Texas Quarterly Apartment Report

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Texas Quarterly Apartment Report:
3rd Quarter 2019

DALLAS FORT WORTH

	OCCUPANCY RATES	ASKING RENTS
OVERALL	92.4% ▲	3.9% ▲
CLASS A	88.4% ▲	3.7% ▲

AUSTIN

	OCCUPANCY RATES	ASKING RENTS
OVERALL	92.3% =	4.7% =
CLASS A	89.4% ▼	4.2% ▼

SAN ANTONIO

	OCCUPANCY RATES	ASKING RENTS
OVERALL	91.3% =	3.9% =
CLASS A	90.3% ▲	3.6% =

HOUSTON

	OCCUPANCY RATES	ASKING RENTS
OVERALL	90.7% =	2.7% ▲
CLASS A	89.8% ▼	2.4% ▲

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Sources: CoStar and the Real Estate Center at Texas A&M University

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About this Report

Real Estate Center economists continuously monitor multiple facets of the global, national, and Texas economies. The *Texas Quarterly Apartment Report* is a summary of important economic indicators that help discern apartment real estate trends in the four major Texas metropolitan areas (Austin, Dallas-Fort Worth, Houston, and San Antonio).

All quarterly measurements are calculated using seasonally adjusted and trend-cycled data, while percentage changes reflect nominal year-over-year estimates, unless stated otherwise. Seasonal adjustment smooths the quarterly fluctuations in the data. Furthermore, graphs are also trend-cycle adjusted, which provides a clearer, less volatile view of upward and downward movements. Both enrich our analysis by producing a more accurate depiction of long-term movements in the data.

This report analyzes effective rents, as opposed to asking rents, to reflect rental concessions. This report uses data from ALN Apartment Data and CoStar. The time series varies by sector and geography, depending on the data available. Sectors with shorter time series limit the interpretation of the data. CoStar makes changes to its historical data series.

This quarterly publication provides data and insights on the Texas apartment real estate markets. We hope you find them useful. Your feedback is always appreciated. Please send comments and suggestions to info@recenter.tamu.edu.

Dr. James Gaines, Dr. Luis Torres, Dr. Harold Hunt, Clare Losey, Trenton Forbes

Texas Economic Overview

Texas' economy remained healthy in the longest U.S. economic expansion on record. Payroll growth slowed, but unemployment rates hovered at historical lows. Average hourly earnings failed to make positive headway after adjusting for inflation; second-quarter real income per capita, however, increased. Retail sales improved, but overall perceptions were tainted by political and trade-related concerns. Energy prices remained low amid record-breaking production and lowered expectations of global demand in 2020. Escalating trade tensions, political uncertainty, and the slowing world economy continue to be the largest headwinds to the current business-cycle expansion. For additional commentary and statistics, see *Outlook for the Texas Economy* at recenter.tamu.edu.

The Texas Residential Construction Cycle (Coincident) Index, which measures current construction activity, ticked up with industry labor market improvements. The Residential Construction Leading Index rose to its highest level since the Great Recession amid falling interest rates and upward-trending building permits and housing starts. The amount of multifamily construction loans increased in 2019, suggesting higher levels of construction in the coming months. The Austin, DFW, Houston, and San Antonio indices pointed toward higher activity. Overall market trends for the majority of Texas areas show positive occupancy rate growth combined with positive rent growth, with only three registering negative rent growth: Midland/Odessa, Bryan-College Station, and Lufkin. With the supply of single-family starter homes being constrained, young adults continue to rent apartments.

Texas' nonfarm employment growth slowed to 2.6 percent seasonally adjusted annualized rate (SAAR) during the third quarter, resulting in only 49,300 jobs added. The deceleration is unsurprising given the 112,000-job gain last quarter (almost double the post-recession average). Nonetheless, the Dallas Fed's annual employment growth projection slowed from 2.3 to 2.1 percent. Overall labor market conditions, however, remained strong. The unemployment rate posted 3.4 percent for the fourth consecutive month. The U.S. economy slowed in 2019, and growth is expected to average about 2.4 percent above its expected growth potential of around 2 percent. The U.S. economy is expected to slow in 2020 but still register positive growth, achieving a growth rate of around 2.1 percent.

Houston and Austin employment growth decelerated in the third quarter, resulting in a net 5,400 and 200 jobs, respectively. Houston's education/health and leisure/hospitality sectors dragged the three months ending in September, contributing to the third-quarter slowdown in overall employment growth compared with double-digit average monthly additions in the

second quarter. Austin's primary detractors were education/health services and mining/logging/construction. Dallas contributed to more than half of Texas' payroll expansion, adding 24,900 new jobs in the third quarter. Much of the growth occurred in the mining/logging/construction and financial activities sectors. The GM strike began after the September employment survey and did not affect 3Q2019 numbers. San Antonio was the runner-up in terms of number of jobs created, expanding employment by 10,500. Hiring in education/health services accelerated, while leisure/hospitality recovered second-quarter losses. The same industries contributed to a gain of 3,700 positions in Fort Worth, offsetting contractions in retail trade and transportation/utilities. For additional commentary and statistics, see *Outlook for the Texas Economy* at recenter.tamu.edu.

Overall Apartment Sector Forecast

Table 1. Overall Apartment Forecasted Vacancy Rates, Effective Rents

MSA	Natural Apartment Vacancy Rate	Vacancy Rates (%)				Effective Rent Growth (y-o-y %)		
		2018	2019	2020		2018	2019	2020
Austin	8.3	8.1	7.7	7.6		3.3	4.3	3.8
DFW	8.5	8.1	7.9	7.7		3.0	3.5	4.6
Houston	9.2	9.7	9.3	9.5		3.7	1.9	2.0
San Antonio	8.5	9.3	8.9	8.6		3.1	3.5	3.4

Note: Annual numbers are the four-quarter average of the seasonally adjusted data. The rent growth is nominal, estimated from the previous year's average.
Source: Real Estate Center at Texas A&M University

Austin (See Figures 5 - 8):

Since 2013, actual vacancy has generally trended upward while remaining below natural vacancy (8.3 percent); 3Q2017-1Q2018 were an exception to this trend, with actual vacancy rising above the natural vacancy. Actual vacancy continued to trend slightly upward through 2019. Net absorption hit a record number of units in 2Q2018 and has since decreased. The Metropolitan Statistical Area (MSA) demand for overall apartment units is showing signs of slowing as vacancies inch upward and net absorption falls. However, actual vacancy is expected to remain below the natural vacancy, averaging 7.7 percent for 2019 and 7.6 percent for 2020. Rent growth increased from 4Q2017-1Q2019 in response to the increased demand. It then flattened over 2019 to around 4.7 percent. Due to decreasing net absorption and increasing vacancies, rent growth is forecasted to decrease over 2019 and 2020, averaging 4.3 percent and 3.8 percent, respectively.

Austin's robust economy and increased demand for housing (population growth) have driven an increasing trend of construction starts (value of construction project starts) and units under construction since 2011. Construction starts have skyrocketed in all three quarters of 2019. Deliveries have declined over the past two quarters. However, they should begin to increase in the near term as units under construction remain high. High levels of units delivered in recent years have contributed to the high vacancies. As construction projects are delivered in the near future, Austin may experience more modest rent growth along with declining net absorption.

Dallas-Fort Worth (See Figures 9 - 12):

Between 2016 and 2018 actual vacancy increased to just under the natural vacancy (8.5 percent), remaining just above 8.0 percent. Vacancy since declined to under 8.0 percent through 2019. Actual vacancy is expected to continue this trend, averaging 7.9 percent in 2019 and 7.7 percent in 2020. Net absorption trended upward from essentially zero units during the Great Recession. Demand for overall apartment units in the MSA remains strong. Rent growth dampened after peaking in 3Q2015 at 8.7 percent. However, as actual vacancies trended downward, effective rent growth began to increase in 3Q2018, approaching 4.0 percent. Rent growth is forecasted at 3.5 and 4.6 percent for 2019 and 2020, respectively.

Construction starts posted two large spikes in recent years, once in early 2016 and again in mid-2018. Since the mid-2018 rise, construction starts have trended downward. Units under construction have increased since 2011. The rise in vacancy between 2016 and 2018 is, in part, explained by the large number of units being delivered from 2Q2016 to 1Q2019. However, deliveries have declined over the previous two quarters of 2019. With demand holding strong in the MSA, developers may begin to consider new projects.

Houston (See Figures 13 - 16):

Following the oil downturn that began in 2014, Houston's overall apartment market slowed drastically. Actual vacancy increased from the downturn through mid-2017 and has remained above the natural vacancy (9.2 percent) since 2Q2016. Net absorption has fluctuated since the oil downturn while still remaining positive. More recently, net absorption has declined over 2019. Actual vacancy is projected to remain above the natural vacancy, increasing slightly and averaging 9.3 percent and 9.5 percent in 2019 and 2020, respectively. Rent growth began to plummet in mid-2015 in response to increasing vacancies, reaching negative rates from 3Q2016-2Q2017. After rising and falling since 2017, rent growth has increased through all three quarters of 2019. Rent growth is expected to average 1.9 percent in 2019 and 2.0 percent in 2020.

Construction starts reached a record peak in 2Q2015 before decreasing drastically in response to weakening demand in the aftermath of the oil downturn. Construction starts increased again in mid-2018 and, despite vacancy rates never recovering, have trended upward through 2019. After peaking in 2015, units under construction declined and bottomed out in 4Q2017, increasing ever since. Deliveries declined from 2016 to 2017 and increased modestly in 2019. Low levels of deliveries have helped keep net absorptions relatively high.

San Antonio (See Figures 17 - 20):

Actual vacancy has exceeded natural vacancy (8.5 percent) for 12 consecutive quarters (since 4Q2016) while decreasing for the past seven quarters. Net absorption remained strong since 2011, reaching a post-recessionary high in 2Q2018 and declining ever since. Anticipated actual

vacancy should average 8.9 and 8.6 percent in 2019 and 2020, respectively. Demand for overall apartments in the MSA remains rather modest. However, declining vacancies provide some optimism for strengthening demand. In response to actual vacancy, rent growth declined in 2016 but remained positive. Rent growth has since rebounded and is forecasted to average 3.5 percent and 3.4 percent in 2019 and 2020, respectively.

Despite relatively robust construction starts, units under construction have generally declined over the past several years. Deliveries have drastically declined since late 2017 and are expected to continue this trend should units under construction continue to weaken. This has helped facilitate positive net absorption and, in part, accounts for the forecasted rent growth.

Class A Apartment Sector Forecast

Table 2. Class A Apartment Forecasted Vacancy Rates, Effective Rents

| | | Vacancy Rates (%) | | | | Effective Rent Growth (y-o-y %) | | |
MSA	Natural Apartment Vacancy Rate	2018	2019	2020		2018	2019	2020
Austin	9.0	11.2	10.2	10.6		2.9	4.0	4.2
DFW	9.1	13.3	12.3	12.0		1.3	2.4	3.0
Houston	9.7	11.1	9.8	10.7		2.9	1.4	3.0
San Antonio	10.0	11.9	10.3	10.0		1.8	3.0	3.5

Note: Annual numbers are the four-quarter average of the seasonally adjusted data. The rent growth is nominal, estimated from the previous year's average.
Source: Real Estate Center at Texas A&M University

Austin (See Figures 21 - 24):

Actual vacancy measured above natural vacancy (9.0 percent) for 18 consecutive quarters, likely, in part, to the recent increase in deliveries. Net absorption has increased significantly. It has remained high since the end of the Great Recession, reaching a record peak in late 2018. Net absorption has declined since 4Q2018. The demand for Class A apartments is weakening similar to the overall apartment market in Austin, only more volatile. Actual vacancy is projected to average 10.2 percent and 10.6 percent in 2019 and 2020, respectively. In late 2017 effective rent growth approached zero as actual vacancy increased but has since rebounded to over 4.0 percent. Despite weakening demand, rent growth is expected to post solid results in 2019 and 2020 (an average of 4.0 and 4.2 percent, respectively).

Units under construction have remained above pre-recessionary levels since 2013. High construction start values suggest that units under construction should remain robust. Deliveries have continued to decline since late 2017. However, the high volume of units under construction suggests deliveries should begin to increase near term. Continued construction by developers in the wake of high vacancies is bolstered by strong rents and population growth in the MSA.

Dallas-Fort Worth (See Figures 25 - 28):

Actual vacancy has surpassed natural vacancy (9.1 percent) for the past 14 consecutive quarters. Vacancies declined in all three quarters of 2019, suggesting demand for Class A units

is strengthening in DFW. Net absorption remains strong and has increased since 2011. Based on forecasts, actual vacancy is expected to average 12.3 and 12.0 percent in 2019 and 2020, respectively. With the large divergence between actual and natural vacancy, rent growth declined to nearly 1.0 percent from 2016 to mid-2018. Rent growth increased recently with declining vacancies and is expected to average 2.4 percent in 2019 and 3.0 percent in 2020.

Generally increasing since the end of the Great Recession, construction starts had two large spikes in recent years, once in early 2016 and the other in mid-2018. Since the mid-2018 rise, construction starts have trended downward, yet have remained above post recessionary values. Units under construction have generally increased since 2010. Deliveries followed suit and, in part, explain the rise in vacancy between 2016 and 2018. However, deliveries have declined over the previous two quarters of 2019, facilitating decreasing actual vacancy.

Houston (See Figures 29 - 32):

Houston's Class A apartment market struggled in the wake of the oil downturn that began in 2014; 1Q2019 marked the first time for 17 consecutive quarters (4Q2014-4Q2018) that actual vacancy dropped below natural vacancy (9.7 percent). Both 2Q2019 and 3Q2019 actual vacancies were slightly above natural vacancy. Net absorption has declined since a record peak in 2Q2017. A recent decline in vacancies provides some optimism for the demand for Class A units in the MSA. However, relatively high actual vacancy coupled with declining net absorption suggests demand is weak. Actual vacancy is forecasted to increase in the future, averaging 9.8 percent and 10.7 percent in 2019 and 2020, respectively. Rent growth declined considerably in the wake of the oil downturn, falling to nearly -6.0 percent in 4Q2016 before subsequently climbing and falling again. The decline in actual vacancy has bolstered increasing rent growth in the previous two quarters (2Q2019 and 3Q2019) and is anticipated to average 1.4 and 3.0 percent in 2019 and 2020, respectively.

Construction starts peaked in 2Q2015 then decreased drastically in response to the weakening demand in the aftermath of the oil downturn. They increased again in mid-2018 and have trended upward through 2019. However, new development may stall if net absorption continues to decline and actual vacancy increases in the future. Units under construction have increased since 2017. Deliveries declined from 2016 to 2017 and increased modestly in 2019. Still, low levels of deliveries have not kept net absorption from decreasing.

San Antonio (See Figures 33 - 36):

Actual vacancy remained above the natural vacancy (10.0 percent) for the past 17 quarters and have decreased for the past six quarters (2Q2018-3Q2019). In the past two quarters, actual vacancy registered right at the natural vacancy. After increasing since 2011 and reaching a record peak, net absorption has steeply declined since 2Q2018. Vacancy is expected to continue to hover around the natural vacancy, averaging 10.3 and 10.0 percent in 2019 and

2020, respectively. Rent growth has climbed since mid-2018 due to declining vacancy rates. Rent growth is expected to continue to climb, averaging 3.0 in 2019 and 3.5 percent in 2020.

Construction starts have moderately trended downward since mid-2015, suggesting that units under construction will continue to decline as they have since 2017. However, units under construction did increase in 2Q2019 and 3Q2019. Deliveries have significantly decreased since 2018, but this has not promoted strong net absorption. This further suggests demand for Class A units in San Antonio is weakening.

Figure 1. Texas Residential Construction Index
(Index Oct 1990 = 100)
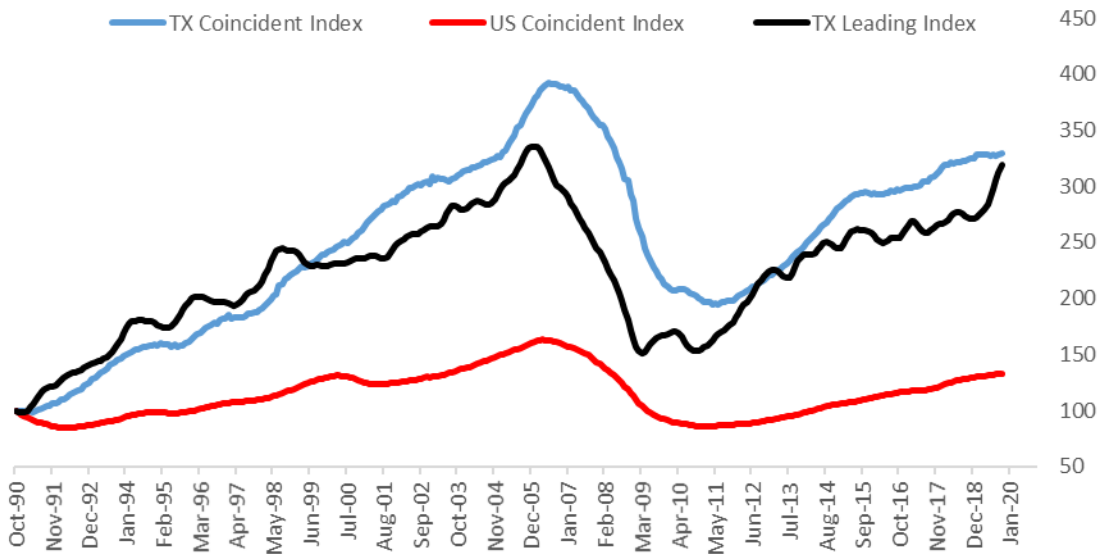
Source: Real Estate Center at Texas A&M University

Figure 2. Major MSAs' Residential Construction Leading Index
(Index Jan 1984 = 100)
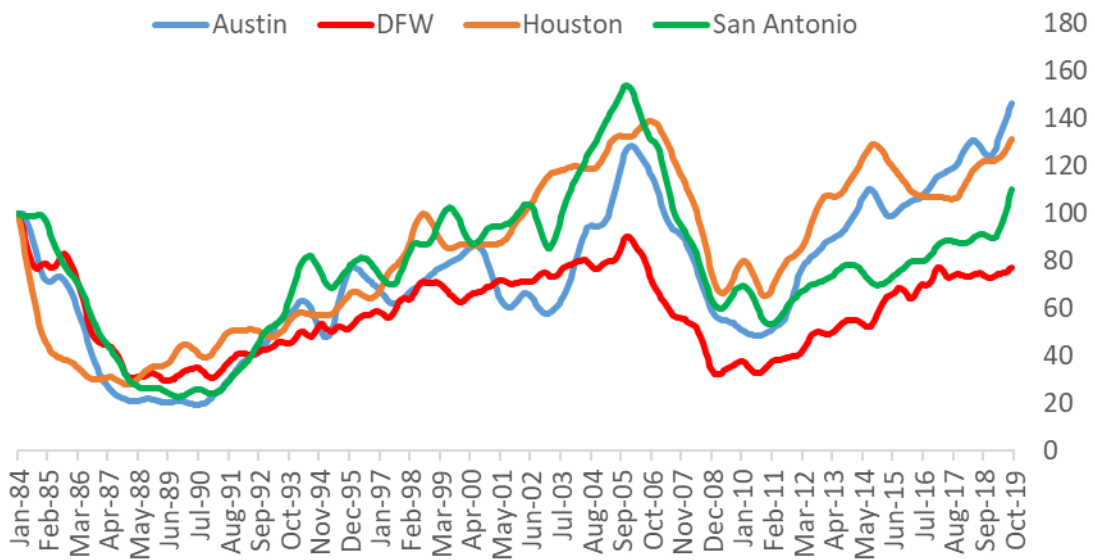
Source: Real Estate Center at Texas A&M University

Figure 3. Overall Apartment Market Percent Changes in Effective Rent and Occupancy

Y-O-Y Pct. Chg. in Effective Rent vs Occupancy Change
(Overall Market September, 2018 to September, 2019)
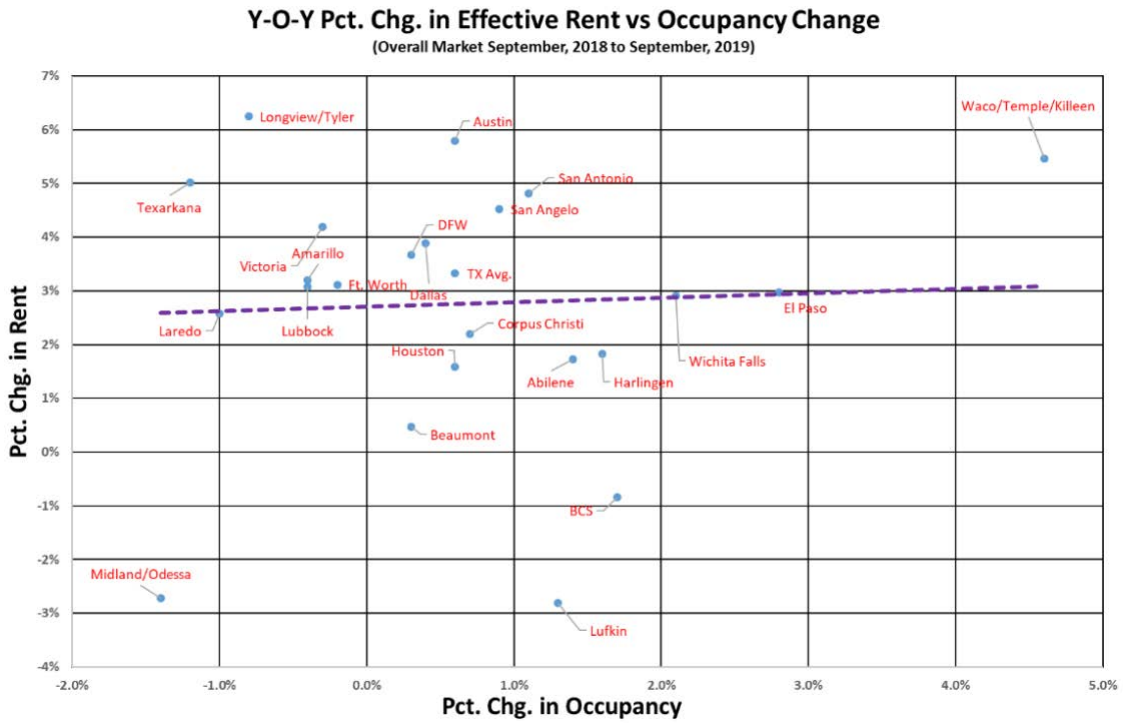
Sources: ALN Apartment Data and Real Estate Center at Texas A&M University

Figure 4. Real Multifamily Domestic Loans
(Index 1992Q4=100)

Multifamily Domestic Loans
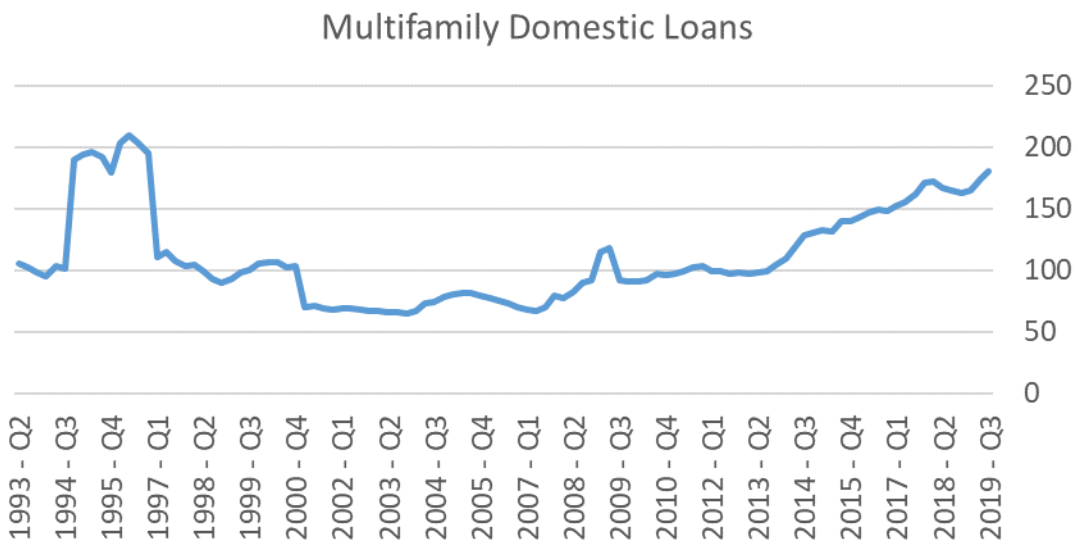
Note: Seasonally Adjusted and inflation adjusted.
Source: Federal Deport Insurance

OCCUPANCY RATE	EFFECTIVE RENT GROWTH (PER UNIT)	NET ABSORPTION (UNITS)	CONSTRUCTION STARTS
92.3%	4.7%	▼ 995	▲

Sources: CoStar and the Real Estate Center at Texas A&M University
Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

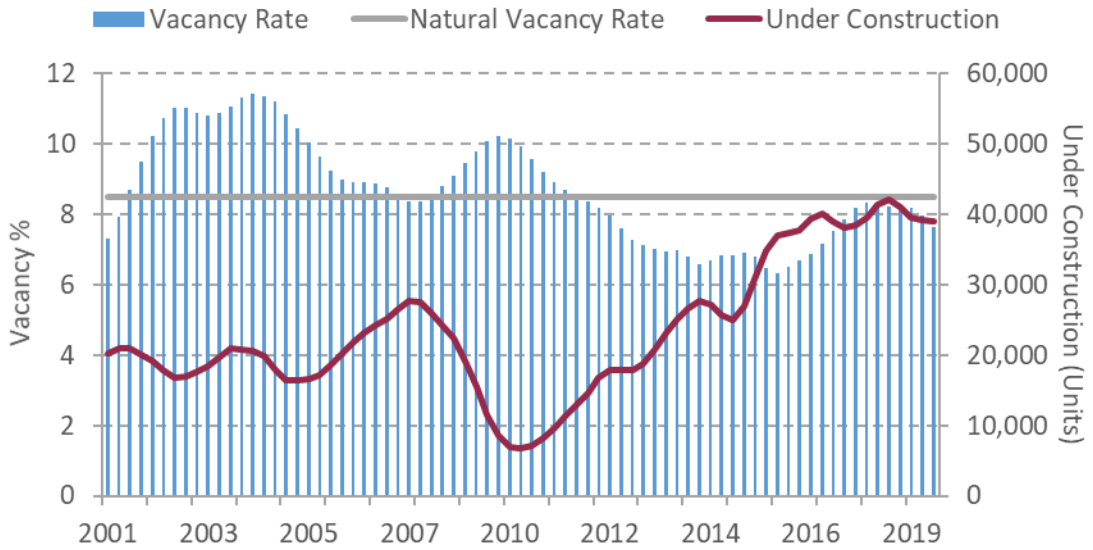### Figure 5. Austin Overall Vacancy and Effective Rent Growth
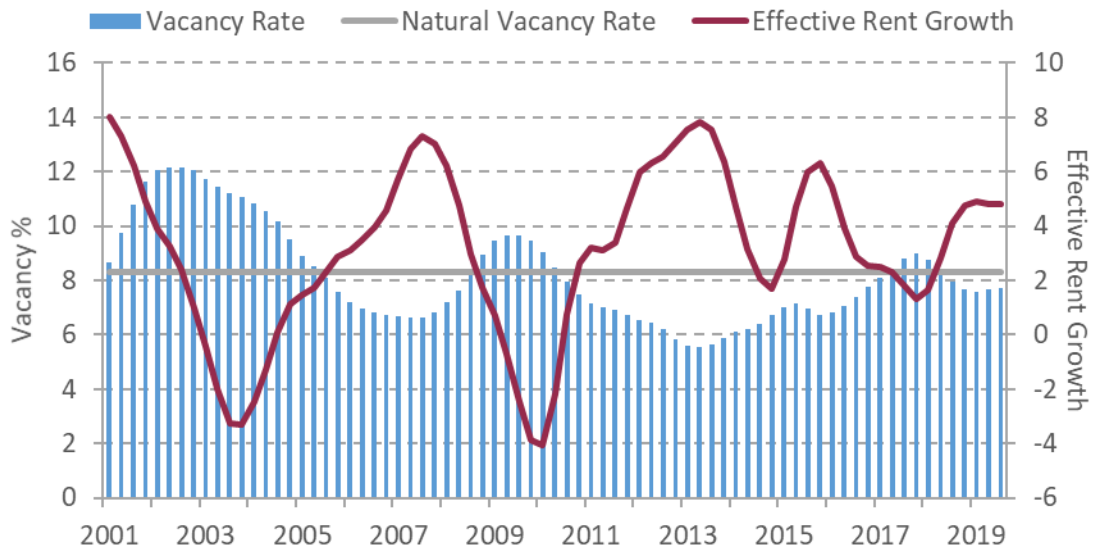
Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 6. Austin Overall Net Absorption and Construction Starts Index
(Index 2000 Q1 = 100)
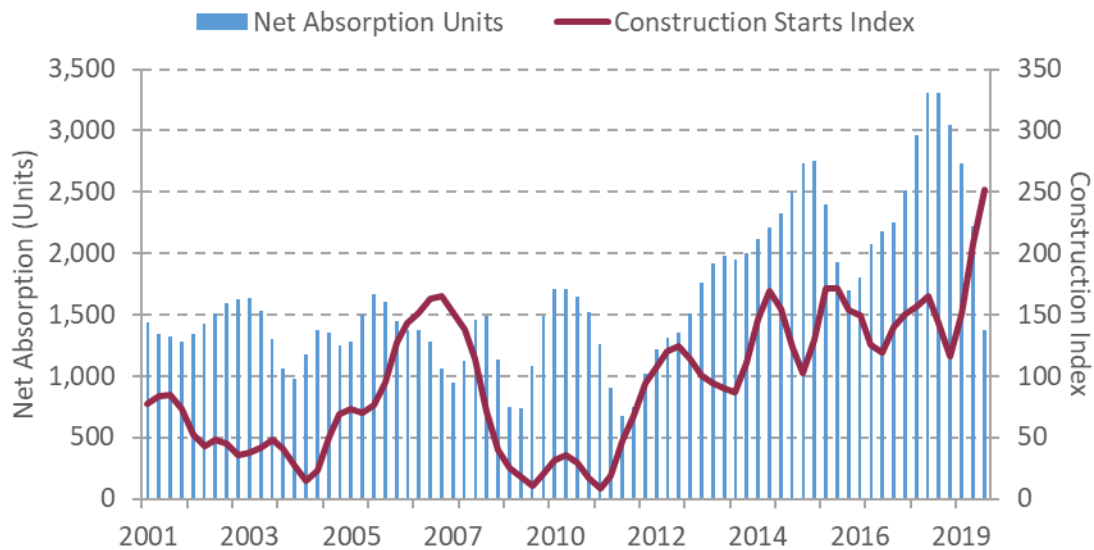
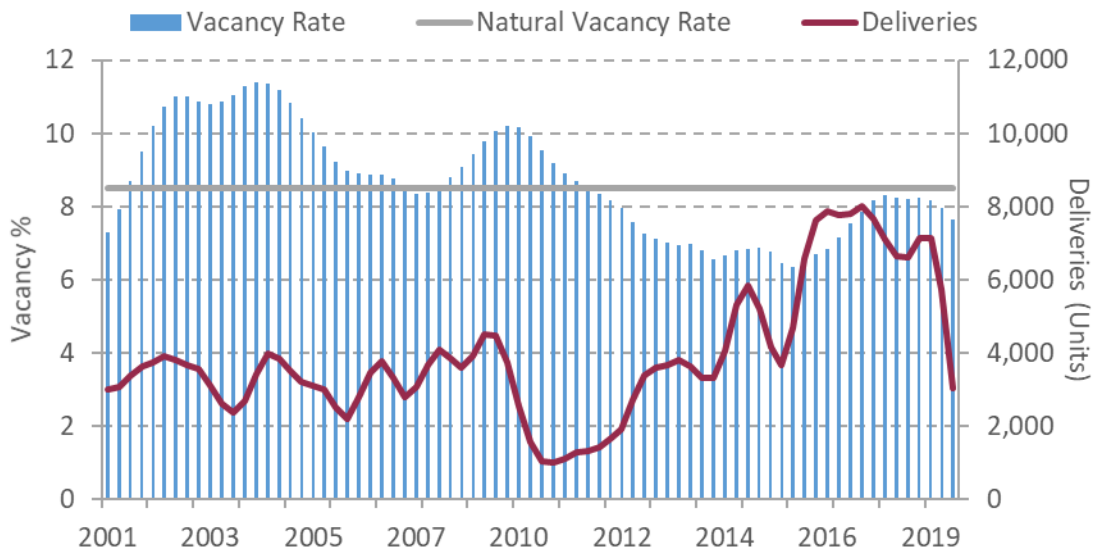Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

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Figure 7. Austin Overall Vacancy and Units Under Construction
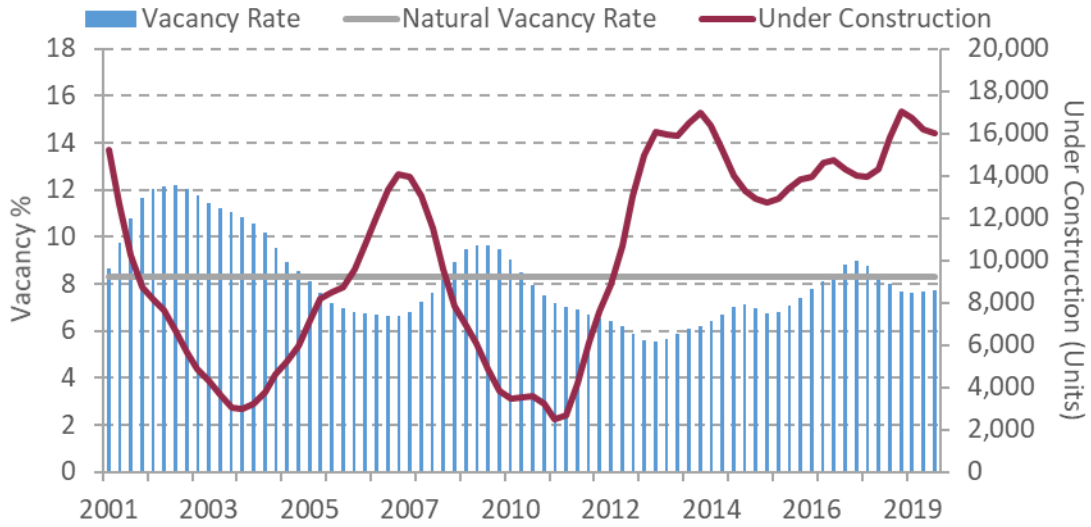
Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University
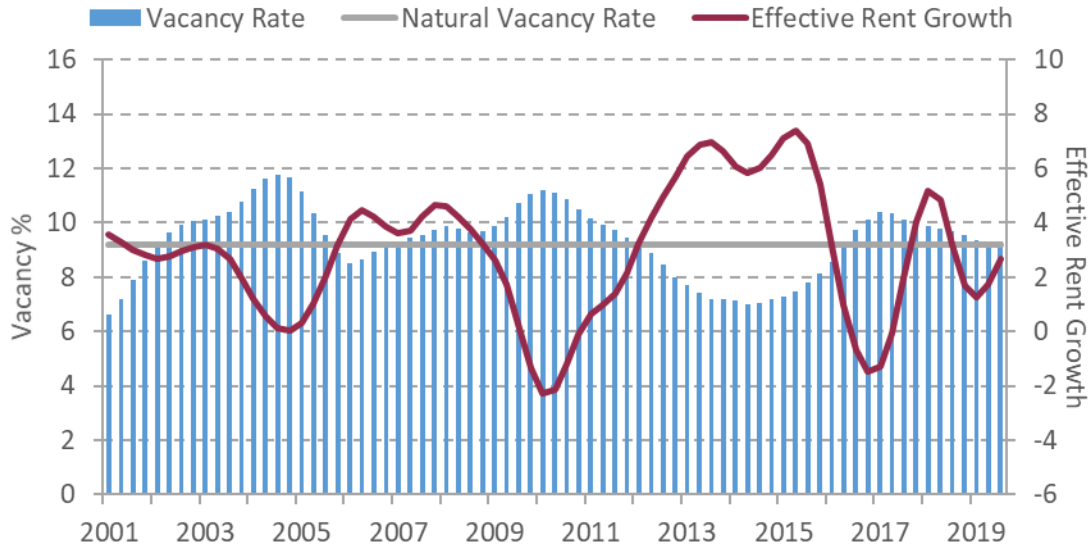
Figure 8. Austin Overall Vacancy and Deliveries in Units
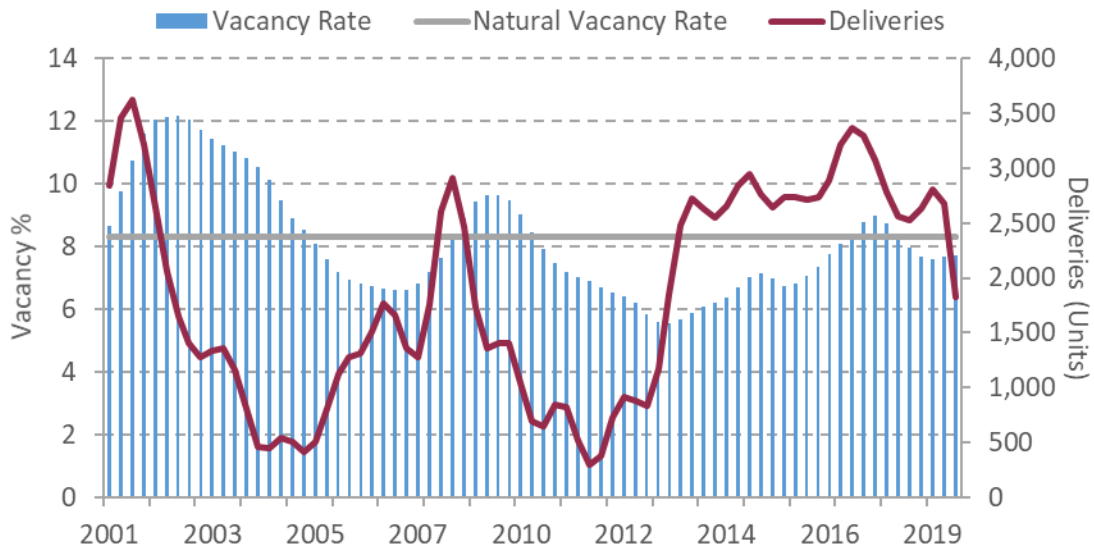
Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Dallas-Fort Worth Overall

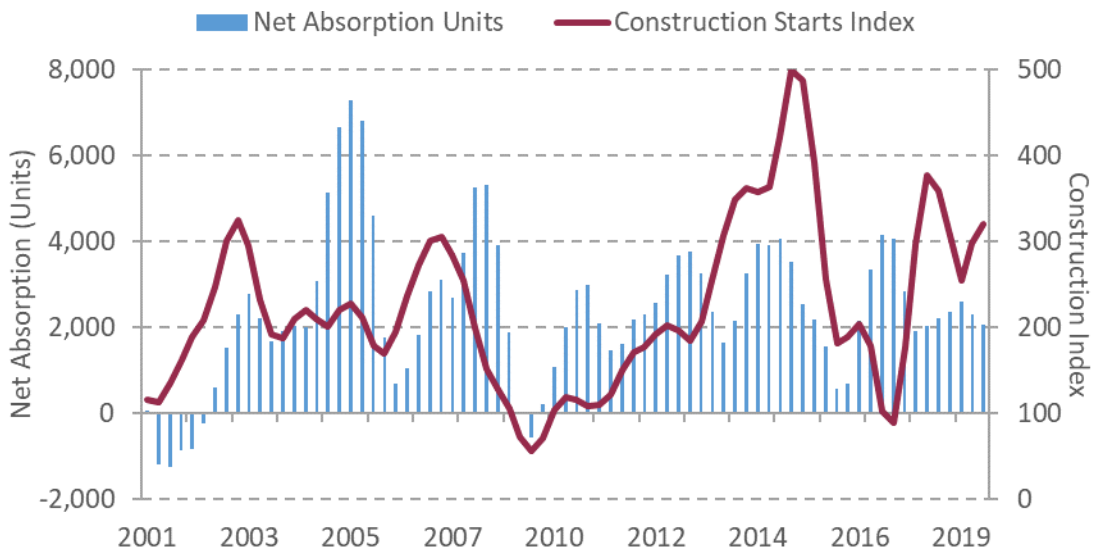| OCCUPANCY RATE	EFFECTIVE RENT GROWTH (PER UNIT)	NET ABSORPTION (UNITS)	CONSTRUCTION STARTS
▲ 92.4%	▲ 3.9%	▼ 6,028	▲

Sources: CoStar and the Real Estate Center at Texas A&M University
Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

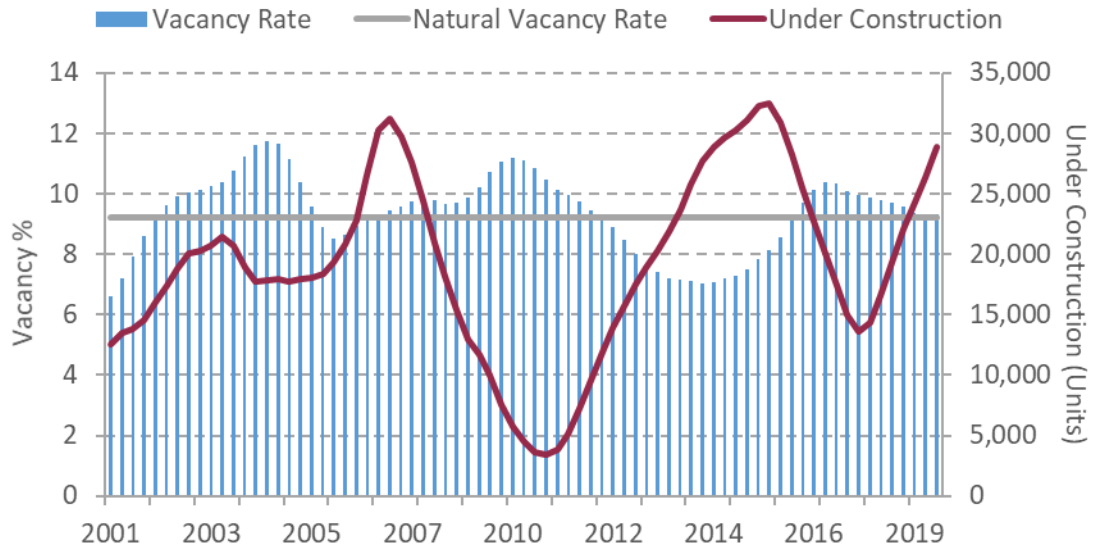## Figure 9. DFW Overall Vacancy and Effective Rent Growth
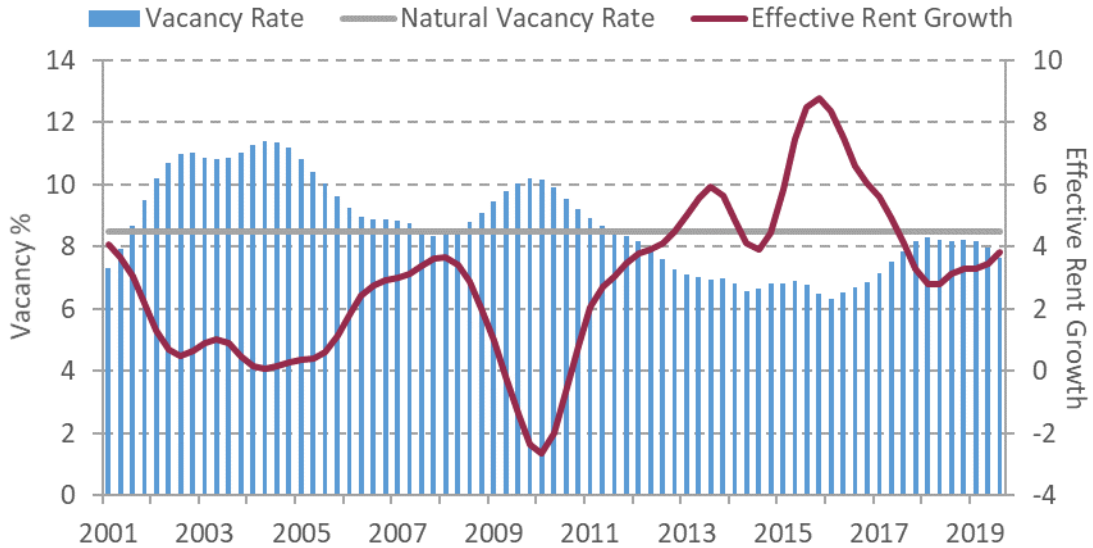
Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 10. DFW Overall Net Absorption and Construction Starts Index
(Index 2000 Q1 = 100)
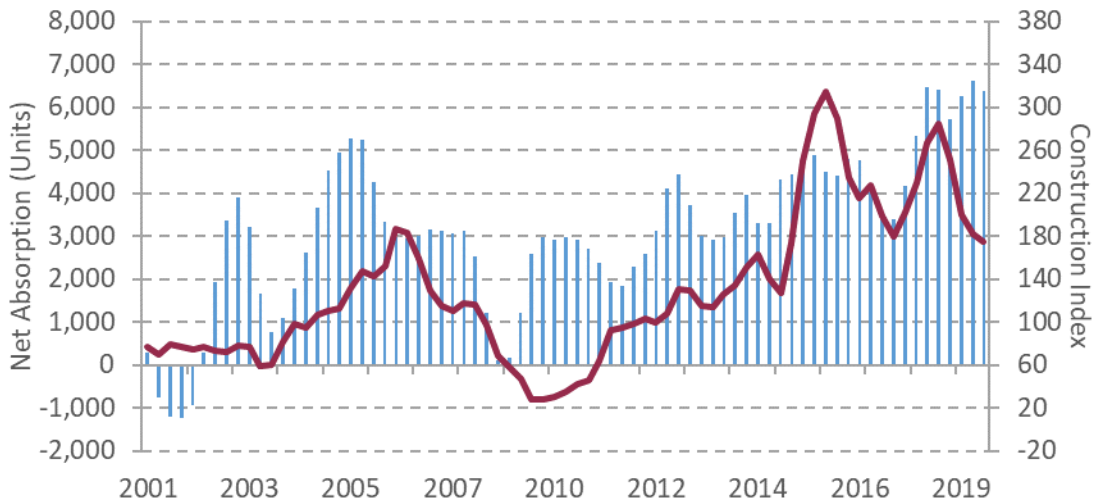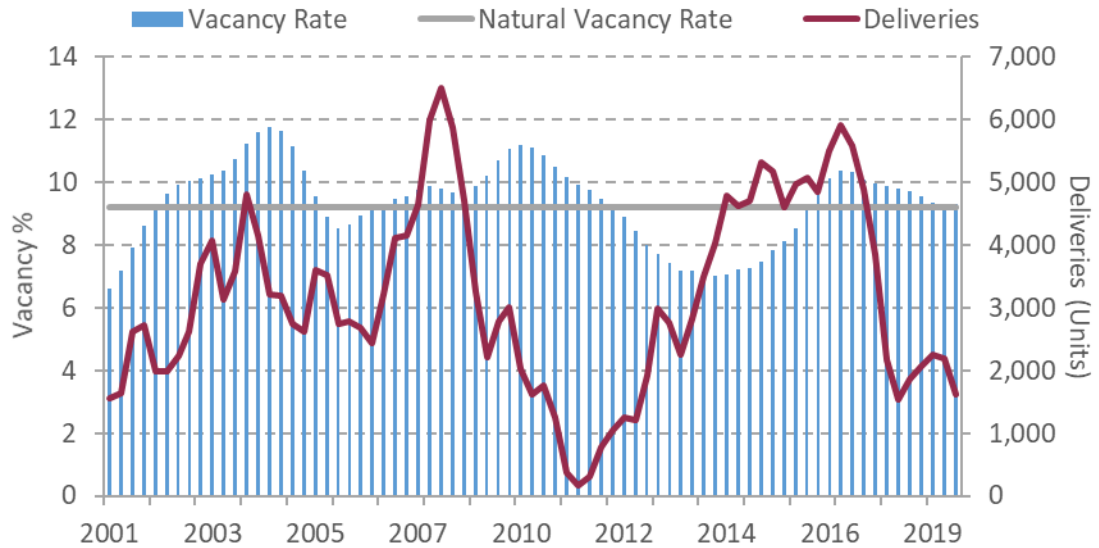

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

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Figure 11. DFW Overall Vacancy and Units Under Construction

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 12. DFW Overall Vacancy and Deliveries in Units

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

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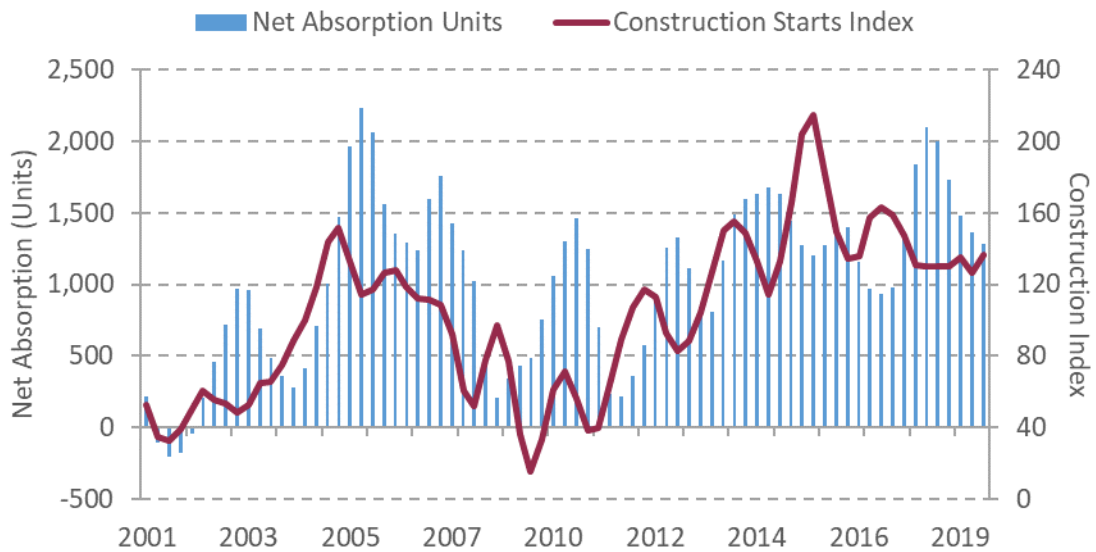| OCCUPANCY RATE	EFFECTIVE RENT GROWTH (PER UNIT)	NET ABSORPTION (UNITS)	CONSTRUCTION STARTS
90.7%	▲ 2.7%	▼ 2,169	▼

Sources: CoStar and the Real Estate Center at Texas A&M University
Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

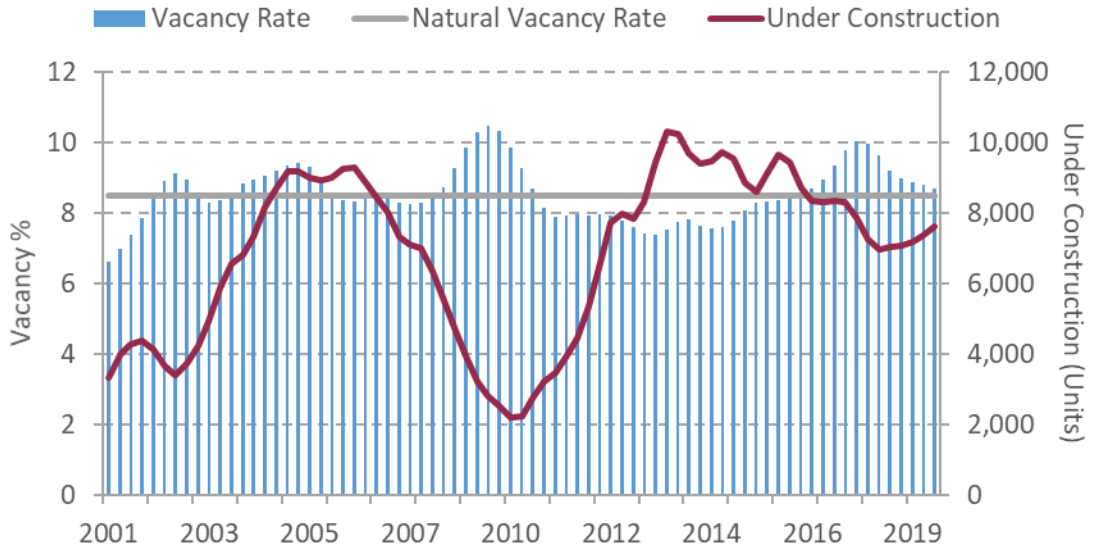**Figure 13. Houston Overall Vacancy and Effective Rent Growth**

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 14. Houston Overall Net Absorption and Construction Starts Index
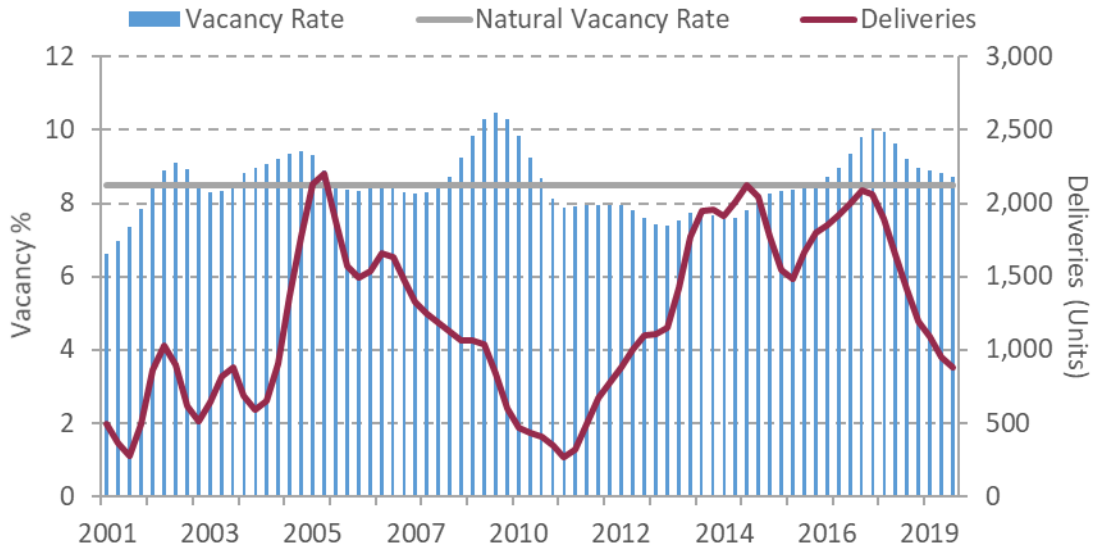**(Index 2000 Q1 = 100)**

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

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Figure 15. Houston Overall Vacancy and Units Under Construction

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 16. Houston Overall Vacancy and Deliveries in Units

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

OCCUPANCY RATE
═ 91.3%

EFFECTIVE RENT GROWTH (PER UNIT)
═ 3.9%

NET ABSORPTION (UNITS)
▼ 1,285

CONSTRUCTION STARTS
▲

Sources: CoStar and the Real Estate Center at Texas A&M University
Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.
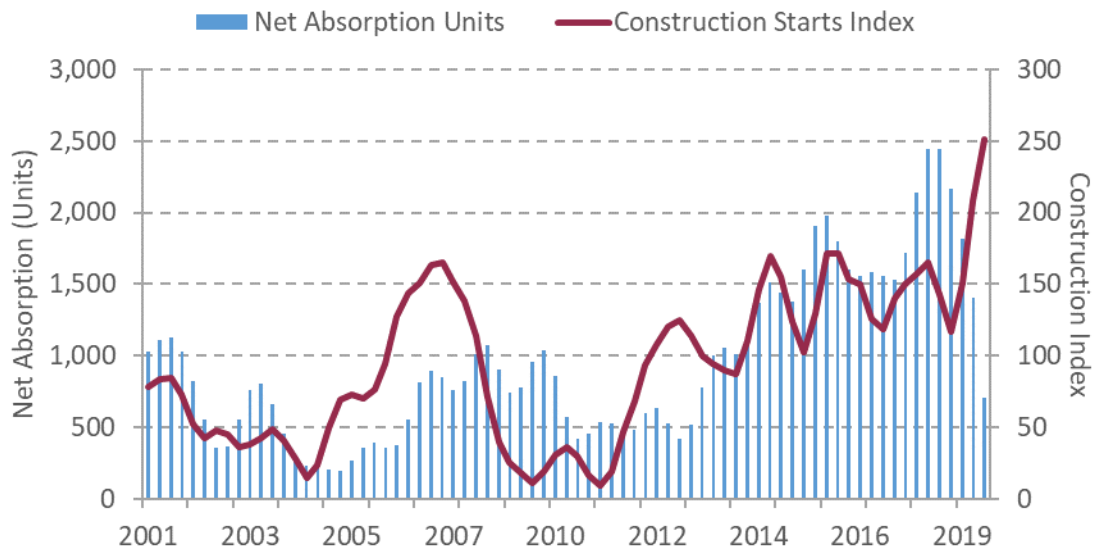
Figure 17. San Antonio Overall Vacancy and Effective Rent Growth
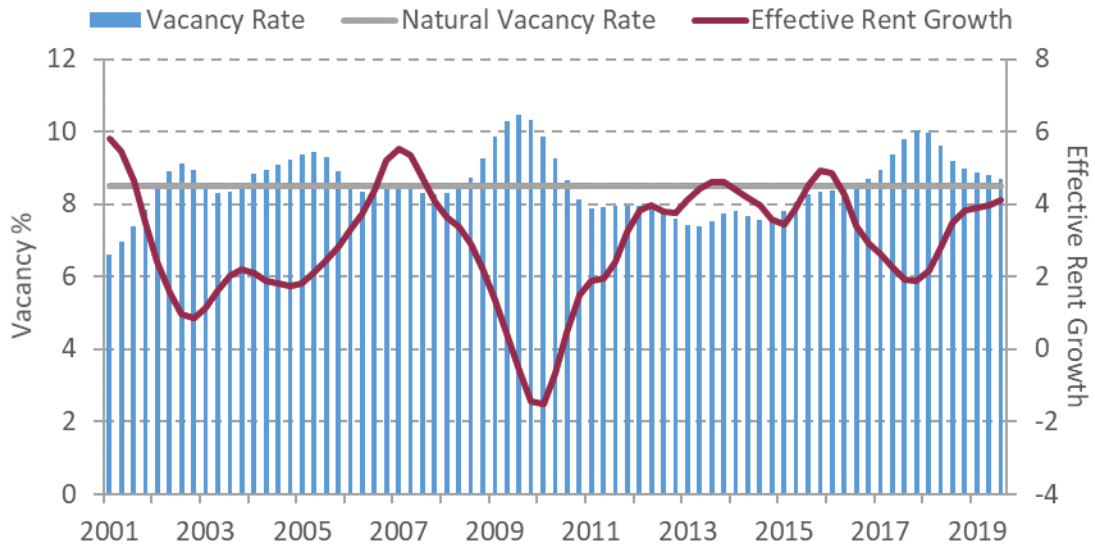
Note: Seasonally Adjusted and Trend-Cycle Component.
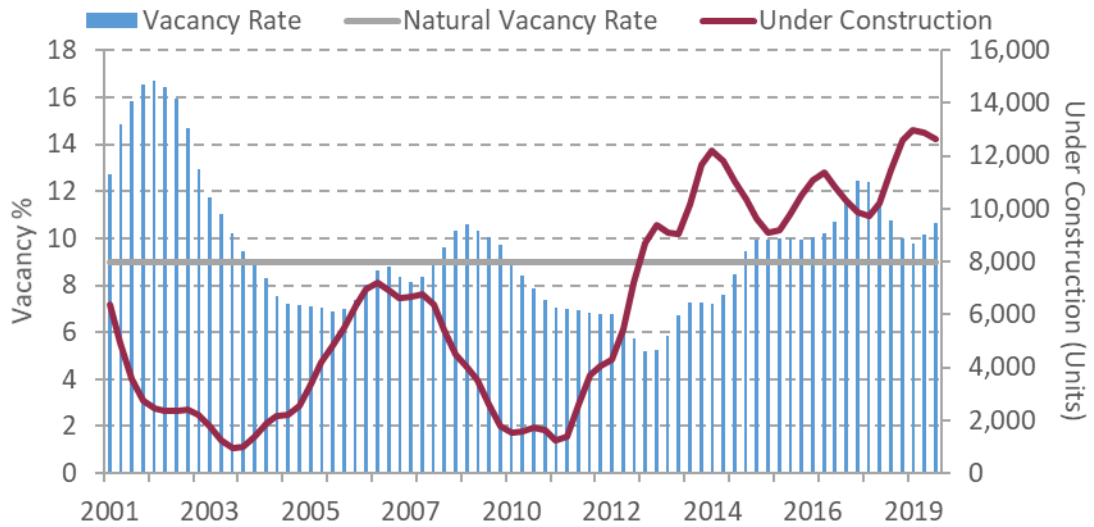Sources: CoStar and Real Estate Center at Texas A&M University

Figure 18. San Antonio Overall Net Absorption and Construction Starts Index
(Index 2000 Q1 = 100)

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

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Figure 19. San Antonio Overall Vacancy and Units Under Construction

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 20. San Antonio Overall Vacancy and Deliveries in Units

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Austin Class A

OCCUPANCY RATE	EFFECTIVE RENT GROWTH (PER UNIT)	NET ABSORPTION (UNITS)	CONSTRUCTION STARTS
▼ 89.4%	▼ 4.2%	▼ 526	▲

Sources: CoStar and the Real Estate Center at Texas A&M University
Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

Figure 21. Austin Class A Vacancy and Effective Rent Growth
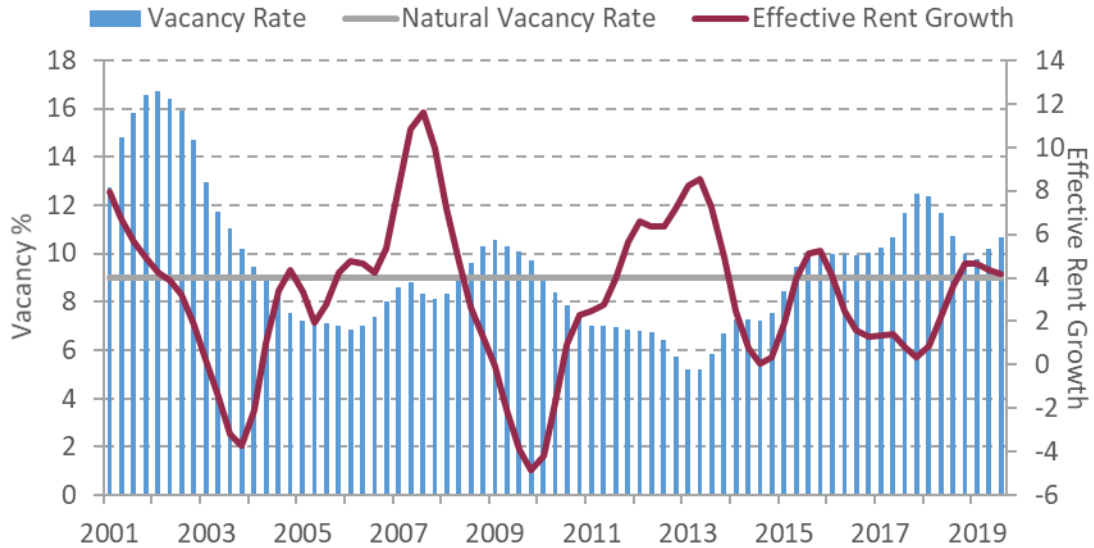
Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 22. Austin Class A Net Absorption and Construction Starts Index
(Index 2000 Q1 = 100)

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

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Figure 23. Austin Class A Vacancy and Units Under Construction

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 24. Austin Class A Vacancy and Deliveries in Units
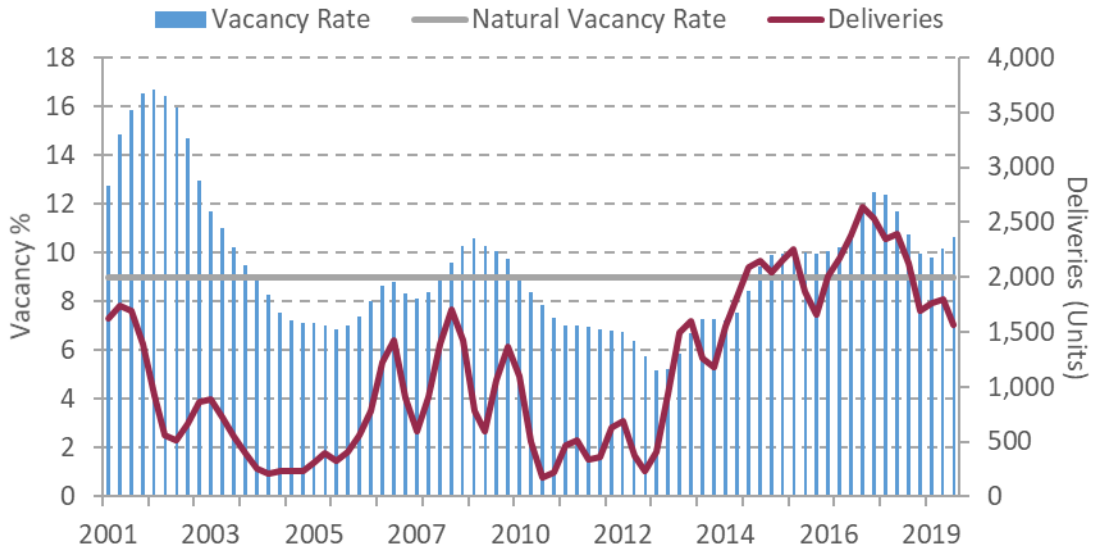
Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Dallas-Fort Worth Class A
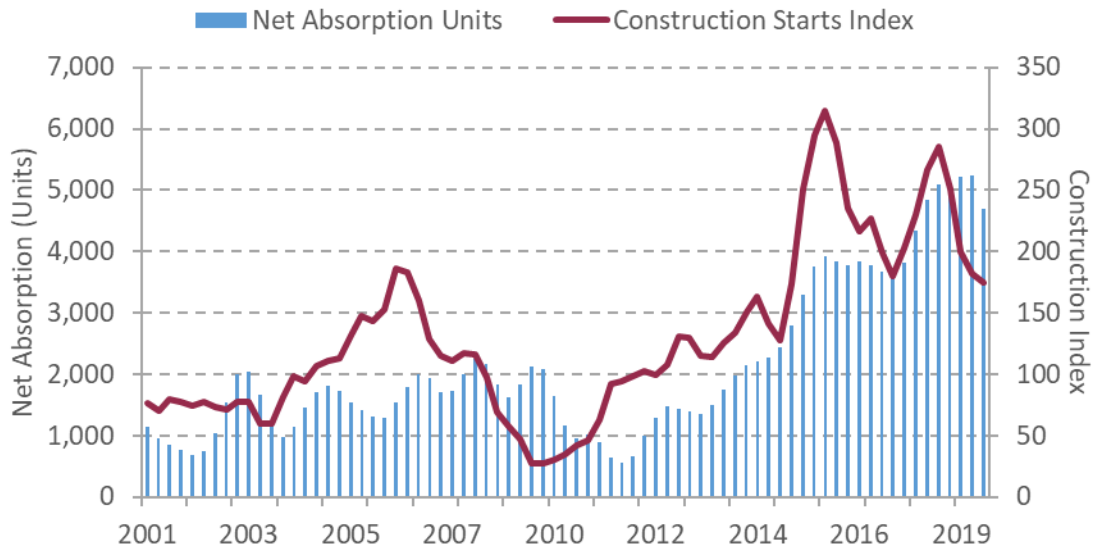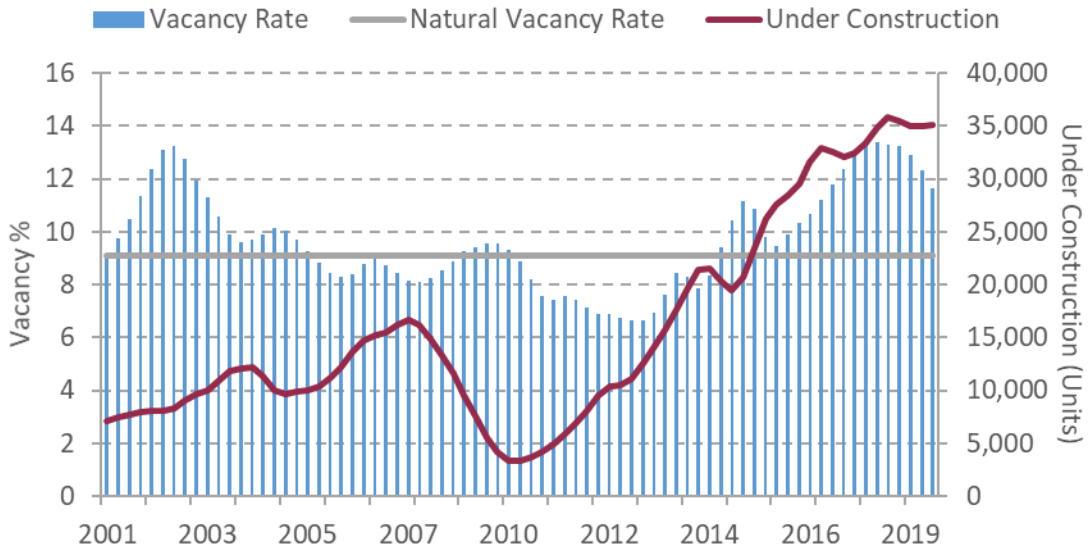
OCCUPANCY RATE	EFFECTIVE RENT GROWTH (PER UNIT)	NET ABSORPTION (UNITS)	CONSTRUCTION STARTS
▲ 88.4%	▲ 3.7%	▼ 4,554	▲

Sources: CoStar and the Real Estate Center at Texas A&M University
Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

Figure 25. DFW Class A Vacancy and Effective Rent Growth
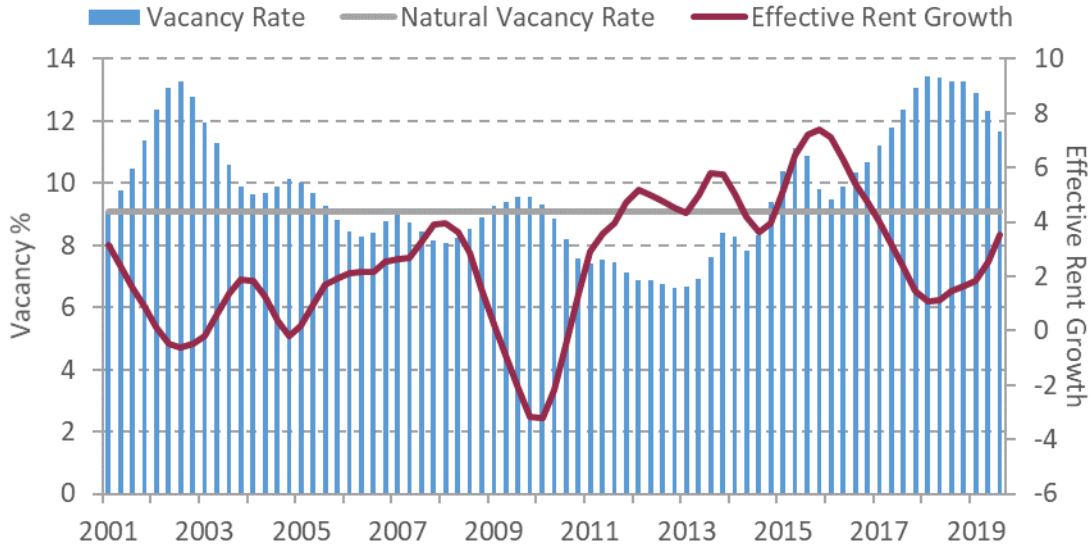
Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 26. DFW Class A Net Absorption and Construction Starts Index
(Index 2000 Q1 = 100)
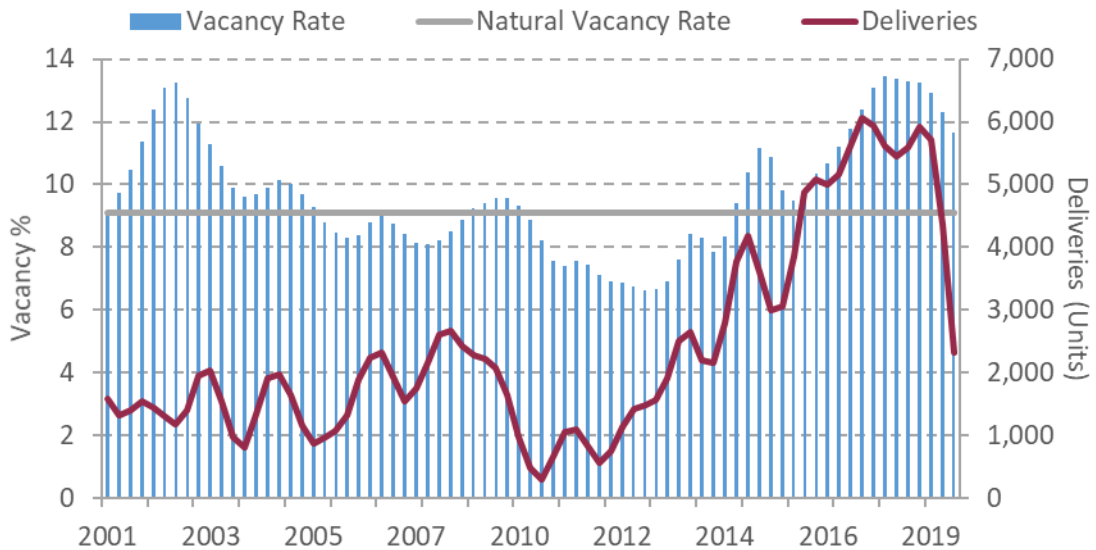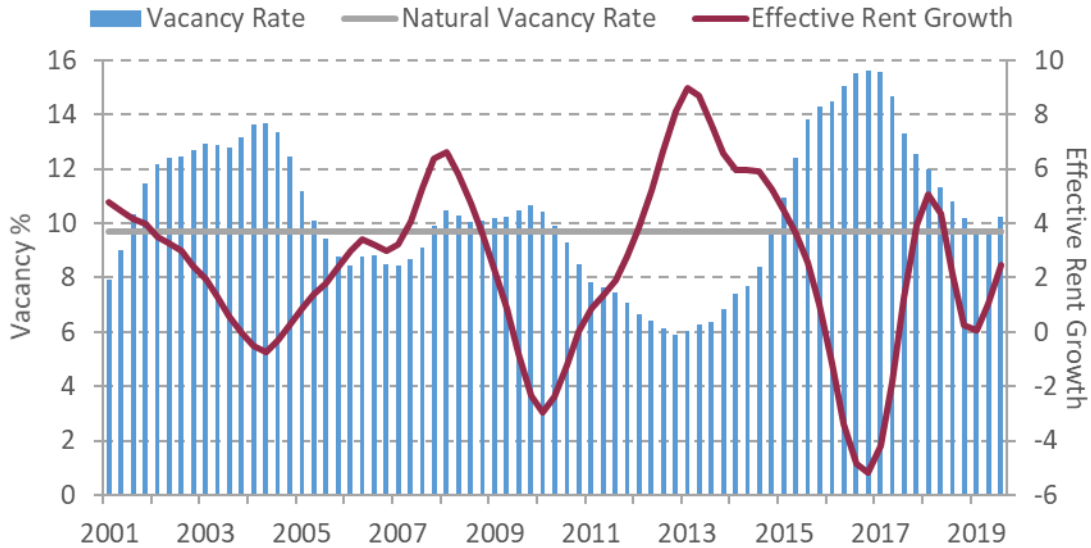

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

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Figure 27. DFW Class A Vacancy and Units Under Construction

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 28. DFW Class A Vacancy and Deliveries in Units

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

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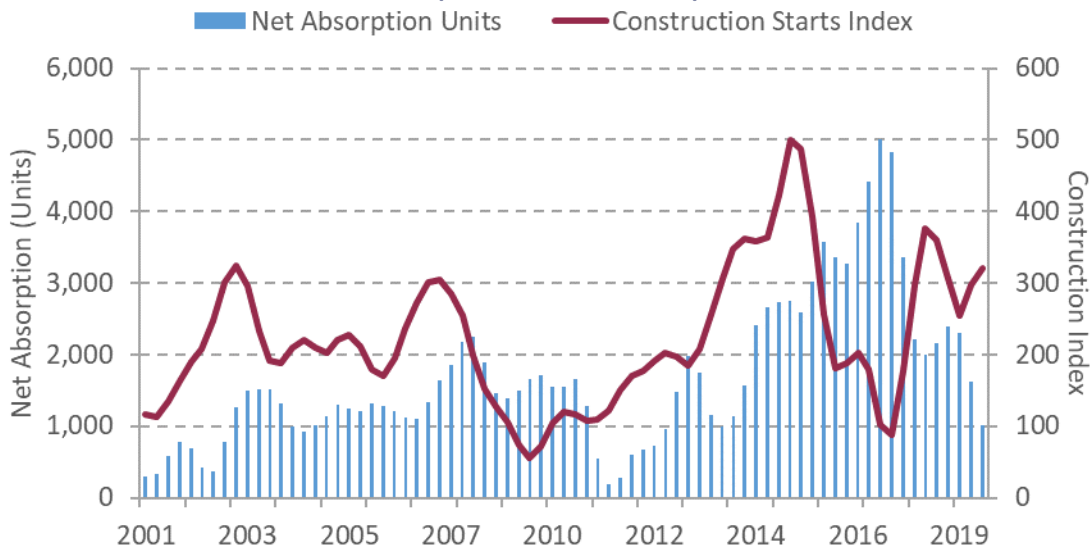Real Estate Center

Houston Class A

Figure 29. Houston Class A Vacancy and Effective Rent Growth

Note: Seasonally Adjusted and Trend-Cycle Component.
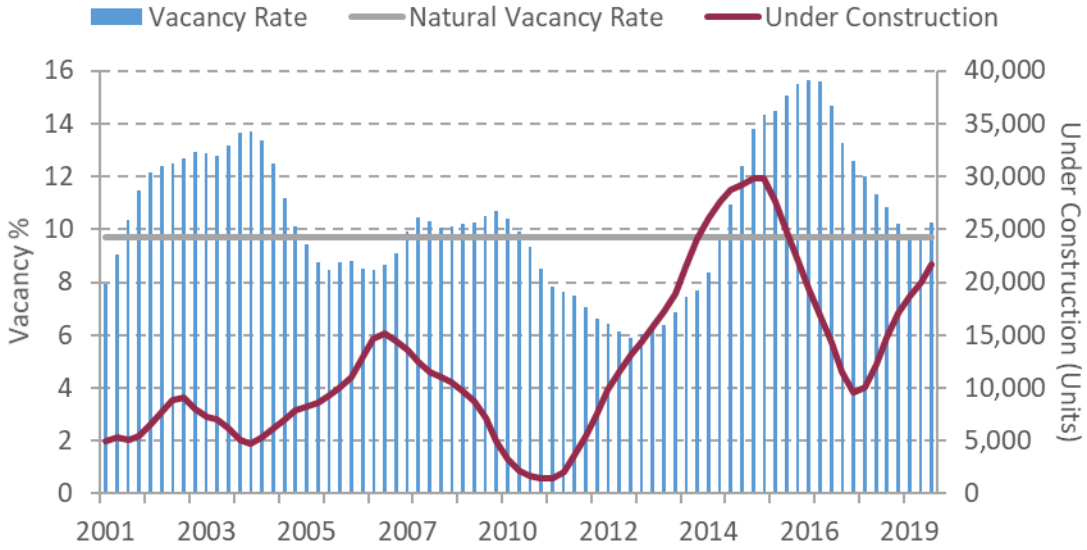Sources: CoStar and Real Estate Center at Texas A&M University

Figure 30. Houston Class A Net Absorption and Construction Starts Index
(Index 2000 Q1 = 100)

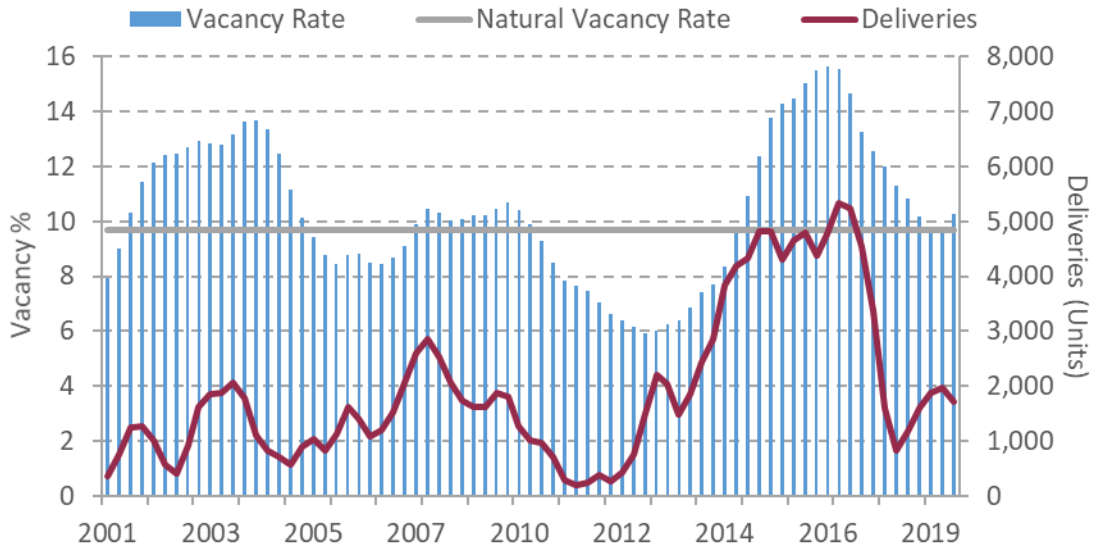Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

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Figure 31. Houston Class A Vacancy and Units Under Construction

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 32. Houston Class A Vacancy and Deliveries in Units

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

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San Antonio Class A

OCCUPANCY RATE	EFFECTIVE RENT GROWTH (PER UNIT)	NET ABSORPTION (UNITS)	CONSTRUCTION STARTS
▲ 90.3%	▬ 3.6%	▼ 603	▲

Sources: CoStar and the Real Estate Center at Texas A&M University
Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.
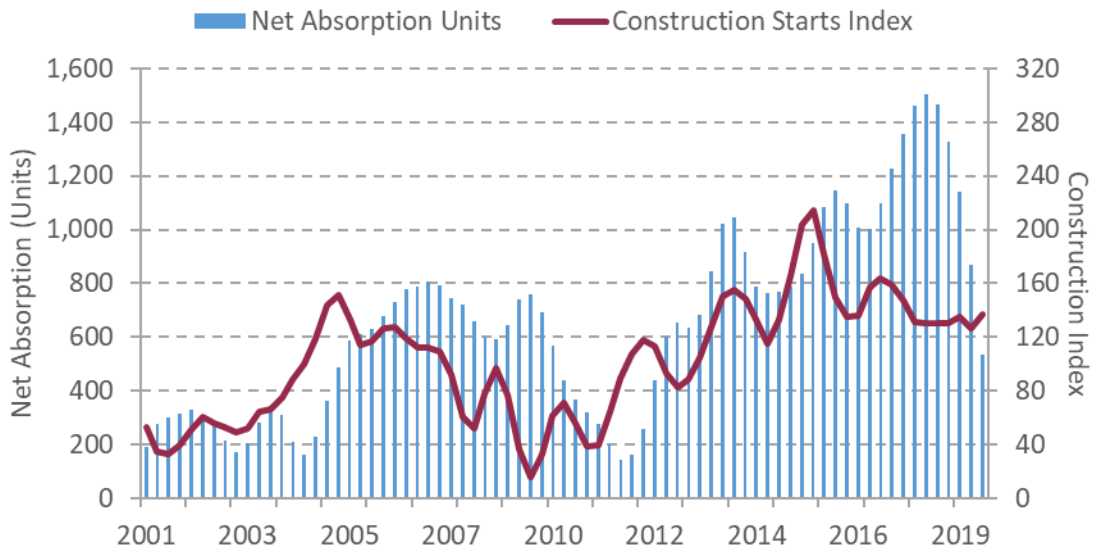
Figure 33. San Antonio Class A Vacancy and Effective Rent Growth
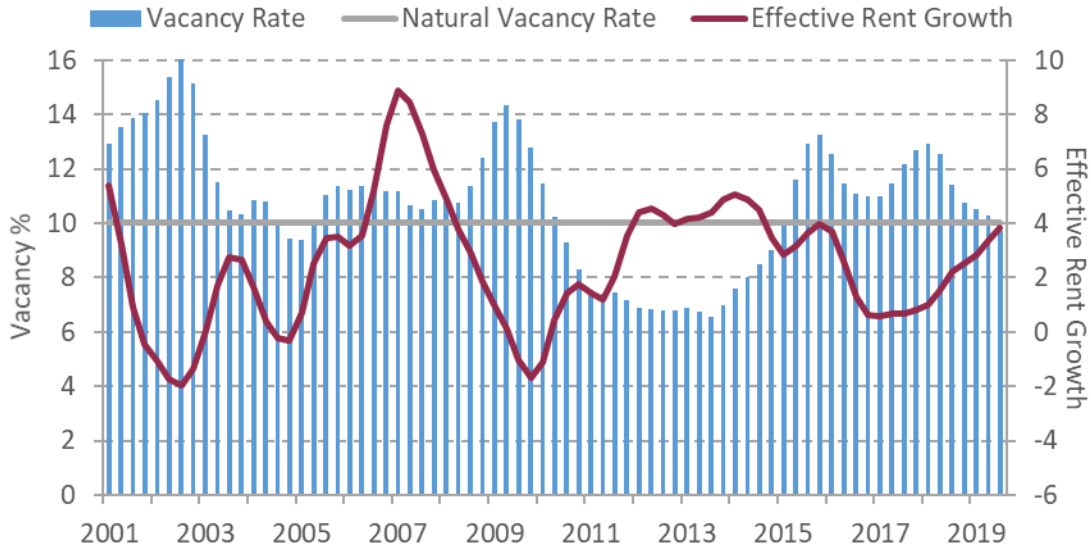
Note: Seasonally Adjusted and Trend-Cycle Component.
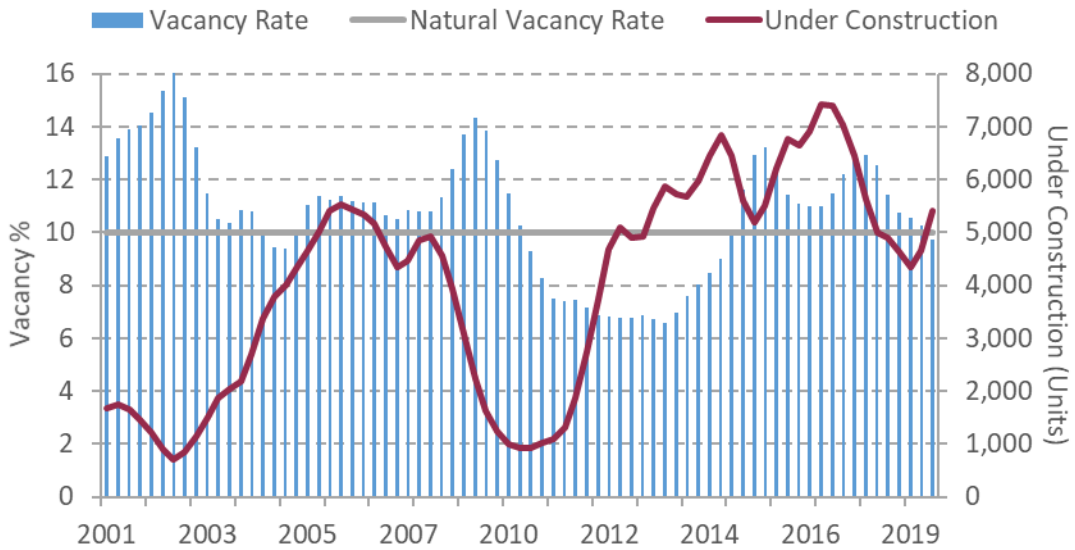Sources: CoStar and Real Estate Center at Texas A&M University

Figure 34. San Antonio Class A Net Absorption and Construction Starts Index
(Index 2000 Q1 = 100)

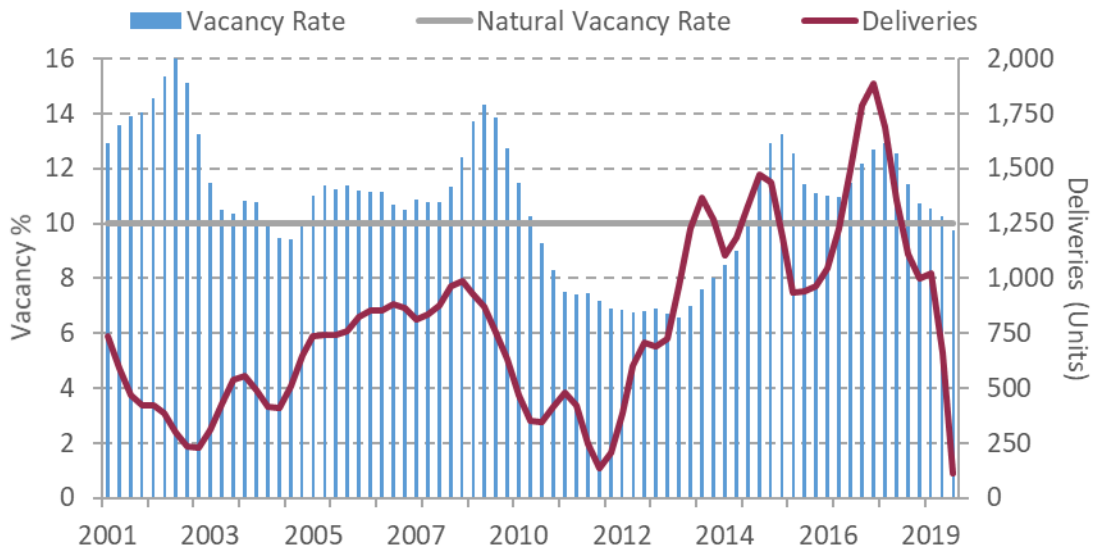Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

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Figure 35. San Antonio Class A Vacancy and Units Under Construction

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 36. San Antonio Class A Vacancy and Deliveries in Units

Note: Seasonally Adjusted and Trend-Cycle Component.
Sources: CoStar and Real Estate Center at Texas A&M University

Definitions

Effective rents: Leases typically dictate this amount to be paid monthly.

Construction Starts Index: Reflects the dollar value of construction starts in relation to a specified base year (1Q2000) and is a precursor to future units under construction.

Dodge Analytics tracks commercial construction start figures as soon as a new project kicks off to estimate its total construction "value," which is essentially total construction cost. We realize that some real estate professionals may question whether calling the total dollars to be spent on a project's "construction value" actually equates to its "market value" at completion. However, for consistency, this report will use Dodge's terminology.

Under Construction: Reflects the number of units under construction within a particular market; applies to buildings that have not received a certificate of occupancy.

Trend-cycle component: Removes the effects of accumulating data sets from a trend to show only the absolute changes in values and to allow potential cyclical patterns to be identified.

Net Absorption: The net change in occupied space, measured in units, over a given period. Net absorption reflects the amount of space occupied as well as the amount of space vacated.

Nominal: Value or rate that reflects current prices or rates, without adjusting for inflation.

Seasonal Adjustment: A statistical method for removing the seasonal component of a time series that exhibits a seasonal pattern.

Vacancy Rate: A measurement expressed as a percentage of the total amount of physically vacant units divided by the total amount of existing inventory.

Natural and actual vacancy:

The natural vacancy rate represents the point at which zero real (inflation-adjusted) rent growth will occur. Natural vacancy reflects the level to which vacancy rates adjust over the long term.

The actual vacancy rate reflects the seasonally adjusted and trend-cycled natural vacancy rate. The actual vacancy rate smooths the raw data by removing fluctuations created by seasonal and time trends.

Natural vacancies for the possibility of new construction are calculated separately using historical construction data. The calculated natural vacancies were compared with the actual vacancies to estimate whether new development should be expected in the various commercial real estate markets. When actual vacancy in a local market falls below natural vacancy, developers may consider building new space.

A comparison of natural vacancy and actual vacancy along with historical vacancy trends allows researchers to anticipate the future direction of commercial real estate (CRE) rental rates in real terms. When actual vacancy in a local market falls below (rises above) natural vacancy, building managers may consider increasing (decreasing) rents.

Aggregate natural vacancy in an overall market may not reflect the trigger vacancy rate an individual CRE professional uses to make decisions affecting a specific property or project. However, these measures provide indication of the direction of rents and new construction.

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