

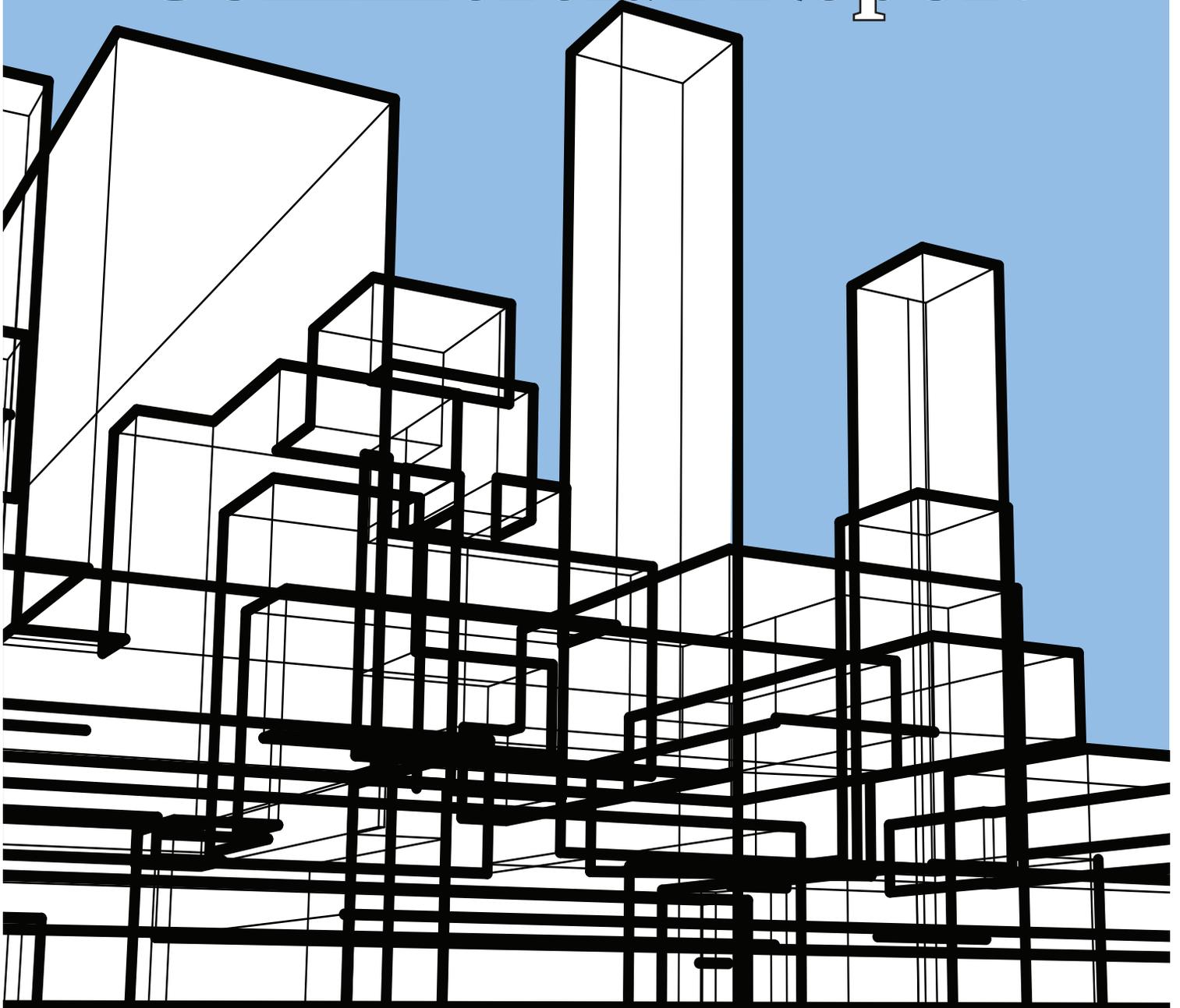


TEXAS A&M UNIVERSITY

Texas Real Estate Research Center



# Texas Quarterly Commercial Report



**Dr. Luis B. Torres**  
Research Economist

**Dr. Harold D. Hunt**  
Research Economist

**Clare Losey**  
Research Intern

**Garret Newman**  
Research Intern

**Brynn Martin**  
Research Intern

Technical Report  
**2211**  
FOURTH QUARTER 2020

# Texas Quarterly Commercial Report: 4<sup>th</sup> Quarter 2020

## DALLAS FORT WORTH

	OCCUPANCY RATES	ASKING RENTS
OFFICE	79.9% ▼	4.0% ▲
OFFICE CLASS A	76.3% ▼	2.9% ▲
RETAIL	92.9% ▼	-0.8% ▲
WAREHOUSE	91.6% ▬	13.6% ▼

## AUSTIN

	OCCUPANCY RATES	ASKING RENTS
OFFICE	85.1% ▼	0.5% ▼
OFFICE CLASS A	81.9% ▼	-4.9% ▼
RETAIL	94.9% ▬	-0.9% ▼
WAREHOUSE	92.8% ▲	7.2% ▲

## SAN ANTONIO

	OCCUPANCY RATES	ASKING RENTS
OFFICE	87.0% ▼	4.2% ▼
OFFICE CLASS A	83.9% ▼	5.8% ▼
RETAIL	93.8% ▬	-2.7% ▼
WAREHOUSE	92.6% ▼	10.0% ▲

## HOUSTON

	OCCUPANCY RATES	ASKING RENTS
OFFICE	77.8% ▼	0.5% ▲
OFFICE CLASS A	74.2% ▼	-0.6% ▲
RETAIL	92.9% ▬	3.6% ▼
WAREHOUSE	87.1% ▼	4.9% ▲



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



# Table of Contents

**About this Report** ..... 3

**Overview of the Texas Economy** ..... 4

**Austin** ..... 8

    Overall Office

    Class A Office

    Retail

    Warehouse

**Dallas-Fort Worth** ..... 10

    Overall Office

    Class A Office

    Retail

    Warehouse

**Houston** ..... 13

    Overall Office

    Class A Office

    Retail

    Warehouse

**San Antonio** ..... 16

    Overall Office

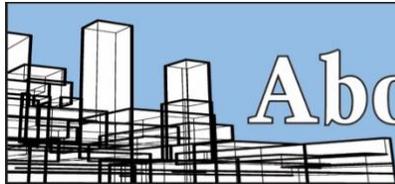
    Class A Office

    Retail

    Warehouse

**Figures** ..... 18

**Definitions** ..... 64



# About this Report

Texas Real Estate Research Center economists continuously monitor multiple facets of the global, national, and Texas economies. The *Texas Quarterly Commercial Report* is a summary of important economic indicators that help discern commercial real estate (CRE) trends in four major Texas Metropolitan Statistical Areas—Austin, Dallas-Fort Worth, Houston, and San Antonio.

All quarterly measurements are calculated using seasonally adjusted and trend-cycled data. Seasonal adjustment smooths the quarterly fluctuations in the data, while trend-cycle adjustment 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 and trends in the data.

This report analyzes asking rents, which exclude tenant improvements and concessions, as opposed to effective rents. Rents reflect nominal year-over-year estimates, unless stated otherwise. The analysis uses industry-specific employment growth to reflect the employment most relevant to each industry. For example, the employment data for the office sector includes finance, insurance, and real estate as well as professional and business services (FIRE & PBS) employment to measure the bulk of employees working in the office sector.

This analysis uses CoStar and Dodge Analytics data. The time series varies by sector and geography, depending on the data available. Sectors with shorter time series limit the interpretation of the data. The data reflect nonowner-occupied space. No raw data are published in this report. Both CoStar and Dodge Analytics make changes to their historical data.

This quarterly publication provides data and insights on the Texas commercial real estate markets. We hope you find them useful. Your feedback is always appreciated. Send comments and suggestions to [info@recenter.tamu.edu](mailto:info@recenter.tamu.edu).

Dr. Luis Torres, Dr. Harold Hunt, Clare Losey, Garrett Newman, and Brynn Martin



# Overview of the Texas Economy

The COVID-19 pandemic didn't just end the longest economic expansion in Texas' history, it also pervaded every facet of the state's economy. Global shutdowns in the spring weighed heavily on the manufacturing, energy, and trade sectors as industrial output plummeted, and the West Texas Intermediate (WTI) crude oil spot price averaged \$39 per barrel.

Conditions improved as factories reopened with social distancing and mask-wearing mandates. Cautious public and consumer sentiment had a greater impact on oil demand and the leisure/hospitality sector via extremely reduced business and pleasure travel, dining at restaurants, and trips to museums and other contact-intensive recreational businesses. Many of the direct stimulus checks Americans received went to paying off debt, building up savings, or paying rent/mortgage rather than being spent on consumer goods and services.

Labor-market conditions deteriorated compared with strong 2019 levels. Layoffs could have been worse if not for federal loans to small businesses that incentivized employee retention. One of the few bright spots, Texas' housing market boomed with record sales amid historically low interest rates, although depleted inventory is a significant headwind in 2021. The nature of the pandemic-induced recession this year, however, suggests a silver lining. If the virus is contained through vaccinations, immunity, and continued measures to prevent the spread of the disease (e.g., social distancing, mask wearing), economic activity and mobility may recover to pre-pandemic levels in the short-term. For additional commentary and statistics, see the Texas Real Estate Research Center's *Outlook for the Texas Economy*.

The Texas Nonresidential Construction Cycle (Coincident) Index, which measures current construction levels, ticked down due to declining construction put in place, industry wages and employment. The statewide Nonresidential Construction Leading Index points toward further future declines in nonresidential construction activity, amid falling construction value starts. Similarly, Houston's leading indexes are pointing toward declines in commercial construction activity in the near future. In contrast, Austin recorded growth in all of its leading indexes as construction value starts and employment numbers rebounded from the 2Q2020 shutdown. DFW leading indexes point toward increased activity in office and warehouse, while future retail construction should decline. San Antonio leading indexes, except for warehouse, are indicating less activity going forward, while warehouse construction should record strong growth in the near future. See Figures 1-5 for the Nonresidential Coincident Index and Leading Indicator for Texas and the four major metros.

Texas shed a record-breaking 431,150 nonfarm jobs in 2020, amounting to 3.4 percent of payrolls, the greatest annual percentage decline since 1945 but less than the national loss of 5.8 percent. Moreover, Texas' labor force participation rate ticked down to an all-time low of 62.7 percent as more than 81,500 Texans exited the labor force amid pandemic-related disruptions and uncertainty. Women in the 25-34 year age group were more likely than men to leave the labor force to take care of children amid in-person school closures. The total contribution to the labor-force contraction, however, was double for men than for women in percentage terms.

Houston shed 122,700 nonfarm jobs, a steeper decline than the state average in percentage terms (3.9 percent). Leisure/hospitality accounted for more than a third of the decrease, followed by the goods-producing sector. The other major MSAs registered the largest drops in leisure/hospitality and education/health services employment. Although Fort Worth regained all the retail layoffs from the previous year plus some, total payrolls still shrank by 35,500 employees (3.3 percent). Transportation/utilities was the bright spot in San Antonio with double-digit annual growth, but the metro still cut 33,400 positions altogether (3.1 percent). In Austin and Dallas, hiring in the financial activities sector offset some of the overall contractions to cap losses at 23,000 (2.1 percent) and 49,250 jobs (1.8 percent), respectively.

Texas' goods-producing sector decreased by 87,000 workers with 45,000 of the discharges energy-related. Due to still-diminished employment levels from the 2015-16 oil bust, however, 2020 mining/logging losses were less than half compared with the mid-decade industry downturn, with hiring resuming, albeit modestly, in the fourth quarter. More than 24,300 manufacturers were laid off, mostly in Houston and Fort Worth's durable-goods industry. Meanwhile, the construction industry laid off more than 17,700 employees with most losses in Houston.

Service-providing employment marked its worst year on record (series starting in 1990), falling by 344,100 positions annually. Coinciding with the economic shutdown, almost 1.3 million jobs were lost in March and April alone. On the subsector level, only transportation/utilities and financial activities eked out modest gains, increasing 1.3 and 1.2 percent, respectively. Leisure/hospitality payrolls declined by 13.9 percent, or 194,000 jobs. Education/health services shed 46,800 positions. Other service-providing services, including personal/laundry services, posted the second-largest percentage decrease of 5 percent.

Almost 4.2 million initial unemployment insurance claims were filed during 2020 (with more than 40 percent submitted in March and April), about three-and-a-half times the number in 2009 compared with just two-and-a-half times nationally. Although the data around the holidays are more volatile, Texas claims climbed in December as COVID-19 cases surged, a divergence from the U.S. eight-month downtrend. Meanwhile, the statewide unemployment rate rose more than 4 percentage points annually to average 7.7 percent. Among the major MSAs, joblessness was highest in Houston, where the rate shot up to 8.6 percent due to a

higher proportion of energy-related jobs in the metro. The metric in San Antonio and DFW was lower than the state average at 7.3 and 7.1 percent, respectively, but Austin maintained the lowest rate of 6.2 percent, although unemployment still increased considerably. The decrease in unemployment after 2Q2020 is important for commercial vacancies given the relationship between unemployment rates and vacancy rates. The longer unemployment rates remain elevated, the stronger the negative impact on vacancies and rents. As expected, the increase in the unemployment rate during 2Q2020 pushed up vacancy rates in the major metros (see Figures 6-9).

Economic uncertainty surrounding the COVID-19 pandemic prompted investors to purchase safe-haven assets at an accelerated rate during the first half of the year, pulling interest rates to historically low levels. Expansionary monetary measures by the Federal Reserve and development on the vaccine front generated both higher inflation and growth expectations, pushing interest rates up in the fourth quarter, but the ten-year U.S. Treasury bond yield still fell 125 basis points in 2020, averaging a record-low 0.9 percent. Even before the pandemic, the spread between commercial capitalization rates and the ten-year Treasury yield had begun to increase by the end of 2019 and has continued through 4Q2020. This increased spread indicates increased risk and profitability in commercial real estate. Inflation and growth expectation are expected to increase in 2021 pushing up interest rates, thus the spread between commercial cap rates and the ten-year Treasury bill should decline somewhat in the coming year.

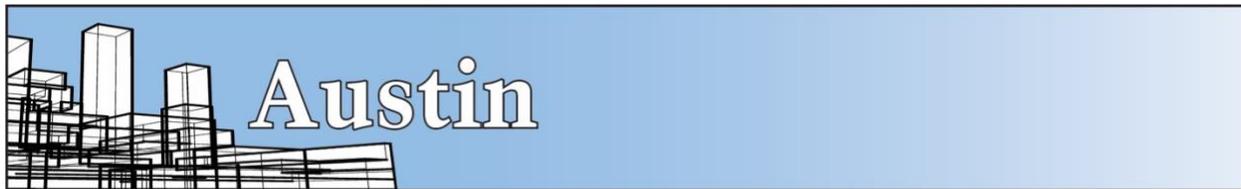
Office cap rates (Figure 10) increased during 2020 in Texas' major MSAs. It was the only market that registered consecutive increases through the four quarters, possible due to the uncertainty surrounding the office markets future once the pandemic ends. San Antonio and Houston continued to register the highest cap rates. During 2020, the spread between the ten-year Treasury bill increased. Austin was the least risky market for office real estate in 2020 based on the spread with the ten-year Treasury bill.

Retail cap rates (Figure 11) decreased during 2020 in Texas' major MSAs. Even with the fall in cap rates, the spread between the ten-year Treasury bill increased during 2020. Austin and San Antonio are the least risky and lowest return markets for retail real estate.

Industrial cap rates (Figure 12) for San Antonio and Austin were the highest during 2020. All major MSAs registered an increase in cap rates during 2020. Like the other two markets, the spread between the ten-year Treasury increased during 2020 in all four MSAs. DFW is the least risky and lowest return market for industrial real estate based on the spread with ten-year Treasury bill.

## Commercial Real Estate Outlook Due to COVID-19

- 2020 accelerated trends already prevalent before the pandemic.
- Office: Vacancy rates and rents hit from accelerated changes due to remote work-from-home.
  - o Not everyone can work from home.
  - o The amenities that some offices provide cannot be duplicated at home.
  - o Relationship and networking building difficult to gain from working from home.
  - o Accelerated the process of some high-tech jobs of working from home and of doing business online.
  - o More satellite offices in the suburbs or in other cities with less density to put fewer employees in central downtowns or in highly density areas.
  - o Possibility that employees relocating to home to work, or maybe even to lower-cost cities, may face cost-of-living pay cuts from employer eliminating the financial gains from working from home or relocating by employer cutting costs.
- Retail: Hit the hardest, accelerating the shift to e-commerce from brick and mortar retail.
- Industrial: Benefited from the shift to e-commerce and need for distributive and warehousing centers.
  - o More warehouse space closer to the consumer.
  - o Companies will want to spread their risk geographically as well to minimize the impact of a local problem such as another pandemic outbreak.
  - o Warehouse's strong recent demand could lead to some overbuilding in the future, driven by increasing investor interest in the sector.
- During and after 2Q2021, commercial real estate would benefit if:
  - o Vaccine is widely distributed among the general population.
  - o Further rounds of federal government stimulus is enacted.
- Based on this scenario:
  - o Office: occupancy will probably not improve significantly until second half of 2021 when employees could start returning to the office safely.
    - Only then will the effects of remote working be apparent to the office sector.
    - Still, the office market has been exposed to some pervasive underlying changes in the working environment that are not fully evident.
  - o Retail: will probably continue to consolidate/contract in 2021.
    - New retail that is more convenient, attractive, pleasing, engaging, or even entertaining could flourish.
  - o Industrial: will continue to benefit from e-commerce growth during 2021.



Sources: CoStar and Texas Real Estate Research 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.

### Overall Office (Figures 13–17)

Since hitting a record low in 2018, vacancy rates have gradually increased, surpassing the natural vacancy rate of 13.0 percent for a second consecutive quarter. Asking rent growth fell modestly in the first quarter but remained positive. With a slight increase in vacancy and a decrease in rent growth, the Austin market is continuing to feel the effects of COVID-19. Net absorption was slightly negative before the pandemic but has significantly fallen further in the past quarter. FIRE & PBS employment growth continued to increase for the third consecutive quarter, hovering just above 7.9 percent.

Deliveries fell rapidly through the end of 2019 and 1Q2020, but have remained under 200,000 with a sharp decrease in 4Q2020. Additionally, the value of construction starts decreased and square feet under construction declined. The COVID-19 crisis apparently has caused apprehension regarding new Austin office construction, increasing vacancy rates during the crisis.



Sources: CoStar and Texas Real Estate Research 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.

### Class A Office (Figures 18–22)

Actual vacancy climbed to 18.1 percent, stretching the trend out into its fifth quarter of decreased occupancy. In addition to last quarter, this is the second quarter that vacancy levels have risen above the natural vacancy rate of 15.0 since 2012. Despite signs of stabilization in the second quarter, asking rent growth and net absorption both fell again in 4Q2020, with asking rent and net absorption falling further negative. These changes signal weakening demand for Class A space.

Deliveries moderately decreased but remained positive as projects started before the pandemic continued to be completed in the previous quarter. Square feet under construction continues to decline as the pipeline clears, indicating reduced construction activity that could be attributed to the negative impact the COVID-19 crisis is having on vacancy rates.



Sources: CoStar and Texas Real Estate Research 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.

### Retail (Figures 23–27)

For the past five years, actual retail vacancy has remained relatively constant between 4.0 and 5.0 percent. Despite the pandemic, 4Q2020 continued this trend, with only a slight increase in actual vacancy to 5.1 percent, still below the natural vacancy rate of 6.0 percent. Asking rents have contracted over the past four quarters, continuing to remain negative in 4Q2020 but improving slightly in this quarter. Employment growth in the retail sector further increased from the previous quarter to 1.5 percent. This could indicate returning demand for retail in Austin, as employment growth corrects from the negative growth experienced in 2Q2020.

The value of construction starts strongly deviated from the negative trend started in 1Q2019. Deliveries decreased from the previous quarter, while square feet under construction increased. Rent collection is also a major concern related to the pandemic. This is particularly relevant to retailers, who have seen their sales decrease considerably. The retail sector will likely be greatly affected as the crisis continues but it shows signs of resiliency most likely attributed to the variety of subsectors within retail.



Sources: CoStar and Texas Real Estate Research 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.

### Warehouse (Figures 28–32)

Actual vacancy decreased from last quarter, finishing out at 7.2 percent, though remaining well below the natural vacancy rate of 11 percent. Asking rent growth increased to 7.2 percent. Demand appears to be increasing in the Austin market even after the previous quarter's recent high. In 4Q2020, occupancy rent growth and employment growth all experienced positive growth as Austin warehouse demand proved resilient to the effects of COVID-19.

Construction starts decreased slightly this quarter as net absorption remained positive but decreased. Additionally, with the pandemic showing the importance of e-commerce, it is not surprising that demand for industrial in Austin is increasing to pre-pandemic highs. The movement of manufacturing firms to Austin is creating an increase in industrial space.



# Dallas-Fort Worth

OCCUPANCY	ASKING RENT GROWTH	EMPLOYMENT GROWTH	NET ABSORPTION SF	CONSTRUCTION STARTS
 79.9%	 4.0%	 2.9%	 -890,729	

Sources: CoStar and Texas Real Estate Research 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.

## Overall Office (Figures 33–37)

Historically, vacancy rates have stayed relatively level, hovering around the natural vacancy rate of 18.0 percent. However, since the deviation of this trend in the previous quarter, vacancy rates in 4Q2020 again continued to climb to 20.1 percent. Asking rent growth increased slightly, lingering around 4.0 percent. Despite posting a negative value for the first time since the Great Recession in 2Q2020, employment growth continues to register positive growth, with a 2.9 percent increase in 4Q2020.

The value of construction starts receded over the past year, practically eliminating any gains from the previous year. However, construction starts have begun to increase this quarter with developers and investors apprehensive to pursue speculative properties while focusing on both build-to-suit space and industrial developments. COVID-19's impact on the Dallas-Fort Worth office market is still unclear. No matter the short-term demand, buyers will likely shop for a different type of office space post-pandemic. With more people working from home than ever before, the days of individually assigned cubicles and desks in the bullpen may be numbered. More employees will likely split their time between home and the office. This means some current office space will require remodeling to remain competitive as the use for office space changes.

OCCUPANCY	ASKING RENT GROWTH	EMPLOYMENT GROWTH	NET ABSORPTION SF	CONSTRUCTION STARTS
 76.3%	 2.9%	 2.9%	 -735,091	

Sources: CoStar and Texas Real Estate Research 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.

## Class A Office (Figures 38–42)

Class A office vacancy rates in Dallas-Fort Worth have been relatively stable since the Great Recession, generally hovering around the natural vacancy rate of 20.0 percent. However, rates have begun to climb steadily as the pandemic-driven recession drags on, reaching 23.7 percent in 4Q2020. Since 2017, asking rent growth has remained between 2.0 percent and 4.0 percent, declining in the first three quarters of 2020 but increasing 2.9 percent this quarter. Despite posting a negative value for the first time since the Great Recession in 2Q2020, employment

growth continues to register positive growth, with a 2.9 percent increase in 4Q2020. Net absorption improved this quarter but remained negative for the fourth quarter in a row.

Similar to the overall office market in DFW, COVID-19's impact on the Dallas-Fort Worth Class A office market is still unclear. And it is likely that a new type of office space will be demanded post-pandemic.



Sources: CoStar and Texas Real Estate Research 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.

### Retail (Figures 43–47)

Actual vacancy continued a gradual climb that began in 4Q2018, reaching 7.1 percent this quarter. While actual vacancy is well below the natural vacancy rate of 9.0 percent, it will likely continue to rise in the coming months due to the pandemic. Asking rents remained steady despite falling last quarter, marking a year of contraction in the retail sector. Net absorption has been declining since 2018, remaining negative since 3Q2019. Such a distressing level of net absorption was not even approached during the Great Recession, highlighting how unexpected the disruption was to an already overbuilt market. Employment growth provides a slightly less dire narrative, with continued growth rising near 2.9 percent after hovering around zero for 1Q2020 and 2Q2020. The future of in-store retail demand is unclear, hinging largely on public perception of personal safety in the aftermath of COVID-19. However, as widespread vaccination occurs there could be a reversion to pre-pandemic demand.

Consecutively, deliveries reached an all-time low, while square footage under construction experienced an increase. The value of construction starts, though not extraordinarily low, increased moderately in 4Q2020. It remains to be seen whether this reduction in new supply will help alleviate the clear fall in in-store demand due to the COVID-19 crisis.



Sources: CoStar and Texas Real Estate Research 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.

### Warehouse (Figures 48 - 52)

Demand for Dallas-Fort Worth warehouse space remains quite strong, outperforming every other sector over previous years in most demand metrics. Actual vacancy remained low at 8.4 percent, far below the natural vacancy rate of 11.0 percent. Additionally, asking rent growth slowed but climbed to 13.6 percent after reaching historic highs in the previous quarter. Net absorption declined from a 1Q2020 peak but remains in line with values from 2019. The warehouse employment growth rate increased slightly this quarter, although still negative.

Though the warehouse market performed relatively well in 4Q2020, supply-side metrics signal caution. The value of construction starts in DFW increased this quarter and remain high. At the same time, deliveries fell slightly while square footage under construction dropped significantly, a year-long trend.



OCCUPANCY	ASKING RENT GROWTH	EMPLOYMENT GROWTH	NET ABSORPTION SF	CONSTRUCTION STARTS
▼ 77.8%	▲ 0.5%	▲ -0.4%	▼ -1,360,341	▼

Sources: CoStar and Texas Real Estate Research 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.

### Overall Office (Figures 53–57)

In 4Q2020, actual vacancy continued a climb that began in 2015, reaching a historic high of 22.2 percent. This is significantly higher than its natural vacancy rate of 14 percent. Despite this, asking rent growth increased slightly to just above zero percent, breaking the trend of contraction in the overall office market. Additionally, FIRE & PBS employment growth increased during the second half of 2020 but remained below pre-pandemic levels. Net absorption improved but remains negative, aligning with increasing vacancy rates.

Since actual vacancy started its ascent in 2015, both square feet under construction and deliveries have trended downward. Even with the upward trend in vacancy rates, construction activity didn't fall off as expected. In the past quarter, square feet under construction grew moderately while deliveries decreased. Value of construction starts continues to decrease after remaining low for several quarters due to the COVID-19 crisis and a battered energy industry. The continued negative economic impact from both factors do not bode well for Houston's overall office market.

OCCUPANCY	ASKING RENT GROWTH	EMPLOYMENT GROWTH	NET ABSORPTION SF	CONSTRUCTION STARTS
▼ 74.2%	▲ -0.6%	▲ -0.4%	▼ -1,030,595	▼

Sources: CoStar and Texas Real Estate Research 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.

### Class A Office (Figures 58–62)

Class A Office vacancy reached a historic high of 25.8 percent this quarter and has remained significantly higher than the natural vacancy rate of 16.0 percent. Asking rents increased but continued to register negative annual growth due in part to the large amount of vacant space. Rent growth for all of 2020 was negative. Both net absorption and FIRE & PBS employment growth continue to remain negative; however, employment growth improved from the previous quarter.

Houston Class A Office deliveries decreased after a significant increase in 3Q2020. However, the number of square feet under construction increased in comparison to the third quarter. Given these factors, neither Houston's overall nor Class A office market is poised to handle the

pandemic and the oil downturn. With the current level of uncertainty surrounding office buildings and their tenants, many parts of Houston will be significantly affected. However, Houston is a highly segmented market with districts that have somewhat independent supply and demand schedules. Office space in the energy corridor continues to flounder, while the rest of the MSA is performing better. Overall, time will tell if the Class A office market will be able to recover to pre-pandemic levels.



Sources: CoStar and Texas Real Estate Research 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.

### Retail (Figures 63–67)

Actual vacancy climbed minimally in 4Q2020 to 7.1 percent. While this is higher than it has been since 2014, it is still less than the natural vacancy rate of 8.0 percent. This quarter, the asking rent growth declined to 3.6 percent and employment growth improved but remained negative with a value of -1.5 percent. These factors coupled with increase in net absorption signal demand for Houston retail space has surprisingly been relatively steady during a pandemic.

Value of construction starts, square feet under construction, and 4Q2020 deliveries indicate developers recognize waning demand. As the ramifications of the pandemic continue to be felt, including tenants’ ability to remain solvent, it is unknown how severely retail will be affected. However, it is likely that this will bring about a shift in utility for retail. As delivery services, online shopping and curbside pickup become increasingly common, retail space will continue to diversify beyond a simple brick-and-mortar sales point to include online fulfillment centers and additional inventory storage.



Sources: CoStar and Texas Real Estate Research 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.

### Warehouse (Figures 68–72)

Actual vacancy (12.9 percent) continued to rise this quarter to a historical high, marking a two-year trend. As opposed to other Texas MSAs, warehouse vacancy in Houston has been well above its natural vacancy rate of 8.0 percent for the past six quarters, likely due to the high number of deliveries during that time. Despite increasing vacancy, asking rent growth increased this quarter to 4.9 percent and employment growth increased by 4.3 percent. Net absorption increased this quarter after a sharp decline in 3Q2020.

The year began with a record amount of space delivered in the first quarter. The three following quarters also registered high deliveries relative to previous years. Square feet under construction decreased from the previous quarter and is still significantly lower than pre-COVID levels in 2019. As e-commerce has become even more popular with the onset of the pandemic, demand for warehouse space will likely continue to rise. With construction start values plummeting and square feet under construction stagnating, vacancy will likely begin leveling out as long as demand remains strong.



OCCUPANCY	ASKING RENT GROWTH	EMPLOYMENT GROWTH	NET ABSORPTION SF	CONSTRUCTION STARTS
▼ 87.0%	▼ 4.2%	▲ -3.9%	▲ -80,924	▼

Sources: CoStar and Texas Real Estate Research 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.

### Overall Office (Figures 73–77)

Overall office vacancies in San Antonio increased by .6 percent in 4Q2020, reaching 13.0 percent and continuing the trend of increasing rates for the fourth quarter in a row. Asking rent growth decreased to 4.2 percent, falling below 5.0 percent for the first time since 1Q2019. San Antonio’s FIRE & PBS employment growth also decreased the most compared with the other major Texas MSAs. The decline of -3.9 percent indicates a significant contraction similar to that of the Great Recession. In addition, net absorption rebounded slightly but remained negative.

Square feet under construction in 4Q2020 decreased only slightly. Deliveries increased after minimal decline in the third quarter and remain well within the normal range of the past ten years. Unlike the slight uptick in value in 3Q2020, San Antonio saw a moderate decrease of construction starts in the 2020. While FIRE & PBS employment contraction and negative net absorption are significant issues facing San Antonio’s office market, the pandemic’s long-term effects remain unclear.

OCCUPANCY	ASKING RENT GROWTH	EMPLOYMENT GROWTH	NET ABSORPTION SF	CONSTRUCTION STARTS
▼ 83.9%	▼ 5.8%	▲ -3.9%	▲ 44,153	▼

Sources: CoStar and Texas Real Estate Research 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.

### Class A Office (Figures 78–82)

Class A office actual vacancy increased this quarter to arrive at 16.1 percent in 4Q2020, higher than the natural vacancy rate of 14.5 percent. Asking rent growth declined to 5.8 percent during the fourth quarter, showing a modest decrease from the previous quarter. Net absorption rebounded from the previous negative values, while square feet under construction started to decline after increasing the previous quarter. As more space becomes available, if FIRE & PBS employment continues to contract, demand could begin to decline in the immediate future.

After the historic low in 3Q2020, deliveries experienced a dramatic increase. With considerable uncertainty surrounding the pandemic, the lack of new supply could help counteract the crisis’

negative effects. However, as with the overall office market, the results of COVID-19 have yet to emerge.



Sources: CoStar and Texas Real Estate Research 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.

### Retail (Figures 83–87)

For San Antonio retail, actual vacancy continued its almost three-year rise to 6.2 percent, although it remained below the natural vacancy of 7.0 percent. Asking rent growth decreased in the fourth quarter to negative 2.7 percent. Net absorption increased this quarter and remained negative, while retail employment growth stagnated and continued to decrease.

Deliveries and square footage under construction have gradually declined over the past five years, likely helping to keep vacancy increases at bay. Following this trend, there was a significant decrease in deliveries this quarter. Value of construction starts increased with respect to 2019 even though they increased the last quarter of 2020. While employment data suggest San Antonio’s retail sector will suffer in the coming months, demand remained relatively steady, indicating the full effects of the pandemic have yet to be seen.



Sources: CoStar and Texas Real Estate Research 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.

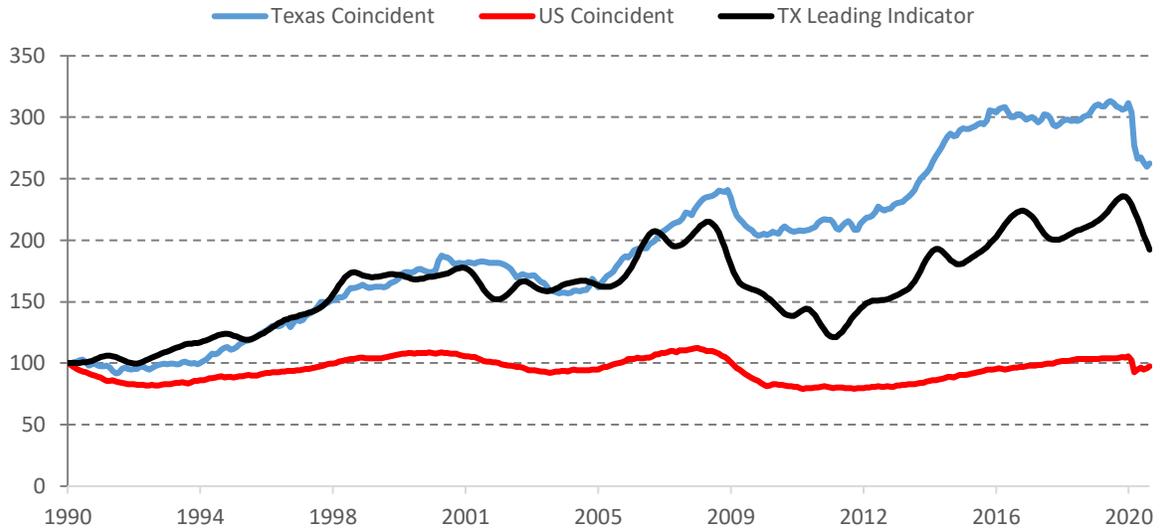
### Warehouse (Figures 88–92)

Actual vacancy remained steady for the fourth quarter at 7.4 percent. It has not surpassed the natural vacancy rate of 8.0 percent since the Great Recession. Asking rent growth increased to 10.0 percent this quarter, while net absorption increased as well. Employment growth in the warehouse sector has been climbing since 4Q2018 despite the COVID-19 crisis.

Deliveries have trended downward since the end of 2019 through 3Q2020, rebounding the last quarter of 2020. This could be one reason why vacancies have remained relatively low. San Antonio’s construction start values increased considerably during 4Q2020. In a similar manner, net absorption and square feet under construction increased at the end of 2020. A continued increase in under-construction and deliveries might put upward pressure on vacancy rates going forward.

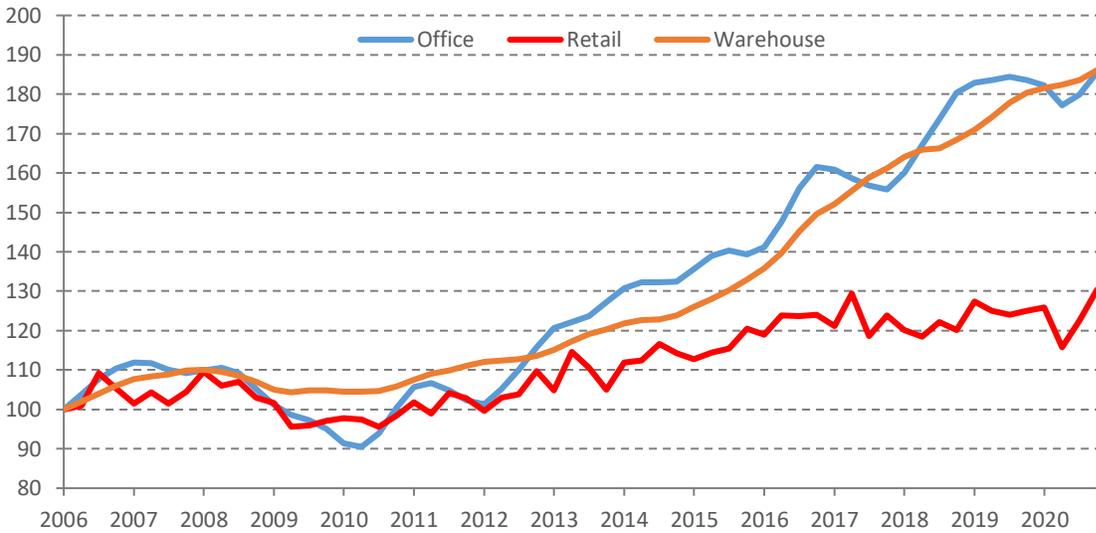


**Figure 1. Texas Nonresidential Construction Coincident and Leading Indicators**  
(Index Oct. 1990 = 100)



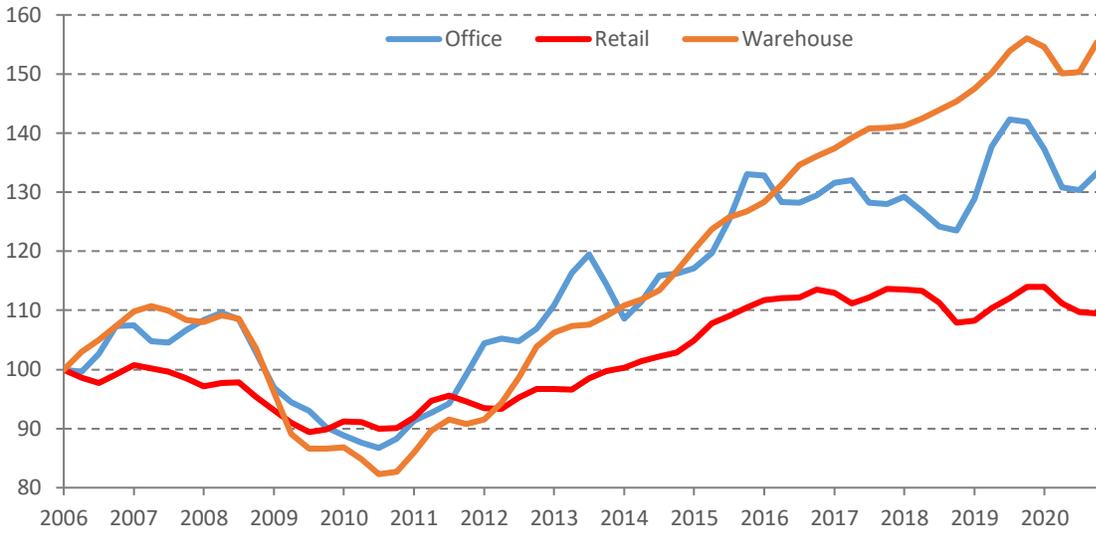
Source: Texas Real Estate Research Center at Texas A&M University

**Figure 2. Austin Nonresidential Construction Leading Indicators**  
(Index 2006 Q1 = 100)



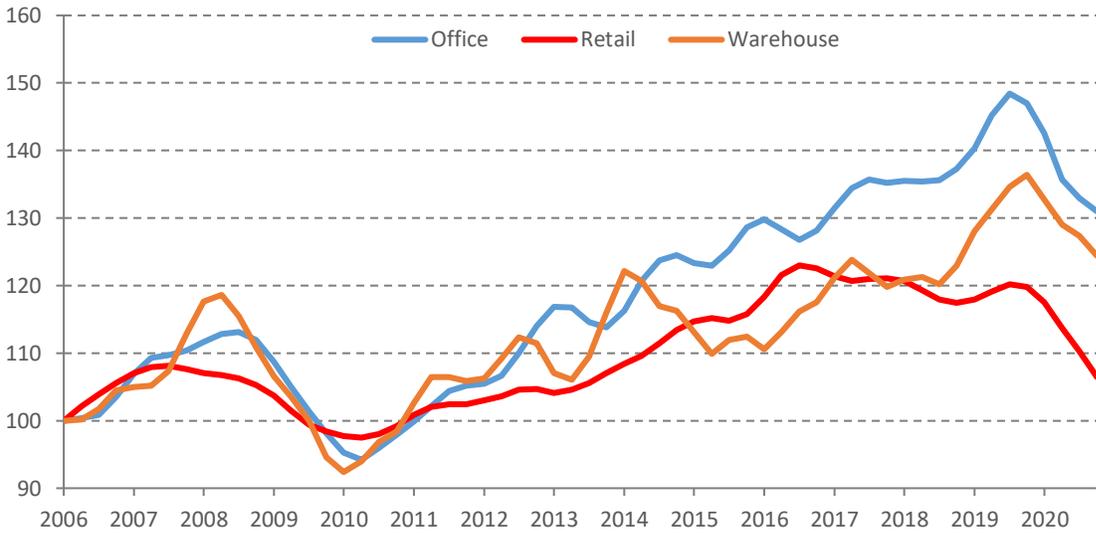
Source: Texas Real Estate Research Center at Texas A&M University

**Figure 3. DFW Nonresidential Construction Leading Indicators**  
(Index 2006 Q1 = 100)



Source: Texas Real Estate Research Center at Texas A&M University

**Figure 4. Houston Nonresidential Construction Leading Indicators**  
(Index 2006 Q1 = 100)



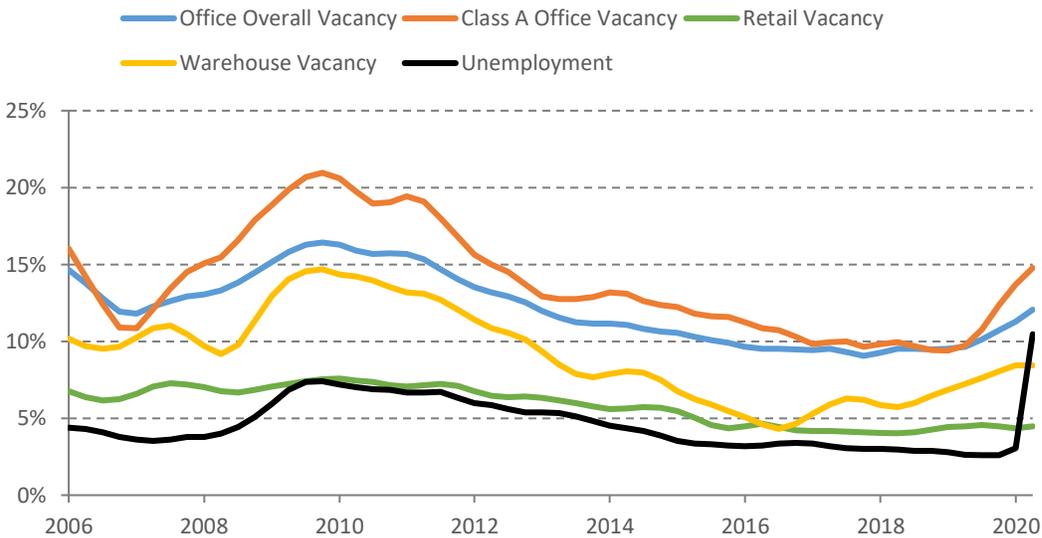
Source: Texas Real Estate Research Center at Texas A&M University

**Figure 5. San Antonio Nonresidential Construction Leading Indicators**  
(Index 2006 Q1 = 100)



Source: Texas Real Estate Research Center at Texas A&M University

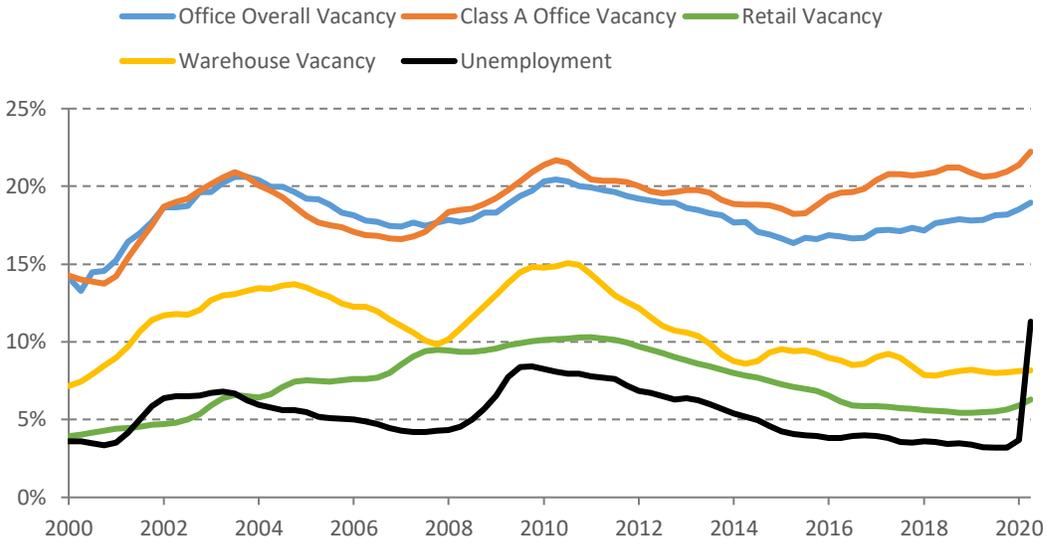
**Figure 6. Austin Commercial Vacancy Rates and Unemployment (SA and TC)\***



\*Note: Vacancy rates seasonally adjusted and trend-cycled, unemployment seasonally adjusted.

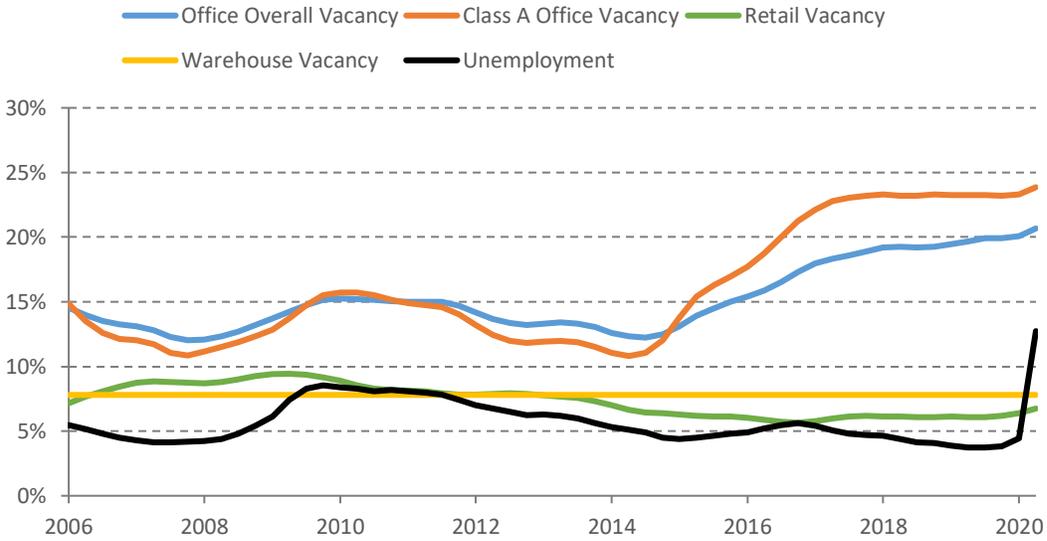
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 7. DFW Commercial Vacancy Rates and Unemployment (SA)\***



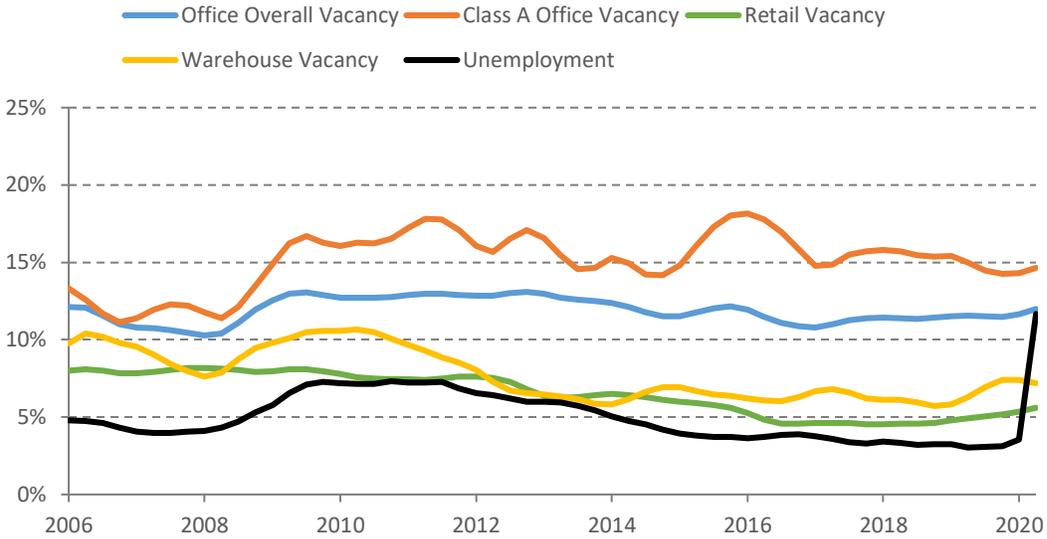
\*Note: Vacancy rates seasonally adjusted and trend-cycled, unemployment seasonally adjusted.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 8. Houston Commercial Vacancy Rates and Unemployment (SA)\***



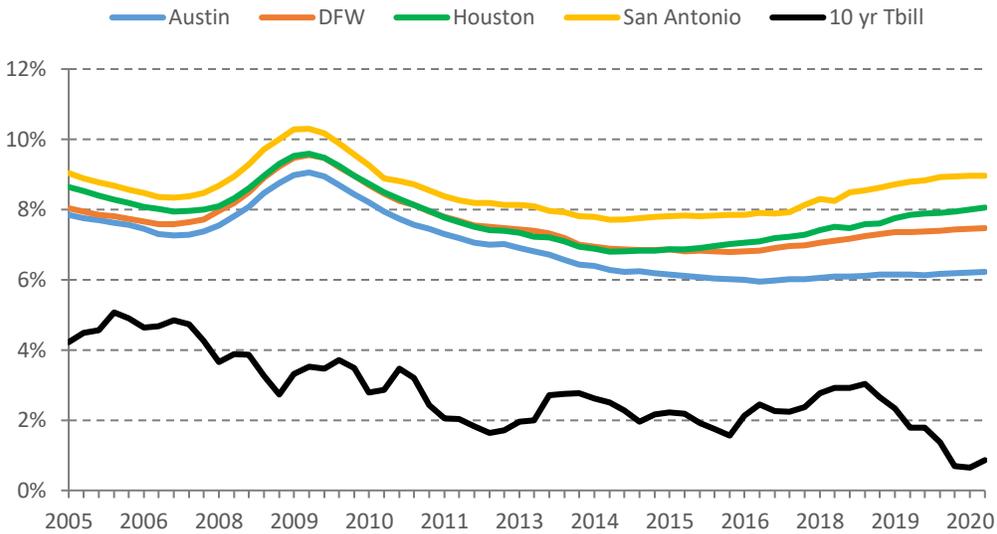
\*Note: Vacancy rates seasonally adjusted and trend-cycled, unemployment seasonally adjusted.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 9. San Antonio Commercial Vacancy Rates and Unemployment**



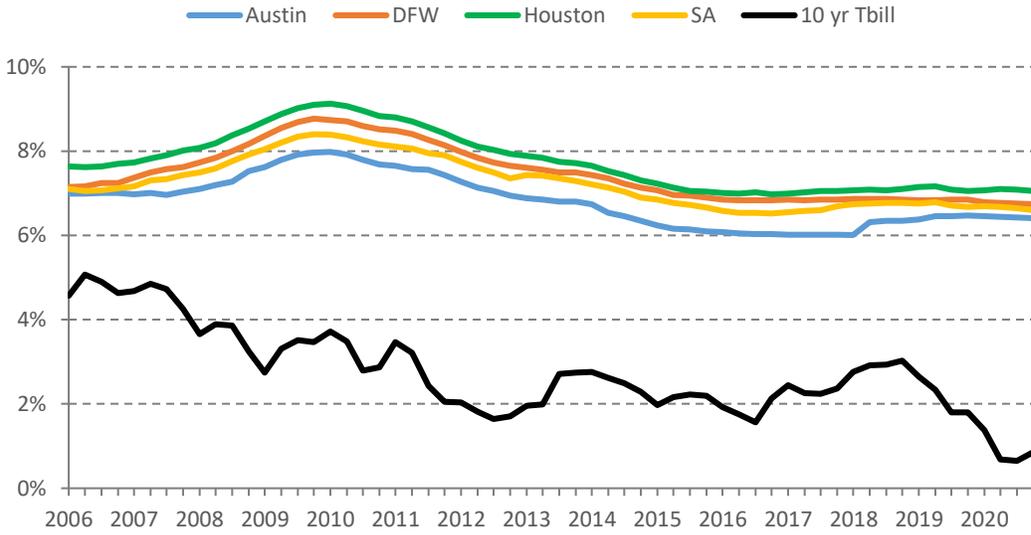
\*Note: Vacancy rates seasonally adjusted and trend-cycled, unemployment seasonally adjusted.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 10. Texas Major MSAs Office Cap Rates**



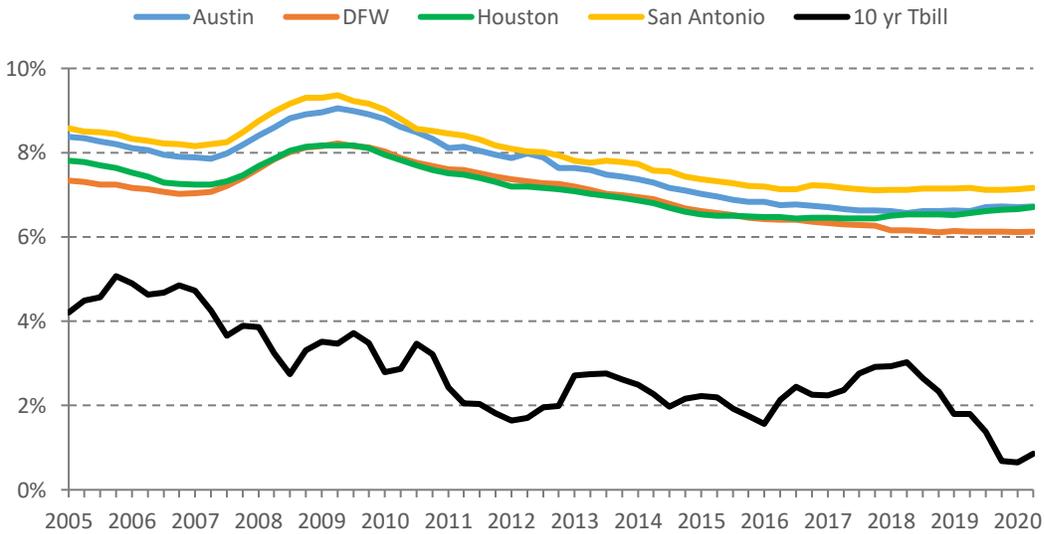
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 11. Texas Major MSAs Retail Cap Rates**



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

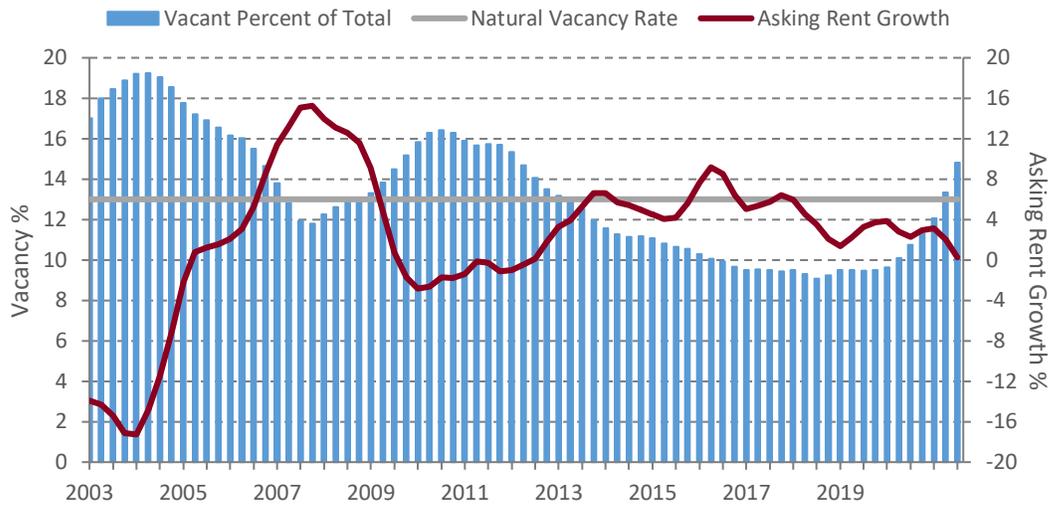
**Figure 12. Texas Major MSAs Warehouse Cap Rates**



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

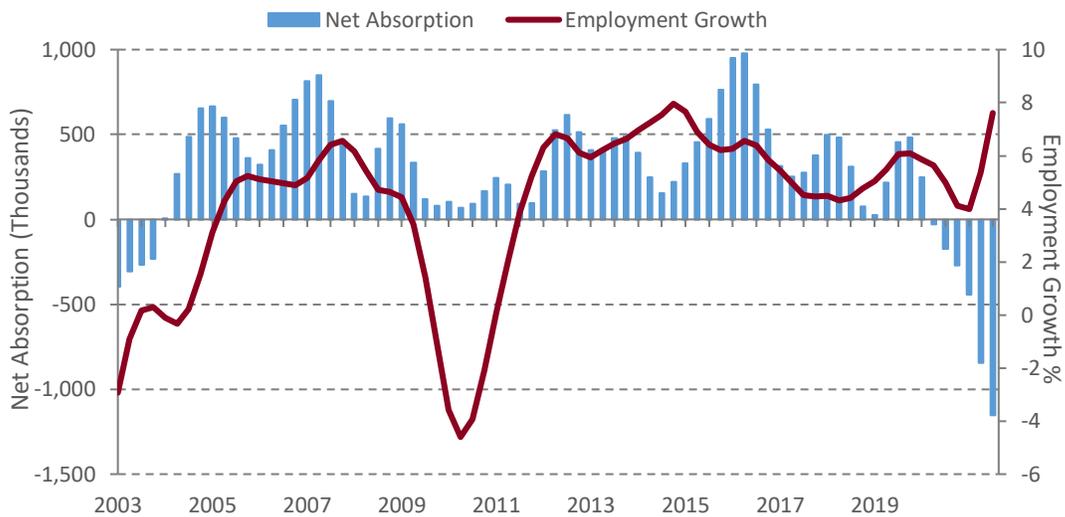
# Austin

**Figure 13. Austin Office Overall Vacancy and Asking Rent Growth (SA and TC)\***



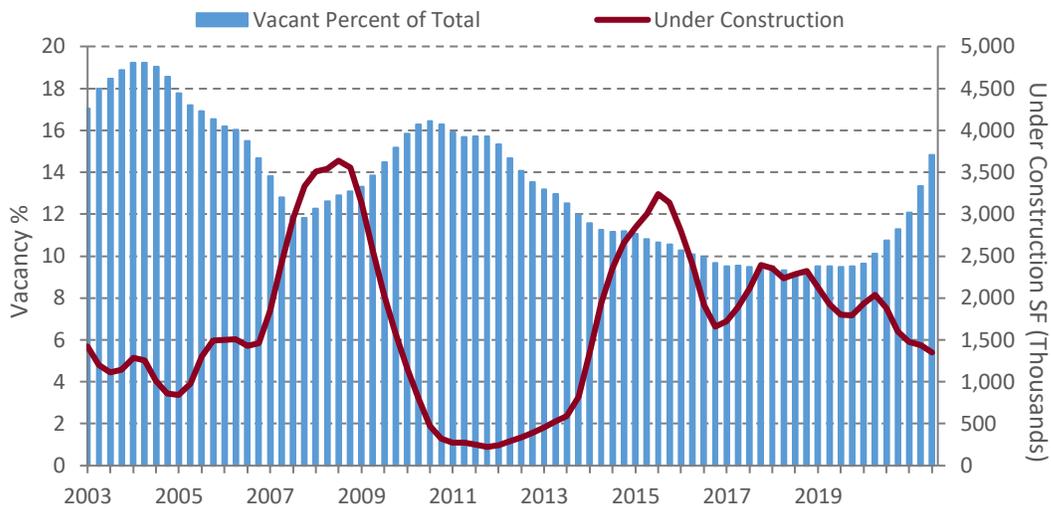
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 14. Austin Office Overall Net Absorption and Employment Growth (SA and TC)\***



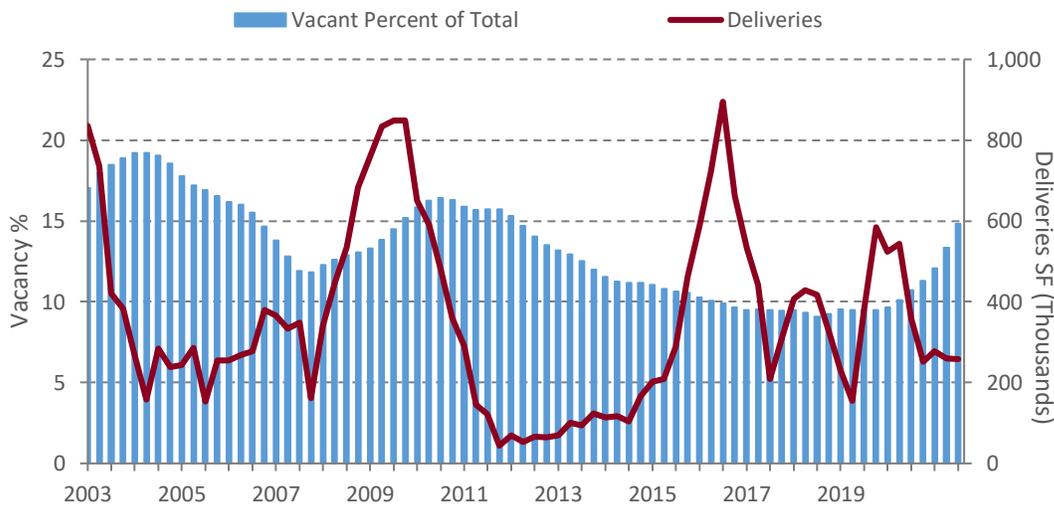
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 15. Austin Office Overall Vacancy and Under Construction (SA and TC)\***



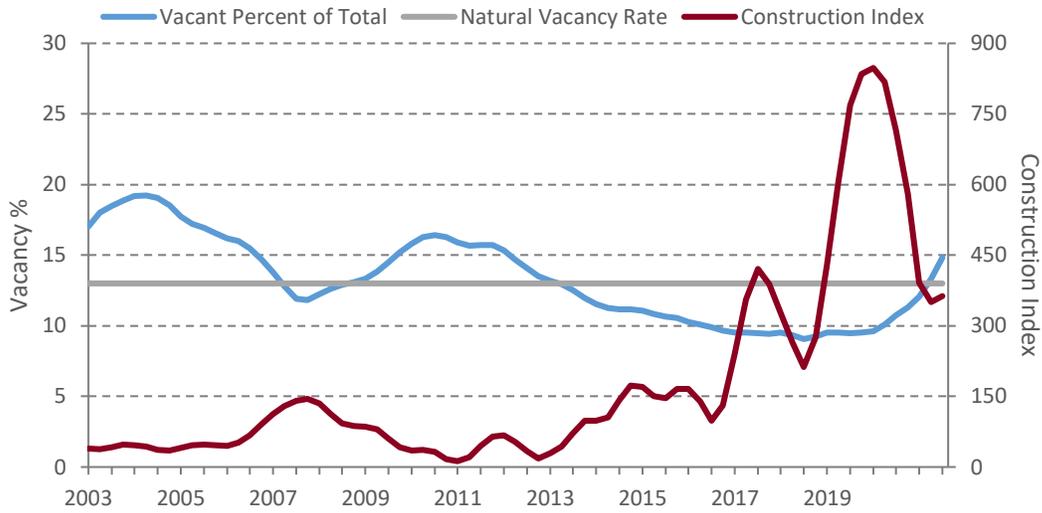
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 16. Austin Office Overall Vacancy (SA and TC)\* and Deliveries**



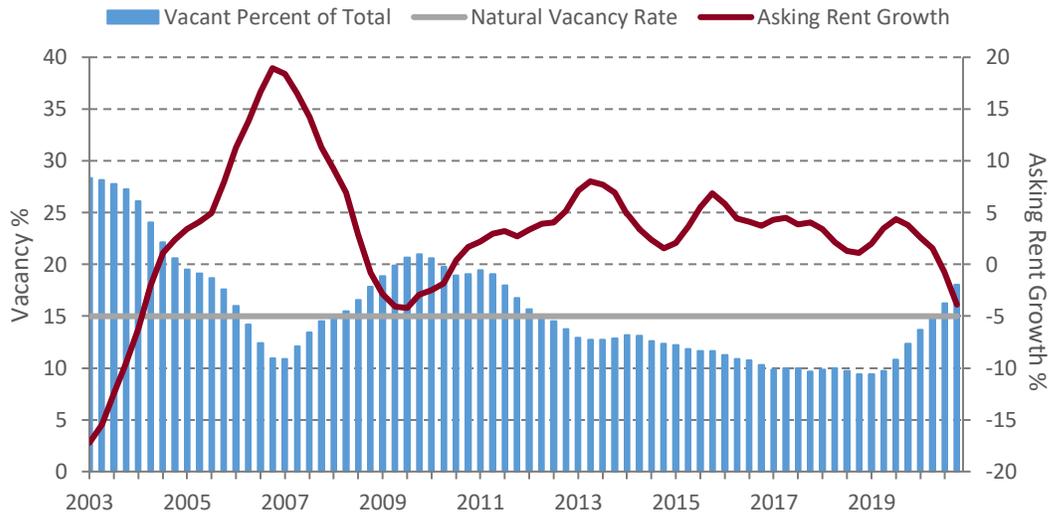
\*Note: Four-quarter moving average used for deliveries, seasonal adjustment and trend cycling used for vacant percent of total.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 17. Austin Office Overall Vacancy and Construction Index (SA and TC)\***  
 (Index 2000 Q4 = 100)



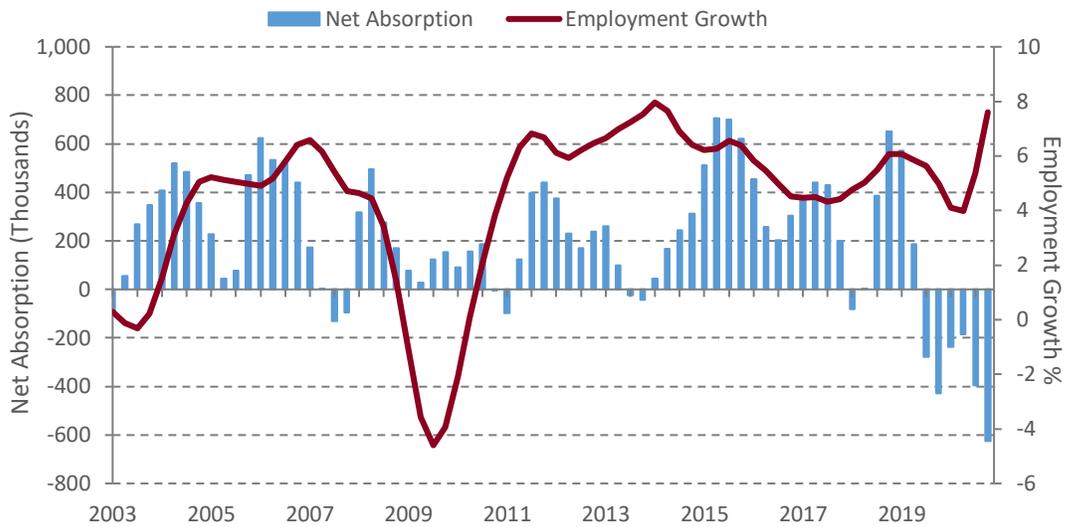
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
 Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 18. Austin Office Class A Vacancy and Asking Rent Growth (SA and TC)\***



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

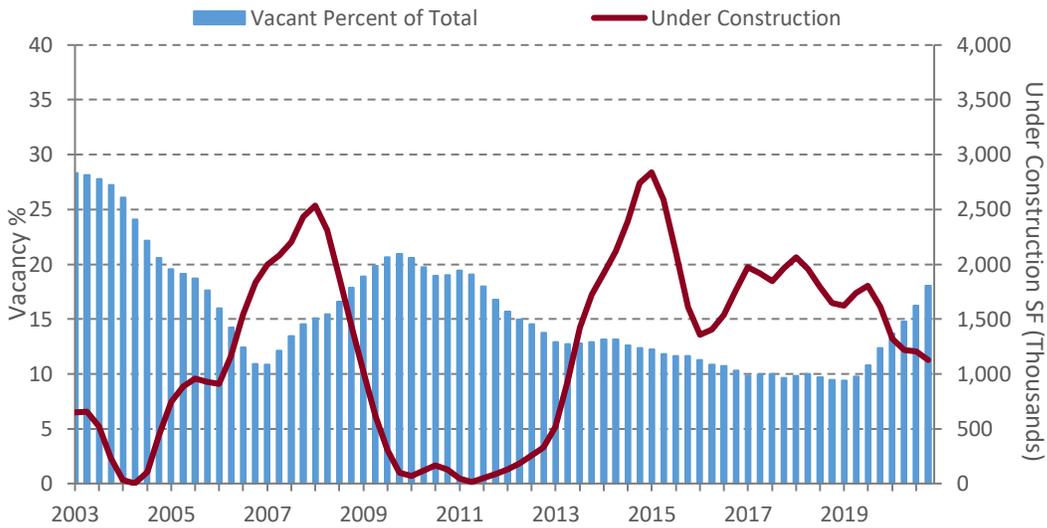
**Figure 19. Austin Office Class A Net Absorption and Employment Growth (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

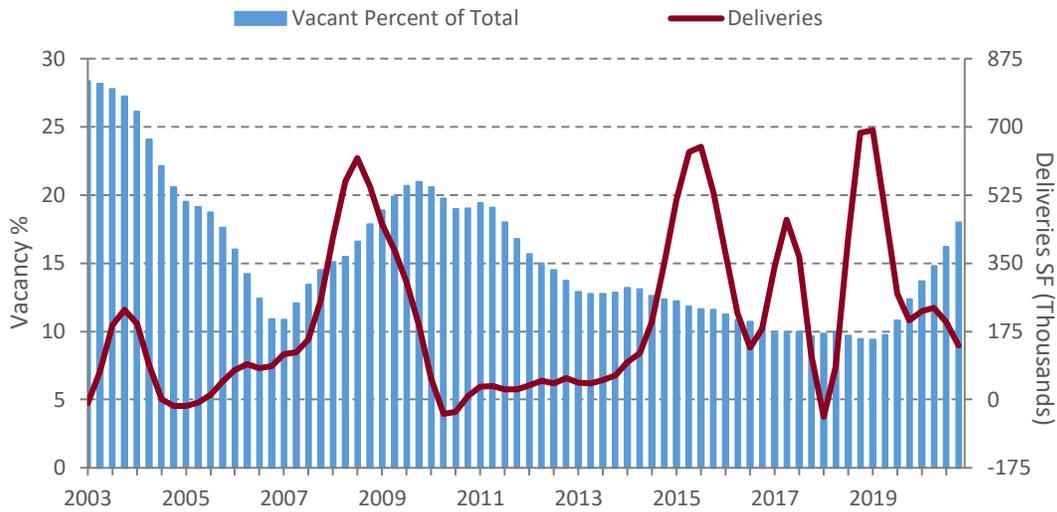
**Figure 20. Austin Office Class A Vacancy and Under Construction (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

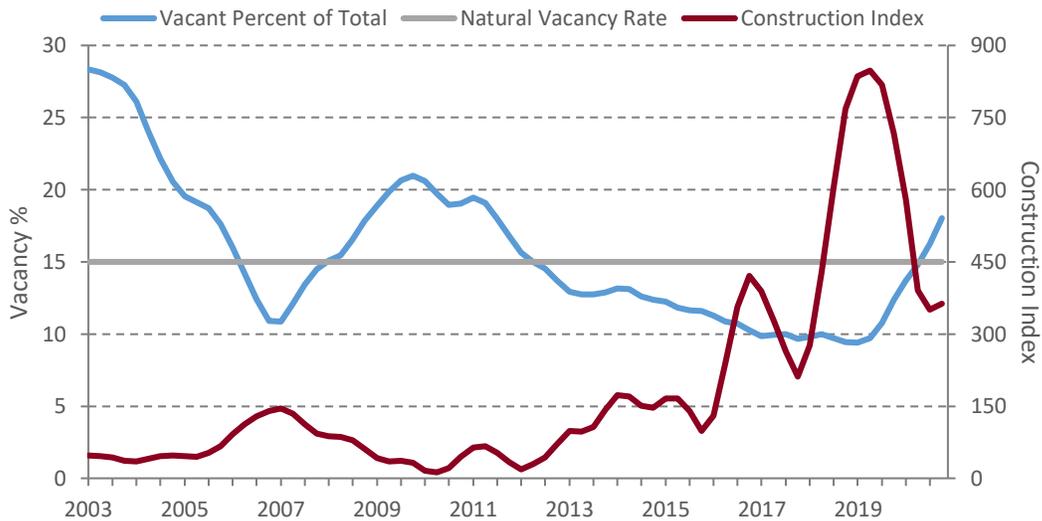
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 21. Austin Office Class A Vacancy and Deliveries (SA and TC)\***



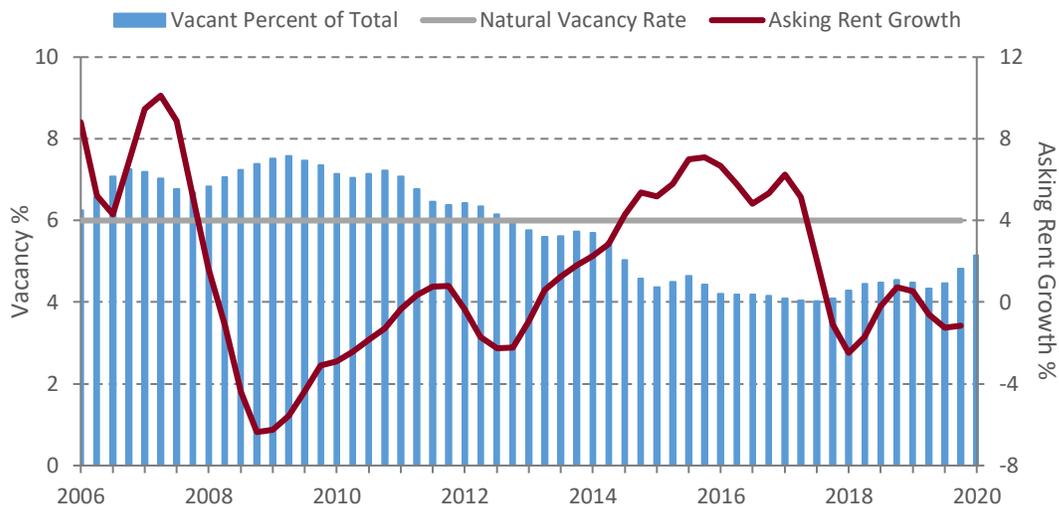
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 22. Austin Office Class A Vacancy and Construction Index (SA and TC)\*  
(Index 2000 Q4 = 100)**



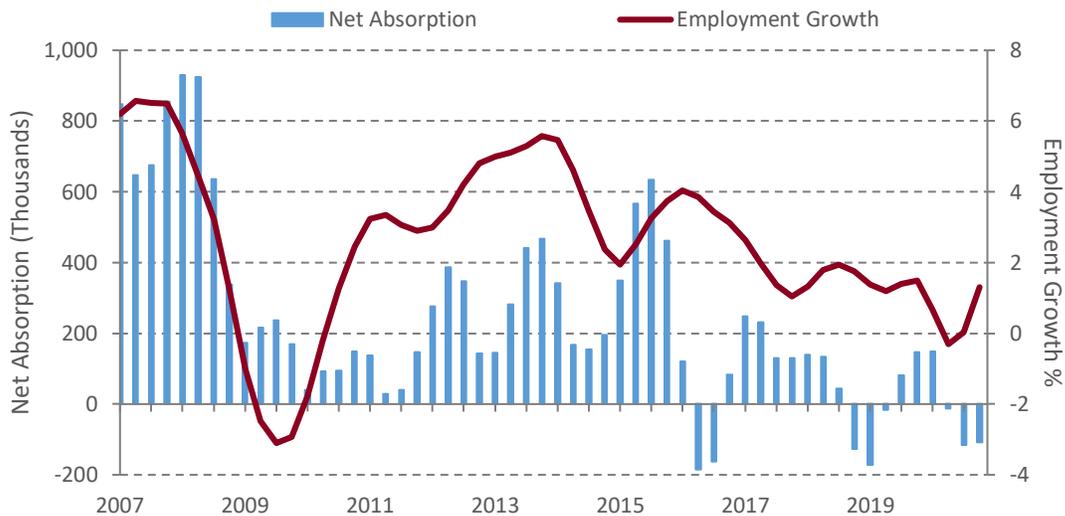
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 23. Austin Retail Vacancy and Asking Rent Growth (SA and TC)\***



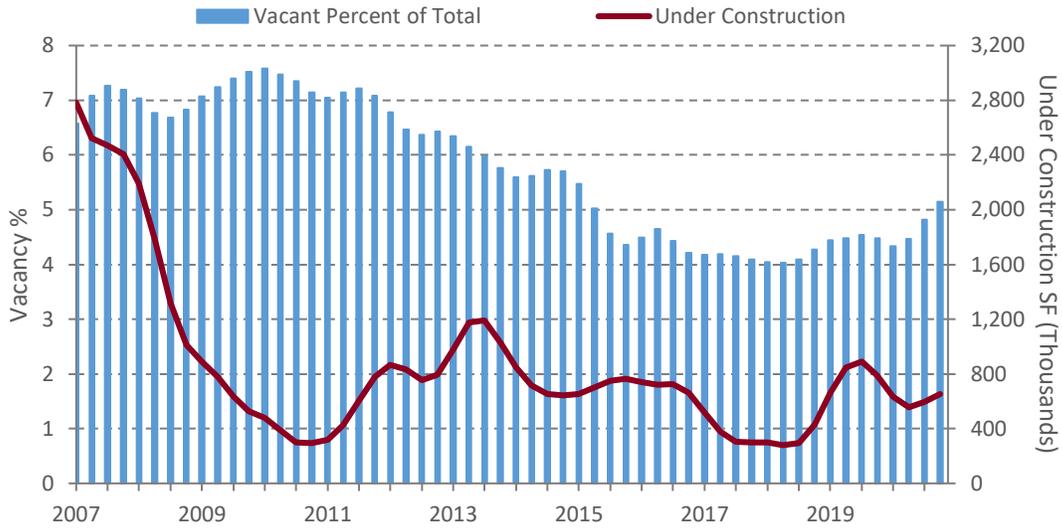
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 24. Austin Retail Net Absorption SF and Employment Growth (SA and TC)\***



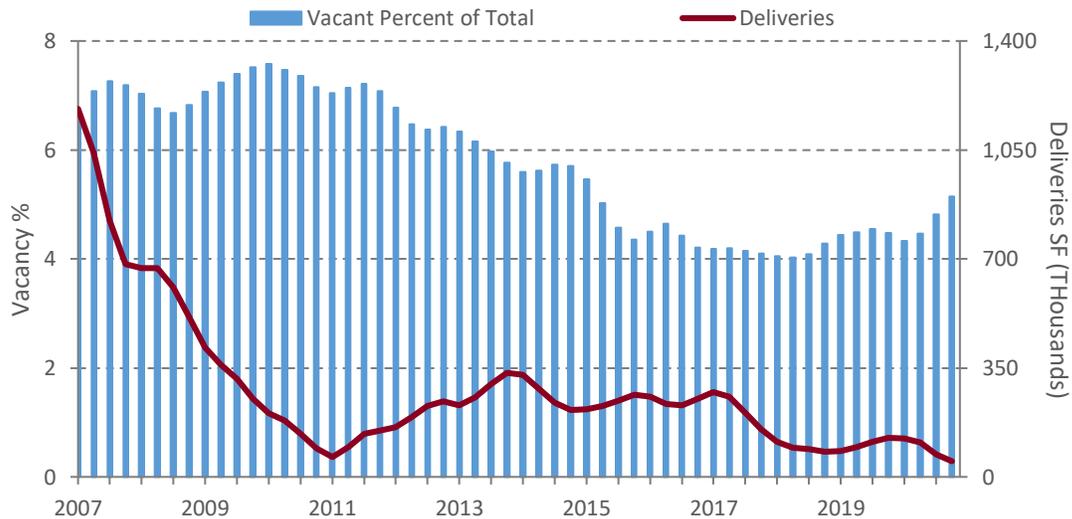
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 25. Austin Retail Vacancy and Under Construction (SA and TC)\***



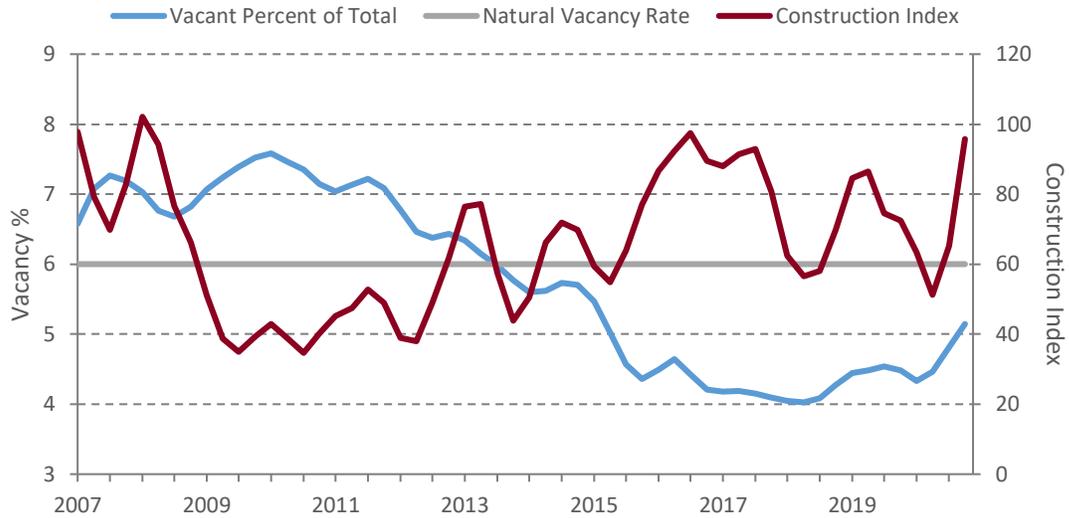
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 26. Austin Retail Vacancy and Deliveries (SA and TC)\***



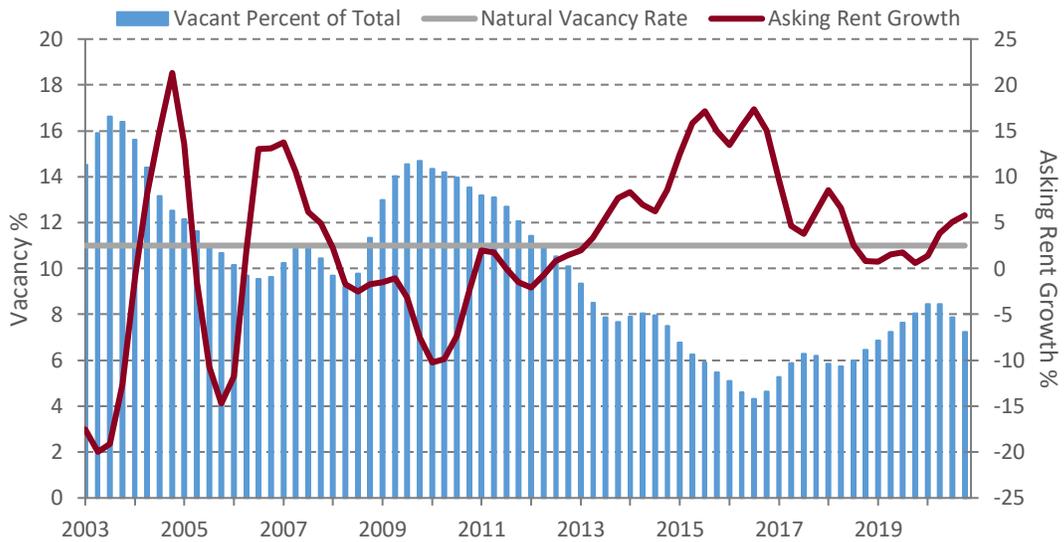
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 27. Austin Retail Vacancy and Construction Index (SA and TC)\***  
(Index 2006 Q1 = 100)



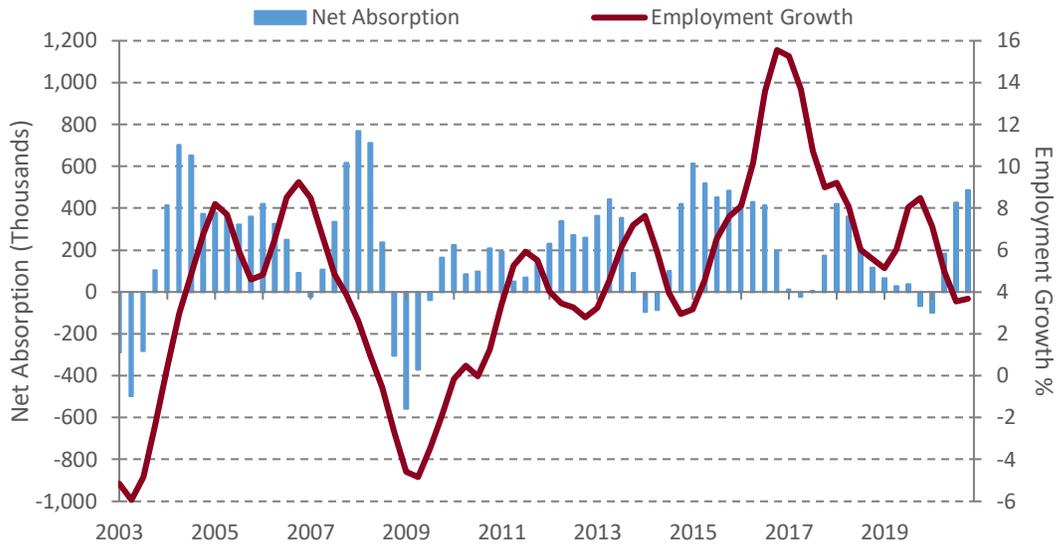
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 28. Austin Warehouse Vacancy and Asking Rent Growth (SA and TC)\***



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

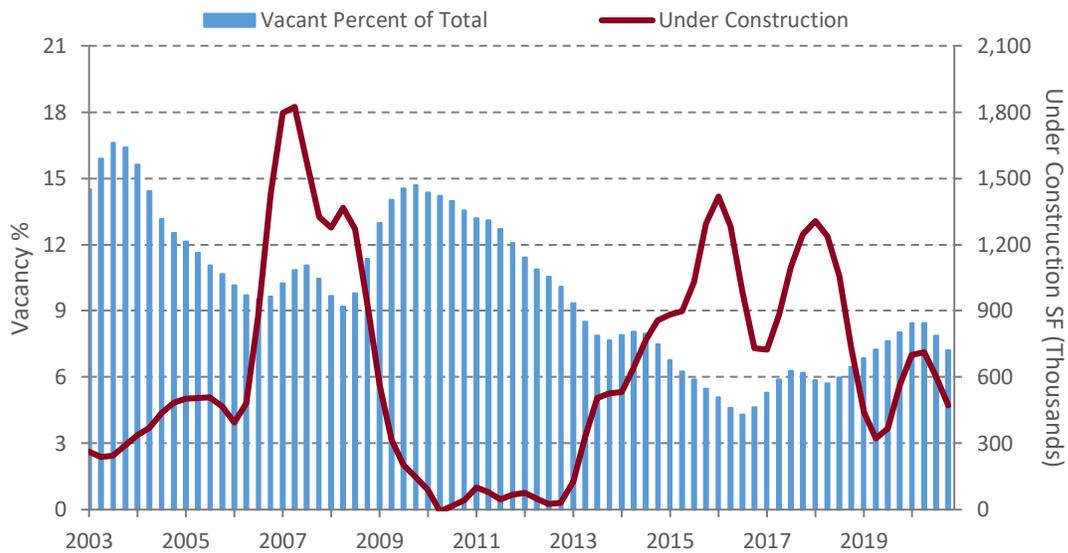
**Figure 29. Austin Warehouse Net Absorption and Employment Growth (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

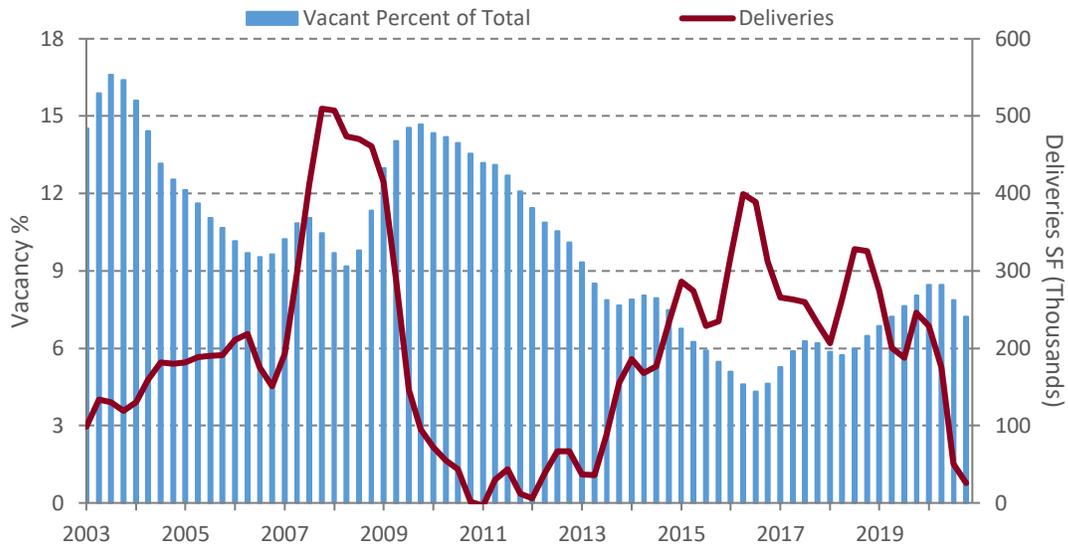
**Figure 30. Austin Warehouse Vacancy and Under Construction (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

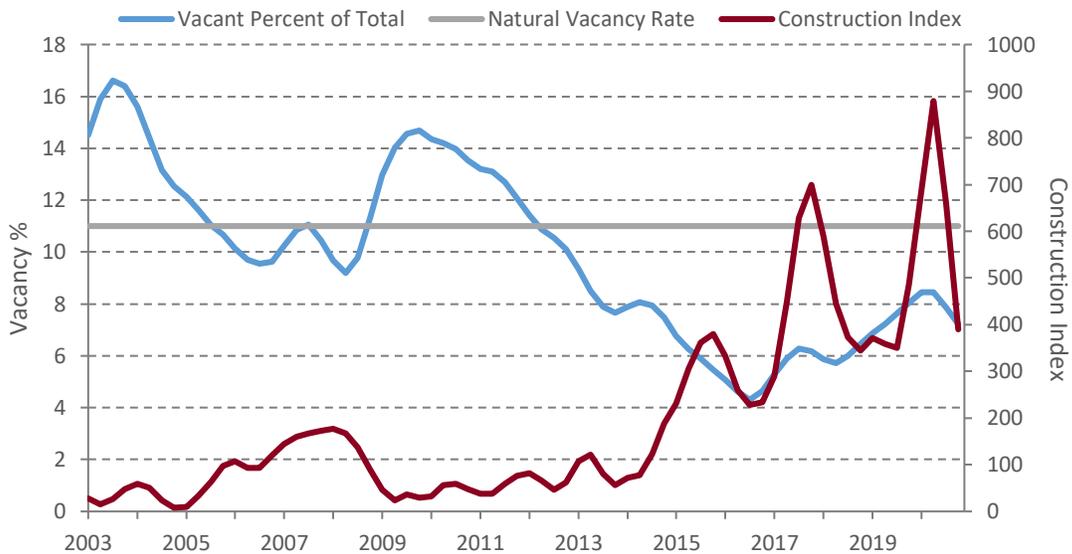
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 31. Austin Warehouse Vacancy and Deliveries (SA and TC)\***



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

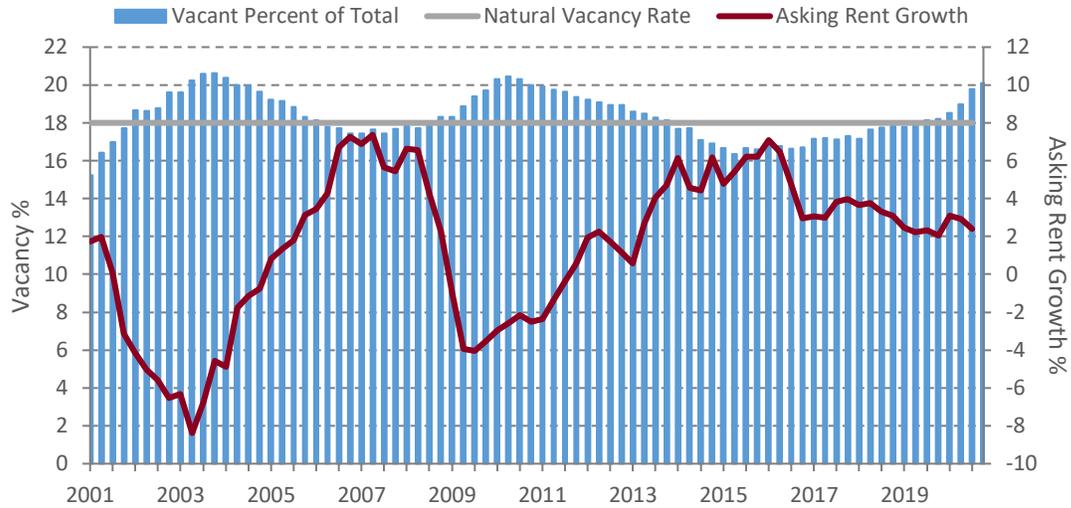
**Figure 32. Austin Warehouse Vacancy and Construction Index (SA and TC)\*  
(Index 2000 Q4 = 100)**



\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

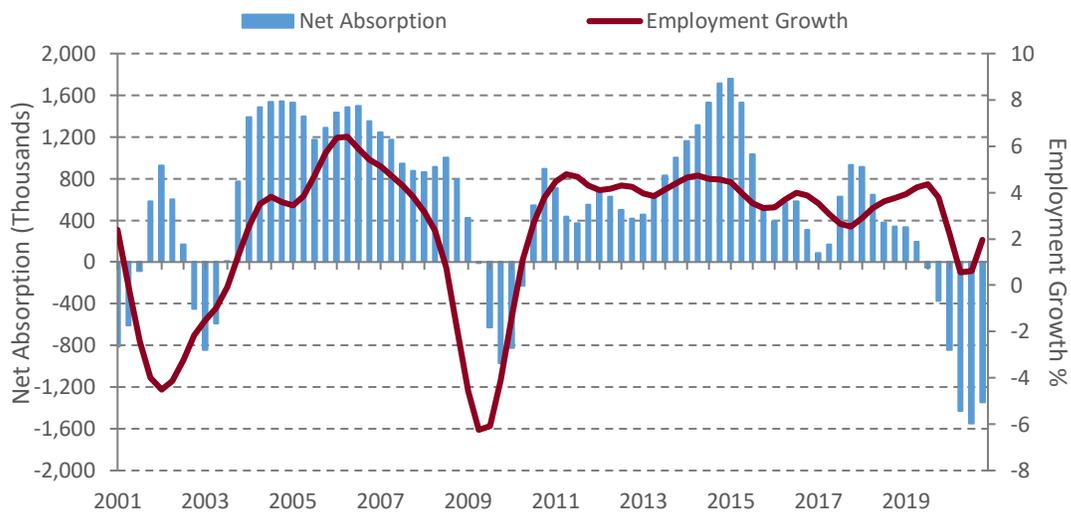
# DFW

**Figure 33. DFW Office Overall Vacancy and Asking Rent Growth (SA and TC)\***



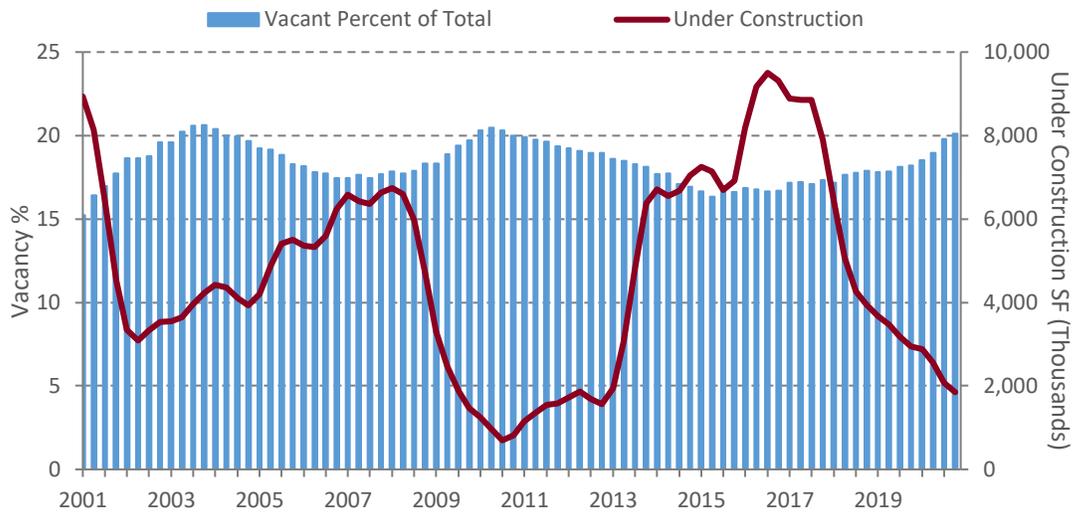
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 34. DFW Office Overall Net Absorption and Employment Growth (SA and TC)\***



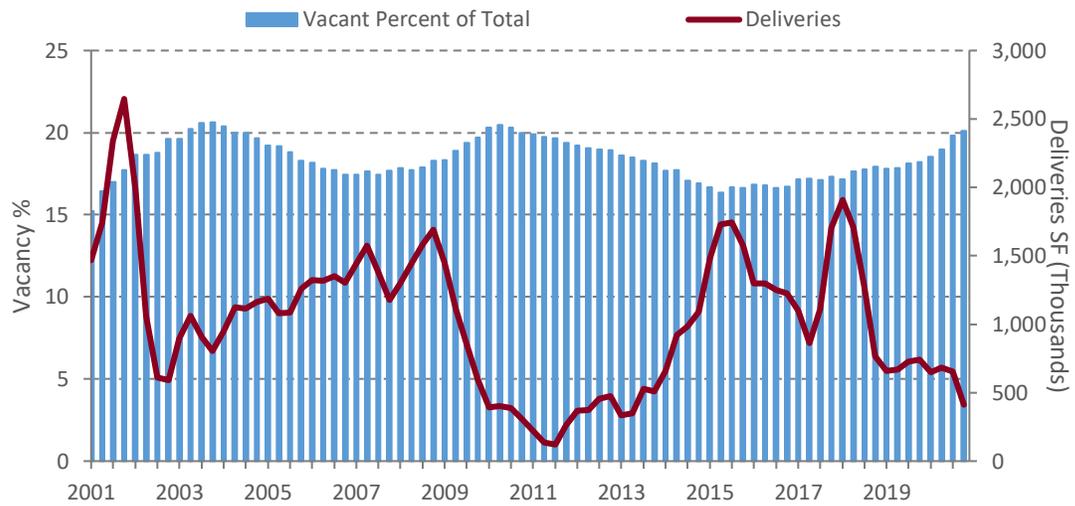
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 35. DFW Office Overall Vacancy and Under Construction (SA and TC)\***



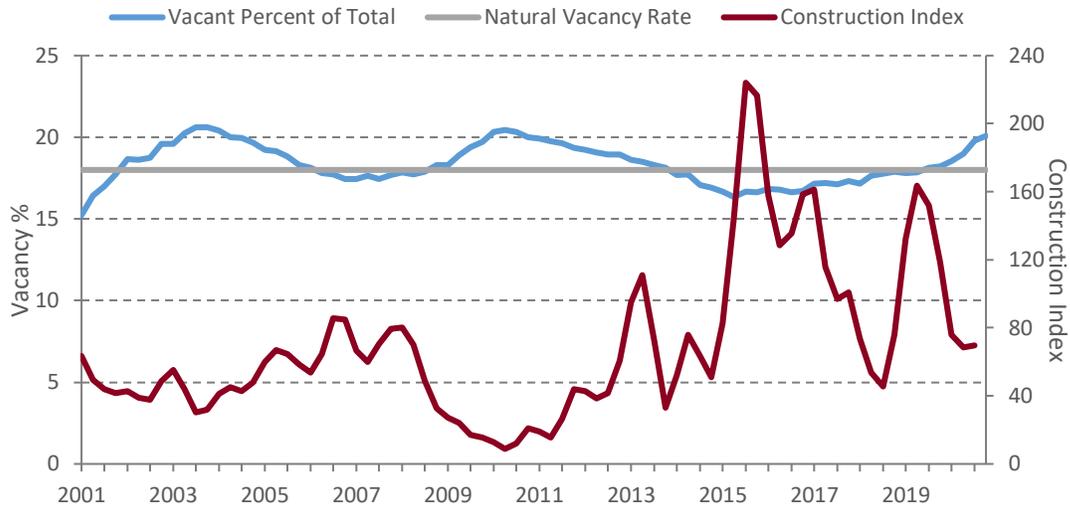
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 36. DFW Office Overall Vacancy and Deliveries (SA and TC)\***



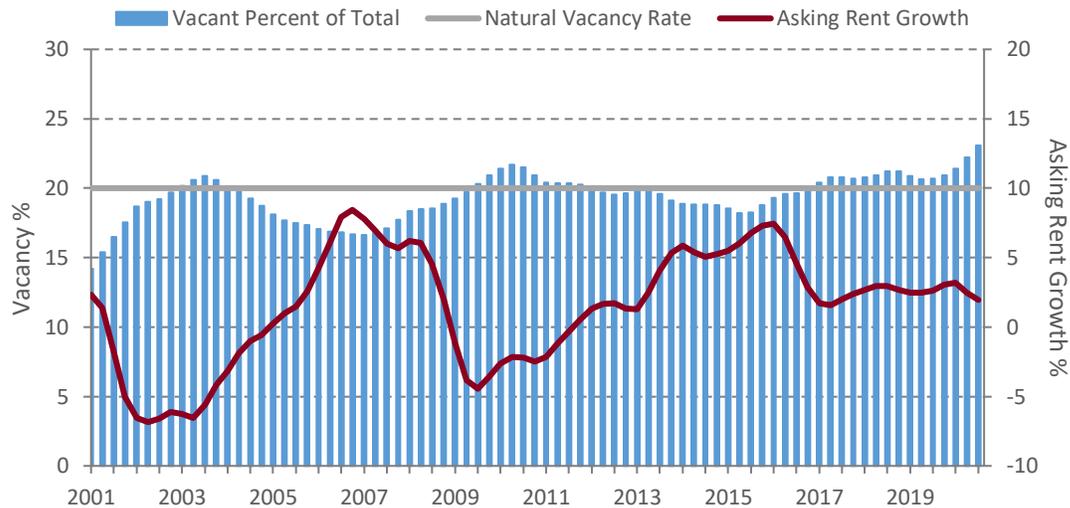
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 37. DFW Office Overall Vacancy and Construction Index (SA and TC)\***  
(Index 1982 Q1 = 100)



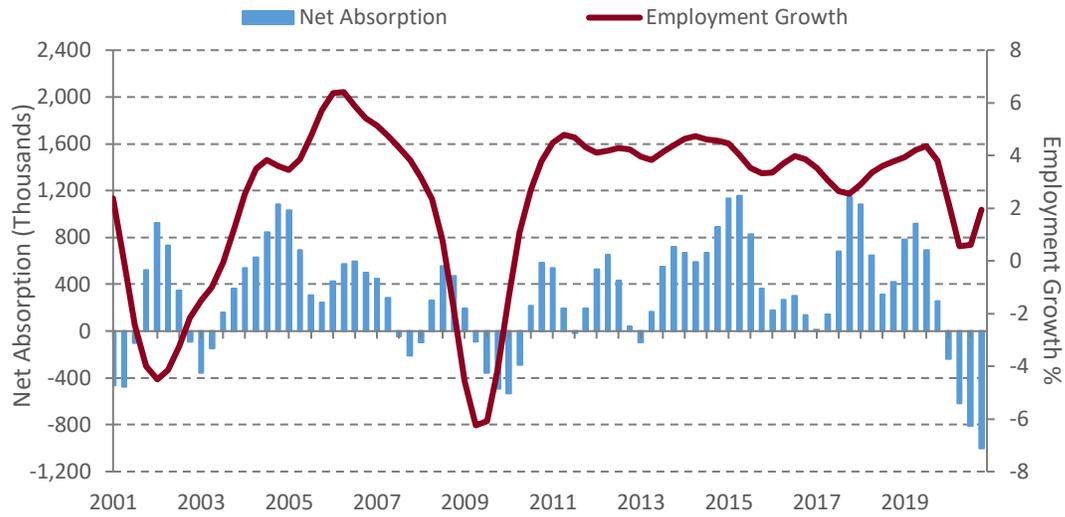
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 38. DFW Office Class A Vacancy and Asking Rent Growth (SA and TC)\***



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

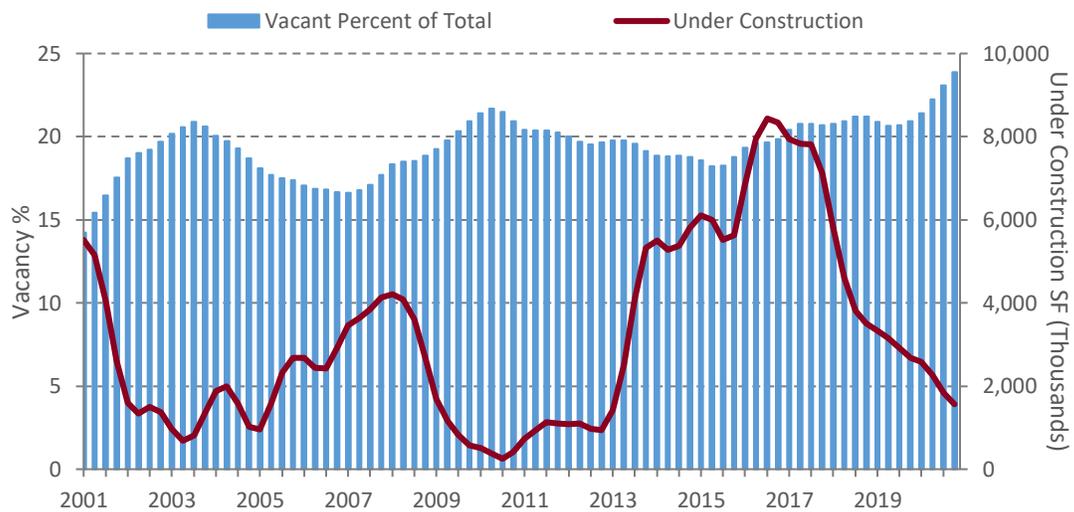
**Figure 39. DFW Office Class A Net Absorption and Employment Growth (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

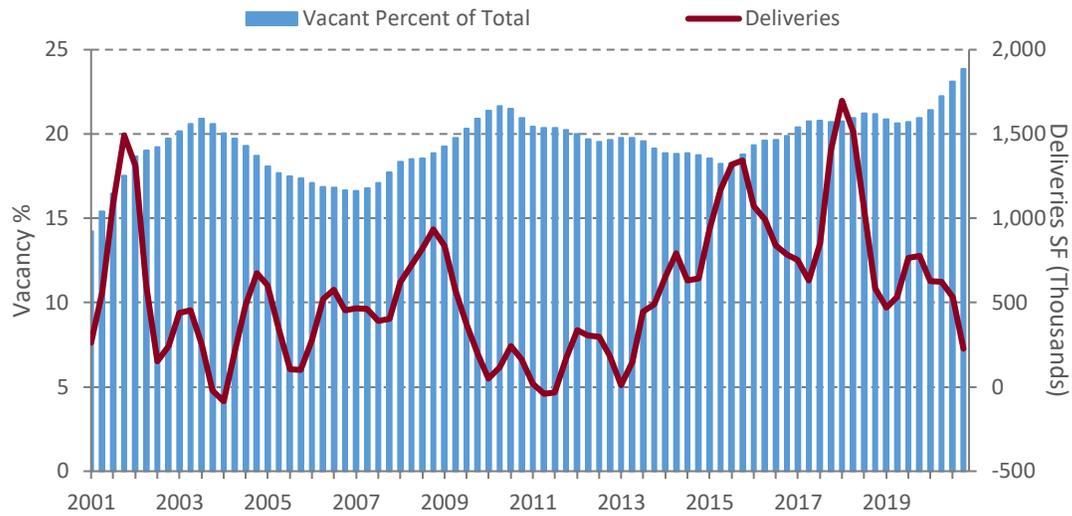
**Figure 40. DFW Office Class A Vacancy and Under Construction (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

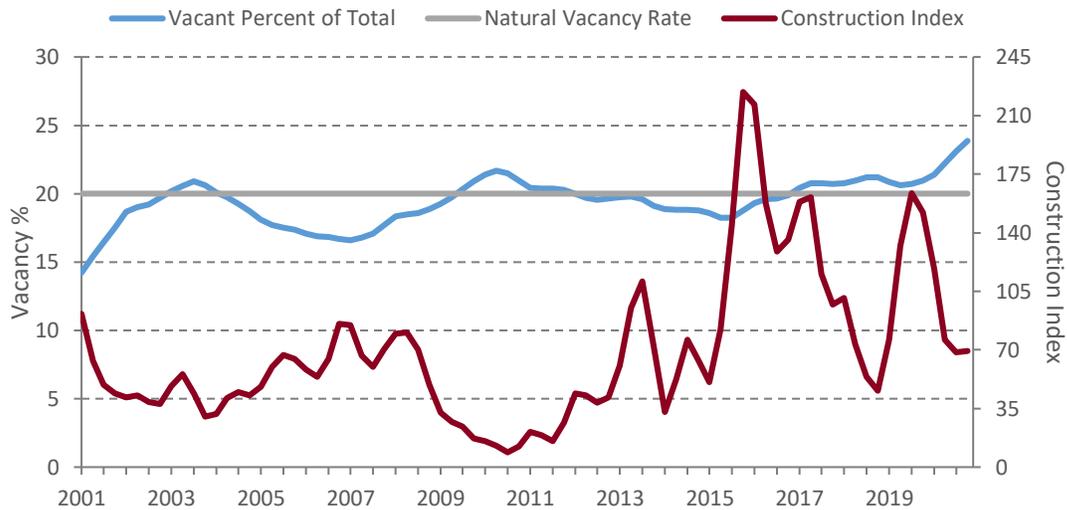
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 41. DFW Office Class A Vacancy and Deliveries (SA and TC)\***



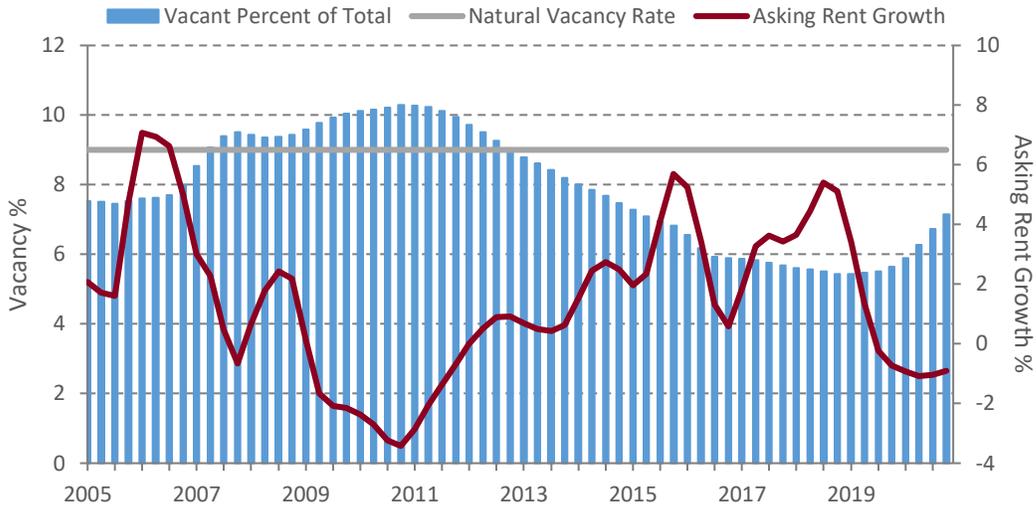
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 42. DFW Office Class A Vacancy and Construction Index (SA and TC)\*  
(Index 1982 Q1 = 100)**



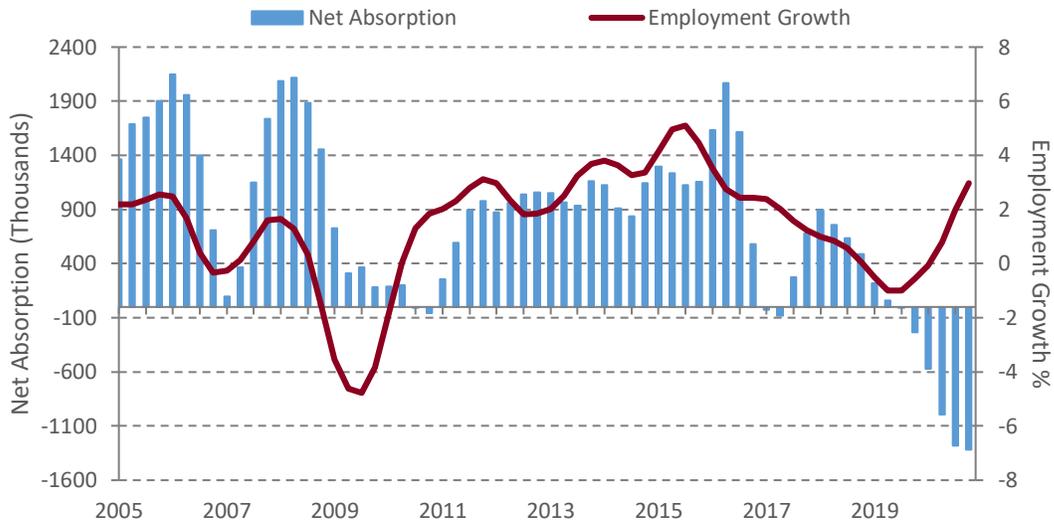
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 43. DFW Retail Vacancy and Asking Rent Growth (SA and TC)\***



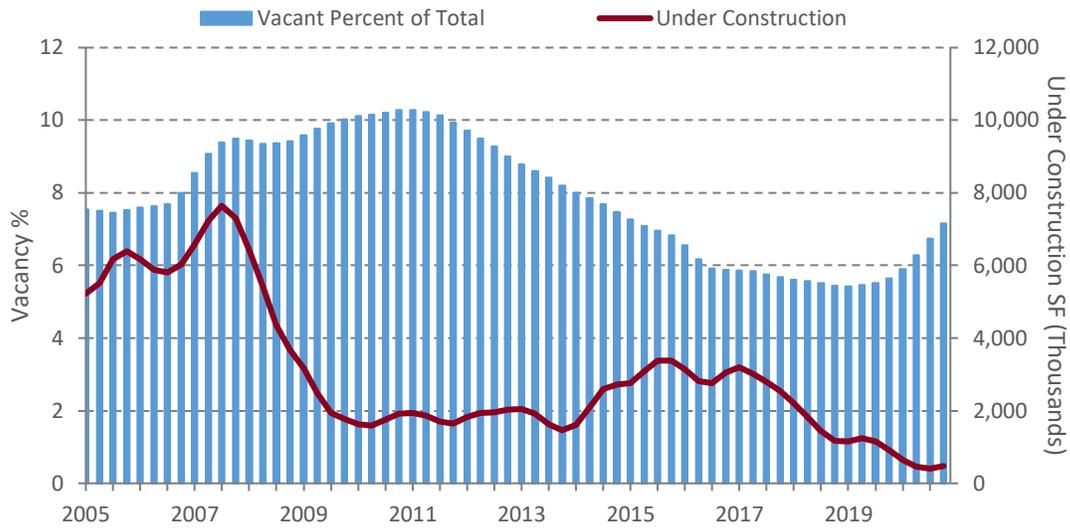
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 44. DFW Retail Net Absorption and Employment Growth (SA and TC)\***



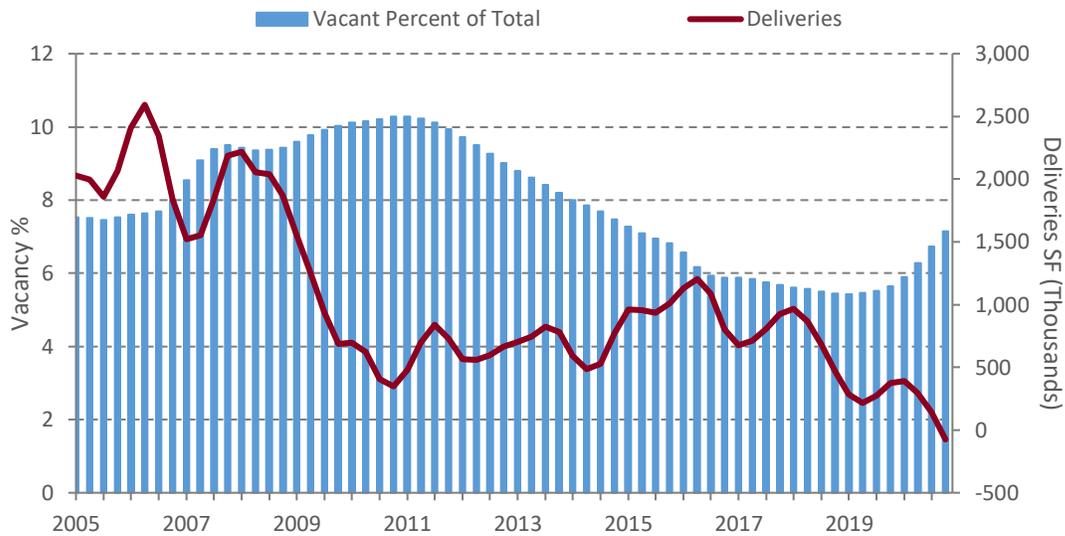
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 45. DFW Retail Vacancy and Under Construction (SA and TC)\***



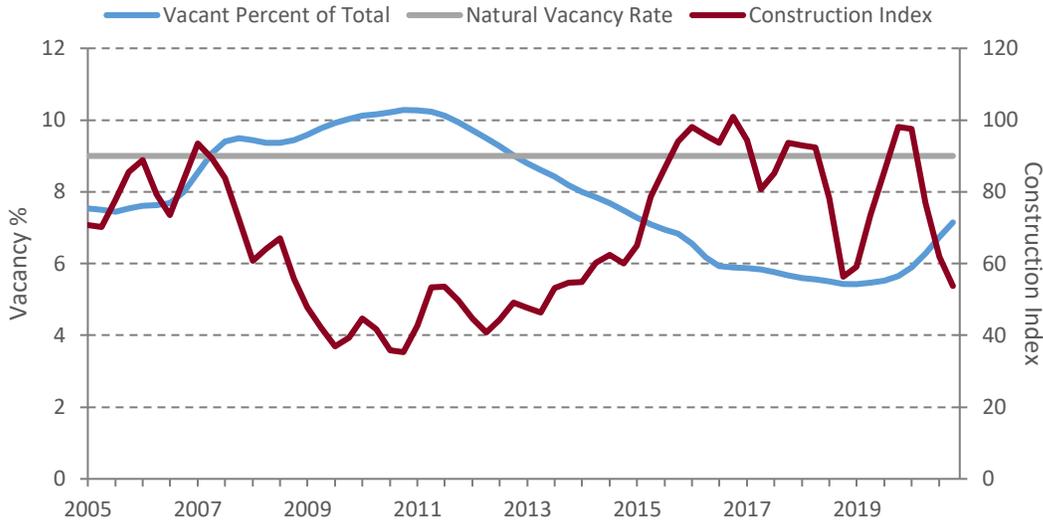
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 46. DFW Retail Vacancy and Deliveries (SA and TC)\***



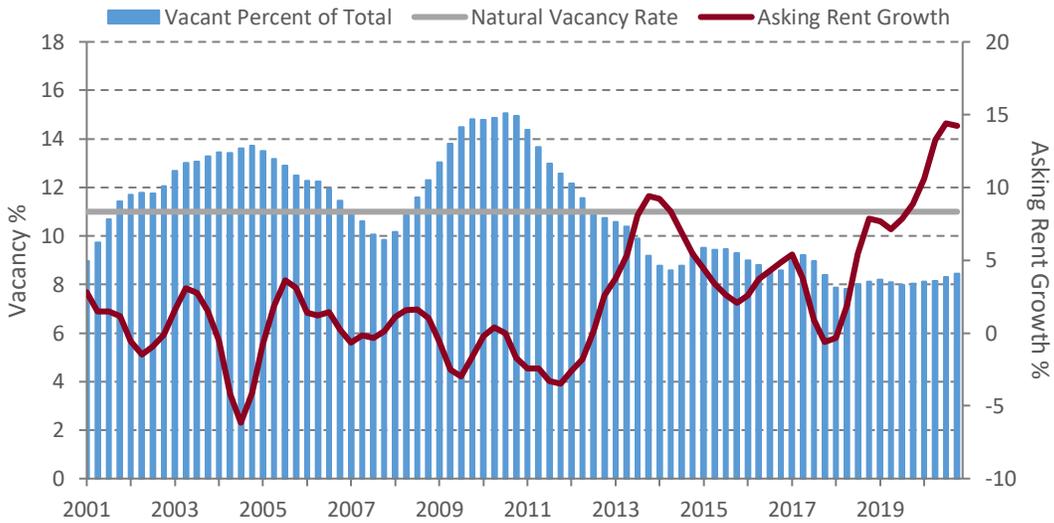
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 47. DFW Retail Vacancy and Construction Index (SA and TC)\***  
(Index 2000 Q1 = 100)



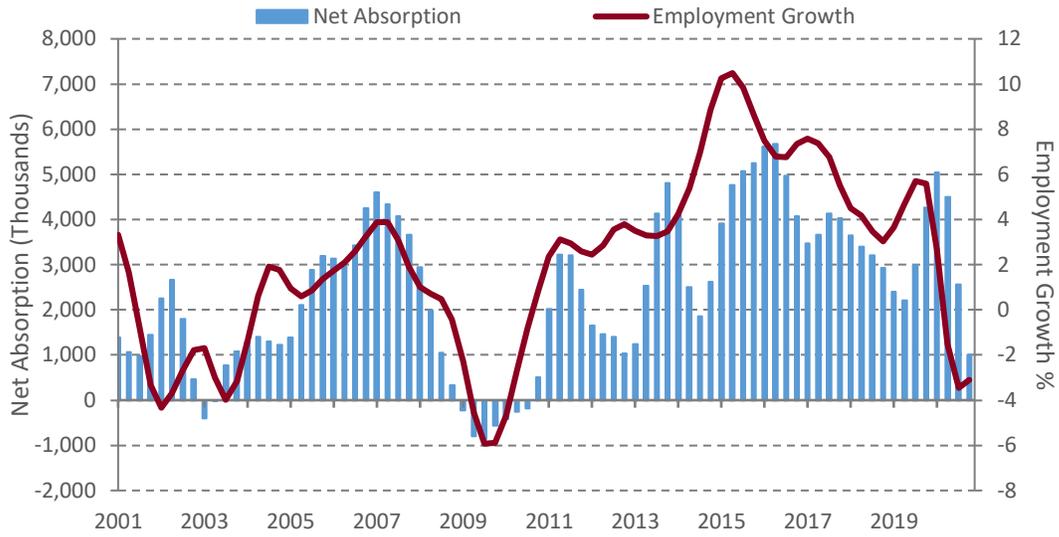
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 48. DFW Warehouse Vacancy and Asking Rent Growth (SA and TC)\***



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

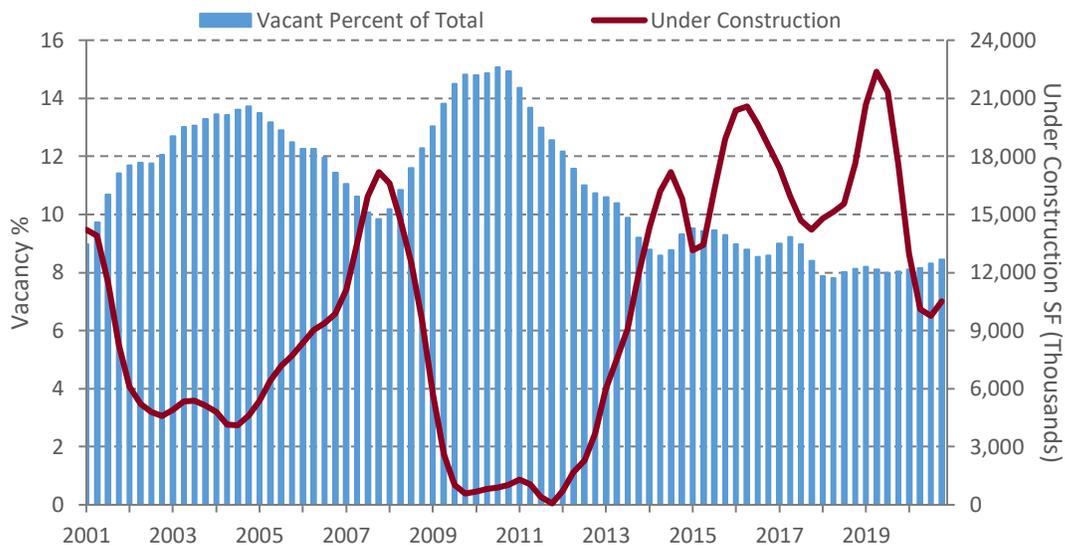
**Figure 49. DFW Warehouse Net Absorption and Employment Growth (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

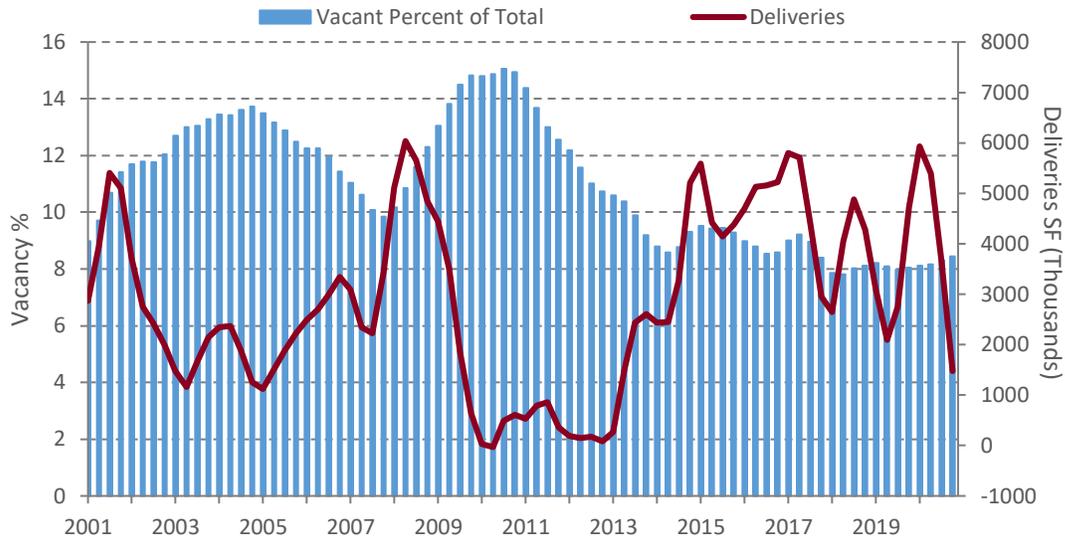
**Figure 50. DFW Warehouse Vacancy and Under Construction (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

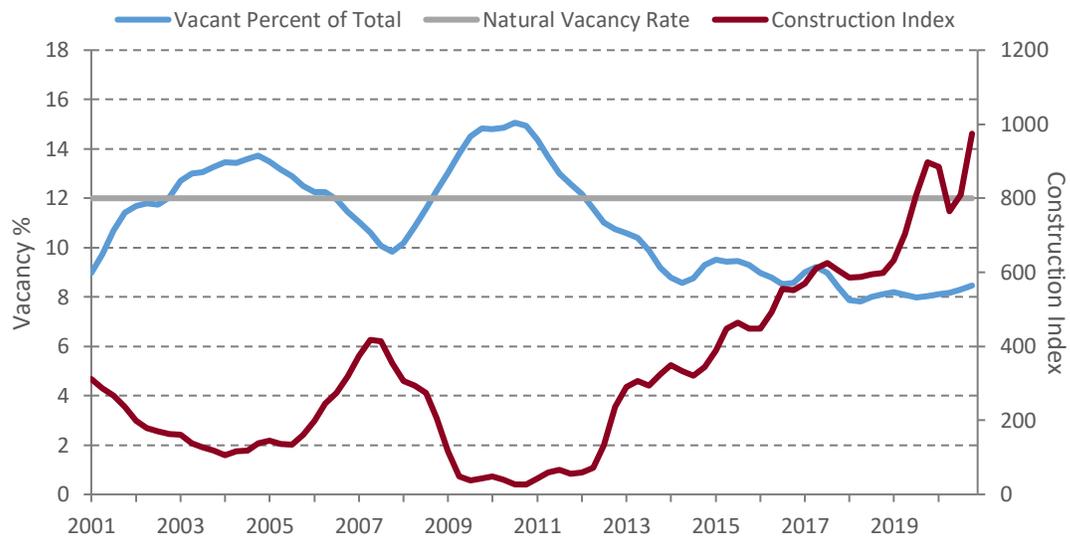
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 51. DFW Warehouse Vacancy and Deliveries (SA and TC)\***



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

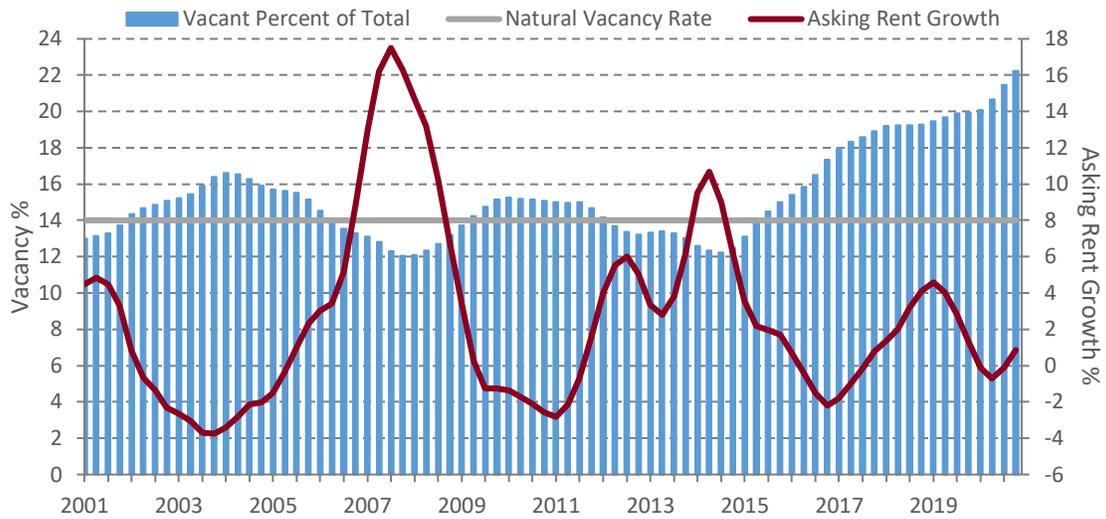
**Figure 52. DFW Warehouse Vacancy and Construction Index (SA and TC)\*  
(Index 1995 Q1 = 100)**



\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

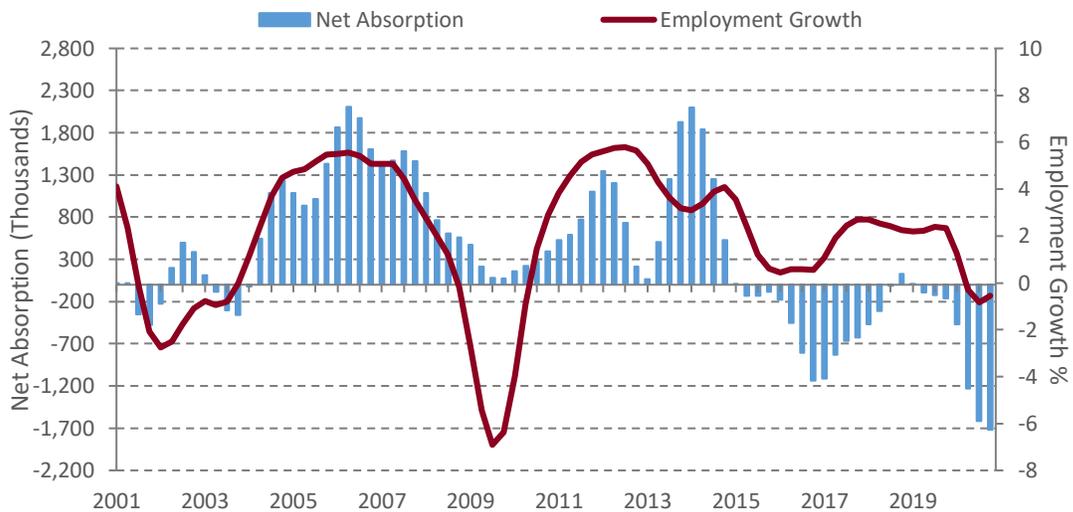
# Houston

**Figure 53. Houston Office Overall Vacancy and Asking Rent Growth (SA and TC)\***



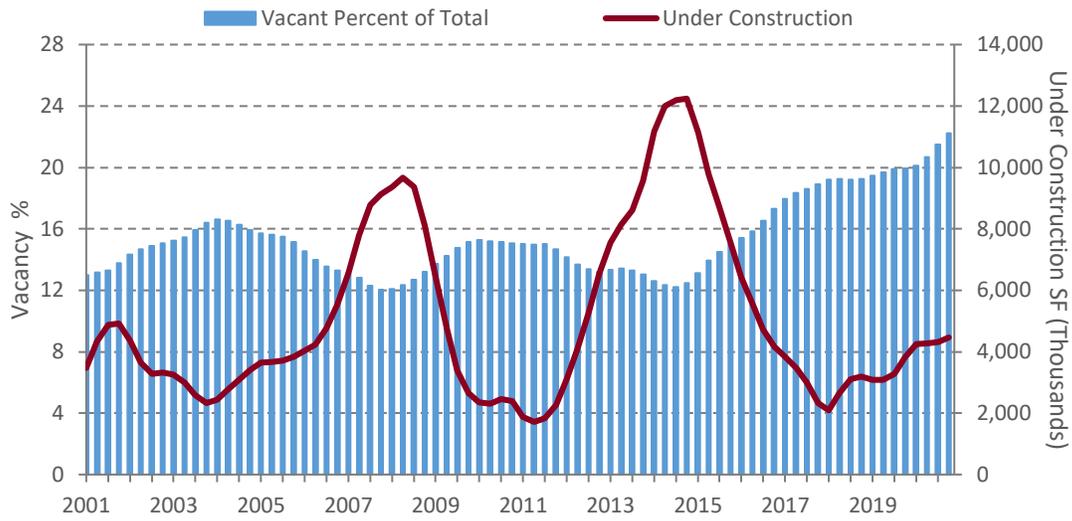
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 54. Houston Office Overall Net Absorption and Employment Growth (SA and TC)\***



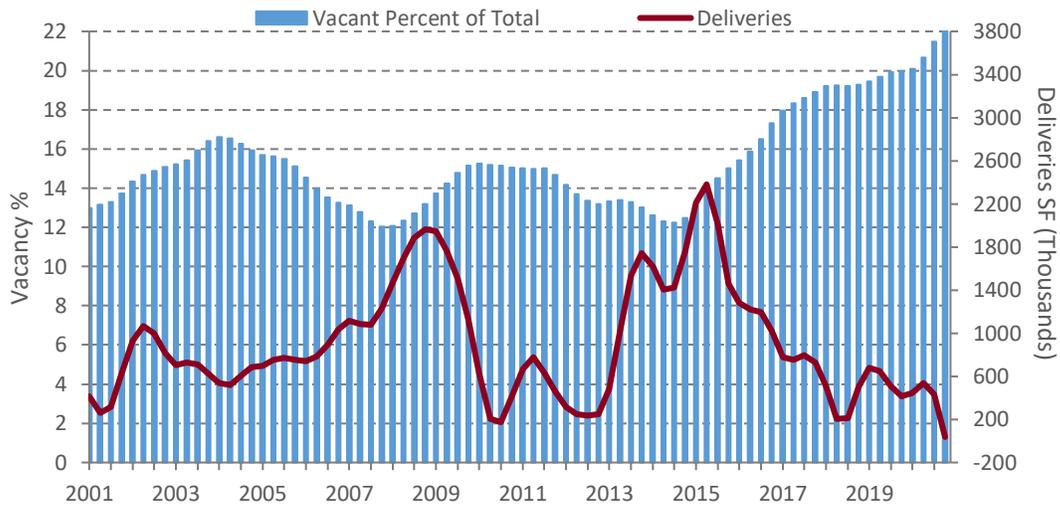
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 55. Houston Office Overall Vacancy and Under Construction (SA and TC)\***



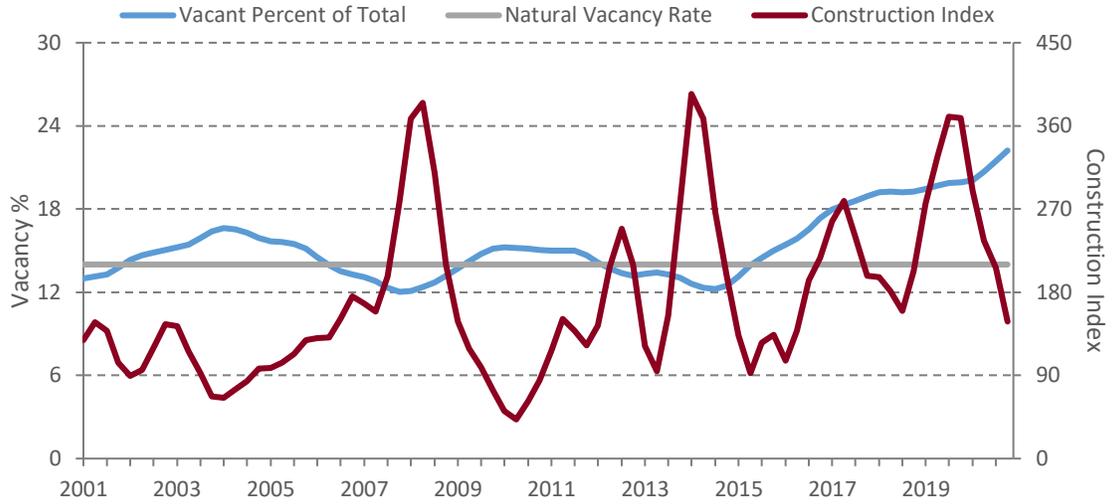
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 56. Houston Office Overall Vacancy and Deliveries (SA and TC)\***



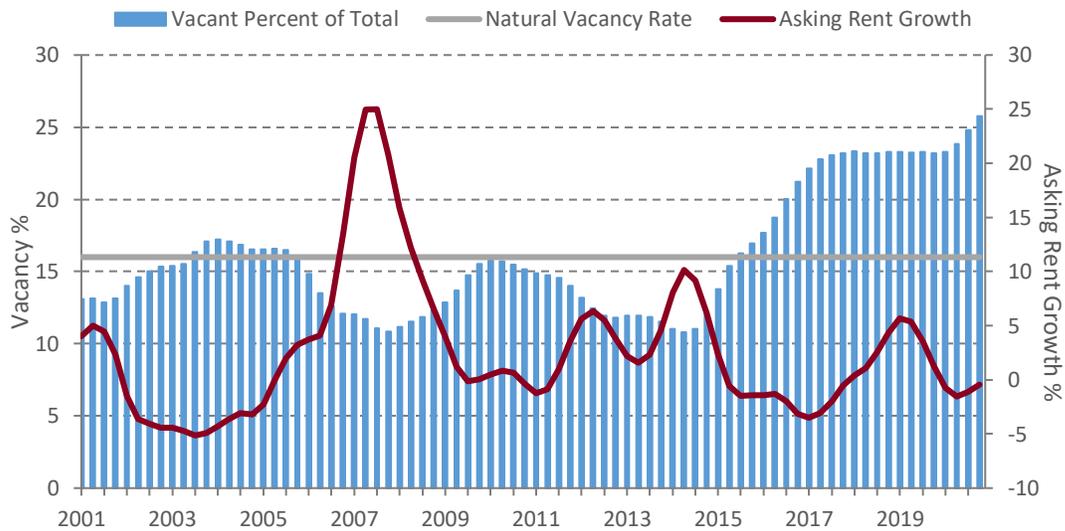
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 57. Houston Office Overall Vacancy and Construction Index (SA and TC)\***  
(Index 1999 Q1 = 100)



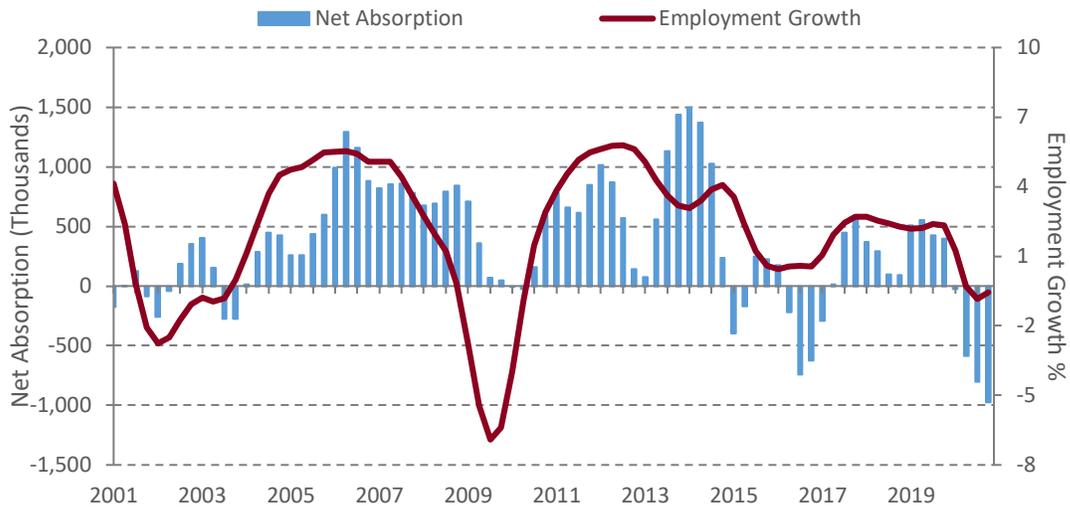
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 58. Houston Office Class A Vacancy and Asking Rent Growth (SA and TC)\***



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

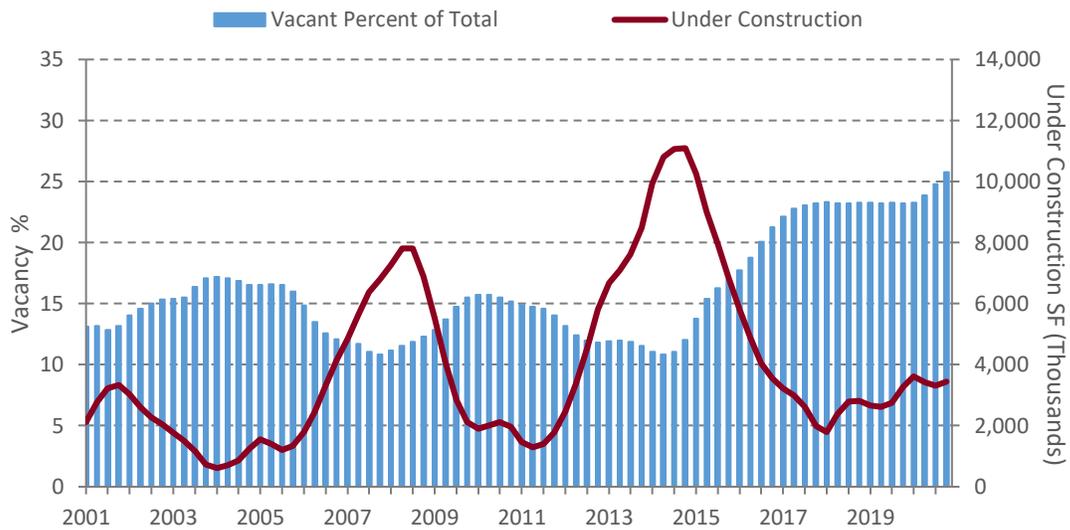
**Figure 59. Houston Office Class A Net Absorption and Employment Growth (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

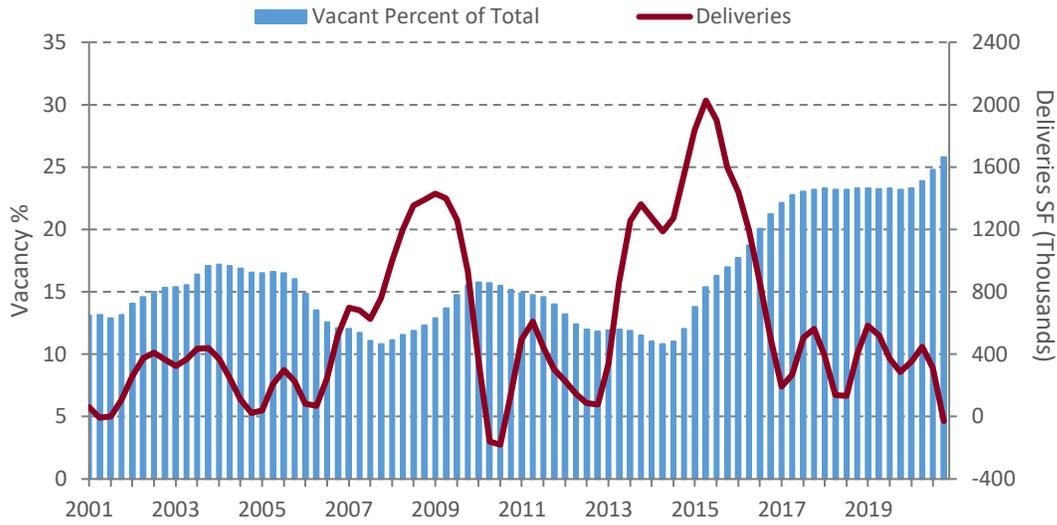
**Figure 60. Houston Office Class A Vacancy and Under Construction (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

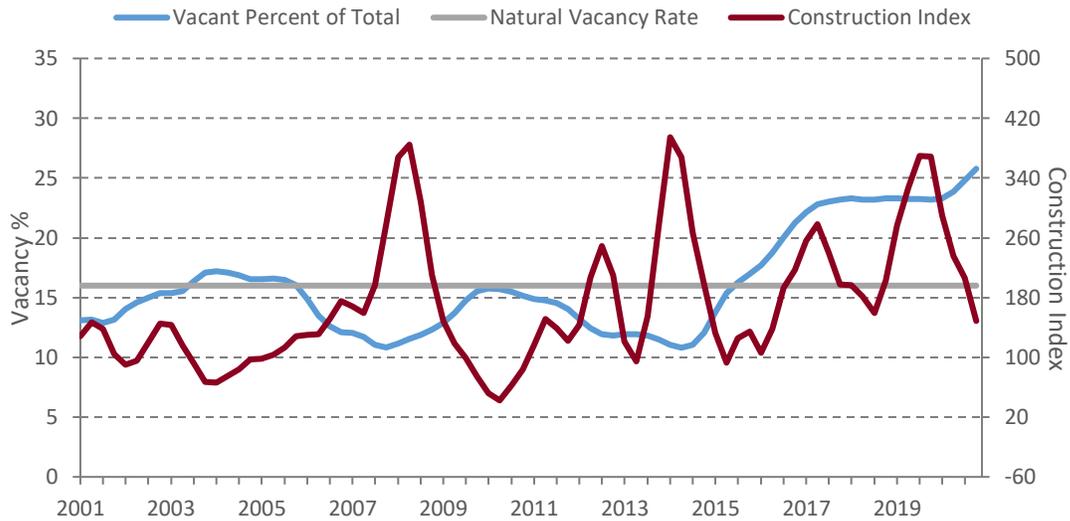
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 61. Houston Office Class A Vacancy and Deliveries (SA and TC)\***



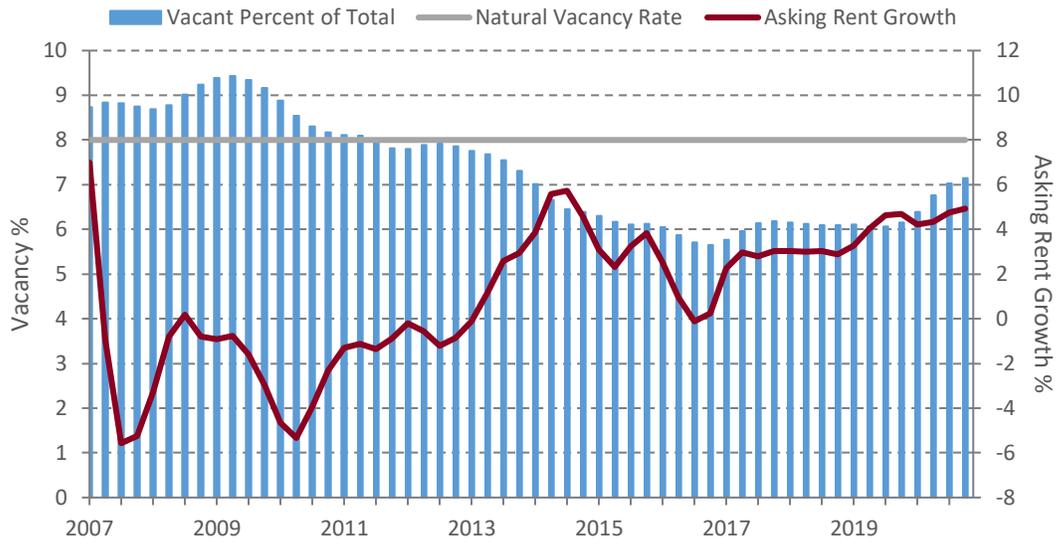
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 62. Houston Office Class A Vacancy and Construction Index (SA and TC)\*  
(Index 1999 Q1 = 100)**



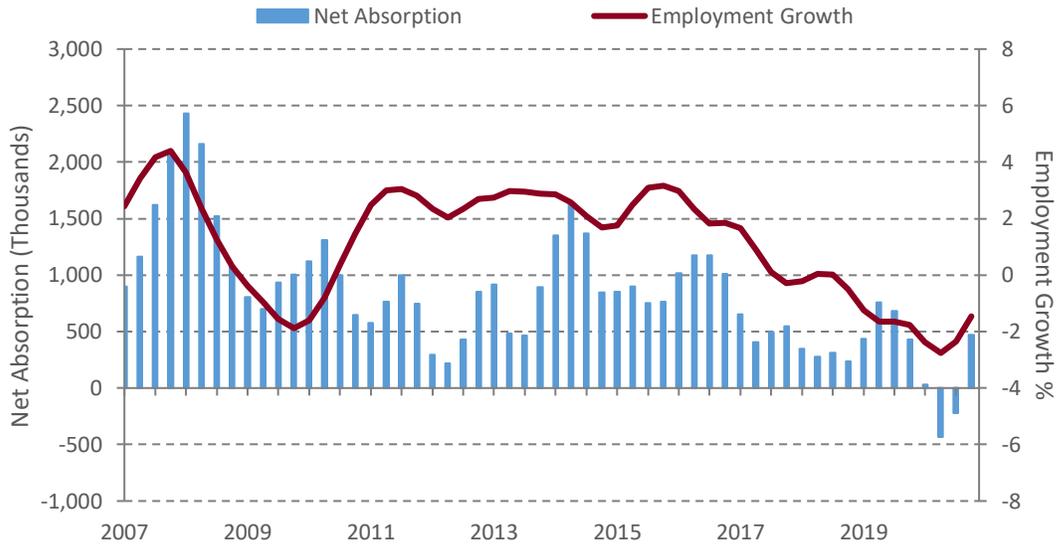
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 63. Houston Retail Vacancy and Asking Rent Growth (SA and TC)\***



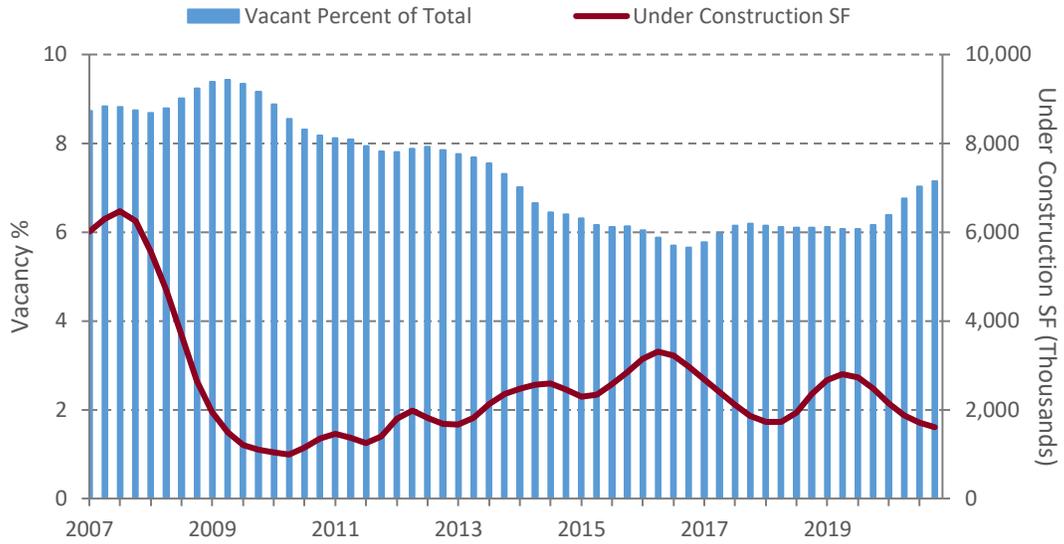
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 64. Houston Retail Net Absorption and Employment Growth (SA and TC)\***



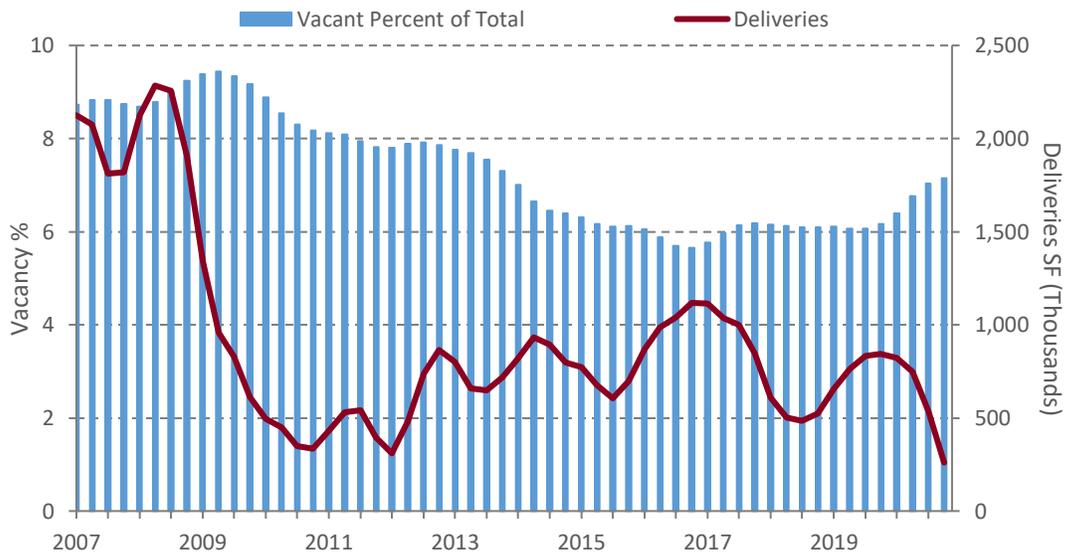
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 65. Houston Retail Vacancy and Under Construction (SA and TC)\***



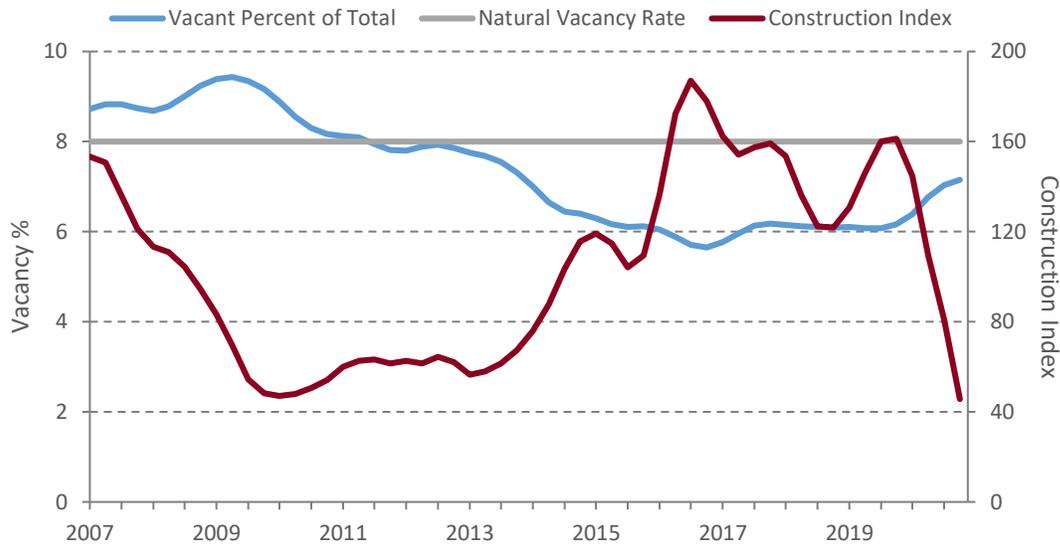
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 66. Houston Retail Vacancy and Deliveries (SA and TC)\***



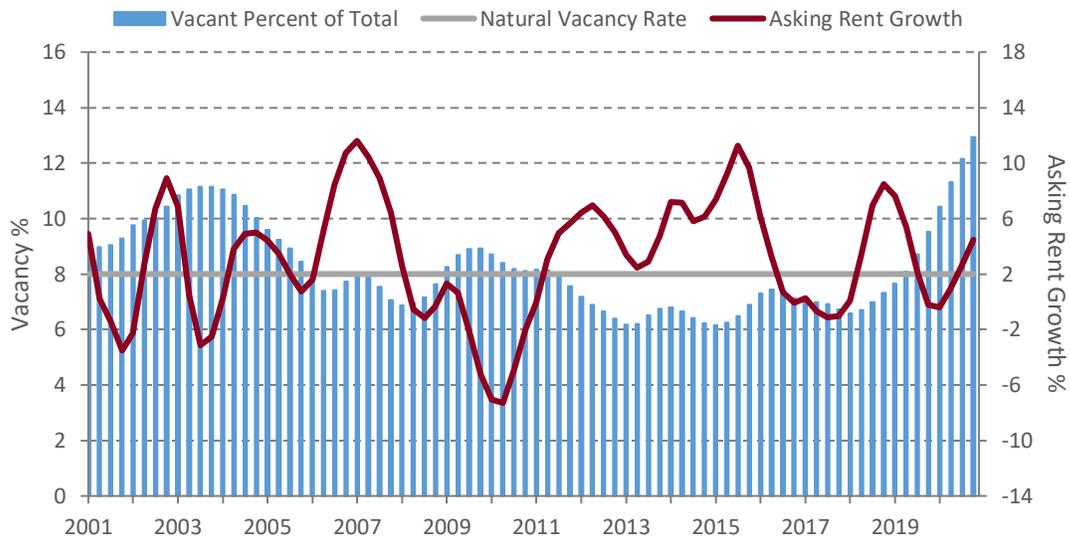
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 67. Houston Retail Vacancy and Construction Index (SA and TC)\***  
(Index 2006 Q1 = 100)



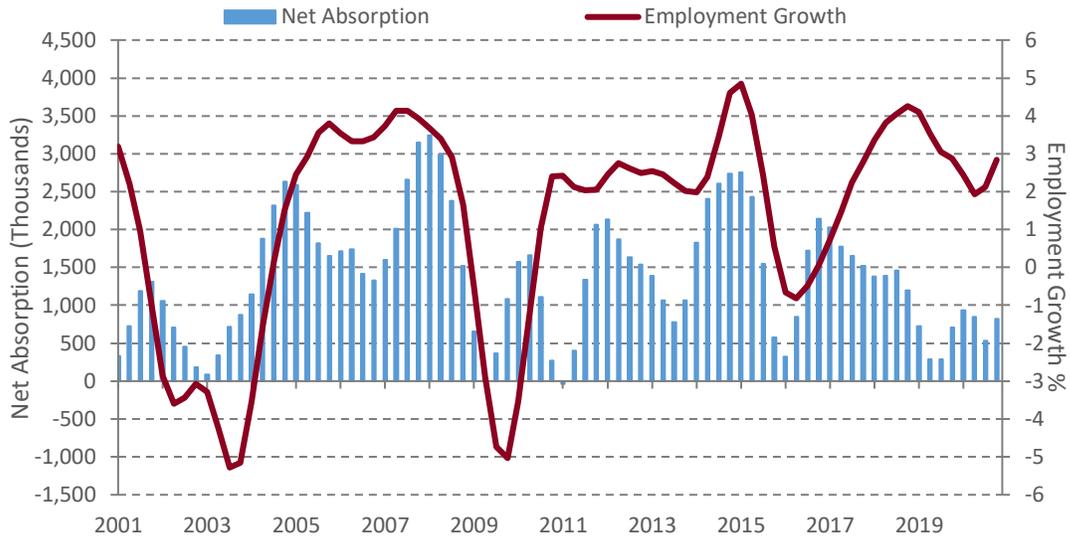
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 68. Houston Warehouse Vacancy and Asking Rent Growth (SA and TC)\***



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

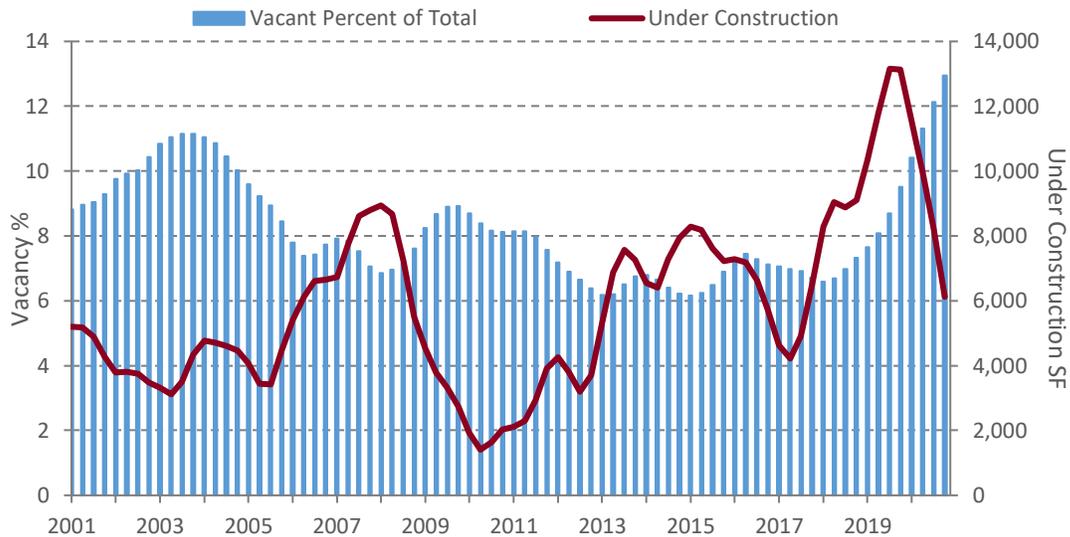
**Figure 69. Houston Warehouse Net Absorption and Employment Growth (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

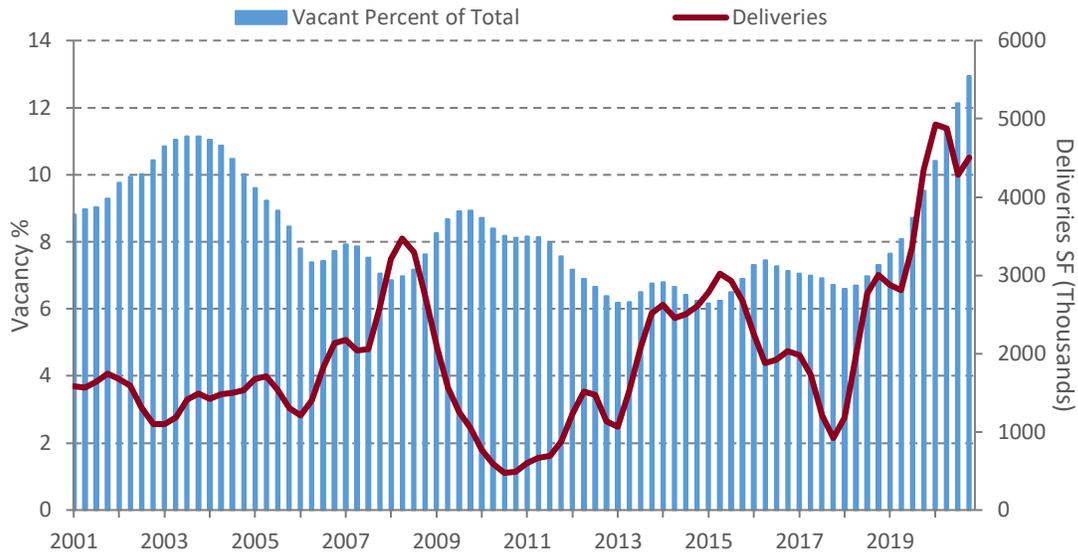
**Figure 70. Houston Warehouse Vacancy and Under Construction (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

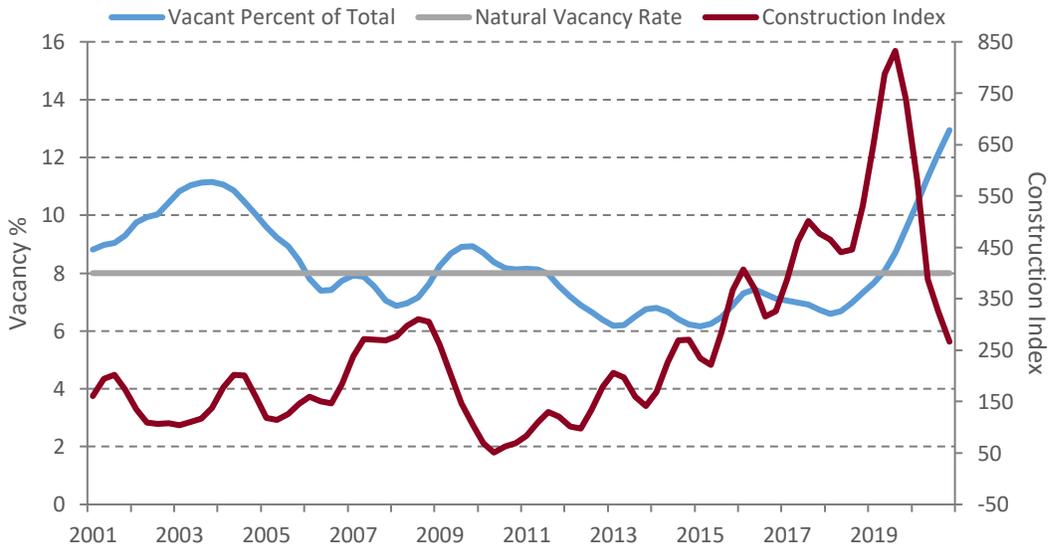
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 71. Houston Warehouse Vacancy and Deliveries (SA and TC)\***



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

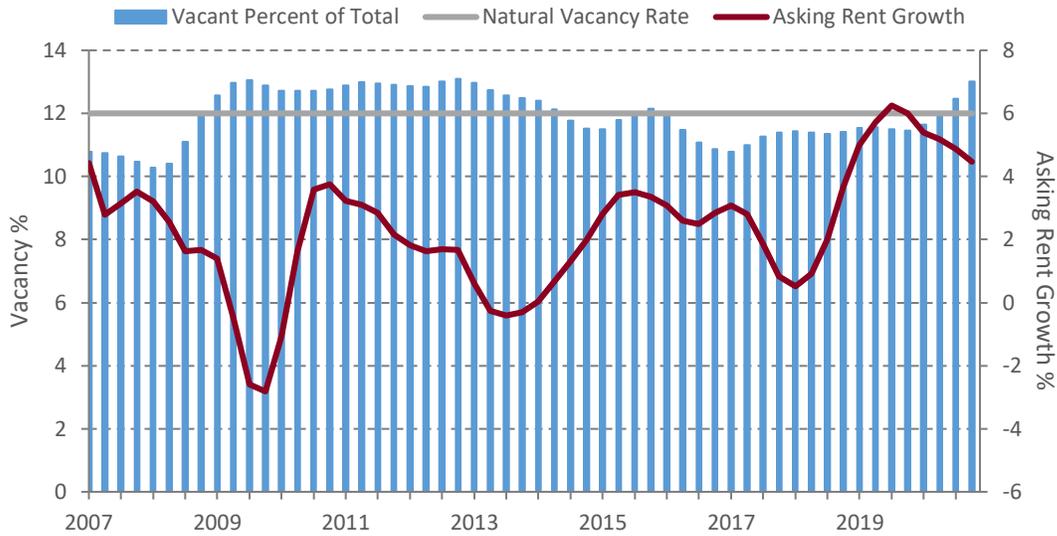
**Figure 72. Houston Warehouse Vacancy and Construction Index (SA and TC)\*  
(Index 1999 Q1 = 100)**



\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

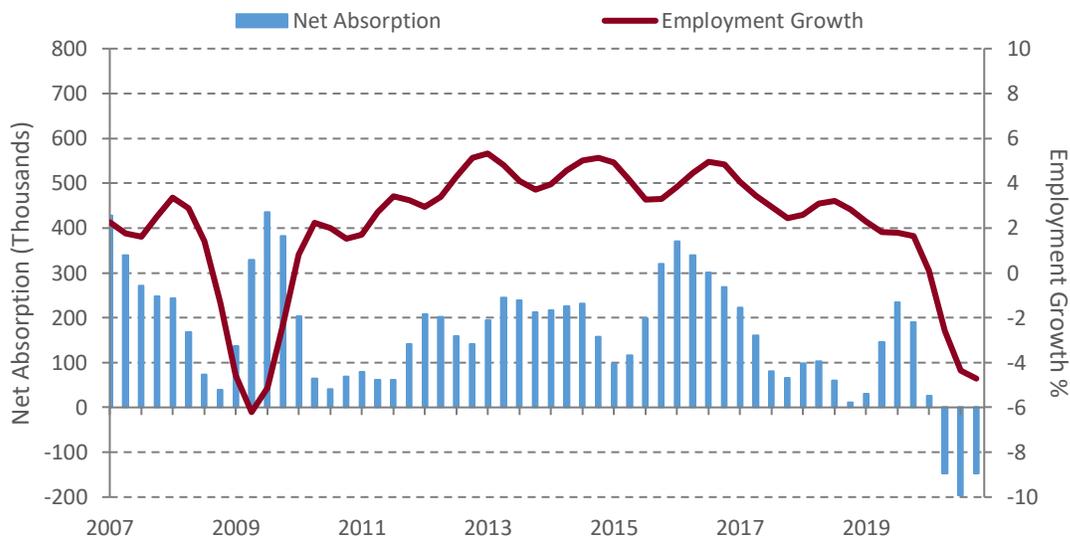
# San Antonio

**Figure 73. San Antonio Office Overall Vacancy and Asking Rent Growth (SA and TC)\***



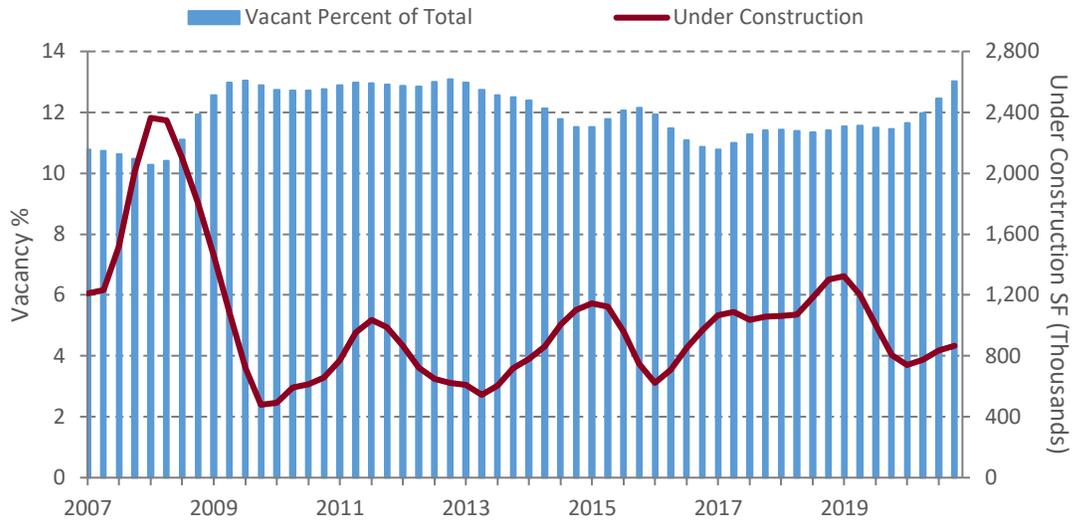
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 74. San Antonio Office Overall Net Absorption and Employment Growth (SA and TC)\***



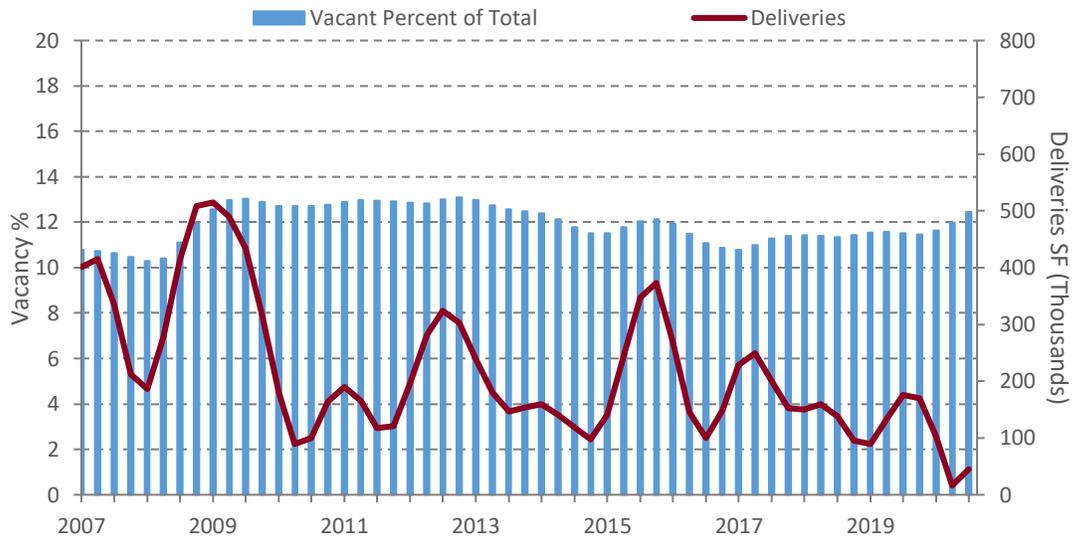
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 75. San Antonio Office Overall Vacancy and Under Construction (SA and TC)\***



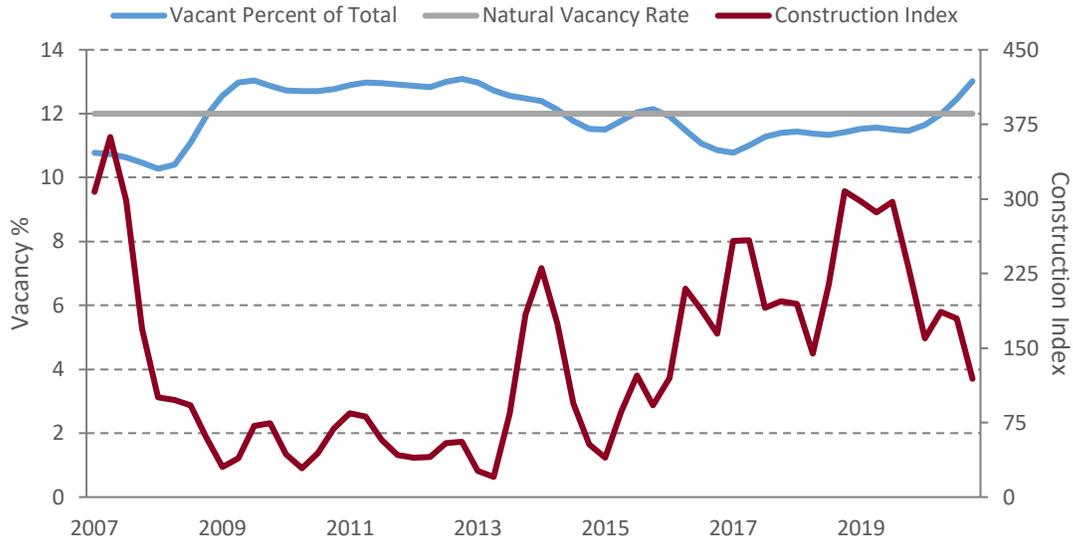
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 76. San Antonio Office Overall Vacancy and Deliveries (SA and TC)\***



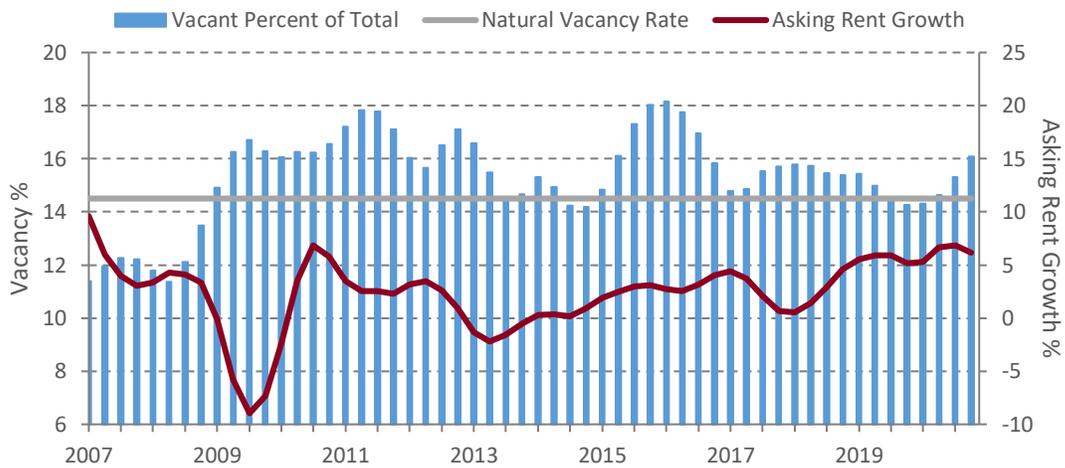
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 77. San Antonio Office Overall Vacancy and Construction Index (SA and TC)\***  
(Index 2005 Q3 = 100)



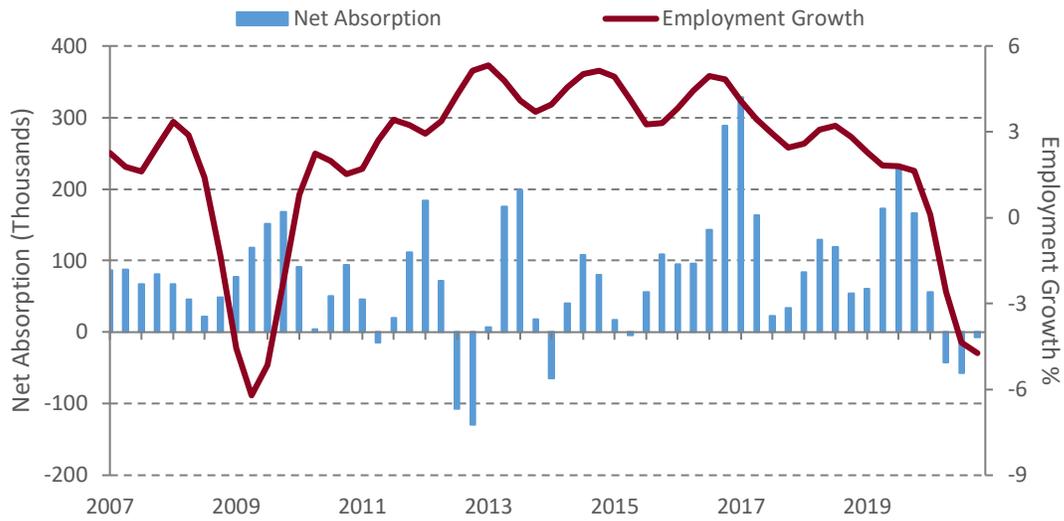
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 78. San Antonio Office Class A Vacancy and Asking Rent Growth (SA and TC)\***



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

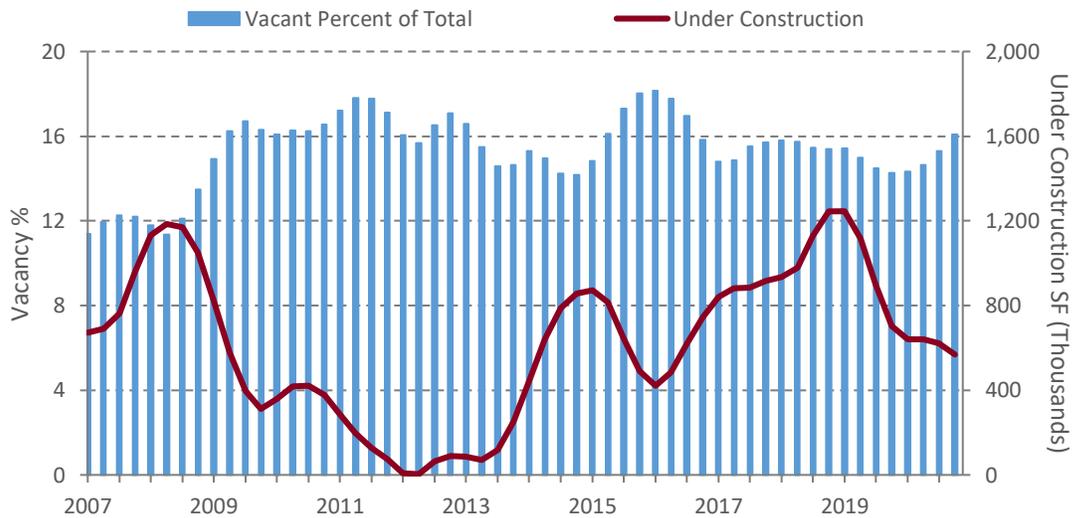
**Figure 79. San Antonio Office Class A Net Absorption and Employment Growth (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

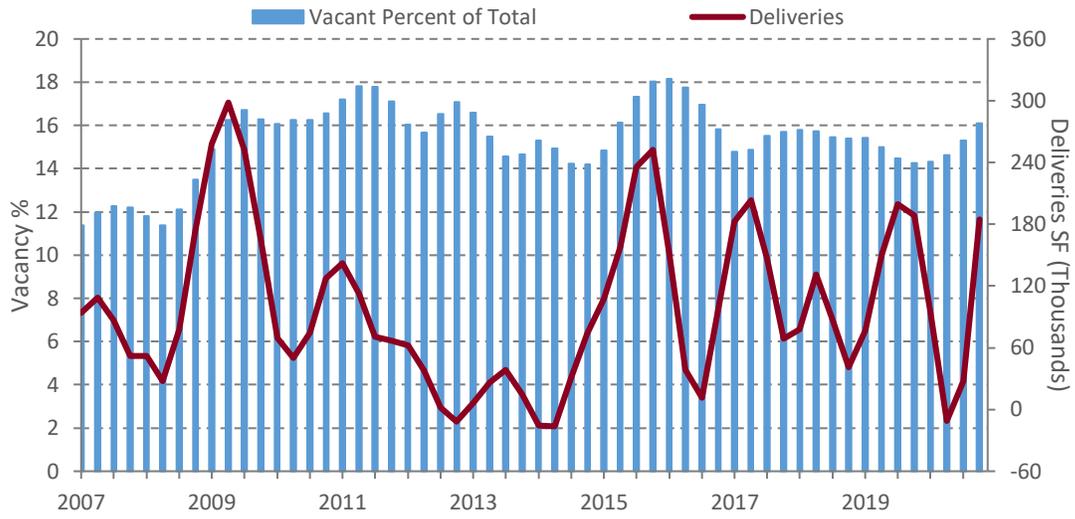
**Figure 80. San Antonio Office Class A Vacancy and Under Construction (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

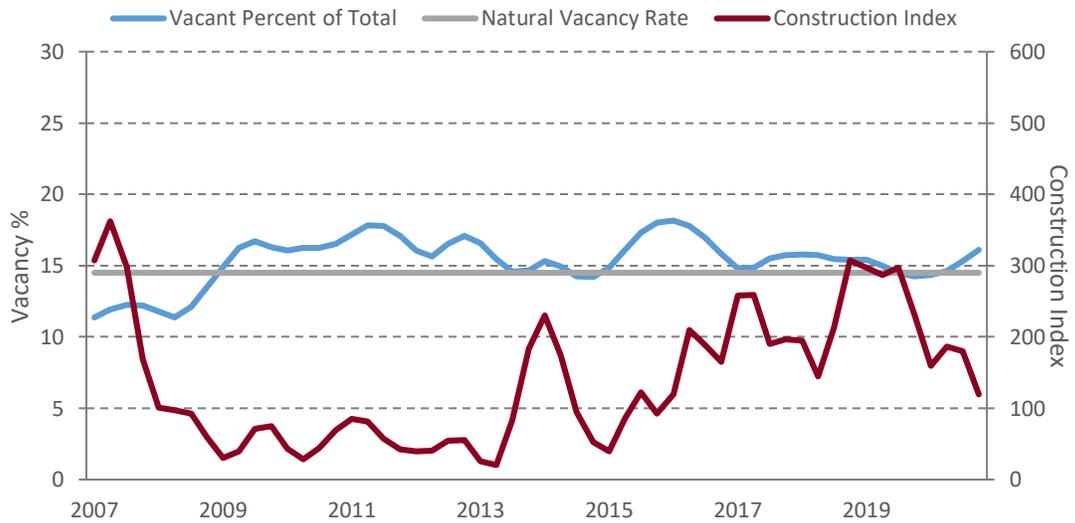
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 81. San Antonio Office Class A Vacancy and Deliveries (SA and TC)\***



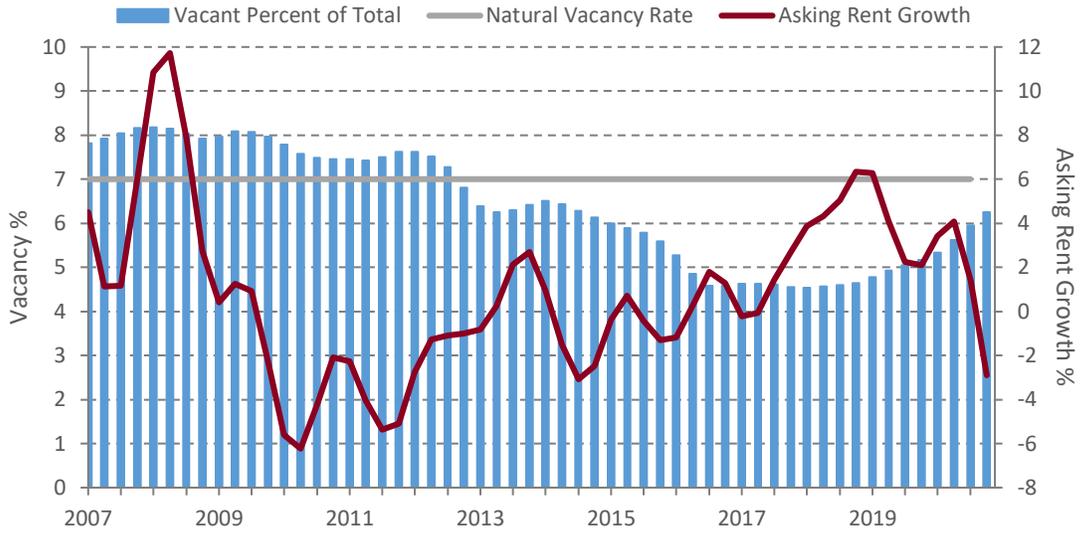
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 82. San Antonio Office Class A Vacancy and Construction Index (SA and TC)\*  
(Index 2005 Q3 = 100)**



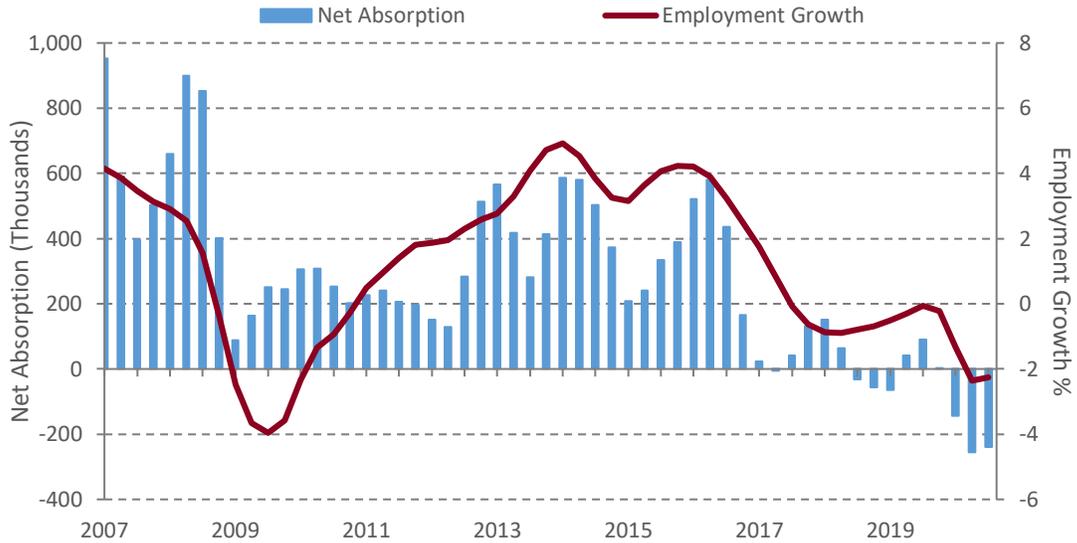
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 83. San Antonio Retail Vacancy and Asking Rent Growth (SA and TC)\***



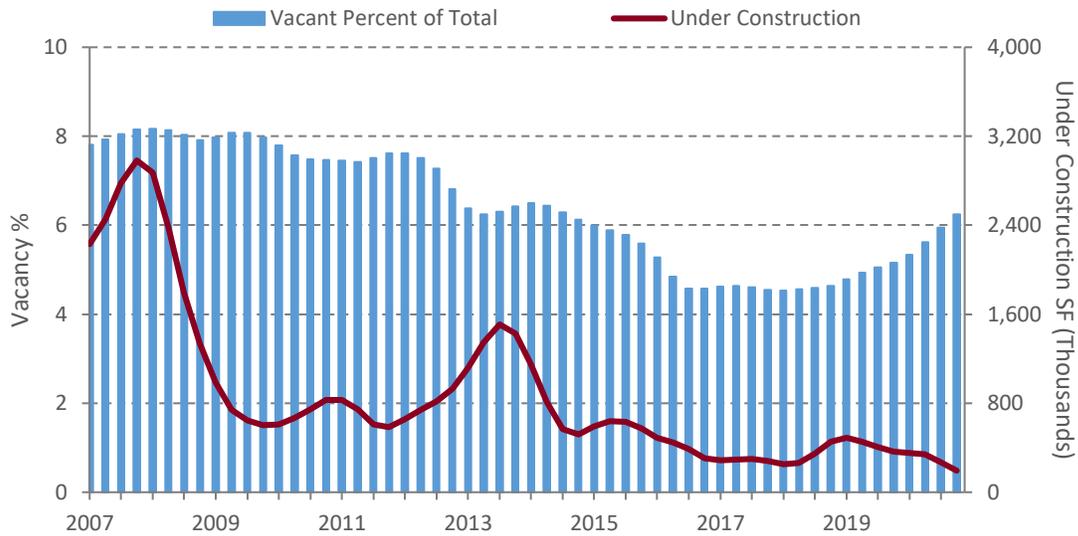
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 84. San Antonio Retail Net Absorption and Employment Growth (SA and TC)\***



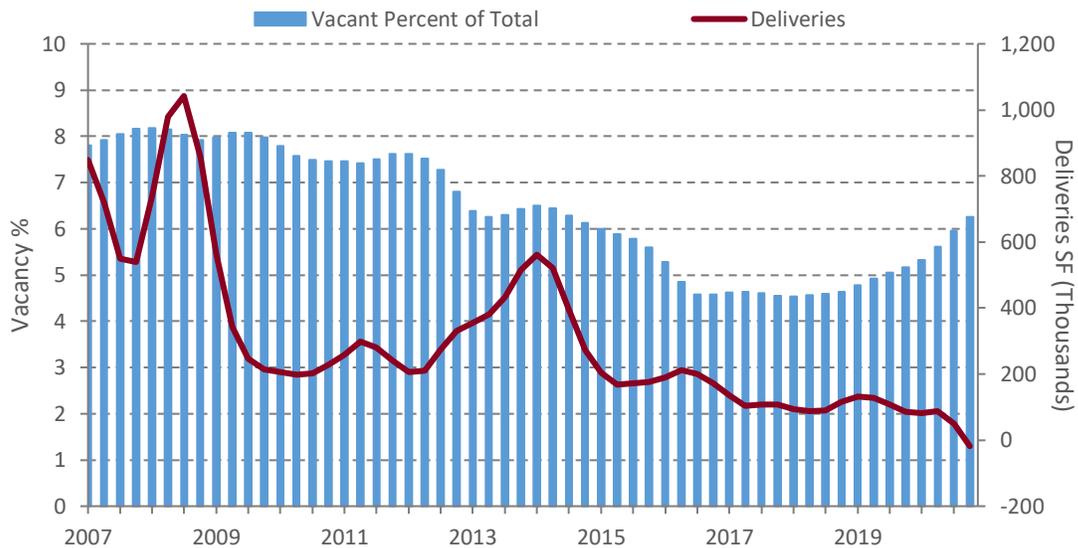
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

**Figure 85. San Antonio Retail Vacancy and Under Construction (SA and TC)\***



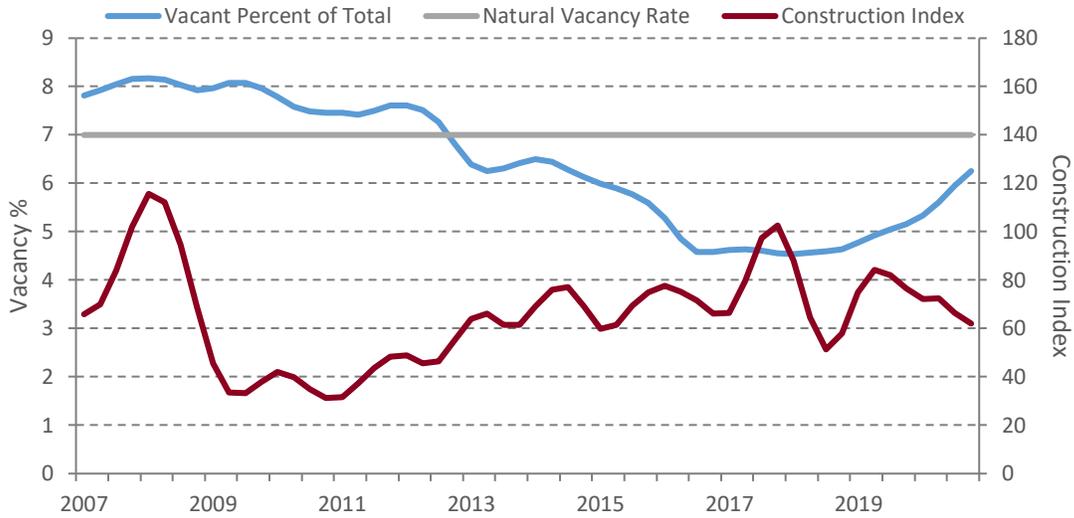
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 86. San Antonio Retail Vacancy and Deliveries (SA and TC)\***



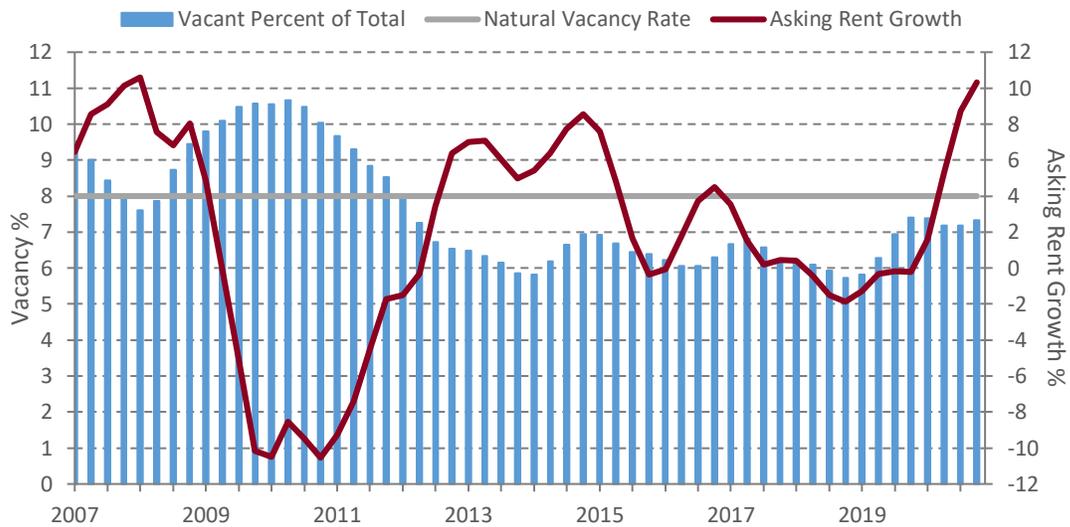
\*Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 87. San Antonio Retail Vacancy and Construction Index (SA and TC)\***  
(Index 2005 Q3 = 100)



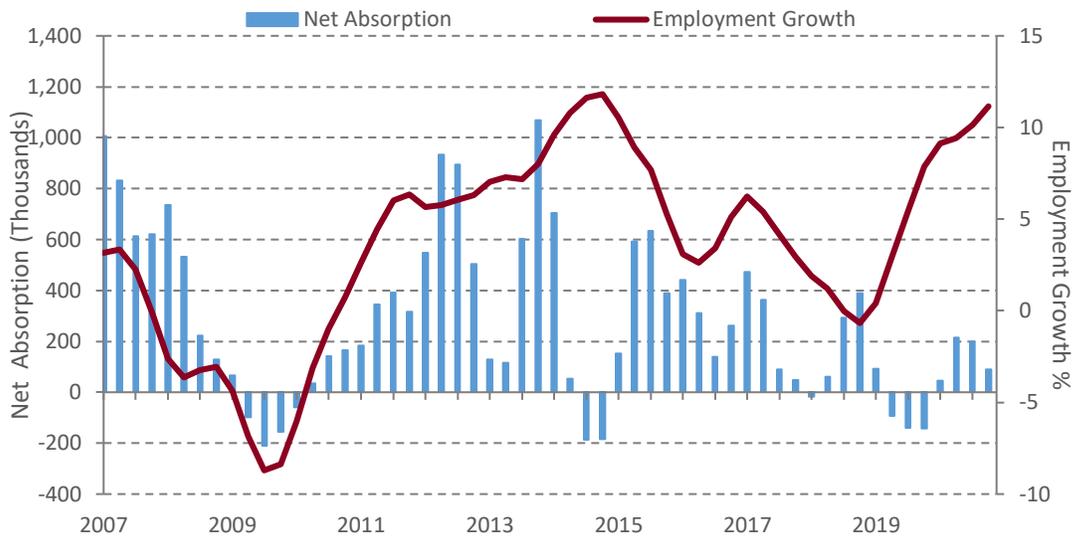
\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University

**Figure 88. San Antonio Warehouse Vacancy and Asking Rent Growth (SA and TC)\***



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

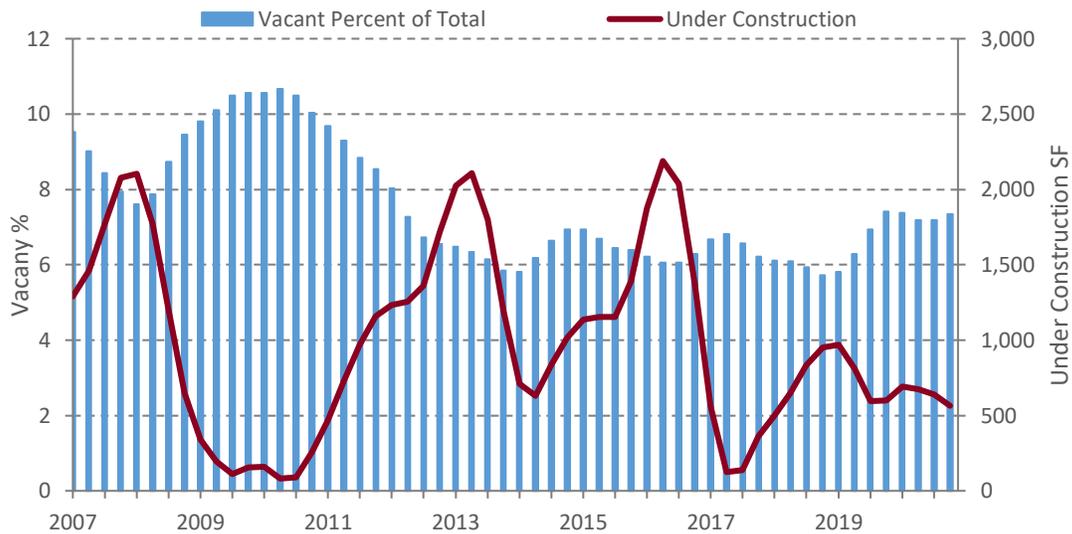
**Figure 89. San Antonio Warehouse Net Absorption and Employment Growth (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

Sources: Bureau of Labor Statistics, CoStar, and Texas Real Estate Research Center at Texas A&M University

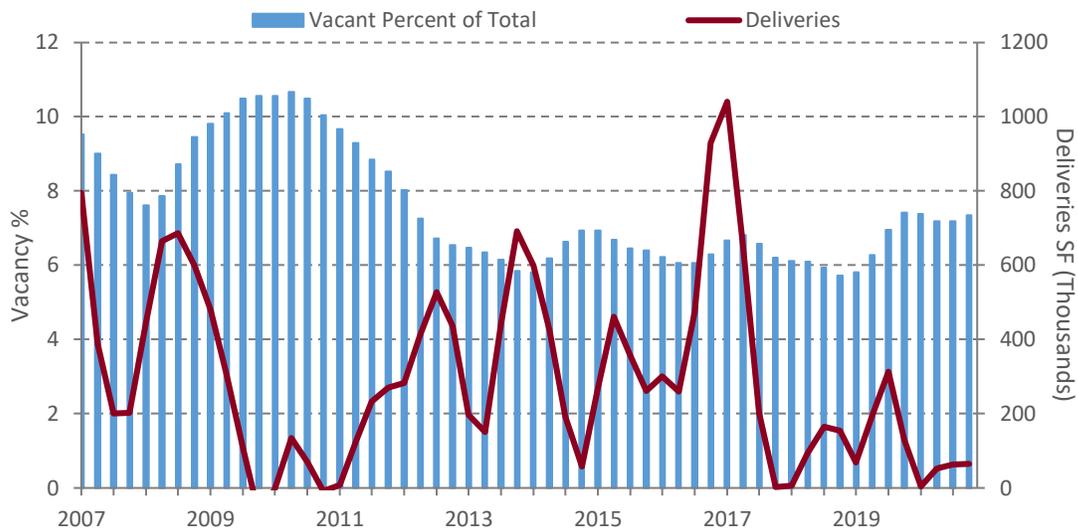
**Figure 90. San Antonio Warehouse Vacancy and Under Construction (SA and TC)\***



\*Note: Seasonally adjusted and trend-cycle component.

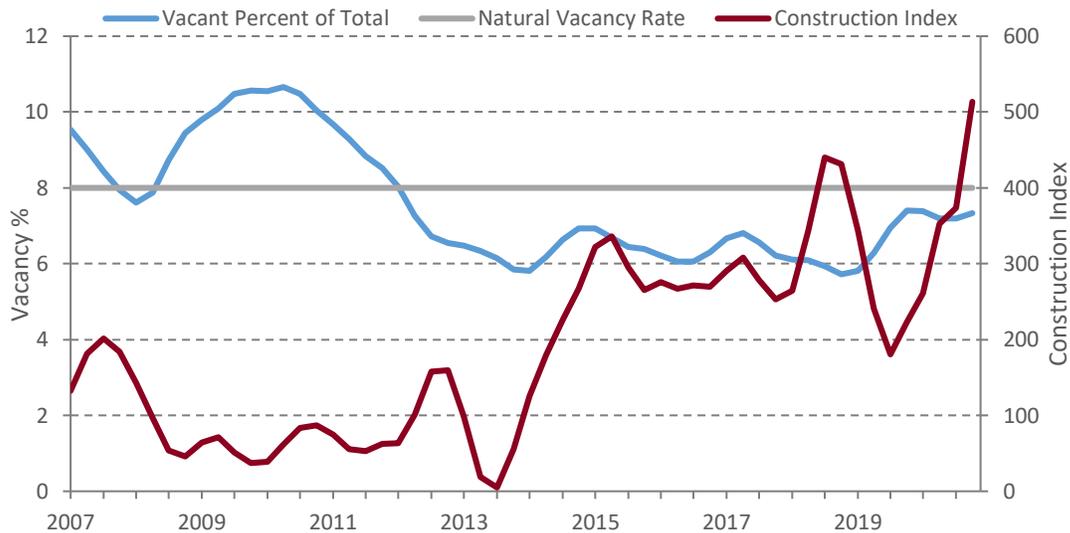
Sources: CoStar and Texas Real Estate Research Center at Texas A&M University

**Figure 91. San Antonio Warehouse Vacancy and Deliveries (SA and TC)\***



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

**Figure 92. San Antonio Warehouse Vacancy and Construction Index (SA and TC)\*  
(Index 2005 Q3 = 100)**



\*Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Texas Real Estate Research Center at Texas A&M University



# Definitions

**Asking rents.** The dollar amount per square foot the landlord requests from a tenant, excluding tenant improvements and concessions. Leases typically dictate this amount paid annually.

**Capitalization rate/cap rate.** The cap rate is computed by dividing expected net operating income (NOI) generated from the property by the current property value (V) and expressing it as a percentage. NOI is rent minus the owners share of expenses, such as taxes, insurance, maintenance, and management costs. Mortgage costs and any other costs of financing are not included in expenses.

In general, the higher the cap rate, the higher the risk. Investors compare cap rates for potential projects with their cost of funds when selecting investment projects, considering only those investments where the cap rates exceed the cost of funds.

Risk can be estimated by computing the “spread,” the difference between the cap rate and some risk-free rate. Because commercial real estate investments are expected to generate streams of income over a long period, investors commonly use the U.S. ten-year Treasury rate as a risk-free rate.

**Construction Starts Index.** Reflects the dollar value of construction starts in relation to a specified base year 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.

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

**FIRE & PBS.** A sector of the economy composed of finance, insurance, and real estate. PBS employment represents 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. Net absorption includes direct and sublease space.

**Nominal.** Value or rate reflecting current prices or rates without adjusting for inflation.

**Real.** Value or rate reflecting current prices or rates adjusted for inflation.

**Seasonal adjustment.** A statistical method for removing the seasonal patterns in time series data.

**SF.** Square feet.

**Under construction.** The square footage being built 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 projected vacancy rates and rents for each commercial use in the four major metro areas are made relative to each area's natural vacancy rate for each property type.

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

The actual vacancy rate is seasonally adjusted and trend-cycled to smooth fluctuations in the data and provide a clearer, less volatile view of upward and downward movements.

Natural vacancies used to estimate 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 could 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.

When actual vacancy in a local market falls below (rises above) natural vacancy, building managers may consider increasing (decreasing) rents. A comparison of natural vacancy and actual vacancy along with historical vacancy trends allows researchers to anticipate the future direction of CRE rental rates in real terms. However, changes in asking rents in this report reflect nominal changes since real estate professionals typically think in nominal terms.

Aggregate natural vacancy in an overall market may not reflect the 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 within the broader market.



TEXAS A&M UNIVERSITY

## Texas Real Estate Research Center

MAYS BUSINESS SCHOOL

Texas A&M University  
2115 TAMU  
College Station, TX 77843-2115

<http://recenter.tamu.edu>  
979-845-2031

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