



The Newmark Opportunity Index: Identifying Commercial Real Estate Opportunities and Challenges in Major U.S. Markets

JUNE 2021

NEWMARK



TABLE OF CONTENTS

I.	The Newmark Opportunity Index: A Comparison of 22 Major Markets Across Economic and Commercial Real Estate Property Type Metrics	5	• Dallas	25
II.	The Indicators: Categories Covered in the Newmark Opportunity Index	6	• Denver	25
	• The Economy	6	• Detroit	25
	• The Office Market	6	• Houston	26
	– Special Section: Three Key Themes Impacting the U.S. Office Market.....	7	• Los Angeles	26
	• The Industrial Market	8	• Miami	26
	• The Multifamily Market	8	• Minneapolis	27
	• The Hospitality Market	9	• Nashville	27
	• The Retail Market	9	• New York City	28
	– Special Section: Opportunities in the Gateway Markets.....	10	• Orange County, CA	28
III.	The Newmark Opportunity Index Data Table	12	• Orlando	28
IV.	Opportunities and Challenges in Major U.S. Markets	24	• Philadelphia.....	29
	• Atlanta	24	• Phoenix	30
	• Boston	24	• San Diego	30
	• Chicago	24	• San Francisco	30
			• Seattle	31
			• St. Louis	31
			• Tampa	32
			• Washington, DC.....	32
V.	Conclusions and Methodology	33		

Key Findings

- 01** While every market included in our index has experienced job recovery since the nadir of the economic downturn, pandemic-related public health restrictions have varied significantly by market, and some markets have recovered more swiftly than others. The markets that ranked highest across the economic metrics in the index were Nashville, Tampa and Dallas.
- 02** Nearly every U.S. office market is challenged by the uncertainty surrounding the increase in remote work brought on by the pandemic, but gateway cities have generally been impacted the most. The markets that ranked highest across the office metrics in the index were Tampa, Miami and Dallas.
- 03** The COVID-19 crisis brought an unprecedented level of uncertainty and disruption to office demand. Three key themes have emerged surrounding office space as post-pandemic changes come into focus: the war for talent, the future of office space, and the migration of companies to new markets.
- 04** The industrial market fared better than other property types during the pandemic. Average asking rents for industrial space have risen by 35.7% nationally over the past five years. Given the uptick in demand and rents for industrial space, industrial sales volume accelerated in many markets in the wake of COVID-19, counter to the decline in sales volume for other property types. The markets that ranked highest across the industrial metrics in the index were Boston, Atlanta and Philadelphia.
- 05** Nationally, multifamily occupancy ticked down to 95.5% at 1Q21 from its cyclical high of 95.9% a year earlier, and effective rents declined 0.9% over the past 12 months, likely a result of the joining of some households amid financial pressure. However, according to the National Multifamily Housing Council, rent collections remained strong throughout the past year, with end of month collections remaining above 93% through April 2021. The markets that ranked highest across the multifamily metrics in the index included Dallas, Phoenix and Atlanta.
- 06** With the vaccine rollout going smoothly and the resumption of travel beginning, the hospitality sector is beginning to thaw. As of March 2021, U.S. hotel occupancy had risen to 54.6%, an increase of nearly 1,600 basis points since the start of the pandemic a year prior. As in other property sectors, hotels in mid-size Sunbelt cities outperformed those in larger coastal and gateway markets during the pandemic. The markets that ranked highest across the hospitality metrics in the index included Atlanta, Phoenix and Tampa.
- 07** Even prior to the pandemic, retail market fundamentals had been under pressure for several years. By the fourth quarter of 2020, the share of retail transactions conducted online had risen to 14.0%, up from 9.6% at 1Q18. Perhaps intuitively, retail real estate has performed best in areas that had fewer pandemic-related restrictions on social distancing and gatherings. Generally, secondary and tertiary markets in the Sunbelt have outperformed larger markets during the past year. The markets that ranked highest across the retail metrics in the index were Nashville, Houston and Tampa.

I.

The Newmark Opportunity Index: A Comparison of 22 Major Markets Across Economic and Commercial Real Estate Property Type Metrics

The U.S. economy and commercial real estate markets have been significantly impacted by the unprecedented changes brought on by the coronavirus pandemic. As the U.S. begins to emerge from the pandemic, we examine how major metro areas have been impacted by these changes. In order to identify where opportunities are most readily found during the recovery period, Newmark Research developed an index comparing 22 major markets across economic and commercial real estate property type metrics. The following sections identify opportunities within each property type as well as overall economic growth opportunities. Section IV identifies opportunities and challenges within each of the 22 markets included in the study. For a look at the index data, please see Section III on page 12.

Notes on Interpreting the Rankings:

- While this index provides a ranking of markets, and each market features distinct strengths and weaknesses, attractive investment opportunities can be found in every major market and at every stage of the economic cycle.
- The property type index rankings are from an owner's or seller's perspective, with lower vacancy and higher pricing being ranked favorably. Given the scale of the economic downturn induced by COVID-19 and the decline in market fundamentals across most property types—as well as the early stage of recovery—most major markets remain tenant-favored. For this reason, opportunities for tenants were not highlighted in this study.
- One metric used to rank markets is Google's Change in Mobility data, which measures movement trends across different categories of places. In the index, markets that maintained greater mobility generally ranked higher, since continued mobility tracks with stronger economic fundamentals. While fewer pandemic-related restrictions allowed some cities to outperform in that category of the index, it is not our intention to minimize the serious public health costs that greater restrictions were meant to address. Larger, denser markets naturally faced greater challenges containing COVID-19, particularly early in the pandemic.
- The index includes metrics on property type pricing and economic recovery potential based on how markets performed following the Great Recession. While comparisons to past economic downturns are valuable, they are not a perfect parallel, as the factors that led to each downturn as well as the rate of job loss were different for each recession.



II.

The Indicators: Categories Covered in the Newmark Opportunity Index



THE ECONOMY

With the pandemic's arrival in the U.S. in mid-March 2020, the nation saw swift declines in employment across every metro area. The U.S. unemployment rate rose from 4.4% in March 2020 to 14.8% in April 2020, an unprecedented increase brought on by public health guidelines forcing closure or drastic scaling back of non-essential businesses. While every market included in our index has experienced job recovery since the nadir of the economic downturn, pandemic-related public health restrictions have varied significantly by market, and some markets have recovered more swiftly than others.

The Opportunity Index: Top 5 Economic Performers

Following are the five markets which ranked the highest overall across the 13 economic metrics included in the index. For more on these indicators, please see the index data starting on page 12 and the methodology section on page 33.

- 1) Nashville
- 2) Tampa
- 3) Dallas
- 4) Phoenix
- 5) St. Louis



THE OFFICE MARKET

The U.S. office market vacancy rate was 13.0% at 1Q20, as the pandemic's impact was arriving. Asking rent growth averaged 3.4% for the prior 12 months, although effective rents were constrained by elevated concessions. Absorption had been sturdy at more than 30 million square feet in each of 2018 and 2019, but new supply was accelerating, which was projected to slow rent growth. One year later, the U.S. office market saw vacancy tick up to 15.8% at 1Q21 and asking rent growth for the prior 12 months slowed to 2.6%. (Asking rents have remained elevated as asset

owners are primarily using concessions to meet tenant demands and retain occupancy.) However, rent change varies greatly by market, with some enduring rent declines over the past 12 months. Nearly every U.S. office market is challenged by the uncertainty surrounding the increase in remote work brought on by the pandemic, but gateway cities have generally been impacted the most.

The Opportunity Index: Top 5 Office Market Performers

Following are the five markets which ranked the highest overall across the seven office metrics included in the index. For more on these indicators, please see the index data starting on page 12 and the methodology section on page 33.

- 1) Tampa
- 2) Miami
- 3) Dallas
- 4) Minneapolis
- 5) Tie: Philadelphia and St. Louis



Special Section: Three Key Themes Impacting the U.S. Office Market

For office investors, understanding future office demand and office-using employment is critical to their investment outlook for the product type. These factors are also important to office owners and tenants as they plan future leasing. However, the COVID-19 crisis brought an unprecedented level of uncertainty and disruption to office demand. Three key themes have emerged surrounding office space as post-pandemic changes come into focus.

The War for Talent

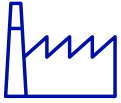
As the economy recovers, the U.S. unemployment rate had fallen to 6.1% as of April 2021, down significantly from the pandemic peak of 14.8% a year earlier but still well above the pre-pandemic rate of 3.5% at February 2020. The leisure and hospitality sector saw the greatest pandemic-induced job losses by a significant margin, while many office-using positions transitioned to remote work. In the coming years, the war for talent that had been brewing prior to the pandemic will continue to heat up, particularly as office workers and employers negotiate the post-pandemic work environment. Many workers have found remote work to be successful and will seek to continue it in some format, while many employers will aim for a full return to the office to rekindle office culture and mentorship. (Notably, while millennial workers were often thought of pre-pandemic as prizing the option to work remotely, many of those workers now say they are eager to return to the office to receive the training and mentorship they have been missing.) The tension between flexibility in scheduling and the value of a strong office presence may lead to rising wages and increasing incentive and benefit packages as employers seek to attract or retain high-skilled workers in a competitive environment. Major cities such as Washington, Boston and Seattle rank highly in Newmark's index for both online job ads and high-tech employment as a share of population. These cities are likely to be strong competitors in the war for talent.

The Future of Office Space

The pandemic has twisted the densification trend that had been occurring for the past several years. Many of the companies that completed office leasing transactions over the past year took an opportunistic approach in the current tenant-favored market and secured attractive concessions for smaller and more efficient space. At the same time, health considerations are likely to result in more space per worker for those physically in the office in a post-pandemic environment. Notably, the forced remote work experiment has enhanced the importance of workplace strategy and implementing a strong culture. Certainly, some companies that have embraced remote work will reduce their office footprint. Still, warnings of a mass exodus from the office market are likely overblown. As of mid-2021, it is still too soon to have a comprehensive understanding of how the pandemic will impact the future use of office space. While some companies are experimenting with more flexible office layouts and a hybrid work model, many firms are awaiting more data before making any major decisions in this regard. Sunbelt cities such as Miami, Houston, Tampa and Phoenix were among those that saw the smallest decline in visits to workplaces as of mid-April, according to the Google change in mobility data. These cities will likely be among the first to see a return of demand for office space.

Migration of Companies to New Markets

Just as the pandemic has forced companies and workers to examine remote work in a new way, it has also in many cases driven companies to reconsider where their offices are located. While the trend of corporate relocations was already underway prior to the pandemic, it has accelerated amid a renewed focus on corporate culture and talent attraction and retention. As companies consider their post-pandemic office environment, many have placed a renewed focus on where to locate headquarters and satellite offices, with talent pool and cost being the most important considerations. Many lower-cost secondary and tertiary cities in the Sunbelt have been the beneficiary of these relocations, with examples including Oracle announcing a corporate headquarters move from Silicon Valley to Austin and Microsoft announcing a new 523,000-square-foot office development in Atlanta. Despite the recent appeal of lower-cost Sunbelt markets, talent availability still remains the vital factor that allowed for the growth of tech hubs like San Francisco, Seattle and Washington, DC. The metros in our index that ranked highest for degrees awarded as a share of population, including New York, Orange County, and Phoenix, will likely benefit from future waves of corporate demand driven by their growing pool of talent.



THE INDUSTRIAL MARKET

At the start of the pandemic at 1Q20, industrial market vacancy was 5.3%, close to its cyclical low. Per annum asking rent growth had been greater than 4% since 2016, reflecting the strength of this property type—one that was well positioned going into the pandemic.

The industrial market fared better than other property types during the pandemic due to the uptick in demand for e-commerce. Over the past three years, industrial vacancy edged up slowly, driven by deliveries of new space. However, vacancy declined in first-quarter 2021, measuring 5.5%. Moreover, asking rents continued to increase steadily, with the first-quarter 2021 average measuring \$8.10/SF (NNN), up 7.3% over the past year. Average asking rents for industrial space have risen by 35.7% nationally over the past five years. Given the increase in demand and rents for industrial space, industrial sales volume accelerated in many (but not all) markets in the wake of COVID-19, counter to the decline in sales volume for other property types.

The Opportunity Index: Top 5 Industrial Market Performers

Following are the five markets which ranked the highest overall across the six industrial metrics included in the index. For more on these indicators, please see the index data starting on page 12 and the methodology section on page 33.

- 1) Boston
- 2) Atlanta
- 3) Philadelphia
- 4) Tampa
- 5) Dallas



THE MULTIFAMILY MARKET

At the start of the pandemic, U.S. multifamily occupancy was 95.9% at 1Q20—a cyclical high but poised to edge lower as new supply arrived. Annual effective rent growth ranged from 2.5% to 5.0% per annum from 1Q15 to 1Q20, exhibiting remarkable consistency. While job losses and pay reductions were projected to keep some potential home buyers out of the single-family market and bolster demand for apartments, many renters took on roommates or joined households amid pandemic-induced financial pressure, and some younger renters moved back in with parents. These trends ultimately outweighed any uptick in demand from delayed home-buying, at least over the past 12 months. Nationally, multifamily occupancy ticked down to 95.5% at 1Q21, and effective rents declined 0.9% over the past 12 months. However, according to the National Multifamily Housing Council, rent collections remained strong throughout the past year, with end of month collections remaining above 93% through April 2021.

The stay-at-home orders that were in place for most office workers for much of the pandemic put an emphasis on less dense locations and called into question whether remote work may make living in urban areas less important. Early on, large corporations such as Facebook, MasterCard and Twitter extended their

work-from-home policies longer than what individual state legislatures required, and there was growing sentiment that some jobs might permanently be performed from home. While it is still too early to have a full sense of how the remote work experiment will evolve—and many large tenants are now activating their return-to-office plans—many Sunbelt markets have benefited from an uptick in multifamily investment over the past year.

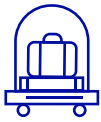
While St. Louis has not historically been a target for multifamily investment dollars, its strong performance across the multifamily leasing metrics drove its second-place ranking, suggesting it may see increasing investment in the future. Though not included in the index for data-availability reasons, secondary markets in the Sunbelt such as Charlotte, Raleigh, and Charleston also offer attractive multifamily investment opportunities.

The Opportunity Index: Top 5 Multifamily Market Performers

Following are the five markets which ranked the highest overall across the six multifamily metrics included in the index. For more on these indicators, please see the index data starting on page 12 and the methodology section on page 33.

- 1) Dallas
- 2) St. Louis
- 3) Phoenix
- 4) Atlanta
- 5) Tie: Denver and Tampa





THE HOSPITALITY MARKET

Before the pandemic, U.S. hotel occupancy rates hovered in the 60-70% range and revenue per available room (RevPAR) was the highest ever recorded at \$86.76, although the rate of growth had been decelerating. By early April 2020, hotel occupancy rates were in the single digits in many markets, and numerous properties had closed. Occupancy has been climbing since then, but notwithstanding the increase in vaccinations, business travel and conventions may be slow to recover.

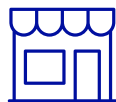
Over the past year, our projections for the hospitality market have positioned opportunistic investors—particularly in the multifamily space—to target hotels as a property type ripe for conversions. Given the oversupply of hotels in some major markets, this may have been a burgeoning strategy even in the absence of the pandemic. Now, with the vaccine rollout going smoothly and the resumption of travel beginning, the hospitality sector is beginning to thaw. As of March 2021, U.S. hotel occupancy had risen to 54.6%, an increase of nearly 1,600 basis points since the start of the pandemic a year prior. As in other property sectors, mid-size Sunbelt cities outperformed larger coastal and gateway markets during the pandemic. While Detroit also performed well across the index's hospitality metrics, this was

driven by relatively weaker hospitality fundamentals going into the pandemic, and thus the metro area saw a smaller drop in rates and occupancy once travel ceased.

The Opportunity Index: Top 5 Hospitality Market Performers

Following are the five markets which ranked the highest overall across the five hospitality metrics included in the index. For more on these indicators, please see the index data starting on page 12 and the methodology section on page 33.

- 1) Tie: Atlanta and Phoenix
- 3) Detroit
- 4) Tampa
- 5) Miami



THE RETAIL MARKET

Even prior to the pandemic, retail market fundamentals had been under pressure for several years as the share of transactions conducted online rose to 11.8% as of 1Q20 compared with 9.6% at 1Q18, according to the U.S. Census Bureau. High-quality mixed-use and experiential centers had been outperforming, but that shifted during the early months of the pandemic to favor centers featuring essential retailers such as grocery stores and pharmacies.

The brick-and-mortar retail environment was under significant pressure from the

growing e-commerce sector even before COVID-19 arrived. It is likely that some of the online shopping habits consumers gained (or honed) during the pandemic will be retained given the convenience they offer. By the fourth quarter of 2020, the share of retail transactions conducted online had risen to 14.0%, although that was down from the 16.1% at the height of social distancing during the second quarter of 2020.

Perhaps intuitively, retail real estate has performed best in areas that had fewer pandemic-related restrictions on social distancing and gatherings. Generally, secondary and tertiary markets in the Sunbelt have outperformed larger markets during the past year. Major coastal markets will rebound, but likely at a slower pace, and perhaps not until vaccination rates increase.

The Opportunity Index: Top 5 Retail Market Performers

Following are the five markets which ranked the highest overall across the four retail metrics included in the index. For more on these indicators, please see the index data starting on page 12 and the methodology section on page 33.

- 1) Nashville
- 2) Tie: Houston and Tampa
- 4) Orlando
- 5) Tie: Dallas and Detroit

Special Section: Opportunities in the Gateway Markets

While many of the highest-ranking markets in our index were smaller, secondary cities, there are numerous reasons the U.S. gateway markets have historically been and will remain prime targets for commercial real estate investment. These include the unparalleled value of an educated workforce, the desire of young people to be near peers and culture, and the historical stability and appeal of gateway markets for attracting capital. In addition, despite the pandemic-induced uptick in remote work, many large U.S. companies have announced plans to require employees spend 2-3 days per week in the office, making it necessary to continue to reside near the job epicenters of major cities. Following are highlights of the opportunities within U.S. gateway markets.

Boston

Boston ranked highest among the gateway markets, placing in the top half of all 22 markets in the study. The region has been a prime target for investment during the pandemic, ranking second in the combined capital markets metrics and first across the combined industrial metrics. With its high concentration of academic institutions, Boston also ranks highly for degrees awarded (#5), online job ads as a share of population (#2), and high-tech employment as a share of total employment (#4). In addition to these factors, Boston's robust life sciences sector continues to drive capital into the region. In 1Q21, Boston ranked 1st for annual price appreciation in RCA's CPPI Global Cities Index and was among the top markets for changes in office market liquidity during the pandemic. Despite temporary challenges to some office and economic fundamentals, robust life sciences demand continues to drive investor interest in multiple property types, a trend that likely will continue to increase in tandem with the growing demand for life sciences space.

Chicago

Gateway markets were the first to see employment and pricing recovery after the Great Recession. If the prior economic downturn is a guide, Chicago is poised to see pricing recovery as it ranked highly in office and industrial pricing recovery potential (5th and 8th, respectively). It also offers sturdy economic recovery prospects, with its unemployment rate having declined 820 basis points from its pandemic peak (#8). Chicago also performed well across the industrial metrics, ranking sixth. It was one of a handful of markets to see a drop in industrial vacancy over the past year, ranking fourth with a nearly 50-basis-point decline. Strong pricing and employment recovery potential along with its status as a stable gateway market will continue to drive investor interest in Chicago.

Los Angeles

Major gateway markets like Los Angeles have shown remarkable potential to bounce back after prior economic downturns. Los Angeles ranks 5th for office pricing recovery potential and 8th for industrial pricing recovery potential (tied with Chicago for both). Investors continued to target major cities during the pandemic, as evidenced by Los Angeles ranking 10th in the overall capital markets metrics. It also had a strong showing in the hospitality metrics, ranking 6th. Some of the metrics in which Los Angeles ranked poorly actually underscore its strength. For example, the region's industrial market saw negative net absorption in 2020, ranking it among the bottom of the markets. However, at 1.6%, Los Angeles has the lowest industrial vacancy rate in the U.S., and because it is so supply-constrained, a handful of deals can easily move the needle. The Boeing facilities that led to the negative net absorption last year are now being redeveloped and have strong leasing interest, leading to an opportunity for growth. Los Angeles will continue to be a target for investment due to the presence of the largest port in the U.S. and its concentration of workforce talent and cultural attractions.



New York

In many respects, New York has faced more challenges than its peer cities over the past year, but numerous bright spots remain. The Long Island industrial market saw strong asking rent growth over the past year of 6.4% (#7) and multifamily absorption in 2020 was nearly double its prior five-year annual average (#3). As with Los Angeles, some of the metrics in which New York ranked poorly relate to supply constraints, particularly in the Long Island industrial market. While employment fundamentals are improving but still challenged, economic indicators that point to future growth remained strong, such as degrees awarded as a share of population (#1) and high-tech as a share of total employment (#8). These factors will continue to drive the creation of high-paying jobs in the New York market. As the largest U.S. city by a significant margin, New York continues to offer investors considerable upside potential.

San Francisco

Despite challenged leasing fundamentals for some property types, investors have remained interested in the region given its status as a gateway market and its strong pricing recovery potential. San Francisco ranked 1st for both office and industrial pricing recovery and 7th for multifamily pricing recovery after the Great Recession. This performance, coupled with relatively stronger office and industrial sales market fundamentals, placed San Francisco 9th in the overall capital markets rankings. While the area was one of the most impacted during the pandemic, the factors that made San Francisco a prime target for investment prior to the pandemic—including its status as a coastal gateway market and its high share of jobs in the high-paying and fast-growing technology sector—are also factors that will carry San Francisco to sustained recovery. In addition, a pricing correction—while a major challenge to current owners—will make the area more affordable for more tenants and likely will drive additional future investment and growth from a diverse set of investors.

Washington, DC

With the presence of the federal government, the Washington area has been counter-cyclical in prior economic downturns and was one of the first to emerge from the Great Recession, ranking 2nd in months to return to a pre-recession level of employment. Federal government stability combined with a fast-growing technology sector in the region likely also contributed to a smaller decline in employment at the nadir of the pandemic downturn, allowing Washington to rank 5th in this metric. The region's strong talent pipeline was one of the primary factors that allowed it to land Amazon's second headquarters location, with other major tenants likely to follow. The region's high share of online job ads (#1) and high-tech as a share of total employment (#3) likely will lead to a sustained recovery and increasing investment.

III. The Newmark Opportunity Index Data Table

Category	Economy / Retail		Economy / Retail		Economy		Economy / Office	
	Change in Mobility: Retail & Recreation (Pre-Pandemic vs. April 2021)	Rank	Change in Mobility: Grocery & Pharmacy (Pre-Pandemic vs. April 2021)	Rank	Change in Mobility: Transit Stations (Pre-Pandemic vs. April 2021)	Rank	Change in Mobility: Workplaces (Pre-Pandemic vs. April 2021)	Rank
Atlanta	-19.00%	11	-12.38%	16	-46.00%	16	-41.88%	18
Boston	-35.94%	19	-16.13%	18	-56.75%	20	-40.88%	17
Chicago	-16.75%	10	-4.81%	4	-39.88%	14	-34.25%	11
Dallas	-11.19%	5	-6.13%	6	-26.19%	5	-31.06%	6
Denver	-27.06%	18	-7.31%	10	-35.25%	11	-35.94%	14
Detroit	-10.88%	4	-6.38%	7	-23.38%	3	-33.94%	9
Houston	-8.75%	1	-4.75%	3	-25.25%	4	-28.19%	2
Los Angeles	-23.75%	15	-12.94%	17	-36.63%	13	-34.94%	12
Miami	-16.25%	9	-8.13%	11	-33.69%	9	-27.25%	1
Minneapolis	-22.25%	14	-16.81%	19	-36.56%	12	-38.19%	16
Nashville	-11.50%	7	-2.06%	1	-28.31%	7	-34.06%	10
New York City	-55.44%	22	-25.31%	21	-52.81%	19	-50.00%	21
Orange County, CA	-23.75%	15	-7.25%	9	-34.38%	10	-33.63%	8
Orlando	-15.94%	8	-9.88%	13	-31.00%	8	-31.56%	7
Philadelphia	-21.38%	13	-9.63%	12	-47.81%	18	-37.13%	15
Phoenix	-10.81%	3	-5.38%	5	-16.81%	1	-29.75%	4
San Diego	-20.63%	12	-10.50%	14	-40.06%	15	-35.38%	13
San Francisco	-49.31%	21	-27.13%	22	-66.75%	22	-53.69%	22
Seattle	-23.81%	17	-11.69%	15	-46.88%	17	-44.38%	19
St. Louis	-11.44%	6	-2.44%	2	-28.00%	6	-28.38%	3
Tampa	-10.44%	2	-7.00%	8	-21.63%	2	-29.81%	5
Washington, DC	-44.06%	20	-18.88%	20	-64.31%	21	-48.13%	20
<i>Data Source</i>	<i>Google</i>		<i>Google</i>		<i>Google</i>		<i>Google</i>	

Economy
 Office
 Industrial
 Multifamily
 Hospitality
 Retail
 Capital Markets

Category	Economy		Economy		Economy		Economy	
	Change in Mobility: Residential (Pre-Pandemic vs. April 2021)	Rank	% Change in Employment: Feb. 2020 Baseline to Nadir of COVID Downturn	Rank	% Change in Employment: Feb. 2020 Baseline to March 2021	Rank	Unemployment Rate (Feb 2021)	Rank
Atlanta	9.00%	11	-13.30%	10	-4.87%	6	4.50%	5
Boston	12.31%	18	-16.96%	19	-8.47%	17	6.50%	11
Chicago	8.56%	10	-12.97%	9	-7.56%	14	8.30%	19
Dallas	5.50%	1	-11.08%	2	-3.01%	2	6.80%	14
Denver	9.31%	13	-12.03%	7	-4.69%	5	6.90%	16
Detroit	8.06%	9	-25.66%	22	-7.09%	13	4.30%	3
Houston	6.06%	2	-11.32%	4	-6.05%	9	8.40%	20
Los Angeles	9.56%	14	-16.72%	18	-11.13%	21	10.90%	22
Miami	7.56%	8	-16.24%	15	-7.02%	12	6.30%	9
Minneapolis	12.06%	17	-13.92%	12	-7.57%	15	4.40%	4
Nashville	6.19%	3	-13.49%	11	-3.35%	4	4.00%	1
New York City	14.13%	21	-19.00%	21	-10.17%	19	9.80%	21
Orange County, CA	10.00%	16	-16.31%	16	-9.65%	18	6.80%	14
Orlando	7.25%	5	-18.86%	20	-12.20%	22	6.50%	11
Philadelphia	9.00%	11	-16.21%	14	-6.63%	11	7.80%	18
Phoenix	7.38%	6	-10.87%	1	-3.08%	3	6.70%	13
San Diego	9.63%	15	-16.37%	17	-8.12%	16	7.20%	17
San Francisco	18.94%	22	-15.81%	13	-10.33%	20	6.30%	9
Seattle	13.25%	19	-11.27%	3	-5.75%	8	5.80%	8
St. Louis	7.38%	6	-11.87%	6	-5.01%	7	5.10%	6
Tampa	6.94%	4	-12.11%	8	-2.74%	1	4.20%	2
Washington, DC	13.63%	20	-11.56%	5	-6.11%	10	5.70%	7
<i>Data Source</i>	<i>Google</i>		<i>BLS</i>		<i>BLS</i>		<i>BLS</i>	

THE NEWMARK OPPORTUNITY INDEX DATA TABLE (CONTINUED)

Category	Economy		Economy		Economy		Economy	
	Unemployment Rate: BPS Change from Pandemic Peak to Feb. 2021	Rank	Months to Recovery After Great Recession (Return to Pre-Recession Level Employment)	Rank	Total Degrees Awarded as % of Population (2018-2019 Academic Year)	Rank	Number of Online Job Ads as % of Population	Rank
Atlanta	-810	9	77	12	1.07%	20	2.73%	8
Boston	-910	6	54	5	2.19%	5	3.47%	2
Chicago	-820	8	89	17	1.52%	13	2.58%	12
Dallas	-570	19	52	3	1.19%	19	2.71%	10
Denver	-550	21	54	5	1.47%	16	2.94%	4
Detroit	-2050	1	102	22	0.81%	22	2.58%	12
Houston	-560	20	36	1	1.00%	21	1.89%	20
Los Angeles	-790	11	94	19	2.17%	6	1.65%	21
Miami	-740	14	83	14	1.69%	9	1.94%	19
Minneapolis	-740	14	82	13	1.93%	8	2.85%	6
Nashville	-1180	3	53	4	1.29%	18	2.94%	4
New York City	-720	16	66	7	5.62%	1	1.98%	17
Orange County, CA	-810	9	84	15	2.85%	2	1.65%	21
Orlando	-1610	2	75	11	2.17%	6	2.30%	16
Philadelphia	-720	16	94	19	1.61%	11	2.78%	7
Phoenix	-680	18	94	19	2.59%	3	2.58%	12
San Diego	-870	7	71	10	2.34%	4	1.99%	17
San Francisco	-740	14	68	8	1.51%	14	2.67%	11
Seattle	-1090	4	69	9	1.43%	17	3.00%	3
St. Louis	-790	11	89	17	1.49%	15	2.73%	8
Tampa	-970	5	86	16	1.54%	12	2.50%	15
Washington, DC	-370	22	43	2	1.69%	9	3.52%	1
<i>Data Source</i>	<i>BLS</i>		<i>BLS</i>		<i>JobsEQ</i>		<i>JobsEQ</i>	

■ Economy
 ■ Office
 ■ Industrial
 ■ Multifamily
 ■ Hospitality
 ■ Retail
 ■ Capital Markets

Category	Economy		Office		Office		Office	
	High-Tech Employment as Share of Total Employment	Rank	Office: BPS Change in Sublease Availability Rate- 1Q20 to 1Q21	Rank	Office: BPS Change in Overall Vacancy Rate- 1Q20 to 1Q21	Rank	Office: % Change in Asking Rental Rate- 1Q20 to 1Q21	Rank
Atlanta	12.40%	12	118	11	361	19	1.76%	10
Boston	18.16%	4	218	20	291	11	0.26%	15
Chicago	10.43%	17	155	13	299	12	4.55%	3
Dallas	12.66%	11	110	9	300	13	2.06%	9
Denver	14.96%	6	170	16	473	21	-4.15%	20
Detroit	13.14%	10	-12	1	156	6	0.70%	13
Houston	12.24%	13	10	3	240	9	-0.14%	16
Los Angeles	9.47%	19	201	18	310	15	3.71%	5
Miami	7.67%	22	-8	2	322	16	6.34%	2
Minneapolis	14.14%	7	53	4	160	7	2.95%	6
Nashville	8.91%	21	160	15	430	20	0.39%	14
New York City	14.09%	8	211	19	330	17	-9.36%	21
Orange County, CA	13.94%	9	76	7	279	10	-3.00%	19
Orlando	9.46%	20	95	8	140	3	0.76%	12
Philadelphia	11.64%	15	131	12	141	5	2.61%	8
Phoenix	10.41%	18	186	17	211	8	-1.11%	18
San Diego	16.38%	5	157	14	335	18	7.92%	1
San Francisco	20.41%	1	630	22	1090	22	-9.83%	22
Seattle	19.73%	2	292	21	304	14	-0.43%	17
St. Louis	12.07%	14	110	9	120	2	2.65%	7
Tampa	10.73%	16	53	4	70	1	4.20%	4
Washington, DC	19.33%	3	75	6	140	3	1.48%	11

Data Source

JobsEQ

Newmark

Newmark

Newmark

THE NEWMARK OPPORTUNITY INDEX DATA TABLE (CONTINUED)

Category	Industrial		Industrial		Industrial		Multifamily	
	Industrial: BPS Change in Overall Vacancy Rate- 1Q20 to 1Q21	Rank	Industrial: % Change in Asking Rental Rate- 1Q20 to 1Q21	Rank	Industrial: 2020 Annual Net Absorption as % of Prior 5-Yr. Annual Average	Rank	Multifamily: % Change in Effective Rental Rate- 1Q20 to 1Q21	Rank
Atlanta	-177	1	5.20%	9	126.67%	4	4.00%	4
Boston	-44	5	14.08%	2	204.46%	1	-7.90%	20
Chicago	-47	4	2.99%	12	91.93%	8	-5.30%	16
Dallas	70	17	7.49%	6	90.38%	9	-0.70%	9
Denver	50	15	2.62%	15	49.11%	15	-1.60%	11
Detroit	93	20	-0.66%	21	20.70%	19	4.70%	2
Houston	180	22	2.16%	19	145.93%	3	-2.30%	15
Los Angeles	-15	8	2.50%	16	-17.94%	21	-5.50%	17
Miami	34	14	2.65%	14	106.12%	6	-1.30%	10
Minneapolis	120	21	-3.99%	22	26.42%	18	-1.90%	12
Nashville	10	9	9.90%	4	63.90%	12	-2.20%	14
New York City	90	18	6.42%	7	-356.36%	22	-14.60%	21
Orange County, CA	-50	3	3.66%	11	57.89%	14	0.60%	8
Orlando	11	11	12.83%	3	12.89%	20	-2.10%	13
Philadelphia	-58	2	16.40%	1	97.61%	7	1.40%	5
Phoenix	92	19	2.68%	13	175.06%	2	5.40%	1
San Diego	26	13	2.37%	17	63.67%	13	1.20%	7
San Francisco	50	15	2.20%	18	39.90%	16	-20.00%	22
Seattle	12	12	5.37%	8	74.88%	11	-7.70%	19
St. Louis	-20	6	1.97%	20	31.73%	17	1.30%	6
Tampa	-19	7	4.44%	10	115.10%	5	4.60%	3
Washington, DC	10	9	9.62%	5	86.02%	10	-5.80%	18

Data Source

Newmark

Newmark

Newmark

RealPage

■ Economy
 ■ Office
 ■ Industrial
 ■ Multifamily
 ■ Hospitality
 ■ Retail
 ■ Capital Markets

Category	Multifamily		Multifamily		Hospitality		Hospitality	
	Multifamily: BPS Change in Occupancy Rate- 1Q20 to 1Q21	Rank	Multifamily: 2020 Annual Net Absorption as % of Prior 5-Yr. Annual Average	Rank	Hospitality: % Change in Occupancy - February 2020- February 2021	Rank	Hospitality: % Change in Average Daily Rate - February 2020- February 2021	Rank
Atlanta	86	2	86.86%	19	-24.80%	3	-28.30%	8
Boston	-99	16	107.92%	13	-48.30%	19	-33.80%	17
Chicago	-100	17	223.27%	1	-41.30%	12	-30.10%	10
Dallas	-73	15	132.27%	6	-29.70%	6	-33.60%	16
Denver	-13	9	123.37%	9	-34.40%	10	-31.60%	12
Detroit	92	1	47.13%	22	-27.90%	4	-20.90%	3
Houston	-72	14	104.64%	16	-28.00%	5	-27.50%	7
Los Angeles	-70	13	71.92%	20	-36.20%	11	-33.30%	15
Miami	-53	11	212.77%	2	-23.80%	2	-25.10%	5
Minneapolis	-105	18	90.19%	18	-44.90%	17	-26.80%	6
Nashville	-55	12	92.54%	17	-42.50%	14	-38.10%	20
New York City	-233	21	197.51%	3	-42.70%	15	-28.50%	9
Orange County, CA	35	4	127.95%	7	-51.30%	21	-34.10%	18
Orlando	-46	10	104.88%	14	-48.90%	20	-36.60%	19
Philadelphia	25	6	136.85%	5	-32.80%	9	-22.30%	4
Phoenix	11	7	123.24%	10	-29.90%	7	-31.00%	11
San Diego	28	5	114.55%	11	-44.00%	16	-31.90%	13
San Francisco	-305	22	67.81%	21	-53.50%	22	-53.60%	22
Seattle	-180	20	126.30%	8	-47.80%	18	-39.00%	21
St. Louis	-12	8	162.12%	4	-31.90%	8	-20.40%	2
Tampa	56	3	104.65%	15	-23.60%	1	-10.70%	1
Washington, DC	-130	19	112.51%	12	-42.00%	13	-32.90%	14

Data Source

RealPage

RealPage

STR

STR

THE NEWMARK OPPORTUNITY INDEX DATA TABLE (CONTINUED)

Category	Hospitality		Capital Markets: Office		Capital Markets: Office		Capital Markets: Office	
	Hospitality: % Change in RevPAR- February 2020- February 2021	Rank	Office: % Change in Sales Volume- 2020 vs. Previous 5-Yr. Annual Average	Rank	Office: BPS Change in Cap Rate- 2020 vs. Previous 5-Yr. Annual Average	Rank	Office: Pricing Recovery Potential (Quarters to Reach Pre-Great Recession Cap Rate Nadir)	Rank
Atlanta	-46.10%	5	-67.72%	22	-86	3	50	13
Boston	-65.70%	18	4.49%	2	-21	10	25	2
Chicago	-59.00%	12	-59.54%	19	-7	14	30	5
Dallas	-53.30%	9	-43.17%	10	-51	5	39	12
Denver	-55.10%	10	-36.47%	7	-60	4	34	9
Detroit	-43.00%	3	-24.95%	5	15	18	57+	22
Houston	-47.80%	6	-53.30%	17	-5	15	55+	19
Los Angeles	-57.50%	11	-48.71%	15	85	22	30	5
Miami	-42.90%	2	-65.06%	21	-15	12	30	5
Minneapolis	-59.70%	14	-43.78%	11	-35	8	54+	16
Nashville	-64.40%	17	13.27%	1	-94	1	34	9
New York City	-59.00%	12	-64.18%	20	72	21	29	4
Orange County, CA	-67.90%	20	-37.57%	8	-20	11	36	11
Orlando	-67.60%	19	-58.60%	18	-39	6	55+	19
Philadelphia	-47.80%	6	-4.89%	3	15	18	33	8
Phoenix	-51.70%	8	-47.39%	14	-8	13	55+	19
San Diego	-61.90%	16	-45.33%	13	-36	7	51	14
San Francisco	-78.50%	22	-15.96%	4	11	16	21	1
Seattle	-68.20%	21	-31.33%	6	-34	9	27	3
St. Louis	-45.80%	4	-44.41%	12	30	20	54+	16
Tampa	-31.80%	1	-52.41%	16	-89	2	54	15
Washington, DC	-61.10%	15	-37.90%	9	12	17	54+	16
<i>Data Source</i>	<i>STR</i>		<i>RCA</i>		<i>RCA</i>		<i>RCA</i>	

Economy
 Office
 Industrial
 Multifamily
 Hospitality
 Retail
 Capital Markets

Category	Capital Markets: Industrial		Capital Markets: Industrial		Capital Markets: Industrial		Capital Markets: Multifamily	
	Industrial: % Change in Sales Volume- 2020 vs. Previous 5-Yr. Annual Average	Rank	Industrial: % Change in Price PSF- 2020 vs. Previous 5-Yr. Annual Average	Rank	Industrial: Pricing Recovery Potential (Quarters to Reach Pre-Great Recession Peak Price PSF)	Rank	Multifamily: % Change in Sales Volume- 2020 vs. Previous 5-Yr. Annual Average	Rank
Atlanta	21.98%	10	26.08%	9	33	14	-0.75%	5
Boston	107.96%	1	56.82%	1	31	12	-14.49%	9
Chicago	6.53%	13	16.26%	19	29	8	-59.13%	21
Dallas	35.42%	7	13.72%	20	20	4	7.68%	2
Denver	23.47%	8	21.51%	13	25	6	-11.82%	8
Detroit	-36.49%	22	26.48%	8	37	16	-40.32%	16
Houston	58.66%	2	17.75%	17	7	1	-45.28%	18
Los Angeles	6.29%	14	28.64%	6	29	8	-30.60%	14
Miami	-14.79%	18	25.08%	10	27	7	-17.48%	11
Minneapolis	53.91%	4	21.51%	13	33	14	-14.62%	10
Nashville	-0.63%	16	18.92%	16	30	11	5.02%	4
New York City	19.52%	11	16.71%	18	18	3	-60.16%	22
Orange County, CA	-20.65%	21	11.87%	21	29	8	-43.69%	17
Orlando	49.24%	5	27.92%	7	41	20	-20.11%	12
Philadelphia	6.11%	15	28.98%	5	38	18	-38.40%	15
Phoenix	39.03%	6	24.14%	11	39	19	13.72%	1
San Diego	-20.63%	20	24.00%	12	37	16	-21.05%	13
San Francisco	8.54%	12	31.10%	3	7	1	-48.07%	20
Seattle	-17.95%	19	33.22%	2	32	13	-45.80%	19
St. Louis	22.46%	9	21.45%	15	43	22	-11.41%	7
Tampa	54.76%	3	30.92%	4	42	21	5.54%	3
Washington, DC	-14.35%	17	8.46%	22	22	5	-10.47%	6
<i>Data Source</i>	<i>RCA</i>		<i>RCA</i>		<i>RCA</i>		<i>RCA</i>	

THE NEWMARK OPPORTUNITY INDEX DATA TABLE (CONTINUED)

Category	Capital Markets: Multifamily		Capital Markets: Multifamily		Capital Markets: Hospitality		Capital Markets: Hospitality	
	Multifamily: BPS Change in Cap Rate- 2020 vs. Previous 5-Yr. Annual Average	Rank	Multifamily: Pricing Recovery Potential (Quarters to Reach Pre-Great Recession Cap Rate Nadir)	Rank	Hospitality: % Change in Sales Volume- 2020 vs. Previous 5-Yr. Annual Average	Rank	Hospitality: % Change in Price Per Room- 2020 vs. Previous 5-Yr. Annual Average	Rank
Atlanta	-56	8	32	12	-35.21%	2	-4.37%	14
Boston	-56	8	16	2	-68.68%	8	-8.88%	16
Chicago	-20	17	34	14	-71.14%	10	-15.66%	19
Dallas	-74	3	9	1	-75.84%	14	-13.44%	17
Denver	-71	4	28	10	-81.75%	17	2.25%	8
Detroit	-98	2	30	11	-73.92%	12	-2.77%	12
Houston	-67	6	21	3	-71.39%	11	-23.61%	21
Los Angeles	9	20	34	14	-54.02%	5	22.78%	1
Miami	-31	14	35	18	-74.42%	13	-15.09%	18
Minneapolis	-31	14	21	3	-71.06%	9	3.20%	7
Nashville	-118	1	27	9	-24.66%	1	3.50%	6
New York City	137	22	23	5	-76.88%	16	-27.12%	22
Orange County, CA	-17	18	34	14	-65.40%	7	-6.15%	15
Orlando	-56	8	36	19	-82.65%	18	20.32%	2
Philadelphia	-30	16	33	13	-76.29%	15	-0.81%	9
Phoenix	-68	5	45	22	-51.27%	3	19.61%	3
San Diego	-15	19	38	21	-61.84%	6	6.15%	4
San Francisco	33	21	24	7	-85.75%	19	-1.48%	10
Seattle	-52	12	23	5	-91.22%	22	-22.76%	20
St. Louis	-54	11	25	8	-88.34%	20	-3.88%	13
Tampa	-62	7	37	20	-90.47%	21	-2.74%	11
Washington, DC	-36	13	35	17	-53.50%	4	4.69%	5
<i>Data Source</i>	<i>RCA</i>		<i>RCA</i>		<i>RCA</i>		<i>RCA</i>	

■ Economy
 ■ Office
 ■ Industrial
 ■ Multifamily
 ■ Hospitality
 ■ Retail
 ■ Capital Markets

Category	Capital Markets: Retail		Capital Markets: Retail					
	Retail: % Change in Sales Volume-2020 vs. Previous 5-Yr. Annual Average	Rank	Retail: BPS Change in Cap Rate- 2020 vs. Previous 5-Yr. Annual Average	Rank	Sum of Change in Mobility Ranking (Lower = Better)	Final Change in Mobility Ranking	Sum of Economic Ranking (Lower = Better)	Final Economic Ranking
Atlanta	-48.05%	12	-25	5	72	16	154	12
Boston	-49.62%	13	-15	8	92	19	161	16
Chicago	-52.76%	17	15	15	49	10	158	14
Dallas	-43.34%	9	-3	10	23	4	103	3
Denver	-47.58%	11	-55	2	66	12	146	9
Detroit	-49.80%	15	-27	4	32	7	137	7
Houston	-56.51%	19	-69	1	12	1	120	6
Los Angeles	-44.85%	10	11	13	71	15	208	21
Miami	-42.21%	7	-9	9	38	8	152	11
Minneapolis	-38.00%	4	36	19	78	17	157	13
Nashville	-5.98%	1	-19	7	28	6	94	1
New York City	-49.68%	14	73	22	104	21	214	22
Orange County, CA	-26.57%	2	29	18	58	11	162	17
Orlando	-37.46%	3	-39	3	41	9	149	10
Philadelphia	-40.99%	5	71	21	69	13	180	19
Phoenix	-54.65%	18	12	14	19	2	106	4
San Diego	-62.31%	21	26	16	69	14	162	17
San Francisco	-50.44%	16	6	12	109	22	199	20
Seattle	-63.65%	22	0	11	87	18	141	8
St. Louis	-41.80%	6	38	20	23	5	107	5
Tampa	-42.79%	8	-20	6	21	3	96	2
Washington, DC	-56.63%	20	28	17	101	20	160	15

Data Source

RCA

RCA

THE NEWMARK OPPORTUNITY INDEX DATA TABLE (CONTINUED)

	Sum of Office Ranking (Lower = Better)	Final Office Ranking	Sum of Industrial Ranking (Lower = Better)	Final Industrial Ranking	Sum of Multifamily Ranking (Lower = Better)	Final Multifamily Ranking	Sum of Hospitality Ranking (Lower = Better)
Atlanta	96	20	47	2	50	4	32
Boston	77	11	22	1	68	11	78
Chicago	77	11	64	6	86	19	63
Dallas	64	3	63	5	36	1	62
Denver	91	17	72	15	51	5	57
Detroit	74	9	106	22	54	7	34
Houston	81	14	64	6	72	13	50
Los Angeles	92	18	73	16	98	21	43
Miami	59	2	69	13	66	10	40
Minneapolis	68	4	92	21	75	14	53
Nashville	70	7	68	11	57	8	58
New York City	123	22	79	18	94	20	74
Orange County, CA	74	9	78	17	68	11	81
Orlando	73	8	66	10	76	15	78
Philadelphia	69	5	48	3	60	9	43
Phoenix	93	19	70	14	46	3	32
San Diego	80	13	91	20	76	15	55
San Francisco	109	21	65	8	113	22	95
Seattle	89	16	65	8	83	17	102
St. Louis	69	5	89	19	44	2	47
Tampa	47	1	50	4	51	5	35
Washington, DC	82	15	68	11	85	18	51

Economy
 Office
 Industrial
 Multifamily
 Hospitality
 Retail
 Capital Markets

	Final Hospitality Ranking	Sum of Retail Ranking (Lower = Better)	Final Retail Ranking	Sum of Overall Capital Markets Ranking (Lower = Better)	Final Overall Capital Markets Ranking	Sum of Overall Ranking (Lower = Better)	Final Overall Ranking (1= Best)
Atlanta	1	44	11	129	5	378	5
Boston	18	58	17	92	2	410	9
Chicago	16	46	13	191	21	469	16
Dallas	15	30	5	114	4	341	2
Denver	13	41	10	107	3	416	12
Detroit	3	30	5	163	14	415	11
Houston	9	24	2	150	12	405	8
Los Angeles	6	55	15	147	10	525	20
Miami	5	36	8	163	14	401	7
Minneapolis	11	56	16	132	6	452	14
Nashville	14	16	1	83	1	345	3
New York City	17	79	22	200	22	599	22
Orange County, CA	20	44	11	171	18	475	17
Orlando	18	27	4	140	8	441	13
Philadelphia	6	51	14	161	13	411	10
Phoenix	1	40	9	148	11	375	4
San Diego	12	63	18	182	20	488	18
San Francisco	21	71	20	142	9	587	21
Seattle	22	65	19	163	14	494	19
St. Louis	8	34	7	179	19	379	6
Tampa	4	24	2	137	7	288	1
Washington, DC	10	77	21	168	17	463	15

Notes:

- Statistics are for the metro area unless otherwise noted
 - New York City data is for Manhattan except industrial capital markets data, which is for NYC boroughs; industrial leasing data, which is for Long Island; and U.S. Bureau of Labor Statistics data, which is for the New York-Newark-Jersey City, NY-NJ-PA MSA
 - San Francisco industrial data is for Oakland/East Bay
 - U.S. Bureau of Labor Statistics and JobsEQ data for Los Angeles is for the Los Angeles-Long Beach-Glendale Metro Division and for Orange County is for the Anaheim-Santa Ana-Irvine Metro Division
 - Google Change in Mobility Data is at the county level
- Google Change in Mobility Data is the average for April 1-16, 2021 compared to pre-pandemic baseline
- For office pricing recovery data, a plus sign indicates the market still has not reached pre-Great Recession pricing (e.g. 54 quarters since peak pricing prior to Great Recession, and current pricing still has not reached that level)

IV.

Opportunities and Challenges in Major U.S. Markets

In the following section, for each market studied, we identify challenges faced in the pandemic recovery phase and focus on opportunities for owners and investors as the recovery continues. The market summaries reference a variety of data points within the index. Markets are listed alphabetically in this section. For more information and context on the specific data points used, please see the column headings of the index table starting on page 12 and the methodology section on page 33.



ATLANTA

OVERALL RANKING: 5/22

Challenges: Office investors shied away from Atlanta during the pandemic, as the area saw the largest decline of the markets studied in office sales volume for 2020 versus the previous five-year annual average. It also saw a 361-basis-point uptick in the office vacancy rate between 1Q20 and 1Q21, with only three markets seeing a larger increase.

Opportunities: Atlanta's position as a growing and versatile commercial real estate hub was apparent in the index data points. The metro area tied for first overall among the hospitality metrics, ranked second overall for industrial metrics, and fourth overall for multifamily metrics. The strong showing across multiple property types makes Atlanta a prime target for additional future investment. Although pricing is poised to accelerate with increasing investor demand for assets, Atlanta and other Sunbelt markets still offer attractive value relative to many coastal gateway markets.



BOSTON

OVERALL RANKING: 9/22

Challenges: Along with other large coastal markets, Boston ranked toward the bottom for the hospitality and retail metrics, as these property types were especially impacted in major cities where social distancing and lockdown measures were most strict and prolonged. Boston also saw a significant uptick in office sublease space over the past year, ranking 20th of the 22 markets with a 218-basis-point increase in sublease availability.

Opportunities: Boston has been a prime target for investment during the pandemic, ranking second in the combined capital markets metrics. This was driven by strong rankings in pricing recovery potential for office and multifamily, and by a #1 ranking for increases in sales volume and price per square foot for industrial space. In fact, Boston ranked first across the combined industrial metrics, with a 14.1% increase in asking rent over the past year (#2) and 2020 net absorption more than doubling the prior five-year annual average (#1). With its high concentration of academic institutions, Boston also ranks highly for degrees awarded (#5), online job ads as a share of population (#2), and high-tech employment as a share of total employment (#4). A strong regional economy and tightening industrial market combined with a robust and growing life sciences market make Boston an attractive target for continued investment.



CHICAGO

OVERALL RANKING: 16/22

Challenges: As with other large gateway markets, Chicago performed near the bottom of the pack in many of the capital markets rankings as investors gravitated to mid-size Sunbelt markets over the past year. It also ranked poorly among many of the multifamily metrics, as multifamily fundamentals in the largest U.S. cities were the most challenged in the pandemic-induced downturn.

Opportunities: Despite lower rankings in many multifamily metrics, 2020 absorption was a bright spot, with the 13,952 units absorbed more than doubling its prior five-year annual average (#1). Chicago also performed well across the industrial metrics, ranking sixth. It was one of a handful of markets to see a drop in industrial vacancy over the past year, ranking fourth with a nearly 50-basis-point decline. If the prior economic downturn is a guide, Chicago is poised to see pricing recovery as it ranked highly in office and industrial pricing recovery potential (5th and 8th, respectively). It also offers sturdy economic recovery prospects, with its unemployment rate having declined 820 basis points from its pandemic peak (#8).



DALLAS

OVERALL RANKING: 2/22

Challenges: While every U.S. hospitality market was impacted by the pandemic, Dallas was among the markets to see the most severe downturn, ranking 15th among the hospitality rankings. Its dependence on business and convention travel likely was a factor. With relatively few public health restrictions in Texas compared with other states, Dallas ranked fourth in the change in mobility rankings. However, its unemployment rate remained elevated at 6.8% as of February (#14) and had seen a decline of only 570 basis points from its pandemic peak (#19).

Opportunities: Even prior to the pandemic, Dallas was experiencing strong growth across nearly all the metrics in our index, setting it up to outrank other markets even in a downturn. The metro area ranked second overall in the index with exceptional rankings across multifamily (#1), office (#3), economy (#3), capital markets (#4), industrial (#5), and retail (#5). As a growing and versatile Sunbelt market, Dallas offers attractive opportunities across all property types, although pricing escalation is a factor to watch in the face of continued strong demand.



DENVER

OVERALL RANKING: 12/22

Challenges: Denver's office leasing fundamentals were challenged over the past year with significant increases in sublease availability and vacancy rate (#16 and #21, respectively) and a 4.2% decline in asking rents (#20). While industrial space has been a strong performer among the property types across all markets, Denver's industrial leasing market ranked in the bottom half of the pack with tepid absorption and rising vacancy.

Opportunities: Real estate assets in growing secondary markets like Denver have been attractive to investors, as evidenced by its #3 ranking among the capital markets metrics. Denver also had a strong showing across the multifamily metrics, ranking fifth. Despite challenges to office and industrial leasing fundamentals, investment sales volume and pricing for those property types remained sturdy. Strong prospects for continued economic and population growth will make Denver a continued target for investment dollars, particularly in the multifamily space.



DETROIT

OVERALL RANKING: 11/22

Challenges: Detroit's industrial market saw rising vacancy over the past year due to new speculative construction and major tenant bankruptcies. Detroit saw a slight decline in industrial asking rents over the past year and below-average absorption, ranking it near the bottom relative to other markets that have seen strong growth in the industrial space.

Opportunities: While Detroit saw the largest relative decline in employment among index markets when the pandemic hit and had the highest unemployment rate of all index markets at the peak of the pandemic, it has begun a notable economic recovery. Its unemployment rate of 4.3% in February 2021 (#3) declined 2,050 basis-points from its pandemic peak (#1). This jobs recovery is driven by the area's strength in the industrial sector, and particularly a resurgence in growth of the automotive, e-commerce and construction industries. Detroit also ranked highly in the retail (#5) and hospitality (#3) metrics, although that performance was driven in part by weaker fundamentals going into the pandemic and thus a relatively smaller decline in hospitality occupancy and rates. As the country emerges from the pandemic, Detroit's significant decline in unemployment will set it up for continued economic growth. A recovery of the industrial sector of the economy will benefit multiple property types, and a resurgence of industrial jobs will likely be coupled with increased demand for industrial assets.



Challenges: Counter to trends in other markets, Houston's industrial leasing market was challenged over the past year with a significant uptick in vacancy (#22) and tepid asking rent growth (#19). It also saw a swift decline in sales volume for some (but not all) of the property types over the past year, with office volume totaling less than half of its five-year annual average (#17) and multifamily volume declining more than 45% from its five-year annual average (#18).

Opportunities: Despite a marked increase in industrial vacancy over the past year, Houston saw a 58.7% increase in industrial sales volume over the prior five-year average, ranking it second. As was the case with Dallas, fewer pandemic-related restrictions allowed Houston to rank first among the change in mobility rankings. This performance, coupled with its strong showing in economic recovery potential (#1) as well as multifamily and industrial pricing recovery potential (#3 and #1, respectively), drove Houston's ranking near the top third of all the markets studied. With its strength across multiple property types and investor interest in Sunbelt markets, Houston will likely experience a robust commercial market recovery.



Challenges: Major coastal gateway markets have been the most challenged in the pandemic, and Los Angeles is no exception. While many of its metrics rank toward the middle of the pack, Los Angeles ranks toward the bottom for office and multifamily fundamentals, with a swift uptick in cap rates for both property types. It also ranks poorly among the economic metrics, with the highest unemployment rate among index markets at 10.9% as of February 2021, and slower economic recovery than peer markets.

Opportunities: Despite these challenges, major gateway markets have shown remarkable potential to bounce back after prior economic downturns. Los Angeles ranks 5th for office pricing recovery potential and 8th for industrial pricing recovery potential. Investors continue to target major cities, as evidenced by Los Angeles ranking 10th in the overall capital markets metrics. It also had a strong showing in the hospitality metrics, ranking 6th. With pricing for some asset types stalled due to the pandemic, opportunistic investors are likely to target major cities like Los Angeles in the near term. Despite alarmist media coverage claiming an exodus from major cities, gateway markets such as Los Angeles will continue to be a target for growth and investment, especially in the longer term, due to their concentration of workforce talent and cultural attractions.



Challenges: Miami has not attracted as much investor attention as some of its peer Sunbelt markets, ranking 14th in the overall capital markets rankings. With a sharp decline in tourism caused by the pandemic, Miami's hospitality investment sales volume declined 74.4% (#13) while its hospitality price per unit declined 15.1% (#18). It also saw a sharp decline in sales volume for both office (-65.1%, #21) and industrial space (-14.8%, #18). Miami ranks last for tech employment as a share of total employment, at 7.7%, suggesting growth of high-paying jobs may be a challenge in the future.

Opportunities: While some investors shied away from Miami over the past year, that may soon change as it ranked toward the top or middle of the pack in leasing metrics for most property types. It was one of only two markets to see flat to declining sublease availability over the past year, counter to the glut of sublease space that is plaguing many other office markets. Miami also saw strong industrial absorption in 2020, higher than its five-year annual average (#6). Despite tepid hospitality sales metrics, Miami outperformed relative to other hospitality markets in change in occupancy and change in RevPAR (both #2). Looking forward, a resurgence of the travel industry will benefit the Miami area and enhance investor interest.





MINNEAPOLIS

OVERALL RANKING: 14/22

Challenges: With public health restrictions that were more strict than in many other markets, Minneapolis ranked toward the bottom of the index's markets in terms of change in mobility, ranking 17th in the combined mobility metrics. A significant decline in visits to retail and recreation (#14) and grocery and pharmacy (#19) also contributed to a bottom-half ranking across the retail metrics (#16). The Minneapolis multifamily market also underperformed, with a 105-basis-point decrease in the occupancy rate (#18) and below-average annual absorption (#18).

Opportunities: As the pandemic recovery progresses, markets like Minneapolis that saw a more significant impact from pandemic lockdowns are likely poised to spring back. The Twin Cities area ranked sixth in the combined capital markets metrics, suggesting investors are confident in its continued recovery. Minneapolis also ranked highly in the office metrics—4th overall—driven in part by a smaller increase in sublease availability than many peer markets (#4). Looking forward, the area's low unemployment rate of 4.4% (#4) coupled with a high share of online job ads (#6) and tech employment as a share of total employment (#7) will drive continued economic growth and investment to the area.



NASHVILLE

OVERALL RANKING: 3/22

Challenges: While all U.S. hospitality markets have been impacted by the pandemic, Nashville's reliance on tourism and conventions was a factor in its hospitality sector underperforming those of some peer cities. From February 2020 to February 2021, Nashville's RevPAR declined 64.4% (#17) and Average Daily Rate declined 38.1% (#20). However, its hospitality sector remained an investment target, experiencing the smallest decline in hospitality sales volume of all the markets.

Opportunities: Nashville has been a darling of investors for the past several years and remained a target for investment during the pandemic, ranking first in the overall capital markets rankings. Its overall economic and retail rankings also came in first place. Nashville experienced fewer pandemic restrictions than many other cities, as evidenced by its #6 ranking in the combined mobility data. This performance, coupled with its strong performance across nearly every economic metric—including the lowest unemployment rate of all the markets at 4.0% as of February 2021—suggests Nashville will continue to experience economic and investment growth. Investors might consider targeting industrial product, as Nashville's industrial leasing metrics generally rank higher than its industrial sales metrics, suggesting that may be the next sector to see an investment boom.





NEW YORK CITY

OVERALL RANKING: 22/22

Challenges: The pandemic-induced challenges for major cities like New York have been well publicized. New York was among the first and hardest-hit U.S. markets by the pandemic; it faced a swift decline in leasing and investment sales fundamentals across most property types. New York ranked last among the markets studied in the overall capital markets, retail, office, and economic rankings. While these challenges are not insignificant, attention-grabbing headlines about the death of major cities are vastly overstated, as many of the metrics that placed New York at the bottom of the pack are temporary factors influenced by the pandemic.

Opportunities: In many respects, New York has faced more challenges than its peer cities over the past year, but numerous bright spots remain. The Long Island industrial market saw strong asking rent growth over the past year of 6.4% (#7) and multifamily absorption in 2020 was nearly double its prior five-year annual average (#3). Further, while employment fundamentals are still challenged, economic indicators that point to future growth remained strong, such as degrees awarded as a share of population (#1) and high-tech as a share of total employment (#8). While not directly measured in the index, fewer than 2 in 10 jobs lost in New York during the most recent downturn were office-using, compared with nearly 9 out of 10 during the Great Recession. As the largest U.S. city by a significant margin, New York continues to offer investors considerable upside potential. While a pricing correction is causing short-term pain for some asset owners, it also is creating a chance to buy low for opportunistic investors.



ORANGE COUNTY

OVERALL RANKING: 17/22

Challenges: As with other large coastal markets with a high cost of living, Orange County was one of the most challenged by the pandemic. The area saw a significant decline in investment and pricing for most property types, ranking 18th in the overall capital markets rankings. Along with other markets that rely on tourism as a major economic engine, Orange County's hospitality market was among the most impacted by the pandemic, ranking 20th overall, a ranking driven by larger-than-average declines in occupancy, RevPAR and average daily rate.

Opportunities: Orange County's office market has remained strong relative to many other markets, placing it 9th among the overall office metrics. It also ranks in the top half of markets for overall retail (#11) and multifamily (#11) metrics. Orange County's change in mobility data ranked 11th, higher than its neighbor Los Angeles, suggesting the area is leading the region in emergence from lockdowns. Other bright spots include its 50-basis-point decline in industrial vacancy (#3), and 35-basis-point increase in multifamily occupancy (#4) over the past year. While employment fundamentals are still challenged, Orange County ranks in the top half of markets for its decline in unemployment from the pandemic peak (#9) and ranks second for degrees awarded as a share of population. With its stable property metrics and substantial population even independent from Los Angeles, Orange County is primed for continued recovery and future investment.



ORLANDO

OVERALL RANKING: 13/22

Challenges: As with other markets that rely heavily on tourism, Orlando's hospitality market was among the most impacted by the pandemic, ranking it 18th among the hospitality metrics with some of the largest declines in hotel occupancy, RevPAR and average daily rate. It also ranked toward the bottom of markets in pricing recovery potential for office, industrial and multifamily, as Orlando was one of the last markets to see pricing recovery after the Great Recession. Likely also related to the outsized impact on its hospitality sector, as of February 2021, employment in Orlando was still down 12.2% from before the pandemic, the largest percentage of all the markets a year after the pandemic began.

Opportunities: Orlando scored highly across the retail metrics, ranking 4th overall with smaller declines in retail sales volume and pricing than most other markets. It also had a strong showing for the overall office and capital markets metrics (both #8). As with many southern states, pandemic-related restrictions were fewer in Florida, allowing Orlando to rank 9th in the change in mobility rankings. Despite its sharp decline in employment during the early days of the pandemic, Orlando has seen its unemployment rate fall significantly from its pandemic peak, a 1,610-basis-point drop (#2) to the February 2021 rate of 6.5%. With an emerging recovery of the hospitality sector, Orlando is poised to bounce back with increasing investment and leasing activity.



PHILADELPHIA

OVERALL RANKING: 10/22

Challenges: As with other northern coastal cities, Philadelphia saw stricter public health guidelines during the pandemic, ranking it 13th in the change in mobility metrics. This performance, combined with the region's still elevated unemployment rate of 7.8% (#18) and slower employment recovery after the Great Recession (#19), contributed to its ranking 19th overall among the economic metrics. Philadelphia has also experienced rising cap rates for both office (#18) and retail (#21) space.

Opportunities: Philadelphia ranked highly across a diverse range of sectors including industrial (#3), office (#5), and hospitality (#6). The region's industrial market is particularly strong, with the largest increase in asking rents over the past year at 16.4%. It also saw the second-largest decline in industrial vacancy over the past year, with a drop of 58 basis points. In addition, while multifamily sales metrics ranked Philadelphia in the bottom half of the markets studied, its multifamily leasing fundamentals were strong, with an increase in effective rents (#5) and occupancy (#6) and above-average annual absorption in 2020 (#5). Given its strength across a diverse set of property types, as well as its status as a hub for the fast-growing life sciences sector, Philadelphia is well-positioned to continue attracting growth and investment.





PHOENIX

OVERALL RANKING: 4/22

Challenges: With a 186-basis-point increase in office sublease availability (#17) and a 1.1% decrease in office asking rents (#18), Phoenix ranked 19th across the office metrics. It also ranked in the bottom half of markets for the industrial metrics at #14. Phoenix was one of the last markets to see office and industrial pricing recovery after the Great Recession (both #19), contributing to its relatively lower rankings across these property types.

Opportunities: Despite challenges to some property types, Phoenix ranked first across the hospitality metrics, third across the multifamily metrics, and fourth for the overall economic metrics. It was one of the areas least impacted by pandemic restrictions, allowing it to rank second across the change in mobility metrics. This also may have allowed a quicker economic recovery, with Phoenix employment down only 3.1% from its pre-pandemic level as of February 2021 (#3). Given remarkable multifamily effective rent growth of 5.4% over the past year (#1), investors have flocked to the Phoenix multifamily market, with a 13.7% increase in multifamily sales volume over the five-year average (#1). With strong property metrics despite pandemic-induced challenges, and the outperformance of Sunbelt markets, Phoenix is likely to continue experiencing economic growth and will remain a target for investors.



SAN DIEGO

OVERALL RANKING: 18/22

Challenges: Softening pricing and a sharp decline in sales volume across multiple property types caused San Diego to rank 20th in the overall capital markets metrics. Its industrial market was also challenged with rising vacancy and below-average absorption in 2020 (both #13) and while industrial asking rents did see an increase of 2.4% over the past year, it was weaker than in other markets, ranking 17th. San Diego's retail market has also been challenged with the second-largest decline in sales volume of all markets and bottom-half rankings in the retail change in mobility metrics.

Opportunities: While San Diego's overall ranking was toward the bottom of the markets studied, it ranks closer to the middle across several metrics including change in mobility (#14), office (#13), multifamily (#14) and hospitality (#12). While 2020 hospitality sales volume was below-average, San Diego saw a smaller decline than in other markets, ranking it 6th. In addition, per-room pricing for hospitality transactions increased 6.2% over its prior five-year average, ranking 4th. San Diego's average office cap rate for 2020 was 36 basis points lower than its prior five-year average, ranking 7th. In the multifamily sector, San Diego was one of a handful of markets to see rising occupancy over the past year (#5) and an increase in effective rents (#7). As with other high-cost coastal markets, San Diego has been one of the most challenged in the pandemic. However, its high concentration of tech employment (#5) and degrees awarded (#4) set it up for a resurgence of growth once the pandemic subsides, particularly given its strength in the rapidly expanding life science sector.



SAN FRANCISCO

OVERALL RANKING: 21/22

Challenges: As with New York and other gateway investment markets, it has been well-publicized that San Francisco's economy and real estate markets have faced many challenges during the pandemic. Strict public health lockdowns placed San Francisco last in the change in mobility rankings and contributed to its ranking 20th across the economic metrics. A swift and significant uptick in sublease availability has challenged its office market (which finished at #21 in the overall rankings) and a sharp decline in multifamily effective rents and occupancy has given investors pause, placing the region 22nd across the multifamily metrics.

Opportunities: Facing unprecedented challenges to nearly every property type, San Francisco likely has a prolonged recovery period ahead. However, despite challenged leasing fundamentals, investors have remained interested in the region given its status as a gateway market and its strong pricing recovery potential. It ranked 1st for both office and industrial pricing recovery and 7th for multifamily pricing recovery after the Great Recession. This performance, coupled with relatively stronger office and industrial sales market fundamentals, placed San Francisco 9th in the overall capital markets rankings. While the area was one of the most impacted during the pandemic, the factors that made San Francisco a prime target for investment prior to the pandemic—including its status as a coastal gateway market and its high share of jobs in the high-paying and fast-growing technology sector—are also factors that will carry San Francisco to sustained recovery. In addition, a pricing correction—while a major challenge to current owners—will make the area more affordable for more tenants and likely will drive additional future investment and growth.



SEATTLE

OVERALL RANKING: 19/22

Challenges: As one of the first U.S. markets to be impacted by the pandemic, Seattle has had stricter public health guidelines than many other markets in the country, as reflected by its ranking 18th in the change in mobility metrics. While the hospitality and retail markets were challenged in every city, Seattle saw some of the largest impacts. It ranked 19th across the retail metrics and last in the hospitality metrics, driven by a rapid decline in investment volume for both property types. Seattle's multifamily market has also been challenged, with some of the largest declines in effective rents (#19) and occupancy (#20).

Opportunities: Despite limited mobility trends, Seattle's economy has outperformed many peer markets, and it ranked 8th across the economic metrics. It experienced the third-lowest decline in employment at the height of the pandemic and ranks in the top half of markets for current employment and unemployment, as well as for employment recovery potential. Despite a swift drop in industrial sales volume (#19), those assets that did trade in 2020 were high-quality, allowing pricing to outpace the prior five-year average (#2). The area also saw a 5.4% increase in industrial asking rents over the past year, ranking it 8th. Going forward, Seattle's high concentration of online job ads (#3) and tech employment as a share of total employment (#2) will drive its pandemic recovery and increase investment.



ST. LOUIS

OVERALL RANKING: 6/22

Challenges: St. Louis' high overall ranking belies its weakness across some metrics, as the area ranked 19th in the overall capital markets and industrial metrics. While sales volume did not see as great a decline as in many other markets, weakening pricing across most property types drove the below-average capital markets performance. In the industrial market, while St. Louis saw a 20-basis-point decline in vacancy over the past year, its asking rent growth (#20) and absorption compared to the previous average (#17) were weaker than in most other markets.

Opportunities: While investors may have shied away from St. Louis during the pandemic, that may soon change given its strong rankings across the multifamily (#2), economic (#5), office (#5), retail (#7), and hospitality (#8) metrics. Counter to many other markets, the St. Louis multifamily market experienced rising effective rents (#6) and above-average net absorption (#4) over the past year. Ranking 5th across the change in mobility metrics, the St. Louis area economy is recovering faster than many peer markets. According to the Brookings Institution's Metro Recovery Index, the St. Louis area outperformed many peer metros in regards to the impact of the pandemic on small businesses, with more businesses staying open for more hours. This likely drove the area's relatively stronger economic performance. At 5.1%, it had the 6th lowest unemployment rate of the markets in the study as of February. The area's strengthening economic fundamentals and outperformance across a diverse range of property types will position it well for continued growth and investment.





TAMPA

OVERALL RANKING: 1/22

Challenges: While Tampa ranked in the top 7 across all the combined economic and property type rankings, some challenges remain. Tampa was one of the last markets to see pricing recovery for office (#15), industrial (#21), and multifamily (#20) assets after the Great Recession, suggesting a prolonged recovery could be ahead. However, since it has performed well across so many other metrics, pricing recovery likely will be faster this time around. Tampa also saw the second-largest decline in hospitality sales volume in 2020 as compared to the prior five-year average, as investors were likely concerned by the region's reliance on tourism amid the pandemic.

Opportunities: Ranking 1st overall out of the 22 markets, Tampa ranked highly across nearly every metric in the index. Its office market saw the smallest increase in vacancy among index markets, its multifamily market experienced strong effective rent growth (#3) and rising occupancy (#3) over the past year, and its hospitality market had the smallest declines in occupancy, RevPAR, and average daily rate among all index markets. Tampa ranked 3rd for change in mobility and its total employment as of March 2021, down 2.74% from its February 2020 level, was the closest to pre-pandemic level of all the markets studied. Given its diversity of strengths across economic and property-type metrics and investors' recent proclivity for mid-size Sunbelt markets, Tampa is likely to continue attracting investment dollars. However, the limited size of its commercial real estate inventory may make it more challenging for buyers to find opportunities.



WASHINGTON, DC

OVERALL RANKING: 15/22

Challenges: The Washington region experienced strict public health guidelines relative to many other markets, as evidenced by it scoring 20th in the change in mobility rankings. Its retail investment sales market was one of the most impacted by the pandemic, with retail sales volume declining 56.6% in 2020 from its prior five-year average (#20). After a long period of remarkable growth, the region's multifamily market experienced a marked downturn over the past year with a decline in effective rents (#18) and occupancy (#19). However, multifamily sales volume—while down from its prior five-year average—held up better than many other markets, ranking 6th and reflecting investors' confidence in a market rebound.

Opportunities: The region's industrial leasing market remained sturdy over the past year with asking rents rising 9.6% (#5). While the region's office market faces the rising vacancy and sublease availability trends that are present in nearly all U.S. markets, it has been less impacted than many others. Its 140-basis-point increase in overall office vacancy over the past year ranks 4th and its 75-basis-point uptick in sublease availability is lower than many peer markets, ranking 6th. With the presence of the federal government, the Washington area has been counter-cyclical in prior economic downturns and was one of the first to emerge from the Great Recession, ranking 2nd in months to return to a pre-recession level of employment. The region's lower ranking in the change in mobility metrics may suggest a resurgence of economic activity and rapid return to economic growth once pandemic restrictions are lifted. In addition, the region's high share of online job ads (#1) and high-tech employment (#3) likely will lead to a sustained recovery and increasing investment activity.



V.

Conclusions and Methodology

While this index provides a ranking of markets, and each market features distinct strengths and weaknesses, attractive investment opportunities can be found in every major market and at every stage of the economic cycle.

It is also important to note that the property type index rankings are from an owner's or seller's perspective, with lower vacancy and higher pricing being ranked favorably. Given the scale of the economic downturn induced by COVID-19 and the decline in market fundamentals across most property types—as well as the early stage of recovery—most major markets remain tenant-favored. For this reason, opportunities for tenants were not highlighted in this study.

While the opportunities offered for each market are geared toward owners and investors, tenants have significant leverage in the current environment. Office tenants have opportunities to capture attractive terms and concession packages in nearly every market, and while industrial market metrics have been more mixed, industrial tenants also have opportunities for cost savings in many markets depending on their specific needs.

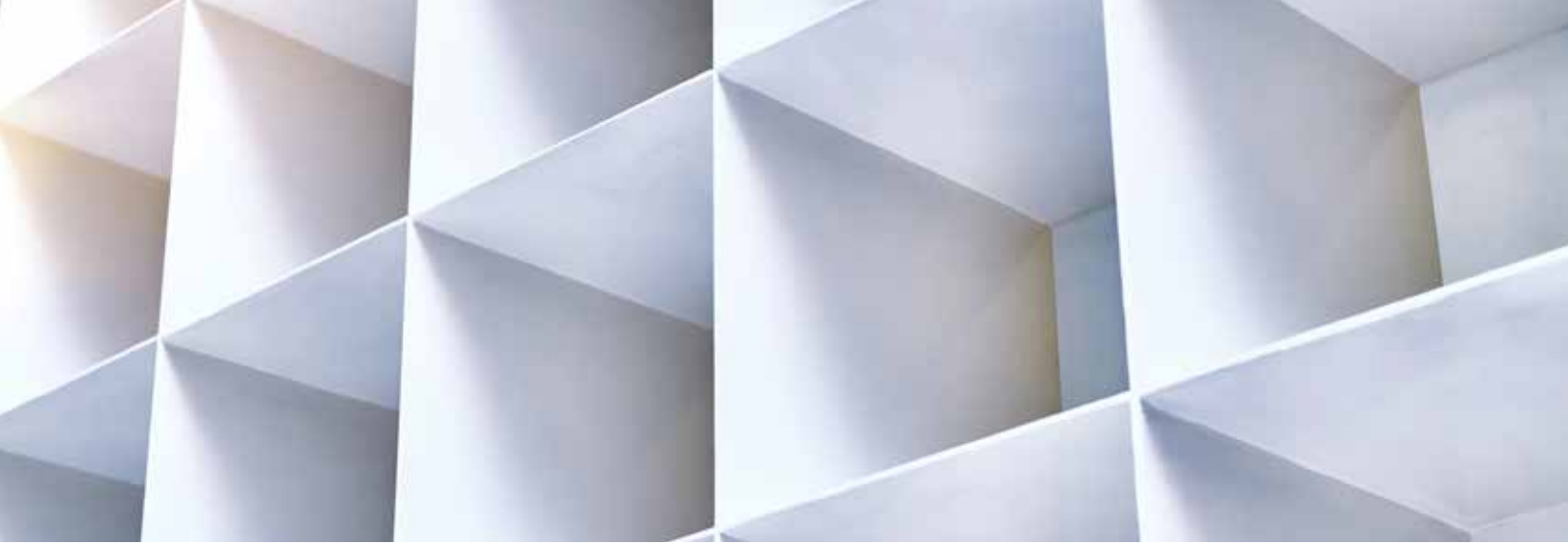


METHODOLOGY Q&A

Q. How did you decide which markets to include?

A. The overarching goal of this study was to include as many markets as possible while prioritizing data availability and accuracy. The 22 markets included in the index are those markets for which reliable data was available for each data point included in the index. While other markets had many of the data points available, the index would be skewed if any of the data points was missing for any of the markets.

Statistics used are for the metro area with a few exceptions where necessary for data applicability as identified in the notes section of the index table on page 23.



Q. How did you decide which data points to use?

A. You may notice different metrics are used across the property types. The index includes data points that Newmark Research most commonly uses to measure market fundamentals for each property type (i.e. vacancy for office and industrial vs. occupancy for multifamily and hospitality) and that are most applicable for each property type (i.e. sublease availability is applicable for office but less so for other property types). Retail leasing metrics were considered but ultimately excluded due to lack of a reliable and robust data source for all markets in the study. Since consistent cap rate data was not available for all markets and all property types, price per square foot is used for some property types as another measure of pricing.

The index includes a diverse set of economic data points that measure both current and pandemic-peak employment and unemployment, recovery potential based on past trends, continuance of economic activity during the pandemic (change in mobility data), and future economic growth potential (degrees awarded, online job ads, and tech employment).

Data points used are the latest available at the time of data gathering or a point in time that allows comparison of before and after the pandemic started (i.e. hospitality metrics compare February 2020 to February 2021). The source for each data point is listed at the bottom of each column in the table.

Q. How are the markets ranked?

A. The index includes a total of 39 data points. Markets are ranked from one through 22 for each data point in the index, with the most favorable score (from an owner or seller's perspective) ranking first. In the case of a tie within a specific metric, both markets are given the same ranking for that metric. All 39 rankings are then totaled to get a final sum for the overall rankings, with the lowest sum ranking first. Every data point in the index is weighted equally to avoid favoring some markets at the expense of others.

In addition, each market is given a combined score for each property type by totaling the rankings across that property type (e.g., the overall office ranking includes the office leasing and sales metrics as well as the change in mobility score for workplaces, since these metrics are related to the office sector). Of note, because they impact multiple categories in the index, the change in mobility scores for retail and recreation, and for grocery and pharmacy, are included in both the overall economic ranking and the overall retail ranking. Similarly, the change in mobility score for workplaces is included in both the overall economic ranking and the overall office ranking.

Q. How do I interpret the change in mobility data?

A. Google's COVID-19 Community Mobility Reports track movement trends across different categories of places. The categories included in the index are retail and recreation, grocery and pharmacy, transit stations, workplaces, and residential. The data for each day is compared to a pre-pandemic baseline for the same day of the week which is the median value for the five-week period from January 3- February 6, 2020. The data used in the index captures an average for the two-week period from April 1-16, 2021 in order to smooth out day-of-the-week fluctuations. The time period used was the latest available at the time of data gathering. Data is at the county level. Markets with a smaller decline in mobility scored higher in the index, since the continuance of visits to local places of business and transit stations was assumed to increase economic activity. One exception is residential, where an increase in the mobility data indicated more people staying at home, and thus the lowest scores were ranked highest for that metric.

Since change in mobility to certain categories of places may indicate how the property types have been impacted, the rankings for grocery and pharmacy and for retail and recreation were added into the overall retail rankings and the workplace data was added into the overall office rankings. We considered including the change in mobility to residential in the overall multifamily rankings but ultimately opted not to since the residential data is not exclusive to multifamily properties.

Sources and Acknowledgments

Atlanta Business Chronicle

Bloomberg

The Brookings Institution

Google COVID-19 Community Mobility Reports

Harvard Business Review

JobsEQ

National Multifamily Housing Council

Newmark Research

Real Capital Analytics

RealPage

STR

U.S. Bureau of Labor Statistics

U.S. Census Bureau

Report Author

Bethany Schneider

Director, Research

Report Editor

Alexander (Sandy) Paul, CRE, LAI

Senior Managing Director of National Research

Report Designer

Sam Willger

Senior Graphic Designer

New York Headquarters

125 Park Ave.
New York, NY 10017
t 212-372-2000

nmrk.com

*National Research Contact:***Alexander (Sandy) Paul,
CRE, LAI**

*Senior Managing Director,
National Research*
Alexander.Paul@nmrk.com

NORTH AMERICA

Canada
United States

LATIN AMERICA

Argentina
Brazil
Chile
Colombia
Costa Rica
Mexico
Peru
Puerto Rico

EUROPE

Austria
Belgium
Czech Republic
France
Germany
Ireland
Italy
Netherlands
Poland
Portugal
Romania
Russia
Spain
Switzerland
United Kingdom

ASIA PACIFIC

Australia
Cambodia
China
India
Indonesia
Japan
Malaysia
New Zealand
Philippines
Singapore
South Korea
Taiwan
Thailand

AFRICA

Botswana
Kenya
Malawi
Nigeria
South Africa
Tanzania
Uganda
Zambia
Zimbabwe

MIDDLE EAST

Saudi Arabia
United Arab Emirates

All information contained in this publication is derived from sources that are deemed to be reliable. However, Newmark has not verified any such information, and the same constitutes the statements and representations only of the source thereof, and not of Newmark. Any recipient of this publication should independently verify such information and all other information that may be material to any decision that recipient may make in response to this publication, and should consult with professionals of the recipient's choice with regard to all aspects of that decision, including its legal, financial and tax aspects and implications. Any recipient of this publication may not, without the prior written approval of Newmark, distribute, disseminate, publish, transmit, copy, broadcast, upload, download or in any other way reproduce this publication or any of the information it contains. This document is intended for informational purposes only and none of the content is intended to advise or otherwise recommend a specific strategy. It is not to be relied upon in any way to predict market movement, investment in securities, transactions, investment strategies or any other matter.

NEWMARK