

Texas Quarterly Apartment Report



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TECHNICAL REPORT
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About this Report	2
Texas Economic Overview	3
Overall Apartment Sector	5
Forecasted Overall Apartment Vacancy Rates, Effective Rents	5
Austin	5
Dallas-Fort Worth	5
Houston	6
San Antonio	6
Class A Apartment Sector	7
Forecasted Class A Apartment Vacancy Rates, Effective Rents.....	7
Austin	7
Dallas-Fort Worth.....	7
Houston.....	8
San Antonio.....	8
Figures	9
Texas Residential Construction Index	9
Major MSA’s Residential Construction Leading Index.....	9
Overall Apartment Market Changes in Effective Rent vs. Occupancy Rate	10
Real Multifamily Domestic Loans.....	10
Overall	11
Austin	11
Dallas-Fort Worth	13
Houston	15
San Antonio	17
Class A.....	19
Austin.....	19
Dallas-Fort Worth.....	21
Houston	23
San Antonio	25
Definitions	27



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, figures 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. It uses data from ALN Apartment Data and CoStar.

We hope you find the *Texas Quarterly Apartment Report* useful. Your feedback is always appreciated. Please send comments and suggestions to info@recenter.tamu.edu.

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Texas Economic Overview

Entering the ninth year of the business cycle expansion, Texas' economic activity remained strong. Payroll employment grew at a steady pace, and unemployment remained historically low. Headline wage numbers, however, were sluggish despite labor-market tightness and decreased inflationary pressure. Low interest rates and job growth supported commercial investments and pushed housing sales to a record high. Total commodity exports stalled in the first quarter and could continue to struggle amid the ongoing U.S.-China trade spat. Political tension, trade uncertainty, and a slowdown in the global economy present the greatest challenges to extending the current expansion.

The Texas Residential Construction Cycle (Coincident) Index, which measures current construction activity, inched downward as construction values trended downward. A slowdown in construction permits hindered the Residential Construction Leading Index, pointing to slower residential construction going forward. The Austin and San Antonio leading indexes also pointed toward a construction slowdown while the Dallas-Fort Worth (DFW) and Houston indexes pointed toward higher activity. Overall market trends for the majority of Texas areas (metropolitan and micro) show positive occupancy rate growth combined with positive rent growth, with only two registering negative rent growth (Bryan-College Station and Lufkin).

However, lower interest rates and the extended economic expansion should support the industry in coming months. The apartment market should continue to benefit from the lack of supply of single-family homes priced below \$200,000 causing potential homebuyers to continue to rent instead of purchasing a home even in a low mortgage rate environment.

The pace of domestic borrowing by the multifamily sector decreased in 2018, registering mild positive growth in 1Q2019. Although market fundamentals remain strong—low long-term interest rates and increasing rents combine with low vacancy rates—borrowing and lending activity suggests developers were expecting moderate growth in the apartment market as interest rates rose at the end of 2018, and expectations were for higher rates in 2019 and a slower-growth economic environment.

Austin's overall economic activity moderated in 1Q2019 even as job growth continued its upward trend and wage growth rose. Employment continued to climb in DFW with the services sector leading job growth. In Houston, the overall outlook remains positive, supported by higher oil prices and a strong U.S. economy, although at a slower pace than during the oil boom. San Antonio's job growth improved in 1Q2019 after slowing at the end of 2018.

The outlook for the rest of 2019 appears to be positive for the major Texas Metropolitan Statistical Areas due to the strength of the U.S. and Texas economies. As oil prices jumped in 1Q2019, Texas' fundamental economic factors appear to provide a positive tailwind moving

forward. Interest rates should continue to remain low as inflation pressure remains subdued. On the negative side, a declining trade environment remains the greatest headwind to the Texas economy, challenging some of the state's most productive industries. Although Mexico, Canada, and the U.S. announced official trade agreements, the agreements need approval from each country's legislative branches. The U.S. economy has shown signs of slowing in 2019 as the effects of the 2018 fiscal stimulus dilute and returning to its long-run potential trend of around 2 percent annual growth.

Overall Apartment Sector

Table 1. Forecasted Overall Apartment Vacancy Rates, Effective Rents

MSA	Natural Apartment Vacancy Rate	Vacancy Rates (%)			Effective Rents (y-o-y %)		
		2018	2019	2020	2018	2019	2020
Austin	8.3	8.0	7.4	6.9	3.1	4.2	3.4
DFW	8.5	8.0	8.0	7.1	2.6	2.3	2.7
Houston	9.2	9.7	9.2	9.5	3.5	1.7	2.1
San Antonio	8.5	9.3	9.3	10.0	2.7	3.4	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 1-4)

Since the end of the recovery from the Great Recession (GR), actual vacancy has generally measured below natural vacancy, with the exception of the latter half of 2017 (3Q and 4Q) and beginning of 2018 (1Q). Actual vacancy is expected to average 7.4 percent for 2019 and 6.9 percent for 2020, well below the natural vacancy of 8.3 percent. The decline in actual vacancy should stimulate effective rent growth, which is projected to average 4.2 and 3.4 percent for 2019 and 2020, respectively. Effective rent growth has remained positive since the end of the recovery from the GR, but it has recently slumped, likely a result of the uptick in actual vacancy.

Austin's robust economy and increased demand for housing (population growth) have buoyed strong construction activity (the amount of square footage under construction) since the end of the recovery from the GR. Despite a slight decline, construction values remain relatively high, indicating construction activity should maintain pace. Deliveries have diminished over the past several quarters, which, combined with the demand for apartments, should bolster rent growth.

Dallas-Fort Worth (see figures 5-8)

Actual vacancy has measured below natural vacancy since the end of the recovery from the GR, but it has climbed over recent quarters. Projections suggest actual vacancy should average 8 and 7.1 percent for 2019 and 2020, respectively, measuring below natural vacancy (8.5 percent). While effective rent growth has dampened since peaking at 8.5 percent in 3Q2015, it should remain solid at 2.3 and 2.7 percent for 2019 and 2020, respectively.

Construction activity has climbed substantially since the end of the recovery from the GR. Construction values have tumbled over the past three quarters, indicating construction activity

may moderate in the near-term. Net absorption has remained positive during the significant uptick in construction activity, indicating population growth has proven sufficient to maintain pace with the considerable increase in deliveries.

Houston (see figures 9-12)

Conditions in Houston's apartment market have moderated since the oil downturn, which began in 2014. Actual vacancy, which surpassed natural vacancy (9.2 percent) in 3Q2016, is expected to average 9.2 and 9.5 percent in 2019 and 2020, respectively. This indicates that rent growth will likely be stagnant; indeed, anticipated effective rent growth will average 1.7 and 2.1 percent in 2019 and 2020, respectively. Rent growth has proven volatile in the wake of the oil downturn, dropping nearly ten percentage points from 2Q2015 to 4Q2017, subsequently rebounding to over 5 percent in 1Q2018. Rent growth has since declined.

Construction activity (square footage under construction) declined substantially in the immediate aftermath of the oil downturn but has increased steadily since 4Q2017. The recent decline in construction values indicates construction activity may stagnate in the near-term. Net absorption has remained positive despite the oil downturn. The significant slowdown in deliveries has likely facilitated positive net absorption.

San Antonio (see figures 13-16)

Despite the increase in actual vacancy, effective rent growth is expected to remain fairly robust over 2019 and 2020. Actual vacancy has exceeded natural vacancy (8.5 percent) for nine consecutive quarters (since 1Q2017). Anticipated actual vacancy should average 3.4 percent in both 2019 and 2020. While effective rent growth declined considerably from 2Q2015 to 4Q2017, it has since rebounded.

Despite relatively robust construction values, construction activity (square footage under construction) has generally declined over the past several years. This has facilitated positive net absorption despite the recent uptick in actual vacancy and could account for the forecasted growth in rents. Deliveries have remained robust but should moderate if construction activity continues to decline.

Class A Apartment Sector

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

MSA	Natural Apartment Vacancy Rate	Vacancy Rates (%)			Effective Rents (y-o-y %)		
		2018	2019	2020	2018	2019	2020
Austin	9.0	10.6	9.1	8.4	2.7	2.7	4.5
DFW	9.1	13.2	12.4	12.0	0.9	0.9	1.7
Houston	9.7	11.0	9.2	9.5	2.6	1.6	2.1
San Antonio	10.0	11.7	10.8	11.3	1.6	1.8	2.0

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 17-20)

Despite a healthy overall apartment market, Austin's Class A apartment market has struggled to maintain the same level of rent growth. Actual vacancy measured above natural vacancy (9 percent) for ten consecutive quarters, likely the result of the recent spike in deliveries. Anticipated actual vacancy should average 9.1 and 8.4 percent in 2019 and 2020, respectively. Effective rent growth approached zero as actual vacancy increased but is expected to post solid results in 2019 and 2020 (an average of 2.7 and 4.5 percent, respectively).

After climbing considerably in the aftermath of the GR, construction activity has returned to prerecessionary levels. High construction values suggest construction activity should remain robust. While deliveries have slowed in recent quarters, the high volume of construction suggests deliveries should increase in the near-term.

Dallas-Fort Worth (see figures 21-24)

Actual vacancy has surpassed natural vacancy (9.1 percent) for the past 12 consecutive quarters. Based on forecasts, this trend should continue; actual vacancy is expected to average 12.4 and 12 percent in 2019 and 2020, respectively. The divergence between actual and natural vacancy will likely hamper effective rent growth, which is expected to average a mere 0.9 and 1.7 percent for 2019 and 2020, respectively. Rent growth approached zero in 2Q2018 but has since remained positive.

Construction activity increased significantly in the wake of the GR. However, the recent decline in construction values indicates construction activity should diminish in the near-term, dampening deliveries. Despite the uptick in actual vacancy, net absorption has remained positive.

Houston (see figures 25-28)

Houston's Class A apartment market struggled in the wake of the oil downturn. Actual vacancy exceeded natural vacancy (9.7 percent) for 16 consecutive quarters, from 1Q2015 to 4Q2018. Actual vacancy is expected to continue to decline, averaging less than natural vacancy in 2019 and 2020 (9.2 and 9.5 percent, respectively). Effective rent growth declined considerably in the wake of the oil downturn, reaching nearly -6 percent in 4Q2016 before subsequently climbing and falling again. The decline in actual vacancy should bolster rent growth, which is anticipated to average 1.6 and 2.1 percent in 2019 and 2020, respectively.

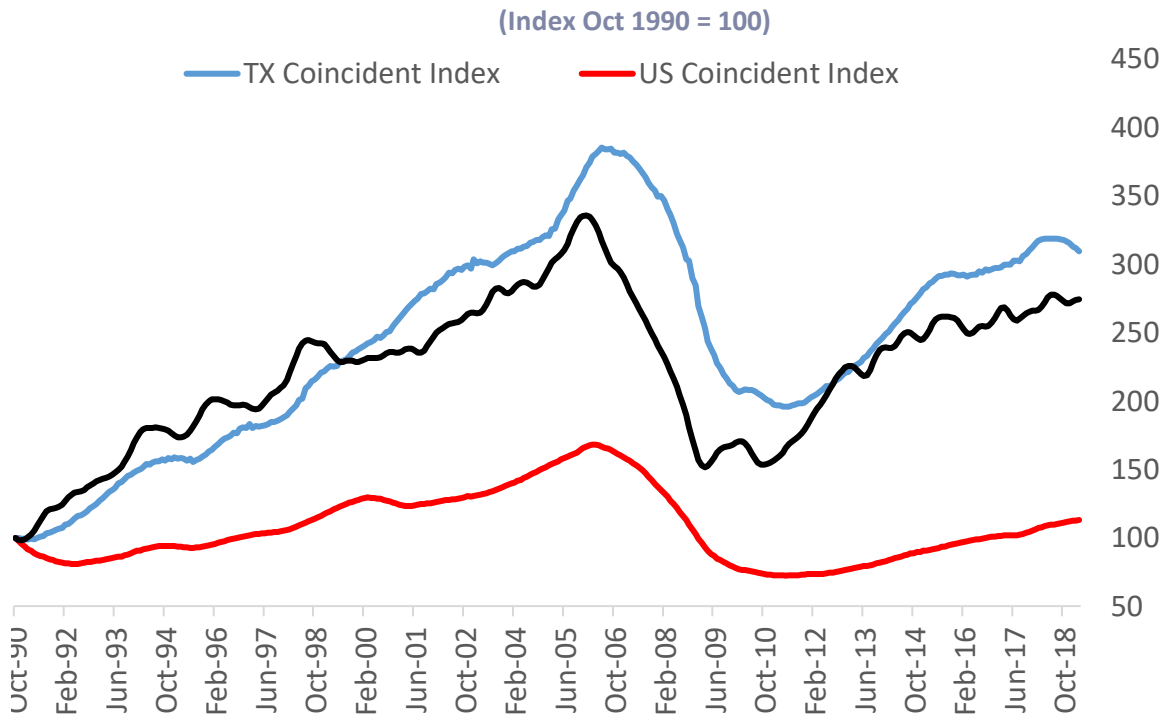
Construction activity increased considerably in the wake of the GR before falling in the midst of the oil downturn. Despite the downturn, net absorption remained positive, likely buoyed by the significant reduction in construction activity in its aftermath. The recent decline in construction values indicates construction activity should abate in the near-term.

San Antonio (see figures 29-32)

Actual vacancy surpassed natural vacancy for sixteen consecutive quarters (1Q2015-4Q2018) but neared natural vacancy by 1Q2019. However, anticipated actual vacancy will average 10.8 percent in 2019, slightly more than natural vacancy (10 percent), indicating actual vacancy will likely climb over the ensuing quarters. Effective rent is anticipated to maintain its moderate growth, averaging 1.8 percent in 2019.

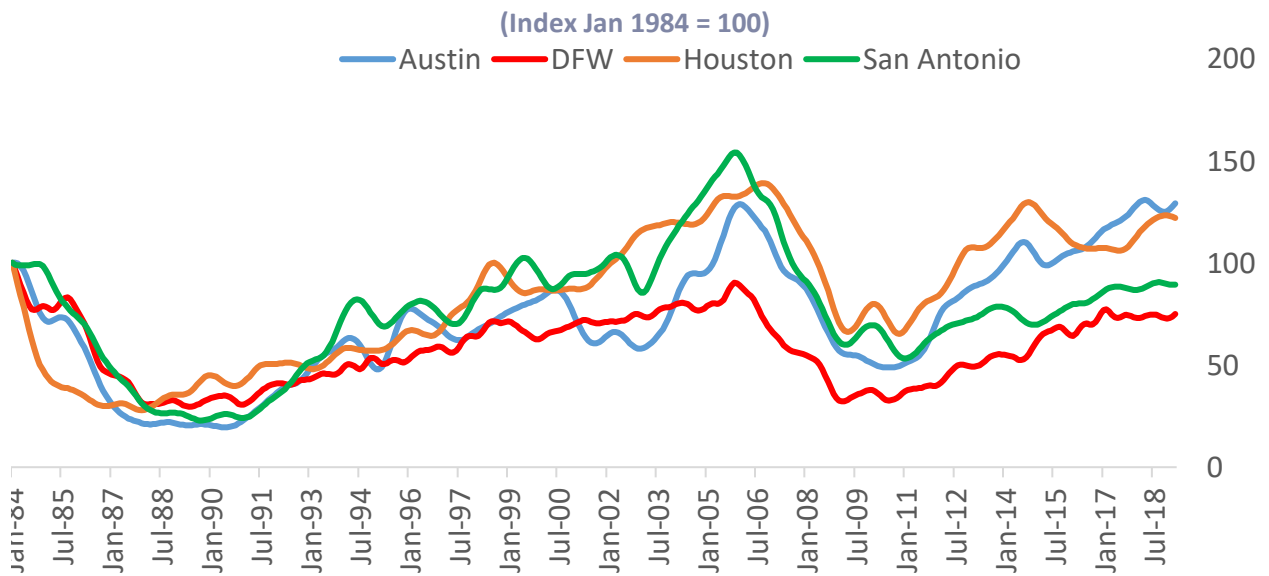
Despite the uptick in actual vacancy, construction values have continued to increase, suggesting construction activity should remain robust. Although net absorption is positive, when combined with the high actual vacancy, this may produce weak positive growth in future effective rents.

Figure 1. Texas Residential Construction Index



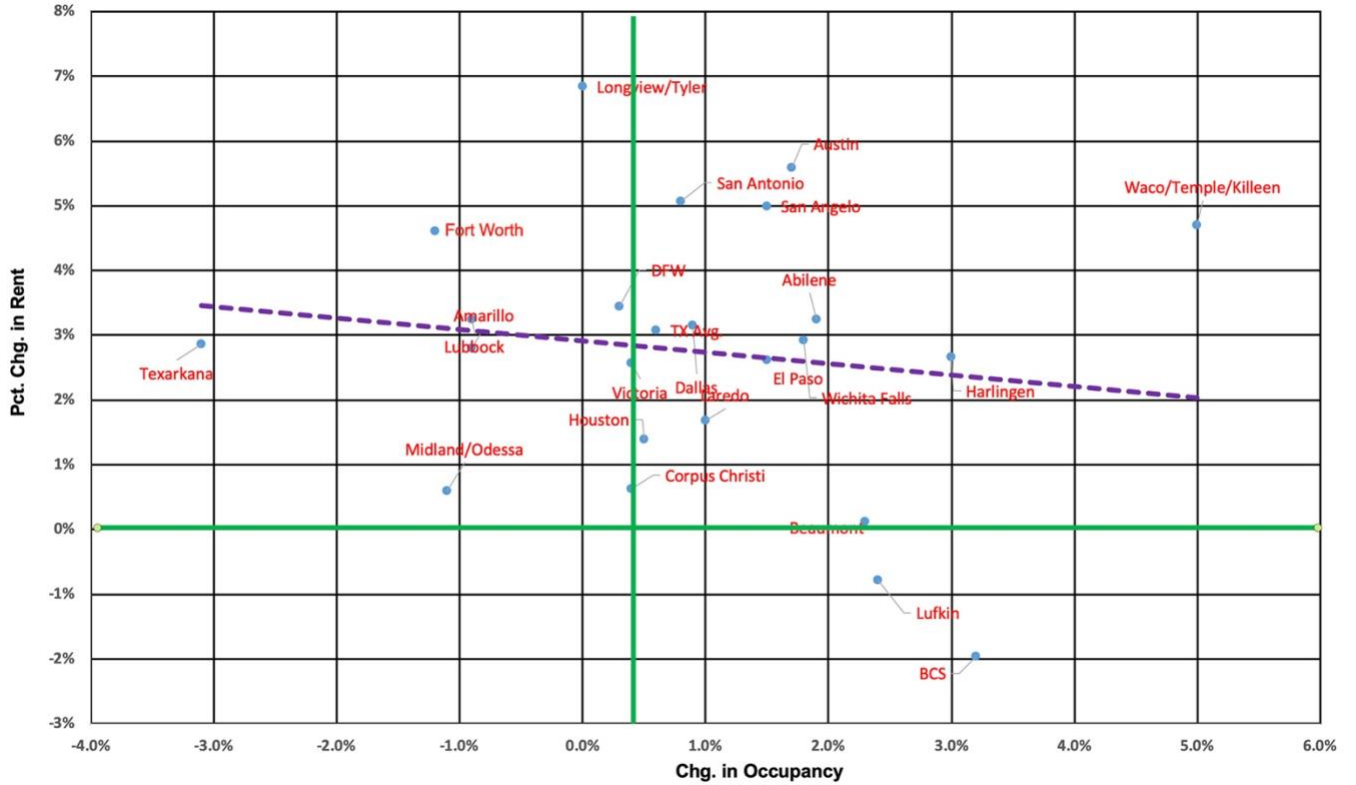
Source: Real Estate Center at Texas A&M University

Figure 2. Major MSA's Residential Construction Leading Index



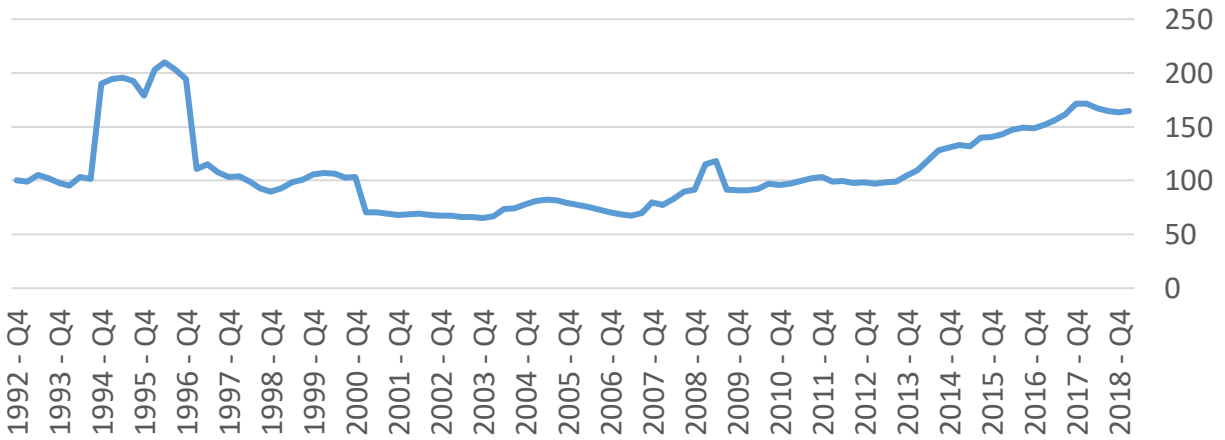
Source: Real Estate Center at Texas A&M University

**Figure 3. Overall Apartment Market Changes in Effective Rent vs. Occupancy Rate
(Jun-18 to Jun-19, y-o-y %)**



Sources: ALN Apartment Data and Real Estate Center at Texas A&M University

**Figure 4. Real Multifamily Domestic Loans
(Index 4Q1992=100)**

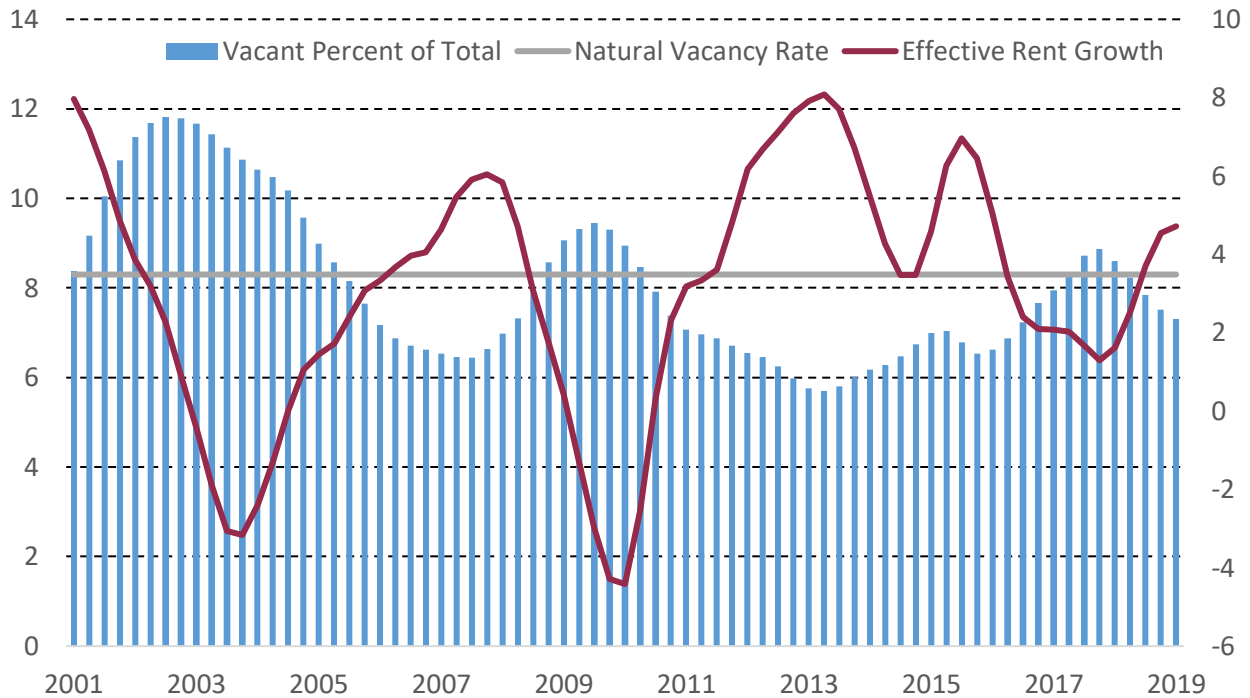


Note: Seasonally adjusted and inflation-adjusted.

Source: Federal Deposit Insurance

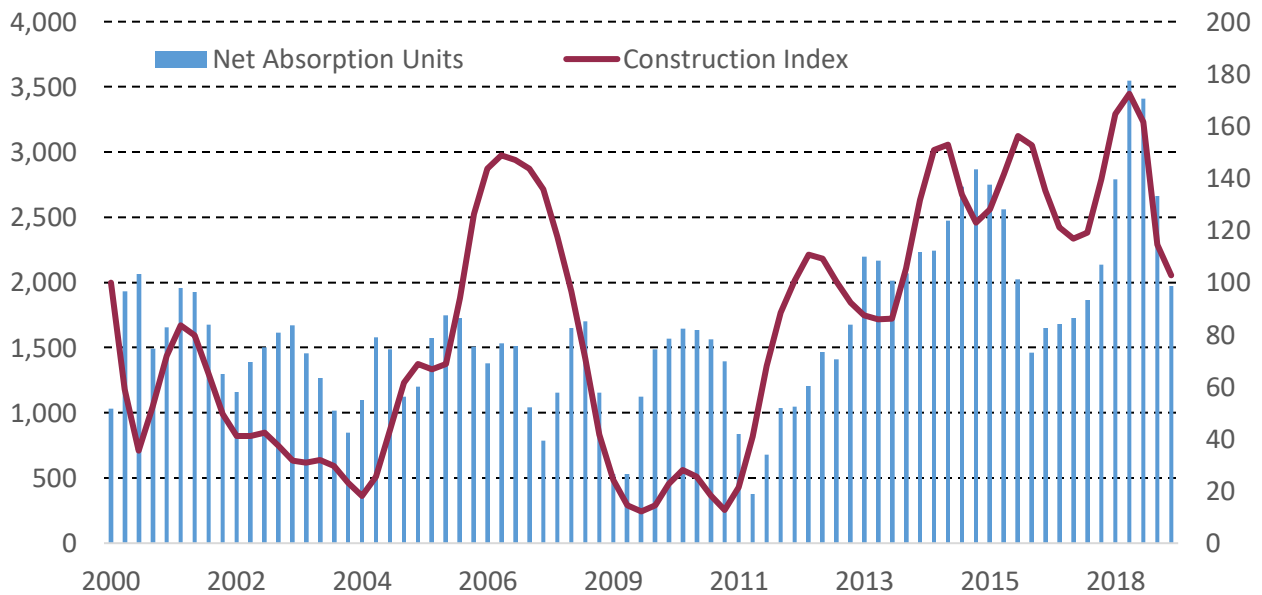
Overall

Figure 1. Austin Overall Vacancy and Effective Rent Growth



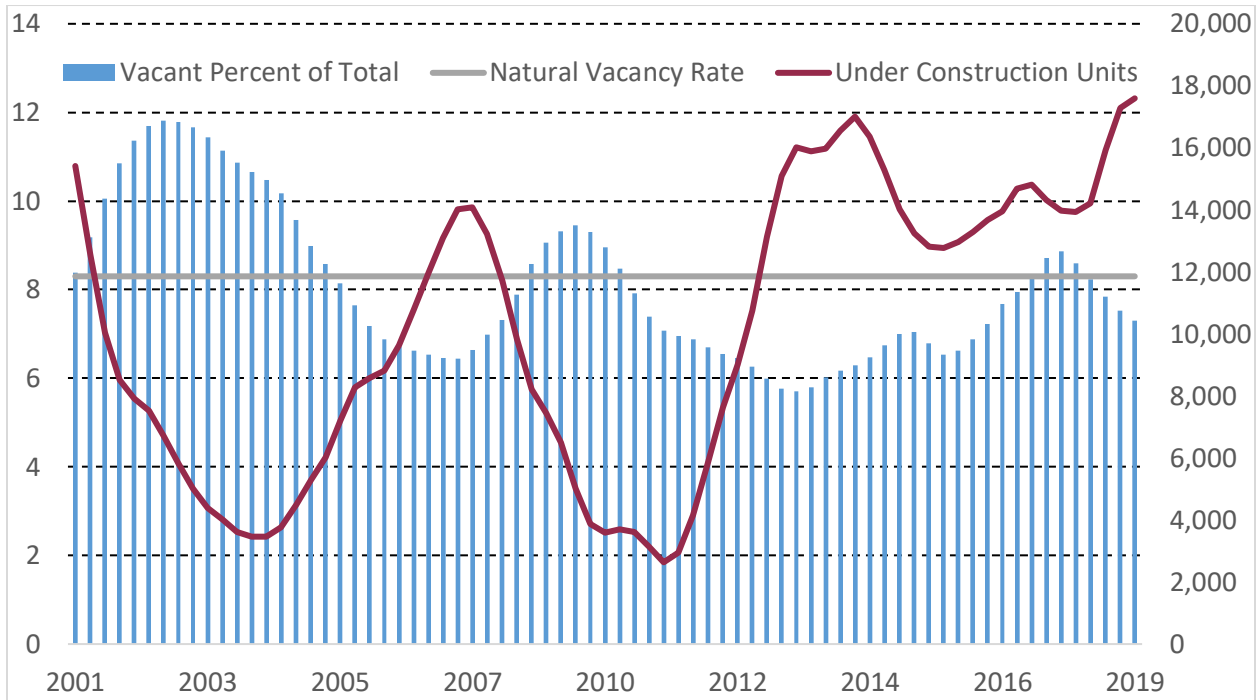
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 2. Austin Overall Net Absorption and Construction Index



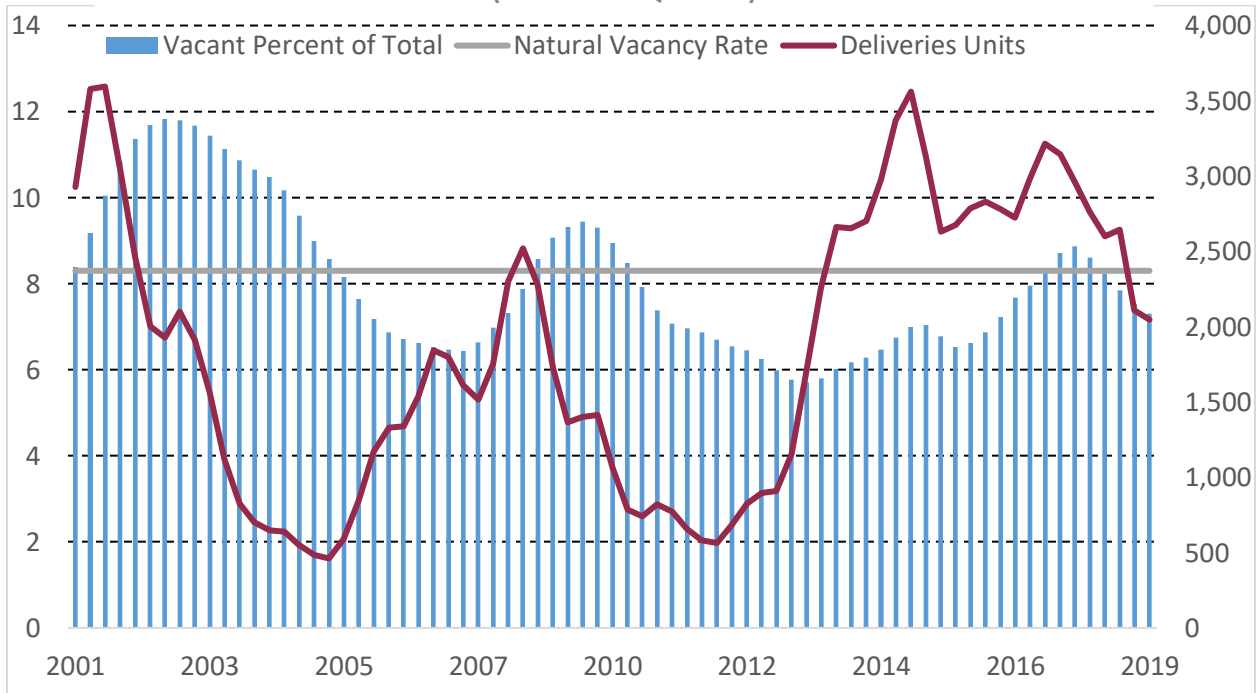
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

Figure 3. Austin Overall Vacancy and Units Under Construction



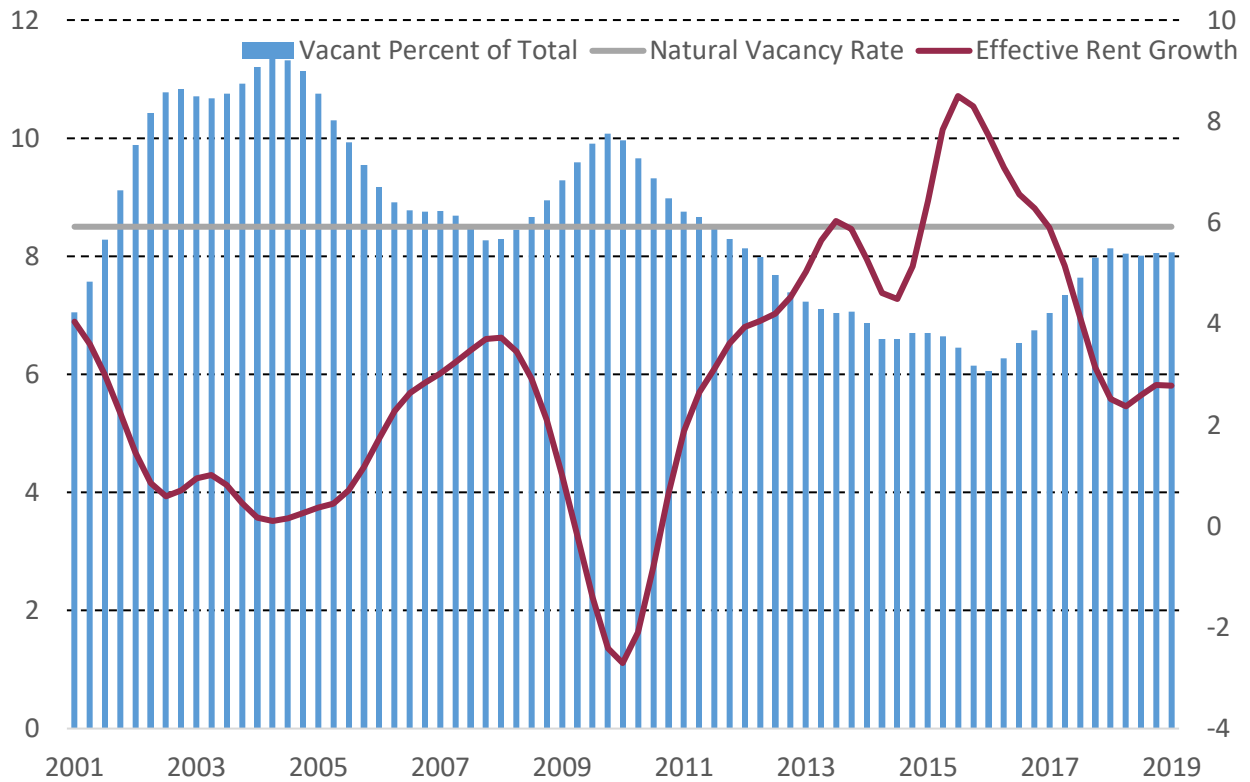
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 4. Austin Overall Vacancy and Delivery Units
(Index 2000 Q4 = 100)



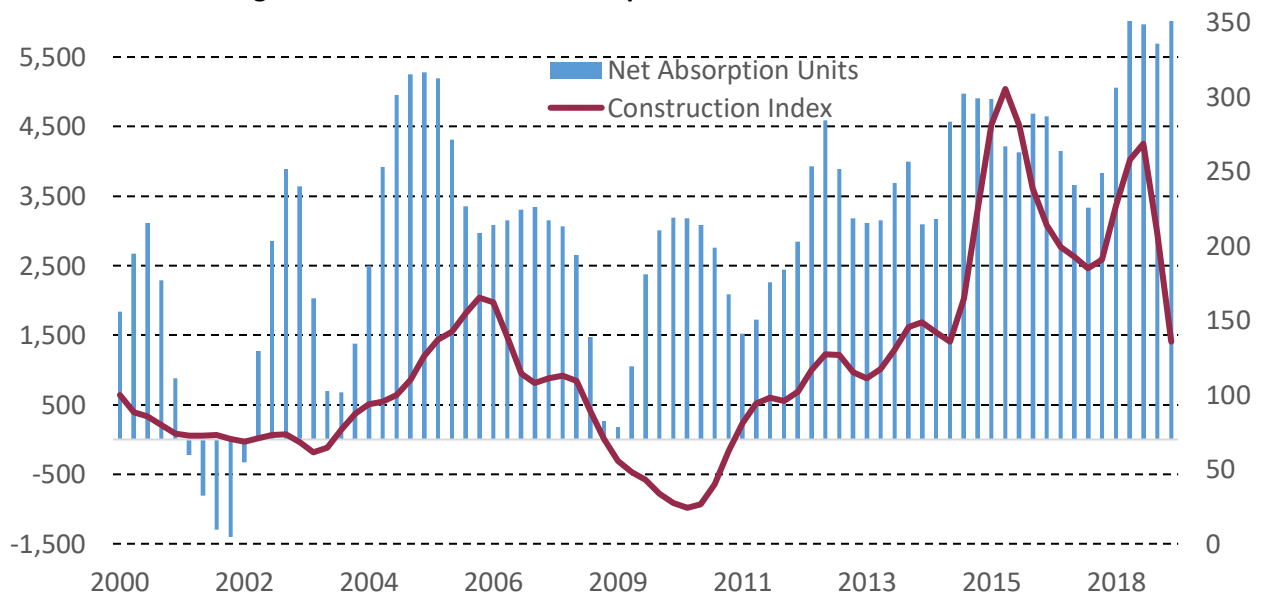
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 5. DFW Overall Vacancy and Effective Rent Growth



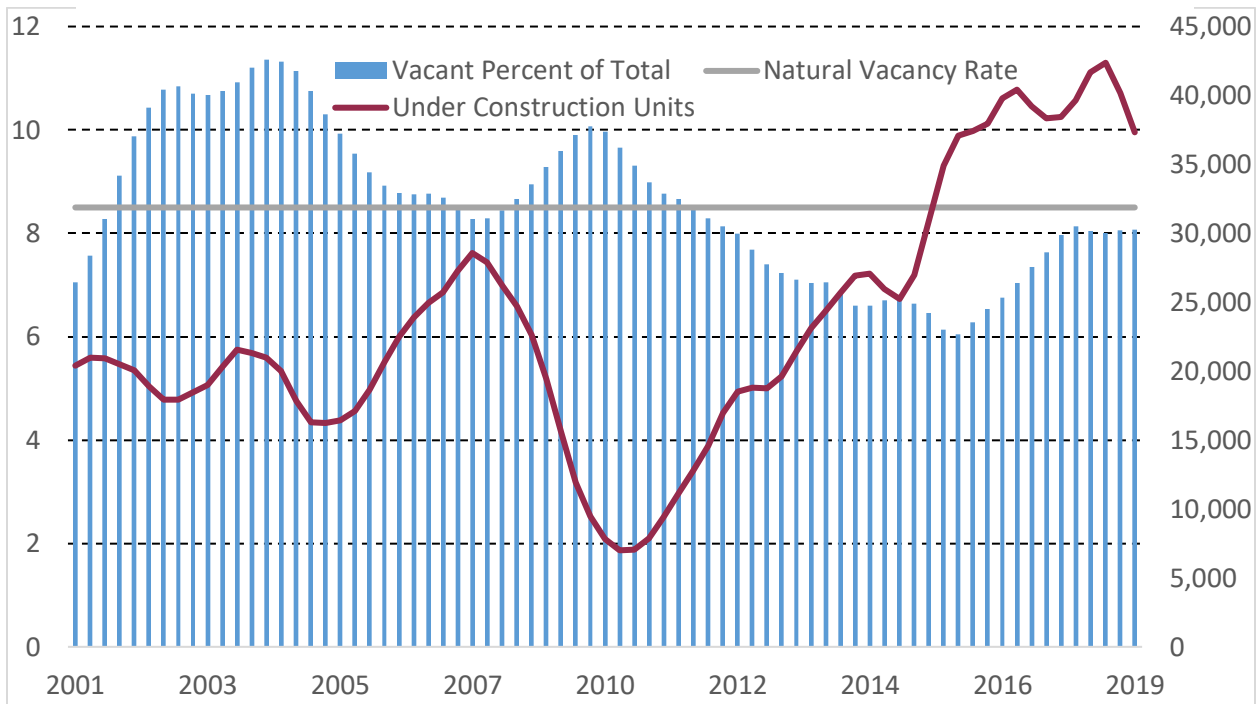
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 6. DFW Overall Net Absorption and Construction Index



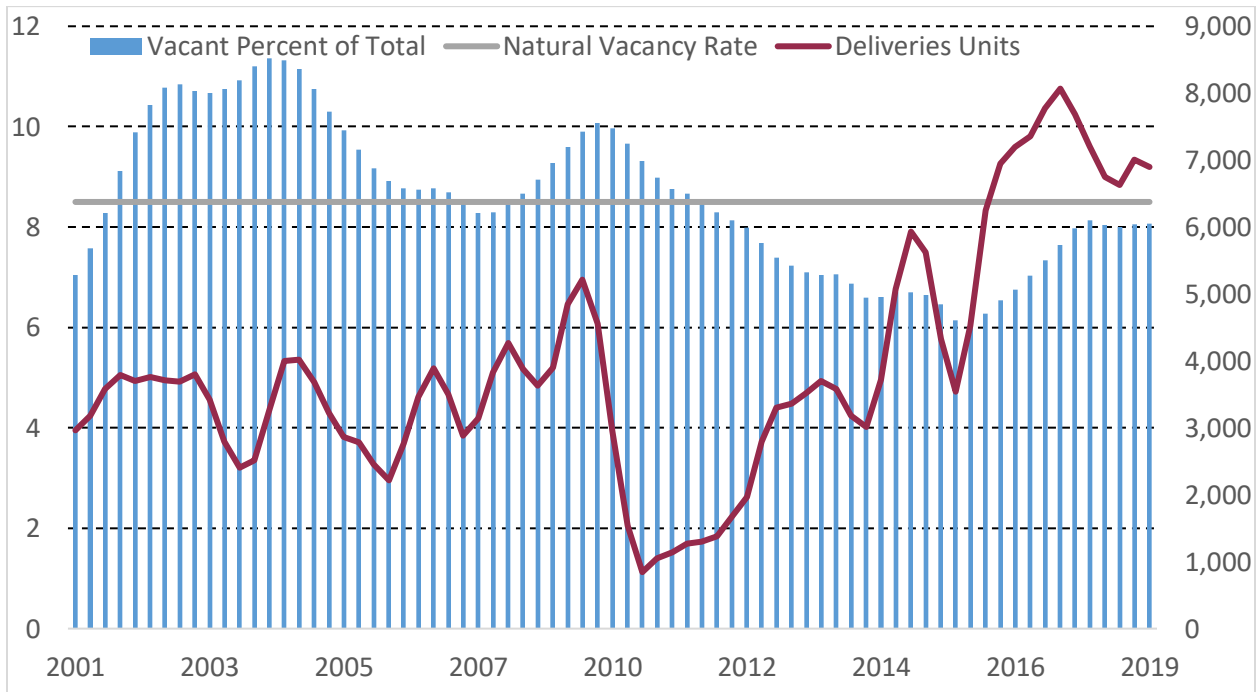
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

Figure 7. DFW Overall Vacancy and Units Under Construction



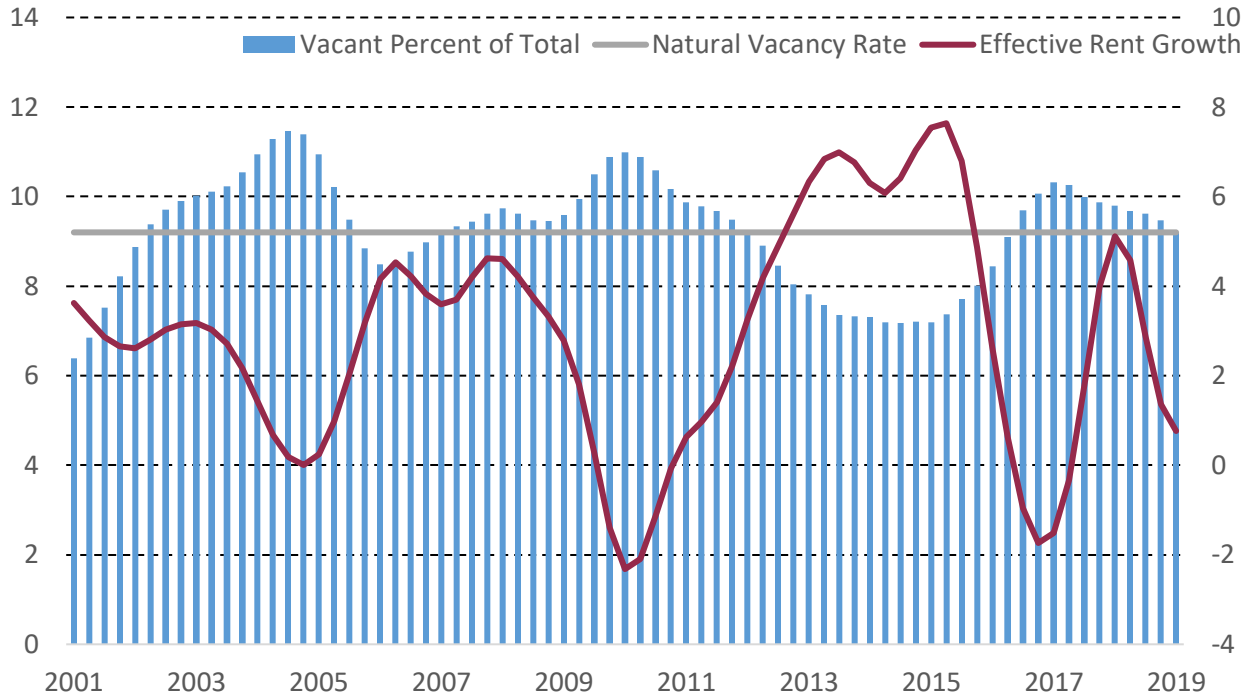
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 8. DFW Overall Vacancy and Delivery Units
(Index 1982 Q1 = 100)



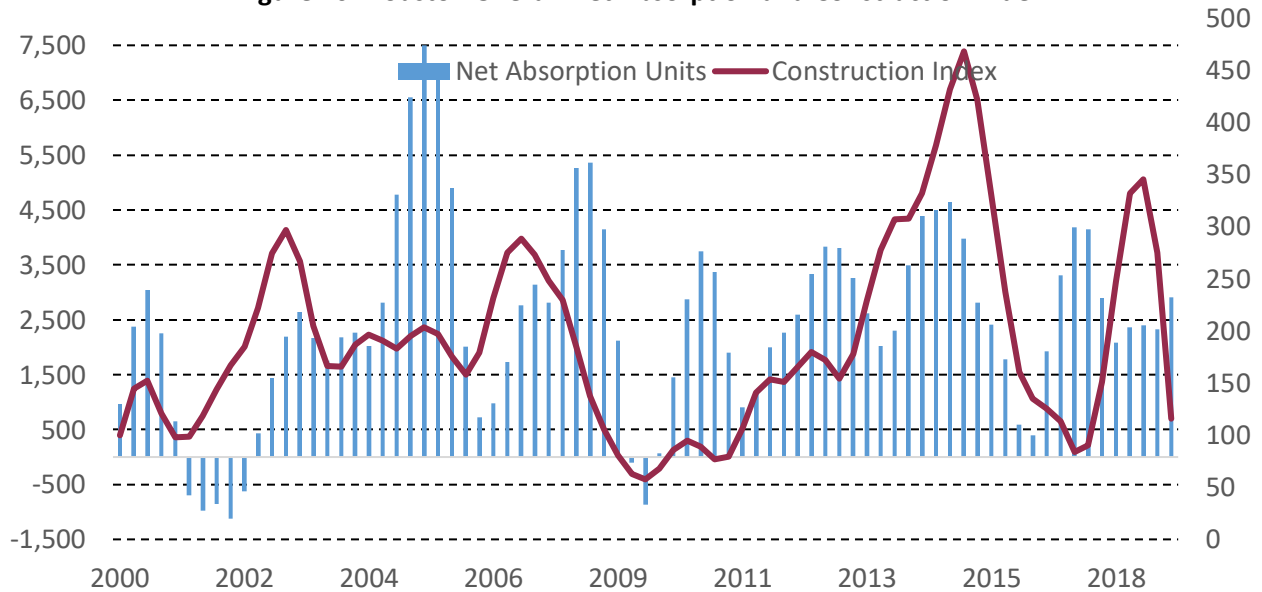
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 9. Houston Overall Vacancy and Effective Rent Growth



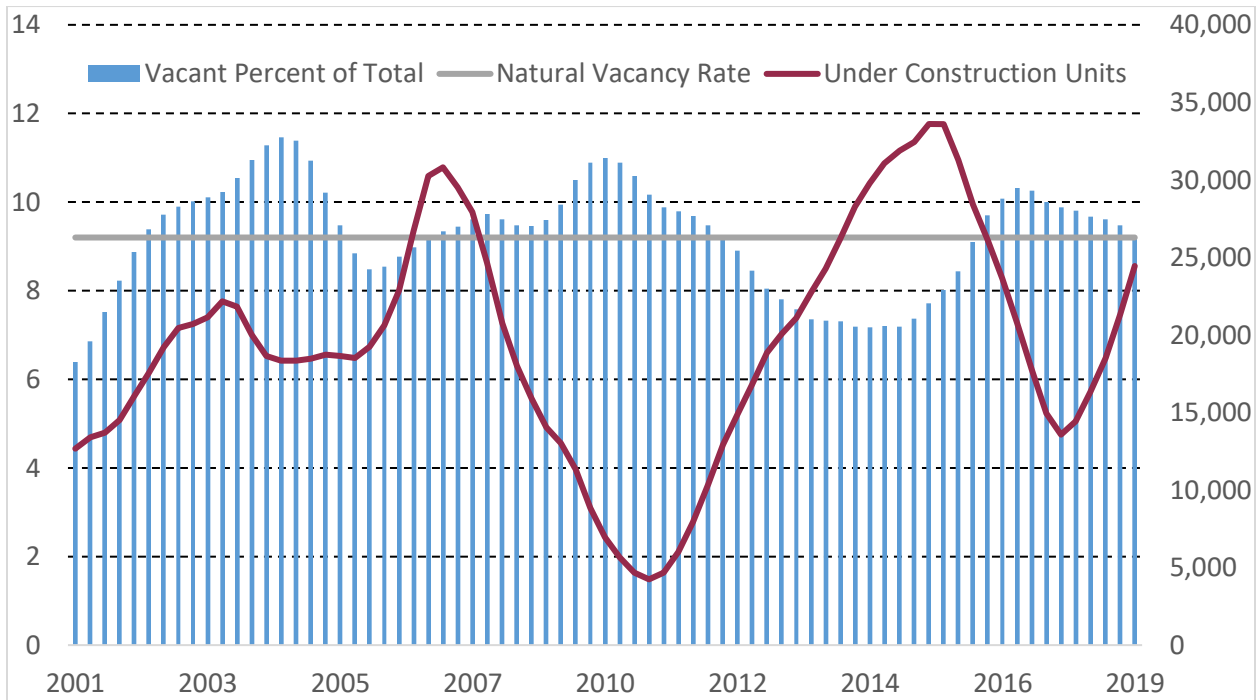
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 10. Houston Overall Net Absorption and Construction Index



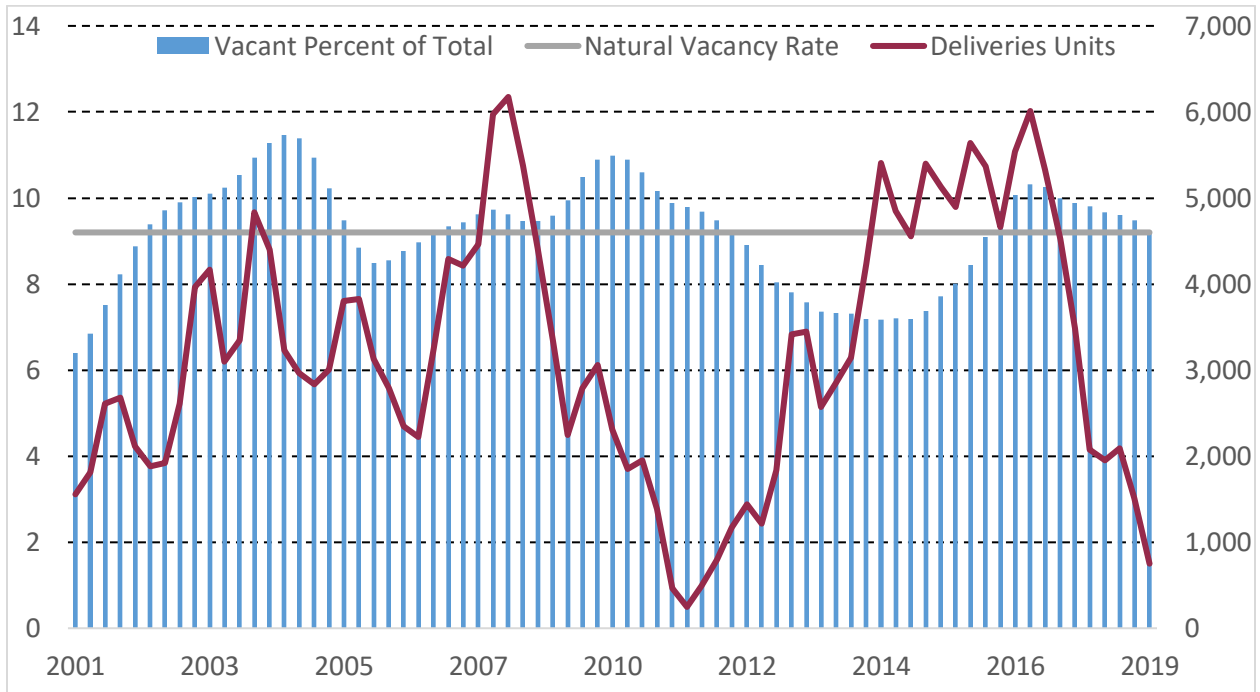
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

Figure 11. Houston Overall Vacancy and Units Under Construction



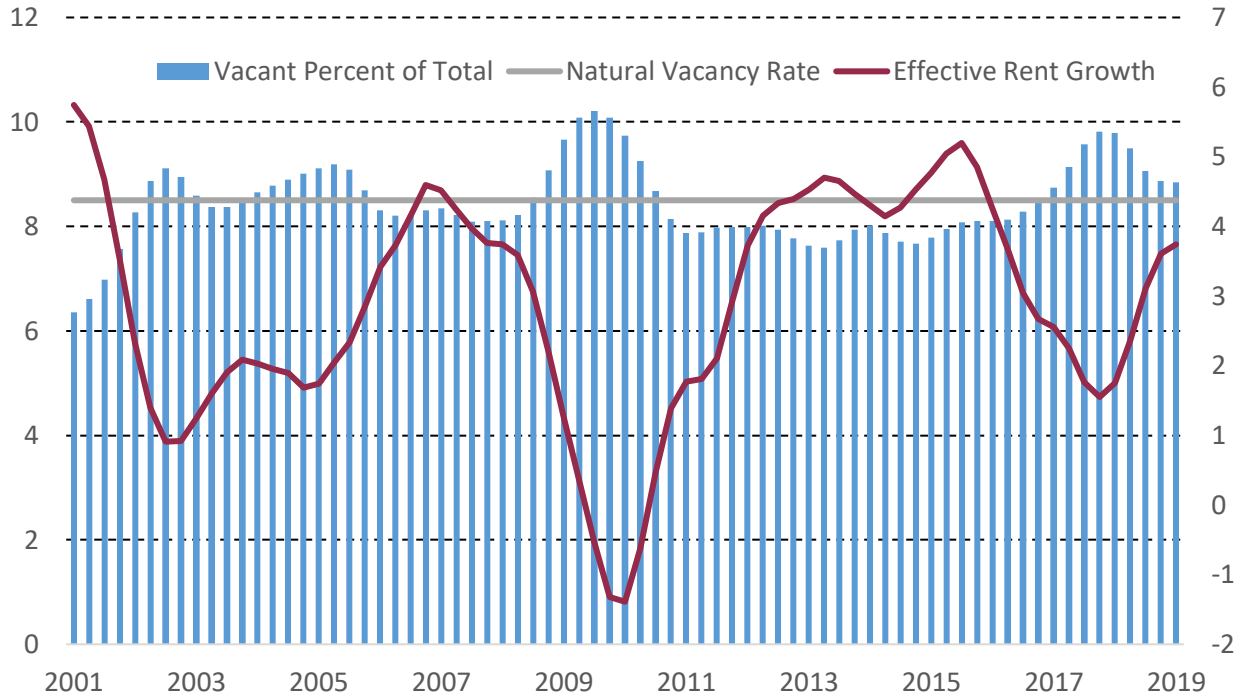
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 12. Houston Overall Vacancy and Delivery Units
(Index 1999 Q1 = 100)**



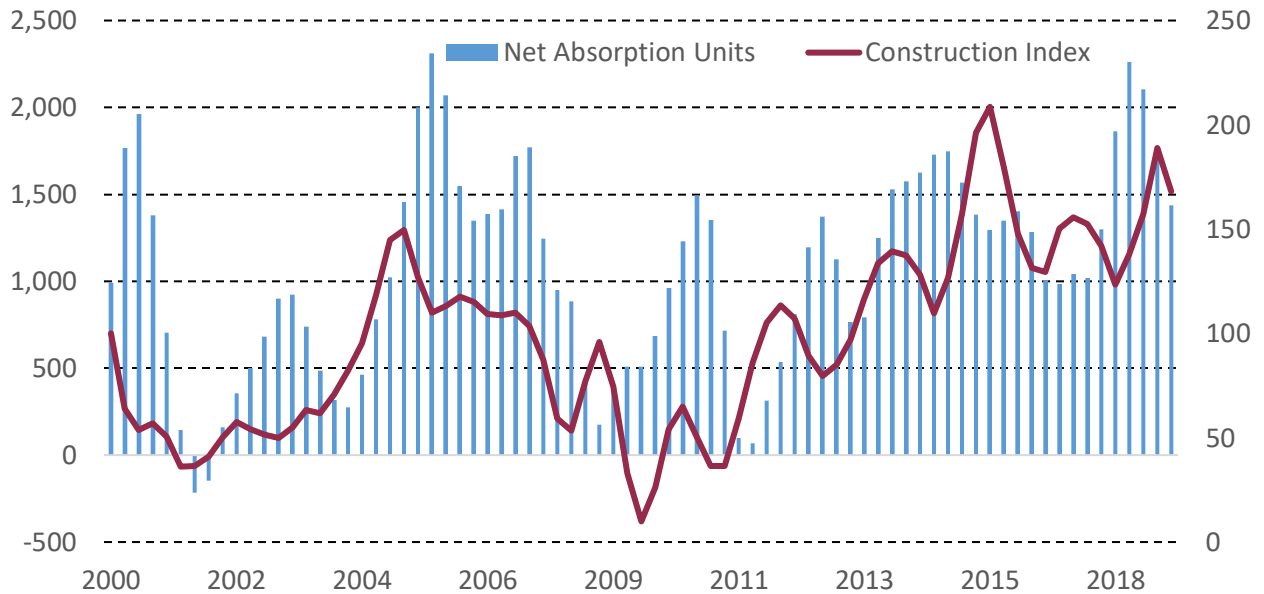
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 13. San Antonio Overall Vacancy and Effective Rent Growth



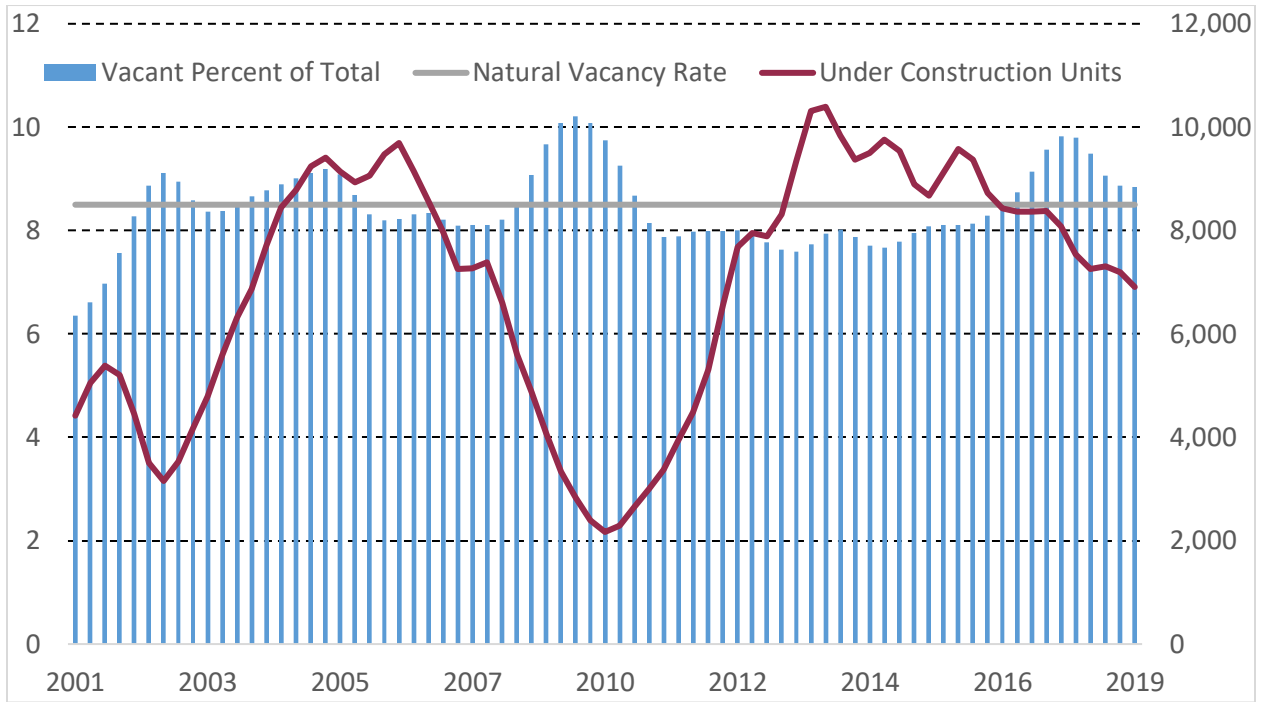
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 14. San Antonio Overall Net Absorption and Construction Index



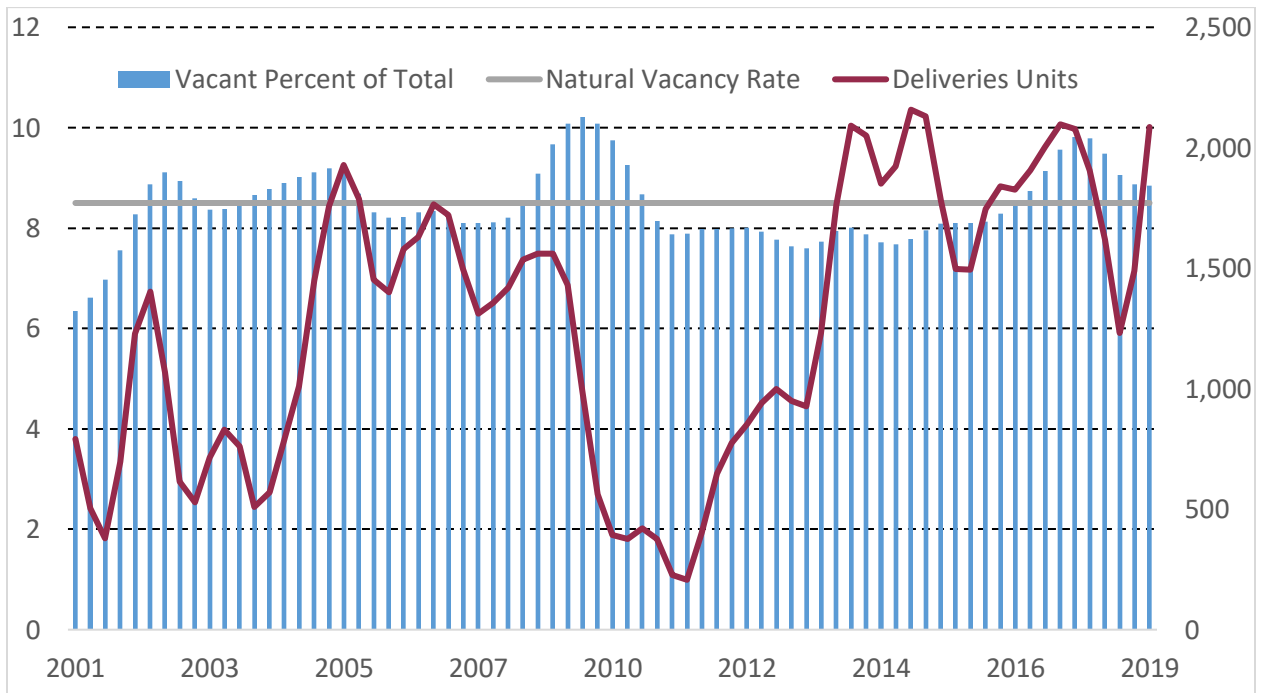
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

Figure 15. San Antonio Overall Vacancy and Units Under Construction



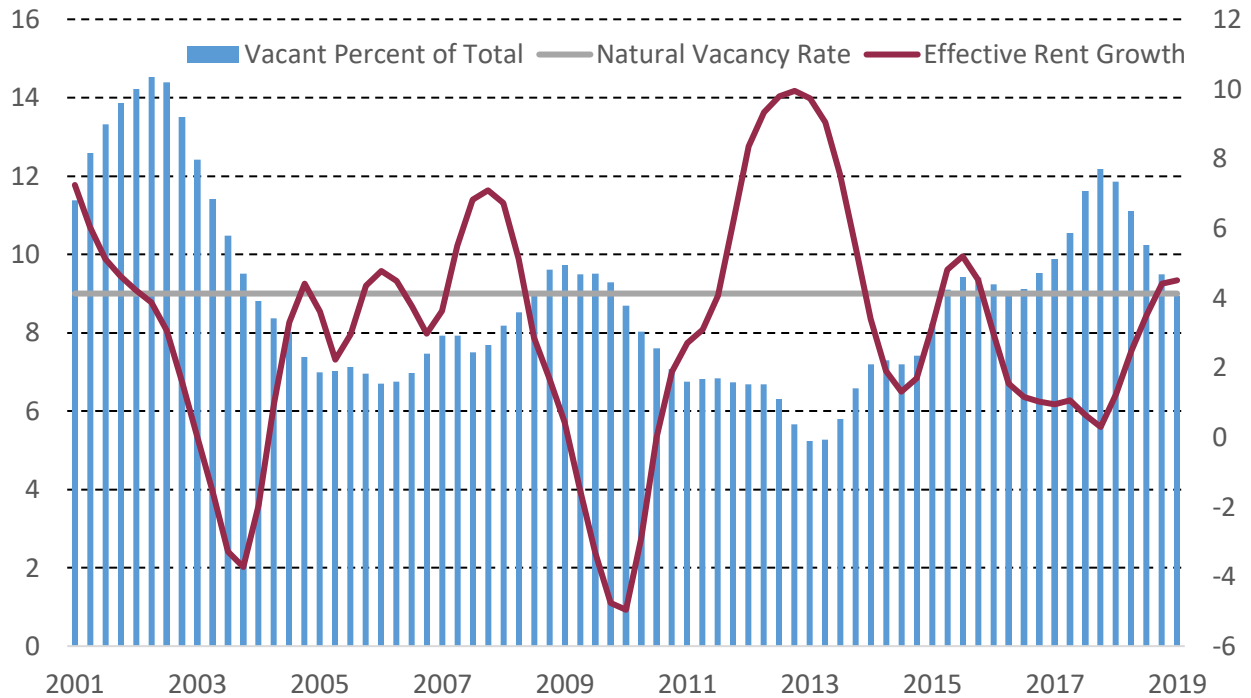
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 16. San Antonio Overall Vacancy and Delivery Units
(Index 2005 Q3 = 100)



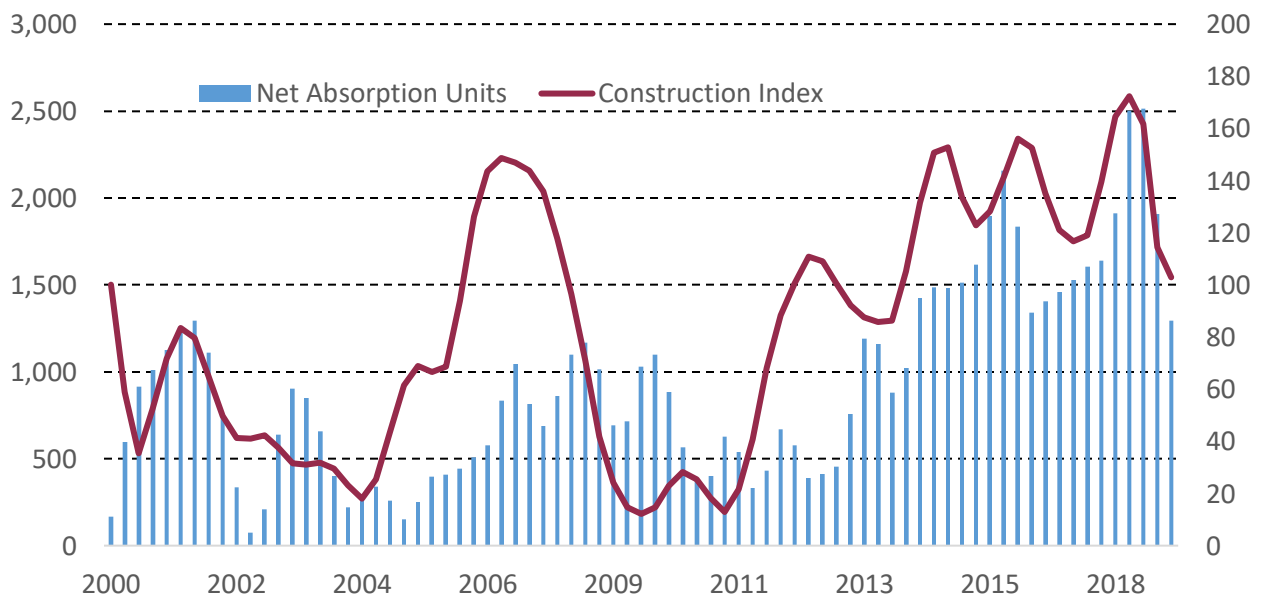
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 17. Austin Class A Vacancy and Effective Rent Growth



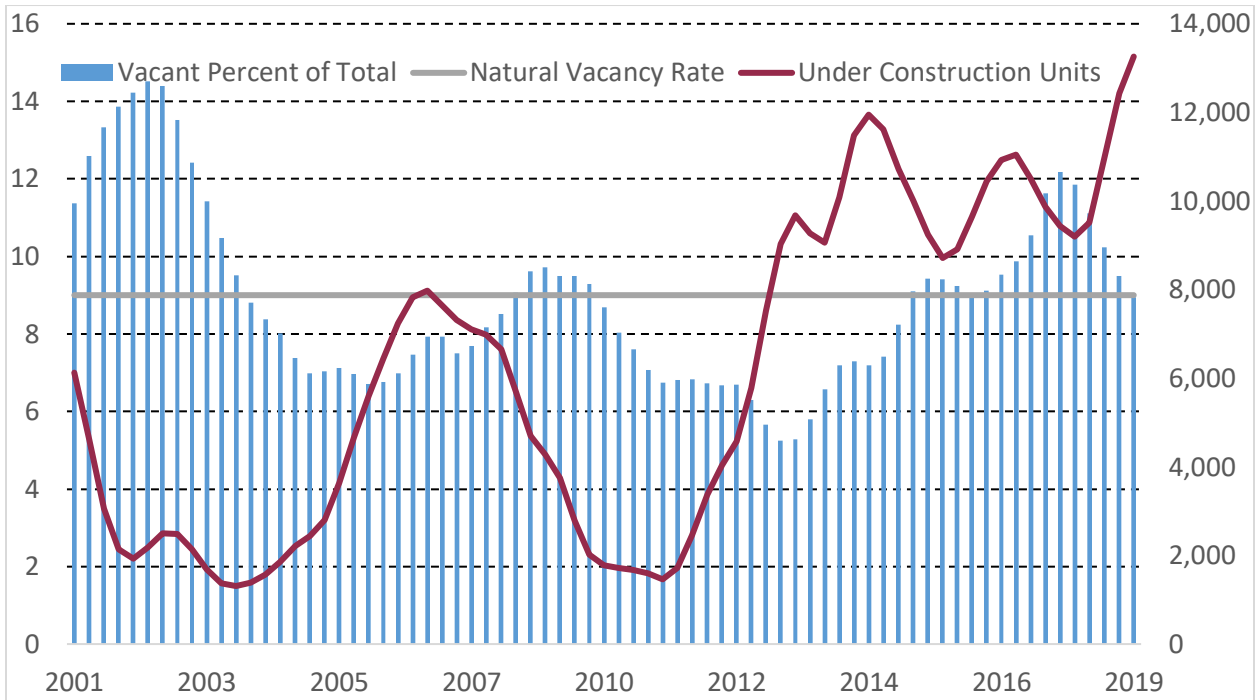
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 18. Austin Class A Net Absorption and Construction Index



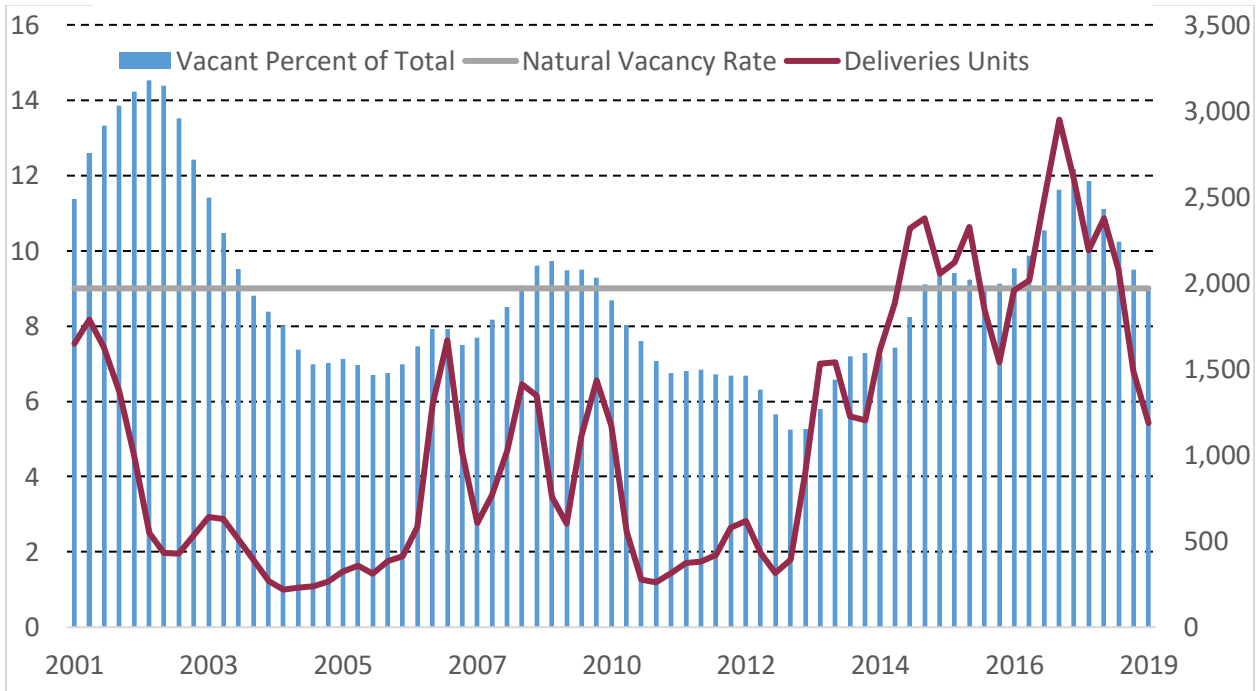
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

Figure 19. Austin Class A Vacancy and Units Under Construction



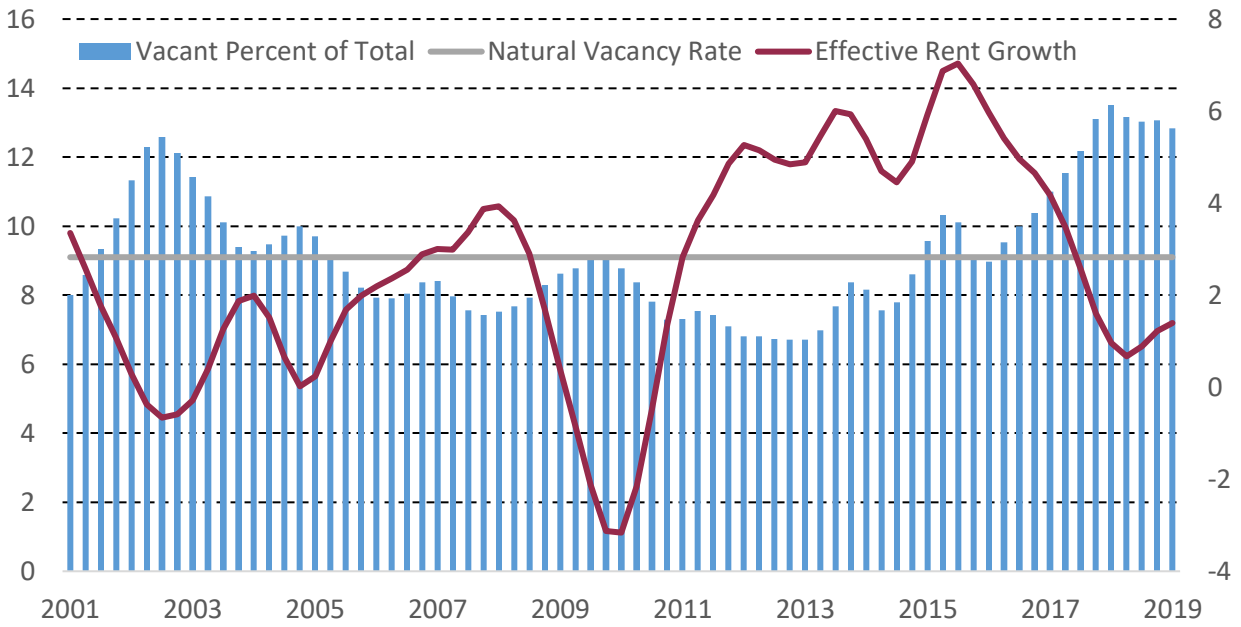
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 20. Austin Class A Vacancy and Delivery Units
(Index 2006 Q1 = 100)



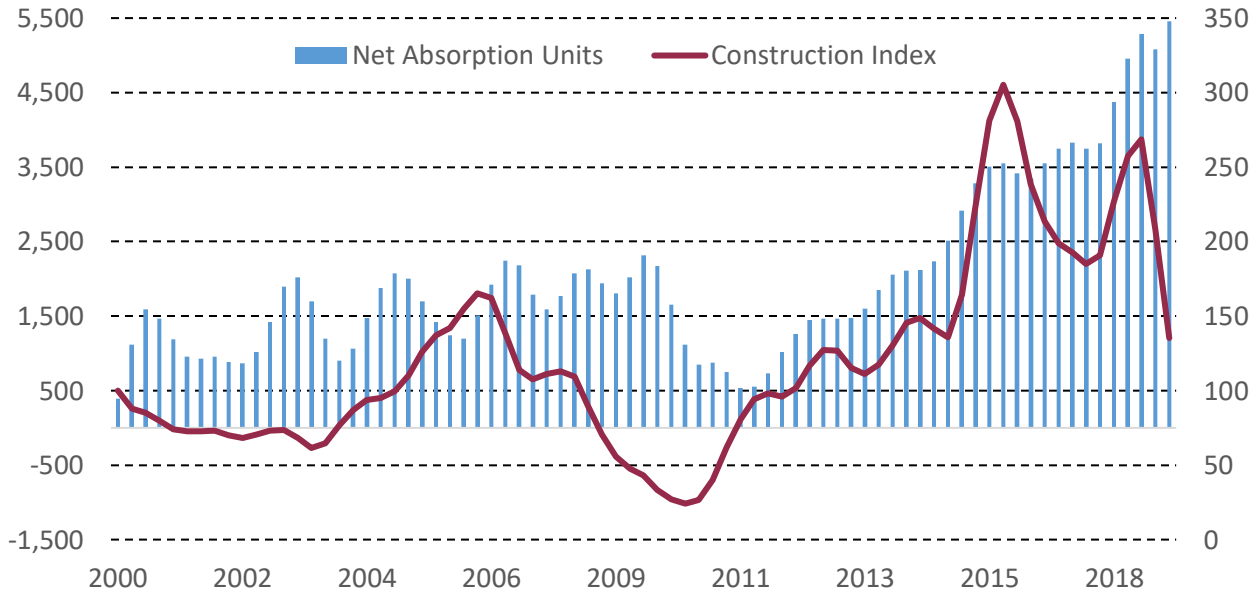
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 21. DFW Class A Vacancy and Effective Rent Growth



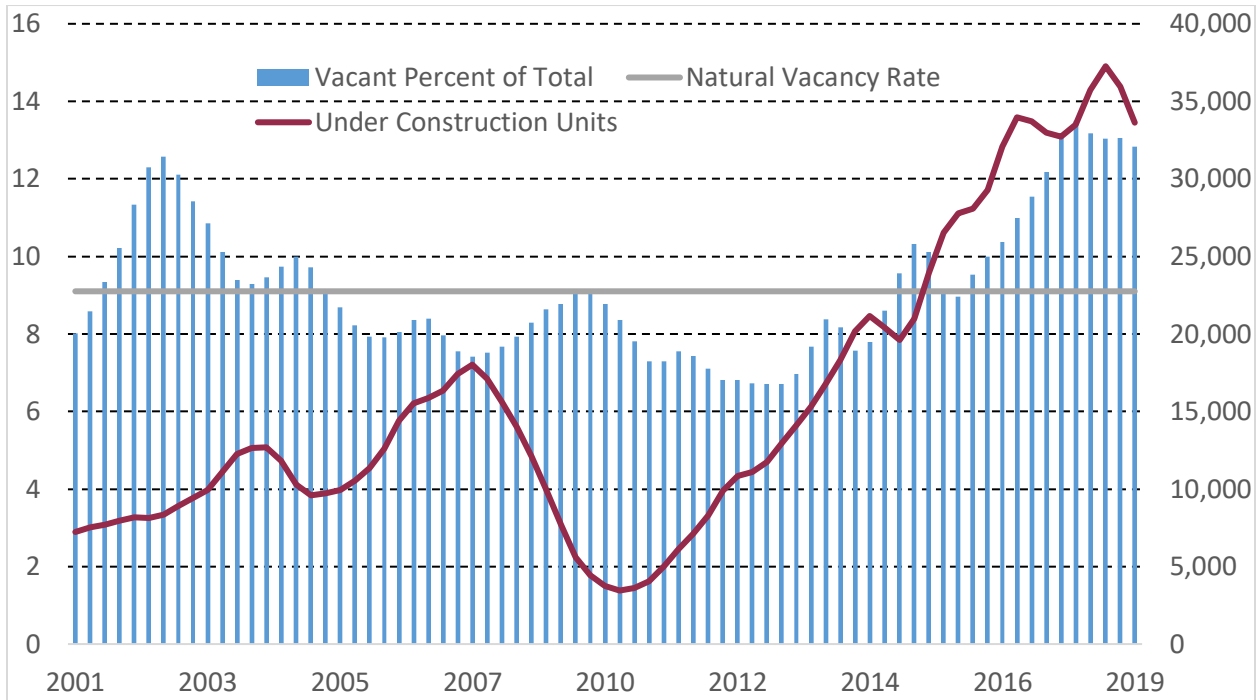
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 22. DFW Class A Net Absorption and Construction Index



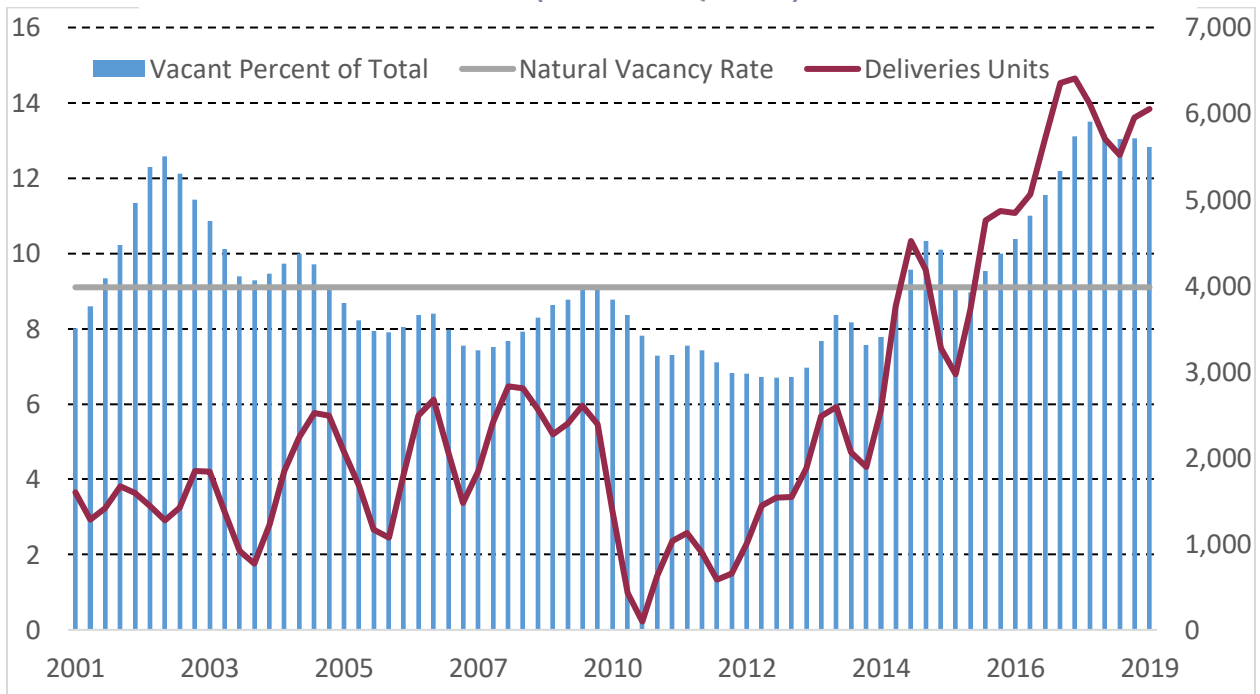
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

Figure 23. DFW Class A Vacancy and Units Under Construction



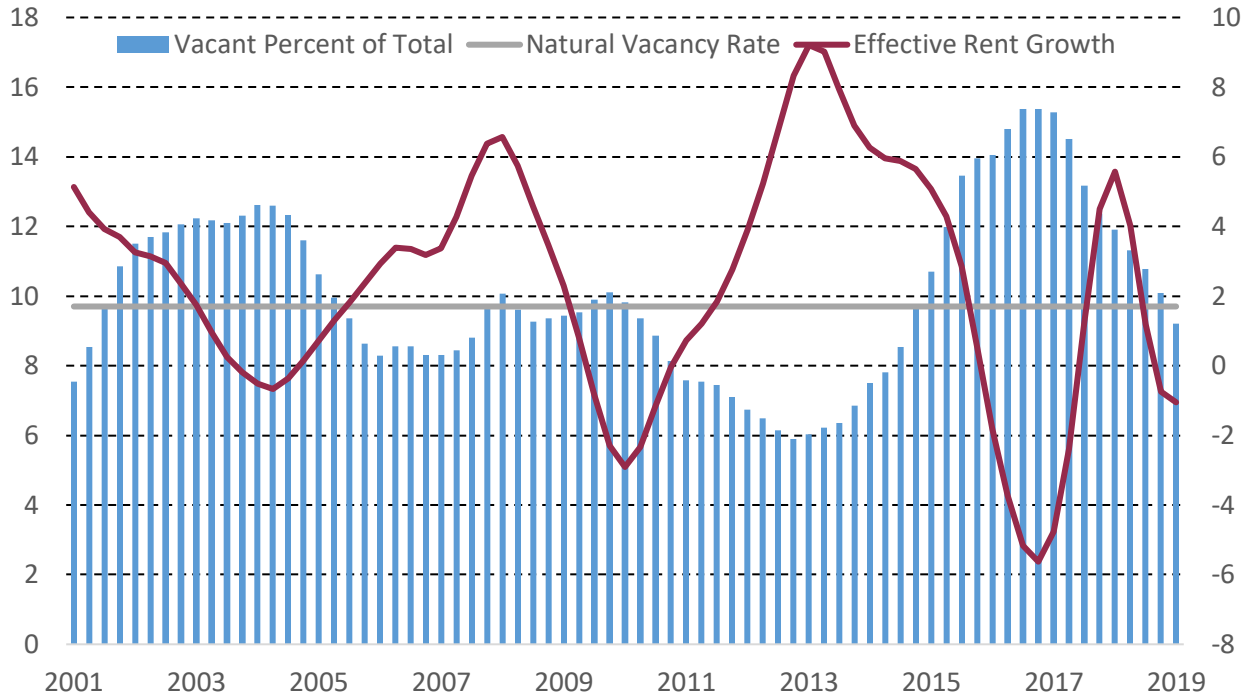
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 24. DFW Class A Vacancy and Delivery Units
(Index 2000 Q1 = 100)**



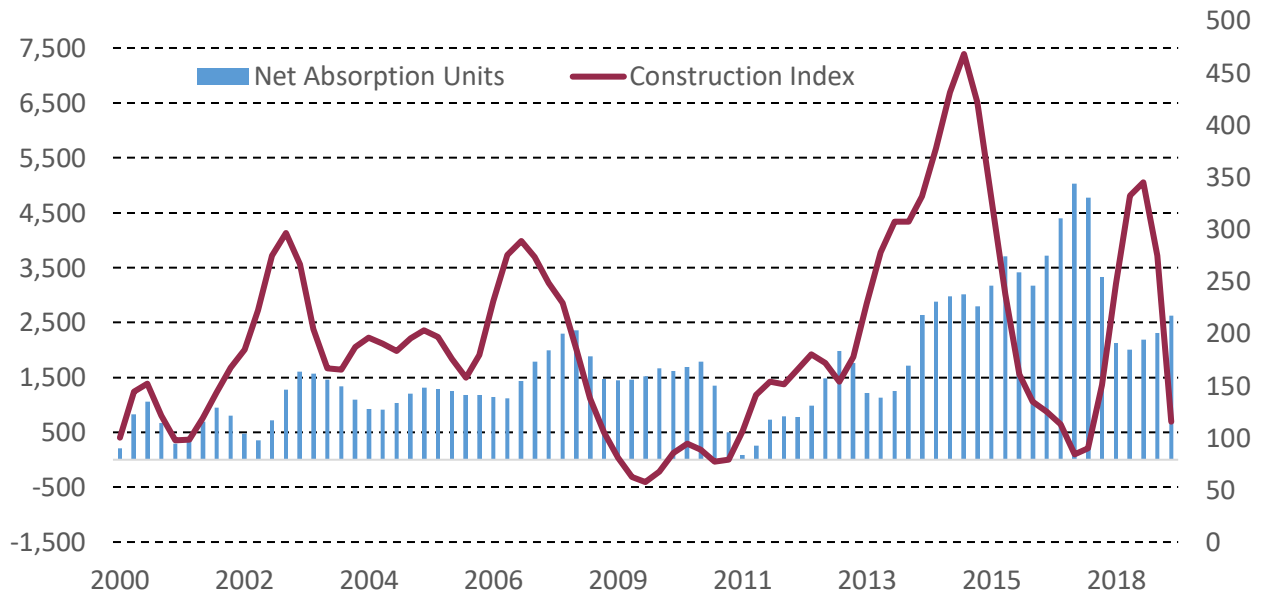
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 25. Houston Class A Vacancy and Effective Rent Growth



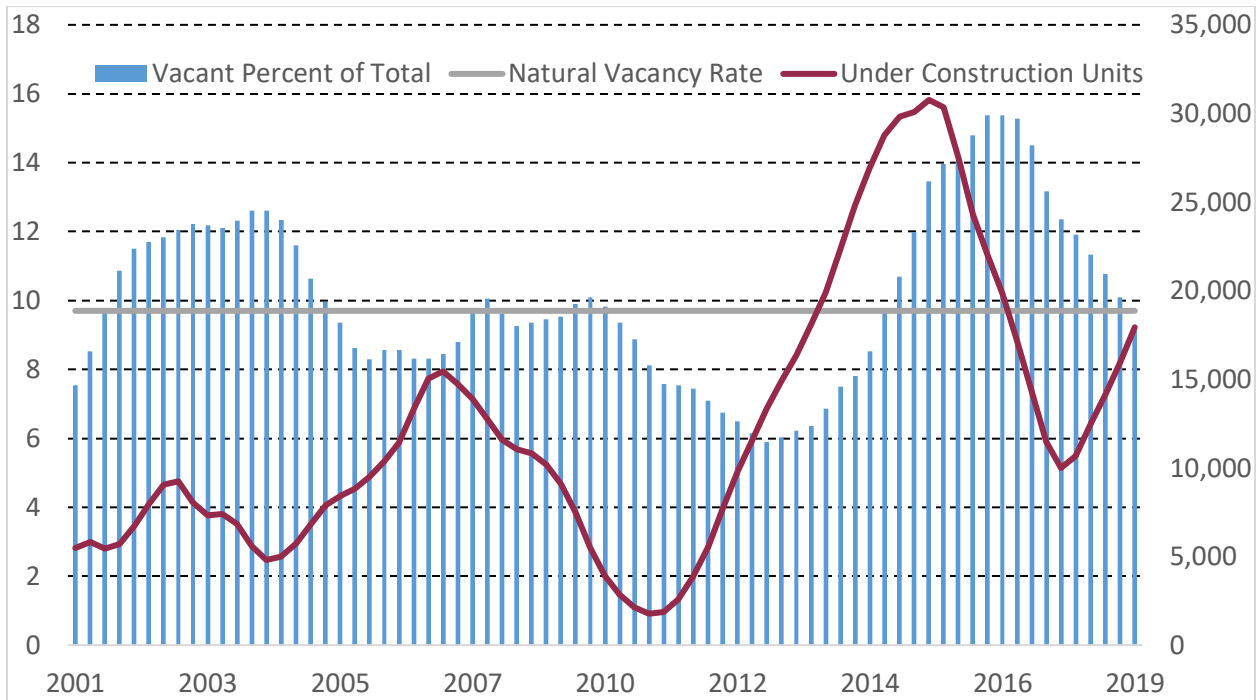
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 26. Houston Class A Net Absorption and Construction Index



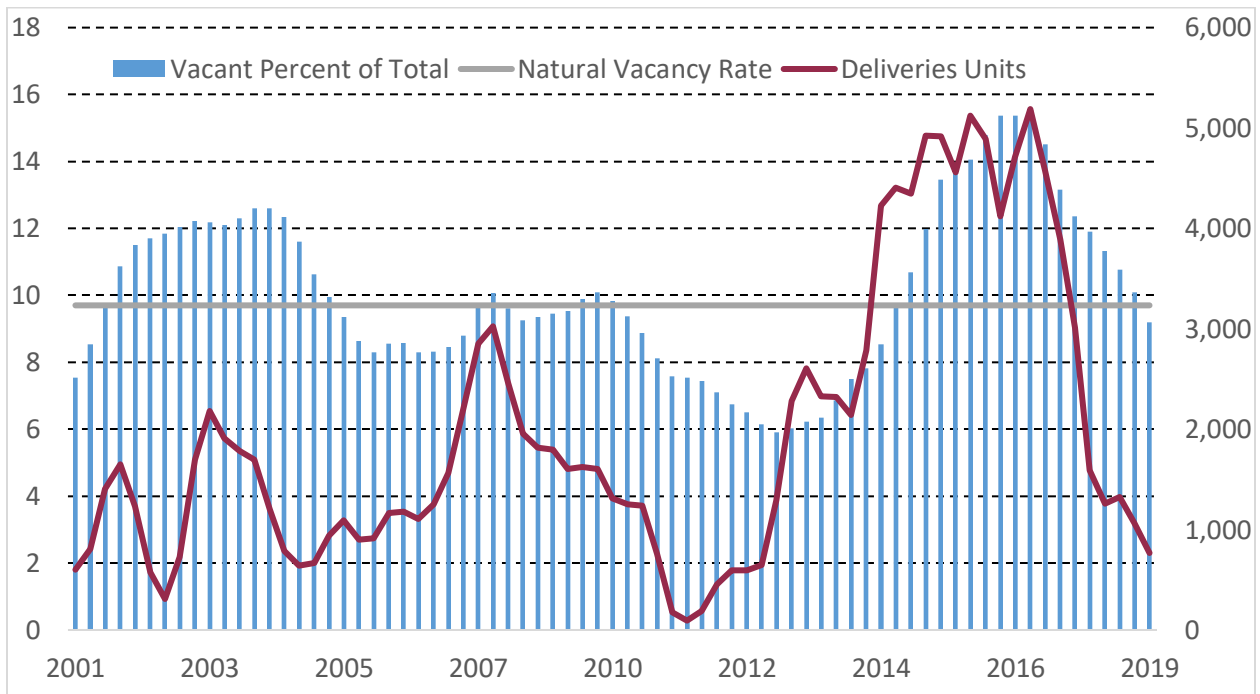
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

Figure 27. Houston Class A Vacancy and Units Under Construction



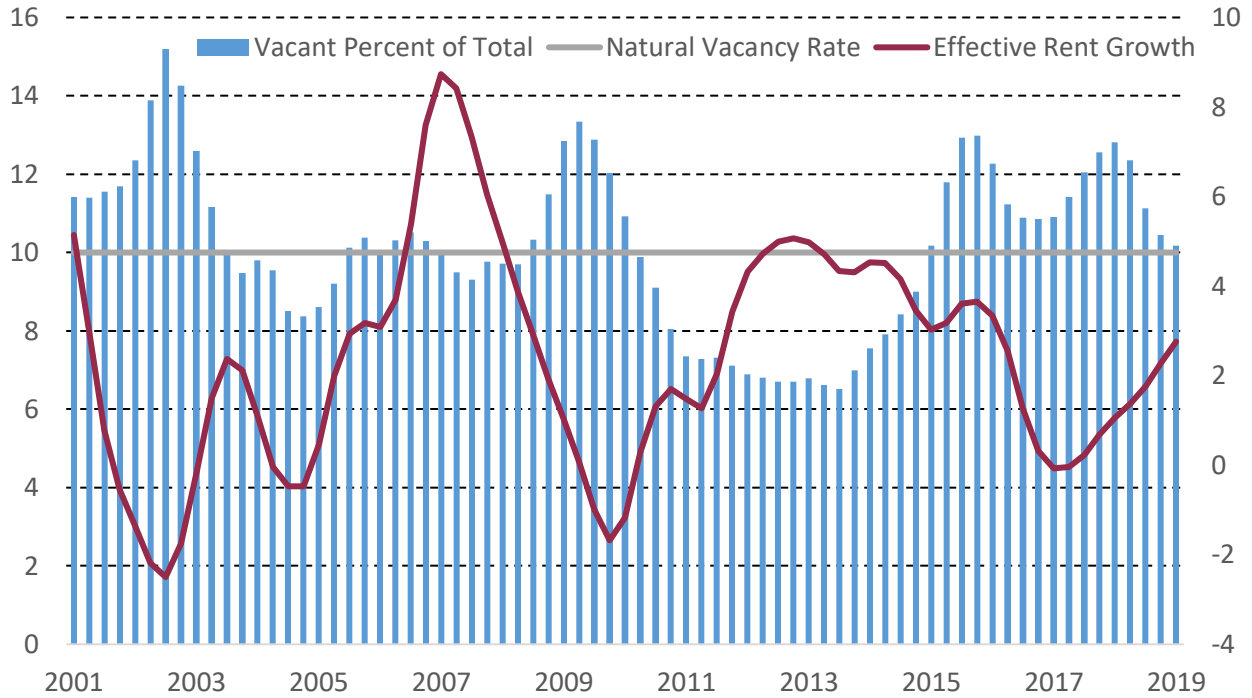
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 28. Houston Class A Vacancy and Delivery Units
(Index 2006 Q1 = 100)



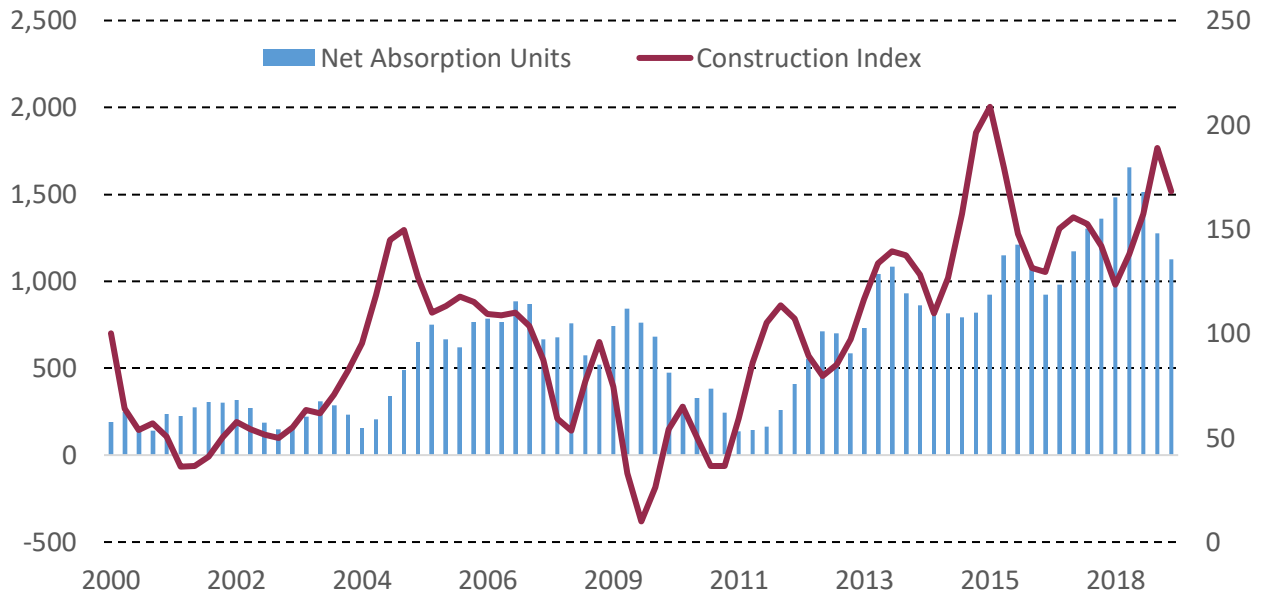
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 29. San Antonio Class A Vacancy and Effective Rent Growth



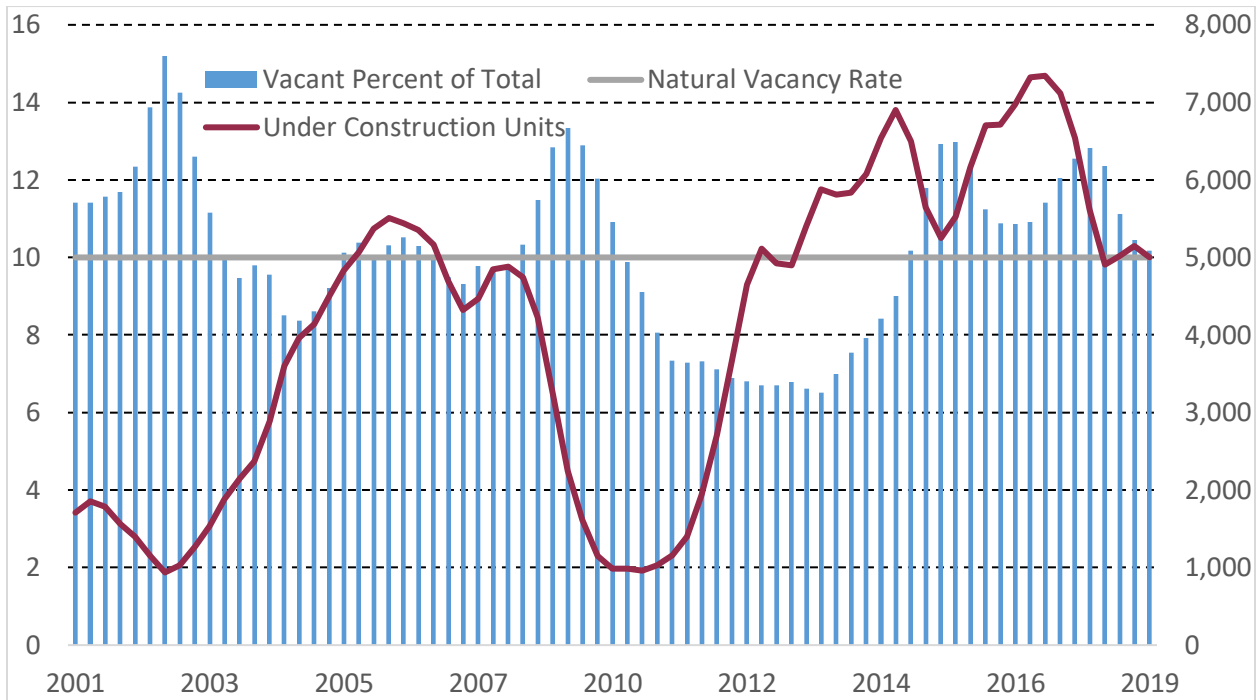
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 30. San Antonio Class A Net Absorption and Construction Index



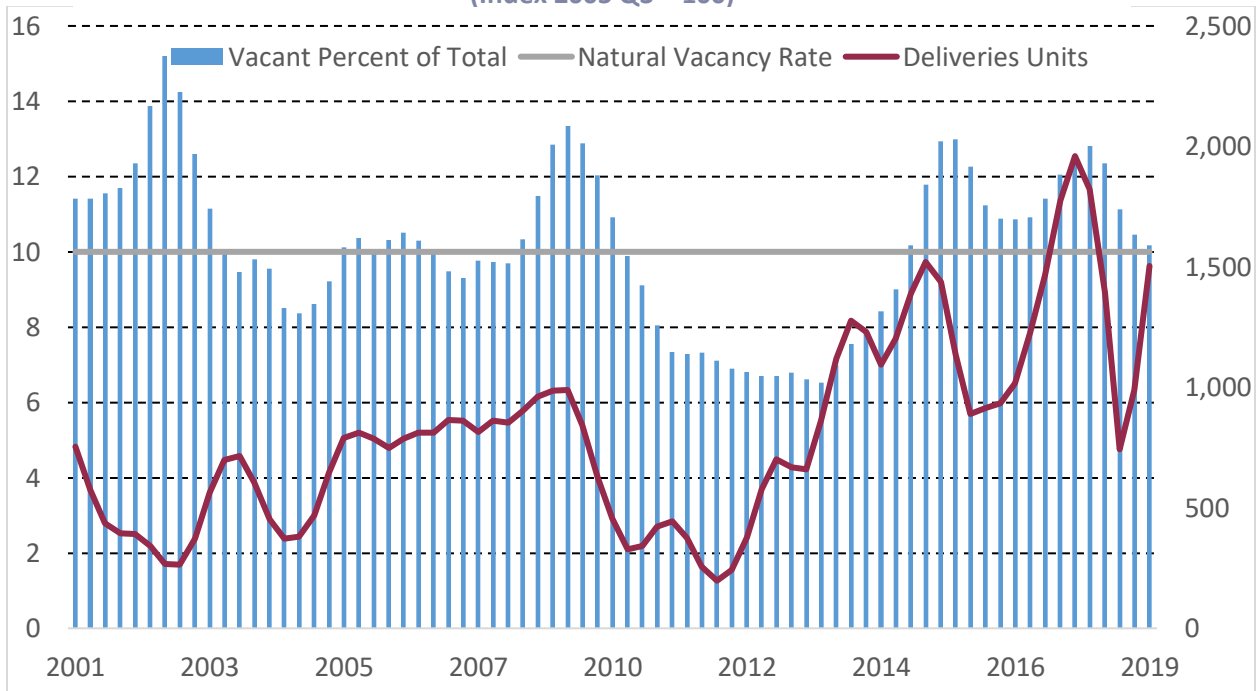
Note: Seasonally adjusted and trend-cycle component.
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

Figure 31. 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 32. San Antonio Class A Vacancy and Delivery Units
(Index 2005 Q3 = 100)



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 index: Reflects the construction value in relation to a specified base year.

Construction values: Depict the collective value of project starts for a particular sector.

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.

FIRE: A sector of the economy composed of finance, insurance, and real estate. Within this report, FIRE employment includes professional and business services.

Net absorption: The net change in occupied space, measured in square feet, 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.

SF: Square feet.

Under construction: Reflects the square footage of space under construction within a particular market; applies to buildings that have not received a certificate of occupancy.

Vacancy rate: A measurement expressed as a percentage of the total amount of physically vacant space 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 indicate the direction of rents and new construction.