Harris Central Appraisal District

2023

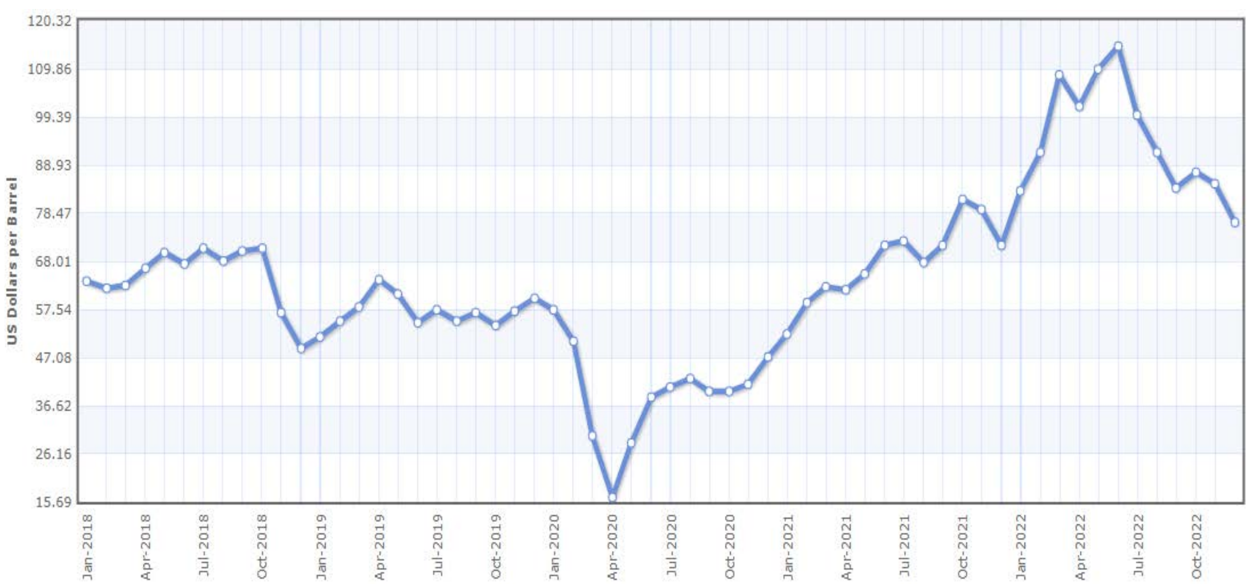
Market Trends

Table of Contents

2022 Residential Real Estate Market Overview

As we close out 2022 there a is a lot of uncertainty and red flags in the market: inflation that is in the high single digits, interest rate hikes that have more than doubled mortgage costs, market turbulaence, and fears of a recession. Despite all of these "headwinds" the Houston's residential single family market is doing well. The stability in Houston's housing market can be best evidenced by several key metrics that are indicative of a healthy market: Oil prices, home inventory levels, and sales price, and low unemployment. All of this being said, we are in a period of some significant uncertainty as inflation, borrowing rates, and recession are daily focal points for the markets.

OIL PRICES – The spot price for West Texas Intermediate oil (WTI) after starting the year in the low $80 before spiking to >$110 in the summer spent the last 4+ months of the year hovering in the $75-$85 range.



Rig Count/Production:

Area	Last Count	Count	Change from Prior Count	Date of Prior Count	Change from Last Year	Date of Last Year's Count
U.S.	17 Feb 2023	760	-1	10 Feb 2023	+115	18 Feb 2022
Canada	17 Feb 2023	248	-2	10 Feb 2023	+28	18 Feb 2022
International	Jan 2023	901	+1	Dec 2022	+60	Jan 2022

JOB GROWTH **–** Metro Houston created an estimated 144,000 jobs thru October of 2022.

Houston Forecasted to Add Approximately 60,000 Jobs, But Recession Uncertainty Could Swing the Gain

On December 8th the greater Houston published an article stating:

> "Even in the worst-case scenario, Houston's core industries are well-buffered to handle the downturn and will not see wholesale job losses, according to the forecast. Regardless of the scenario, growth will be strongest in the region's construction, energy, government, health care, professional services, and restaurant sectors."

UNEMPLOYMENT **–** https://www.twc.texas.gov/news

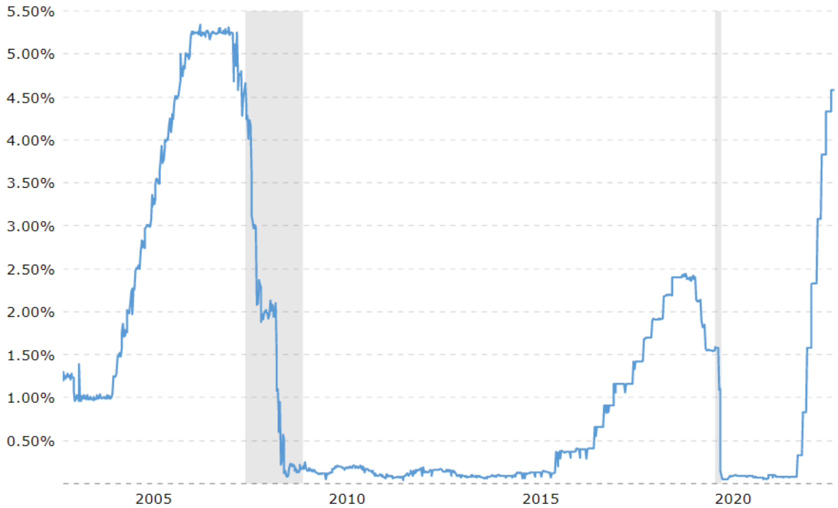
Dec 2019 – 3.9%
Dec 2020 – 8.0%
Dec 2021 – 4.2% (revised since last report)
Dec 2022 – 3.6%

The Texas Workforce Commission reports:

> "December marked the 14th consecutive record employment high in Texas, after the state first surpassed the pre-COVID level in November 2021."

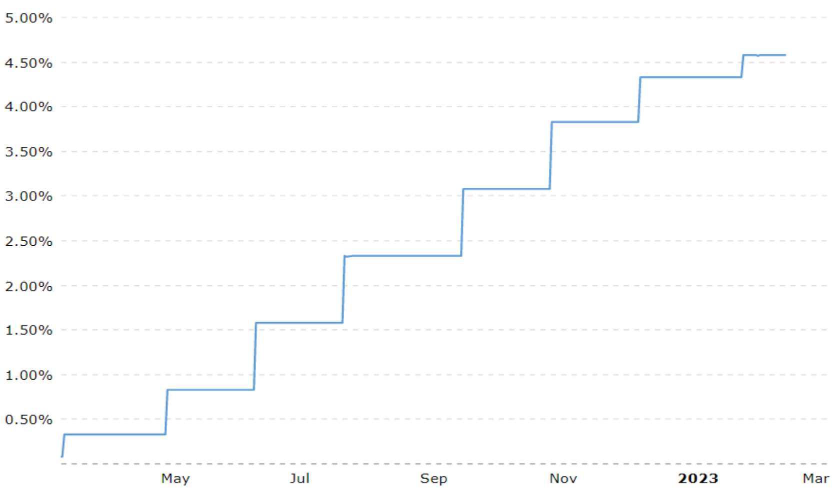
INTEREST RATES **–** The Federal Funds rate, which is established by the Federal Open Market Committee (FOMC), is the rate banks charge each other to borrow and lend their excess resrves over night. This rate indirectly affects the prime lending rate and many other lending rates including mortgage rates. Since the great recession which started '06-'07 this rate has been less than 0.5% for 11 of 15 years as depicted in the first chart below.

Federal Funds Rate (2002-2022)



Over the last year the FOMC has raised this rate every time it met which is roughly every six weeks (depicted below). This is being done in an attempt to reduce or slow inflation which is the highest its been in almost 50 years. As of 2/24/23 the Fed Funds rate is 4.58%.

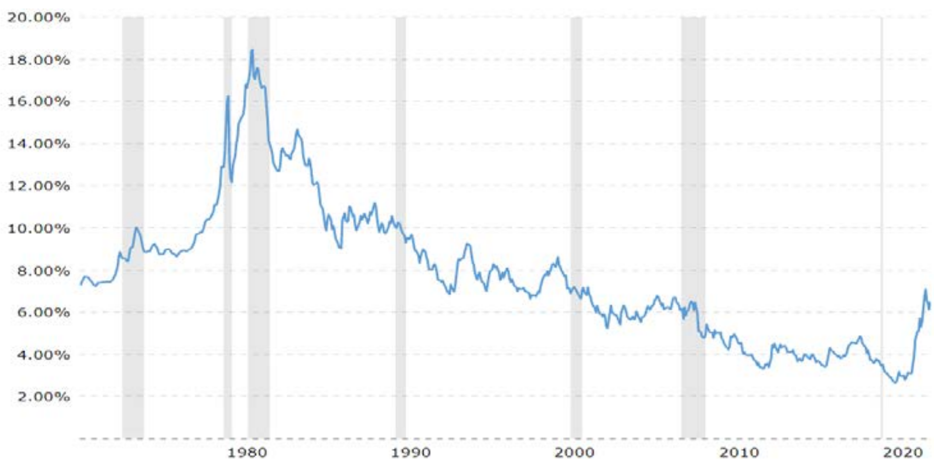
Federal Funds Rate (2/22 thru 2/23)



https://www.macrotrends.net/2015/fed-funds-rate-historical-chart

MORTGAGE RATES – depicted in the chart below have fallen consistently over the last 40 years. This is now changing. As the Fed Funds rate increases mortgage rates also increase which is intended to slow the market and in-turn curb inflation. What remains to be seen is what affect this will have on the housing market. Thoeretically, the increase should reduce demand for mortgages as the cost of money increases and slow or reduce prices levels. It can definitely be argued that historically low interest rates is one of the major contributing factors in the rapid escalation in the values of homes over the last 5-10 years. The major problem with this theory is that if the supply of new homes and developments is dimished due to the elevated cost of construction, then there will likely be no change in prices as the supply side is falling in a similar fashion to demand. As of 2/24/23 the 30 year mortgage rate is 6.5%.

Avg. 30 year Mortgage Rate (1971-2022)



https://www.macrotrends.net/2604/30-year-fixed-mortgage-rate-chart

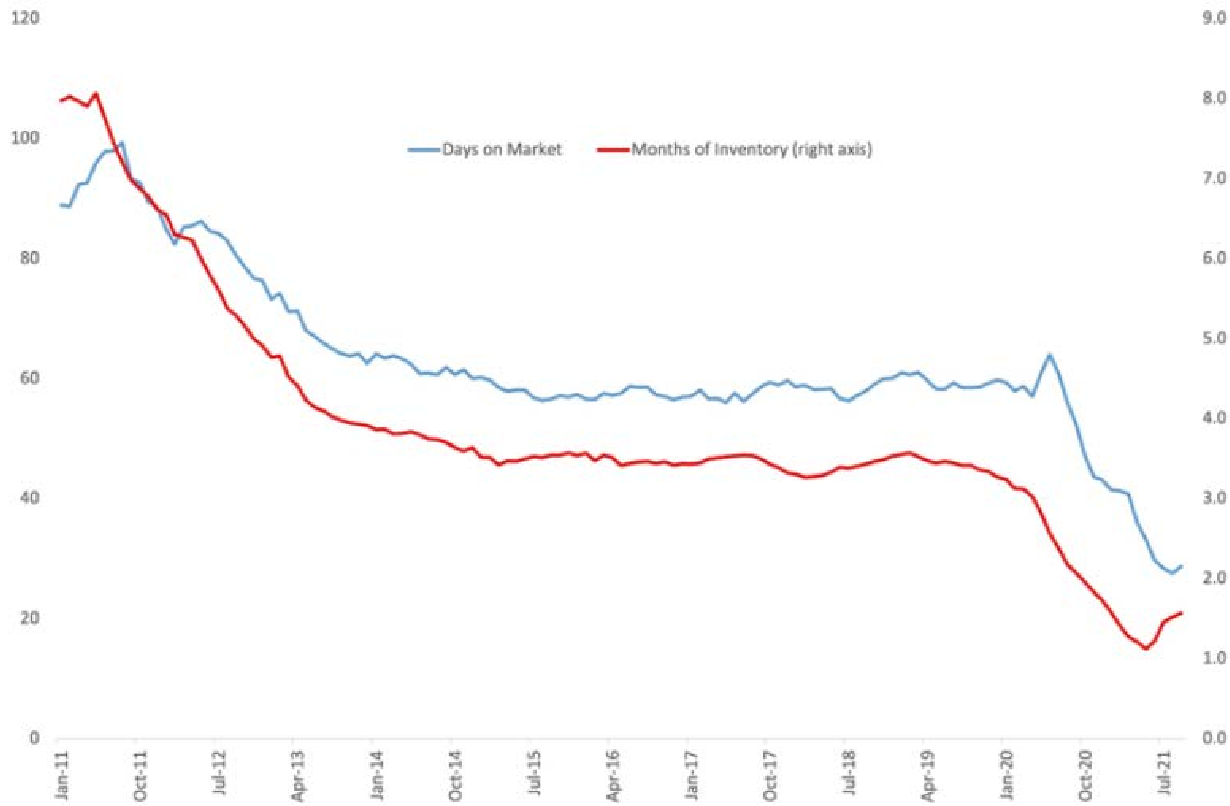
HOME INVENTORY – According to the Houston Association of Realtors (HAR), the inventory of available homes increased to 33,606 (2.7 months) as of January 2023. The 2.7 months inventory has doubled since January of '22 when it stood at 1.3 months. Typically, 4-6 months of inventory is considered equilibrium. Accordingly, inventory levels below 4 months indicate a seller's market which is generally accompanied by an increase in sales prices and in-turn appraisal values.

Until the supply of homes moves closer to equilibrium we are likely to continue experiencing a seller's market and the corresponding increases in sales prices. The number of days it took a home to sell (a.k.a. Days on Market) increased sharply from 39 to 59 days.

Houston's housing market has been a sellers' market since 2012-2013 which is depicted in the chart below:

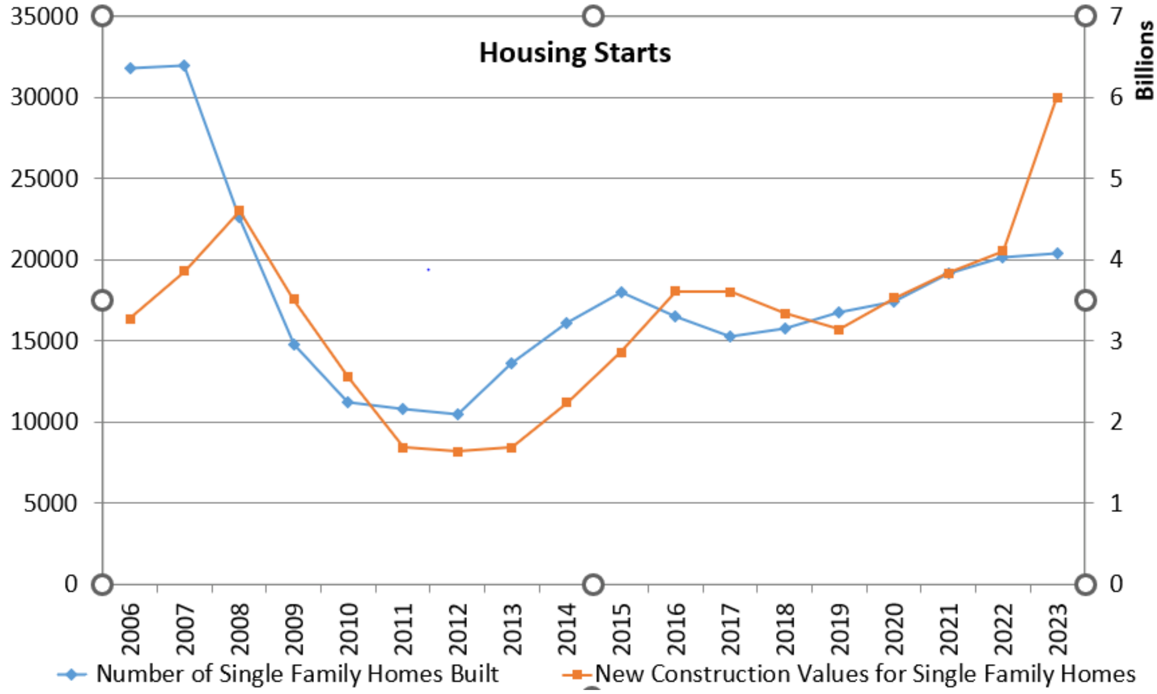
[Newsroom - HAR.com]

Home Inventory in Texas



[Is the Pandemic Housing Frenzy Over? - Texas Real Estate Research Center (tamu.edu)]

***NEW STARTS* –** The number of new starts for 2023 will surpass 20,000 homes which will be the second most in the last fourteen years. The new construction value associated with the new starts will approach $7 billion in value which will be the most since 2007.



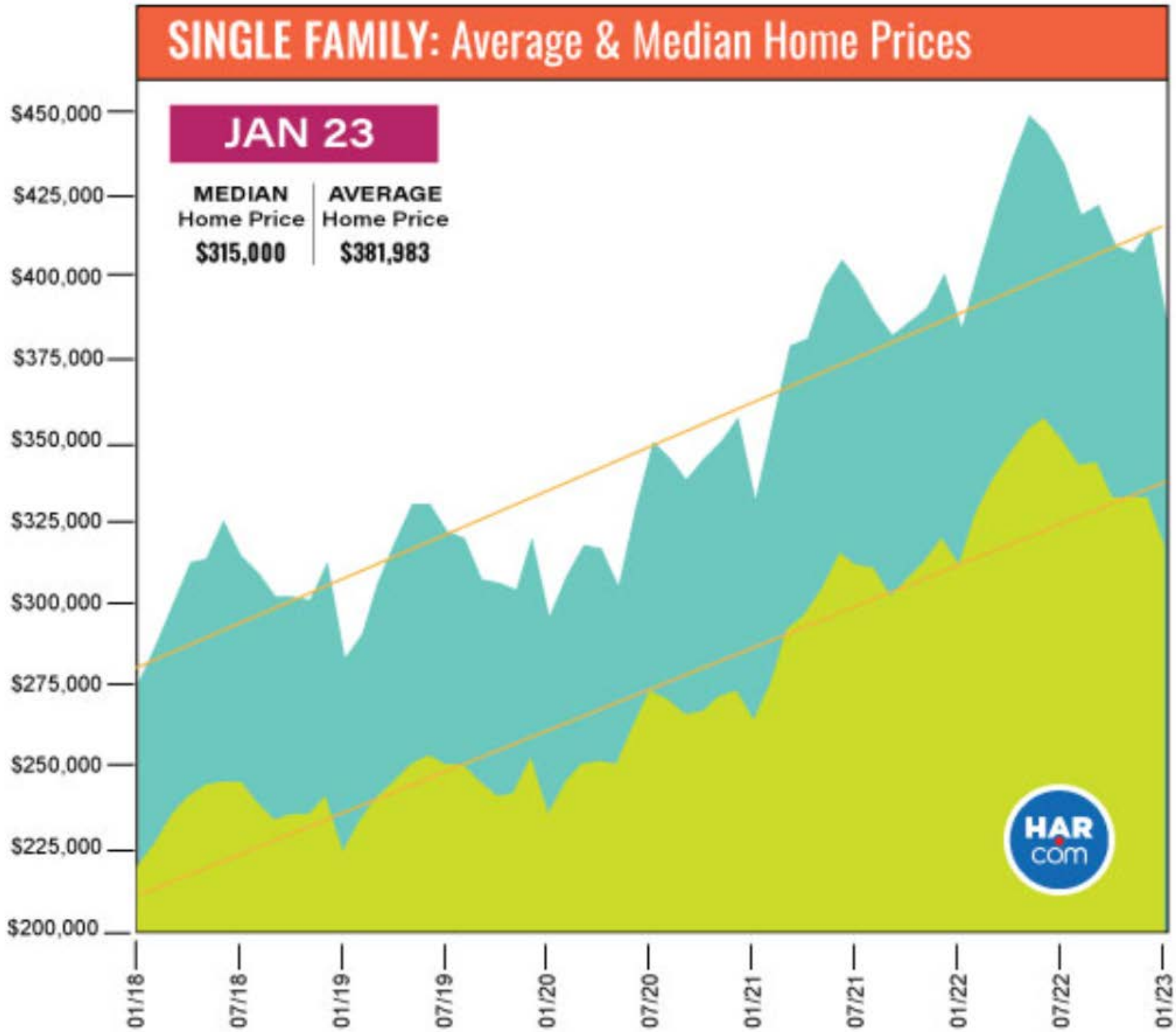
***SALES VOLUME* –** According to HAR, sales volume for single family residential properties for the full year 2022 totaled 95,113 units which is a 10.9 percent decrease versus the 106,756 units sold in 2021. This reduction in sales volume continued in January as sales fell 29.9% versus the previous year.

CATEGORIES	FULL-YEAR 2021	FULL-YEAR 2022	CHANGE
SINGLE-FAMILY HOME SALES	106,756	95,113	-10.9%
TOTAL PROPERTY SALES	131,678	117,572	-10.7%
TOTAL DOLLAR VOLUME	$46,544,097,535	$45,631,779,205	-2.0%
SINGLE-FAMILY AVERAGE SALES PRICE	$376,075	$413,657	10.0%
SINGLE-FAMILY MEDIAN SALES PRICE	$300,000	$338,295	12.8%

Courtesy HAR February 8, 2023

***SALES PRICES* –** In a full year's comparison, the median price for a home increased to its highest level ever rising 12.8 percent from $300,000 to $338,295. In a full year's comparison, the average price increased 10.0% from $ $376,075 to $413,657.

The chart below shows a five-year trend line for both the average home sale price and the median home sale price of single-family homes. Over the last five years the average price of homes increased from $275,000 in January of 2018 to $382,000 in January of 2023. This represents an almost 39 percent increase over the 5-year period. Over the last five years the median price of a home increased from $220,000 in January 2018 to $315,000 in January of 2023. This represents a 43 percent increase over the 5-year period.



Courtesy HAR January 13, 2016

2023 Outlook and Insights

Given the amount of volatility and uncertainty in the market it is difficult to say what will happen with the housing market in 2023. Below is a list of factors that will be important indicators as to how the housing market will fair in 2023.

- Oil price – will oil prices continue to provide stability by staying range bound in a sweet spot of $80-$90 per barrel.
- Interest rates – will the FOMC continue to raise interest rate and what affect will it have on inflaltion.

- Job Growth – as job growth continues to surge in Texas and nationally taking unemployment to a 50+ year low will this prompt more Fed interest rate hikes?
- Will sales volumes continue to fall (10 consecutvite months of year over year monthly sales volume reduction) and inventories build from the historic lows?
- Will residential land development and new starts fall?
- Is a recession coming?

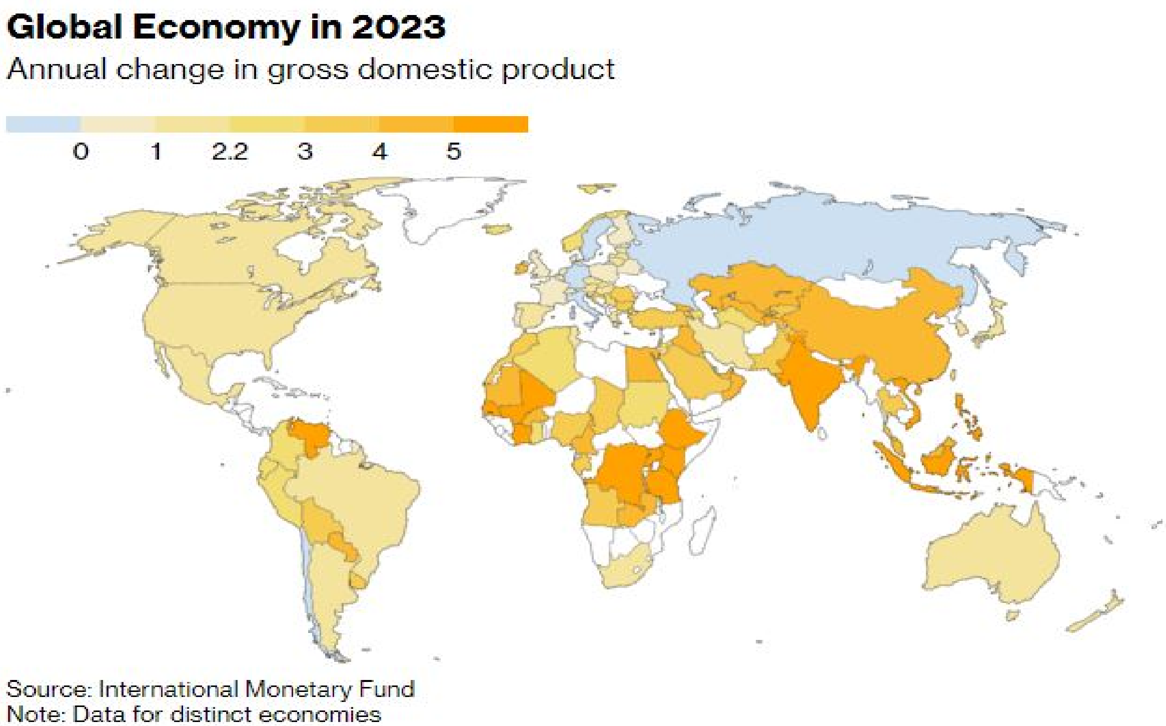
2023 Houston Commercial Real Estate Market Overview

Global Warning

Economist are painting a bleak picture of the global economy for 2023. In a recent interview, International Monetary Fund Managing Director Kristalina Georgieva warned that the global economy faces “a tough year, tougher than the year we leave behind.”

One-third of the world economy is expected to be in recession. The reasoning behind this forecast is because the three big economies – US, EU, China – are all slowing down simultaneously.

The IMF already warned in October 2022 that more than a third of the global economy will contract and that there is a 25% chance of global GDP growing by less than 2% in 2023, which it defines as a global recession.



Georgieva painted a muddled picture of the three largest economy’s ability to contend with the downturn.

While “the US may avoid recession,” the European Union has been “very severely hit by the war in Ukraine — half of the EU will be in recession next year,” she said. At the same time, China faces a “tough year.”

‘Negative Trends’

Data published on December 31, 2022 showed that China’s abrupt reversal of its Covid Zero policy pushed economic activity in December to the slowest pace since February 2020 as the virus swept through major cities and prompted people to stay home and businesses to shut.

The slowdown in the largest economies “translates into negative trends globally — when we look at the emerging markets in developing economies, there, the picture is even direr,” Georgieva said.

Purchasing manager index numbers for manufacturing published on January 2, 2023 showed negative readings across Europe, Turkey and in South Korea. Data published January 3, 2023 revealed similarly dire numbers for Malaysia, Taiwan, Vietnam, the UK, Canada, and the US.

Still, the outlook for the world’s largest economy may offer respite.

“If that resilience of the labor market in the US holds, the US would help the world to get through a very difficult year,” Georgieva said.

National Outlook

Global Chief Economist & Global Head of Research Richard Barkham of CBRE tells us, high interest rates and a recession will make 2023 a challenging year for commercial real estate. Though inflation eased in late 2022, it was still running at more than 7%. The Fed will continue raising rates until it sees a marked reduction in inflation nearer to its 2% target. Weakening fundamentals and higher cost of capital will generally lower asset values.

The recession will not be particularly deep. Corporate finances are in good shape and employers will shun excessive layoffs to avoid losing employees in a tight market for skilled labor. While consumer confidence is highly subdued, average household debt is low compared with the onset of previous recessions. These factors suggest a moderate downturn, with unemployment unlikely to breach the 6% level. Inflation will be significantly lower by the second half of 2023, setting the stage for falling interest rates and the beginning of a new cycle that will last to the 2030’s.

Despite economic headwinds, the pace of change will not ease. ESG considerations and the growth of the digital economy will continue to affect real estate demand. Hybrid working offers many benefits for businesses and employees, but companies and the office sector will have to evolve. Cities too will need to adjust to new commuting patterns and reduced office demand. The resurgent retail sector is just now reaping the benefits of a long period of change, which is attracting keen investor interest. Data centers and industrial real estate will probably be the most resilient sectors and the housing shortage will benefit the multifamily sector. The hotel sector’s recovery from pandemic restrictions will continue but life sciences activity, which was turbocharged by COVID, will ease for a while as venture capital becomes scarcer. All sectors in all places will be required by governments, occupiers, and investors to make significant decarbonization efforts.

The global, national, and local economy have a direct impact on our local commercial and residential real estate markets. The information above is not used to create panic but warn of the economic cycle we are headed into. While it may seem like doom and gloom, all food groups of the commercial real estate market will have different outcomes for 2023.

COMMERCIAL LAND

The market trend report for 2022 revealed the 2021 supply of land in Harris County sold for commercial development was 3,778 acres. Due to sales data coming in throughout the year, the total number of acres sold for 2021 was closer to 5,249 acres.

So far, the total number of acres sold for 2022 is 2,909 acres. This number is well behind the amount sold around this time last year. It is hard to tell why there is a sharp decline for 2022. It is possible there is a lack of quality tracts, or there is a fear of a looming recession. Either way, we know this is a preliminary number and should consider that more sales from 2022 will be discovered throughout the year.

With the population influx in Harris County, we can be sure there is still a healthy market for land development. The housing market is still running behind the demand for single family residences and multi-family complexes. The need for residential development is still driving the need for commercial development.

The population of the City of Houston grew by nearly 10% over the last decade. The population of Houston is expected to continue surging this decade, adding more than 1.2 million new residents through 2029.

Land pricing throughout Harris County is on the rise. In the past, the highest values have been in the Central Business District and the Galleria area. Those are still the most expensive neighborhoods in the county, but we are beginning to see $100+ per square foot land sales for inner loop properties.

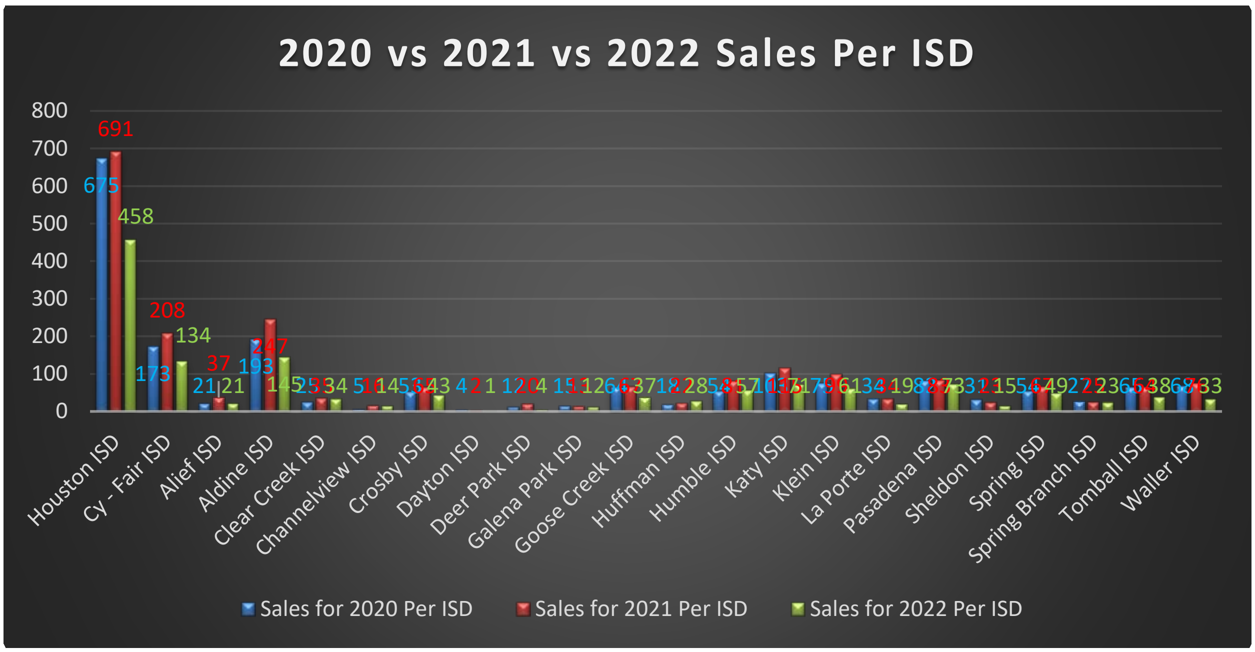
Sales have increased land values by 20% to 25% on most inner loop properties. Neighborhoods seeing major increases are the Houston Heights, Montrose, Upper Kirby, Greenway, and West University/Rice University area.

Land pricing outside of the loop is increasing as well. It is estimated that land pricing outside the loop is increasing like inner loop properties over previous years values. The increases range between 27% on average to 34% at the highest.

The direction of growth is still centered in HISD but expanding north through Aldine ISD and west into Cypress-Fairbanks ISD.

The chart below shows the amount of land transactions per school district per year. It should be noted the number of sales is as of 1/01/2023. Sales are still added throughout the year and the final number may be different by the time the next report is written.

The sales follow the usual trends of the most sales taking place in Houston ISD, Aldine ISD, and Cypress Fairbanks ISD.



Source: Harris Central Appraisal District Sales Ratio Analysis

2020 vs 2021 vs 2022 Sales Per ISD

ISD	2020	2021	2022
Houston	**675**	**691**	**458**
Cy-Fair	**173**	**208**	**134**
Alief	**21**	**37**	**21**
Aldine	**193**	**247**	**145**
Clear Creek	**25**	**35**	**34**
Channelview	**5**	**16**	**14**

Crosby	**53**	**65**	**43**
Dayton	**4**	**2**	**1**
Deer Park	**12**	**20**	**4**
Galena Park	**15**	**13**	**12**
Goose Creek	**64**	**67**	**37**
Huffman	**18**	**22**	**28**
Humble	**54**	**81**	**57**
Katy	**103**	**115**	**71**
Klein	**75**	**99**	**61**
LaPorte	**34**	**34**	**19**
Pasadena	**82**	**83**	**73**
Sheldon	**31**	**23**	**15**
Spring	**54**	**67**	**49**
Spring Branch	**27**	**25**	**23**
Tomball	**65**	**64**	**38**
Waller	**68**	**76**	**33**

The chart above reinforces the notion that location, location, location is what drives real estate activity. HISD continues to lead land sales activity. HISD has always been the seat of Harris County. Considering there is available land here, there will always be a demand in this part of the county.

For the last three years, Aldine ISD has outperformed Cypress-Fairbanks ISD. The performance can be attributed to its location as well. I-45 and I-69 run through the district and the city's largest airport, Bush International Airport, is centered in Aldine ISD. Over the last three years, the number of warehouse properties in this area have grown exponentially. Based on the current trend in this area the demand for warehouse space has not decreased.

Cypress-Fairbanks follows closely behind Aldine ISD for the most sales activity. The area has been developing and growing for quite a while. Cy-Fair has a lot of land available for both residential and commercial development. A lot of families move into this area for the new schools and better inventory of housing located here.

The other districts on the chart have always shown a few sales each year. These districts tend to be rank and file when the land sales activity discussion is held.

MULTI-FAMILY

In looking at market trends in the Houston Multi-Family market, it is important to consider the previous 3 unpredictable years (2020 to 2022), considered as a “turbulent” market period. Forecasting for each year was challenging as economic and market conditions by the end of the year were very different from the year’s start in each case. On March 13, 2020, the nation experienced the Covid Lockdown, affecting the nation’s economy, business operations and commercial property occupancy and profit levels. Average multifamily Houston market rents for that year decreased -0.7%. For the majority of 2020, occupancy hovered around an average of 88%. About half of the units were offering concessions by year end 2020, with close to 7 of 10 of Class A units and 50% of Class C and D giving concessions, and Class A averaging close to 7% concessions.

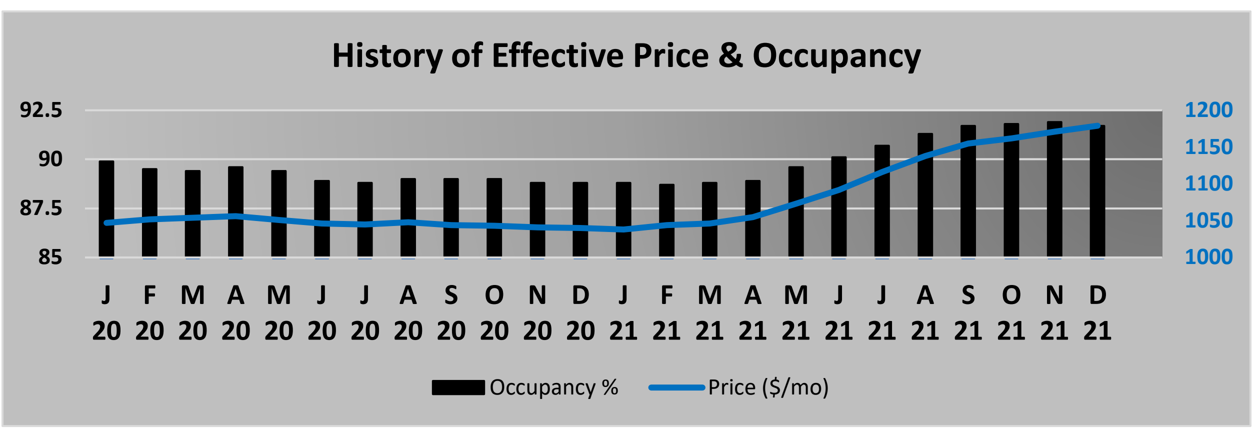
The Covid vaccines became available by February 2021, and market conditions for apartment properties then exploded positively in the 2nd Quarter of that year, with significant rent increases, reduced concessions and increased occupancy at rates not seen in at least the previous 10 years. For that year, Market Rents increased 13.9%, almost double the previous 10 year best of 7.8% in 2014. In better economic areas Market Rent increased 20%-24%, with some areas increasing as high as 33%. Texas does not have rent controls, adding to the demand for multi-family properties. In a typically stable year in Houston, absorption is normally about 12 to 13 thousand units. Absorption was an unreal 38,296 units for 2021, including 15,780 units absorbed in the 2nd Quarter. The 12-month trailing absorption for 2022 (indicated in January 2022) was only 4,438 units, but it appears that much of the absorption slated for 2022 additionally occurred “ahead of the game” in 2021 due to pent up rental demand. Occupancy began 2022 for Class A and B apartment complexes at an astounding 94%, where typically it might range around the 91% to 92% mark. Only 1 out of 4 units offered concessions at all, with 2 of 3 Class A and 4 of 5 Class B not offering concessions at all. Overall, Class A concessions averaged 2% and a little less than 1% for Class B.

Then February 2022 saw the start of the Russo-Ukraine War, affecting worldwide economics and stability. With the Fed Reserve increasing interest rates, home mortgage rates increased as well, slowing down the single-family residential market somewhat. This put pressure on apartment tenants to wait to buy residences anticipating rates to decrease with time. Meanwhile, increased interest rates added to inflation and the cost of operating apartments, and thus increased rental rates.

Even so, with the exponential increase in the rental market in 2021, multifamily market conditions still improved during 2022. With market conditions peaking by September 2022, Market Rents went up 5.8% additionally to the previous year increases. The total units offering concessions increased to about 1 of 3 for All, Class B and C, and 40% for Class A. The concession percentage increased slightly from 2021. It is more likely to conclude that Occupancy in stabilized Class A and B properties returned to the typical 92% than say occupancy or rental rates were in decline. According to Marshall & Swift costing service, Houston cost of construction increased 22% over the two-year period, included in an annual inflation rate of 8.5% by July, but 6.5% by 2022-year end. As a result, a few apartment buildings under construction sold before completion since the long-term budgeted profit margin was realized, allowing the seller to take on other profitable projects.

Similar rent, occupancy and concession patterns were evident in Austin, Dallas, and San Antonio areas over the last three years. In the two-year period after January 2021, in Houston average rent per unit went from of $1,038 per month to $1,250 per month. The cost of rent varies depending on several factors, including location, size, and quality. Houston remains one of the more affordable cities in Texas, with only San Antonio listing slightly cheaper average monthly rent.

The graph below displays the overall occupancy and effective rental prices over the past 24 months. These statistics are derived from a continuous survey of all apartment communities in the Houston market. Effective rental prices are calculated net of concessions and utility adjustments.



Data Source: Apartment Data Services

Houston Multifamily Metrics

Occupancy

Class	Jan 2020	Jan 2020	July 2021	Jan 2022	Sept 2022	Jan 2023
All	**89.9%**	**88.8%**	**90.7%**	**91.8%**	**91.2%**	**90.6%**
Class A	**85.7%**	**81.4%**	**86.4%**	**88.4%**	**88.2%**	**87.8%**
Class B	**91.5%**	**91.7%**	**93.3%**	**93.9%**	**92.8%**	**92.1%**
Class C	**91.0%**	**90.3%**	**91.5%**	**93.1%**	**92.4%**	**91.4%**
Class D	**89.0%**	**90.5%**	**90.3%**	**90.9%**	**90.9%**	**90.3%**
Occupancy Stabilized						
Class A	**91.7%**	**89.6%**	**92.8%**	**94.1%**	**93.5%**	**92.2%**
Class B	**91.6%**	**91.7%**	**93.3%**	**94.0%**	**93.1%**	**92.2%**

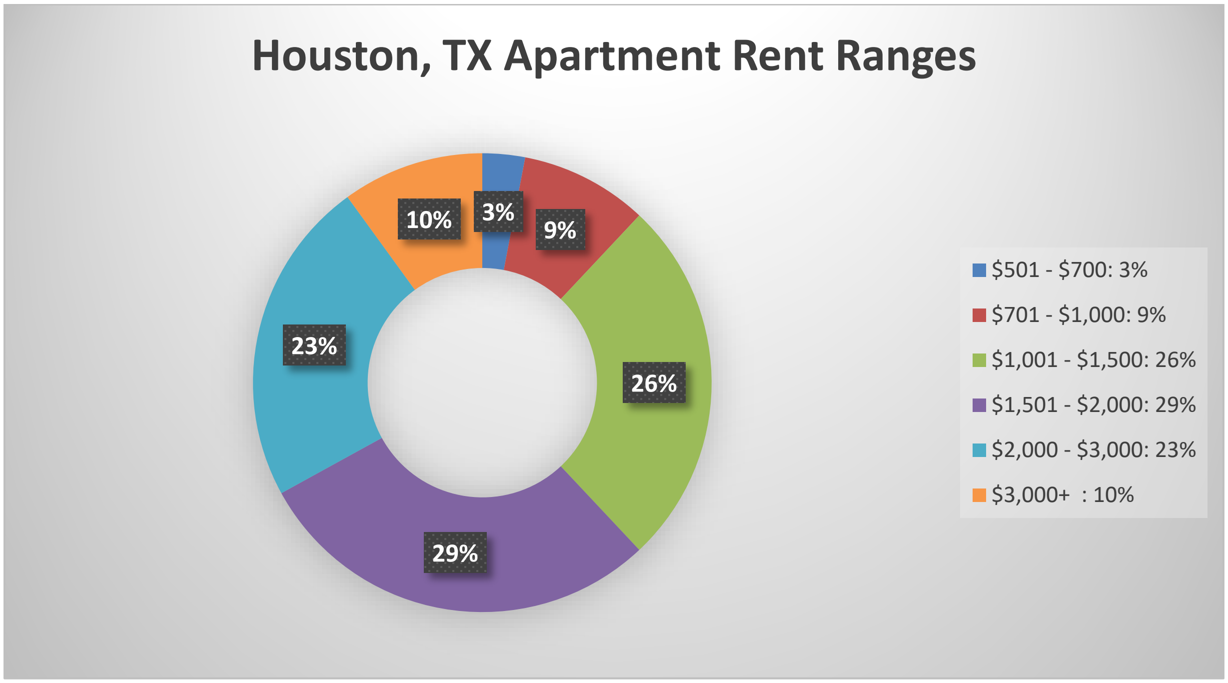
Source: **Apartment Data Services**

	Jan 2020	Jan 2021	July 2021	Jan 2022	Sept 2022	Jan 2023
Under Construction	22,963	17,152	15,981	13,478	15,682	19,585
Opened	15,987	23,983	23,431	21,583	22,727	20,137
Absorption	14,025	11,309	27,759	37,308	10,706	4,439
Opened/ Absorption	1.14	2.12	0.84	0.58	2.12	4.54
Under Construction/ Absorption	1.64	1.52	0.57	0.49	1.46	4.41
Price/Month	$1,047	$1,038	$1,116	$1,212	$1,262	$1,250
Rate/Month	$1.18	$1.17	$1.26	$1.33	$1.42	$1.40
Rent Growth	2.9%	-1.7%	5.0%	13.9%	9.0%	5.8%

Source: **Apartment Data Services**

In the Houston market, there are 3,049 multi-family communities with 720,599 units. Over the last twelve months, 81 communities were added to the previous mentioned total adding 20,137 units. There are 72 communities currently under construction (compared to 50 communities in Jan. 2022) that will add 19,585 more units. There are 113 communities still proposed for future development. That proposed number will add 35,075 units.

The average size for a Houston, TX apartment is 890 square feet but this number varies greatly depending on unit type, with cheap and luxury alternatives for houses and apartments alike. Studio apartments are the smallest and most affordable, 1-bedroom apartments are closer to the average, while 2-bedroom apartments and 3-bedroom apartments offer a more generous square footage.



Source: RentCafe

The most affordable neighborhoods in Houston are Sharpstown, where the average rent goes for $858 per month, Westpark, where renters pay $858 per month on average, and U of Houston area, where the rent goes for $862 per month but with average unit size of 796 square feet. These asking prices are below the average Houston rent of $1,250/month.

The most expensive neighborhoods in Houston are Downtown ($2,233 per month), Montrose ($1,941), and Upper Kirby ($1,975).

The hottest sub-markets in Harris County by Rental Rate Growth (last quarter of 2022 annualized) are NE Houston Crosby 17.4%, Greenspoint 5.0%, Sharpstown 4.9%, Northline 4.0%, and Alief 1.4%. The economies of these areas are considered less than average for Houston, and more affordable units may generate higher percentage increases per dollar amount than areas with higher rents. The areas with the least Rental Rate Growth are Downtown -11.6%, I-69 North -11.1%, Medical Center Braes Bayou -10.8%, Clear Lake Webster -10.2% and Montrose -9.7%. These areas are considered to have superior economic factors and higher rents than average neighborhoods in Houston, so the softening of rental rates will have less of an impact on the profitability of the apartments within.

The table below distributes and analyzes concessions by classification. Concessions are represented by three types of specials: move-in, months free, or floorplan. This table captures the effect of these specials and prorates them over a lease term to arrive at a percentage reduction in market or street rents.

CONCESSIONS				
Class	**Total Units w/ Concessions**	**% Of Total Units**	**Citywide Effect**	**Average Special**
ALL	**220,698**	**31%**	**-1.7%**	**-5.3%**
A	**78,298**	**41%**	**-2.6%**	**-5.9%**
B	**76,020**	**29%**	**-1.3%**	**-4.6%**
C	**58,476**	**30%**	**-1.4%**	**-4.9%**
D	**7,904**	**11%**	**-0.7%**	**-5.3%**

Source: Apartment Data Services, January 2023 ***Note: One Month Free= -8.3%***

Texas' largest markets have materialized as a popular haven to establish capital in multifamily assets. They offer investors diversity as each of the four major markets (Multifamily, Office, Retail, Warehouse) have unique economic profiles and drivers and feature multifamily inventories that cater to different investor types and strategies.

One-quarter of all the Commercial property value in Texas is in Harris County. Of that, $1 out of every $3.50 of Commercial property value in the county is in Multifamily/Apartments (including the refineries, Navigation Ship Channel, shopping centers, Galleria, downtown Office high rises). There is an ongoing demand for low-Income housing, with a national waiting list of 9 tenants for each available tax credit unit, and 1/4 of all the Tax Credit apartments in Harris County are restricted to seniors' occupancy only (55+ years of age).

In 2022, the Dow Jones Industrial Index dropped a staggering -9.0%. REITs and large investors anticipating the underperformance of the equities market, increase in interest rates (for a "buy now" strategy), and increase in rental income were in heavy demand for multifamily properties, especially for those in prosperous Texas. The competition for obtaining those properties resulted in increased sales activity and volume with compressed capitalization rates to facilitate acquisitions. This same phenomenon was apparent in 2011 during the recovery from the Great Recession. An internal study in Harris CAD's Commercial Property Division indicated that for the year 2021 (in some cases, apartment values went up an amazing 50%), annual profit (net operating income, with property taxes included in operating expenses) averaged 44% to 48% for Class A multifamily, and 44% for Class B apartments. For 2022, with increased rental income, it was 52% to 54% for Class A and 45% to 48% for Class B. In addition, based on 15-year 70% financing with 2.5% annual value growth (Houston average over the past 50 years), the property value appreciation and amortizing the mortgage added an *additional* 33% return on investment *each year*. In uncertain times, it is considered that there is a "flight to quality" to secure investment value. With the Stock Market being unpredictable and uncertain in 2022, higher apartment rental income, property values and return of and on investment made long-term gains much more attractive and in demand with compressed capitalization rates.

Secondly, the participation of "value added" buyers (much like residential "fix and flip") greatly increased the demand for Class C and D properties, for rehabbing and re-branding properties, then establishing Class B rents, with shorter holding periods (3-5 years, rather than 10-20 as typical in the market). Houston is experienced a consistent population growth over the last 20 years, as it is expected to do so over the next 20 to 30 years. Approximately 3/4 of the those are Class C tenants. Since it is not feasible to build new Class C properties, due to new conditions and qualities and lower rents, this draws Class C properties away from that market and adds it to the Class B market. More demand for Class C and D properties, but eventual less supply. It is estimated that in Harris County, approximately half of all Class C and D properties have changed ownership, in one form or another, in the last 5 years. Not all are market sales, but that type of activity is unprecedented in other types of commercial property or residential neighborhoods.

Therefore, it appears there are two relatively independent and separate markets in the Houston multifamily area and may also be such through Texas – the Class A & B investment market, and the Class C & D value added. Market activity, increased demand and diminishing supply for the latter has put cap rates unbelievably lower than the first category. Of the 22 disclosed sale price sales of Garden Style, High- and Mid-Rise Class A and B apartments in 2022, the cap rate ranges and average between 3.73% to 4.21%. For this same group, there were 61 sales in 2021 and only 14 sales in the "holding pattern" Covid year of 2020. For 2022, Class C and D properties, cap rates on average ranged between 3.51 to 3.72% on 14 known sales. There were 24 sales in 2021 in this group and 10 sales in Covid 2020. It may be that mid-size or local non-investment grade buyers look for lower valued properties for redevelopment opportunities and have less resources than large national or foreign investment-grade buyers.

Supply, demand, and dynamics appear to be independent between investment and redevelopment buyers, accounting for lower cap rates in the latter than properties considered superior in location, quality, condition, and rental incomes. This is difficult to address but is strongly indicated in the market.

Out-of-state investors continue to garner the lion's share of investment volume, as has been the case for the past several years, accounting for more of buyer volume so far this and last year. Along with no rent controls in Texas, which can restrict returns and opportunities elsewhere, in Texas, the economies of scale are favorable and increase purchasing power for investment grade investors. For example, $100 million may have an investor as part owner of one multifamily property in New York or California, but for the same price would allow them to buy five (5) $20 million apartment properties as sole owners in Houston. In 2022, a 330-unit 75 story high rise apartment (taller than the 62-story building in the Galleria's Williams Tower) sold in New York City for $975 million. That is equivalent to collectively buying the seven (7) best and highest value high rise multifamily buildings in Harris County. Note that there are now only about 10,000 high rise apartment units in Harris County, with a total of approximately 5 million residents in the county.

Sales activity has surged over the past few quarters. Houston ranks among the top three markets in the country for investment in 2022 with $10.7 billion through the end of the third quarter, trailing only Dallas-Fort Worth and Atlanta. Furthermore, 2023 is on pace to be a record year for investment sales volume in Houston.

Market Activity

	January 2023	VS	January 2022	January 2021
Occupancy	90.6%	↓	91.8%	88.8%
Avg Price/Mo	$1,250	↑	$1,184	$1,038
Rental Rate Per Sq Ft/Mo	$1.40	↑	$1.33	$1.17
Avg Unit Size Sq Ft	890	↑	888	885
Rental Rate Growth Past 12 Mo	5.8%	↓	16%	-0.7%
Units Absorbed	4.439	↓	37,308	11,309
Operating Supply # Communities	3,049	↑	2,982	2,903
Operating Supply # Units	720,599	↑	704,812	684,821
Deliveries (12 Months) Communities	81	--	81	85
Deliveries (12 Months) Units	20,137	↓	21,583	23,983
Under Construction Communities	72	↑	50	61
Under Construction Units	19,585	↑	13,478	17,152

Source: Apartment Data Services

Highlighted Multifamily Activity

High Street Residential will build a mixed-use building with 209 residential units where a strip mall currently stands in the Greenway/Upper Kirby area. The complex at 2311 Westheimer Road will be called Residences of Westheimer and offer ground-floor retail. High Street Residential is a subsidiary of Dallas-based Trammell Crow Co.

The project is projected to cost $97M, or about $464K per residential unit, the article states. Residences of Westheimer will feature nine stories of residential, four levels of parking and 2.8K SF of retail, per plans filed with the city.

The strip mall site at Westheimer Road and Revere Street has several businesses still in operation, including an antique shop, a dry cleaner, and a restaurant, though construction on the complex will begin in February. Completion is slated for December 2024, according to The Real Deal.

This is not the first attempt to build a multifamily complex at this location. Stanmore Partners had planned to break ground in 2019 on Stanmore River Oaks, an 11-story, 184-unit apartment building, according to Stanmore Partners' website, as reported by houstonarchitecture.com. The start date was then pushed to 2020, and plans for the project no longer exist on Stanmore Partners' website.

The developers had wanted a variance to build closer to Westheimer than typically allowed and widen sidewalks, the Houston Chronicle reported. Trammell Crow's High Street Residential is also developing a 43-story luxury multifamily complex downtown, and broke ground last week on a garden-style complex in the Kingwood area.

Owners of the near century old downtown Esperson building will convert parts of its office space into multifamily units, part of the greater trend of repurposing old office space as tenants flock to newer, highly amenitized buildings.

The building at 808 Travis St. was first built in the 1940's and was the largest office building built during the Great Depression, as well as the first Houston skyscraper to have central air conditioning. The renovations, designed by Gensler, will add multifamily units as well as an amenity space on the 17th floor, available to both residents and office tenants.

Plans for the amenity space call for removing the roof on the northwest corner of the 17th floor to create an outdoor-indoor space, with a rooftop swimming pool, a dog park, a speak-easy, a wellness facility, indoor and outdoor lounge areas, and a space for catered meetings.

"Removing the roof of the northwest corner of the 17th floor, bringing back the unique terrace where [original owner] Mellie Esperson entertained friends, and adding the outdoor lap pool will create a dynamic space unlike anywhere else in downtown Houston," Cameron Management President Dougal Cameron said in a release. "In fact, we'll have three different roof decks accessed from this level, with appealing amenities for both residential and office tenants."

Owner Cameron Management will decide how much office space to convert based on market demand, so an official square footage and number of units is yet to be determined, according to a

Gensler spokesperson. Construction will begin in the first quarter of 2023; renovations are estimated to take a year.

"While many owners of older office buildings are contemplating complete conversions to residential in response to a post-pandemic and hybrid work economy, Cameron Management's pioneering approach of entrepreneurs living and working together in the historically significant Esperson is truly unique," Gensler Houston principal Dean Strombom said in the release. "The new amenity level offerings will create a buzz downtown and foster a community experience." Amenitized office buildings are where large office deals are taking place, in an otherwise sluggish local office market.

For older buildings without the newest conference centers and chic bars, developers have funneled major cash into renovations. And with hybrid work having taken hold, architecture firms are in high demand to renovate and update aging offices.

THE OFFICE MARKET

Houston's office market continues to face its fair share of challenges going in to 2023. The Houston office market pulled back in Q4 2022, as uncertainty over the economy left office players with hesitancy. Rents, construction, availability, and the vacancy rate remained relatively stable in Q4 2022, as the market was virtually unchanged. The lease negotiation process slowed, as economic pressures led to increased interest rates, coupled with tenants receiving record-high concessions, and thereby hindering leasing volume.

The vacancy rate at year end 2022 was 18.8%, remaining among the highest in the nation among major markets. The high vacancy rates are a result stemming from the pandemic. Many companies transitioning to remote working, as well as the uncertainty of how space, and how much space will be utilized moving forward has generated a number of vacancy issues. Vacancy is also being affected by the amount of sublet space on the market. Currently around 8.5 million square feet is vacant, which is at the highest levels since Q4 2016 (due to oil bust of 2015). The Central Business District accounts for 1/3 of all of Houston's sublet space.

Three years after the coronavirus outbreak, some Houston companies are moving forward with key commitments to office space and renewing current leases. While uncertainty continues to trouble the Houston office market, the flight-to-quality trend continues as employers look for space to retain current employees and attract new ones. Many businesses are encouraging a hybrid return to the office; however, some are leaning towards a return to the office in line with pre-pandemic attendance, believing company culture is built in the office. Acknowledging that hybrid working is a trend that is here to stay, the physical office will remain important for employees to build relationships, collaborate, and feel connected to the company culture.

Net Absorption closed 2022 on positive note for the first time since 2019, however the forecasted return to the office has fallen short of expectations. Costar is anticipating positive net absorption during the next few years; however, the previous bullish expectations have been tapered. Costar expects 1.5 million to 2 million sq ft net absorption over the next five years.

The total amount of office space under construction at approximately 1.8 million square feet excluding medical office properties.

Overall rents remained relatively flat when looking at all classes of properties with decreases in certain submarkets. The largest decreases were in areas such as the Energy Corridor and Westchase District, especially for Class A properties. Rents have been driven down by high levels of sublet space and the uncertainty of space utilization going forward. Considering data driven reports about the office market for 2023, this falls in line with what we've seen in the data and rent rolls we've reviewed during the hearing's process. Rents are expected to remain relatively flat in to 2023.

Rising borrowing costs have begun impacting the region, and deal flow has waned considerably since mid-2022. Expectations are that sales activity will continue to decline. Given the uncertainty over the near term, investors in Houston favor deals with minimal leasing risk, low vacancies and stable cash flows with newer assets leased to credit tenants selling at premiums while properties with vacancy issues have been selling at discounts.

Key Indicators

Current Quarter	RBA	Vacancy Rate	Market Rent	Availability Rate	Net Absorption SF	Deliveries SF	Under Construction
4 & 5 Star	158,878,770	22.8%	$33.79	28.2%	(342,224)	0	3,733,970

3 Star	141,316,695	17.8%	$25.24	19.7%	(358,793)	6,125	1,345,760
1 & 2 Star	49,102,163	10.0%	$23.46	11.7%	(66,929)	0	2,100
Market	**349,297628**	**19.0%**	**$28.92**	**22.5%**	**(767,946)**	**6,125**	**5,081,830**

Annual Trends	12 Month	Historical Average	Forecast Average	Peak	When	Trough	When
Vacancy Change (YOY)	0.4%	13.4%	19.1%	19.0%	2023 Q1	8.7%	1999 Q1
Net Absorption SF	(366K)	2,627,954	1,678,474	10,550,403	2014 Q2	(4,012,312)	2017 Q3
Deliveries SF	2.1M	5,087,549	3,088,523	13,855,119	2015 Q4	1,327,352	2010 Q4
Rent Growth	0.7%	1.5%	1.8%	14.6%	2008 Q1	-6.4%	2009 Q4
Sales Volume	$1.2B	$1.7B	N/A	$4.9B	2013 Q3	$259.7M	2009 Q4

Data Source: CoStar Group

Highlighted Office Activity

While some of its competitors are busy scaling back, Callon Petroleum Co. has signed a 107K SF lease for new headquarters space in MetroNational's nine-story office building under construction in Memorial City.

The independent oil and natural gas company plans to relocate its headquarters from 2000 West Sam Houston Parkway S., just 5 miles away from its new digs, in the second half of 2024. Callon Petroleum's current headquarters occupies 75K SF, while its new 107K SF space is the 10th-largest Houston office lease of 2022.

Callon Petroleum's decision to increase space by more than 42% contrasts with other energy companies in the area, which are cutting square footage.

The move to a new office building aligns with the ongoing flight-to-quality trend that has seen companies "leaning toward newer, more efficient buildings with state-of-the-art interior design to capitalize on the shift in employees' demand for a better workplace experience.

Houston-based Moody Rambin is set to break ground soon on a new 167,141-square-foot office building next to CityCentre and Town & Country Village on the west side of town.

The eight-story Town Centre Two will be the latest addition to the company's Town Centre development, the first phase of which broke ground in 2013.

Moody Rambin expects Town Centre Two to be completed by the third quarter of 2023, the company said in a news release. The new building will be located at 730 Town & Country Blvd.

Town Centre Two is being built with support from Galveston-based American National Insurance Co. The building was designed by Kirksey Architecture, engineered by DBR Engineering, and the landscape was designed by Kudela & Weinheimer, all based in Houston. San Antonio-based Frost Bank is responsible for providing the construction financing, and Birmingham, Alabama-based Hoar Construction will serve as the general contractor.

When the new office project comes online next year, Town Centre will have a total of 420,855 square feet of office space between the two buildings.

The 10-story, 270,000-square-foot Town Centre One has a two-level, stone-and-wood lobby; energy-efficient construction and building systems; and all-weather access to the parking garage.

MEDICAL OFFICE

Houston is home to the largest medical complex in the world known as the Texas Medical Center (TMC). The TMC ranks as the 8th largest business district in the U.S. and is one of the largest employers in Houston. According to the TMC, its annual economic impact is estimated to be approximately $25 billion. Due to an aging baby-boomer generation and a growing Houston population, healthcare is one of the fastest growth industries in Houston. With these trending demographics, medical office buildings are viewed by investors as safe-haven assets.

The Houston healthcare real estate market continues to demonstrate strong fundamentals despite the lingering effects of the COVID-19 pandemic and increasing concerns over the economy's direction and inflationary pressures. In addition, major health systems continue to expand their facilities both on campus and off campus outpatient settings to accommodate Houston's expanding population and robust job growth.

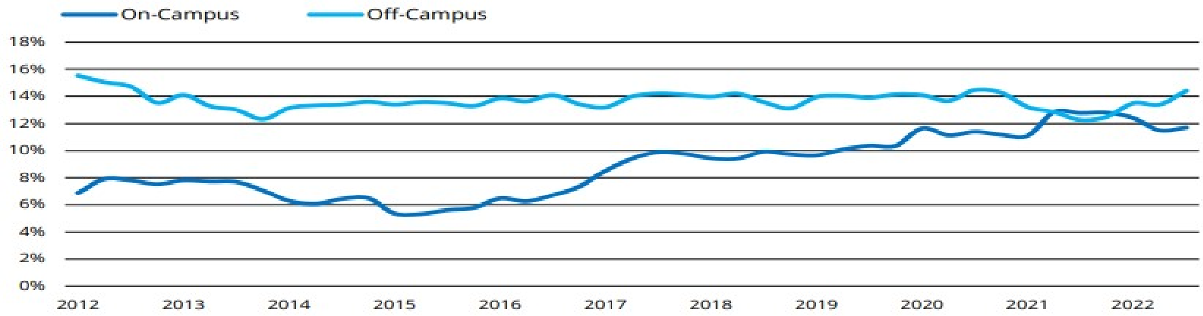
Driven by advancing technology, increasing competition and pricing pressure, healthcare delivery is rapidly evolving to become more consumer-centric, moving off the hospital campus to an ambulatory setting. Healthcare providers have added outpatient space and have increasingly taken on retail space as part of the outpatient clinic real estate strategy, particularly in Houston's fast-growing suburban submarkets. On the supply side, rapidly rising material costs and labor shortages cause delivery delays and extended fit-out periods for new properties.

Metro Houston added 14,800 jobs in September 2022, a total in line with expectations for the month. In years with strong growth, the region typically creates 10,000 to 16,000 jobs in September, according to the latest jobs update from Greater Houston Partnership (GHP).

	2022 Q3	2021 Q3
Unemployment Rate %	4.6%	6.8%
Net Absorption (Thousands SF)	29.0	95.4
Direct Vacancy Rate	13.2%	12.5%
Total Availability (MSF)	4.2	3.8
Under Construction (MSF)	1.9	1.0
Asking Rent, Full Service (PSF)	$30.18	$28.57
Sales Volume (Millions)	$19.0	$124

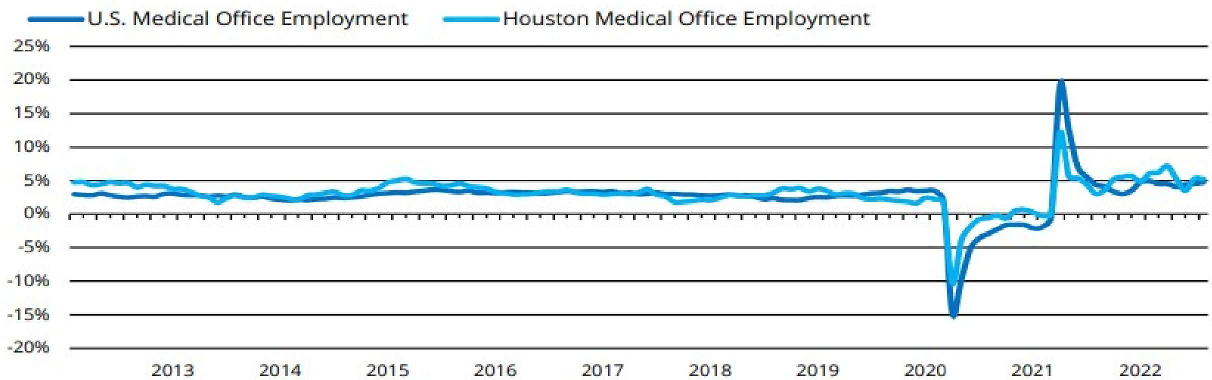
Absorption in Q3 2022 slowed after several quarters of consistent growing demand. Overall, net absorption totaled nearly 30,000 sq. ft., with the bulk of absorption occurring in the Near West submarket.

OVERALL VACANCY RATE



Source: CoStar, Revista, Transwestern

Y-O-Y CHANGE IN MEDICAL OFFICE JOBS



Source: Bureau of Labor Statistics, Transwestern

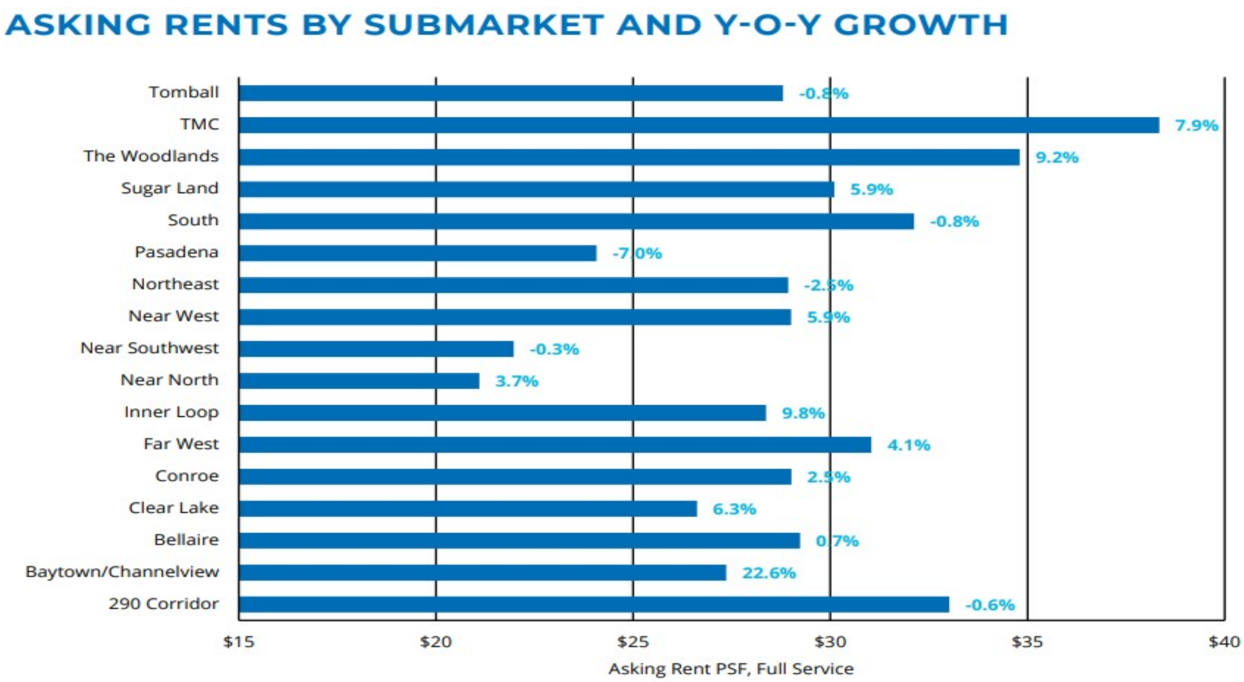
Overall direct vacancy slightly increased Q3 2022 by 30 basis points to 13.2 %, as Houston's healthcare sector experienced a measured reduction in leasing activity while several previously available listings became completely vacant. Houston's on-campus medical properties experienced tightening in direct vacancy, going from 11.8 % in the second quarter and to 11.7 % in the third quarter.

Off-campus medical office facilities saw direct vacancy increase from 13.9 % to 14.4 % over the 9-year period, with the most notable escalation in space coming from the Near North submarket where dire vacancy climbed from 24.8 % to 28.8 %. Red Oak Cardiovascular building located at 17400 Red Oak Dr., added nearly 33,000 sq. ft. of vacant space to the submarket, also being listed for sale.

Houston's healthcare sector asking rents climbed during Q3 2022, rising to $30.18 per square foot/year from $30.12 per square foot/year with the largest gains coming from the Baytown/Channelview, and Near North submarkets. The most notable was in the

Baytown/Channelview submarket where overall rates rose 4.6 % quarter-over-quarter due to the limited inventory and markup in rates at 5616 Lawndale St. The Near North submarket also experienced a rent upturn of 2.6 % because of the additional space being marketed by the Red Oak Cardiovascular facility.

Rents also signaled annual year-over-year improvement by rising $1.29 per square foot/year over Q3 2021 when average asking full-service rent weighed in at $28.89 per square foot/yr. As the population in Houston's suburban submarkets grow, so has the demand for medical services.



<u>Highlighted Medical Office Activity</u>

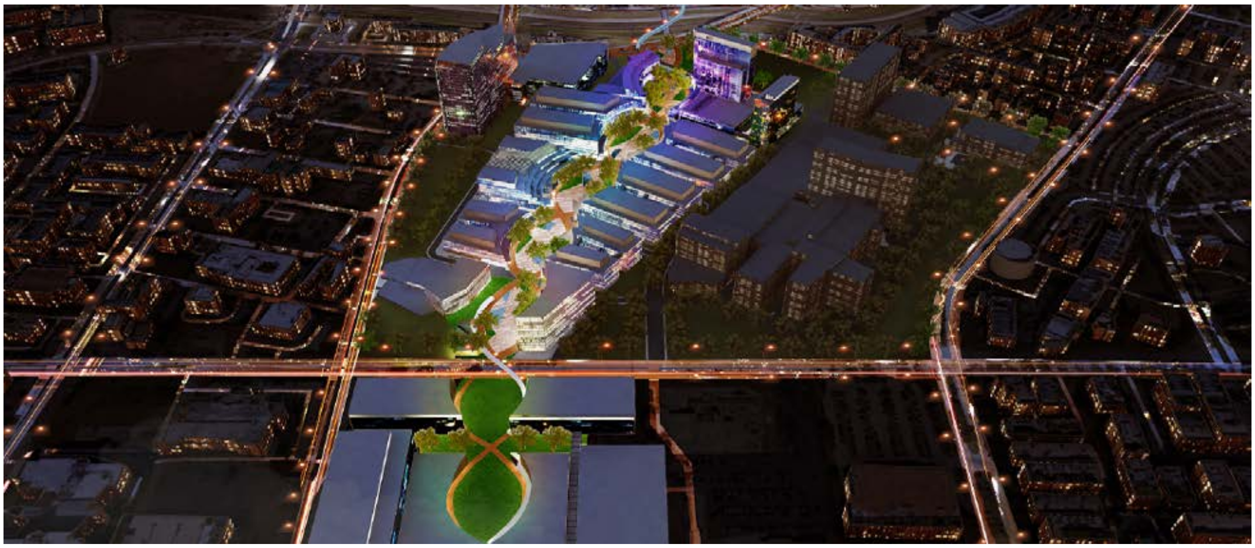
Houston is home to the largest medical complex in the world known as the Texas Medical Center (TMC). The TMC ranks as the 8th largest business district in the U.S. and is one of the largest employers in Houston. According to the TMC, its annual economic impact is estimated to be approximately $25 billion. Due to an aging baby-boomer generation and a growing Houston population, healthcare is one of the fastest growth industries in Houston.

The Texas Medical Center has 10 million patient encounters annually, more than 160,000 visitors, over 180,000 annual surgeries, 750,000 ER visits per year, almost 14,000 total heart surgeries, home to over 120,000 employees, 50,000 life science students, thousands of volunteers, 50 million sq. ft. of developed building area with an additional 3 million sq. ft. in the planning stages, and $3 billion in construction projects underway. Houston's top three recipients receiving grant funding from the National Institute of Health (NIH) include: Baylor College of Medicine, The University of Texas MD Anderson Cancer Center, and The University of Texas Health Science Center of Houston; all three totaling more than $520 million.

Texas A&M University TMC3, a 37-acre biomedical research campus, is still in its development phase. The $546M development located in the [Texas Medical Center] is one of several major projects underway in the area. Texas A&M Innovation Plaza will consist of two new towers, as well as the purchase and renovation of 1020 Holcombe Blvd., an 18-story building. Innovation Plaza will be home to the Texas A&M Engineering Medicine (EnMed) program and provide student housing, while the other is a mixed-use development for medical offices and retail. The 3 towers names are Discovery, Life, and Horizon. The mixed-use building, known as Horizon

Tower, is an integrated medical plaza of 17 stories sitting atop a 13-story parking garage and will cater to life sciences, clinical, biomedical, technology and office uses. Medistar Corp. held a virtual groundbreaking ceremony for the campus on Oct. 1, and Horizon Tower is slated for completion in January 2024.

Texas Medical Center 3 (TMC3) is a world-class life science complex that unites the best minds in medicine across several institutions. The 37-acre project will include shared and proprietary research centers, multi-disciplinary laboratories, health care institutions, a hotel and conference center, retail, and a unique double helix-shaped green space TMC3 Helix Gardens – totaling almost 3.7 million square feet of developed property. The complex will add an estimated 23,000 permanent jobs and an ongoing annual impact of $5.4 billion to the Houston economy. It is also estimated that 17,000 construction jobs will help bring the TMC3 vision to life.



TMC3 Collaborative Building is a four-story, 250,000 square foot, state-of-the-art building that is expected to deliver in Q3 2023. The building features include a 43,000 square foot joint research lab, office/co-working space, and a shared IT infrastructure to facilitate synergistic research initiatives for four founding institutions: MD Anderson, Texas A&M University Health Science Center, the University of Texas Health Science Center at Houston, and TMC.

As the TMC expands, global real estate giant Hines and partners Harrison and 2ML Real Estate Interests are progressing on a 53-acre mixed-use project that's expected to infuse more residential, retail and life science space into one of Houston's most prominent business districts.

Levit Green launched with a five-story mixed-use building that is expected to eventually include a mix of residential, retail and office space. The first 270,000 sq. ft. building features research and wet lab space, a 7,000 sq. ft. conference center, and a 25,000 sq. ft. lab and office space for entrepreneurs and startups. The building is alongside several lakes that Hines is planning to build as part of the project. A boardwalk and a 5,800 sq. ft. fitness center, and outdoor garden are expected to encourage tenant connections to the outdoors.

Levit Green is expected to have immediate access to state Highway 288, the MetroRail, and Metro bus and bike trails, according to Hines. The project is being built on land that was once home to Grocers Supply Co. facility at the corner of SH 288 and Holcombe Blvd.

Kelsey-Seybold Clinic opened its new five-story, 125,000 sq. ft. campus in the heart of the Memorial and Spring Branch area in August 2022. The new clinic represents another significant investment by Kelsey-Seybold to bring comprehensive care closer to area residents and their families.

Kelsey-Seybold opened another clinic in The Grid, the 192-acre mixed-use district development on the site of the former Texas Instruments campus in Stafford. The new facility is the latest of the milestone in Kelsey-Seybold's stated five-year plan of expansion, with a targeted goal of patients living within 10 to 12 minutes of a clinic and within 20 minutes of campus, which provides expanded services. The system is launching a new campus in City Place. Existing Clear Lake clinic and Fort Bend Medical and Diagnostic Center are also set to be expanded into campuses by the end of the year.

The Stafford clinic is part of at least nine expansion or construction projects Kelsey-Seybold had underway by the end of 2022. The company also recently expanded the 16th floor of its Memorial City clinic in Memorial Hermann Tower on Gessner Rd. and is working to complete it in early 2023. Other new clinics are set to open in South Shore Harbor, Fairfield and Westchase. Other existing near Houston locations include Kingwood and Pearland.

(Above photo: Old Sysco Corp. office buildings prior to renovations)

Houston Methodist breaks ground on a 106-acre site on U.S. Highway 290 near Barker Cypress Rd. in northwest Houston in summer of 2022. Methodist purchased the land which formerly housed administrative operations for Sysco Corp., in 2021. The campus will include a seven-story, 571,000 sq. ft. hospital, and a 160,000 sq. ft. medical office building. Opening is planned for the first quarter of 2025.

The new campus will be modeled after the comprehensive Houston Methodist West and Houston Methodist The Woodlands facilities, and according to a press release, will ultimately have 400 beds, multiple medical office buildings and room for future growth. The new hospital could open as early as 2024 and ultimately employ more than 500 people, according to the press release. Officials said outpatient clinics and medical staff offices are slated to open first.

(Above photo: North Cypress Professional Building II sold as part of portfolio sale)

On July 2022, Healthcare Realty Trust Inc. (HR) and the Healthcare Trust of America, Inc. (HTA), announced the closing of their previously announced merger. The combined company will continue to operate with the Healthcare Realty name and trade on the NYSE under the ticker symbol HR.

The combination brings together two of the largest owners of medical office buildings to create the preeminent, pure-play medical office building REIT. Healthcare Realty Trust Incorporated sold their entire portfolio of office, land, health care, retail, multi-family, specialty properties, sold as reserve merger. As a result of the transaction, the surviving name for the company merger will be Healthcare Realty Trust Inc. The number of properties in the portfolio sale is 471; approximately 19 properties are in Harris County.

RETAIL

Despite record high construction costs, rising interest rates, sky-high food costs, and a possible recession looming, the Houston Metro managed to finish the year as one of the most active retail markets in the country. Supported by well-established growth drivers (strong population and household growth, and affordability) the Bayou City market rallied for a second year in a row since the peak of the Covid-19 pandemic and entered 2023 with continued optimism that will attract new residents, retailers, and investors.

All major Texas markets rebounded swiftly from the lowest points of pandemic. As Houston, Austin, and Dallas outpaced every other major city in the U.S. in employees returning to the office, U.S. retailers took notice and shifted their expansion plans to the state. As new-to-market retailers and restaurant concepts have turned their focus to Houston, and existing concepts have expanded to new trade areas, the Bayou City has gone from nearly 93% occupancy at its peak in 2020, back to about 95% in Q4 of 2022.

The Houston Metro's healthy population growth outpaces most larger cities, and its above average disposable income has kept consumer demand for retail strong, particularly for discount, drive-thru, pharmacy, home improvement, and beauty stores. Like 2021, total net absorption (5.1 million sq. ft.) outpaced new supply (3.1 million sq. ft.), a trend that is supported in large part by suburban areas outside of the 610 Loop, which accounted for 90% of all leasing activity in 2022. Total leasing volume for the year was 8.4 million sq. ft., pushing the market's vacancy rate down 60 basis points to 5.2% YOY by December 2022. Demand is expected to stay constant in 2023 as residential development continues in the North and West submarkets of the Metro area.

New supply levels are at a 12-year low; however, Houston still ranks 2nd in deliveries among major metros in the nation over the past 12 months. The metro has seen around 3.1 million sq. ft. of new space delivered in 2022, which is less than half of the annual average of 6.8 million sq. ft. between 2016 and 2020. Despite record-high construction costs and rising interest rates, developers are set to increase deliveries in 2023 with approximately 4.3 million sq. ft. anticipated to reach completion. As builders attempt to satiate demand, construction remains concentrated in the quickly growing suburban and exurban submarkets in the Northwest quadrant of the market area, which has been the case for the past decade. However, in pace with the densification of the Inner Loop several projects are currently underway following the trend of coupling retail with multi-family, particularly in the East End and River Oaks submarkets.

Following the upwards trends of leasing and absorption, all retail categories have seen an uptick in market rents over the past 12 months with strip centers growth at 4.1%, neighborhood centers at 4.7%, and malls at 5.6%. Overall growth was at about 4.4%, which was above the national average at 3.8%, at the end of 2022. Submarkets in and around Uptown command a notable premium over the metro-wide average. By the end of 2022, Uptown/Galleria rents were 90% higher than the metro-wide average and River Oaks was 60% higher. CoStar anticipates a deceleration in rent growth in 2023 with a current forecast of 3.5% growth.

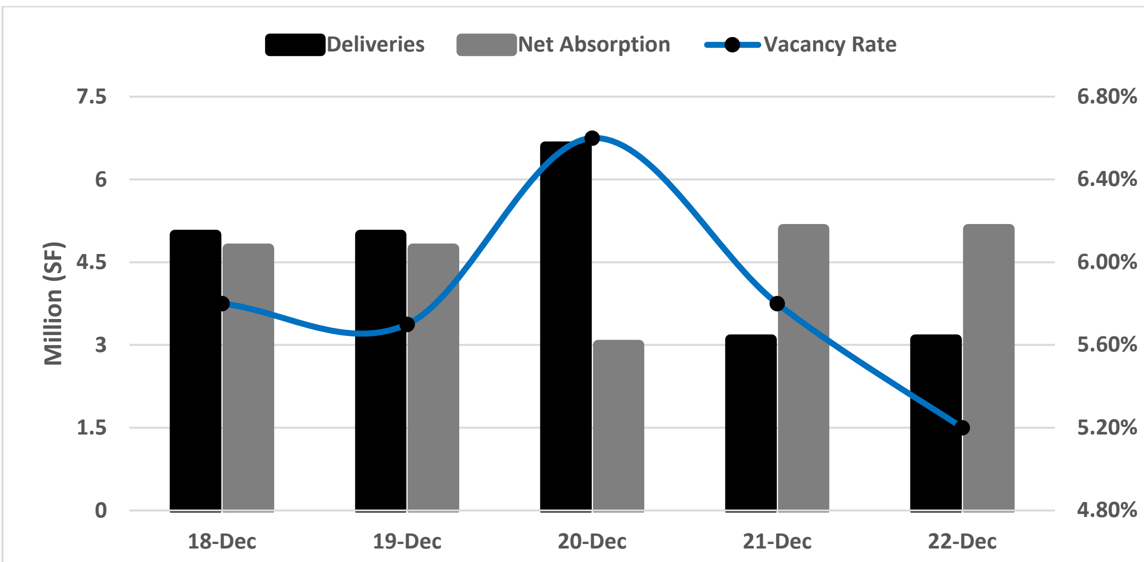
Sales volume for retail properties has declined each consecutive quarter in 2022 in conjunction with rising interest rates, however total disclosed retail sales only declined slightly from 2021 ($1.3 billion) to 2022 ($1.1 billion). While pricing levels in Houston ($240/sf) have been in line with the national benchmarks, strong NOI growth and flight to quality deals have kept retail pricing at all-time highs.

Market Activity

	December 2022	VS	December 2021
Vacancy	5.2%	↓	5.8%

Availability	6.1%	↓	6.6%
Under Construction SF	4,343,695	↓	4,848,818
NNN Avg Asking Rent/MO	$19.58	↑	$19.06
Net Absorption SF YTD	5,108,769	↓	5,165,875
Leasing Activity SF YTD	8,425,767	↑	8,260,106
Deliveries SF YTD	3,124,129	↓	3,196,886

Supply & Demand



Retail Highlighted Activity

Memorial City Town Square

After demolishing the former Memorial City Mall’s Sears store in 2020, MetroNational unveiled its redevelopment plan for the space located at the southwest corner of the mall (Gessner and Barryknoll lane). A 27-acre urban infill development will take up the space that is currently being used as parking. The new Memorial Town Square will feature a mix of retail, coworking, traditional office, and multifamily spaces. Slated to break ground in 2023, the first phase of the project will focus on building 10 standalone retail buildings, which will total 190,000 sq. ft. centered around a half-acre green space.

Once the retail phase is completed, work will begin on the multi-family piece of the development which will consist of a 250-plus unit tower with 50,000 sq. ft. (or more) of retail at the base. The final phase of the project will be a 375,000 sq. ft. office building. The retail portion has an expected completion date of 2025.

Village Green at Bridgeland Central

Village Green at Bridgeland Central is a 23-acre mixed-use development that will be the first phase of a 925-acre project aimed at becoming an urban hub in Northwest Houston.

This first phase will be anchored by Bridgeland’s first H-E-B, which will be within walking distance to a 49,000 sq. ft. mass timber office building, a luxurious multifamily community and direct connectivity to the master planned communities 250-mile hike and bike trail. The office building is scheduled to break ground in early 2023 with the 100,000 sq. ft. grocery store and retail slated to follow in 2024.

East River Phase I

Houston-based Midway, the privately owned, fully integrated real estate investment and development firm, broke ground in August 2021 on its 150-acre East River development, one of the most impactful urban revitalizations for a generation in Houston's urban core. Designed to grow and evolve through multiple phases across a decades-long development horizon, East River will transform the city's waterfront east of Downtown into a new economic center. Alongside commemorating this significant milestone, Midway announced two office tenants—Method Architecture and TEAL—as well as a new event venue and rooftop bar from the owners of The Astorian will join the development's first phase, slated for completion in 2023.

East River's 150-acre redevelopment site is the largest in Houston's urban core, with over one-million square feet of new construction extending 60 city blocks. Centrally located less than a mile from Downtown at the intersection of culturally rich and historic communities, East River is in the Historic Fifth Ward, adjacent to East End (Second Ward). The project is ideally positioned to serve a wide range of residents and a spectrum of housing price points, innovative and globally competitive companies, cutting-edge retail and restaurant concepts, and a host of institutional, educational, and recreational opportunities.

Located on approximately 26 acres at the intersection of Jensen Drive and Clinton Drive, East River Phase One is comprised of The Laura, a five-story, modern-industrial multifamily community of 360 apartment homes; approximately 250,000 square feet of office space designed to fit a wide variety of business needs; and an additional 110,000 square feet of retail at the ground floor of the office buildings, garage, freestanding plaza and bayou pavilions that will fuse commerce and culture with restaurant, hospitality, retail, medical, and entertainment forming spaces. At the heart of the first phase will be more than 13,000 square feet of plaza greenspace with a full calendar of activations including events and live music. Located on the Buffalo Bayou, East River's hike and bike trails will also be connected to the nearly 500 miles of bike lanes and trails in Houston.

HOTELS

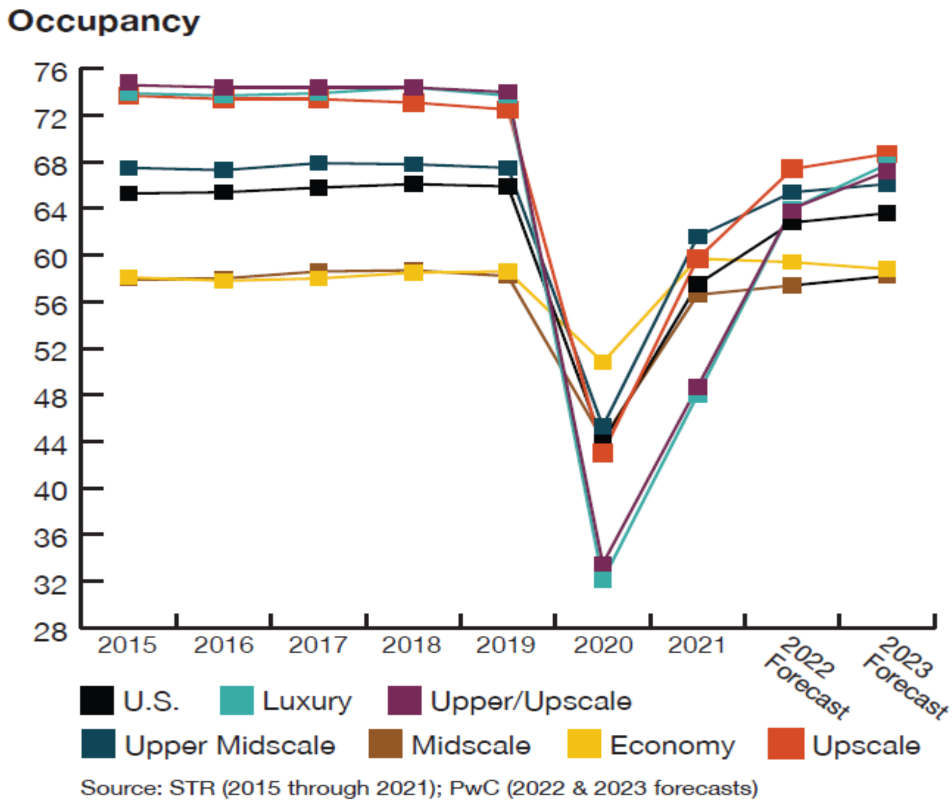
Following the ease of travel restrictions and propelled by pent-up demand, hotels across the country have mostly rebounded on almost every key industry metric. As consumers became more comfortable with traveling in 2022, a strong return to luxury hotels was mounted, even as average daily rates (ADR) rose to record levels. Last year most major hotel markets saw strong recoveries at each hotel service level, where occupancy was the only metric that did not perform better than pre-pandemic levels.

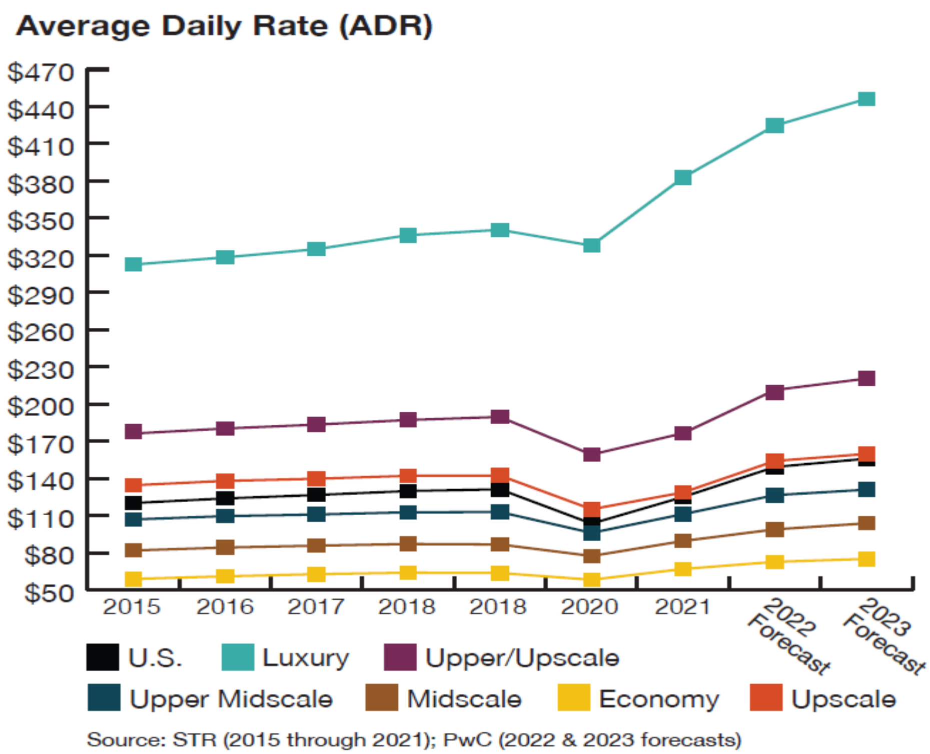
By Q3 of 2022, the US hotel industry had surpassed 2019 revenue per available room (RevPAR) by 6.4%, based on STR national data. In Texas, Q3 RevPAR was up 9.1% from the previous year and 4.2% higher than Q3 of 2019. According to Source Strategies, the statewide average RevPAR was $69.78 for Q3, compared to $66.96 at the same time in 2019.

Occupancy remains one of the few areas where hotels did not outperform 2019 figures, this is especially true for luxury and full-service hotels. Nationally, Q3 of 2022 was 3.8 points below the same period in 2019. Texas has not been able to buck this trend, as third quarter occupancies for all subsectors was 60.3%, based on Source Strategies data. While this is an improvement from 2021, comparison to Q3 of 2019 (63.8%) is nearly identical to nationwide trends.

Room Revenue remains the bright spot across the entire sector. Nationally average daily rates (ADR) for Q3 were up 12.8% from 2019, with the state of Texas up 10.2% from 2019.

In December 2022, Houston remained 4.1% below pre-pandemic occupancy, while ADR and RevPAR were up 6.5% and 2.2% respectively, according to reporting done by the Houston Business Journal on hotel performance. These trends are expected through 2023, as business travelers continue to make their return to the market and offset softening leisure demand.





<u>Highlighted Hotel Activity</u>

Great Wolf Lodge Gulf Coast Texas

Great Wolf Lodge is coming to the Houston area. Great Wolf Lodge Gulf Coast Texas in Webster will become the second Great Wolf Lodge indoor water park resort in Texas and the company's 22nd resort in North America. The property will feature 400,000 sq. ft. of entertainment and lodging including 532-rooms, about 95,000 sq. ft. of indoor waterpark, and close to 10,000 sq. ft. of convention center facility.

The resort broke ground in 2022, on the 35-acre site just behind the American Furniture Warehouse along the Gulf Freeway, with and expected delivery date in 2024.

The Allen, a $500 million mixed-use development at 1599 Allen Parkway, will be a 35-story luxury condominium-hotel that will also include a 62,128 sq. ft. retail pavilion. The first 15 stories will be occupied by the luxury hotel brand Thompson, which will be making its first appearance in the Houston market. The hotel will consist of 170 rooms at its completion in late 2023.

Thompson Hotel (The Allen)

Hyatt House Hyatt Place Houston Medical Center

Houston-based developer Satya Inc. has broken ground on a 350,000 square-foot hotel near the Texas Medical Center. The project, at 7329 Fannin St. near the corner of Fannin and Old Spanish Trail, is slated to be branded as a dual Hyatt hotel and extended stay facility. The 14-story development will offer 159 hotel rooms under the Hyatt Place flag and 139 extended stay rooms under the Hyatt House brand. The development will be Chicago-based Hyatt Hotels Corp.'s (NYSE: H) first dual-branded property in Houston. The hotel is scheduled for completion in early 2023.

WAREHOUSE (INDUSTRIAL) MARKET

Momentum in the warehouse market did not cease throughout 2022, affirming the Houston market's regional and national prominence entering 2023. Driven by record container volumes through the ship channel, nationally leading population growth, continued e-commerce growth, as well as a massive manufacturing sector and petrochemical industry, Houston surpassed every other major metro area in warehouse space absorbed in 2022. These market drivers are expected to keep the Houston metro at the forefront of leasing and investment decisions, even with potential slowdowns in construction activity in 2023.

Demand has remained strong through 2022 and will carry over into 2023. For a second year in a row Houston's Industrial net absorption (29 million sq. ft.) has outpaced deliveries (24 million sq. ft.). Houston metro experienced a record-breaking year in new construction starts for warehouse buildings with 33.5 million sq. ft. underway to end the year, the majority of which were distribution warehouses. While construction is expected to decelerate in response to financing challenges in the year ahead, 17 million sq. ft. has already been proposed for 2023, and demand shows little sign of slowing down.

Over the past two years, Houston's warehouse vacancy rate has been cut by close to 300 bases points down to 5.6% to end Q4 of 2022. This compression in vacancy rates is an effect of a sustained high volume of leasing activity, including several distribution and third-party logistics firms that have signed a record number of large leases to meet demand from e-commerce. In 2022, 100 leases of 100,000 sq. ft. or higher were signed. Vacancy has the potential to tick-up in 2023 as a record amount of ongoing construction is set to come on-line, including a significant number of speculative projects, however the current tenant demand and a pause new construction starts should keep rates stable in the first half of the year.

The volume of signed lease transactions was down from the 2021 record high annual total of 40.6 million sq. ft. to 36.3 million sq. ft. during the trailing 12-months of 2022. The 4th quarter of 2022 alone accounted for 10.7 million sq. ft. of signed leases, marking the 9th consecutive quarter that the Houston warehouse market has surpassed 10 million sq. ft. of leasing activity.

Asking rents climbed nominally behind decreasing vacancy rates, with the overall average asking rent at $0.66 per sq. ft. to end 2022, up just 1.5% from year end of 2021. However, increases have been seen across all major sectors with Flex up to $0.92 per sq. ft., Manufacturing at $0.62 per sq. ft., and Distribution up to $0.65 per sq. ft. to end the year. Year-to-date the Southwest ($0.88PSF), North ($0.75 PSF), and Northwest ($0.73) have consistently represented the highest asking rates among the Houston submarkets. The large volume of incoming supply has pushed market asking rents to remain tight and competitive through the 4th quarter of 2022.

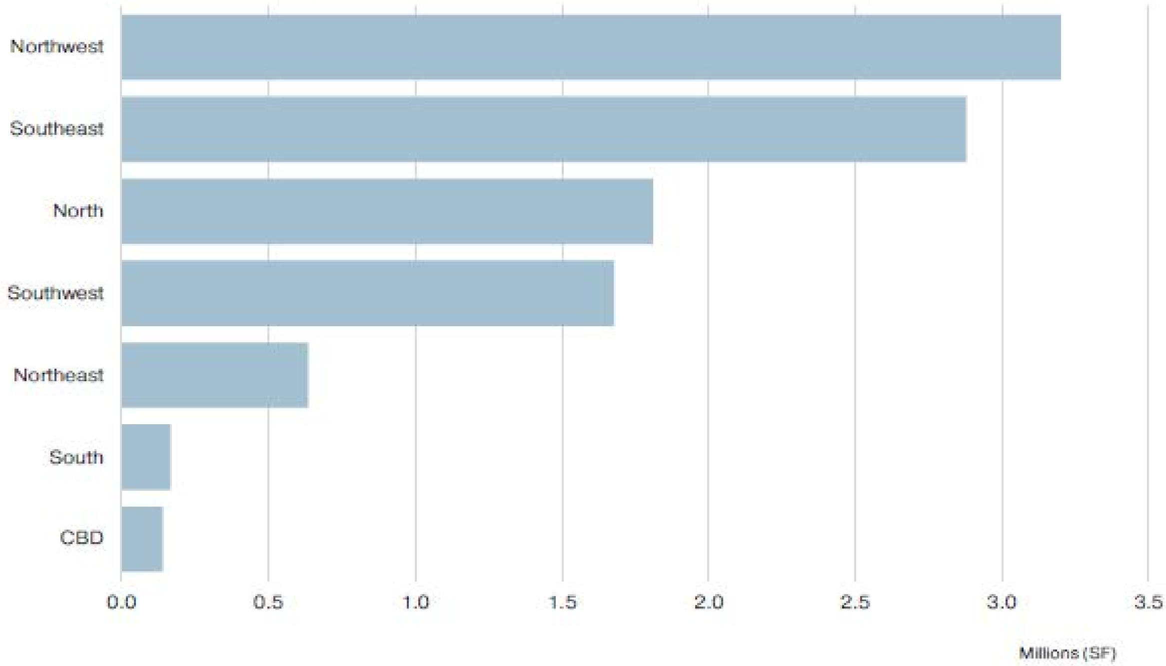
Rising commercial mortgage rates have tempered sales velocity at the end of 2022, however most sellers are exiting their investments with notable earnings. The 4th quarter of 2022 saw sales volume down 79% from the previous year at $418 million. Buyer composition in 2022 was made up of 53% private investors, 30% institutional, and 8% REITs. For sellers, the majority were private investors at 44% and REITs at 37%.

Market Activity

	CURRENT Q4 2022	PRIOR QUARTER Q3 2022		PRIOR YEAR Q4 2021	
Vacant Total	5.6%	5.6%	—	6.5%	↓
Vacant Direct	5.3%	5.3%	—	6.3%	↓
Available Total	10.4%	10.3%	↑	9.4%	↑
Available Direct	9.7%	9.8%	↓	8.7%	↑
Net Absorption (SF)	5,415,314	7,314,935	↓	9,449,402	↓
Leasing Activity (SF)	10,656,859	11,643,062	↓	10,271,475	↑
Construction (SF)	33,525,497	31,838,052	↑	19,711,210	↑
Deliveries (SF)	5,589,844	9,439,846	↓	4,980,915	↑
Avg Asking Rent (Gross)	$0.72	$0.71	↑	$0.64	↑
Inventory (SF)	704,780,677	699,190,833	↑	680,539,991	↑

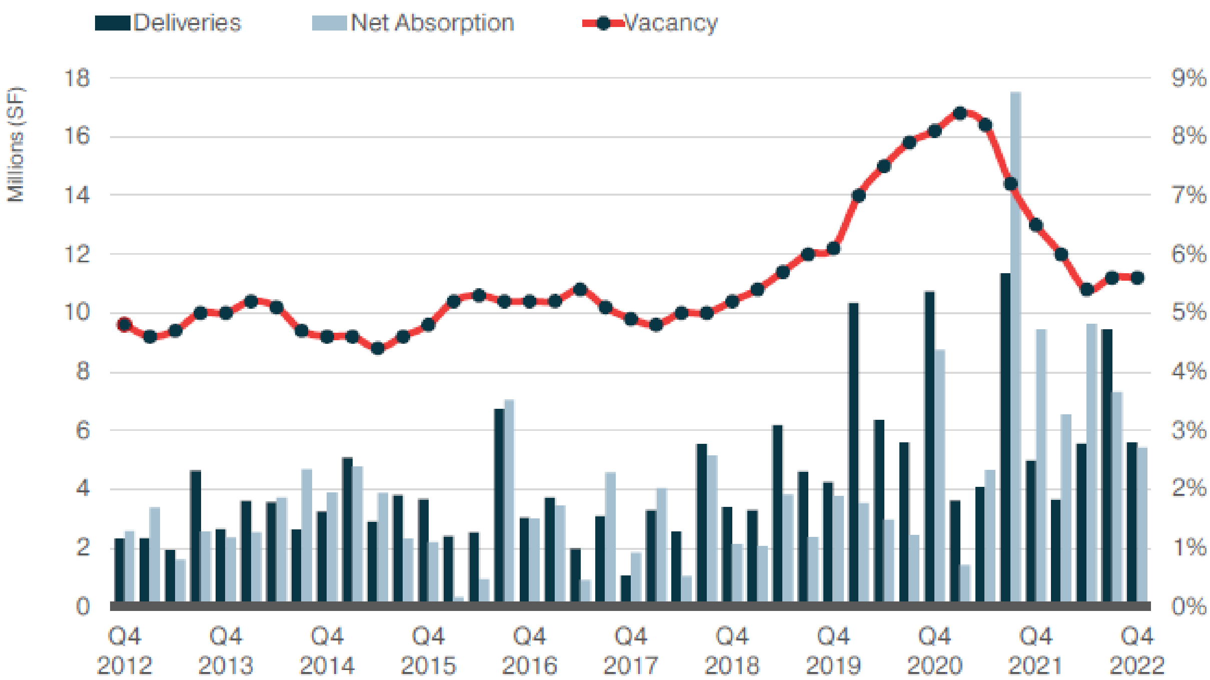
Source: Partners Real Estate

Leasing Activity



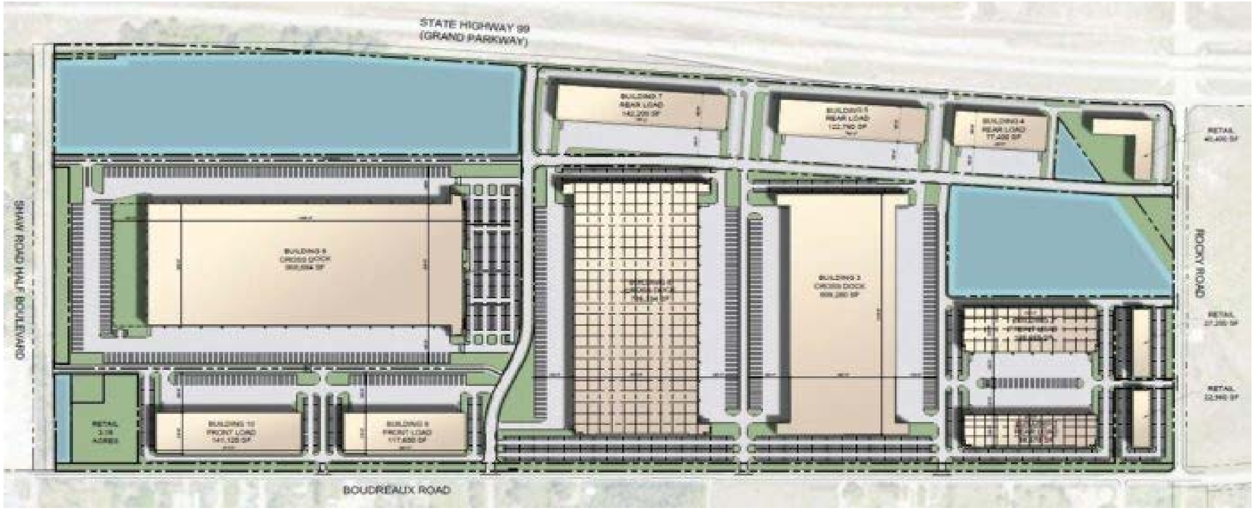
Source: Partners Real Estate

Supply & Demand



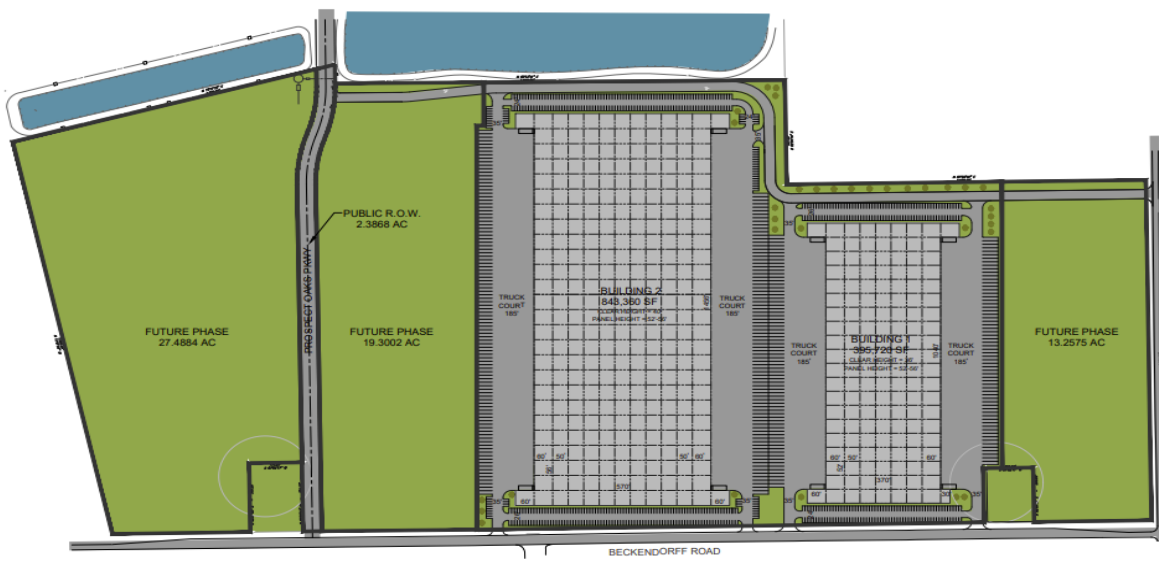
Source: Partners Real Estate

<u>Highlighted Industrial Activity</u>



Interchange 249

Interchange 249 is a multi-phased 240-acre business park that will offer nearly 3.1 million square feet of light industrial and warehouse space. The park is positioned at the interchange of Highway 249 and the Grand Parkway in Tomball, TX making it well suited for both local and regional distribution. Phase 1 of the master planned development (pictured above) is scheduled for completion in mid-2023, including a 908,853 sq. ft. distribution and fulfillment center for Macy's.



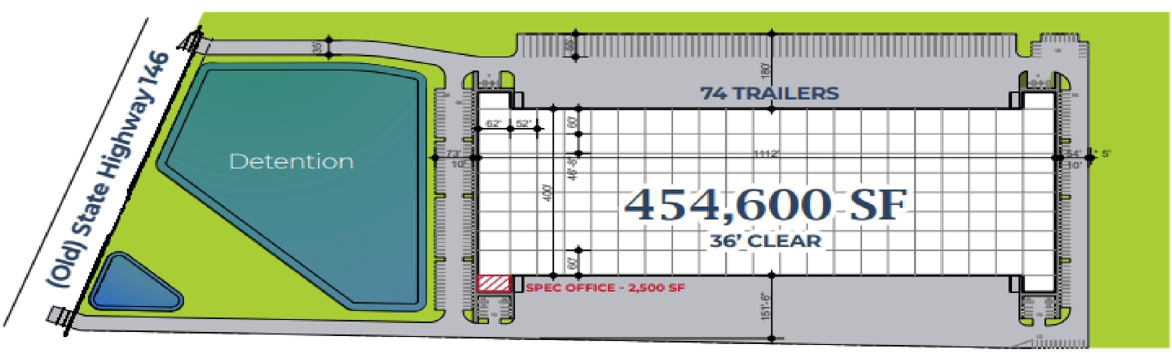
Grand Central Industrial Park

Grand Central Industrial Park in Katy is scheduled to deliver buildings 3 and 4 in Q1 of 2023. The industrial park is situated with frontage on the Grand Parkway West near FM 249 and will bring a total over 1 million sq. ft. to the Northwest Outliers sub-market with its Phase 1 completion.

Nexus North Logistics Park

Nexus North Logistics Park began construction in Q3 of 2022. The 567,140 sq. ft. project is in the heart of Houston's Northern Submarket and is only minutes away from George Bush International Airport. Located directly off I-69 and Greens Road, the site also benefits from quick access to Beltway 8.

Nexus North Logistics Park will feature a 36-foot clear height, 7-inch reinforced concrete slab, 104 dock-high doors, 135 - 190-foot truck courts, and ample trailer parking. Construction began in August 2022 and is expected to be completed in May 2023.



Bayport 146 Distribution Center

Bayport 146 Distribution Center is scheduled for delivery in January of 2023. Construction on the state-of-the-art cross-dock distribution center began in the first half of 2022 and will bring 454,600 sq. ft. to the Southeast sub-market.

The project is located adjacent to the Bayport Container Terminal and is accessed via Old State Highway 146. It will have a shall depth of 400-feet and a clear height of 36-feet.

Summary

Three years ago, no one expected a world-wide pandemic. The pandemic changed the way everyone does business, changed the way everybody shopped and changed the way everybody lived. Some markets are slowly returning to pre pandemic levels, whereas some markets are performing at pre pandemic levels or better.

Per many analyst and economic experts, a recession is looming on the horizon. Inflation has been high. Some industries were cutting costs and laying off thousands of people, preparing for harder times. Inflation has been our number one problem.

The good news is the Federal Reserve has been raising interest rates very aggressively to stifle that inflation. Oil prices, natural gas prices and other commodities are dropping. Supply chains are opening up and getting prices down for a lot of products that were disrupted during the pandemic. Wage growth is taking place in certain parts of the economy like healthcare and hospitality.

The Federal Reserve is expected to increase interest rates by 25 basis points at its two-day meeting starting February 1, 2023. That is a pullback on previous hikes to the Federal Funds Rate of 50 and 75 basis points as it winds down its fight with inflation, which fell to its lowest rate in more than a year in December 2022 at 6.5%.

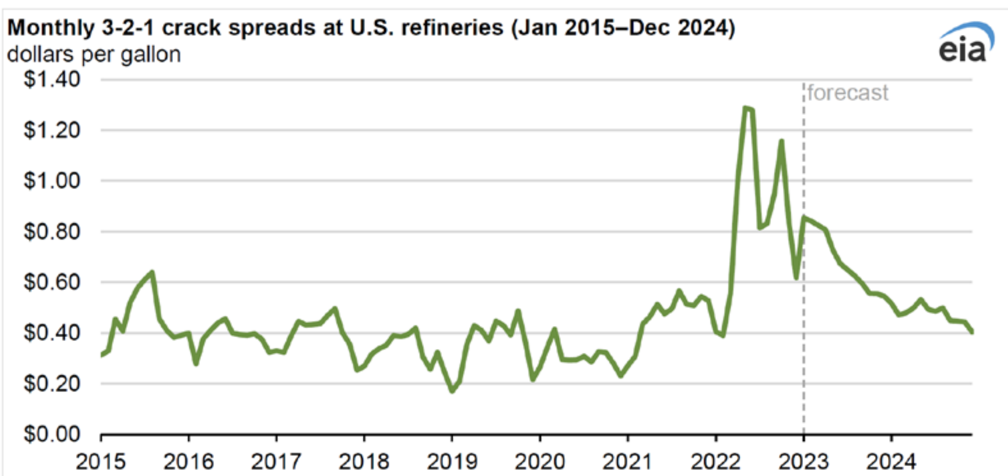
The United States economy's apparent ability to weather any storms initiated by rate rises is beginning to leave some analysts bullish that a widely expected recession can be avoided.

Leading strategists are growing increasingly confident that the US will avoid a recession in 2023 as markets remain resilient while the Fed softens its hawkish monetary policy stance.

Refineries

A confluent of events came together during mostly the first half of 2022 to produce the highest refining margin spike ever seen on the Gulf Coast. Stout product demand in the U.S. and Europe along with Russia-Ukraine sanctions, and the Nord Stream Pipeline stoppage combined to serve up a significant, but short-lived margin, for refiners. On the first trading day of 2023, the price of West Texas Intermediate (WTI) crude oil was about $76.87 per barrel compared to last year at $75.99 (NYMEX; first trading day 2022).

The Texas Gulf Coast refinery's average annual capacity utilization, as defined by the Department of Energy, for 2022 was 93.5 percent compared to 86.1 percent in 2021. Pre-pandemic (2019), the rate was 92.0 percent, so there was either a recovery bounce, some pent-up demand that took place, or both, especially in the summer driving/vacation months of 2022.



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, February 2023
Note: The 3-2-1 crack spread is calculated by subtracting the value of a gallon of Brent crude oil (based on the Brent spot average) from the price of two-thirds of a gallon of gasoline and one-third of a gallon of diesel (based on the refiner price for resale).

The graphic above shows the historical and forecasted refining margins using a 3-2-1 crack spread as an estimate of earnings and highlights the magnitude of the 2022 market. For 2022, Baker & O'Brien Inc.'s PRISM® cash margins for refining on the Gulf Coast (PADD 3) were more than $30 per barrel better than the same period for the prior year (Q2 only). This provides some perspective on the single-quarter magnitude of the record-high earnings. Another third-party subscription service reflects a 135% increase in the annual average U.S. composite refiner earnings from '21 to '22. Again, economics is site-specific, and heavy crude coking refinery performance continues to underperform the market average. Refiner margins will be site specific depending on the configuration, crude diet, and utilization, but in general, it was a fantastic few months for the segment. 2023 could prove to be better or worse, but much of that depends on whether The FOMC induces a recession via their 2023 Treasury rate hikes, or whether there's travel demand this summer. If product demand is robust, margins should flourish, if not, they won't. Prognosticators anticipate a 32% decline in 2023 margins compared to 2022 which would still be a robust level of earnings.

The price of D6, or ethanol-based, RINs (Renewable Identification Numbers; the renewable fuels trading/compliance mechanism) increased by 11% on average for 2022 versus 2021. Diesel RINs (D4) costs were up about the same (11%) in 2022 compared to 2021. The current administration appears to have discontinued the small refiner (capacities less than 100,000 bpd) exemption on RINs.

ExxonMobil is expanding its chemical plant operations adjacent to the refinery in Baytown with a performance polymer unit and a specialty additives unit. Construction for both units began in 2020 and is expected to be completed sometime in the second quarter of this year.

There were two sale announcements for U.S.-based refineries in 2022, BP Toledo and ExxonMobil Billings: In August BP agreed to sell its 50% interest in the BP-Husky Toledo refinery (240,000 bpd) in Ohio to Cenovus Energy Inc. for $300 million which closed February 28, 2023. In October ExxonMobil, agreed to sell its Billings, Montana refinery (63,000 bpd) and associated pipelines and terminals to PAR Pacific Holdings, Inc. for $310 million. The sale has not closed as of March 8, 2023.

Chemicals

The US economy has been growing steadily since bottoming out in the second quarter of 2020 when the Coronavirus first hit. Since then, the market has been on a steady upward trend into 2022. The biggest disruptions have been lingering supply chain issues for various markets along with the Ukraine invasion in early 2022. The chemicals industry varies by product, but as a whole has done well in early 2022 and fell back off in the 3rd and 4th quarter, just to turn around again in early 2023.

The chemicals industry is heavily dependent on auto manufacturing, home building, and the health of the economy. GDP is up 9.1% for 2022 and expectations are that it could be up again in 2023.

The growth hasn't come without its concerns, and with oil prices peaking at over $115/bbl, the Federal Reserve (Fed) has been looking at the potential of a looming recession. The Fed is trying to battle out-of-control inflation by raising interest rates, which they have done from an all-time low of 0.25% going into 2022 to a year-end 4.5%. There was another 0.25% bump in February and thoughts are that there will be another quarter percent in May. Inflation appears to have been curtailed after reaching a high of 8% in 2021 down to 4% in 2022. Predictions are that inflation in 2023 will be at a much more typical 2.4%.

Housing starts peaked in 2022, and they continued to build along with the economy until the Fed began its crusade against inflation. Additionally, vehicle sales have increased with the microchip shortage being resolved. Vehicle sales are expected to increase in 2023 to 14.8 million units from 13.6 in 2022, but still well below pre-pandemic sales of 17 million units as vehicle inventories were down below 26 days in December.

Texas has been blessed with an abundance of oil and natural gas fields that continue to be developed. West Texas is the most recent boom area with massive volumes of gas and natural gas liquids. The glut of natural gas that has been in place since 2005 has caused a tremendous amount of new construction to process the gas. The natural gas liquids have been piped to the Texas Gulf Coast to be fractionated into Ethanes, Propanes, Butanes, and heavier components which can be sold domestically or liquified for exports.

Many companies have begun exporting natural gas through LNG liquefaction terminals. Expansion of existing facilities and construction of new projects is ongoing with natural gas going out to the world market. Current natural gas prices may not be as cheap or as stable as they have been for nearly a decade as we've seen natural gas prices climbing near $10/MMBTU at the end of 2022 only to fall off to less than $3/MMBTU in early 2023. The increases at the end of 2022 lead to reduced margins on products that result from natural gas derivatives, which adversely impacts many facilities in the Houston and Gulf Coast region.

The economics of the large commodities chemical units built on the Gulf Coast started strong but hit some substantial headwinds in 2022. Increased raw material costs from natural gas derivatives along with an increase in global capacity over the last 5 years put a heavy squeeze on margins. Operation rates for olefins units have decreased by 2% for the year. Altogether this industry appears to have peaked in 2015 for the current 5-15 year cycle and is not likely to get to those levels again for a while.

Chemical-related inventory volumes are likely to be all over the place. Many plants are trying to sell everything they can produce while others are trying to build as much inventory as they can combat supply chain issues. Values on older facilities will likely hold steady or have a slight increase for 2022, but the newer facilities are still depreciating heavier than the growth in the industry. Specialty chemicals may be up or down depending on the products.

Utilities

NATURAL GAS DISTRIBUTION

Natural Gas Distribution utility companies are always requesting that regulators allow them higher returns (through the rates they are allowed to charge their customers) to pay for the cost of expansion to maintain reliable overall service, as well as expenses to repair storm damage (when needed). However, the main goal of regulators is to make sure gas distribution companies remain operational while keeping service costs as low as possible, in return for the monopoly power given to these companies over designated service areas. Because both revenues and expenses tend to be held in line with this process, the values of property owned by these natural gas distribution businesses tend to be rather stable. Other factors that augur well for a continued healthy future demand for utility services are: a) the nation's population appears to be on a steady upward growth course; b) limited practical alternatives exist for consumers seeking a steady supply of natural gas; and c) natural gas supplies in this country are abundant thanks to proficient drilling and extraction technologies. Unseasonably warm or cold weather (eg: Winter Storm Uri in Feb. 2021) can always cause substantial volatility in quarterly operating results; however, companies strive to counteract this exposure through long-term oriented temperature-adjusted rate mechanisms.

For 2023, the market values of the companies in this sector should remain stable if not improve slightly, due to a continued increase in customer base in their operational areas and higher rate cases being approved in certain service areas. Natural gas quotations have dropped substantially over the past several months, reflecting such factors as the prolonged shutdown of a key LNG export terminal in the United States and a decrease in weather-related demand. Even though this scenario does not augur well for companies that produce this commodity, regulated utility units generally benefit. That's partially because diminished gas pricing tends to lead to lower prices for customers, which might bring down bad debt expenses. Moreover, there is an increased possibility that homeowners will convert from alternative fuel sources, such as propane or oil, to natural gas. (At present, it's estimated that over half of all households in this country use natural gas.) The market is optimistic, in general, about the sector's operating performance over the long term. Natural gas should remain an abundant resource in the United States, brought about partially by new technologies, so a shortage does not seem probable anytime soon. Too, there are limited alternatives for the services the companies in this category offer. Furthermore, it's a challenge for new entrants in the market, given such factors as the size of existing competitors and the substantial initial capital outlays that are required. Finally, the country's population should remain on a steady, upward course, which augurs well for future demand for utility services.

TELECOMMUNICATIONS

Capital spending has increased across the Telecommunications Services Industry. Both the wireless and the wireline companies are building out their networks to offer larger coverage areas with faster and more reliable product offerings. The "Big Three" wireless carriers have picked up the pace of their 5G wireless network buildouts, which is forcing many of their smaller competitors to do the same to maintain market share. Fiber-based broadband is also gaining a lot of investment and increased government spending via The American Rescue Plan and the Infrastructure Investment and Jobs Act (IIJA) should only accelerate this trend. The mapping process for what areas will receive funds was completed in mid-November and funding should begin in the latter part of 2023.

Merger and acquisition (M&A) activity continue to be a feature of the Telecommunications Services Industry. However, in 2022 private equity drove the mergers and acquisitions. For example, investment firm Apollo Global Management completed the largest deal in 2022, when it purchased operations in 20 states from Lumen Technologies. Furthermore, Alina Capital Partners purchased Consolidated Communications operations in Kansas City, and the list goes on with many smaller purchases by private equity. The 2022 non-private equity M&A activity includes: Amherst Communications buying Union Telephone, CommNet buying Sacred Wind, Consolidated Communications selling its wireless business to Verizon, Metronet merging with Vexus Fiber, and Nextlink buying CCAOnline.

For the traditional portion of Telephone Utilities, the number of phone lines in the United States continues to decrease. Competition from alternative technologies, namely wireless, instant messaging, and Voice over Internet Protocol, has caused residential and business customers to continue to cancel their wireline service. Most wireline carriers are rural; thus, peer competition is scarce. Access lines continue to be in decline. Margins remain under pressure across the

Telecommunications Services Industry. Data usage continues to grow exponentially as technological innovation has led to faster networks and more powerful cell phones. Thus, price competition has become more intense. Traditional telephone property across the state is expected to continue declining over the next few years as it is replaced and/or transformed into broadband and/or wireless service.

CABLE TV

The Cable TV Group continues to decline. Shaw Communications, which provides broadband services to more than 1.8 million customers in Alberta and British Columbia, was the group's best performer. Comcast, the nation's largest cable service provider, saw broadband-subscriber growth slow dramatically in the third quarter with only 14,000 subscribers added, which was a 95% drop over the previous year. Management has cited fewer selling opportunities, coinciding with depressed move activity. The U.S. Census Bureau showed that just 8.4% of Americans changed homes in the prior year, which is the lowest rate in over 70 years. This industry is also blaming increased competition brought by increased demand for connectivity as a result of the COVID-19 pandemic. T-Mobile and Verizon, with the new fixed-wireless services they began offering this year, are now the leaders in broadband-subscriber growth.

ELECTRIC POWER

The EIA, in their January 2023 Short-Term Energy Outlook predicts that coal generation will continue to fall from 20% in 2022 to 17% in 2024. This decreased capacity will partially be compensated for by utility-scale solar and wind generation, which was projected to increase from 16% in 2023 to 18% in 2024. Forecast fuel prices were projected to decrease from 2023 to 2024. Finally, electricity consumption was estimated to grow by 3% in 2022 and is now expected to remain fairly stable.

ERCOT set an all-time maximum peak demand record of 76,681 MW for the system on 6/23/2022, which was 1,861 MW more than the previous record of 74,820 MW on 8/12/2019. In addition, monthly energy generation increased by 13% year-over-year to 42,031 GWh in June 2022 compared to 37,346 GWh in June 2021. There are, by far, the most planned solar and battery installations in the next 7 years including 112 GW (52.3%) Solar, 65 GW (30.6%) Battery, 22 GW (10.4%) Wind, and 13 GW (6.0 %) Gas. There were transmission projects totaling $1.523 billion started up in 2022.

The Production Tax Credit (PTC), (for wind, closed-loop biomass, geothermal energy, open-loop biomass, landfill gas facilities, and trash facilities) which was originally enacted in 1992, has been renewed and expanded multiple times. Most recently, the PTC was extended again by the Inflation Reduction Act of 2022, which made significant changes to the credit. Those changes include extending the expiration date, providing new bonus credits, and establishing new criteria to qualify for the full credit. The base credit can now be earned only if all laborers and mechanics involved in the construction and maintenance of the project are paid prevailing wages for the entire PTC credit period. Several bonus credits can also be earned. Those include the domestic content bonus, which is earned by any project with 100% of steel or iron and 40% of manufactured products produced in the United States. Furthermore, there is also the energy community bonus, which now can be earned by any project located at one of the following: (i) a brownfield site, (ii) a metropolitan or non-metropolitan statistical area which (A) has (or, at any time during the period beginning after December 31, 2009, had) 0.17% or greater direct employment or 25% or greater local tax revenues related to the extraction, processing, transport, or storage of coal, oil, or natural gas, or (B) has an unemployment rate above the national average for the previous year, or (iii) a census tract or a census tract that is adjoining a census tract in which a coal mine has closed after 1999 or a coal-fired electric generating unit was retired after 2009. Finally, this credit will now be phased out by the end of 2024 and replaced with a new technology-neutral tax credit.

The TCEQ and Texas Legislative Branch completed a rulemaking process and law change during the special legislative sessions in 2021, which finalize the tax exemption of Heat Recovery Steam Generators (HRSGs). HRSGs have been added to the Tier 1 exempted properties at 65% exempted. Those taxpayers who have not applied for HRSG exemptions can now get a 65% tax exemption on the HRSG portion of their combined cycle facility.

UNDERGROUND STORAGE

Natural gas–a colorless, odorless, gaseous hydrocarbon–may be stored in several different ways. It is most commonly held as inventory underground under pressure in three types of facilities. These underground facilities are:

- depleted reservoirs in oil and/or natural gas fields;
- salt cavern formations; and
- aquifers.

Natural gas is also stored in a liquid or gaseous form in above–ground tanks, such as liquid natural gas (LNG) export facilities. Each storage type has its physical characteristics (porosity, permeability, retention capability) and economics (site preparation and maintenance costs, deliverability rates, and cycling capability) which govern its suitability for particular applications. Two important characteristics of an underground storage facility are its capacity to hold natural gas for future use and its deliverability, the rate at which gas inventory can be withdrawn.

The principal owners/operators of underground storage facilities are interstate pipeline companies, intrastate pipeline companies, local distribution companies (LDCs), and independent storage service providers. If a storage facility serves interstate commerce, it is subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC); otherwise, it is state-regulated. Most working gas held in storage facilities is held under lease with shippers, LDCs, or end users who own the gas.

Underground gas storage serves a variety of purposes. Pipeline companies, both interstate and intrastate, rely heavily on underground storage to facilitate load balancing and system supply management on their long-haul transmission lines. Local gas distribution companies generally use underground storage exclusively to serve various customer needs directly. Independent storage service providers build and own underground storage facilities to almost exclusively serve third-party customers like marketers and electricity generators on an "open access" basis. All of these storage purposes exist because of the underlying principle that injection will/must happen during summer months when demand is relatively low (and which keeps upstream producers in business), and conversely, the withdrawal will/must happen in the winter months when there isn't enough upstream gas being produced to satisfy total demand.

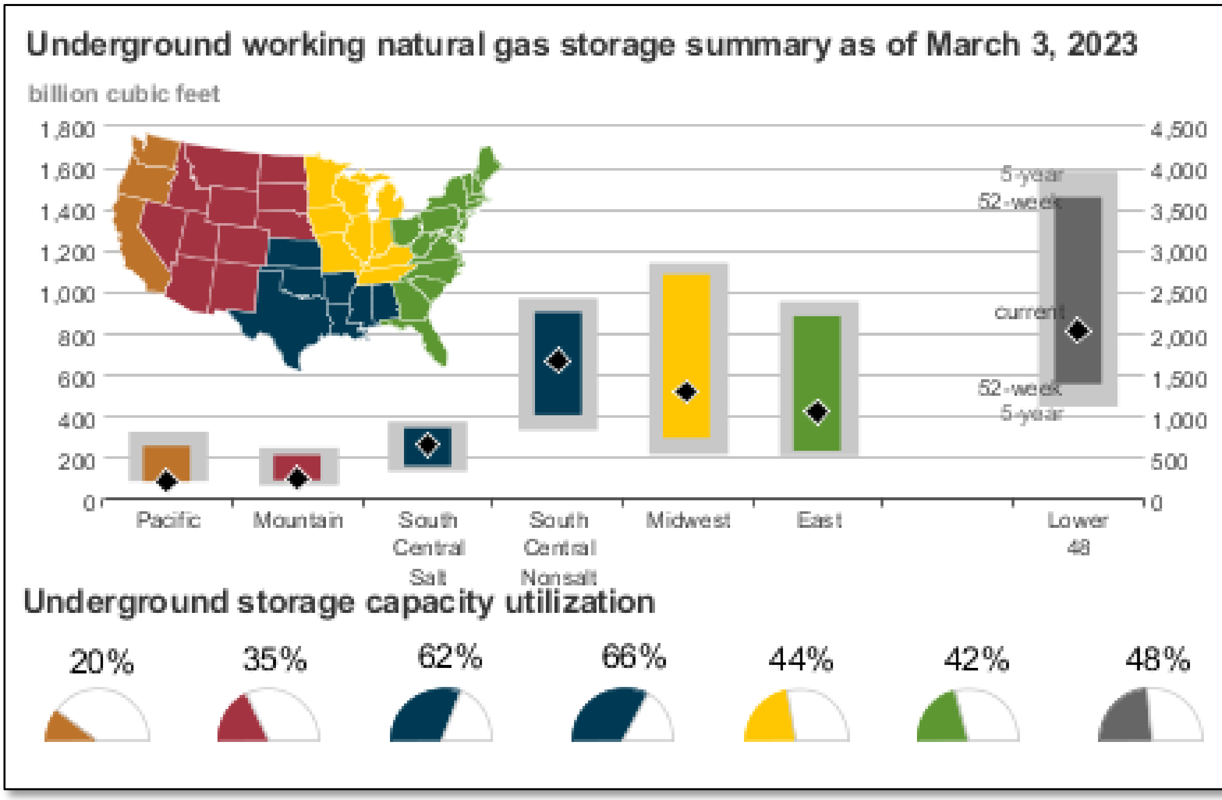
The value of underground gas storage in Texas has the potential to increase as the population here keeps growing and the associated need for electricity ramps up, especially if gas production itself doesn't commensurately increase and renewable sources of energy (wind, solar, commercial battery storage, etc.) can't reliably fill the breach.

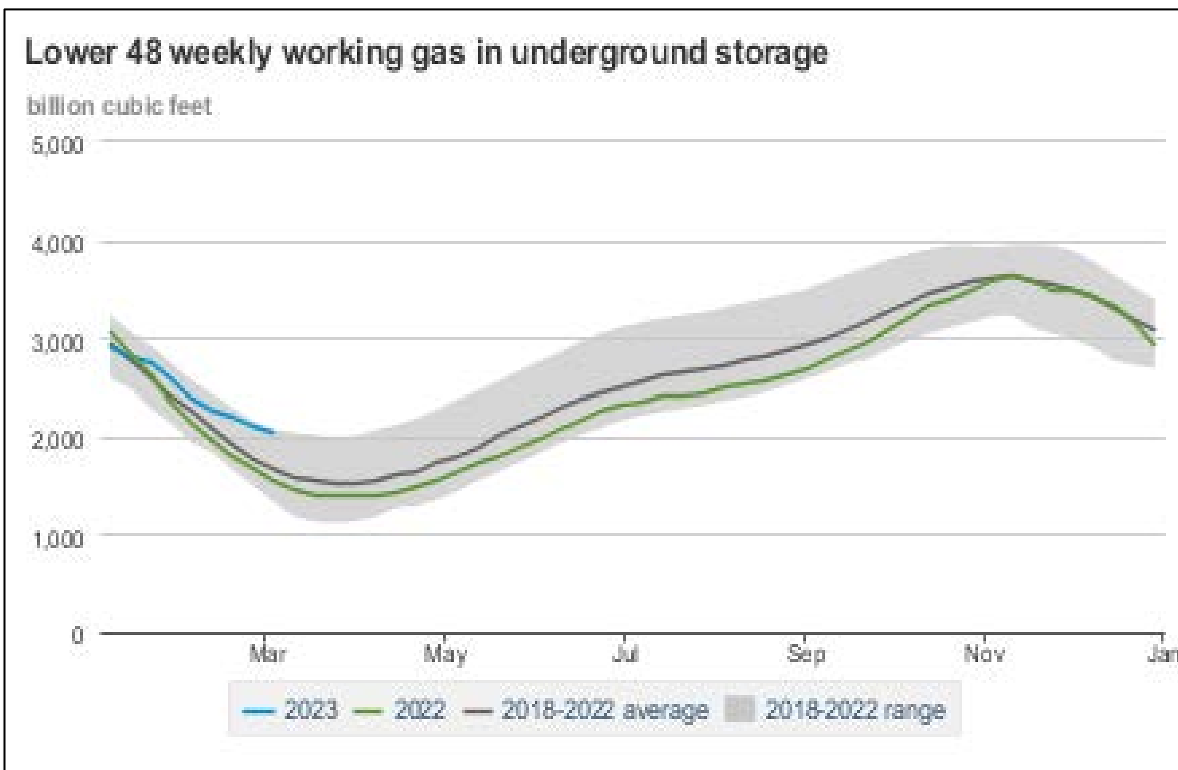
Per forecasts by the U.S. Energy Information Administration (EIA) in their March *Short-Term Energy Outlook* (STEO) report, natural gas will continue to be the predominant source of U.S. electricity generation through 2024, as it has been over the past five years, accounting for an average of around 38% of total generation in 2023 and 2024. This is despite the number of renewable energy sources expected to grow the most during the next two years.

As a result of the mild 2022/23 winter and low natural gas consumption in the residential and commercial sectors, the EIA expects 2.4% (2 Bcf/d) less U.S. natural gas consumption in 2023 than in 2022. Reduced natural gas consumption in January and February slowed withdrawals from natural gas inventories to less than the five-year average and reduced natural gas prices. As a result, gas inventories were able to be rebuilt over the last twelve months to a more normal level, and natural gas production is expected to be relatively flat for the rest of 2023 as producers reduce the drilling of new wells.

This doesn't mean the business of storing natural gas is a declining industry, as electricity generation is hardly the only use for natural gas. Any declines in residential and commercial sectors will likely be offset by increases in industrial sector consumption. As always, winter weather plays a leading role in how much gas is ultimately withdrawn from storage for domestic heating purposes. But a significant and growing use of domestically produced natural gas is as export volumes to the world at large in the form of liquified natural gas (LNG). The EIA currently assumes that global demand for natural gas will remain strong and that expected additional U.S. LNG export capacity comes online. U.S. LNG exports are forecasted to average about 12 Bcf/d in 2023, up 14% from last year, and increase by an additional 5% in 2024.

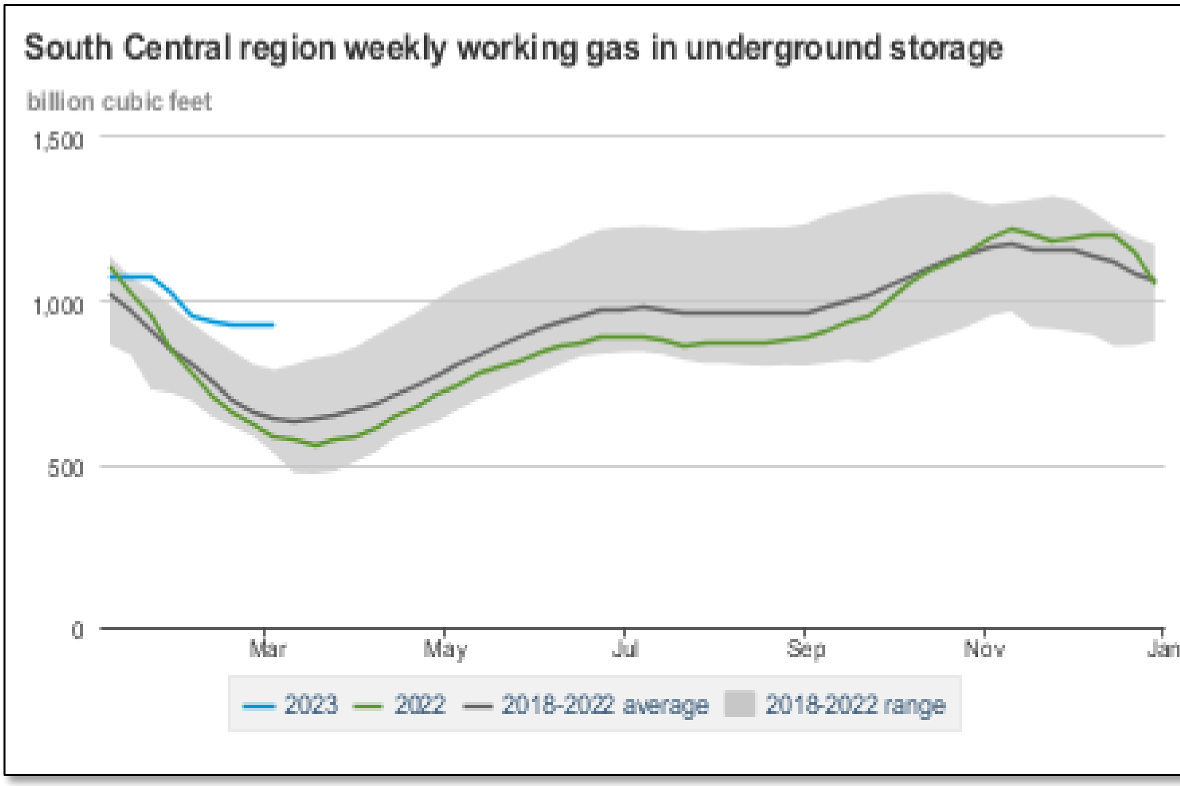
Per the EIA's *Weekly Natural Storage Report* released March 3, 2023, working gas in storage for the Lower 48 states (the amount of gas owned by the third-party customers of the storage facility operators) was estimated to be 2,030 Bcf (2.030 trillion cubic feet), within the higher part of the five-year historical range. The five-year range of available inventory volume oscillates during the year, with the high point typically reached in November before the winter heating season. The low point is typically in late March or April, or immediately after the winter heating season.

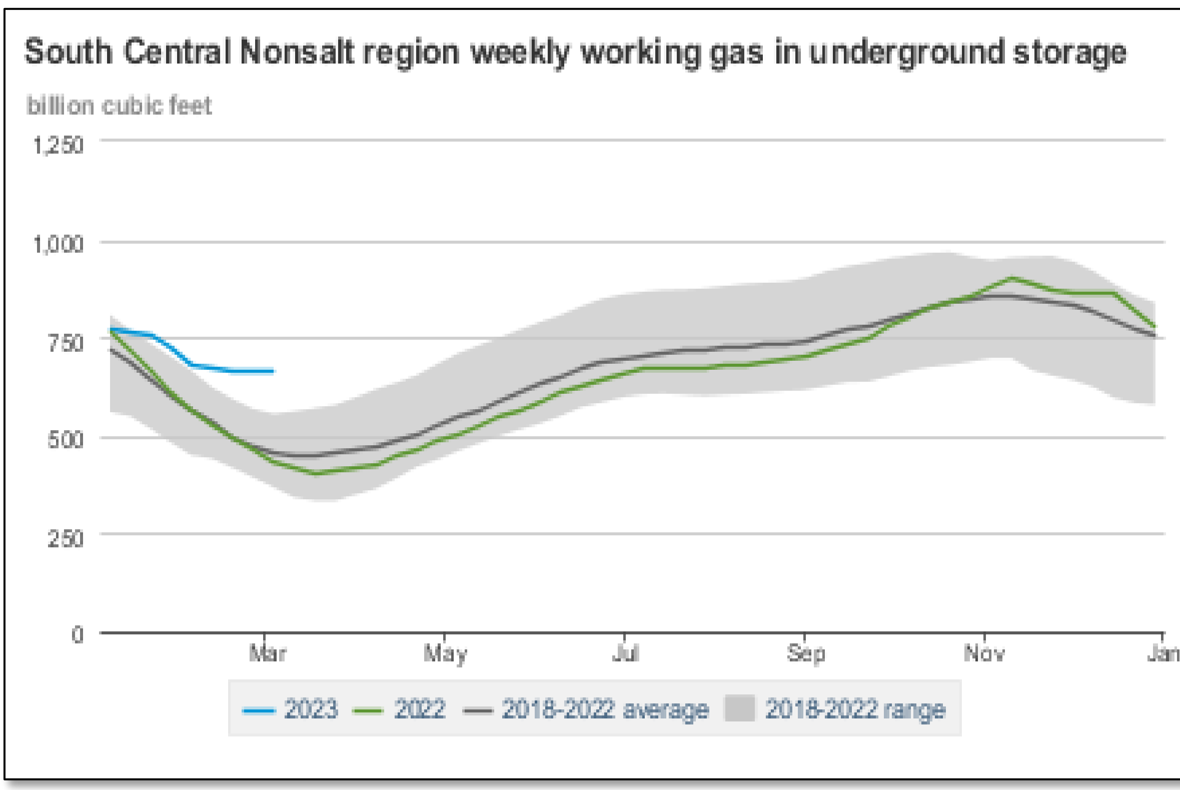


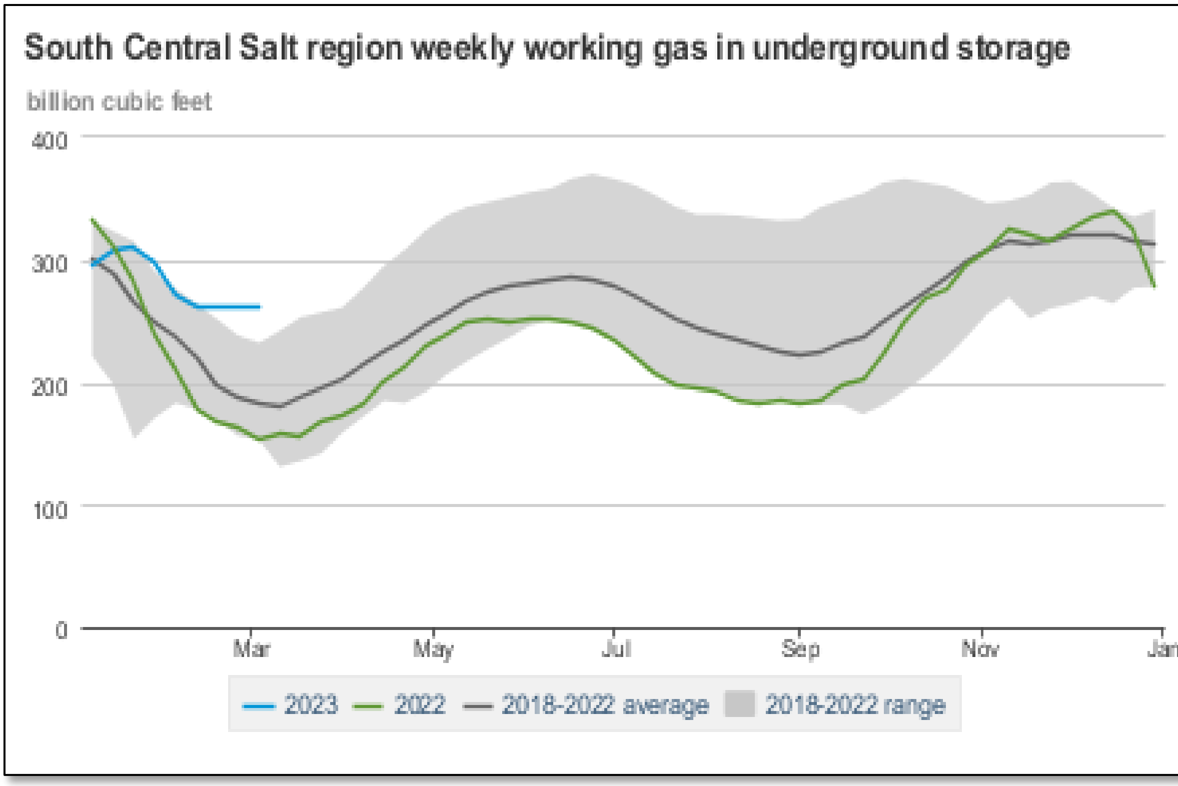


Injection and withdrawal amounts can fluctuate widely over short periods, particularly in winter when significant cold weather events can trigger large sudden withdrawals. However, over time, storage levels have a predictable swing pattern of increasing during the summer months and depleting during the winter months.

Per the EIA's *Natural Gas Storage Dashboard* of March 9, 2023, for the South Central Region (including Harris County), storage was at 915 Bcf or approximately 68% of the region's 1.341 Tcf maximum storage level over the last five years. Just like for the national figures cited above, this storage level is within the upper part of the 5-year historical range. Salt dome cavern storage represents approximately 30% of the region's total capacity.


South Central region weekly working gas in underground storage
billion cubic feet
1,500
1,000
500
0
Mar
May
Jul
Sep
Nov
Jan
2023
2022
2018-2022 average
2018-2022 range


South Central Nonsalt region weekly working gas in underground storage
billion cubic feet
1,250
1,000
750
500
250
0
Mar
May
Jul
Sep
Nov
Jan
2023
2022
2018-2022 average
2018-2022 range



The storage volumes at individual storage sites such as Enterprise's Pierce Junction salt dome caverns, or the depleted gas field storage facilities operated by KinderMorgan (West Clear Lake) and Energy Transfer (Bammel), do not necessarily follow overall U.S. trends all the time. They each have unique markets, shippers, and end-users. In any event, gas inventories present on the inventory owner's chosen lien date (either January 1 or September 1) will be appraised with the prevailing market price at that time. The facilities themselves (including salt dome caverns as man-made structures) will be appraised with analysis and consideration of the most appropriate methods and techniques applicable to each property, in conjunction with and adherence to Property Tax Code Sec. 23.01(b) regarding uniformity of appraisal for similarly situated properties.