



The U.S. economy continued its path back to health through the third quarter of 2021. As of the second-quarter estimate of annualized real gross domestic product (GDP), the economy is now 0.9% larger than it was before the onset of the pandemic. The multifamily sector has weathered the storm exceedingly well and is accelerating into the recovery. According to the <u>Real Capital Analytics Commercial Property Price Index</u> for apartment properties, asset valuations are up 14.7% from one year ago, measured through August.

In this report, the research teams at Arbor Realty Trust and Chandan Economics present an analytical framework to develop a cross-market comparison for large multifamily investment. The top 50 U.S. metros¹ are ranked using the Arbor-Chandan Large Multifamily Opportunity Matrix based on a composite of performance metrics. It pays specific attention to how local economies have fared during the pandemic and how well multifamily investment activity has held up. Overall, the Matrix finds Sun Belt markets remain well-positioned for the year ahead, with Las Vegas, Dallas and Miami leading the way.

Key Findings

- Work from home (WFH) resiliency and a recovering tourism industry propelled Las Vegas to the top of the 2021 Arbor-Chandan Large Multifamily Opportunity Matrix.
- Four metros in Florida jumped significantly in the Matrix rankings, reflecting the state's continued strong labor market performance despite pandemic disruptions.
- As a region, the Sun Belt generally ranked well across the Matrix factors measured, despite experiencing higher COVID-19 case counts per capita.



¹ The top 50 metros are based on population estimates. All metros are reported at the Metropolitan Statical Area (MSA) level.



The 2021 Arbor-Chandan Large Multifamily Opportunity Matrix measures eight key categories:

- 1. **Levels of Large Multifamily Investment:** debt financing availability within a market and a market's ability to support additional multifamily investment
- 2. Employment Base: labor market size and growth
- 3. **Labor Market Performance:** current labor market conditions amid the continued pandemic
- 4. Population Growth: overall growth of a metro over the short and medium term
- 5. **Renter Demographics:** spending power and age profile of existing renters (higher household incomes and younger householders assumed as conducive for higher levels of multifamily demand)
- 6. **Renter Migration:** a market's ability to retain existing renters and attract renters from elsewhere
- 7. Work From Home (WFH) Resiliency: a market's degree of WFH adoption
- 8. COVID-19 Risk Assessment: the continued impact of the pandemic on a market



The Opportunity Matrix includes factors a multifamily investor might consider in their market selection process. All eight categories get equal weighting. In categories with more than one variable, each variable receives equal weight. For the full Matrix breakdown, see *Table 1* below.

Table 1 **Arbor-Chandan 2021 Large Multifamily Opportunity Matrix**Source: Arbor Realty Trust and Chandan Economics Analysis of Sources Noted Below

Composite Categories	Variables	Source	Weight
1 M. 1416 '1	Large Multifamily Lending Volume	Chandan Farmania Maraumal 07 2020 C2 2021	6.25%
Large Multifamily Investment	Large Multifamily Lending Volume per Capita	Chandan Economics, Measured Q3 2020 - Q2 2021 U.S. Bureau of Labor Statistics, Through July 2021 U.S. Bureau of Labor Statistics, Through July 2021 U.S. Census Bureau, Measured Through 2020 U.S. Census Bureau 2019 American Community Survey IPUMS Apartment List Q2 2021 Migration Report U.S. Bureau of Economic Analysis Regional Price Parities by Metro Area, Measured Through 2019 Google Mobility Trends, Measured Through August 2021	6.25%
Frankrymant P	Employment Level	LLC Duranu of Labor Chatistics Through July 2023	6.25%
Employment Base	Employment Level (1-Year Change)	0.5. Bureau of Labor Statistics, Inrough July 2021	6.25%
	Unemployment Rate		4.17%
Labor Market Performance	Unemployment Rate (1-Year Change)	U.S. Bureau of Labor Statistics, Through July 2021	4.17%
	Wage Growth (I-Year Change)		
	1-Year Population Growth Rate	U.S. Carrana Burrana Managara d'Thurangh 2020	6.25%
Population	10-Year Population Growth Rate	U.S. Census Bureau, Measured Through 2020	
Demographics	Household Rentership Rate		2.50%
	U35 Household Rentership Rate		2.50%
	Percent Share of Renters U35		2.50%
	Renter Household Income		2.50%
	U35 Renter Household Income		2.50%
Renter Migration	Percent Share of Apartment Searchers from Within Metro Staying		3.13%
	Percent Share of Searchers within a Metro Originating from Elsewhere	U.S. Bureau of Economic Analysis Regional Price	3.13%
	Cost of Living: Rent	Parities by Metro Area, Measured Through 2019	3.13%
	Cost of Living: Prices of Goods		3.13%
Work From Home (WFH) Resiliency*	Google Mobility Trips to the Office: Current Level		4.17%
	Google Mobility Trips to the Office: 1-Year Low	Google Mobility Trends, Measured Through August 2021	4.17%
	Percent Share of Workers that are WFH Due to the Pandemic	U.S. Census Bureau July 2021 Current Population Survey	
	Daily New Cases per 100,000 Residents	Covid Act Now Coalition	6.25%
COVID-19 Risk Assessment*	Single-Dose Vaccination Rate	,	6.25%

^{*}Denotes a special category included due to the ongoing pandemic





Rising to the top of the 2021 rankings is Las Vegas (*Table 2*). The metro leads the pack in several key criteria, including a favorable cost of living, a high share of apartment-searching renters looking to stay in the metro area and a resurgent labor market. The Las Vegas labor market appears to be one of the more WFH-resilient in the country, a partial function of its tourism-centric economy and a high share of workers employed in the leisure and hospitality sector. According to Chandan Economics' analysis of the latest <u>Current Population Survey</u>, the Las Vegas metro had the second-lowest percentage of workers in the country that reported working remotely in the prior month due to the pandemic.

of the 2021 and 2020 MSA composite scores and rankings, see Table 3 in the Appendix at the back of the report.

Table 2

Arbor-Chandan 2021 Large Multifamily Opportunity Matrix: Top 10 Markets

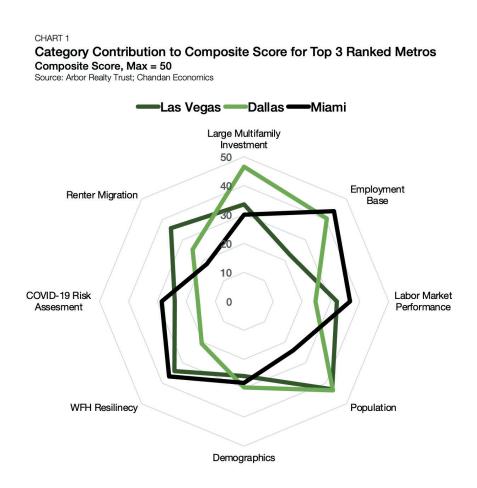
Composite Score, Max = 50

Source: Arbor Realty Trust; Chandan Economics

Metro	Composite Score	2021 Ranking	2020 Ranking	Change
Las Vegas	31.32	1	26	25
Dallas	30.86	2	5	3
Miami	30.79	3	48	45
Tampa	30.63	4	28	24
Orlando	30.49	5	38	33
Jacksonville	30.00	6	23	17
Phoenix	29.95	7	2	-5
Austin	29.95	8	3	-5
Houston	29.81	9	20	11
Atlanta	28.02	10	17	7

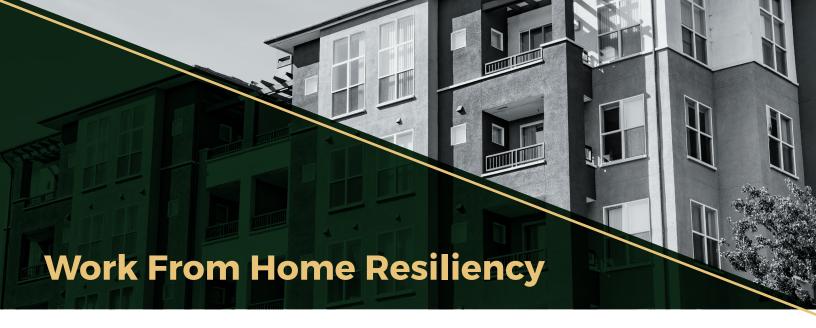


Dallas, after appearing as the fifth-ranked metro in 2020, has returned back to the podium, claiming the No. 2 spot in the 2021 rankings (*Chart 1*). Wages grew 8.7% from a year earlier through July across the Dallas metro area, the second-fastest tally in the nation. According to Apartment List's Q2 2021 Renter Migration Report, no metropolitan area tracked in this report does a better job of retaining its renters than Dallas. A nation-leading 82.2% of the metro's apartment searchers are looking to stay local. Through the year ending in second-quarter 2021, Dallas comes in third and fourth for large multifamily lending volume and large multifamily lending volume per capita, respectively, reflecting the market's size and continued ascent.



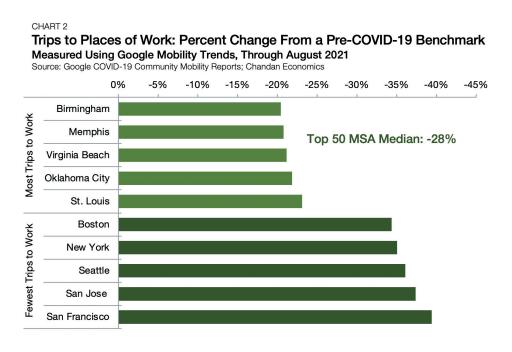
Miami comes in third, with the metro appearing resistant to the de-urbanizing wave of WFH adoption. Miami's pandemic-related share of WFH employees is the 10th lowest in the country. Moreover, Miami posts the fourth-highest <u>vaccination rate</u> and the third most significant drop in its unemployment rate of all metro markets in the sample. Miami's success comes as it continues to attract both firms and workers from the Northeast, offering lower taxes and warmer temperatures. According to the Apartment List report, a whopping 15.7% of inbound searchers are from New York alone — more than three times as high as the next highest inbound-searching metro, Orlando (4.5%). It should come as no surprise that <u>Bloomberg</u> is dubbing the blossoming market as Wall Street South, as more workers are trading the West Village for West Palm.



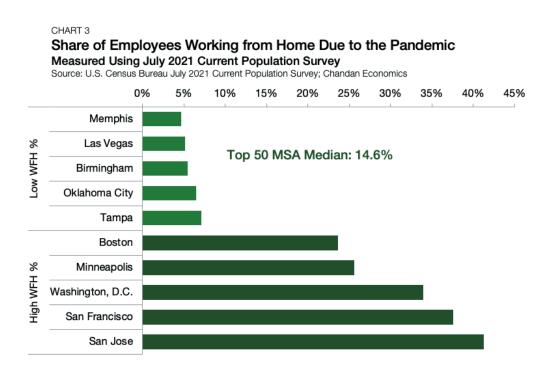


While the long-term impact of WFH adoption is presently unknown, it is a new factor that investors are paying attention to and will continue to watch. Multifamily properties near large central business districts (CBDs) tend to achieve their high rents and tenant demand due to their proximity to the CBDs. These assumptions follow a recent Fitch Ratings paper studying New York and the potential adverse long-term effects of a shift to WFH. The report notes the potential for negative downstream effects for all other commercial property sectors, government revenues and population migration trends.

Measured across the three WFH resiliency variables in the Matrix, secondary Sun Belt metros, especially in the Southeast, are ahead. According to <u>Google Mobility Data</u>, compared to a pre-pandemic baseline, trips to the workplace in Birmingham are only down by 20% through August (*Chart 2*). Memphis and Virginia Beach follow closely behind, with trips to the workplace only down by 21% each. San Francisco and San Jose are at the other end of the spectrum, with trips to work down by 39% and 37%, respectively.



Data trends are similar for the share of workers who report working from home in the past month due to the pandemic. Memphis comes out on top, with just 4.6% of workers reporting they are working from home as a direct result of the pandemic (*Chart 3*). Las Vegas follows next at 5.2%. Again, the tech-centric San Jose and San Francisco markets are at the other end, with 41.2% and 37.5% of workers reporting they worked from home because of the pandemic, respectively.





Chandan Economics considers two criteria as a proxy for forward-looking pandemic risk: single-dose vaccination rates and current case counts per 100,000 people. Together, these two metrics reflect the presence of heightened uncertainty in today's investment environment. While recent COVID-19 trends have had little bearing on market-level success over the past year, the unlikely (though possible) scenario of a worsening pandemic warrants consideration.

We include single-dose vaccination rates assuming that higher vaccination rates will result in less severe public health crises through the current Delta variant wave and potential future waves. Current case counts per 100.000 residents reflect how well public officials have managed the most recent surge, offering a real-time performance gauge and a starting point for future expectations if additional variants are detected.

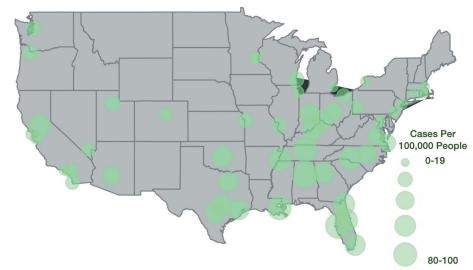
Despite performing exceedingly well in the final rankings, portions of the Sun Belt lag in their recent public health response. Birmingham had the highest level of cases of any major metro in the U.S., confirming an average of 97.2 cases per 100,000 people through early September (Chart 4). Tampa, which sits at fourth in the overall Matrix, follows closely with 92.3 cases per 100,000. On the other end of the spectrum, Baltimore, Hartford and Buffalo lead the charge in effectively limiting the spread of the Delta variant, with caseloads of 16.1, 18.8, and 19.7 per 100,000 people, respectively.

CHART 4

COVID-19 Cases per 100,000 People

Top 50 MSAs, Measured Through Sept. 3, 2021

Source: Covid Act Now Coalition; Center for Disease Control and Prevention; Chandan Economics

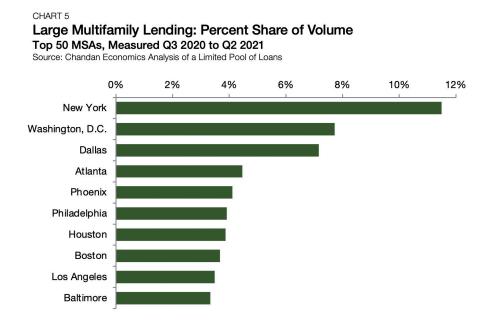




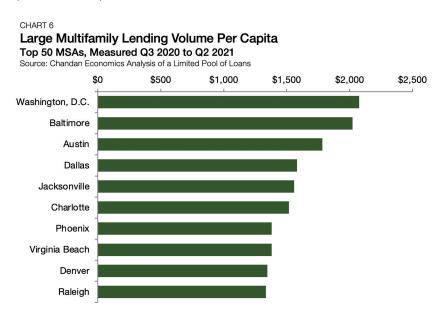


Large multifamily investment across U.S. markets is anything but uniform. Here, we analyze a limited pool of loans originated between the second half of 2020 and the first half of 2021, with original balances above \$15 million and across the top 50 metros. Lending volumes include loans originated for both investment sales and refinancings. They are used here as a proxy for where market-level liquidity and total investment activity have held up amid the coronavirus turbulence.

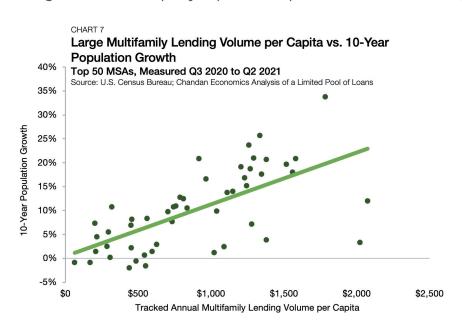
Leading the way and accounting for 11.5% of the sample's total lending volume was New York, the country's largest metropolitan area (Chart 5). The Big Apple's overall size means it will always remain at or near the top of the multifamily investment list when measured in the aggregate. Although New York had a uniquely challenging and downtrodden year compared to its previous performance, it remains the most liquid market in the country. The next closest metro by tracked lending volume, Washington, D.C., accounted for 7.7% of the overall sample.



Next, we look at the most liquid markets relative to existing market size by taking a percapita metric of lending volume. These data adjust for population differences and allow for an 'apples' comparison, meaning that a metro won't just come out ahead because of how big it is. Measuring this way, Washington, D.C claims the top spot, with Chandan Economics tracking \$2,075 of large multifamily lending volume for every MSA resident (*Chart 6*). Baltimore, Austin and Dallas follow next, with annual multifamily lending volumes per capita between \$1,581 and \$2,023.



Taking these data together with population growth figures uncovers an expected albeit meaningful relationship. The sample's large multifamily lending volume per capita is 65% correlated with 10-year population growth totals (*Chart 7*). Broadly speaking, where people are moving, investment dollars tend to follow. These data suggest that while the investment prospects of a market are multifaceted and unique to local factors, how well a market is supporting residential population growth is a simple yet powerful predictor of multifamily demand.



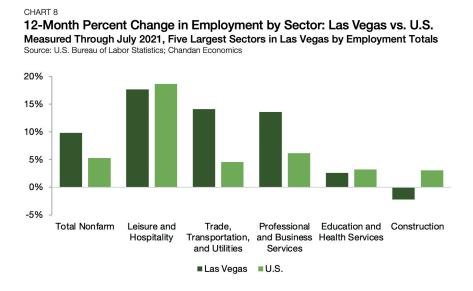




The Las Vegas metropolitan area hit the jackpot, rising to the top of the 2021 Matrix. The Las Vegas labor market and its post-shutdown bounce back are significant reasons for its nation-leading rank.

Total nonfarm employment grew by 9.8% in Las Vegas over the year ending July 2021, significantly higher than the 5.3% observed nationally. The Las Vegas MSA's largest employment sector, leisure and hospitality, bounced back over the year ending July 2021, posting annual job growth totals of 13.6%. While the leisure and hospitality sector grew slightly slower in Las Vegas than the sector's national average (18.7%), leisure and hospitality accounts for a much larger share of Las Vegas employment totals (23.7%) than it does nationally (10.3%).

In addition to leisure and hospitality, the trade, transportation and utilities sector, and the professional and business services sectors, each posted double-digit annual job growth, more than double the sectors' national growth rates. The Las Vegas MSA notched the second-largest drop in its unemployment rate in the year ending July 2021, declining by 10.2%.





At the heart of the Las Vegas economy is, of course, tourism. Visitor traffic to Las Vegas had nearly recovered by July 2021, before receding 9.0% amid the Delta variant surge in August. Despite the recent setback, the return of visitors is a welcome sign for the near-term Las Vegas recovery, and with major conferences now officially back underway, the sector should receive another boost.

At the same time, Las Vegas has done an impressive job in recent years of reducing its reliance on its largest sector. According to a Chandan Economics analysis of U.S. Bureau of Labor Statistics data, between mid-2011 and the onset of the pandemic, the leisure and hospitality share of the Las Vegas workforce gradually declined by 4.4% as other sectors grew more quickly.²

The Las Vegas 1-year and 10-year population growth rates through 2020 were 3.6x and 2.8x higher than the national average, respectively.

Population and demographic trends in the Las Vegas metro are also pointing to sustained growth in multifamily demand. In 2020, the resident population in Las Vegas grew by 1.8% — the fourth-highest growth rate in the country. Further, the Las Vegas population over the 10 years ending in 2020 expanded by an equally impressive 18.7%, the 10th-fastest rate in the sample.

The local rental market in Las Vegas is well-positioned to benefit from an expanding population. According to a Chandan Economics analysis of the latest American Community Survey, the homerentership rate in the Las Vegas MSA sat at 42.7%, the fifth-highest mark in the country. These trends have The Entertainment Capital of the World adding "Relocation Heaven" to its growing list of nicknames, with its proximity to expensive California markets and comparatively affordable rents making it a magnet for transient lifestyle renters.

Altogether, the Las Vegas local market story is one of resiliency, diversification and desirability — all of which support forward-looking multifamily market success. According to <u>Yardi Matrix</u>, rents are up 14.6% from one year ago through the second quarter of 2021. Yardi Matrix also notes in their latest <u>report</u> that apartment supply constraints and strong population growth are pushing occupancy rates to 96.0% in stabilized rentals, indicating continued demand for multifamily.



² Analysis from June 2011 through March 2020. Sector percent share of nonfarm employment fell from 32.3% to 27.9%.



The ongoing pandemic has dominated the market-level investment narrative since mid-2020. However, national and local economies have learned to cope with the pandemic more effectively and its impacts are less disruptive.

Moving into 2022 and beyond, fundamentals of supply and demand along with traditional considerations of labor growth and productivity, residential affordability, and the attractiveness of markets to new businesses and residents, will take center stage. As a result, significant shifts in the Matrix should become less frequent.

As employers call workers back to the office and commute times become relevant once again, the demand for apartments in coastal gateway markets will continue to recover. However, if WFH policies becoming permanent within

companies, these markets would likely be negatively impacted.

Coastal gateway markets' gain, however, does not mean a reversal of the Sun Belt's positive trajectory bolstered by the pandemic. Sun Belt markets will remain attractive and continue to grow due to their relative affordability and appeal to renters with the means and flexibility to relocate. However, the growth rate across these smaller markets will likely return to a more normal pace.



arbor.com



833.842.1195





Table 3
Arbor-Chandan 2021 Opportunity Matrix Market Rankings and Scores
Top 50 Metro Rankings and Scores

Metro	Composite Score	2021 Ranking	2020 Ranking	Change
Las Vegas	31.32	1	26	25
Dallas	30.86	2	5	3
Miami	30.79	3	48	45
Гатра	30.63	4	28	24
Orlando	30.49	5	38	33
acksonville	30.00	6	23	17
Phoenix	29.95	7	2	-5
Austin	29.95	8	<u></u>	-5
louston	29.81	9	20	11
Atlanta	28.02	10	17	7
San Antonio	27.98	11	4	-7
Denver	27.70	12	8	-4
Raleigh	27.34	13	36	23
Seattle	27.28	14	1	-13
lashville	27.00	15	30	15
Boston	26.46	16	35	19
Oklahoma City	26.39	17		30
Portland (OR)	26.29	18	6	-12
Riverside	25.97	19	44	25
Charlotte	25.51	20	33	25 13
	25.47	21		-10
Washington, D.C.				
Chicago	25.25	22	42	20
/irginia Beach	25.24	23	22	-1
os Angeles	25.18	24	45	21
St. Louis	24.95	25	21	-4
Salt Lake City	24.26	26	24	-2
ndianapolis	24.22	27	34	7
Baltimore	23.89	28	7	-21
Cansas City	23.83	29	16	-13
Columbus	23.60	30	10	-20
lew York	23.56	31	25	-6
ian Diego	23.48	32	29	-3
Richmond	22.94	33	40	7
Cleveland	22.88	34	46	12
Philadelphia	22.73	35	13	-22
San Francisco	22.56	36	31	-5
Memphis	22.03	37	39	2
Milwaukee	21.75	38	15	-23
Sacramento	21.55	39	50	11
Providence	21.54	40	32	-8
lew Orleans	20.16	41	N/A	N/A
/linneapolis	20.09	42	9	-33
Cincinnati	20.03	43	12	-31
ouisville	19.92	44	43	-1
Birmingham	19.64	45	49	4
Pittsburgh	19.52	46	27	-19
Detroit	18.75	47	41	-6
Buffalo	17.81	48	N/A	N/A
San Jose	16.80	49	37	-12
Hartford	14.31	50	18	-32

