

THE ECONOMY AT A GLANCE

HOUSTON



GREATER HOUSTON
PARTNERSHIP.

Making Houston Greater.

A publication of the Greater Houston Partnership

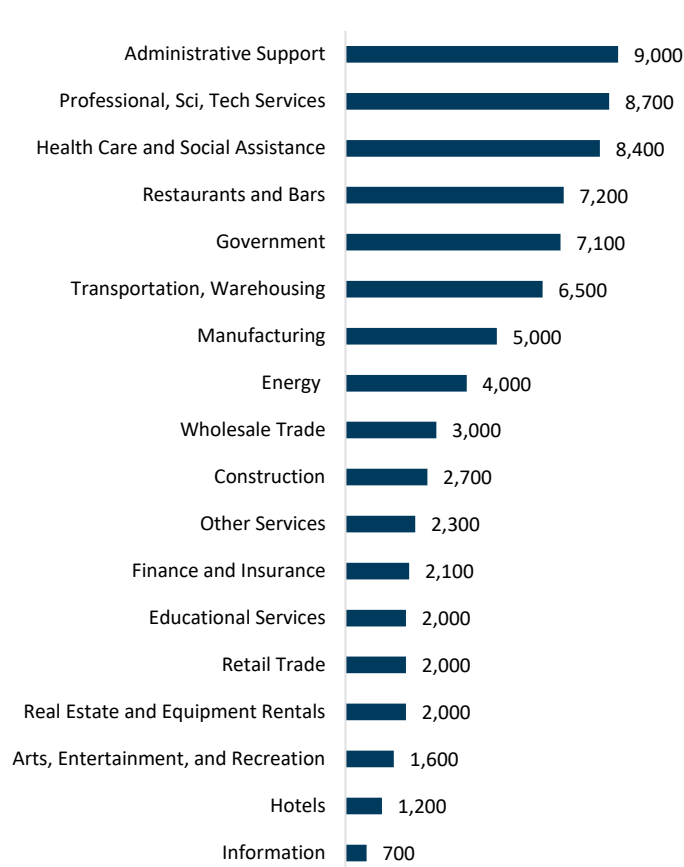
Volume 30 Number 12 – December 2021

Editor's Note: The Partnership released its 2022 Houston Employment Forecast on Wednesday, December 1, 2021. This newsletter summarizes that forecast. The full document can be found at the Partnership's website or by clicking [here](#).

THE FORECAST

The Partnership's forecast calls for Metro Houston to create 75,500 jobs in '22. Job growth will occur in every sector of the economy, including several that struggled to create jobs prior to the pandemic. The greatest gains will occur in administrative support; government; health care and social assistance; professional, scientific, and technical services; and restaurants and bars.

Metro Houston Employment Forecast, Dec '21 – Dec '22



Source: Greater Houston Partnership

Several factors will drive Houston's growth in '22: a strong U.S. economy, expanding global trade, energy consumption returning to pre-crisis levels, pent-up consumer demand, local population growth, and the ongoing housing boom. The recovery will continue to face headwinds, however. Elevated inflation, supply chain woes, and worker shortages may temper growth but won't halt it.

U.S. GDP GROWTH

Adjusted for inflation, gross domestic product (GDP) should grow 3.6 percent in '22, according to economists surveyed by *The Wall Street Journal* in October. The Organisation for Economic Co-operation and Development (OECD) forecasts U.S. growth at 3.9 percent. The Federal Reserve Bank of Philadelphia's Survey of Professional Forecasters pegs GDP growth at 4.4 percent.

U.S. JOB GROWTH

As of November '21, the nation had recovered roughly 80 percent of the 22.1 million jobs lost in the early stages of the pandemic. Prior to the pandemic, the U.S. averaged 200,000 new jobs per month. The consensus of the 47 professional forecasters surveyed in September by the National Association for Business Economics (NABE) is for the U.S. to average 321,000 new jobs per month in '22. According to *The Wall Street Journal's* survey, the U.S. should add 350,000 jobs per month in '22. The Survey of Professional Forecasters calls for 456,300 jobs per month. At even the lower range of forecasts, the U.S. should recoup all its pandemic losses by late '22 or early '23.

GLOBAL TRADE

The resurgence of economic activity in the first half of '21 lifted global trade above its pre-pandemic peak, according to the World Trade Organization. The WTO predicts global merchandise trade growth of 10.8 percent in '21—up from 8.0 percent forecasted in March—followed by a 4.7 percent rise in '22. That's up from 4.1 percent in an earlier forecast.

CRUDE CONSUMPTION

Global crude consumption topped 98.5 million barrels per day (b/d) in February '20. Then COVID-19 spread across the globe halting air travel, reducing business trips, and forcing people to stay home. By April, consumption had fallen to 82.3 million (b/d). Demand began to recover in May, then accelerated as economies reopened and people received the COVID-19 vaccine. Global crude demand should return to pre-pandemic levels by the end of '22.

**GLOBAL CRUDE DEMAND FORECAST,
MILLION BARRELS/DAY**

Quarter	OPEC	EIA
Q4/19	101.07	101.6
Q2/20	82.60	84.9
Q3/21	97.89	98.6
Q3/22	101.75	101.6

Sources: Organization for Petroleum Exporting Countries, U.S. Energy Information Administration

PENT UP CONSUMER DEMAND

Research firm Morning Consult has surveyed consumer attitudes since early in the pandemic. In early April '20 fewer than 20 percent of respondents felt comfortable going on vacation or dining in a restaurant. By October '21, that had increased to 63 and 66 percent, respectively.

LOCAL POPULATION GROWTH

Metro Houston added 91,000 residents in '20, boosting the region's population to over 7.1 million. Houston's improving job market, low cost of living, and high quality of life should boost gains above 100,000 in '22. Just over half those gains will come from the natural increase, (i.e., births minus deaths), and under half from in-migration.

METRO POPULATION GROWTH, '000s

	In-migration	Natural Increase	Total*
'11	49.6	59.2	108.8
'12	69.0	57.8	127.1
'13	86.5	57.3	144.5
'14	109.7	60.9	171.8
'15	108.4	62.7	171.4
'16	71.6	63.9	135.5
'17	33.3	59.1	92.6
'18	21.9	54.0	76.0
'19	37.2	51.2	88.5
'20	44.3	46.7	91.1

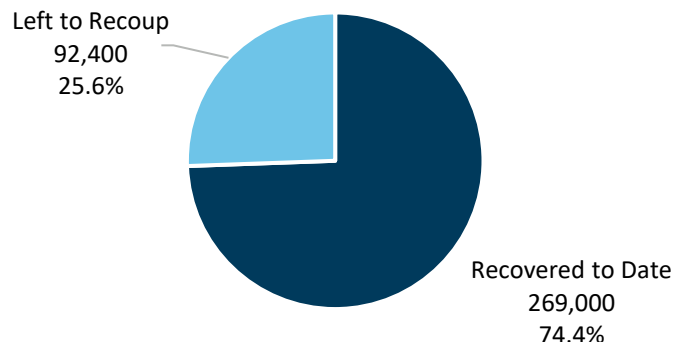
* columns may not sum to total due to rounding errors and data omissions

Source: U.S. Census Bureau

PROGRESS TO DATE

As of October '21, Metro Houston had recouped 269,000 jobs, or roughly 75 percent of the 361,400 jobs lost in the early stages of the pandemic. Nine sectors have fully recovered their losses: ambulatory healthcare, computer systems design, employment services, general merchandise stores, insurance, legal services, refining, services to buildings, and transportation/warehousing.

RECOVERY TO DATE, HOUSTON EMPLOYMENT*



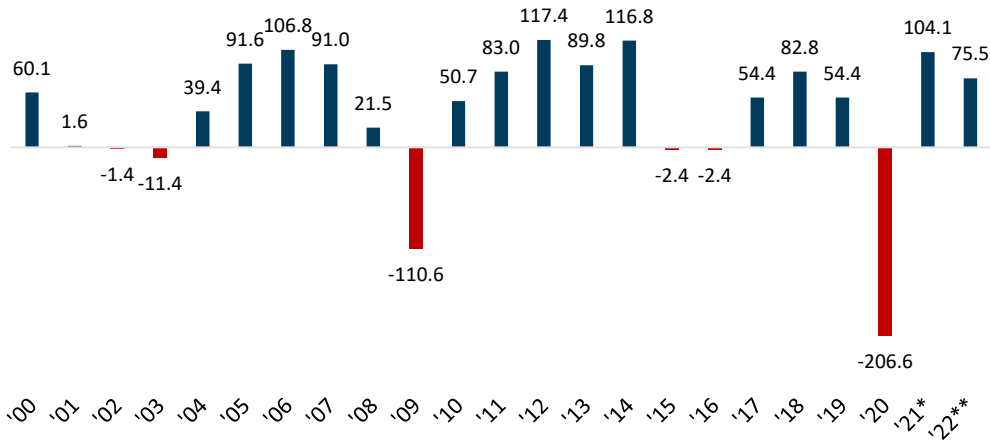
* As of October '21

Source: GHP calculations based on Texas Workforce Commission data

Four indicators reinforce that Houston's recovery is well underway:

- The Houston Purchasing Managers Index (PMI), a short-term leading indicator for regional production, registered 61.0 in October, up from a pandemic low of 34.0 percent in April '20. October marked the 15th consecutive month above 50.
- Through the first nine months of '21, the Houston/Galveston Customs District handled over \$123.2 billion in exports, up 33.5 percent from the same period in '20. At the current pace, Houston should finish '21 with a record volume of exports passing through the district (+\$150 billion).
- Houston's unemployment rate fell to 5.4 percent in October, down from a peak of 14.0 percent in April '20. In the five years leading up to the pandemic, the rate averaged 4.6 percent.
- In the four weeks ending November 20, '21, metro Houston averaged 4,163 initial weekly claims for unemployment benefits. In the comparable period in '20, claims averaged 9,266 per week. At the height of the pandemic layoffs, weekly claims averaged 64,849.

METRO HOUSTON JOB GAINS/LOSSES, 000s



* Oct YTD ** Forecast

Source: Texas Workforce Commission and Greater Houston Partnership

Factor out the years in which high oil prices over stimulated growth or low oil prices spiked it, and growth ranges between 65,000 and 70,000 jobs per year. If the Partnerships forecast for 75,500 jobs forecast proves accurate, '22 will be one of the better years for growth in Houston. Now the details behind the forecast.

ENERGY

On July 1, 2021, the spot price for West Texas Intermediate (WTI) topped \$75 per barrel. In the past, crude trading at that level would lead to a surge in drilling activity, a wave of equipment orders, energy firms scrambling to find geologists, and conversations with real estate brokers about the need to lease more office space. None of that has happened, which shows how much the industry has changed in recent years. Those changes are well-documented, but to understand the impact on Houston over the next 12-18 months it helps to restate them.

Oil prices have become more volatile, even by energy industry standards. Since '14, the industry has endured five episodes where crude prices rose or fell 40 percent or more over less than six months, according to data from the U.S. Energy Information Administration (EIA).

Volatility has led to more companies hedging their production. A recent analysis by *World Oil* found that 90 percent of oil and gas firms hedged their production in '20, up from 73 percent the year before.

The industry has fallen out of favor with Wall Street. Oil firms were able to rapidly grow production through much of the last decade because investors were willing to lend

them funds to do so. Between '10 and '20, the industry raised well over \$300 billion, according to Deloitte. But promised returns never materialized, so investors pulled back. Drillers must now exercise "capital discipline," funding any exploration activities from their own cash flow.

The industry has become more productive. According to the EIA, initial production from wells drilled in the Permian

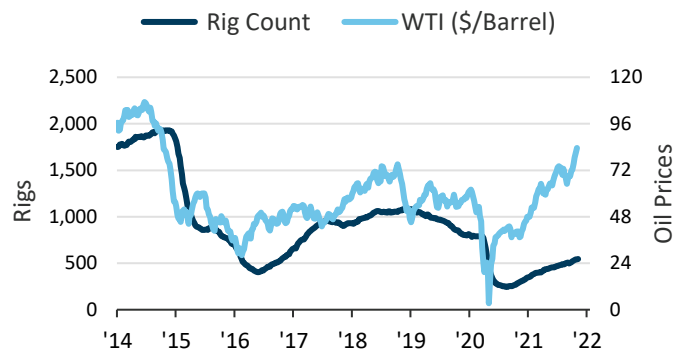
Basin and the Bakken nearly doubled between October '16 and October '21.

The industry has learned to do more with less. From December '14 to December '19, upstream energy (exploration, production, oil field services) shed roughly one-third of its workforce yet managed to grow U.S. production by 3.4 million barrels over the same period.

And dealing with climate change and the approaching peak demand for crude dominates long-term planning. Firms like BP and Shell have sold off acreage and assets to focus on non-fossil fuel technologies. Others, like ConocoPhillips, have snapped up acreage, ensuring crude and natural gas remain in their portfolios well into the future.

And shareholders continue to pressure energy companies to take a more aggressive stance on combatting global warming. ExxonMobil and Chevron suffered shareholder rebellions from climate activists and disgruntled institutional investors over the oil giants' plodding adoption of strategies for a low-carbon future.

U.S. Rig Count v WTI Spot Prices



Source: U.S. Energy Information Administration and Baker Hughes

The good news, as noted earlier, is that global demand for crude will soon recover to pre-pandemic levels. The return to pre-pandemic consumption should sustain crude prices above \$52 per barrel, the typical break-even point for a new well drilled in the U.S. according to the Federal Reserve Bank of Dallas. The EIA's forecast calls for crude to average \$68 per barrel in '22.

All this bodes well for Houston's energy sector. Higher demand will sustain oil prices near their current level. That will boost U.S. drilling activity, leading to new equipment orders and additional hiring. But the early '20s won't look like the early '10s. Production growth, equipment orders, and job gains will be more subdued.

MANUFACTURING

The U.S. manufacturing outlook remains strong. In its Q3/21 survey, 87.5 percent of respondents to a National Association of Manufacturers survey indicated that the outlook for their firms was positive leading into '22. The majority expect sales, production, wages, and employment to rise over the next four quarters.

Locally, an increase in drilling activity in '22 should lift the demand for oil field equipment. All the petrochemical plants damaged by Winter Storm Uri should be fully recovered by early '22. Since January of '21, over 50 firms have announced plans to expand or establish manufacturing plants in Houston. All this will feed the demand for labor in '22. The forecast calls for the sector to add 5,000 jobs next year.

HOUSTON MANUFACTURING EMPLOYMENT*

	Jobs	% Total
Chemicals, Plastics, Fuels	57,414	27.4
Machinery, Computers, Electrical Equip	56,010	26.7
Fabricated Metal Products	43,284	20.6
Food & Beverages	15,565	7.4
Miscellaneous Manufacturing	9,938	4.7
Primary Metals	9,861	4.7
Paper & Wood Products	9,335	4.5
Transportation Equipment	4,210	2.0
Textiles & Apparel	4,008	1.9
Total	209,625	100.0

* as of Q1/21

Source: Texas Workforce Commission

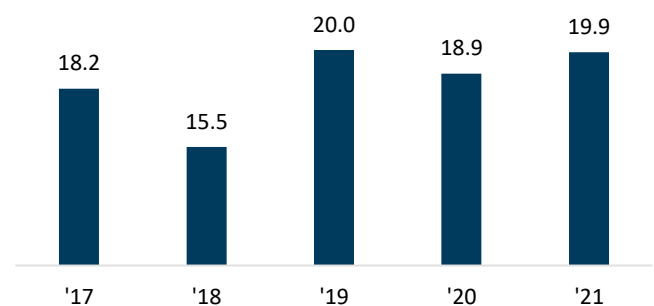
CONSTRUCTION

The industry faces several challenges as it enters the new year. Supply chain issues continue to dog the industry.

Builders are reporting delays of four to six months on appliances, windows, cabinets, and granite countertops. Construction labor, always in short supply, is even more so now. And vaccine mandates from Washington don't sit well with many construction workers who have threatened to quit and find employment elsewhere.

Despite the headwinds, the outlook for construction has improved since the first of the year. The August report from Dodge Data & Analytics indicates construction activity was up 1.3 percent in the first eight months of this year. That's much improved from Q1/21 when activity year-to-date was down 14.2 percent. Through the first eight months of '21, the value of City of Houston building permits was flat compared to the prior year. That's much improved from Q1/21 when activity year-to-date was down 30.8 percent.

CONSTRUCTION CONTRACTS AWARDED OCTOBER YTD, \$ BILLIONS*



* excludes streets, bridges, and utilities

Source: Dodge Data & Analytics

Houston's office glut will dampen the need for new office construction. The demand of e-commerce and container traffic at the port will spur the need for additional warehouse and distribution space. As the housing boom continues in the distant suburbs, developers will break ground on retail centers to serve these more distant populations. The demand for single-family homes remains steady so construction will likely maintain its current pace. Homebuilders have enough orders on the books and potential buyers on waiting lists to remain busy well into '22. Multifamily construction will rise to meet the growing demand. The outlook for industrial construction remains cloudy, but engineering/procurement/construction firms remain optimistic about their prospects in the new year. The Partnership expects the pace of construction to pick up marginally next year. The forecast calls for the sector to create 3,000 jobs in '22.

WHOLESALE TRADE

The fortunes of the industry track those of the overall economy. Like so many others, wholesalers were caught off-guard at the start of the pandemic. Their inventory-to-sales ratios shot up to unhealthy levels. To survive, they had to cut costs, which meant laying off workers. In Houston, one in every 12 lost their jobs. They also cut back on their own orders and sold down their inventories.

The current supply chain issues affecting the broader economy have hit wholesale trade especially hard. As the economy reopened, they found themselves short on inventory and unable to secure supplies from manufacturers and other vendors. In August, the wholesale inventory-to-sales ratio was at its second lowest level since October '14. The industry is also dealing with a shortage of freight handlers, forklift operators and truck drivers.

U.S. WHOLESALERS INVENTORY-TO-SALES RATIO*



Source: U.S. Census Bureau

Wholesale trade in Houston faces an extra challenge—much of it is tied to the oil and gas industry. Wholesalers sell directly to the oil field service firms and drillers or to the manufacturers of oil field and drilling equipment. The slow recovery of the domestic rig count has held back the sector's recovery.

The demand for wholesale products won't abate in '22. If anything, it will accelerate, especially if the energy industry resumes drilling. But that may be tapered somewhat by a slowdown in construction. The Partnership's forecast assumes that more factors will lean positive than negative and that the region's wholesale trade sector will add another 4,900 jobs in '22.

TRANSPORTATION, WAREHOUSING

The outlook for transportation and warehousing is among the brightest of all sectors. The International Air Transport Association (IATA) expects air passenger traffic to pick up

substantially in '22. The WTO has revised upward its forecast for global trade. Local merchants continue to restock their shelves, wholesalers their warehouses, and manufacturers their inventories. U.S. online sales are forecast to top \$1.0 trillion in '22. The transportation and warehousing sector will record strong growth next year. Only another recession could disrupt its recovery and that's unlikely. The forecast calls for Houston to add 6,500 transportation jobs in the coming year.

INFORMATION

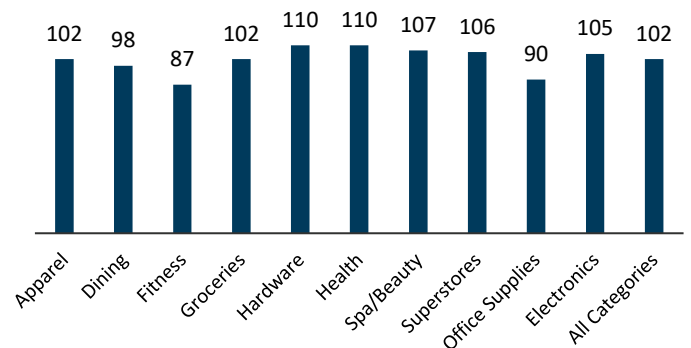
The outlook for the information sector has improved over the past 12 months. Advertising spending is recovering. In the U.S., revenues will hit \$278 billion in '21, an increase of 23 percent, according to Magna, a media intelligence company. Moviegoers are returning to the cinema. The industry is on track to sell over 400 million tickets in '21, nearly double the 223 million sold in '20 but far short of the \$1.2 billion sold in '19.

The forecast assumes an overall improving economy, a growing desire for consumers to experience movies in a theater, that media and telecom companies have the revenues to resume hiring, and there's no additional job losses in data processing and telecommunications. The forecast calls for information to recoup 700 jobs in '21.

RETAIL

U.S. Retail sales now exceed their pre-pandemic level. Consumers have fatter wallets and lower debt levels. Only a handful of stores declared bankruptcy in '21. Online shopping continues to grow as a percentage of sales, impacting revenues from brick-and-mortar retail. And supply chain bottlenecks and labor shortages weigh on retail perhaps more than that of any other sector.

HOUSTON RETAIL FOOT TRAFFIC, OCT '21 AS % OF OCT '19



Source: Placer.ai

The forecast assumes the fundamentals that traditionally drive retail—jobs, population, income, home construction, access to credit and consumer confidence—still favor Houston. Online sales will eat into brick-and-mortar sales but a surge in retail activity in the suburbs will offset those losses. The forecast calls for retail to reverse the recent trend in employment losses and add 2,000 jobs in '22.

REAL ESTATE AND RENTAL AND LEASING

Real estate remains a mixed bag. Office leasing remains weak. Retail leasing has picked up. Industrial, single-family and multifamily have soared. And this may be the best year on record for raw land transactions, according to Land Advisors.

Equipment rentals have fared better. Consumers have resumed traveling, nudging up vehicle rentals. Construction activity has ticked up, lifting heavy equipment rentals. And offices have reopened, boosting the need for office electronics.

As the recovery accelerates, so should activity in the sector. The forecast calls for the real estate and rentals and leasing sector to add 1,000 jobs in '22.

ADMINISTRATIVE SUPPORT AND WASTE MANAGEMENT

This sector includes employment services (i.e., contract workers), services to buildings (i.e., janitorial, landscaping), investigation and security services (i.e., guards, watchmen), administrative and support services (i.e., back-office operations), and waste collection and treatment.

In '22, businesses will continue to rely on contract workers to meet their labor needs, but the ongoing labor shortage will provide those workers with additional bargaining power. As a byproduct of “the Great Resignation,” Houstonians not wanting any long-term commitments may pursue contract work instead of full-time, permanent work. As more businesses call their employees back to the office, demand for cleaning and disposal services will increase. And as consumers grew more comfortable visiting bars and restaurants and attending arts and sporting events, the region will need more security guards. The forecast calls for the industry to add 9,600 jobs in '22.

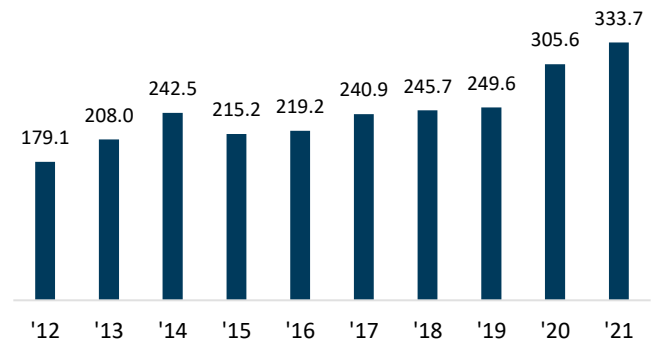
FINANCE AND INSURANCE

Since '12, the banking industry has shuttered over 120 brick-and-mortar branches in Houston. As more services move online, the industry will need fewer tellers but more programmers. There's also a strong need for loan officers

and wealth managers as well. Experienced loan officers, like truckers, are in short supply.

Between Q2/19 and Q2/21, \$84 billion in deposits flowed into FDIC-insured banks in Houston, so there's money to lend. According to the Fed's July Senior Loan Officer Opinion Survey, banks have eased their lending standards and are experiencing stronger demand for loans of all types—commercial, industrial, and residential mortgage.

INSURED BANK DEPOSITS, METRO HOUSTON, \$ BILLIONS



Source: Federal Deposit Insurance Corporation * as of June 30

As millennials entered the workforce, insurance plans, specifically life and home, were often thought of as a luxury. Now, a bit older and entering new life stages, millennials have realized that employer-supplied insurance may not be enough.

After several hurricanes (Harvey, Imelda, Nicholas), a pandemic (COVID-19), and a winter storm (Uri), firms are more aware of the need for business interruption insurance.

The forecast assumes ongoing U.S. growth; that Houston will continue to recoup jobs lost early in the pandemic; that there's an uptick in energy, manufacturing, and construction; the pace of in-migration to the region accelerates; and single- and multifamily-housing continues to boom. The forecast calls for finance and insurance to add 2,100 jobs in '22.

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES

The outlook for professional services rides on the health of their clients. Fifty-eight percent of all respondents to the October '21 NABE Business Conditions Survey expect revenues to continue rising in coming months. Only 7 percent expect falling revenues. This bodes well for professional service firms seeking to engage their clients in audits, analyses, advisory and consulting work.

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES

Employment by Subsector, Q1/21

	Employment	% Total
Architecture, Engineering	63,260	28.4
Management Consulting	40,758	18.3
Computer Systems	31,967	14.3
Legal Services	27,823	12.5
Accounting, Tax Prep	25,047	11.2
Other Professional Services	20,047	9.0
Scientific Research Services	9,342	4.2
Advertising, Public Relations	4,703	2.1
Total	222,947	100.0

Source: Texas Workforce Commission

Factors supporting growth in '22:

- Congress wants to raise taxes to pay for infrastructure investments and new social programs. Any time Congress tinkers with the tax code it creates work for lawyers and accountants.
- The dollar value of projects entering planning continues to suggest that the recovery in engineering, construction and procurement work should resume early in '22, according to *Engineering News-Record*.
- Money is flowing back into marketing budgets. According to *Ad Age*, U.S. ad spending will grow 12 percent in '22. This translates into the need for more marketing, advertising, and public relations professionals.
- Ransomware attacks are up 62 percent since '19, according to the 2021 Cyber Threat Report by SonicWall. The threat of further cyber-attacks will drive companies to upgrade their networks.
- And the focus on big data across industries translates into more work for tech firms.

The forecast calls for professional, scientific, and technical services to add 8,700 jobs in '22.

EDUCATIONAL SERVICES

In '22, population, income and employment growth in other sectors will help lift growth in educational services. Job gains will also be driven by parents seeking alternatives to public schools, workers needing to improve their skill sets, students wanting better grades on exams, and athletes trying to improve their performance on the field. Growth should resume its normal pace next year. The sector should add 2,000 jobs in '22.

HEALTH CARE AND SOCIAL ASSISTANCE

Demographic trends support the expansion of Houston's health care sector post-pandemic. The region records 90,000 to 100,000 live births each year. Each baby represents a new customer for health care providers. Another 30,000 to 40,000 people move to Houston each year. Each represents another consumer of health care services. The population continues to age. Houston has 175,000 more residents aged 65 and older than it did five years ago. Older Houstonians tend to consume more health care services than younger ones. And residents are living longer. A man who reaches 65 can expect to live another 18.1 years. A woman at 65 can expect another 20.7 years.

One of the biggest challenges facing Houston's health care industry is the large number of uninsured in the region. According to the U.S. Census Bureau, one in five Houstonians lacks health insurance compared to one in 10 for the nation as whole. Treating the uninsured creates a financial burden on the hospitals and the costs either get passed on to the patients with health coverage or absorbed by the hospitals. The Bush School of Government & Public Service at Texas A&M University estimates another 220,000 Houston-area residents would receive health coverage and \$1.2 billion in federal dollars would flow to local health care providers if the Texas Legislature would agree to expand Medicaid in Texas, something it has been unwilling to do.

Other challenges facing health care providers: pressure from insurance companies to control costs, lower reimbursements by the federal government for patients treated under Medicare and Medicaid, consumers who have become more selective about when and how they seek treatment, and competition from health care providers outside traditional settings (like pharmacies and grocery stores).

Houston's health care providers will work through its challenges and find ways to efficiently and cost effectively serve the community. The forecast assumes staff burnout will have only a marginal impact on total employment, new government regulations have a minimal impact on scheduling of services, demographic trends continue to drive the need for doctors, nurses, and physician assistants, and daycares are able to recruit to fill at least some of their open positions. The sector should create 8,400 jobs in '22.

ARTS, ENTERTAINMENT AND RECREATION

The forecast assumes the full benefits from reopening have yet to accrue to arts and recreation. Attendance and patronage should pick up next year. At some point in '22, the traditional growth drivers—population, income, leisure time, out-of-town visitors, corporate donations, fitness resolutions—will kick in spurring additional growth.

The forecast calls for the sector to add 1,600 jobs in '22. Arts and Rec is unlikely to return to pre-crisis employment levels until the following year.

HOTELS

The pandemic continues to subside, vaccine rates continue to grow, albeit slowly, and families are more comfortable taking vacations again. Though leisure travel has returned, business, convention, and group travel remain depressed. Hotel occupancy rates, revenues, and employment remain well below '19 levels. The sector will be among the last to fully recover from the COVID-induced recession.

The recovery may come a bit sooner if some of the pent-up demand for business travel is unleashed. A recent survey commissioned by Hilton and Morning Brew of more than 7,000 of the news site's business-savvy readers found 87 percent of respondents acknowledging they miss hopping from city to city to pursue their work. More than half (54 percent) mentioned that the importance of building "in real life" relationships is more apparent than ever.

The industry should get a lift from an increase in conventions and trade shows. As of late October, Houston First had 41 meetings and conventions booked for '22, up from 20 in '21 but down from 43 in '20.

If there's no fifth wave, business travel picks up, residents and visitors grow more comfortable with large social gatherings, and there's no drop in business and consumer confidence, '22 should be a much better year for the industry than the previous two. Job growth will return. The forecast calls for the sector to add 1,200 jobs in '22.

FOOD SERVICES AND DRINKING PLACES

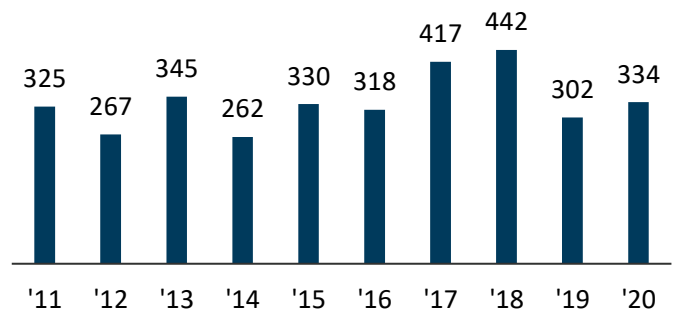
The restaurant industry, like so many others, continues to deal with the aftereffects of the pandemic. In September '21, the National Restaurant Survey conducted a nationwide survey of its members and 83 percent said their restaurant was 10 percent or more below necessary

staffing levels; 39 percent were down by 20 percent or more.

Understaffing is severe. According to BLS, there were 1.6 million job openings in the accommodations and food services (which includes hotels as well) in August '21. That equates to one in every nine positions in the industry. No other sector has a higher vacancy rate.

Growth in '22 will depend on several factors—the willingness of consumers to dine out again (higher vaccination rates should help), more employees returning to the office (boosting the lunch-time crowds), consumers' willingness to try new concepts (never a problem in Houston), the sector returning to a normal pace of openings (250 or more per year), and operators' ability to find waitstaff, busboys, cooks and counter help (a big unknown). The forecast assumes these factors will align next year. The forecast calls for restaurant and bars to add 7,200 jobs in '22.

NET GAINS, BARS AND RESTAURANTS



Source: Texas Workforce Commission

OTHER SERVICES

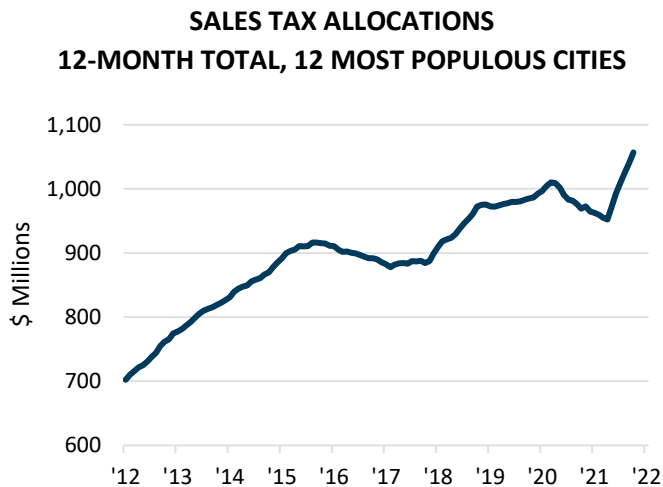
Other services includes automotive repair, beauty salons, machinery repair, dry cleaning, home repair services, nail salons, and social advocacy organizations. Government mandates forced many to close early in the pandemic. Decisions to work remotely impacted others. Economic uncertainty reduced funding to others. The sector shed over 30,000 jobs in March and April of '20. It benefitted from the quick reopening and the growth that followed. As of September '21, 94.0 percent of the lost jobs had been recouped. The sector will have fully recovered by early '22. As the rest of the economy grows, so will the repair shops, beauty salons, and organizations that serve Houston's workers. The forecast calls for other services to add 2,400 jobs in '22.

GOVERNMENT

A growing population equates to larger constituent base. This in turn equates to a greater demand on public services—libraries, health clinics, waste management, road repairs, and fire and police protection. Though population growth slowed in the early stages of the pandemic, the number of out-of-state license plates on the roads today suggests in-migration has resumed.

Public school enrollment grows in tandem with population. The population enrolled in elementary education grows by 10,000 to 12,000 each year. The population enrolled in four-year and two-year colleges grows by roughly 4,000 each year. This growth will drive the need for additional teachers, classroom aids, instructors, and administrators on Houston campuses.

The two greatest revenue sources for government services are sales and property taxes. After falling significantly during the early stages of the pandemic, sales to consumers and businesses have recovered and with them tax collections. In the 12 months ending September '21, collections in the region's 12 most populous cities were up 10 percent compared to the same period in '20.



Source: Texas Comptroller of Public Accounts

Property values continue to rise as well, with the value of assessed property in the Houston Independent School District up 11.7 percent, in the City of Houston up 11.2 percent, and in Harris County up 12.5 percent over the past three years. Other jurisdictions have experienced similar increases. The revenues generated, of course, depend on the rates set by each jurisdiction and restrictions voters or the Texas State Legislature have placed on the ability to raise taxes.

FULL MARKET VALUE OF TAX ROLL

	\$ Billions		Change, '17 - '20	
	'17	'20	\$	%
Houston ISD	227.0	253.5	26.5	11.7
City of Houston	303.8	337.8	34	11.2
Harris County	585.3	658.4	73.1	12.5

Source: Harris County Appraisal District and Partnership calculations

The forecast assumes the public sector will receive adequate sales tax and property revenues to serve the region's growing population. Government services should add 7,100 jobs in '22.

Elizabeth Balderrama, Heath Duran, Annaissa Flores, Patrick Jankowski and Roel Martinez contributed to this issue of Houston, The Economy at a Glance.

The Key Economic Indicators page will return with the January '22 issue.

STAY UP TO DATE

For past issues of **Economy at a Glance**, click [here](#).

If you are a not a member of the Greater Houston Partnership and would like to subscribe to **Economy at a Glance**, please click [here](#) and enter your email address. For information about joining the Greater Houston Partnership, call Member Engagement at 713-844-3683.

The Key Economic Indicator reports are **updated whenever any data change** — typically, six or so times per month. If you would like to receive these updates by e-mail, usually accompanied by commentary, click [here](#).

HOUSTON MSA NONFARM PAYROLL EMPLOYMENT (000)

	Oct '21	Sep '21	Sept '20	Change from		% Change from	
				Sep '21	Sept '20	Sep '21	Sept '20
Total Nonfarm Payroll Jobs	3,099.8	3,066.7	2,964.2	33.1	135.6	1.1	4.6
<i>Total Private</i>	<i>2,685.7</i>	<i>2,660.0</i>	<i>2,552.1</i>	<i>25.7</i>	<i>133.6</i>	<i>1.0</i>	<i>5.2</i>
<i>Goods Producing</i>	<i>490.0</i>	<i>485.7</i>	<i>481.2</i>	<i>4.3</i>	<i>8.8</i>	<i>0.9</i>	<i>1.8</i>
<i>Service Providing</i>	<i>2,609.8</i>	<i>2,581.0</i>	<i>2,483.0</i>	<i>28.8</i>	<i>126.8</i>	<i>1.1</i>	<i>5.1</i>
<i>Private Service Providing</i>	<i>2,195.7</i>	<i>2,174.3</i>	<i>2,070.9</i>	<i>21.4</i>	<i>124.8</i>	<i>1.0</i>	<i>6.0</i>
Mining and Logging	71.7	71.0	64.5	0.7	7.2	1.0	11.2
Oil & Gas Extraction	35.4	35.1	34.2	0.3	1.2	0.9	3.5
Support Activities for Mining	34.2	33.8	29.1	0.4	5.1	1.2	17.5
Construction	206.8	203.7	207.1	3.1	-0.3	1.5	-0.1
Manufacturing	211.5	211.0	209.6	0.5	1.9	0.2	0.9
Durable Goods Manufacturing	130.9	130.0	128.4	0.9	2.5	0.7	1.9
Nondurable Goods Manufacturing	80.6	81.0	81.2	-0.4	-0.6	-0.5	-0.7
Wholesale Trade	163.4	162.2	157.8	1.2	5.6	0.7	3.5
Retail Trade	301.5	295.7	296.4	5.8	5.1	2.0	1.7
Transportation, Warehousing and Utilities	173.2	172.6	161.6	0.6	11.6	0.3	7.2
Utilities	17.1	17.0	17.1	0.1	0.0	0.6	0.0
Air Transportation	18.3	18.3	18.3	0.0	0.0	0.0	0.0
Truck Transportation	27.3	27.3	26.5	0.0	0.8	0.0	3.0
Pipeline Transportation	11.6	11.5	12.0	0.1	-0.4	0.9	-3.3
Information	28.9	28.9	28.2	0.0	0.7	0.0	2.5
Telecommunications	12.4	12.4	12.5	0.0	-0.1	0.0	-0.8
Finance & Insurance	107.7	107.0	104.3	0.7	3.4	0.7	3.3
Real Estate & Rental and Leasing	57.1	58.5	60.9	-1.4	-3.8	-2.4	-6.2
Professional & Business Services	515.2	511.7	483.4	3.5	31.8	0.7	6.6
Professional, Scientific & Technical Services	248.0	245.1	233.2	2.9	14.8	1.2	6.3
<i>Legal Services</i>	<i>28.7</i>	<i>28.4</i>	<i>28.3</i>	<i>0.3</i>	<i>0.4</i>	<i>1.1</i>	<i>1.4</i>
<i>Accounting, Tax Preparation, Bookkeeping</i>	<i>24.2</i>	<i>23.7</i>	<i>23.9</i>	<i>0.5</i>	<i>0.3</i>	<i>2.1</i>	<i>1.3</i>
<i>Architectural, Engineering & Related Services</i>	<i>66.4</i>	<i>66.6</i>	<i>66.5</i>	<i>-0.2</i>	<i>-0.1</i>	<i>-0.3</i>	<i>-0.2</i>
<i>Computer Systems Design & Related Services</i>	<i>37.8</i>	<i>37.7</i>	<i>33.3</i>	<i>0.1</i>	<i>4.5</i>	<i>0.3</i>	<i>13.5</i>
Admin & Support/Waste Mgt & Remediation	222.5	222.0	205.0	0.5	17.5	0.2	8.5
<i>Administrative & Support Services</i>	<i>208.6</i>	<i>208.5</i>	<i>193.5</i>	<i>0.1</i>	<i>15.1</i>	<i>0.0</i>	<i>7.8</i>
<i>Employment Services</i>	<i>85.2</i>	<i>82.9</i>	<i>71.6</i>	<i>2.3</i>	<i>13.6</i>	<i>2.8</i>	<i>19.0</i>
Educational Services	68.9	65.0	61.6	3.9	7.3	6.0	11.9
Health Care & Social Assistance	350.4	342.5	332.9	7.9	17.5	2.3	5.3
Arts, Entertainment & Recreation	29.0	30.9	25.8	-1.9	3.2	-6.1	12.4
Accommodation & Food Services	281.5	281.7	253.9	-0.2	27.6	-0.1	10.9
Other Services	118.9	117.6	104.1	1.3	14.8	1.1	14.2
Government	414.1	406.7	412.1	7.4	2.0	1.8	0.5
Federal Government	31.2	31.4	32.5	-0.2	-1.3	-0.6	-4.0
State Government	91.4	89.9	90.0	1.5	1.4	1.7	1.6
<i>State Government Educational Services</i>	<i>53.1</i>	<i>51.5</i>	<i>52.4</i>	<i>1.6</i>	<i>0.7</i>	<i>3.1</i>	<i>1.3</i>
Local Government	291.5	285.4	289.6	6.1	1.9	2.1	0.7
<i>Local Government Educational Services</i>	<i>195.9</i>	<i>191.2</i>	<i>195.5</i>	<i>4.7</i>	<i>0.4</i>	<i>2.5</i>	<i>0.2</i>

SOURCE: Texas Workforce Commission