplace countered by the need for more space per person.

Exhibit 4-1 **Emerging Trends Barometer 2021**



Source: *Emerging Trends in Real Estate* surveys.
Note: Based on Canadian investors only.

A trend that has accelerated with perhaps more clarity than any other is around property technology (proptech), although the conversation has shifted significantly from that of previous years. While the pandemic has led the industry to quickly adopt proptech that addresses their operational needs and helps them manage costs, companies are being more careful in their technology investments as the fear of missing out (FOMO) on the latest solution dissipates. "Necessity has replaced FOMO," said one interviewee.

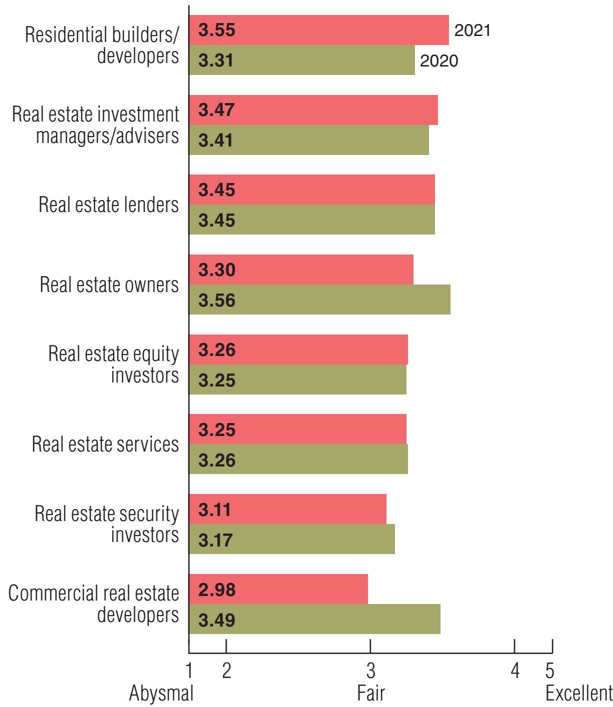
Some of these trends are contradictory, and trying to make sense of the change and uncertainty is not easy, especially when we are still in the midst of a global health crisis that brought a sudden halt to economic growth. The coming year will be all about embracing opportunities to be resilient in the face of uncertainty while shifting strategies to anticipate and stay ahead of the emerging, and accelerating, trends.

Reimagining Portfolios: Strategies to Succeed in Times of Uncertainty

"We have seemed to have avoided a major recession, but we cannot ignore what just happened."

With so much uncertainty, many investors are being cautious about their next moves. "Now is not the time for an 'always' deci-

Exhibit 4-2 **Real Estate Business Prospects, 2021 versus 2020**



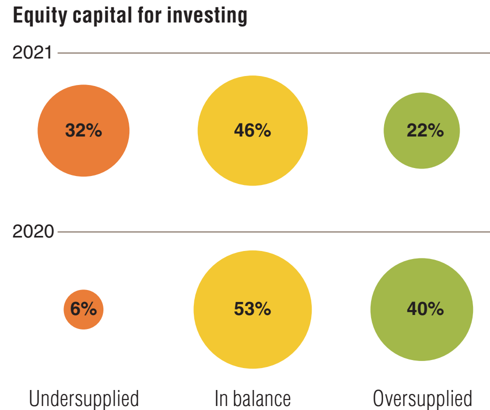
Source: *Emerging Trends in Real Estate* surveys.
Note: Based on Canadian respondents only.

sion," said one interviewee. "There is no sense of what the long term is going to be or what the future will look like."

Others emphasized that with so much change, the industry has no choice but to press forward and adapt. "Denial is not a river in Egypt," one interviewee said repeatedly, using the well-known phrase to describe what they see as a reluctance of some real estate players to acknowledge that while no one can accurately predict how the industry will evolve, it is clear that it will not be going back to what was considered normal before the pandemic (see exhibit 4-1).

While caution is called for in an atmosphere of uncertainty, many interviewees are keeping a close eye on opportunities to reposition their portfolios to stay ahead of trends that they can anticipate with more confidence. One area where this is particularly relevant is the retail sector, where the explosion of e-commerce during the pandemic has added new urgency to transform properties and business models. It is all about finding the highest and best use for a property, said one interviewee, who felt the biggest opportunity is to unearth value by rezoning

Exhibit 4-3 **Real Estate Capital Market Balance Forecast, 2021 versus 2020**



Source: *Emerging Trends in Real Estate* surveys.
Note: Based on Canadian respondents only.

the land. Whether it is pivoting to residential development on excess lands or incorporating new last-mile delivery solutions, real estate in this sector needs to be reimagined.

Retail property owners are also exploring more innovative options to evolve their assets. "The lens through which creative landlords look at their assets has to change," said one interviewee involved in the retail sector, citing health services as one opportunity for giving new life to retail space. Owners of weaker class B and C offices will also be looking at new uses for their assets, including through redevelopment to other purposes like residential property.

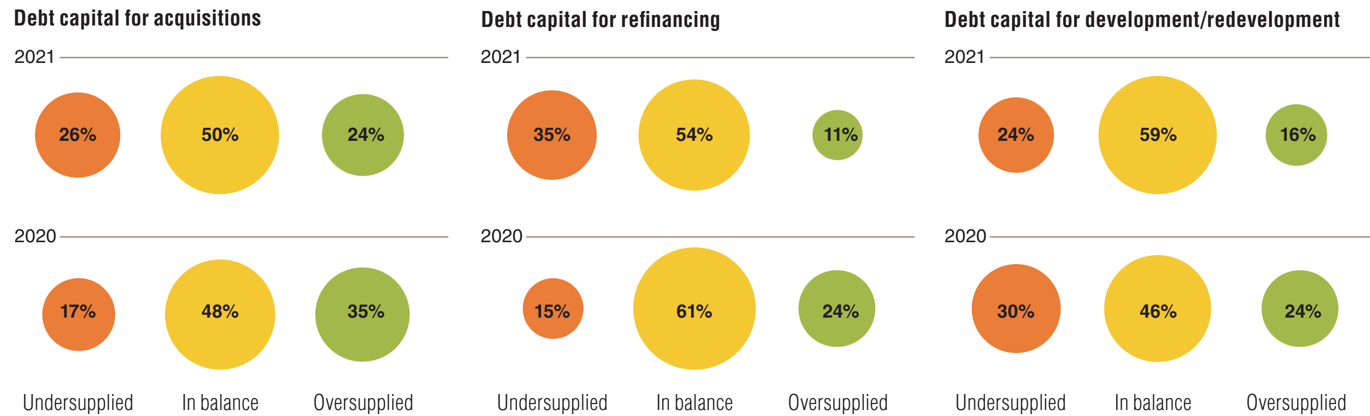
Finding the Right Deals

"We are in a time of price discovery."

Investors are also looking for buying opportunities. But despite widespread agreement about the outlook for some asset classes, interviewees say that the right opportunities have been slow to materialize. Why is that? Many believe it is because we are in a time of price discovery and that until some of the uncertainty dissipates and buyers and sellers converge on the value of an asset, there will be fewer transactions (see exhibit 4-2).

"We're finally getting rent increases that we've wanted, we're awash in cash and don't know what to do with it," said one interviewee, whose company's portfolio includes industrial assets. The company has been "very challenged to find product worth owning," the interviewee added.

Exhibit 4-4 **Real Estate Capital Market Balance Forecast, 2021 versus 2020**

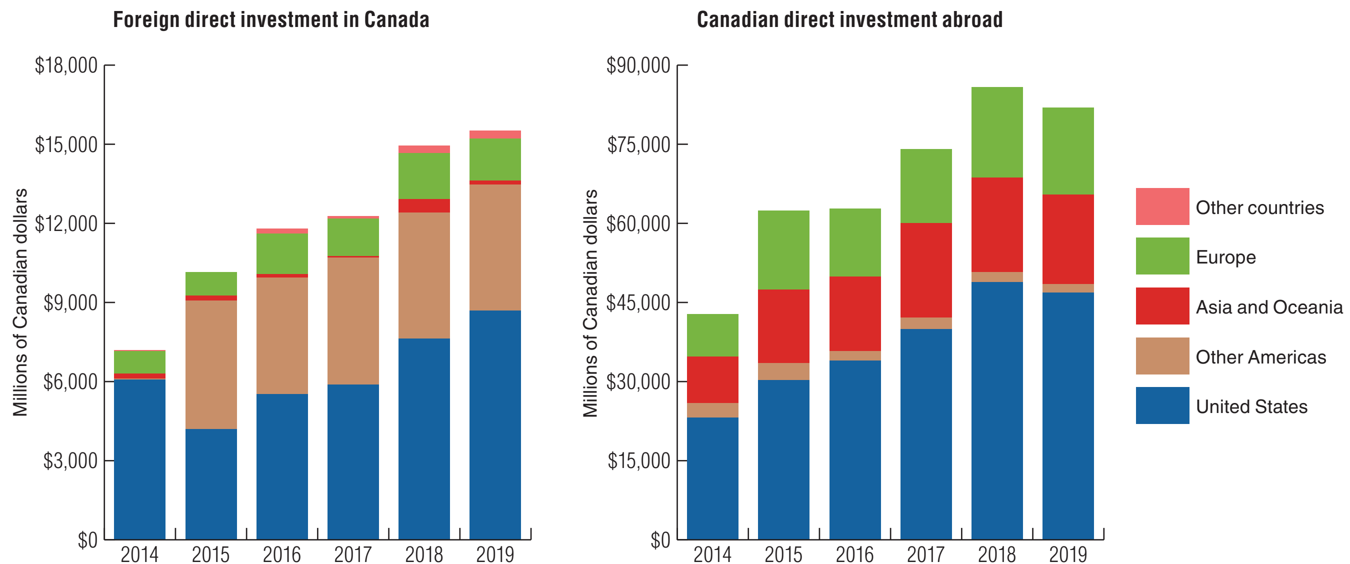


Source: *Emerging Trends in Real Estate* surveys.
Note: Based on Canadian respondents only.

Also affecting deal flow is an ongoing flight to quality. Investors are looking carefully for the best assets worth paying more for while making price adjustments for riskier opportunities and those outside their core competencies. Prudence reigns, leading many to take a wait-and-see approach while they line up capital for potential opportunities. As our survey showed, there was a significant rise from last year in the number of respondents who believe that capital is undersupplied (see exhibits 4-3 and 4-4), which may reflect the current environment of prudence and price discovery.

But overall, there is a general feeling that debt capital markets are in balance and a sentiment from many interviewees that Canada, which has seen consistent growth in foreign direct investment in real estate in recent years (see exhibit 4-5), is in a good position to be even more attractive to investors seeking

Exhibit 4-5 **Foreign Direct Investment in Canada and Canadian Direct Investment Abroad: Real Estate, Rental, and Leasing**



Source: Statistics Canada, accessed September 10, 2020.
Note: Figures include firms under the North American Industry Classification System (NAICS) 53.

stability in the current environment. In the meantime, deals are still happening. While we have yet to see many large publicly announced deals, we are seeing private transactions behind the scenes. Many have involved joint ventures or partnerships aimed at injecting liquidity into organizations that need it and to de-risk projects.

For investors looking for larger opportunities, one strategy is to double down on investments in data analytics and predictive modeling to gain insights into the opportunities of tomorrow. Now is a good time to prepare since there is a fairly strong sentiment among interviewees that more opportunities, including potential distressed transactions, will emerge over the next year or so.

Emerging Opportunities in Alternative Assets

"Niche sectors are very important to create income and differentiate yourself."

Investors are also looking at niche assets, whether in Canada or abroad, that show promise, including the following:

- **Single-family rental housing:** As people look for more space during the pandemic either to work from home or get outdoors, many will consider moving from apartments to single-family homes, even if they are still renting. This type of housing is more common in the United States, particularly where excess land near big cities is available.

- **Life sciences:** With aging populations and so much funding going into finding a vaccine for the novel coronavirus, research and development space to serve the life sciences industry is a growing investment and development opportunity. Often resembling suburban campus-style offices or sometimes housed in industrial-like settings, these labs can offer attractive rents. Some Canadian cities, like Montreal, have vibrant clusters of life sciences activities, as do several U.S. markets, where companies are eager to be near the top research talent.

- **Self-storage:** Several interviewees cited self-storage, a subset of warehousing, as a good niche opportunity, especially as people grapple with space constraints at home during the pandemic. Others noted that the strong demand for self-storage reflects an ongoing trend as more multifamily housing has been built in Canada.

Other niche areas identified by interviewees include TV and film production studios, which have good prospects given the popularity of streaming services during the pandemic and the need for companies to replenish content quickly. Speaking more generally about niche opportunities, one interviewee referred to them as an important strategy in the current environment. For this interviewee, this has meant making a large number of smaller deals as well as investing in custom projects.

"Creativity and innovation will win the day," said another interviewee, who referred to opportunities to invest in data centers, which are seeing surging demand. But not everyone agrees on the merits of a niche-focused strategy. Some interviewees felt that with so much uncertainty, the best approach is to remain focused on assets with which they are familiar.

18-Hour and 15-Minute Cities: Staying Ahead of an Evolving Real Estate Customer

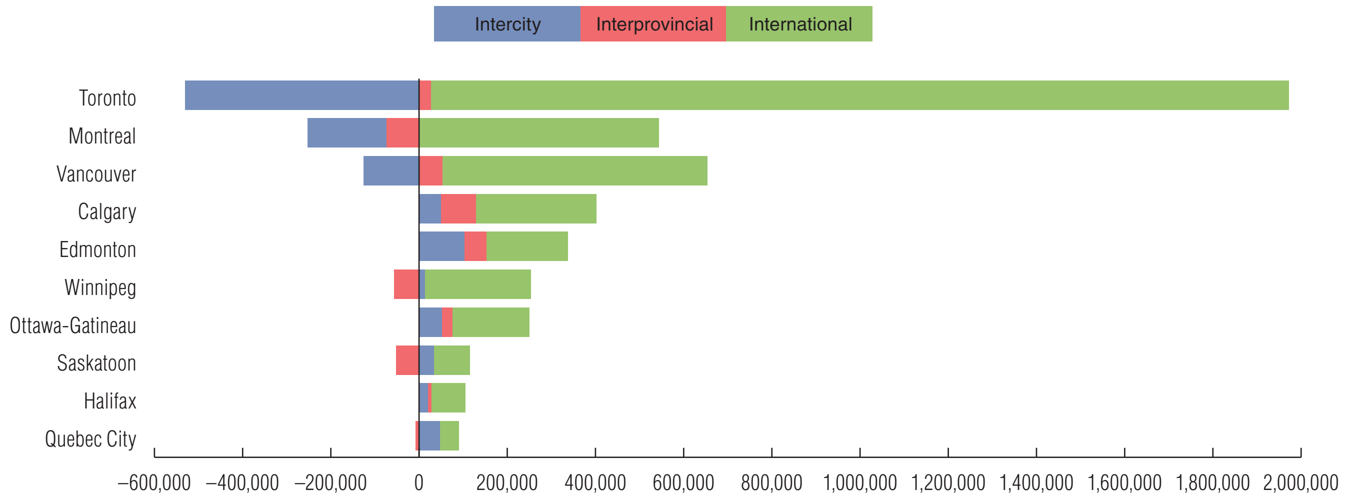
"COVID-19 has hit the pause button for urbanization, but this trend will continue as the pandemic fears subside."

Last year, the key trends were all about adapting to changing customer expectations as real estate becomes a more service-focused industry. Expectations and behaviors have continued to shift, particularly when it comes to where people want to be and how they use space. Understanding and being nimble in the face of these changes will be critical to navigating a challenging business environment.

Once again, the trends looking ahead to 2021 are complex. Take the trends around flexibility and the blurring of lines between property uses. They have not gone away, but they have evolved. For example, the concept of real estate as a service, which focuses on more flexible models of occupying space, has undoubtedly shifted during the pandemic as physical distancing requirements and other health and safety concerns make co-living or coworking less appealing. But the demand for flexibility around office space has endured, with uncertainty around the return to workplaces leading some office tenants to ask landlords to agree to short-term leases for now.

On the residential side, lines are blurring in the use of space, as seen in rising demand for homes with quiet areas for people to work or study. Developers and landlords are looking at condo amenities with common space for people to work or adding so-called Zoom rooms in homes where people can have more privacy to take calls. Besides better options to work from home, there is a growing desire for more space across the board, whether to get outdoors or have more distance from other people.

Exhibit 4-6 **Forecast Net Migration, 2020–2024**



Source: Conference Board of Canada, accessed September 1, 2020.

A New Chapter for Urbanization?

"Sprawl to suburbs that some are predicting will be a detriment to society and not really the future for us. People need to be near people."

There also is a shift in discussions about where people will want to live, particularly around whether suburbanization will pick up in a world of remote working, affordability concerns, and pandemic-related worries about dense environments and taking mass transit. We found no consensus among interviewees. A significant number believe that there will be at least some movement away from major cities, even if they remain attractive to many people.

This is backed up by a July 2020 report released by the Ontario Real Estate Association, in which 61 percent of respondents agreed that living in the suburbs is now more appealing than before the pandemic. The survey found that 60 percent felt the same about rural areas, versus just 34 percent for downtown settings. Data from the Conference Board of Canada (CBoC) also reflect growing movement out of our biggest urban centers, with both Toronto and Montreal showing a gradual rise in the number of people moving elsewhere in their respective provinces over the period spanning 2020–2024 even as international migration keeps their populations growing (see exhibit 4-6).

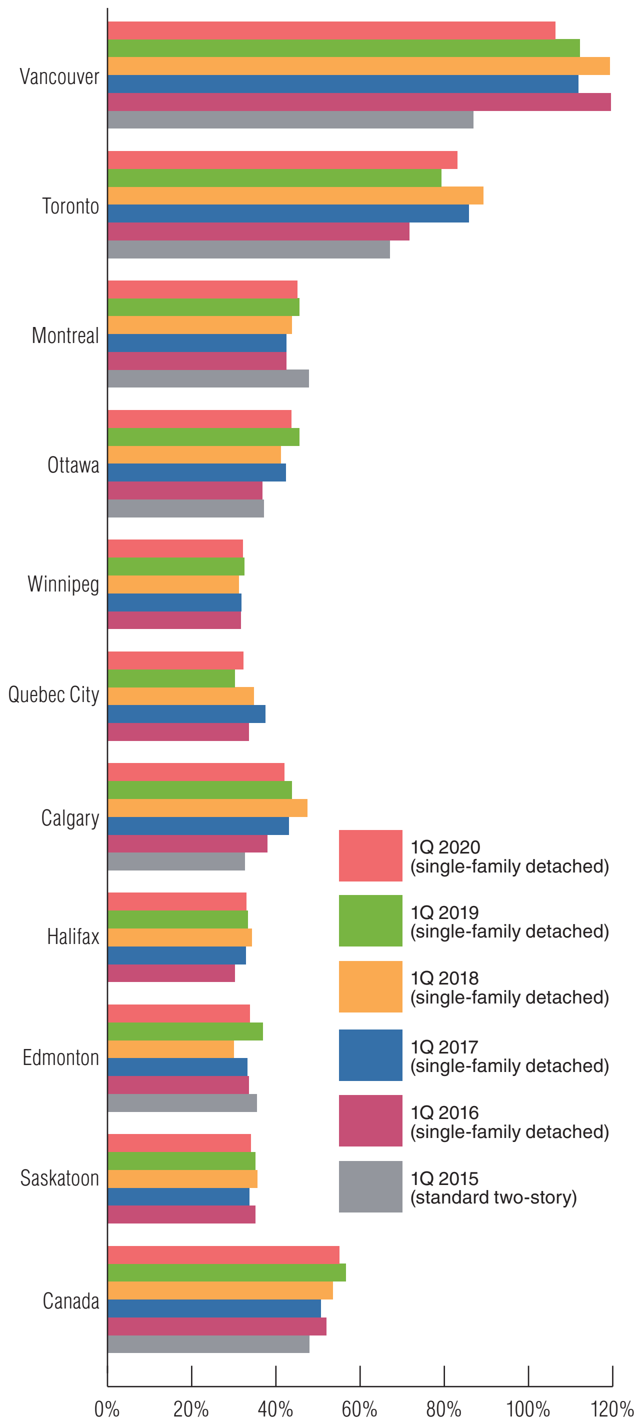
But even with this potential shift, we see evidence of an evolution of trends from before. Many people will still seek urban environments that combine live/work/play elements, even if they are not living in major city cores. This is playing out in many ways.

18-Hour Cities. We have previously included places like Vancouver and Montreal on the list of 18-hour cities in Canada, which are a less intense version of some of the biggest global centers while still maintaining an international character and a vibrant urban core. Recent changes in the real estate market are adding new energy to the phenomenon of 18-hour cities in Canada, with good prospects for accelerated growth of communities with some of the key characteristics.

In Ontario, this would include secondary cities like Kitchener-Waterloo, London, and Ottawa—which, according to Statistics Canada, were the fastest-growing census metropolitan areas in 2018–2019—that are more affordable than Toronto but still have good amenities and urban features. With remote working making it possible for more people to look at moving to these types of communities, we expect the 18-hour trend to pick up across Canada, whether in the Ontario centers mentioned or places like Victoria, Quebec City, and Halifax.

Transit-Oriented Communities. Even on the question of city versus suburb, the trends are blurry. While some downtown residents will likely take advantage of remote working arrangements to move outside the core, many will choose areas with urban characteristics further afield. This includes suburban areas along transit lines, where the trend of transit-oriented community development is leading to denser, more diverse, and walkable mixed-use communities in places that have traditionally looked very different.

Exhibit 4-7 **Housing Affordability**



Source: RBC Economics, *Housing Trends and Affordability* reports, accessed September 1, 2020.

Note: The RBC Housing Affordability Measures show the proportion of median pre-tax household income that would be required to service the cost of mortgage payments (principal and interest), property taxes, and utilities based on the average market price.

Suburbanization, then, does not mean a decline in prospects for transit-oriented communities, especially since transit can connect suburbs to each other. But some interviewees are questioning the viability of transit in the COVID-19 era. Some believe that people will shy away from transit, but there is a perhaps stronger feeling that ridership will recover as the pandemic subsides and people go back to seeking more affordable transportation options. So far, signals from governments have been positive that they will continue with transit investments across Canada, which have the potential to play a significant role in stimulating the country's economic recovery.

Several interviewees remain bullish on transit-oriented communities, especially given the significant benefits of linking transit infrastructure and real estate. In fact, a big concern for many interviewees is the slow pace of progress in building transit, which can open up more affordable housing options to people and create opportunities for further job growth. "We need the levels of government to come together to execute these projects more quickly," said one interviewee. In Ontario, the provincial government has increased efforts to prioritize transit-oriented communities through the Transit-Oriented Communities Act, which aims for more timely construction of vibrant communities around transit stations along the routes of the province's four priority subway projects.

15-Minute Cities. Related to this trend of expanded urbanization is the idea of the 15-minute city, which also reflects the ongoing movement toward building more vibrant communities with a live/work/play dynamic. A concept that has started to become popular around the world, the 15-minute city refers to ensuring that urban residents can meet their daily needs, such as a trip to the grocery store or school, within 15 minutes of their home either by walking or cycling. One way to make this happen is through gentle intensification of traditional single-family neighborhoods while encouraging more diverse land uses.

Ottawa has adopted the idea of 15-minute neighborhoods into its official plan, while cities like Toronto and Vancouver are exploring ways to increase density in traditional single-family areas to create more housing options. These changes will not be easy to make, but when they do happen, they represent an opportunity for the real estate industry to address the growing desire for these types of neighborhoods in areas beyond the traditional city core.

The Policy Imperative

"Immigration has always been a good catalyst for economic development and for the real estate industry."

The real estate industry will always be nimble in adapting to these trends, but there is a role for governments to provide some help through a supportive policy environment. One area that the industry feels is especially important right now is immigration, which not only has been key to urban population growth and driving significant activity in the housing market, but also is a major driver of the economy.

Already, we have seen immigration activity fall during the pandemic. According to RBC Economics, the number of permanent residents admitted to Canada in the second quarter fell by 67 percent compared with the same period last year. While the decline is undoubtedly temporary, we can expect challenges on the immigration front for the time being, especially given the large decreases in new applications for permanent residency as well as the number of new study permits processed. Interviewees emphasized repeatedly how important it will be to find ways to safely restore immigration activity, especially given the need for much faster economic growth to handle massive government debt burdens.

As a key sector of the economy, the real estate industry also has a significant role in supporting Canada's recovery. Besides ensuring a safe restart for immigration, what else would help on the policy front?

Faster Approvals. We know that supply is the key to alleviating housing affordability pressures, which remain elevated in Canada (see exhibit 4-7). While some governments have made strides on policies to increase supply, there is more to do. Interviewees were almost universal in their concern about municipal timelines for development approvals, with some noting that processes slowed down even more during the pandemic since not all cities had the infrastructure for their staff to work remotely. This is one area where technology can help.

Taxes. Interviewees expressed concern that governments will turn to real estate to address their massive deficits. But increasing levies like development charges will only exacerbate the supply gap, worsen affordability, and hold back the economy and urban growth. Several interviewees cited the need for tax measures to stimulate the economy and support home construction, a concern echoed in a set of recommendations compiled by BILD, the Ontario Home Builders' Association, and the Canadian Home Builders' Association to Ontario's finance minister earlier this year. While the document focused on ways to boost Ontario's economic recovery, it also addressed several measures that the federal government could take, including the removal of the goods and services tax on the purchase of new homes for 2020 and 2021.

The Rise of ESG

"[Those] who care, win."

Another aspect of changing expectations in real estate is the growing focus on environmental, social, and governance (ESG) factors. From health and safety ratings in office buildings to discussions about ways to help struggling tenants, the COVID-19 pandemic has in some ways heightened this focus in 2020.

While some interviewees felt that ESG issues are not a major priority, many said that addressing them makes good business sense and can be key to creating value. Having a good ESG profile is a significant focus for many investors, particularly on the institutional side, since reputational risks and other ESG considerations have a growing impact on a property's attractiveness and competitiveness. One interviewee noted that investors will price in the costs of addressing ESG deficiencies, while another said that their organization had turned down potential partners because of ESG issues.

Addressing ESG issues can mean extra costs, but it can also create value in ways that go beyond attracting capital and talent. If companies can position themselves as a force for good in society by more effectively working with stakeholders to tailor developments to their needs, they will be in a better position to build community and government support for development plans. "License to operate forms part of what we do," said one interviewee, who noted the importance of community engagement in addressing the social aspects of ESG.

To keep pace with this trend, companies need to make sure they are living up to their ESG claims. This means not only putting appropriate reporting frameworks in place with proper assurance over ESG metrics, but also embedding ESG matters into company values and culture.

Necessity versus FOMO: A Shifting Proptech Landscape Opens New Possibilities for Digital Transformation

"Technology has accelerated by a decade."

After years of talking about how the real estate industry was on the cusp of proptech adoption, digitization has truly accelerated during the pandemic. But once again, the conversation has shifted. While part of what had been fueling investments and new funds to accelerate proptech was a fear of missing out on this emerging trend, the tone of the discussion in 2020 reflects a more cautious approach as funding is projected to fall slightly to US$8.4 billion in 2020 after years of rapid growth (see exhibit 4-8). With companies paying close attention to costs, the focus now is on necessity rather than finding the next unicorn.

Areas of investment in 2020 include the following:

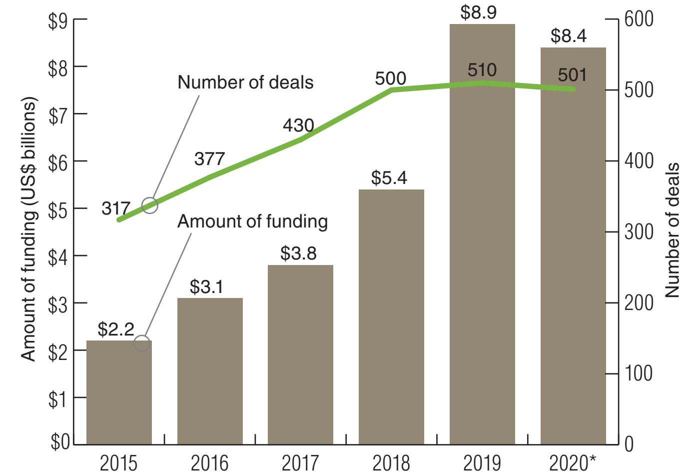
- **Solutions to ensure business continuity:** From video-conferencing and collaboration tools to cloud technologies, real estate companies have embraced solutions that have helped them continue operations remotely during the pandemic. Solutions to ensure business continuity have also been critical on the landlord and tenant engagement side, with proptech tools that support the safe reopening of offices and retail properties seeing high demand in 2020 and likely into 2021.

- **Customer engagement and sales:** While virtual tours for selling and showing properties have also been around for some time, they have evolved quickly during the pandemic to become more interactive and include different formats, like voice-activated devices that guide prospective buyers through a home. Virtual tools have been critical during the pandemic, and there is potential for continued growth as they evolve to a pre-sale tool that lets buyers narrow down the list of homes to visit in person.

  In the office and retail sectors, tenant engagement apps have played a growing role in helping employees and customers navigate the return to physical spaces, particularly when it comes to giving them useful health and safety information.

- **Tools to manage costs and efficiencies:** At a time of increased pressure on the business, real estate companies are looking for solutions to manage their costs, particularly those that do not get passed onto tenants. From tools to monitor buildings remotely to project management software that streamlines operations on a single platform, interviewees told us how the pandemic has sped up their search for efficiencies through proptech.

Exhibit 4-8 **Real Estate Tech Global Financing History**



Source: CB Insights, accessed September 9, 2020.

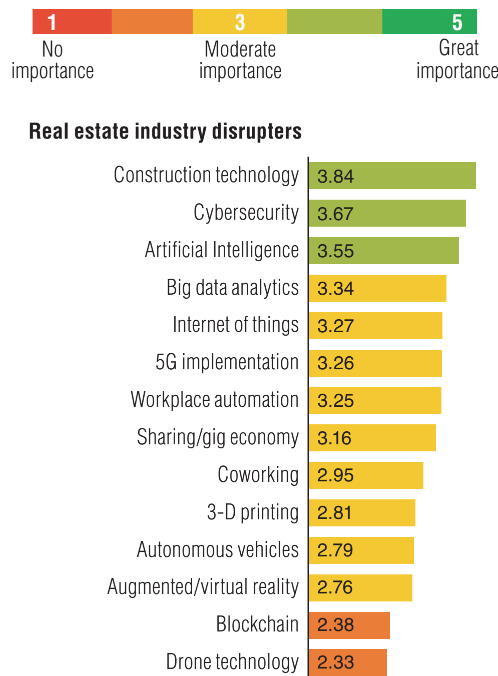
*Full-year projection.

- **Construction technology:** Once again, construction technology was at the top of the list of real estate disrupters in our survey this year (see exhibit 4-9). Many interviewees believe that modular construction solutions that address labor shortages have reached the point where they make more sense from a cost perspective and are seeing greater adoption as a result. Construction companies are also showing more interest in digital twin technologies, which use data collected by sensors to improve building and design processes.

As business continues to emerge from pandemic restrictions, proptech will offer additional solutions for real estate needs. In the office context, for example, this can mean everything from technologies that can help attract or retain tenants by facilitating flexible space options to tools that use artificial intelligence and advanced sensors to adjust airflow and temperature.

Not all the tools embraced in recent months would fall into the category of emerging technologies typically associated with proptech, but the shift to more practical and immediate solutions in no way detracts from the benefits of digitization. In fact, if anything, recent months have only highlighted the advantages of pressing ahead. Interviewees who were already ahead on digitization told us that their early adoption was key to being able to shift their operations as soon as the pandemic took hold.

Exhibit 4-9 **Importance of Real Estate Industry Disrupters in 2021**



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on Canadian respondents only.

Now that the industry as a whole has seen the tangible benefits, there is a clear opportunity to embrace the next wave of digitization as a tool not only for navigating today's uncertainty but also for strategizing for even wider adoption ahead. But making the most of this opportunity will require a holistic approach that looks beyond the technology itself. What are some of the other elements of digital transformation?

Data Analytics. With digitization giving real estate companies access to more data than ever, they have a powerful new tool to help them make important business decisions.

Take site selection or asset/portfolio optimization. New tools can combine a company's own data with third-party sources to gain insights into new strategies for existing properties or portfolios or identify additional markets or locations for investment opportunities. Data analytics and predictive modeling can help with the determination of optimal asset allocation for mixed-use developments at a high level, as well as provide more detailed insights into the composition of unit mixes for a property. Companies can also use this information to make financial projections related to rents, sales per square foot, absorption patterns by asset class, as well as the impact of amenities and constraints on the success of their projects.

We have seen significant interest in this use of data analytics for development and redevelopment initiatives as well as for transit-oriented community development. The results of the analysis can then be combined with visualization tools to project demographics, economics, and real estate metrics that inform on return calculations for these projects.

Interviewees clearly see the benefits of investing in data, but to truly accelerate their capabilities, real estate companies will need to focus on the fundamentals first. In a world where data is multiplying at an accelerating rate, building trust with customers, partners, regulators, and the public is critical. This will require real estate companies to focus on the secure and ethical use of data by getting it more organized and putting strong governance systems in place to deal with rising privacy concerns.

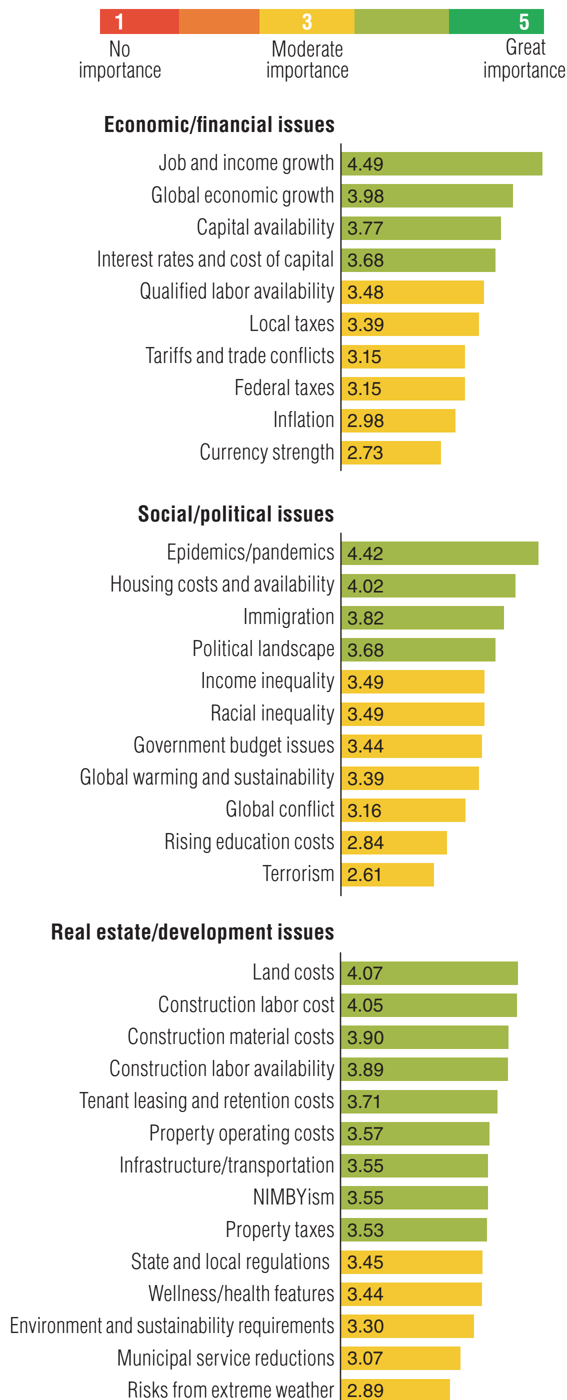
The potential of data analytics will only grow with the larger data sets enabled by powerful fifth-generation (5G) networks, which makes it even more important for real estate companies to focus on properly collecting and structuring their data. As one interviewee told us, investing in collaborative software can help companies access the data they need more easily.

Cybersecurity. Effectively managing cybersecurity risk will also be key to building trust in the more digital and data-focused world that real estate companies are moving toward. While cybersecurity ranked second among real estate disrupters in our survey this year, we have also seen how the industry may be underestimating the threat. According to PwC's 2020 CEO Survey, 64 percent of global real estate executives said that they were concerned about cyber threats. For all respondents, 73 percent said that they were concerned.

Cyber threats continue to evolve rapidly, and organizations need to continuously monitor developments in this area. Threat actors include nation-states, "hacktivist" groups, organized crime, and insiders.

Proptech tools, smart homes and buildings, and other technology investments have significant benefits, but they are also creating new vulnerabilities. Ransomware continues to be the biggest problem for most organizations as threat actors attempt to take control of critical systems. And with so many companies moving to remote working, the risks have only increased. A recent bulletin from the Canadian Centre for Cyber Security outlined the rising threats, which include attempts to exploit security

Exhibit 4-10 **Importance of Issues for Real Estate in 2021**



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on Canadian respondents only.

gaps in commonly used technology like virtual private networks, cloud applications, and videoconferencing tools.

To respond to cybersecurity threats, real estate companies should look at the following measures:

1. Perform adequate due diligence before introducing new technology. This may include performing risk assessments, architecture reviews, and more intrusive measures such as penetration tests.

2. Define and implement clear processes for monitoring the overall risk exposure on an ongoing basis. Cybersecurity tools and capabilities can get outdated very quickly.

3. Monitor the technology environment for signs of malicious activity at all times.

4. Prepare a robust incident response and crisis management plan.

Besides these measures, it is important for organizations to focus on ensuring sufficient resources to address cybersecurity, especially when cybersecurity talent continues to be scarce. And because cybersecurity is everyone's responsibility, it is also important to take an integrated approach by uniting your lines of defense. This will help you advance innovation with speed and confidence.

Upskilling Your Workforce. A holistic approach to digitization will also require real estate companies to focus on ensuring that they have the right people and processes in place to make the most of their technology investments. We have seen some companies introduce promising technologies like automation and project management tools only to find their employees struggling to use them effectively.

This will require real estate companies to invest in their employees' skills, even if the current labor market has made it easier to hire talent in some areas. But as our 2020 CEO Survey indicated, real estate companies have some way to go on upskilling. About 39 percent of global real estate CEOs said that their organization had made moderate or significant progress in setting up an upskilling program that develops a mix of soft, technical, and digital skills (compared with 52 percent for CEOs as a whole). A quarter of real estate CEOs said that their organization had yet to make progress, while 33 percent said they were just getting started (versus 11 percent and 31 percent, respectively, for CEOs as a whole). Many are still trying to figure

out which skills they need to develop: real estate CEOs cited this as their top challenge in regard to upskilling.

But upskilling is not just about training; it is also about developing the digital workforce of the future. After their sudden shift to remote working, real estate companies will need to help employees succeed in a virtual workplace. As PwC's recent Canadian workforce study showed, communication is a significant employee concern: 45 percent listed connectivity with their team as a top challenge in a remote working environment. Addressing this will require further investment in virtual collaboration tools and in the skills of leaders, who will increasingly be called on not only to model good virtual habits but also to improve communication and feedback and develop new ways of thinking, working, and problem solving.

Property Type Outlook

Office

This year has seen a reversal of past trends, in large part due to COVID-19. While in previous years we saw a move toward reduced space requirements and increased densification with the rise of open-concept offices and coworking environments, physical distancing measures may be prompting a need for more space.

Some interviewees even speculated on a possible return to traditional offices. But returning to the office is still elusive due to inconsistencies in each city, elevator anxiety, and concerns about employer liability for infection. We asked employers and employees about their views on returning to the office in our recent Canadian workforce study. Of employers that had yet to return to the workplace, 78 percent expected to do so to at least some extent in the next three months. When we asked employees about their ideal work environment, 34 percent said that they prefer to work mostly or entirely remotely; 37 percent want to be in the office most or all of the time; and the remaining 29 percent are looking for an even split between the two options.

The findings reflect ongoing uncertainty about the extent to which tenants will bring their employees back to offices. In downtown Toronto and Vancouver, several companies, big and small, have been trying to offload at least some of their office space. On the other hand, some developers and institutional investors are confident that the market will come back because humans are social creatures—they are suffering from videoconferencing fatigue and miss spontaneous in-person collaboration.

While remote work has generally turned out to be productive, some of our interviewees question whether this is sustainable. There also is a strong feeling that face-to-face interaction is important, especially for hiring, integrating, and mentoring entry-level staff and for developing organizational culture.

But for now, office is seeing a shift. While JLL Research found Canada's office vacancy rate of 10.2 percent in the second quarter of 2020 was just 40 basis points over the long-term (20-year) average, COVID-19 is amplifying demand for more flexible commercial real estate, including short-term leases. Some interviewees also question whether the pandemic will spark renewed interest in suburban office development as some employees look to work closer to home. While there is no clear trend in that direction, an overall sense exists that despite its resilience, the office segment will need to evolve (see exhibit 4-11).

Retail

Interviewees are seeing a structural shift in retail, but it is an acceleration of the move toward e-commerce already underway (see exhibit 4-12). Several retailers, including big-name brands, have shut their doors permanently or are seeking creditor protection. Enclosed malls have been hit particularly hard, and street retailers in downtown cores like Toronto, Montreal, and

Exhibit 4-11 **Downtown Class A Office Space, 2Q 2020**

	Class A space under construction (sq ft)	Class A vacancy rate	All-class vacancy rate
Vancouver	3,809,617	4.9%	4.9%
Toronto	9,946,013	2.4%	3.2%
Montreal	1,320,000	6.4%	6.9%
Ottawa	0	4.6%	7.6%
Calgary	0	22.5%	24.8%
Edmonton	0	19.0%	18.9%

Source: JLL Office Insight, 2Q 2020, accessed September 8, 2020.

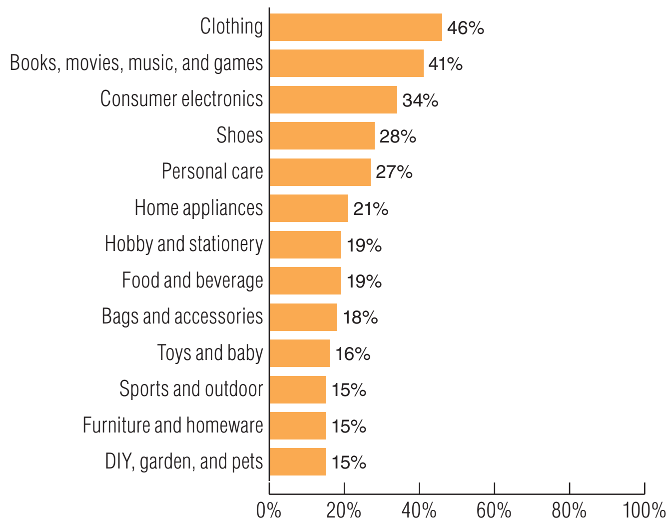
Vancouver are seeing less foot traffic because many office towers are still mostly vacant.

As the federal government's rent relief program comes to an end, some tenants are looking to negotiate additional rent-free periods or new arrangements, including full conversion to rents based on percentage of sales. Even with these efforts to stay afloat, many retailers are worried that the pandemic will permanently change consumer behavior in favor of e-commerce.

With some areas of brick-and-mortar retail, like outlet centers, regional malls, and power centers, struggling (see exhibit 4-13), there is a strong sense among interviewees that retail properties need to evolve. Malls might convert into residential or mixed-use properties, possibly using some of that space for warehousing, distribution, or fulfillment—including last-mile delivery—to satisfy the growing demand for online shopping. Community-based uses, like health care services, are another rising trend. Institutional investors are starting to consider these types of opportunities because malls are putting a strain on cash flows.

It is expected that grocery-anchored strip malls will fare best, since grocers have seen record sales during the pandemic. Bigger players may begin to reallocate capital away from retail properties in Canada and focus on other asset classes, while landlords could find themselves making concessions by cutting rents. Tenants may not be able to pay full rent, but at this point, it will be challenging for landlords to fill vacant spaces. Many

Exhibit 4-12 **E-commerce Penetration Rates in Canada**



Source: Statista, *Digital Market Outlook*, e-commerce, accessed September 11, 2020.

Note: The penetration rate corresponds to the share of active paying customers (or accounts) as part of the total population (adults ages 18–64). Data updated through August 2020.

interviewees said that predictions about the death of retail are probably too harsh since humans are "social animals and we need to be in social places."

Industrial

Logistics, warehousing, and fulfillment are the clear winners this year. This segment of industrial real estate has remained resilient throughout the pandemic—in large part because of a surge in demand from e-commerce, food delivery services, home improvement retailers, and, to a lesser degree, medical supply companies.

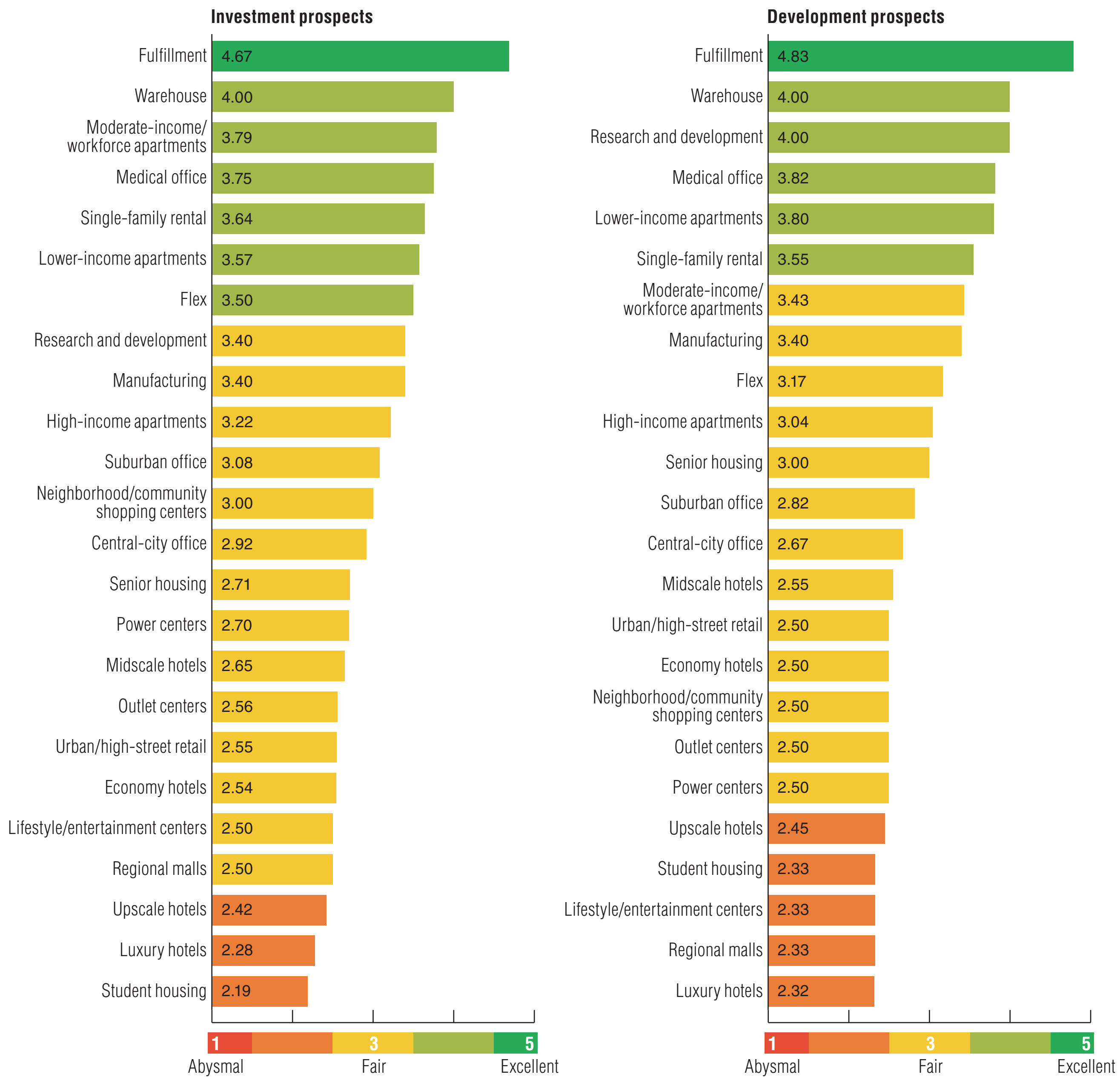
Much of the country continues to see tight market conditions, according to CBRE's report on the Canadian industrial real estate market for the second quarter of 2020. The availability rate has edged up since the start of the pandemic, but at 3.5 percent nationally, it is still well below the 10-year average of 5.1 percent. Many interviewees are seeing rents go up significantly. Six of 10 markets saw an increase in rental rates over the prior quarter, and the national average net asking rent was up by almost 10 percent from the same period last year, according to CBRE.

The biggest challenge, according to interviewees, is getting their hands on high-quality distribution space to facilitate e-commerce. Redundant retail space might be repurposed into industrial uses to help with last-mile delivery and overall fulfillment and distribution. In Atlantic Canada, ports in Halifax and Saint John have both undergone upgrades and modernization, so there is an expectation that the industrial and storage segments will benefit. We are also starting to see multilevel industrial properties in certain areas, like Vancouver, although this has yet to take root across Canada.

Single-Family Residential

Recovery in major markets is uncertain and varies considerably. There is talk of a potential slowdown in the urbanization trend we have highlighted in previous years, although it is too early to tell whether this will turn into a long-term trend. If remote work becomes a more permanent option, some homeowners—particularly those working from home in a small space—might look outside large cities for more square footage and accessible green space. At least one developer in the Greater Toronto Area (GTA) said that they were changing their strategy to accommodate this trend and were looking further afield for housing developments. Open-concept homes may need to be reimagined, as people working from home require a dedicated working space. Recent interviews have indicated that demand for low-rise homes, particularly in suburban locations, has been very strong, but there are concerns that this may be just a false signal after the pandemic restrictions.

Exhibit 4-13 **Prospects for Commercial/Multifamily Subsectors in 2021**



Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on Canadian respondents only.

But higher unemployment and economic uncertainty, combined with lower immigration, are expected to slow housing activity across Canada, at least for the next year. The Canada Mortgage and Housing Corporation (CMHC) expects housing starts, sales, and prices to fall in major cities, but Toronto, Ottawa, and Montreal will recover faster than Vancouver, Edmonton, and Calgary. The two Alberta cities are expected to take more time to recover since they were already suffering from the impact of low oil prices (see exhibit 4-15).

Exhibit 4-14 **Investment Recommendations for Commercial/Multifamily Subsectors in 2021**

	Buy	Hold	Sell
Moderate-income apartments	61.5%	38.5%	0.0%
Single-family rental	48.0	40.0	12.0
Lower-income apartments	42.3	46.2	11.5
Medical office	38.5	46.2	15.4
Neighborhood/community shopping centers	33.3	53.3	13.3
Upscale hotels	23.5	54.1	22.4
Suburban office	23.1	53.8	23.1
Senior housing	23.1	42.3	34.6
High-income apartments	23.1	53.8	23.1
Midscale hotels	22.7	48.5	28.9
Lifestyle/entertainment centers	21.4	50.0	28.6
Luxury hotels	20.4	57.1	22.4
Economy hotels	18.2	52.5	29.3
Urban/high-street retail	13.3	53.3	33.3
Student housing	8.0	48.0	44.0
Central-city office	7.7	76.9	15.4
Outlet centers	0.0	53.3	46.7
Regional malls	0.0	46.7	53.3
Power centers	0.0	53.3	46.7

Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on Canadian investors only.

Condominiums

CMHC is expecting a softening of prices in the condo market next year, although it is important to note that supply has been curtailed in some markets. There was more concern in the Toronto market, where decreased short-term rental activity is leading some investors to sell, but that is expected to be short-lived. Still, interviewees indicated that condo living may need to be reimagined for the future of work; homeowners may not be as excited to be in a 500-square-foot condo if the pandemic continues to keep them socially distanced—particularly if they are working from home. A number of features are being incorporated to make condos more attractive to buyers, such as videoconferencing rooms, dedicated areas for parcel and grocery deliveries, improved amenities, and tools to create more connected communities.

There also is increased interest in what one interviewee referred to as the “amenitization of communities,” where neighborhood amenities are available within a 15-minute walking radius of the condominium. Finding and developing these types of live/work/play communities is being considered much more seriously in light of the pandemic. Ontario’s new Transit-Oriented Communities Act, which aims to rethink the relationship among transit, housing, and commercial spaces, could facilitate this movement.

Purpose-Built Rental

Demand for rental accommodations could be tempered by both a drop in immigration and uptake by university students (many of whom are taking classes virtually rather than in person). While the asking price for rentals is either stable or has fallen in major centers like Toronto, it is expected that the rental market

Exhibit 4-15 **Housing Starts by City**

	2009			2014			2019			1Q 2020			2Q 2020		
	Home-owner	Rental	Condo	Home-owner	Rental	Condo	Home-owner	Rental	Condo	Home-owner	Rental	Condo	Home-owner	Rental	Condo
Vancouver	3,611	663	12,850	3,892	3,556	17,223	3,842	10,182	32,016	3,662	9,790	30,905	3,656	10,012	29,601
Toronto	10,212	2,661	35,458	11,293	3,269	54,386	9,853	7,887	56,711	10,643	8,687	54,398	10,485	10,000	57,182
Montreal	3,361	2,809	6,139	1,974	3,369	10,946	2,312	15,114	11,077	2,083	15,478	11,090	2,302	15,874	12,392
Ottawa	3,340	220	1,928	2,526	746	2,615	4,288	2,972	2,591	4,207	2,716	2,880	4,521	2,264	3,178
Halifax	758	480	395	551	1,768	238	771	4,130	359	781	4,305	273	794	4,079	193
Winnipeg	738	257	293	1,356	1,058	2,141	1,233	2,988	1,532	1,206	3,312	1,638	1,124	3,913	1,668
Quebec City	804	1,082	781	448	1,675	719	527	4,495	503	562	4,755	511	685	5,300	463
Calgary	3,578	337	5,275	4,808	1,384	9,143	3,788	2,362	5,437	3,867	2,605	4,866	3,380	2,884	4,586
Saskatoon	863	10	642	1,179	621	1,527	574	503	344	513	534	476	510	447	313
Edmonton	3,792	486	3,271	6,712	2,869	5,151	4,040	1,735	4,485	4,251	1,843	4,715	4,025	2,727	3,630
Canada	41,034	12,985	72,865	45,126	27,825	113,219	45,922	65,736	131,820	45,509	68,575	128,106	45,243	72,064	129,488

Source: CMHC Starts and Completions Survey, accessed September 1, 2020.
Note: Dwelling types include single, semi-detached, row, and apartment.

will eventually benefit from a slowdown in homeownership and, when borders open up again, a backlog of new immigrants. But there is some concern about the end of government income support and wage subsidy programs, which could affect tenants' ability to pay their rent in the coming months, as well as increased supply caused by the pause in short-term rental activity.

Looking to some of the subsectors, the outlook is mixed for both student and senior housing. For senior housing, some interviewees said that they would be avoiding it, especially given the impacts of COVID-19 and the complexities of operating these homes. Still, many interviewees felt that the demographic trends are positive for this subsector in the longer term, although some suggested that the operating model will need to change. For student housing, interviewees are also facing challenges. The switch to virtual learning at post-secondary schools is dampening demand, although many interviewees believe that the long-term trend is positive.

Markets to Watch

Vancouver

Like other major centers across the country, there is plenty of uncertainty and an inability to predict what's to come. The CBoC's *Major City Insights* report predicts a 3 percent drop in gross domestic product (GDP) in 2020, with a rebound of 6.5 percent anticipated in 2021. And while there may be higher failure rates once government subsidies end, many investors are looking to add Vancouver real estate to their portfolios since it is still considered a safe harbor. Overall, there is a sentiment that Vancouver remains a good place for patient capital to invest in the right project.

Real estate prices are not dropping significantly in Vancouver, but certain categories will likely suffer more than others. Interviewees do not expect a permanent flight to the suburbs but are cautious about building expensive downtown product until the impacts of COVID-19 become clearer. But demand for new construction may be challenged in the near term by reduced migration domestically and abroad and by loss of household income due to increased unemployment. Economic uncertainty also is affecting confidence in launching new housing units.

With single-family residential housing, prices are still down from their 2017 highs, but the city will continue to have a supply issue and plenty of demand. The high-rise condo market has seen more activity than was expected during this time, although developers are not rushing to build new supply; instead, they are working on projects already in the pipeline.

As in other parts of Canada, retail in Vancouver is expected to see accelerated disruption, while the industrial market has strong underlying metrics, with interviewees bullish on distribution. Vancouver's industrial fundamentals remained strong in the second quarter of 2020, according to Colliers, with vacancy below 2 percent for the 13th consecutive quarter (1.7 percent) and availability at 5.1 percent, which is still below the 10-year average of 5.5 percent. Office, on the other hand, has a total vacancy rate of 5.5 percent, according to JLL Research, and a lot is up for sublet.

Toronto

The pandemic has put Toronto's economy on a weaker footing this year. The CBoC predicts that real GDP will retreat significantly in 2020 but will rebound by 6.2 percent in 2021. While total housing starts are likely to drop this year before rebounding in 2021, interviewees predict that strong pre-construction sales across Toronto should help ensure the city's recovery.

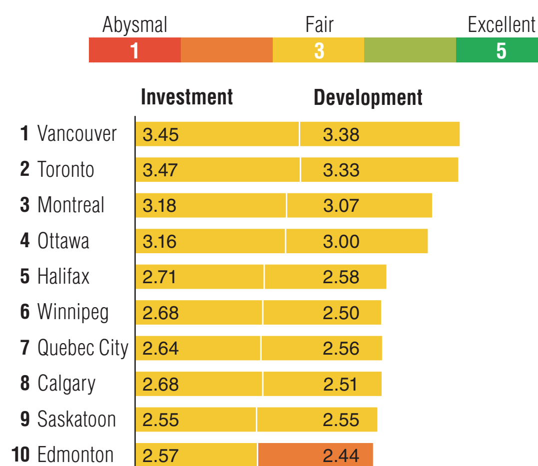
The Greater Toronto Area's housing market picked up steam in July as GTA residents recalibrated in response to working from home. This has also driven interest in properties outside Toronto—not just in the suburbs, but further afield in areas like Niagara, Peterborough, and Kitchener-Waterloo. But interviewees indicated that it is too early to tell whether a trend away from the city will take a stronger foothold.

Immigration also has a direct impact on residential development in the GTA. With borders closed and immigration curtailed, the rental housing market has been adversely affected. After years of record-low vacancy rates in Toronto, the pandemic has stifled demand and put downward pressure on rent increases, according to the CMHC. When immigration activity resumes, it is expected that there will be pent-up demand, particularly for rental units.

As tenants and landlords turn their focus to returning to office spaces, the market remains on uncertain ground. And while there may be a slight increase in vacancy, there is still a need for office space in Toronto, even if it looks different post-COVID-19. The market remains in triage mode, according to JLL Research. Although there is pent-up demand in the market, everyone is waiting for stability to return before transacting.

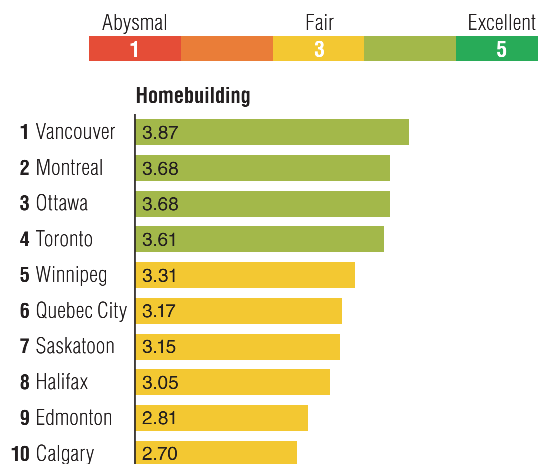
When it comes to industrial properties, demand remains very strong in the GTA, with some interviewees saying, "I can't find enough of it." According to Colliers, leasing and sales transaction volumes were down in the second quarter of 2020, with the availability rate in the GTA reaching 1.7 percent, after two consecutive quarters at 1.1 percent. It is expected that the market

Exhibit 4-16 **Canada Markets to Watch: Overall Real Estate Prospects**



Source: *Emerging Trends in Real Estate 2021* survey.

Exhibit 4-16A **Canada Markets to Watch: Homebuilding**



Source: *Emerging Trends in Real Estate 2021* survey.

will continue to grow, given the need for e-commerce distribution centers. It is also expected that outdoor malls and big-box grocers will move to a combination of logistics and fulfillment to deal with last-mile delivery.

Montreal

The COVID-19 pandemic has put a stop to Montreal's four-year run of economic growth. The CBoC forecasts a 3.6 percent decline in GDP in 2020, with a 6 percent rebound, helped by

Exhibit 4-17 **Survey Respondents' Views of Their Local Markets**

Poor | Fair | Good | Excellent

	Average	Strength of local economy	Investor demand	Capital availability	Development/ redevelopment opportunities	Public/private investment	Local development community
Vancouver	4.22	4.00	4.58	4.58	4.15	4.00	4.00
Toronto	4.23	3.88	4.50	4.50	4.12	4.19	4.18
Montreal	3.80	3.91	4.18	3.73	3.73	3.91	3.36
Ottawa	3.56	3.46	3.54	3.69	3.62	3.62	3.46
Halifax	2.58	2.50	2.40	2.50	2.50	2.90	2.70
Winnipeg	2.81	2.50	2.64	3.09	2.83	2.91	2.92
Quebec City	2.65	2.78	2.67	2.67	2.56	2.56	2.67
Calgary	2.61	1.88	2.38	2.94	2.82	2.88	2.76
Saskatoon	2.46	2.09	2.30	2.50	2.55	2.60	2.73
Edmonton	2.68	2.07	2.29	3.00	2.80	3.14	2.80

Source: *Emerging Trends in Real Estate 2021* survey.
Note: Based on Canadian respondents only.

significant infrastructure and transit spending, in the cards the next year.

While housing starts in Montreal have rebounded from the sharp drop in activity at the height of the pandemic, they are still expected to fall by 1.3 percent in 2020, according to the CBoC. This downward trend is expected to continue next year, with housing starts set to fall a further 7 percent.

The industrial category is extremely bullish, with cap rates declining and rents going up. Warehousing is the clear winner, and there is a need for more of it. Low vacancy rates, coupled with limited availability, are pushing net rental rates to all-time highs. Colliers noted that the market slowed down slightly in the second quarter of 2020, reflected in an increased availability rate of 2.6 percent, but many are hopeful that the demand for industrial space will continue into 2021.

Interviewees expect organizations to carefully review their office footprints to accommodate physical distancing and work-from-home strategies. JLL Research reported a total vacancy rate of 9.3 percent in the second quarter of 2020. Many interviewees said that they were being cautious in regard to this asset class.

Ottawa

Overall, the city's real estate market is faring well. A significant number of buyers are tied to the public sector, making them somewhat insulated from the economic realities of COVID-19. The government's contribution to Ottawa's economy is expected to limit COVID-19's impact on GDP, which the CBoC predicts will decline by 2.4 percent in 2020 and jump 4.9 percent the next year.

Prior to the pandemic, Ottawa had a red-hot housing market. While starts are expected to soften somewhat, interviewees say that both condominium and single-family residential activity has not slowed at all. One interviewee said that they cannot build fast enough. Product is selling, there is growth in townhomes, and the resale market is still hot. Stage two of the city's light-rail transit (LRT) project has been announced, and there is still interest in procuring land around LRT sites. Despite some short-term uncertainty in the rental housing market caused by factors like the switch to online learning at universities, CMHC expects demand to remain strong as conditions return to normal. The housing agency, which reported a 1.8 percent vacancy rate and an 8.1 percent growth in rents in October 2019, said in its summer 2020 report that rental market conditions could see little change over its forecast timeline up to 2022.

Office is still strong in Ottawa, fueled by the federal government (although there are questions about how government will incorporate remote workers in the long term). While the government has rented a large portion of class B and C space for the past 50 years, it is looking to occupy class A properties (or retrofitted class B space) in the future. One interviewee said that there is no demand for much of that older class B and C office space—and not much interest in converting it either.

Exhibit 4-18 **Forecast Economic Indicators by City, 2021**

	Real GDP growth	Total employment growth	Unemployment rate	Personal income per capita growth	Population growth	Total housing starts	Retail sales growth
Vancouver	6.5%	4.9%	5.0%	4.4%	1.2%	24,101	6.6%
Toronto	6.2	2.7	5.8	2.1	1.6	39,870	4.7
Montreal	6.0	2.7	7.1	3.4	0.6	23,047	4.2
Ottawa	4.9	5.7	5.4	4.2	1.2	10,052	3.5
Halifax	5.9	3.4	7.6	3.0	1.4	2,830	2.9
Winnipeg	5.9	3.0	6.4	2.4	1.5	5,440	3.9
Quebec City	5.6	2.6	5.4	3.1	0.7	5,926	4.0
Calgary	6.0	4.6	9.3	3.0	2.0	12,345	4.7
Saskatoon	5.2	2.6	6.9	2.3	1.5	2,138	3.9
Edmonton	6.2	4.1	9.2	3.1	1.7	11,497	5.4

Source: Conference Board of Canada, *Major City Insights*, May 2020, accessed September 1, 2020.

Industrial real estate is a hot market, but land availability is a problem. Colliers reports that the availability rate increased marginally to 2.1 percent in the second quarter of 2020, due to space becoming available in the city's east end. Demand is outstripping local zoning regulations, and the question remains if and how the city will adjust.

Halifax

While the new-home market in Halifax has fared well in recent years, the COVID-19 pandemic brought the local economy to a standstill, with the CBoC calling for a 3.4 percent decline in real GDP for 2020 before jumping by 5.9 percent in 2021.

The CBoC also expects the construction sector to contract, declining by 2.8 percent following 8.2 percent growth in 2019. Despite this, interviewees said that the housing market is "extremely hot," with single-family residential homes selling above listing price. Population growth due to migration is also boosting the market for purpose-built rental housing, which is seeing significant construction activity both downtown and in the surrounding areas. In office, interviewees were more pessimistic. On the leasing side, a lot of commercial tenants are looking to renew their terms, knowing the market is in their favor.

Self-storage and industrial are the winners this year. The Halifax industrial market recorded 35,180 square feet of positive net absorption in the second quarter of 2020, according to Colliers, with the vacancy rate dropping to 8.7 percent. With supply chain issues that came to light at the start of the pandemic, there is more interest in sourcing products from different regions or closer to home, which translates into the need for more warehouse space. With the growth of online shopping, there is also a need for more local fulfillment centers. Interviewees felt that Atlantic Canada has an edge here, thanks to its affordability and access to major ports.

Winnipeg

Like the economies of other cities, Winnipeg's economy has been particularly hard hit by the pandemic, with real GDP forecast to decline by 3.5 percent in 2020 before expanding by 5.9 percent in 2021. The housing market had disappointed over the past two years, due to a combination of rising interest rates and an impact fee that dampened demand, according to the CBoC.

In the industrial category, it is a different story. A number of new projects are in the works, consisting of both new-builds and redevelopments of existing properties, although COVID-19 has made the pipeline less certain. According to Colliers, demand for high-quality industrial space in the second quarter of 2020 continued to hold firm, with the vacancy rate stable at 3.9 percent (versus 3.6 percent last year) and sales remaining strong due to market fundamentals. Tenant demand is healthy, particularly in warehousing and transportation.

Quebec City

Quebec City's economy is somewhat insulated by the public sector, so it is expected to weather the pandemic better than many other cities. The CBoC reports that the region's GDP will drop 3.3 percent in 2020, with growth of 5.6 percent projected for 2021.

Exhibit 4-19 **Industrial Space, 2Q 2020**

	Availability rate	Under construction (sq ft)
Greater Vancouver	5.1%	3,354,688
Greater Toronto	1.7%	14,163,551
Greater Montreal	2.6%	927,531
Greater Ottawa	2.1%	90,476
Winnipeg	—	631,310
Calgary	10.9%	1,738,938
Halifax	10.1%	68,508
Greater Edmonton	9.5%	1,770,248

Source: Colliers industrial market reports, 2Q 2020, accessed September 10, 2020.

Prior to the pandemic, the local housing market was heating up. Inventories of unsold new apartments, which accounted for two-thirds of local housing starts over the past decade, hit an 11-year low in March 2020, according to the CBoC, which predicts that the pandemic will cut total housing starts by 12 percent this year and pause the resale market. Low interest rates and supportive federal programs should help the housing market in 2021. While Montreal has several larger projects in the works, Quebec City developers are in wait-and-see mode.

Calgary

Calgary's market is already feeling the impact of depressed oil and gas markets, along with reduced economic activity during COVID-19. The city's GDP is expected to contract by 5.5 percent in 2020 before expanding by 6 percent in 2021 as the pandemic eases and oil prices strengthen, according to the CBoC.

The industrial market showed signs of resilience and has diversified into warehousing and distribution over the past decade. Interviewees are now seeing an acceleration of a trend to repurposing retail space for warehousing and distribution uses for last-mile delivery. According to Colliers, overall industrial vacancy rose slightly to 6.2 percent in the second quarter of 2020. One interviewee from Vancouver noted they are looking for distribution locations in Calgary due to its large coverage area (a truck leaving Calgary can reach Vancouver or Winnipeg in about 14 hours) and the fact that "the rates are a third or less of what Vancouver costs in warehouse spaces."

With oil prices at all-time lows, downtown rental rates were among the lowest in Canada, with office vacancy sitting at 24.8 percent in the second quarter of 2020, according to JLL Research. Construction output is expected to fall this year, down nearly 20 percent, and it was already on a decline due to uncertainty in the energy sector, according to the CBoC. But the residential market could benefit in the coming months from low interest rates, although interviewees indicate that there are "a ton of condos" on the market. There also is some concern that recent strength in the residential market could reflect a temporary burst of activity that will take away from demand and sales of new homes in the months and years to come.

Saskatoon

After falling slightly in 2019, Saskatoon's GDP is expected to retreat a further 4.9 percent in 2020 due to the pandemic and weak commodity prices, according to the CBoC. Growth of 5.2 percent is projected for 2021.

While the housing market was hurting prior to the pandemic (starts fell to a 14-year low in 2019), falling inventories of unsold new homes and low interest rates could boost residential markets, says the Conference Board, and produce a modest increase in starts next year.

In the first half of 2020, office vacancy in the city's downtown central business district had been trending upward while the suburban vacancy rate was heading in the opposite direction. As a result, the citywide impact has been minimal, experiencing a very small increase in vacancy over six months to 13.1 percent.

Edmonton

With the unemployment rate rising to 15.7 percent in June 2020 and real GDP projected to fall 5.6 percent in 2020, Edmonton's economy has felt the combined impact of low oil and gas prices and the COVID-19 pandemic. The CBoC expects an easing of pandemic measures and recovering oil prices to help spur growth of 6.2 percent for Edmonton next year.

But the city is fairly stable from a housing perspective. Homebuilders are still selling houses, although much of the activity stems from low borrowing costs and a trend of reverse urbanization. More rental units (both purpose-built and condominium) are expected to enter the market over the next two years, which will likely lead to increased vacancy rates. Affordability and low borrowing costs will keep the single-family residential space afloat. A lot of condo product is currently available; interviewees indicated that developers are "kicking projects down the road."

Office had an 18.8 percent vacancy rate in the second quarter of 2020, according to JLL Research. It expects that landlords will reduce capital expenditures, pushing concessions lower. In

the industrial category, interviewees indicated that there could be an increase in business failures by small- and medium-sized companies as government incentives wind down, although warehousing remains strong.

Expected Best Bets for 2021

- **Warehousing and fulfillment:** This category topped the list of both investment and development prospects in our survey this year. The growth of e-commerce is a significant factor, but interviewees also cite supply chain disruptions during the pandemic as a key contributor, since some companies respond to these challenges by holding more inventory. Several interviewees see particularly good prospects for facilities that offer last-mile delivery solutions in urban areas that speed up delivery of products ordered online to customers. The interest in warehousing and fulfillment is consistent with interviewees across the country, although certain centers—notably, Calgary, Ottawa, and port cities in Atlantic Canada like Halifax—have particularly strong sentiment. The biggest challenge is finding available space, although some interviewees mentioned opportunities in adapting mixed-use properties to incorporate fulfillment.

- **Multifamily residential:** Also ranking high in our survey this year were several categories of residential real estate, including moderate-income/workforce apartments. Although some pandemic impacts—notably, reduced immigration, the desire for more space, and unemployment—may put a damper on demand for very dense housing types, interviewees emphasized that shelter remains a core need and noted the stability that the multifamily category can offer right now. But demand may shift, with renters and homebuyers looking to live in townhouses and mid-rise buildings rather than larger towers that have been the trend in urban centers in recent years. Interviewees also emphasized that the best prospects are for more affordable multifamily housing options, especially in light of uncertainty about jobs and the economy.

- **Medical office:** A third category that ranked near the top of our survey this year is medical office, which can also offer the stability that many investors and property owners are looking for right now. With hospitals facing a space crunch, there may be opportunities to move some health care functions to high-traffic community locations like malls, one interviewee said. While the pandemic has led to the rapid adoption of virtual health services, there will be an ongoing need for physical space for care that cannot be delivered digitally as well as for diagnostic equipment. An aging population will ensure rising demand for health services, although the shift to virtual care could lead to some repurposing of medical office space as practitioners adjust to digital delivery.

Interviewees

3 North
Katie Harrigan

3650 REIT
Malay Bansal

48 Development Company
Mark Davis

A&W Food Services of Canada Inc.
Patti Parente

Ackman-Ziff Real Estate Capital Advisors
David Robinov

Acore Capital
Andrew Dietz
Boyd Fellows

ADEPT Commercial Real Estate
Andrew Hwang

Advantes Development
Jacob Surratt

AEW Capital Management
Michael Byrne
Tony Crooks
Marc Davidson
Joshua Heller
Pamela Herbst
Maureen Joyce
Robert Plumb

Affordable Central Texas
David Steinwedell

Alabaster Homes
Yosh Kasahara

Alamo Architects
Beverly Baldwin

Alate Partners
Courtney Cooper

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