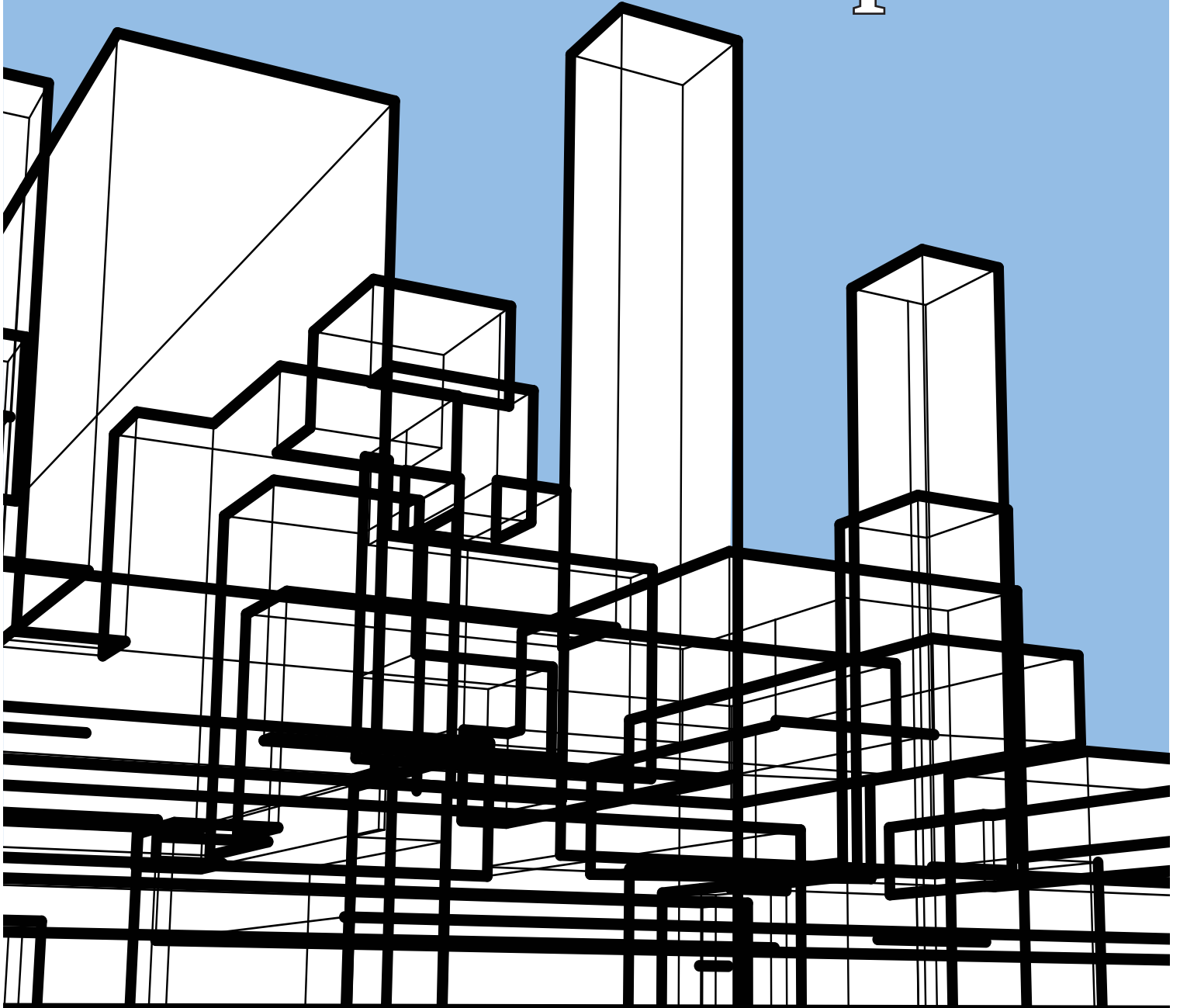




TEXAS A&M UNIVERSITY  
Real Estate Center

# Texas Quarterly Commercial Report



**Dr. James P. Gaines**  
Chief Economist

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

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

**Kristina Richter**  
Research Intern

**Garret Newman**  
Research Intern

**Caleb Smoot**  
Research Intern

Technical Report  
**2211**  
THIRD QUARTER 2020

# Texas Quarterly Commercial Report: 3<sup>rd</sup> Quarter 2020

## DALLAS FORT WORTH

	OCCUPANCY RATES	ASKING RENTS
OFFICE	80.4% ▼	2.2% ▼
OFFICE CLASS A	77.3% ▼	1.0% ▼
RETAIL	93.1% ▼	-1.6% ▬
WAREHOUSE	91.8% ▬	13.4% ▲

## AUSTIN

	OCCUPANCY RATES	ASKING RENTS
OFFICE	87.1% ▼	1.8% ▼
OFFICE CLASS A	84.5% ▼	-0.1% ▼
RETAIL	95.1% ▼	-1.4% ▼
WAREHOUSE	92.3% ▲	2.7% ▼

## SAN ANTONIO

	OCCUPANCY RATES	ASKING RENTS
OFFICE	87.5% ▼	5.6% ▲
OFFICE CLASS A	84.7% ▼	7.1% ▼
RETAIL	94.0% ▼	1.7% ▼
WAREHOUSE	93.0% ▬	8.8% ▲

## HOUSTON

	OCCUPANCY RATES	ASKING RENTS
OFFICE	78.4% ▼	-0.02% ▲
OFFICE CLASS A	76.0% ▼	-1.2% ▲
RETAIL	92.9% ▼	4.9% ▲
WAREHOUSE	87.8% ▼	4.2% ▲



TEXAS A&M UNIVERSITY

Real Estate Center

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



# Table of Contents

<b>About this Report</b> .....	3
<b>Overview of the Texas Economy</b> .....	4
<b>Austin</b> .....	14
Overall Office	
Class A Office	
Retail	
Warehouse	
<b>Dallas-Fort Worth</b> .....	17
Overall Office	
Class A Office	
Retail	
Warehouse	
<b>Houston</b> .....	20
Overall Office	
Class A Office	
Retail	
Warehouse	
<b>San Antonio</b> .....	23
Overall Office	
Class A Office	
Retail	
Warehouse	
<b>Figures</b> .....	25
<b>Definitions</b> .....	71



# About this Report

Real Estate 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 (MSA)—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.

CoStar and Dodge Analytics data are used for this report. 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. James Gaines, Dr. Luis Torres, Dr. Harold Hunt, Kristina Richter, Garret Newman, and Caleb Smoot



# Overview of the Texas Economy

Economic activity rebounded during third quarter 2020 after contracting sharply during the previous quarter due to COVID-19 shelter-in-place restrictions. Putting the health crisis in a historical context, neither the Great Depression nor the Great Recession nor any other recession over the past two centuries caused such a steep economic decline, especially in such a short period. However, the recovery's strength and pace slowed by the end of the third quarter due to the incomplete reopening of the economy, fiscal stimulus dissipating, and future uncertainty regarding the pandemic.

The Texas Nonresidential Construction Cycle (Coincident) Index, which measures current construction levels, ticked up due to the improvements in industry wages and employment. The statewide Nonresidential Construction Leading Index declined during 3Q2020 after rebounding the previous quarter amid decreasing construction value starts, indicating lower future construction. However, the major metros registered growth in their leading indexes as construction value starts and employment numbers rebounded from the 2Q2020 shutdown. In contrast, Houston's leading index for warehouse construction indicates slowing activity in the coming months due to a decrease in construction value starts. See Figures 1-5 for the Nonresidential Coincident Index and Leading Indicator for Texas and the four major metros.

The Texas economy lost 1.4 million jobs between March and April but recovered 661,000 of those jobs from May through September. Texas nonfarm employment gained 40,700 jobs during September, although hiring was slower than previous months. Jobs remained 5.1 percent below 2019 year-end levels. Employment by sector in the major metros recovered in September at varying paces, but the leisure/hospitality sector made up the lion's share of gains.

Although Austin gained only 1,300 jobs in September, the metro registered the smallest decline of 3.6 percent below year-end 2019 employment. The leisure/hospitality sector accounted for the majority of year-to-date (YTD) losses in Austin and Dallas, where monthly hiring added 10,100 workers, pulling YTD contraction down to 3.9 percent. Employment was 5.8 and 5.6 percent below year-end 2019 levels in Houston and Fort Worth, respectively, amid widespread losses across both goods-producing and service-providing industries. This is despite the monthly addition of 20,300 positions in the former and 2,600 in the latter. Decreases in San Antonio's government sector offset hiring in leisure/hospitality, resulting in 1,600 jobs shed overall in September and a 5.1 percent YTD decline.

Upsurges in COVID-19 cases may hinder Texas' economic recovery going forward. Further waves of infections could reverse increased mobility and spending, affecting future recovery. The good news for the coming year is the announcement of two COVID-19 vaccines reporting between 90 percent and 95 percent effectiveness. While the initial news of a successful vaccine helps reduce some uncertainty surrounding the pandemic, there are still headwinds facing the economy. These include monumental job loss, stagnate private investment, and a decline in business activity. Additionally, it will take many months before a vaccine can be administered to enough people to allow the economy to operate at pre-pandemic levels. For additional commentary and statistics, see the Real Estate Center's *Outlook for the Texas Economy*.

Texas' goods-producing payrolls expanded by 7,700 workers in September. However, the industry still reduced employment by 7.0 percent YTD. Energy-related employment contracted YOY for the seventh straight quarter, although 1,300 monthly jobs were added in September. The manufacturing sector also posted gains for the month, adding 1,100 and 1,600 employees in durable-goods and non-durable goods, respectively. The latter recorded positive quarterly growth but remained below year-end levels. In addition, the construction industry eked out positive quarterly growth as payrolls gained 3,700 jobs in September.

The service-providing industries added 33,000 positions monthly, bringing the three-month recovery to 179,900 total employees. Still, jobs were down 5 percent YTD with leisure/hospitality losses numbering 239,100. Federal government, however, increased 14.8 percent YTD amid mid-year Census-related recruitment, while professional/scientific/technical services and finance/insurance were up modestly above year-end levels. Texas' retailers decreased slightly in September, falling 3.4 percent below year-end employment. Although general merchandisers decreased by 8,900 workers on the month, the subsector registered only a 1.2 percent YTD decrease. Electronic/appliance stores and miscellaneous store retailers posted the steepest YTD declines, dropping 21.6 and 11.5 percent, respectively. In contrast, building material/garden equipment/supplies dealers increased 7.9 percent compared with December 2019 levels.

The state's overall unemployment rate reversed a four-month decline, jumping one-and-a-half percentage points to 8.3 percent due to an increase in the labor force, whereas the national metric continued to decrease to 7.9 percent. Joblessness rose across Texas' major metros, especially in Houston, where the rate climbed to 9.7 percent. The metric in San Antonio increased to 7.8 percent, while posting 7.7 and 7.5 percent in Fort Worth and Dallas, respectively. Austin maintained the lowest unemployment rate at 6.4 percent. The increase in unemployment 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 3Q2020 pushed up vacancy rates in the major metros (Figures 6-9).

Continued uncertainty stemming from the ongoing spread of the coronavirus kept interest rates at historically low levels as expectations for future inflation and growth are currently dim. The spread between commercial capitalization rates and the ten-year Treasury yield began increasing by the end of 2019 and has continued through 3Q2020. This increased spread indicates increased risk and profitability in commercial real estate and is projected to continue through the remainder of 2020.

Office cap rates (Figure 10) increased in 3Q2020 in Texas' major MSAs. San Antonio and Houston remained the highest, with both cap rates increasing during the first nine months of 2020. Austin and DFW cap rates have also increased through 3Q2020. Even with the increase in cap rates, the spread with the ten-year Treasury actually declined due to an increase in Treasury yield during 3Q2020. During the first half of 2020, Austin was the least risky market for office real estate based on the spread with the ten-year Treasury bill.

Retail cap rates (Figure 11) began to decrease in 2019 in the major MSAs, except for Houston. Austin and DFW decreased the most during the first nine months of 2020, followed by San Antonio. Houston's 3Q2020 cap rate decreased from the previous quarter. The spread between the ten-year Treasury bill increased during the first six months of 2020 and then decreased during 3Q2020, due to an increase in the ten-year Treasury bill. 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 first nine months of 2020. All major MSAs registered an increase in 3Q2020, with the exception of Austin. Similar to the other two commercial markets, the spread between the ten-year Treasury decreased in all four markets. 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.
  - Not everyone can work from home.
  - The amenities that some offices provide cannot be duplicated at home.
  - Relationship-building and networking difficult from home.
  - Accelerated the process of performing some high-tech jobs from home and of doing business online.
  - More satellite offices in the suburbs or in other cities with less density to put fewer employees in central downtowns or in high-density areas.
  - Possibility that employees relocating to home to work, or maybe even to lower-cost cities, may face cost-of-living pay cuts from employer. This eliminates 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.
  - More warehouse space closer to the consumer.
  - Companies will want to spread their risk geographically and minimize the impact of a local problem such as another pandemic outbreak.
  - 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:
  - Vaccine is widely distributed among the general population.
  - Second round of federal government stimulus is enacted.
- Based on this scenario:
  - 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 work environment that are not fully evident.
  - Retail will probably continue to consolidate/contract in 2021.
    - New retail that is more convenient, attractive, pleasing, engaging, or even entertaining will possibly flourish.
  - Industrial will continue to benefit from e-commerce growth during 2021.

## Office Class A Tenants by Industry

To better understand how economic expansions and recessions will affect demand for commercial space in a particular location, it is important to know who the tenants are and what industry they belong to. This allows one to estimate the industry mix and the market's diversity from a downturn in a particular industry.

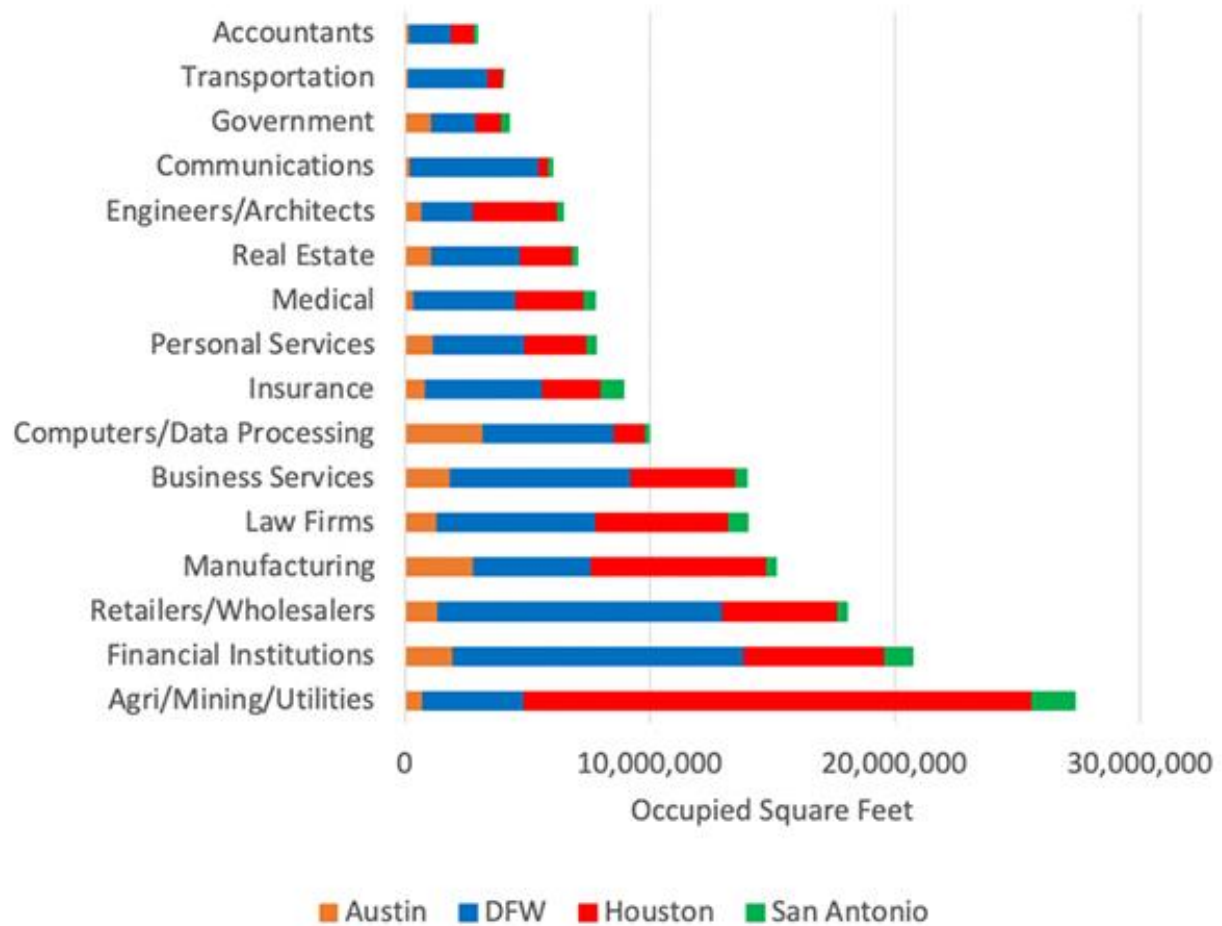
Houston's concentration of tenants in the oil industry stands out. Around one-third of the occupied space is from tenants in this industry (Graphs 1 and 4). The oil industry has been especially hit during the pandemic as world demand has fallen off, making the future prospects for Class A office in Houston dreary. To a lesser degree, San Antonio's tenant concentration in the oil industry is also worrisome, as one-fifth of the occupied space is for tenants in the oil sector.

Dallas-Fort Worth (DFW) is the most diversified market, followed by Austin (Graphs 2 and 3). Financial industry tenants play an important demand role in all markets. This industry has been able to socially distance and has done a good job of managing the transition of working from home. This has implications for future office space demand.

A significant share of the tenants in DFW belong to the retail and wholesale sector (Graph 3). The brick-and-mortar retail sector has been one of the hardest hit by the pandemic while e-commerce retail has done particularly well. Demand for office space will increase as the retail sector adapts and e-commerce becomes more prevalent.

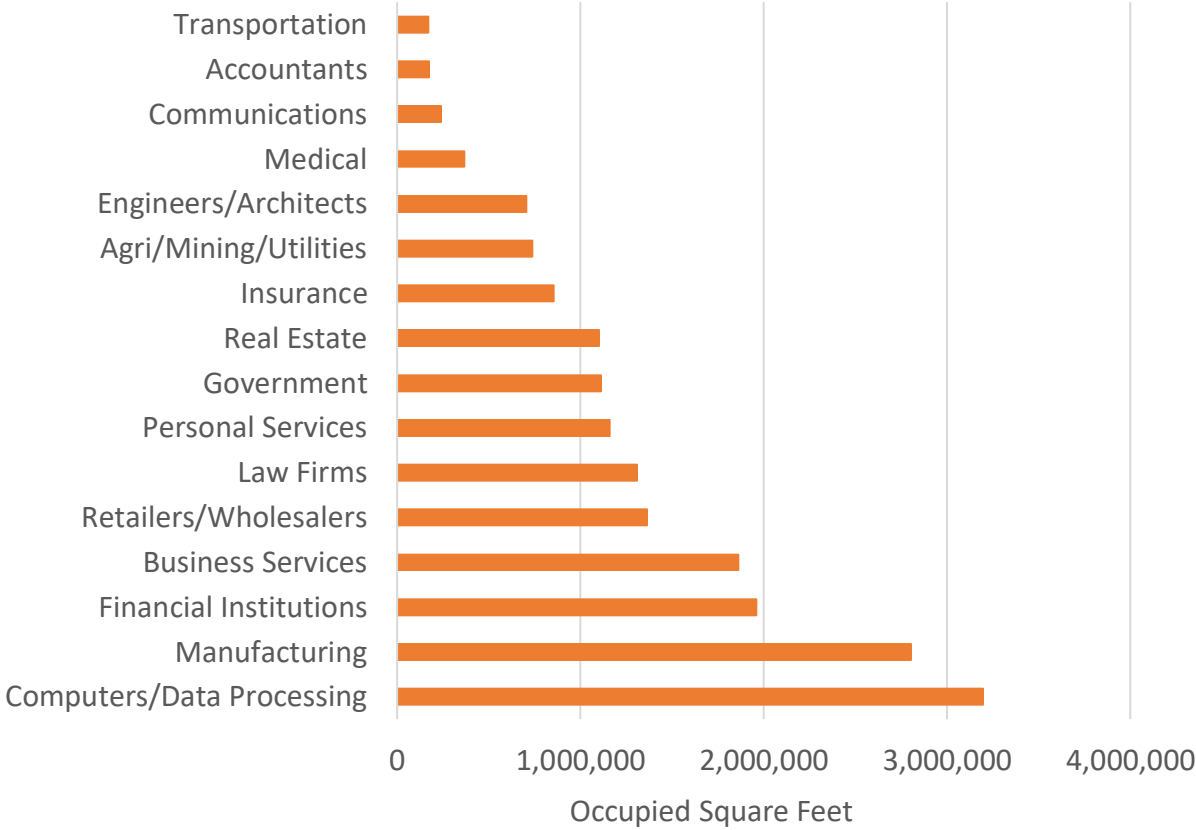
The importance of the technological industry in Austin is observed in the high percentage of tenants that belong to the computer and processing sector (Graph 2). This industry has performed relatively well during the pandemic. Working from home will have consequences on future office space demand. (Look at the outlook box for further comments on the outlook for the office market).

**Graph 1. Class A Office Tenant Industries**



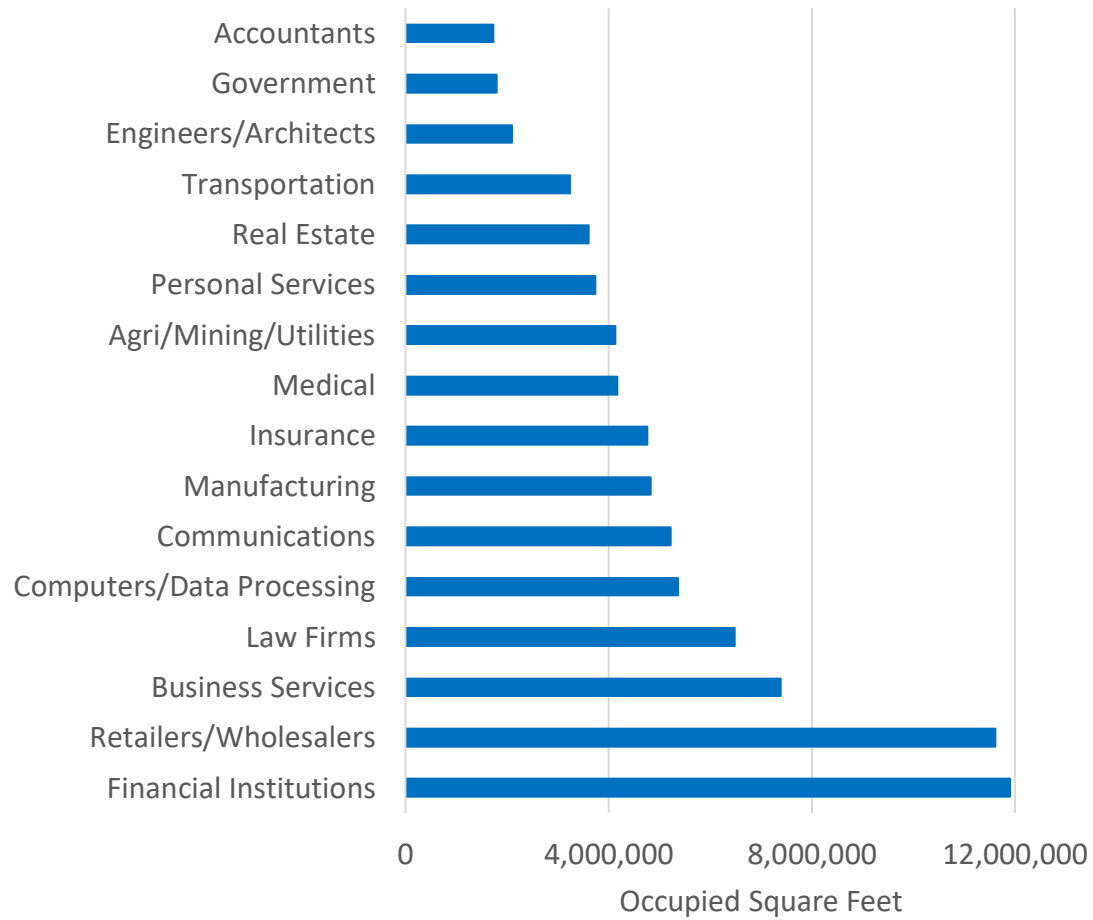
Sources: CoStar and Real Estate Center calculations

Graph 2. Austin



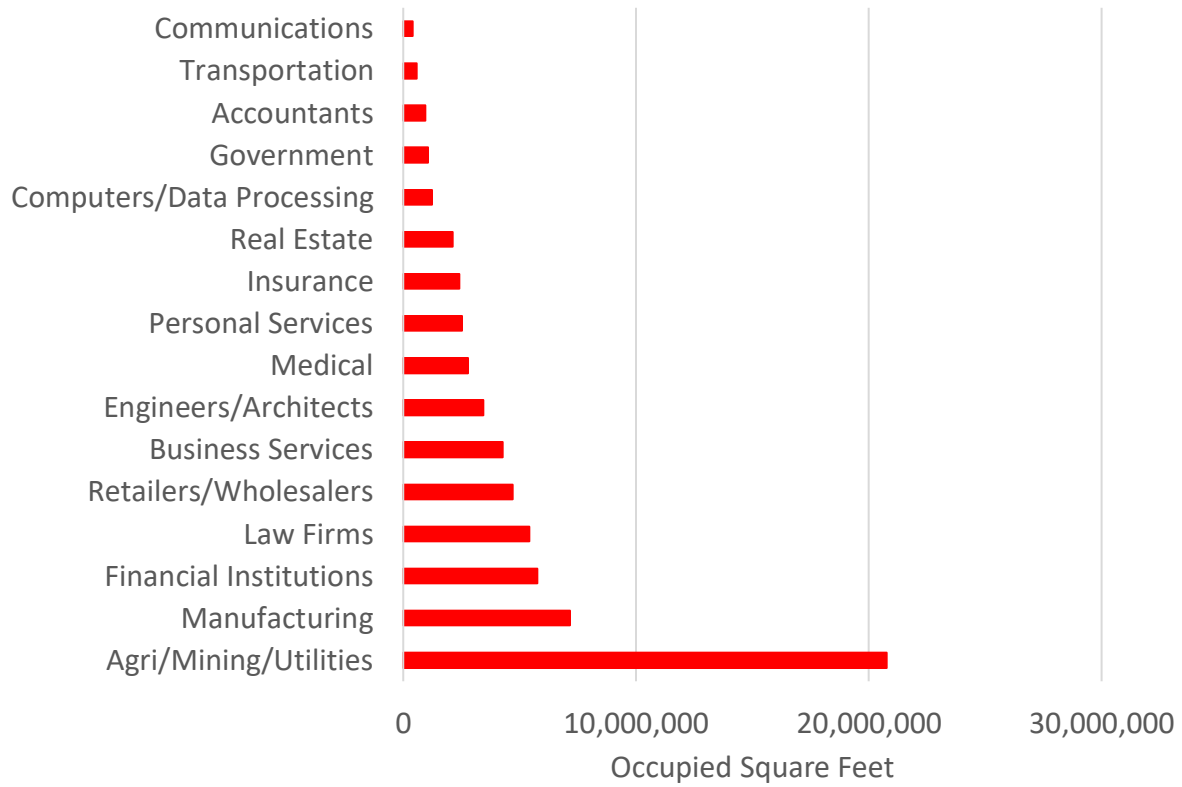
Sources: CoStar and Real Estate Center calculations

**Graph 3. DFW**



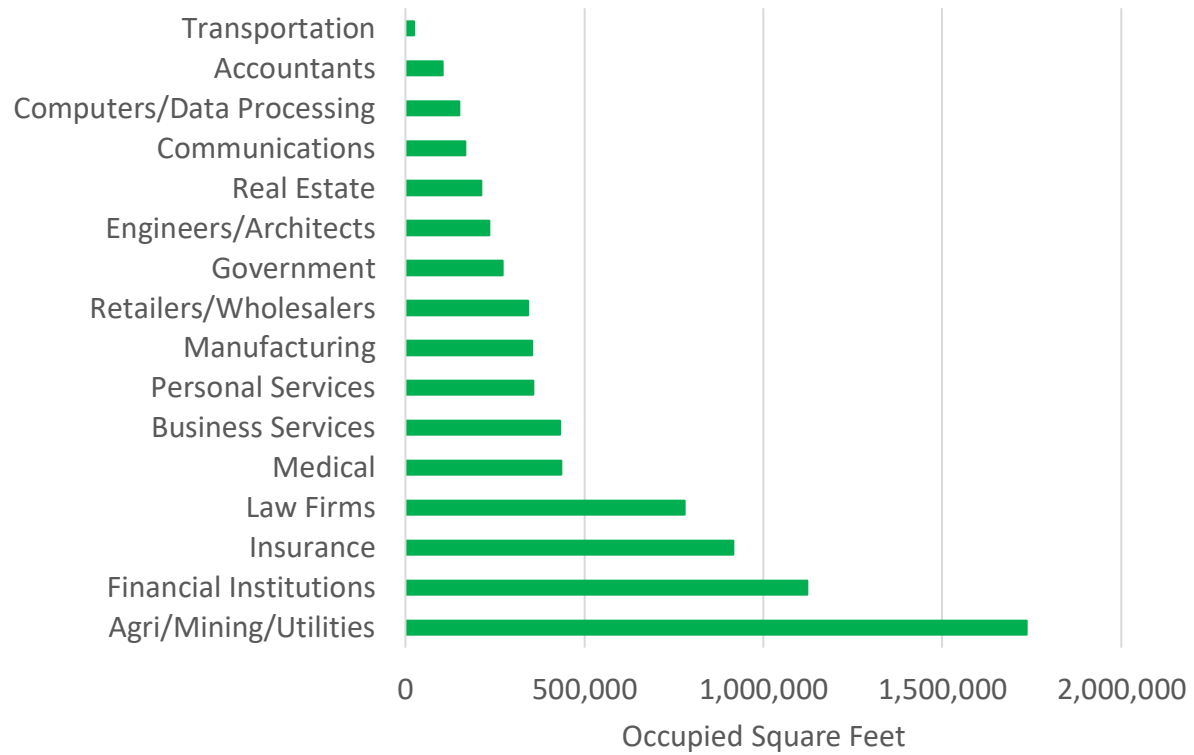
Sources: CoStar and Real Estate Center calculations

**Graph 4. Houston**

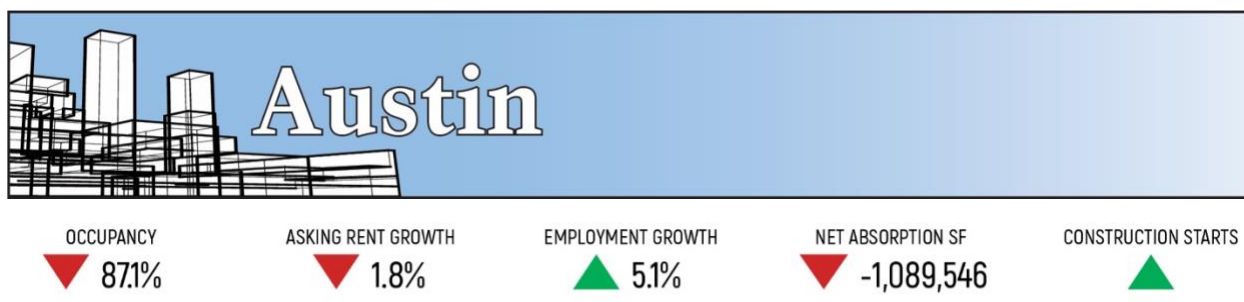


Sources: CoStar and Real Estate Center calculations

**Graph 5. San Antonio**



Sources: CoStar and Real Estate Center calculations



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### Overall Office (Figures 13 - 17)

Since hitting a record low in 2018, vacancy rates have gradually increased, nearing the natural vacancy rate of 13.0 percent for the first time since 2012. Asking rent growth fell modestly in the third quarter but remained positive. Changes in vacancy rates and rent growth indicate that demand may be slipping, and the Austin market is starting to feel the effects of COVID-19. Net absorption was slightly negative before the pandemic, but has fallen further in the past two quarters. FIRE & PBS employment growth continued to hover just above 5.1 percent.

Deliveries fell rapidly through the end of 2019 and into 1Q2020, having stayed below 200,000 each quarter this year. Additionally, the value of construction starts increased and square feet under construction declined. The COVID-19 crisis apparently has not caused apprehension regarding new Austin office construction; this could increase vacancy rates during the crisis.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### Class A Office (Figures 18 - 22)

Actual vacancy climbed to 15.5 percent, stretching the trend out into its fifth quarter. This is the first quarter in which 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 3Q2020, with asking rent growth falling slightly below zero and net absorption falling further negative. These changes signal Class A demand is weakening.

Deliveries increased as projects started before the pandemic are completed. Square feet under construction also declined as the pipeline clears up, indicating reduced construction activity that could be attributed to the negative impact the COVID-19 crisis is having on vacancy rates.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

## 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, 3Q2020 followed suit, with only a slight increase in actual vacancy to 4.9 percent, still below the natural vacancy rate of 6.0 percent. Asking rents have contracted over the past three quarters, finally reaching negative growth in 2Q2020 and falling further in this quarter. Surprisingly, employment growth in the retail sector rebounded from the negative growth the previous quarter to 0.6 percent. Austin had not experienced negative retail employment growth since the Great Recession. This, coupled with another decline in net absorption, indicates a possible reduction in demand in the near future. The expected pandemic fallout on retail space occupancy and rents has yet to fully emerge but appears to be in an early stage of becoming a reality.

The value of construction starts deviated from the negative trend started in 1Q2019. Deliveries and square feet under construction increased as well. 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.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

## Warehouse (Figures 28 - 32)

Actual vacancy decreased from last quarter, finishing at 7.7 percent, though remaining well below the natural vacancy rate of 11 percent. The asking rent growth rate decreased to 2.7 percent. Demand appears to be strong in the Austin market, with net absorption increasing over last quarter to a recent high. Similar to other Texas MSAs, Austin's warehouse employment growth rate decreased. While this quarter's rate of 2.1 percent is higher than other sectors in Austin, it is the lowest rate in the Austin warehouse market since 3Q2018.

The value of construction starts decreased this quarter. In the first quarter, Amazon announced plans to build a 3.8 million-square-foot fulfillment center in Pflugerville, just outside of Austin. This center and third-party services related to Amazon may be a contributor to the spike in construction values. Additionally, with the pandemic showing the importance of e-commerce, it is not surprising that values of construction starts are rising. Square footage under construction

increased slightly, while deliveries grew minimally, staying within the expected range of the past two years.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### Overall Office (Figures 33 - 37)

Historically, vacancy rates have stayed relatively level, hovering around the natural vacancy rate of 18.0 percent. Third quarter 2020 shows a possible deviation from this trend, with the vacancy rate climbing for the third consecutive quarter to 19.6 percent. Asking rent growth slowed slightly, lingering around 2.2 percent. FIRE & PBS employment growth registered slight positive growth of 0.3 percent after posting a negative value for the first time since the Great Recession last quarter. Net absorption fell further from an already negative value in the second quarter.

Square feet under construction and deliveries have generally declined for the past two years, with some variance in deliveries. The values of construction starts receded over the past year, practically eliminating any gains from the previous year. Developers and investors are apprehensive pursuing speculative properties, focusing on both build-to-suit space and industrial developments. COVID-19's impact on the Dallas-Fort Worth office market is still unclear. It is likely that, no matter the short-term demand, buyers will be shopping 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 that some current office space will require remodeling to remain competitive as office space usage changes.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### 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 22.7 in

3Q2020. Since 2017, asking rent growth has remained between 2.0 percent and 4.0 percent, dropping to 1.0 percent this quarter, the third consecutive quarter of decline. Net absorption also fell this quarter, staying negative for the third quarter in a row.

Deliveries and square feet under construction have fluctuated greatly over the past few years. Deliveries increased in 3Q2020, the second consecutive quarter of growth. With the contraction in FIRE & PBS employment growth and the pandemic, DFW's Class A office market will likely struggle in the coming months. Hopefully, changes in taste will provide new opportunities for yield as properties are forced to revamp space to stay competitive.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### Retail (Figures 43 - 47)

Actual vacancy continued a gradual climb that began in 4Q2018, reaching 6.9 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 falling since 2018, remaining negative since 3Q2019. Such a distressing level of net absorption was not approached even during the Great Recession, highlighting how unexpected the disruption was to an already overbuilt market. Employment growth provides a slightly less dire narrative, with growth rising near 2.2 percent after hovering around zero for the previous three quarters. The future of in-store retail demand is unclear, hinging largely on public perception of personal safety in the aftermath of COVID-19.

Both deliveries and square footage under construction reached all-time lows this quarter. The value of construction starts, though not extraordinarily low, declined sharply as well. 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 the Real Estate Center at Texas A&M University

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### 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 8.2 percent, far below the natural vacancy rate of 11.0 percent. Additionally, asking rent growth

climbed to a historic high of 13.4 percent. Net absorption declined from a 1Q2020 peak, but remains in line with values from 2019. The warehouse employment growth rate fell this quarter, contracting for only the second quarter since the Great Recession. However, this decline may only be temporary as COVID-19 continues to stifle the economy in the short-term.

Though the warehouse market performed relatively well in 3Q2020, the supply side metrics signal caution. The value of construction starts in DFW increased this quarter and still remain high. At the same time, deliveries also fell slightly while square footage under construction dropped significantly, a year-long trend.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### Overall Office (Figures 53 - 57)

In 3Q2020, actual vacancy continued a climb that began in 2015, reaching a historic high of 21.6 percent. This is significantly higher than its natural vacancy rate of 14 percent. Meanwhile, asking rent growth increased slightly to just below 0 percent, breaking the trend of contraction in the overall office market. Additionally, FIRE & PBS employment growth increased minimally but remained negative, after turning negative for the first time since the Great Recession in the previous quarter. Net absorption also continued to fall further, aligning with increasing vacancy rates.

Since actual vacancy started its ascent in 2015, both square feet under construction and deliveries declined accordingly. However, vacancy leveled off in 2018, spurring increased construction activity. In the past quarter, square feet under construction grew modestly, while deliveries increased as well. Value of construction starts leveled off in 3Q2020, remaining low after several quarters of decline caused 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.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### Class A Office (Figures 58 - 62)

Since reaching a historic high of 23.1 percent at the beginning of 2018, actual vacancy has remained significantly higher than the natural vacancy rate of 16.0 percent. This quarter, Class A office actual vacancy rose again to 24.0 percent. Additionally, this quarter marked the fifth consecutive quarter of contracting asking rents, due in part to the large amount of vacant space. 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 picked up significantly in the face of a contracting market. However, the number of square feet under construction decreased in comparison to the second 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. This could explain why there is still a considerable amount of new construction in the face of what appears to be a souring market.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

## Retail (Figures 63 - 67)

Actual vacancy climbed minimally in 3Q2020 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. Despite social distancing mandates and reduced in-store foot traffic, asking rent growth climbed to 4.9 percent, the highest since 2014. Alternatively, both net absorption and employment remained negative, with net absorption increasing from last quarter and employment growth continuing a long running streak of contraction. These factors signal that demand for Houston retail space has been decreasing and will likely continue to decrease in the face of the ongoing pandemic.

Value of construction starts, square feet under construction, and 3Q2020 deliveries indicate that developers recognize waning demand in the market. As the ramifications of the pandemic continue to be felt, including tenants' ability to remain solvent, how severely retail will be affected is unknown. 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.

OCCUPANCY ▼ 87.8%	ASKING RENT GROWTH ▲ 4.2%	EMPLOYMENT GROWTH ▼ 0.5%	NET ABSORPTION SF ▼ -471,460	CONSTRUCTION STARTS ▼
----------------------	------------------------------	-----------------------------	---------------------------------	--------------------------

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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

## Warehouse (Figures 68 - 72)

Actual vacancy (12.2 percent) continued to rise this quarter to a recent high, marking a two-year trend. Unlike in other Texas MSAs, warehouse vacancy in Houston has been well above its natural vacancy rate of 8.0 percent for the past five quarters, likely due to the high number of deliveries during that time. Despite increasing vacancy, asking rent growth rebounded this quarter to 4.2 percent. Net absorption fell below zero this quarter for the first time since 2019 as the market became increasingly saturated from several quarters of relatively high deliveries. Employment growth stagnated, finishing at just above zero for the quarter.

The year began with a record amount of space delivered in the first quarter. The two following quarters also registered high deliveries relative to previous years. Square feet under construction increased from the previous quarter but 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 going forward will likely begin leveling out as long as demand remains strong.



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

Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### Overall Office (Figures 73 - 77)

Overall office vacancies in San Antonio grew minimally in 3Q2020, topping the natural vacancy rate of 12.0 percent. Asking rent growth increased to 5.6 percent, the highest of all major Texas MSAs. However, San Antonio's FIRE & PBS employment growth dropped in comparison with the other major Texas MSAs other than Austin. The 4.5 percent decline indicates a significant contraction similar to that of the Great Recession. In addition, net absorption reached a historic negative low.

Square feet under construction has remained relatively constant over the past ten years, with 3Q2020 following suit, increasing only slightly. Deliveries dipped but remained well within the normal range of the past ten years. Unlike the other three major Texas MSAs, San Antonio saw a slight uptick in value of construction starts in 3Q. While FIRE & PBS employment contraction and negative net absorption are significant issues in San Antonio, the long-term effects of the pandemic remain unclear.



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

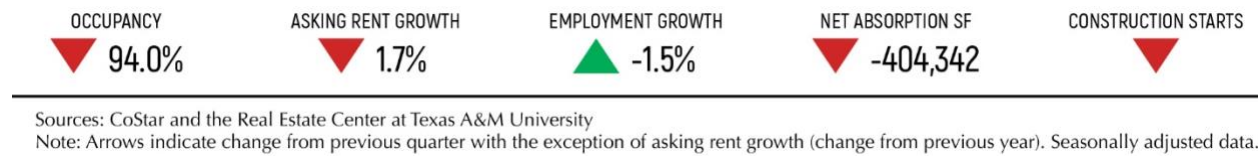
Note: Arrows indicate change from previous quarter with the exception of asking rent growth (change from previous year). Seasonally adjusted data.

### Class A Office (Figures 78 - 82)

Class A office actual vacancy increased this quarter to arrive at 15.3 percent in 3Q2020, higher than the natural vacancy rate of 14.5 percent. Asking rent growth jumped fairly significantly to 7.1 percent during the third quarter, showing a modest increase from the previous quarter. Net absorption was once again negative, while square feet under construction continued to increase for the third consecutive quarter. As more space becomes available, demand could begin to decline in the immediate future if FIRE & PBS employment continues to contract.

Deliveries reached a historic low this quarter, which could be good news for San Antonio's Class A office market. With considerable uncertainty surrounding the pandemic, the lack of new

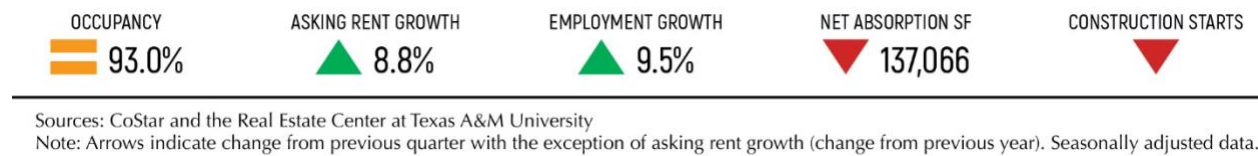
supply could help counteract the crisis' negative effects. However, the results of COVID-19 have yet to emerge.



### Retail (Figures 83 - 87)

Actual vacancy continued its almost three-year rise to 6.0 percent, although it remained below the natural vacancy of 7.0 percent. Asking rent growth decreased in the third quarter to 1.7 percent. Net absorption was negative this quarter, and retail employment growth improved but remained negative.

Deliveries and square footage under construction have gradually declined over the past five years, likely helping keep area vacancy increases at bay. However, there was an increase in deliveries this quarter. Value of construction starts stayed constant for the previous three quarters, possibly due to the steady level of demand. This was not the case this quarter, though, with construction starts decreasing. Both the employment data and the decline in demand (net absorption) suggest San Antonio's retail will suffer in the coming months.



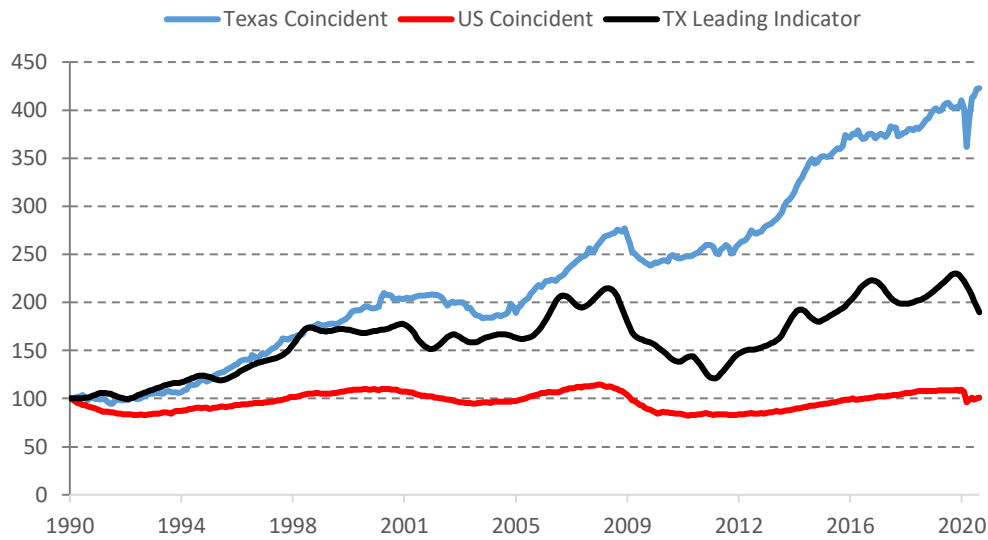
### Warehouse (Figures 88 - 92)

Actual vacancy remained steady for the third quarter at 7.0 percent. Actual vacancy has not surpassed the natural vacancy rate of 8.0 percent since the Great Recession. Asking rent growth increased from 6.5 to 8.8 percent this quarter, which, along with an increase in net absorption, indicates steady demand. Employment growth has been climbing since 4Q2018, despite the COVID-19 crisis.

Deliveries have been low in the past three quarters and decreased even more this quarter. This could be one reason vacancy has remained low. San Antonio's warehouse construction start values, net absorption and square feet under construction all decreased this quarter as well as during the past few years, which should help the market weather the pandemic.

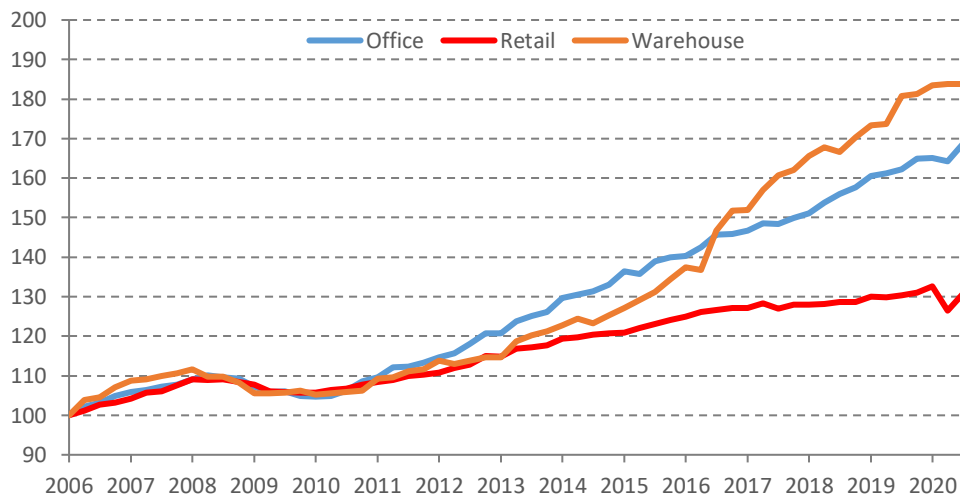


**Figure 1. Texas Nonresidential Construction Coincident and Leading Indicators**  
(Index Oct. 1990 = 100)



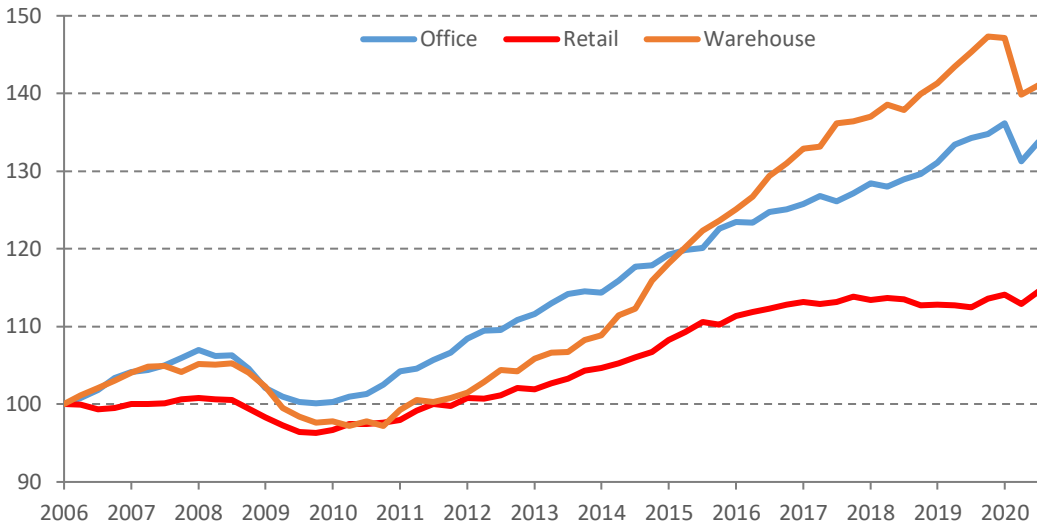
Source: Real Estate Center at Texas A&M University

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



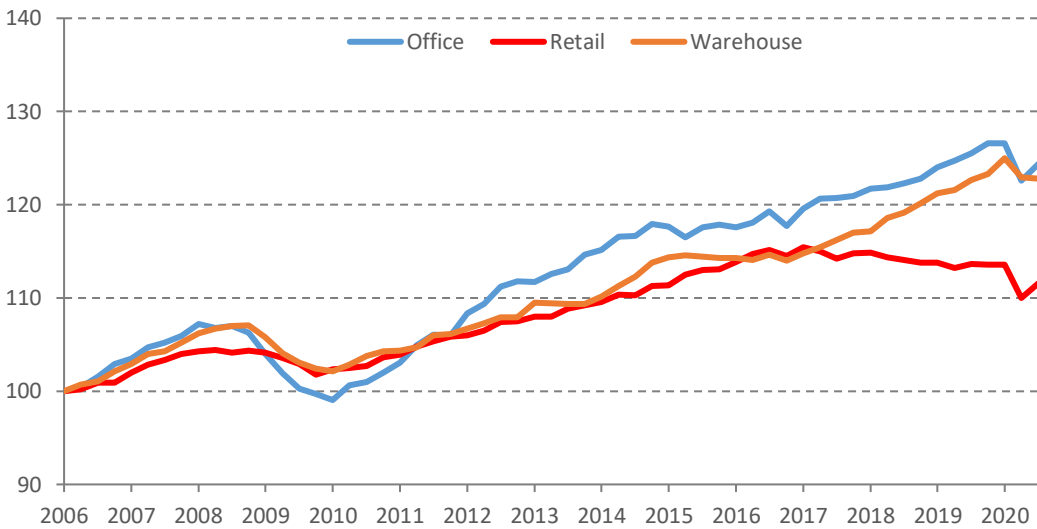
Source: Real Estate Center at Texas A&M University

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



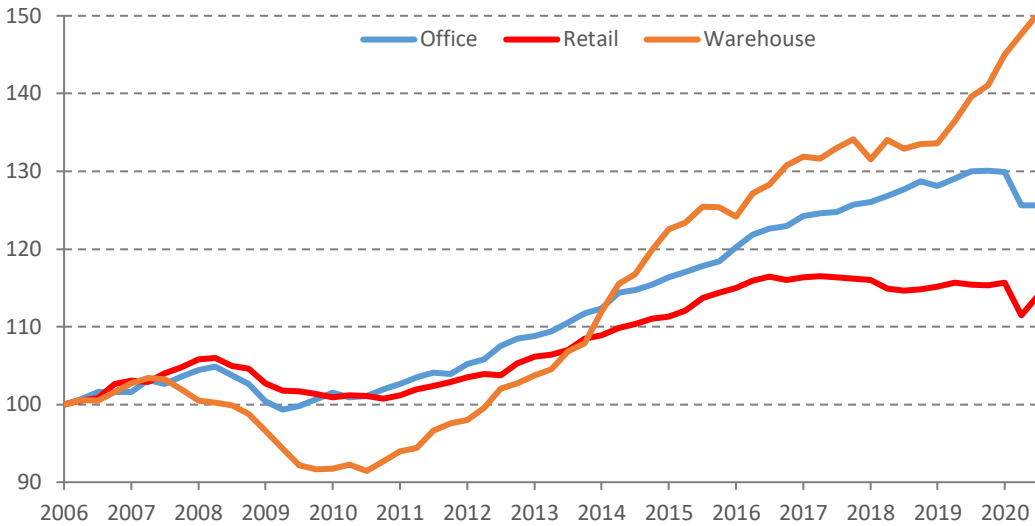
Source: Real Estate Center at Texas A&M University

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



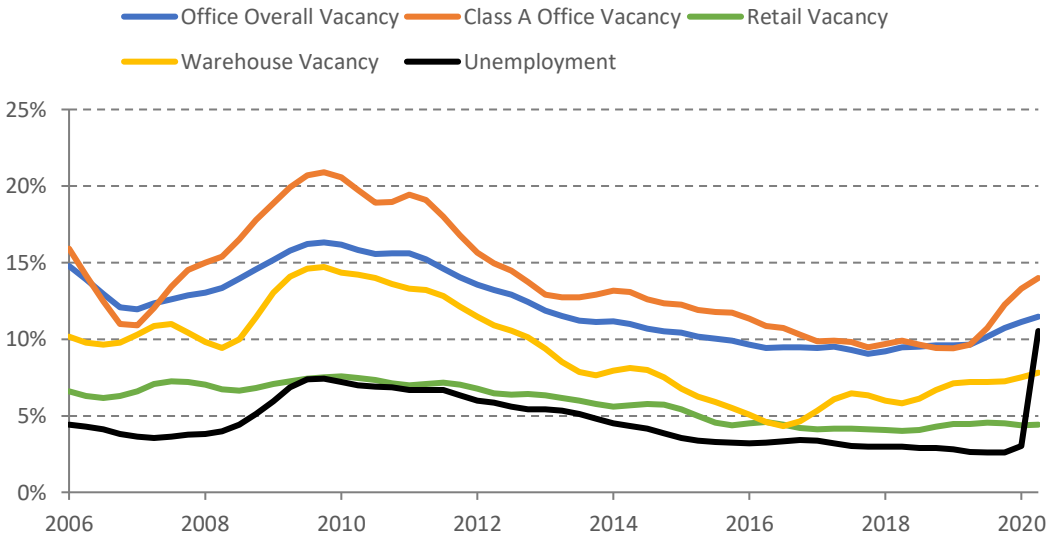
Source: Real Estate Center at Texas A&M University

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



Source: Real Estate Center at Texas A&M University

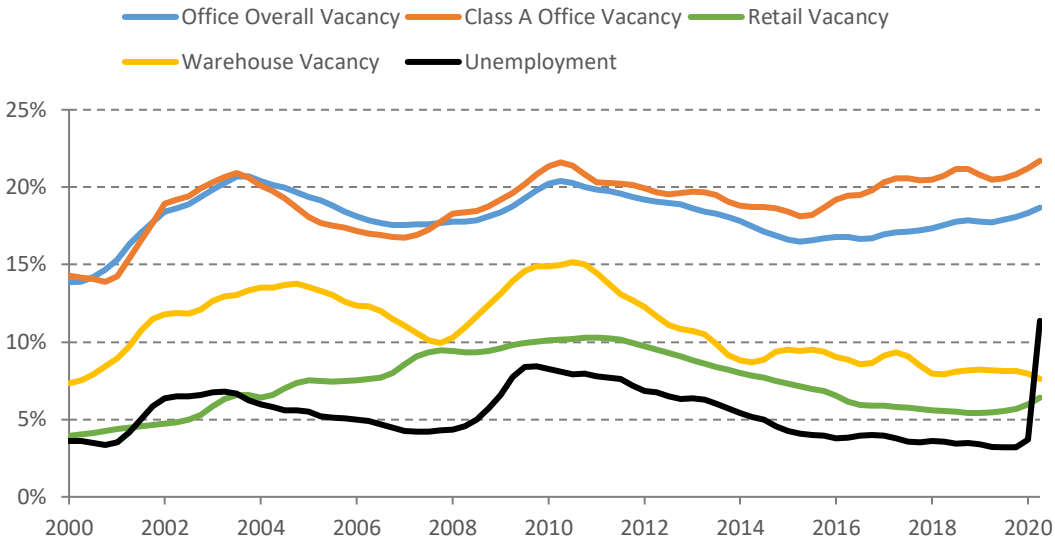
**Figure 6. Austin Commercial Vacancy Rates and Unemployment**



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

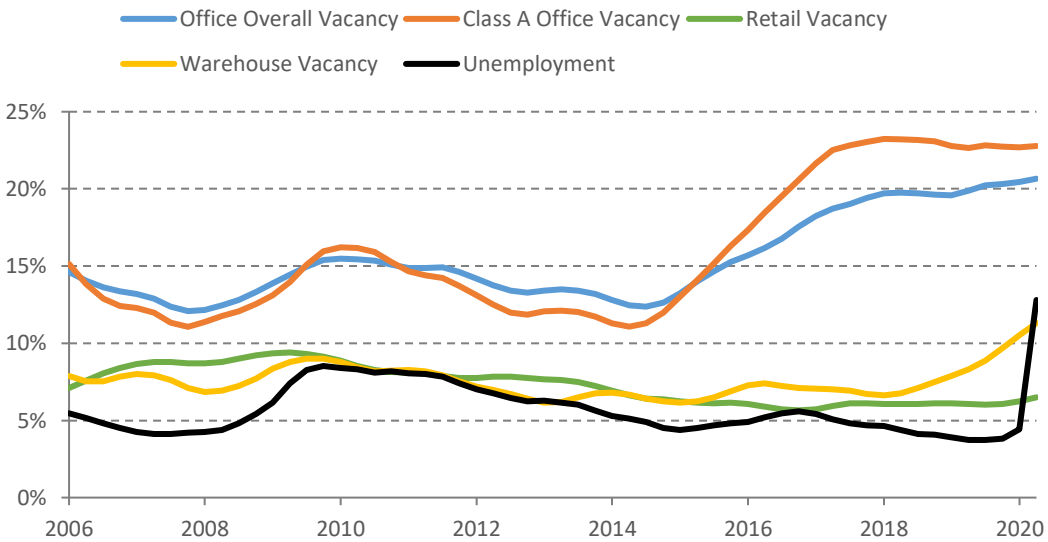
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 7. DFW Commercial Vacancy Rates and Unemployment**



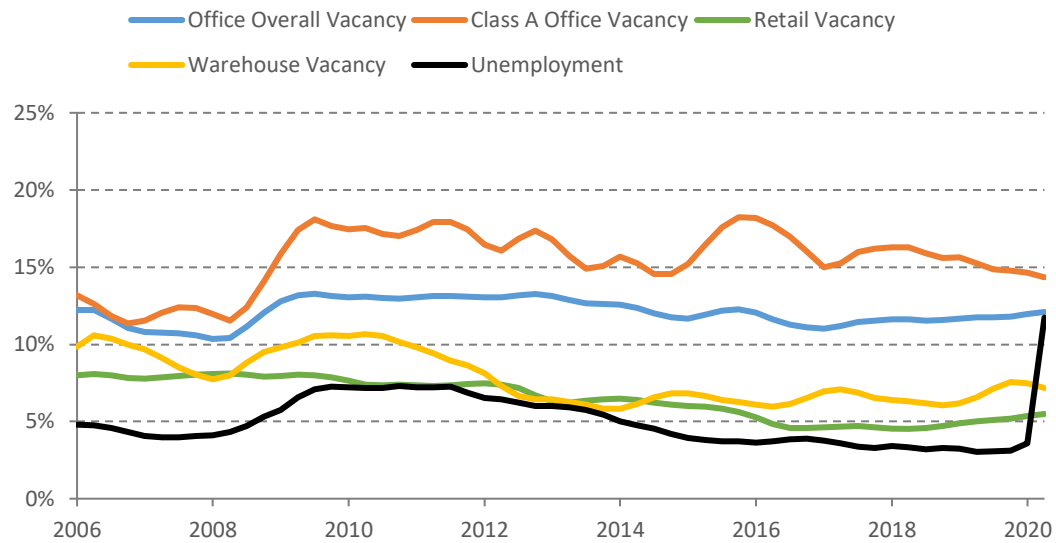
Note: Vacancy rates seasonally adjusted and trend-cycled, unemployment seasonally adjusted.  
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 8. Houston Commercial Vacancy Rates and Unemployment**



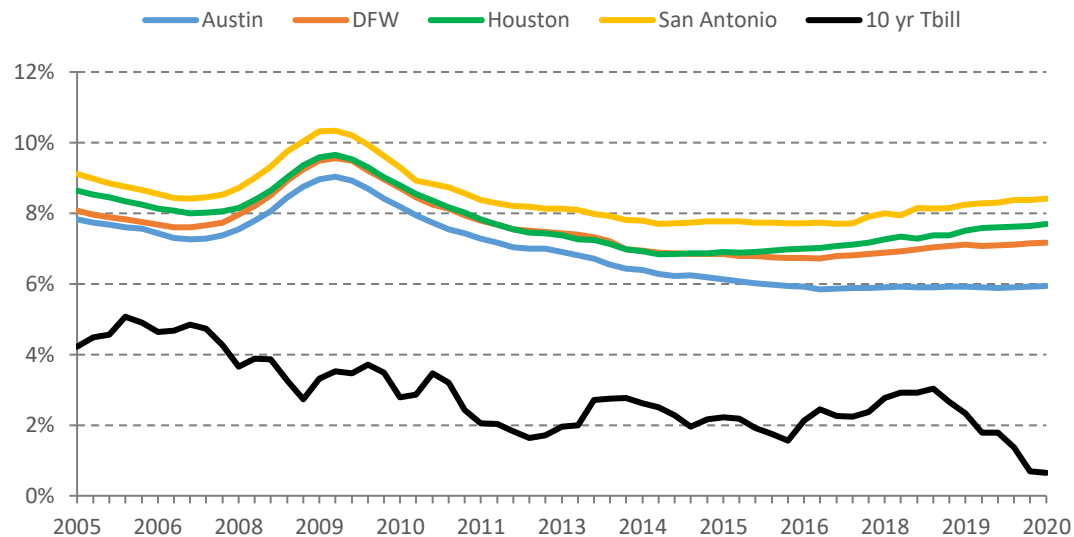
Note: Vacancy rates seasonally adjusted and trend-cycled, unemployment seasonally adjusted.  
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

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



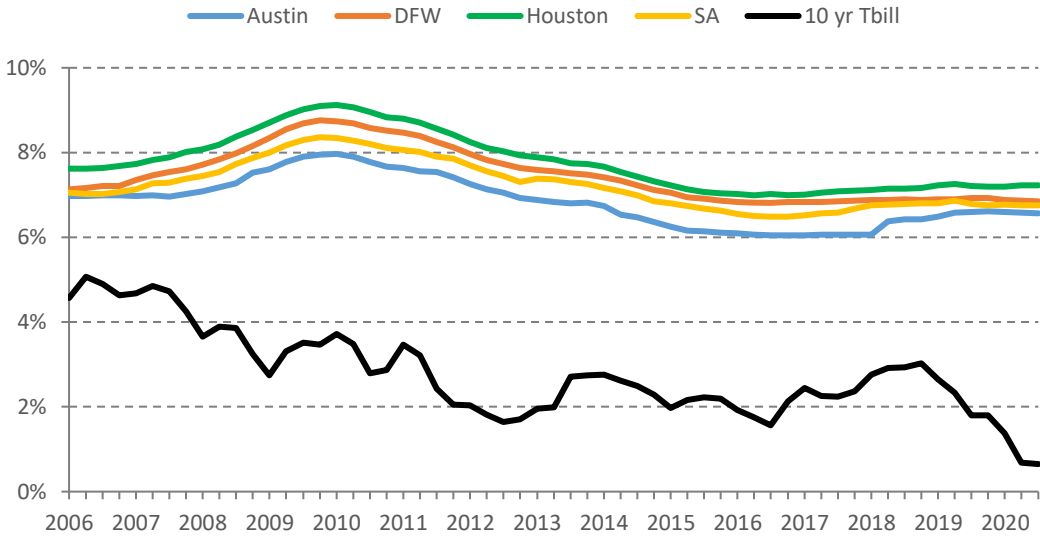
Note: Vacancy rates seasonally adjusted and trend-cycled, unemployment seasonally adjusted.  
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

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



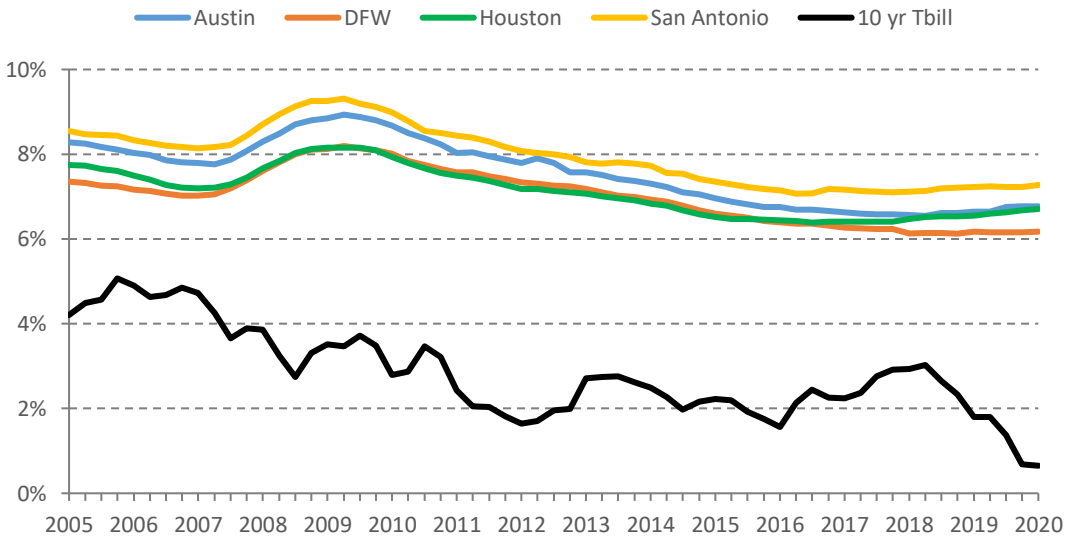
Sources: CoStar and Real Estate Center at Texas A&M University

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



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

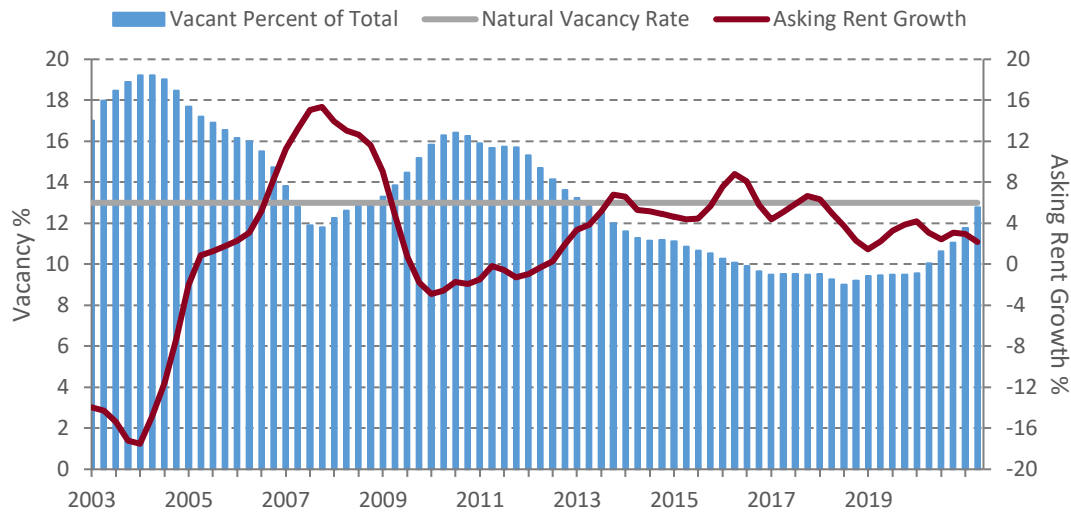
**Figure 12. Texas Major MSAs Warehouse Cap Rates**



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

## Austin

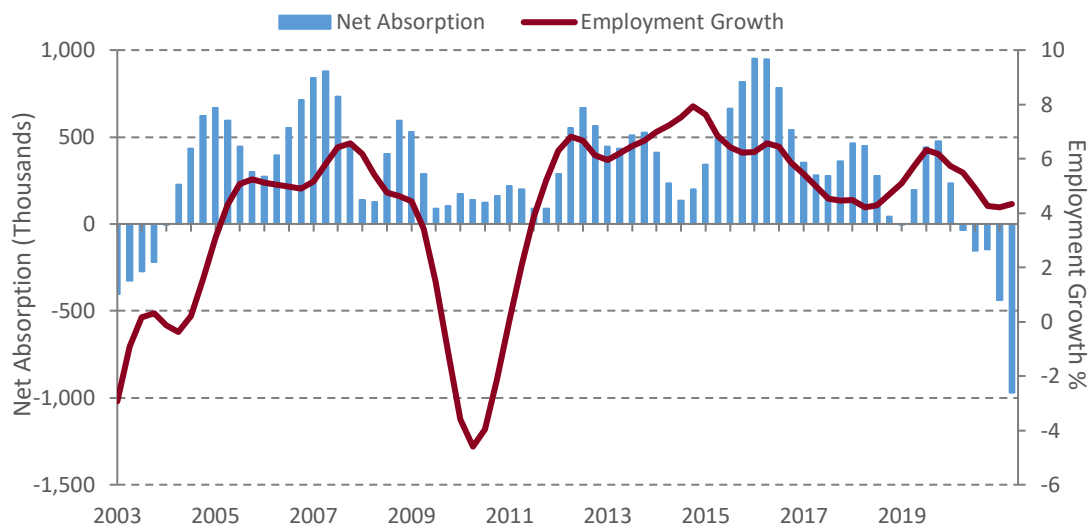
**Figure 13. Austin Office Overall Vacancy and Asking Rent Growth**



Note: Seasonally adjusted and trend-cycle component.

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

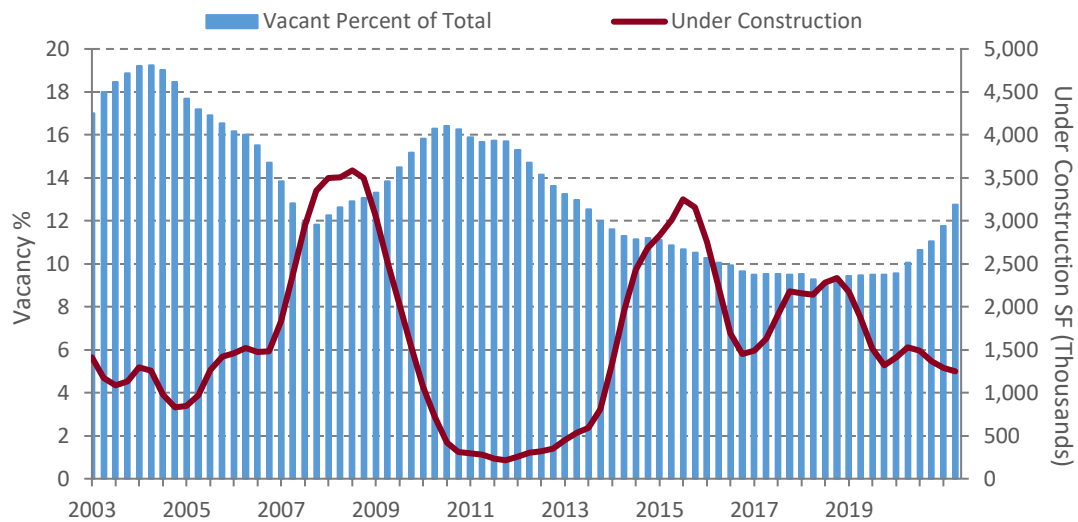
**Figure 14. Austin Office Overall Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

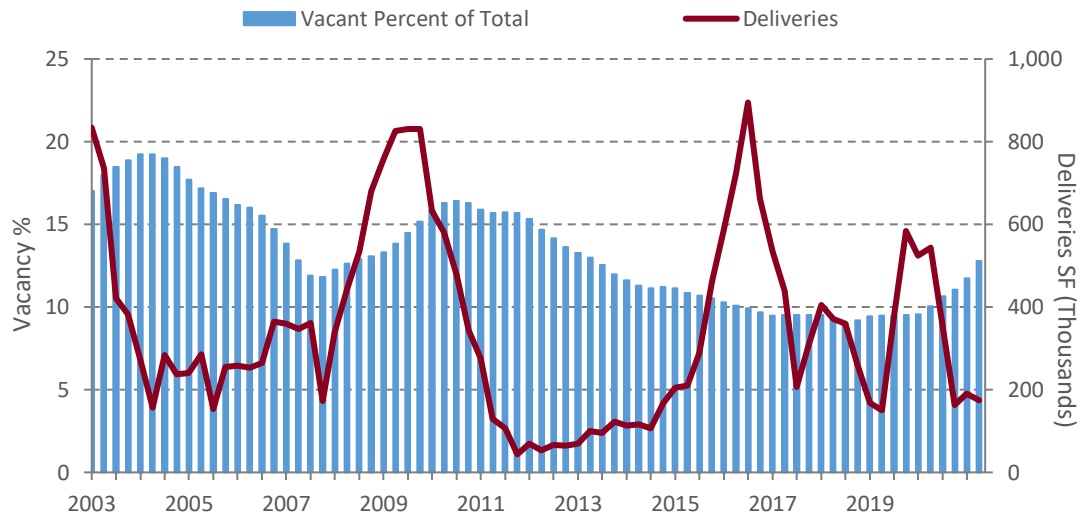
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 15. Austin Office Overall Vacancy and Under Construction**



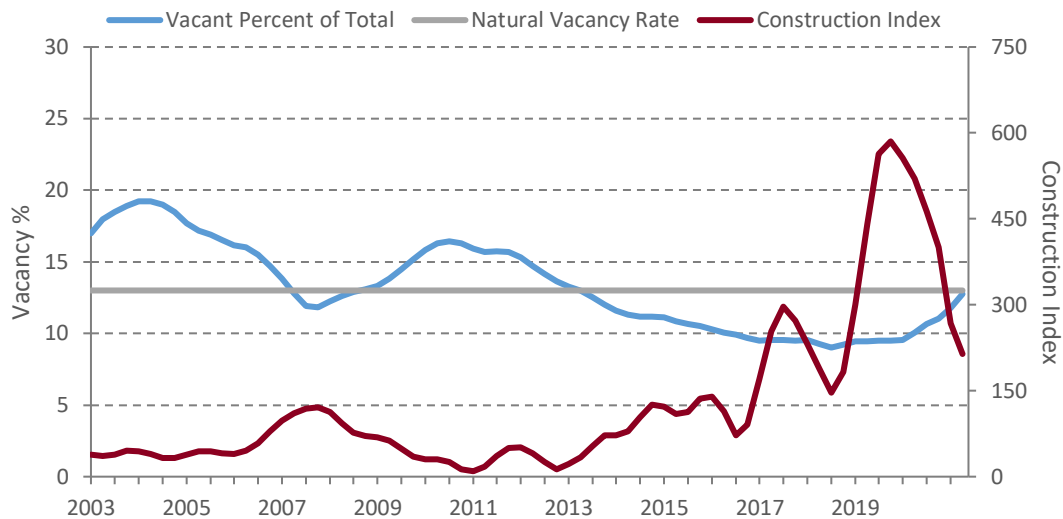
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 16. Austin Office Overall Vacancy and Deliveries**



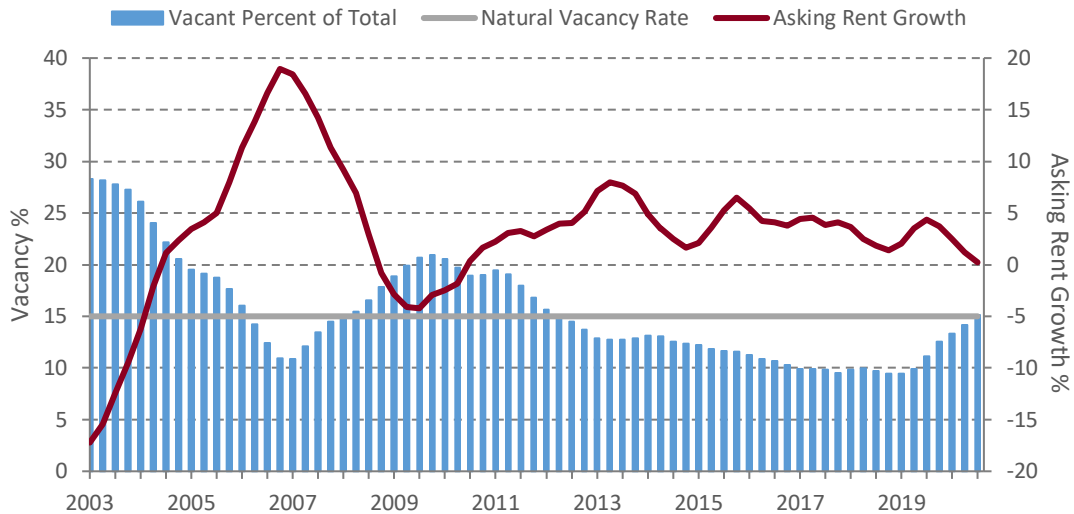
Note: Four-quarter moving average used for deliveries, seasonal adjustment and trend cycling used for vacant percent of total.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



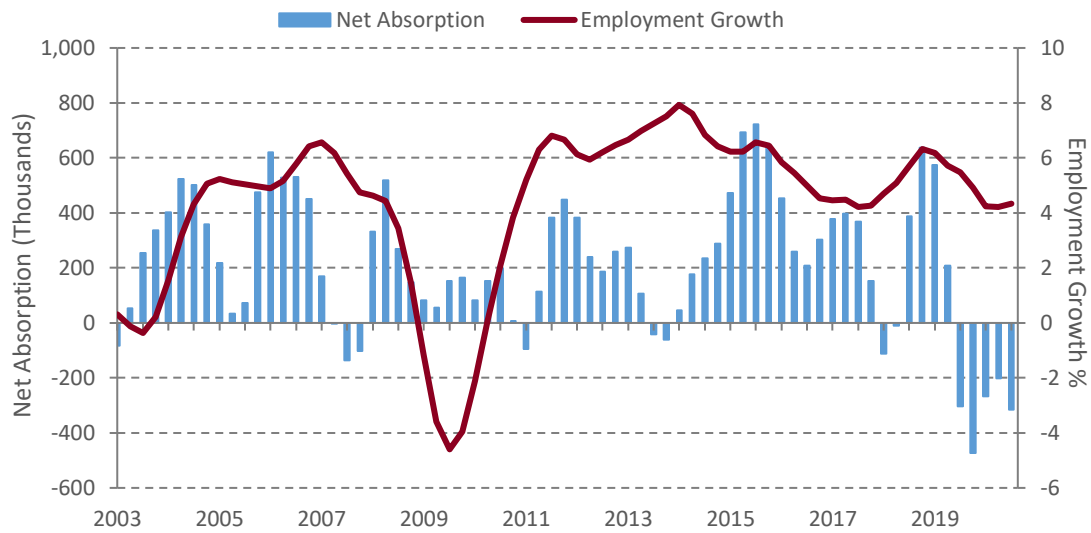
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 18. Austin Office Class A Vacancy and Asking Rent Growth**



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

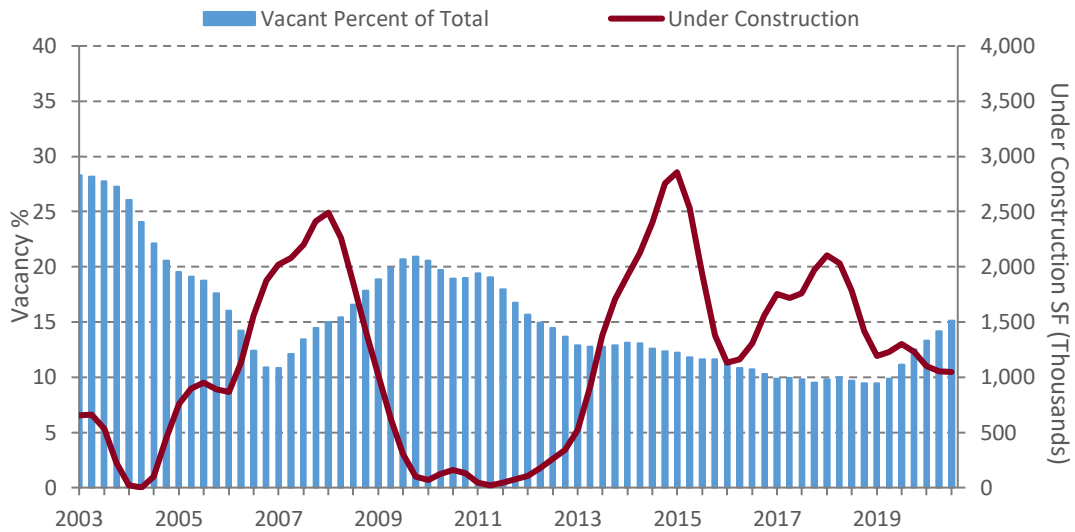
**Figure 19. Austin Office Class A Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

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

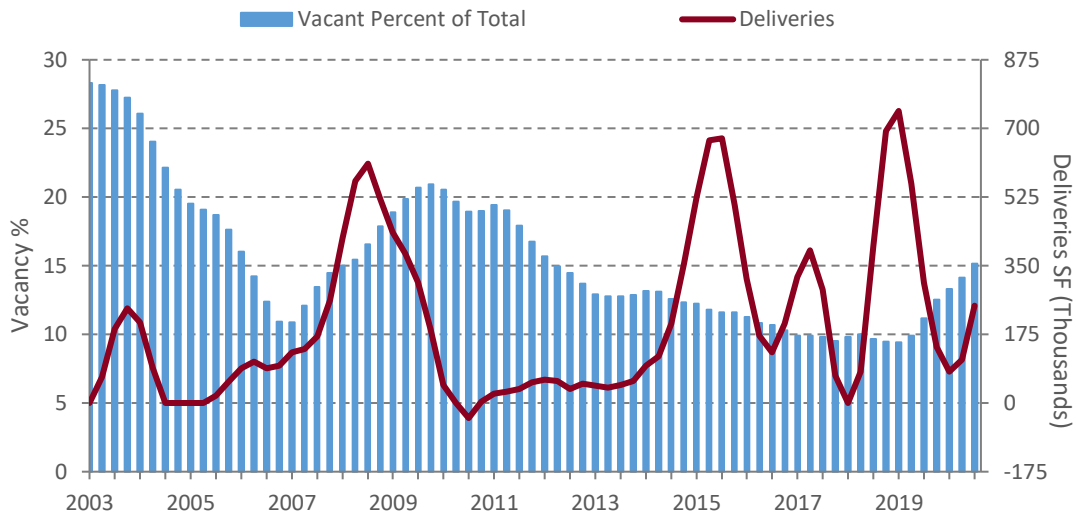
**Figure 20. Austin Office Class A Vacancy and Under Construction**



Note: Seasonally adjusted and trend-cycle component.

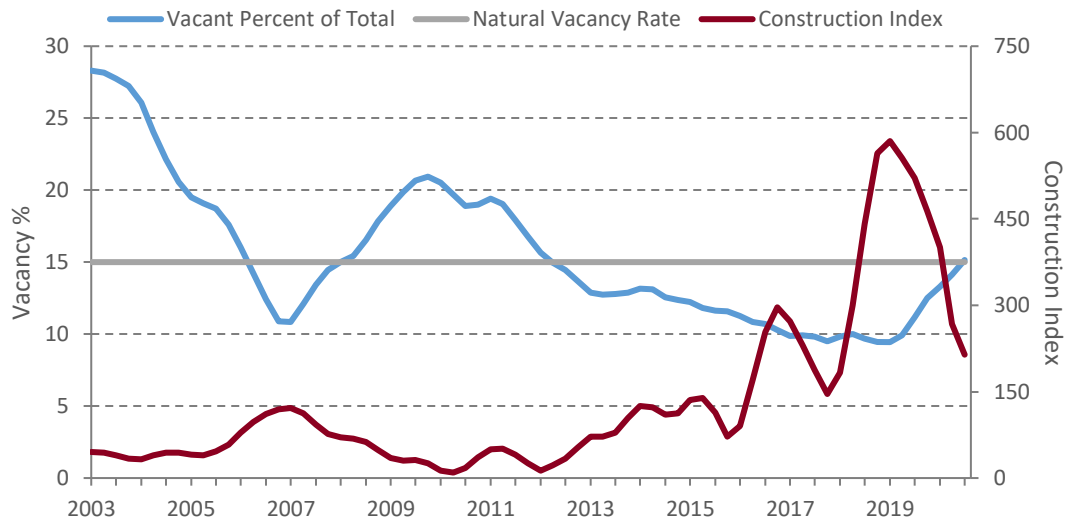
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 21. Austin Office Class A Vacancy and Deliveries**



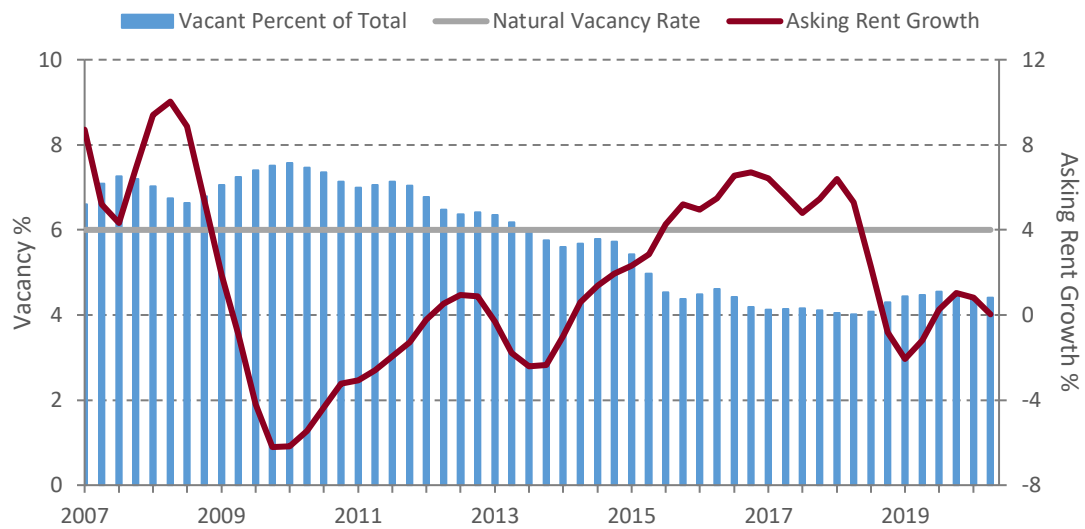
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



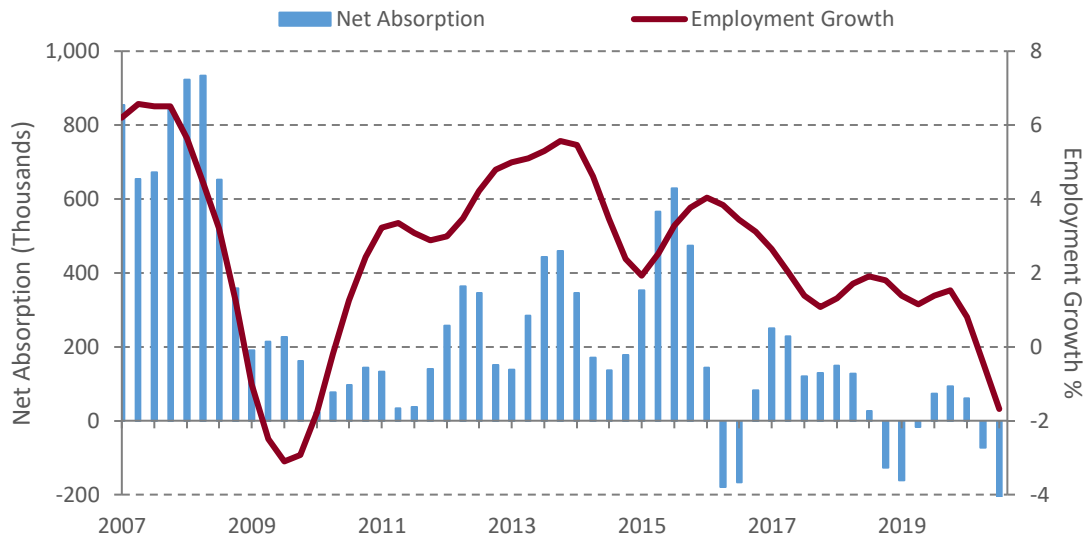
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 23. Austin Retail Vacancy and Asking Rent Growth**



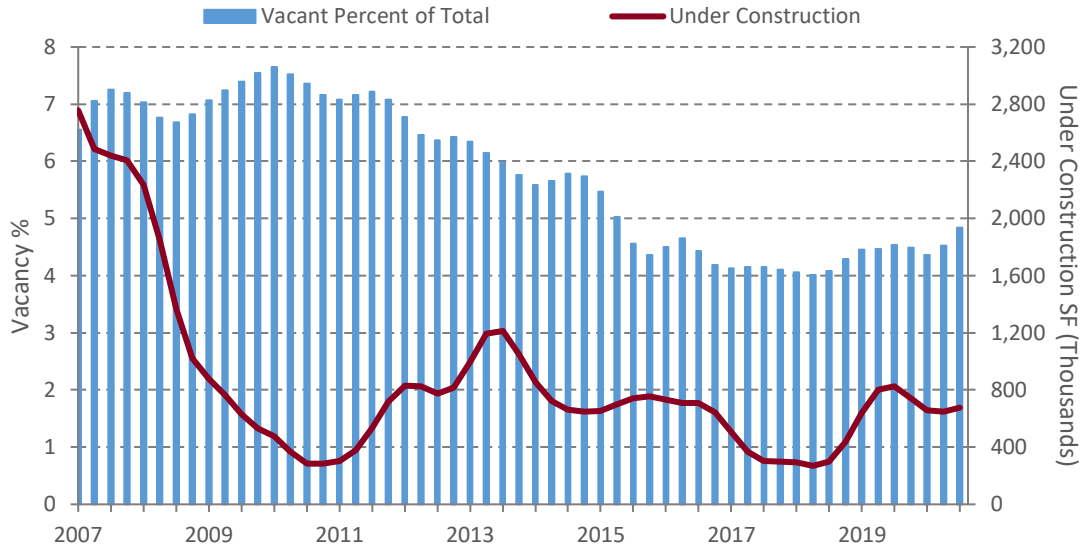
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 24. Austin Retail Net Absorption SF and Employment Growth**



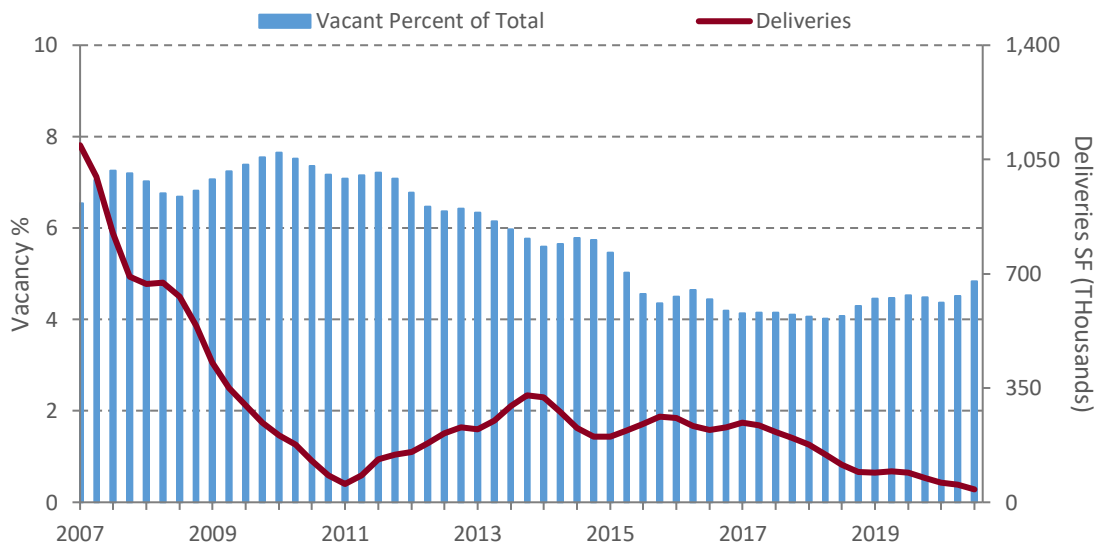
Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 25. Austin Retail Vacancy and Under Construction**



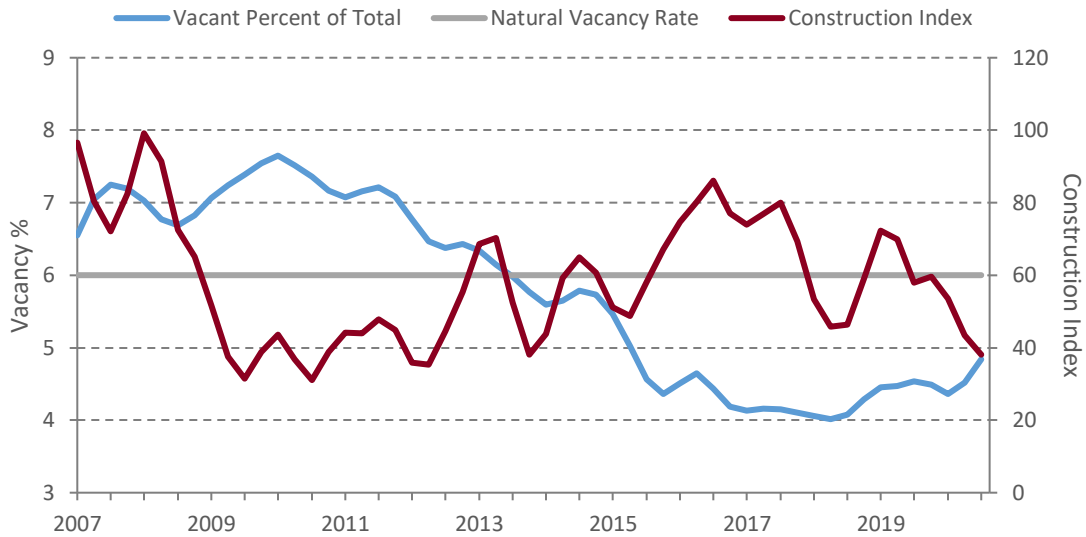
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 26. Austin Retail Vacancy and Deliveries**



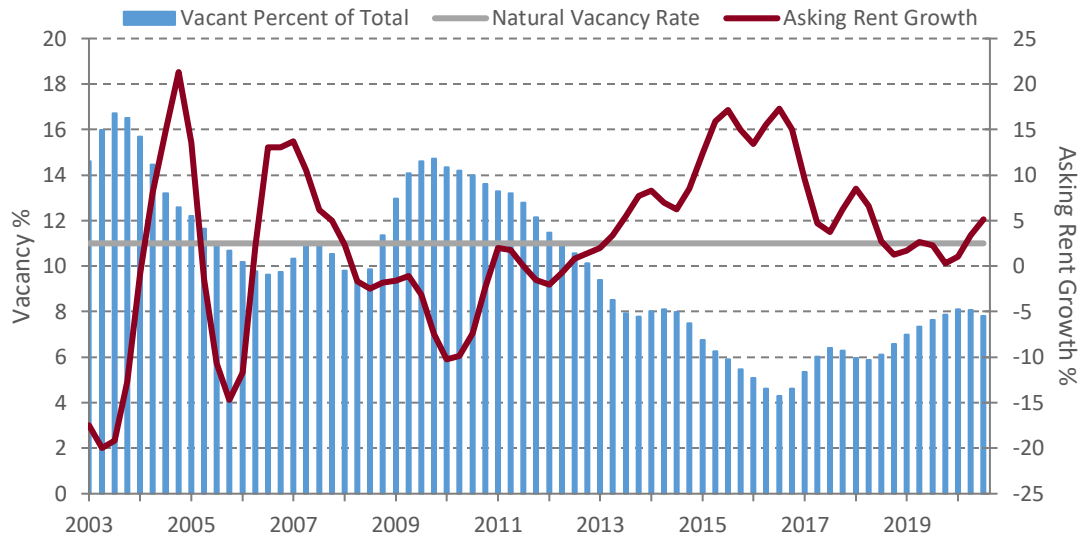
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



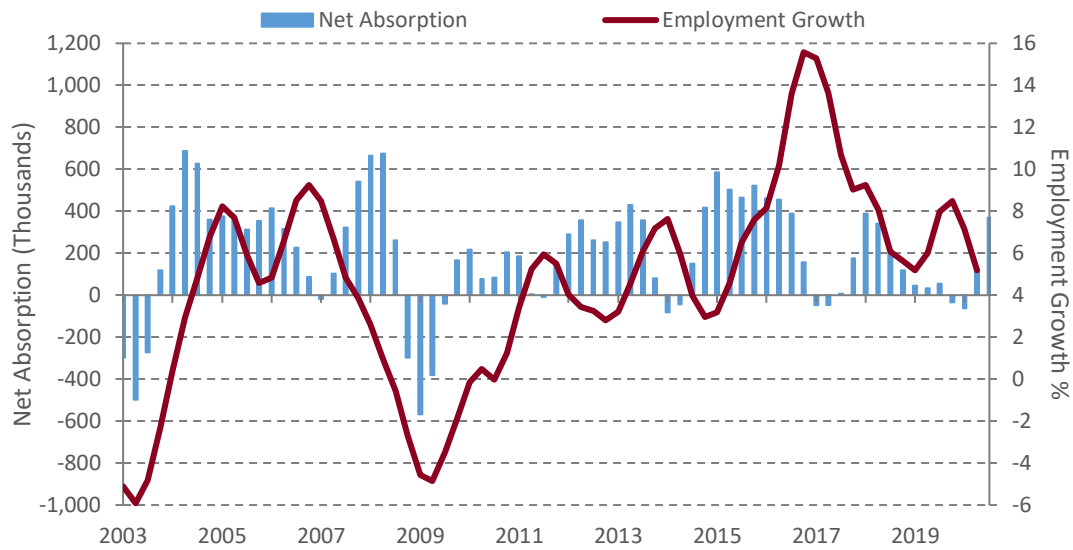
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 28. Austin Warehouse Vacancy and Asking Rent Growth**



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

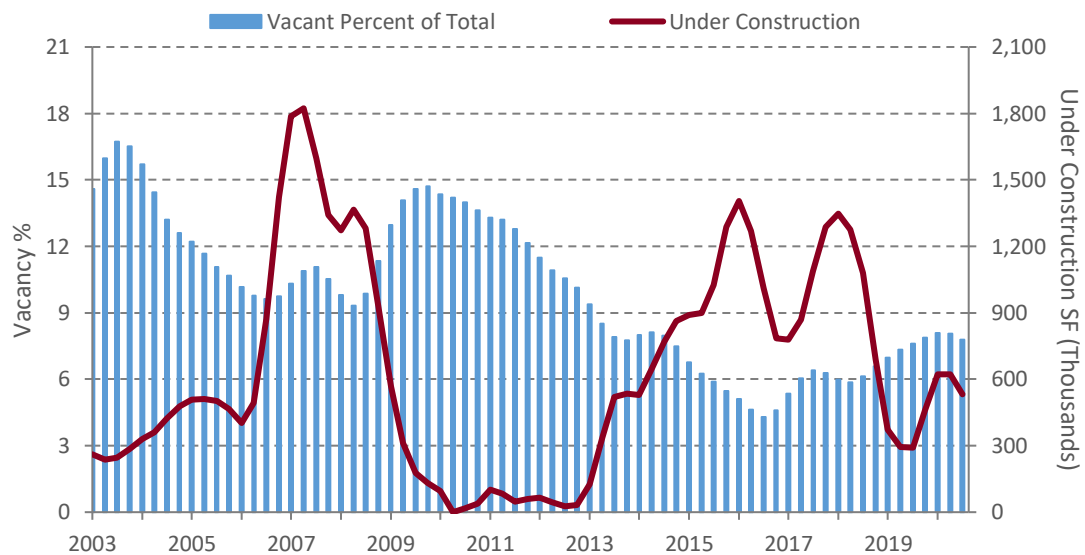
**Figure 29. Austin Warehouse Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

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

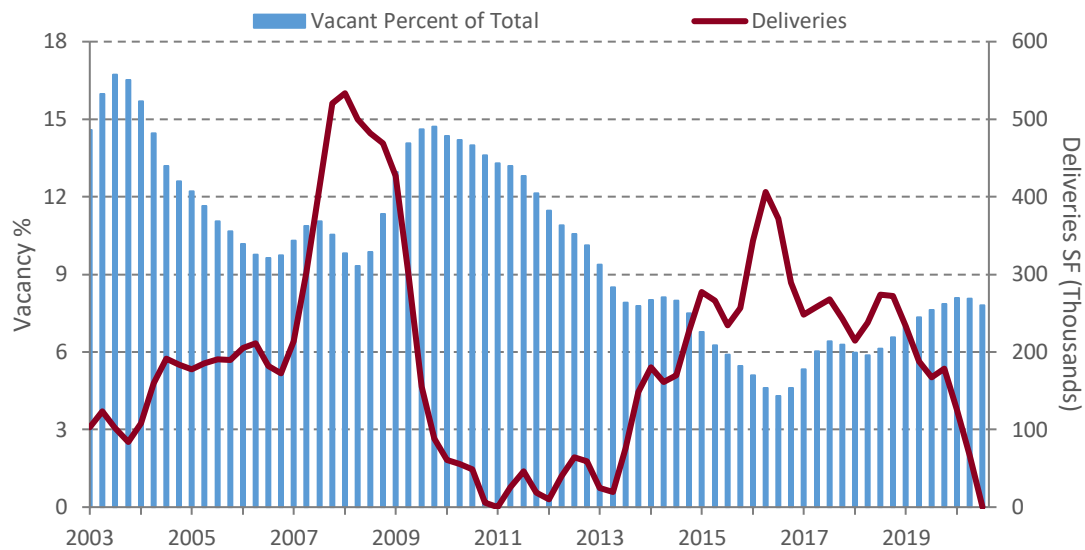
**Figure 30. Austin Warehouse Vacancy and Under Construction**



Note: Seasonally adjusted and trend-cycle component.

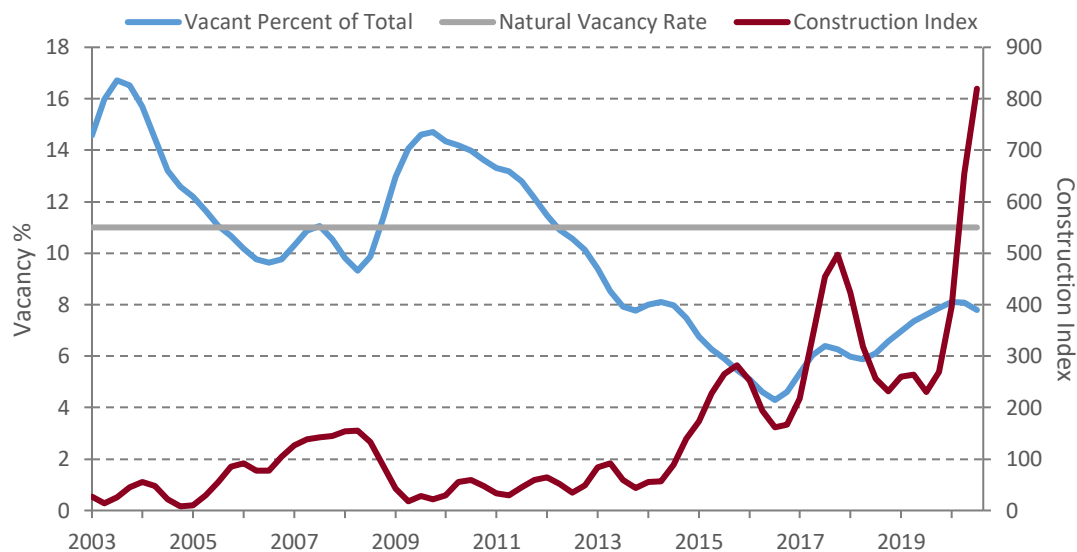
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 31. Austin Warehouse Vacancy and Deliveries**



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

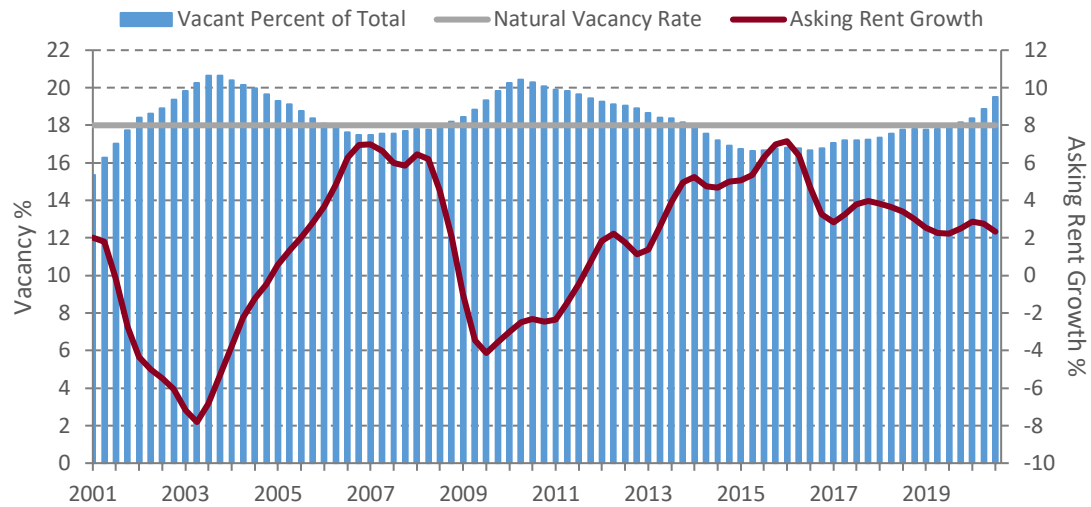
**Figure 32. Austin Warehouse Vacancy and Construction Index  
(Index 2000 Q4 = 100)**



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

## DFW

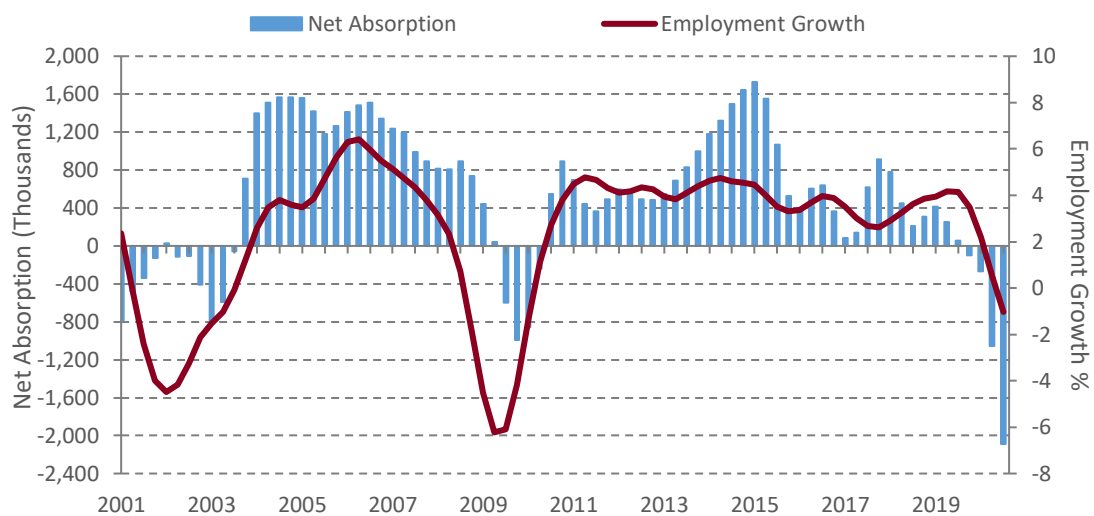
**Figure 33. DFW Office Overall Vacancy and Asking Rent Growth**



Note: Seasonally adjusted and trend-cycle component.

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

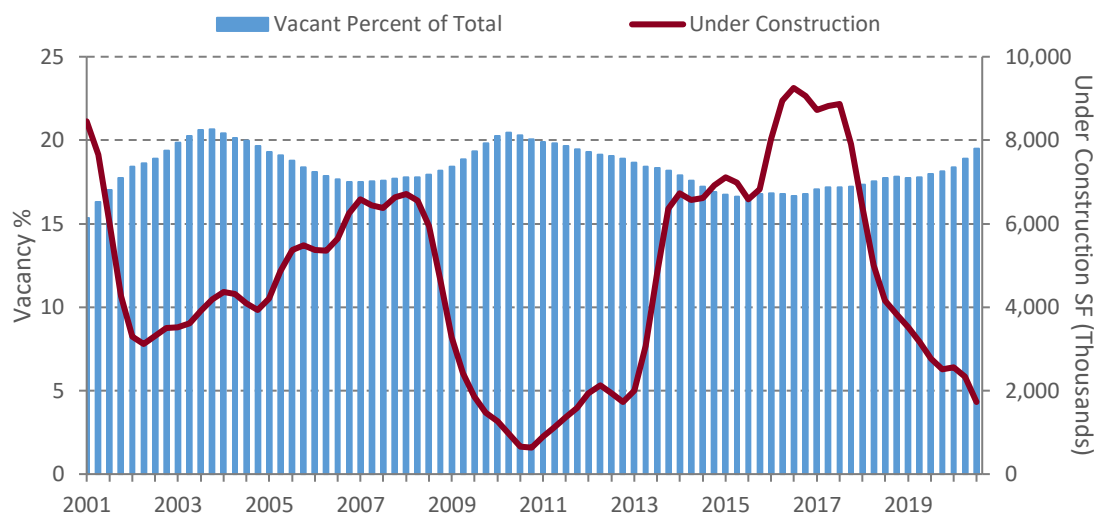
**Figure 34. DFW Office Overall Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

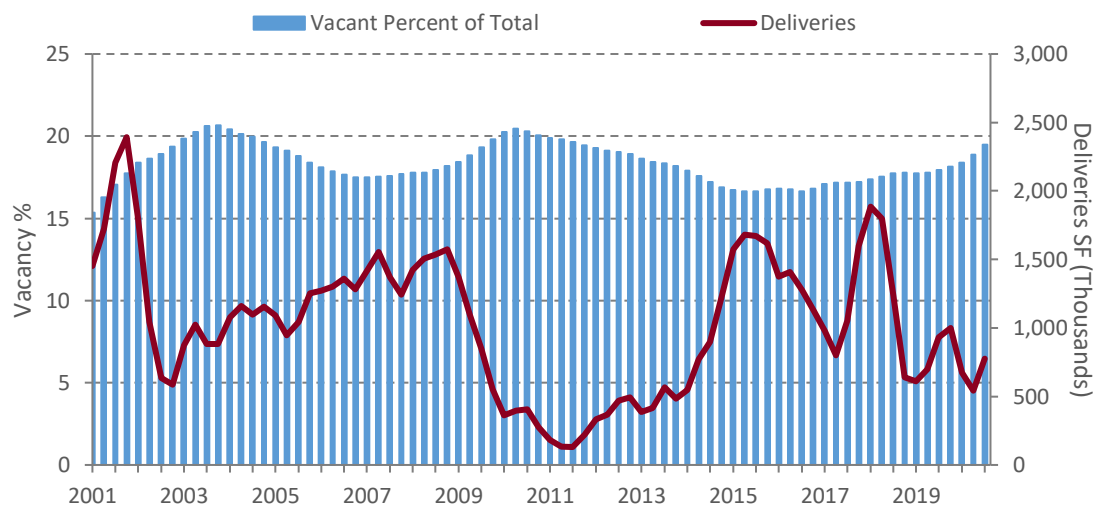
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 35. DFW Office Overall Vacancy and Under Construction**



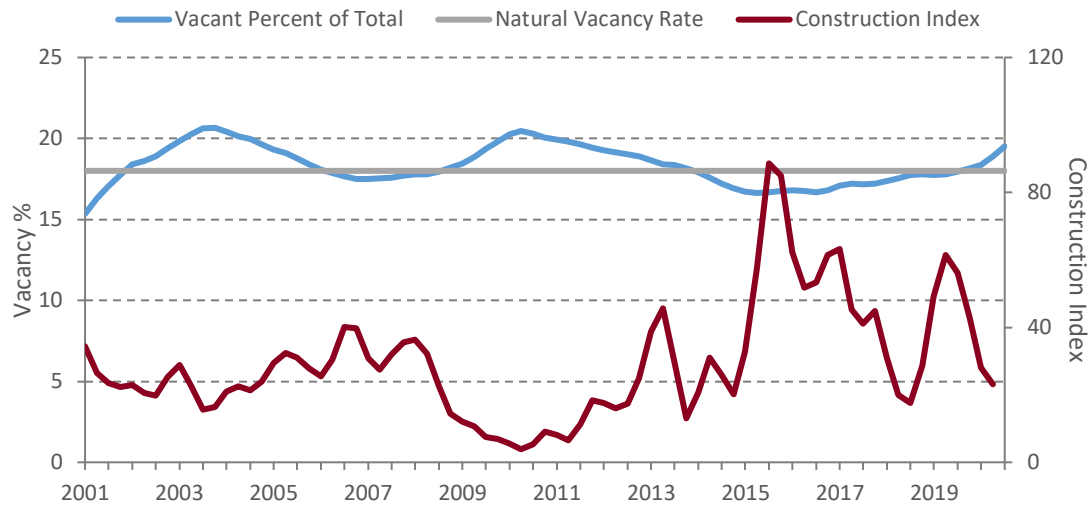
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 36. DFW Office Overall Vacancy and Deliveries**



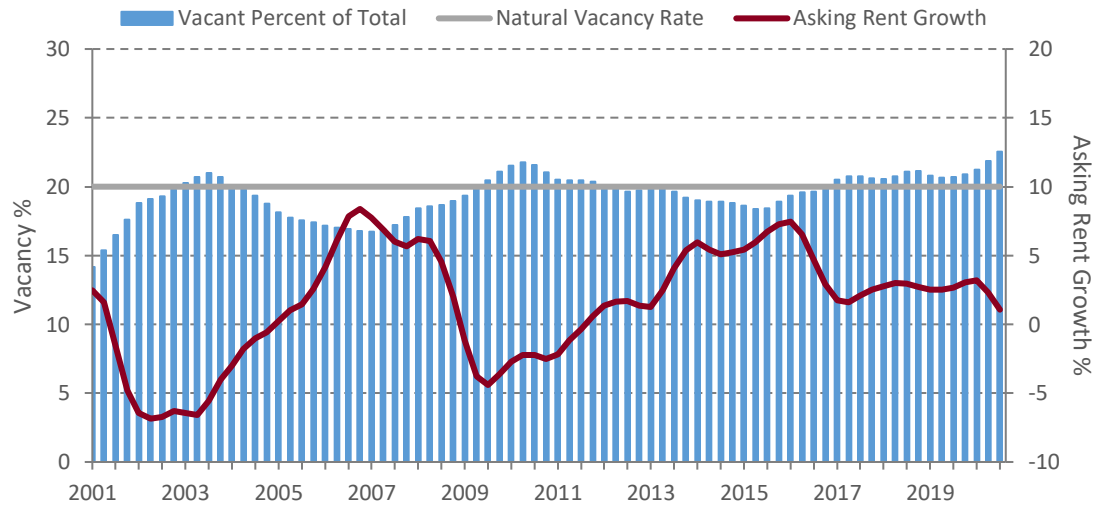
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



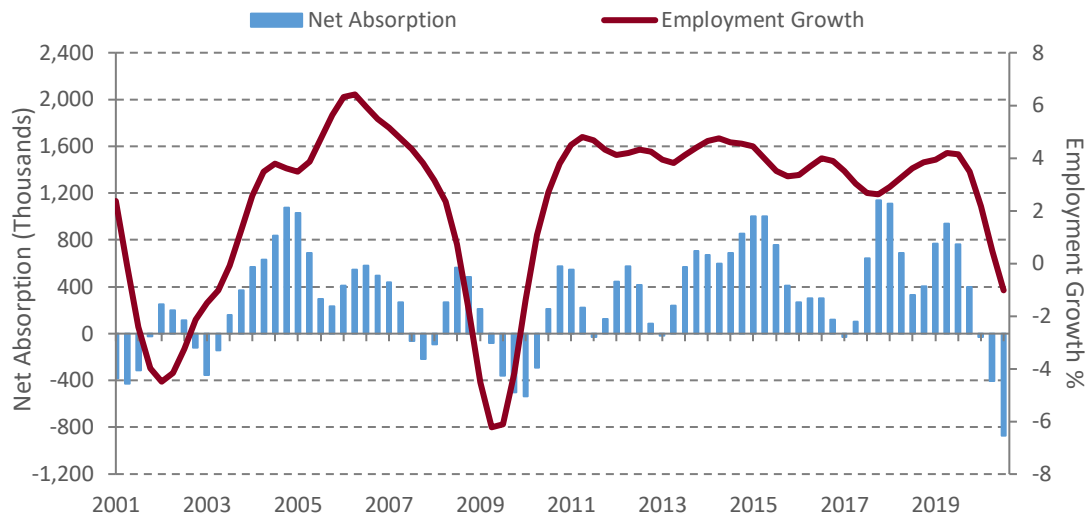
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 38. DFW Office Class A Vacancy and Asking Rent Growth**



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

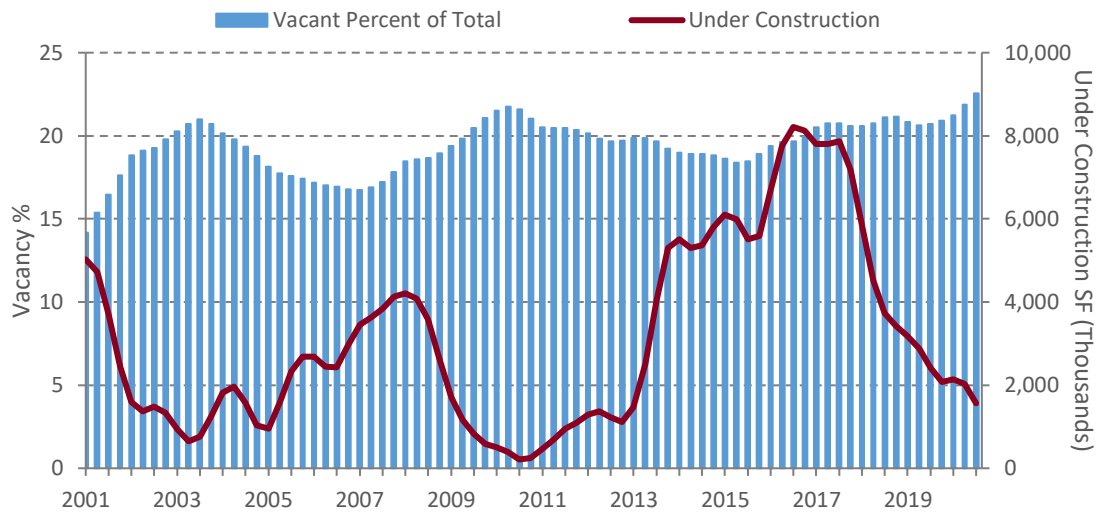
**Figure 39. DFW Office Class A Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

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

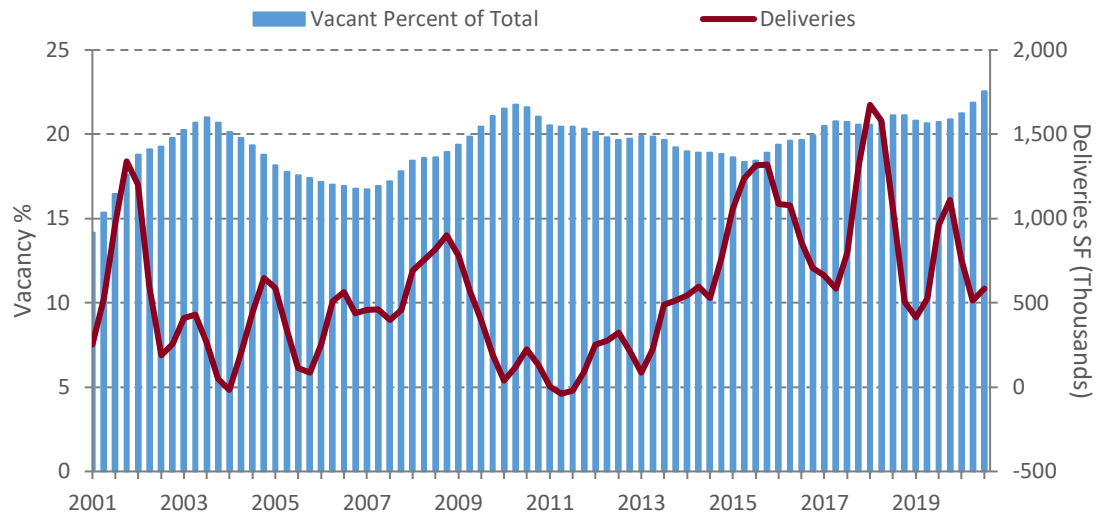
**Figure 40. DFW Office Class A Vacancy and Under Construction**



Note: Seasonally adjusted and trend-cycle component.

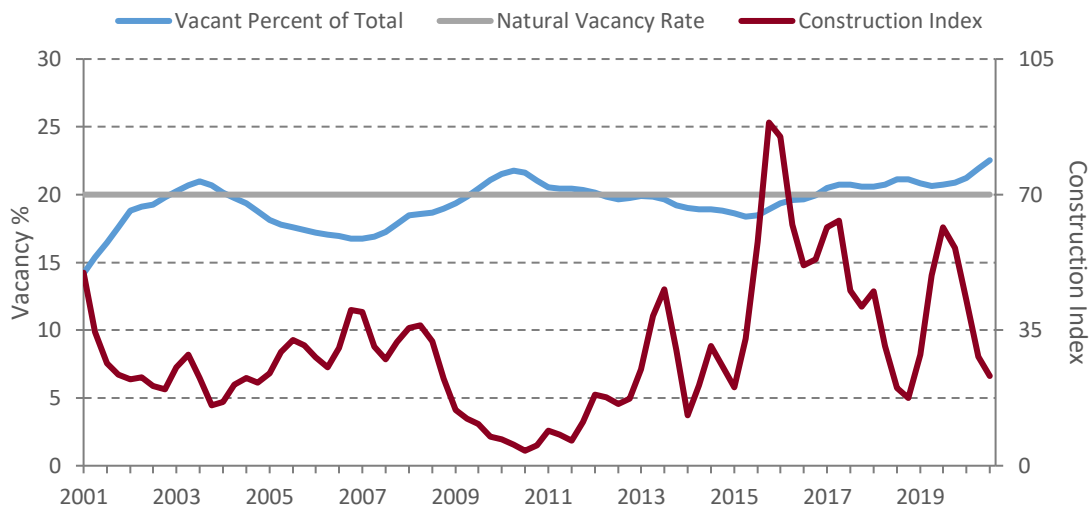
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 41. DFW Office Class A Vacancy and Deliveries**



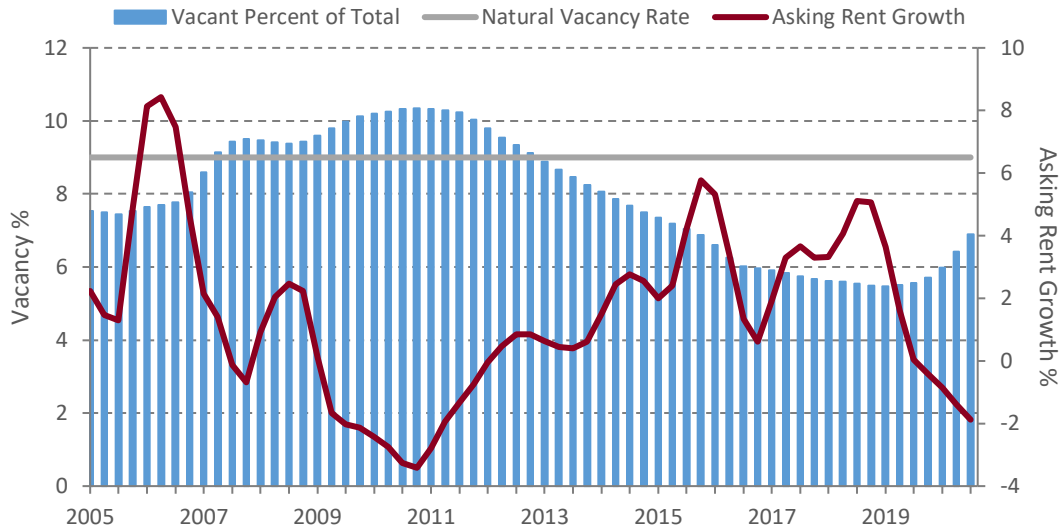
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



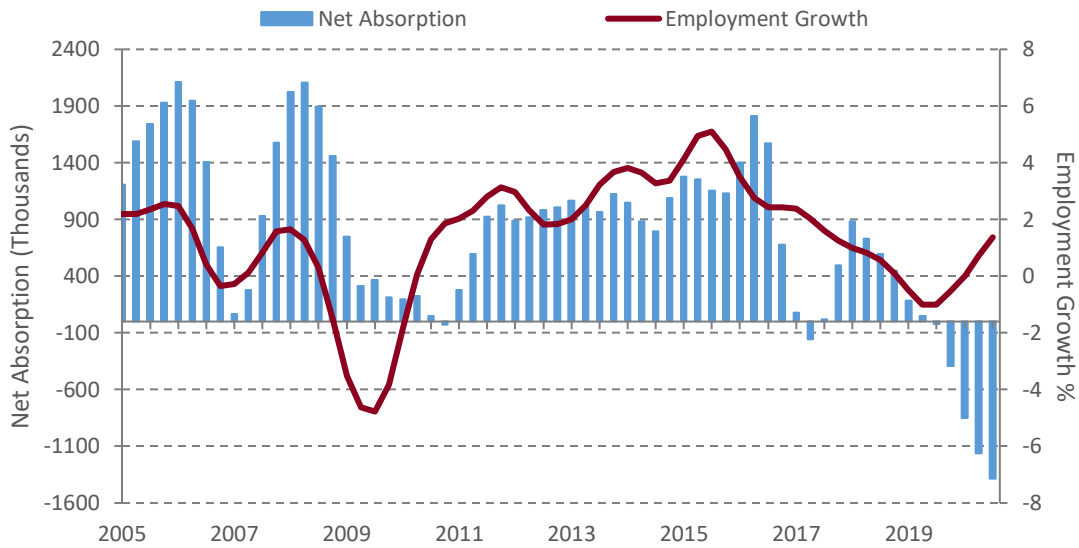
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 43. DFW Retail Vacancy and Asking Rent Growth**



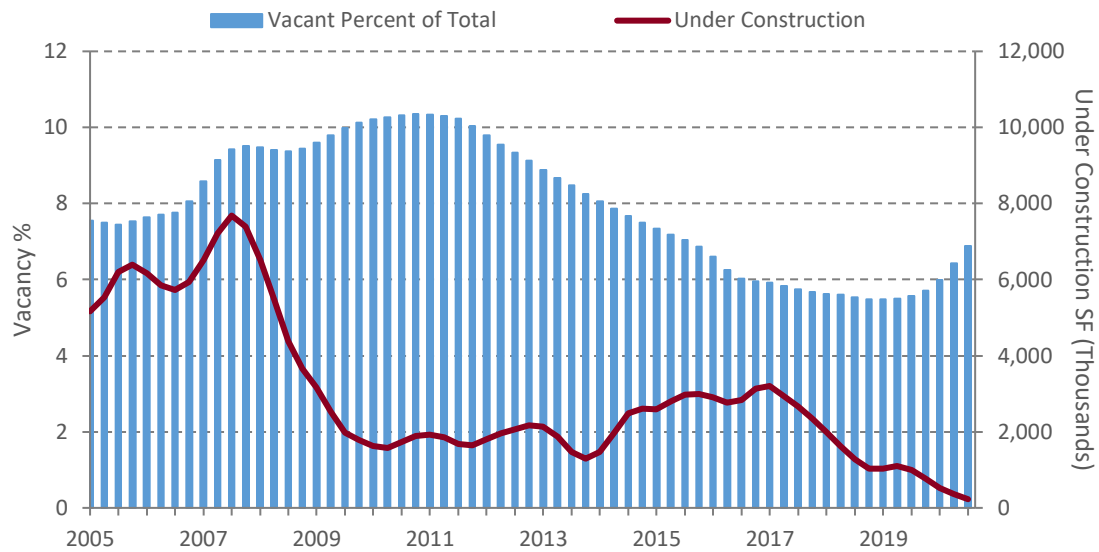
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 44. DFW Retail Net Absorption and Employment Growth**



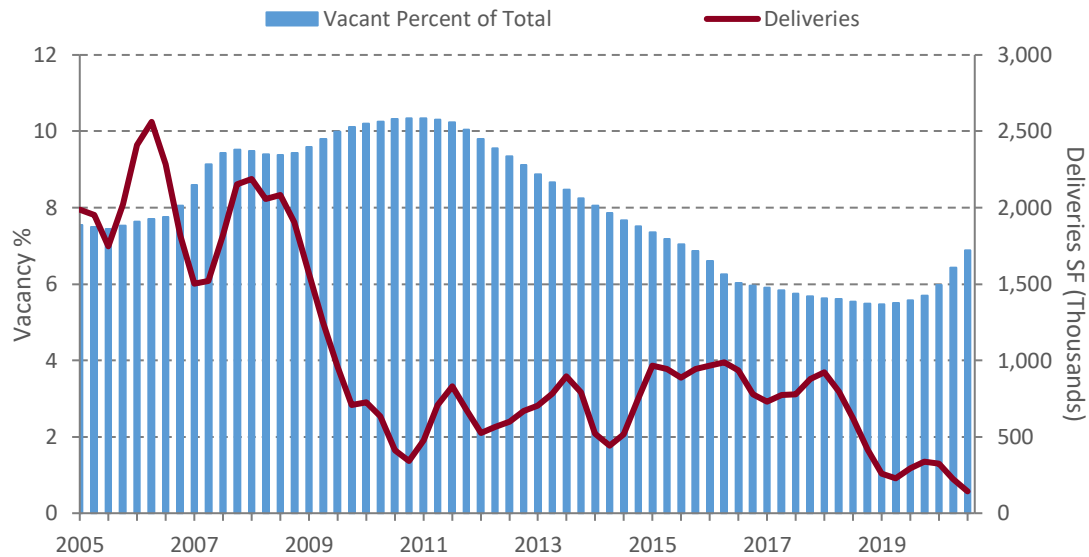
Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 45. DFW Retail Vacancy and Under Construction**



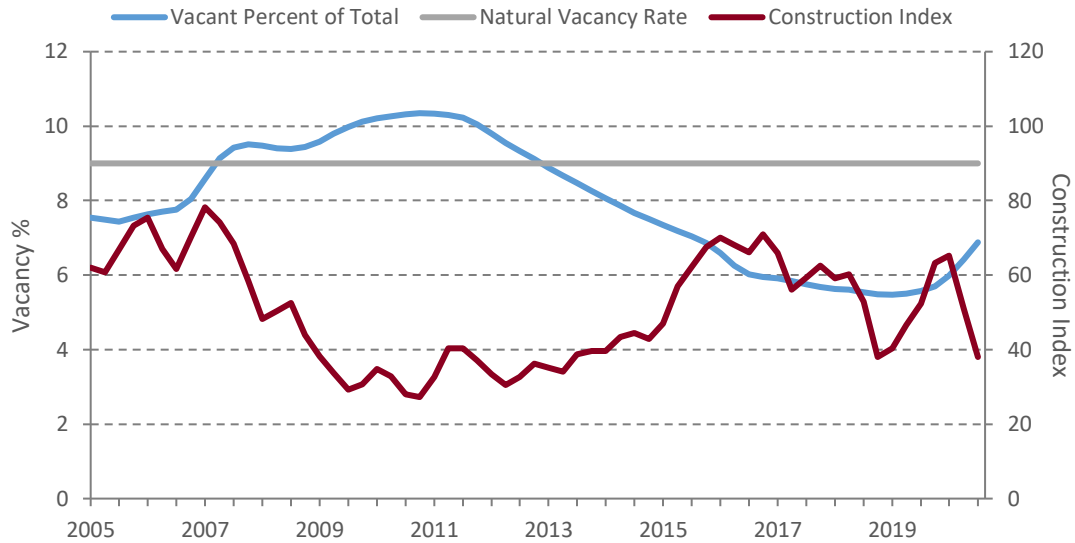
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 46. DFW Retail Vacancy and Deliveries**



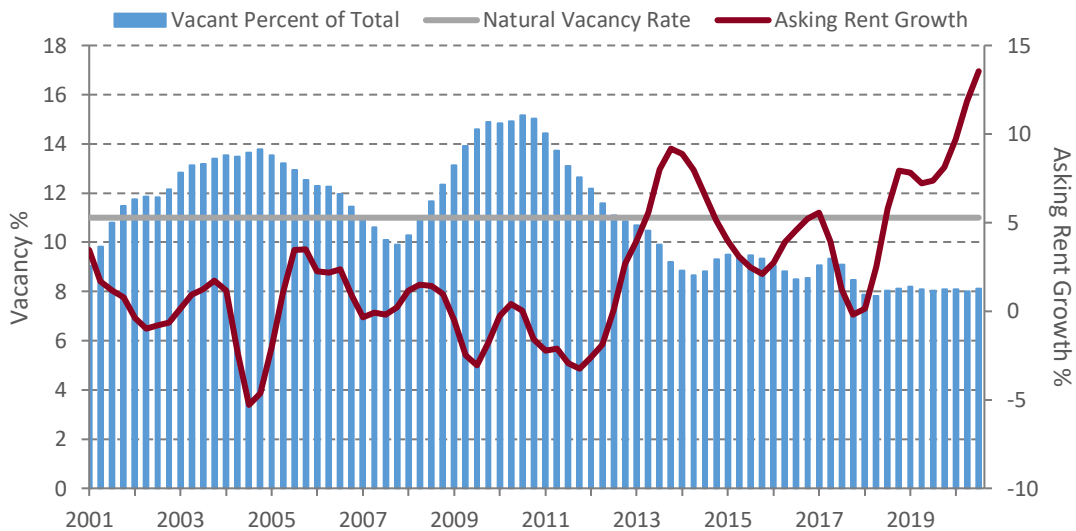
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



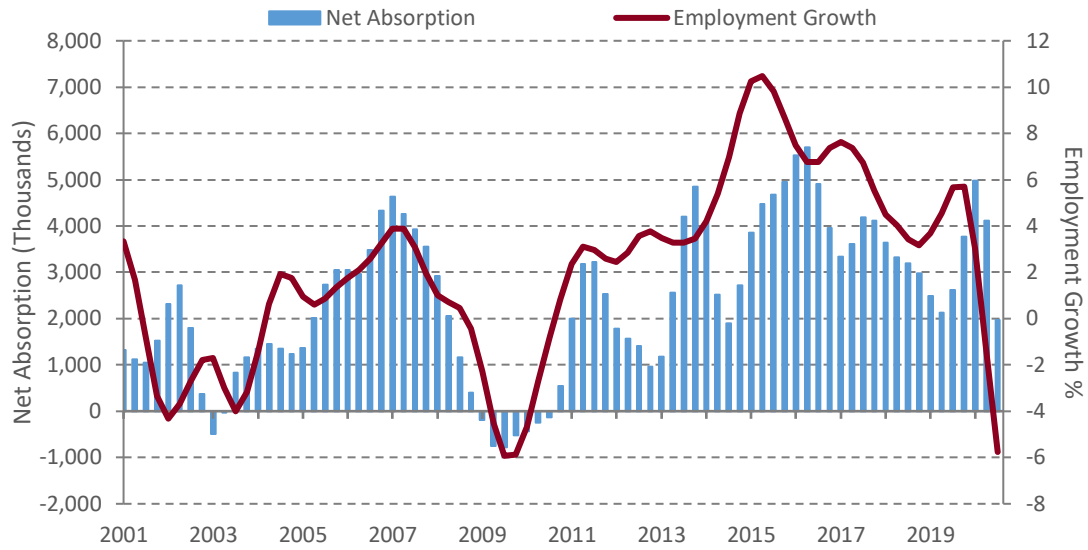
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 48. DFW Warehouse Vacancy and Asking Rent Growth**



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

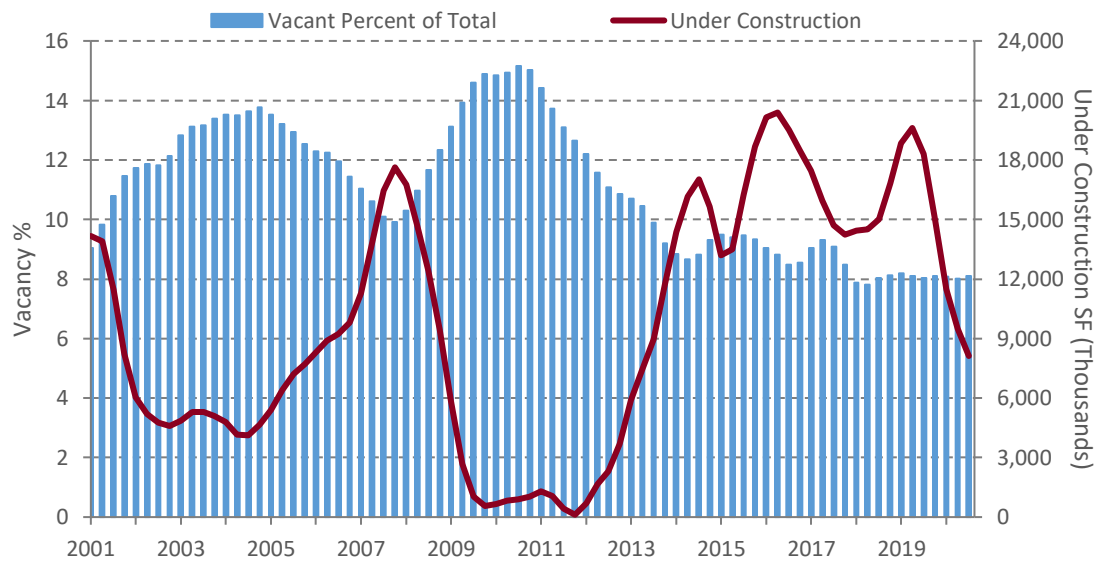
**Figure 49. DFW Warehouse Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

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

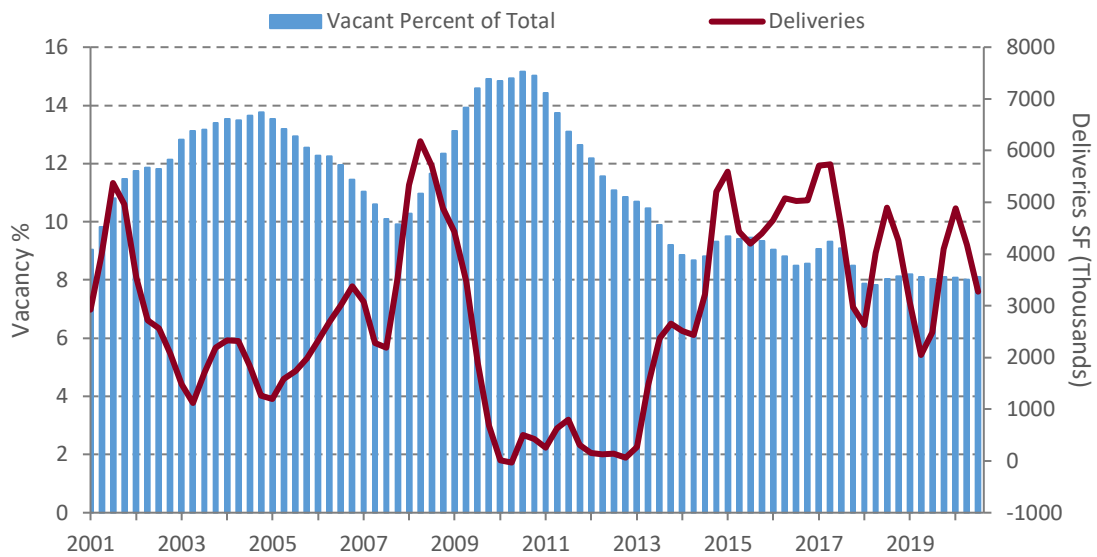
**Figure 50. DFW Warehouse Vacancy and Under Construction**



Note: Seasonally adjusted and trend-cycle component.

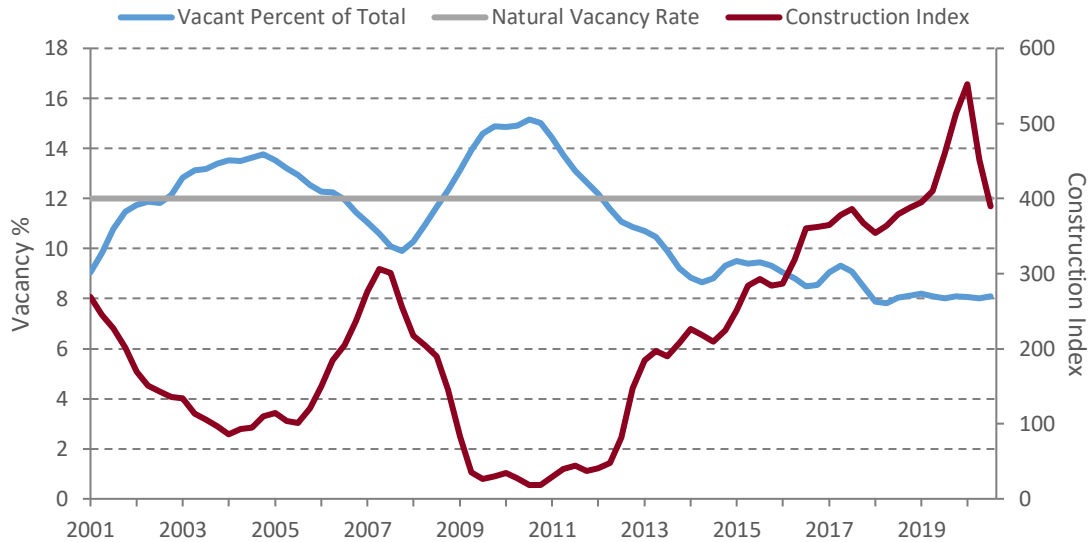
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 51. DFW Warehouse Vacancy and Deliveries**



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

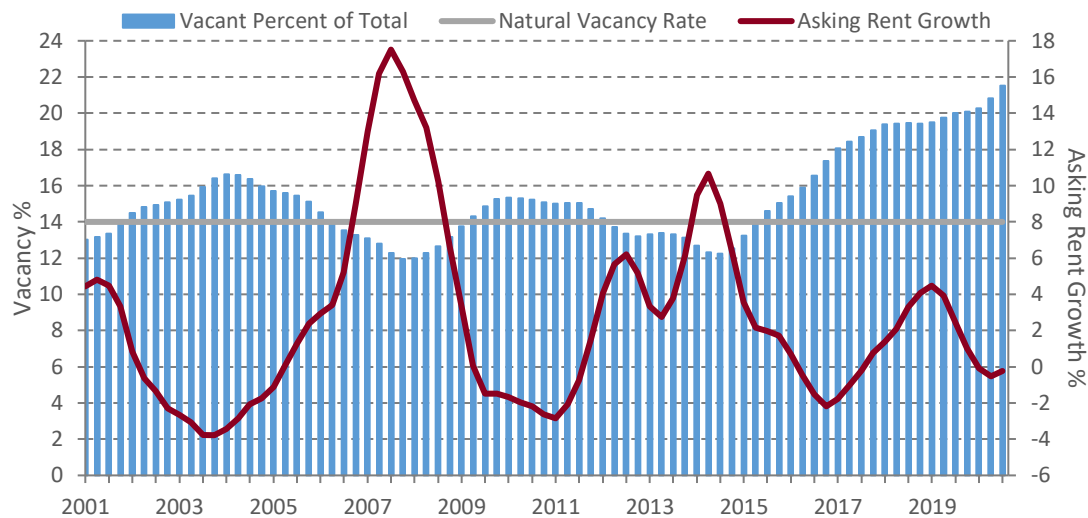
**Figure 52. DFW Warehouse Vacancy and Construction Index**  
(Index 1995 Q1 = 100)



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

## Houston

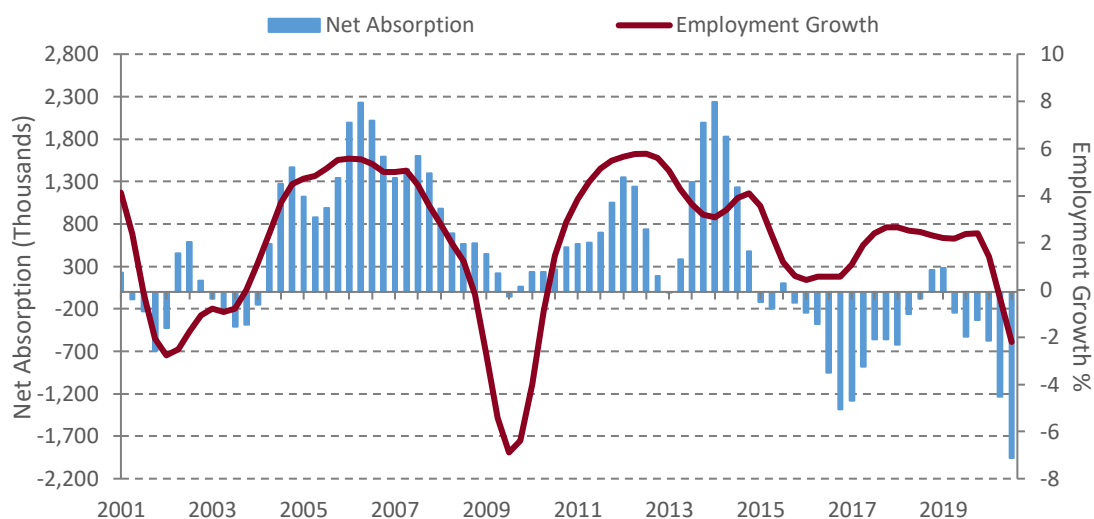
**Figure 53. Houston Office Overall Vacancy and Asking Rent Growth**



Note: Seasonally adjusted and trend-cycle component.

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

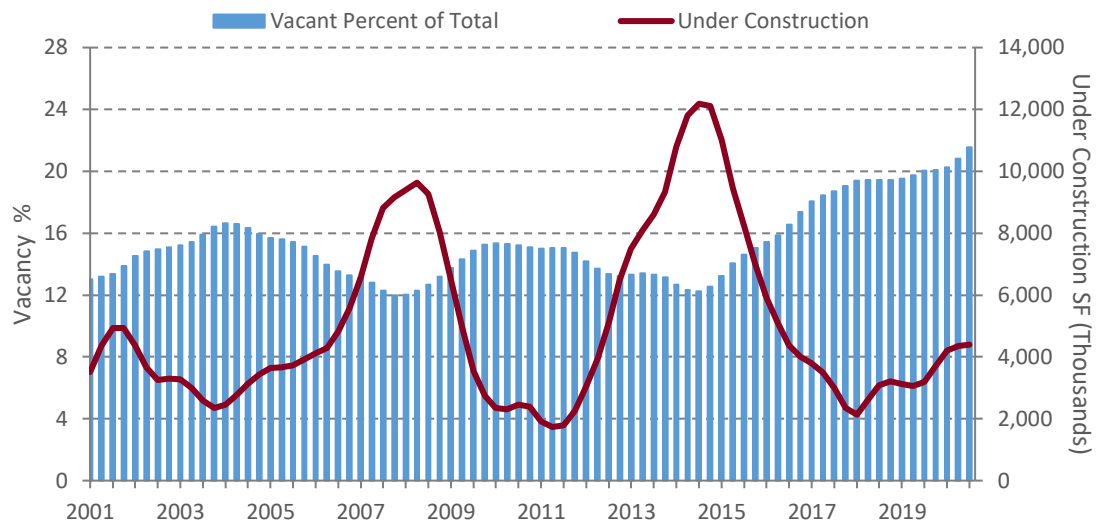
**Figure 54. Houston Office Overall Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

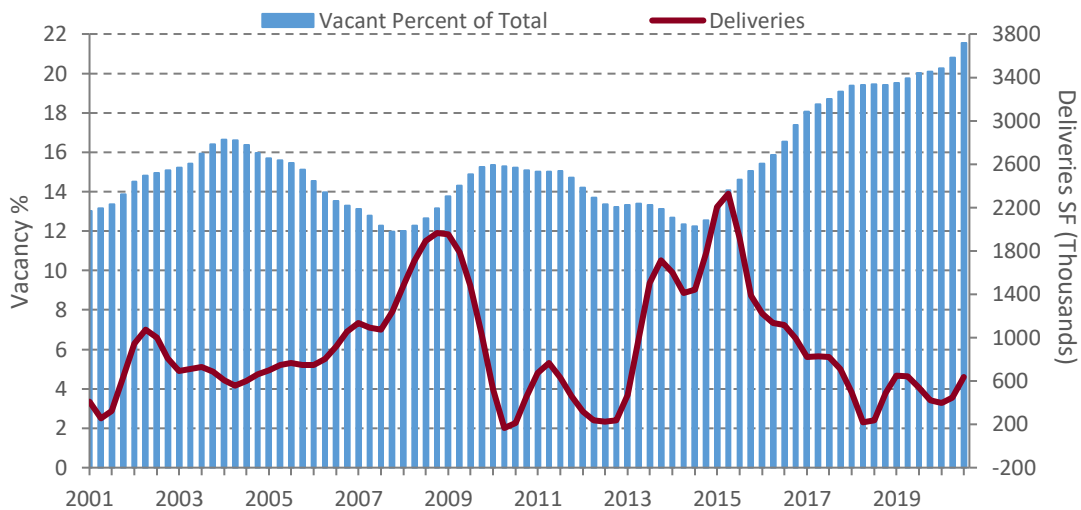
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 55. Houston Office Overall Vacancy and Under Construction**



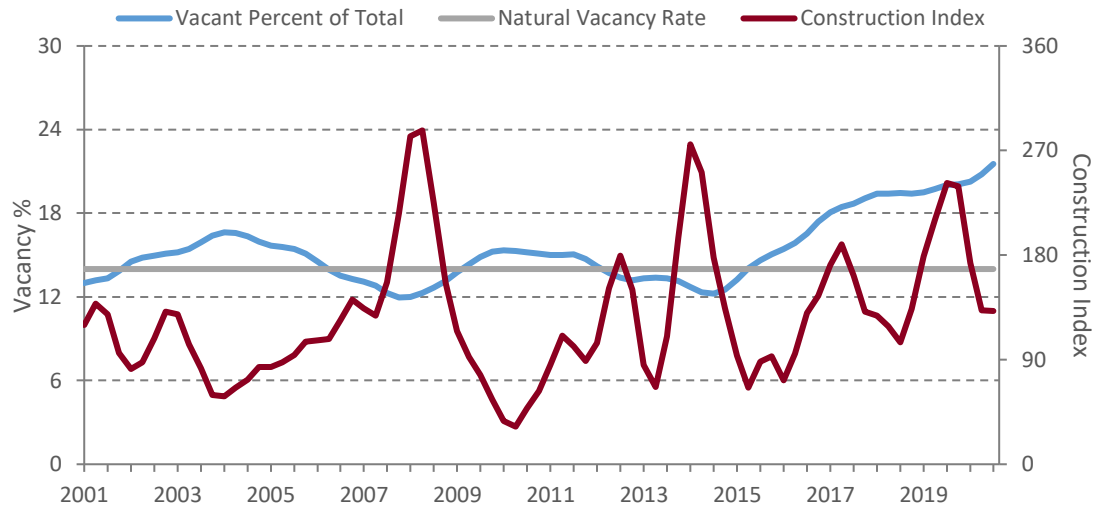
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 56. Houston Office Overall Vacancy and Deliveries**



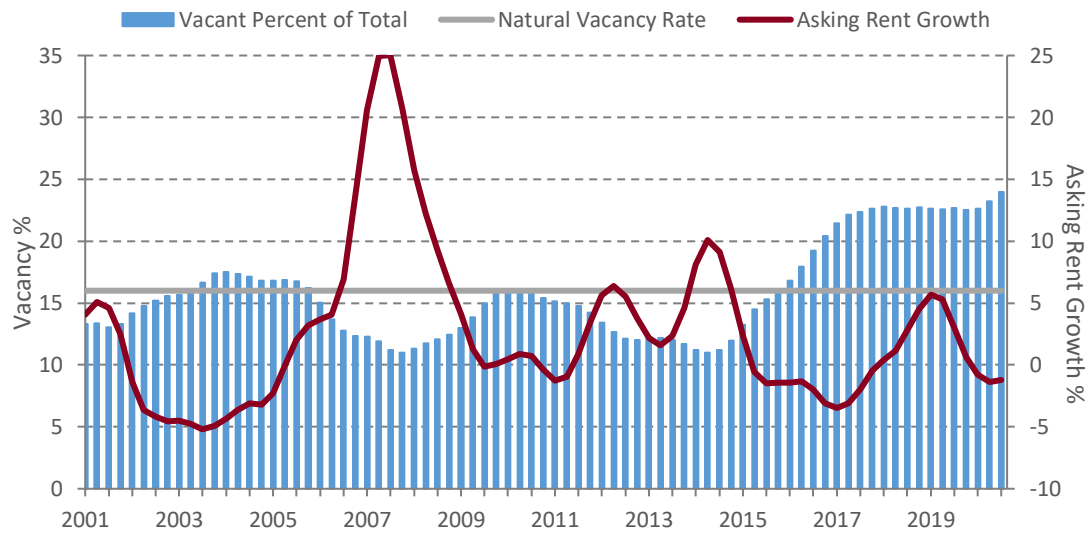
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



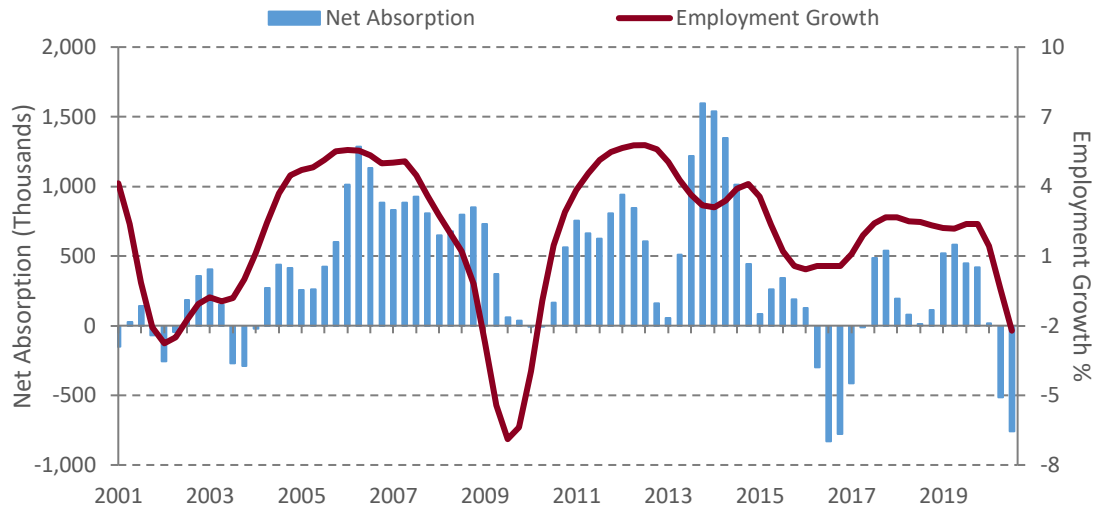
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 58. Houston Office Class A Vacancy and Asking Rent Growth**



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

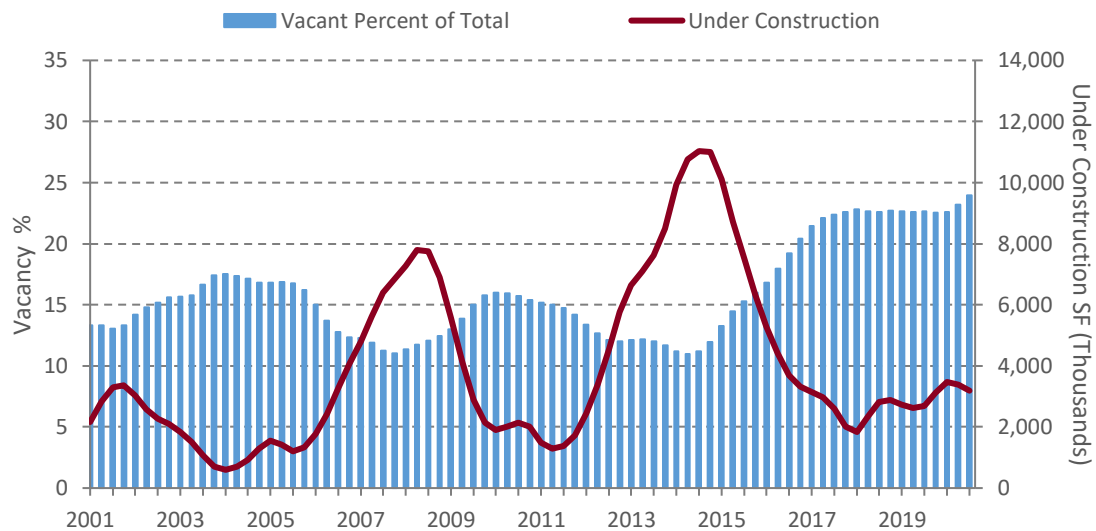
**Figure 59. Houston Office Class A Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

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

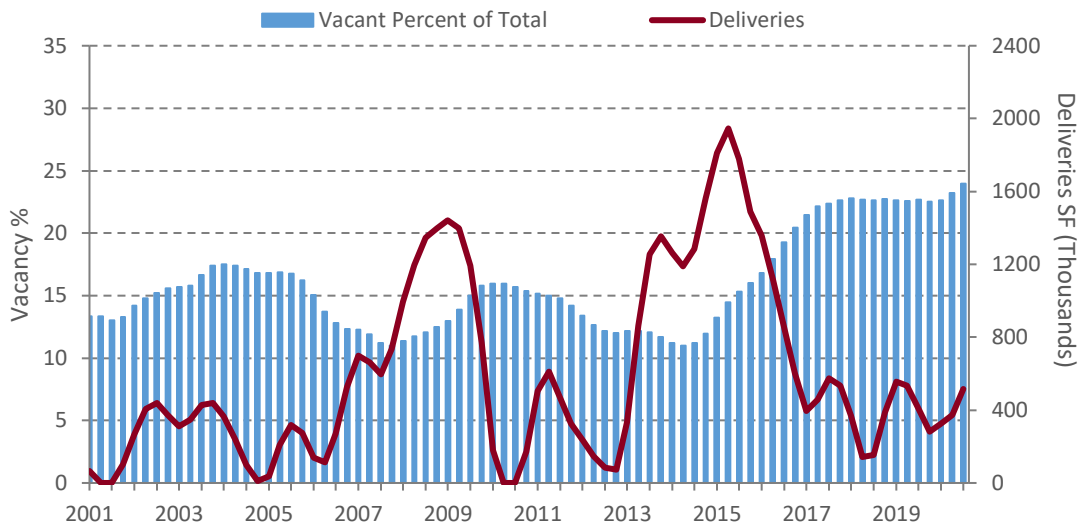
**Figure 60. Houston Office Class A Vacancy and Under Construction**



Note: Seasonally adjusted and trend-cycle component.

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

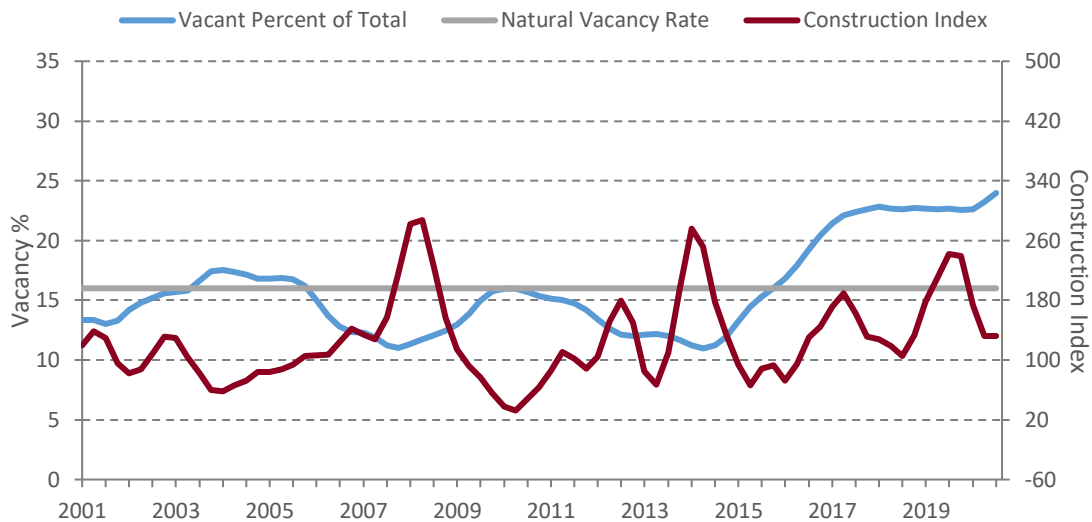
**Figure 61. Houston Office Class A Vacancy and Deliveries**



Note: Seasonally adjusted and trend-cycle component.

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

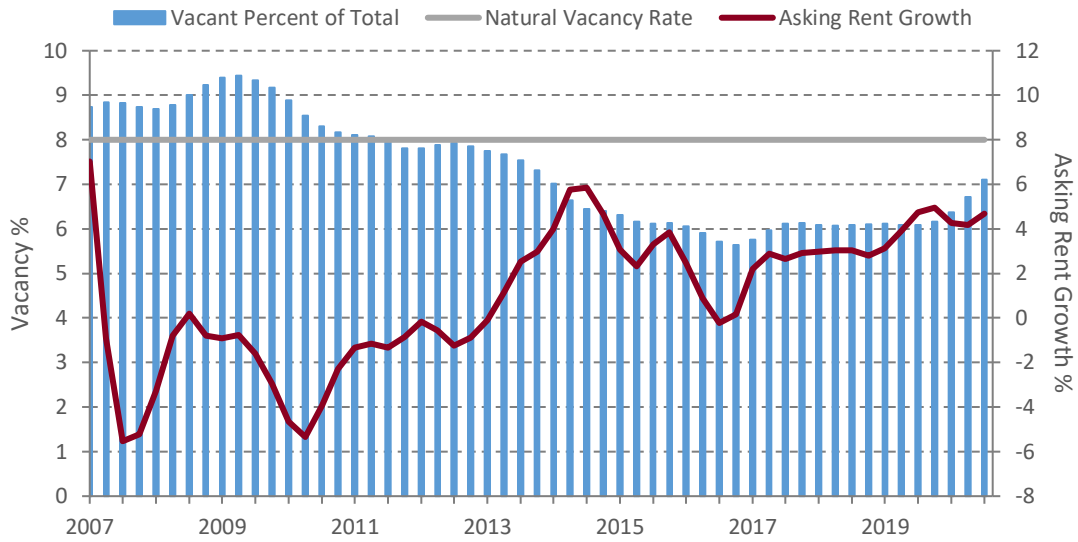
**Figure 62. Houston Office Class A Vacancy and Construction Index  
(Index 1999 Q1 = 100)**



Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.

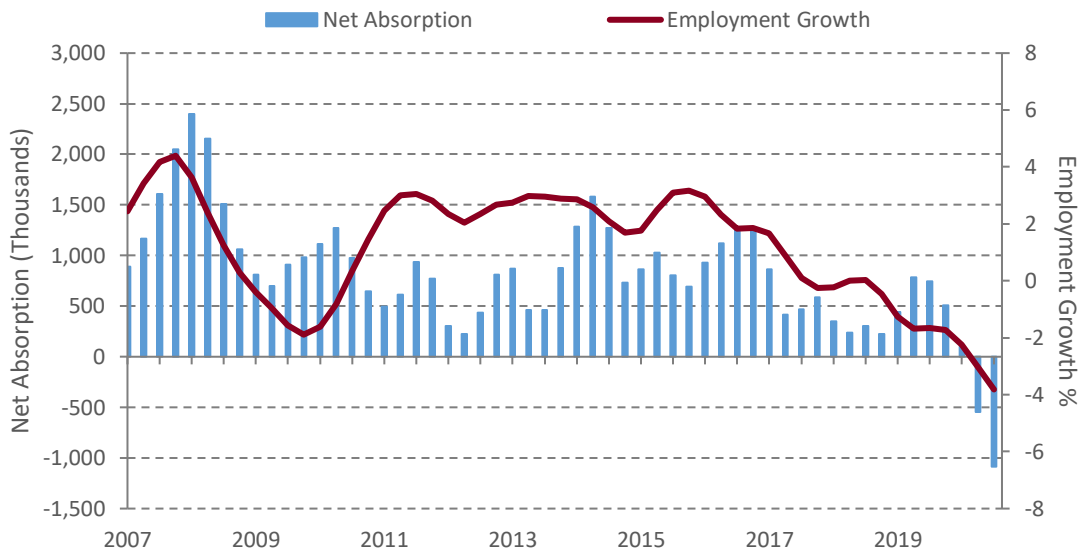
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 63. Houston Retail Vacancy and Asking Rent Growth**



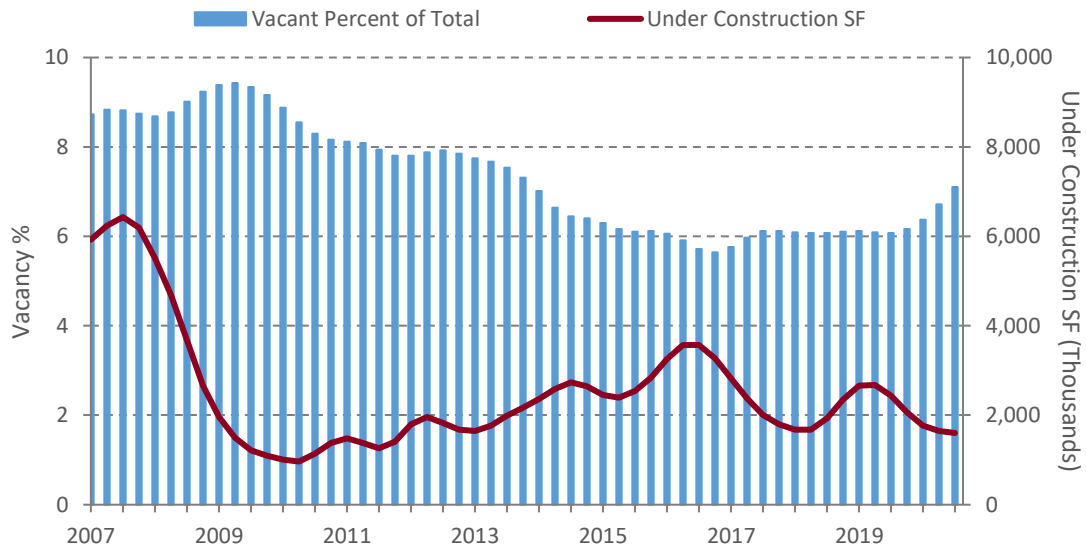
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 64. Houston Retail Net Absorption and Employment Growth**



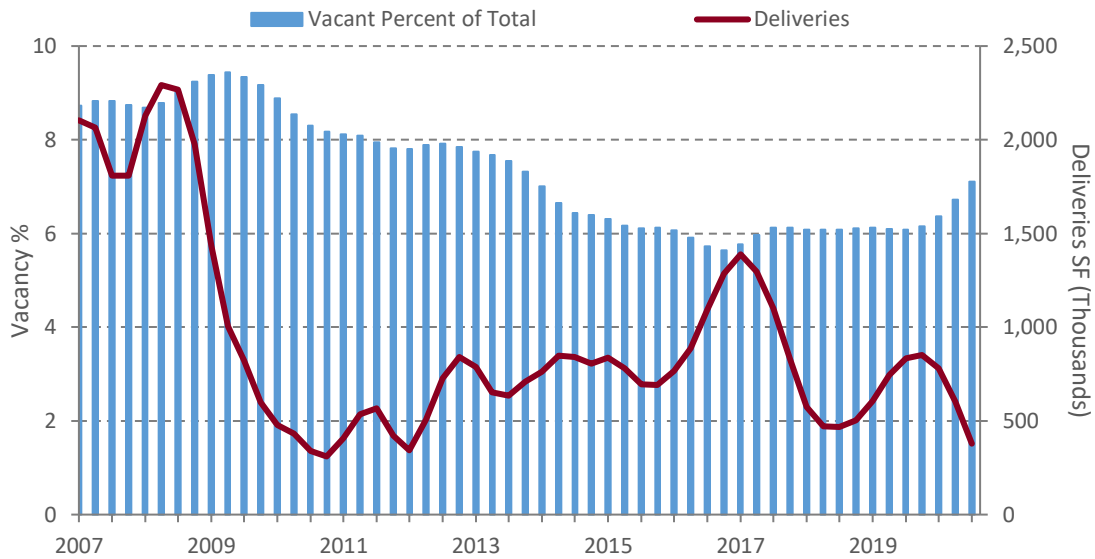
Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 65. Houston Retail Vacancy and Under Construction**



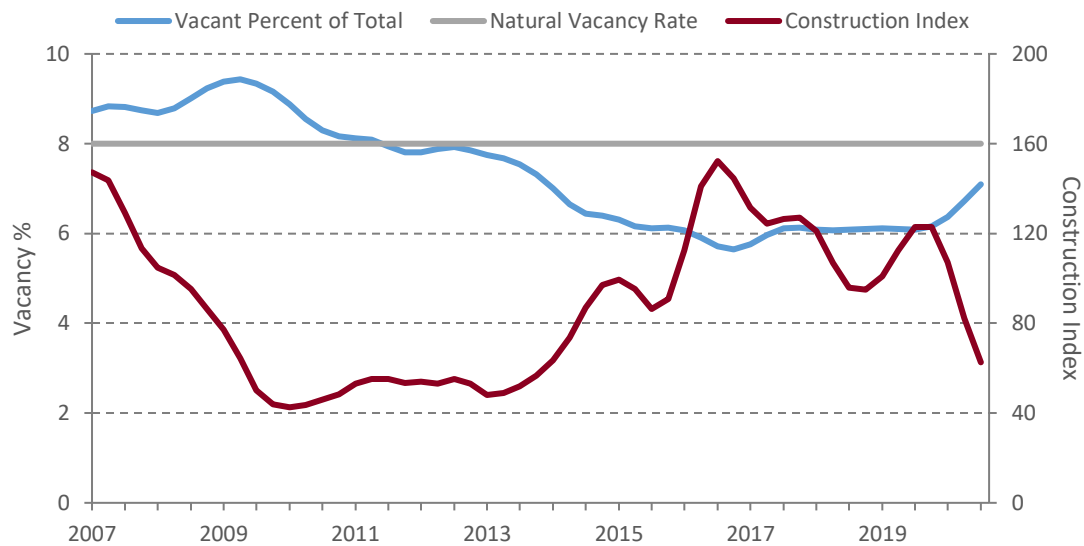
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 66. Houston Retail Vacancy and Deliveries**



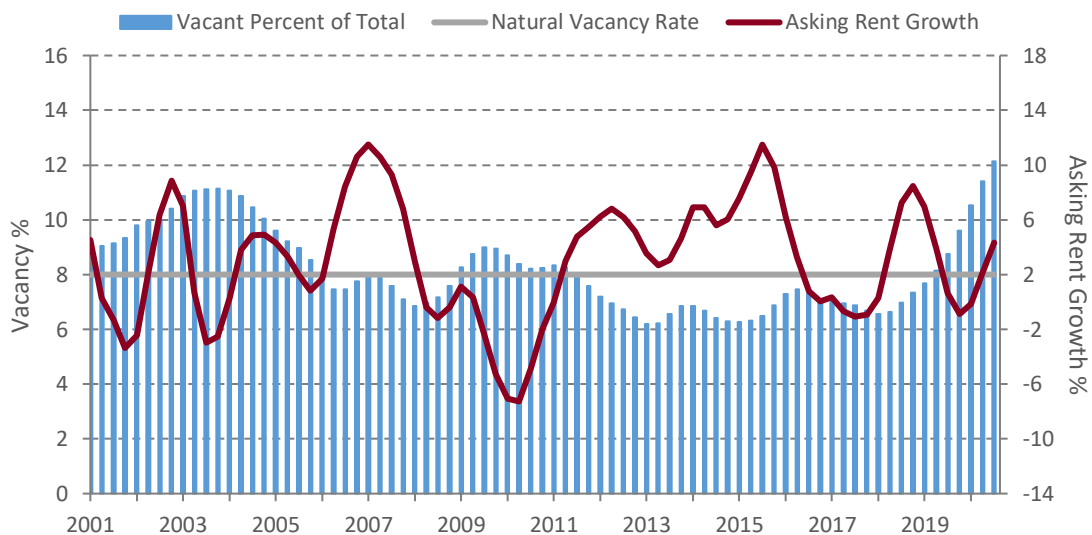
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



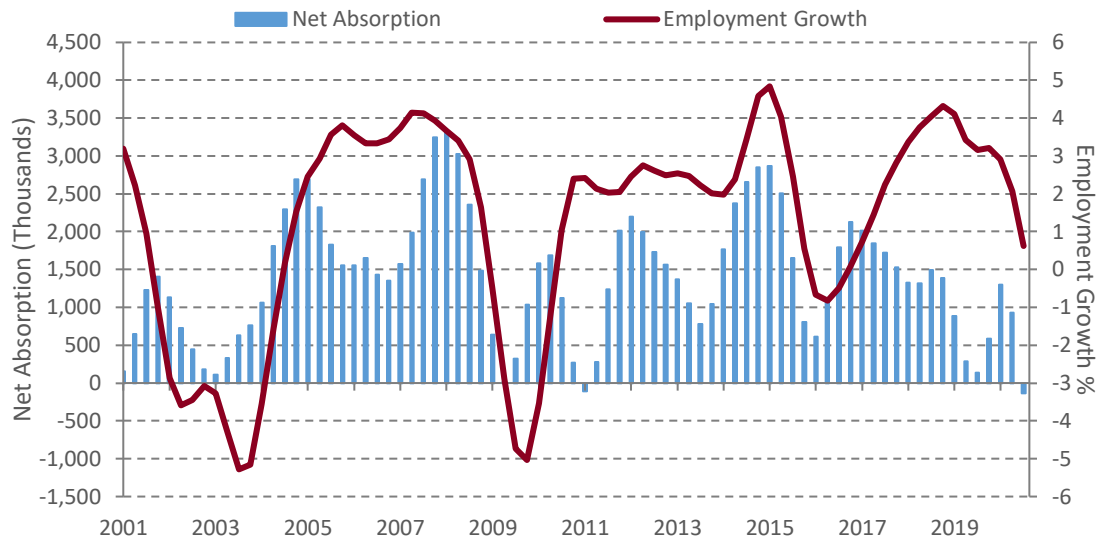
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 68. Houston Warehouse Vacancy and Asking Rent Growth**



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

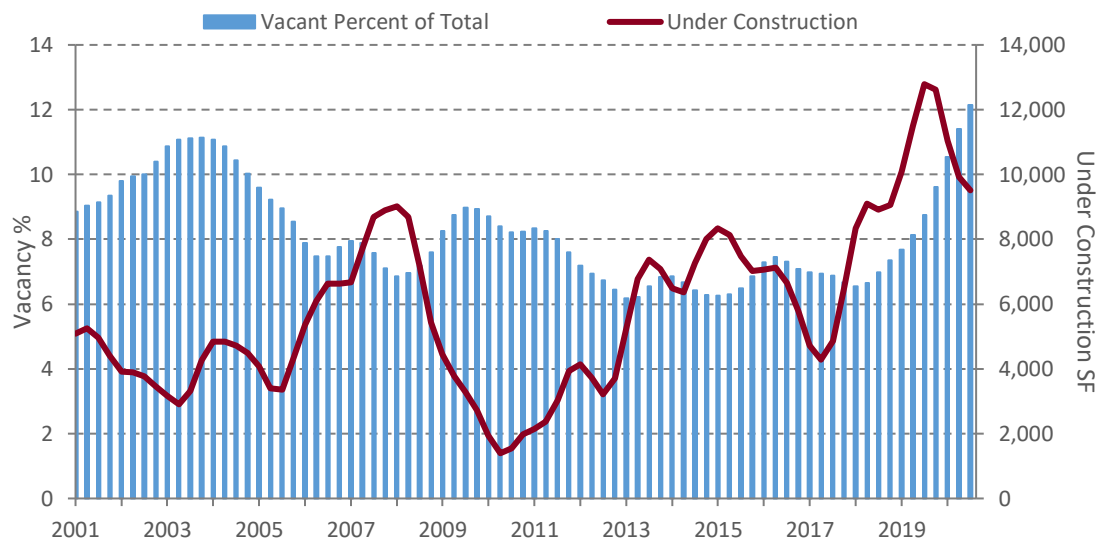
**Figure 69. Houston Warehouse Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

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

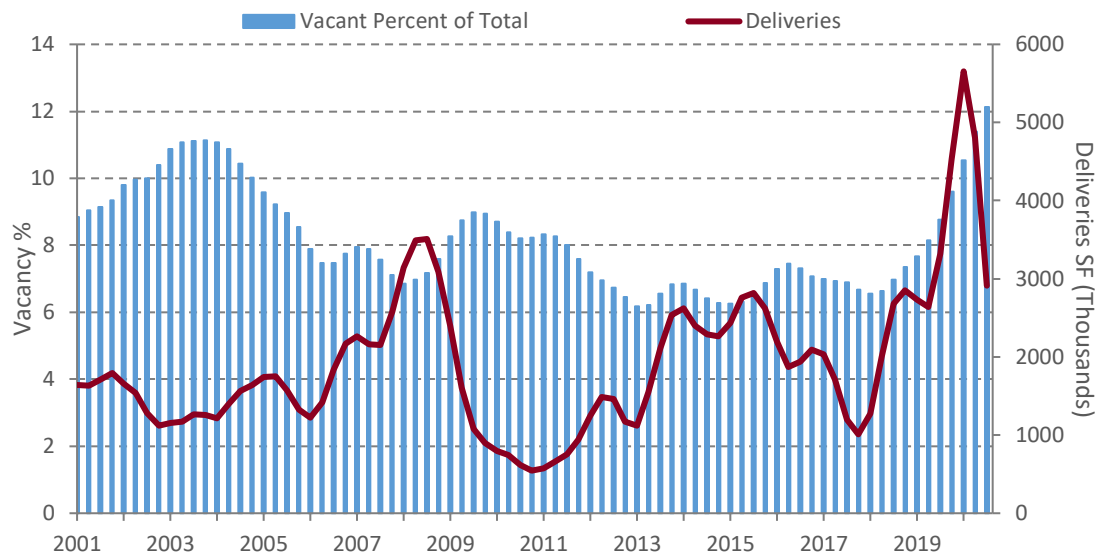
**Figure 70. Houston Warehouse Vacancy and Under Construction**



Note: Seasonally adjusted and trend-cycle component.

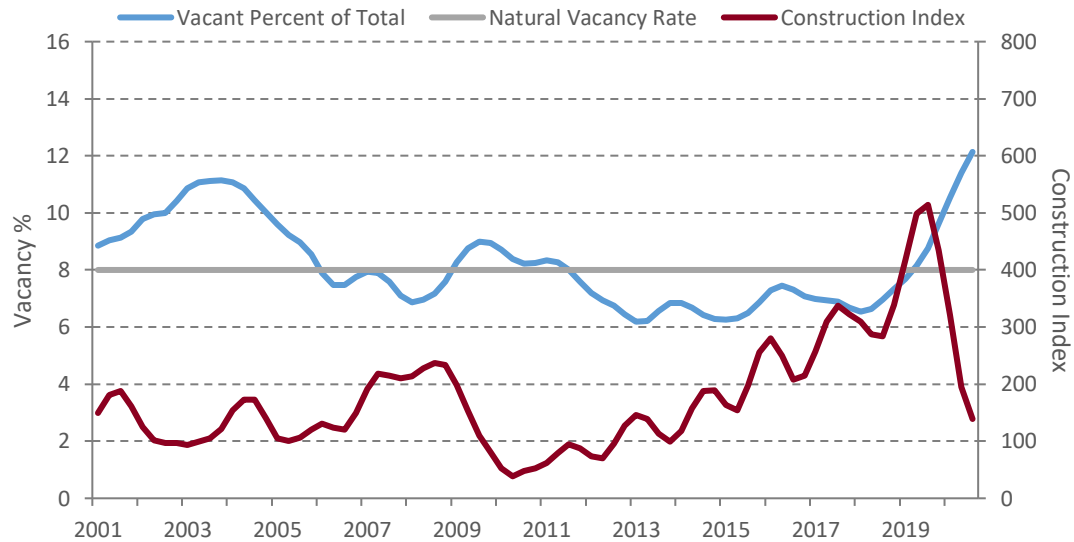
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 71. Houston Warehouse Vacancy and Deliveries**



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

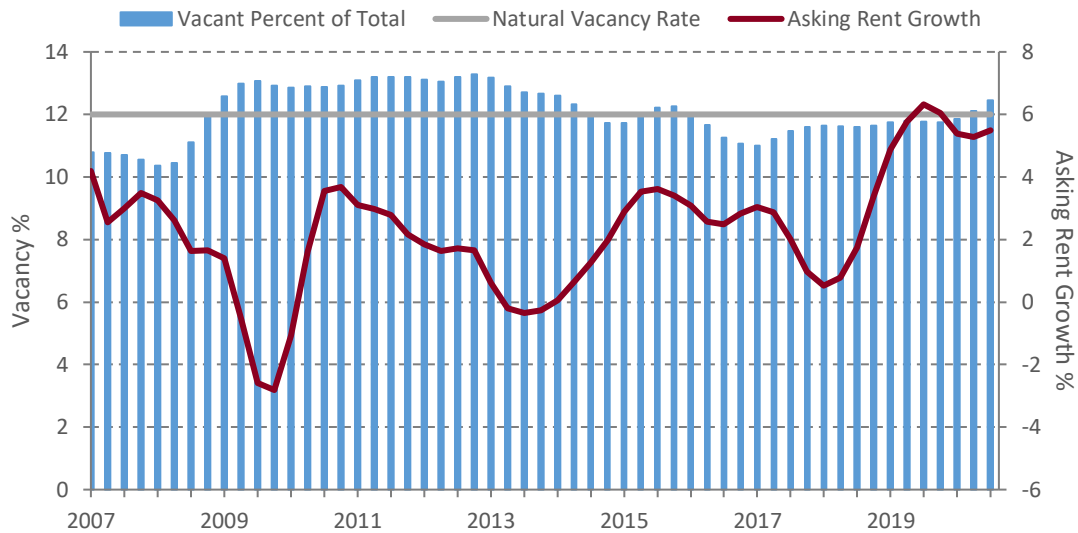
**Figure 72. Houston Warehouse Vacancy and Construction Index  
(Index 1999 Q1 = 100)**



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

## San Antonio

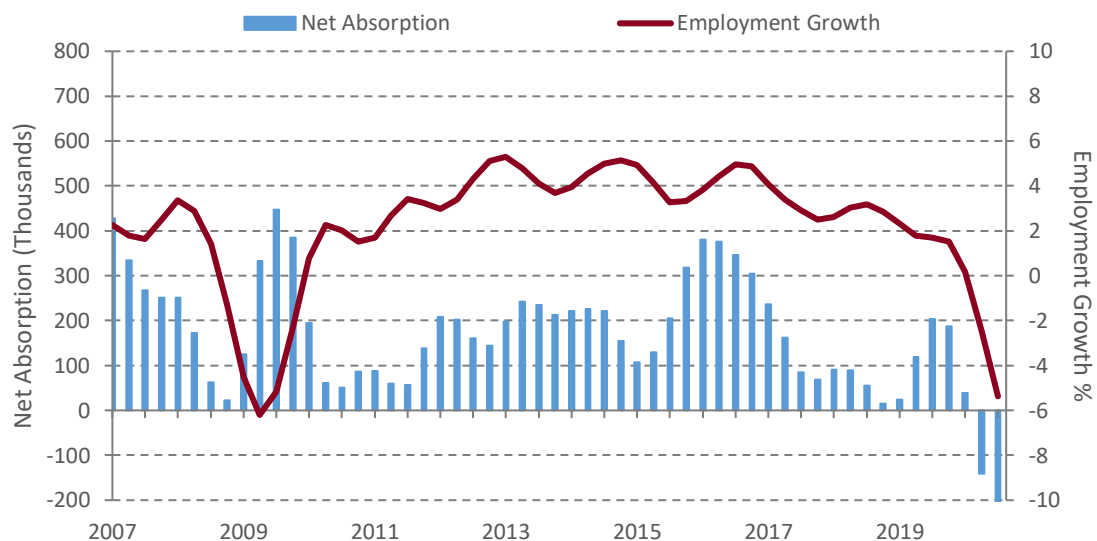
**Figure 73. San Antonio Office Overall Vacancy and Asking Rent Growth**



Note: Seasonally adjusted and trend-cycle component.

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

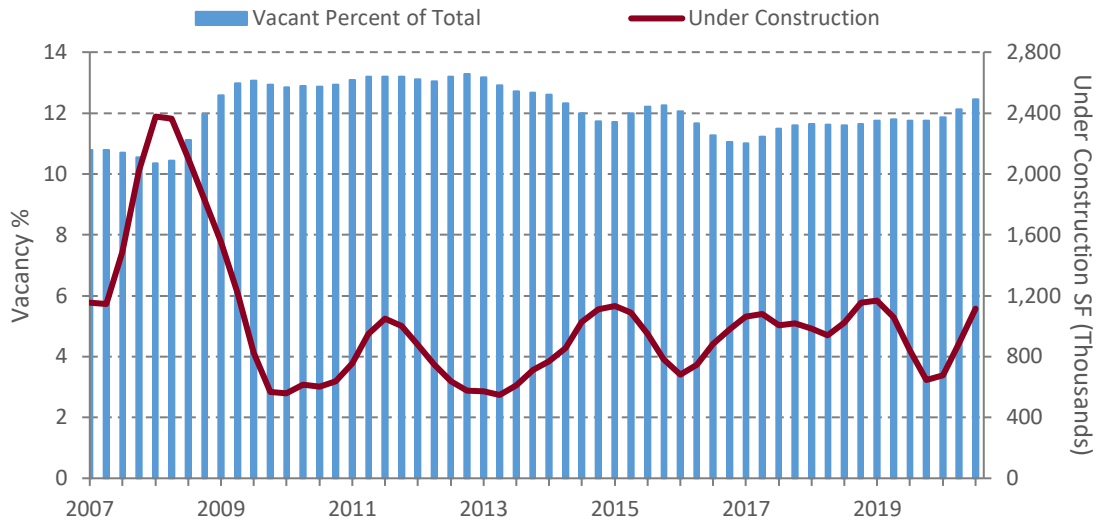
**Figure 74. San Antonio Office Overall Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

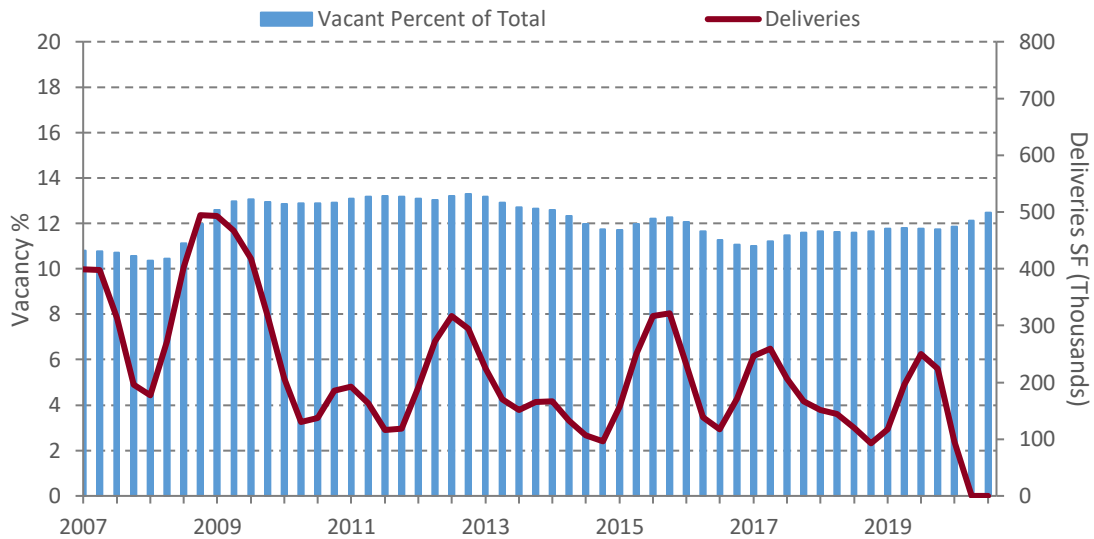
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 75. San Antonio Office Overall Vacancy and Under Construction**



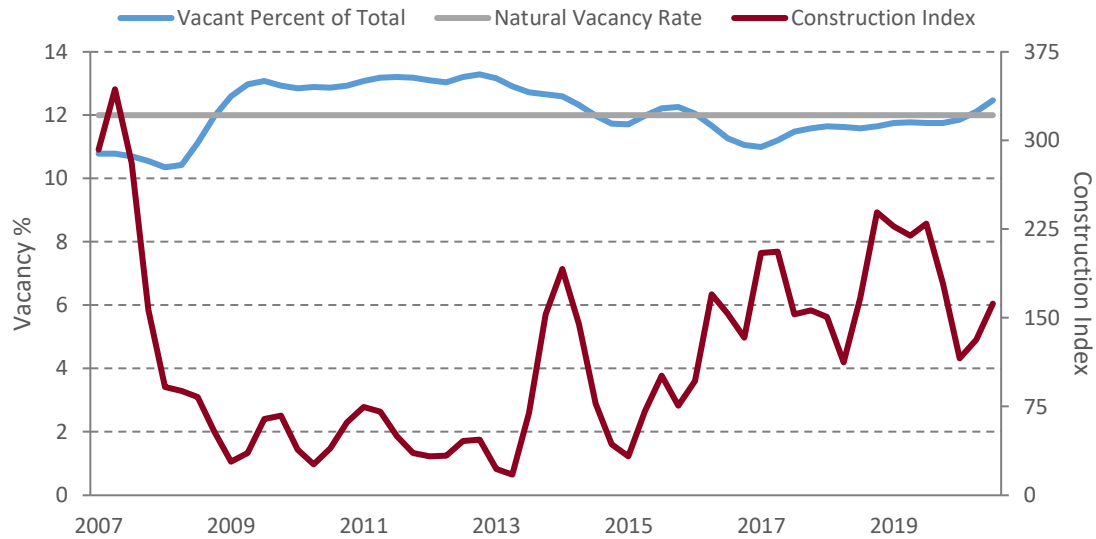
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 76. San Antonio Office Overall Vacancy and Deliveries**



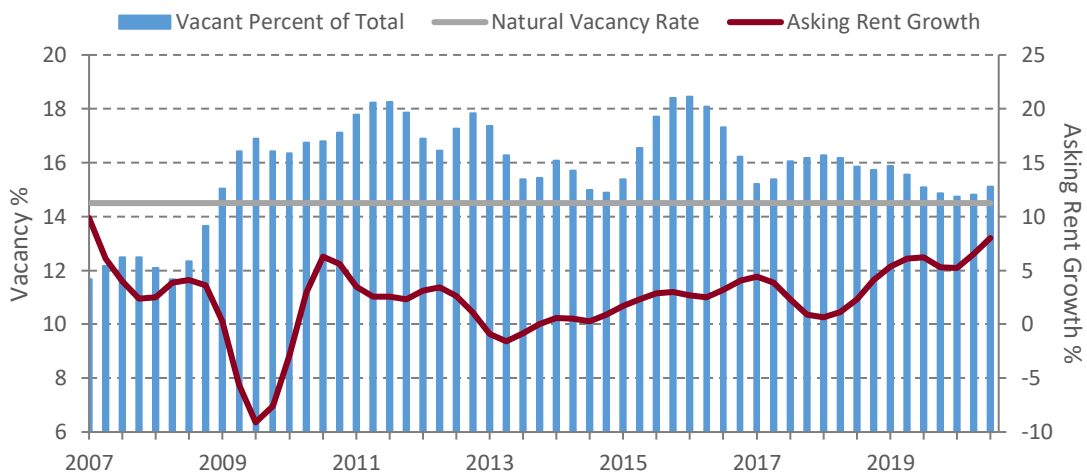
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



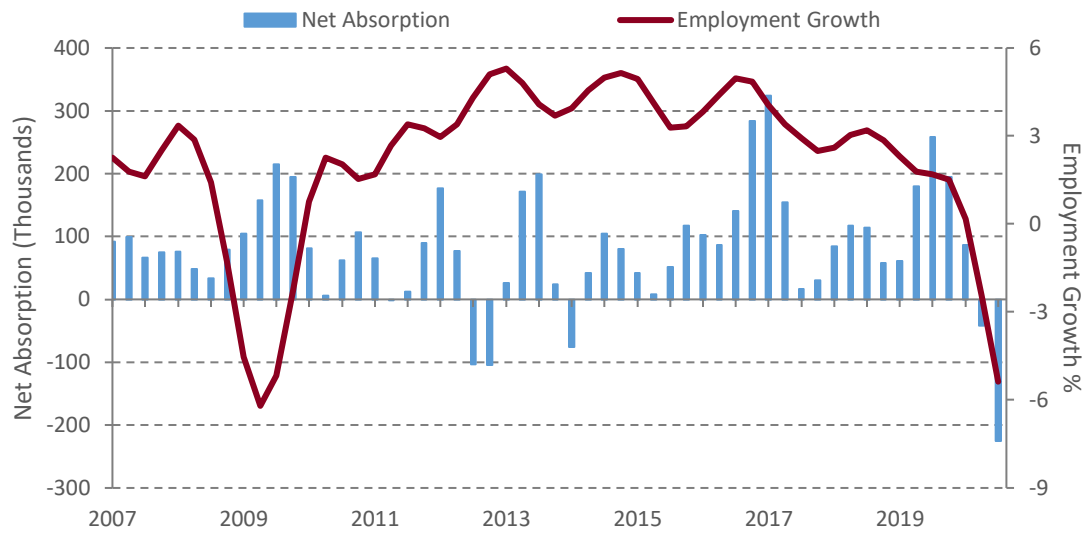
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 78. San Antonio Office Class A Vacancy and Asking Rent Growth**



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

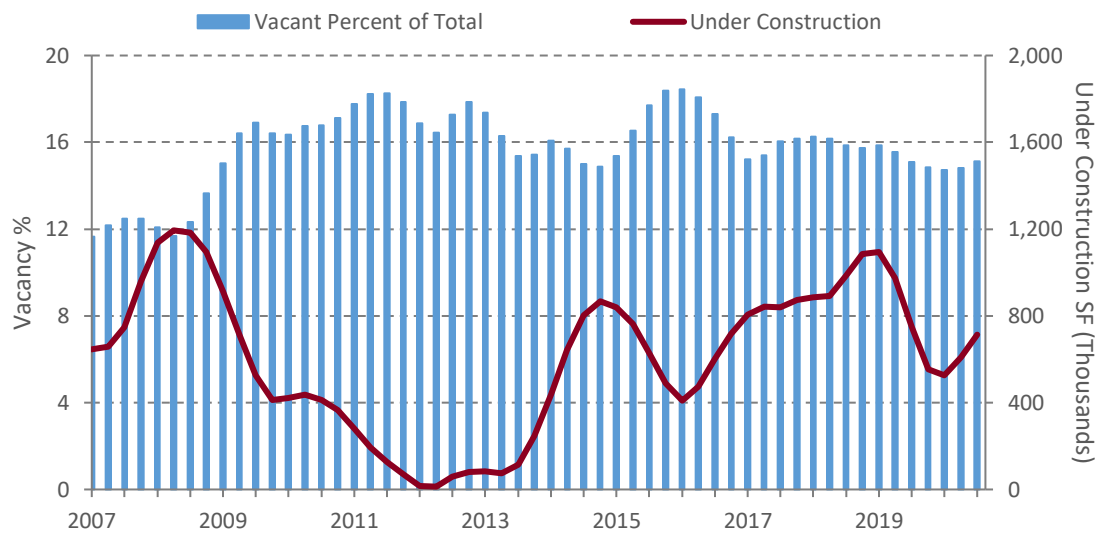
**Figure 79. San Antonio Office Class A Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

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

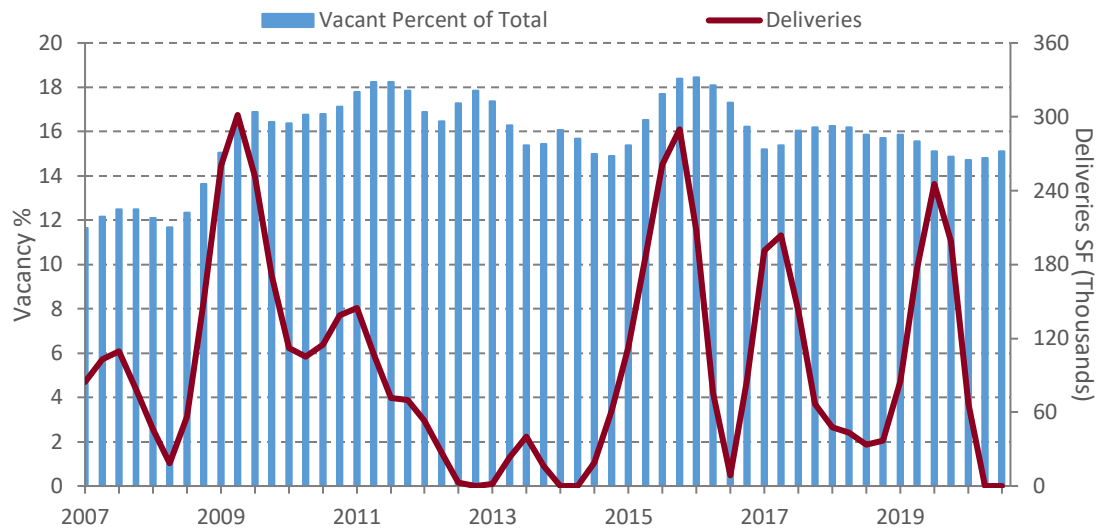
**Figure 80. San Antonio Office Class A Vacancy and Under Construction**



Note: Seasonally adjusted and trend-cycle component.

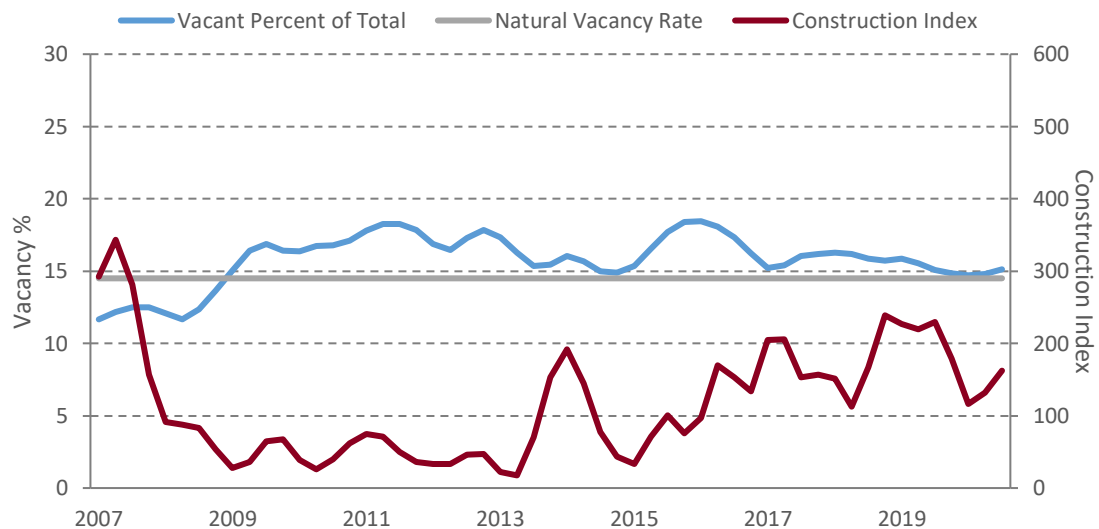
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 81. San Antonio Office Class A Vacancy and Deliveries**



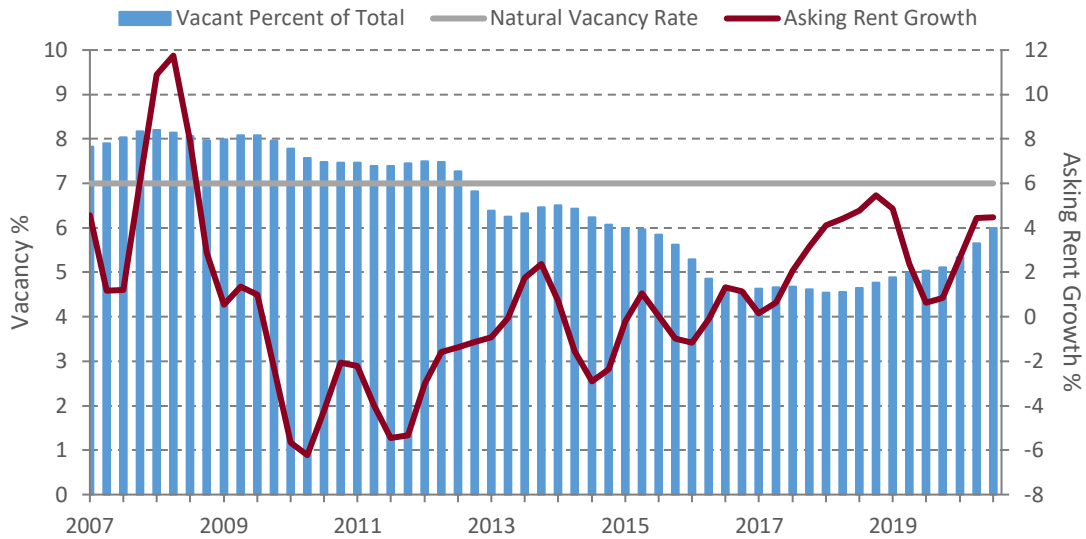
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



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

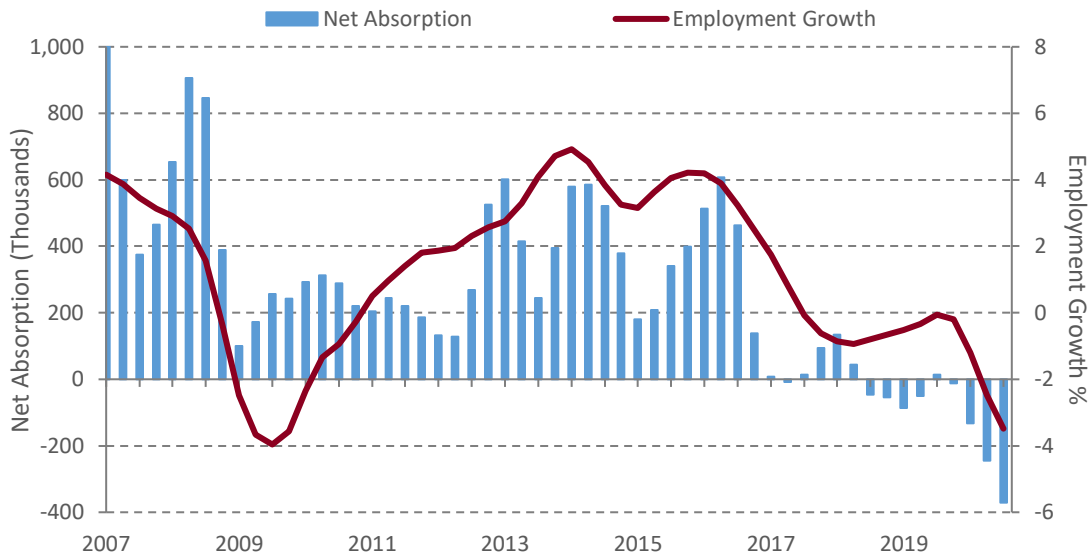
**Figure 83. San Antonio Retail Vacancy and Asking Rent Growth (SA and TC)\***



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

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

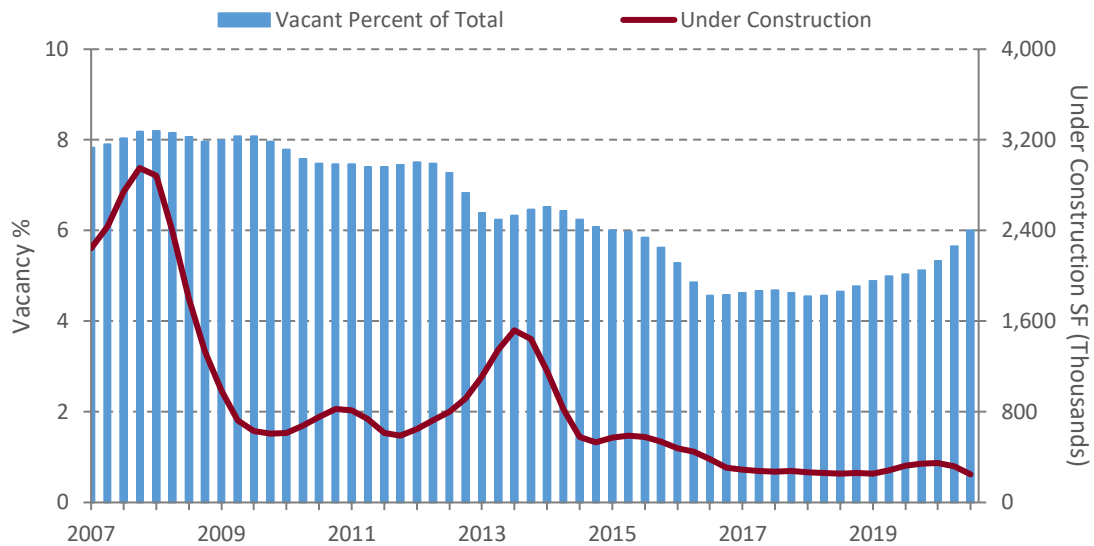
**Figure 84. San Antonio Retail Net Absorption and Employment Growth**



Note: Seasonally adjusted and trend-cycle component.

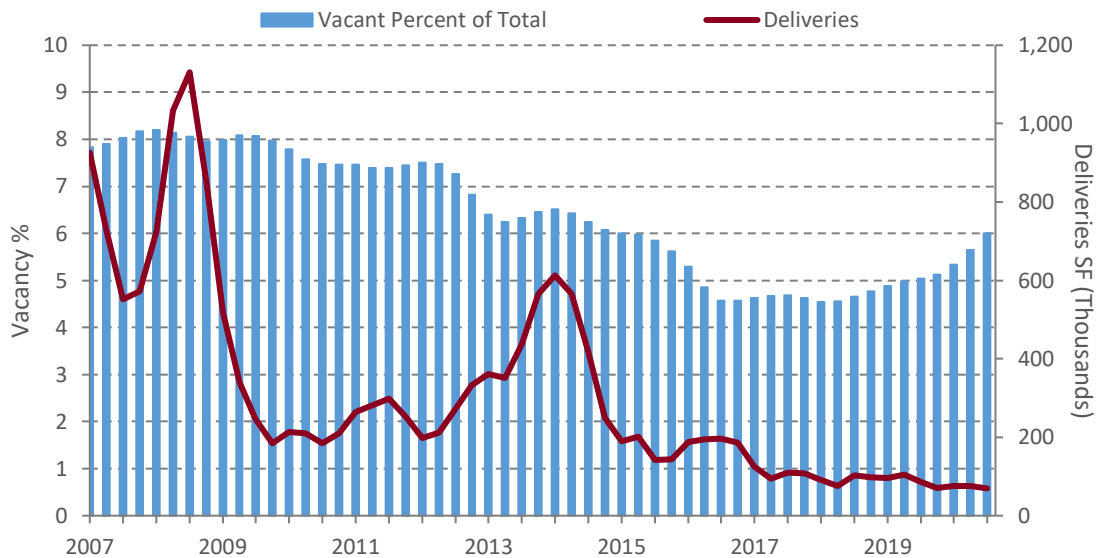
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

**Figure 85. San Antonio Retail Vacancy and Under Construction**



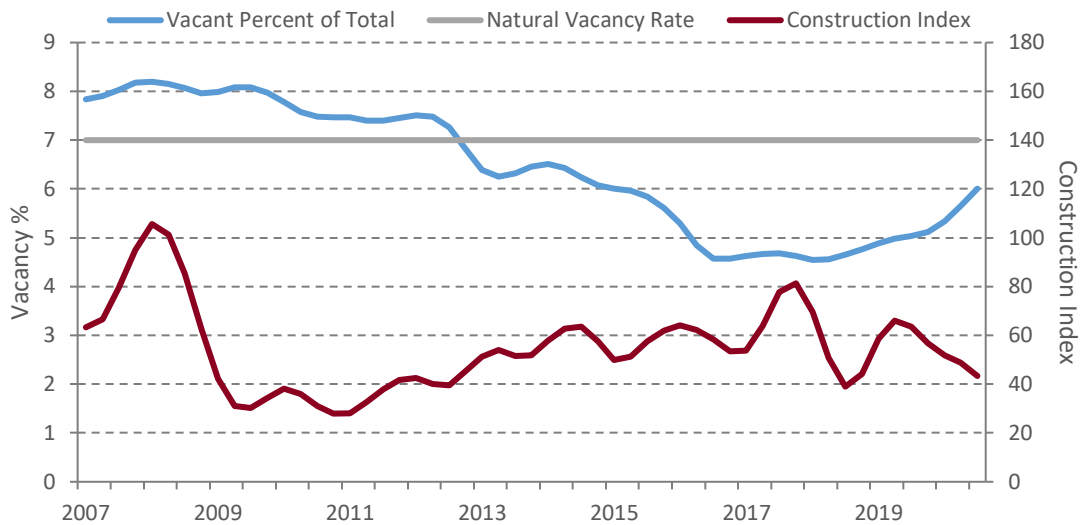
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 86. San Antonio Retail Vacancy and Deliveries**



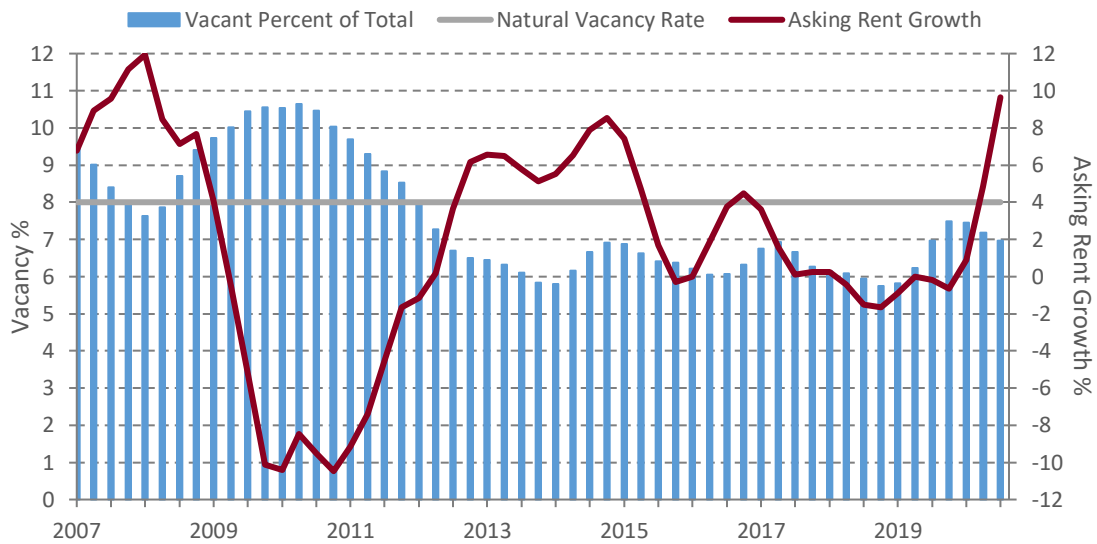
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

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



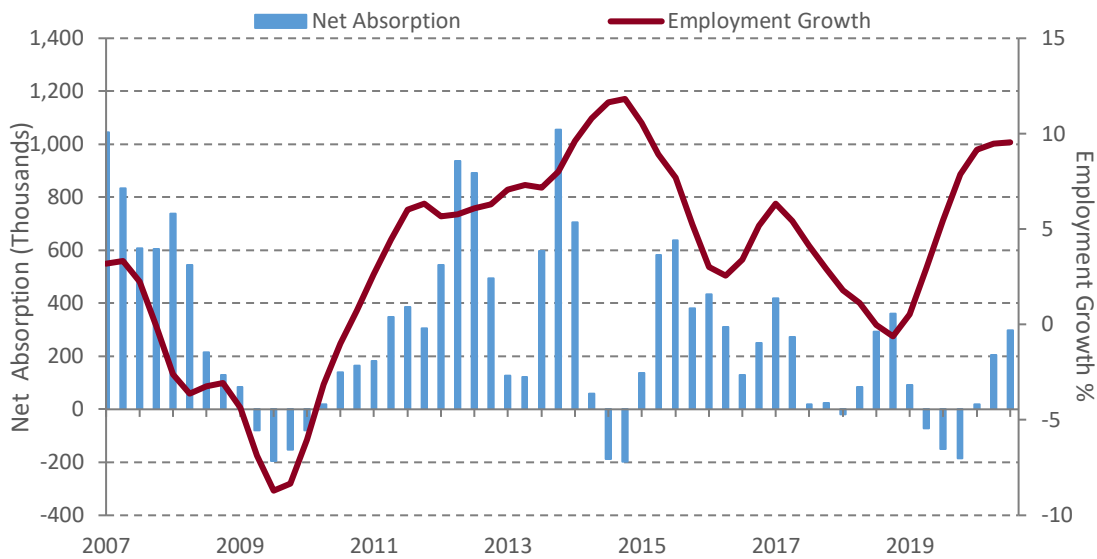
Note: Inflation adjusted, seasonally adjusted, and trend-cycle component.  
Sources: CoStar, Dodge Analytics, and Real Estate Center at Texas A&M University

**Figure 88. San Antonio Warehouse Vacancy and Asking Rent Growth**



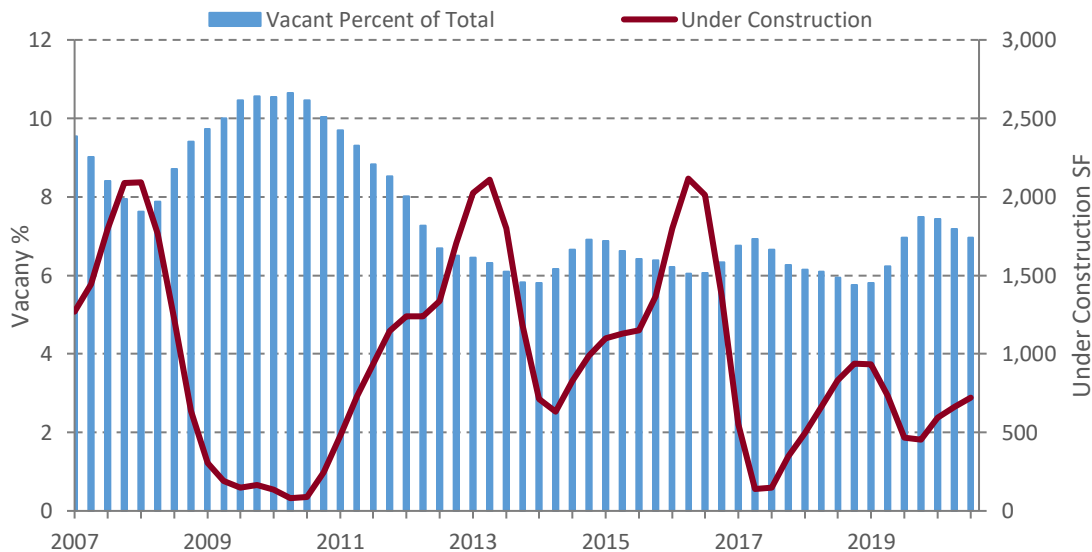
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

Figure 89. San Antonio Warehouse Net Absorption and Employment Growth



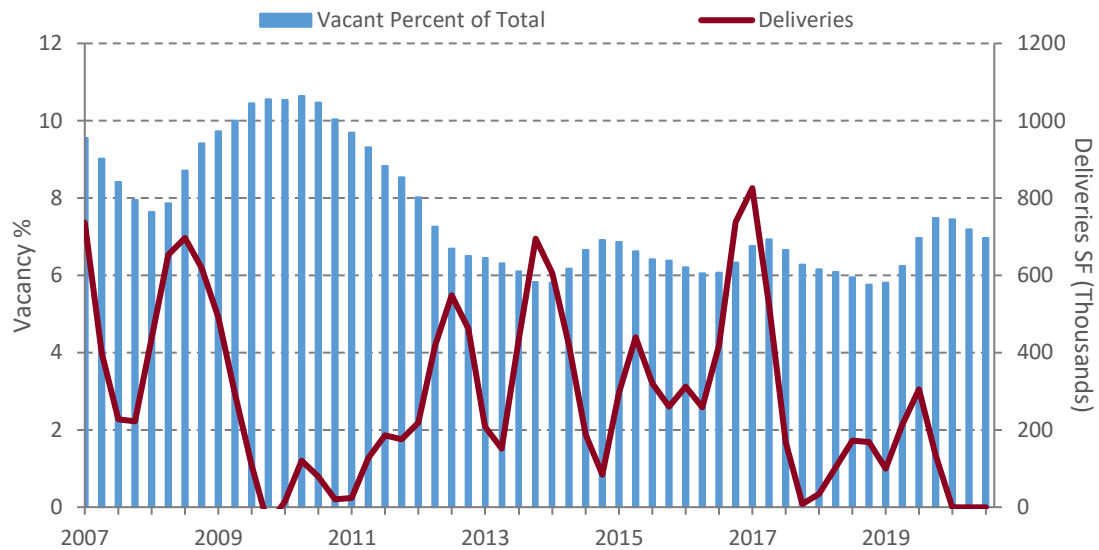
Note: Seasonally adjusted and trend-cycle component.  
Sources: Bureau of Labor Statistics, CoStar, and Real Estate Center at Texas A&M University

Figure 90. San Antonio Warehouse Vacancy and Under Construction



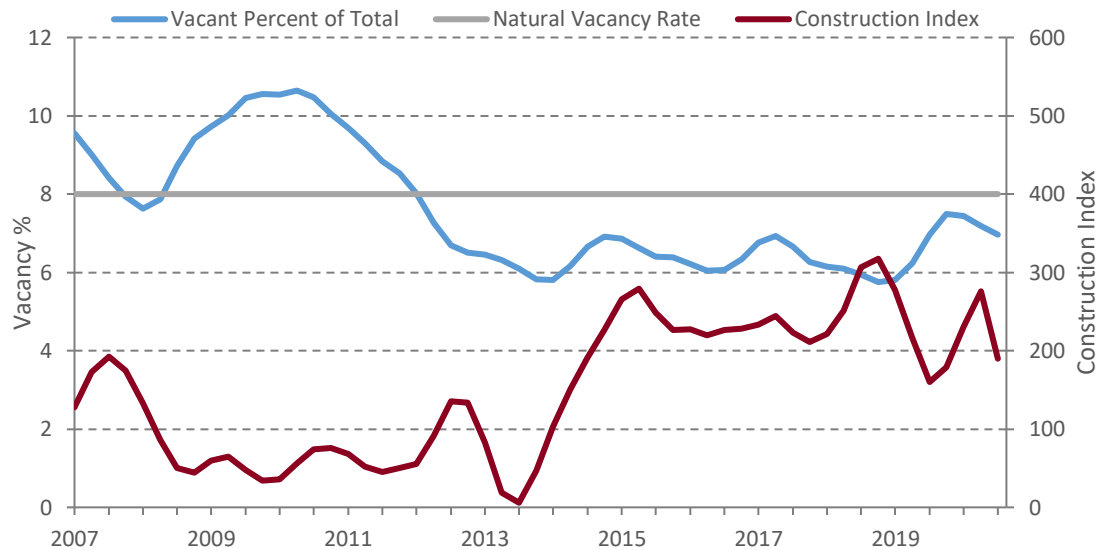
Note: Seasonally adjusted and trend-cycle component.  
Sources: CoStar and Real Estate Center at Texas A&M University

**Figure 91. San Antonio Warehouse Vacancy and Deliveries**



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

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



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



**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

# Real Estate Center

MAYS BUSINESS SCHOOL

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

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

## DIRECTOR

GARY W. MALER

## ADVISORY COMMITTEE

TROY ALLEY, JR. CHAIRMAN DeSoto	ALVIN COLLINS, VICE CHAIRMAN Andrews
RUSSELL CAIN Port Lavaca	TED NELSON Houston
JJ CLEMENCE Sugar Land	DOUG ROBERTS Austin
DOUG JENNINGS Fort Worth	C. CLARK WELDER Fredericksburg
BESA MARTIN Boerne	JAN FITE-MILLER, EX-OFFICIO Dallas



**LinkedIn**  
[linkedin.com/company/recentertx](https://www.linkedin.com/company/recentertx)



**Instagram**  
[@recentertx](https://www.instagram.com/recentertx)



**YouTube**  
[YouTube.com/realestatecenter](https://www.youtube.com/realestatecenter)



**Facebook**  
[@recentertx](https://www.facebook.com/recentertx)



**Twitter**  
[@recentertx](https://www.twitter.com/recentertx)