

HOUSTON FACTS

2023

Your Guide to
Data on the
Houston Region

A photograph of a park with a wooden boardwalk, greenery, and people walking. The boardwalk is made of dark wood and curves through a lush green landscape. There are many trees and bushes. People are walking along the boardwalk, some with dogs. The sky is blue and clear.

**GREATER
HOUSTON
PARTNERSHIP**

HOUSTON FACTS

2023

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*Cover photo: Barrett Doherty
Courtesy of NBWLA*



ABOUT THE GREATER HOUSTON PARTNERSHIP

The mission of the Greater Houston Partnership is to make Houston one of the world's best places to live, work and build a business. The Partnership works to make Houston greater by promoting economic development, foreign trade and investment, and by advocating for efficient and effective government that supports, rather than impedes, business growth. The Partnership also convenes key stakeholders to solve the region's most pressing issues.

The Partnership was formed in 1989 in a merger of the Greater Houston Chamber of Commerce, the Houston Economic Development Council and the Houston World Trade Association. Today, the Partnership serves the 12-county greater Houston region and represents a member roster of over 950 businesses and institutions. Members of the Partnership account for one-fifth of all jobs in Houston. They engage in various initiatives, committees and task forces to work toward our goal of making Houston greater.

GREATER HOUSTON PARTNERSHIP

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TABLE OF CONTENTS

INTRODUCTION 4

REGION IN PERSPECTIVE..... 5

Geography.....	5
Population.....	6
Area.....	7
Economy.....	7
Selected Key Economic Indicators for '22.....	7

DEMOGRAPHICS..... 8

Population and People.....	8
Income.....	11
Total Wages.....	11
Employment by Occupation.....	12

HOUSTON ECONOMY..... 13

Establishments by Industry.....	14
International Business.....	15
Houston's Top Employers.....	16

KEY INDUSTRIES AND SECTORS 18

Construction and Real Estate.....	18
Health Care and Social Assistance.....	20
Manufacturing.....	22
Professional and Technical Services.....	24
Wholesale and Retail Trade.....	26
Energy.....	28
Energy Transition.....	29
NASA and Aerospace.....	32
Innovation.....	33
Biotech and Life Science.....	35

GOVERNMENT 36

City of Houston.....	36
Metro Area Counties.....	36
Texas Government.....	36
Local Council of Governments.....	38
Taxation.....	39
Public Safety.....	39
Libraries.....	39

EDUCATION 40

Elementary and Secondary Education.....	41
Higher Education.....	41

INFRASTRUCTURE..... 42

Utilities.....	42
Land Transportation.....	44
Sea Ports.....	45
Air Transportation.....	47
Aviation Statistics.....	49

COMMUNICATIONS AND MEDIA..... 50

Broadcast.....	50
Digital and Print.....	50

LIFE IN HOUSTON..... 52

Cost of Living.....	52
Weather.....	54
Travel and Tourism.....	55
Dining.....	56
Arts and Culture.....	57
Arts Organizations.....	58
Museums.....	60
Recurring Events and Festivals.....	64
Religious and Cultural Diversity.....	66
Conventions and Sports Facilities.....	68
Parks and Recreation.....	70

HISTORY..... 74

HOUSTON FACTS

THE FACTS SPEAK FOR THEMSELVES

Houston Facts has presented unvarnished information about the Houston region since 1959, and its predecessor publications—under different names, but with the same objective—date back to 1906. Over the decades, Houston Facts has grown well beyond its original four pages so that we could expand the range and depth of coverage, bringing you more information about parks, museums, schools, living costs, the regional economy and a host of other topics. It has evolved into a concise almanac for the Houston region. Corporate planners, market analysts, students, relocation and site selection consultants, real estate professionals, government agencies and myriad others turn to it for authoritative information on this region.

Of course, we believe the Houston region is one of the nation's most attractive major metropolitan areas—an outstanding place to live, work and build a business. We would like you to share that view. But we won't try to persuade you. The facts need no embellishment. They speak for themselves.

Houston Facts. The title says much about this publication. No spin. No frills. No hyperbole. Just page after page of straightforward information from hundreds of sources to answer questions frequently asked about the Houston region.

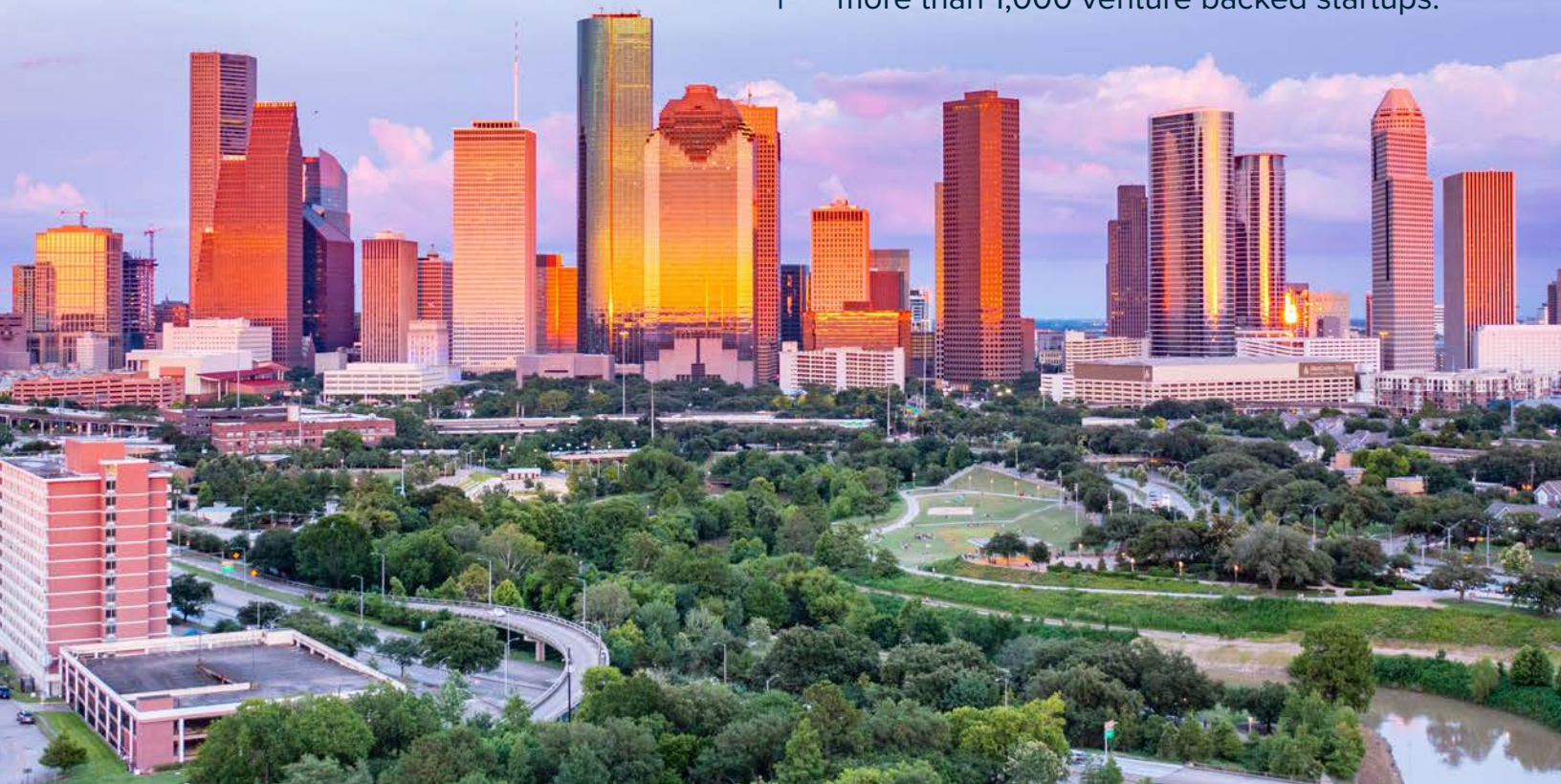
You may find in these pages facts that you never knew about the Houston region. For example:

OVER 1.7 M HOUSTONIANS
or ROUGHLY 1 IN 4
were born outside the U.S.

Metro Houston has the **THIRD LARGEST** number of **FORTUNE 500 COMPANIES** in nation.

If Houston were a country, it would rank as **25TH LARGEST ECONOMY IN THE WORLD**, exceeding Thailand and Ireland.

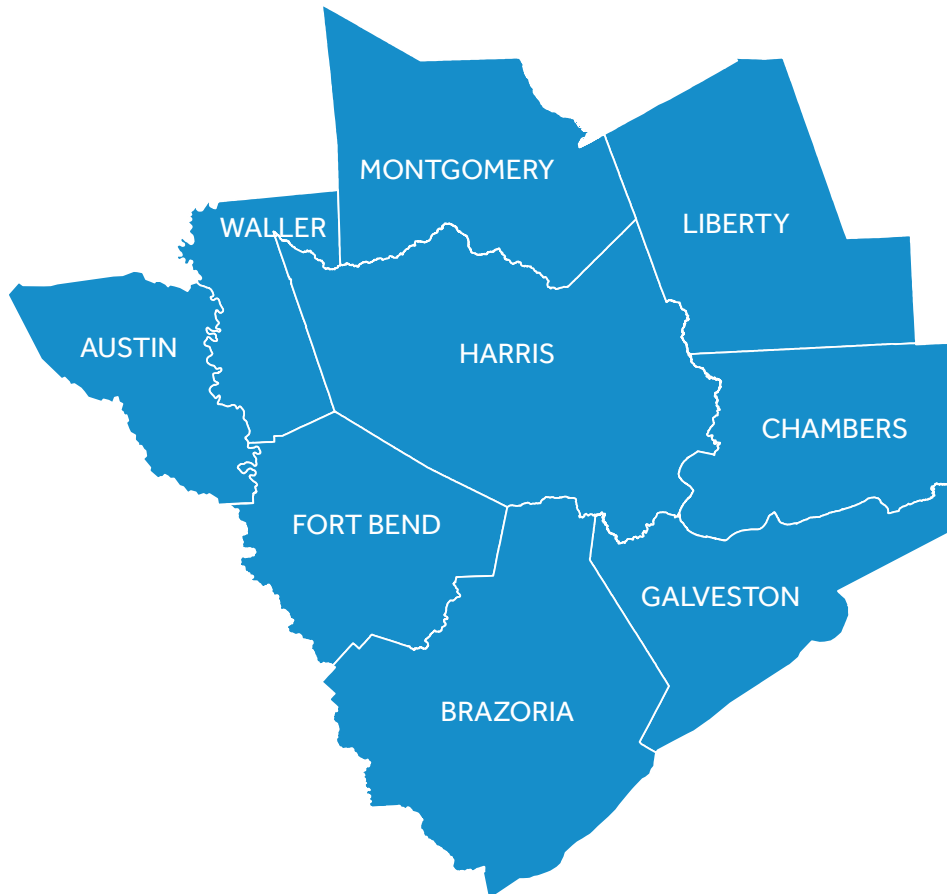
Houston is home to more than **9,100 TECH-RELATED FIRMS** including more than 1,000 venture backed startups.



REGION IN PERSPECTIVE

Geography

THE HOUSTON-THE WOODLANDS-SUGAR LAND METROPOLITAN STATISTICAL AREA (MSA) ¹ CONTAINS NINE TEXAS COUNTIES:



Within these nine counties are 124 incorporated cities and 33 Census Designated Places (CDP). ²

Harris County contains the bulk of the city in addition to all or part of 33 incorporated cities and 12 CDPs.

The county seat or administrative center of Harris County is the City of Houston.

Small portions of Houston spread into adjacent Montgomery and Fort Bend counties.

¹The longer title is shortened to "Houston MSA," "metro Houston," "Greater Houston," "Houston area" or simply "Houston" in Houston Facts. MSAs are geographic delineations defined by the Office of Management and Budget (OMB) for use by federal statistical agencies in collecting, tabulating and publishing data.

²A Census Designated Place functions like a city or town but is not incorporated.

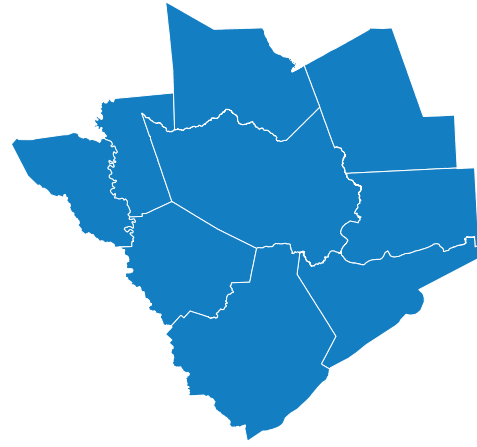
³Combined land and water area.

Population

7,340,118

Nine-County Houston MSA, as of July 1, 2022

If metro Houston were a state, it would have the 15th largest population in the U.S. behind Arizona (7,359,197) and ahead of Massachusetts (7,051,339) and Tennessee (6,981,974).



4,780,913

Harris County Population, as of July 1, 2022

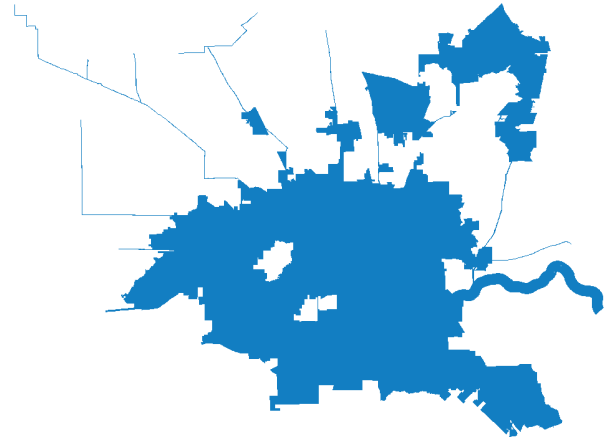
If Harris County were a state, it would have the 25th largest population in the U.S., behind Alabama (5,074,296) and ahead of Louisiana (4,590,241) and Kentucky (4,512,310).



2,302,878

City of Houston Population, as of July 1, 2022

If the city were a state, it would rank 36th in population in the U.S., behind Kansas (2,937,150) but ahead of New Mexico (2,113,344) and Nebraska (1,967,923).



Area

The nine-county **Houston-The Woodlands-Sugar Land Metropolitan Statistical Area (MSA)** covers 9,444 square miles. If the MSA were a state, it would rank as the 45th largest, ahead of New Hampshire, New Jersey, Connecticut, Delaware and Rhode Island.

Harris County covers 1,778 square miles, enough space to fit the cities of Austin, Boston, Chicago, Dallas, New York City and Seattle with room still to spare.

At 665 square miles, the **City of Houston** is larger in area than the cities of Chicago, Dallas, Los Angeles, New York, Phoenix and San Diego.

Economy

The U.S. Bureau of Economic Analysis estimates the Houston MSA's Gross Domestic Product (GDP) at **\$537.1 billion in '21**, making it the seventh largest U.S. metro economy.

If Houston were a state, its GDP would rank 15th, behind Virginia (\$605.0 billion) and Michigan (\$572.2 billion) but ahead of Maryland (\$443.9 billion) and Colorado (\$436.4 billion.)

If the MSA were an independent nation, **it would rank as the world's 25th largest economy**, behind Sweden (\$636.9 billion) and Belgium (\$594.5 billion) but ahead of Thailand (\$505.5 billion) and Ireland (\$504.5 billion), according to the International Monetary Fund.

Selected Key Economic Indicators for '22

HOME SALES

The Houston Association of Realtors' Multiple Listing Service recorded closings on 117,572 properties (includes single-family homes, townhomes, condos, high rises, etc.) in '22, an average of one every 4.4 minutes.

VEHICLE SALES

Houston MSA automobile dealers sold 230,906 new cars, trucks and SUVs in '22, an average of one every 2.3 minutes.

BUILDING PERMITS

The City of Houston issued building permits for construction valued at \$7.9 billion in '22, an average of \$14,400 per minute.

DEMOGRAPHICS

Population and People

The Houston-The Woodlands-Sugar Land MSA's population of 7,340,118 residents on July 1, 2022, ranks fifth among the nation's metropolitan areas.

The Houston MSA had the second largest numeric increase (124,281) in population of any U.S. metro from July 1, 2021 to July 1, 2022, reflecting 1.7 percent growth.

Harris County, population of 4,780,913 on July 1, 2022, ranks as the third most populous county in the nation.

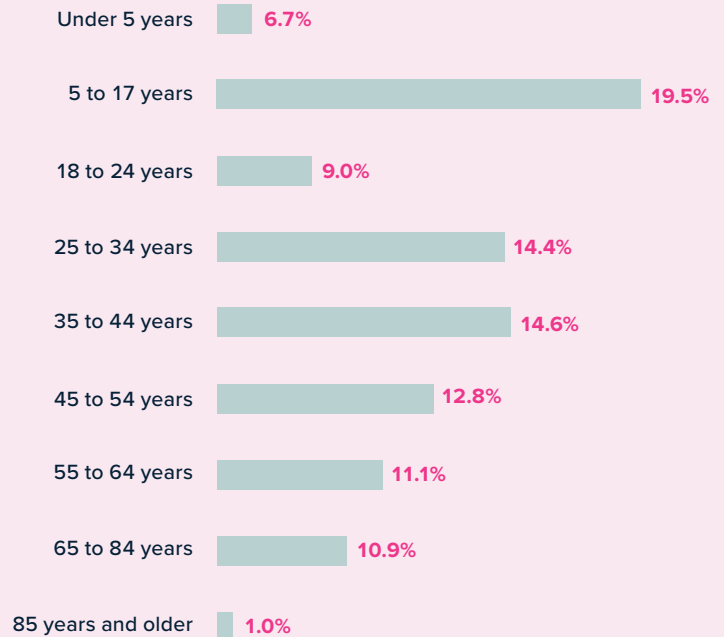
Harris County also gained population between July 1, 2021 and July 1, 2022, with 45,626 more residents than it had the year before.

The City of Houston, the fourth most populous U.S. city, had a population of 2,302,878 on July 1, 2022.

The City of Houston added 11,223 residents in '22, ranking it seventh among U.S. cities in population growth.

AGE DISTRIBUTION

Houston MSA, 2022



Note: Sums may not total due to rounding.

Source: U.S. Census Bureau, Population Division

SELECTED DEMOGRAPHIC CHARACTERISTICS

Metro Houston

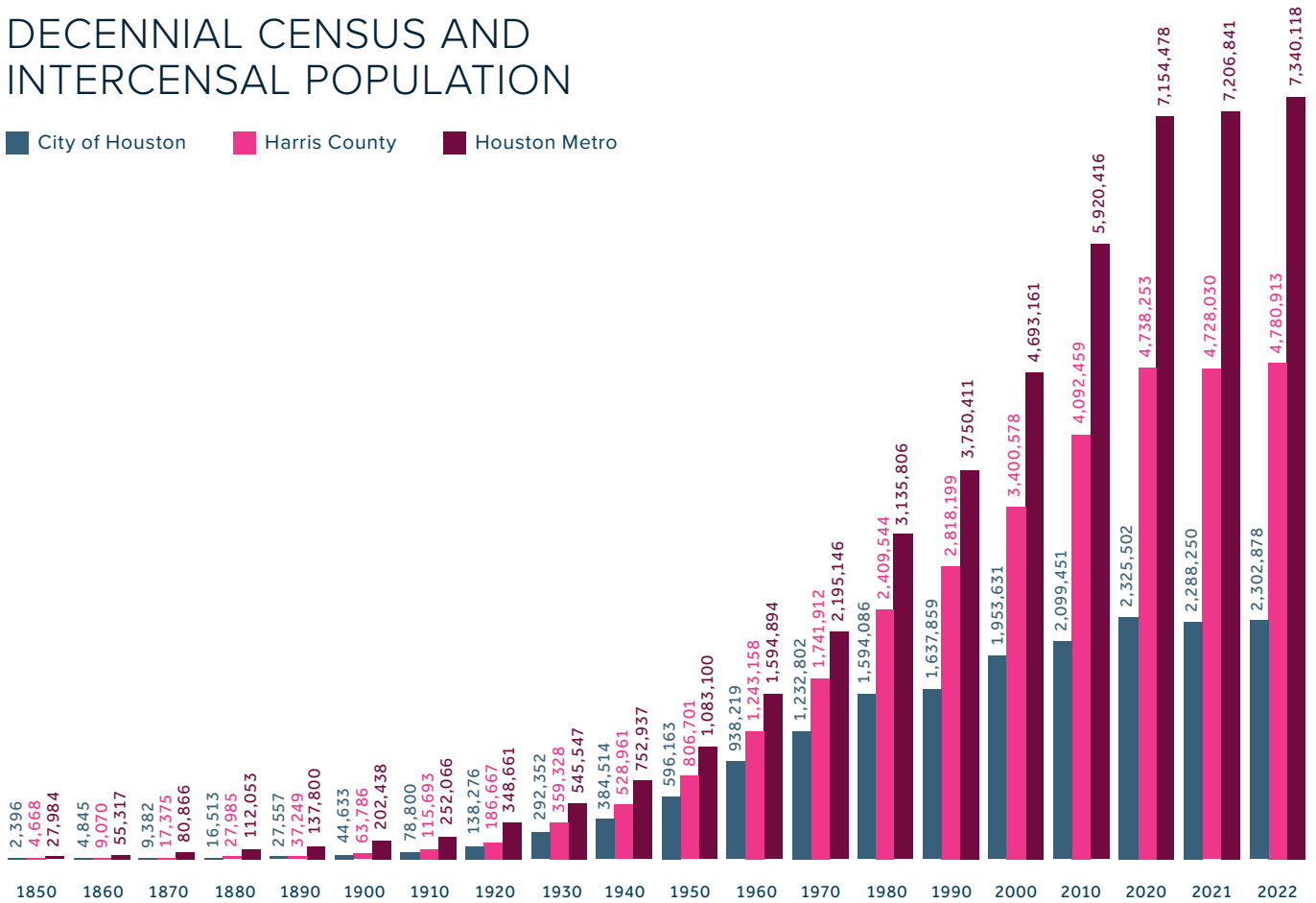
COUNTY	MEDIAN AGE (YEARS)	TOTAL HOUSEHOLDS	AVERAGE HOUSEHOLD SIZE	PERCENT OF ADULTS WITH BACHELOR'S DEGREE OR HIGHER	PERCENT OF POPULATION FOREIGN BORN
Austin	41.0	11,841	2.52	23.9	10.0
Brazoria	36.1	124,284	2.87	31.3	13.5
Chambers	35.1	14,905	3.02	23.9	8.2
Fort Bend	36.7	259,106	3.09	48.1	29.3
Galveston	37.9	131,877	2.59	33.2	9.9
Harris	33.9	1,658,503	2.81	32.5	26.2
Liberty	34.6	27,688	3.02	9.9	10.2
Montgomery	37.3	214,328	2.83	36.4	13.8
Waller	29.9	17,286	2.98	25.2	11.8
HOUSTON MSA	34.8	2,459,818	2.83	34.2	23.5

Note: County data may not sum to Houston MSA total due to a difference in survey methods.

Source: County data from U.S. Census Bureau, 2016-21 American Community Survey

DECENNIAL CENSUS AND INTERCENSAL POPULATION

■ City of Houston ■ Harris County ■ Houston Metro



Source: U.S. Census Bureau, Texas Almanac

COMPONENTS OF POPULATION CHANGE

Metro Houston, 2013-2022

COUNTY	POPULATION		POPULATION CHANGE SINCE '13				TOTAL POPULATION CHANGE
	'13	'22	NET MIGRATION		NATURAL INCREASE		
			INTERNATIONAL MIGRATION	DOMESTIC MIGRATION	BIRTHS	DEATHS	
Austin	28,572	31,097	138	1,783	3,425	2,976	2,525
Brazoria	324,295	388,181	4,949	43,942	47,123	25,516	63,886
Chambers	36,497	51,288	530	10,503	5,396	3,082	14,791
Fort Bend	624,737	889,146	50,447	167,087	93,035	35,904	264,409
Galveston	301,099	357,117	4,538	34,198	40,022	29,360	56,018
Harris	4,262,549	4,780,913	286,970	-164,352	681,964	282,586	518,364
Liberty	76,378	101,992	334	21,230	11,886	8,603	25,614
Montgomery	484,627	678,490	12,623	149,809	72,801	40,753	193,863
Waller	44,365	61,894	489	14,163	6,543	3,601	17,529
HOUSTON MSA	6,183,119	7,340,118	361,018	278,363	962,195	432,381	1,156,999

Note: In some cases, the increase due to migration and the natural increase will not sum to the change in population due to rounding and the Census Bureau's use of residual values in generating the estimates.
Source: U.S. Census Bureau, 2022 Population Estimates

NEARLY
ONE IN FOUR HOUSTONIANS BORN
FOUR OUTSIDE THE U.S.

4,491,253
total population
age 25 or older

\$1,471
average weekly
wage

2,897,040

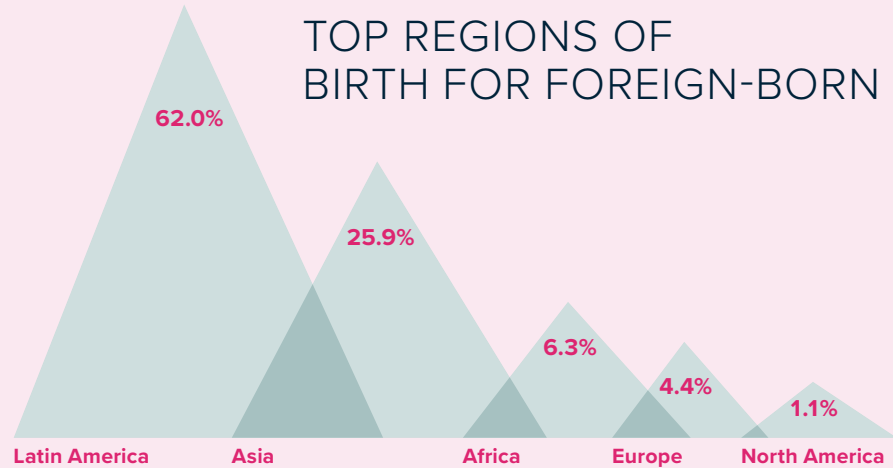
total occupational employment
TOP OCCUPATIONS



Among the 1,654,511 foreign-born in the Houston metro area, 71.8 percent entered the U.S. before '10.

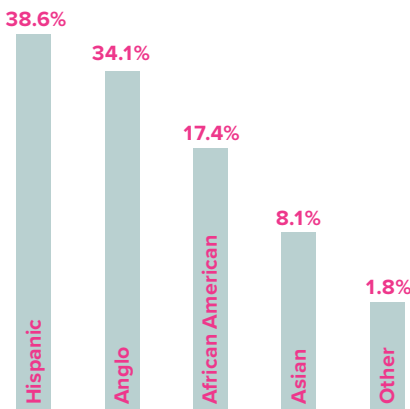


TOP REGIONS OF BIRTH FOR FOREIGN-BORN



Source: U.S. Census Bureau, American Community Survey

RACE/ETHNIC COMPOSITION
Houston MSA, 2021



Note: Hispanic/Latino includes all races. Sums may not total due to rounding.
Source: U.S. Census Bureau, 2021 American Community Survey

EDUCATIONAL ATTAINMENT
Houston MSA

POPULATION AGE 25 OR OLDER		
HIGHEST EDUCATION LEVEL ATTAINED	NUMBER	PERCENT
NO HIGH SCHOOL DIPLOMA	706,614	15.6
HIGH SCHOOL GRADUATE OR HIGHER	3,832,386	84.4
High School Diploma or GED	1,031,528	22.7
Some College, No Degree	915,301	20.2
Associate Degree	334,136	7.4
BACHELOR'S DEGREE OR HIGHER	1,551,421	34.2
Bachelor's Degree	982,109	21.6
Graduate or Professional Degree	569,312	12.5
TOTAL POPULATION AGE 25 OR OLDER	4,539,000	100.0

Note: Sums may not total due to rounding.
Source: U.S. Census Bureau, 2016-2021 American Community Survey

Income

PER CAPITA PERSONAL INCOME

The nine-county Houston MSA's pretax per capita personal income (PCPI) was \$64,837 in '21, just above the national average of \$64,143, according to the latest data available from the U.S. Bureau of Economic Analysis (BEA).

PCPI increased **6.1%** in the Houston MSA compared to a **7.3%** increase nationwide from '20 to '21

TOTAL PERSONAL INCOME

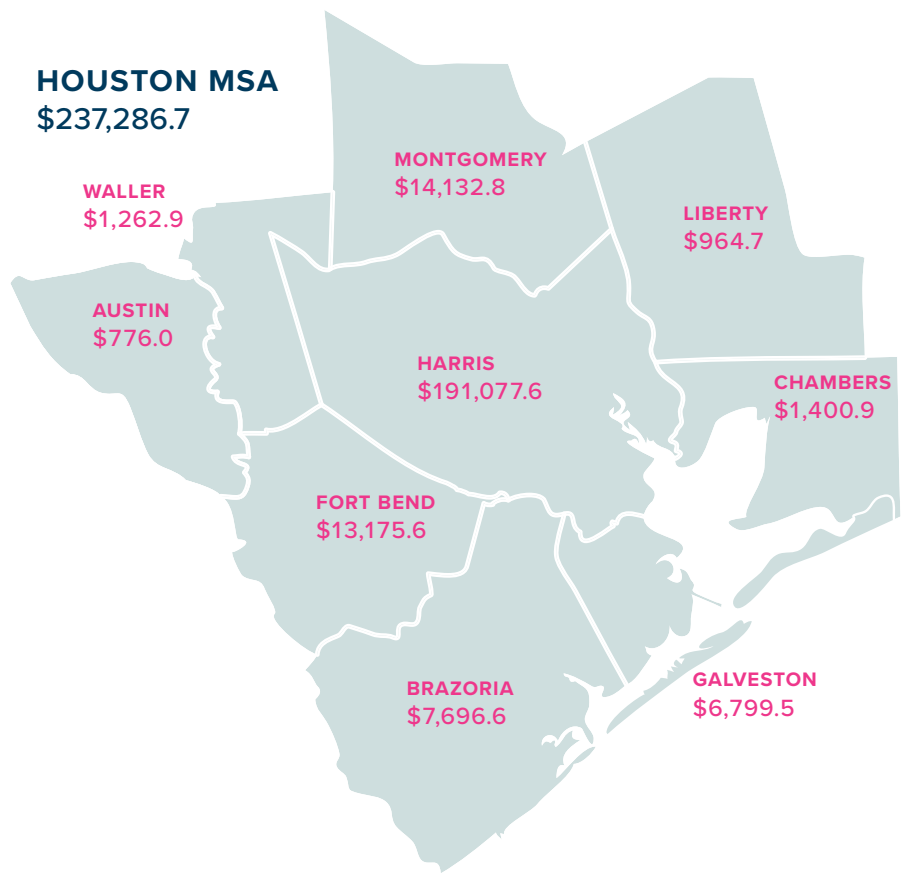
Total personal income, defined as income received from all sources, in the nine-county Houston MSA in '21 was \$467.3 billion, up 9.1 percent from '19, according to BEA data.

Wages

The average weekly wage in metro Houston was \$1,471 in '22, according to the Texas Workforce Commission. Total wages for the metro area were \$237.3 billion for the same period.

TOTAL WAGES

Metro Houston, 2022* (\$ Millions)



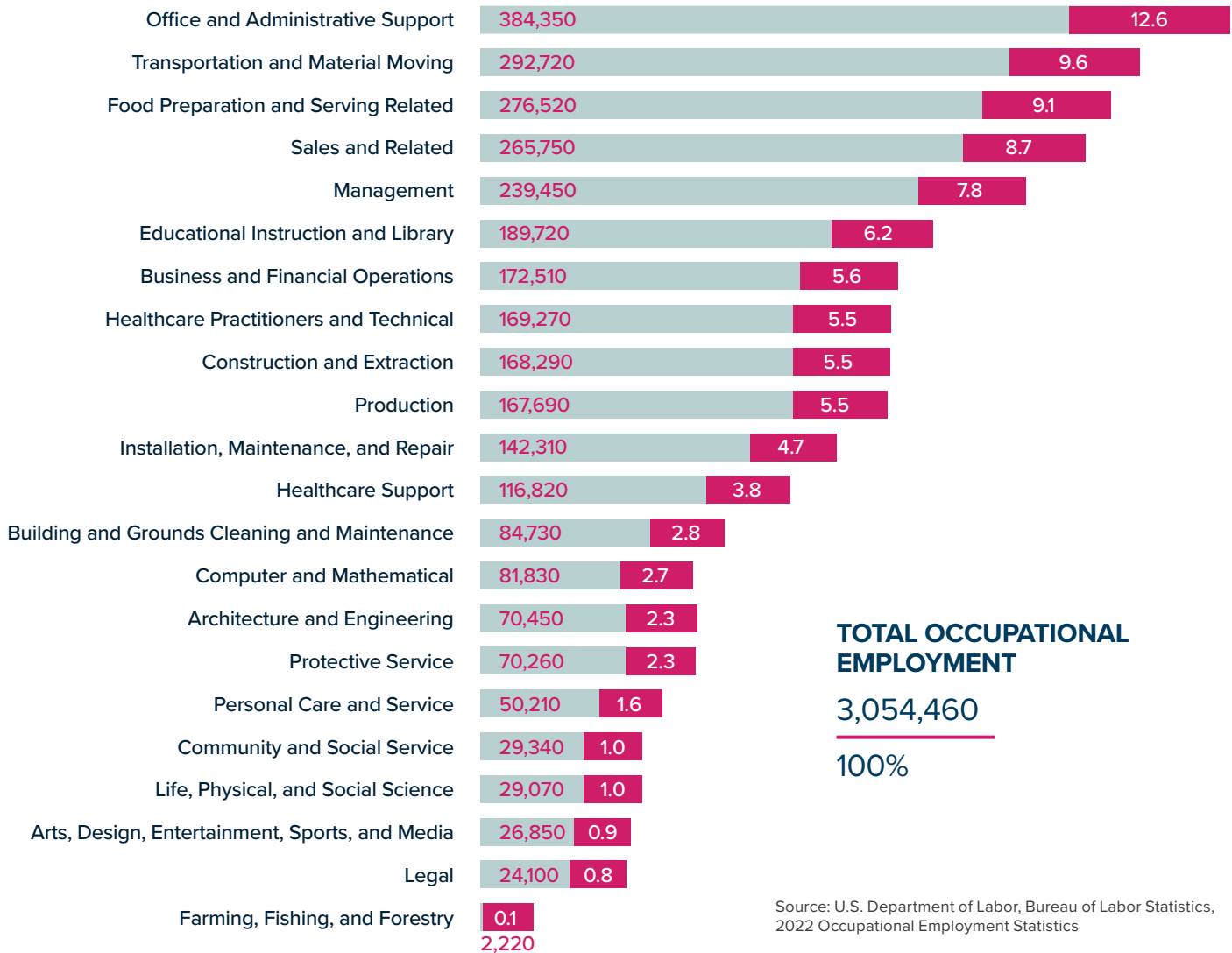
*Note: Four quarters ending Q4/22. Sums may not total due to rounding.
Source: Texas Workforce Commission, Quarterly Census of Employment and Wages



METRO EMPLOYMENT BY OCCUPATION

Houston MSA, 2022

■ Employment ■ Percent of Total



HOUSTON ECONOMY



Houston set a record for employment growth in '21, with the region adding 172,100 jobs. '22 was the second-best year on record, with the metro area adding another 145,700 jobs. By April '22, Houston had fully recovered from its pandemic job losses.

The region continues to perform well despite concerns over a possible national recession. As of May '22, employment topped 3,354,300, an all-time high. The local unemployment rate was 4.4 percent, well below the pre-pandemic average of 5.6 percent. Initial claims for unemployment benefits began to tick up in the spring of '23, but this only brought them back to pre-pandemic levels.

Half a dozen factors are driving Houston's growth:

A strong U.S. economy: Since emerging from the pandemic shutdown, the nation has created 25.7 million jobs, nearly four million more than it lost. Consumer spending surged 31.4 percent between April

'20, the lowest point of the COVID recession, and April '23, the most recent data available. It's 8.2 percent above pre-pandemic levels. Real personal income hit an all-time high in April '23. And in Q1/23, U.S. gross domestic product hit a record \$26.5 billion.

Close ties to the global economy: Houston exports topped \$191.8 billion in '22, well over the previous record of \$140.8 billion set in '21. The Houston-Galveston Customs District ranked first in the country in tonnage (exports and imports) handled in '22, with over 382.8 million metric tons.

A surge in corporate activity: The Partnership has identified 540 companies that have announced relocations, expansions, or start-up operations in the region in '21 and '22. Seventy-seven of these involved foreign-owned entities.

A robust construction boom: Over \$30 billion in construction contracts were awarded in Houston in '22.

However, the boom appeared to be winding down in mid-'23.

Houston's emergence as a logistics center: Developers have added over 146 million square feet of warehouse space since '16. The Port of Houston set a record for container traffic, handling nearly 3.2 million loaded TEUs (twenty-foot-equivalent units), a 17.9% increase over '21. The Port is on track to handle over 3.3 million loaded containers in '23, which would be another record for the region.

Sustained population growth: Over 125,000 people moved to the metro area between July '20 and July '22. They've been drawn to the region by job opportunities, affordable housing, a cost of living that's 8.0 to 10.0 percent below the major metro average, and an appealing quality of life. Metro Houston's population is expected to surpass 8.0 million and payroll employment to approach 4.0 million by the end of the decade.

ESTABLISHMENTS BY INDUSTRY

Houston MSA, Q4/22

INDUSTRY	ESTABLISHMENTS	% OF TOTAL
Professional, Scientific, and Technical Services	26,825	7.9
Health Care and Social Assistance	22,569	12.9
Retail Trade	19,547	10.1
Other Services (except Public Administration)	15,252	3.0
Accommodation and Food Services	14,364	9.5
Construction	12,655	7.3
Wholesale Trade	11,310	5.1
Finance and Insurance	10,244	3.3
Administrative and Support and Waste Management and Remediation Services	9,781	7.2
Real Estate and Rental and Leasing	9,265	2.1
Manufacturing	7,025	7.1
Transportation and Warehousing	5,902	5.8
Educational Services	2,405	9.9
Information	2,246	1.0
Arts, Entertainment, and Recreation	2,010	1.2
Mining, Quarrying, and Oil and Gas Extraction	1,806	2.1
Unclassified	1,537	0.1
Management of Companies and Enterprises	954	1.4
Public Administration	724	2.5
Agriculture, Forestry, Fishing and Hunting	637	0.1
Utilities	583	0.7
TOTAL	177,641	100.0

Note: Four quarters ending Q4/2022. Sums may not total due to rounding.
Source: Texas Workforce Commission



International Business

Houston is the base of operations for the international oil and gas exploration and production industry as well as for many of the nation's largest international engineering and construction firms.

A key center for international finance, Houston leads the Southwest U.S. with 17 foreign banks from nine nations.

Houston's economy is deeply tied to global trade and foreign investment. The region has trading relationships with more than 200 countries. The Houston/Galveston Customs District handled 299.9 million metric tons in exports (via vessel) valued at \$246.0 billion in '22, according to WISERTrade. These exports accounted for 63.3 percent of the value of total trade that passed through the region in '22.

With 88 active consular offices, Houston has the third largest consular corps in the nation, behind New York and Los Angeles and tied with Chicago.

Fifteen foreign governments maintain trade and commercial offices here, and the city has 39 active foreign chambers of commerce and trade associations.

Houston has 19 sister-city relationships promoting business opportunities across five continents: Asia (8), Europe (7), Americas (2), Africa (1), and Oceania (1). Houston's oldest sister-city relationship was established in 1961 with Taipei, Taiwan, and its most recent relationship with Ulsan, South Korea was established in '21.

HOUSTON SISTER CITIES

Abu Dhabi, United Arab Emirates (2001)

Baku, Azerbaijan (1976)

Basrah, Iraq (2015)

Chiba, Japan (1972)

Grampian Region, Aberdeen, Scotland (1979)

Guayaquil, Ecuador (1987)

Huelva, Spain (1969)

Istanbul, Turkey (1988)

Karachi, Pakistan (2009)

Leipzig, Germany (1992)

Luanda, Angola (2003)

Nice, France (1973)

Perth, Australia (1984)

Shenzhen, China (1986)

Stavanger, Norway (1988)

Taipei, Taiwan (1961)

Tampico, Mexico (2003)

Tyumen, Russia (1995)

Ulsan Metropolitan City, Republic of Korea (2021)

145 Houston firms operate

3,107 Subsidiary locations across

108 Foreign countries

These subsidiary locations represent branch offices (57%), service centers (15%), retail or sales locations (17%), manufacturing or distribution facilities (5%), or other types of operations.

Since '09, more than 500 foreign-owned firms have announced over 700 projects in metro Houston, according to the Partnership's New Business Announcements database. The parent companies are from 38 countries. Those 700+ projects stretch across 65 industries and represent \$36.7 billion in capital investments. That's likely an underestimate since many firms did not disclose the value of their investments.

International projects of note landing in Houston last year in '22 and in the first three months of '23

Singapore-based ACE Green Recycling, a battery recycling company, is projected to create 100 jobs with a capital investment of \$150 Million.

Turkish company Borusan Mannesmann announced plans to develop a \$192 million expansion of its existing pipe facility in Chambers County.

Daikin Comfort Technologies, a Japanese HVAC manufacturer, will invest \$40 million and create an addition 200 jobs to expand their production facilities in Houston.

Hu Steel of South Korea plans to build a manufacturing plant for oil field tubular goods. The project will create 101 jobs with a \$122 million investment.

Danish renewables company Ørsted plans to open a new office in The Woodlands which will employ up to 100 people.

UK-based STERIS, a leading provider of healthcare services and products, relocated a product line from Ohio and created 90 new jobs.

Sumika Semiconductor Materials Texas Inc, a subsidiary of Sumitomo Chemical of Japan, is building a high-purity semiconductor process chemical manufacturing plant. The project includes an investment of \$250 million and will create 50 jobs in the region.

Toshiba International Corporation, a Japanese corporation, invested \$100 million into heavy equipment manufacturing in Houston, keeping 1,100 employees in the region.

Houston's Top Employers

OVER 20,000 EMPLOYEES

Amazon
H-E-B
Houston Methodist
Memorial Hermann Health System
Walmart

10,000 TO 19,000 EMPLOYEES

CHI St. Luke's Health
ExxonMobil
HCA Houston Healthcare
Kroger
SLB

Texas Children's Hospital
University of Houston
UT Health Science Center
UT Medical Branch Health System
Wood Group

5,000 TO 9,999 EMPLOYEES

Academy Sports & Outdoors
AT&T
Baker Hughes
Baylor College of Medicine
BP America
Chevron
Daikin/Goodman
Dow Chemical Co.

Fiesta Mart
Harris Health System
Home Depot
Houston Community College
JPMorgan Chase
Landry's
Lone Star College
Michael E. DeBakey VA Medical Center

Occidental Petroleum
Shell Oil Co.
Target
Texas A&M University
United Airlines
Walgreens

2,000 TO 4,999 EMPLOYEES

Accenture
Air Liquide USA
Ascend Performance Materials
Austin Industrial Inc.
Bank of America
Bechtel Corp.
Boeing
Brinker International
CenterPoint Energy
Chevron Phillips Chemical Co.
CVS Health
Deloitte
Enterprise Products Partners
FedEx

Fluor Corporation
Grocers Supply Company
Halliburton
Hewlett Packard Enterprise
Jacobs
KBR
Kelsey-Seybold Clinic
Kinder Morgan
Lowe's Cos.
LyondellBasell
Macy's
Metropolitan Transit Authority
NASA - Johnson Space Center
NOV

NRG
Rice University
S&B Engineers and Constructors
Sam's Club
Sam Houston State University
San Jacinto Community College
Southwest Airlines
Sysco Corp.
TechnipFMC
Texas Home Health
Turner Industries
Universal Plant Services
Weatherford International Ltd.
Wells Fargo

1,000 TO 1,999 EMPLOYEES

Comcast
ConocoPhillips
EY

The Friedkin Group, Inc.
Group 1 Automotive
Phillips 66

Randall's
Waste Management (WM)

Note: The list includes only private sector employers, except for Texas Medical Center institutions and institutions of higher education, and excludes fast-food chains.

Source: Greater Houston Partnership Research, June 2023.

26 Fortune 500 Headquarters

48 Fortune 1,000 Headquarters

5 Fortune Global 500

26 Forbes Global 2,000

87 Inc. 1,000

4 Fortune 100 Best Companies to Work For



KEY INDUSTRIES AND SECTORS

Construction and Real Estate

INDUSTRY	EMPLOYMENT	PERCENT %	ESTABLISHMENTS	PERCENT %	AVG. ANNUAL WAGE (\$)
Construction of Buildings	54,811	23.8%	3,901	30.8%	\$87,984
Heavy and Civil Engineering Construction	60,116	26.1%	1,273	10.1%	\$93,080
Specialty Trade Contractors	115,502	50.1%	7,481	59.1%	\$76,648
Construction and Real Estate	\$76,648	100.0%	12,655	100.0%	\$87,984

EMPLOYMENT

The construction sector in Houston employed 230,428 people in Q4/22, according to the Texas Workforce Commission. Specialty trade contractors (e.g., electrical work, plumbing, site preparation, painting) made up half (50.1 percent) of all construction employment. Building construction and heavy and civil engineering, accounted for 23.8 percent and 26.1 percent of construction employment, respectively. The average annual wage was \$87,984.

ESTABLISHMENTS

The Houston metro area was home to 12,655 construction establishments in Q4/22. Of that total, 59.1 percent were specialty trade contractors, 30.8 percent were in building construction, and 10.1 percent were heavy and civil engineering construction establishments.

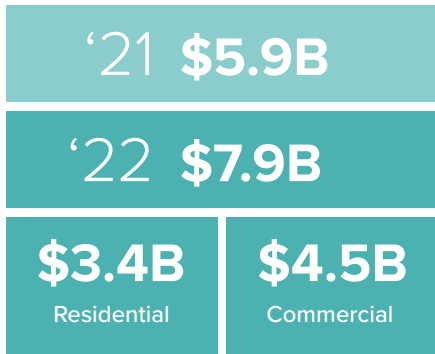
MAJOR EMPLOYERS

Arch-Con	Hensel Phelps
ARCO Design/Build	Hoar
Austin Industrial	Manhattan Construction
Burns & McDonnell	McCarthy Building Companies
Burton, D.E. Harvey Builders	O'Donnell/ Snider
DPR Construction	Rosenberger
DivisionOne Construction	Satterfield & Pontikes
Durotech, E.E. Reed Construction	SpawGlass
Flintco	Tellepsen
G.T. Leach	Turner Construction
Gamma	VCC Construction
Gilbane	Webber
Harvey Harvey-Cleary	

BUILDING PERMITS

City of Houston building permits totaled \$7.9 billion in '22, up from \$5.9 billion in '21, with over \$3.4 billion for residential and over \$4.5 billion for commercial building permits, according to city data.

CITY OF HOUSTON BUILDING PERMITS



Source: City of Houston

OFFICE

The Houston office market had 240.9 million square feet (msf) of space at the end of '22, according to Partnership analysis of CoStar data. The three largest submarkets were the Central Business District (39.7 msf), Galleria/West Loop (28.7 msf), and the Energy Corridor (23.4 msf).

Net absorption (net change in leased space in completed buildings) for all general-purpose office space was 663,755 square-feet in '22. The overall vacancy rate for the Houston market was 25.0 percent at the end of '22.

The overall average asking rent was \$29.97 per square foot, up from \$29.68 at the end of '21.

INDUSTRIAL

Houston had 704.8 million square feet (msf) of industrial/warehouse space at the end of '22, a jump of over 24 msf from the year before, according to Partnership analysis of CoStar data. The overall vacancy rate slipped from 6.5 percent at the end of '21 to 5.6 percent at the end of '22. In Q4/22, 33.5 msf was under construction. Net

absorption for '22 was strong with a total of 28.9 msf. Across the market, average monthly asking rates were \$0.72 per square foot in the fourth quarter of '22.

RETAIL

The Houston market contained 386.8 million square feet (msf) of retail space at the end of '22, according to Partnership analysis of CoStar data. The market absorbed 5.3 msf that year. '22 ended with a 5.2 percent vacancy rate, down from 5.7 percent at the end of '21. The average asking rent on a triple net basis was \$19.53 per square foot in Q4/22, up from \$18.91 in Q4/21.

SINGLE-FAMILY

In '22, residential real estate set records for total sales, average prices and median prices. Single-family closings totaled 95,113. All property types, including townhome, condo, and high-rise closings totaled 117,572,

according to the Houston Association of Realtors. The median sales price for a resale single-family detached home at the end of '22 was \$330,000. The average price was \$409,777. Annual single-family starts numbered 37,706 in '22, according to Zonda.

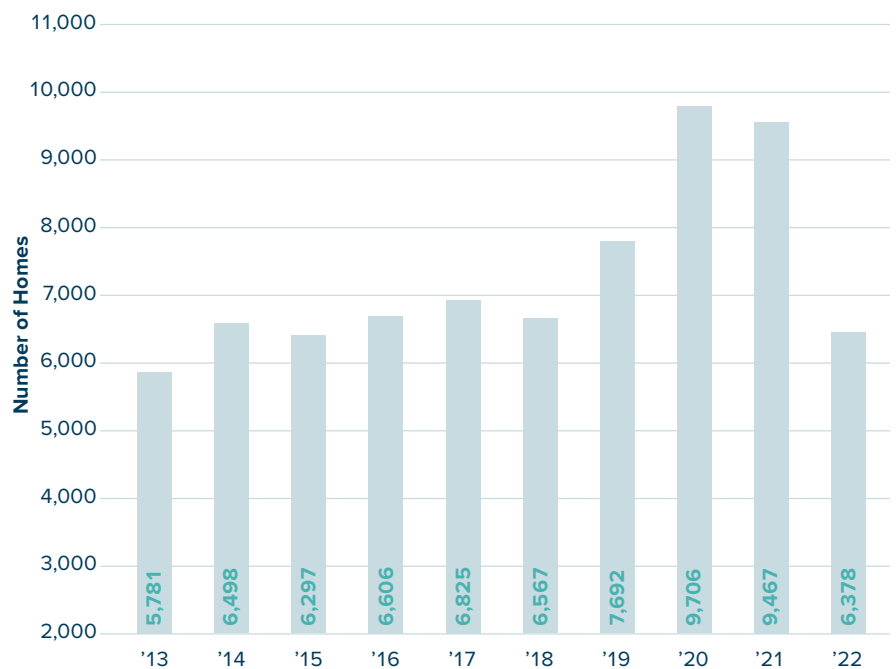
MULTI-FAMILY

ApartmentData.com reported that Houston area multi-family occupancy was 90.3 percent at the end of '22, with an inventory of 722,136 units. Average rent for Class A apartments was \$1,767; Class B rents averaged \$1,255.

An additional 14,434 new units were added to the market in '22, a dip from the 19,619 added in '21. The market absorbed 4,528 units, down significantly from 38,340 absorbed in '21 and a record low for the region. As of March '23, there were 21,582 units in 76 apartment communities under construction with another 33,297 proposed, according to ApartmentData.com

NUMBER OF SINGLE FAMILY HOMES SOLD

Houston MSA



Source: Houston Association of REALTORS® Multiple Listing Service

Health Care and Social Assistance

INDUSTRY	EMPLOYMENT	PERCENT %	ESTABLISHMENTS	PERCENT %	AVG. ANNUAL WAGE (\$)
Ambulatory Health Care Services	186,756	45.6%	15,164	67.2%	67,132
Hospitals	131,810	32.2%	244	1.1%	91,468
Social Assistance	58,172	14.2%	6,320	28.0%	35,100
Nursing and Residential Care Facilities	32,945	8.0%	841	3.7%	42,484
Health Care and Social Assistance	409,683	100.0%	22,569	100.0%	68,432

EMPLOYMENT

Health care and social assistance employed 409,683 at the end of '22, one in eight Houston workers, according to the Texas Workforce Commission. Ambulatory health care accounted for 45.6 percent of the sector employment, hospitals for 32.2 percent and social assistance, nursing and residential care account for 22.2 percent. The average annual wage for the sector was \$432 in '22.

According to the Texas Medical Board, 20,668 physicians are licensed in the Houston region, with Harris County accounting for nearly 80.0 percent. The concentration of anesthesiologists, nurse anesthetists, surgeons,

cardiovascular technologists and technicians, pediatricians, dentists, and occupational health and safety specialists/technicians is well above the national average.

ESTABLISHMENTS

Houston's 22,569 health care and social assistance establishments included 15,164 ambulatory health care providers, 6,320 social assistance establishments, 841 nursing and residential care facilities and 244 hospitals.

MAJOR EMPLOYERS

Baylor College of Medicine
 CHI St. Luke's Health
 HCA Houston Healthcare
 Harris Health System
 Houston Methodist
 Kelsey-Seybold Clinic
 Kindred Healthcare
 MD Anderson Cancer Center
 Memorial Hermann Healthcare System
 Michael E. DeBakey Veterans Affairs Medical Center
 St. Joseph Medical Center
 Tenet Health, Texas Children's Hospital
 UTMB Health
 Texas A&M Health Science Center
 University of Texas Health Science Center



TEXAS MEDICAL CENTER

Houston's Texas Medical Center is the world's largest medical complex by several measures: number of hospitals, number of physicians, square footage and patient volume.

Texas Medical Center's 63 member institutions are consistently recognized by U.S. News and World Report as some of the best hospitals and universities in the nation.

Scientists at TMC-affiliated institutions, most notably Baylor College of Medicine, Houston Methodist, and MD Anderson, are advancing life science

breakthroughs across dozens of research centers and more than 300 research laboratories.

In early '21, the University of Houston College of Medicine, Houston's first new medical school in nearly 50 years, became the TMC's 63rd member institution. The school, founded with a mission to improve health in underserved communities, joins four existing TMC-affiliated medical schools: University of Texas Health Science Center at Houston, Baylor College of Medicine, University of Texas Medical Branch at Galveston and Texas A&M College of Medicine.

In '21, construction began on Helix Park, a multi-institutional 37-acre research campus designed to foster collaboration in clinical care, research and industry. Baylor College of Medicine was announced as an anchor tenant for Dynamic One life-sciences building set to open in '23. The TMC3 Collaborative Building will be the campus's first collaborative research hub, four founding institutions: MD Anderson, UTHealth, Texas A&M Health Science Center and TMC. Helix Park is projected to create over 26,500 permanent jobs and bring \$5.4 billion annually to the Texas' economy.

TMC BY THE NUMBERS

\$3 billion

in construction projects underway

50 million

developed square feet

10 million

patient visits per year

8th largest

business district in the U.S. with 1,345 total acres

750,000

ER visits per year

106,000+

total employees

13,600 +

total heart surgeries

180,000 +

annual surgeries



Manufacturing

EMPLOYMENT

The 7,025 manufacturing establishments in the Houston region employed 225,163 or about 1 in 13 Houston-area workers in '22, according to the Texas Workforce Commission. The average annual wage was \$98,956. The value of goods manufactured in metro Houston topped \$75.0 billion in '21 and accounted for 14.0 percent of the region's total GDP, according to the Bureau of Economic Analysis.

CHEMICALS

The Houston region was home to 672 chemical plants employing 40,982, or 18.2 percent of Greater Houston's total manufacturing workforce in '22, according to the Texas Workforce Commission. The region has 44.4 percent of the nation's overall base petrochemicals manufacturing capacity which includes 58.9 percent of butadiene produced in the country, 46.6 percent of ethylene, 47.8 percent of propylene, 44.3 percent of benzene, 44.7 percent of xylenes and 45.3 percent of toluene.

Base petrochemicals are the raw materials for producing some of the more important plastics and resins. The Houston MSA also dominates U.S. production of three major resins, producing 51.6 percent of the country's polypropylene, 41.7 percent of polyethylene and 30.6 percent of polyvinyl chloride.

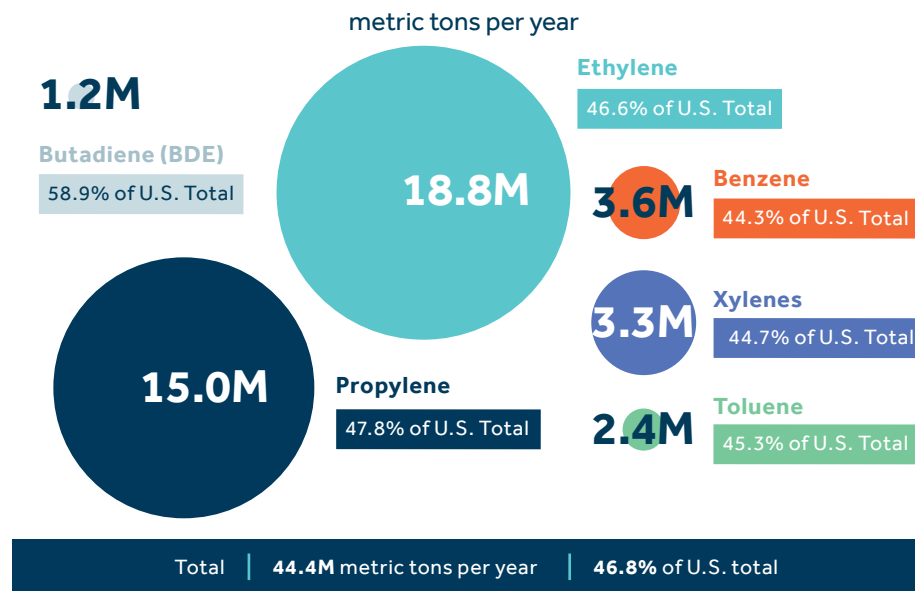
PETROLEUM REFINING

The Spaghetti Bowl is a complex of several thousand miles of product pipeline connecting hundreds of chemical plants, refineries, salt domes and fractionation plants along the Texas Gulf Coast. It gives the Houston area an economic advantage through convenient and low-cost transfer of feedstocks, fuel and chemical products among plants, storage terminals and transportation facilities.

In '21, the Houston metro had a crude operating capacity of 2.6 million barrels of refined petroleum products per calendar day, representing 14.9 percent of overall U.S. capacity, according to the U.S. Energy Information Administration.

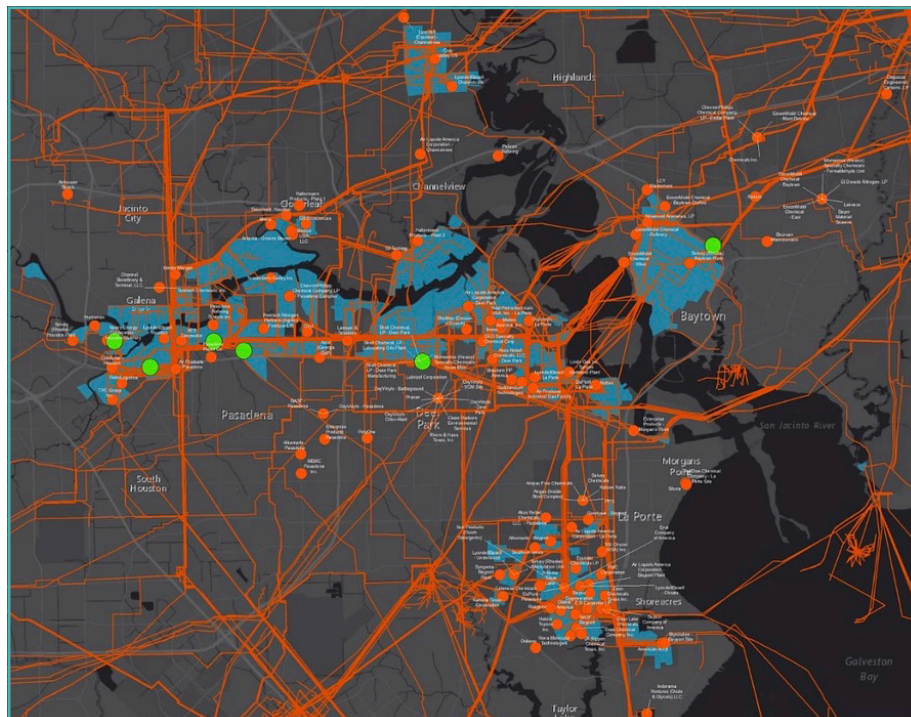
Oil refiners in the region employed 6,948 in '22, equivalent to 3.1 percent of the Houston region's total manufacturing workforce.

BASE CHEMICAL PRODUCTION CAPACITY Houston MSA, 2022



Note: Sums may not total due to rounding.

Source: IHS Markit



Blue Area = One of world's largest petrochemical complexes, along the Houston Ship Channel

Orange dots = some of the largest petrochemical plants

Green dots = largest refineries

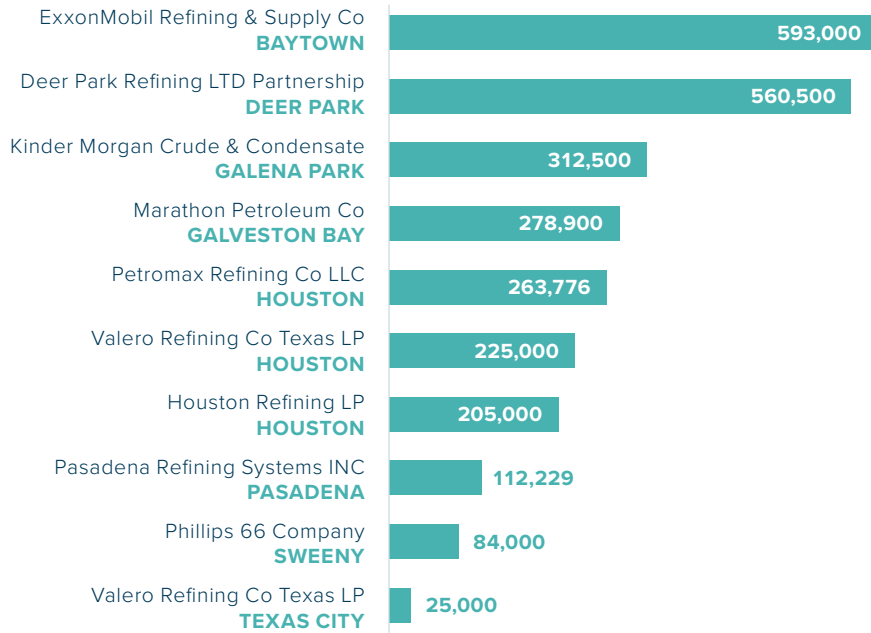
Orange Lines = Underground network of interconnected pipelines, thousands of miles. Moving and transporting innumerable amounts and types of petroleum and chemical compounds.

INDUSTRY	EMPLOYMENT	PERCENT %	ESTABLISHMENTS	PERCENT %	AVG. ANNUAL WAGE (\$)
Fabricated Metal Product Manufacturing	47,721	21.2	1,732	24.7	52,208
Machinery Manufacturing	41,363	18.4	845	12.0	68,796
Chemical Manufacturing	40,982	18.2	672	9.6	44,304
Computer and Electronic Product Manufacturing	13,969	6.2	417	5.9	52,260
Food Manufacturing	13,092	5.8	544	7.7	46,956
Plastics and Rubber Products Manufacturing	11,441	5.1	237	3.4	42,380
Petroleum and Coal Products Manufacturing	7,786	3.5	89	1.3	60,372
All Other Manufacturing	48,809	21.7	2,489	35.4	94,896
Manufacturing	225,163	100.0	7,025	100.0	98,856



PETROLEUM REFINING CAPACITY

Metro Houston, 2022



Source: U.S. Energy Information Agency, Refinery Capacity Report January 1, 2022



Professional and Technical Services

INDUSTRY	EMPLOYMENT	PERCENT %	ESTABLISHMENTS	PERCENT %	AVG. ANNUAL WAGE (\$)
Architectural, Engineering, and Related Services	68,944	27.6	3,628	13.5	134,784
Management, Scientific, and Technical Consulting Services	47,481	19.0	6,747	25.2	130,104
Computer Systems Design and Related Services	37,215	14.9	5,481	20.4	131,508
Legal Services	30,839	12.4	4,198	15.6	177,528
Accounting, Tax Preparation, Bookkeeping, and Payroll Services	27,523	11.0	3,312	12.3	101,816
Other Professional, Scientific, and Technical Services	19,108	7.7	1,463	5.5	71,760
Scientific Research and Development Services	10,828	4.3	623	2.3	142,948
Advertising, Public Relations, and Related Services	5,056	2.0	729	2.7	89,232
Specialized Design Services	2,538	1.0	644	2.4	73,996
Professional, Scientific, and Technical Services	249,532	100.0	26,825	100.0	129,064

EMPLOYMENT

Metro Houston employed 249,532 professional, scientific and technical service workers in Q4/22. Architectural and engineering, with 68,944 workers, represents just over one-fourth of the sector's total employment. The second

and third largest industry subsectors include management and technical consulting (47,481 employees) and computer systems design services (37,215 employees).

Houston has 44,540 engineers of all disciplines, the most numerous being

civil, mechanical, petroleum, industrial, electrical and chemical. Houston has one of the highest concentrations of engineering talent in the nation. For every 100,000 workers in the Houston MSA, there are 1,458 engineers. By comparison, for every 100,000 workers in the U.S., there are 1,113 engineers.

	PER 100,000 WORKERS			
	HOUSTON	U.S.	HOUSTON	U.S.
TOTAL, ALL OCCUPATIONS	2,897,060	140,886,310		
Aerospace Engineers	1,670	56,640	54.7	41.6
Bioengineers and Biomedical Engineers	130	17,190	4.3	13.0
Chemical Engineers	2,180	24,180	71.4	13.8
Civil Engineers	8,930	304,310	292.4	208.0
Computer Hardware Engineers	810	73,750	26.5	50.5
Electrical Engineers	3,770	186,020	123.4	123.2
Electronics Engineers, Except Computer	1,320	107,170	43.2	72.1
Environmental Engineers	930	42,660	30.4	30.7
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	1,080	22,870	35.4	14.6
Industrial Engineers	7,150	293,950	234.1	217.3
Marine Engineers and Naval Architects	760	7,380	24.9	5.0
Materials Engineers	460	21,530	15.1	14.5
Mechanical Engineers	6,840	278,240	223.9	187.7
Mining and Geological Engineers, Including Mining Safety Engineers	200	7,370	6.5	5.0
Petroleum Engineers	5,480	22,100	13.9	13.9
Engineers, All Other	2,830	151,940	92.7	101.7
TOTAL ENGINEERS	44,540	1,617,300	1,458.2	1,112.7

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics May 2022

ESTABLISHMENTS

The Houston MSA had 26,825 establishments in professional, scientific and technical services at the end of '22. The sector includes 6,747 management and technical consulting establishments, 5,481 computer systems design companies and 4,198 establishments that provide legal services.

FINANCE

Metro Houston's 97 Federal Deposit Insurance Corporation (FDIC)-insured institutions operate 1,371 offices and branches with \$374.8 billion in local deposits ranking 10th among U.S. metros, according to June '22 FDIC data.

HOUSTON'S 10 LARGEST BANKS BY DEPOSITS

\$187.4M	JPMorgan Chase
\$33.5M	Wells Fargo
\$29.2M	Bank of America
\$14.1M	Zions Bancorporation
\$11.3M	PNC Bank
\$8.4M	Frost Bank
\$7.6M	Cadence Bank
\$7.5M	Capital One
\$6.7M	Prosperity Bank
\$5.8M	Woodforest National Bank

Source: Federal Deposit Insurance Corporation, June 2022
Five of the nation's 10 largest FDIC-insured banks, as measured by domestic deposits, operate full-service branches or commercial loan offices in the Houston region.

Wholesale and Retail Trade

EMPLOYMENT

Wholesale trade employed 161,516 in the Houston MSA, including 101,284 in durable goods, 50,097 in nondurable goods, and 10,134 in electronic markets in '22. Retail trade employed 319,026, including 72,958 in food and beverage, 64,137 in general merchandise and 43,279 in motor vehicle and part dealers. The average wage in '22 was \$106,392 for wholesale workers and \$41,860 for retail workers.

ESTABLISHMENTS

Metro Houston had 11,310 wholesale trade establishments, including 6,766 durable goods wholesalers and 2,627 nondurable goods wholesalers in '22. There were 19,547 retail establishments, including 3,055 food and beverage stores, 2,760 gas stations, 2,170 motor vehicle and parts dealers, 2,222 clothing stores and 1,355 general merchandise stores.



MAJOR EMPLOYERS ACROSS SECTORS

- Academy Sports + Outdoors
- Aldi
- Amazon
- H-E-B
- Home Depot
- Kohl's
- Kroger
- Lowe's
- Randall's
- Target
- Walmart



GROSS RETAIL SALES

Metro Houston, 12 Months Ending June 30 (\$ Millions)

COUNTY	'21	'22	% CHANGE FROM '21
Austin	391.7	439.7	12.3
Brazoria	5,932.6	5,648.4	-4.8
Chambers	537.9	737.1	37.0
Fort Bend	10,344.1	12,823.7	24.0
Galveston	4,952.8	5,922.9	19.6
Harris	102,211.5	125,943.7	23.2
Liberty	992.6	1,150.7	15.9
Montgomery	12,252.6	14,666.2	19.7
Waller	611.6	906.3	48.2
TOTAL	138,294.6	168,312.0	21.7

Note: Data compiled from four quarters ending Q2.
Source: Texas Comptroller's Office

INDUSTRY	EMPLOYMENT	PERCENT %	ESTABLISHMENTS	PERCENT %	AVG. ANNUAL WAGE (\$)
Merchant Wholesalers, Durable Goods	101,284	62.7	6,766	59.8	105,092
Merchant Wholesalers, Nondurable Goods	50,097	31.0	2,627	23.2	106,132
Wholesale Trade Agents and Brokers	10,134	6.3	1,917	16.9	121,212
Wholesale Trade	161,516	100.0	11,310	100.0	106,392



SECTOR	EMPLOYMENT	PERCENT %	ESTABLISHMENTS	PERCENT %	AVG. ANNUAL WAGE (\$)
Food and Beverage Retailers	72,958	22.9	3,055	15.6	33,020
General Merchandise Retailers	64,137	20.1	1,355	6.9	29,588
Motor Vehicle and Parts Dealers	43,279	13.6	2,170	11.1	78,156
Sporting Goods, Hobby, Musical Instrument, Book, and Miscellaneous Retailers	27,310	8.6	2,894	14.8	33,644
Clothing, Clothing Accessories, Shoe, and Jewelry Retailers	27,095	8.5	2,222	11.4	29,016
Building Material and Garden Equipment and Supplies Dealers	23,533	7.4	1,015	5.2	45,708
Health and Personal Care Retailers	20,994	6.6	2,386	12.2	48,464
Furniture, Home Furnishings, Electronics, and Appliance Retailers	20,352	6.4	1,690	8.6	58,708
Gasoline Stations and Fuel Dealers	19,367	6.1	2,760	14.1	34,944
Retail Trade	319,026	100.0	19,547	100.0	41,860

Energy

Houston is the leading domestic and international center for virtually every segment of the energy industry—exploration and production, transmission, marketing, service, trading, supply, offshore drilling and technology.

More than 4,700 energy-related firms are located within the Houston metro area, including over 430 exploration and production firms, 760 oilfield service companies, nearly 90 pipeline transportation firms, and hundreds of manufacturers and wholesalers of energy-sector products.

Houston is home to 38 of the nation's 85 publicly traded oil and gas exploration and production firms – including 10 of the top 25.

The 10 refineries in the Houston region process 2.6 million barrels of crude oil per calendar day—approximately 45.4 percent of the state's total capacity and 14.9 percent of total U.S. capacity.

The logistics for moving much of the nation's petroleum and natural gas across the country are controlled from Houston.

Fifteen of the nation's top 20 natural gas transmission pipelines are operated by companies with corporate or divisional headquarters in Houston, controlling 112,619 miles of U.S. pipeline, which is 58.2 percent of the total U.S. natural gas pipeline capacity.

In June '22, the Houston MSA held 23.8 percent of the nation's jobs in oil and gas extraction (33,400 of 140,200) 17.0 percent of jobs in oil field services (33,600 of 198,100), and 9.6 percent of jobs in manufacturing of agricultural, construction and mining equipment (20,400 of 212,000), according to the U.S. Bureau of Labor Statistics.

OIL & GAS ENERGY AND RELATED INDUSTRIES

Houston MSA, 2022

INDUSTRY	AVERAGE EMPLOYMENT	FIRMS	AVERAGE ANNUAL WAGE (\$)
Engineering Services	47,386	1,950	149,500
Chemical Manufacturing	40,982	517	141,960
Oil and Gas Extraction	28,843	432	246,272
Support Activities for Oil and Gas Operations	25,421	760	149,344
Oil and Gas Pipeline and Related Structures Construction	21,672	210	101,556
Oil and Gas Field Machinery and Equipment Manufacturing	20,838	236	122,668
Pipeline Transportation	12,663	86	173,004
Drilling Oil and Gas Wells	9,324	128	144,560
Petroleum Refineries	6,948	43	171,860
Fabricated Pipe and Pipe Fitting Manufacturing	4,744	87	86,268
Industrial Valve Manufacturing	3,514	81	98,228
Geophysical Surveying and Mapping Services	2,099	126	139,100
Pump and Compressor Manufacturing	1,804	54	123,032
Energy-Related	226,238	4,710	151,778
Share of Houston Metro Total	7.1%	3.3%	

Note: Due to the reach of the energy industry in Houston, portions of several other industries (e.g., utilities, accounting, real estate) could be added to this definition.

*Four quarters ending Q4/22

Source: Texas Workforce Commission, Quarterly Census of Employment and Wages

Energy Transition

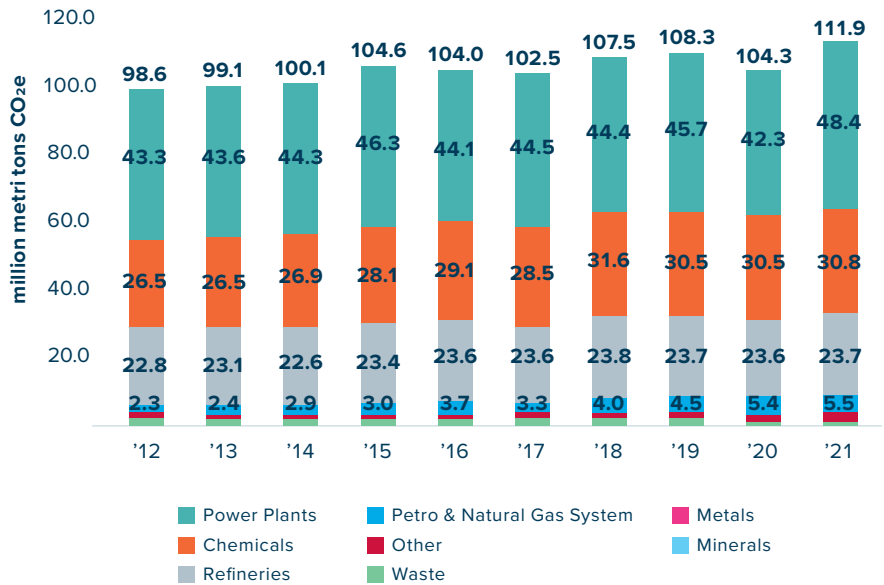
The energy transition refers to the global effort to address a dual challenge -- meeting growing demand for energy while simultaneously reducing emissions associated with climate change. It is an "all of the above" approach, where all resources play a role in our energy future. The Greater Houston Partnership released a blueprint in June '20, stating that if the region continues with business as usual, it could lose 270,000 jobs over the next 30 years. However, if the energy transition is accelerated, Houston could gain 370,000 jobs, and with aggressive emission reduction efforts, it could gain 650,000 jobs. In summer '21, the Partnership launched the Houston Energy Transition Initiative (HETI), a coalition focused on accelerating global solutions for an energy-abundant, low-carbon future.

EMISSIONS

In 2021, Houston's industrial emissions¹ reached 111.9 million metric tons of carbon dioxide equivalent (CO₂e). The power plant sector emerged as the largest greenhouse gas (GHG) emitter, responsible for 43.2 percent of the region's total industrial emissions. The chemicals sector ranked second, contributing 27.5 percent of industrial emissions, while refineries ranked third, accounting for 21.2 percent of emissions.

The region's industrial greenhouse gas (GHG) emissions rose by 7.3 percent in '21 compared to the previous year. Emissions from power plants have displayed fluctuations over the years but generally show an increasing trend. Chemical emissions reached a peak in '18, slightly declined in '19, and have remained relatively constant through '21. Refinery emissions have demonstrated stability with only minor fluctuations throughout the given period. Emissions from the petroleum and natural gas sector have consistently increased since '12, exhibiting a steady upward trend and notable annual growth, except for '17.

HOUSTON INDUSTRIAL GHG EMISSIONS BY YEAR



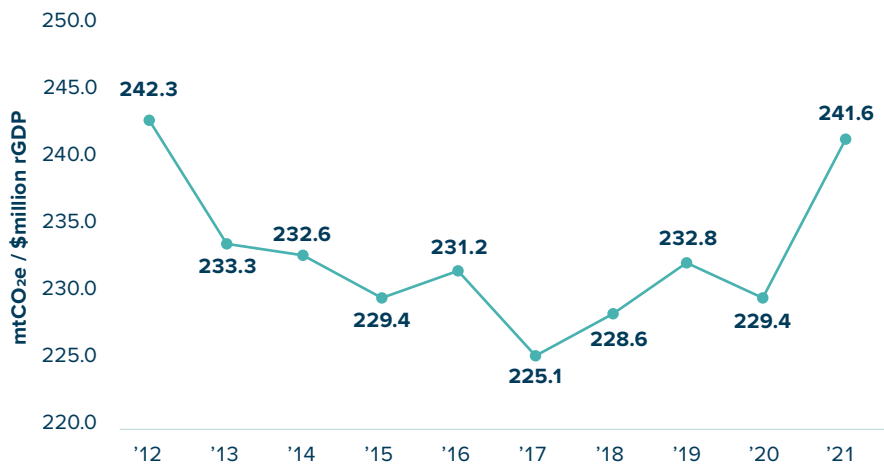
Source: Partnership analysis of data from the U.S. Environment Protection Agency, Greenhouse Gas Reporting Program (GHGRP)

The region's industrial greenhouse gas (GHG) emission rate per unit of economic output, measured as \$1 million in real GDP dollars, was 241.6 metric tons (mt) of CO₂e. Houston's emission rate reached its lowest point in the past decade at 225.1 mtCO₂e in

'17, followed by a continuous increase every year, except for '20. Presently, Houston's emission rate is slightly below the highest point of the past ten years, which was 243.2 mtCO₂e recorded in '12.

HOUSTON INDUSTRIAL GHG EMISSIONS RATE

Metric tons CO₂e per \$1 million real GDP (chained to 2012 dollars)



Source: Partnership analysis of data from the U.S. Environment Protection Agency, Greenhouse Gas Reporting Program (GHGRP); the U.S. Bureau of Economic Analysis

¹ This data specifically pertains to direct greenhouse gas (GHG) emissions from large stationary facilities and emitters. It does not encompass emissions from the transportation, agriculture, and residential sectors. Additionally, at the metro and county levels of reporting, emissions from onshore oil and gas production, onshore oil and gas gathering and boosting, onshore gas transmission pipelines, natural gas local distribution companies, and the use of electrical transmission and distribution equipment are excluded. The reported GHG emissions account for approximately 60-70% of the total regional emissions, while the excluded sectors (transportation, residential, etc.) contribute to the remaining 30-40% of emissions.

CLEAN ENERGY JOBS

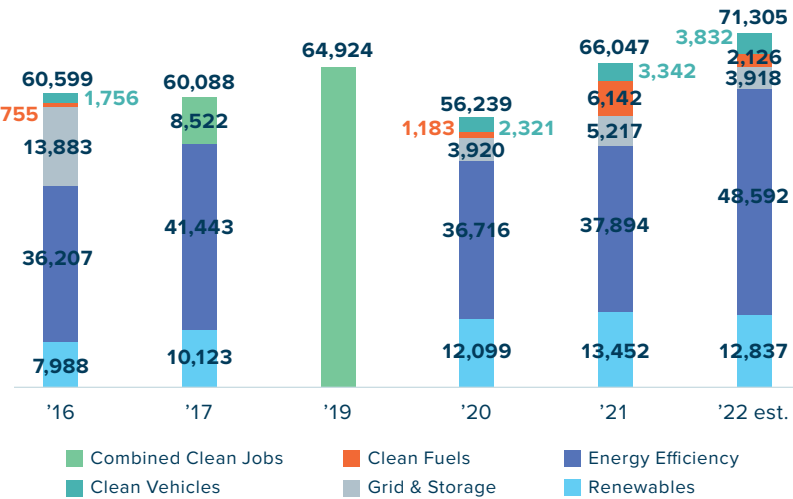
Clean energy jobs span across various industry sectors in Houston and can be categorized into five main technology applications²: renewables, energy efficiency, grid & storage, clean fuels, and clean vehicles. In '21, these clean energy technologies provided employment to 66,047 professionals in the Houston metro area, with a projected increase to 71,305 jobs in '22. Among these applications, energy efficiency accounts for the highest number of jobs, representing approximately 68.1 percent of total clean energy employment in '22 and experiencing a notable 28.2 percent increase from the previous year. Clean vehicle employment also saw a significant increase of approximately 14.7 percent in '22 compared to the previous year. On the other hand, job counts in grid & storage and clean fuel applications declined notably in '22, while the decline in renewable jobs was comparatively less pronounced.

According to the U.S. Department of Energy's (DOE) Office of Energy Jobs, 69 percent of traditional transmission and distribution³ jobs in '22 were associated with non-fossil fuels. When jobs in this technology application are factored in, Houston's clean energy job count approached 105 thousand in '21, with a projected 110 thousand in '22.

ENERGY TRANSITION INVESTMENTS

Houston-based energy transition⁵ startups, businesses, and companies secured \$6.1 billion in financing from private market investments in '22, showing a significant 61.9 percent increase compared to the previous year. Over the last five years, Houston has seen constant growth in annual energy transition investments, with a notable surge observed from 2020 onwards.

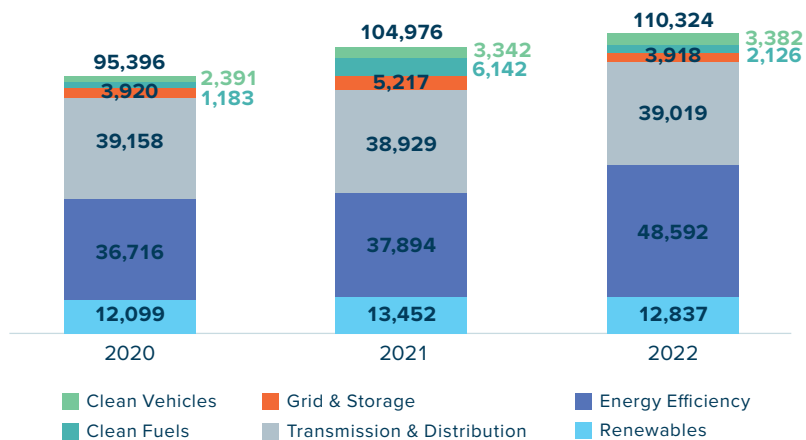
CLEAN JOBS BY ENERGY TECHNOLOGY, ACROSS INDUSTRIES IN HOUSTON (without traditional transmission & distribution)



Note 1: The clean energy job estimate for 2022 in Houston is based on estimated data that disaggregates state-level job data. It is important to note that the data is subject to change.
 Note 2: Data for 2018 is unavailable, and for 2019, it was not disaggregated and reported by energy technology.

Source: Partnership analysis and estimates of data from the U.S. Energy and Employment Report (USEER) and The Energy Futures Initiative (EFI), the National Association of State Energy Officials (NASEO), BW Research Partnership (BWRP) and E2 (Environmental Entrepreneurs)

CLEAN JOBS BY ENERGY TECHNOLOGY, ACROSS INDUSTRIES IN HOUSTON (with non-fossil fuel transmission & distribution³)



Note 1: The clean energy job estimate for 2022 in Houston is based on estimated data that disaggregates state-level job data. It is important to note that the data is subject to change.
 Source: Partnership analysis and estimates of data from the U.S. Energy and Employment Report (USEER) and The Energy Futures Initiative (EFI), the National Association of State Energy Officials (NASEO), BW Research Partnership (BWRP) and E2 (Environmental Entrepreneurs)

² Renewables includes solar; wind; traditional hydropower; low impact hydropower, marine, and hydrokinetics; geothermal electricity; bioenergy/combined heat and power; and nuclear electricity.
 Energy efficiency includes energy STAR and efficient lighting; traditional HVAC with an efficiency component; high efficiency HVAC and renewable heating and cooling; advanced materials; other energy efficiencies.
 Grid & storage includes clean storage, smart grid, micro grid, other grid modernization, and may or may not include a portion of traditional transmission and distribution.
 Clean fuels include corn ethanol, other ethanol and non-woody biomass; woody biomass; other biofuels; nuclear fuels.
 Clean vehicles include hybrid electric vehicles, plug-in hybrid electric, battery electric, hydrogen/fuel cell.

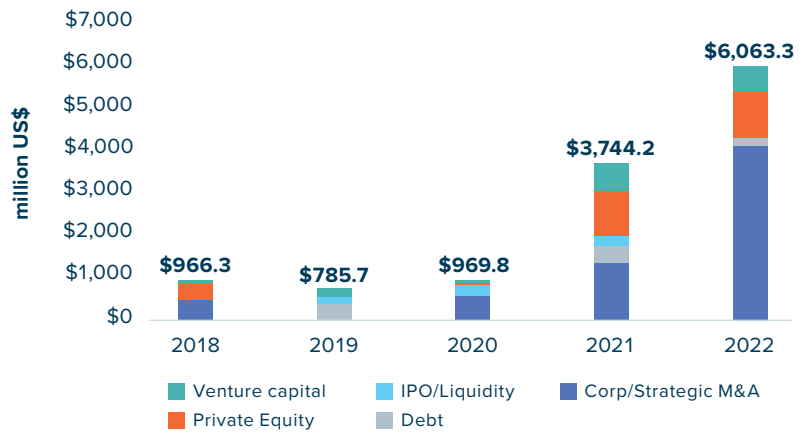
³ Traditional transmission and distribution allow electricity to move across the country through infrastructure commonly referred to as "poles and wires."

Corporate/strategic merger & acquisition investments dominate the five deal types, representing 68.8 percent of the total investment in '22. Private equity accounted for 19.3 percent of all deals, with venture capital comprising 9.5 percent.

Energy transition (ET) private market investments in Houston are steadily growing as a percentage of total private market investments across all deal types. The share of ET investments compared to all annual investments increased from 1.1 percent in '18 to 8.9 percent in '22.

HOUSTON ENERGY TRANSITION INVESTMENTS

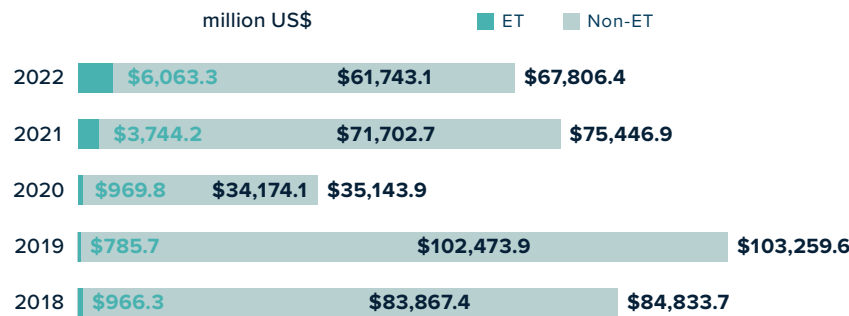
by Deal Type (\$M)



Source: Partnership analysis of data from the U.S. Environment Protection Agency, Greenhouse Gas Reporting Program (GHGRP)

HOUSTON PRIVATE MARKET INVESTMENTS (\$M)

Energy Transition (ET) vs. Non-ET



Source: Partnership analysis of data from PitchBook, pulled July 2023

ENERGY TRANSITION COMPANIES

In '23, the Partnership identified over 550 Houston-based companies engaged in the energy transition. These companies work in the areas of battery/energy storage, biofuels, carbon capture, use, and storage (CCUS), circular economy – plastics, energy efficiency, geothermal, hydrogen, renewables (solar and wind), renewable natural gas (RNG), and other energy value chains.



⁵ The analysis focused on energy transition deals identified by PitchBook as Alternative Energy Equipment, Clean Tech, ClimateTech, or Emerging Energy Spaces.

NASA and Aerospace

NASA's Johnson Space Center (JSC), located 25 miles southeast of downtown Houston, has served as mission control for U.S. space exploration and astronaut training since 1961.

ECONOMIC IMPACT



JSC, a \$1.5 billion complex established in 1961, occupies over 1,700 acres and is one of NASA's largest R&D facilities. JSC managed an annual budget of \$5.65 billion in '22 and generated more than \$2.69 billion in expenditures in Texas.

Houston's trade in aircraft, spacecraft, and parts totaled \$2.9 billion in '22, and aircraft, spacecraft, and parts were Houston's 15th largest internationally traded commodity.

PROGRAMS AND MISSIONS

JSC is known as NASA's human spaceflight center – home to the NASA astronaut corps, several major NASA programs and organizations such as The Orion, Gateway, and Human Landing System programs, which will each play a part in future lunar plans.

ORION

According to JSC, the Orion spacecraft is the safest, most capable vehicle for deep space travel and will take astronauts farther in space than a spacecraft built for humans has gone before.

GATEWAY

The Gateway Program is an international collaboration to establish humanity's first space station in orbit around the Moon as a vital component of NASA's Artemis missions.

ARTEMIS

In November '22, Artemis I blasted off, sending the Orion spacecraft on a 25-day mission to capture images of the Lunar surface. With Artemis missions, NASA will land the first woman and first person of color on the Moon collaborating with commercial and international partners and establishing the first long-term presence on the Moon.

Ellington Airport, located 18 miles southeast of downtown Houston, became a Federal Aviation Administration (FAA) designated spaceport in '15. One of only 10 spaceports in the U.S., the project is intended to help attract aerospace companies.

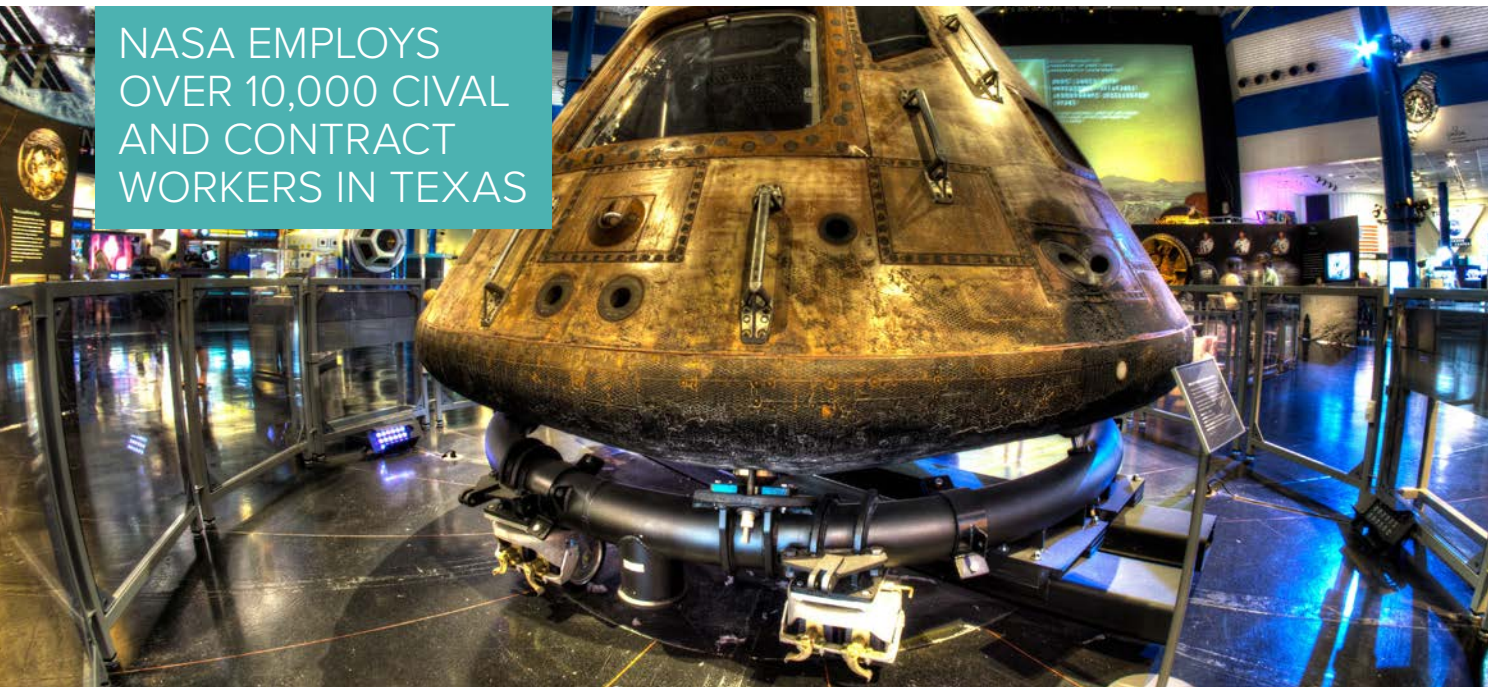
With the construction of multiple new facilities, major aerospace companies began operations or expanded their footprint at the Houston Spaceport in '23:

Axiom Space broke ground on Phase I of its 22-acre campus. The campus will be used to train future astronauts and develop Axiom Station – a commercial module that will attach to the ISS.

Houston-based **Intuitive Machines** broke ground on its 12.5-acre campus. Intuitive will build lunar landers, operate its mission control center, and make guidance, navigation, and make products at its site.

Collins Aerospace began operations at their eight-acre campus where it will develop systems for NASA's human spaceflight programs. The company, and Axiom Space, will create the next generation of NASA spacesuits – a contract valued at up to \$3.5 billion over a 15-year period.

NASA EMPLOYS
OVER 10,000 CIVIL
AND CONTRACT
WORKERS IN TEXAS



Innovation

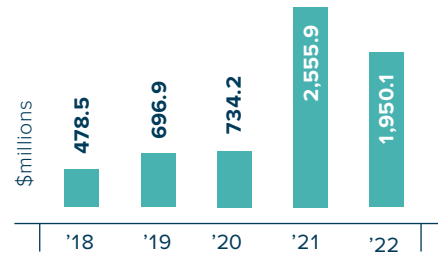
Houston is a thriving hub of digital tech talent, with more than 230,800 tech workers representing 6.9 percent of the region's workforce, according to an analysis by the Greater Houston Partnership.

Houston is home to 9,100 tech-related firms, including more than 1,000 venture-backed startups. These companies have received \$6.42 billion in venture capital funding over the last five years including \$1.95 billion in '22, according to the financial database Pitchbook.

In '22, the most heavily invested industry for VC funding in Houston was Energy, which received \$785.6 million across 11 deals. Information Technology followed, with \$285.3

across 73 deals. Business Products and Services came in third, with \$277.6 million in funding.

VENTURE CAPITAL INVESTED IN HOUSTON



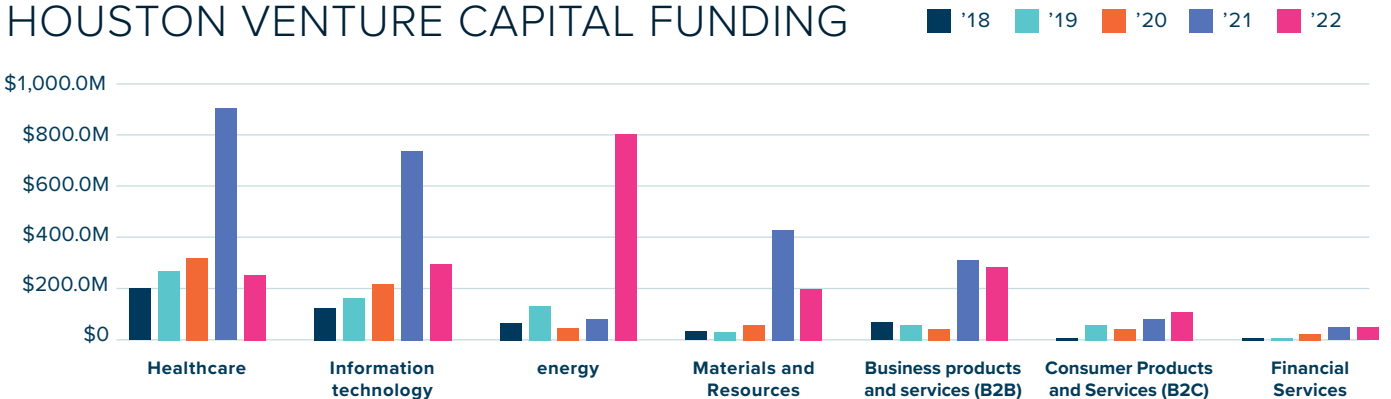
Source: Partnership analysis of Pitchbook data

TECH EMPLOYERS

According to a study by Dice, Houston led all cities in tech job posting growth in '22 (as of October 31), with a 45.6% increase year-over-year. Several tech companies are among Houston's largest employers including:

Asurion	PROS
AWS	BMC Software
Dell	Siemens
HighRadius	Honeywell
HP Enterprise	Oracle
HP Inc.	Microsoft
IBM	

HOUSTON VENTURE CAPITAL FUNDING



Top health startups and venture-backed companies that received VC funding in '22:

NuProbe | \$50.0M Deal

Precision diagnostic technology designed to offer early detection of cancer and infectious diseases.

RadioMedix | \$40.0M Deal

Biotechnology firm intended to focus on targeted radio-pharmaceuticals for diagnosis, monitoring, and therapy of cancer.

Medical Informatics | \$27.0M Deal

Patient monitoring and analytics platform designed to assist healthcare professionals by enabling more informed data-driven decisions.

XCath | \$24.0M Deal

Medical device company intended to design and develop microsurgical robotic devices to treat life-threatening conditions such as cerebral stroke and ischemic cardiac disease.

Stream Biomedical | \$21.5M Deal

Developer of neuroreparative therapies intended to address unmet therapeutic needs of individuals suffering from neurologic trauma or degeneration.

Decisio | \$15.3M Deal

Clinical decision support platform designed to aggregate and prioritize real-time data.

Adient Medical | \$14.5M Deal

Absorbable medical devices designed for the prevention of pulmonary embolisms in patients.

Coya Therapeutics (NAS: COYA) | \$10.4M Deal

Clinical-stage biotechnology company focused on developing proprietary medicinal products to modulate the function of regulatory T cells.

Octagos Health | \$8.9M Deal

Remote monitoring software designed to monitor and consolidate device transmissions and patient data in real-time enabling healthcare professionals to manage high volumes of patient data and identify what is urgent, so they do not miss anything critical.

Luna Genetics | \$8.5M Deal

Diagnostic testing system intended to establish a new, standard of care for non-invasive prenatal testing (NIPT).

HOUSTON'S STARTUP ECOSYSTEM

Dozens of startup development organizations (SDOs) have emerged in recent years to facilitate growth across Houston's tech ecosystem. In '22, the region included more than 80 SDOs, including incubators and accelerators, makerspaces, co-working spaces, non-profits, and academic institutions. These organizations have formed a growing web of resources assisting tech entrepreneurs across the Houston region.

INNOVATION CORRIDOR AND THE ION

At the nucleus of Houston's tech ecosystem, the Innovation Corridor covers a four-mile expanse across the city's dense urban core. Stretching from Downtown to the Texas Medical Center, the corridor encompasses Houston's major business, academic and innovation centers.

THE ION

Rice University's The Ion is a \$100 million tech hub that anchors the Innovation Corridor fostering tech entrepreneurship in the region. The 266,000-square-foot building (formerly a Sears department store) includes commercial office space for established tech companies, co-working space for early-stage startups, and 50,000

square feet of common space for events and programming.

INCUBATORS AND ACCELERATORS

The recent push by Houston leaders to encourage more startup companies has produced a surge of incubator and accelerator activity in Houston. There are at least 30 incubator and accelerator programs operating in Houston. Notable programs include: MassChallenge, Ion Smart Cities Accelerator, Gener8tor, and JLABS.

The energy accelerator Greentown Labs in Midtown provides office space, mentorship and support for early-stage companies working on climate change technologies. The Houston office is the first expansion outside of Boston.

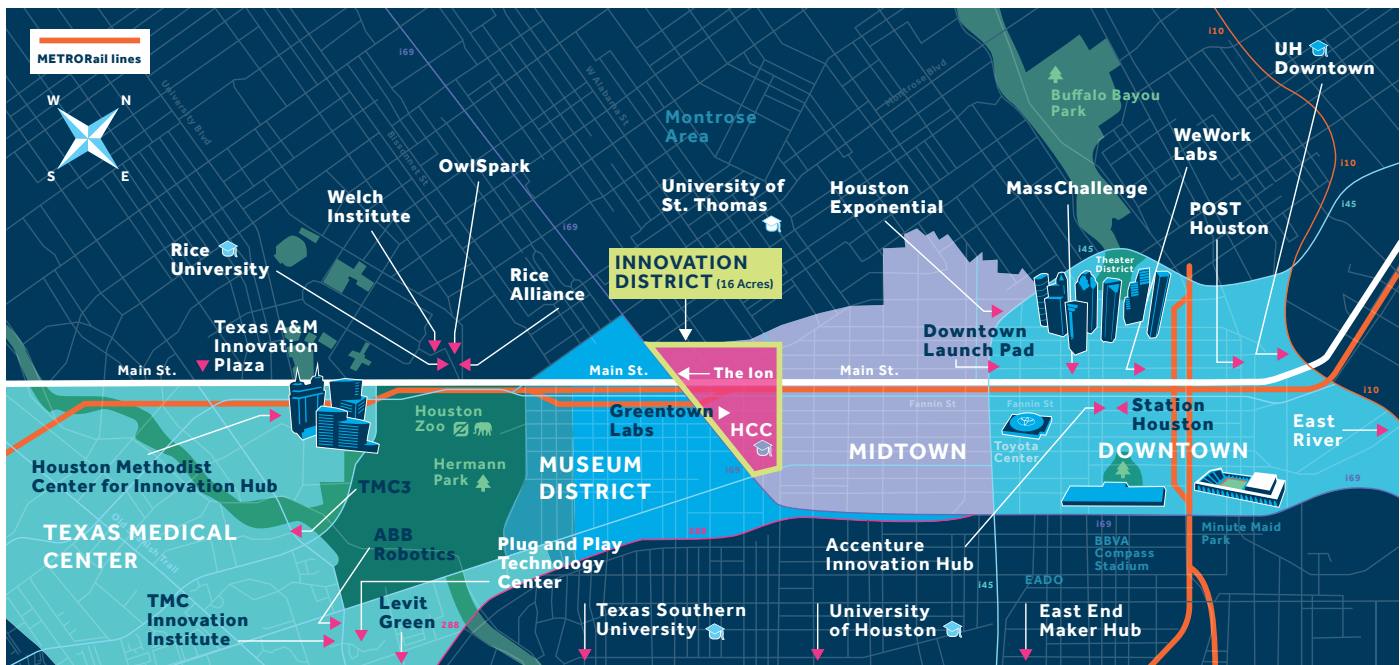
TMC Innovation (TMCi) unites promising innovators with the best minds in science and medicine at the member institutions of the Texas Medical Center. Since its inception in '14, the program has accelerated 221 companies that have collectively raised over \$5.2 billion in venture capital funding.

UNIVERSITY PROGRAMS

The Princeton Review consistently ranks the entrepreneurship programs

at Rice University and University of Houston as among the nation's best. Rice University's entrepreneurship program at the Jones Graduate School of Business supports student innovation through the Rice Alliance for Technology and Entrepreneurship. The organization sponsors programs involving technology commercialization, entrepreneurship education and the launch of student run technology companies. Rice's Owlspark Accelerator has helped launch dozens of companies and the Rice Business Plan Competition is the richest pitch competition in the country, according to the Princeton Review. In '22, the competition awarded nearly \$2.0 million in prizes.

The University of Houston's Cyvia and Melvyn Wolff Center for Entrepreneurship at the Bauer College of Business aims to teach students how to run their own businesses from the inception of an idea through its implementation. Students with promising concepts are accepted into Red Labs, the University of Houston's startup incubator/accelerator program. At the graduate level, students manage the million-dollar Cougar Venture Fund, working with an advisory board of entrepreneurs, angel investors and venture capitalists to analyze and invest in early stage early-stage technology



companies. The Princeton Review rated the undergraduate program as the best in the nation in '22.

CIVIC INITIATIVES

The HX Venture Fund is a \$50 million fund of funds that seeks to transform Houston into a world-leading hub for innovation by linking outside investors to local startups.

HX is one of several non-profit startup development organizations (SDOs) working to grow the innovation ecosystem. Other notable SDOs

include: Impact Hub Houston, which fosters startups advancing the United Nation's Sustainable Development Goals; and BioHouston, which convenes the life science sector in Houston.

INDUSTRY BACKING

Historically, oil and gas startups have been the most frequent destination for venture capital and private equity funding in Houston, with investments flowing from outside capital markets and the industry itself. Many of the major oil and gas companies have

business units dedicated to finding and funding innovative ideas in the sector. A few of these include: Shell Ventures, Chevron Technology Ventures, ConocoPhillips Technology Exploitation, Aramco Ventures and bp ventures. In '21, Boston-based Greentown Labs, a startup incubator focused on new energy technology, opened a Houston office, its first outside of Boston, to capitalize on synergies with the region's existing energy companies. The 40,000-square-foot incubator has welcomed over 60 members its first 12 months of operation.

Biotech and Life Science

Houston's health care industry includes 161,800 health care practitioners and technical occupations, including 12,250 medical doctors and 58,820 nurses. Another 115,000 Houstonians work in health care support occupations.

As a hub for medical device manufacturing, pharmaceuticals, and health research, the Houston region is home to more than 15,400 life science and biotech researchers. More than 1,990 clinical trials were active in the Houston region in mid-'23, representing 20.7 percent of all trials in the U.S. In '22, Houston medical institutions and life science firms received \$963.1 million in National Institutes of Health (NIH) grant funding, up 11.5 percent from '20.

TMC Innovation is the epicenter of Houston's life science startup activity. The organization aims to help early-stage companies commercialize new medical technologies by providing access to the vast resources of the world's largest medical center.

TMCi Accelerators, formerly TMCx, focuses on early-stage companies making breakthroughs in medical devices, digital health care services, diagnostics and therapeutics. TMC Biodesign unites the talents of innovators with diverse backgrounds to quickly bring breakthrough products to market. Additionally, the Texas Medical Center launched the

TMC Venture Fund in '17. The fund has invested in 30 Houston health startups in the last three years.

TMC Innovation partners with several industry-backed programs supporting health innovation. Johnson & Johnson's JLABSs @ TMC provides lab space and support to companies developing promising technologies in consumer health, medical devices and pharmaceuticals. TMC Innovation is also home to Johnson & Johnson's Center for Device Innovation, a one-of-a-kind medical device prototyping lab.

2022 NIH FUNDING

Baylor College of Medicine **\$364,921,843**

University of Texas MD Anderson Cancer Center **\$179,490,492**

University of Texas Medical Branch Galveston **\$164,790,297**

University of Texas Health Science Center Houston **\$121,690,343**

University of Houston **\$42,052,102**

Methodist Hospital Research Institute **\$30,794,507**

Rice University **\$24,643,321**

Texas Heart Institute **\$2,651,678**

Spark Biomedical **\$2,494,701**

Fannin Partners **\$2,278,261**



GOVERNMENT

City of Houston

The City of Houston is a home-rule municipality, which provides the city with inherent powers to manage its own affairs with minimal interference from the state.

The city's current elected officials, serving four-year terms, are the mayor,

Sylvester Turner; the city controller, Chris B. Brown; and the 16 members of the City Council. Eleven council members are elected from single-member districts and five are elected citywide or "at-large." The City of Houston elected officials can serve no more than two terms of four years each.

The city's General Fund budget for fiscal year (FY) '23 is \$2.73 billion. Property taxes account for 46.8 percent of revenues (\$1.279 billion), sales taxes for 29.5 percent (\$806.9 million), and intergovernmental transfers for 8.0 percent (\$217.8 million).

Metro Area Counties

Each county in Texas is run by a five-member Commissioners Court consisting of four commissioners elected from single-member districts, called commissioner precincts, and a county judge elected "at-large" or countywide. The county

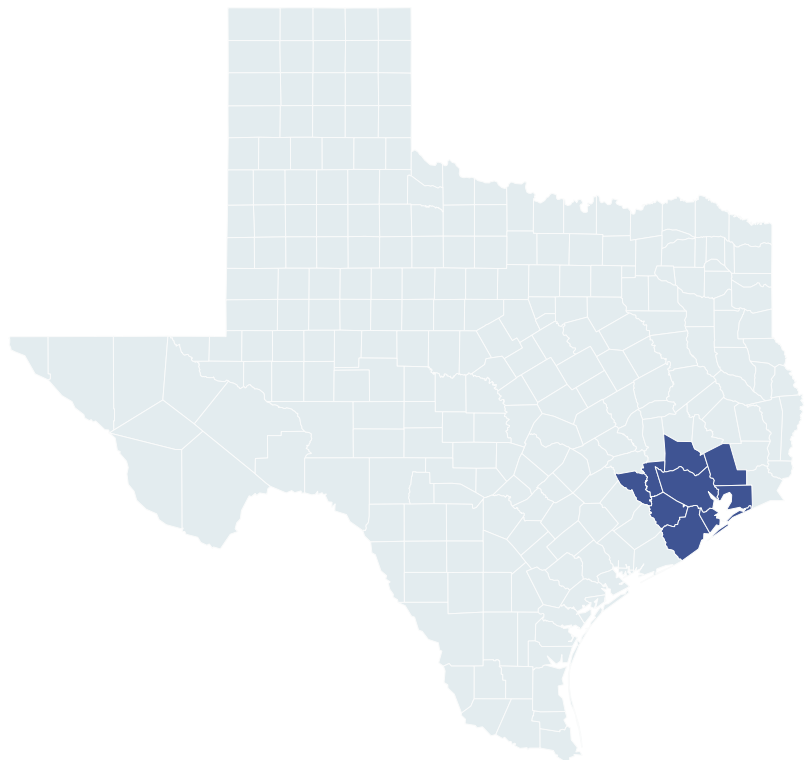
commissioners and county judge serve staggered four-year terms and are not term limited. The Commissioners Court of Harris County, which overlaps the City of Houston, has Judge Lina Hidalgo in addition to its four precinct

commissioners. The county's General Fund budget for fiscal year '23 is \$2.24 billion. Property taxes typically comprise about 75 percent of county revenues.

Texas Government

The chief executive of the State of Texas is the governor. Other elected officials with executive responsibilities include the lieutenant governor, attorney general, comptroller of public accounts, commissioner of the General Land Office, commissioner of agriculture, and the railroad commissioner. These elected offices have a term of four years.

The Texas Legislature has 181 members: 31 in the State Senate, who are elected to four-year overlapping terms, and 150 in the State House of Representatives, who are elected to two-year terms. Regular state legislature sessions convene on the second Tuesday of January in odd-numbered years. The Texas Constitution limits the regular session to 140 calendar days; however, the governor may call a special 30-day session.





Local Council of Governments

The Houston-Galveston Area Council (H-GAC) is a regional council of governments in the 13-county Gulf Coast planning region. Organized in 1966, H-GAC is overseen by 36 elected officials that represent 13 counties (Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty,

Matagorda, Montgomery, Walker, Waller, and Wharton), 177 cities, and 84 school districts.

H-GAC's regional programs focus on community and environmental planning, data tools and resources, disaster planning and recovery, transportation planning, public safety,

workforce, and economic development. As one of the country's largest councils of governments, H-GAC provides a forum for jurisdictions of all sizes to solve regional issues; identifies and prioritizes funding opportunities; and helps analyze trends and conditions affecting the region.



U.S. House of Representatives legislative districts partly or entirely within the Greater Houston Partnership's service area:

District 2 | Harris County

District 7 | Harris County

District 8 | Harris and Montgomery Counties

District 9 | Brazoria and Harris Counties

District 10 | Austin, Harris and Waller Counties

District 14 | Brazoria and Galveston Counties

District 17 | Matagorda and Wharton Counties

District 18 | Harris County

District 22 | Brazoria and Fort Bend Counties

District 29 | Harris County

District 36 | Chambers, Harris and Liberty Counties

Taxation

The sales and use tax in the State of Texas is 6.25 percent. The City of Houston levies an additional 1.0 percent. The Harris County Metropolitan Transit Authority levies an additional 1.0 percent in areas it serves, which includes the entire City of Houston and many of the unincorporated parts of Harris County.

The table below shows typical tax rates for property located within Houston city limits. The tax rates are expressed as dollars per \$100 taxable value. Ad valorem property tax is the primary source of local government revenue in the Houston region.

Ad valorem property tax is the primary source of local government revenue in the Houston region.

FULL MARKET VALUE OF TAX ROLL

2022

Houston ISD

\$293.5 Billion

City of Houston

\$392.5 Billion

Harris County

\$794.5 Billion

Source: Harris County Appraisal District

TYPICAL PROPERTY TAXES Tax Rate per \$100 Taxable Value | 2022

City of Houston	Harris County	Houston ISD	Houston Community College	Other Jurisdictions
\$0.533640	\$0.343730	\$1.037200	\$0.095569	\$0.19175
Total Property Tax Rate			\$2.201889	

Public Safety

HOUSTON POLICE DEPARTMENT (HPD)

HPD's budget for FY '23 is \$988.8 million.

The HPD budget calls for a total of 6,288 full-time-equivalent (FTE) police personnel, of which 5,171 are classified, 940 civilian and 178 police cadets in training.

HPD's estimated average response time in '22 was 5.9 minutes for priority one calls and 11.6 minutes for priority two calls. HPD responded to 1,096,636 calls for service in '22.

HARRIS COUNTY SHERIFF'S OFFICE (HCSO)

Founded in 1837, HCSO is the largest sheriff's office in Texas and the fourth largest in the United States.

HCSO's FY '23 operating budget is \$604.0 million.

The Harris County Sheriff's Office provides law enforcement protection to the 4.7 million residents in Harris County.

HCSO employs over 5,000 plus an additional 200 volunteer reserve deputies.

HOUSTON FIRE DEPARTMENT (HFD)

HFD is the largest fire department in Texas, the third largest fire department in the United States, and is responsible for preserving life and property to a population of more than 2.3 million in an area totaling 654 square miles. In the last five years the Houston Fire Department has

invested in 32 new frontline engines, 12 frontline aerial (ladder) trucks, 29 frontline transport units, and an additional 27 frontline transport units have been purchased and are expected to go into service in '23. In addition, one quint truck, two aerial trucks, and one tower truck delivered in calendar year '19, plus seven high water booster vehicles, one cascade, three decontamination task force, one rescue trailer were acquired in calendar year '22.

In '22, HFD responded to 384,229 incidents. Of these incidents, there were 52,234 fire-related and 331,995 EMS-related.

HFD's FY '23 budget is \$559.1 million and calls for 4,436 FTE employees, which includes 487 overtime FTEs and 95 civilian employees.

Libraries

The Houston Public Library (HPL) is comprised of 41 public service units including 27 neighborhood libraries, five regional libraries, three history research centers, two express libraries, the HPL mobile express, three TECHLink locations and a satellite location at the Children's Museum of Houston. The system has a collection of 2.9 million items and

1.6 million registered borrowers. In fiscal year 2022, the library hopes to host 1.5 million in-house visits and 2.0 million virtual visits.

In January of '23, HPL stopped charging late fines for overdue books and borrowed items, lowering financial barriers and increasing access to library services. According to HPL, over 3,000 people returned around

21,245 items borrowed from the library, valuing \$425,000 at the library.

The Harris County Public Library (HCPL) system is a network of 26 branches with 2.3 million items in its collection. HCPL circulates more than 11 million items each year and has over 900,000 registered borrowers. It has the highest circulation of any public library in Texas.

EDUCATION

SELECTED HOUSTON-AREA INDEPENDENT SCHOOL DISTRICTS (ISDs) AND CHARTER MANAGEMENT ORGANIZATIONS (CMOs)

2021-2022

ISD OR CMO	CAMPUSES	TOTAL STUDENTS FALL '22	STUDENT TEACHER RATIO	COUNTY
HOUSTON ISD	274	189,934	18.2	Harris
CYPRESS-FAIRBANKS ISD	93	118,010	15.2	Harris
KATY ISD	79	92,667	14.5	Harris
FORT BEND ISD	87	79,660	15.3	Fort Bend
CONROE ISD	67	186,756	15.9	Montgomery
ALDINE ISD	80	60,074	15.6	Harris
KLEIN ISD	53	53,712	14.5	Harris
HUMBLE ISD	52	48,758	14.8	Harris
PASADENA ISD	67	48,726	12.9	Harris
LAMAR CISD	51	42,461	16.3	Fort Bend
CLEAR CREEK ISD	48	40,693	15.6	Galveston
ALIEF ISD	48	40,329	12.8	Harris
SPRING ISD	43	34,114	15.3	Harris
SPRING BRANCH ISD	50	33,649	15.2	Harris
ALVIN ISD	36	29,188	14.9	Brazoria
GOOSE CREEK CISD	34	24,431	14.7	Harris
TOMBALL ISD	24	21,426	15.9	Harris
GALENA PARK ISD	25	21,392	15.3	Harris
PEARLAND ISD	24	21,237	16.1	Brazoria
NEW CANEY ISD	22	18,344	15.8	Montgomery
YES PREP PUBLIC SCHOOLS INC	21	16,366	17	Harris
MAGNOLIA ISD	17	14,046	15.1	Montgomery
DICKINSON ISD	19	12,360	14.3	Galveston
DEER PARK ISD	15	12,263	14.7	Harris
BRAZOSPORT ISD	21	11,618	13.7	Brazoria
CLEVELAND ISD	11	11,567	17.1	San Jacinto
SHELDON ISD	14	10,990	16.8	Harris
MONTGOMERY ISD	11	9,748	16	Montgomery
CHANNELVIEW ISD	13	9,520	15.8	Harris
WALLER ISD	11	8,834	16.1	Waller



INSTITUTIONS OF HIGHER EDUCATION

Greater Houston Area, Fall 2022

Elementary and Secondary Education

The Houston MSA contains 62 independent school districts (ISDs) and 41 state-approved charter management organizations (CMOs). In fall '22, public schools in the Houston metro area enrolled more than 1.3 million students, approximately one in four school children in Texas.

The Houston Independent School District (HISD) is the eighth largest public school system in the nation and the largest in Texas. In the '21 - '22 school year, HISD operated 274 campuses and enrolled more than 194,000 students.

Higher Education

Colleges and universities in the Houston area enrolled nearly 425,000 students across 31 academic institutions in the fall of '22, according to the Texas Higher Education Coordinating Board. Community college students accounted for 45.9 percent and four-year, professional and medical students for 54.1 percent of enrollment in '22.

Houston benefits from three Tier I research universities: Rice University, the University of Houston, and Texas A&M University. These institutions have the highest ranking under the Carnegie classification system for research activity.

TWO-YEAR COMMUNITY COLLEGES		FALL 2022 ENROLLMENT
Lone Star College System District		73,556
Houston Community College System		39,201
San Jacinto College		30,425
Blinn College		17,319
Lee College		7,814
Wharton County Junior College*		5,498
Alvin Community College		5,204
Lamar Institute of Technology*		4,621
College of the Mainland Community College District		4,504
Brazosport College		4,078
Galveston College		2,029
Texas State Technical College - Fort Bend		661
		194,910 STUDENTS
FOUR-YEAR OR ABOVE		FALL 2022 ENROLLMENT
Texas A&M University*		67,239
University of Houston		46,581
Sam Houston State University*		20,996
Lamar University*		15,403
University of Houston-Downtown		14,212
Prairie View A&M University		9,187
Texas Southern University		8,634
University of Houston-Clear Lake		8,559
Rice University		8,552
The University of Texas Health Science Center at Houston		5,413
Houston Christian University		4,250
University of Houston-Victoria*		4,108
The Texas A&M University System Health Science Center		3,718
University of St. Thomas		3,590
The University of Texas Medical Branch at Galveston		3,380
Texas A&M University at Galveston		2,246
Baylor College of Medicine		1,603
South Texas College of Law		994
The University of Texas M. D. Anderson Cancer Center		364
Texas Chiropractic College		260
University of Houston Medical School		120
		229,409 STUDENTS
TOTAL		424,319 STUDENTS

Source: Texas Higher Education Coordinating Board

*Located outside Houston MSA but within 100-mile radius.

INFRASTRUCTURE

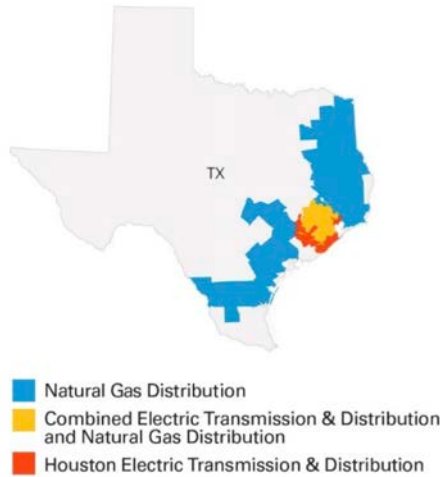
Utilities

ELECTRICITY AND NATURAL GAS

Headquartered in Houston, CenterPoint Energy is an energy delivery company with electric transmission and distribution, power generation and natural gas distribution. CenterPoint Energy also has competitive energy businesses including energy efficiency, sustainability and infrastructure modernization solutions.

CenterPoint Energy's Houston service area:

- CenterPoint Energy owns 206,000 miles of distribution and transmission mains across its natural gas service territories.
- With about 3,700 miles of transmission lines and nearly 50,000 miles of distribution lines, the company delivers electricity to customers in a 5,000-square-mile area.
- The utility owns and operates over 1,610 miles of transmission right of way, including more than 30,000 transmission towers.
- CenterPoint Energy's infrastructure investment plan calls for an approximately \$20 billion investment in system growth, reliability, modernization and cleaner energy enablement to improve the overall resiliency of its Houston electric service territory.
- CenterPoint Energy is focused on resiliency and reliability efforts throughout the greater Houston region to help alleviate the impact of extreme weather events. These efforts include upgrades focused on modernizing electric delivery to create a stronger, smarter and more adaptable grid to support the evolution and growth of the region.
- CenterPoint Energy continues to invest and modernize natural gas infrastructure to help further reduce methane emissions, enhance safety and eliminate cast-iron pipe in the natural gas system.



TELECOMMUNICATIONS

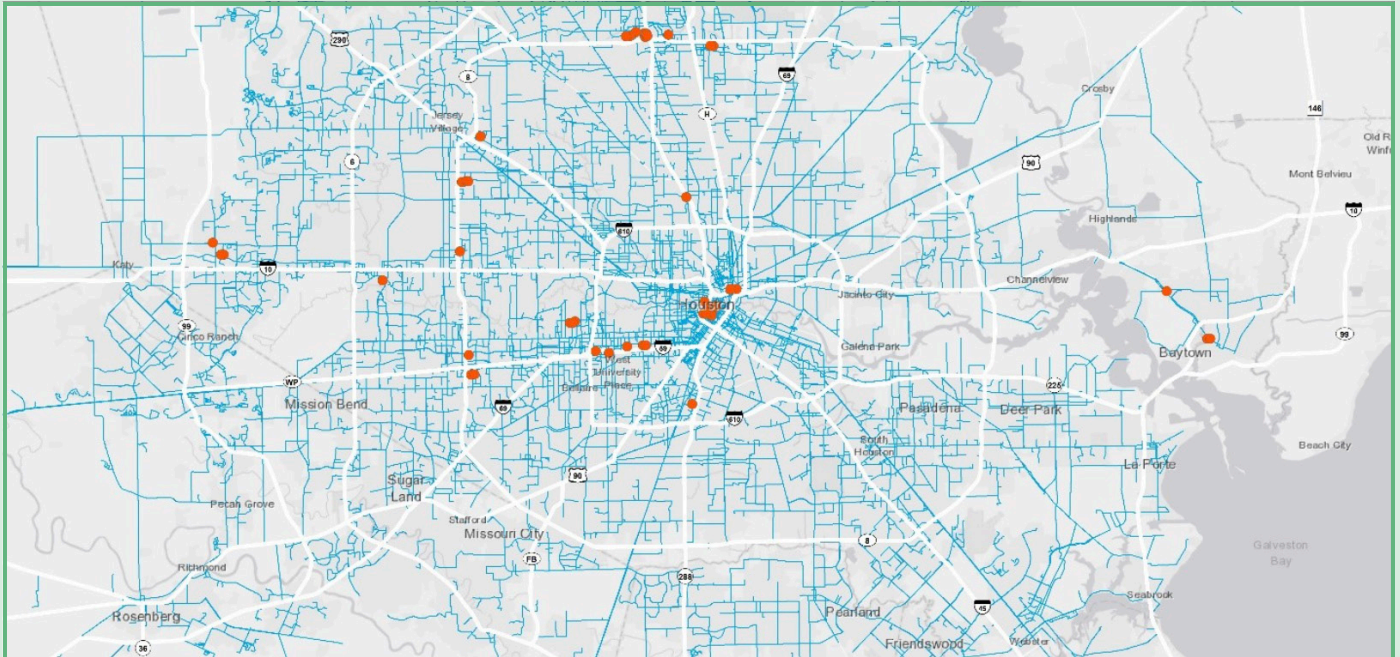
Houston is served by seven area codes: 281, 346, 409, 713, 832, 936 and 979, four of which overlap.

- The Public Utilities Commission of Texas (PUC) has certified 362 carriers to provide local phone service in the state.
- The Texas PUC has registered 264 active long-distance Interexchange Carriers.
- Numerous cellular service providers offer mobile voice and data communications in the Houston MSA, and Houston was first U.S. metro to install Verizon 5G broadband in October '18.

CARRIER (TOP 10 BY MILEAGE)	FIBER CARRIER MILES
AT&T	4,978
CROWN CASTLE	1,882
LUMEN	1,217
VERIZON	963
WINDSTREAM	948
FIBERLIGHT	941
ZAYO	686
CONSOLIDATED COMMUNICATIONS	567
PHONOSCOPE	530
ICTX	551
ALL OTHERS	1,954
TOTAL	15,016

365NAP	NETRALITY DATA CENTERS
ALPHEUS COMMUNICATIONS	SOFTLAYER TECHNOLOGIES
CYRUSONE	SPECTRUM COMMUNICATIONS
DATA FOUNDRY	STRATITSPHERE
DIGITAL REALTY	SUNGARD AVAILABILITY SERVICES
INAP	VERIZON
LOGIX COMMUNICATIONS	
LUMEN	





Blue Lines = Fiber Routes Orange Dotes = Data Centers or related

FIBER

Fiber optic lines support very high rates of data transmission. The Houston metro area has over 15,000 fiber carrier miles.

In Houston, 25 carriers operate or provide fiber service.

Fifty-nine companies operate 56 fiber-lit data centers, colocation, or carrier hotel facilities (only one facility per unique address) in Houston.

WATER

The City of Houston is the regional water provider for Harris County and portions of three surrounding counties. At projected usage rates, the City has sufficient water supplies for its wholesale and retail customers through the year 2050.

The City owns water rights to over 1.2 billion gallons per day of reliable surface water and over 200 million gallons per day of available groundwater supplies.

The City of Houston owns a 70 percent share of Lake Livingston, 70 percent of Lake Conroe and 100 percent of Lake Houston.

Houston's Drinking Water Operations produced and distributes over 146 billion gallons of water per year through a 7,000-mile pipeline distribution system. The City of Houston treated 94.5 billion gallons of water in '21. Most of this water is used for industrial and manufacturing purposes.

The City has three purification plants: the Northeast Water Plant, the East Water Plant and the Southeast Water Plant. The Northeast Water Plant is currently undergoing an expansion that will increase the plant's capacity from 80 mgd to 400 mgd by '24.

The City of Houston's drinking water system maintains a "Superior" rating, the highest rating for water quality issued by the Texas Commission on Environmental Quality (TCEQ).

WASTEWATER

The City of Houston operates 40 wastewater treatment plants, three wet weather facilities, 18 storm water underpass pump stations and over 383 lift stations. The City treats an average of 250 mgd of wastewater with an overall permitted capacity of 564 mgd. It maintains 6,200 miles of sewer pipelines with over 129,600 manholes.



Transportation

MOTOR FREIGHT LINES

Fifteen hundred long-distance trucking establishments operate in the Houston MSA.

RAILROADS

The Houston area is served by BNSF Railway Company, Kansas City Southern Railway Company and Union Pacific Railroad Company. Businesses along the Houston Ship Channel are served by the Galveston Railroad, Port Terminal Railroad Association and Texas City Terminal Railway Company. Eight mainline tracks and five branch line tracks radiate from Houston.

Amtrak provides passenger service three times per week in Houston via the Sunset Limited route that travels from New Orleans to San Antonio and Los Angeles.

INTRACOASTAL WATERWAY

The Texas portion of the Gulf Intracoastal Waterway stretches

423 miles. The main channel is 12 feet deep and 125 feet wide. The entire Gulf Intracoastal Waterway spans approximately 1,300 miles from Brownsville, Texas to St. Mark's, Florida. Texas' portion of the Gulf Coast Intracoastal Waterway facilitates the transportation of up to 90 million tons of freight annually.

FREEWAYS, HIGHWAYS AND TOLL ROADS

There are 3,433 centerline miles and 11,754 lane miles of freeways and expressways in operation, according to the Texas Department of Transportation (TxDOT) Houston District. The Houston District includes Brazoria, Fort Bend, Galveston, Harris, Montgomery, and Waller Counties.

Corridors: Houston's major thoroughfares include Beltway 8, Fort Bend Tollway, Grand Parkway 99, Hardy Tollway, I-10, I-45, I-610, SH 6, SH 146, SH 225, SH 288, US 59/I-69, US 90, US 290 and the Westpark Tollway.

Highway Spending: In FY '22, TxDOT spent \$1.3 billion on construction, and maintenance projects in the Houston District.

Vehicle Miles Traveled (VMT):

Motorists traveled a total of 100,384,365 vehicle miles per day in the Houston district in '22. The average daily VMT per vehicle was 19.7 miles based on the 5,091,153 vehicles registered in the region.

In March '23, the Federal Highway Administration entered into a Voluntary Resolution Agreement with TxDOT, formally removing a hold on the North Houston Highway Improvement Project (NHHIP). The NHHIP is TxDOT's \$9 billion investment to improve I-45 from Beltway 8 to I-10, and reroute I-45 through the downtown Houston area along I-10 and US 59/I-69.

METROPOLITAN TRANSIT AUTHORITY (METRO)

Created and funded with a one-cent sales tax in a 1978 voter referendum, the Metropolitan Transit Authority of Harris County began operations in January 1979. The American Public Transportation System (APTA) has honored METRO as the Best Transit Agency in North America award three times – most recently in 2020.

METRO serves an area of 1,303 square miles with 21 transit centers, over 9,000 bus stops and 28 Park & Ride facilities, according to the most recent edition of METRO at a Glance.

METRO's fleet included 1,545 active buses and transit vans, and 76 light rail train cars. METRO operates 87 bus routes, one Bus Rapid Transit (BRT) route, and 16 Park & Ride routes and three light-rail lines that travel on 22.7 miles of track. Boardings for METRORail service are forecast to exceed 13.1 million, up 15.8 percent from 11.3 million in '22.

Houston Metro secured \$21.6 million from the Federal Transit Administration to buy electric buses and charging infrastructure. This



follows the adoption of METRO's Climate Action Plan in early '22. METRO detailed their plans for a zero-emission fleet, with a goal of shifting purchasing to only zero-emission buses by '30. The funds from the FTA allow METRO to double their previous purchase of 20 buses to build a fleet of 40 electric buses.

During FY '22 METRO experienced its first increase in ridership since FY '20. Total ridership is expected to continue to increase in '23.

In May '22, METRO celebrated the completion of 2,500 universally accessible bus stops. All buses on METRO's bus routes and all METRO Rail vehicles are fully accessible to disabled patrons. METROLift offers prescheduled curb-to-curb service for disabled patrons who cannot use METRO's fixed-route service.



Sea Ports

The Houston region has four seaports which handled 299.9 million metric tons of foreign trade in '22. Of these four ports, the Port of Houston is the largest and ranks first in foreign trade tonnage among all U.S. seaports. Port Freeport ranks 17th in the U.S., Port of Texas City ranks 24th and Port of Galveston ranks 42nd.

PORT HOUSTON

In '22, the Port of Houston ranked first in total tonnage (domestic and foreign)— and first in foreign tonnage (exports and imports). Houston has ranked first in foreign tonnage for 26 consecutive years, according to the most recent data available from the U.S. Army Corps of Engineers.

Container service was initiated in Houston in 1956. Today, the Port of Houston is the largest Gulf Coast container port, handling 73 percent of U.S. Gulf Coast container traffic and 97 percent of Texas container traffic.

TOP FIVE TRADING PARTNERS Port of Houston, 2022

RANK	DESCRIPTION	2022 IN BILLIONS
1	China	27.0
2	Mexico	19.9
3	Brazil	14.4
4	South Korea	12.3
5	Japan	10.5

TOP 5 TRADING PARTNERS		\$84.1 B
REMAINING 227 TRADING PARTNERS		\$156.0 B
TOTAL ALL PARTNER COUNTRIES		\$240.1 B

RANK	DESCRIPTION	ANNUAL 2022 METRIC TONS IN BILLIONS
1	Mexico	25.72
2	Brazil	14.33
3	China	12.53
4	Japan	11.86
5	South Korea	8.94

TOTAL TOP 5 TRADING PARTNERS		73.38 M
ALL OTHER TRADING PARTNERS		126.67 M
TOTAL ALL TRADING PARTNERS		200.05 M

Source: U.S. Census Bureau Foreign Trade Division; WISERTrade

The Port of Houston handled 32.4 million metric tons of containerized cargo and hauled in 3.8 million TEUs (twenty-foot equivalent units) in '22, setting new port records for containers handled in a year. The Port ranked as the fifth busiest U.S. container port in '22, based on total TEUs.

Foreign trade in '22 totaled 200.0 million metric tons and was valued at \$240.1 billion. Imports totaled 59.4 million metric tons, valued at \$108.4 billion. Exports totaled 140.6 million metric tons, valued at \$131.6 billion.

The Port of Houston traded with 213 countries in '22. Of those, trade with 45 countries exceeded one billion dollars each while trade with 50 additional countries exceeded \$100 million. The Port's top trading partner by value is China and by weight is Mexico.

HOUSTON SHIP CHANNEL

The Houston Ship Channel, a 52-mile inland waterway, connects Houston with the sea lanes of the world. Its turning basin is eight miles east of Houston's central business district.

Most of the channel has a minimum width of 530 feet and a depth of 45 feet at mean low tide.

More than 330 public and private terminals, owned by more than 150 companies, line both sides of the channel and serve one of the world's largest petrochemical industrial complexes.

PROJECT 11

The Houston Ship Channel expansion project, also known as Project 11, began in late '22. Project 11 will widen the channel by 170 feet along its Galveston Bay reach, from 530 feet to 700 feet. It will also deepen some upstream segments to 46.5 feet. These improvements aim to improve safety and efficiency, and to include new environmental features. Work is expected to be complete in '26.

SEAPORTS RANKED BY FOREIGN TRADE
2022

Port Houston
200,048,542

Port Freeport
24,461,480

Port of Texas City
14,522,538

Port of Galveston
5,421,108



Note Metric Tons by Vessel

PORT OF HOUSTON TOTAL TRADE AND WEIGHT
2022

RANK	DESCRIPTION	ANNUAL 2022 IN BILLIONS
1	Mineral Fuels, Oil; Refined Products	92.0
2	Organic Chemicals	22.7
3	Industrial Equipment and Computers	18.5
4	Plastics and Plastic Products	16.6
5	Articles Of Iron Or Steel	11.6
TOTAL TOP 5 COMMODITIES		\$161.4 B
ALL OTHER COMMODITIES		\$78.7 B
TOTAL ALL COMMODITIES		\$240.1 B

RANK	DESCRIPTION	ANNUAL 2022 METRIC TONS IN MILLIONS
1	Mineral Fuel, Oil; Refined Products	130.9
2	Organic Chemicals	18.3
3	Plastics and Plastic Products	9.4
4	Articles Of Iron Or Steel	5.3
5	Salt, Sulfur, Stone, Lime, and Cement Plaster	5.2
TOTAL TOP 5 COMMODITIES		169.2 M
ALL OTHER COMMODITIES		30.0 M
TOTAL ALL COMMODITIES		199.1 M

Source: U.S. Census Bureau Foreign Trade Division; WISERTrade

Air Transportation

Houston is an international air gateway with extensive service to Latin America. In '15, Hobby Airport added direct flights to Mexico, making Houston the only city in Texas with two international airports – one of only eight such cities nationwide. The Houston Airport System (HAS) has received high honors at the Skytrax 2022 World Airport Awards ceremony. Both William P. Hobby and Bush Intercontinental ranked among the World's Top 100 airports, claiming #33 and #36 respectively. They were the second- and third-highest ranking U.S. airports in that category.

Work is currently underway on \$1.2 billion in renovations to George Bush Intercontinental Airport. The project includes the reconstruction of the Mickey Leland International Terminal (MLIT), which consolidates the existing D and E terminals into a centralized ticketing, departures and arrivals hall for international flights. The MLIT is slated to open in '24. The project also includes demolishing the existing Terminal D/E parking garage.

AIR CARRIERS SERVING THE HOUSTON AIRPORT SYSTEM

GEORGE BUSH INTERCONTINENTAL (IAH)

Airlines Offering Direct Domestic Flights

Alaska Airlines	Frontier Airlines	Spirit Airlines
American Airlines	JetBlue Airways	United Airlines
Delta Airlines	Southwest Airlines	Sun Country

Airlines Offering Direct International Flights

Aeromexico	EVA Air	Turkish Airlines
Air Canada	KLM Royal	United Airlines
Air France	Dutch Airlines	VivaAerobus
Air New Zealand	Lufthansa	Volaris
All Nippon Airways	Qatar Airways	Westjet
Avianca	Singapore Airlines	
British Airways	Spirit Airlines	
Emirates	Sun Country Airlines	

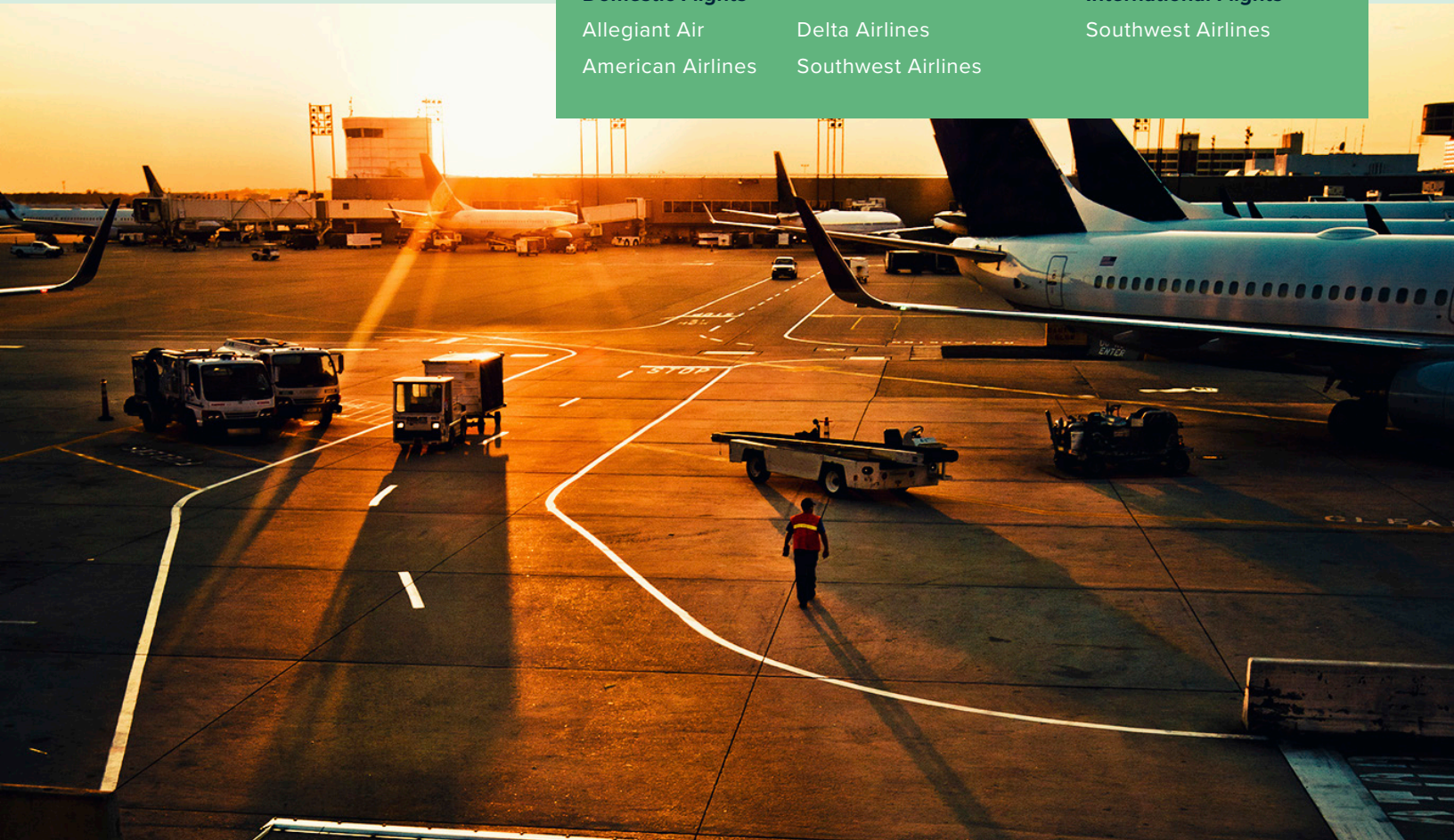
WILLIAM P. HOBBY AIRPORT (HOU)

Airlines Offering Direct Domestic Flights

Allegiant Air	Delta Airlines
American Airlines	Southwest Airlines

Airlines Offering Direct International Flights

Southwest Airlines



INTERNATIONAL CITIES SERVED FROM HOUSTON

ASIA

Beijing, China (PEK)
 Taipei, Taiwan (TPE)
 Tokyo-Narita, Japan (NRT)

AUSTRALASIA

Auckland, New Zealand (AKL)
 Sydney, Australia (SYD)

CANADA

Calgary, Alberta (YYC)
 Edmonton, Alberta (YEG)
 Montréal-PET, Québec (YUL)
 Ontario (ONT)
 Toronto, Ontario (YYZ)
 Vancouver, British Columbia (YVR)

CARIBBEAN

Aruba, Dutch Caribbean (AUA)
 Bonaire, Leeward Antilles (BON)
 Grand Cayman, Cayman Islands (GCM)
 Havana, Cuba (HAV)
 Montego Bay, Jamaica (MBJ)
 Nassau, Bahamas (NAS)

Port of Spain, Trinidad and Tobago (POS)
 Providenciales, Turks and Caicos Islands (PLS)
 Punta Cana, Dominican Republic (PUJ)
 St. Thomas, Virgin Islands (STT)

CENTRAL AMERICA

Belize City, Belize (BZE)
 Guatemala City, Guatemala (GUA)
 Liberia, Costa Rica (LIR)
 Managua, Nicaragua (MGA)
 Panama City, Panama (PTY)
 Roatán, Honduras (RTB)
 San José, Costa Rica (SJO)
 San Pedro Sula, Honduras (SAP)
 San Salvador, El Salvador (SAL)
 Tegucigalpa, Honduras (TGU)

EUROPE

Amsterdam, the Netherlands (AMS)
 Frankfurt, Germany (FRA)
 Istanbul, Turkey (IST)
 London-Heathrow, England, United Kingdom (LHR)
 Manchester, England, United Kingdom (MAN)
 Munich, Germany (MUC)
 Paris-De Gaulle, France (CDG)

MEXICO

Acapulco (ACA)
 Aguascalientes (AGU)
 Cancún (CUN)
 Chihuahua (CUU)
 Cozumel (CZM)
 Guadalajara (GDL)
 Ixtapa/Zihuatanejo (ZIH)
 León/Guanajuato (BJX)
 Manzanillo (ZLO)
 Mazatlan, MX (MZT)
 Mérida (MID)

México City (MEX)
 Monterrey (MTY)
 Morelia (MLM)
 Oaxaca (OAX)
 Puebla (PBC)
 Puerto Vallarta (PVR)
 Querétaro (QRO)
 San José del Cabo (SJD)
 San Luis Potosí (SLP)
 Tampico (TAM)
 Veracruz (VER)

MIDDLE EAST

Doha, Qatar (DOH)
 Dubai, United Arab Emirates (DXB)

SOUTH AMERICA

Bogotá, Colombia (BOG)
 Buenos Aires, Argentina (EZE)
 Lima, Peru (LIM)
 Quito, Ecuador (UIO)
 Rio de Janeiro, Brazil (GIG)
 Santiago, Chile (SCL)
 São Paulo-Guarulhos, Brazil (GRU)

Houston Aviation Statistics:

IAH and HOU served 54,092,778 passengers in '22, up 20.3 percent from '21.

International traffic rose 43.0 percent to 10,455,856 passengers in '22.

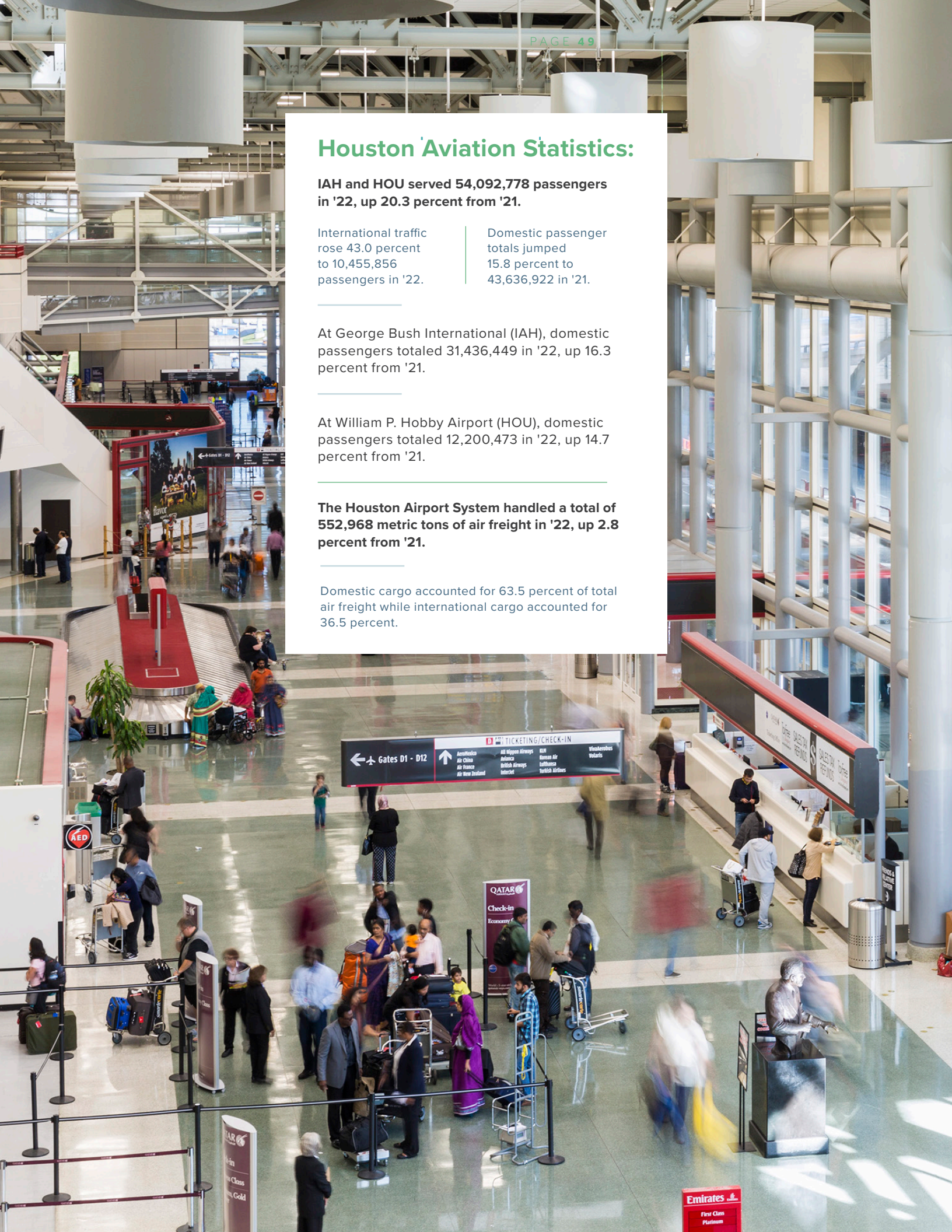
Domestic passenger totals jumped 15.8 percent to 43,636,922 in '21.

At George Bush International (IAH), domestic passengers totaled 31,436,449 in '22, up 16.3 percent from '21.

At William P. Hobby Airport (HOU), domestic passengers totaled 12,200,473 in '22, up 14.7 percent from '21.

The Houston Airport System handled a total of 552,968 metric tons of air freight in '22, up 2.8 percent from '21.

Domestic cargo accounted for 63.5 percent of total air freight while international cargo accounted for 36.5 percent.



COMMUNICATIONS AND MEDIA

Houston has 245 newspaper, periodical and book publishers, 28 radio and seven television broadcasting stations. The Houston Chronicle, with over 1,000 employees, is the region's largest media employer. The University of Houston's KUHT, which aired its first broadcast May 25, 1953, is the oldest public television station in the U.S.

Broadcast

According to Nielsen, the Houston television market was the sixth largest in the nation in '22, making up 2.1 percent of all TV households in the U.S. Top local TV news stations include:

NBC-affiliate KPRC (Channel 2)
CBS-affiliate KHOU (Channel 11)
ABC-affiliate KTRK (Channel 13)
FOX-affiliate KRIV (Channel 26)
CW-affiliate KIAH (Channel 39)
Univision-affiliate KXLN (Channel 45)
Telemundo-affiliate KTMD (Channel 47)

The most popular local radio stations, by share of listenership according to ratings from Nielsen, include:

KODA-FM (Sunny 99.1)
KTBZ-FM (The Buzz 94.5)
KLTN-FM (Que Buena 102.9)
KMJQ-FM (Magic 102.1)
KGLKFM (The Eagle 107.5)
KSBJ-FM (God Listens, 89.3)
KKHH-FM (Hot 95.7)
KTRH-AM (News Radio 740)
KOVEFM (Somos Amore 106.5)
KKBQFM (The New 92.9)

COMMUNICATIONS MEDIA BY TYPE

Houston MSA, 2022

Newspaper Publishers

107 establishments | 1,094 jobs

\$82,784 average annual wage

Book Publishers

43 establishments | 298 jobs

\$110,292 average annual wage

Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers

103 establishments | 1,484 jobs

\$104,000 average annual wage

Periodical Publishers

95 establishments | 1,884 jobs

\$107,328 average annual wage

Radio Broadcasting Stations

28 establishments | 673 jobs

\$101,505 average annual wage

Television Broadcasting Stations

7 establishments | 443 jobs

\$106,444 average annual wage

Source: Texas Labor Market Information, Quarterly Census of Employment and Wages

Digital and Print

Houston's major daily newspaper is the Houston Chronicle, which was founded in 1901. The paper has the second highest circulation in Texas and consistently ranks among the most widely read newspapers in the country.

In addition to the Houston Chronicle's 825,000 daily readers and 1.4 million readers on Sunday, Chron.com is widely regarded as one of the top newspaper websites and averages nearly 95 million page views and 15 million unique visitors each month.

PRINT AND DIGITAL OUTLETS IN HOUSTON

Bisnow
Community Impact
Culture Map Houston
Houston Business Journal
Houston Landing
Houston Press
Houston Public Media
Houstonia Magazine
Houston CityBook
Intown Magazine
PaperCity
Realty News Report



WELCOME

P

BOSTON

AVENIDA SOUTH GARAGE

PARKING

STEM GO

NON STOP STREET

4607

LIFE IN HOUSTON

Cost of Living

HOUSTON RANKS AS 2ND MOST AFFORDABLE METRO

Source: Cost of Living Index, Council for Community and Economic Research (C2ER)

Houston's living costs are 7.9 percent below the U.S. average and 34.1 percent below the average of the nation's 20 most populous metropolitan areas.

Housing costs in Houston are 17.9 percent below the U.S. average and

89.0 percent below the average for the nation's 20 most populous metro areas. Excluding the two most expensive housing markets, New York and San Francisco, which tend to skew the average, Houston's housing costs are 62.7 percent below the major metro average.

COST OF LIVING COMPARISONS

2022 Annual Average

20 Most Populous U.S. Metros* (Average for 265 Urban Areas = 100)

URBAN AREA	COMPOSITE	GROCERIES	HOUSING	UTILITIES	TRANSPOR-TATION	HEALTH CARE	MISC. GOODS & SERVICES
New York (Manhattan), NY	227.7	134.9	483.1	102.7	116.0	108.7	137.1
San Francisco, CA	178.6	131.4	306.6	131.8	138.4	131.5	123.6
Washington, DC	152.2	109.3	251.5	112.6	108.5	99.1	118.8
Los Angeles, CA	150.6	111.3	239.8	110.4	128.5	112.1	116.6
Seattle, WA	149.9	125.3	210.8	105.4	123.6	130.4	132.0
Boston, MA	149.7	114.0	223.8	124.8	128.1	119.8	121.1
San Diego, CA	143.7	112.0	222.3	112.5	131.7	104.8	110.1
Miami, FL	120.6	120.2	147.0	106.0	108.0	94.8	109.6
Chicago, IL	120.3	105.5	151.4	96.7	124.9	113.9	107.4
Denver, CO	110.5	94.4	135.6	86.5	100.3	99.6	107.8
Philadelphia, PA	104.5	117.5	99.8	111.4	109.3	97.5	100.4
Phoenix, AZ	104.3	99.7	123.8	102.2	106.7	93.7	91.8
Detroit, MI	104.3	101.3	107.7	97.9	101.1	99.3	106.2
Dallas, TX	102.5	95.4	96.3	113.8	85.7	113.1	110.8
Atlanta, GA	101.6	92.6	107.3	85.5	102.8	107.4	104.3
Tampa, FL	99.8	108.2	96.5	97.0	100.4	92.6	100.4
Minneapolis, MN	99.0	95.2	91.4	99.2	104.5	102.8	105.0
Houston, TX	92.1	94.1	82.1	98.1	94.3	95.8	96.9
St. Louis, MO	86.3	97.4	74.1	93.0	90.3	88.9	88.2

*Metro areas represented by most dominant urban area. Riverside, California is among the 20 most populous MSAs, but did not submit COLI data.

Source: Council for Community and Economic Research (C2ER), Cost of Living Index, 2022 Annual Average (Data based on a survey of 265 urban areas, published January 2023).



Weather

Houston has a subtropical climate, with hot and humid summers and mild winters. The city is located in southeastern Texas, near the Gulf of Mexico, which has a significant influence on the local climate.

TEMPERATURE AND HUMIDITY

During the summer months (June-August), Houston experiences high temperatures in the mid to upper 90s°F (32-37°C) and high humidity, with occasional thunderstorms. The city is prone to flooding during these months due to the heavy rainfall.

Winters (December-February) are mild, with temperatures ranging from the mid-40s°F to mid-60s°F (7-18°C), and occasional cold fronts that can bring temperatures below freezing. Houston rarely sees snowfall, but it does occur occasionally.

Spring (March-May) and fall (September-November) are generally pleasant, with mild temperatures and lower humidity. However, severe weather, such as thunderstorms and tornadoes, can occur during the spring.

PRECIPITATION

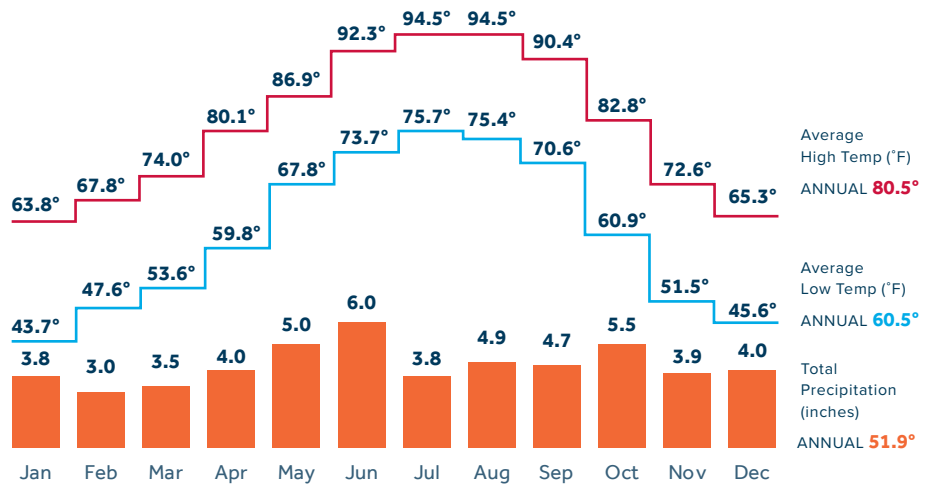
Houston receives an average of 49 inches of precipitation per year, with most of the rainfall occurring during the summer months. June is typically the wettest month, with an average of 6.3 inches of rainfall, while February is the driest month, with an average of 3.2 inches.

Houston is prone to severe weather events, such as thunderstorms, hurricanes, and tropical storms, which can cause significant amounts of precipitation in a short amount of time. This can lead to flooding, particularly in low-lying areas of the city. Houston has experienced several major floods in recent years, including the Memorial Day flood in 2015 and Hurricane Harvey in 2017.

In addition to rainfall, Houston also experiences some snowfall, although it is rare. On average, the city sees less than an inch of snow per year.

HOUSTON WEATHER

Average, 1991-2020



Note: Recorded at George Bush Intercontinental Airport's weather station.
Source: National Oceanic and Atmospheric Administration

SUNSHINE

Houston receives an average of 204 sunny days per year, with an average of 3,066 hours of sunshine annually. However, the amount of sunshine can vary widely depending on the season and weather conditions. During the summer months, Houston can experience extended periods of cloudiness due to the frequent thunderstorms and tropical storms. This can result in fewer hours of sunshine per day. In contrast, during the fall and winter months, Houston generally experiences clearer skies and more sunshine.

WIND

Houston experiences a moderate amount of wind throughout the year, with average wind speeds ranging from 6-10 mph. During the summer months, Houston can experience occasional tropical storms and hurricanes, which can bring strong winds and gusts to the area. In the fall and winter months, the city can also experience cold fronts that can bring strong northerly winds. The wind direction in Houston is generally from the southeast, due to the prevailing winds from the Gulf of Mexico.



Travel and Tourism

Travelers spent \$17.6 billion in metro Houston in '22, according to Dean Runyan Associates, which gathered the data on behalf of the Office of the Texas Governor. Their spending supported over 135,000 jobs in the region, paid almost \$7.0 billion in salaries and wages, and generated \$1.9 billion in tax revenue.

Metro Houston had 1,470 hotels and motels and 102 campgrounds and RV parks at the end of '22.

According to tourism and convention organization Houston First Corporation, the city hosted 417 events with more than 751,500 attendees in 2022, up from just 156 events with more than 342,500 attendees in 2021.

In '23, Houston will host more than 280 events, including 24 major conventions.

Houston is slated to host the College Football National Championship in '24 and is one of the host cities for the '26 FIFA World Cup. Less than an inch of snow per year.

TRAVELER SPENDING IN METRO HOUSTON 2022

Local Transportation & Gas
\$4.8B | 27%

Food Service
\$3.6B | 20%

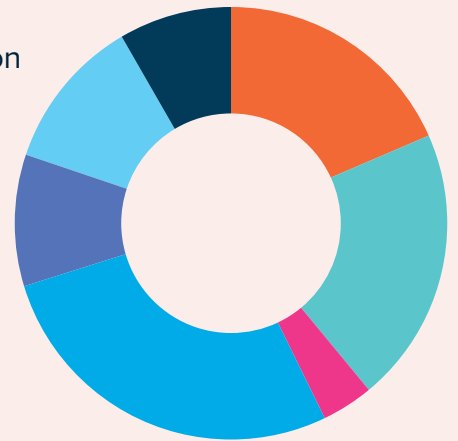
Accommodations
\$3.3B | 19%

Retail Sales
\$2.0B | 12%

Arts, Entertainment & Recreation
\$1.7B | 10%

Food Stores
\$0.7B | 4%

Visitor Air Transportation
\$1.5B | 8%



Dining

Houston restaurants feature outstanding regional dishes as well as diverse international cuisine. At the end of '22, the Houston MSA was home to 12,894 food service and drinking establishments that employed more than 277,167. These establishments included: 4,943 full-service restaurants, 4,810 limited service eating places, 680 drinking establishments, 1,671 snack

bars, and 790 other food service establishments.

According to Yelp.com, Houston has over 80 categories of cuisine, including Cajun, Latin American, Ramen, Polish and Vegan restaurants. Houston is also home to nearly 1,000 food trucks and stands and about 100 wine bars. Houston's reputation of being a culinary hotspot is recognized

by the James Beard Foundation, the organization that bestows the James Beard Awards, commonly known as the "Oscars of the food world." The greater Houston area received Best New Restaurant (Tatemó), Outstanding Wine and Other Beverage Program (Nancy's Hustle) and Best Chef: Texas (Benchawan Jabthong Painter, Street to Kitchen) nominations for the '23 awards.

SELECTED CATEGORIES OF CUISINE

Afghani	East African	Hawaiian	Lebanese	Portuguese	Tex-Mex
American (New)	Egyptian	Honduran	Malaysian	Russian	Thai
Argentinian	Ethiopian	Indian	Mediterranean	Salvadorian	Turkish
Asian Fusion	European (Modern)	Italian	Mexican	Seafood	Ukrainian
Barbeque	Filipino	Jamaican	Nepalese	Soul Food	Vegan
Cajun/Creole	French	Japanese	Pakistani	Southern	Venezuelan
Caribbean	German	Korean	Persian	Sri Lankan	Vietnamese
Chinese	Greek	Kosher	Peruvian	Sushi	West African
Cuban	Halal	Laotian	Polish	Szechuan	Yemenite



Arts and Culture

PERFORMANCE ARTS

Resident companies in drama, ballet, opera, and orchestra perform year-round in Houston. More than 550 institutions are devoted to the performing and visual arts, science, and history in the Houston area. According to the most recent comprehensive study by Americans for the Arts, the nonprofit arts and culture industry in the Houston area generates over one billion dollars in economic activity each year. The survey also found that this spending—\$579.4 million by nonprofit arts and cultural organizations and an additional \$538 million in event-related spending by their audiences—supports over 25,000 full-time equivalent jobs, generates \$801.6 million in household income to residents, and delivers \$119.3 million in local and state government revenue.

THEATER DISTRICT VENUES

Houston's Theater District, located in downtown Houston, spans 17 blocks, and its five flagship theaters house 13,000 seats. The Alley Theatre, Hobby Center for the Performing Arts, Jones Hall, Revention Music Center and Wortham Theater Center host seven renowned performing arts organizations as well as many smaller programs. The Theater District also includes one venue dedicated solely to dance: Houston Ballet's Center for Dance.

ALLEY THEATRE, home to a nationally recognized performing arts company, offers two stages, the 774-seat Hubbard Stage and the 296-seat Neuhaus Stage, and nearly 500 annual performances. Founded in 1947, the theater company produces up to 16 plays annually. Through its performances and educational programs, the company reaches over 200,000 people each year.

HOBBY CENTER FOR THE PERFORMING ARTS, opened in '02, is home to Theatre Under the Stars (TUTS), Broadway Across America, the Humphreys School of Musical Theatre and Uniquely Houston (a program that provides a home venue for Houston's smaller and mid-sized nonprofit performing arts organizations in the Theater District). Its two stages, Sarofim Hall and Zilkha Hall, have seating for 2,650 and 500, respectively.

HOUSTON BALLET'S CENTER FOR DANCE is the largest professional dance company facility of its kind in the U.S. With 115,000 square feet, the six-story structure with sustainable features was constructed for \$46.6 million and opened in '11. The center features nine dance studios and a dance lab that seats 175.

JESSE H. JONES HALL FOR THE PERFORMING ARTS, opened in 1966, is home to the Houston Symphony and the Society for the Performing Arts. Spanning an entire city block, the hall offers 250 events annually and seats 2,911. More than 400,000 visitors attend performances each year.

BAYOU MUSIC CENTER, formerly known as the Revention Music Center, seats 2,815 inside the 130,000-squarefoot Bayou Place entertainment complex in downtown Houston.

WORTHAM THEATER CENTER, built entirely with private funds at the height of the 1980's oil bust on land provided by the city, opened in 1987. The theater is home to the opera and ballet companies, and its two halls, the Alice and George Brown Theater and the Lillie and Roy Cullen Theater, seat 2,405 and 1,100, respectively.



OTHER VENUES

BERRY CENTER, located in Northwest Houston, includes an 11,000-seat athletic stadium, a conference center with over 15,000 square feet of event space, an 8,312-seat arena and a 484-seat theater.

CYNTHIA WOODS MITCHELL PAVILION, located in The Woodlands, offers outdoor performance space and accommodates approximately 17,000, with 6,500 reserved seats and a lawn area for general admission. Established in 1990, it presents an eclectic range of programs featuring nationally and internationally recognized artists.

MIDTOWN ARTS & THEATER CENTER HOUSTON (MATCH), which began holding performances in '15, was formed to create a new space for Houston artists to collaborate and present their work. More than 40 arts groups provided input for the design of the venue, which consists of two buildings with four performance spaces, three rehearsal studios, a 3,000 square feet gallery space and offices for arts professionals.

MILLER OUTDOOR THEATRE

offers free outdoor performances by Houston's performing arts organizations. The city-owned theatre is located on 7.5 acres of land in Hermann Park, site of the Houston Zoo, the Garden Center and the Museum of Natural Science. Seating is provided for 1,700 patrons under the covered pavilion. A sloping lawn accommodates approximately 4,500 more on blankets or lawn chairs.

SMART FINANCIAL CENTRE, located in Sugar Land, opened in January '17 and is a premier venue for a wide variety of performances and programs. This state-of-the-art indoor hall can seat up to 6,400. In '19, the Centre ranked seventh in the world in ticket sales for venues under 10,000 seats according to a Pollstar survey.

STAFFORD CENTRE is a performing arts and convention center located in Stafford. The center opened in 2004 and features a main performance hall with a seating capacity of approximately 1,100, as well as several smaller meeting rooms and banquet halls.

THE GRAND 1894 OPERA HOUSE in Galveston is a Romanesque Revival style theater. Listed in the National Register of Historic Places, the Opera House has seating for 1,000 and presents Broadway shows, comedians, musicians, silent films and more.

WHITE OAK MUSIC HALL, opened in '16, hosts over 400 live music events per year, from a diverse array of musical acts and genres, including rock, country, hip-hop, R&B and more. Covering over five5 acres, the venue provides two indoor performance stages, supporting 200 and 1,000 attendees, and an outdoor amphitheater that can fit over 3,000 people.

Arts Organizations

DANCE

HOUSTON BALLET, founded in 1955 and established as a professional company in 1969, is the nation's fourth-largest ballet company, with annual operating expenses as of June 30, 2022, of \$35.5 million and 59 dancers. Houston Ballet has toured extensively, appearing in Europe, Canada, Australia, and cities throughout the U.S. and has an extensive education and outreach program, with classes and performances that reach over 60,000 students, teachers, and community members each year.

LITERATURE

INPRINT, founded in 1983, is a literary arts nonprofit organization that provides literary performances, writing workshops and financial support for emerging writers. Inprint annually serves more than 15,000 readers and writers of fiction, poetry, and creative nonfiction. Literary performance programs have featured more than 370 celebrated writers from 28 countries, including winners of nine Nobel Prizes, 15 Man Booker Prizes, 50 National Book Critics Circle Awards, 56 National Book Awards, 62 Pulitzer Prizes as well as 19 U.S. Poets Laureate.



MUSIC

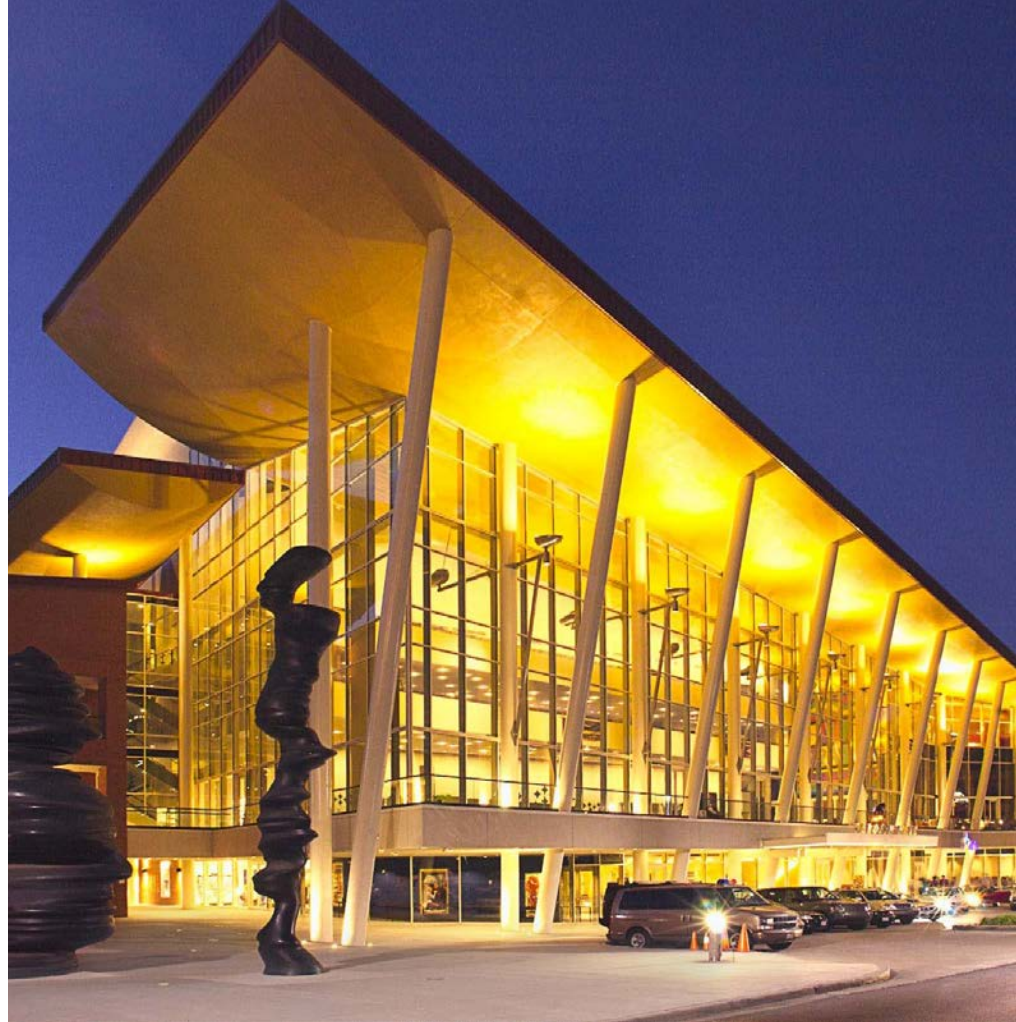
DA CAMERA is a music presenting organization that was founded in 1987. Its mission is to bring world-class chamber music and jazz performances to Houston audiences and to engage and inspire them through music. In addition to its performances, Da Camera also offers educational programs that promote music appreciation and literacy.

HOUSTON GRAND OPERA (HGO), founded in 1955, is known worldwide for training young artists and for commissioning and presenting new works. HGO has presented 71 world premieres through the end of 2021. With an operating budget of \$27 million, HGO presents six to eight productions per season. The opera offers diverse, innovative, and wide-reaching community and education projects. HGO has won three Emmy Awards, two Grammy Awards, and a Tony Award. In '19, HGO was the only American finalist for Opera Company of the Year at the International Opera Awards.

HOUSTON SYMPHONY was founded in 1913 and is one of the oldest performing arts organizations in the nation. The Grammy Award-winning symphony has a full-time ensemble of 79 professional musicians and presents 170 concerts each year. In addition, the musicians offer more than 1,000 community-based performances each year. The symphony's long tradition of touring has included Europe, Japan, and Russia. In '18, the Houston Symphony won their first-ever Grammy award for Best Opera Recording of Alban Berg's *Wozzeck*.

PERFORMANCE ARTS

PERFORMING ARTS HOUSTON, was founded in 1966, when Jones Hall opened, and was responsible for overseeing the venue's operations and programming for several decades. In the early 2000s, the organization merged with another nonprofit, the Houston Symphony Society, to form the Houston Symphony Society, which is now the primary operator of Jones Hall.



THEATER

A.D. PLAYERS, founded in 1967, is one of Houston's largest and oldest professional theater companies, which produces plays and programs from a Christian worldview. The A. D. Players operates out of its own theater, the Jeannette and L.M. George Theater, which is in the Galleria area. The theater features a 450-seat auditorium, a black box theater, and rehearsal and production facilities. They are also involved in educational outreach programs that serve over 100,000 students and educators each year.

ENSEMBLE THEATRE is a non-profit professional theater company, founded in 1976, with the mission of providing high-quality theatrical productions that reflect the African American experience.

MAIN STREET THEATER (MST), founded in 1975, operates out of two theaters in the Houston area: the MainStage Theater in the Midtown area, and the Theater for Youth at the MATCH (Midtown Arts and Theater Center Houston). The MainStage Theater is a 250-seat theater that

hosts the company's mainstage productions, while the Theater for Youth is a smaller, more intimate space that hosts productions specifically geared towards young audiences.

STAGES THEATRE, founded in 1978, presents plays and musicals. Stages is Houston's sixth-largest nonprofit performing arts producer, the largest outside of Houston's downtown theatre district. With an average of 12 productions per year and more than 430 performances, Stages welcomes more than 75,000 visitors each season. In '20, Stages opened its new three-theater venue called The Gordy.

THEATRE UNDER THE STARS (TUTS), founded in 1968, offers a mix of touring musicals and self-produced shows, both new works and revivals, performed at the Hobby Center. It also operates the Humphreys School of Musical Theatre. The River Performing and Visual Arts Center merged with TUTS in '10 to provide singing, dancing, and acting opportunities to children with disabilities. The theater celebrated its 50th anniversary during the '18-'19 season.



Museums

HOUSTON MUSEUM DISTRICT

The Houston Museum District is one of the country's most visited and diverse cultural centers with 19 museums. These museums provide rich experiences in art, history, culture, nature and science. The district is divided into four walkable zones, each of which includes a group of museums.

ASIA SOCIETY TEXAS CENTER, opened in '12, houses the 273-seat Brown Foundation Performing Arts Theater, the Louisa Stude Sarofim Gallery and more. One of only 13 Asia Society locations throughout the world, the center serves as an Asia-Pacific educational and cultural institution in the region.

BUFFALO SOLDIERS NATIONAL MUSEUM, opened in '01, is the only U.S. museum dedicated to preserving the legacy and honor of the African-American soldiers that served on behalf of the United States of America.

CHILDREN'S MUSEUM OF HOUSTON was named Good Housekeeping's "2023 Stand-Out Kids' Museum" in the Best Family Travel Awards. Serving nearly a million people onsite and through its outreach programs, and welcoming visitors from every state in the United States and from more than 40 nations, Children's Museum Houston is the only children's museum in the country to be included in the lengthy award list. The museum was founded in 1980.

CONTEMPORARY ARTS MUSEUM

HOUSTON, founded in 1948, is a non-collecting museum that presents regional, national and international art of the past 40 years through exhibitions accompanied by publications and educational programming.

CZECH CENTER MUSEUM

HOUSTON, opened in 1996, is dedicated to the exploration and preservation of Czech and Slovak heritage, including art, music and dance. The center features a wide array of cultural events, film screenings, art exhibitions and lectures.

DIVERSEWORKS, founded in 1982, presents and commissions new art in all forms. DiverseWorks supports freedom of artistic expression with an artist-centered focus through a schedule of exhibitions, performances, and community programs.

HOLOCAUST MUSEUM HOUSTON

opened in 1996, is dedicated to educating people about the Holocaust, honoring the survivors' legacy and remembering the six million Jews and other innocent victims who died in concentration camps in WWII. Reopening in '19 after undergoing a \$34 million expansion, its new 57,000-square-foot facility is ranked as the fourth largest Holocaust Museum in the nation.

HOUSTON CENTER FOR

CONTEMPORARY CRAFT, founded in '01, is a nonprofit arts organization dedicated to advancing education about the process, product and history of craft. The center is one of the few venues in the U.S. dedicated exclusively to craft.

HOUSTON CENTER FOR

PHOTOGRAPHY, founded in 1981, brings together a community of people interested in photography and lens-based work. The center offers a gallery and a library with over 4,000 books. In addition, the center provides more than 300 photography classes and workshops annually.

HOUSTON MUSEUM OF AFRICAN

AMERICAN CULTURE (HMAAC), opened in '12, exhibits the material and intellectual culture of Africans and African Americans in Houston, the state of Texas, the Southwest and the African Diaspora.

HOUSTON MUSEUM OF NATURAL

SCIENCE, established in 1909, houses four floors of 17 permanent exhibits, the Burke Baker Planetarium, Cockrell Butterfly Center and the Wortham Giant Screen Theatre. The museum also maintains a satellite facility in Sugar Land and the George Observatory in Fort Bend County, which houses one of the largest telescopes in the country.

HOUSTON ZOO in 2022, celebrated its 100th anniversary. The Houston Zoo occupies 55 acres of Hermann Park and is home to more than 6,000 animals from 900 species, attracting more than 2.4 million guests each year. In 2023, the new Galapagos Islands exhibit opened.

JUNG CENTER OF HOUSTON was founded in 1958 in honor of Carl Gustav Jung, the revolutionary psychologist. The center displays new art exhibits each month and offers more than 200 classes annually. Much of the featured artwork is generated by local and regional artists.

LAWNDALE ART CENTER, founded in 1979, is one of the only institutions in Houston that is dedicated to the presentation of contemporary art with an emphasis on work by regional artists.

MENIL COLLECTION, opened in 1987, features a highly acclaimed collection of some 19,000 works of art, including masterpieces from antiquity, the Byzantine and the tribal cultures of Oceania. The museum has one of the world's foremost collections of Surrealist holdings.

MOODY CENTER FOR THE ARTS, located at Rice University, serves as an experimental platform for creating and presenting art works. The 50,000-square-foot facility constructed in '17 for \$30 million features a striking contemporary design with bold geometric shapes. In '17, the Moody received a Design Honor Award from the American Institute of Architects, California Council.

MUSEUM OF FINE ARTS, HOUSTON (MFAH), opened in 1924, the museum is among the 10 largest art museums in the U.S. with nearly 70,000 works of art. The MFAH campus includes three buildings, the Glassell School of Art, a sculpture garden and more. Satellite facilities include the Bayou Bend Collection and Gardens. In November '20, the museum completed the construction of a new master planned campus transformation. The \$450 million expansion included a state-of-the-art conservation center, a new tunnel system connecting the buildings, and the Nancy and Rich Kinder Building, which adds more than 100,000 square feet of exhibition space to the museum.

ROTHKO CHAPEL, founded in 1971, is a non-denominational place of meditation and reflection that welcomes over 100,000 visitors each year. The chapel contains 14 canvases by the painter Mark Rothko and is lit only by skylight. The chapel's plaza contains an obelisk in memory of Dr. Martin Luther King Jr. After closing for expansion and restorations, the chapel re-opened in Fall '20.

THE HEALTH MUSEUM, opened in 1996, is an interactive science center and a member institution of the world renowned Texas Medical Center. With over 2.5 million visitors, the museum is the most visited health museum in the country. In '17, the museum was named a Smithsonian Affiliate.

OUTSIDE THE MUSEUM DISTRICT

1940 AIR TERMINAL MUSEUM, founded in 1940, has a theater and several galleries of aviation memorabilia housed in Houston's original art deco air terminal. The museum also serves as a venue for planespotters to view activity at nearby Hobby Airport. The 1928 Carter Airmail Hangar onsite is also open for tours. In '20, the Museum celebrated the 80th anniversary of the opening of the Houston Municipal Airport terminal.



ART CAR MUSEUM, opened in 1998, is a private institution that exhibits contemporary art with a focus on art cars and other fine arts not typically seen in museums.

BLAFFER ART MUSEUM established in 1973, is dedicated to furthering the understanding of contemporary art through exhibits, publications and programs.

BRYAN MUSEUM, located in the historic Galveston Orphans Home, opened in '15 and houses one of the world's largest collections of historical artifacts, documents and artwork relating to Texas and the American West. The museum also has a library and an archive.

FORT BEND ART CENTER, managed by the Art League of Fort Bend, opened in '18. It is a multi-arts center with fine artwork by more than 30 member artists on display and for sale. With two galleries, the art center functions as a shared space for artists and art enthusiasts to create, exhibit and experience art.

GALVESTON NAVAL MUSEUM, opened in 1971 and located in Seawolf Park, has two drydocked WWII vessels that visitors can explore: the USS Cavalla submarine, and the USS Stewart, the only Edsall-class destroyer escort preserved in the United States.

GALVESTON RAILROAD MUSEUM, opened in 1983, is located at the site of the 1932 Santa Fe depot and railyard. The museum also served as the terminal for the Texas Limited excursion train until it ceased operations in 1996. The museum's artifacts include forty pieces of rolling stock (railcars and locomotives) and exhibits detailing rail history.

HARRIS COUNTY HERITAGE SOCIETY operates ten historic buildings that date from 1823 to 1905, which the organization authentically restored and moved to Sam Houston Park. Together with the Museum Gallery, these buildings serve as historic reference points and exhibition spaces for more than 23,000 artifacts that document life in historic Houston.

HOUSTON BLUES MUSEUM, founded in '09, works to preserve the legacy of Houston's Blues musicians. The museum also provides educational programs for adults and children.

HOUSTON MARITIME MUSEUM, founded in '00, has eight galleries with collections of maritime artifacts and ship models throughout history, including exhibits on the history of Buffalo Bayou and the Houston Ship Channel.

LONE STAR FLIGHT MUSEUM, opened in 1990, is an aviation museum and STEM learning center. The museum is home to the Texas Aviation Hall of Fame as well as a collection of historic aircraft, hands-

on exhibits and a \$1 million Aviation Learning Center. The museum opened a new \$38-million, 130,000-square-foot facility at Houston's Ellington Airport in '17.

NATIONAL UNITED STATES ARMED FORCES MUSEUM collects, restores and displays military artifacts including vehicles, aircraft and artillery field pieces. The museum also acts as a research facility with an online database and serves as a meeting space for military organizations.

NATIONAL MUSEUM OF FUNERAL HISTORY, founded in 1992, houses 17 permanent exhibits of funerary artifacts, including a rare collection of historical hearses. The museum collaborates with the Vatican to display an exhibit on the lives and deaths of the Popes.

O'KANE GALLERY, established in 1970, annually offers about six exhibitions representing a diversity of artists, themes and mediums.

ORANGE SHOW CENTER FOR VISIONARY ART is a nonprofit organization founded in 1980 that preserves, promotes and documents visionary art environments. The center has been the producer of the annual Houston Art Car Parade for the past 35 years.

PEARL FINCHER MUSEUM, opened in '08, is a non-collecting fine art museum that provides a wide array of art exhibits and educational programs. Housed in a former county library, the Pearl is located in Spring.





SAN JACINTO MONUMENT AND MUSEUM OF HISTORY, located at San Jacinto Battleground State Historic Site, features artifacts and documents covering Mexican Texas, the Texas Revolution and the Republic of Texas. This 1,200-acre site is also a National Historic Landmark and consists of the San Jacinto battleground, the monument with observation floor, the museum of history and Battleship Texas. In '20, operational control of the Battleship was transferred to the Battleship Texas Foundation. The Battleship is currently undergoing renovations.

SPACE CENTER HOUSTON, opening in 1992, Space Center Houston has welcomed more than 22 million people and hosts nearly 1.25 million visitors annually in its 250,000-square-foot educational complex. The center features more than 400 space artifacts, permanent and traveling exhibits, exhibits and experiences, and theaters related to the exciting future and remarkable past of America's human space-flight program.

STATION MUSEUM OF CONTEMPORARY ART located in the Third Ward, is an exhibition forum for local, national and international artists with comprehensive exhibitions from Afghanistan, Austria, Colombia, Congo, Czech Republic, India, Iraq, Mexico, Palestine, Peru, Russia, South Africa and Venezuela.

TEXAS SEAPORT MUSEUM is home to the 1877 tall ship ELISSA, a National Historic Landmark that has also been designated as an American Treasure by the National Trust for Historic Preservation. The museum displays information on seaborne commerce and immigration, including a database containing names of over 133,000 immigrants who entered the U.S. through Galveston.

THE HOUSTON FIRE MUSEUM, established in 1982 and housed in a historic firehouse, provides exhibits, educational programs and public events that explore the history of Houston's fire service. Originally Fire Station No. 7 and the first paid fire station built by the Houston Fire Department, the two-story building

opened in 1899 and had a steamer and hose wagon each pulled by horses. The museum is currently closed, but plans to reopen in 2023. Fully renovated, the museum is listed on the National Register of Historic Places.

THE PRINTING MUSEUM, founded in 1979, has interactive tours and exhibits with over 10,000 items in its permanent collection. Founded by four printers, the museum features ancient papyrus fragments, a Johannes Gutenberg Gallery and early American and Texan printing.

THE WOODLANDS CHILDREN'S MUSEUM provides a cooperative learning environment for children, including dynamic workshops and more than 15 interactive exhibits.

UNIVERSITY MUSEUM AT TEXAS SOUTHERN UNIVERSITY (UMUSE), opened in '00, has 11,000 square feet of exhibition space with acoustics for musical performances. The museum displays a collection of African and African American art.

Recurring Events and Festivals

JANUARY

Chevron Houston Marathon
Houston Boat Show
MLK Grande Parade
"Original" MLK, Jr. Birthday Parade
Texas Lunar New Year Houston

FEBRUARY

Mardi Gras! Galveston
World's Championship Bar-B-Que Contest

MARCH

Azalea Trail
Buffalo Bayou Regatta
Hermann Park Kite Festival
Houston Holi: Festival of Colors
Houston Livestock Show and Rodeo

APRIL

BP MS 150
Houston Art Car Parade
Houston Barbecue Festival
Houston Children's Festival
Houston Press Brewfest
Houston Turkish Festival
Japan Festival Houston
McDonald's Houston Children's Festival
Memorial Hermann IRONMAN Texas
North America Championship
The Nutcracker Market Spring
San Jacinto Day Celebration and Battle Reenactment
Southwest International Boat Show
The Woodlands Waterway Arts Festival
Tour de Houston
U.S. Men's Clay Court Championship
WorldFest: Houston International Film Festival

MAY

Cinco de Mayo Parade and Celebration
Comicpalooza
Dragon Boat Festival

Houston Polish Festival
Keels & Wheels Concours d'Elegance
Pasadena Strawberry Festival
Rails & Tails Mudbug Festival

JUNE

Houston Caribbean Festival
Juneteenth Celebration
Pride Houston
Texas Outlaw Challenge

JULY

Freedom Over Texas Festival
Great Texas Mosquito Festival
Star-Spangled Salute

AUGUST

AIA Sandcastle Competition
Houston Restaurant Weeks
Houston Shakespeare Festival
Theater District Open House
White Linen Night in the Heights

SEPTEMBER

Houston International Jazz Festival
Texas Kickoff
Fiestas Patrias
Oktoberfest Houston



Featuring the nation's largest parade of decorated automobiles, a.k.a. Art Cars.

OCTOBER

Bayou City Art Festival
Día de los Muertos at Sugar Land
Heritage Foundation
Grito Fest
Houston Black Heritage Music & Arts Festival
Houston Italian Festival
International Quilt Festival
Original Greek Festival
Pearland Art & Crafts on the Pavilion
Texas Contemporary Art Fair
Texas Renaissance Festival
Texian Market Days
Wings Over Houston Airshow

NOVEMBER

Annual Turkish Festival
Día de los Muertos at Discovery Green
H-E-B Thanksgiving Day Parade
Houston Open



Over 2.4 million patrons attended the 2023 Houston Rodeo. The annual 20-day rodeo and concert event is the biggest rodeo in the world.

Houston Zoo Lights
Ice @ Discovery Green
Interfaith Thanksgiving Service at Rothko Chapel
Lone Star Rally
Mayor's Holiday Celebration and Tree Lighting
Moody Gardens Festival of Lights
Puerto Rican and Cuban Festival
Texas Championship Native American Pow Wow

The Nutcracker Market
Veterans Day Celebration
Via Colori

DECEMBER

Christmas Boat Lane Parade
Christmas Village at Bayou Bend
Dickens on the Strand
Texas Bowl
Tamale Festival Houston
Tomball German Christmas Market & Festival



Since 2016, over 26,400 pounds of holiday lights have been recycled at the Zoo – the weight of approximately 80 adult black bears, according to the Houston Zoo.

Religious and Cultural Diversity

RELIGIOUS AND CULTURAL DIVERSITY

According to the Kinder Institute for Urban Research's 39th Annual Houston Area Survey, 80.1 percent of Harris County residents report that religion is "somewhat" or "very" important to them. Among those surveyed, 40.5 percent identify as Protestant, 30.1 percent identify as Catholic, 1.3 percent identify as Jewish, and 4.4 percent of respondents are of another religion. Of the remaining respondents, 18.3 percent have no religious affiliation, and 5.3 percent did not answer. As the nation's most diverse city, Houston is home to a wide array of faith traditions. One can experience Houston's religious diversity through the numerous mosques, synagogues, Hindu temples and a Zoroastrian cultural center in the region. Representative religious congregations in Houston include:

AL-NOOR MOSQUE Al-Noor Mosque, established in 1987, boasts a large gold dome that can be seen from I-69 and the Westpark Tollway. It is located in Houston's Hillcroft region, a vibrant center of South Asian culture within the city.

ANTIOCH MISSIONARY BAPTIST CHURCH, located in the heart of downtown, is a predominantly African-American church founded by freed slaves in 1866.

BAPS SHRI SWAMINARAYAN MANDIR, the first traditional Hindu Mandir of its kind in the U.S., is located in Stafford. The stones used to build the temple were quarried in Turkey and Italy, and then shipped to India where traditional artisans sculpted more than 33,000 individual pieces.

CENTRO ISLÁMICO, opened in early '16, is the nation's first Spanish speaking mosque. Located in a former industrial building on Houston's far southwest side, the building's inside has architectural elements of Moorish Spain.

CHAPEL OF ST. BASIL, located at Houston's Catholic University of St. Thomas in the Montrose district, is a cube-shaped chapel designed by renowned architect Philip Johnson.

CHRIST CHURCH CATHEDRAL was Houston's first religious congregation when founded in 1839 and is the only one still worshiping on its original site from the days when Houston was the capital of the Republic of Texas. In 1949, Christ Church became the cathedral for the Episcopal Diocese of Texas.

CO-CATHEDRAL OF THE SACRED HEART is a Catholic place of worship with a congregational history dating back to the 1890s. The current cathedral building opened in '08 and features a towering stained-glass display created by artisans in Florence, Italy.

CONGREGATION BETH YESHURUN, the largest conservative synagogue in the U.S., is important not only for its 120-year history but also for its location in the Meyerland area, which is known as the center of Houston's Jewish community.

ISMAILI JAMATKHANA AND CENTER, opened in '02, is set by a lake on an 11.5-acre site in Sugar Land. The center is a religious venue for Shi'a Ismaili Muslims in Houston, as well as a site for community events to stimulate the intellect, encourage dialogue and celebrate cultural diversity in the greater Houston area.

LAKWOOD CHURCH, housed in a former sports arena, is one of the largest religious congregations in the U.S. It is pastored by televangelist Joel Osteen and features both English and Spanish language services.

MTO SHAHMAGHSOUDI SCHOOL OF ISLAMIC SUFISM, located along Beltway 8, is a Sufi temple that is rich in art and architecture. The energy efficient design of the building features solar panels.

OUR LADY OF GUADALUPE CHURCH, founded in 1912 in Houston's Second Ward, was the first church in Houston to offer services in Spanish. The parish hosts the oldest Catholic grade school in Houston.

SAINTS CONSTANTINE & HELEN SERBIAN ORTHODOX CHURCH, built in 1896 and originally supported by the last czar of Imperial Russia, Czar Nicholas II, originally held services in Greek, Russian, and Serbian. Located in Galveston, the church celebrated its 125th anniversary in '21.

ST. MARTIN'S EPISCOPAL CHURCH, founded in 1952, has grown to become the largest Episcopal Church in North America with more than 9,800 members. The funerals for former president George H. W. Bush and his wife Barbara Bush were both held at St. Martin's where they had been active members since the 1950s.



ST. PAUL'S UNITED METHODIST CHURCH, founded in 1905, is in the heart of Houston's Museum District. The church is renowned for its choir and Neo-Gothic architecture.

TEXAS GUANDI TEMPLE, founded in 1999, welcomes Taoists, Buddhists and anyone who seeks respite, meditation or counsel. The building is a focal point of Houston Old Chinatown. An architect from China

designed the Texas Guandi Temple, the largest temple in the nation dedicated to Guandi. Materials for the building and for the interior also came from China.

THE ISLAMIC SOCIETY OF GREATER HOUSTON (ISGH) is the largest Islamic society in North America. Established in 1969, ISGH currently includes 21 Islamic Centers across the Houston metro.

ZARATHUSHTI HERITAGE AND CULTURAL CENTER, opened in May 1998, is built on a seven-acre site that was donated by community members. The Center is a house of worship for Irani Zarathushtis and Parsis from India, Iran and Pakistan.



Convention and Sports Facilities

AVENIDA HOUSTON, Avenida Houston, which opened in '17, is the entertainment district in front of the George R. Brown (GRB) Convention Center in downtown Houston. The 97,000-square-foot outdoor plaza connects Discovery Green's 12-acre park, public art installations, as well as two convention headquarter hotels adjoined to the GRB, the 1,200-room Hilton Americas and the 1,000-room Marriott Marquis. The area around Avenida Houston offers many retail and dining options, including several restaurants within the GRB.

SHELL ENERGY STADIUM, Shell Energy Stadium is a state-of-the-art, open-air stadium designed to host Houston Dynamo and Houston Dash soccer matches as well as additional sporting and concert events. It opened in May '12, and the 22,000-seat stadium was the first soccer-specific stadium in Major League Soccer located in a city's downtown district. In addition, the stadium has been home to Texas Southern University Tigers football since 2012.

CONSTELLATION FIELD opened in '12 as home of the Sugar Land Space Cowboys of the Pacific Coast League. The stadium hosts sporting events as well as concerts. It has a capacity of 7,500 spectators for baseball games (expandable to 10,000) and 9,500 for concerts.

GEORGE R. BROWN GRB CONVENTION CENTER, one of the nation's largest convention centers, opened in 1987. GRB offers nearly 2 million square feet of exhibit and meeting space, including 773,000 square feet total of exhibit space with seven exhibit halls, more than 100 meeting rooms, and 3,600 fixed seating in its amphitheater. GRB's latest improvements, which include the development of a grand entryway and four restaurants, were completed in December '16.

In April '23, GRB hosted the FIRST® Robotics Competition drawing around 50,000 people from across the globe as hundreds of student robotics teams competed. Houston will also host the 2024 and 2025 FIRST Championship events.



MINUTE MAID PARK, the Houston Astros' retractable-roof downtown baseball stadium with seating for 41,000, opened in April '00. In '19, a \$25-million renovation to the stadium's suite level, to be paid for by the Astros, was approved by the Harris County Houston Sports Authority. The stadium's ornamental train, positioned 90 feet above the field on the left-field wall, makes its way along the 800-foot track whenever the Astros score a homerun.

FERTITTA CENTER, formerly known as Hofheinz Pavilion, is home to the University of Houston Cougars men's and women's basketball teams. The 7,100-seat multipurpose area, built in 1969, underwent a \$60-million transformation in '18, including the addition of a seating bowl bringing fans only 10 feet from the sideline and a new audio system, sports lighting, and video boards.

NRG PARK, which occupies 350 acres and offers 26,000 parking spaces, is among the most versatile sports and meeting complexes in the United States. Hosting over 500 events annually, NRG Park includes the following venues:

NRG STADIUM, a 71,995-seat football stadium with a retractable roof and natural grass, opened in '02. It is home to the National Football League's Houston Texans and the Houston Livestock Show and Rodeo.

NRG CENTER, opened in '02, has 1.4 million square feet, which includes 706,000 square feet of contiguous exposition space and 59 meeting rooms.

NRG ARENA has 350,000 square feet of exhibit space, an 8,000-seat arena, and a 2,000-seat pavilion.

NRG ASTRODOME debuted in 1965 as the first full-enclosed sports stadium seating over 70,000. It was added to the national register of historic places in '14.

OTHER SPORTS VENUES

RICE STADIUM, which opened in 1950, is a 47,000-seat football stadium located on the Rice University campus. It has been the home of the Rice Owls football team since its completion in 1950 and hosted Super Bowl VIII in 1974. It was at this stadium in 1962 where President John F. Kennedy made his famous challenge to America, to place a man on the moon and bring him safely home again by the end of the decade.

TDECU STADIUM, which opened in August '14, is a \$125-million, 40,000-seat football stadium located on the campus of the University of Houston. To ensure the best level of comfort for Houston fans and student athletes, sun and shade studies were conducted prior to construction.

TOYOTA CENTER, which opened in '03, is a sports and entertainment center located downtown. It is home to the National Basketball Association's Houston Rockets. The center can seat 18,300 for basketball and up to 19,000 for concerts.

PROFESSIONAL TEAMS IN GREATER HOUSTON



HOUSTON ASTROS
'17 and '22 World Series Champions
Major League Baseball's
American League
Minute Maid Park



HOUSTON ROCKETS
Western Conference in the
National Basketball Association
Toyota Center



HOUSTON DASH
National Women's Soccer League
BBVA Compass Stadium



HOUSTON TEXANS
American Football Conference in
the National Football League
NRG Stadium



HOUSTON DYNAMO
Major League Soccer's
Western Conference
BBVA Compass Stadium



HOUSTON ROUGHNECKS
West Division of the
Xtreme Football League
TDECU Stadium



HOUSTON ROLLER DERBY
Women's Flat Track Derby Association
Revention Music Center

SUGAR LAND SPACE COWBOYS
'18 Atlantic League World Champions
Pacific Coast League
Constellation Field



HOUSTON SABERCATS
Major League Rugby
Aveva Stadium



Parks and Recreation

Houston contains 44,480 acres of parkland and 699 parks, according to The Trust for Public Land's '22 City Parks report.

- Parks represent 12.0 percent of the city's adjusted land area in '22.
- Sixty percent of Houston residents live within a 10-minute walk of a park, which is six percent above the national average.
- Houston's oldest municipal park is Sam Houston Park, established 1899, while the area's largest municipal park is Cullen Park with 9,270 acres. Cullen Park is also one of the largest parks in the U.S. The most visited park in the Houston region is Hermann Park, with six million visitors annually.
- There are 18.5 acres of total parkland per 1,000 residents, well above the Median of 15.1 acres per 1,000 residents for cities of similar density.



CITY OF HOUSTON PARKS

Houston Parks and Recreation Department (HPARD) oversees 381 developed municipal parks and more than 167 green spaces, which together encompass approximately 39,501 acres.

HPARD owns and operates 60 community centers across the city along with the Metropolitan Multi-Service Center.

MAJOR CITY OF HOUSTON PARKS

CULLEN PARK (10,488 acres)

LAKE HOUSTON WILDERNESS PARK (4,787 acres)

MEMORIAL PARK (1,504 acres)

HERMAN BROWN PARK (717 acres)

EISENHOWER PARK (682 acres)

KEITH-WIESS PARK (499 acres)

HERMANN PARK (445 acres)

BUFFALO BAYOU PARK (160 acres)

MACGREGOR PARK (85 acres)

Metropolitan Multi-Service Centers provide access to year-round activities for children and adults with disabilities.

CITY OF HOUSTON PARK AMENITIES

232 Playgrounds

161 Baseball & Softball Fields

27 Water Spray Grounds

13 Dog Parks

201 Tennis Courts

87 Soccer Fields

20 Volleyball Courts

8 Golf Courses

173 Basketball Courts

75 Practice Backstops

16 Football/Rugby/
Cricket/Lacrosse Fields

7 Skate Parks

165.3 Miles of Trails

38 Pools

14 Fitness Centers

4 Nature Centers

CULLINAN PARK, a 754-acre park in Sugar Land, is currently undergoing renovations to improve its trail routes, playgrounds and include additional parking spaces.

MEMORIAL PARK, a 1,504-acre park, opened the Clay Family Eastern Glades in summer of '20. The Clay Family Eastern Glades is a 100-acre urban oasis within Memorial Park featuring a lake, picnic pavilions and a boardwalk. In early '23, the Land Bridge and Prairie project was completed, creating a land bridge over Memorial Drive and a new network of trails for people and wildlife.

HOUSTON BOTANIC GARDEN, a 132-acre botanical garden, opened in '20. The botanical garden provides a vast collection of plants from around the world.

DOWNTOWN HOUSTON PARKS

ALLEN'S LANDING ON BUFFALO BAYOU, described as "Houston's heart," Allen's Landing is the spot where in 1836 that August C. and John K. Allen stepped ashore and claimed Houston as their own. Currently, 1.76-acre Allen's Landing is undergoing major revitalization and rejuvenation.

BUFFALO BAYOU PARK, on the northwest side of downtown, visitors can enjoy the greenbelt consisting of hike and bike trails; exercise stations; the Jim Mozola Memorial Disc Golf Course; a dog park; canoeing and kayaking trails; and children's playgrounds.

CITY HALL/HERMANN SQUARE is a small park dominated by a reflecting pool. The front of Houston's City Hall steps down to the park and is used almost daily for festivals, protests, and concerts. The reflecting pool is planked over to accommodate larger events.

DISCOVERY GREEN is downtown's premier green space, encompassing 12 acres, surrounded by the George R. Brown Convention Center, hotels,

and downtown sports arenas. The park includes two restaurants, a kids' play area, lake, two dog runs, a multi-use amphitheater, an event lawn, and more.

ELEANOR TINSLEY PARK sits inside a greenbelt that winds from Shepherd Drive on the west to Bagby Street on the east. The heart of the park near downtown is the site of major Houston festivals, including the city's Fourth of July Fireworks.

MARKET SQUARE PARK is anchored by a central lawn, picnic areas, a plaza for performances, and Lauren's Garden, a memorial that honors all lost on September 11, 2001.

SAM HOUSTON PARK on the western edge of downtown includes 10 historic structures, including a St. John Church and a log cabin dating to 1823.

SESQUICENTENNIAL PARK was created to commemorate Houston's 150th birthday in 1986. The park features cascading waterfalls, distinctive lighting, a gazebo, and a promenade. Visitors can enjoy the waterway, green spaces, hike-and-bike trails, and boat launches.

MAJOR HARRIS COUNTY PARKS

CULLEN PARK (9,270 acres)

GEORGE BUSH PARK (7,800 acres)

LAKE HOUSTON WILDERNESS PARK (4,786 acres)

SHELDON LAKE STATE PARK (2,800 acres)

BEAR CREEK PIONEERS PARK (2,154 acres)

BAYTOWN NATURE CENTER (450 acres)

HERMANN PARK (445 acres)

MERCER ARBORETUM & BOTANIC GARDENS (350 acres)

MATZKE PARK (320 acres)

JESSE H. JONES PARK & NATURE RESERVE (312 acres)

ALEXANDER DEUSSEN PARK (309 acres)

TOM BASS REGIONAL PARK (115 acres)

MASON PARK (104 acres)

KICKERILLO MISCHER PRESERVE (80 acres)

SYLVAN BEACH PARK (31 acres)



STATE PARKS

BRAZOS BEND STATE PARK, 45 miles southwest of downtown Houston, features hike and bike trails, lakes, observation towers, camping and picnic areas. The park, which covers 5,000 acres, is also known for its waterfowl and alligators. The state began purchasing the land in '76 and the park opened in '84.

GALVESTON ISLAND STATE PARK provides access to Gulf of Mexico beaches and amenities such as fishing, hiking, kayaking, camping, swimming and birdwatching. The park is located southwest of Houston in Galveston County.

SAN JACINTO BATTLEGROUND STATE HISTORIC SITE is a 1,300-acre site, 20 miles east of downtown that includes the towering 567-foot-tall San Jacinto Monument and the San Jacinto Museum of History. Walk in the Texian soldiers' footsteps on the grounds, explore the museum, and ride the elevator to the top of the monument to take in a bird's-eye view of where Texas' independence was won.

SHELDON LAKE STATE PARK & ENVIRONMENTAL LEARNING CENTER is 15 minutes from downtown Houston. The park has a lake, ponds, wetlands, woods, and prairie to explore. The park is a 2,800-acre outdoor education and recreation center in northeast Harris County. It opened in '55 and became a state park in '84.

STEPHEN F. AUSTIN STATE PARK is 50 miles west of Houston on the banks of the Brazos River. It offers camping, hiking, picnicking and wildlife viewing.



FORESTS

SAM HOUSTON NATIONAL FOREST, one of four National Forests in Texas, is located 50 miles north of Houston. The forest contains 163,037 acres between Huntsville, Conroe, Cleveland, and Richards, Texas. With land in Montgomery, Walker, and San Jacinto counties, the Sam Houston National Forest is intermingled with privately owned timberlands and small farms.

W. GOODRICH JONES STATE FOREST, an urban working forest covering 1,733 acres, is located 40 miles north of Houston near Conroe in Montgomery County. The forest provides 15 miles of trails, horseback riding, and two small lakes for fishing. It is owned and administered by the Texas A&M Forest Service.

WILDLIFE REFUGES

BRAZORIA NATIONAL WILDLIFE REFUGE: This refuge, located an hour south of Houston, encompasses over 44,000 acres of coastal prairie, freshwater sloughs, and marshes. The refuge is part of the Great Texas Coastal Birding Trail and lies in the Central Flyway which includes both coastal and trans-oceanic bird migration paths. It is home to more than 320 species of birds, 95 species of reptiles and amphibians, and 130 species of butterflies and dragonflies.

ANAHUAC NATIONAL WILDLIFE REFUGE: Located an hour east of Houston, this refuge covers over 34,000 acres of coastal wetlands and prairies. The refuge's Shoveler Pond Auto-Tour loop, Butterfly Garden, moist soil units and Skillern Tract are just a few of the places on the refuge where the wildlife

watching is spectacular. Here you will find excellent views of alligators and opportunities to see any of the six rail species.

SAN BERNARD NATIONAL WILDLIFE REFUGE: This refuge is located about an hour southwest of Houston and encompasses over 25,000 acres of wetlands and coastal prairies. It

provides habitat for over 300 species of birds, as well as American alligators, river otters, and bobcats.

HOUSTON ZOO

The Houston Zoo, founded in 1922, receives more than 2 million visitors per year and is the second most

visited zoo in the U.S. Occupying 55 acres in Hermann Park and accredited by the Association of Zoos and Aquariums, the zoo is home to more than 700 species and over 280 employees. In 2022, the Houston Zoo celebrated its 100th anniversary by completing the Galapagos Islands exhibit, which opened in early 2023.



HISTORY

1830s

- 1836 On April 21, General Sam Houston's army wins Texas' independence from Mexico in the Battle of San Jacinto.
- 1836 Houston founded on Aug. 30 by brothers Augustus C. and John K. Allen, who pay just over \$1.40 per acre for 6,642 acres near headwaters of Buffalo Bayou.
- 1836 Allen Brothers call on Gail Borden (publisher, surveyor, originator of condensed milk) and Thomas H. Borden to survey the site. Gail Borden lays out the town's streets 80' wide, with the principal east-west street (Texas Ave.) 100' wide.
- 1837 General Sam Houston, first president of the Republic of Texas, signs an act authorizing Houston to incorporate. Houston is capital of the Republic from 1837-1839.
- 1837 The Laura is the first steamship to visit Houston.
- 1838 A bucket brigade, Protection Fire Company No. 1, is formed to fight fires.

1840s

- 1840 On April 4, seven Houston businessmen form the Houston Chamber of Commerce.
- 1841 Houston Police Department is formed.
- 1842 Texas' oldest newspaper, The Galveston County Daily News, is first published.
- 1846 Texas becomes the 28th state.

1850s

- 1850 First census after Texas joins the United States counts 2,396 Houstonians. Galveston, with 4,117 residents, is the state's largest city.
- 1853 Houston's first railroad — the Buffalo Bayou, Brazos & Colorado Railroad — begins operations.
- 1853 Texas Legislature appropriates \$4,000 for Buffalo Bayou improvements.
- 1859 Three competing firefighting companies combined into the Houston Volunteer Fire Department.

1860s

- 1861 Houston and Harris County vote to secede from the Union. During the Civil War, the closest fighting is at Galveston.
- 1865 On June 19, Federal troops arrive in Galveston to enforce the Emancipation Proclamation of 1863, becoming the Juneteenth holiday.
- 1866 Houston's first bank, First National Bank, is founded.

- 1867 Houston Stonewalls defeat Galveston Robert E. Lees 35-2 in first recorded baseball game in Houston.
- 1868 Houston's first trolley cars (mule-drawn) appear.
- 1868 Houston's first gaslights are installed.
- 1870 Texas readmitted to the Union.
- 1870 Census shows Houston's population up to 9,332. Harris County's has reached 17,375, ranking it second in the state.
- 1870 Congress designates Houston a port; first survey of Houston's proposed ship channel is conducted.
- 1872 Congress makes its first appropriation — \$10,000 — for ship channel improvements.
- 1874 Houston Board of Trade and Cotton Exchange are organized.
- 1875 First grain elevator is built on the Houston Ship Channel.
- 1877 Houston's first free public schools are established.

1880s

- 1880 Houston's first telephone exchange is created.
- 1882 Houston Electric Light Co. is organized. Houston and New York are the first cities to build electric power plants.
- 1882 Houston gets its first arc light.
- 1887 Sisters of Charity open Houston's first general hospital.
- 1891 Houston is first Texas city with electric streetcars.
- 1895 Houston Business League is founded (became Houston Chamber of Commerce in 1910).
- 1895 Houston Fire Department replaces Houston Volunteer Fire Department.
- 1897 Automobile first appears in Houston as an advertising gimmick.
- 1897 Houston's first asphalt street paving is laid on Franklin St.
- 1898 Galveston Country Club opens with Texas' first recorded professionally designed golf course.
- 1899 First Houston city park opens. (This site, now Sam Houston Park, contains several of Houston's earliest buildings.)

1900s

- 1900 A Category 4 hurricane — deadliest in U.S. history — strikes Galveston, claiming more than 6,000 lives and causing property damage exceeding \$30 million (\$902 million in 2019 dollars).
- 1901 Houston Left Hand Fishing Club purchases the city's first automobile from Olds Motor Works of Detroit.
- 1901 Oil discovered at Spindletop, and later discoveries at Humble in 1905 and Goose Creek in 1906, put Houston in the center of new oil and oilfield equipment development.

- 1902 Congress appropriates \$1 million for work on the Houston Ship Channel.
- 1909 Houston Museum and Scientific Society, Inc., predecessor of the Houston Museum of Natural Science, is organized.
- 1909 Houston Country Club opens with Houston's first professionally-designed 18-hole golf course.

1910s

- 1910 Congress accepts, from a group of Houston businessmen headed by the Houston Chamber of Commerce, a novel plan to split ship channel development costs between Houston and the federal government.
- 1912 Rice Institute (now Rice University) begins classes.
- 1913 Houston Symphony is established.
- 1914 George Hermann donates 285 acres to the city for a public park near Rice Institute.
- 1914 The 25-foot-deep Houston Ship Channel is completed and formally dedicated.
- 1915 First deepwater vessel, the S.S. Satilla, calls at Houston.

1920s

- 1920s-1930s Oil refineries proliferate along the Ship Channel, taking advantage of inexpensive waterborne shipping.
- 1921 Houston adopts ordinance dedicating tax monies to its library system.
- 1923 Second National Bank becomes Houston's first air-conditioned building.
- 1924 Houston Museum of Fine Arts, the first fine arts museum in Texas, opens.
- 1926 Natural gas first piped into Houston.
- 1927 Houston Colored Junior College, the forerunner of Texas Southern University, established.
- 1927 Houston Junior College (now the University of Houston) is established.
- 1928 National Democratic Convention is held in Houston.
- 1928 Municipal airport opened; air mail service to Houston begins.
- 1929 City Planning Commission recommends that Houston adopt a zoning ordinance but finds scant support.

1930s

- 1930 Census ranks Houston as the state's most populous city at 292,352.
- 1932 First Houston Fat Stock Show & Rodeo (now Houston Livestock Show and Rodeo) held.
- 1934 Intracoastal Canal links Houston to Mississippi River navigation system.
- 1935 Braniff International inaugurates first scheduled air passenger service to Houston.

1940s

- 1940s ○ Petrochemical complex develops, taking feedstocks from nearby refineries.
- 1941 ○ New master plan for Houston thoroughfares emphasizes a loop system.
- 1943 ○ Texas Medical Center is founded.
- 1946 ○ Houston Golf Assn. hosts its first PGA Tour event — now the Houston Open, 10th oldest event on the PGA schedule.
- 1947 ○ Houston College for Negroes acquired by Texas Legislature; established as Texas State University for Negroes (now Texas Southern University).
- 1947 ○ Alley Theatre established.
- 1947 ○ Engineering begins on the Gulf Freeway, Texas' first freeway.
- 1948 ○ Dec. 31 annexation expands Houston's area from 74.4 to 216 square-miles.
- 1948 ○ Port of Houston ranks second nationally in total tonnage.
- 1949 ○ KLEE-TV broadcasts first Houston commercial TV program.

1950s

- 1953 ○ KUHT-TV, the nation's first public broadcast TV station, goes on the air.
- 1955 ○ Houston Grand Opera Association and Houston Ballet founded.
- 1955 ○ Houston metro area population reaches 1,000,000.

1960s

- 1962 ○ NASA's Manned Spacecraft Center moves to Houston.
- 1965 ○ First event held in the Astrodome.
- 1969 ○ Houston Intercontinental Airport begins operations.
- 1969 ○ "Houston" is the first word spoken from the lunar surface.

1970s

- 1970 ○ The Galleria opens.
- Shell Oil Co. relocates corporate headquarters to Houston. More than 200 major firms move headquarters, subsidiaries and divisions here in the 1970s.
- 1971 ○
- 1973 ○ Arab oil embargo quadruples oil prices in 90 days, fueling Houston's 1973-1981 economic boom.
- 1978 ○ Voters approve and fund Metropolitan Transit Authority.

1980s

- 1982 ○ Employment peaks at 1,583,400 in March before onset of recession.
- 1983 ○ 155 office buildings completed in 12 months.
- 1983 ○ Voters approve creation of Harris County Toll Road Authority.

- 1987 ○ Trough of recession in January; net recession loss of 221,900 jobs.
- 1987 ○ Wortham Center, home to Houston Ballet and Houston Grand Opera, opens.
- 1989 ○ Houston Chamber of Commerce, Houston Economic Development Council and Houston World Trade Association combine to form Greater Houston Partnership.

1990s

- 1990 ○ Houston economic recovery complete; April job count above March 1982 level.
- 1990 ○ Houston hosts 16th annual Economic Summit of Industrialized Nations.
- 1991 ○ Houston City Council mandates first zoning regulations.
- 1992 ○ Republican National Convention held in Houston.

2000s

- 2000 ○ Census finds Houston MSA has no racial or ethnic majority.
- 2000 ○ Minute Maid Park, home of Major League Baseball's Houston Astros, opens.
- 2001 ○ Tropical Storm Allison inundates Houston June 5-9, claiming 22 lives and inflicting \$4.9 billion in property damage, with storm precipitation as high as 35.67 inches in some areas.
- 2002 ○ NRG Stadium, home of the National Football League's Houston Texans, opens.
- 2002 ○ Hobby Center for the Performing Arts opens.
- 2003 ○ Toyota Center, home of the National Basketball Association's Houston Rockets, opens
- 2004 ○ Houston's first modern light rail line, 7.5-miles long, begins operations.
- 2004 ○ Houston hosts NFL Superbowl XXXVIII
- 2005 ○ More than 100,000 evacuees flee to Houston from southern Louisiana in the wake of Hurricane Katrina.
- 2008 ○ Hurricane Ike makes landfall Sept. 13 at Galveston as a Category 2 storm, claiming at least 70 lives and causing some \$27 billion in property damage along the Texas Gulf Coast, ranking it third most costly among U.S. hurricanes.

2010s

- 2011 ○ By November, Houston returns to 2008 pre-recession employment levels; first major metro to do so.
- 2012 ○ BBVA Compass Stadium, home of Major League Soccer's Houston Dynamo, opens.
- 2013 ○ A \$60-billion boom in chemical plant construction begins along the Gulf Coast. The construction boom helps to offset job losses in energy over the next two years.
- 2014 ○ Oil prices peak at \$108 per barrel in June before plunging 75% over the next 18 months, devastating the local energy industry. Nearly 80,000 energy-related jobs are lost.

- 2015 ○ Hobby Airport launches international service with the opening of the airport's first international terminal.
- 2015 ○ Ellington Airport receives a commercial spaceport license by the Federal Aviation Administration.
- 2016 ○ The energy downturn bottoms out and a slow recovery begins.
- 2017 ○ Houston hosts NFL Super Bowl LI.
- 2017 ○ Hurricane Harvey inundates Houston with five days of rain. Total rainfall exceeds 50 inches in many parts of the region.
- 2017 ○ The American League Houston Astros defeat the National League Los Angeles Dodgers to win Major League Baseball's World Series.
- 2019 ○ The world celebrates the 50th anniversary of the Apollo 11 lunar landing on July 20.
- 2019 ○ The World Health Organization declares the emergence of a mysterious pneumonia-like virus in Wuhan, China on December 31.

2020s

- 2020 ○ The COVID-19 pandemic arrives in Houston infecting nearly 85,000 residents and causing nearly 1,200 deaths during the first four months of the outbreak. Over 350,000 jobs are lost in March and April. A tepid economic recovery begins in May.
- 2020 ○ On June 2, more than 60,000 Houstonians gather at Discovery Green and to City Hall to protest systematic racism and police brutality, the demonstration brought on by the death of native Houstonian George Floyd, killed by Minneapolis police while being taken into custody.
- 2020 ○ In December 2020, the City of Houston receives first shipment of COVID-19 vaccine.
- 2021 ○ Winter Storm Uri causes Houston temperatures to plunge to record lows. The city records up to four inches of sleet and snow.
- 2021 ○ Rothko Chapel celebrates its 50th anniversary as a landmark of modern art.
- 2021 ○ Rice University opens The Ion, a tech-focused hub in the Innovation Corridor.
- 2022 ○ ExxonMobil announces their HQ relocation, marking the third Fortune 500 company moving to Houston in 14 months.
- 2022 ○ The American League Houston Astros defeat the National League Philadelphia Phillies to win their second MLB World Series in.
- 2023 ○ Houston hosts the NCAA Men's Final Four for the fourth time.

PRESENTING SPONSOR



FIFTH THIRD BANK



GREATER HOUSTON
PARTNERSHIP.