

# GLOBAL '22 HOUSTON

INTERNATIONAL TRENDS AND THEIR IMPACT ON THE REGION



GREATER HOUSTON **PARTNERSHIP**

# GLOBAL HOUSTON

2022

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sponsored by



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## 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 ensure Houston's place among the world's great global cities 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 900+ member companies. 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 goals of making Houston greater.

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# INTRODUCTION

The Greater Houston Partnership and its predecessor organizations have a long history of analyzing and promoting the region's ties to the global economy. In 1906, the Houston Business League (predecessor to the Houston Chamber of Commerce) published a 32-page pamphlet titled *Houston, Distributing Center of the Southwest*. The document notes that the U.S. Congress had recently appropriated \$1.0 million for the deepening and widening of the Houston Ship Channel. It also anticipates the benefits the Panama Canal will have on the region once it opens.

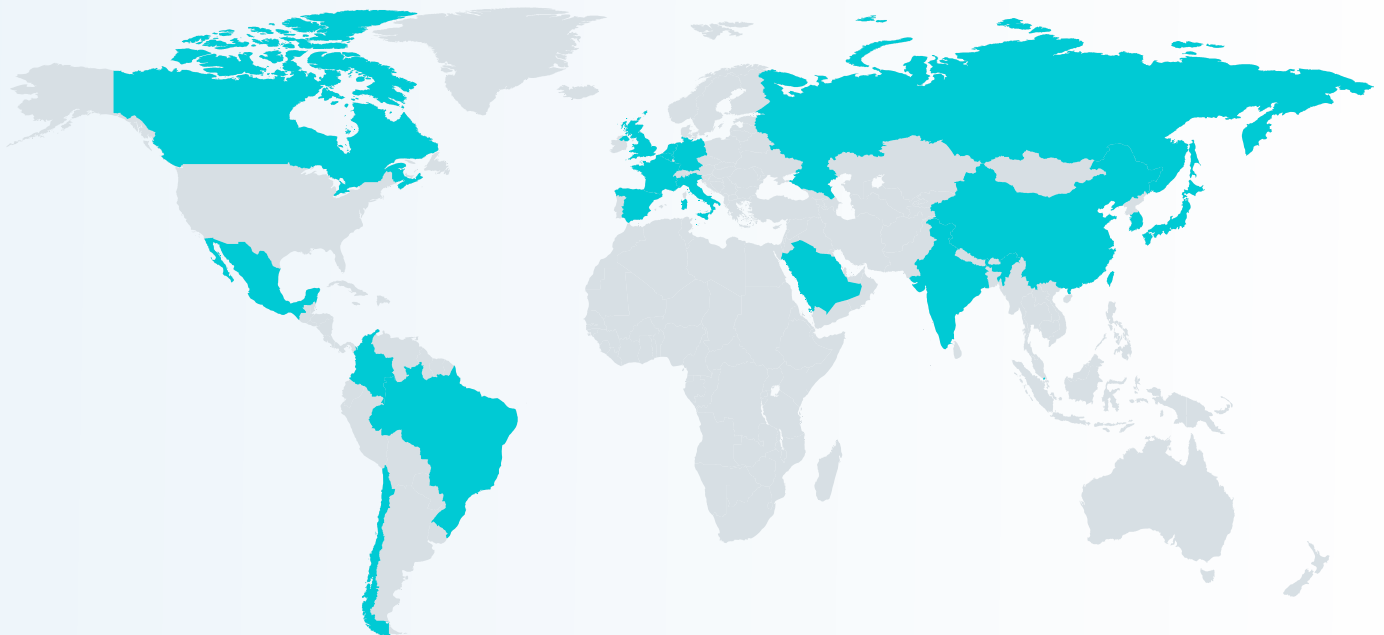
The 1937 edition of *Houston Facts*, a publication that's still published today, noted the Port of Houston handled 28.5 million tons the year before, ranking it the fourth busiest port in the nation. The value of that tonnage was estimated at \$643.5 million. Cotton was a major export.

Fast-forward fifty years and the 1987 edition of *Houston Facts* notes that 623 firms headquartered in 51 nations had offices in Houston. Fifty-one foreign governments had consular offices here, making Houston's consular corps the fifth largest in the nation. Japan, West Germany, and Mexico were Houston's leading trading partners.

By 2017, Houston had 20 foreign-flag air carriers, nearly 1.6 million foreign-born residents, and nearly 5,000 firms doing business globally. Source: *Houston Facts*. Today, Houston is recognized as a major global city. The details can be found on page X.

Houston's ties to the globally economy have grown with the city. In many ways, those ties propelled Houston's growth. The region's fortune now rise and fall with those of the global economy. In the following pages, the Partnership examines our ties to the global economy and what they portend for Houston's future growth.

## TOP 20 TRADING PARTNERS





## RECOVERY NEARLY COMPLETE

Two and a half years have passed since the first COVID-19 case was detected in Wuhan, China. Since then, more than 500 million people have contracted the virus worldwide and over 6.2 million have died. The U.S. was hit hard by the virus, logging 81 million infections and 990,000 COVID deaths. In metro Houston, 1.6 million residents, one in every five, contracted the virus and nearly 16,000, one in every 450, have died.

Overseas air travel all but ceased. International migration, key to Houston's population growth, ground to a near halt. Global oil consumption fell, dragging crude prices down with it.

The recovery, which began mid-'20, accelerated last year. As of March '22, the U.S. had recovered 92.8 percent of its pandemic job losses. U.S. gross domestic product now exceeds pre-pandemic levels. Initial claims for

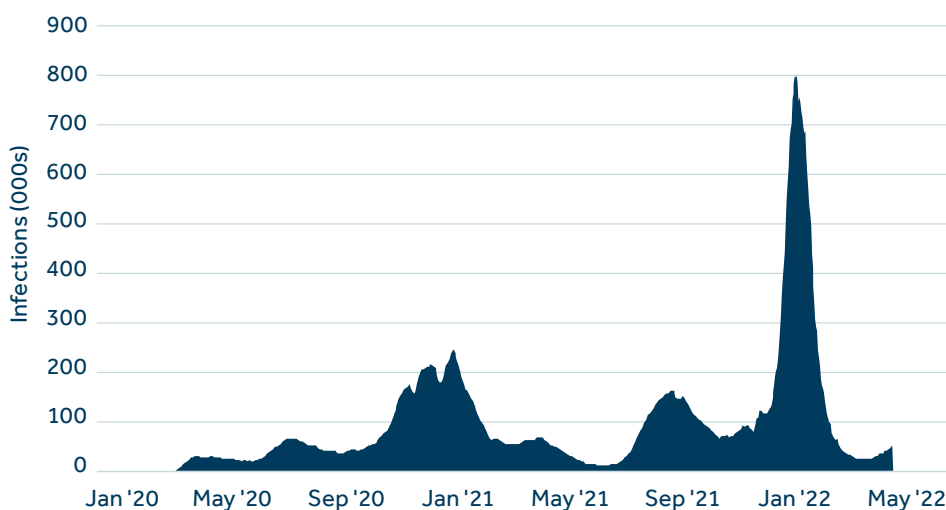
Houston has nearly recovered from the economic damage caused by the pandemic. As this report goes to press, the metro area had recouped 92.2 percent of jobs lost in March and April of '20.

- Employment in educational services, finance, government (primarily public education), health care, restaurants and bars, retail, and transportation and warehousing now exceeds pre-pandemic levels.
- Administrative support (i.e., outsourcing), arts, entertainment, and recreation, information, other services, and professional, scientific, and technical services are near full recovery.
- Construction, energy, hotels, manufacturing, real estate, equipment rentals, and wholesale trade still struggle.

The recovery can be seen in other sectors as well.

- The Houston Purchasing Managers Index (PMI) registered 58.5 in March. Readings over 50 generally indicate expansion in the economy, below 50, contraction. The PMI has held consistently above 50 since August '20.
- Sales and use tax collections for the 12 most populous Houston-area cities totaled \$1.1 billion in the 12 months ending February '22, up 20.6 percent from the \$952.3 million collected over the same period a year ago. Collections have trended up since February '21.
- Over \$7.0 billion in construction contracts were awarded in Q1/22. That's the strongest first quarter on record.
- The industrial/warehouse market absorbed 5.6 million square feet of space in Q1/22. Though not a record, it does mark the 51st consecutive quarter for positive absorption in the region.

### NEWLY REPORTED U.S. COVID CASES 7-Day Moving Average



Source: Centers for Disease and Prevention

The pandemic caused the worst economic downturn since the Great Depression. The global economy shrank by 6.7 percent during the first year of the pandemic. Metro Houston lost nearly 360,000 jobs, more than in the '80s oil bust (221,000) and the Great Recession (120,500) combined. The local unemployment rate hit 14.7 percent in April '20, the highest on record. Six months into the pandemic, nearly 300,000 Houstonians were collecting unemployment benefits.

Every sector of the economy suffered, especially those tied to global trade. Houston's exports fell by more than 25 percent. Tonnage through the customs district slumped. Foreign investment slowed to a trickle.

unemployment are at their lowest level since the '70s. And at 3.6 percent, the U.S. unemployment rate is marginally above that recorded prior to the pandemic, 3.5 percent.

COVID-19 remains a threat. However, the threat appears to be diminishing. In mid-January '22, the world averaged 3.4 million new infections daily. By early May, that had slipped to under 600,000. Over the same period, deaths fell from 11,000 per day to under 2,500. Each new wave of the virus (there have been five) has inflicted less damage on the economy than the previous wave. Most nations have found ways to mitigate the risks of COVID without disrupting their economies.

- Houston's struggling office market absorbed 1.0 million square feet of space in Q1/22, the first quarter since Q1/20 the market has absorbed any space.

The Partnership monitors dozens of metrics that gauge the health of Houston's economy. What do these indicators say about Houston's ties to the global economy?

- Exports set a record last year.

- The Houston/Galveston Customs District now handles more tonnage than it did prior to the pandemic.
- Container traffic at the Port of Houston continues to set records.
- Overseas investors are once again snapping up Houston real estate.
- Foreign-owned companies are expanding their operations in Houston, though activity remains somewhat below pre-COVID levels.

- International migration slowed in '21, but the pace should quicken as travel restrictions are lifted.
- Oil prices have recovered, though not drilling activity. The industry is hiring, but at a snail's pace.

In summary, international activity in Houston has for the most part returned to pre-pandemic levels. Those segments which haven't fully recovered are well on their way to doing so. The details follow.

## EXPORTS

COVID had a short-lived impact on Houston's exports. Shipments fell 30.1 percent in the first half of '20, began to improve in the second half of '20, and were fully recovered by the second half of '21. Houston exported over \$41.0 billion in goods and commodities in Q4/21, the best quarter on record. That capped off a record year for Houston. Exports topped \$140 billion, well above the previous record of \$128.7 billion set in '18.

### METRO HOUSTON EXPORTS \$ Billions



Source: U.S. International Trade Administration

### TOP U.S. EXPORTING METROS - 2021

Metro	Exports \$ Billions
<b>Houston</b>	<b>140.8</b>
New York	103.9
Los Angeles	58.6
Chicago	54.5
Dallas-Fort Worth	43.2
Miami	36.0
New Orleans	35.8
Detroit	35.4
Portland	33.8
El Paso	32.4

Source: U.S. Census Bureau

### About the Data

The export data comes from the U.S. Census Bureau's origin of movement (OM) series. Unlike customs district data which measures trade passing through a region, the OM series identifies the zip code from which a good began its export journey. For example, an oil field pump manufactured in Houston may be trucked to Los Angeles then loaded onto a ship destined for Asia. Though the export leaves the U.S. via the Port of Los Angeles, it began its export journey in Houston. Census records that as a Houston export.

Houston's top exports should be no surprise. They are chemicals, plastics, refined products, crude, oil field equipment, and exploration and production activities. In '20, the latest year for which this data is available, those six sectors accounted for 81.2 percent of the region's exports. The top destinations for Houston's exports are Brazil, Canada, China, Japan, Mexico, Netherlands, Singapore, and South Korea.

### It's Not About the Money

Exports support Houston-area jobs. The International Trade Administration (ITA) estimates that every \$1 billion in services provided overseas supports

5,200 jobs back in the states. Every \$1 billion in manufactured goods exported supports 4,800 U.S. jobs. Every \$1 billion in energy exploration activity supports 3,700 jobs. Those ratios suggest exports support over 450,000 jobs, both direct and indirect, in Houston. That may somewhat overstate the impact chemicals and refined products exports have on

local employment. Those industries are more capital-intensive than labor-intensive, so fewer workers are needed to generate \$1 billion in exports.

Since '06, Houston's exports have grown at a 6.7 percent compound annual rate (CAGR). By comparison, Houston's population has grown at a 1.9 percent CAGR and employment at a 1.5 percent CAGR over the same

period. Houston ranked as the nation's top exporting metro in '21, a position it has held nine out of the past 10 years. As retailers work to rebuild their inventories, as factories struggle to resolve supply chain issues, as the global economy continues to grow, so will the demand for Houston's exports, and so will Houston employment.

## CUSTOMS DISTRICT/ TRAFFIC

The Houston/Galveston Customs District set a tonnage record in '21. The eight ports that comprise the district handled over 351.5 million metric tons of goods and commodities, up 3.1 percent over the previous year.<sup>1</sup> Those shipments were valued at \$273.1 billion, up 40.5 percent from the previous year.

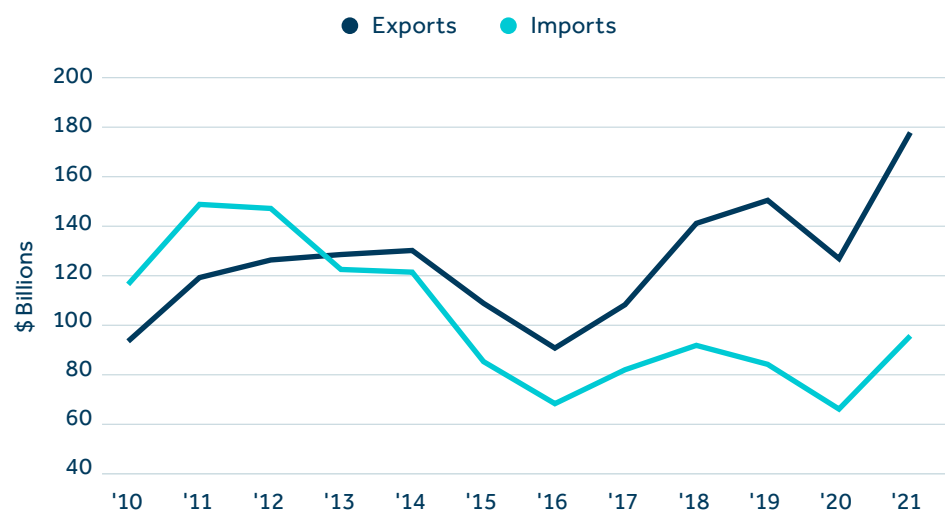
There are 44 U.S. customs districts. In '21, the Houston/Galveston Customs District ranked:

- First in total tonnage (351.4 million metric tons),
- Fifth in total value (\$273.1 billion),
- First in export tonnage (273.7 million metric tons),
- First in export value (\$176.9 billion),
- Second for import tonnage (77.8 million metric tons), and
- Ninth in import value (\$96.2 billion).

The Houston/Galveston district is one of the few where exports consistently exceed imports. Exports accounted for 64.8 percent of all shipments via Houston in '21. That's up from 51.1 percent in '16, the first year that exports overtook imports.

Los Angeles, New York, and Chicago may rank above Houston in total value, but exports comprise a smaller share of the cargoes they handle. In '21, exports accounted for 25.3

### HOUSTON/GALVESTON CUSTOMS DISTRICT TRAFFIC 12-Month Total



Source: U.S. Census Bureau

percent of shipments through Los Angeles, 24.4 percent through the New York, and 19.1 percent through Chicago.

#### About the Data

Customs district data differs from origin of movement (OM) data in several ways. First, districts don't align with metro areas. For example, the Houston/Galveston District includes two ports outside the Houston metro area—Corpus Christi and Port Lavaca. The Dallas district includes the inland ports of Austin, San Antonio, and Tulsa. The New Orleans district includes the ports of Little Rock, Vicksburg, and the FedEx hub in Memphis.

Second, the data reflects what passes through each district, which doesn't necessarily correspond with where something was manufactured or from where it originated. For example, the Laredo district is the third busiest in the U.S., yet the Laredo metro area has only the 217th largest U.S. economy. Most of what passes through Laredo are goods manufactured in the U.S., shipped to Mexico for final assembly, then returned via Laredo to the states. Houston, however, is the exception. Exports via the Houston/Galveston district reflect the region's industrial base: chemicals, crude and refined products, industrial machinery, electrical machinery, fabricated metal

<sup>1</sup> The Houston/Galveston Customs District includes the ports of Corpus Christi, Freeport, Galveston, Houston, Port Lavaca, Texas City, Bush Intercontinental Airport and Sugar Land Regional Airport.

products and plastics. It's reasonable to assume the bulk of these exports originated in Houston.

Third, district data provides a timelier view of export trends than does OM data. Customs district data is updated monthly; OM data is only quarterly. There's only a two-month lag from when the Census gathers district data and releases it to the public. There's a two- to three-quarter lag with OM data.

And fourth, district data provides a greater level of detail than OM data. Customs district data is available for over 200 of Houston's trading partners, OM data is available for fewer than 10. Customs district data is available for 97 categories of goods and commodity exports. OM data is available for only the top six commodities.

An analysis of Houston/Galveston Customs District data follows this report, but to summarize:

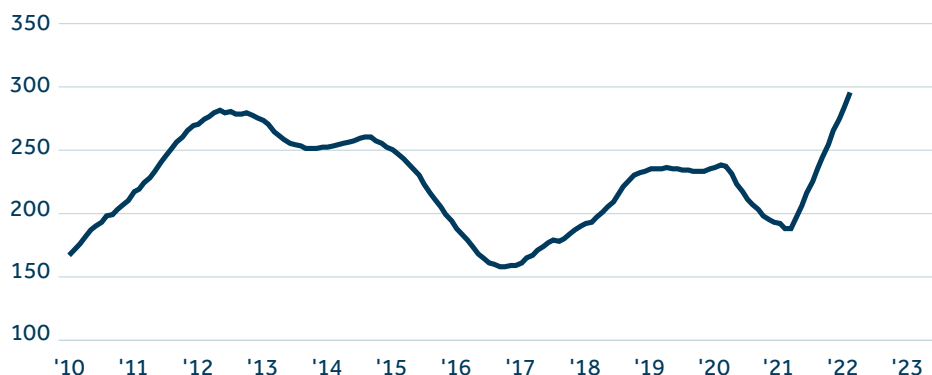
- Houston's leading trading partners are Belgium, Brazil, Canada, Chile, China, Colombia, France, Germany, India, Italy, Japan, Korea, Mexico, Netherlands, Russia, Singapore, Spain, Taiwan, Turkey, and United Kingdom.
- Through March of this year, exports are up 65.6 percent in value and 40.4 percent in weight compared

to the same period in '21.

- Over the same period, imports are up 67.4 percent in value and 25.8 percent in weight.

Exports and imports are both benefiting from higher commodity prices compared to last year.

## HOUSTON/GALVESTON CUSTOMS DISTRICT TOTAL TRADE 12-Month Total, \$ Billions



Source: U.S. Census Bureau

## CONTAINER TRAFFIC

Houston ranks as the nation's seventh busiest container port and handles over 70 percent of all container traffic on the U.S. Gulf Coast.<sup>2</sup>

Companies that import via Houston's Barbour's Cut and Bayport Container terminals tend to be household names: Anheuser Busch, Heineken, Igloo Products, Ikea, Red Bull North America, Rooms to Go, Samsung, Ramontina, Vestas and Walmart. The exporters are less well-known: Allenberg Cotton, Dow, ExxonMobil, Montachem International, Olam Cotton, Sasol Chemical, Shintech, Vinmar and World Food Programme.

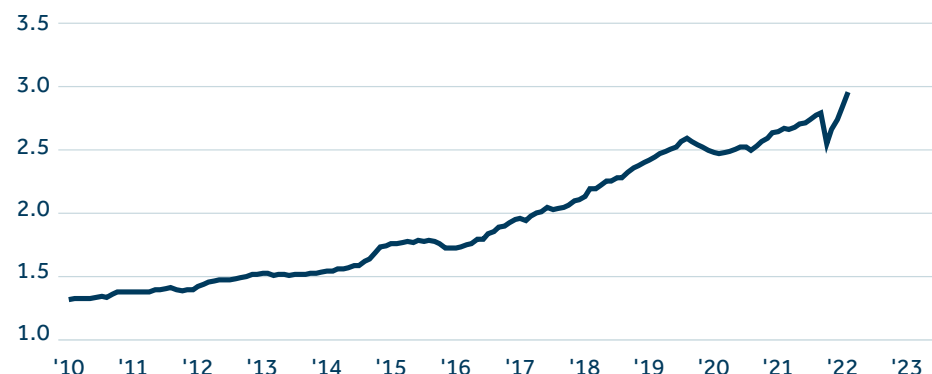
Container traffic fell during the early stages of the pandemic. March through June of '20 saw volumes down 11.5 percent compared with

the same period the year before. Shipments began to pick up as the global economy reopened. By June '21, volume exceeded pre-pandemic levels. The Port of Houston handled 2.7 million loaded containers TEUs

(twenty-foot-equivalent units) in '21, up from 10.2 percent from '20

Like the ports of Los Angeles, New York and Chicago, the bulk of Houston's container traffic is import-

## PORT OF HOUSTON CONTAINER TRAFFIC TEUs, 12-Month Total



Source: Port of Houston Authority

<sup>2</sup> Port Houston handles a significant volume of empty containers each year as shipping companies reposition equipment to where its most needed. Only loaded containers are included in this analysis

oriented. In '21, 61.3 percent of all TEUs handled by Port Houston were imports, up from 49.1 percent five years ago.

The gap between container imports and exports will continue to widen. For one, U.S. firms are still rebuilding inventories and need to bring in more goods from overseas. Second, some container traffic has begun to shift from congested areas like Los

Angeles and Long Beach to Houston. Third, metro Houston continues to grow as a distribution center. Developers have added more than 96 million square feet of warehouse space over the past five years. As of Q1/22, another 18.4 million square feet was under construction. And fourth, Houston has returned to being one of the most rapidly growing metros, which will drive the need for

more consumer goods, most of which will arrive in a container via the Port of Houston.

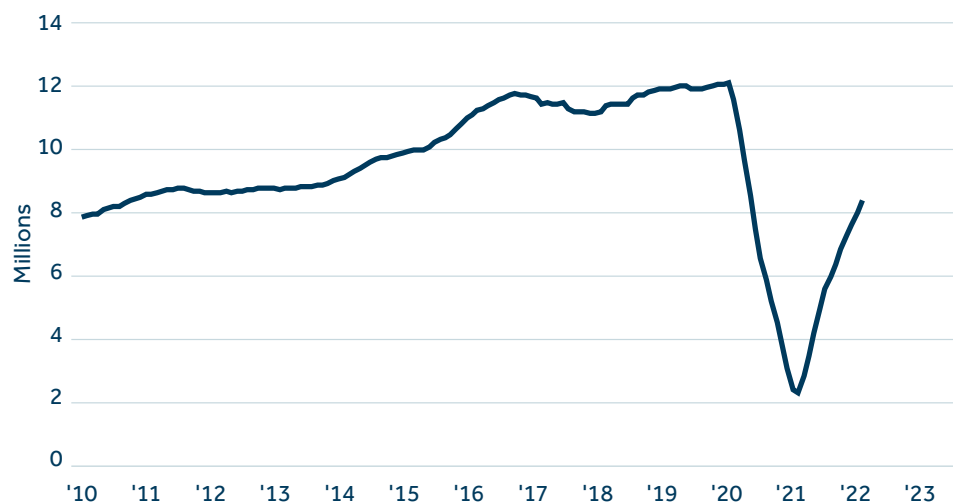
Through March of '22, volume was up 25.5 percent compared to March '21. For the 12 months ending March '22, the region handled 2.8 million loaded containers. Houston should easily surpass 3.0 million TEUs this year, which would be another record for the region.

## INTERNATIONAL AIR TRAVEL

During the early stages of the pandemic, nations imposed quarantines, entry bans, and other restrictions on travelers arriving in their countries. They hoped these measures would stop the spread of the virus. These mandates nearly shut down international air travel. The Houston Airport System (HAS) went from handling 33,000 international passengers per day in January of '20 to fewer than 100 per day in March of that year.

The travel bans proved costly for many countries, especially those dependent on tourism. The United Nations World Tourism Organization estimated the initial loss to the global economy exceeded \$900 billion. Within months of the initial shutdown, some of the most affected countries began to relax their restrictions. For Mexico, there was no need to provide a negative PCR test or enter quarantine upon arrival. Americans embraced Mexico's openness and booked vacations. As of March '22, HAS passenger traffic to destinations in Mexico is at 119 percent of pre-pandemic levels. Mexico is the exception, however. International long-haul traffic (i.e., to Asia, Europe and South America) remains nearly 40 percent below pre-pandemic levels.

### HOUSTON AIRPORT SYSTEM INTERNATIONAL PASSENGERS 12-Month Total



Source: Houston Airport System

Overall, international traffic has improved since the early days of the pandemic. HAS handled 7.3 million international passengers in '21, up from 3.9 million handled in '20 but below the pre-COVID peak of 12.0 million in '19.

International travel continues to recover. The Biden Administration has eased restrictions on foreign travelers entering the U.S. Other countries have since followed suit. And international carriers are slowly adding capacity back into their systems. As of March

'22, international passenger traffic was only 27.2 percent below pre-pandemic levels. That gap is expected to narrow in the coming months.



## INTERNATIONAL AIR CARGO

The pandemic drastically reduced the volume of international freight handled at Bush Intercontinental. Tonnage fell 49.1 percent March '20 through August of '20 compared to the same period in '19.

International air cargo tends to fall into four categories:

- Perishable goods (flowers, seafood) and live animals (pets, livestock),
- Ultra-high value cargo that requires additional security (precious metals, gemstones, works of art),
- Cargo with delivery urgency, (replacement parts, medicines, components for just-in-time manufacturing processes), and
- Items in small quantities, volumes, or weights (like consumer purchases)

Customers pay a premium for air service, as much as five to ten times what they'd pay to ship the same cargo via water. They're willing to pay extra for a quicker delivery. Items shipped via air typically arrive in three to five days compared to six to eight weeks if shipped via water.

Houston exports via air many of the same items it exports via water—industrial and electrical equipment, spare parts for that equipment, plastics and chemicals, and items

### HOUSTON AIRPORT SYSTEM INTERNATIONAL AIR CARGO 12-Month Total



Source: U.S. Census Bureau

of iron or steel (i.e., pipes, valves, fittings). Houston imports via air many of the same items it imports via water, as well as seafood and fresh flowers.

During the early stages of the pandemic, Houston's international air cargo operations suffered from the global recession and the near collapse of international passenger service. Roughly half the international cargo handled out of Houston prior to the pandemic traveled in the belly of passenger planes. Luggage always takes priority, but once that's been

loaded the remaining space is filled with freight. With so many passenger flights canceled, Houston lost much of its export capacity.

In Q1/22, international cargo traffic was up 26.8 percent from Q1/21 but remains 5.9 percent below that of Q1/19. Freight activity at HAS is expected to grow as airlines restore service to the region, the global economy continues to expand, and firms frustrated with delays and firms frustrated with waterborne delays shift to air.

## FOREIGN INVESTMENT

COVID choked off the flow of foreign investment into Houston. In '20, only 13 foreign-owned firms announced plans to expand or relocate to the region. Houston typically tracks 40 or more such announcements a year. In '18, one of the best years on record, the region logged 85 such announcements. Last year saw marginal improvement with 26 foreign-owned firms selecting Houston for their expansions.

### Why Worry?

Foreign investment is important to Houston because it injects new capital into the region, expands the manufacturing base, helps underpin jobs, facilitates the exchange of ideas, increases trade, stimulates growth, and adds to the tax base. Without FDI, Houston's economy would be smaller, and residents would have fewer employment, retail, and entertainment options.

Since '09, more than 450 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 projects stretch across 65 industries and represent \$36.4 billion in capital investments. That's likely an underestimate since many firms did not disclose the value of their investments.

Foreign investment always slumps in a recession. Firms must deal with weak demand, stagnant or falling prices, reduced cash flow, potential difficulties servicing debt, mounting layoffs, reductions in R&D spending, and the need to conserve cash. A recession is a poor time to take on additional debt, especially with a new overseas venture.

The COVID recession made investing outside a firm's home country especially difficult. Severe restrictions on international travel made it nearly impossible for investors to visit Houston, meet with local officials, and assess the market. For many firms, government restrictions were a moot point. They didn't want their employees traveling and potentially exposing themselves to the virus.

The one investment area that has already recovered is real estate. Foreign investors acquired \$1.4 billion in Houston office, industrial and retail properties in '21. That was up from \$250 million the year before and the third highest level of transactions over the past 10 years. The investors came from Bahrain, Canada, Israel, Luxembourg, Qatar, Singapore, South Korea, and United Arab Emirates.

Of the handful of companies that announced plans to expand last year, several already had footholds in Houston, like Goodman/Daikin Manufacturing (air conditioning units) and Convestro (petrochemicals). Others are new to the region, like Roboze (3-D printing) and Han's Laser (laser manufacturer).

The worst of the COVID pandemic appears to be over. Businesses are shifting from preservation to expansion mode. '21 was the best year on record for job growth in Houston and the region ranked third among U.S. metros for population growth. That should catch the attention of foreign investors. Restrictions on international travel are being lifted, making it easier for potential investors to visit Houston. And the Houston Energy Transition Initiative (launched by the Partnership in June '21) is attracting attention from overseas firms looking to leverage Houston's talent pool as the world moves towards a low-carbon energy future. All these factors should lead to a jump in foreign investment in Houston in '22.

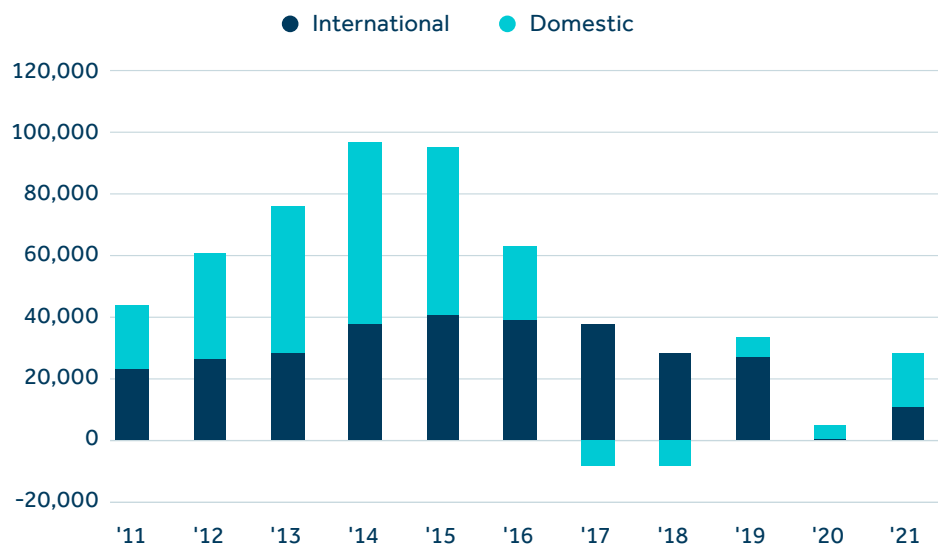
## INTERNATIONAL MIGRATION<sup>3</sup>

International migration plays a critical role in Houston's population growth. Early in the last decade, immigrants accounted for 40 percent of all people moving to the region. In '17 and '18, international migrants were the only newcomers to Houston.

The region would be much smaller, both in population and gross domestic product (GDP), without the contributions of its foreign-born population. The Census Bureau estimates Houston's foreign-born population at about 1.7 million in '21, or one in five residents. And as stated in the '19 *Global Houston* report, roughly 30 percent of the region's GDP can be attributed to the labor and investments of the region's foreign-born residents.

Immigration to the United States began to decline prior to COVID. The anti-immigrant rhetoric of the past few years has deterred many would-be migrants from leaving their homeland. Stricter controls at the U.S.-Mexico

### NET MIGRATION, METRO HOUSTON



Source: U.S. Census Bureau

border have kept many out of the country. Weak growth in Houston meant the job opportunities for migrants were limited. Restructuring of the oil and gas industry reduced the flow of ex-pat workers to the region.

Restrictions on international air travel kept many away during the pandemic. Immigration added only 12,500 new residents to Houston's population in '21.<sup>4</sup> That's one-third the annual average of the previous ten years.

<sup>3</sup> International migration includes anyone who moved here from abroad, including ex-pats returning home, temporary workers here on visas, green card recipients, foreign students enrolled at local colleges, refugees, and legal and undocumented immigrants.

<sup>4</sup> The estimates are for the period from July 1, 2020 to June 30, 2021.

Houston should begin to see an uptick in international migration. The Biden Administration has eased restrictions on travel to the

United States, Houston's economy continues to grow, local firms can't find enough workers, and there is a construction boom underway—all

factors that support a return to trend in international migration this year.

## ENERGY

The world consumed about 100 million barrels of crude per day leading up to the pandemic. With the onset of COVID, that collapsed to 81 million barrels.

The collapse in consumption led to a collapse in prices. West Texas Intermediate, the benchmark for U.S. light, sweet crude, fell from \$57 per barrel in January '20 to under \$17 in April '20. The price briefly turned negative that month as options traders with expiring contracts struggled to find anyone willing to take physical possession of the crude they held title to, demand was that weak.

OPEC responded to the collapse by pulling nearly eight million barrels of crude off the market. U.S. firms responded by scaling back their exploration operations. The rig count began slipping prior to the pandemic. COVID pushed it over the edge. The number of rigs operating in the U.S. fell from 796 in early January to 244 in mid-August. It had been as high as

### SPOT PRICE, WEST TEXAS INTERMEDIATE Monthly Average



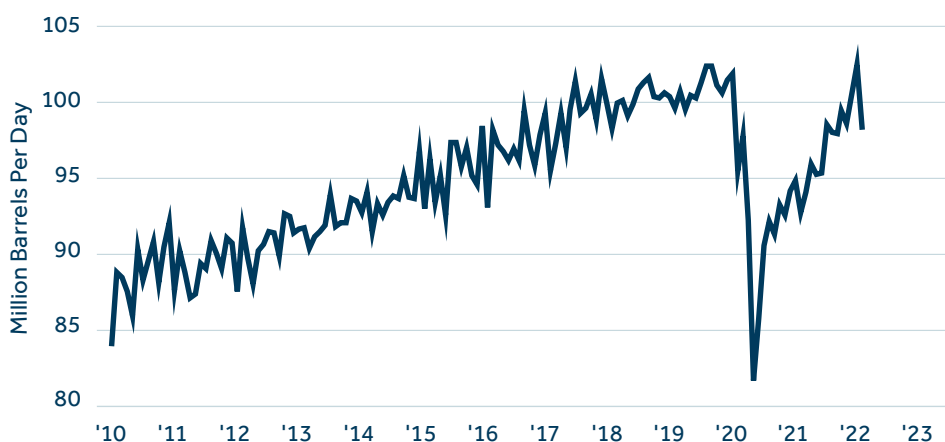
Source: U.S. Energy Information Administration

1,083 in December '18. Pulling rigs from the field didn't help prices much. WTI didn't trade above \$50 a barrel until early January '21. According to the Federal Reserve Bank of Dallas, most firms need crude to trade at \$52 or higher to be able to profitably drill a new well.

The industry responded by laying off workers. Energy-related employment in Houston had never recovered from the '15 – '16 fracking bust in which 100,000 jobs were lost.<sup>5</sup> Firms began hiring in early '17, but layoffs resumed when outside sources of capital dried up. Houston shed another 4,400 energy-related jobs from June '19 to January '20. COVID accelerated the losses. Even as the economy reopened layoffs continued. Houston had 33,700 fewer energy-related jobs in March '22 (latest data available) than it did prior to the pandemic.

Energy demand returned as the economy reopened. Starting July of '21, OPEC began increasing the amount of crude it sold on global markets, roughly 400,000 barrels of daily production each month. Global consumption returned to pre-pandemic levels in November '21 and is expected to average 100.1 million barrels per day through the end of '22 and 101.7 million barrels per day in '23.

### DAILY GLOBAL CRUDE CONSUMPTION Monthly Average



Source: U.S. Energy Information Administration

<sup>5</sup> Upstream energy-related jobs include exploration and production, oil field services, oil field equipment manufacturing, fabricated metal products (pipes, valves and fittings), and engineering services

Reopening hasn't helped energy employment in Houston, though. Upstream energy added only 2,800 jobs in '21, a year in which the overall Houston economy added nearly 160,000 jobs. Clearly, Houston's recovery is not being driven by oil and gas.

The outlook for crude remains uncertain. Russia's invasion of Ukraine has added a premium to the price of oil. From early March to late April WTI has average \$105 per barrel, up from \$85 a barrel in the three months leading up to the invasion. The Chinese have tightened restrictions on Shanghai and Beijing to contain recent outbreaks of the virus. If there's

a new surge in China, more cities will be quarantined. COVID continues to weigh on China's growth, which in turn translates into weaker global crude consumption. And economists have begun to warn of a potential global slowdown, possible even a recession, which would cut into demand and send oil prices lower.

## IS A GLOBAL RECESSION LOOMING?

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Prospects for the global economy have darkened since the outbreak of war in Ukraine, prompting economists to reassess their forecasts.

- The International Monetary Fund (IMF) projects global growth to slow from an estimated 6.1 percent in '21 to 3.6 percent in '22. This is 0.8 percentage points lower for '22 than projected in January.
- The World Trade Organization (WTO) expects merchandise trade to grow 3.0 percent in '22, down from its previous forecast of 4.7 percent.
- The Organization for Economic Cooperation and Development (OECD) predicts inflation, already high at the start of the year, could be 2.5 percentage points higher, on average, across the globe.
- The World Bank (WB) warns that food and energy price shocks from Ukraine war could last for years.

The world was already dealing with recessionary challenges prior to the war in Ukraine. Inflation in many countries has spiked to levels not seen in 40 years. Such high levels of inflation in the absence of comparable wage gains have reduced consumers' purchasing power. To combat inflation,

central banks have begun to raise interest rates. By raising the cost of borrowing, they hope to tamp down demand, which in turn should reduce upward pressure on prices. Economists worry that central banks will raise rates too high and too quickly, stifling demand and sending economies into a recession. Supply chain and labor shortages show little sign of easing, keeping upward pressure on prices, and counteracting measures the central banks are taking to control inflation.

While a recession is a possibility, it's not a probability, at least not for the U.S.

- Labor markets remain tight. Employers had 11.3 million job openings in March. In the five years leading up to the pandemic, the U.S. average 6.4 million per month. With labor markets so tight, employers will be reluctant to lay off workers even if sales weaken.
- In March '22, industrial production was up 5.5 percent compared to the same month the previous year. Industrial production is the combined output of the nation's mines, factories, and utilities. This is another sign the U.S. economy continues to grow.

- Surveys by the Institute for Supply Management show orders for new goods and for services continue to rise. The manufacturing PMI registered 57.1 in March, the services PMI 58.3. Reading above 50 signal expansion in the U.S. economy.
- The University of Michigan Surveys of Consumers show overall consumer sentiment bounced higher in April. The gain was almost entirely due to a jump in consumer expectations for the future.

In April, *The Wall Street Journal* surveyed 62 prominent economists asking them to forecast U.S. GDP growth, job gains, inflation, and the probability of a recession over the next 12 months. The average of the forecasts was for U.S. GDP to grow 3.3 percent this year, the nation to add 260,000 jobs per month over the next 12 months, and for inflation to remain elevated but slip to 5.3 percent by the end of the year. The group put the probability of a recession at only 28 percent.

## CONCLUSIONS

On Wednesday, May 4, two days before to this report went to the printer, the U.S. Federal Reserve announced that it would raise interest rates by half a percent point. Financial markets were initially ecstatic. They had expected an even larger rate hike. The Dow closed up more than 932 points, or 2.8 percent, that day. The S&P 500 and Nasdaq composite index soared 3.0 percent and 3.2 percent, respectively. On Thursday, reality set in. Higher interest rates would soon translate into higher borrowing costs and slower economic growth. Supply chain issues continue to plague the economy. And inflation would likely remain elevated through the end of the year. The Dow, S&P 500 and NASDAQ closed down 3.1 percent, 3.6 percent, and 5.0 percent, respectively, that day.

On Thursday, May 5, Reuters reported that Russia had breached the Ukrainian defenses around the Azovstal steel plant in Mariupol. Russia now controls the city, linking territory it controls in the east with the Crimean Peninsula in the south, which Moscow had seized eight years earlier. Supply

chain disruption caused by the war would likely get worse, and fears are mounting that the conflict could spill over into other countries.

The same day Russia overran Azovstal, the World Health Organization (WHO) announced that previous estimates of global COVID fatalities were vastly understated, perhaps by as much as 9.4 million deaths. Pandemic related deaths likely exceed 14.9 million, nearly three times original count. Since March, China, the location of the original outbreak, has been struggling to control a new surge of the virus.

The onslaught of bad news could leave one apprehensive about global economy, and by extension, Houston's. Some economists worry that the U.S. may already be in recession.

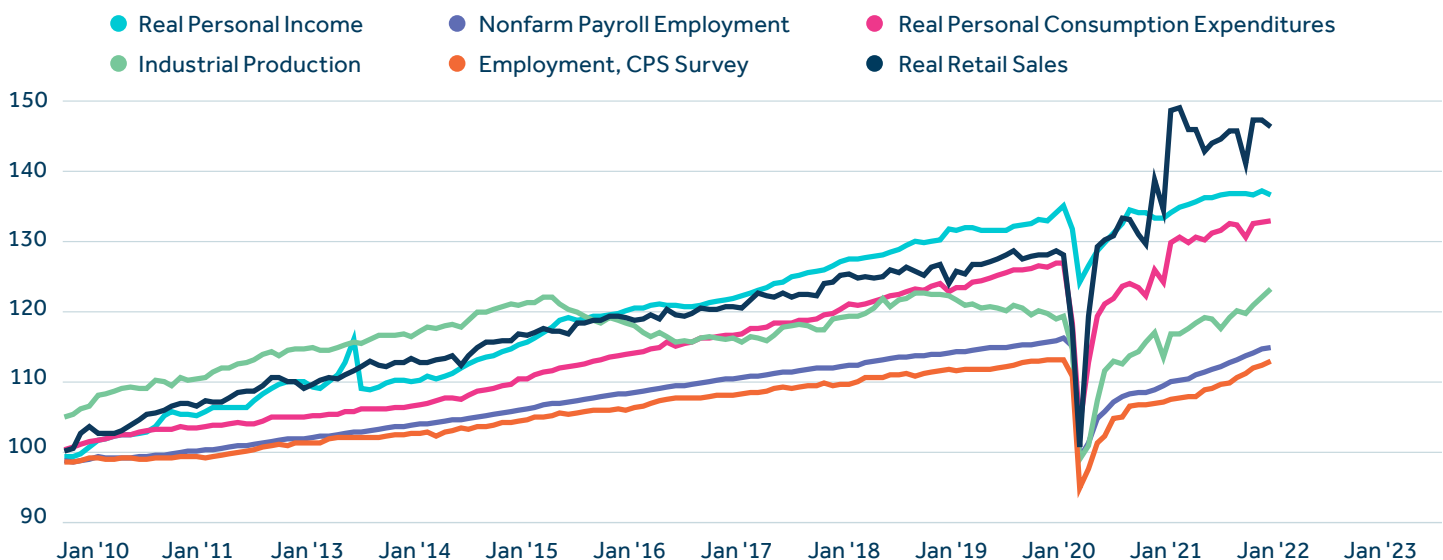
A widely held belief is that a recession is underway when the U.S. has suffered two consecutive quarters of declining gross domestic product. U.S. GDP did slip 1.4 percent in the first quarter. By that metric, a weak second quarter would cast the U.S., and Houston, into

recession. But that's too simplistic a measure.

The Business Cycle Dating Committee (yes, there is such a creature) of the National Bureau of Economic Research has a more robust definition. For one, the committee looks at the depth, diffusion, and duration of any economic decline. Second, the committee looks for that decline across a broad set of metrics: real personal income, nonfarm payroll employment, employment as measured by the Current Population Survey, real personal consumption expenditures, wholesale and retail sales adjusted for inflation, and industrial production. As can be seen in the accompanying chart, the latest readings for these indicators show the U.S. economy is expanding. Wholesale is not shown because the index is 50 percent higher than the other indicators which distorts the scale when include in the same graph. Only retail sales have softened, and that's because consumers are now spending more on services. Houston is following the same path as the U.S.

### INDEX, U.S. RECESSION INDICATORS

June '09 = 100



Sources: Board of Governors of the Federal Reserve System, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, U.S. Census Bureau



## SUMMARY

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The war in Ukraine has triggered a costly humanitarian crisis. At the same time, economic damage from the conflict is contributing to a slowdown in global growth and adding to inflation. Fuel and food prices have increased rapidly, hitting vulnerable

populations in low-income countries hardest.

For Houston, the risks are indirect. The conflict will slow growth among Houston's trading partners with close ties to Russia and Ukraine. That in turn will reduce demand for Houston's

exports. The most likely scenario is for slower growth, perhaps a recession in Europe, but a slowdown in the global economy is unlikely to nudge Houston into recession this year.

## SOURCES

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The data from the following agencies, organizations and publications were consulted in preparing this report: *Bloomberg.com*, Centers for Disease Control and Prevention, Dodge Data & Analytics, *The Economist*, *Forbes*, *Foreign Affairs*, *Fortune*, Greater Houston Partnership New Business Announcements database, Institute for Supply Management-Houston, International Monetary Fund, Houston Airport System,

*Houston Business Journal*, *Houston Chronicle*, Houston Facts, Houston First, Houston Office of Foreign Missions, NAI Partners, *The New York Times*, Organisation for Economic Cooperation and Development, Port of Houston Authority, *Reuters*, Statista, Sister Cities of Houston, Texas Comptroller of Public Accounts, Texas Workforce Commission, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, U.S.

Census Bureau, U.S. Employment and Training Administration, U.S. Energy Information Administration, U.S. International Trade Administration, United Nations Conference on Trade and Development, UniWorld Online, *The Wall Street Journal*, *The Washington Post*, WISERTrade, World Bank, and World Trade Organization.

# HOUSTON: GLOBAL CITY HIGHLIGHTS

## INTERNATIONAL POPULATION & RANKINGS

nearly

1 in 4

HOUSTONIANS  
are foreign-born

top

3

metro in the nation  
for the number of  
consular office,  
87 TOTAL

7<sup>TH</sup>

largest metro  
economy

5<sup>TH</sup>

most populous  
metro area

4<sup>TH</sup>

largest city

19

sister-city relationships  
promoting opportunities  
across the world

42

active foreign  
chambers of commerce  
or trade associations

15

foreign trade and  
commercial offices

## INTERNATIONAL BUSINESS

16

foreign banks  
from 9 nations

140

Houston firms operate more  
than 2,900 foreign subsidiaries

Over

1,700

Houston companies  
report foreign ownership

Houston is  
home to

18

Forbes Global 2000  
headquarters

More than

12,000

Houston companies export  
goods and services overseas

\$140 billion

in goods and commodities  
were shipped abroad from  
Houston in '21

of the  
world's

100

largest non-U.S.-based  
companies, nearly half have  
operations in Houston.

## PORT HOUSTON

Largest

Largest container port  
in the Gulf of Mexico

1<sup>ST</sup>

IN U.S.

for foreign tonnage

3<sup>RD</sup>

IN U.S.

port for total  
foreign cargo value

7<sup>TH</sup>

IN U.S.

container port  
by total TEUs

HOUSTON AIRPORT SYSTEM

2 international airports  
George Bush Intercontinental & William P. Hobby Airports

1 space port

IAH ranked 25<sup>TH</sup>  
best airport among the world and the top U.S. airport by Skytrax

2021 PASSENGER VOLUME

7.3 million international

37.7 million domestic

FLIGHT DATA

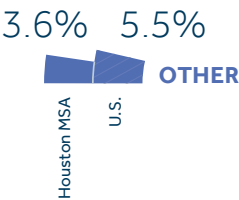
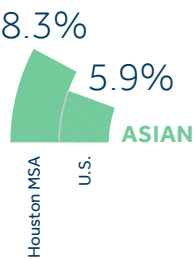
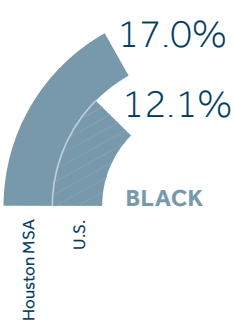
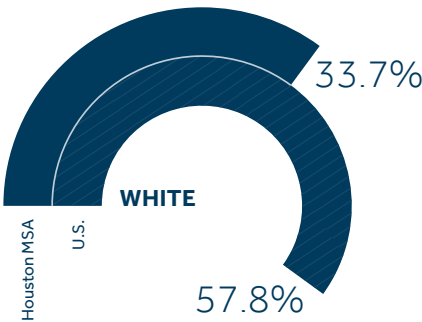
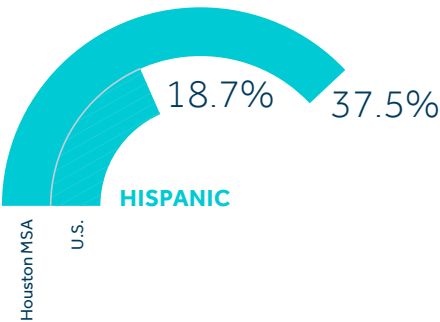
IAH ranked 5<sup>TH</sup>  
in nation in number of international flights per week prior to COVID-19

66 international destinations

127 domestic destinations

193 nonstop destinations to 36 countries

DEMOGRAPHICS

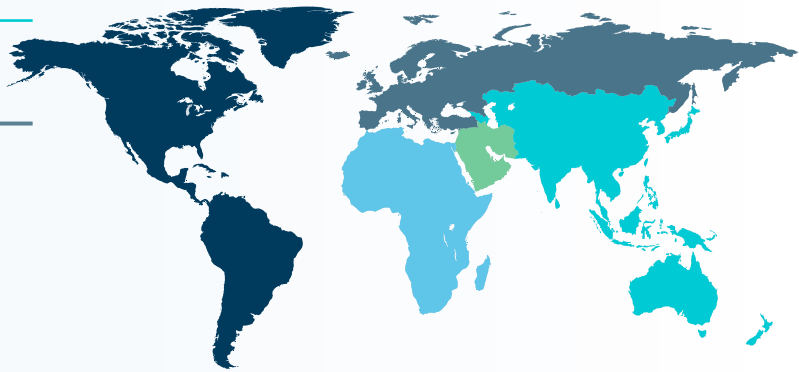


Source: U.S. Census Bureau Decennial Data 2020

# Houston Trade by Region

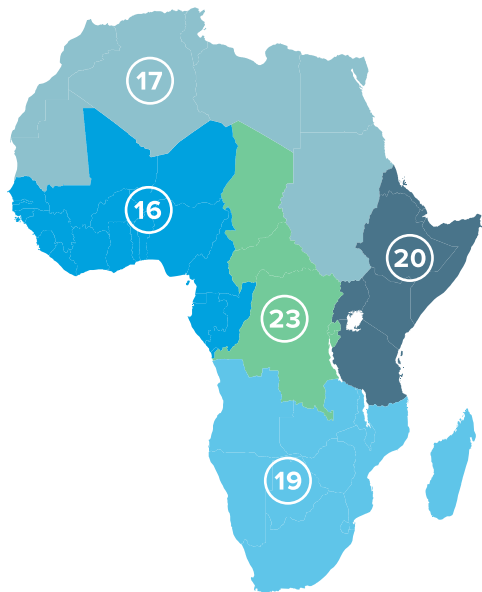
## TOTAL GLOBAL TRADE Houston 2021

Global 2021 Trade	Imports to Houston		Exports from Houston	
	(\$ millions)	% of total	(\$ millions)	% of total
Global Total	96,232.9	100.0	176,871.4	100.0
● Asia	33,717.4	35.0	59,808.1	33.8
● Americas	23,637.2	24.6	54,271.3	30.7
● Europe	32,788.9	34.1	50,532.7	28.6
● Middle East	4,571.8	4.8	6,506.5	3.7
● Africa	1,517.5	1.6	5,752.8	3.3



## AMERICAS Houston 2021

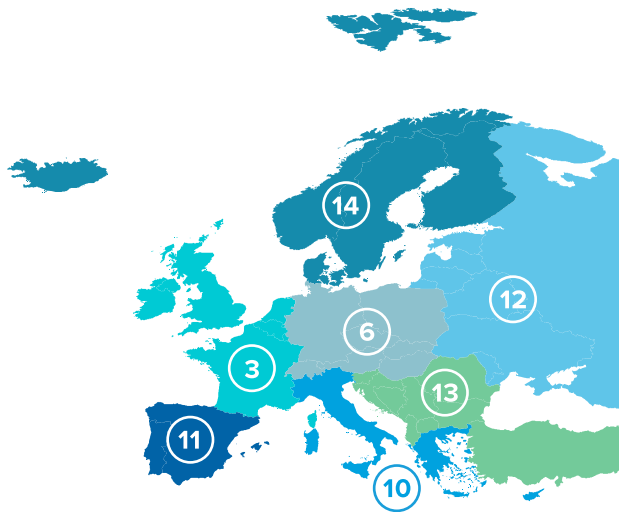
Region Rank	Sub-Region	Imports to Houston		Exports from Houston	
		(\$ millions)	% of total	(\$ millions)	% of total
	Americas	23,637.2	100	54,271.3	100
2	South America	9,967.5	42.2	29,110.1	53.6
4	North America	11,278.7	47.7	15,765.9	29.1
9	Central America	1,710.4	7.2	5,675.2	10.5
15	Caribbean	680.6	2.9	3,720.0	6.9



## AFRICA Houston 2021

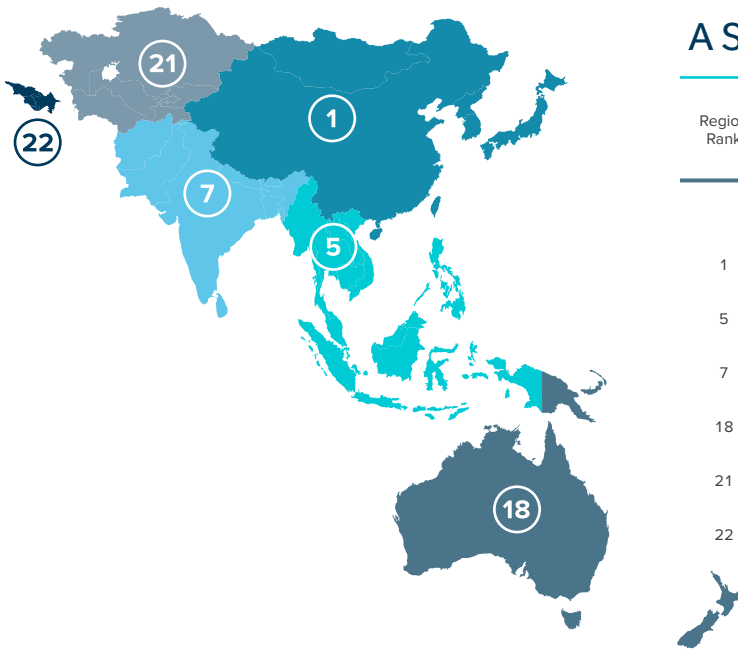
Region Rank	Sub-Region	Imports to Houston		Exports from Houston	
		(\$ millions)	% of total	(\$ millions)	% of total
	Africa Total	1,517.5	100	5,752.8	100
16	Western Africa	146.4	9.6	2,369.1	41.2
17	Northern Africa	603.3	39.8	1,897.8	33.0
19	Southern Africa	606.3	40.0	1,023.3	17.8
20	Eastern Africa	149.5	9.9	354.1	6.2
23	Central Africa	11.9	0.8	108.5	1.9

Source: U.S. Census Bureau, Foreign Trade Division data



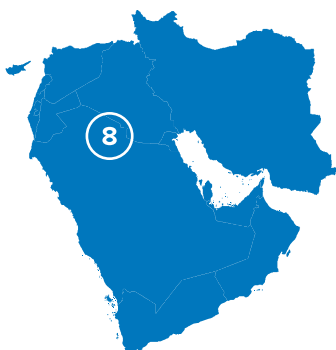
## EUROPE Houston 2021

Region Rank	Sub-Region	Imports to Houston		Exports from Houston	
		(\$ millions)	% of total	(\$ millions)	% of total
	<b>Europe Total</b>	<b>32,788.9</b>	<b>100</b>	<b>50,532.7</b>	<b>100</b>
3	Western Europe	7,707.4	23.5	29,162.8	57.7
6	Central Europe	10,862.6	33.1	6,241.4	12.4
10	Southern Europe	3,605.3	11.0	3,698.8	7.3
11	Southwestern Europe	2,258.5	6.9	4,621.8	9.1
12	Eastern Europe	4,556.3	13.9	974.9	1.9
13	Southeastern Europe	2,411.2	7.4	2,746.9	5.4
14	Northern Europe	1,387.6	4.2	3,086.0	6.1



## ASIA Houston 2021

Region Rank	Sub-Region	Imports to Houston		Exports from Houston	
		(\$ millions)	% of total	(\$ millions)	% of total
	<b>Asia Total</b>	<b>33,717.4</b>	<b>100</b>	<b>59,808.1</b>	<b>100</b>
1	Eastern Asia	21,737.0	64.5	37,092.3	62.0
5	Southeastern Asia	6,708.6	19.9	10,603.8	17.7
7	Southern Asia	4,649.2	13.8	10,425.8	17.4
18	Oceania	507.9	1.5	1,460.8	2.4
21	Central Asia	93.2	0.3	99.2	0.2
22	Southwestern Asia	21.5	58.5	126.1	0.2



## MIDDLE EAST Houston 2021

Region Rank	Sub-Region	Imports to Houston		Exports from Houston	
		(\$ millions)	% of total	(\$ millions)	% of total
8	Middle East	4,571.8	5.1	6,506.5	5.3



# 1 CHINA

## HOUSTON AND CHINA: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the eighth busiest gateway for U.S.-Chinese trade and China is Houston's largest international trading partner. From '12 to '21, trade between Houston and China averaged \$17.3 billion annually and was valued at \$24.7 billion in '21. Metro Houston has a Chinese-born population of over 67,500 people.

### HOUSTON'S BUSINESS TIES

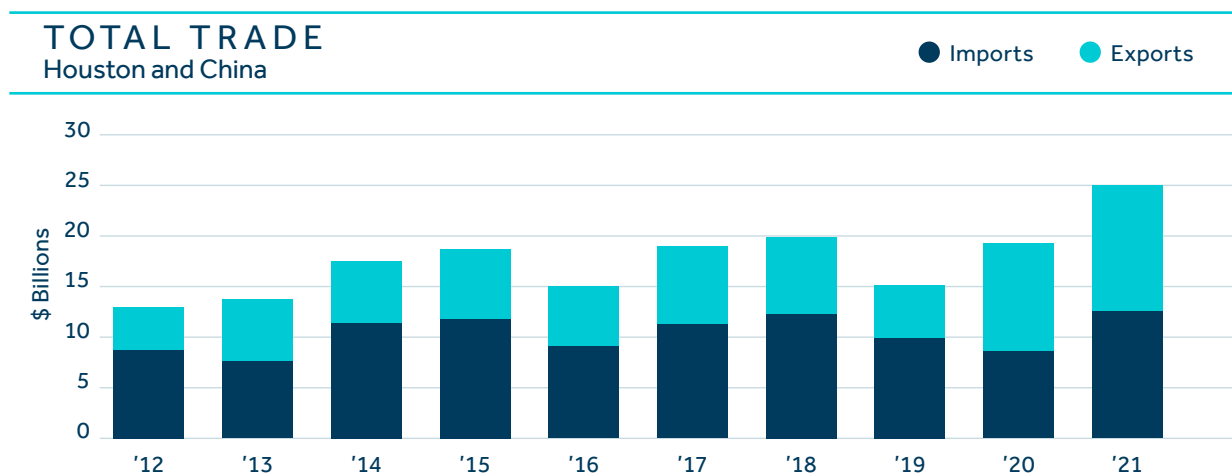
- Forty-five Houston firms operate 123 subsidiary locations in China, including American Bureau of Shipping, Baker Botts, Halliburton, Huntsman, and Schlumberger.
- Nineteen Chinese firms operate 25 subsidiaries in the Houston area, including Air China, China National Petroleum Corporation (CNPC), MSP Drillex, and SAIC USA.
- Trade and cultural relationships with China are facilitated in Houston through the Asian Chamber of Commerce, the Asia Society Texas, the Chinese Community Center, the American Chinese Culture Exchange Association, and the Institute of Chinese Culture.
- Shenzhen, China was designated as one of Houston's 19 international sister cities in 1986.

### AIR CARGO TRADE

- Houston ranks as the 15th busiest gateway for U.S.-China air cargo trade (by weight).
- Air cargo trade between Houston and China totaled 13,144.1 metric tons in '21, a 39.5 percent increase over '20. It was valued at \$494.0 million in '21, a 4.2 percent decline over '20.
- In '21, the top three commodities by weight were industrial equipment and computers; miscellaneous chemical products; and electrical machinery, equipment, and parts, accounting for 56.0 percent of total air cargo trade.

### TOTAL TRADE

Houston-China trade has nearly doubled over the past decade, from \$12.9 billion in '12 to \$24.7 billion in '21. In '21, total trade between Houston and China increased 27.6 percent over '20. The increase can be attributed to "gains" in the import value of industrial equipment and computers, as well as an increase in the export value of fuels, oil, and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from China to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	1,839.2	2,037.9	15.5	10.8
2	Electrical Machinery, Equipment and Parts	1,145.8	1,769.9	13.5	54.5
3	Toys, Games, and Sports Equipment	856.4	1,277.9	9.7	49.2
4	Furniture, Bedding, Lamps	784.8	1,226.4	9.3	56.3
5	Articles of Iron or Steel	725.2	1,056.0	8.0	45.6
6	Plastics and Plastic Products	675.3	1,027.7	7.8	52.2
7	Organic Chemicals	377.3	838.6	6.4	122.2
8	Motor Vehicles and Parts	333.2	575.2	4.4	72.6
9	Linens, Needlecraft Sets, Worn Clothing	320.2	384.8	2.9	20.2
10	Optic, Photographic, Measuring, Medical Instruments	132.1	225.0	1.7	70.3
Total Top 10 Commodities		7,189.4	10,419.4	79.2	44.9
All Other Commodities		1,919.8	2,733.5	20.8	42.4
TOTAL ALL COMMODITIES		9,109.2	13,152.9	100.0	44.4

## EXPORTS from Houston to China

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	5,503.0	6,002.5	52.1	9.1
2	Cereals	1,148.2	1,695.6	14.7	47.7
3	Organic Chemicals	1,041.2	1,110.1	9.6	6.6
4	Plastics and Plastic Products	1,046.0	956.5	8.3	-8.6
5	Industrial Equipment and Computers	223.0	366.0	3.2	64.1
6	Miscellaneous Chemical Products	171.4	344.0	3.0	100.7
7	Cotton Woven Fabrics	223.6	198.4	1.7	-11.3
8	Beverages, Spirits, and Vinegar	35.2	156.3	1.4	343.9
9	Meat and Edible Meat Products	90.1	134.4	1.2	49.2
10	Soaps, Waxes, Polishes, Candles, Dental Preps	93.3	120.6	1.0	29.2
Total Top 10 Commodities		9,575.0	11,084.5	96.1	15.8
All Other Commodities		658.1	447.7	3.9	-32.0
TOTAL ALL COMMODITIES		10,233.1	11,532.2	100.0	12.7

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 2 MEXICO

## HOUSTON AND MEXICO: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the fifth busiest gateway for U.S.-Mexico trade and Mexico is Houston's second largest international trading partner. From '12 to '21, trade between Houston and Mexico averaged \$22.2 billion annually and was valued at \$21.6 billion in '21. More than 590,000 people living in the Houston metro were born in Mexico.

### HOUSTON'S BUSINESS TIES

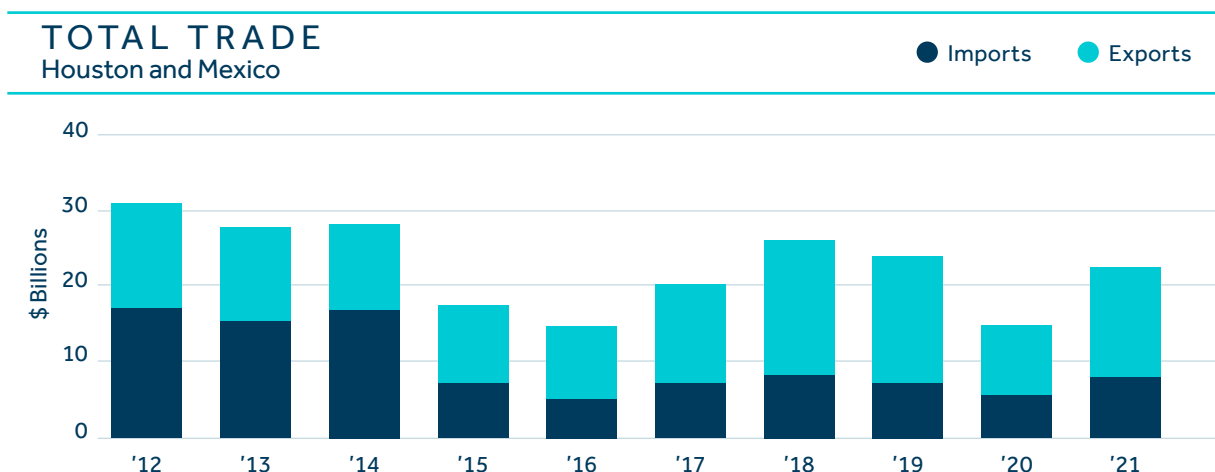
- Thirty-nine Houston firms operate 116 subsidiary locations in Mexico, including the American Bureau of Shipping, Crane Worldwide Logistics, LyondellBassell, NOV, and Schlumberger.
- Eight Mexican firms operate 21 subsidiaries in the Houston area, including Banorte-IXE Securities, CEMEX USA, Grupo Prodensa, Mission Foods, and Interceramic Tile & Stone Gallery.
- Trade and cultural relationships with Mexico are facilitated in Houston through the Consulate General of Mexico, the U.S.-Mexico Chamber of Commerce, the Mexico Tourism Board, the Institute of Hispanic Culture of Houston, as well as numerous festivals.
- Of Houston's 16 foreign-owned banks, one is from Mexico: BBVA Bancomer, S.A. Institución de Banca Múltiple, Grupo Fin.
- Tampico, Mexico was designated as one of Houston's 19 international sister cities in '03.

### AIR CARGO TRADE

- Houston ranks as the 17th busiest gateway for U.S.-Mexico air cargo trade (by weight).
- Air cargo trade between Houston and Mexico totaled 506.4 metric tons in '21, a 1.0 percent increase over '20. It was valued at \$94.6 million in '21, a 20.8 percent decline over '20.
- In '21, the top three commodities by weight were miscellaneous industrial components, equipment, and parts; industrial equipment and computer; and aircraft, spacecraft, and parts, accounting for 51.4 percent of total air cargo trade.

### TOTAL TRADE

Houston-Mexico trade has fluctuated over the past decade from a high of \$30.5 billion in '12 to \$21.6 billion in '21. Trade between Houston and Mexico fell to a 10-year low in '20 of \$14.5 billion. The '20 decrease in trade was largely due to a decline in the import and export of fuels, oil, and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Mexico to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	4,383.9	7,169.2	85.6	63.5
2	Articles of Iron or Steel	277.4	440.6	5.3	58.8
3	Iron and Steel	23.0	172.8	2.1	651.3
4	Organic Chemicals	118.6	167.2	2.0	41.0
5	Beverages, Spirits, and Vinegar	102.0	94.2	1.1	-7.7
6	Motor Vehicles and Parts	51.8	77.6	0.9	49.7
7	Miscellaneous Industrial Components, Equipment and Parts	110.0	68.4	0.8	-37.8
8	Industrial Equipment and Computers	7.4	33.2	0.4	347.7
9	Electrical Machinery, Equipment and Parts	35.3	29.6	0.4	-16.3
10	Furniture, Bedding, Lamps	1.6	19.9	0.2	1163.1
Total Top 10 Commodities		5,111.2	8,272.8	98.8	61.9
All Other Commodities		81.4	102.3	1.2	25.7
TOTAL ALL COMMODITIES		5,192.6	8,375.1	100.0	61.3

## EXPORTS from Houston to Mexico

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	5,860.2	8,603.2	65.3	46.8
2	Organic Chemicals	2,576.8	3,859.3	29.3	49.8
3	Cereals	103.2	179.6	1.4	74.1
4	Iron and Steel	75.3	140.4	1.1	86.6
5	Inorganic Chemicals, Rare Earths, Precious Metals	77.8	93.1	0.7	19.7
6	Beverages, Spirits, and Vinegar	85.3	69.4	0.5	-18.7
7	Industrial Equipment and Computers	26.2	56.1	0.4	114.5
8	Plastics and Plastic Products	21.9	41.3	0.3	88.8
9	Animal or Vegetable Fats, Oils, Waxes	13.9	39.5	0.3	184.3
10	Miscellaneous Chemical Products	16.9	25.4	0.2	49.8
Total Top 10 Commodities		8,857.4	13,107.4	99.4	48.0
All Other Commodities		42.4	74.9	0.6	76.7
TOTAL ALL COMMODITIES		8,899.9	13,182.4	100.0	48.1

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 3 BRAZIL

## HOUSTON AND BRAZIL: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the top gateway for U.S.-Brazilian trade and Brazil is Houston's third largest international trading partner. From '12 to '21, trade between Houston and Brazil averaged \$13.4 billion annually and was valued at \$16.9 billion in '21. More than 7,700 people living in metro Houston were born in Brazil.

### HOUSTON'S BUSINESS TIES

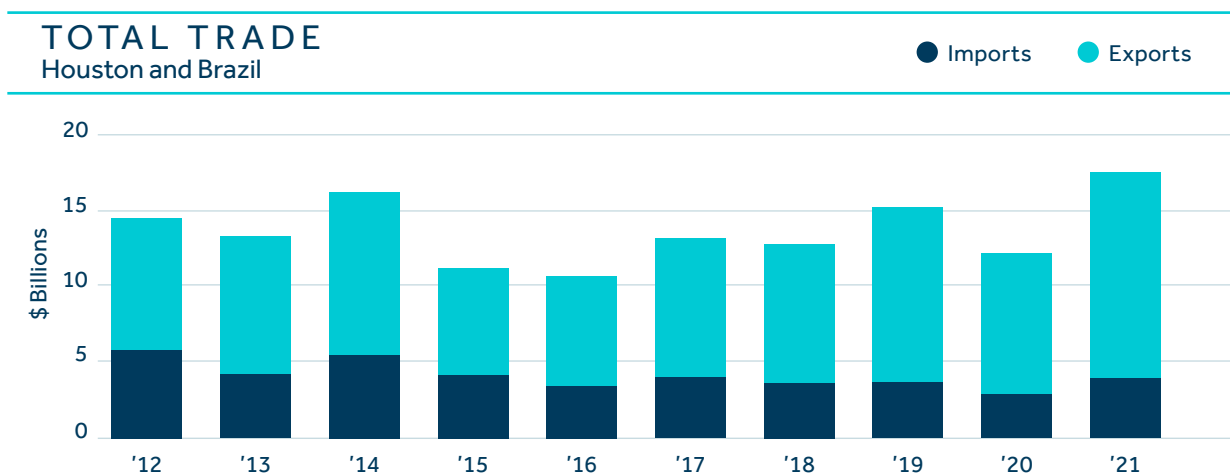
- Forty-one Houston firms operate 113 subsidiary locations in Brazil, including Airswift, Crane Worldwide Logistics, Hines, McDermott, and Schlumberger.
- Seven Brazilian firms operate 12 subsidiaries in the Houston area, including Braskem America, Gerdau, Petrobras, SMAR International and WEG Electric Corp.
- Trade and cultural relationships with Brazil are facilitated in Houston through the Consulate General of Brazil, the Brazil-Texas Chamber of Commerce, and the Brazilian Arts Foundation Houston.

### AIR CARGO TRADE

- Houston ranks as the fifth busiest gateway for U.S.-Brazil air cargo trade (by weight).
- Air cargo trade between Houston and Brazil totaled 6,884.9 metric tons in '21, a 44.4 percent increase over '20. It was valued at \$370 million in '20, a 4.8 percent decline over '21.
- In '21, the top three commodities by weight were industrial equipment and computers; edible products; and rubber and rubber products, accounting for 23.3 percent of total air cargo trade.

### TOTAL TRADE

Houston-Brazil trade reached a ten-year high in '21 of \$16.9 billion, largely driven by gains in the exports of fuels and refined products. From '12 to '14, trade averaged \$14.7 billion before falling to a decade low of \$10.2 in '16. Trade grew steadily in the subsequent years, temporarily dipping to \$11.9 billion in '20, then rebounding 43.6 percent from '20 to '21. The rebound is largely due to the rise in both value and volume of fuels, oil, and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data



## IMPORTS from Brazil to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	462.1	781.5	20.4	69.1
2	Wood and Wood Products	260.6	426.4	11.1	63.6
3	Mineral Fuels, Oil and Refined Products	311.9	288.1	7.5	-7.6
4	Organic Chemicals	186.1	286.0	7.5	53.7
5	Iron and Steel	195.2	223.0	5.8	14.2
6	Electrical Machinery, Equipment and Parts	132.6	221.1	5.8	66.8
7	Products of Stone, Plaster, Cement, Asbestos, Mica	130.0	181.1	4.7	39.4
8	Motor Vehicles and Parts	107.5	180.0	4.7	67.5
9	Articles of Iron or Steel	97.1	131.3	3.4	35.1
10	Beverages, Spirits, and Vinegar	201.1	108.7	2.8	-46.0
Total Top 10 Commodities		2,084.2	2,827.1	73.8	35.6
All Other Commodities		761.6	1,003.7	26.2	31.8
TOTAL ALL COMMODITIES		2,845.8	3,830.8	100.0	34.6

## EXPORTS from Houston to Brazil

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	4,937.5	8,492.2	65.2	72.0
2	Plastics and Plastic Products	891.6	1,081.9	8.3	21.3
3	Organic Chemicals	760.4	930.3	7.1	22.3
4	Industrial Equipment and Computers	499.3	655.1	5.0	31.2
5	Inorganic Chemicals, Rare Earths, Precious Metals	233.3	340.8	2.6	46.1
6	Miscellaneous Chemical Products	271.9	311.0	2.4	14.4
7	Motor Vehicles and Parts	160.0	276.1	2.1	72.6
8	Electrical Machinery, Equipment and Parts	110.4	135.3	1.0	22.6
9	Beverages, Spirits, and Vinegar	254.7	133.6	1.0	-47.5
10	Rubber and Rubber Products	87.7	132.6	1.0	51.3
Total Top 10 Commodities		8,206.7	12,488.9	95.8	52.2
All Other Commodities		690.0	544.7	4.2	-21.1
TOTAL ALL COMMODITIES		8,896.7	13,033.6	100.0	46.5

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 4 KOREA

## HOUSTON AND KOREA: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the third busiest gateway for U.S.-Korean trade and Korea is Houston's second largest Asian trading partner. From '12 to '21, trade between Houston and Korea averaged \$8.8 billion annually and was valued at \$16.2 billion in '21. More than 11,000 people living in metro Houston were born in Korea.

### HOUSTON'S BUSINESS TIES

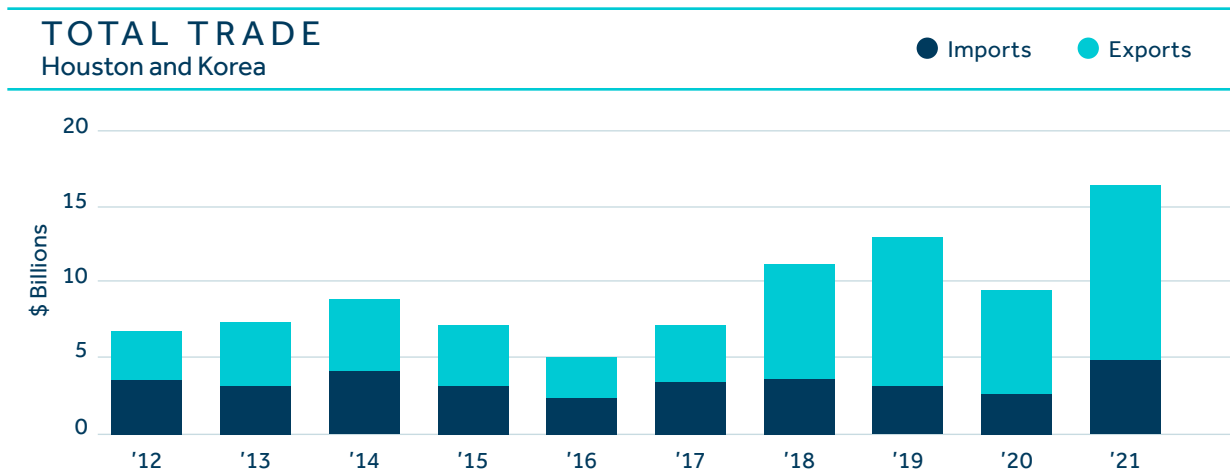
- Twelve Houston firms operate 33 subsidiary locations in Korea, including Airswift Group, American Bureau of Shipping (ABS), Hines, and Huntsman International.
- Thirty-two Korean firms operate 37 subsidiaries in the Houston area, including Daewoo Shipbuilding & Marine Engineering, GS Engineering & Construction, Hyundai Corporation, Korean Air Cargo, and Samsung Heavy Industries Ltd.
- Trade and cultural relationships with Korea are facilitated in Houston through the Consulate General of Korea, the Korean American Chamber of Commerce of Houston, Asia Society Texas, the Korean Community Center of Houston, the Korean American Society of Houston, and the Houston Korean Education Center.
- Ulsan Metropolitan City, Republic of Korea was designated in 2021 as one of Houston's 19 international sister cities.

### AIR CARGO TRADE

- Houston ranks as the 17th busiest gateway for U.S.-Korean air cargo trade (by weight).
- Air cargo trade between Houston and Korea totaled 1,341.1 metric tons in '21, a 16.1 percent increase over '20. It was valued at \$71.7 million in '21, a 26.5 percent decline over '20.
- In '21, the top three commodities by weight were miscellaneous chemical products; industrial machinery, including computers; and electric machinery including sound and TV equipment, accounting for 51.5 percent of total air cargo trade.

### TOTAL TRADE

Houston-Korea trade has more than doubled over the past decade, from \$5.9 billion in '12 to \$16.2 billion in '21. In the first five years of the decade, trade between the two countries averaged \$6.5 billion and then grew steadily after '16 until '20. However, in '21 trade between Houston and Korea increased 72.1 percent over the previous year, largely due to an increase in the export value in fuels, oil, and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Korea to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Articles of Iron or Steel	536.6	982.1	19.6	83.0
2	Industrial Equipment and Computers	521.3	845.5	16.9	62.2
3	Mineral Fuels, Oil and Refined Products	262.7	571.8	11.4	117.7
4	Motor Vehicles and Parts	547.3	571.5	11.4	4.4
5	Organic Chemicals	366.4	531.0	10.6	44.9
6	Iron and Steel	194.6	482.1	9.6	147.7
7	Plastics and Plastic Products	133.1	250.6	5.0	88.2
8	Ships, Boats and Floating Structures	0.0	197.6	3.9	-
9	Electrical Machinery, Equipment and Parts	181.9	185.1	3.7	1.7
10	Copper and Copper Products	14.8	58.0	1.2	290.9
Total Top 10 Commodities		2,758.8	4,675.2	93.4	69.5
All Other Commodities		261.7	329.3	6.6	25.8
TOTAL ALL COMMODITIES		3,020.5	5,004.5	100.0	65.7

## EXPORTS from Houston to Korea

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	4,834.4	9,470.1	84.4	95.9
2	Organic Chemicals	1,025.7	1,004.7	9.0	-2.0
3	Miscellaneous Chemical Products	128.7	199.9	1.8	55.4
4	Plastics and Plastic Products	231.3	182.5	1.6	-21.1
5	Beverages, Spirits, and Vinegar	44.2	115.8	1.0	162.1
6	Industrial Equipment and Computers	27.7	36.1	0.3	30.7
7	Aluminum and Aluminum Products	6.4	28.1	0.3	336.6
8	Rubber and Rubber Products	15.5	26.8	0.2	72.9
9	Cotton Woven Fabrics	10.2	20.4	0.2	100.3
10	Copper and Copper Products	11.1	19.3	0.2	74.0
Total Top 10 Commodities		6,335.1	11,103.9	99.0	75.3
All Other Commodities		69.8	110.7	1.0	58.5
TOTAL ALL COMMODITIES		6,404.9	11,214.5	100.0	75.1

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 5 INDIA

## HOUSTON AND INDIA: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the second busiest gateway for U.S.-Indian trade and India is Houston's fifth largest international trading partner. From '12 to '21, trade between Houston and India averaged \$6.8 billion annually and was valued at \$13.9 billion in '21. Nearly 90,000 people living in metro Houston were born in India.

### HOUSTON'S BUSINESS TIES

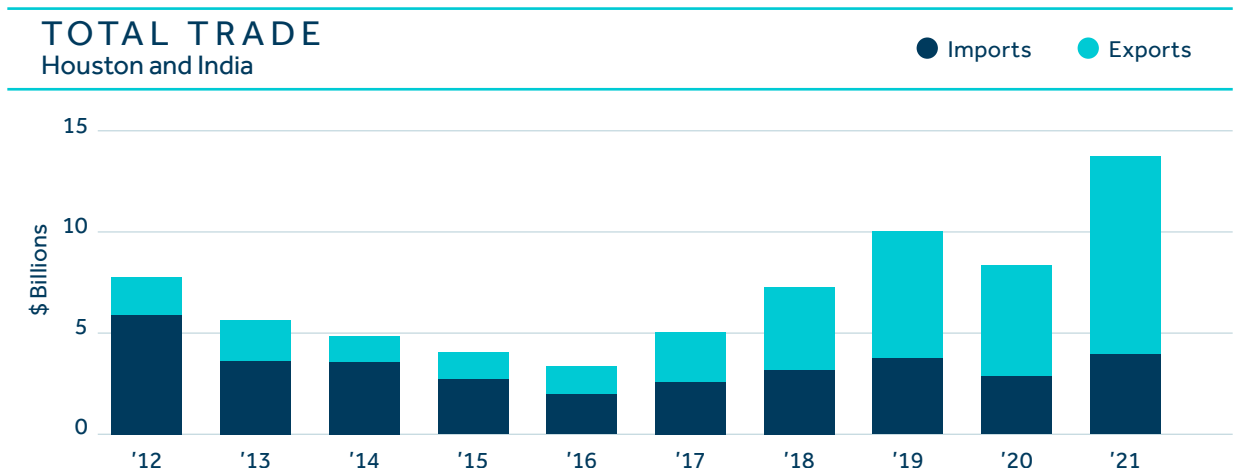
- Twenty-eight Houston firms operate 84 subsidiary locations in India, including: American Bureau of Shipping (ABS), Huntsman International, NOV, Oceaneering International, and Westlake Chemical.
- Twenty-seven Indian firms operate 28 subsidiaries in the Houston area, including JSW Steel, FSS Technologies, Mahindra USA, The Himalayan Drug Company, and Thermax.
- Trade and cultural relationships with India are facilitated in Houston through the Consulate General of India, the Indo-American Chamber of Commerce, Asia Society Texas, Houston Indian Community Association, India House Houston, and the Indo-American Association Houston.

### AIR CARGO TRADE

- Houston ranks as the seventh busiest gateway for U.S.-India air cargo trade (by weight).
- Air cargo trade between Houston and India totaled 9,691.4 metric tons in '21, a 51.1 percent increase over '20. It was valued at \$381.5 million in '21, an 8.0 percent increase over '20.
- In '21, the top three commodities shipped by air were industrial equipment and computers; electrical machinery, equipment, and parts; and articles of iron or steel, accounting for 57.9 percent of the total weight of air cargo trade.

### TOTAL TRADE

Houston-India trade has nearly doubled over the past decade, from \$7.5 billion in '12 to \$13.9 billion in '21. Trade between Houston and India grew steadily after '16 but fell 21.0 percent to \$8.0 billion in '20. However, trade increased 74.3 percent from '20 to '21 due to an increase in the export and import value of trade in mineral fuels, crude oil, and refined products. In addition, the increase in the import value of industrial equipment and computers also contributed to the total trade increase between the two countries.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from India to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	491.2	819.0	19.8	66.7
2	Articles of Iron or Steel	240.2	418.4	10.1	74.2
3	Mineral Fuels, Oil and Refined Products	182.1	330.0	8.0	81.2
4	Organic Chemicals	171.5	247.3	6.0	44.2
5	Electrical Machinery, Equipment and Parts	157.9	240.0	5.8	52.0
6	Linens, Needlecraft Sets, Worn Clothing	173.8	234.3	5.7	34.8
7	Fish, Crustaceans and Aquatic Invertebrates	129.6	198.2	4.8	52.9
8	Motor Vehicles and Parts	158.1	175.0	4.2	10.7
9	Iron and Steel	18.5	131.6	3.2	610.0
10	Aluminum and Aluminum Products	40.7	129.9	3.1	219.1
Total Top 10 Commodities		1,763.6	2,923.7	70.7	65.8
All Other Commodities		753.1	1,209.8	29.3	60.6
TOTAL ALL COMMODITIES		2,516.7	4,133.5	100.0	64.2

## EXPORTS from Houston to India

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	3,326.7	7,286.0	74.6	119.0
2	Organic Chemicals	881.0	1,130.2	11.6	28.3
3	Beverages, Spirits, and Vinegar	292.8	265.7	2.7	-9.2
4	Industrial Equipment and Computers	209.5	225.7	2.3	7.7
5	Plastics and Plastic Products	241.0	215.6	2.2	-10.5
6	Miscellaneous Chemical Products	90.7	125.1	1.3	37.9
7	Iron and Steel	44.0	61.1	0.6	39.0
8	Electrical Machinery, Equipment and Parts	91.5	61.1	0.6	-33.3
9	Railway or Tramway Stock	0.1	57.5	0.6	74820.8
10	Articles of Iron or Steel	38.1	47.1	0.5	23.8
Total Top 10 Commodities		5,215.4	9,475.2	97.0	81.7
All Other Commodities		240.7	291.7	3.0	21.2
TOTAL ALL COMMODITIES		5,456.1	9,766.8	100.0	79.0

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data



# 6

## NETHERLANDS

### HOUSTON AND THE NETHERLANDS: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the second busiest gateway for U.S.-Netherlands trade and the Netherlands is Houston's largest European trading partner. From '12 to '21, trade between Houston and the Netherlands averaged \$9.7 billion annually and was valued at \$13.8 billion in '21. More than 1,600 people living in metro Houston were born in the Netherlands.

#### HOUSTON'S BUSINESS TIES

- Forty-nine Houston firms operate 44 subsidiary locations in the Netherlands, including Airswift Group, American Bureau of Shipping, BMC Software, Idera, Ion Geophysical, Hines, NOV, and Schlumberger.
- Thirty-eight Dutch firms operate 78 subsidiary offices in Houston, including Akzom Nobel, Brunel USA, Royal Dutch Shell, SBM Offshore, and Vopak.
- Trade and cultural relationships with the Netherlands are facilitated in Houston through the Honorary Consul of the Netherlands, the Netherlands Business Support Office, and the Holland Club of Houston.

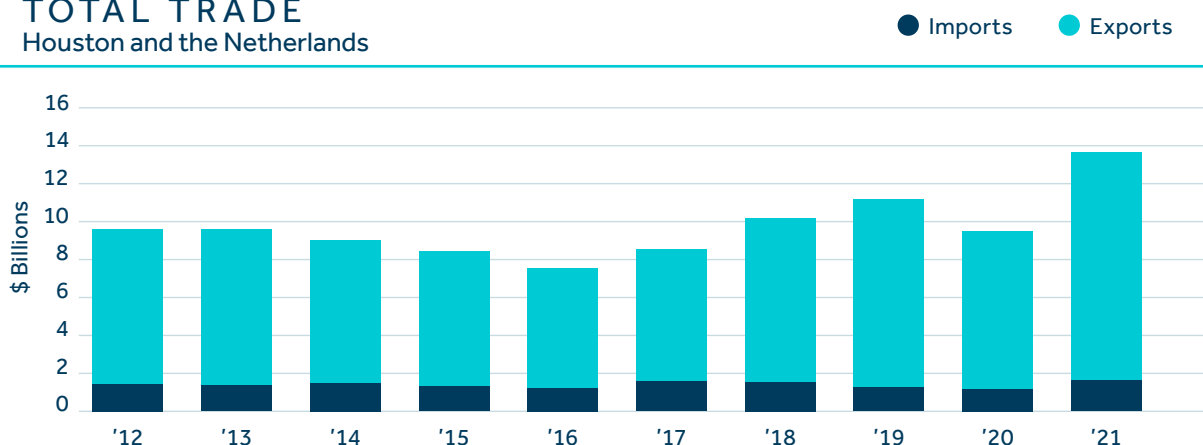
#### AIR CARGO TRADE

- Houston ranks as the 10th busiest gateway for U.S.-Netherlands air cargo trade (by weight).
- Air cargo trade between Houston and the Netherlands totaled 7,862.2 metric tons in '21, a 53.2 percent increase from '20. It was valued at \$1.1 billion in '21, a 20.7 percent increase over '20.
- In '21, the top three commodities by weight were plastics and plastic products; industrial equipment and computers; and electric machinery, accounting for 47.8 percent of total air cargo trade.

#### TOTAL TRADE

Houston-Netherlands trade fluctuated over the decade, from a low of \$7.7 billion in '16 to a ten-year high of \$13.8 billion in '21. The Netherlands is primarily an export market for Houston oil and gas products. In '21, trade between Houston and The Netherlands increased 46.2 percent over '20 which is largely due to an increase in the import and export value of fuels and refined products.

#### TOTAL TRADE Houston and the Netherlands



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from the Netherlands to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	194.3	483.6	27.1	148.9
2	Mineral Fuels, Oil and Refined Products	122.6	414.8	23.3	238.3
3	Organic Chemicals	143.9	212.0	11.9	47.4
4	Beverages, Spirits, and Vinegar	141.4	120.9	6.8	-14.5
5	Optic, Photographic, Measuring, Medical Instruments	54.5	98.8	5.5	81.3
6	Electrical Machinery, Equipment and Parts	57.2	61.5	3.5	7.5
7	Miscellaneous Chemical Products	71.4	59.2	3.3	-17.1
8	Plastics and Plastic Products	34.4	44.5	2.5	29.5
9	Articles of Iron or Steel	24.8	40.6	2.3	63.7
10	Miscellaneous Industrial Components, Equipment and Parts	41.9	40.4	2.3	-3.4
Total Top 10 Commodities		886.4	1,576.3	88.4	77.8
All Other Commodities		230.0	206.2	11.6	-10.3
TOTAL ALL COMMODITIES		1,116.3	1,782.4	100.0	59.7

## EXPORTS from Houston to the Netherlands

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	5,157.2	9,089.7	75.7	76.3
2	Organic Chemicals	573.3	817.9	6.8	42.6
3	Industrial Equipment and Computers	399.2	476.0	4.0	19.3
4	Electrical Machinery, Equipment and Parts	556.5	321.8	2.7	-42.2
5	Plastics and Plastic Products	209.1	250.2	2.1	19.7
6	Optic, Photographic, Measuring, Medical Instruments	118.6	188.2	1.6	58.7
7	Ores, Slag and Ash	127.7	173.4	1.4	35.7
8	Miscellaneous Chemical Products	80.8	125.2	1.0	55.0
9	Motor Vehicles and Parts	521.0	77.7	0.6	-85.1
10	Edible Fruit and Nuts	47.7	60.2	0.5	26.1
Total Top 10 Commodities		7,791.2	11,580.2	96.4	48.6
All Other Commodities		522.0	426.9	3.6	-18.2
TOTAL ALL COMMODITIES		8,313.3	12,007.1	100.0	44.4

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 7 GERMANY

## HOUSTON AND GERMANY: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the sixth busiest gateway for U.S.-German trade and Germany is Houston's second largest European trade partner. From '12 to '21, trade between Houston and Germany averaged \$9.8 billion annually and was valued at \$11.9 billion in '21. More than 8,800 people living in metro Houston were born in Germany.

### HOUSTON'S BUSINESS TIES

- Thirty Houston firms operate 64 subsidiary locations in Germany, including Baker Hughes, BMC Software, LyondellBasell, Schlumberger, and Westlake Chemical Corporation.
- Eighty-two German firms operate 126 subsidiaries in the Houston area, including BASF, Lufthansa Airlines, Deutsche Bank, Siemens, and Trader Joe's.
- Trade and cultural relationships with Germany are facilitated in Houston through the Consulate General of Germany, the German American Chamber of Commerce of the Southern U.S., the Texas German Society, the Tomball German Festival, and the German Institute for the Southwest, an official German cultural organization that fosters German language and culture among southwestern states.
- Leipzig, Germany was designated as one of Houston's 19 international sister cities in 1992.

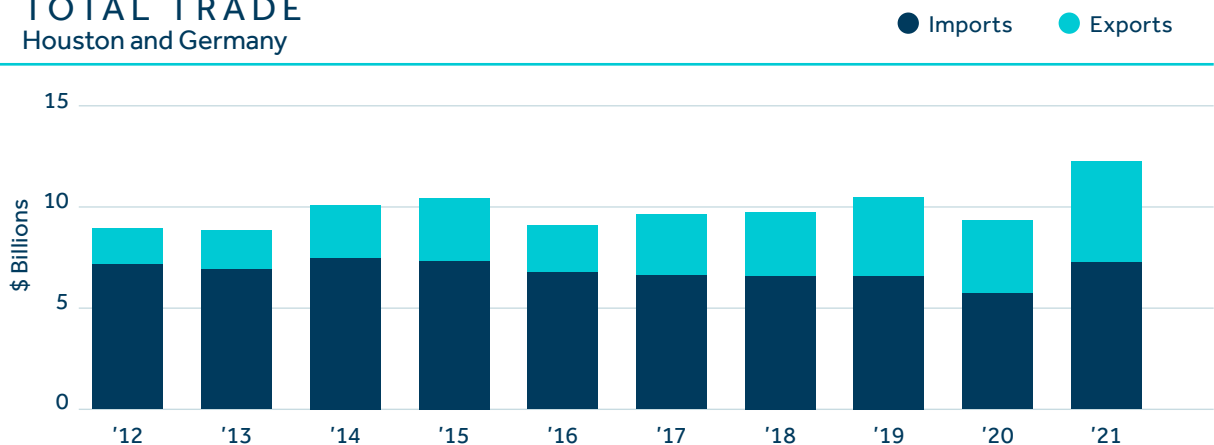
### AIR CARGO TRADE

- Houston ranks as the 12th busiest gateway for U.S.-Germany air cargo trade (by weight).
- Air cargo trade between Houston and Germany totaled 13,595.7 metric tons in '21, a 25.0 percent increase over '20. It was valued at \$1.2 billion in '21, a 32.2 percent increase over '20.
- In '21, the top three commodities by weight were industrial equipment and computers; electrical machinery, equipment, and parts; and optic, photographic, measuring, medical instruments, accounting for 46.1 percent of total air cargo trade.

### TOTAL TRADE

Houston-Germany trade held steady over much of the past decade before accelerating to \$11.9 billion in '21, a 26.3 percent over '20. This increase can largely be attributed to a 31.0 percent jump in the value of imports, which included motor vehicles and parts and industrial equipment and computers.

### TOTAL TRADE Houston and Germany



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Germany to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Motor Vehicles and Parts	1,675.2	2,088.1	27.8	24.6
2	Industrial Equipment and Computers	1,587.6	1,820.0	24.2	14.6
3	Precious Stones, Metals, Coins, Pearls	132.5	469.4	6.2	254.2
4	Organic Chemicals	291.6	395.2	5.3	35.5
5	Electrical Machinery, Equipment and Parts	333.6	386.1	5.1	15.7
6	Plastics and Plastic Products	198.0	274.4	3.7	38.6
7	Optic, Photographic, Measuring, Medical Instruments	212.1	247.9	3.3	16.9
8	Articles of Iron or Steel	242.3	237.5	3.2	-2.0
9	Miscellaneous Industrial Components, Equipment and Parts	74.3	227.9	3.0	206.6
10	Miscellaneous Chemical Products	119.2	150.6	2.0	26.4
Total Top 10 Commodities		4,866.5	6,297.2	83.8	29.4
All Other Commodities		872.4	1,219.8	16.2	39.8
TOTAL ALL COMMODITIES		5,738.9	7,516.9	100.0	31.0

## EXPORTS from Houston to Germany

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	1,482.3	1,744.3	39.9	17.7
2	Pharmaceutical Products	720.7	794.4	18.2	10.2
3	Electrical Machinery, Equipment and Parts	243.5	331.2	7.6	36.0
4	Industrial Equipment and Computers	188.3	265.5	6.1	41.0
5	Miscellaneous Chemical Products	136.2	170.4	3.9	25.1
6	Organic Chemicals	129.2	150.5	3.4	16.4
7	Aircraft, Spacecraft and Parts	160.1	138.2	3.2	-13.7
8	Optic, Photographic, Measuring, Medical Instruments	127.9	131.0	3.0	2.4
9	Plastics and Plastic Products	73.8	101.1	2.3	37.1
10	Motor Vehicles and Parts	69.3	100.3	2.3	44.9
Total Top 10 Commodities		3,331.4	3,926.9	89.9	17.9
All Other Commodities		340.3	443.3	10.1	30.3
TOTAL ALL COMMODITIES		3,671.7	4,370.2	100.0	19.0

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 8 JAPAN

## HOUSTON AND JAPAN: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the seventh busiest gateway for U.S.-Japanese trade and Japan is Houston's fourth largest Asian trading partner. From '12 to '21, trade between Houston and Japan averaged \$6.9 billion annually; it was valued at \$11.5 billion in '21. More than 3,800 people living in metro Houston were born in Japan.

### HOUSTON'S BUSINESS TIES

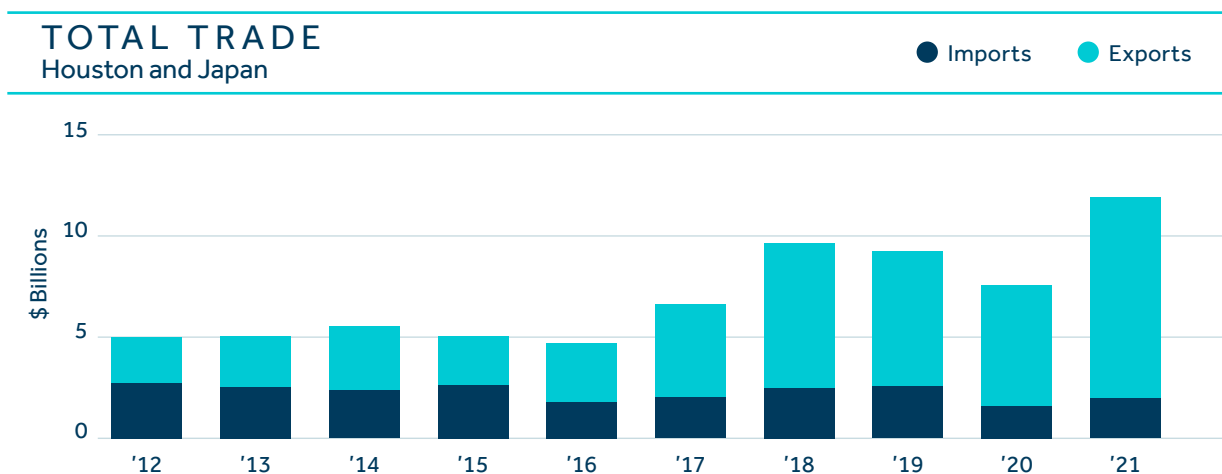
- Eighteen Houston firms operate 30 subsidiary locations in Japan, including American Bureau of Shipping (ABS), Huntsman International, Schlumberger Limited, Vinson & Elkins, and Westlake Chemical Corporation.
- 104 Japanese firms operate 239 subsidiaries in the Houston area, including Bridgestone Corporation, Daikin Industries, Goodman Manufacturing, Mitsubishi Corporation, and Toshiba Corporation.
- Trade and cultural relationships with Japan are facilitated in Houston through the Consulate General of Japan, Japan Business Association of Houston, Asia Society Texas, the Greater Houston Japanese Association, the Japan America Society of Houston, and the Japanese American Citizens League, Houston Chapter.
- Chiba, Japan was designated as one of Houston's 19 international sister cities in 1972.
- Of Houston's 16 foreign-owned banks, three are from Japan: Mizuho Bank, Ltd. MUFG Bank, Ltd. Sumitomo Mitsui Banking Corporation.

### AIR CARGO TRADE

- Houston ranks as the 11th busiest gateway for U.S.-Japan air cargo trade (by weight).
- Air cargo trade between Houston and Japan totaled 9,389.0 metric tons in '21, a 238.2 percent increase over '20. It was valued at \$381.3 million in '21, a 37.5 increase over '20.
- In '21, the top three commodities by weight were plastic products; electrical machinery, sound equipment; and industrial machinery, including computers, accounting for 44.3 percent of total air cargo trade.

### TOTAL TRADE

Houston-Japan trade has more than doubled over the past decade, from \$4.9 billion in '12 to \$11.5 billion in '21. In the first five years of the decade, trade between Houston and Japan averaged \$4.9 billion and then grew steadily until '20 when trade fell 19.8 percent from the previous year. However, in '21 trade jumped 54.6 percent largely due to an increase in the export value of fuels, oil, and refined products; and organic chemicals.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Japan to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	834.9	950.8	41.2	13.9
2	Electrical Machinery, Equipment and Parts	205.7	324.2	14.1	57.6
3	Motor Vehicles and Parts	81.9	189.9	8.2	131.8
4	Articles of Iron or Steel	150.4	165.0	7.2	9.7
5	Organic Chemicals	123.3	151.8	6.6	23.0
6	Miscellaneous Chemical Products	100.3	122.5	5.3	22.1
7	Plastics and Plastic Products	98.5	109.3	4.7	10.9
8	Optic, Photographic, Measuring, Medical Instruments	37.8	47.0	2.0	24.3
9	Miscellaneous Industrial Components, Equipment and Parts	33.3	40.3	1.7	20.9
10	Mineral Fuels, Oil and Refined Products	29.7	34.1	1.5	14.7
Total Top 10 Commodities		1,696.0	2,134.9	92.6	25.9
All Other Commodities		139.0	171.6	7.4	23.4
TOTAL ALL COMMODITIES		1,835.0	2,306.5	100.0	25.7

## EXPORTS from Houston to Japan

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	4,252.8	7,168.9	77.6	68.6
2	Organic Chemicals	1,082.6	1,641.5	17.8	51.6
3	Plastics and Plastic Products	52.8	113.9	1.2	115.7
4	Miscellaneous Chemical Products	41.1	108.1	1.2	162.7
5	Optic, Photographic, Measuring, Medical Instruments	13.5	23.8	0.3	75.8
6	Industrial Equipment and Computers	68.2	23.6	0.3	-65.4
7	Soaps, Waxes, Polishes, Candles, Dental Preps	7.2	18.0	0.2	149.5
8	Electrical Machinery, Equipment and Parts	61.9	16.6	0.2	-73.2
9	Inorganic Chemicals, Rare Earths, Precious Metals	2.6	13.3	0.1	415.6
10	Rubber and Rubber Products	3.9	12.3	0.1	214.0
Total Top 10 Commodities		5,586.7	9,139.9	99.0	63.6
All Other Commodities		43.3	96.8	1.0	123.6
TOTAL ALL COMMODITIES		5,630.0	9,236.7	100.0	64.1

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 9

## UNITED KINGDOM

### HOUSTON AND UNITED KINGDOM: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the second busiest gateway for U.S.-United Kingdom trade and the U.K. is Houston's third largest European trading partner. From '12 to '21, trade between Houston and the United Kingdom averaged \$6.8 billion annually and was valued at \$9.8 billion in '21. More than 15,500 people living in metro Houston were born in the United Kingdom.

#### HOUSTON'S BUSINESS TIES

- Eighty-eight Houston firms operate 311 subsidiary offices in the United Kingdom, including BMC Software, Cardtronics, ConocoPhillips, Gyrodata, and Halliburton.
- 169 U.K. firms operate 357 subsidiary offices in Houston, including Aon, BAE Systems, BP, Barclays, INEOS Group, Norton Rose Fulbright, Subsea 7, and Wood Mackenzie.
- Trade and cultural relationships with the United Kingdom are facilitated in Houston through the Consul General of The United Kingdom, the British-American Business Council Houston, and Britannia International Services.
- Of Houston's 16 foreign-owned banks, one is from the United Kingdom: Standard Chartered Bank.

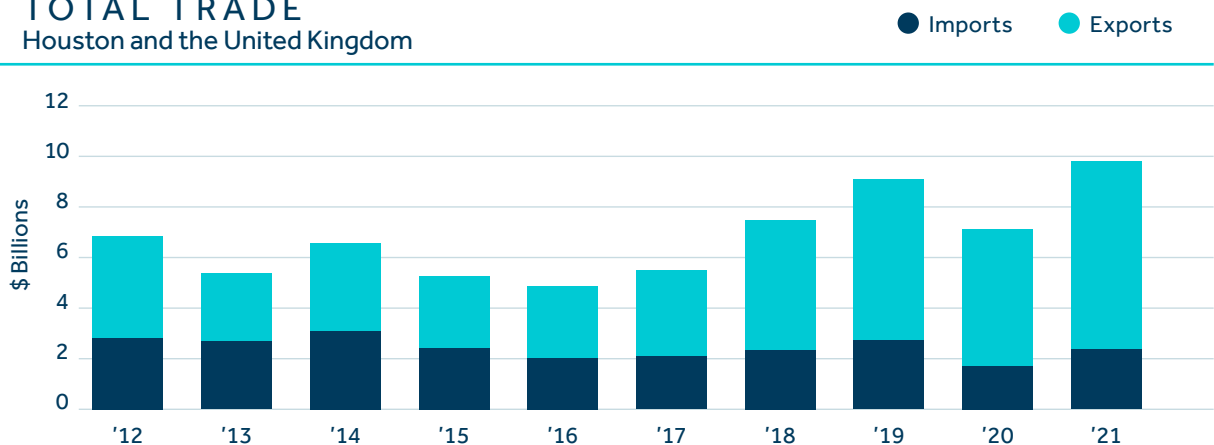
#### AIR CARGO TRADE

- Houston ranks as the 10th busiest gateway for U.S.-U.K. air cargo trade (by weight).
- Air cargo trade between Houston and the United Kingdom totaled 11,024.3 metric tons in '21, a 21.8 percent increase from '20. It was valued at \$839.8 million in '21, a 7.2 percent increase over '20.
- In '21, the top three commodities by weight were industrial equipment and computers; articles of iron and steel; and plastic products, accounting for 53.5 percent of total air cargo trade.

#### TOTAL TRADE

Over the last decade, Houston-U.K. trade fluctuated from a low of \$4.5 billion in '16 to a high of \$9.7 billion in '21. Overall trade declined in '20 by 21.0 percent but recovered in '21. Trade between Houston and the U.K. increased 32.8 percent over '20 largely due to an increase in the export value of fuels and refined products. These commodities represent 66.3 percent of trade between the two countries.

#### TOTAL TRADE Houston and the United Kingdom



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data



## IMPORTS from the United Kingdom to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	444.1	541.5	23.3	21.9
2	Mineral Fuels, Oil and Refined Products	46.7	376.0	16.2	704.6
3	Motor Vehicles and Parts	142.7	213.0	9.2	49.3
4	Precious Stones, Metals, Coins, Pearls	150.1	191.0	8.2	27.3
5	Aircraft, Spacecraft and Parts	188.5	163.8	7.1	-13.1
6	Beverages, Spirits, and Vinegar	96.0	92.4	4.0	-3.7
7	Miscellaneous Industrial Components, Equipment and Parts	73.0	83.6	3.6	14.5
8	Optic, Photographic, Measuring, Medical Instruments	77.9	80.1	3.5	2.9
9	Organic Chemicals	71.2	79.3	3.4	11.3
10	Articles of Iron or Steel	113.3	70.0	3.0	-38.2
Total Top 10 Commodities		1,403.5	1,890.9	81.5	34.7
All Other Commodities		443.7	430.6	18.5	-3.0
TOTAL ALL COMMODITIES		1,847.2	2,321.5	100.0	25.7

## EXPORTS from Houston to the United Kingdom

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	4,200.2	6,098.9	81.9	45.2
2	Industrial Equipment and Computers	356.0	370.1	5.0	4.0
3	Plastics and Plastic Products	109.6	127.3	1.7	16.2
4	Precious Stones, Metals, Coins, Pearls	59.2	109.2	1.5	84.4
5	Optic, Photographic, Measuring, Medical Instruments	89.1	95.5	1.3	7.2
6	Aircraft, Spacecraft and Parts	90.8	81.1	1.1	-10.6
7	Electrical Machinery, Equipment and Parts	65.6	80.3	1.1	22.5
8	Organic Chemicals	93.4	57.5	0.8	-38.4
9	Articles of Iron or Steel	63.6	49.0	0.7	-22.9
10	Beverages, Spirits, and Vinegar	26.4	39.1	0.5	48.0
Total Top 10 Commodities		5,153.7	7,108.0	95.5	37.9
All Other Commodities		350.0	335.3	4.5	-4.2
TOTAL ALL COMMODITIES		5,503.8	7,443.3	100.0	35.2

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 10 COLOMBIA

## HOUSTON AND COLOMBIA: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the second busiest gateway for U.S.-Colombian trade. Colombia is Houston's 10th largest international trade partner. From '12 to '21, trade between Houston and Colombia averaged \$7.7 billion annually and it was valued at \$7.1 billion in '21. Around 29,500 people living in the Houston metro were born in Colombia.

### HOUSTON'S BUSINESS TIES

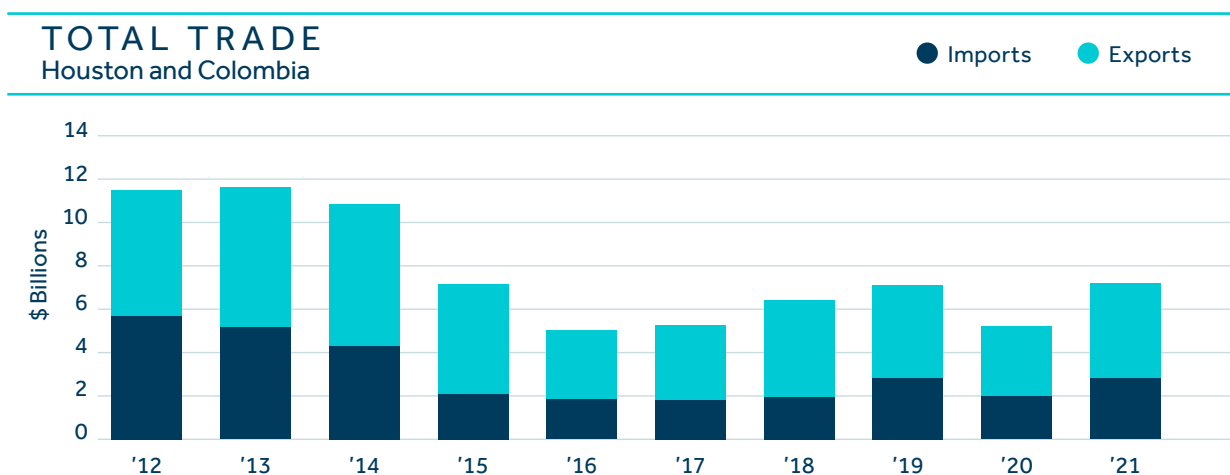
- Twenty Houston firms operate 41 subsidiary locations in Colombia, including the American Bureau of Shipping, Crane Worldwide Logistics, Halliburton, Huntsman, and Schlumberger.
- Trade and cultural relationships with Colombia are facilitated in Houston through the Consulate General of Colombia, the Colombia-Texas Chamber of Commerce, the Colombian Fest International, and multiple festivals throughout the year.

### AIR CARGO TRADE

- Houston ranks as the 10th busiest gateway for U.S.-Colombia air cargo trade (by weight).
- Air cargo trade between Houston and Colombia totaled 410.8 metric tons in '21, an 83.9 percent increase over '20. It was valued at \$22.3 million in '21, a 17.0 percent increase over '20.
- In '21, the top three commodities by weight were plastics and plastic products; industrial equipment and computers; and miscellaneous industrial components, equipment, and parts, accounting for 55.4 percent of total air cargo trade.

### TOTAL TRADE

Houston-Colombia trade declined over the past decade, from \$11.4 billion in '12 to \$7.1 billion in '21. Trade between the two countries hit a decade low of \$5.0 billion in '16 largely due to a decline in the import and export value of fuels, crude oil, and refined products. Trade then grew steadily until '20, when it fell 25.7 percent below '19. From '20 to '21, trade increased by 26.7 percent, which can be attributed to an increase in the import value of fuels, crude oil, and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Colombia to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	1,791.5	2,384.1	83.1	33.1
2	Coffee, Tea, Spices	73.2	116.8	4.1	59.6
3	Articles of Iron or Steel	26.5	57.9	2.0	118.7
4	Edible Products	20.4	50.5	1.8	147.2
5	Electrical Machinery, Equipment and Parts	31.9	42.1	1.5	31.9
6	Miscellaneous Chemical Products	18.4	22.1	0.8	20.1
7	Plastics and Plastic Products	11.3	20.6	0.7	82.9
8	Aluminum and Aluminum Products	7.1	18.5	0.6	159.7
9	Miscellaneous Industrial Components, Equipment and Parts	24.0	16.9	0.6	-29.5
10	Salt, Sulfur, Stone, Lime and Cement Plaster	4.0	15.2	0.5	280.6
Total Top 10 Commodities		2,008.3	2,744.9	95.7	36.7
All Other Commodities		81.3	123.9	4.3	52.3
TOTAL ALL COMMODITIES		2,089.7	2,868.7	100.0	37.3

## EXPORTS from Houston to Colombia

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	1,449.4	2,293.1	53.9	58.2
2	Organic Chemicals	654.2	824.8	19.4	26.1
3	Plastics and Plastic Products	374.4	516.8	12.2	38.0
4	Industrial Equipment and Computers	138.7	126.6	3.0	-8.7
5	Miscellaneous Chemical Products	96.8	95.5	2.2	-1.3
6	Cereals	68.0	84.6	2.0	24.4
7	Beverages, Spirits, and Vinegar	118.9	69.6	1.6	-41.5
8	Meat and Edible Meat Products	36.5	38.3	0.9	4.8
9	Electrical Machinery, Equipment and Parts	37.8	25.4	0.6	-32.7
10	Paper and Paperboard Articles	24.3	25.2	0.6	3.8
Total Top 10 Commodities		2,999.0	4,099.9	96.4	36.7
All Other Commodities		129.3	153.2	3.6	18.5
TOTAL ALL COMMODITIES		3,128.3	4,253.1	100.0	36.0

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 11 ITALY

## HOUSTON AND ITALY: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the second busiest gateway for U.S.-Italian trade and Italy is Houston's fourth largest European trading partner. From '12 to '21, trade between Houston and Italy averaged \$5.1 billion annually and it was valued at \$7.0 billion in '21. More than 3,700 people living in metro Houston were born in Italy.

### HOUSTON'S BUSINESS TIES

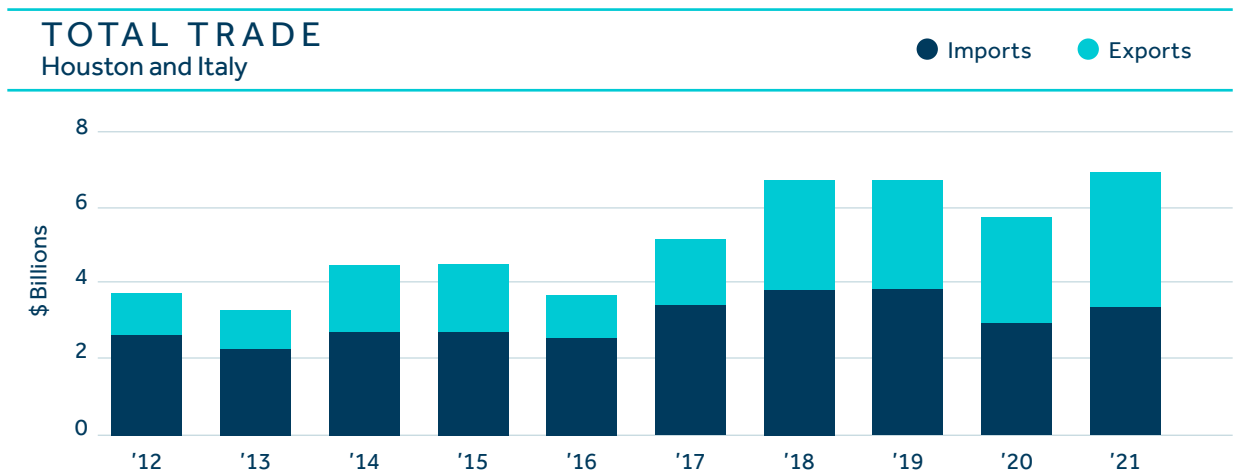
- Seventeen Houston firms operate 33 subsidiary locations in Italy, including ABS, Hines, Huntsman, NOV, and Schlumberger.
- Thirty-one Italian firms operate 36 subsidiaries in the Houston area, including Bulgari, Dolce & Gabbana, Eni Oil Company, Prysmian Downhole Technology, and Versace.
- Trade and cultural relationships with Italy are facilitated in Houston through the Consulate General of Italy, the Italy-America Chamber of Commerce of Texas, the Italian Trade Commission, and the Italian Cultural & Community Center.

### AIR CARGO TRADE

- Houston ranks as the 9th busiest gateway for U.S.-Italy air cargo trade (by weight).
- Air cargo trade between Houston and Italy totaled 6,170.2 metric tons in '21, a 54.7 percent increase over '20. It was valued at \$294.6 million in '21, a 32.0 percent increase over '20.
- In '21, the top three commodities by weight were industrial equipment and computers; articles of iron or steel; and plastics and plastic products, accounting for 69.03 percent of total air cargo trade.

### TOTAL TRADE

Houston-Italy trade has nearly doubled over the past decade, from \$3.6 billion in '12 to \$7.0 billion in '21. Since '16, trade between Houston and Italy grew steadily until '20 when trade declined 14.5 percent but recovered in '21. Total trade increased 21.9 percent over '20 and can largely be attributed to an increase in the import value of industrial equipment and computers and in the export value of fuel, oil and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Italy to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	884.7	1,074.0	30.5	21.4
2	Aircraft, Spacecraft and Parts	304.4	258.9	7.4	-14.9
3	Motor Vehicles and Parts	292.5	256.0	7.3	-12.5
4	Beverages, Spirits, and Vinegar	194.1	234.6	6.7	20.8
5	Articles of Iron or Steel	217.6	188.5	5.4	-13.4
6	Mineral Fuels, Oil and Refined Products	130.0	159.2	4.5	22.5
7	Miscellaneous Chemical Products	117.4	140.0	4.0	19.3
8	Furniture, Bedding, Lamps	67.1	105.5	3.0	57.3
9	Electrical Machinery, Equipment and Parts	79.7	100.4	2.9	25.9
10	Ceramic Products	77.0	97.7	2.8	26.8
Total Top 10 Commodities		2,364.5	2,614.8	74.3	10.6
All Other Commodities		627.1	902.6	25.7	43.9
TOTAL ALL COMMODITIES		2,991.5	3,517.4	100.0	17.6

## EXPORTS from Houston to Italy

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	2,085.7	2,740.0	79.1	31.4
2	Aircraft, Spacecraft and Parts	85.3	158.3	4.6	85.7
3	Industrial Equipment and Computers	93.1	102.1	2.9	9.7
4	Plastics and Plastic Products	96.7	101.3	2.9	4.7
5	Organic Chemicals	65.3	97.0	2.8	48.5
6	Cereals	79.8	40.9	1.2	-48.8
7	Raw Hides, Skins and Leather	26.4	31.5	0.9	19.2
8	Electrical Machinery, Equipment and Parts	37.3	28.2	0.8	-24.4
9	Edible Fruit and Nuts	16.8	24.4	0.7	45.2
10	Miscellaneous Chemical Products	24.4	23.9	0.7	-2.2
Total Top 10 Commodities		2,610.8	3,347.7	96.6	28.2
All Other Commodities		125.7	118.2	3.4	-5.9
TOTAL ALL COMMODITIES		2,736.5	3,465.9	100.0	26.7

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 12 SINGAPORE

## HOUSTON AND SINGAPORE: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the fifth busiest gateway for U.S.-Singaporean trade and Singapore is Houston's fifth largest Asian trading partner. From '12 to '21, trade between Houston and Singapore averaged \$3.7 billion annually and it was valued at \$6.3 billion in '21. Over 2,100 people living in metro Houston were born in Singapore.

### HOUSTON'S BUSINESS TIES

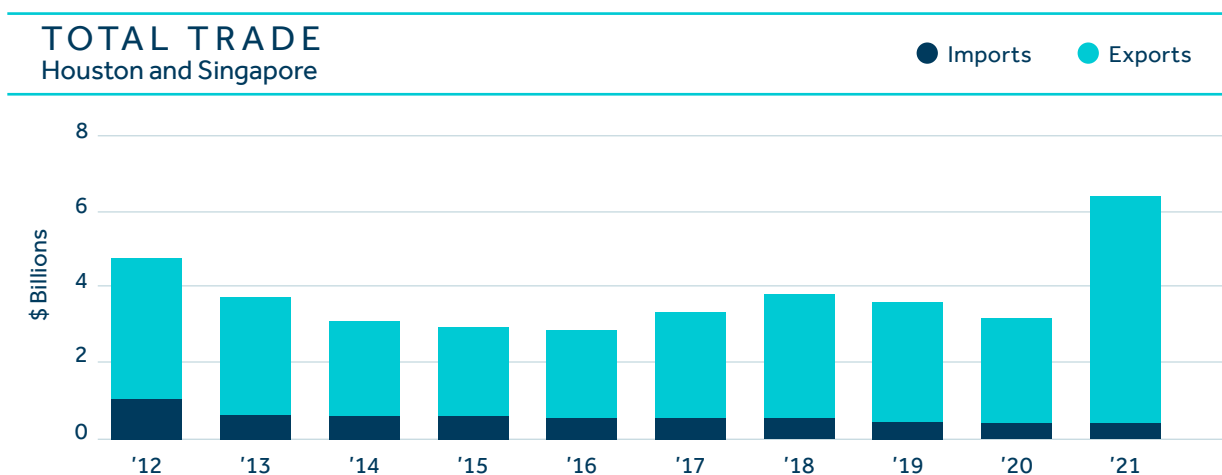
- Forty-six Houston firms operate 73 subsidiary locations in Singapore, including Chevron Phillips Chemical, Diamond Offshore, Honeywell, KBR, and Schlumberger.
- Fifteen Singapore firms operate 21 subsidiaries in the Houston area including: CSE Global, Keppel Corporation, BW Group, and Singapore Airlines.
- Cultural relationships with Singapore are facilitated in Houston through the Malaysian Investment Development Authority of Houston and the Malaysian Singaporean Association of Houston.

### AIR CARGO TRADE

- Houston ranks as the 11th busiest gateway for U.S.-Singapore air cargo trade (by weight).
- Air cargo trade between Houston and Singapore totaled 3,797.9 metric tons in '21, a 37.1 percent increase over '20. That trade was valued at \$261.9 million in '21, a 9.0 percent increase over '20.
- In '21, the top three commodities by weight were industrial equipment and computers; plastics and plastic product; and miscellaneous chemical products, accounting for 56.3 percent of total air cargo trade.

### TOTAL TRADE

Houston-Singapore trade fluctuated over the past decade and peaked in '21 at \$6.3 billion. From '12 to '16, annual trade declined until reversing in '17. In '21, trade doubled in value to \$6.3 billion over the previous year. This recent increase in trade can be attributed to the 156.9 percent increase in the export value of fuel, oil, and refined products from Houston to Singapore.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Singapore to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	53.6	70.5	32.4	31.6
2	Miscellaneous Industrial Components, Equipment and Parts	49.6	36.9	16.9	-25.6
3	Plastics and Plastic Products	26.9	36.7	16.8	36.5
4	Organic Chemicals	10.5	19.2	8.8	82.5
5	Miscellaneous Chemical Products	5.2	12.0	5.5	130.1
6	Optic, Photographic, Measuring, Medical Instruments	16.9	10.4	4.8	-38.6
7	Electrical Machinery, Equipment and Parts	19.2	8.3	3.8	-56.8
8	Articles of Iron or Steel	8.6	6.3	2.9	-26.7
9	Inorganic Chemicals, Rare Earths, Precious Metals	6.1	4.2	1.9	-30.7
10	Aluminum and Aluminum Products	0.0	3.2	1.5	-
Total Top 10 Commodities		196.6	207.7	95.3	5.7
All Other Commodities		16.8	10.2	4.7	-39.4
TOTAL ALL COMMODITIES		213.4	217.9	100.0	2.1

## EXPORTS from Houston to Singapore

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	1,562.0	4,012.3	66.3	156.9
2	Industrial Equipment and Computers	253.1	575.3	9.5	127.3
3	Plastics and Plastic Products	349.6	396.7	6.6	13.5
4	Animal or Vegetable Fats, Oils, Waxes	259.7	382.9	6.3	47.4
5	Organic Chemicals	148.2	263.2	4.3	77.6
6	Miscellaneous Chemical Products	91.0	163.3	2.7	79.5
7	Electrical Machinery, Equipment and Parts	57.7	53.6	0.9	-7.1
8	Optic, Photographic, Measuring, Medical Instruments	36.4	44.5	0.7	22.3
9	Rubber and Rubber Products	37.9	36.2	0.6	-4.5
10	Soaps, Waxes, Polishes, Candles, Dental Preps	19.4	27.6	0.5	42.2
Total Top 10 Commodities		2,814.9	5,955.6	98.4	111.6
All Other Commodities		71.4	97.8	1.6	37.0
TOTAL ALL COMMODITIES		2,886.2	6,053.4	100.0	109.7

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data



# 13 TAIWAN

## HOUSTON AND TAIWAN: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the seventh busiest gateway for U.S.-Taiwanese trade and Taiwan is Houston's 6th largest Asian trading partner. From '12 to '21, trade between Houston and Taiwan averaged \$3.2 billion annually and was valued at \$6.0 billion in '21. More than 14,200 people living in metro Houston were born in Taiwan.

### HOUSTON'S BUSINESS TIES

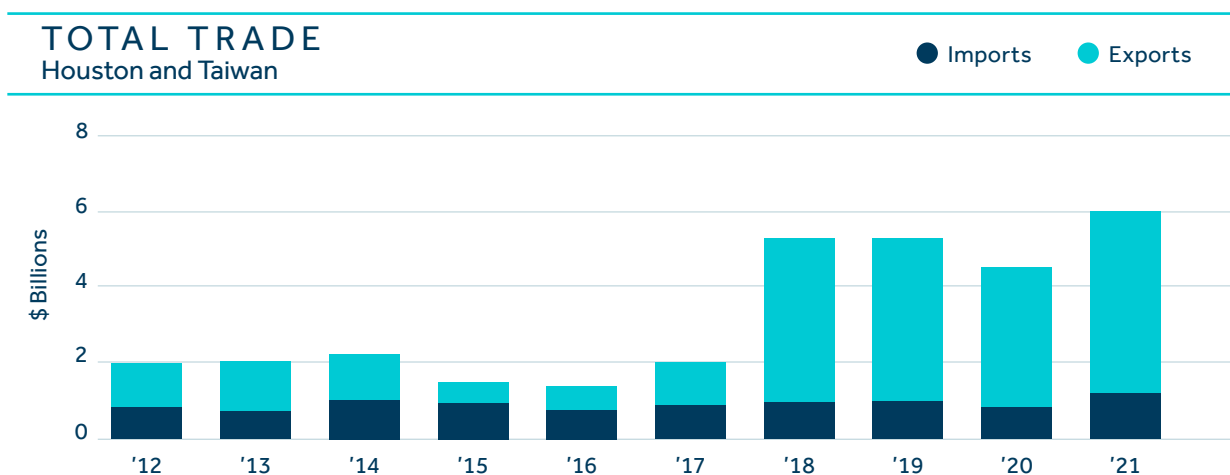
- Eleven Houston firms operate 14 subsidiary locations in Taiwan, including American Bureau of Shipping, BMC Software, Crane Worldwide Logistics, Huntsman, and Westlake Chemical Corporation.
- Nine Taiwanese firms operate 11 subsidiaries in the Houston area, including Continental Carbon, Delta Electronics, EVA Airways, Nan Ya Plastics Corporation, and Ta Chen International, Inc.
- Trade and cultural relationships with Taiwan are facilitated in Houston through the Taiwanese Chamber of Commerce of Greater Houston, the Taiwanese Heritage Society, the Houston-Taipei Society, and the Taipei Economic and Cultural Office in Houston.
- Of Houston's 16 foreign-owned banks, two are from Taiwan: First Commercial Bank and Taiwan Cooperative Bank.
- Taipei, Taiwan was designated as one of Houston's 19 international sister cities in 1961.

### AIR CARGO TRADE

- Houston ranks as the 14th busiest gateway for U.S.-Taiwan air cargo trade (by weight).
- Air cargo trade between Houston and Taiwan totaled 1,716.7 metric tons in '21, a 134.0 percent increase over '20. It was valued at \$93.9 million in '21, a 2.0 increase over '20.
- In '21, the top three commodities by weight were industrial equipment and computers; plastic products; and electrical machinery, accounting for 33.52 percent of total air cargo trade.

### TOTAL TRADE

Houston-Taiwan trade has tripled over the past decade, from \$2.0 billion in '12 to \$6.0 billion in '21. Prior to '17, annual trade between Houston and Taiwan averaged \$1.8 billion. Today, the average has increased to \$5.2 billion from '18 to '21, largely due to increases in the export value of fuels, oil and refined products. In '20, trade fell by 13.8 percent but recovered in '21 from increases in the import value of organic chemicals and the export value of fuels, oil, and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Taiwan to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	197.4	225.5	18.0	14.2
2	Organic Chemicals	41.8	190.2	15.2	355.5
3	Electrical Machinery, Equipment and Parts	104.2	159.6	12.8	53.2
4	Articles of Iron or Steel	168.6	156.0	12.5	-7.5
5	Iron and Steel	33.5	100.7	8.0	200.3
6	Furniture, Bedding, Lamps	55.2	84.7	6.8	53.4
7	Plastics and Plastic Products	55.4	83.1	6.6	50.1
8	Motor Vehicles and Parts	16.4	47.4	3.8	189.2
9	Arms and Ammunition	18.9	30.9	2.5	63.7
10	Toys, Games, and Sports Equipment	25.9	24.8	2.0	-4.3
Total Top 10 Commodities		717.3	1,102.9	88.1	53.8
All Other Commodities		130.3	148.9	11.9	14.3
TOTAL ALL COMMODITIES		847.5	1,251.8	100.0	47.7

## EXPORTS from Houston to Taiwan

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	2,806.1	3,915.4	82.0	39.5
2	Organic Chemicals	519.4	544.4	11.4	4.8
3	Plastics and Plastic Products	146.1	145.7	3.1	-0.2
4	Miscellaneous Chemical Products	30.9	37.2	0.8	20.5
5	Meat and Edible Meat Products	42.8	33.5	0.7	-21.9
6	Electrical Machinery, Equipment and Parts	37.3	32.9	0.7	-11.9
7	Rubber and Rubber Products	11.9	15.9	0.3	33.1
8	Industrial Equipment and Computers	17.3	11.3	0.2	-34.8
9	Paper and Paperboard Articles	2.4	7.0	0.1	195.0
10	Cotton Woven Fabrics	1.5	3.9	0.1	155.2
Total Top 10 Commodities		3,615.6	4,747.1	99.4	31.3
All Other Commodities		29.5	29.3	0.6	-0.6
TOTAL ALL COMMODITIES		3,645.1	4,776.4	100.0	31.0

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 14 CHILE

## HOUSTON AND CHILE: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the second busiest gateway for U.S.-Chilean trade and Chile is Houston's third largest South American trade partner. From '12 to '21, trade between Houston and Chile averaged \$4.2 billion annually and was valued at \$5.9 billion in '21. More than 2,300 people living in the Houston metro were born in Chile.

### HOUSTON'S BUSINESS TIES

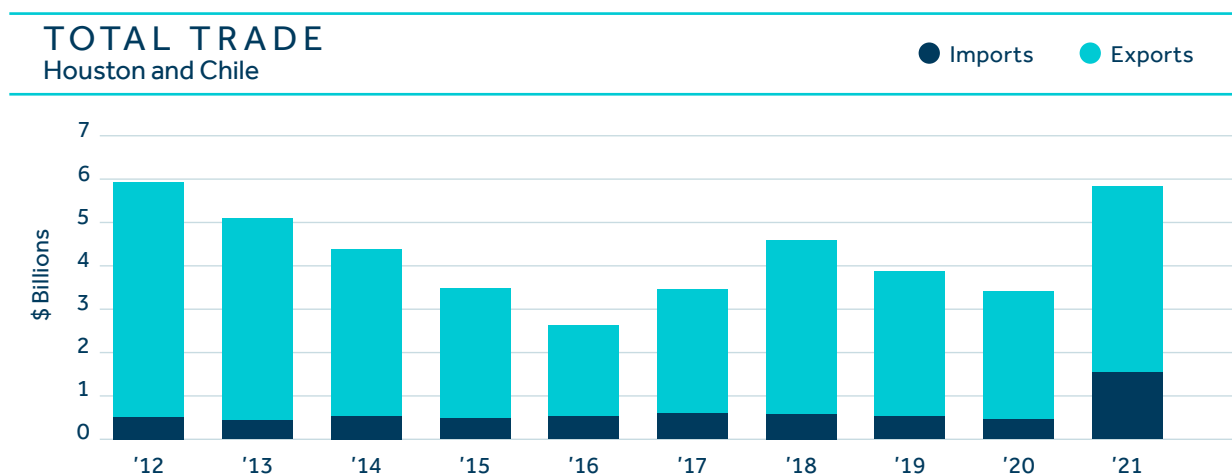
- Six Houston firms operate eight subsidiaries in Chile, including the American Bureau of Shipping, Exterran Corporation, Occidental Petroleum, Target Hospitality, and UTC Overseas.
- One Chilean firm operates a subsidiary in Houston, CSAV Agency.
- Trade and cultural relationships with Chile are facilitated in Houston through the Consulate General of Chile, the Institute of Hispanic Culture of Houston, Casa de Chilena, as well as numerous festivals.

### AIR CARGO TRADE

- Houston ranks as the 5th busiest gateway for U.S.-Chile air cargo trade (by weight).
- Air cargo trade between Houston and Chile totaled 5,826.0 metric tons in '21, a 51.7 percent increase over '20. It was valued at \$120.9 million in '21, a 39.5 percent increase over '20.
- In '21, the top three commodities by weight were fish, crustaceans, and aquatic invertebrates; industrial equipment; and miscellaneous chemical products, accounting for 92.2 percent of total air cargo trade.

### TOTAL TRADE

Houston-Chile trade has fluctuated over the past decade, from a decade low of \$2.6 billion in '16 to \$5.9 billion in '21. After falling steadily from '12-'16, trade rose in '17 but decreased again in '19, dropping 15.3 percent from \$4.6 billion in '18. In '21, total trade increased 74.7 percent over '20, largely due to an increase in the import value of copper and copper products; as well as the increase in the export value of fuels, crude oil, and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Chile to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Copper and Copper Products	89.3	1,049.0	66.9	1074.3
2	Wood and Wood Products	80.8	138.1	8.8	70.9
3	Edible Fruit and Nuts	43.6	69.5	4.4	59.4
4	Fish, Crustaceans and Aquatic Invertebrates	33.8	58.2	3.7	71.9
5	Rubber and Rubber Products	29.4	55.0	3.5	86.7
6	Inorganic Chemicals, Rare Earths, Precious Metals	37.9	46.7	3.0	23.5
7	Miscellaneous Industrial Components, Equipment and Parts	16.0	27.3	1.7	70.2
8	Mineral Fuels, Oil and Refined Products	0.0	25.8	1.6	-
9	Meat and Edible Meat Products	5.0	21.6	1.4	330.6
10	Industrial Equipment and Computers	16.6	13.4	0.9	-19.1
Total Top 10 Commodities		352.5	1,504.5	96.0	326.8
All Other Commodities		56.9	63.3	4.0	11.1
TOTAL ALL COMMODITIES		409.5	1,567.8	100.0	282.9

## EXPORTS from Houston to Chile

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	1,529.2	2,415.9	56.3	58.0
2	Motor Vehicles and Parts	289.8	430.8	10.0	48.7
3	Industrial Equipment and Computers	343.6	340.5	7.9	-0.9
4	Plastics and Plastic Products	209.7	324.7	7.6	54.8
5	Organic Chemicals	194.6	286.5	6.7	47.2
6	Miscellaneous Chemical Products	64.3	97.5	2.3	51.6
7	Inorganic Chemicals, Rare Earths, Precious Metals	37.5	71.9	1.7	91.7
8	Rubber and Rubber Products	23.9	51.8	1.2	116.8
9	Soaps, Waxes, Polishes, Candles, Dental Preps	26.7	29.8	0.7	11.4
10	Meat and Edible Meat Products	45.5	27.2	0.6	-40.3
Total Top 10 Commodities		2,765.1	4,076.7	95.0	47.4
All Other Commodities		180.9	216.6	5.0	19.7
TOTAL ALL COMMODITIES		2,946.0	4,293.3	100.0	45.7

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 15 BELGIUM

## HOUSTON AND BELGIUM: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the second busiest gateway for U.S.-Belgian trade and Belgium is Houston's fifth largest European trading partner. From '12 to '21, trade between Houston and Belgium averaged \$4.6 billion annually and was valued at \$5.7 billion in '21. More than 560 people living in metro Houston were born in Belgium.

### HOUSTON'S BUSINESS TIES

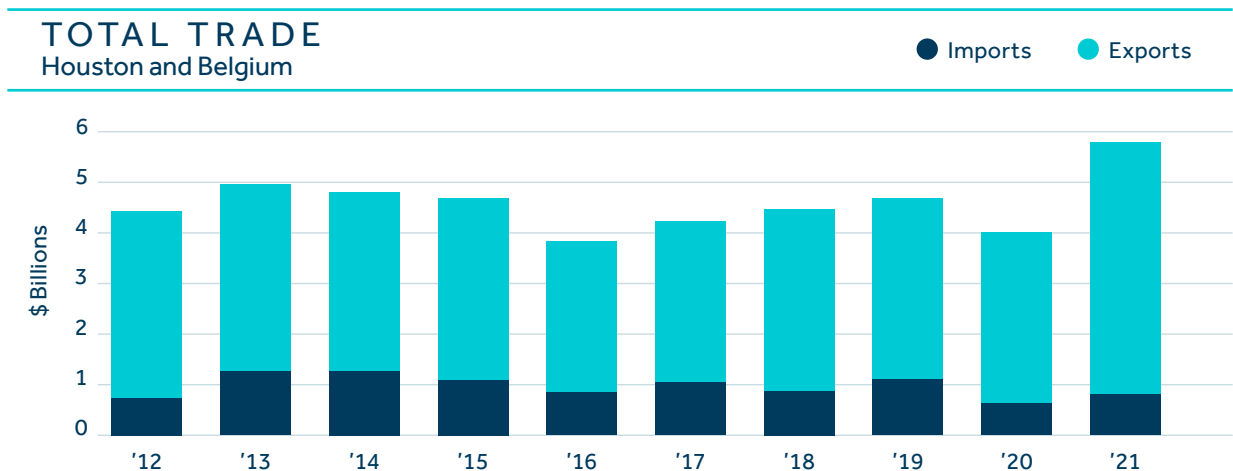
- Seventeen Houston firms operate 24 subsidiary locations in Belgium, including Baker Botts, Chevron Phillips Chemical, Huntsman, NOV, and Occidental Chemical.
- Seven Belgian firms operate 15 subsidiaries in the Houston area, including Anheuser-Busch, BDO, Harrington Industrial Plastics, SOCONORD, and Solvay.
- Trade and cultural relationships with Belgium are facilitated in Houston through the Belgian Consulate and the Belgian Trade Commission.

### AIR CARGO TRADE

- Houston ranks as the 6th busiest gateway for U.S.-Belgium air cargo trade (by weight).
- Air cargo trade between Houston and Belgium totaled 6,102.6 metric tons in '21, a 255.1 percent increase over '20. That trade was valued at \$220.1 million in '21, a 142.9 percent increase from '20.
- In '21, the top three commodities by weight were plastics and plastic products; electrical machinery, equipment, and parts; and miscellaneous chemical products, accounting for 70.1 percent of total air cargo trade.

### TOTAL TRADE

Houston-Belgium trade fluctuated over the past decade, from \$4.3 billion in '12 to a decade high of \$5.7 billion in '21. Total trade between Houston and Belgium fell to a low of 3.9 billion in '16, largely due to a decline in the export of organic chemicals. In '21, trade increased by 42.5 percent over '20 largely due to increases in the value of both imports and exports of organic chemicals and mineral fuels, oil, and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Belgium to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Organic Chemicals	115.1	156.4	17.6	35.8
2	Motor Vehicles and Parts	81.2	106.1	12.0	30.7
3	Mineral Fuels, Oil and Refined Products	31.0	99.7	11.2	221.8
4	Industrial Equipment and Computers	128.2	92.0	10.4	-28.2
5	Plastics and Plastic Products	24.8	64.9	7.3	161.8
6	Miscellaneous Chemical Products	19.6	47.8	5.4	143.8
7	Electrical Machinery, Equipment and Parts	12.8	45.1	5.1	251.4
8	Iron and Steel	20.2	38.2	4.3	89.1
9	Pharmaceutical Products	1.3	37.0	4.2	-
10	Miscellaneous Industrial Components, Equipment and Parts	23.5	26.4	3.0	12.2
Total Top 10 Commodities		457.7	713.4	80.4	55.9
All Other Commodities		147.7	173.5	19.6	17.5
TOTAL ALL COMMODITIES		605.4	887.0	100.0	46.5

## EXPORTS from Houston to Belgium

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Organic Chemicals	1,136.1	1,966.4	40.7	73.1
2	Plastics and Plastic Products	982.4	1,052.6	21.8	7.1
3	Mineral Fuels, Oil and Refined Products	379.8	650.0	13.5	71.1
4	Precious Stones, Metals, Coins, Pearls	164.5	248.5	5.1	51.0
5	Miscellaneous Chemical Products	138.5	170.3	3.5	23.0
6	Industrial Equipment and Computers	156.8	164.1	3.4	4.7
7	Optic, Photographic, Measuring, Medical Instruments	30.9	116.7	2.4	277.7
8	Electrical Machinery, Equipment and Parts	102.1	79.9	1.7	-21.7
9	Rubber and Rubber Products	44.4	63.8	1.3	43.7
10	Inorganic Chemicals, Rare Earths, Precious Metals	70.3	57.2	1.2	-18.7
Total Top 10 Commodities		3,205.8	4,569.5	94.7	42.5
All Other Commodities		198.2	256.4	5.3	29.4
TOTAL ALL COMMODITIES		3,404.0	4,825.9	100.0	41.8

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 16 FRANCE

## HOUSTON AND FRANCE: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the fourth busiest gateway for U.S.-French trade and France is Houston's sixth largest European trading partner. From '12 to '21, trade between Houston and France averaged \$4.2 billion annually and was valued at \$5.5 billion in '21. More than 3,100 people living in metro Houston were born in France.

### HOUSTON'S BUSINESS TIES

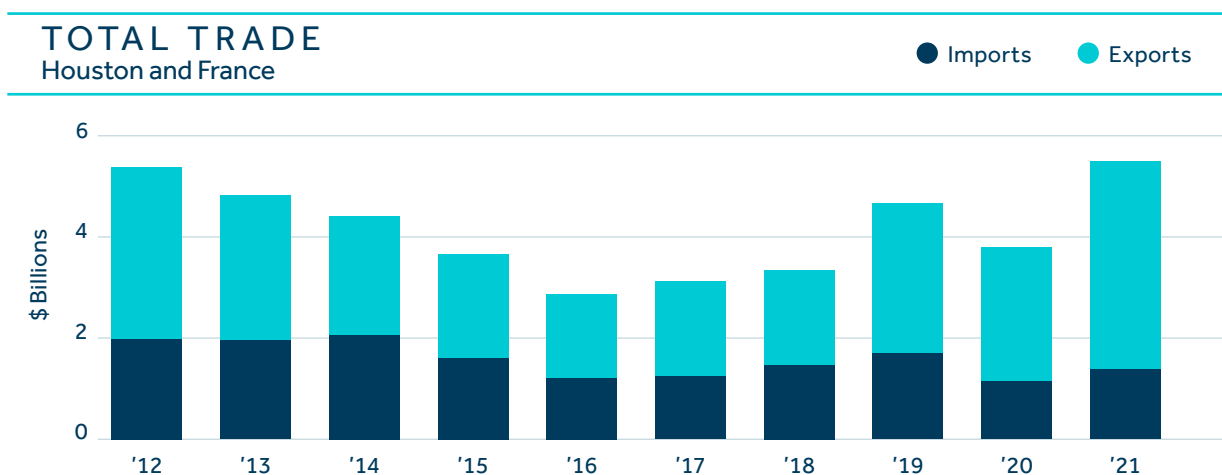
- Twenty-five Houston firms operate 46 subsidiary locations in France, including Baker Hughes, Hines, Huntsman, NOV, and Schlumberger.
- Sixty-three French firms operate 112 subsidiaries in the Houston area, including Air Liquide, Arkema, EDF Trading North America, Engie North America, and Total Petrochemicals & Refining.
- Trade and cultural relationships with France are facilitated in Houston through the Consulate General of France, French American Chamber of Commerce, the French Trade Commission (UBIFRANCE), French Alliance, and the Texan French Alliance for the Arts.
- Of Houston's 16 foreign-owned banks, three are from France: Credit Agricole Corporate and Investment Bank, Natixis, and Société Générale.
- Nice, France was designated as one of Houston's 19 international sister cities in 1973.

### AIR CARGO TRADE

- Houston ranks as the 12th busiest gateway for U.S.-France air cargo trade by weight.
- Air cargo trade between Houston and France totaled 4,753.9 metric tons in '21, a 61.1 percent increase over '20. It was valued at \$482.6 million in '21, a 31.9 percent increase from '20.
- In '21, the top three commodities by weight were industrial equipment and computers; plastics and plastic products; and miscellaneous chemical products, accounting for 50.3 percent of total air cargo trade.

### TOTAL TRADE

Houston-France trade began the decade at \$5.3 billion before slipping to a low of \$2.9 billion in '16. Trade recovered to \$5.5 billion by '21. After '16, trade began to increase, reaching to \$4.7 billion in '19 before falling to \$3.8 billion in '20. Total trade in '21 increased by 44.7 percent, hitting a decade high. The increase in total trade can be attributed to increases in the import value of beverages, spirits, and vinegar; and miscellaneous chemical products; as well as an increase in the export value of fuels and refined products, and aircraft, spacecraft and parts.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data



## IMPORTS from France to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Beverages, Spirits, and Vinegar	193.2	284.5	19.3	47.3
2	Industrial Equipment and Computers	247.0	268.3	18.2	8.6
3	Miscellaneous Chemical Products	61.3	119.3	8.1	94.4
4	Essential Oils, Perfumery, Cosmetic Products	56.5	101.6	6.9	79.8
5	Organic Chemicals	99.8	97.0	6.6	-2.9
6	Plastics and Plastic Products	83.2	86.0	5.8	3.4
7	Iron and Steel	14.8	53.7	3.6	263.4
8	Rubber and Rubber Products	37.3	52.6	3.6	41.0
9	Motor Vehicles and Parts	40.6	52.1	3.5	28.1
10	Electrical Machinery, Equipment and Parts	45.0	47.3	3.2	5.0
Total Top 10 Commodities		878.8	1,162.2	78.7	32.3
All Other Commodities		292.5	314.5	21.3	7.5
TOTAL ALL COMMODITIES		1,171.3	1,476.7	100.0	26.1

## EXPORTS from Houston to France

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	1,862.2	3,125.2	77.2	67.8
2	Aircraft, Spacecraft and Parts	102.1	190.5	4.7	86.6
3	Miscellaneous Chemical Products	153.1	136.9	3.4	-10.6
4	Industrial Equipment and Computers	101.0	108.4	2.7	7.4
5	Organic Chemicals	127.0	102.1	2.5	-19.6
6	Plastics and Plastic Products	80.8	77.2	1.9	-4.4
7	Iron and Steel	9.9	41.1	1.0	314.3
8	Optic, Photographic, Measuring, Medical Instruments	20.2	37.1	0.9	83.9
9	Tanning Extracts, Dyes, Paints, Inks	0.1	32.9	0.8	-
10	Electrical Machinery, Equipment and Parts	25.5	31.8	0.8	24.5
Total Top 10 Commodities		2,481.9	3,883.1	95.9	56.5
All Other Commodities		165.4	165.4	4.1	0.0
TOTAL ALL COMMODITIES		2,647.2	4,048.5	100.0	52.9

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 17 CANADA

## HOUSTON AND CANADA: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the 18th busiest gateway for U.S.-Canadian trade and Canada is Houston's second largest North American trade partner. From '12 to '21, trade between Houston and Canada averaged \$4.0 billion annually and it was valued at \$5.5 billion in '21. More than 15,600 people living in the Houston metro were born in Canada.

### HOUSTON'S BUSINESS TIES

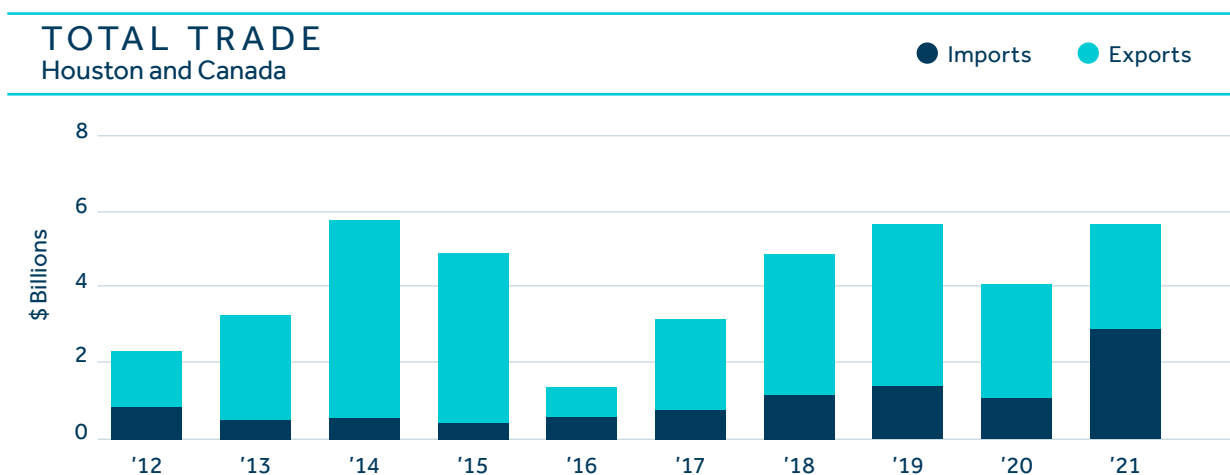
- Seventy-five Houston firms operate 695 subsidiary locations in Canada, including American Bureau of Shipping, ConocoPhillips, NOV, Schlumberger, and Waste Management.
- 101 Canadian firms operate 175 subsidiaries in the Houston area, including ALDO, Caliber Collisions Centers, Colliers International, Lululemon Athletica, and Sunbelt Group.
- Trade and cultural relationships with Canada are facilitated in Houston through the Consulate of Canada, the Canada-Texas Chamber of Commerce of Houston, the Québec Government Office in Houston, and the Canadian Club of Houston, a membership organization that promotes Canadian culture and commerce.
- Of Houston's 16 foreign-owned banks, four are from Canada: Bank of Montreal, Bank of Nova Scotia, Canadian Imperial Bank of Commerce, and the Royal Bank of Canada.

### AIR CARGO TRADE

- Houston ranks as the 30th busiest gateway for U.S.-Canada air cargo trade (by weight).
- Air cargo trade between Houston and Canada totaled 179.9 metric tons in '21, a 1.4 percent decline over '20. It was valued at \$88.9 million in '21, a 47.5 percent increase over '20.
- In '21, the top three commodities by weight were industrial equipment and computers; electrical machinery, equipment; and parts, and metal tools, implements, cutlery, accounting for 57.1 percent of total air cargo trade.

### TOTAL TRADE

Houston-Canada trade has more than doubled over the past decade, from \$2.1 billion in '12 to \$5.5 billion in '21. Trade between Houston and Canada steadily increased after '16, but dipped 30.0 percent year-over-year in '20. Most recently, trade increased 40.9 percent over '20 which can be attributed to an increase in the import value of fuels and refined products.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Canada to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	904.8	2,365.7	81.5	161.5
2	Industrial Equipment and Computers	57.5	219.0	7.5	280.8
3	Ores, Slag and Ash	93.8	157.5	5.4	67.9
4	Organic Chemicals	10.9	57.4	2.0	427.3
5	Articles of Iron or Steel	59.2	43.6	1.5	-26.4
6	Optic, Photographic, Measuring, Medical Instruments	7.0	16.1	0.6	129.3
7	Salt, Sulfur, Stone, Lime and Cement Plaster	8.4	11.5	0.4	37.1
8	Miscellaneous Industrial Components, Equipment and Parts	8.8	8.2	0.3	-6.8
9	Aircraft, Spacecraft and Parts	21.8	5.0	0.2	-76.9
10	Pharmaceutical Products	0.0	4.8	0.2	-
Total Top 10 Commodities		1,172.2	2,888.7	99.5	146.4
All Other Commodities		13.8	14.2	0.5	2.9
TOTAL ALL COMMODITIES		1,185.9	2,902.9	100.0	144.8

## EXPORTS from Houston to Canada

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	2,558.0	2,499.7	96.9	-2.3
2	Inorganic Chemicals, Rare Earths, Precious Metals	90.2	40.6	1.6	-54.9
3	Industrial Equipment and Computers	14.7	12.5	0.5	-15.0
4	Fertilizers	8.5	6.7	0.3	-21.2
5	Motor Vehicles and Parts	0.0	5.0	0.2	-
6	Aircraft, Spacecraft and Parts	7.1	4.6	0.2	-35.1
7	Vegetable, Fruit, Nut Products	3.8	1.5	0.1	-60.8
8	Electrical Machinery, Equipment and Parts	1.5	1.3	0.1	-9.1
9	Optic, Photographic, Measuring, Medical Instruments	1.4	1.3	0.1	-8.2
10	Precious Stones, Metals, Coins, Pearls	0.0	1.2	0.0	-
Total Top 10 Commodities		2,685.2	2,574.6	99.8	-4.1
All Other Commodities		19.1	4.1	0.2	-78.4
TOTAL ALL COMMODITIES		2,704.3	2,578.7	100.0	-4.6

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 18 SPAIN

## HOUSTON AND SPAIN: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the second busiest gateway for U.S.-Spanish trade and Spain is Houston's 7th largest European trading partner. From '12 to '21, trade between Houston and Spain averaged \$3.1 billion annually and was valued at \$5.4 billion in '21. More than 2,800 people living in metro Houston were born in Spain.

### HOUSTON'S BUSINESS TIES

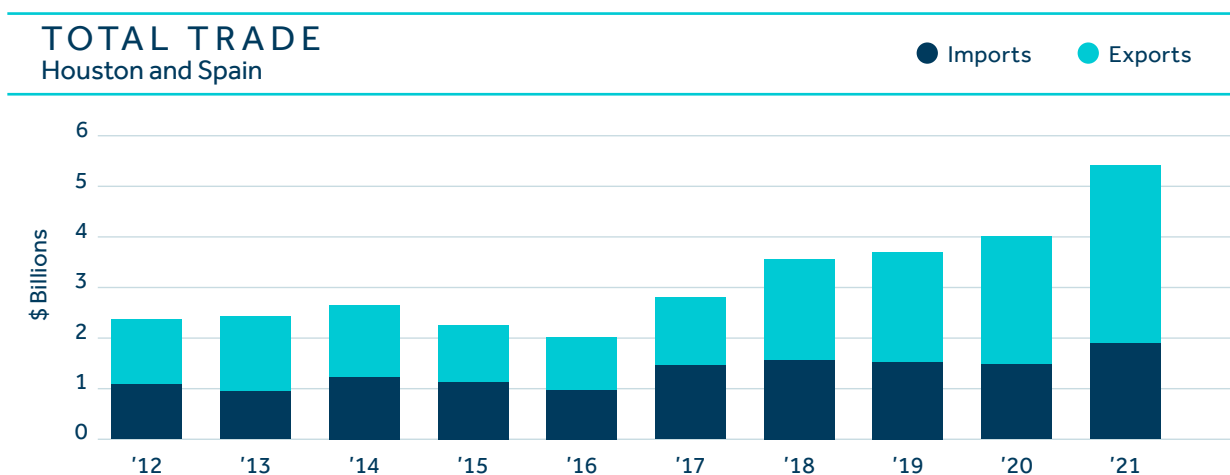
- Fourteen Houston firms operate 25 subsidiaries in Spain, including American Bureau of Shipping, BMC Software, Hines, Huntsman, and Westlake Chemical.
- Twenty Spanish firms operate 34 subsidiaries in the Houston area, including BBVA Compass, EDP Renewables, Santander, and Zara.
- Trade and cultural relationships with Spain are facilitated in Houston through the Consulate General of Spain, the Spain-Texas Chamber of Commerce, and the Houston Spain Fest.
- Huelva, Spain was designated as one of Houston's 19 international sister cities in 1969.

### AIR CARGO TRADE

- Houston ranks as the eighth busiest gateway for U.S.-Spanish air cargo trade (by weight).
- Air cargo trade between Houston and Spain totaled 2,670.3 metric tons in '21, a 131.7 percent increase over '20. It was valued at \$90.5 million in '21, 78.2 percent increase over '20.
- In '21, the top three commodities by weight were plastics and plastic products; industrial equipment and computers; and electrical machinery, equipment and parts, accounting for 76.5 percent of total air cargo trade.

### TOTAL TRADE

Trade between Houston and Spain grew over the past five years, reaching \$5.4 billion in '21. In the first half of the decade, Houston-Spanish trade fluctuated but remained below \$3.0 billion. Trade fell to a decade low of \$1.9 billion in '16 due to the global decline in oil prices. Most recently, trade increased 37.3 percent over '20 largely due to an increase in the export value of fuels and refined products, plastics and plastic products, and organic chemicals.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Spain to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	384.1	515.2	26.4	34.1
2	Electrical Machinery, Equipment and Parts	437.8	382.2	19.6	-12.7
3	Articles of Iron or Steel	183.2	174.4	9.0	-4.8
4	Mineral Fuels, Oil and Refined Products	93.8	164.0	8.4	74.8
5	Products of Stone, Plaster, Cement, Asbestos, Mica	69.3	110.6	5.7	59.5
6	Ceramic Products	56.2	78.7	4.0	40.2
7	Miscellaneous Chemical Products	24.3	76.5	3.9	215.0
8	Plastics and Plastic Products	32.6	62.2	3.2	90.7
9	Miscellaneous Industrial Components, Equipment and Parts	63.7	43.2	2.2	-32.2
10	Iron and Steel	45.8	33.6	1.7	-26.8
Total Top 10 Commodities		1,390.9	1,640.6	84.2	17.9
All Other Commodities		234.7	308.2	15.8	31.3
TOTAL ALL COMMODITIES		1,625.7	1,948.7	100.0	19.9

## EXPORTS from Houston to Spain

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	1,654.7	2,666.4	76.2	61.1
2	Plastics and Plastic Products	125.8	235.1	6.7	86.9
3	Organic Chemicals	73.7	111.0	3.2	50.7
4	Inorganic Chemicals, Rare Earths, Precious Metals	72.6	93.5	2.7	28.9
5	Industrial Equipment and Computers	63.3	92.3	2.6	45.9
6	Articles of Iron or Steel	40.4	39.3	1.1	-2.8
7	Electrical Machinery, Equipment and Parts	61.3	38.3	1.1	-37.6
8	Oil Grain, Seed, Fruit, Plant Seeds	42.5	33.9	1.0	-20.2
9	Miscellaneous Chemical Products	70.3	33.7	1.0	-52.0
10	Products of Stone, Plaster, Cement, Asbestos, Mica	7.6	31.5	0.9	313.1
Total Top 10 Commodities		2,212.2	3,375.0	96.4	52.6
All Other Commodities		131.8	124.6	3.6	-5.5
TOTAL ALL COMMODITIES		2,343.9	3,499.6	100.0	49.3

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# 19 RUSSIA

## HOUSTON AND RUSSIA: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the third busiest gateway for U.S.-Russian trade and Russia is Houston's eighth largest European trading partner. From '12 to '21, trade between Houston and Russia averaged \$5.0 billion annually and was valued at \$4.3 billion in '21. More than 6,200 people living in metro Houston were born in Russia.

### HOUSTON'S BUSINESS TIES

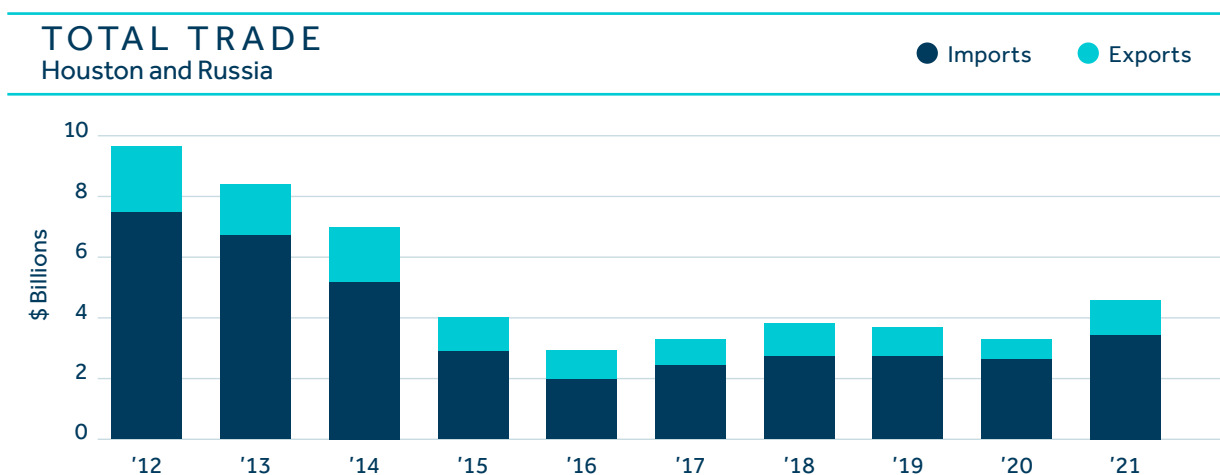
- Twenty-seven Houston firms operate 60 subsidiary locations in Russia, including Baker Botts, Baker Hughes, Distribution NOW, Halliburton, and Schlumberger.
- Six Russian firms operate seven subsidiaries in the Houston area, AirBridgeCargo Airlines, Rock Flow Dynamics, TMK IPSCO, and Volga-Dnepr.
- Trade and cultural relationships with Russia are facilitated in Houston through the Consulate General of Russia, the U.S. - Russian Chamber of Commerce, the Russian Cultural Center – Our Texas, and the United Russian American Association.
- Tyumen, Russia was designated as one of Houston's 19 international sister cities in 1995.

### AIR CARGO TRADE

- Houston ranks as the seventh busiest gateway for U.S.-Russia air cargo trade (by weight).
- Air cargo trade between Houston and Russia totaled 697.9 metric tons in '21, a 1.3 percent increase over '20. It was valued at \$67.3 million in '21, a 4.8 percent increase over '20.
- In '21, the top three commodities by weight were industrial equipment and computers; articles of iron or steel; and electrical machinery, equipment and parts, accounting for 67.35 percent of total air cargo trade.

### TOTAL TRADE

Houston-Russia trade has fallen 55.0 percent over the past decade, from \$9.5 billion in '12 to \$4.3 billion in '21. However, trade increased by 34.4 percent in '21, largely due to an increase in the import value of fuels and mineral products; articles of iron or steel; and inorganic chemicals, rare earths, precious metals.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Russia to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	2,377.3	3,196.4	83.8	34.5
2	Articles of Iron or Steel	45.1	125.6	3.3	178.4
3	Inorganic Chemicals, Rare Earths, Precious Metals	12.7	88.6	2.3	595.5
4	Wood and Wood Products	31.8	87.6	2.3	175.5
5	Fertilizers	68.8	74.9	2.0	8.9
6	Aluminum and Aluminum Products	58.0	71.4	1.9	23.0
7	Electrical Machinery, Equipment and Parts	31.6	31.4	0.8	-0.6
8	Industrial Equipment and Computers	11.2	19.8	0.5	76.6
9	Iron and Steel	5.7	13.9	0.4	141.4
10	Railway or Tramway Stock	7.2	12.1	0.3	67.5
Total Top 10 Commodities		2,649.5	3,721.5	97.6	40.5
All Other Commodities		47.8	92.6	2.4	93.9
TOTAL ALL COMMODITIES		2,697.2	3,814.1	100.0	41.4

## EXPORTS from Houston to Russia

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Industrial Equipment and Computers	211.0	181.5	38.6	-14.0
2	Motor Vehicles and Parts	72.6	82.9	17.6	14.2
3	Optic, Photographic, Measuring, Medical Instruments	34.2	37.1	7.9	8.3
4	Miscellaneous Chemical Products	34.8	32.7	6.9	-6.0
5	Plastics and Plastic Products	38.2	28.8	6.1	-24.7
6	Electrical Machinery, Equipment and Parts	19.0	25.4	5.4	34.0
7	Essential Oils, Perfumery, Cosmetic Products	16.0	24.3	5.2	51.7
8	Articles of Iron or Steel	19.3	9.7	2.1	-49.6
9	Organic Chemicals	4.9	6.2	1.3	27.8
10	Rubber and Rubber Products	4.0	5.6	1.2	41.6
Total Top 10 Commodities		454.0	434.3	92.2	-4.3
All Other Commodities		36.2	36.5	7.8	0.7
TOTAL ALL COMMODITIES		490.2	470.8	100.0	-4.0

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data



# 20 TURKEY

## HOUSTON AND TURKEY: TRADE, BUSINESS TIES

The Houston-Galveston Customs District is the second busiest gateway for U.S.-Turkey trade. In '21, Turkey was Houston's 20th largest international trading partner. From '12 to '21, trade between Houston and Turkey averaged \$2.6 billion annually and was valued at \$4.0 billion in '21. More than 2,250 people living in metro Houston were born in Turkey.

### HOUSTON'S BUSINESS TIES

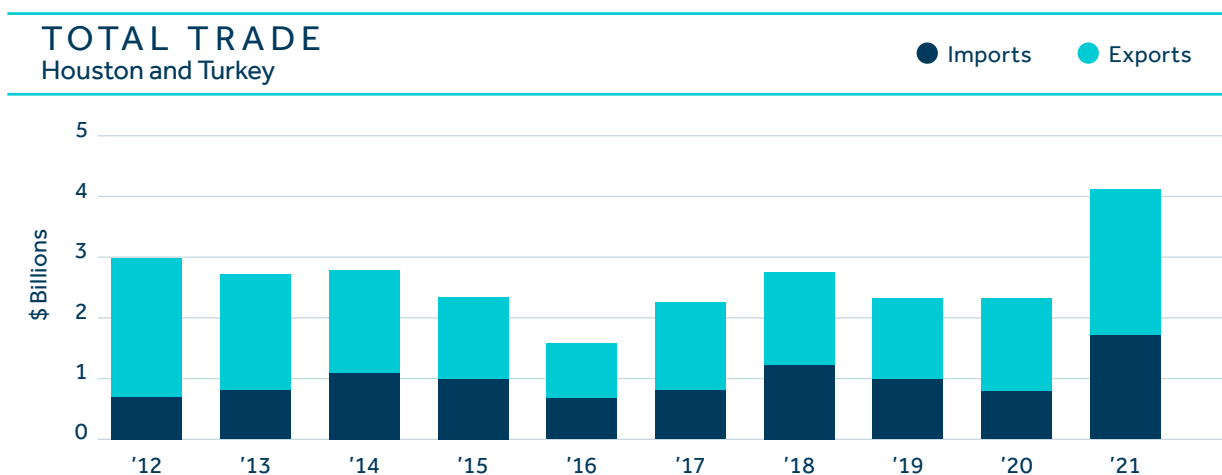
- Six Houston firms operate seven subsidiary locations in Turkey, including American Bureau of Shipping (ABS), HMT, Huntsman International, LyondellBassel, National Oilwell Varco, Pentair Thermal Management, and UTC Overseas.
- Two Turkish firms operate four subsidiaries in the Houston area including, Cesur Packaging, and Turkish Airlines. Turkish company Borusan Mannesmann, a subsidiary of a German company, also has operations in the Houston area.
- Trade and cultural relationships with Turkey are facilitated in Houston through the Consulate General of Turkey and the American Turkish Association Houston.
- Istanbul, Turkey was designated as one of Houston's 19 international sister cities in 1988.

### AIR CARGO TRADE

- Houston ranks as the seventh busiest gateway for U.S.-Turkey air cargo trade (by weight).
- Air cargo trade between Houston and Turkey totaled 3,939.1 metric tons in '21, a 26.2 percent increase over '20. It was valued at \$218.7 million in '21, an 11.3 percent increase over '20.
- In '21, the top three commodities by weight were arms and ammunition; industrial equipment and computers; and electrical machinery, equipment and parts, accounting for 56.8 percent of total air cargo trade.

### TOTAL TRADE

Houston-Turkey trade has fluctuated over the past decade, from \$3.0 billion in '12 to a high of \$4.0 billion in '21. Since '12, imports have averaged 38.4 percent of total trade but increased to 45.1 percent in '21 largely due to an increase in imported value of fuels and refined products. Overall, total trade increased 75.1 percent over '20 which is attributed to increases in the total trade value of fuels and refined products; import value of iron and steel; and the export value of organic chemicals.



Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

## IMPORTS from Turkey to Houston

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	56.1	458.6	25.2	717.2
2	Iron and Steel	72.5	298.2	16.4	311.2
3	Salt, Sulfur, Stone, Lime and Cement Plaster	121.4	177.6	9.8	46.3
4	Articles of Iron or Steel	77.4	117.2	6.4	51.4
5	Aircraft, Spacecraft and Parts	89.2	109.8	6.0	23.0
6	Products of Stone, Plaster, Cement, Asbestos, Mica	52.8	98.0	5.4	85.7
7	Arms and Ammunition	47.2	82.6	4.5	75.1
8	Motor Vehicles and Parts	50.0	79.0	4.3	58.2
9	Industrial Equipment and Computers	49.9	52.8	2.9	5.8
10	Electrical Machinery, Equipment and Parts	30.5	44.3	2.4	45.4
Total Top 10 Commodities		646.9	1,518.0	83.4	134.6
All Other Commodities		219.4	302.1	16.6	37.7
TOTAL ALL COMMODITIES		866.4	1,820.1	100.0	110.1

## EXPORTS from Houston to Turkey

Rank	Commodity	\$Value, Millions		% of Total '21	% Change '20 - '21
		'20	'21		
1	Mineral Fuels, Oil and Refined Products	341.3	808.1	36.5	136.8
2	Organic Chemicals	342.2	608.5	27.5	77.8
3	Plastics and Plastic Products	273.3	251.2	11.4	-8.1
4	Cotton Woven Fabrics	178.5	212.0	9.6	18.7
5	Industrial Equipment and Computers	77.6	79.2	3.6	2.0
6	Oil Grain, Seed, Fruit, Plant Seeds	0.4	48.7	2.2	-
7	Pharmaceutical Products	15.6	29.8	1.3	91.5
8	Aircraft, Spacecraft and Parts	30.3	22.0	1.0	-27.3
9	Electrical Machinery, Equipment and Parts	22.2	22.0	1.0	-0.9
10	Rubber and Rubber Products	18.0	21.2	1.0	17.4
Total Top 10 Commodities		1,299.4	2,102.7	95.0	61.8
All Other Commodities		137.8	110.1	5.0	-20.1
TOTAL ALL COMMODITIES		1,437.2	2,212.7	100.0	54.0

Source: WISERTrade from U.S. Census Bureau, Foreign Trade Division data

# HOUSTON COMMODITY TRADE

RANKED BY  
VALUE IN 2021

Rank	Commodity Description	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
	TOTAL ALL COMMODITIES	235,461.3	194,330.2	273,104.3	-17.5	40.5
1	Mineral Fuel, Oil Etc.; Bitumin Subst; Mineral Wax	106,490.6	84,689.7	132,379.0	-20.5	56.3
2	Industrial Machinery, Including Computers	23,992.7	18,474.1	21,828.2	-23.0	18.2
3	Organic Chemicals	17,928.3	14,958.8	21,315.0	-16.6	42.5
4	Plastics And Articles Thereof	11,768.4	11,090.2	12,872.4	-5.8	16.1
5	Vehicles, Except Railway Or Tramway, And Parts Etc	9,698.6	8,341.4	9,883.1	-14.0	18.5
6	Electric Machinery Etc; Sound Equip; Tv Equip; Pts	8,688.4	8,040.5	9,073.8	-7.5	12.9
7	Articles Of Iron Or Steel	8,106.9	5,090.8	6,818.9	-37.2	34.0
8	Miscellaneous Chemical Products	4,227.1	3,684.5	4,784.4	-12.8	29.9
9	Cereals	1,759.7	2,441.0	3,347.4	38.7	37.1
10	Iron And Steel	2,341.5	1,527.2	3,177.4	-34.8	108.1
11	Furnit;Bedding,Mattres;Luminaires,Light Fix;Prefab	1,939.0	2,094.7	2,956.7	8.0	41.2
12	Optic, Photo Etc, Medic Or Surgical Instrments Etc	3,070.9	2,413.4	2,949.0	-21.4	22.2
13	Beverages, Spirits And Vinegar	3,019.9	3,231.6	2,798.0	7.0	-13.4
14	Rubber And Articles Thereof	1,853.9	1,567.8	2,233.9	-15.4	42.5
15	Aircraft, Spacecraft, And Parts Thereof	3,077.9	1,905.8	2,178.9	-38.1	14.3
16	Inorg Chem; Prec & Rare-Earth Met & Radioact Compd	1,859.6	1,470.4	1,971.2	-20.9	34.1
17	Aluminum And Articles Thereof	1,614.2	1,134.3	1,877.9	-29.7	65.6
18	Wood And Articles Of Wood; Wood Charcoal	727.4	902.1	1,740.0	24.0	92.9
19	Copper And Articles Thereof	409.5	386.4	1,688.8	-5.7	337.1
20	Special Classification Provisions, Nesoi	2,025.0	1,606.8	1,606.5	-20.7	0.0
21	Toys, Games & Sport Equipment; Parts & Accessories	1,101.6	1,064.8	1,573.2	-3.3	47.7
22	Pharmaceutical Products	1,615.9	1,314.2	1,502.8	-18.7	14.4
23	Nat Etc Pearls, Prec Etc Stones, Pr Met Etc; Coin	391.5	656.8	1,463.4	67.8	122.8
24	Essential Oils Etc; Perfumery, Cosmetic Etc Preps	1,463.8	1,460.4	1,444.8	-0.2	-1.1
25	Textile Art Nesoi; Needlecraft Sets; Worn Text Art	771.4	835.3	1,072.4	8.3	28.4
26	Art Of Stone, Plaster, Cement, Asbestos, Mica Etc.	700.3	712.7	1,031.5	1.8	44.7
27	Meat And Edible Meat Offal	677.8	741.1	935.2	9.3	26.2
28	Apparel Articles And Accessories, Knit Or Crochet	632.7	607.9	919.0	-3.9	51.2
29	Ores, Slag And Ash	1,046.7	527.6	888.9	-49.6	68.5
30	Soap Etc; Waxes, Polish Etc; Candles; Dental Preps	669.7	686.3	852.9	2.5	24.3

Rank	Commodity Description	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
31	Edible Fruit & Nuts; Citrus Fruit Or Melon Peel	683.7	659.5	798.5	-3.5	21.1
32	Cotton, Including Yarn And Woven Fabric Thereof	862.2	712.4	785.8	-17.4	10.3
33	Animal, Vegetable Or Microbial Fats And Oils Etc	525.7	591.6	762.7	12.5	28.9
34	Oil Seeds Etc.; Misc Grain, Seed, Fruit, Plant Etc	144.8	858.9	754.2	493.0	-12.2
35	Fish, Crustaceans & Aquatic Invertebrates	577.8	492.8	673.4	-14.7	36.6
36	Apparel Articles And Accessories, Not Knit Etc.	413.6	326.4	579.7	-21.1	77.6
37	Paper & Paperboard & Articles (Inc Papr Pulp Artl)	597.5	470.7	570.0	-21.2	21.1
38	Tools, Cutlery Etc. Of Base Metal & Parts Thereof	580.6	402.6	509.1	-30.7	26.5
39	Ceramic Products	342.9	329.7	468.9	-3.9	42.2
40	Salt; Sulfur; Earth & Stone; Lime & Cement Plaster	482.4	365.2	466.3	-24.3	27.7
41	Arms And Ammunition; Parts And Accessories Thereof	1,078.0	501.9	460.6	-53.4	-8.2
42	Fertilizers	362.8	257.7	457.7	-29.0	77.6
43	Coffee, Tea, Mate & Spices	344.0	317.5	447.8	-7.7	41.1
44	Miscellaneous Articles Of Base Metal	276.9	223.9	349.7	-19.2	56.2
45	Miscellaneous Edible Preparations	225.8	240.3	331.6	6.4	38.0
46	Dairy Prods; Birds Eggs; Honey; Ed Animal Pr Nesoi	102.1	165.9	312.4	62.5	88.4
47	Prep Vegetables, Fruit, Nuts Or Other Plant Parts	242.8	261.6	299.1	7.8	14.3
48	Railway Or Tramway Stock Etc; Traffic Signal Equip	170.8	175.1	298.3	2.5	70.4
49	Glass And Glassware	240.2	218.5	290.7	-9.0	33.0
50	Footwear, Gaiters Etc. And Parts Thereof	148.6	143.4	288.3	-3.5	101.1
51	Ships, Boats And Floating Structures	83.1	106.2	276.1	27.8	159.9
52	Tanning & Dye Ext Etc; Dye, Paint, Putty Etc; Inks	249.0	208.4	244.2	-16.3	17.2
53	Prep Of Meat,Of Fish,Of Crustaceans Etc,Of Insects	219.2	216.4	237.2	-1.3	9.6
54	Leather Art; Saddlery Etc; Handbags Etc; Gut Art	130.4	108.7	225.8	-16.7	107.8
55	Prep Cereal, Flour, Starch Or Milk; Bakers Wares	160.4	196.1	219.7	22.2	12.0
56	Edible Vegetables & Certain Roots & Tubers	161.0	199.8	205.8	24.1	3.1
57	Food Industry Residues & Waste; Prep Animal Feed	175.9	158.7	190.3	-9.8	19.9
58	Nickel And Articles Thereof	215.2	171.3	175.5	-20.4	2.5
59	Works Of Art, Collectors Pieces And Antiques	140.2	83.8	168.5	-40.2	101.0
60	Impregnated Etc Text Fabrics; Tex Art For Industry	120.1	105.9	147.9	-11.8	39.7
61	Miscellaneous Manufactured Articles	107.8	105.8	139.5	-1.8	31.8

Rank	Commodity Description	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
62	Sugars And Sugar Confectionary	85.9	103.5	135.2	20.6	30.6
63	Wadding, Felt Etc; Sp Yarn; Twine, Ropes Etc.	71.1	84.4	120.9	18.7	43.3
64	Explosives; Pyrotechnics; Matches; Pyro Alloys Etc	181.8	109.8	119.7	-39.6	9.0
65	Albuminoidal Subst; Modified Starch; Glue; Enzymes	91.4	73.3	118.4	-19.9	61.6
66	Products Of Animal Origin, Nesoi	102.1	84.2	108.4	-17.5	28.7
67	Lac; Gums, Resins & Other Vegetable Sap & Extract	214.5	87.7	104.8	-59.1	19.6
68	Carpets And Other Textile Floor Coverings	70.6	56.0	102.6	-20.8	83.2
69	Raw Hides And Skins (No Furskins) And Leather	78.6	73.7	99.4	-6.2	35.0
70	Milling Products; Malt; Starch; Inulin; Wht Gluten	67.9	62.5	95.3	-7.9	52.6
71	Printed Books, Newspapers Etc; Manuscripts Etc	71.3	57.0	76.7	-20.1	34.6
72	Base Metals Nesoi; Cermets; Articles Thereof	78.5	55.6	66.1	-29.2	19.0
73	Mfr Of Straw, Esparto Etc.; Basketware & Wickerwrk	29.3	29.3	57.9	-0.1	97.9
74	Wood Pulp Etc; Recovd (Waste & Scrap) Ppr & Pprbd	117.2	84.5	55.6	-27.9	-34.2
75	Manmade Filaments, Including Yarns & Woven Fabrics	28.3	29.0	53.1	2.5	82.8
76	Lead And Articles Thereof	30.6	17.1	49.2	-44.0	187.0
77	Live Animals	7.3	22.0	45.6	200.5	107.8
78	Headgear And Parts Thereof	21.0	21.8	43.2	3.8	98.5
79	Zinc And Articles Thereof	54.6	33.2	43.2	-39.2	29.9
80	Prep Feathers, Down Etc; Artif Flowers; H Hair Art	28.9	27.2	42.1	-6.0	54.9
81	Cocoa And Cocoa Preparations	36.2	28.7	35.8	-20.7	24.7
82	Photographic Or Cinematographic Goods	25.8	27.9	34.2	8.1	22.3
83	Knitted Or Crocheted Fabrics	16.0	28.2	33.2	76.7	17.8
84	Tin And Articles Thereof	1.5	4.7	23.2	219.8	391.2
85	Manmade Staple Fibers, Incl Yarns & Woven Fabrics	13.9	10.9	22.8	-21.8	109.2
86	Umbrellas, Walking-Sticks, Riding-Crops Etc, Parts	9.3	11.8	19.6	27.0	65.5
87	Spec Wov Fabrics; Tufted Fab; Lace; Tapestries Etc	13.7	14.2	18.6	4.2	30.6
88	Musical Instruments; Parts And Accessories Thereof	11.5	7.6	14.8	-34.5	96.2
89	Wool & Animal Hair, Including Yarn & Woven Fabric	5.1	5.8	13.8	13.5	139.2
90	Clocks And Watches And Parts Thereof	18.0	11.4	11.7	-36.7	2.8
91	Vegetable Plaiting Materials & Products Nesoi	5.0	5.2	9.5	3.0	82.6
92	Tobacco & Subs;Prod For Inhal W/O Combust;Nic Prod	23.7	15.5	8.8	-34.4	-43.3

Rank	Commodity Description	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
93	Cork And Articles Of Cork	3.1	3.2	7.2	5.1	123.8
94	Veg Text Fib Nesoi; Veg Fib & Paper Yns & Wov Fab	2.8	2.4	4.8	-14.9	105.2
95	Live Trees, Plants, Bulbs Etc.; Cut Flowers Etc.	4.5	3.5	4.7	-23.0	36.7
96	Furskins And Artificial Fur; Manufactures Thereof	3.9	2.3	4.0	-39.4	70.7
97	Silk, Including Yarns And Woven Fabric Thereof	0.1	0.0	0.1	-49.6	15.1

Data sourced from US Census Bureau, Foreign Trade Division.

# HOUSTON GLOBAL TRADE PARTNERS

RANKED BY  
VALUE IN 2021

Rank	Country	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
	TOTAL ALL PARTNER COUNTRIES	235,461.3	194,330.2	273,104.3	-17.5	40.5
1	China	14,670.4	19,342.3	24,685.1	31.9	27.6
2	Mexico	21,691.7	14,092.5	21,557.5	-35.0	53.0
3	Brazil	15,154.1	11,742.5	16,864.4	-22.5	43.6
4	Korea, Republic Of	13,219.3	9,425.4	16,219.0	-28.7	72.1
5	India	10,027.7	7,972.9	13,900.4	-20.5	74.4
6	Netherlands	11,365.4	9,429.6	13,789.5	-17.0	46.2
7	Germany	10,048.0	9,410.6	11,887.1	-6.3	26.3
8	Japan	9,305.0	7,465.0	11,543.2	-19.8	54.6
9	United Kingdom	9,310.0	7,350.9	9,764.8	-21.0	32.8
10	Colombia	7,024.8	5,218.0	7,121.8	-25.7	36.5
11	Italy	6,695.9	5,728.0	6,983.2	-14.5	21.9
12	Singapore	3,617.3	3,099.6	6,271.3	-14.3	102.3
13	Taiwan	5,210.9	4,492.6	6,028.1	-13.8	34.2
14	Chile	3,884.4	3,355.5	5,861.1	-13.6	74.7
15	Belgium	4,782.2	4,009.4	5,712.9	-16.2	42.5
16	France	4,682.8	3,818.5	5,525.3	-18.5	44.7
17	Canada	5,595.2	3,890.2	5,481.6	-30.5	40.9
18	Spain	3,686.1	3,969.6	5,448.3	7.7	37.3
19	Russia	3,717.8	3,187.4	4,284.9	-14.3	34.4
20	Turkey	2,291.1	2,303.6	4,032.8	0.5	75.1
21	Peru	3,207.3	2,353.4	3,746.9	-26.6	59.2
22	Vietnam	2,149.0	2,283.8	3,086.1	6.3	35.1
23	Indonesia	1,769.6	1,921.9	3,021.8	8.6	57.2
24	United Arab Emirates	3,875.5	2,443.1	2,764.8	-37.0	13.2
25	Saudi Arabia	4,267.2	3,608.2	2,759.2	-15.4	-23.5
26	Thailand	2,723.2	2,378.7	2,623.0	-12.7	10.3
27	Argentina	2,516.0	1,284.3	2,152.4	-49.0	67.6
28	Guatemala	2,071.5	1,693.3	2,133.4	-18.3	26.0
29	Ireland	1,639.6	1,670.7	2,007.0	1.9	20.1

Rank	Country	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
30	Ecuador	2,123.0	1,396.0	1,776.8	-34.2	27.3
31	Dominican Republic	1,206.7	938.6	1,704.6	-22.2	81.6
32	Malaysia	1,344.8	1,635.5	1,692.7	21.6	3.5
33	Nigeria	1,708.2	1,316.7	1,658.0	-22.9	25.9
34	Norway	1,539.8	867.3	1,554.8	-43.7	79.3
35	Israel	2,116.6	1,251.7	1,532.8	-40.9	22.5
36	Switzerland	514.5	731.4	1,517.3	42.2	107.5
37	Australia	2,053.9	1,328.9	1,511.7	-35.3	13.8
38	Denmark	1,064.0	1,126.0	1,472.6	5.8	30.8
39	Honduras	883.2	755.1	1,370.7	-14.5	81.5
40	Portugal	343.3	632.6	1,349.8	84.3	113.4
41	Egypt	1,497.9	1,003.3	1,314.1	-33.0	31.0
42	South Africa	1,129.7	960.8	1,205.0	-15.0	25.4
43	Costa Rica	1,248.5	880.9	1,202.0	-29.4	36.5
44	Trinidad And Tobago	1,122.4	735.2	1,198.8	-34.5	63.1
45	Panama	1,739.6	1,800.8	1,134.4	3.5	-37.0
46	Sweden	709.5	1,073.0	1,006.5	51.2	-6.2
47	Austria	1,058.2	846.6	971.8	-20.0	14.8
48	Kuwait	669.2	525.6	954.7	-21.5	81.6
49	Poland	826.8	583.3	899.2	-29.5	54.2
50	Qatar	856.3	681.1	896.9	-20.5	31.7
51	Pakistan	497.7	569.7	790.9	14.5	38.8
52	El Salvador	507.1	487.1	778.3	-3.9	59.8
53	Iraq	2,301.5	591.1	772.8	-74.3	30.7
54	Slovakia	1,012.7	850.7	716.7	-16.0	-15.8
55	Romania	354.5	264.4	682.1	-25.4	158.0
56	Nicaragua	557.9	533.5	675.4	-4.4	26.6
57	Uruguay	393.2	228.8	593.4	-41.8	159.3
58	Oman	656.7	405.5	557.7	-38.3	37.6
59	Hungary	505.1	437.7	532.1	-13.4	21.6
60	Czech Republic	486.5	433.6	501.9	-10.9	15.8
61	Morocco	708.6	364.5	494.1	-48.6	35.5
62	Ukraine	363.3	277.5	444.4	-23.6	60.2



Rank	Country	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
63	Finland	368.1	367.3	438.2	-0.2	19.3
64	Guyana	283.4	392.6	436.0	38.5	11.0
65	Bahamas	397.6	518.5	428.3	30.4	-17.4
66	Bahrain	446.5	300.4	388.1	-32.7	29.2
67	Algeria	432.1	321.4	346.7	-25.6	7.9
68	Hong Kong	342.8	306.1	343.5	-10.7	12.2
69	Greece	446.3	291.2	313.4	-34.8	7.6
70	New Zealand	231.7	247.2	300.4	6.7	21.6
71	Philippines	293.8	164.7	290.9	-43.9	76.6
72	Jamaica	485.0	232.9	285.1	-52.0	22.4
73	Bangladesh	157.5	247.3	279.6	57.0	13.1
74	Lithuania	167.9	215.7	278.2	28.5	29.0
75	Cambodia	129.5	176.9	273.2	36.5	54.5
76	Venezuela	536.7	159.5	256.9	-70.3	61.1
77	Jordan	241.7	214.4	244.9	-11.3	14.3
78	Estonia	103.6	116.5	239.8	12.5	105.8
79	Croatia	88.1	66.2	218.7	-24.9	230.7
80	Angola	283.5	236.7	213.6	-16.5	-9.8
81	Kenya	206.3	222.4	198.6	7.8	-10.7
82	Dominica	80.5	41.2	193.0	-48.9	368.9
83	Ghana	302.7	238.3	182.1	-21.3	-23.6
84	Haiti	117.9	120.8	178.9	2.4	48.2
85	Ethiopia	87.3	133.0	158.8	52.4	19.4
86	Latvia	124.3	42.9	153.6	-65.5	258.3
87	Kazakhstan	249.7	118.9	141.5	-52.4	19.0
88	Marshall Islands	0.1	45.0	135.1	60,147.68	200.0
89	St. Lucia	27.0	61.8	127.5	129.5	106.1
90	Belarus	35.4	86.1	124.8	143.7	44.8
91	Lebanon	338.8	193.6	124.1	-42.9	-35.9
92	Ivory Coast	132.8	89.1	117.7	-32.9	32.1
93	Tunisia	76.4	91.3	113.1	19.6	23.8
94	Paraguay	113.1	39.9	109.2	-64.8	173.9
95	Sudan (Starting 2011)	46.5	41.5	105.6	-10.7	154.3

Rank	Country	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
96	Bolivia	70.8	63.4	104.5	-10.5	64.9
97	Togo	218.7	136.0	104.3	-37.8	-23.3
98	Senegal	43.8	85.5	95.7	95.1	12.0
99	Belize	148.5	163.7	91.3	10.3	-44.2
100	Georgia	124.3	64.5	90.6	-48.1	40.5
101	Libya	119.7	75.1	89.4	-37.3	19.1
102	Bulgaria	138.0	142.7	83.4	3.3	-41.5
103	Sri Lanka	77.1	69.1	83.3	-10.5	20.6
104	Antigua And Barbuda	38.1	34.3	81.3	-9.9	136.7
105	Gibraltar	189.8	127.8	81.3	-32.7	-36.4
106	Congo, Democratic Republic Of The Congo (Formerly Zaire)	57.2	69.8	78.9	22.0	13.1
107	Serbia	39.5	36.8	68.8	-6.8	87.1
108	Djibouti	42.8	42.2	65.8	-1.3	55.9
109	Gabon	88.1	63.9	63.7	-27.5	-0.4
110	Luxembourg	95.7	31.7	63.2	-66.9	99.6
111	Equatorial Guinea	230.0	93.1	61.9	-59.5	-33.5
112	Benin	40.3	28.4	59.5	-29.4	109.1
113	Slovenia	109.5	31.2	57.0	-71.5	82.6
114	Tanzania	70.6	117.4	57.0	66.3	-51.5
115	Cameroon	137.3	80.8	56.6	-41.2	-30.0
116	Madagascar	62.1	41.5	55.8	-33.3	34.6
117	Azerbaijan	100.1	58.2	55.4	-41.9	-4.8
118	Suriname	96.4	57.7	52.6	-40.2	-8.8
119	Namibia	82.8	27.3	47.8	-67.0	74.8
120	Republic Of Yemen	44.9	52.6	42.3	17.1	-19.5
121	Lesotho	38.5	33.8	40.9	-12.4	21.1
122	Mauritania	33.8	36.5	38.0	8.1	4.2
123	British Virgin Islands	12.9	10.0	37.6	-22.9	277.3
124	Cyprus	34.0	38.1	35.2	12.1	-7.4
125	Cayman Islands	46.5	25.2	33.0	-45.8	30.8
126	Martinique	2.2	5.5	31.8	146.8	483.8
127	Curacao	38.1	18.1	31.8	-52.4	75.4
128	Uzbekistan	32.1	30.1	30.4	-6.2	1.0

Rank	Country	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
129	Congo, Republic Of The Congo	49.6	42.4	30.3	-14.6	-28.5
130	Albania	14.1	8.3	27.6	-41.3	232.4
131	Brunei	77.6	27.9	23.6	-64.0	-15.3
132	Guinea	17.0	32.2	23.0	89.3	-28.5
133	Bosnia And Herzegovina	16.0	3.6	21.7	-77.5	503.6
134	Burma (Myanmar)	53.7	50.6	21.1	-5.7	-58.2
135	Liechtenstein	23.1	26.2	20.8	13.7	-20.6
136	St.Christopher-Nevis	0.5	12.1	20.3	2,155.8	67.3
137	Mozambique	52.8	19.5	20.3	-63.1	4.0
138	Chad	35.1	24.2	19.9	-30.9	-17.8
139	Kosovo	0.7	1.1	18.3	70.6	1,491.9
140	Barbados	18.1	20.6	17.0	13.5	-17.5
141	Mali	12.8	20.3	16.0	58.3	-21.1
142	Zambia	7.7	9.0	15.1	16.5	67.9
143	Zimbabwe	5.2	14.8	14.7	184.4	-0.7
144	Afghanistan	60.9	84.8	14.4	39.3	-83.0
145	Fiji	8.2	12.1	14.0	47.7	15.8
146	Sierra Leone	8.8	10.2	13.1	15.9	28.5
147	Guadeloupe	31.2	17.1	13.1	-45.3	-23.2
148	Aruba	18.3	15.1	12.4	-17.6	-18.2
149	Liberia	13.6	26.1	11.4	91.7	-56.3
150	Turkmenistan	23.8	6.6	11.0	-72.1	66.1
151	Niger	13.2	19.0	11.0	44.0	-42.0
152	Uganda	23.8	18.0	10.1	-24.3	-44.3
153	South Sudan	1.7	29.4	9.8	1,630.7	-66.6
154	Mongolia	1.0	3.1	9.3	219.4	194.1
155	Kyrgyzstan	6.5	19.3	9.2	197.8	-52.2
156	Monaco	0.1	0.2	7.6	104.2	3,475.3
157	Malta	12.9	4.4	7.4	-66.2	69.8
158	Burkina Faso	14.0	10.0	7.1	-28.6	-28.8
159	Somalia	36.6	11.8	7.1	-67.8	-40.0
160	Laos	11.2	2.2	7.0	-79.9	213.5
161	Rwanda	5.0	2.7	6.6	-45.4	141.1

Rank	Country	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
162	Eritrea	10.7	15.1	6.1	40.3	-59.3
163	Moldova	7.1	5.0	5.6	-29.4	10.3
164	Papua New Guinea	7.1	10.8	5.3	52.8	-50.8
165	Nepal	3.5	6.2	5.2	78.8	-15.6
166	Botswana	0.4	8.1	5.0	1,961.3	-38.8
167	Bermuda	28.9	8.2	4.8	-71.8	-40.7
168	Macedonia	11.4	4.4	4.3	-60.9	-2.6
169	Iran	3.3	2.4	4.1	-27.4	71.3
170	Mauritius	63.9	3.1	4.1	-95.2	32.3
171	Malawi	9.2	3.3	3.6	-63.9	9.9
172	Gambia	2.2	1.4	3.6	-37.7	155.8
173	Central African Republic	0.6	1.0	2.8	75.7	179.1
174	St. Vincent	2.2	1.1	2.4	-47.3	110.5
175	Burundi	1.2	2.3	2.3	91.1	1.0
176	Fr.Sthern.,Antarctic Lands	0.0	0.0	1.8	-100.0	0.0
177	New Caledonia	2.6	5.0	1.8	94.8	-64.7
178	French Guiana	175.6	7.0	1.7	-96.0	-75.4
179	Armenia	4.7	1.7	1.5	-63.7	-9.7
180	Sint Maarten	1.3	1.0	1.5	-23.2	56.6
181	Swaziland	0.7	1.4	1.5	94.8	9.0
182	Iceland	35.1	3.3	1.4	-90.5	-58.3
183	Cuba	1.9	1.7	1.3	-9.5	-22.4
184	East Timor	0.6	5.5	1.1	825.0	-79.7
185	Macau	0.6	4.6	1.1	717.3	-76.9
186	Andorra	0.0	0.0	1.0	0.0	2,575.2
187	Maldives	1.9	1.2	0.9	-33.5	-30.7
188	Greenland	0.5	0.3	0.7	-32.6	143.1
189	Grenada	1.5	2.9	0.5	94.0	-81.0
190	Guinea-Bissau	0.0	1.0	0.5	3,350.2	-49.5
191	West Bank Admin By Israel	0.7	0.8	0.4	7.7	-49.5
192	Montenegro	0.1	0.2	0.4	105.8	99.1
193	Cocos Islands	0.0	0.0	0.4	0.0	8,219.1
194	Reunion	1.2	0.6	0.3	-48.5	-46.8

Rank	Country	\$Value, Millions			% Change	
		'19	'20	'21	'19-'20	'20-'21
195	Anguilla	0.2	0.5	0.3	154.1	-34.8
196	Tajikistan	0.5	0.2	0.3	-61.5	88.9
197	British Indian Ocean Terr.	3.2	0.0	0.3	-98.7	561.9
198	Seychelles	1.4	0.4	0.2	-73.7	-41.1
199	Turks And Caicos Islands	0.0	0.0	0.2	0.0	7,116.5
200	Syria	0.1	0.1	0.2	101.5	50.8
201	Cabo Verde	0.2	0.5	0.1	148.6	-69.0
202	Federated States Of Micronesia	0.0	0.0	0.1	923.6	352.1
203	French Polynesia	0.8	15.9	0.1	1,843.6	-99.2
204	Comoros	0.3	0.0	0.1	-100.0	0.0
205	Faroe Islands	1.6	0.7	0.1	-58.8	-85.4
206	Western Samoa	0.4	0.1	0.1	-72.0	-39.7
207	St. Helena	0.0	0.0	0.0	58.0	267.3
208	Bhutan	0.0	0.0	0.0	0.0	222.3
209	Vanuatu	0.1	0.1	0.0	-50.7	-60.0
210	San Marino	0.0	0.0	0.0	0.0	0.0
211	Niue	0.0	0.0	0.0	0.0	598.2
212	Vatican City	0.0	0.1	0.0	141.1	-70.3
213	Montserrat	0.0	0.0	0.0	0.0	64.1
214	Cook Islands	0.4	0.0	0.0	-91.8	-72.5
215	Sao Tome And Principe	0.2	0.0	0.0	-81.6	-88.8
216	Christmas Island	0.2	0.0	0.0	-97.8	-41.8

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