



HOUSTON REGION economic outlook

GREATER HOUSTON **PARTNERSHIP**



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INTRODUCTION

The most anticipated recession in U.S. history has yet to arrive. Despite all the dire predictions, the economy is in pretty good shape. Real gross domestic product (GDP) grew at a 5.4 percent annual rate in Q3/23, well above the long-term average. The nation continues to create jobs, over 2.4 million during the first 10 months of '23. And consumers keep opening their wallets. Adjusted for inflation, spending was up \$347 billion in the 12 months ending September '23.

When analysts predicted a recession, they cited trends, economic principles, and how the nation reacted when facing similar circumstances in the past. The relationship between leading data and imminent downturn didn't hold up this time.

Take interest rates, for example. Rising rates coincided with all but two U.S. recessions since 1970. As soon as the Federal Reserve began raising rates in March '22, economists warned that a recession was but a few quarters away. Fed Chair Jerome Powell even acknowledged that to rein in inflation, joblessness and economic pain was unavoidable. Twenty-one months and 11 rate hikes later, the U.S. economy is still growing.

Historically, an inverted yield curve has been a reliable indicator that a recession is looming. The curve inverts when short-term interest rates rise above long-term rates, a signal that investors see greater volatility today than in the distant future. An inverted yield curve preceded eight of the last ten recessions. As of late October '23, the yield curve was inverted for 16 consecutive months, yet no recession.

The Conference Board's closely watched Leading Economic Index foretold the recessions of '01 - '02 and '08 - '09. In June '22, the index

signaled a recession was again likely. As of October '23, the economy was still growing.

A rise in the Michigan Consumer Sentiment Index has always correlated with a rise in spending and a drop in the index with a decline. That relationship has been unequivocal—until now. For the past two years, the index has signaled a decline in spending was forthcoming. Yet in August '23, consumer spending was up \$346 billion from August the year prior, even after adjusting for inflation. Several academic papers have addressed the disconnect. The authors speculate that responses to the survey now reflect consumer concerns over inflation or their political bias, not future spending plans.

Finally, many economists assumed that once consumers drew down the enormous savings built up in the pandemic, they would reduce spending and thus slow growth. In September '23, the Federal Reserve Bank of San Francisco estimated that only \$500 billion of the \$2.1 trillion in total accumulated excess savings remained. In October, however,

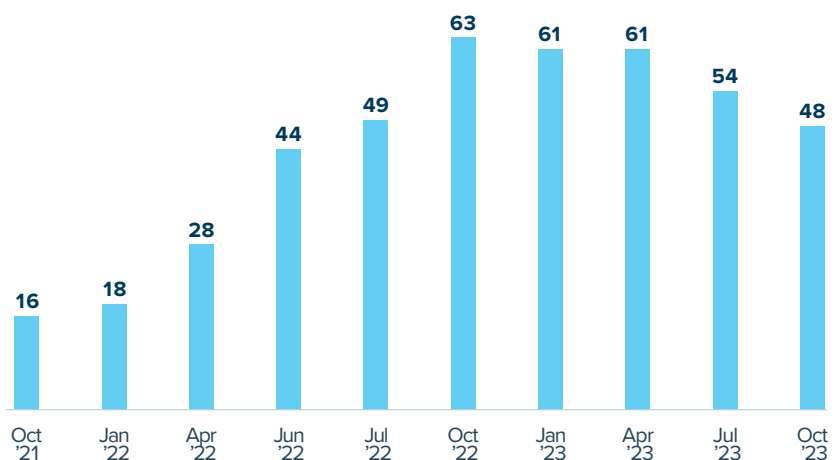
the New York Fed released its own study, revising the remaining savings upward by \$390 billion. Obviously, consumers have not exhausted their pandemic savings.

All these indicators emphasize that the long-awaited recession did not materialize in '23. There's a growing consensus that the U.S. will avoid one in '24 as well.

In October '22, a panel of economists surveyed by *The Wall Street Journal* placed the probability of a recession over the next 12 months at 63 percent. The *Journal* published the results under the headline, "Economists Now Expect a Recession, Job Losses by Next Year." In October '23, the same panel reduced the probability of a recession to 48 percent. The findings ran under the headline, "A Recession Is No Longer the Consensus."

Economists surveyed by the Philadelphia Fed, the National Association for Business Economics, and Bloomberg have reached the same conclusion. That's good news. If the U.S. avoids a recession, so will Houston.

% PROBABILITY OF A RECESSION IN THE NEXT 12 MONTHS



Source: The Wall Street Journal

But there's also a growing consensus that growth will be slower in '24. The Partnership agrees. Higher interest rates, ongoing labor shortages, reductions in government spending, tighter lending standards, and turmoil in commercial real estate will weigh on the economy. If the U.S. slows, so will Houston. Signs of a local slowdown have already emerged:

- Over the first 10 months of '23, metro Houston created 53,700 jobs. That's down from 122,800 over the comparable period in '22.
- The Baker Hughes U.S. rig count slipped to 625 the last week of October '23, down from 768 the same week in '22.

- Through September, Houston's exports of chemicals, plastics, and industrial and electrical machinery were down 10.9 percent compared to last year.
- Adjusted for inflation, sales tax collections in the region's twelve most populous cities were up 1.7 percent through August. At the same time last year, they were up 8.2 percent.
- Construction activity peaked in '22 and has trended down since. City of Houston building permits through September are down 9.1 percent compared to '22, after adjusting for inflation. Initial reports from Dodge Data & Analytics suggest activity outside the city is down by over 20 percent.

A recession might still occur, but it would be triggered by events beyond the Fed's control, like a global trade war, an extreme weather event, direct conflict between China and Taiwan, a prolonged U.S. government shutdown, an oil price spike, the Israel-Hamas war spreading to other countries, or the Ukraine-Russia war spiraling into a global conflict. The Partnership assigns no probabilities to these events but acknowledges any one of them would dramatically alter this forecast.

Three factors will temper growth in '24 — a tight labor market, persistent high interest rates, and turmoil in commercial real estate.

TIGHT LABOR MARKET

The U.S. labor force will continue to grow, but not fast enough to keep pace with the demand for workers. The Bureau of Labor Statistics estimates 3.1 million Americans joined the labor force between October '22 and October '23. As this forecast went to press, there were 9.6 million job openings.

Employers always have open positions. Some workers quit, others retire, or the firm needs the extra hands to expand operations. The current level of openings, however, is 50 percent above the average prior to the pandemic. Unless more workers come off the sidelines or the U.S. allows more legal immigration, chronic worker shortages will prevail.

U.S. JOB OPENINGS



Source: U.S. Bureau of Labor Statistics

INTEREST RATES AND INFLATION

The annual rate of inflation was 3.2 percent in October. The core rate, which excludes volatile food and energy, was 4.0 percent. Most

forecasts call for core inflation to track 2.5 percent or better in '24. As long as the inflation rate tracks above the Fed's preferred 2.0 percent target,

the bank is unlikely to lower interest rates. The Fed may even raise them again if inflation heats back up.

COMMERCIAL REAL ESTATE WOES

Turmoil in commercial real estate will be a third impediment to growth. A recent study by Newmark Group, a real estate firm, determined that \$1.2 trillion of U.S. commercial real estate debt is highly leveraged while property values are falling. Office buildings account for more than

half of the at-risk debt set to mature within the next two years.

Banks are setting aside additional reserves to cover potential losses. They have also reduced lending. Nearly half of all respondents to the Fed's *Senior Loan Officer Opinion Survey* indicated they tightened

lending standards to small, medium-sized, and large firms in Q2/23. Pension funds, private equity groups, and insurance companies have also become more careful with their lending and acquisitions. Across the board, access to capital will be limited, impeding growth.

FORECAST ASSUMPTIONS

The Partnership's forecast for '24 is based on the following assumptions:

- Real U.S. GDP growth averages 1.5 percent or higher in '24.
- Job growth averages 150,000 or better per month.
- Consumers continue to spend at their current pace.
- Inflation tracks above 3.0 percent early in '24 but falls to 2.5 percent by December.
- The Fed maintains interest rates at their current levels through mid-year, then initiates its first cuts to spur growth in the latter half of '24.

Those assumptions align with Bloomberg, NABE, *Wall Street Journal*, and Survey of Professional Forecasters expectations. The forecast is also based on the following assumptions about the local economy:

- Oil averages \$80 per barrel, spurring a marginal increase in drilling.
- Houston sees no reduction in demand for the goods and services it exports to its major trading partners.
- Inventory drawdowns bottom out mid-year and demand for manufactured goods picks up.

- The region welcomes another 120,000 residents, half arriving via the moving van, half via the maternity ward.
- Demand for new single- and multi-family housing slips marginally from current levels.
- Houstonians remain confident about the future and there's no pullback in local spending.

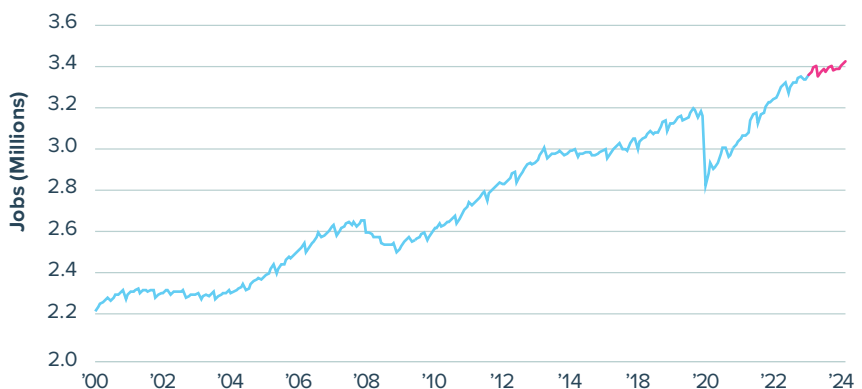
If only one or two assumptions prove wrong, the Partnership's forecast should still hold. But if three or more prove wrong, the forecast would need to be revised.

IN A NUTSHELL

Houstonians can expect the following in '24: Job growth below the current pace. More vehicles on the freeways. Record passenger volumes at the region's airports. Fewer housing starts. Energy prices high enough to spur an uptick in drilling. Minor reductions in inflation. No relief on interest rates until mid-year. And a slump in commercial construction.

The Partnership's forecast calls for growth in administrative services, arts, entertainment, and recreation,

METRO HOUSTON EMPLOYMENT



Source: Texas Workforce Commission

Historic Projected

energy, government, health care, hotels, manufacturing, other services, private education, professional services, restaurants and bars, retail, transportation, and wholesale trade.

Job losses will occur in construction, finance and insurance, information, and real estate. The region is projected to add 57,600 jobs on net in '24, a subpar performance

compared to recent years but still a healthy gain. Houston should finish the year with total employment surpassing 3.4 million, a new record for the region.

ONE FINAL NOTE

The purpose of this forecast isn't to score a bullseye, though the Partnership would be pleased if it did. Rather, the purpose is to highlight the forces shaping Houston's economy. A clearer understanding

of the trends driving gains or losses should help the business community make better investment, staffing, and purchase decisions. Given the uncertainty surrounding real estate, interest rates, inflation, consumer

spending, geopolitics, and the climate in Washington, the more insight, the better. Now, the details behind the numbers.



Two words best describe the current status of the energy industry in Houston—transition and consolidation. “Transition” refers to the global effort to meet a growing need for energy while simultaneously reducing emissions associated with climate change. “Consolidation” refers to the recent acquisitions and mergers of several independent producers by the major oil companies. Both are influencing growth in the region.

Houston scored a major victory in October when the U.S. Department of Energy selected the Gulf Coast as one of seven regional clean hydrogen hubs in the nation. The HyVelocity Hydrogen Hub, led by seven industry partners—AES Corporation, Air Liquide, Chevron, ExxonMobil, Mitsubishi Power Americas, Ørsted, and Sempra Infrastructure—will receive up to \$1.2 billion out of \$7 billion in Bipartisan Infrastructure Law funding.

The Partnership has also identified over 500 smaller companies engaged in energy transition activities. These companies work in the areas

of biofuels, carbon capture use and storage, the efficient use of energy, energy storage, geothermal, hydrogen, solar, and wind.

Traditional energy, defined here as oil and gas exploration and oil field services, employed 70,000 Houstonians, or 2.1 percent of all jobs in the region. But that understates the industry's importance to the region. The sector has a high job multiplier because firms in the industry and their employees purchase a significant amount of goods and services from other businesses in Houston. According to IMPLAN, a model the Partnership uses to calculate the impact that relocations have on the region, every 1,000 jobs in exploration and production supports an additional 5,667 elsewhere in the economy, every 1,000 in oil field services supports another 3,613.

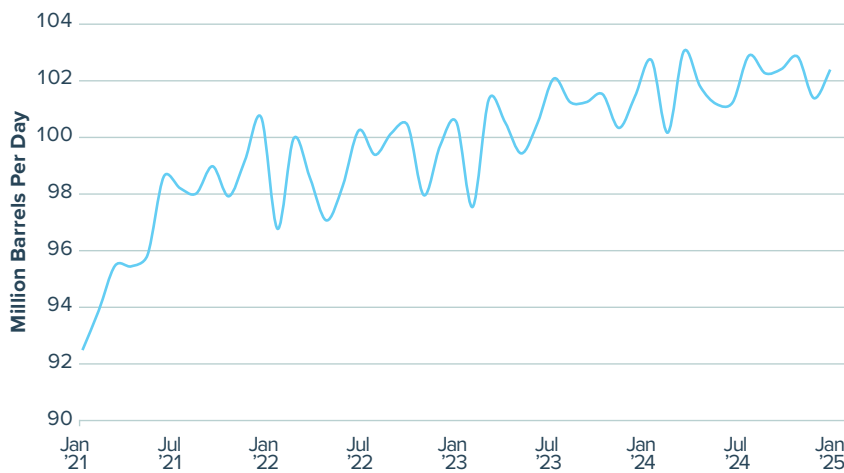
Major consolidations are underway in the industry. In October '23, ExxonMobil announced it would acquire Pioneer Natural Resources in a deal valued at \$59.5 billion. Also in October, Chevron announced it would

acquire Hess in a transaction valued at \$53.0 billion. Additional mergers and acquisitions are expected.

The mergers signal that Exxon and Chevron are confident the global economy will need hydrocarbons well into the future. Estimates vary of when the world will hit peak crude demand. Shell and BP expect the peak to occur within the next 10 years. Exxon, Chevron, and OPEC don't anticipate the peak for another 20 or 30. Even as the use of hydrocarbons for transportation fuels declines, the world will need crude to produce chemicals, plastics, and other materials.

At present, the world consumes about 100 million barrels of crude per day. That's expected to hit 102-103 million in '24. Demand growth will be driven by China, India, and the emerging markets. The U.S. Energy Information Administration (EIA) forecasts Brent, the global crude benchmark, to average \$95 per barrel in '24, and West Texas Intermediate (WTI), the U.S. benchmark for light, sweet crude, to average \$91 per barrel. If the

DAILY GLOBAL CRUDE CONSUMPTION



Source: U.S. Energy Information Administration

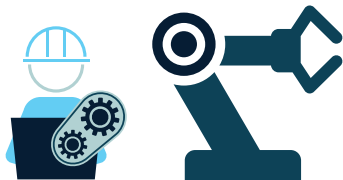
conflict between Israel and Hamas spreads, drawing other Middle East nations into the fighting, oil prices could soar. Crude at \$120 per barrel would translate to gasoline selling for \$5 a gallon at the pump and tip the U.S. into recession. No one wants to see crude at \$120 per barrel.

The industry should see an uptick in drilling in '24 but not a surge. Oil companies will be reluctant to make significant investments to expand production when Saudi Arabia holds over three million barrels of daily production off the market. And domestic companies continue to practice capital discipline, focusing on

growing profits and not production. They won't significantly expand their drilling programs without approval from Wall Street. Companies in acquisition mode will be more focused on integrating operations than growing production. More efficient drilling techniques, longer laterals (the horizontal portion of a well), and a better understanding of the underlying geology will marginally boost U.S. production in '24. However, this may be offset by rising prices for oilfield equipment and services, increasing uncertainty on the regulatory front, and difficulty in hiring enough employees to expand operations.

In the short run, the consolidations will be a net positive for the region, especially when operations managed elsewhere are pulled into Houston. Substantial benefits from the energy transition are still a few years away.

The forecast assumes a modest uptick in exploration activity in '24, leading to a modest uptick in hiring. The energy sector is projected to add 3,000 jobs by the end of the year.



MANUFACTURING

Manufacturing employed 233,100 workers, 6.9 percent of all jobs in the region, as of September '23. It's the single largest contributor to Houston's GDP, accounting for \$1 in every \$8 of Houston's economic output.

The industry is divided into durables and nondurables manufacturing. Durables are goods with a lifespan of three or more years, like machinery and equipment. Nondurables have shorter lifespans or become components of durable goods. Examples include paint and chemicals.

Durables account for 30 percent of the region's manufacturing output but 62 percent of its jobs; nondurables account for 70 percent of output and

38 percent of the jobs. Chemicals and refining, highly capital-intensive industries, dominate nondurables, thus the higher output per worker.

Manufacturing never recovered all the jobs lost in the Fracking Bust. It made some progress over the years but gave up most of those gains during the pandemic. Employment remains 28,600 jobs shy of its January '15 peak.

The sector saw moderate growth early in '23, but that began to taper off mid-year.

- The U.S. rig count began to decline in the spring, losing 130 rigs by late October. Roughly one-third of the manufacturing jobs in

Houston are tied to oil and gas exploration.

- Data from the U.S. Census Bureau suggests businesses stopped adding to inventory late last year. In August '23, inventories were up only 1.0 percent compared to August the year prior.
- Among Houston's top 10 export destinations, shipments to Belgium, Brazil, Chile, Mexico, Japan, South Korea, and the United Kingdom were down in the first eight months of '23 compared to '22.

Drilling activity should pick up in '24. The International Monetary Fund (IMF)

METRO HOUSTON MANUFACTURING, Q1/23

Industry	Plants	Employment
Fabricated Metal Products	1,746	49,656
Chemicals	670	41,326
Machinery	850	40,541
Food Processing	674	17,629
Plastics and Rubber	230	11,329
Wood, Paper, Printing	690	9,562
Petroleum Products	86	8,608
Nonmetallic Minerals	292	8,133
Computers and Electronics	419	5,939
Electrical Equipment	145	5,939
Transportation Equipment	150	4,545
Primary Metals	124	3,233
Furniture	175	2,908
Textiles and Apparel	197	2,330
Misc. Manufacturing	554	21,422
Total	5,256	233,100

Source: Texas Workforce Commission and Partnership estimates

projects that all of Houston's top 20 export markets will see economic growth. S&P Global sees the demand for chemicals, a key Houston export, picking up. However, a recent survey by the National Association for Business Economics suggests inventories will remain flat in '24.

Some of manufacturing's growth will come from firms that relocate or expand in the region. Through September, 60 firms announced plans to do so, according to the Partnership's New Business Announcements database. These firms will operate across a broad swath of industries, e.g., batteries, building materials, chemicals, electronics, heating and air conditioning equipment, industrial machinery, metal fabrication, and solar panels. When fully operational, these plants and facilities will employ more than 5,000 workers in the region, the gains to be spread over several years.

In lean years, the sector adds 4,000 to 6,000 jobs, and in boom times, 10,000 to 12,000. This forecast is conservative, calling for manufacturing to add 6,300 jobs in '24.



CONSTRUCTION

Construction employed 218,500 workers as of September '23, accounting for 6.5 percent of all jobs in the region. Activity has slowed significantly from its recent peak. It may seem like the industry is sliding into recession, but the last two years were an aberration. What's happening now is the industry resetting to a new normal.

Houston construction benefited from an enormous release of pent-up demand in '21 and '22. Projects placed on hold early in the pandemic finally broke ground while a surge in overall growth juiced demand for housing and industrial space.

Builders delivered 15 million square feet of industrial/warehouse space on average in the five years prior to COVID. In the 12 months ending September '23, they delivered over twice that amount, nearly 32.7 million. The pace has slackened since, with only 21.7 million under construction at the start of Q4/23.

Builders closed on roughly 42,000 single-family homes in '21 and '22. From '15 through '19, they averaged 30,000 annually. In '23 and '24, they're likely to average 37,000, which is below the recent peak but above the long-term average.

Prior to the pandemic, apartment construction was erratic, with some years seeing as few as 6,000 units built and others as many as 21,000, ultimately averaging 14,000 per year over the decade. Developers delivered 25,000 units in the 12 months ending October '23 but should only deliver 13,000 in all of '24.

Maintenance and construction work will continue at the chemical plants and refineries in the region. Industrial Information Resources has identified nearly \$71 billion in projects at various stages of development in the nine-county region. Granted,

many of these will never be funded, but \$5.5 billion in projects will break ground in Q4/23. This should help offset construction job losses in other sectors.

What will '24 look like? Higher interest rates, tighter credit standards, banks' reluctance to lend, lower office

and industrial occupancies, and economic uncertainty will be a drag on construction in '24. New projects will break ground, but lenders will require builders to have higher equity stakes in their projects. Many builders who focused on private sector work in prior years will seek out public sector work in '24.

Houston's construction sector had already shed 6,100 jobs through the first three-quarters of '23. Layoffs are likely early in the year then should level off. The forecast calls for the sector to lose approximately 4,800 jobs.



WHOLESALE TRADE

Wholesalers are a key link in the region's economy. They buy goods in bulk, store them in warehouses, and sell them to retailers, manufacturers, and other businesses. For grocers, this includes produce, meat, and canned goods; for manufacturers, parts and components; for service industries, office supplies and equipment. The sector employed 180,000 workers as of September '23, accounting for 5.3 percent of all jobs in the region.

The sector exploded in '21 and '22 as manufacturers and retailers rushed to rebuild inventories. Businesses shifted from a just-in-time to a just-in-case mindset and over-ordered. Back then, this made sense given the snarled supply chains and long waits for items on backorder.

But that changed as consumers shifted from spending on "things" to spending on "experiences," and rising interest rates drove up the cost of carrying inventory. In June '23, the business inventory-to-sales ratio rose to a near-record high. Retailers, manufacturers, and wholesalers have begun to destock, and that shows up in various indicators:

- Through August, containerized imports via the Port of Houston were down 7.0 percent compared to August the prior year.
- The Houston PMI's finished goods inventory index rose to 51.9 in

HOUSTON FINISHED GOODS INVENTORY

Above 50 = Excessive Inventories



Source: Institute for Supply Management-Houston

September. In this instance, readings above 50 are bad. They indicate firms have too much inventory on hand. The index has tracked above 50 since March '23.

- The market absorbed only 4.2 msf of warehouse space in Q3/23. While still a healthy amount, that's down from 11.4 msf absorbed in the same quarter in '22.
- The sector added 6,200 jobs from January through June but no jobs from July through September or '23.

There's some debate about whether the destocking trend is a sign of a weak economy or merely stabilizing supply chains. What is clear is that companies have decided pandemic-era buffers are no longer necessary.

In Houston, wholesale activity is likely to remain flat in the first half of '24, but pick up mid-year in line with expectations for the overall economy. Job growth will lag, however, as employers hesitate to bring on new workers until Q4 after they've seen several months of growth. The forecast calls for wholesale trade to add 4,300 jobs in '24.



RETAIL TRADE

Retail employs nearly 320,000 Houstonians, accounting for one in 10 jobs in the region. It plays a key role in meeting the region's workforce needs. Many teenagers land their first job stocking shelves or bagging groceries. Retail provides career options for those with limited education or training. And for professionals between jobs, a short stint in retail helps to bridge the gap between paychecks.

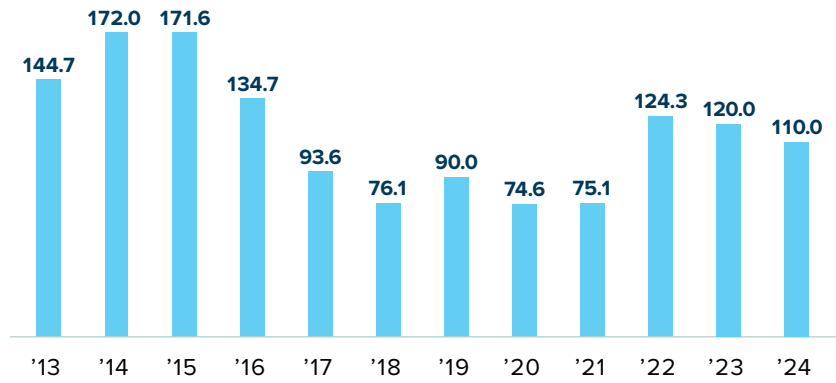
Nationwide, retail sales were up 3.7 percent in the 12 months ending September '23. Given the inflation rate was 3.7 percent over the same period, sales in real terms were essentially flat. Retail data for Houston lags by 12 months, the most current available being Q3/22, not a good indicator of recent trends. But sales tax collections, which include consumer and business purchases, are a good proxy. Through August '23, they were up roughly 1.7 percent after adjusting for inflation.

Six factors drive retail in Houston: job creation, population gains, home construction, consumer confidence, income growth and access to credit.

Job creation: Metro Houston set records in '21 and '22, adding 172,100 and 145,700 jobs respectively. '23 will likely finish with a net gain between 70,000 and 80,000, slightly above the region's long-term average. While job growth will fall below that in '24, Houston will easily top 3.4 million payroll jobs next year, a new record for the region.

Population growth: Over 135,000 people moved to Houston over the past three years. The region gained another 85,000 via the net natural increase, i.e., the difference

METRO HOUSTON POPULATION GAINS 000s



Source: U.S. Census Bureau ('13-'22), Partnership projections ('23 - '24)

between births and deaths. Barring an economic collapse or pandemic resurgence, Houston should add another 110,000 to 120,000 residents through births and immigration and over the next two years.

Home construction: The John Burns Real Estate Consulting firm forecasts that developers will close on approximately 37,000 new homes in '24, about the same level as '23 but down about 5,000 from the peak in '21. New home construction will continue to draw retailers to the region. The bulk of the 4.7 million square feet of retail construction underway in Q4/23 was outside the City of Houston and in the newer suburbs.

Consumer confidence: In August, the Greater Houston Partnership commissioned a survey of Harris, Fort Bend, and Montgomery County residents. Eighty-five percent of respondents expected their financial situations to remain stable or improve in the coming months. Only 15 percent expected their situations to worsen.

While those factors favor retail growth, higher interest rates (noted earlier), declining real incomes, and reduced access to credit will weigh on growth.

Income growth: Houston's median household income was \$74,863 in '22. Adjusted for inflation, average annual household income slipped by over \$8,000 from '21. This reflects the loss of pandemic stimulus payments, not a decline in wages. Nevertheless, it does reflect a drop in purchasing power.

Access to credit: One-fourth (25.4 percent) of respondents to the Fed's Senior Loan Officer Opinion Survey indicated they are less willing to make consumer installment loans and over one-third (36.4 percent) indicated they tightened credit standards for credit card applications.

The Partnership believes that factors supporting growth outweigh those constraining it. Sales will grow, and with them employment, but at subpar rates. The forecast calls for the sector to add 6,500 jobs in '24.



TRANSPORTATION, WAREHOUSING

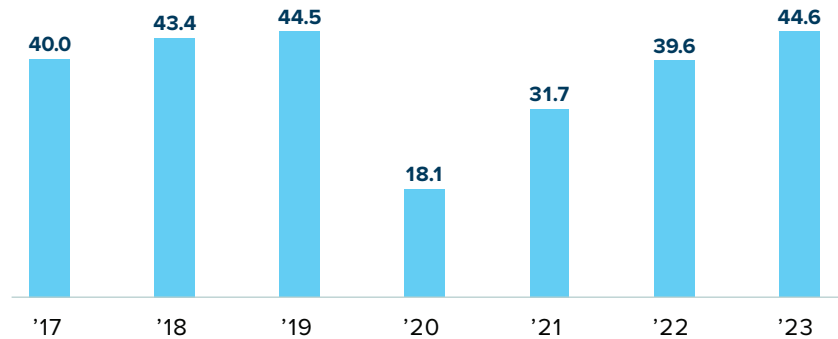
This sector includes airlines, trucking firms, barge companies, bus companies, taxis, limousines, pipelines, sightseeing services, messengers, couriers, freight services, and warehousing. It employed 196,000 workers as of September '23, or 5.8 percent of all jobs in the region.

Results for the sector were mixed leading into '24.

- The Houston Airport System (HAS) handled 44.7 million passengers through September of '23, traffic finally surpassing pre-pandemic levels.
- However, air cargo has trended down since August '22. The system handled 390,000 metric tons of air cargo through Q3/23, down 4.4 percent from the comparable period in '22.
- The four ports in the region (Houston, Galveston, Texas City, and Freeport) handled 167.7 million tons of cargo in the first eight months of '23, up 2.6 percent over the comparable period in '22.
- However, container traffic through the Port of Houston's Barbours Cut

HOUSTON AIRPORT SYSTEM PASSENGER TRAFFIC, SEPT YTD

Millions



Source: Houston Airport System

- and Bayport terminals was down 4.3 percent year to date.
- Union Pacific, a railroad with substantial trackage in Houston, J.B. Hunt, a major U.S. trucking company serving the region, and UPS, a global package delivery company, all reported falling revenues in Q3, indicative of results across much of the industry.

The outlook for the sector in '24 is mixed as well. Air passenger traffic will grow despite higher ticket prices,

lost luggage, and flight delays. The only limitation will be the airline's inability to hire additional staff. The World Trade Organization (WTO) expects global trade to grow 3.3 percent in '24, which should bode well for the region's ports. However, the slowdown in manufacturing and wholesale trade will continue to weigh on trucking, rail, and air cargo services.

The forecast assumes subpar growth in '24, with the sector adding 4,100 jobs.



INFORMATION

Information includes book publishers, cable television services, cell phone providers, data processing, Internet publishing, libraries and archives, motion picture production, music publishers, news syndicates, magazine publishers, newspapers, radio broadcasting, recording studios, software, television

broadcasting, web hosting, and wired telecommunications carriers. The sector employed 33,000 workers as of September '23, accounting for 1.0 percent of all jobs in the region.

Mergers and acquisitions, traditional media competing with web-based media, workers replaced by

technology, and the need to cut operating costs have reduced the number of firms and employees in the sector. Information has lost jobs in 11 of the past 20 years. This forecast anticipates that the trend will continue and calls for the sector to lose 300 jobs by the end of '24.



FINANCE AND INSURANCE

The finance and insurance sector includes banks, credit unions, consumer finance companies, international trade financing, mortgage brokers, payday lenders, investment banks, securities brokerages, investment advisors, insurance carriers and brokers, claims adjusters, and pension funds. The industry employed 116,000 workers as of September '23, accounting for 3.5 percent of all jobs in the region.

Banking will face considerable headwinds in '24. These include having to pay higher interest rates on customer deposits, slower loan growth, and rising loan defaults. However, the industry is unlikely to see a repeat of the Silicon Valley, Signature, and Republic Bank collapses. Those banks failed because they were mismanaged and poorly supervised. That doesn't seem to be the case for Houston banks. And the Fed and U.S. Treasury have signaled they will step in if needed to prevent future bank runs.

But many banks have already hunkered down. They've tightened lending standards, issued fewer loans, and set aside additional reserves to cover future losses. Bloomberg reports that JPMorgan,

Citigroup, Wells Fargo, and Bank of America wrote off \$5.3 billion in bad loans in Q3/23, the highest for the group since Q2/20. There's also growing concern about loan losses at regional banks, which are more heavily involved than the big banks in local real estate and construction financing.

Mortgage activity stalled in the late summer of '23, with loan applications falling for seven consecutive weeks, hitting their slowest pace in 28 years. Higher mortgage rates are keeping prospective homebuyers out of the market and existing owners from refinancing their loans. The mortgage banking sector already saw layoffs in '23, and if home sales don't rebound, it will see more in '24.

As of late October, the S&P 500, Dow Industrial Average, and the NASDAQ Composite had fallen 12.6 percent, 10.2 percent, and 17.4 percent respectively from their recent peaks. Their poor performance has spurred many Americans to move assets into other areas. Many are ditching actively managed mutual funds for passive investments, like index funds. According to Bloomberg, passive funds now account for 47 percent of all assets in mutual funds, up from 27

percent 10 years ago. This has huge implications for employment in the sector. Significantly fewer personnel are needed to manage a passive fund than an active one.

Inflation has hit the insurance industry especially hard. Past premiums have fallen well short of the costs to repair or replace items covered under auto, home, and business policies. Furthermore, the increased frequency of extreme weather events, like wildfires, hurricanes, and prolonged freezes, have contributed to a dramatic jump in claims. Underwriting costs have risen so high in California and Florida that some carriers have left those markets altogether.

Traditionally, jobs, population, and overall economic growth have fed the need for additional banking, investment, and insurance services. That won't be the case in '24. Banking's "circle-the-wagons" response to the expected wave of loan defaults, consumers' souring attitude toward the stock market, and the insurance industry's struggle with rising policy costs will negate any benefits from growth elsewhere in the economy. The forecast calls for a moderate loss of 1,500 jobs in '24.



REAL ESTATE AND EQUIPMENT RENTALS

Real estate and rental and leasing includes the sale, leasing, and management of property (single-family homes, apartments, office buildings, warehouses) and the rental of vehicles, appliances, furniture, office, construction, and industrial

equipment. The sector employed 72,000 workers as of September '23, accounting for 2.1 percent of all jobs in the region.

Higher interest rates, tighter lending conditions, and waning property values are weighing heavily on

commercial real estate. Nationwide, the value of properties in bankruptcy, repossessed, or in liquidation ballooned to \$80 billion in Q3/23, the highest level in over a decade, according to MSCI Real Assets.

Office buildings account for the largest share of distressed debt. Vacancy rates in many U.S. cities now top 20 percent. Houston is approaching 30 percent. Fewer new leases are being signed. When existing leases are renewed, tenants typically downsize the space they occupy. Would-be sellers and potential buyers can't agree on the value of half-empty buildings, so sales transactions have dried up. Buildings that do sell often change hands for a fraction of their original value. In '23, several buildings in Houston sold for no more than the value of the land they sat on.

Multifamily faces uncertainty as well. Developers are overbuilding. Occupancy rates are slipping. Incentives to lease are on the rise. And effective rents have begun to fall.

The industrial/warehouse market has likely passed its heyday. Leasing activity in Q3/23 was down 25 percent from Q3/22. The pace of construction has finally slowed, but vacancy rates have begun to creep up.

The stress on the real estate firms is evident in the quarterly reports of the publicly traded firms. Several have reported declining revenues this year.

HOUSTON COMMERCIAL REAL ESTATE SALES TRANSACTIONS

	Office		Industrial		Retail	
	Deals	Value	Deals	Value	Deals	Value
'23*	582	\$228.0 M	798	\$410.2 M	914	\$349.0 M
'22	976	\$1.1 B	1,408	\$2.1 B	1,720	\$1.2 B
'21	949	\$1.2 B	1,734	\$2.7 B	1,986	\$1.4 B
'20	640	\$773.1 M	1,137	\$655.1 M	1,196	\$466.2 M

Source: CoStar

*SEP YTD

"Cost cutting" has become the new mantra. Hiring freezes are common. Layoffs are quietly taking place.

Residential real estate faces a similar downturn. Closings, prices, and overall transaction values are down from recent peaks. Most agents are affiliated with their firms, not employed by them, so slower sales result in lower commissions, not outright layoffs.

It's not all gloom and doom, though. In the office market, newer buildings saw a vacancy rate of 12.6 percent in Q3/23, less than half that of the market overall. The occupancy rate for Class A apartments open a year or more stood at 92.1 percent in September '23, down only slightly from 93.1 percent in September the year prior. And the retail occupancy

rate has stayed within a narrow range—94.9 to 95.0 percent—for the past six quarters.

Office leasing will remain weak in '24. Industrial activity will return to historic norms. There will be a rise in the number of distressed properties, and this will further impact valuations and sales transactions. As loans roll over, banks will require borrowers to provide additional equity. High interest rates will challenge the viability of many deals. And the decline in construction activity will impact heavy equipment rentals, but other equipment rentals will be unaffected.

The sector will see continued layoffs as firms work to contain costs. The forecast calls for the sector to shed 1,000 jobs in '24.



ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT

The rather clumsily named sector includes employment services (contract workers), services to buildings (janitors and maids), investigation and security services (guards and watchmen), administrative and business support services (back-office operations), and waste collection and treatment (garbage pick-up and disposal). The sector employed 237,000 workers as of September '23, accounting for 7.0 percent of all jobs in the region.

Administrative support serves as a bellwether for broader trends in the economy. When a recession sets in, companies lay off contract workers first and scale back on outsourcing. When the recovery begins, businesses add contract workers to handle the initial uptick in demand and outsourcing contracts are reinstated. Once the recovery is well underway, the contract workers are typically offered permanent, full-time positions. The sector logged gains early in '23 but began to slide

toward the end of the year, which is no surprise given how growth overall has slowed in recent months.

In a typical downturn, administrative support sheds 12,000 or more jobs. The sector adds 12,000 or more in boom times. In periods of stable growth, the sector gains 6,000 to 10,000 jobs. The forecast assumes losses in the first half of '24 will be recouped in the second half, with the sector adding a modest 4,200 jobs by December.



PRIVATE EDUCATIONAL SERVICES

Private educational services includes private colleges, universities, elementary and secondary schools, sports instruction, exam preparation, fine arts academies, and technical and trade schools.

Employment growth remains strong, driven by a budding school-age population, parents seeking alternatives to public schools, workers upgrading skills to pursue new careers or hang on to the ones they have, students (and parents) wanting better grades on exams, athletes trying to improve

their performance on the field, and aggressive marketing by private universities. The sector employed 73,000 workers as of September '23, accounting for 2.2 percent of all jobs in the region. The forecast assumes that nothing derails recent trends, and the sector adds 1,800 jobs in '24.



ARTS, ENTERTAINMENT, AND RECREATION

The arts, entertainment, and recreation sector is the “leisure” part of the leisure and hospitality industry. Hotels, restaurants, and bars (which follow this section) are the “hospitality” part. This sector includes arcades, amusement parks, bowling alleys, fitness centers, golf courses, marinas, museums, musical groups, racetracks, theaters, and zoos. The sector employed 42,000 workers as of September '23, accounting for 1.2 percent of all jobs in the region.

With the exception of the major institutions, like the Houston Astros, the Museum of Fine Arts, Houston Grand Opera, or 24-Hour Fitness, most firms in the sector are modest enterprises with small

staffs. Additions to payroll come one or two employees at a time. Significant growth occurs only when a new museum, amusement park, or professional sports franchise enters the market. The Partnership doesn't anticipate any announcements of this type in '24.

Employment in the sector is highly seasonal, peaking in the summer months when children are out of school, families are on vacation, and Houstonians are spending more time outdoors. The start of the fall arts season offsets some of the losses in outdoor activities when summer ends, and the sector almost always ends up with net job gains.

A recent survey conducted by Momentum Worldwide, an advertising agency, found that 76 percent of consumers would rather spend their money on “experiences” rather than “merchandise.” And a recent survey by StyleSeat, an appointment app, found that 71 percent of respondents did not plan to reduce spending on fitness and wellness services despite price increases. Both suggest that the demand for theatre tickets, gym memberships, and rounds of golf will hold steady in '24. Arts, entertainment, and recreation will also benefit from the region's ongoing population and job growth. The forecast calls an additional 1,100 jobs in '24.



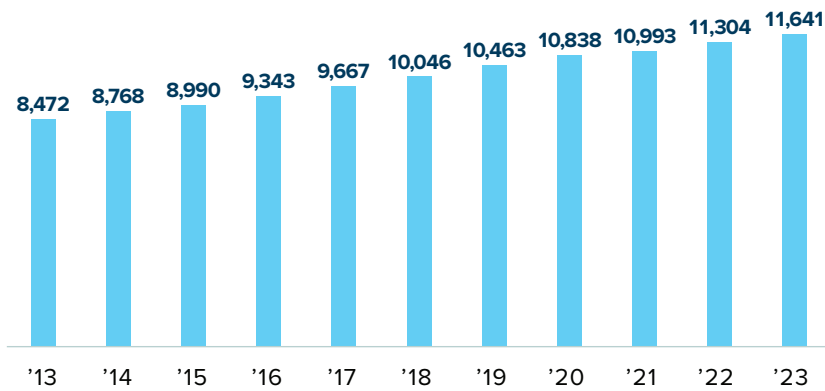
FOOD SERVICES AND DRINKING PLACES

The sector is Houston's third largest employer, behind health care and retail. It employed 283,000 workers as of September '23, accounting for 8.4 percent of all jobs in the region.

Surprisingly, it's also one of the more resilient. Only twice in the past 30 years has the restaurant sector recorded job losses. That was in '08 and '20, the former due to Hurricane

Ike, the latter due to the pandemic. Likewise, the sector has added new bars and restaurants every year for the past 30 years, except for '08, which again was due to Ike.

HOUSTON-AREA RESTAURANTS AND BARS



Source: Texas Workforce Commission

Though restaurants have one of the highest failure rates among business startups, Houston has averaged 350 new eating/drinking places a year over the past three decades, dropping off during COVID, only to pick up again the following year. And thanks to the region's diverse population, easy access to fresh produce, meat, poultry, and seafood, and a deep roster of inventive chefs,

Houstonians can dine on over 80 types of cuisine.

The industry was among the hardest hit during the pandemic, losing one-third of its workforce, but recouped all its losses by March '22. It faces a host of new challenges, however. These include chronic labor shortages, changing consumer behavior, and a high inflation rate.

Since September '20, the cost of dining out in Houston has gone up more than 20 percent, according to the U.S. Bureau of Labor Statistics.

Nationwide, the industry has nearly one million open positions, well above the 770,000 monthly average in the five years leading up to the pandemic.

And consumers are looking for ways to mitigate inflation, favoring take-out over dining in, opting for brunch rather than dinner, eschewing appetizers, not ordering alcohol, and using coupons when possible.

In '24, penny-pinching will be offset by job growth, population growth, increasingly hectic lifestyles, Houstonian's willingness to try new concepts, and a lack of will or skill to cook at home. The region should see a net gain of 300 or more bars and restaurants. The Partnership forecasts the sector to add 7,200 jobs by year's end.



PROFESSIONAL, SCIENTIFIC, AND TECH SERVICES

The sector includes accounting, advertising, architectural and engineering services, bookkeeping, computer systems design, geophysical surveying, law, management consulting, marketing, public relations, and laboratory testing. It employed 276,000 workers as of September '23, accounting for 8.2 percent of all jobs in the region. The jobs tend to be white-collar, well-paid, and until recently, office-based.

This industry is coming off two years of record growth, driven by rapid economic expansion following COVID and an increased need for consulting services from clients struggling to adapt to post-pandemic changes in the business world. In the past

two years, the sector has added over 40,000 jobs.

Accounting, law, and management consulting now face their own challenges. Among them are cutbacks on consulting services, pushbacks on billing rates, persistent high inflation, and general economic uncertainty. Advertising, public relations, and marketing face traditional challenges. In an economic downturn, their budgets are always the first to get axed.

At the start of '23, firms fretted over the difficulties in recruiting talent. By the end of the year, they worried about finding enough work to keep that talent busy. In a recent survey

of professional service firms by Korn Ferry, 50 percent of respondents expect their clients to spend less on consulting services in '24 than in '23. In the same survey, 45 percent expect their firms would reduce headcount over the next 12 months. Many have already initiated hiring freezes. A few have instituted layoffs. Still, 72 percent of respondents were either strongly or somewhat optimistic about their firms' prospects heading into '24. Only 28 percent were somewhat pessimistic. No one was "strongly" pessimistic.

On the bright side, Houston's focus on the energy transition continues to keep many engineering and management consulting firms busy.

The ongoing spate of mergers in the industry will require additional accounting, law, and consulting services. Supply chain resilience,

artificial intelligence, and cyber security needs will also provide opportunities for growth. The Partnership's forecast assumes this

work will more than offset the drop in demand for other services, the sector adding a modest 6,800 jobs in '24.



HEALTH CARE AND SOCIAL ASSISTANCE

Health care is the most resilient of Houston's industries. Only once since '93 has the sector finished the year with fewer jobs than it started. That was in '20 when the pandemic upended the entire economy. Even then, losses were nominal, only 3,800 jobs, or 1.1 percent of total health care employment. The sector employed 381,000 workers as of September '23, accounting for 11.3 percent of all jobs in the region.

Several factors have driven health care employment over the years:

Population: Metro Houston added 1.1 million residents between '12 and '22. Gains would have been greater still if not for the pandemic. The region added 124,000 in '23 and should add a comparable number in '24.

Job growth: Houston has added 527,000 jobs over the past 10 years. The greatest gains have been in transportation, professional services, government, and health care, sectors that typically offer benefit packages that include health insurance.

Income growth: Over one million households in Houston reported incomes of \$100,000 or more in '22, up from 550,000 households 10 years ago. Studies have shown that people with higher incomes are more likely to seek treatment when an illness or medical condition arises.

High birth rates: Doctors deliver approximately 95,000 babies a year in Houston. Each infant is a new health care consumer. They will make frequent visits to pediatricians for checkups, vaccinations, and school physicals well into their teen years.

Aging populations: The number of residents over 65 has increased from 570,000 in '12 to 900,000 in '23. The afflictions that come with growing old (e.g., cataracts, heart disease, osteoporosis, type 2 diabetes, and hypertension) require regular visits to the doctor and often to the hospital.

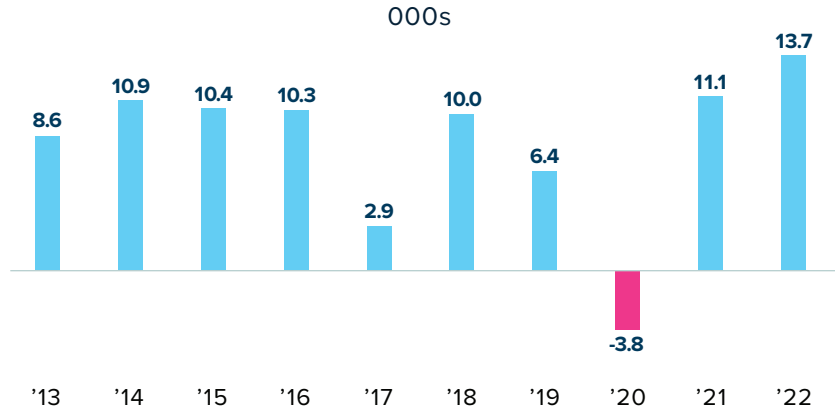
Longer life expectancies: According to the Centers for Disease Control and Prevention, Americans who reach the age of 65 can expect to live another 20 years. Longer lifespans translate into more years as a health care consumer.

Increases in the number of insured: The Affordable Care Act (ACA) required most employers to offer health insurance and individuals without an employer-sponsored plan to buy it of their own accord. Today, 82.0 percent of all Houstonians are covered, up from 76.6 percent in '12. Those mandates, along with population growth, translate into 1.2 million more Houstonians with coverage than 10 years ago.

Health care providers will continue to face pressure from insurance companies to control costs, accept lower reimbursements by the federal government for patients treated under Medicare and Medicaid, and deal with consumers being more selective about when and how they seek treatment. Those issues aren't new. The industry has been dealing with them for well over a decade.

This forecast assumes population and job growth will continue, U.S. and state legislators make no significant changes to the Medicare and Medicaid programs, and there won't be mass layoffs at area hospitals. The sector should create 10,000 or more jobs in '24.

ANNUAL JOB GAINS, HOUSTON HEALTH CARE



Source: U.S. Bureau of Labor Statistics



HOTELS

The sector is not a major employer, with only 26,800 workers as of September '23, but it generates significant tax revenue through the Hotel Occupancy Tax (HOT). Since the HOT is tacked onto hotel bills, it's paid mostly by out-of-towners. As a result, non-Houstonians help service debt issued to construct local sports venues and convention facilities. The hotel tax is also used to operate Miller Theatre, the Houston Arts Alliance, the Theatre and Museum Districts, as well as the operations of Houston First Corporation (which markets the city as a destination and manages several city-owned assets).

Houston hotel occupancy has tracked at or above pre-pandemic levels since January '23. The number of conventional room nights booked from January '23 through August '23 nearly matches those booked in all of '22. Leisure travel continues to grow, and business travel is making a comeback. Finally, Houston First has boosted its leisure travel marketing efforts which should further boost hotel room demand.

Roughly 1,400 new hotel rooms will come online in '23 and an equal number in '24. McCaslin Hotel Consulting expects occupancy to

average 64.0 percent in '23 and 65.5 percent in '24, up from 59.5 percent in '22. However, the sector still faces severe labor shortages and has only recovered 85 percent of the jobs lost during the pandemic. It's one of a handful of sectors still struggling.

In boom years, the sector adds 1,200 to 1,500 jobs. In lean years, only 200 to 300. The forecast assumes '24 will be a year of moderate growth for the industry, with local hoteliers adding 1,000 jobs by the end of '24.



OTHER SERVICES

This is a catch-all sector. It includes repair shops (appliance, automotive, computer, furniture), glamour shops (barbers, beauty shops, nail salons), social organizations (churches, foundations, advocacy groups), and businesses not easily classified (funeral homes, dry cleaners, linen services). These are typically

small businesses with a handful of employees. The sector employed 120,000 workers as of September '23, accounting for 3.5 percent of all jobs in the region.

The sector tracks the overall economy. In boom times, workers don't hesitate to fix what's broken, splurge on salon visits, and give

generously. In lean times, workers make the repairs themselves, visit salons and shops less often, and reduce their charitable donations. '24 will fall somewhere between "boom" and "lean." The sector will add 1,100 jobs by year's end.



GOVERNMENT

Metro Houston includes 10 counties, 111 cities, 63 school districts, and hundreds of agencies, bureaus, and departments. The government sector employs more than 446,000 workers,

one in every eight in the region. Just under two-thirds are involved in education, either at a state-funded university, community college, or school district. Employment growth

depends on a number of factors—tax collections, population growth, state and federal budget allocations, and school enrollments.

Public sector employment has grown somewhat slower than private sector employment (1.5 percent annually vs 1.6 percent). The bulk of the gains have been at school districts, which have grown along with school enrollments. The need to provide services to an ever-expanding population has boosted government employment at cities, counties, and state-funded agencies.

Employment trends in the government sector tend to lag the rest of the economy. Slower growth impacts sales tax collections almost immediately, but lower property valuations don't appear on the tax rolls for a year or two. State laws limit annual growth in homestead appraisals, so residential values may still be increasing even as the economy cools. One of the area's largest government employers, the

City of Houston, faces structural budget imbalances that will have to be dealt with soon.

The sector has lost jobs twice in the past 30 years—once in '11 following the Great Recession and again in '20 in the middle of the pandemic. In lean years, the sector adds 2,000 to 4,000 jobs and in boom times, 11,000 to 13,000. The forecast is conservative, calling for the public sector to add 7,800 jobs in '24.

CONCLUSION

Since emerging from the pandemic, metro Houston has gained well over half a million jobs. That's a decade's worth of growth in just 42 months. As of October '23, Houston added nearly 200,000 more jobs than it did before COVID.

Over the past three-plus years, Houston also set records for home sales (440,00 closings), witnessed a surge in commercial construction (\$40+ billion), and handled record container traffic at the port (12.5 million TEUs). But Houston can't maintain that pace indefinitely. Like a distance runner, Houston was quick out of the blocks, but now must find a more sustainable pace.

Growth will slow in '24, it may even seem sluggish, but that's only because we've watched Houston sprint through the last three years. The region needs time to catch its breath, which is what will happen in '24. Growth will pick up again in '25, not back to the rapid pace of recent years, but to a more moderate pace, one that can be maintained for the long run.

METRO HOUSTON '24 EMPLOYMENT FORECAST

Industry/Sector	Jobs Gained or Lost
Health Care	10,000
Government	7,800
Restaurants & Bars	7,200
Professional Services	6,800
Retail	6,500
Manufacturing	6,300
Wholesale Trade	4,300
Administrative Services	4,200
Transportation	4,100
Energy	3,000
Private Education	1,800
Arts, Entertainment, Recreation	1,100
Other Services	1,100
Hotels	1,000
Information	-300
Real Estate	-1,000
Finance & Insurance	-1,500
Construction	-4,800
Total	57,600

Source: Greater Houston Partnership Research

SOURCES

Data used in the analysis and forecast came from the following sources: American Chemistry Council, Americans for the Arts, Apartment Data Services, American Staffing Association, Associated Builders & Contractors, Associated General Contractors of America, Baker Hughes, Biznow Commercial Real Estate News, Bloomberg, CenterPoint Energy, Chemical Week, City of Houston Aviation Department, Colliers International, CoStar, The Conference Board, Dodge Data & Analytics, Federal Deposit Insurance Corp., Federal Reserve Bank of Dallas, Federal Reserve Bank of Philadelphia, Federal Reserve Bank of New York, Federal Reserve Bank of St. Louis, Federal Reserve Bank of Philadelphia, Federal Reserve Bank of San Francisco, Forbes, Freddie Mac, Houston Association of Realtors, Houston Business Journal, Houston Chronicle, Houston First, Houston: The Economy at a Glance, Houston Facts, Institute for Supply Management, International Energy Agency, JLL, John Burns Real Estate Consulting, Korn Ferry, McCaslin Hotel Consulting, Moody's, Morning Consult, Mortgage Bankers Association, National Association for Business Economics, National Association of Manufacturers, National Restaurant Association, Office of the Texas Governor, Organisation for Economic Co-operation and Development, Oil & Gas Journal, Organization of Petroleum Exporting Countries, Piper Sander, Port Houston, Rigzone, RSM, TexAuto Facts, Texas Comptroller of Public Accounts, Texas Workforce Commission, The Wall Street Journal, Transwestern, U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis, U.S. Census Bureau, U.S. Energy Information Administration, Wells Fargo, WISERTrade, World Trade Organization, and various company websites.



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