THE ECONOMY AT A GLANCE
HOUSTON

GREATER HOUSTON PARTNERSHIP
Making Houston Greater.

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INEVITABLE?

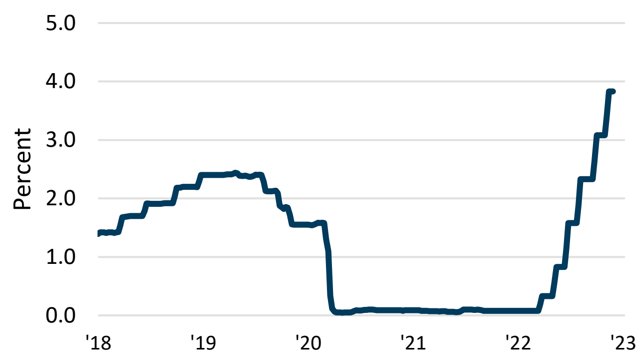
The presidents of the Federal Reserve Banks have been making the rounds lately, speaking at conferences, sitting for media interviews, and discussing the outlook for inflation, interest rates, and the U.S. economy in ’23.

- At a recent Houston conference, Dallas Fed President Lorie Logan noted that even though inflation is moderating it remains much too high and the Fed has more work to do.
- Cleveland President Loretta Mester told the *Financial Times* that the U.S. central bank wasn’t yet ready to pause its rate-hike campaign.
- St. Louis President James Bullard advised *Barron’s* that financial markets underestimate the likelihood the Fed will continue to aggressively raise interest rates in ’23 to curb inflation.
- New York Fed President John Williams told the Economic Club of New York that rates need to rise higher and stay there through the end of ’23, not coming down until sometime in ’24.
- Bank of Richmond President Thomas Barkin told *Bloomberg Television* that he favors slowing the pace of rate hikes but added they may need to remain higher for longer to tamp down inflation.
- Fed Chair Jerome Powell recently told the Brookings Institution that although the Fed plans to slow its pace of interest-rate hikes, there is a “long way” to go before inflation is tamed so rates will be higher in the coming year.

Why it Matters

The Fed has hiked interest rates at all but one of the seven meetings of the Federal Open Market Committee (FOMC) in ’22. Economists worry the higher rates will tip the U.S. economy into recession.

FEDERAL FUNDS EFFECTIVE RATE*



* Weekly average
Source: Board of Governors of the Federal Reserve System

If higher interest rates are inevitable, is a recession inevitable? If the U.S. slips into recession, is Houston far behind? The Partnership will answer both questions on Thursday, December 8, when it presents its *Houston Economic Outlook for 2023* at the Royal Sonesta Hotel.

The program begins at 10:30 a.m. with a Business Expo and networking event. A few booths are still available. Organizations that would like to exhibit should reach out to Samantha Hodges (shodges@houston.org) or Mikayla Collins (mcollins@houston.org).

Doors to the ballroom open at 11:45 a.m. with lunch served at noon. A discussion among experts from industries key to the region’s growth begins at 12:30. This year’s panelists and the industries they represent are:

Health Care: Doug Lawson, President and CEO, St. Luke's Health. St. Luke’s is comprised of 16 hospitals throughout southeast Texas, including the research and teaching hospital for Baylor College of Medicine.

Finance: Isaac Johnson, President & CEO, TDECU. He oversees Houston's largest credit union, with over $4.3 billion in assets and 360,000 members.

Retail: Armando Perez, Executive Vice President, H-E-B. The well-known grocery chain ranked ninth on *Forbes*' 2020 list of "America's Largest Private Companies."

Construction/Engineering: Leslie Duke, President and General Manager, Burns & McDonnell. The firm focuses on the design and construction of high-voltage power, refining, chemical, terminal, and pipeline facilities.

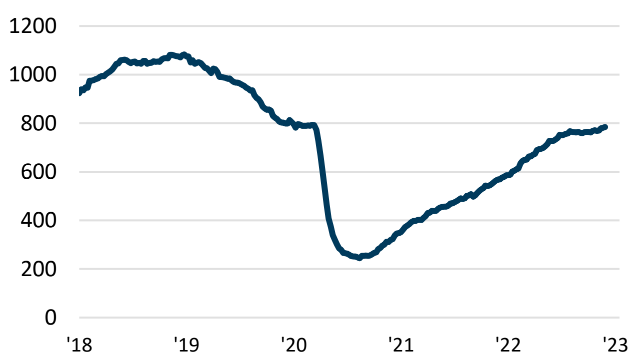
Following the discussion, Patrick Jankowski, the Partnership's Chief Economist and Senior Vice President of Research, will share the Partnership's forecast. All attendees will receive a printed copy at the event.

To register for the lunch, panel discussion, and forecast, go to the Events section of the Partnership's webpage, www.houston.org, or click here.

A VIEW FROM THE OIL PATCH

It's taken nearly three years, but the U.S. rig count has recovered nearly all its pandemic losses. Baker Hughes reports that 784 rigs were working in the U.S. the week before Thanksgiving. That puts the count just below the 790 working mid-February '20. It had fallen to a recession trough of 244 in mid-August '20 before beginning a long, slow recovery.

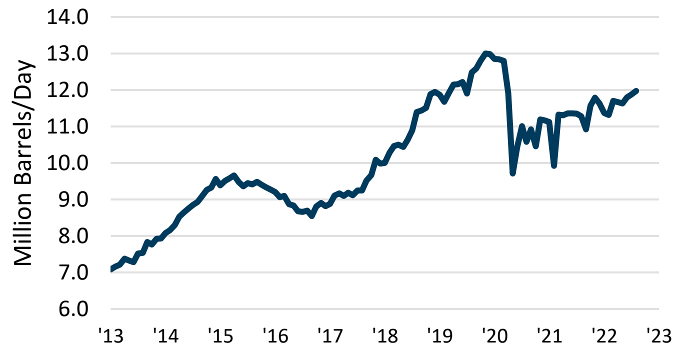
U.S. ACTIVE RIG COUNT



Source: Baker Hughes

Production has logged steady improvement as well. The U.S. Energy Information Administration (EIA) estimates domestic output hit 11.98 million barrels per day (mb/d) in August '22, up from the pandemic low of 9.71 mb/d in May '20. That's still short of the November '19 peak of 13.0 mb/d.

U.S. CRUDE PRODUCTION



Source: U.S. Energy Information Administration

Employment is not as far along in the recovery. Data from the Texas Workforce Commission (TWC) indicates the state has recouped 84.1 percent of the oil field service (OFS) jobs and 63.2 percent of the exploration and production (E&P) jobs lost in the downturn. Houston lags the state, recovering only 54.5 percent of its E&P losses and 50.8 percent of its OFS losses.

ENERGY INDUSTRY EMPLOYMENT, JAN '20 TO OCT '22

Jobs Lost, Peak to Trough			
Texas		Houston	
E&P	OFS	E&P	OFS
13,600	55,500	7,700	13,000
Jobs Recovered, Trough to Present			
Texas		Houston	
E&P	OFS	E&P	OFS
8,600	46,700	4,200	6,600
Percent Job Losses Recovered			
Texas		Houston	
E&P	OFS	E&P	OFS
63.2%	84.1%	54.5%	50.8%
Jobs Need to Close the Gap			
Texas		Houston	
E&P	OFS	E&P	OFS
5,000	8,800	3,500	6,400

E&P = Exploration and Production; OFS = Oilfield Services
Source: Partnership calculations based on Texas Workforce Commission data

While the rig count, employment, and production are trending up, oil prices are headed in the opposite direction. The West Texas Intermediate (WTI) averaged $74 per barrel on the spot market in the second half of '21, climbed to over $100 soon after Russia invaded Ukraine, and then peaked at $122 in early June. Crude prices began their decline mid-summer as global production rose, the Biden Administration tapped the U.S. Strategic Petroleum Reserve, Russia managed to evade the sanctions on their crude exports, and growing fears of a global recession began to weigh on commodity markets. On November 29, 2022, WTI closed on the New York Mercantile (NYMEX) spot market at $78 per barrel, roughly $8 above the same day one year ago.

WEST TEXAS INTERMEDIATE SPOT PRICE

Source: U.S. Energy Information Administration

Geopolitical uncertainties continue to plague global energy markets. On October 5, OPEC announced it would reduce its crude oil production targets by 2.0 million barrels per day (b/d) beginning in November. On December 5, the European Union (EU) will embargo all imports by sea of Russian crude. On February 5, 2023, the EU will ban imports of Russian refined products. And widespread lockdowns in China to contain COVID-19 have dimmed the country's economic prospects and any hope for growth in global crude consumption.

The domestic industry faces a host of challenges as well. Many blue-collar workers faced with the slow recovery in the oil patch left for jobs in construction, manufacturing, and transportation. When the industry resumed hiring, those workers weren't around anymore. The industry also struggles to attract white-collar workers as well. Many see oil and gas as having no long-term future.

Steel tubing, sand, and chemicals are often in short supply. Lead times for spare parts, new equipment, and machine-tool orders have increased to more than a year.

Inflation continues to eat into exploration budgets. In the 12 months ending October '22, oilfield equipment costs were up 9.5 percent and oilfield services costs 21.8 percent, according to the U.S. Producer Price Index. That compares to 7.7 percent for the Consumer Price Index over the same period.

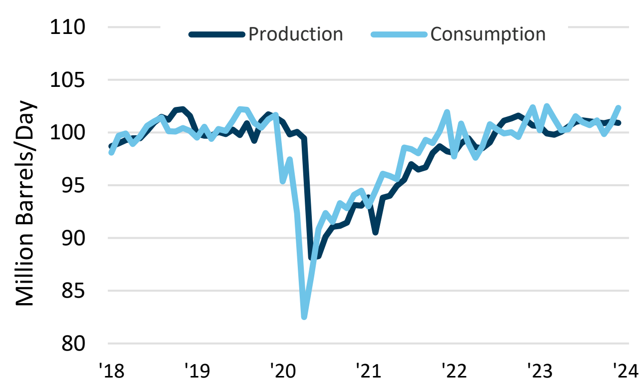
Higher labor, equipment, and supply costs are driving up breakeven points. Most firms need oil in the mid-to-high $60s to profitably drill a well, up from the mid-to-low $50s a year ago, according to the Dallas Fed.

Wall Street continues to impose "capital discipline" on the industry, requiring drillers to fund their exploration programs from cash flow. The inability to access to capital markets is limiting the industry's ability to expand production. Some investors are reluctant to support an industry they blame for global climate change.

Finally, the Biden Administration continues to send mixed signals, calling on the industry to ramp up while at the same time imposing regulations that stifle exploration and production.

Despite all the uncertainties, EIA forecasts global oil consumption to outpace production in '23. The imbalance should stabilize and maybe even lift prices. EIA forecasts WTI to trade near $88 per barrel in the first half of the year and $91 in the second half. By comparison, WTI has averaged $90 per barrel since July of this year.

GLOBAL CRUDE PRODUCTION AND CONSUMPTION



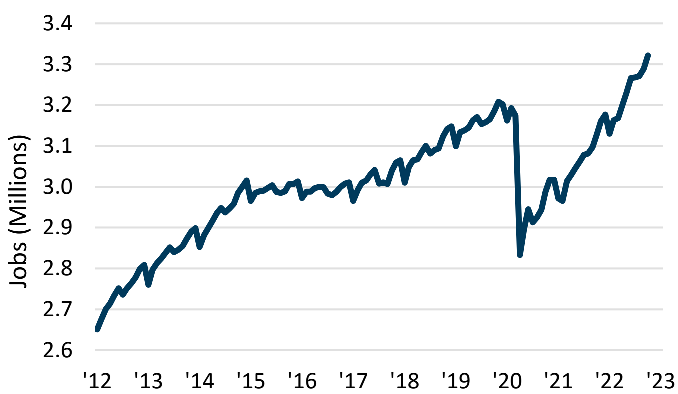
Source: U.S. Energy Information Administration

Consulting firm Piper Sandler expects spending on domestic exploration and production to top $36.6 billion in '23, a 22 percent increase over '22. Much of the increase will be absorbed by higher labor, equipment, and material costs. But there should be enough left over to marginally expand domestic drilling programs. EIA expects U.S. production to average 12.31 mb/d in '23, up nearly half a million barrels from 11.83 mb/d this year.

TOO GOOD TO BE TRUE

Houston added 32,400 jobs in October, according to the Texas Workforce Commission (TWC). That ties a record for the month, the previous being set in October of ’17 when hiring surged after Hurricane Harvey. Through October of this year, the region has added 144,500 jobs. Metro Houston employment now tops 3.3 million.

PAYROLL EMPLOYMENT, METRO HOUSTON



Source: Texas Workforce Commission

The robust job growth helps to explain why home sales were so strong earlier in the year, why traffic congestion feels worse than before the pandemic, and why Houston’s inflation rate has tracked higher than the nation’s for most of the year.

The Partnership, however, is concerned that TWC is vastly overestimating job growth. In six of the past 12 months, the region has created 30,000 or more jobs. Not counting May and June ’20 (when the economy reopened after the COVID-19 shutdown), the region has created 30,000 or more jobs in a single month only 14 times over the past two decades.

As noted in previous issues of *Glance*, TWC’s monthly estimates are derived from a survey of employers, and like all surveys, the results are subject to sampling, response, and processing errors. Alternate data sources suggest job growth is somewhat slower than what TWC is reporting.

Four times a year the U.S. Bureau of Labor Statistics (BLS) releases its *Quarterly Census of Employment and Wages (QCEW).* The QCEW reflects how many employees in the state are covered by unemployment insurance. With few exceptions, all employers must provide this benefit to their employees. The Dallas Fed uses QCEW data to develop its own estimates of employment growth for Texas and the state’s major metro areas.

According to the Dallas Fed, Houston has created roughly 22,000 fewer jobs than what TWC estimates for the 12 months ending October ’22. The Fed’s data also shows Houston has added more jobs than any other Texas metro if Dallas and Fort Worth are considered separate entities.

EMPLOYMENT GROWTH THROUGH OCTOBER ’22
Based on Dallas Fed Estimates

	12-Month		Year-to-Date	
Metro	’000s	%	’000s	%
Houston	172.9	5.5	149.1	4.7
Austin	61.1	5.1	46.9	3.9
Dallas	152.0	5.4	125.7	4.4
Fort Worth	53.9	4.9	42.7	3.8
San Antonio	48.2	4.5	44.3	4.1
Texas	602.3	4.6	505.8	3.9
Midland	4.7	4.5	3.2	3.0
Odessa	3.0	4.1	2.8	3.9

Source: Federal Reserve Bank of Dallas

The *Local Area Unemployment Statistics (LAUS)* series provides another view of Houston employment. The LAUS is derived from the Current Population Survey (CPS), the primary source of labor force statistics for the U.S. There’s a key difference, however, between the QCEW and the LAUS. QCEW reflects where the jobs are located. LAUS reflects where the job holders live. For example, a job inside the city of Houston (QCEW series) may be held by someone who lives in Fort Bend County (LAUS series), but commutes into Houston for work.

The LAUS data suggests metro Houston has created about 145,100 jobs, about 50,000 fewer than what TWC is reporting over the previous 12 months.

EMPLOYMENT GROWTH BASED ON LAUS DATA

	12-Month		October YTD	
METRO	’000s	% Δ	’000s	% Δ
Houston	145,100	4.5	103,200	3.1

Source: Texas Workforce Commission

Each March, TWC issues its “benchmark” revisions to local employment data. The revisions derive from a full year’s worth of QCEW data. In some years, TWC has adjusted growth by 35,000 to 45,000 jobs. Houstonians should be prepared for comparable revisions to this year’s data when TWC issues its next set of benchmarks in March of next year.

Patrick Jankowski and Clara Richardson contributed to this issue of Houston, The Economy at a Glance.

KEY ECONOMIC INDICATORS

Aviation — The Houston Airport System (HAS) handled 5.0 million passengers in October '22, up 13.4 percent from 4.4 million in October '21. This is the highest passenger count for Houston since July '21.

Construction — Metro Houston construction starts totaled $38.4 billion through October of this year, up from $17.2 billion over the comparable period in '21, according to the latest data from Dodge Data & Analytics. Nonresidential activity increased from $7.5 billion to $15.8 billion and residential activity from $12.4 billion to $12.6 billion.

Crude Oil — The closing spot price for West Texas Intermediate (WTI), the U.S. benchmark for light, sweet crude, averaged $87.55 per barrel in October '22, up from $81.48 for the same period in '21. WTI dropped below $90 in early September for the first time since February '21. The U.S. Energy Information Administration forecasts WTI to average $95.74 per barrel this year and $88.58 in '23.

Foreign Trade — Houston area ports handled 185.3 million metric tons of goods and commodities through September of this year, a 10.7 percent increase over the comparable period in '21. Those shipments were valued at $223.2 billion, a 46.3 percent increase over '21. This year-over-year increase was largely due to increased shipments of mineral fuels, oil, and refined products; organic chemicals; and plastics.

Home Sales — In the 12 months ending in October, Houston area realtors closed on 124,524 homes, compared to 126,946 for the 12 months ending in September, and 128,869 for the 12 months ending in August. In October '22, active listings of all property types (single-family, townhomes, condos, duplexes) were up 36.9 percent over October of '21. They are still 13.3 percent below where they stood five years ago.

Inflation — Inflation, as measured by the Consumer Price Index for all Urban Consumers (CPI-U), rose 7.8 percent nationwide in the 12 months ending October '22. This is slightly down from June's 9.1 percent. The peak of the last 50 years was in March '80 when the annual rate topped 14.6 percent.

Note: Additional details are available by clicking on the hyperlink for each indicator.

Natural Gas — October's natural gas prices averaged $5.66 per million British thermal units (MMBtu), up 2.7 percent from October the year before. Prices briefly topped $9.56 in August and have trended down since.

Purchasing Managers Index — Economic activity in Houston expanded in October at a slightly slower rate than September, according to the most recent Houston Purchasing Managers Index (PMI). The October '22 PMI registered 52.9, down from 61.0 percent in '21. Readings over 50 generally indicate expansion in the economy, below 50, contraction.

Rig Count — The Baker Hughes count of active domestic rotary rigs hit 784 the last week of November, up 215 rigs from the same week the year before, according to data recently released by the company. The rig count is 8 shy of where it stood in mid-March '20 prior to the pandemic. However, the rig count peaked at 1,083 the last week of December '18. The pandemic only accelerated the decline.

Unemployment — The unemployment rate for metro Houston was 4.1 percent in October '22, down from 4.2 percent in September '22 and 5.4 percent in October '21. The Texas rate was 3.8 percent, down from 4.8 percent the year prior. The U.S. rate was 3.4 percent, down from 4.3 percent in '21. The rates are not seasonally adjusted.

Vehicle Sales — New car, truck, and SUV sales are up 13.6 percent through October '22 compared to the same period in '21. Truck and SUV sales continue to dominate the market, accounting for one in four (77.4 percent) of all vehicles sold to date.

The Partnership sends updates for the most important economic indicators each month. If you would like to opt-in to receive these updates, please click here.

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If you would like to receive updates via Twitter, follow the Partnership's Chief Economist, Patrick Jankowski, at @PNJankowski.

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HOUSTON MSA NONFARM PAYROLL EMPLOYMENT (000)

	October 22	September 22	October 21	Change from September 22	Change from October 21	% Change from September 22	% Change from October 21
Total Nonfarm Payroll Jobs	**3,321.5**	**3,289.1**	**3,127.4**	**32.4**	**194.1**	**1.0**	**6.2**
Total Private	***2,882.2***	***2,861.1***	***2,694.3***	***21.1***	***187.9***	***0.7***	***7.0***
Goods Producing	***537.0***	***537.9***	***487.0***	***-0.9***	***50.0***	***-0.2***	***10.3***
Service Providing	***2,784.5***	***2,751.2***	***2,640.4***	***33.3***	***144.1***	***1.2***	***5.5***
Private Service Providing	***2,345.2***	***2,323.2***	***2,207.3***	***22.0***	***137.9***	***0.9***	***6.2***
Mining and Logging	68.9	68.6	59.9	0.3	9.0	0.4	15.0
Oil & Gas Extraction	33.0	32.9	28.9	0.1	4.1	0.3	14.2
Support Activities for Mining	34.1	33.9	29.2	0.2	4.9	0.6	16.8
Construction	239.9	241.4	213.9	-1.5	26.0	-0.6	12.2
Manufacturing	228.2	227.9	213.2	0.3	15.0	0.1	7.0
Durable Goods Manufacturing	142.1	142.4	131.7	-0.3	10.4	-0.2	7.9
Nondurable Goods Manufacturing	86.1	85.5	81.5	0.6	4.6	0.7	5.6
Wholesale Trade	179.4	175.8	163.7	3.6	15.7	2.0	9.6
Retail Trade	323.4	318.7	311.2	4.7	12.2	1.5	3.9
Transportation, Warehousing and Utilities	174.1	170.2	168.3	3.9	5.8	2.3	3.4
Utilities	17.8	17.6	17.3	0.2	0.5	1.1	2.9
Air Transportation	19.3	19.2	18.3	0.1	1.0	0.5	5.5
Truck Transportation	29.5	29.2	27.7	0.3	1.8	1.0	6.5
Pipeline Transportation	12.8	12.7	12.3	0.1	0.5	0.8	4.1
Information	32.5	32.3	30.8	0.2	1.7	0.6	5.5
Telecommunications	12.4	12.4	12.2	0.0	0.2	0.0	1.6
Finance & Insurance	111.4	110.6	108.6	0.8	2.8	0.7	2.6
Real Estate & Rental and Leasing	65.6	65.2	61.7	0.4	3.9	0.6	6.3
Professional & Business Services	546.4	539.8	514.7	6.6	31.7	1.2	6.2
Professional, Scientific & Technical Services	263.0	257.8	245.7	5.2	17.3	2.0	7.0
Legal Services	*31.2*	*30.5*	*29.7*	*0.7*	*1.5*	*2.3*	*5.1*
Accounting, Tax Preparation, Bookkeeping	*27.3*	*26.6*	*25.9*	*0.7*	*1.4*	*2.6*	*5.4*
Architectural, Engineering & Related Services	*75.9*	*73.9*	*66.7*	*2.0*	*9.2*	*2.7*	*13.8*
Computer Systems Design & Related Services	*40.2*	*39.3*	*38.2*	*0.9*	*2.0*	*2.3*	*5.2*
Admin & Support/Waste Mgt & Remediation	238.5	236.9	225.5	1.6	13.0	0.7	5.8
Administrative & Support Services	*227.7*	*226.2*	*213.7*	*1.5*	*14.0*	*0.7*	*6.6*
Employment Services	*88.6*	*88.3*	*87.4*	*0.3*	*1.2*	*0.3*	*1.4*
Educational Services	75.0	73.9	68.7	1.1	6.3	1.5	9.2
Health Care & Social Assistance	365.8	363.8	353.5	2.0	12.3	0.5	3.5
Arts, Entertainment & Recreation	38.2	38.3	30.4	-0.1	7.8	-0.3	25.7
Accommodation & Food Services	320.9	321.4	282.7	-0.5	38.2	-0.2	13.5
Other Services	112.5	113.2	113.0	-0.7	-0.5	-0.6	-0.4
Government	439.3	428.0	433.1	11.3	6.2	2.6	1.4
Federal Government	32.3	32.1	31.3	0.2	1.0	0.6	3.2
State Government	96.0	94.6	94.1	1.4	1.9	1.5	2.0
State Government Educational Services	*55.6*	*54.1*	*54.5*	*1.5*	*1.1*	*2.8*	*2.0*
Local Government	311.0	301.3	*307.7*	9.7	3.3	3.2	1.1
Local Government Educational Services	*217.1*	*208.9*	*213.8*	*8.2*	*3.3*	*3.9*	*1.5*

SOURCE: Texas Workforce Commission