

Market Close-up: Dallas and Fort Worth

Overview and Economy. With an inventory of 620 million square feet in 22 submarkets, the Dallas-Fort Worth MSA's industrial vacancy rate stood at 6.1% in the second quarter of 2020. This will weaken as new supply comes online and demand softens. Brokerage-reported real (2019 dollars) net asking rents decreased year-over-year by 1.4%, to \$5.04 per square foot per annum through the second quarter of 2020. In comparison, U.S. real net rents slightly increased from \$6.45 per square foot per annum to \$6.58. Expect real rents to fall in 2020 as demand collapses.

With a population of 7.5 million, the MSA has a diversified economic base, including significant employment in trade, transportation, and utilities (21%); education and health services (12%); professional and business services (17%); the government (12%); and financial activities (9%).

The MSA's largest employers include American Airlines (33,000 jobs), Baylor Scott & White Health (24,088), Lockheed Martin (20,500), University of Texas Southwestern Medical Center (18,666), and Medical City Healthcare (17,000). Fortune 500 companies headquartered in the Dallas-Fort Worth MSA include Exxon Mobil, AT&T, American Airlines Group, McKesson, and Southwest Airlines.

Payroll employment in the MSA peaked in February 2020 at nearly 3.9 million but declined to 3.6 million through July 2020 (latest available). Year-over-year payroll employment in the Dallas-Fort Worth metro area decreased by 150,000 jobs (5.1%), with leisure and health services (-75,000) and education and health services (-32,300) experiencing notable declines. This will continue in the near term due to coronavirus uncertainty. The MSA's only sector that saw growth was financial activities, at 3.3% (10,700 jobs gained) year-over-year through July. The trade, transportation, and utilities (779,800 jobs) sector accounted for the largest number of jobs in the region as of July 2020.

In previous issues, we have discussed a covariance analysis that was first published in the *Spring 2007 Wharton Real Estate Review* and regularly updated in this publication. The analysis examines how various economic indicators behave in individual metropolitan areas based on national economic changes. For each MSA, we estimated an equation, which summarizes how a 100-basis point (bp) change in the national variable affects the local indicator. The equation consists of a

constant ("alpha") for each market and a "beta," which is a multiplier applied to the national percent change in employment. The alpha indicates MSA growth that is independent of national growth. If there is no national job growth, then the alpha is the expected annual percentage change in MSA employment. The beta for the U.S. as a whole is defined as one. An MSA with a beta of one registers (on average) an increase of 100 bps in employment growth (plus its alpha) when national employment rises by 100 bps. A beta that is less than one indicates that the MSA does not boom (or bust) around its trend to as great an extent as the national economy, while a beta of greater than one indicates that such an MSA experiences swings of greater magnitude (compared to its trend) than the percentage changes at the national level.

With an employment beta of 1.28, Dallas-Fort Worth reacts 28% more than the nation during both economic downturns and recoveries. The MSA has an alpha of 0.77, indicating 0.77% employment growth when U.S. job growth is zero. The interaction between the alpha and beta results in a breakeven point of -0.60. That is, the MSA tends to experience positive job growth as long as U.S. job growth exceeds -0.6% per year. The MSA's R-squared statistic of 0.86 indicates that the forecasting model for Dallas-Ft. Worth explains future job growth with a very strong 86% "fit."

Applying our beta model for the Dallas-Fort Worth metro area to the Dallas job base, we project that the Dallas-Fort Worth metro area would lose 6.5% of jobs given that the nation lost 6.3% of its job base during the last recession. In fact, Dallas-Fort Worth lost 154,000 (5.1%) of payroll jobs from the beginning of 2008 to the bottom in January of 2010. During the recovery, U.S. employment grew by 17.6% from the bottom through February 2020, while metro area employment increased by 33.2% over the same period, slightly above our predicted 32.4% job growth. Between the April 2020 shutdown low and July 2020, national employment grew by 7.1%, while the Dallas-Fort Worth job base grew by 5.1% over the same period, significantly less than the projected 9%.

The MSA unemployment rate hit a low of 3.2% in February 2020, below the comparable national unemployment rate of 3.5%. Due to the shutdown, the MSA unemployment rate spiked to 13.2% in April 2020, while the official national rate (which understates reality) rose to 14.7% in April. As businesses reopened,

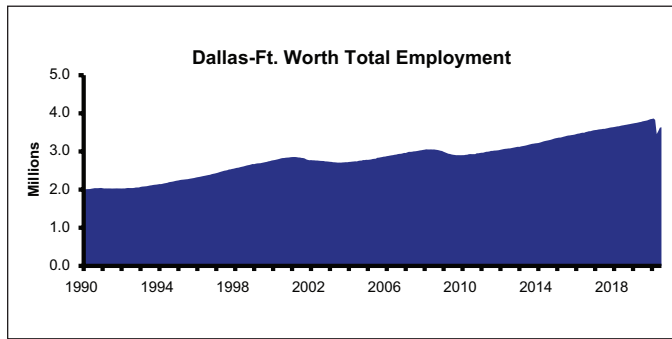


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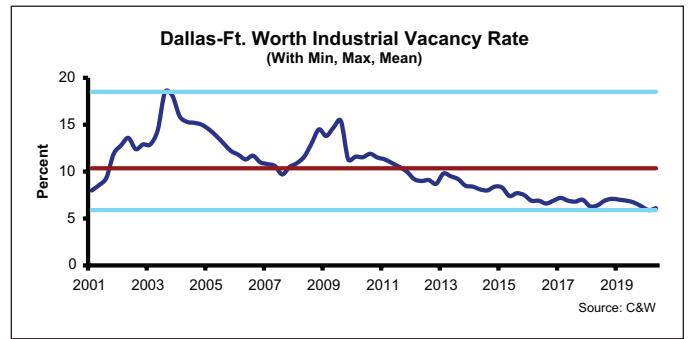


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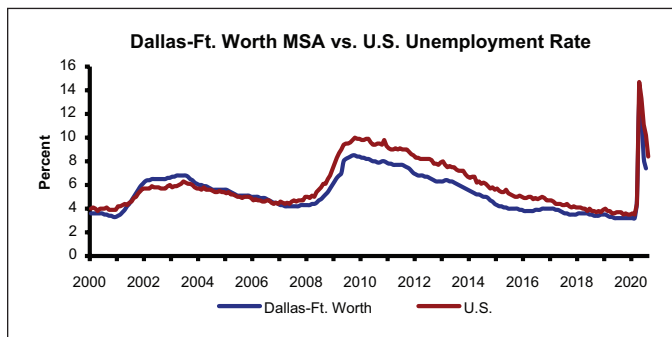


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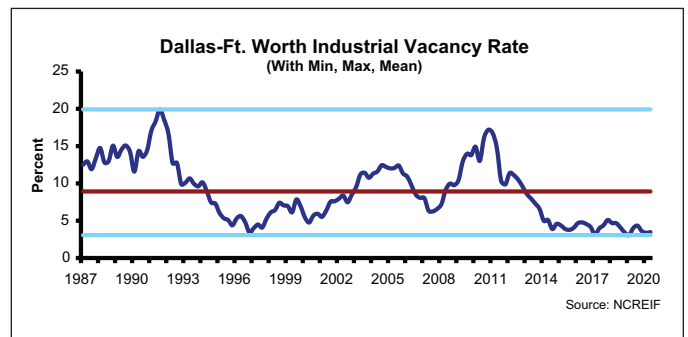


figure 4

the MSA unemployment rate dropped to 7.4% in July (latest available), while the reported U.S. unemployment rate stood at 10.2% in July and 8.4% in August 2020.

Absorption and Vacancy. Industrial net absorption in the second quarter of 2020 was 5.9 million square feet. The East Dallas submarket absorbed over 1.2 million net square feet during the quarter, fully 20% of the MSA’s total net absorption. In contrast, the Pinnacle/Turnpike submarket had negative net absorption of nearly 77,000 square feet in the second quarter.

The metro area vacancy rate decreased by 80 bps during the second quarter of 2020, to 6.1%, from 6.9% a year ago. The MSA’s long-term average (2001-present) industrial vacancy rate is 10.4%, with the highest registering at 18.5% in the third quarter of 2003 and the lowest at 5.9% in the first quarter of 2020. The Alliance submarket had the highest vacancy rate at 14% in the second quarter, while the lowest was in the East Dallas submarket at 0.4%, according to Cushman and Wakefield.

Based on NCREIF data (for institutional quality properties), the metro area vacancy rate decreased during the second quarter to 3.5%, 50 bps lower than a year ago. This figure sits 40 bps above the historical

low of 3.1% and 540 bps below the long-term mean of 8.9%. While the latest NCREIF vacancy rate (3.5%) is lower than the brokerage-reported vacancy rate (6.1%), volatility is slightly higher for the NCREIF data (1.9%) than the brokerage data (1.2%). Volatility is proxied as the difference between the historical peak and low levels, divided by the historical mean.

Rental Rates and Leasing. The largest lease transaction of the second quarter took place in the South Dallas submarket, where Fedex leased 776,630 square feet at 3800 Cedardale Rd. Other notable leases were signed by Mars Petcare (610,806 square feet) in the South Dallas submarket and AmeriPac (401,280 square feet) in the DFW Airport submarket.

NCREIF’s real (2019 dollars) industrial base rent stood at \$4.13 per square foot in the second quarter of 2020, up by 2.5% from \$4.01 a year earlier. The latest NCREIF real rent is 1.4% below the long-term average of \$4.19 per square foot and 28.7% above the recessionary low of \$3.21 per square foot. The current rent is 26.4% below the all-time high of \$5.61 seen in the fourth quarter of 2001. Savills’ reported rents show a different trend over the last five years, with a real average industrial rent in the MSA of \$5.24 per square foot at the end of the

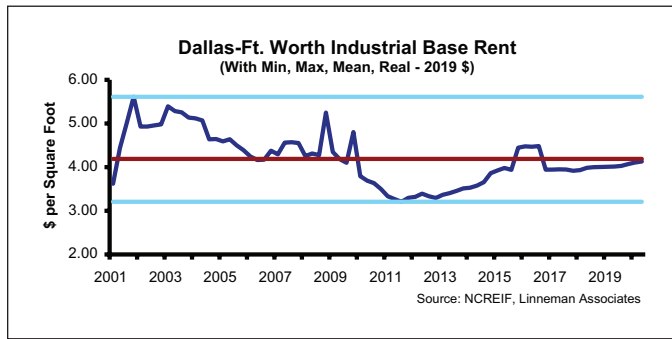


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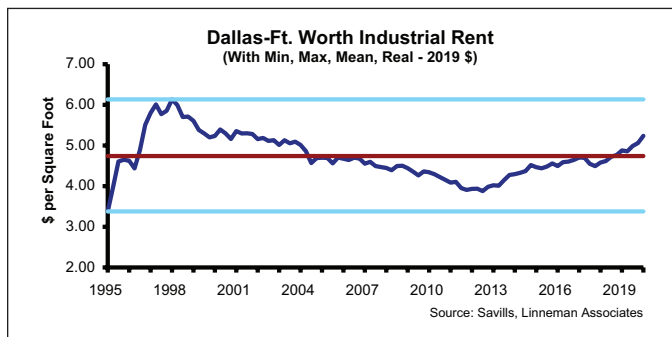


figure 6

second quarter of 2020, up 7.3% for the year. In contrast, Cushman and Wakefield reported that net asking rents decreased year-over-year by 1.4%, to \$5.04 per square foot per annum, through the second quarter of 2020.

Development/Construction Pipeline. In the second quarter of 2020, there were 23.5 million industrial square feet (2.9% of inventory) under construction in the MSA versus 2% of stock under construction nationally. Fifteen of the 22 submarkets had industrial construction activity in the second quarter, according to Cushman and Wakefield. The submarkets with the most active construction pipelines were Alliance, DFW Airport, and South Fort Worth, with almost 7.5 million, 4.9 million, and three million square feet under construction, respectively.

Submarkets

- **Allen McKinney.** This submarket has 10.1 million square feet of inventory and 919,000 square feet of industrial space under construction. In the second quarter of 2020, the vacancy rate stood at 6.2%, while the submarket experienced net absorption of about 72,000 square feet in the second quarter. Overall weighted average annual net rents per square foot were \$8.88.

- **Central Dallas.** The submarket has a total inventory of 14.3 million square feet and no space under construction. The vacancy rate was 2.6%, and the submarket experienced net absorption of about -48,000 square feet.

- **Great Southwest.** This submarket has a total inventory of 1.2 million square feet and 576,000 square feet of industrial space under construction. In the second quarter, net absorption was 2.9 million square feet, resulting in a vacancy rate of 4.5%. Overall weighted average annual net rent per square foot was \$5.38.

- **Redbird.** This submarket has a total inventory of 23.2 million square feet and no industrial space under construction in the second quarter of 2020. The overall vacancy rate was 2.5%, and net absorption was 299,000 square feet in the second quarter. Overall weighted average annual net rent per square foot was \$6.02.

- **East Dallas.** This submarket has an inventory of 11.8 million square feet, with 275,600 million square feet under construction. The MSA had the lowest vacancy rate at 0.4%, with net absorption of 1.2 million square feet in the second quarter. Overall weighted average annual net rent per square foot was \$10.

- **Alliance.** This submarket has a total inventory of 51.4 million square feet, with 7.5 million square feet under construction in the second quarter. The overall vacancy rate stood at 14%, the highest in the MSA, and the submarket experienced net absorption of 1.4 million square feet during the quarter. Overall weighted average annual net rent per square foot was \$3.96.

- **South Fort Worth.** This submarket has a total inventory of 27.9 million square feet, with three million square feet under construction in the second quarter. The overall vacancy rate stood at 4.2%. The submarket also experienced net absorption of 757,000 square feet during the same period. The overall weighted-average annual net rent per square foot was \$4.14.

Investment and Sales. Dallas-Fort Worth industrial's real rolling four-quarter sales volume through the second quarter of 2020 was of \$5.6 billion, a 30.8% increase from \$4.3 billion a year earlier, though down from its all-time high of over \$6 billion from the first quarter of 2020. The latest level is over 2,200% above the \$240.9 million low seen in the first quarter of 2001 and over 150% above the 10-year average of \$2.2 billion.

The MSA's NCREIF cap rate was 5% in the second quarter of 2020, 250 bps below the long-term average

(since 1980) of 7.5%. The industrial cap rate reached a high in the fourth quarter of 1994 at 10.1%.

The second-quarter real rolling average sales price per square foot in the MSA was \$83 (in real 2019 dollars), 5.6% higher than the previous year and comparable to the long-term high of \$84. Current real pricing per square foot is 42.2% higher than the 10-year low seen in the third quarter of 2002 and 28.5% higher than the long-term average.

Opportunities and Challenges. Dallas/Fort Worth International Airport is facing COVID-related setbacks to its expansion project. DFW is one of the busiest

airports in the world and is the largest American Airlines hub. Announced in May 2019 in response to requests from American Airlines, DFW planned to build a sixth terminal which would add 24 gates. Since March, DFW has seen 20,000 to 30,000 customers a day, down from over 200,000 a day in 2019. As a result of the drastic decrease in air travel, the Terminal F project has been postponed indefinitely. In related news, American Airlines has also announced it will be laying off 30,000 employees, many of whom worked within the DFW umbrella. It has also been announced that the U.S. Department of Transportation awarded a grant to DFW of \$14 million with the intention of improving the infrastructure of the airport. It remains to be seen whether this grant will have any impact on the delayed American Airlines project.

Amazon, already the largest occupier of industrial space in North Texas, has announced it will open two new facilities in the MSA. A 200,000 square-foot delivery station is set to open later this year, along with a 1 million square foot fulfillment center opening in 2021. These buildings will supplement existing Amazon distribution centers throughout the region, centered at their regional hub in Fort Worth's Alliance Airport. These new facilities will create a total of 600 full-time jobs.

Online retailer Hello Fresh has announced it will be expanding into the DFW region. The new Irving-based distribution center will be the company's largest to date, at 375,000 square feet, and will include corporate office space, cold storage for products, and shipping facilities. Hello Fresh expects that this state-of-the-art facility will increase the company's total distribution capacity by more than 30% and will bring 1,200 new jobs to the area.

In 2017, the Dallas-Fort Worth metropolitan area was the fifth largest export market in the U.S. (up from ninth in 2016), with merchandise shipments totaling \$58.4 billion, or 11.9% of Texas' export-related GDP. Goods exported from the Dallas-Fort Worth area increased \$32.4 billion since 2003. We predict a significant decline in both imports and exports due to COVID-19. As unprecedented levels of unemployment around the world ease, demand for products will slowly rebound but will take years to achieve pre-COVID levels.

Outlook. The truth is that nobody knows what near-term job growth will be, but we use our best estimates of job recovery nationally and within each

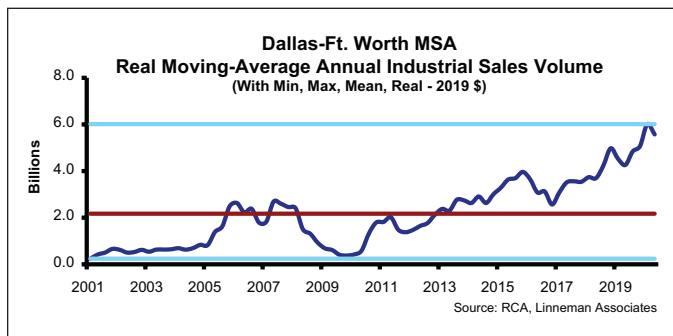


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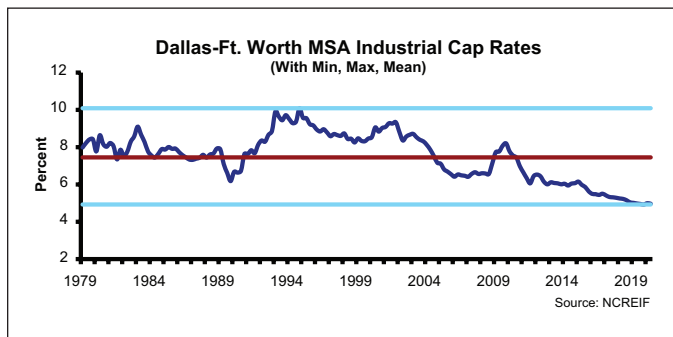


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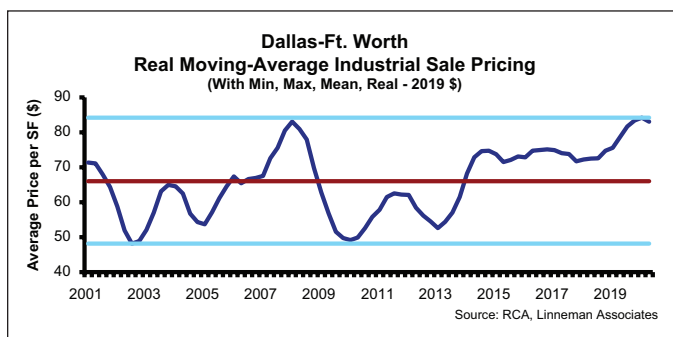


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MSA. Our statistical employment forecasts are net of construction jobs due to the volatility and short-term nature of that sector. We forecast that the Dallas-Ft. Worth MSA will add about 50,000 non-construction jobs per year in 2021-2025. Our projections indicate that a total of 250,000 jobs will be added to the MSA over the next 5 years. We expect that the current vacancy rate of 6.1% will increase to 8.5% by year-end 2020 and then will slowly strengthen as jobs are regained.

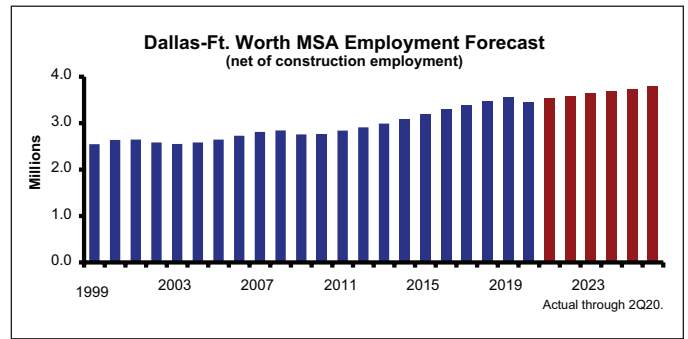


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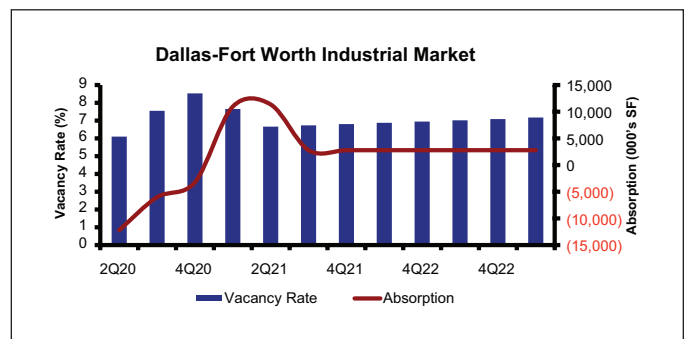


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