

An aerial photograph of a city skyline, likely Houston, featuring numerous skyscrapers and a large green park area in the foreground. A large yellow circle is superimposed over the image, framing the text.

# CORONAVIRUS RESPONSE AND RECOVERY

## INTERIM REPORT

MARCH 2021

### PREPARED BY

MARVIN ODUM - CITY OF HOUSTON COVID-19  
RELIEF AND RECOVERY LEADER, BEN MELSON -  
CHIEF OF STAFF, AND THE COVID-19 RECOVERY  
TEAM



# MAYOR SYLVESTER TURNER

The full global impact from the Covid-19 Pandemic is yet to be written, but the cost in terms of both lives and livelihoods has already proven devastating. For Houston, this comes on top of continued recovery from Hurricane Harvey, the economic impact of the energy sector downturn, and of course, the crushing winter freeze in February 2021. It is a daunting combination of catastrophic events but no match for Houston's strength and resilience and our growing community.

This interim report on the COVID-19 recovery is intended to capture the essence of the work done by the team I assigned under Marvin Odum and his Chief of Staff Ben Melson (on loan from the Greater Houston Partnership) to lead the City's multi-faceted recovery.

A single report cannot do justice to the massive contributions by countless individuals, each of our city departments, Houston City Council members, the medical sector, as well as many community organizations and businesses who have answered the call.

You will see some examples that highlight the tremendous efforts of these groups and individuals and I am grateful for their continued contributions. A second report detailing the impact of several direct assistance programs will also be provided.

Crisis response and recovery are largely about setting priorities and allocating resources. To do this, we operate under a set of guiding principles which you will see highlighted in the report. First and foremost, it assists and builds resilience for our most vulnerable and at-risk communities – the same individuals and communities that see compounded impacts from sequential events.



Needs always outweigh available resources, and therefore, collaboration is at the heart of this response. My administration has intentionally improved our ability to address disproportional impacts on communities through collaboration, and this has been taken to new levels in response to COVID-19. We are working with dozens of non-profits, the medical community, County, State, and Federal governments, faith-based organizations, civic organizations, and the business community.

It is this combined and diversified response that is the true strength of Houston.

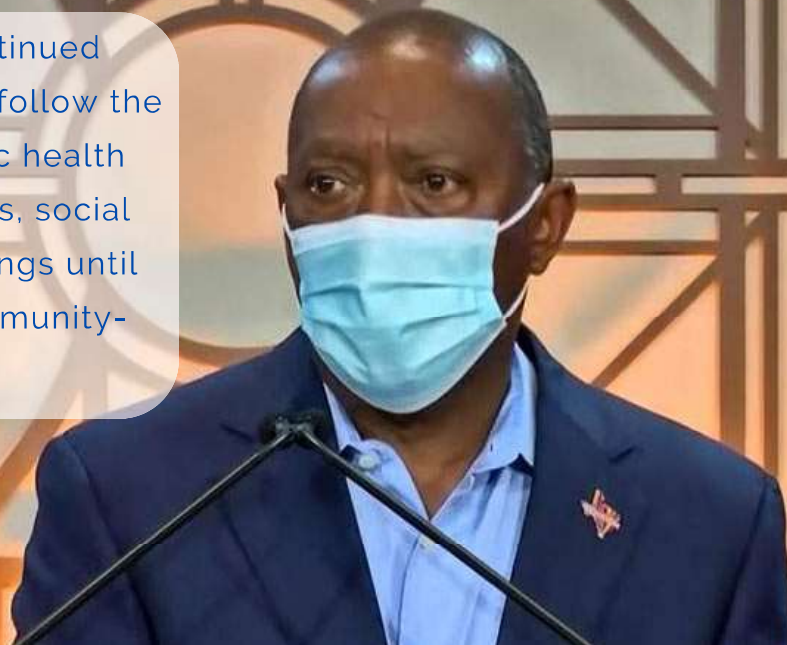
Another cornerstone of this recovery is building resilience. As we spend the available funding and target our response on the most vulnerable communities, we are doing so with an eye to long-term resiliency – better preparing Houston for future shocks and stresses. Covid-19 vaccines have now arrived, and I'm encouraged by the progress made to vaccinate Houstonians and our prospects to return to a sense of normalcy.

But I want to emphasize, as I do every day, that this will require the continued diligence by Houstonians to follow the simple and effective public health measures of wearing masks, social distancing, and hand washings until we get to the point of community-wide vaccination. This is our best defense and the best way to defeat this virus.

On March 4, 2020, a year ago, the first confirmed COVID-19 positive case was reported in Fort Bend County. I cannot overstate how devastating this health crisis, and corresponding economic crisis, have been for Houstonians and people worldwide. But if you look across our community and at this report, it is evident that we have the will and ability to emerge stronger than before.

**-Mayor Sylvester Turner**

"This will require the continued diligence by Houstonians to follow the simple and effective public health measures of wearing masks, social distancing, and hand washings until we get to the point of community-wide vaccination."



# CONTENTS

---

05	COVID-19 Timeline
07	Health and Economic Impact
13	City of Houston Response and Recovery <ul style="list-style-type: none"><li>-The Recovery Team</li><li>-Approach and Guiding Principles</li><li>-Collaboration</li><li>-CRF Performance and Assurance Program</li><li>-CRF Program Overview</li></ul>
21	City of Houston Health Department Response
23	Health Equity Response Task Force
26	Direct Assistance Programs <ul style="list-style-type: none"><li>-Direct Financial Assistance</li><li>-Rental Assistance Program</li><li>-Small Business Grant Program</li><li>-Community Health Fellowship Program</li><li>-Arts and Culture Assistance Program</li><li>-Childcare Center Assistance Program</li><li>-Houston Eats: Restaurant and Food Access Program</li></ul>
33	Looking Forward <ul style="list-style-type: none"><li>-Vaccine Distribution</li><li>-Federal Funding Potential</li></ul>
39	Appendices

# COVID-19 TIMELINE

---

**March 4, 2020** – Fort Bend County Health and Human Services announced that a Fort Bend individual in his 70's is the Houston region's first positive case of COVID-19.

**March 11, 2020** – Rodeo Houston Cancelled

**March 16, 2020** – All Harris County bars closed and restaurants limited to takeout and delivery for two weeks. Houston ISD closes schools through April 10.

**March 19, 2020** – Texas declares public health disaster. Governor Abbott issues executive order limiting social gatherings to no more than ten, closes schools and bars, and restricts restaurants.

**March 24, 2020** – Mayor Turner and Judge Hidalgo announce Stay Home Stay Safe order.

**April 27, 2020** – Governor Abbott issued GA 28 – effective May 1 relating to the expanded reopening of services as part of the safe, strategic plan to Open Texas.

**May 5, 2020** – Federal CARES Act stimulus funding begins to be distributed to states and large metro areas.

**May 18, 2020** – Bars, restaurants, and other businesses allowed to open to 25% capacity.

**June 3, 2020** – All businesses operating at 25% capacity allowed to increase to 50%.

**June 5, 2020** – Two-week increase in positivity rate and hospitalizations following Memorial Day weekend.

**June 12, 2020** – Restaurants begin operating at 75%

**June 16, 2020** – Texas reports a 66% increase in hospitalizations since Memorial Day

**June 24, 2021** – Statewide positivity rate tops 11%



**June 26, 2020** – Bars ordered closed and restaurant capacity lowered

**July 2, 2020** – State mandates the wearing of face coverings in public areas

**July 15, 2020** – Texas public schools are allowed to remain closed for the first six weeks of 2020-21 school year.

**August 11, 2020** – Texas becomes the third state to surpass 500,000 COVID-19 positive cases

**August 17, 2020** – Texas reports 10,000th COVID-19 death

**September 17, 2020** – Business capacity expansion allowed to begin again

**October 14, 2020** – Bars are allowed to reopen

**November 13, 2020** – Texas surpasses 1 million confirmed COVID-19 cases

**December 14, 2020** – First vaccines administered in Texas

**December 19, 2020** – Texas surpasses 25,000 deaths

**December 29, 2020** – Texas surpasses 1.5 million cases

**January 2, 2021** – First case of UK variant in Texas

**February 12, 2021** – 1 million Texans fully vaccinated

**March 2, 2021** – Governor Abbott announces business can fully reopen and lifts mask mandate

**Week of March 1, 2020** - Over 1 million Houstonians vaccinated by City of Houston and Harris County public health departments

**March 4, 2021** – One-year anniversary of first confirmed case in Houston area



CARLOS CORREA

SIMONE BILES

SLIM THUG

# CITY OF HOUSTON COVID-19 HEALTH IMPACT

**\*Confirmed**  
**175,109**

**\*Active**  
**7,547**

**\*Recovered**  
**165,550**

**\*Deaths**  
**2,012**

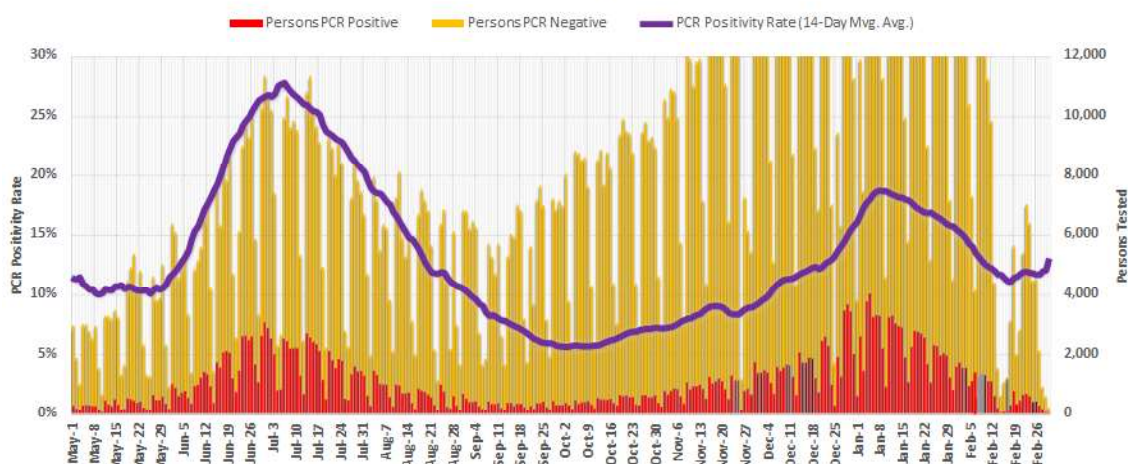
**\*AS OF 3/7/2021**

For Houston, understanding the health and economic impact of COVID-19 requires taking-in the broader landscape of ongoing Hurricane Harvey recovery work, the job and revenue losses from a stressed energy sector, and the near-ubiquitous impact of the virus. Many in our community have felt the weight of these overlapping stresses and that has shaped the City of Houston's overall response.

A year into our COVID-19 response, we now have a clearer picture of the devastating health impact on our community. As of March 4, 2021, there have been over 170 thousand confirmed cases and nearly 2,000 deaths in Houston due to COVID-19.

As of Sunday, March 7th, 10.82% of hospital admissions in TSA-Q (the 9-county region used for GA-32 calculations, a 7-day average)) are due to persons with COVID-19 infections. This value has been steadily decreasing since its peak just below 21% in mid-January. In Harris County hospitals alone, there are 300 confirmed COVID-19 cases occupying ICU beds with another 38 suspect cases awaiting laboratory confirmation. Similarly, there are 761 confirmed COVID-19 patients in non-ICU beds with another 166 suspect cases awaiting laboratory confirmation. For the past week, the number of COVID admissions to Harris County hospitals has remained steady at between 91-127 admissions per day.

**PCR Positivity Rate (14-Day Moving Average) and Total Persons Tested [105 Zip Codes]**



**Race/ethnicity of Houston's 1,965  
COVID-19 deaths as of March 3,  
2021:**

- Black: (414) 21.06%
- Hispanic (1,067) 54.39%
- White (367) 18.56%
- Asian (110) 5.61%
- Native Hawaiian/Pacific Islander: (1) 0.05%
- Arab: (1) 0.05%
- Native American: (1): 0.05%
- Unknown (4) 0.21%

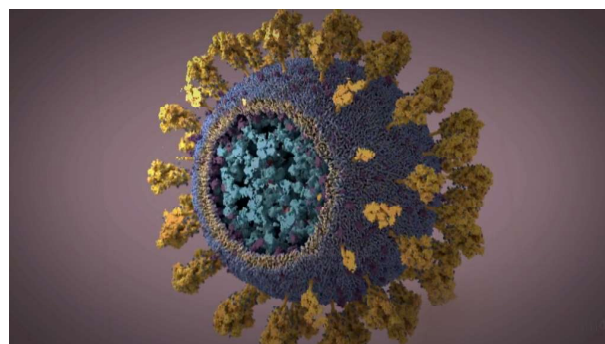
As of Friday, March 5th the TMC Member Hospital Systems are reporting an average of 188 new COVID-19 hospitalizations per day. This is down from a high of 360 during the week of June 29th – July 5th, and more recently, 335 peaks the week of Jan. 4th – Jan. 10th. The TMC ICU bed capacity remains in “Phase 2” which means non-traditional ICU areas of the hospital are being used due to the extra load of COVID patients. Twenty-four percent of all ICU patients are diagnosed with COVID-19 disease.

**On Saturday, March 6th the Houston Health Department reported the 2000th death from COVID-19 among Houston residents.**

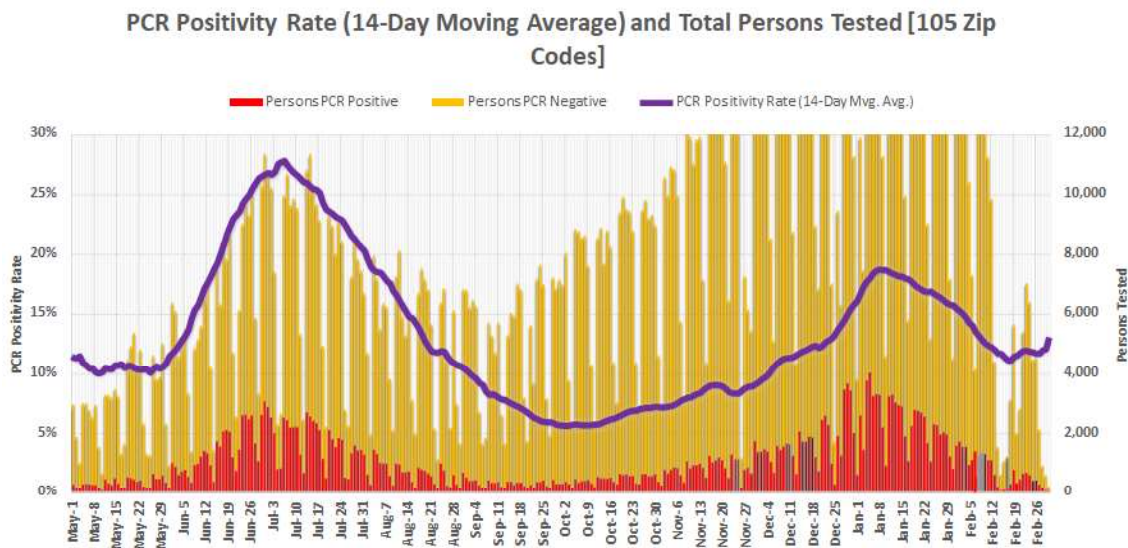
As of March 3rd, ImmTrac2 is reporting over 1 million vaccine doses have been administered in Houston/Harris County. 585,151 persons have received at least one dose, and 328,901 have completed the vaccination series.

All of the viral variants of concern have been identified in patients in Houston, the first major American city to have this unfortunate distinction. The variants include the northern European, the U.K., Brazilian, South African, and Californian variants. The U.K. variant appears to be spreading at the fastest rate.

The HHD wastewater monitoring system is also monitoring for multiple forms of viral variants in the community. For samples collected on February 22, 2021, at the 39 City of Houston wastewater treatment plants, 31 of the 39 wastewater treatment plants were identified as having the UK variant. Wastewater sample results for other highly transmissible variants, including the South Africa, Brazil, and California variants, are pending. Of the total COVID-19 virus detected in the wastewater for samples collected on February 22, 2021, an estimated 19% were identified as the UK variant.



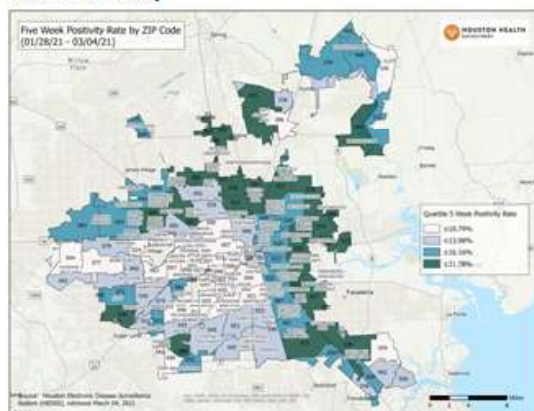




This is a dynamic chart and changes week to week. The purple line, representing the 14-day rolling average positivity rate, is trending up after several weeks of a downward trend. The red bars represent individuals who received a positive PCR test result and the yellow bars represent individuals who received a negative result. There is a time lag of 10-14 days for all the data to come in. This means that the red and yellow bars are going to look different next week.

## Five Week and Two-Week Zip Code Positivity Rates HOUSTON HEALTH DEPARTMENT

**Figure 2: Five-week zip code positivity rates (1/28, 2021-3/4, 2021)**



**Figure 3: Two-week zip code positivity rates 2/18, 2021 – 3/4, 2021)**

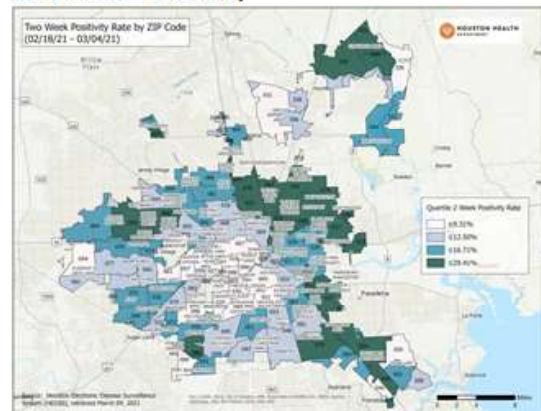
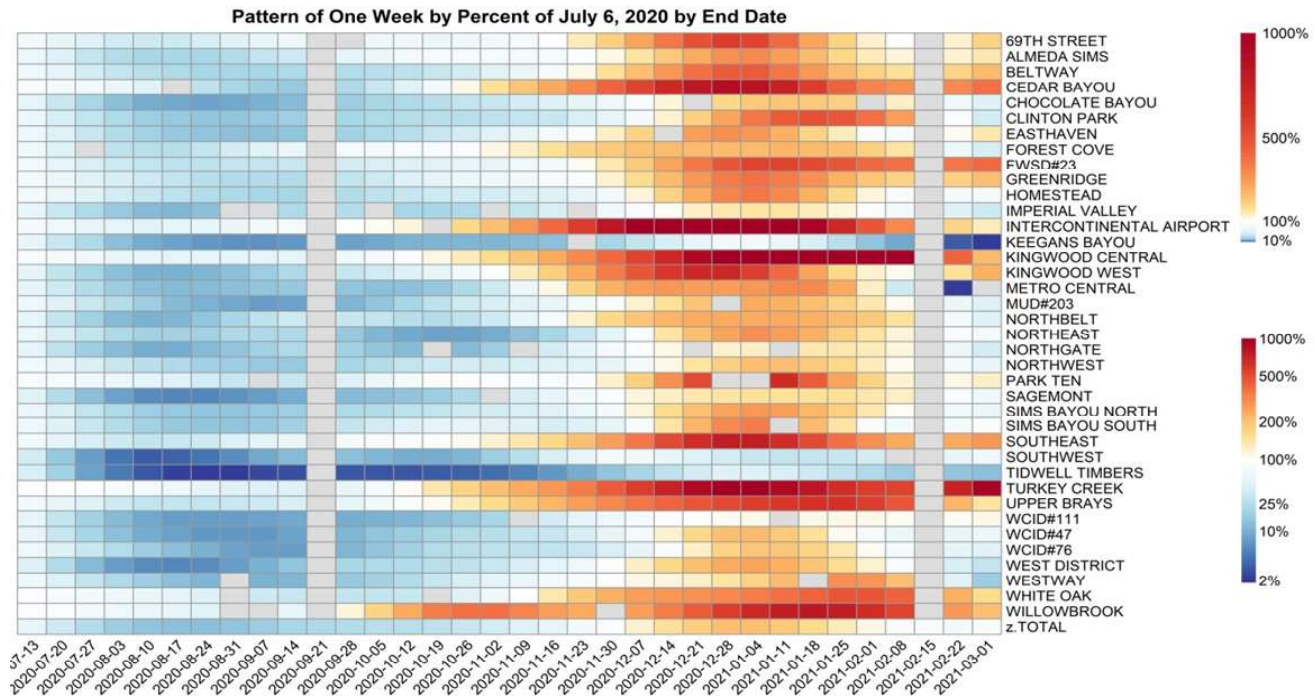


Figure 2 shows the past five-week positivity by zip code and Figure 3 shows the same for the past two weeks. The two maps allow us to see the shifts in positivity spatially. It also shows that although the overall city rate is 17%, as of 1/19, some zip codes have positivity rates above 20%.

In the charts above, figure 2 shows the past five-week positivity rate by zip code and figure 3 shows the same for the past two weeks. The two maps allow us to see the shifts in positivity spatially. They also show that although the citywide positivity rate is 13.1%, several zip codes have positivity rates above 20%.

## CURRENT WASTEWATER TREATMENT LEVELS COMPARED TO JULY 6 BENCHMARK



## WASTEWATER SURVEILLANCE HIGHLIGHTS

COVID-19 goes undetected in a large percentage of the population because many people are asymptomatic or experience only mild symptoms. Undiagnosed, infected individuals are contagious and play a role in the rapid transmission of the virus. Confirmed clinical cases of COVID-19 are a significant underestimate of the total number of COVID-19 cases, particularly in areas with limited testing capabilities.

COVID-19 infected individuals shed the virus in their stool, which ends up as wastewater in the sewer system. Understanding this critical detail about the virus, HHD, in partnership with Rice University, developed a cutting-edge wastewater sampling program.

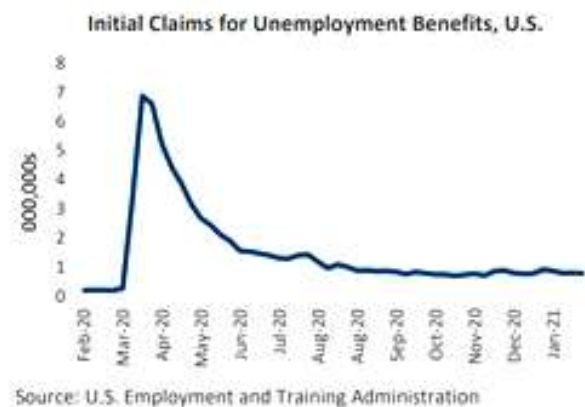
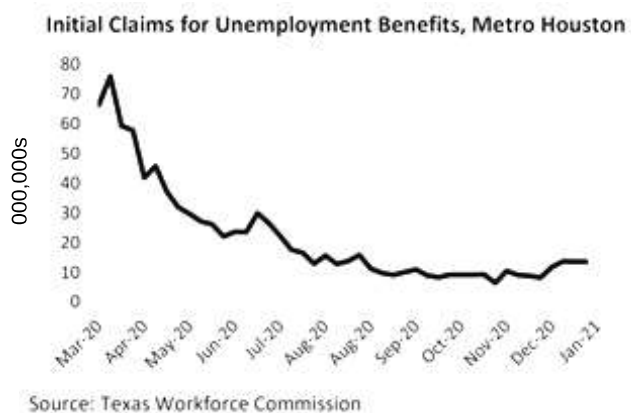
HHD collects, analyzes and interprets COVID-19 in wastewater as an additional data source to inform public health decision making as well as analyze, compare and interpret COVID-19 data from different sources (e.g., MAVEN, ESSENCE, wastewater, COVID-19 registry).

These data are a leading indicator of virus spread in the community and play an important role in the Recovery Team's prioritization and allocation of critical health resources. In the chart above you can see that 8 of the 38 WWTPs are continuing to plateau or slightly increasing, as compared to the previous weeks.

# COVID-19 ECONOMIC IMPACT

The economic impact of COVID-19 on Houston was immediate – from the time of first confirmed case officially announced by the Fort Bend County Health and Human Services Department.

More than 740,000 Texans filed initial claims for unemployment insurance (UI) between March 15 and April 11, 2020, and more than 240,000 Houstonians filed claims over the same period. During the Great Recession, metro Houston lost about 110,000 jobs or 4.5 percent. By the end of May 2020, Houston had exceeded both that numeric and percentage loss. The Houston Purchasing Managers Index (PMI) fell from 50.2 in February 2020 to 40.2 in March 2020, the steepest one-month drop in the history of this measure. Readings above 50 indicate the local economy is expanding, below 50 that it's contracting.



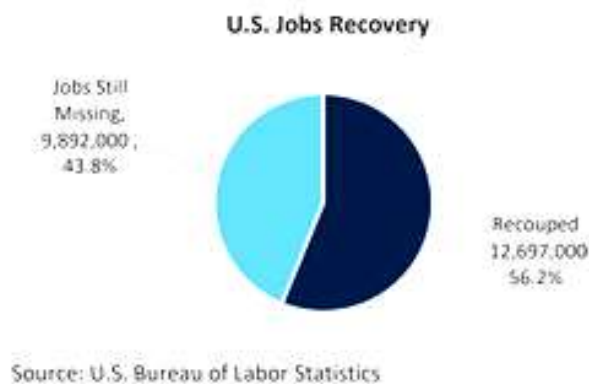
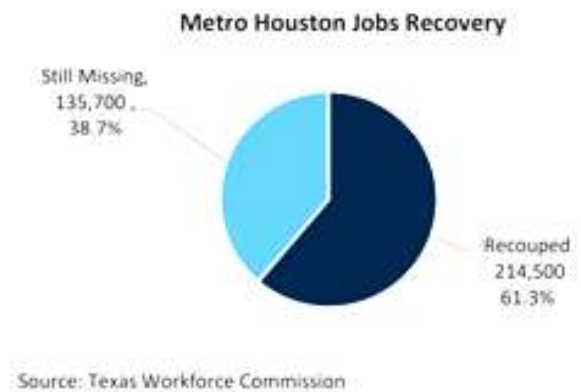
## Current Assessment: U.S. Landscape

A year into the pandemic, the economic outlook is improving, but from a very low level. The Greater Houston Partnership reports that the nation has recouped 12.7 million of the 22.6 million jobs lost in the downturn. That leaves nearly 10 million Americans without jobs who had jobs this time last year. January's report, a net gain of only 49,000 jobs, has spurred concerns that the recovery may be slowing. Even so, many economists expect this to be a strong year for job growth.



IHS Markit forecasts the U.S. will add 6.7 million jobs in '21, Oxford Economics predicts 5.8 million, and the consensus among economists polled by The Wall Street Journal is that the U.S. will add 4.8 million jobs. These forecasts suggest the nation will still finish the year 3.2 million to 5.1 million jobs shy of its pre-pandemic level. Initial claims for unemployment benefits continue a volatile trend downward. The U.S. Employment and Training Administration (ETA) reports 861,000 workers filed claims the week ending February 13, 2021, well below the recession peak of 6.9 million the week ending March 28, 2020. That suggests fewer layoffs are occurring. However, recent claims remain well above the pre-recession average of 235,000 claims per week.

Employment in several sectors, notably professional, scientific, and technical services, finance and insurance, and nondurables manufacturing now exceeds pre-pandemic levels.



Sectors closely tied to energy—exploration and production, oil field services, equipment manufacturing, and wholesale trade—have yet to recoup their losses. For many service sector workers including restaurants, entertainment, and others, the impact continues to be severe. Data from the Texas Workforce Commission (TWC) show that initial claims for unemployment benefits filed in early February '21 were one-fifth of those filed in early April '20, the height of the pandemic. Claims, however, remain elevated and have ticked up in recent weeks.

## Houston Landscape

Houston's economy is following a similar path of recovery, but with disproportionate pain spread across our community. The metro area lost 350,200 jobs in March and April '21 but have since recouped roughly 60 percent of those losses.