RESEARCH Q2 2022

National Office Market

Recovery Slows in Second Quarter; Quality-Focused Demand Drives Leasing

The United States office market experienced softening in the second quarter of 2022. Net absorption contracted for the second consecutive quarter, resulting in accelerated vacancy growth. For much of the last two years, office market fundamentals have followed the pace of public health recovery; however, despite the significantly improved conditions and elimination of pandemic-related restrictions, office market recovery momentum slowed.

Net absorption measured negative 12.8 million square feet in the second quarter of 2022, as mid-year net absorption tallied negative 16.1 million square feet. Primary and tertiary markets were most severely impacted by occupancy contraction; however, secondary markets also recorded negative quarterly net absorption for the first time since the first quarter of 2021. The national vacancy rate increased by 122 basis points over the last year to 17.4%. Upward pressure on vacancy can be attributed to occupancy losses and inventory expansion. Quarterly construction deliveries slowed in 2022, yet the total construction pipeline remains relatively strong. About 10.5 million square feet delivered nationally in the second quarter of 2022, and the construction pipeline held steady at 75.8 million square feet. Low demand and increased construction pricing will likely suppress office development activity the near term, thereby reducing vacancy growth attributed to newly-delivered inventory.

Asking rents continue to appreciate, though at a slowing rate. Average asking rents rose 1.9% over the past year, reaching $31.09/SF. Net effective rents have been under consistent downward pressure due to generous concession packages in most major markets aimed at attracting and retaining tenancy.

Current Conditions

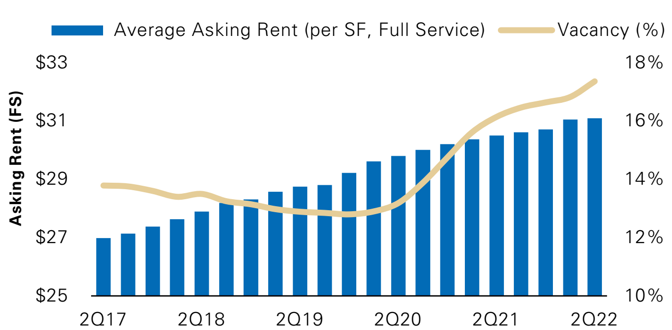
- Second-quarter deliveries added 10.5 million square feet to market inventory and 75.8 million square feet remains under active construction.
- Quarterly net absorption measured negative 12.8 million square feet in the second quarter, a noteworthy contraction following a period of moderating net occupancy. Year-to-date net absorption measures negative 16.1 million square feet.
- Vacancy increased by 122 basis points over the last year, reaching 17.4% in the second quarter.
- Asking rents increased by 1.9% over the last year to $31.09/SF in the second quarter. Though asking rents remain in expansion, effective rents remain under downward pressure in many markets.

Market Summary

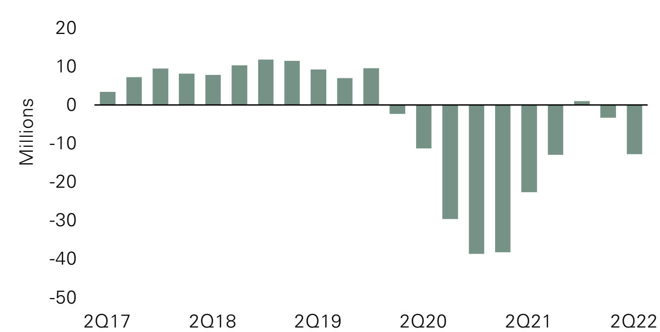
	Current Quarter	Prior Quarter	Year Ago Period	24-Month Forecast
Total Inventory (SF)	5.0 B	5.0 B	4.9 B	↑
Vacancy Rate	17.4%	16.8%	16.1%	↑
Quarterly Net Absorption (SF)	-12.8 M	-3.3 M	-22.7 M	↑
Average Asking Rent/SF	$31.09	$31.05	$30.50	↑
Under Construction (SF)	75.8 M	75.8 M	87.5 M	↓
Deliveries (SF)	10.5 M	10.7 M	12.2 M	↓

Market Analysis

ASKING RENT AND VACANCY RATE



NET ABSORPTION



NEWMARK

Conditions Soften Nationwide but Secondary Markets Exhibit Stronger Fundamentals

Office market recovery slowed into mid-2022, despite improved public health conditions. A variety of factors are contributing to this softening, including general economic headwinds, continued delays in real estate decision making and downsizing among many firms undertaking real estate planning initiatives.

Consistent with the first quarter of 2022, primary and tertiary office markets experienced the most occupancy losses in the quarter, each measuring negative 6.3 million square feet of net absorption. Secondary markets measured net absorption of negative 236,817 square feet in the second quarter of 2022, but on balance, markets in the east and south regions, including Boston, Philadelphia, Atlanta and Miami, recorded modestly positive occupancy. Of the 56 markets tracked by Newmark, 18 recorded positive absorption in the second quarter of 2022, led by Northern New Jersey, San Diego and Charlotte. In a reversal from recent trends, cooling was noted in Seattle and Austin, markets which had otherwise performed well during recovery. Additionally, office markets in the South and West are beginning to show greater susceptibility to occupancy loss, despite relatively strong performance in 2021. The varying rates of recovery over the last year have highlighted the idiosyncratic differences among U.S. office markets and the elevated need for a market-specific perspective when evaluating recovery.

Downward pressure on overall occupancy has resulted in increasing vacancy across most market segments. Primary markets recorded the highest vacancy rate of 19.0%, compared to 17.1% in secondary markets and 15.5% in tertiary markets. Although the national construction cycle is waning, the active construction pipeline is relatively robust and has delivered a total of 39.7 million square feet of new office space in the last year. Flight-to-quality is a significant demand driver, which may continue to encourage development in some markets, despite overall low demand and high construction costs. In the second quarter of 2022, only five markets recorded a construction pipeline in excess of 3% of inventory, including the aforementioned well-performing markets of Austin and Seattle.

Overall asking rents have continued to increase but at a decelerating rate over the last year. Challenging market conditions have slowly applied greater pressure on asking rent growth. Of the 56 markets tracked by Newmark, nine markets recorded asking rent contraction over the last year, but 19 markets recorded asking rent contraction over the last quarter. Overall asking rents are highest on the coasts with San Francisco, Manhattan and Silicon Valley recording asking rates in excess of $50.00/SF.

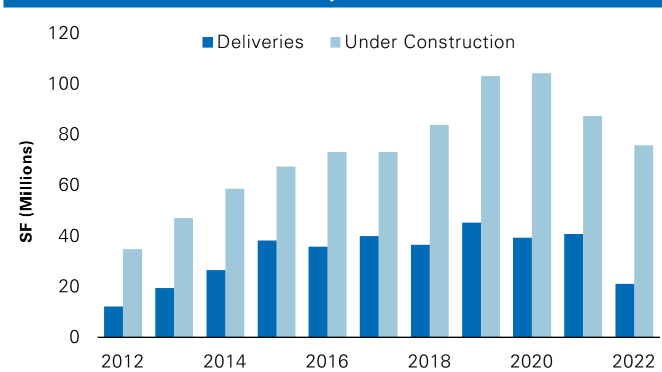
United States Office Market Outlook

Office market fundamentals recorded increased softening in the second quarter of 2022, which underscores the continued unpredictability of the market's recovery following the pandemic. Return-to-office momentum has stabilized in most major markets, a reflection of an extension of remote working arrangements by many firms and perhaps some degree of summer seasonality. Given the traditional summer holiday season, meaningful improvements to return-to-office metrics may not materialize until the fall.

Further complicating the pace of recovery are the current economic conditions. Strong inflation growth, which has been supported by robust consumer spending and disruptions to logistics and energy markets, has caused central banks to increase interest rates to cool the economy. Real estate markets have not been immune to these pricing challenges, which have inflated buildout and construction budgets, as well as elevated borrowing costs for investors. Although the increased cost of goods, services and capital are challenges, some economists are most concerned about the potential for larger recessionary pressures. These concerning indicators are juxtaposed with a healthy labor market and encouraging wage expansion, two indicators not typically found in recessionary markets.

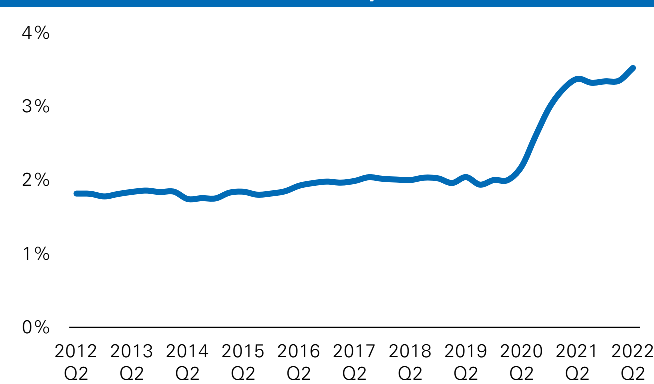
Traditional economic indicators have not been aligned in recent months, causing increased uncertainty and inaction among many firms unsure of long-term planning. Despite headwinds, pent-up demand continues to loosen. But for many office occupiers, remote work arrangements are likely to negatively impact the firms' real estate needs, on balance. This downsizing trend is evidenced by sublease availability, which increased by 8.5 million square feet from the first quarter of 2022. Flight-to-quality remains a significant driver of tenant demand and will support tighter market conditions in top-of-market and well-amenitized assets. Imbalanced supply and demand, particularly in the Class B segment, will be a challenge for owners, as demand is currently concentrated in the highly competitive Class A market. A shrinking construction pipeline will help to slowly mitigate supply-size vacancy growth, but supply is still anticipated to outweigh demand through at least the next year in most major metro areas.

National Construction Pipeline and Deliveries



Note: 2022 data is year-to-date through the second quarter

National Sublease Availability Rate



Notable 2Q 2022 Lease Transactions

Tenant	Building	Market	Type	Square Feet
Takeda Pharmaceuticals	585 Third Street	Cambridge Boston	New Lease	420,000
Takeda Pharmaceuticals, the largest life sciences employer in Massachusetts, signed a 600,000 square-foot lease at Kendall Square's new development, 585 Third Avenue. The project is set to break ground next year, with the 15-year lease commencing upon delivery in 2026.				
InterSystems	1 Congress Street	North Station Boston	New Lease	420,000
InterSystems, a data management and healthcare information systems firm, will be relocating from Cambridge to a new-build trophy office building in Downtown Boston. InterSystems' lease will result in 1 Congress Street reaching a 100% prelease rate ahead of its planned delivery in late 2022.				
GSA - Department of Justice	555 4th Street, NW	East End/Downtown DC Washington	New Lease	331,000
The U.S. Department of Justice (DOJ) will relocate from a full building at 450 5th Street, NW in 2025. This 20-year lease will represent a roughly 31% consolidation from their current size of over 475,000 square feet, which is consistent with the federal government's trend of downsizing.				
ACE Hardware Corporations	2915 Jorie Boulevard	Oak Brook Chicago	New Lease	297,127
ACE Hardware will relocate their headquarters to the entire 297,127 square-foot building at 2915 Jorie Boulevard, the previous McDonald's global headquarters location. Upon lease commencement in 2023, ACE Hardware plans to relocate 1,100 employees to the new headquarters.				
HSBC Bank	66 Hudson Boulevard	Midtown New York	New Lease	263,762
HSBC Bank will relocate their current Midtown headquarters into 263,762 square feet at the Spiral, Tishman Speyer's new Hudson Yards development, in January 2024. Signing a 20-year lease on three full floors, the relocation emphasizes the Manhattan-wide trend of flight-to-quality.				

Notable 2Q 2022 Sales Transactions

Building	Market	Sale Price	Price/SF	Square Feet
Madison Centre 920 5th Avenue	Downtown Seattle	$729,800,000	$959.00	761,000
Boston Properties grew its West Coast portfolio with the acquisition of Madison Centre, a 761,000 SF Class A building in Seattle's CBD. Newmark brokered the sale, which was "…the largest multi-tenant office sale in the nation year to date..." per Kevin Shannon, co-head of U.S. Capital Markets.				
Moffett Green 1275 – 1395 Crossman Avenue	Sunnyvale Northern California	$707,000,000	$983.26	719,037
CommonWealth Partners purchased a 4-property portfolio from Tishman Speyer for a total of $707M. The buildings are located between 1275 and 1395 Crossman Avenue and each measure between 125,000 and 200,000 SF. The seller originally purchased the property in 2021 for $365 million.				
450 Park Avenue	Midtown Manhattan New York	$445,000,000	$1,384.30	321,462
SL Green partnered with two foreign equity investors to acquire the 321,462 SF Class A office tower, noted for its prime location and retail prominence, for $445 million. The building last transacted in 2014, when Oxford Properties and Crown Acquisitions purchased it for $545 million.				
550 Terry A. Francois Boulevard	San Francisco Northern California	$356,000,000	$1,150.62	309,399
DivcoWest acquired the former headquarters of Old Navy and intends on converting the office property into life science and lab space. The building was purchased by The Gap in 2019 and was occupied by Old Navy until late 2021. Old Navy currently operates out of other Gap-occupied space.				
475 5th Avenue	Midtown Manhattan New York	$291,000,000	$1,031.91	282,000
Invesco has sold its interest in 1101 Westlake Avenue North for $151.5 million to San Diego-based life science property owner and developer BioMed Realty. The property is fully leased to Meta. Invesco originally purchased the property for $67.4 million in October of 2015.				

Market Statistics—All Classes (Continued on Next Page)

	Total Inventory (SF)	Under Construction (SF)	2Q 2022 Absorption (SF)	YTD 2022 Absorption (SF)	Overall Vacancy Rate	Average Asking Rent (Price/SF)
National	**4,998,543,574**	**75,808,034**	**-12,760,931**	**-16,102,896**	**17.4%**	**$31.09**
Atlanta	156,070,962	2,540,930	144,937	-399,585	23.1%	$30.10
Austin	76,962,709	7,349,794	150,401	529,557	17.5%	$40.40
Baltimore	82,839,565	747,353	-369,405	-686,756	15.8%	$25.05
Boston	173,685,500	4,536,233	-264,605	242,183	14.4%	$43.46
Broward County, FL	34,469,114	159,756	-233,479	-284,728	15.0%	$34.99
Charleston, SC	55,855,396	473,586	402,595	443,097	19.3%	$33.34
Charlotte	13,841,253	29,985	10,974	102,139	12.1%	$29.59
Chicago	250,808,455	1,440,000	-795,654	-886,223	21.6%	$32.36
Cincinnati	34,060,298	671,591	123,065	-206,818	24.3%	$20.08
Cleveland	37,841,970	343,900	4,570	103,669	17.9%	$18.56
Columbia, SC	16,495,685	0	151,629	151,106	12.7%	$19.33
Columbus	43,713,757	1,245,526	85,044	305,897	15.8%	$21.36
Dallas	271,357,732	1,713,117	-821,716	-831,406	23.9%	$28.50
Delaware	16,753,306	52,000	-161,947	-91,853	18.3%	$26.08
Denver	101,563,124	1,659,433	-625,693	-272,322	22.2%	$25.92
Detroit	79,175,188	263,000	-294,373	-607,162	18.9%	$20.48
Fairfield County, CT	39,563,340	0	-81,478	-248,168	21.5%	$37.03
Fresno	21,841,124	0	59,130	52,324	10.2%	$24.06
Greenville, SC	22,341,722	226,795	118,375	292,525	9.7%	$22.47
Houston	242,782,695	2,281,493	-595,098	485,484	25.1%	$30.23
Indianapolis	61,725,464	187,512	-204,784	-413,277	13.9%	$20.78
Inland Empire, CA	28,162,402	123,000	186,848	178,064	10.8%	$24.78
Jacksonville	32,844,796	142,315	-190,559	-182,097	15.6%	$21.77
Kansas City	74,432,845	319,492	-137,877	-545,858	14.4%	$21.36
Las Vegas	39,291,731	1,146,540	-6,800	323,304	12.0%	$23.85
Long Island	57,443,143	35,700	-127,969	-318,675	10.1%	$27.87
Los Angeles	216,711,265	2,484,505	-348,169	-455,928	19.7%	$44.70
Manhattan	473,449,941	10,289,922	-2,124,950	-3,912,408	11.3%	$76.14

Note: Absorption is the net change in occupied space over a period of time. Data may not match totals in some Newmark metro reports due to different local methodologies. Asking rents are quoted on a full-service basis.

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National	**4,998,543,574**	**75,808,034**	**-12,760,931**	**-16,102,896**	**17.4%**	**$31.09**
Memphis	33,700,481	68,177	-188,192	-69,262	16.9%	$19.76
Miami	49,293,875	2,060,686	-54,222	303,075	14.9%	$44.42
Milwaukee	36,517,080	475,502	-76,850	-187,587	20.0%	$19.31
Minneapolis	121,051,428	359,729	-103,620	-87,602	15.0%	$24.36
Nashville	59,390,687	3,148,657	-254,818	-751,793	14.4%	$29.34
New Jersey Northern	166,087,719	240,350	619,067	532,916	19.8%	$30.21
New Jersey Southern	16,805,320	0	74,587	145,808	18.3%	$18.59
Oakland/Greater East Bay	75,551,858	330,855	-302,939	-615,043	16.8%	$39.49
Oklahoma City	20,888,714	0	103,540	130,178	15.9%	$18.38
Orange County, CA	96,046,894	1,082,436	-21,121	-294,855	16.2%	$33.37
Orlando	65,141,090	347,315	-1,245,890	-1,149,930	9.2%	$24.73
Palm Beach	25,602,273	527,000	-54,252	-9,925	11.7%	$38.90
Philadelphia	109,819,325	1,610,000	-29,803	-248,426	17.4%	$30.76
Phoenix	96,436,055	1,585,980	-117,426	-570,512	19.8%	$27.53
Pittsburgh	57,358,273	926,000	76,703	-50,839	22.1%	$25.79
Portland	61,779,121	559,759	-269,134	-705,902	17.6%	$31.35
Raleigh/Durham	53,645,136	882,089	353,498	749,232	13.6%	$29.43
Sacramento	69,443,241	278,300	-956,501	-1,057,090	13.4%	$25.28
Salt Lake City	73,028,832	1,773,386	-292,115	726,544	13.1%	$24.61
San Antonio	46,801,914	622,006	-205,472	-993,705	16.5%	$24.48
San Diego	72,656,036	4,455,489	549,589	484,883	14.5%	$40.07
San Francisco	88,205,981	445,000	-790,843	-1,335,852	18.4%	$76.77
Seattle	131,204,606	8,300,381	-375,253	534,594	11.1%	$45.65
Silicon Valley	79,240,936	2,045,216	264,525	72,901	15.2%	$60.48
St. Louis	75,018,866	517,000	-211,370	-1,152,229	14.9%	$22.23
Tampa/St. Petersburg	62,296,266	173,000	-2,406,884	-2,242,793	14.1%	$27.99
Washington, DC	373,230,008	2,530,243	-780,953	-534,040	19.3%	$42.06
Westchester County, NY	26,153,936	0	-112,730	-347,137	21.6%	$28.58

Note: Absorption is the net change in occupied space over a period of time. Data may not match totals in some Newmark metro reports due to different local methodologies. Asking rents are quoted on a full-service basis.

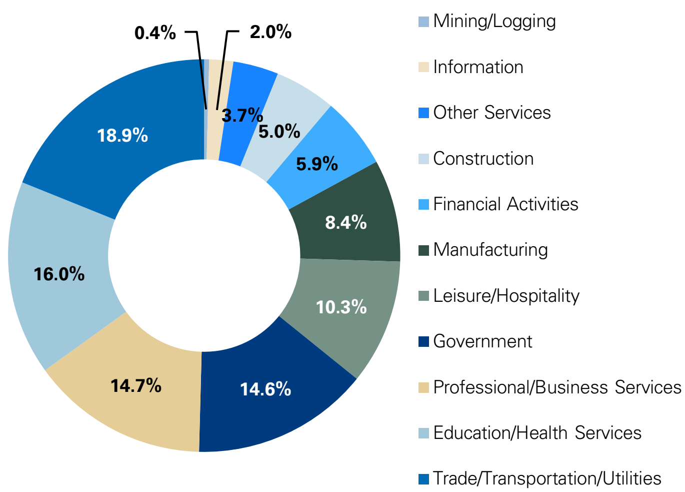
Economic Conditions

United States labor markets have maintained stable growth through mid-2022. For the first time in recovery, nonfarm employment has exceeded March 2020 levels. Total nonfarm employment has grown by 4.3% over the last 12 months, only slightly lower than the 12-month average pace. Job recovery has been more robust in office-using labor sectors, which have recorded 4.8% growth over the last year. Annualized employment growth is modestly accelerating in Information, Financial Activities and Professional and Business Services. Continued labor growth is encouraging for the market's recovery, but it is juxtaposed with fissures elsewhere. Labor force participation rates have contracted 20 basis points between April and June, and the overall unemployment rate has been static at 3.6%.

Annual inflation, as measured by CPI, continues to accelerate through the second quarter of 2022. Total CPI increased to 9.0% in June 2022, but core CPI contracted slightly to 5.9%. The slowing of core CPI highlights some cooling of prices among goods and services outside of energy and food sectors. Still, inflation is elevated, and the Federal Reserve is expected to continue to increase interest rates through the summer to cool the economy. Subsequently, the rising cost of debt has applied greater pressure on real estate investment markets. Instability in other investment markets may steer investors to historically inflation-resistant vehicles, like real estate.

Employment by Industry

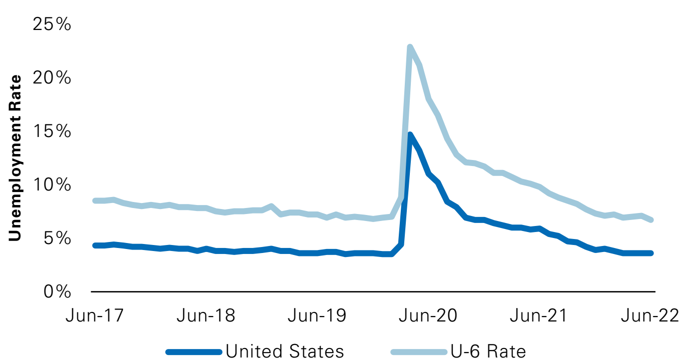
UNITED STATES, 12-MONTH AVERAGE



Source: U.S. Bureau of Labor Statistics, Newmark Research, July 2022

Unemployment Rate

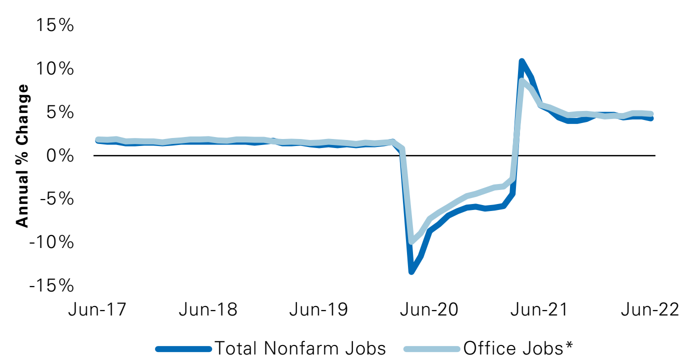
UNITED STATES, SEASONALLY ADJUSTED



Note: U-6 rate includes total unemployed, marginally attached workers, and those working part-time for economic reasons
Source: U.S. Bureau of Labor Statistics, Newmark Research, July 2022

Payroll Employment

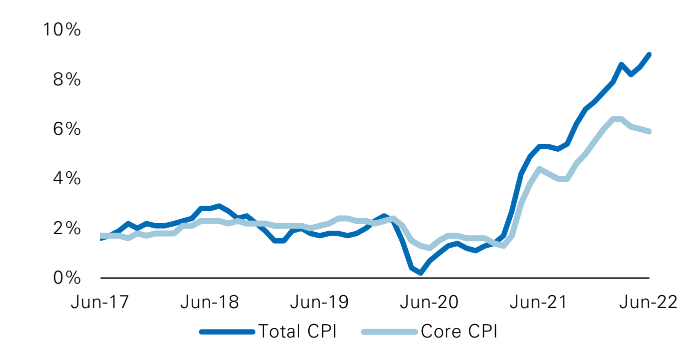
UNITED STATES, 12-MONTH % CHANGE, SEASONALLY ADJUSTED



* Includes Professional/Business Services, Information, Financial Activities, Other Services and Government
Source: U.S. Bureau of Labor Statistics, Newmark Research, July 2022

Consumer Price Index (CPI)

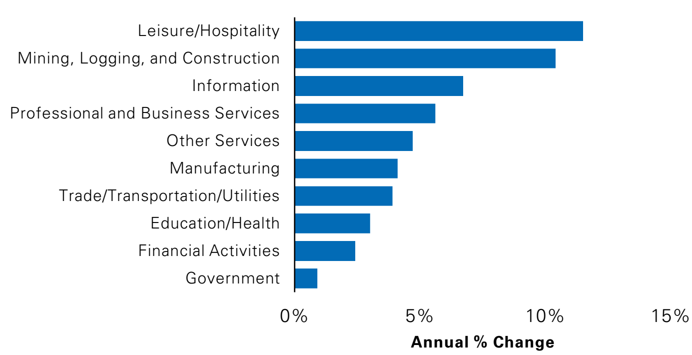
UNITED STATES, 12-MONTH % CHANGE, SEASONALLY ADJUSTED



Note: Core CPI excludes food and energy; Base period = 1982-1982
Source: U.S. Bureau of Labor Statistics, Newmark Research, July 2022

Employment Growth By Industry

U.S., MAR 2022, 12-MONTH % CHANGE, SEASONALLY ADJUSTED



Source: U.S. Bureau of Labor Statistics, Newmark Research, July 2022

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