

COVID-19: Early Weeks of Recovery

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TAKEAWAYS: in this article, we look at GIS-based real-time data that offer insights into the impact of stay-at-home orders on businesses and the economy. Accordingly, governments' lockdown orders alone did not shut down the economy, and some businesses did not reopen immediately after those orders expired. The local economy has been reopening gradually since Easter, and recovery will likely take shape of a Nike swoosh instead of a V-shaped rebound.

The COVID-19, or coronavirus, outbreak and government responses aimed to combat its spread have affected almost every nation, industry and individual in the world.

The widespread and disruptive nature of this ongoing pandemic have prompted various data sources to disseminate near real-time, granular data to the public in addition to the popular COVID-19 caseload data down to the county and even ZIP code level.

Examples of such data are anonymized [personal mobility data](#) extracted from cellphone apps, such as Google Maps, and business operation data, such as [Homebase](#)'s online Timesheet app.

Data are playing a vital role in policymakers' decisions. Both the President and Texas Governor reportedly stated that policy decisions must be justified by data. The real-time and locational, or GIS, nature of individual data points makes it possible for the first time to pinpoint the exact timing of changes in human activity and economic conditions in different locations, and to distinguish different types of business and even brands.

These data are available well before official statistics that are released weeks and months later. In particular, human movement data can help us evaluate the impact of face-to-face interactions on the risk of virus transmission.

So, what do those new data tell us?

New Data Insights

On March 19th, the day that the state and local officials an-

nounced guidelines for social gatherings and ordered forced closures of certain businesses, such as salons and barbershops, more than 20% of businesses were already closed and their employees had worked 30% fewer hours than the baseline set in January.

The trough, which marks the lowest point of the alternative metrics, occurred between the second and third weeks of April. During that period, an average of roughly 40% of businesses were closed and about half of their employees were not working. These observations echo the findings of a [regional business survey](#) conducted for the South Texas region.

Reopening the Economy

Gradual transition also happened later when the governor lifted the statewide state-at-home order and allowed certain non-essential businesses to reopen at 25% capacity on May 1st. The numbers of open businesses and staff reporting to work have trended up since April 12th, Easter Monday.

Perhaps Governor Abbott's policy announcement on April 24th was well anticipated. Another possible reason for this was the financial relief from the Paycheck Protection Program (PPP) loans and Economic Injury Disaster Loans (EIDL).

According to the Small Business Administration that administered those programs under the \$2 trillion Coronavirus Aid, Relief, and Economic Security (CARES) Act, about 135,000 Texas businesses together had received \$28.5 billion in financial assis-

All Businesses in Texas



Source: Homebase.

tance by April 16th.

The rising trend of employees back to work as early as mid-April accords with the falling share of residents staying mostly at home, as reported by [Safegraph](#). Across Texas, there is a positive correlation between counties with high COVID-19 caseloads and the shares of residents staying home.

This means that people are overall aware of the risk of virus transmission; they are less likely to travel away from home or interact with others when the number of confirmed cases in their county is higher.

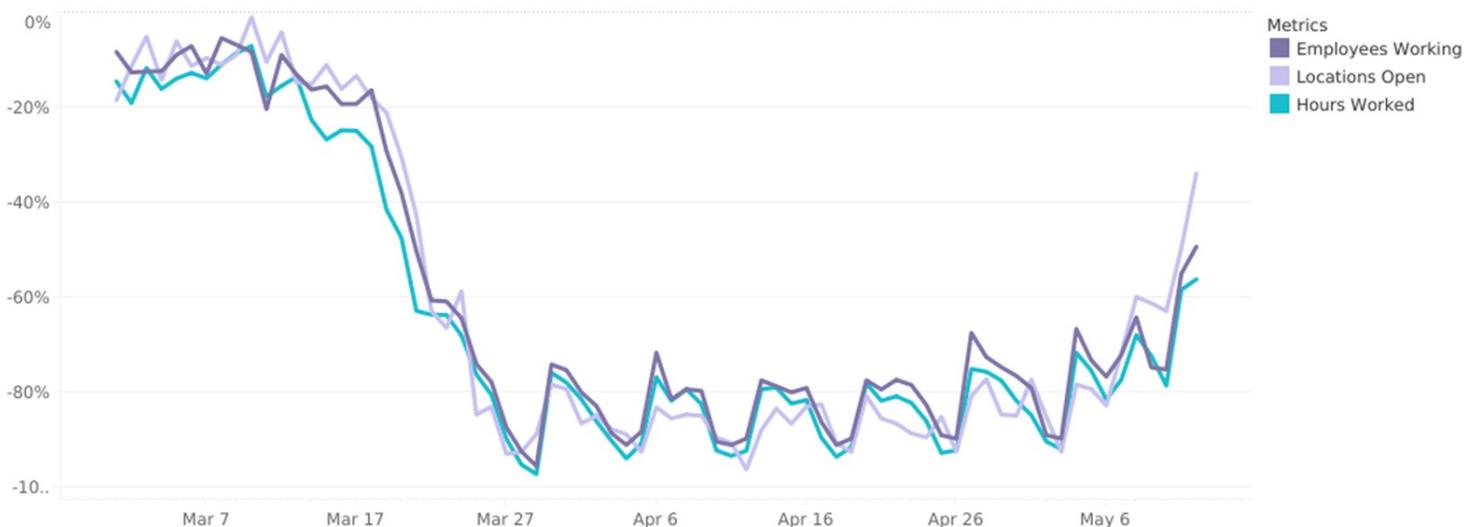
During the first week of May, the numbers of open businesses and worker hours increased about 10 percentage points among retailers, and about 5 percentage points among restaurants. The overall gain in business capacity, measured alternatively by the number of open businesses and workforce reporting to work, below 10 percentage points in that week was less than the 25% capacity limit that the Governor Abbott allowed.

The data by business category provide additional insights into different impacts of a blanket stay-at-home order on industries. While the stay-at-home policy measures shut down slightly more than half of restaurants and retail shops, as much as 80% of personal care and entertainment businesses, like barbershops and massage parlors, were closed through May 8th, when they were allowed to reopen.

While the disruption seemed relatively modest in the sector of professional services partly because relatively more their job tasks can be performed remotely, those businesses have not significantly ramp up operations perhaps due to the social distancing guidelines that are still in place.

A comparison of industries in different states highlights the impact of business closure orders. Georgia was the first state to reopen almost all businesses without restrictions, except bars and nightclubs. In comparison with their Texas counterparts, it is obvious that the shares of businesses remained closed were lower

Beauty and Personal Care Industry in Texas



Source: Homebase.

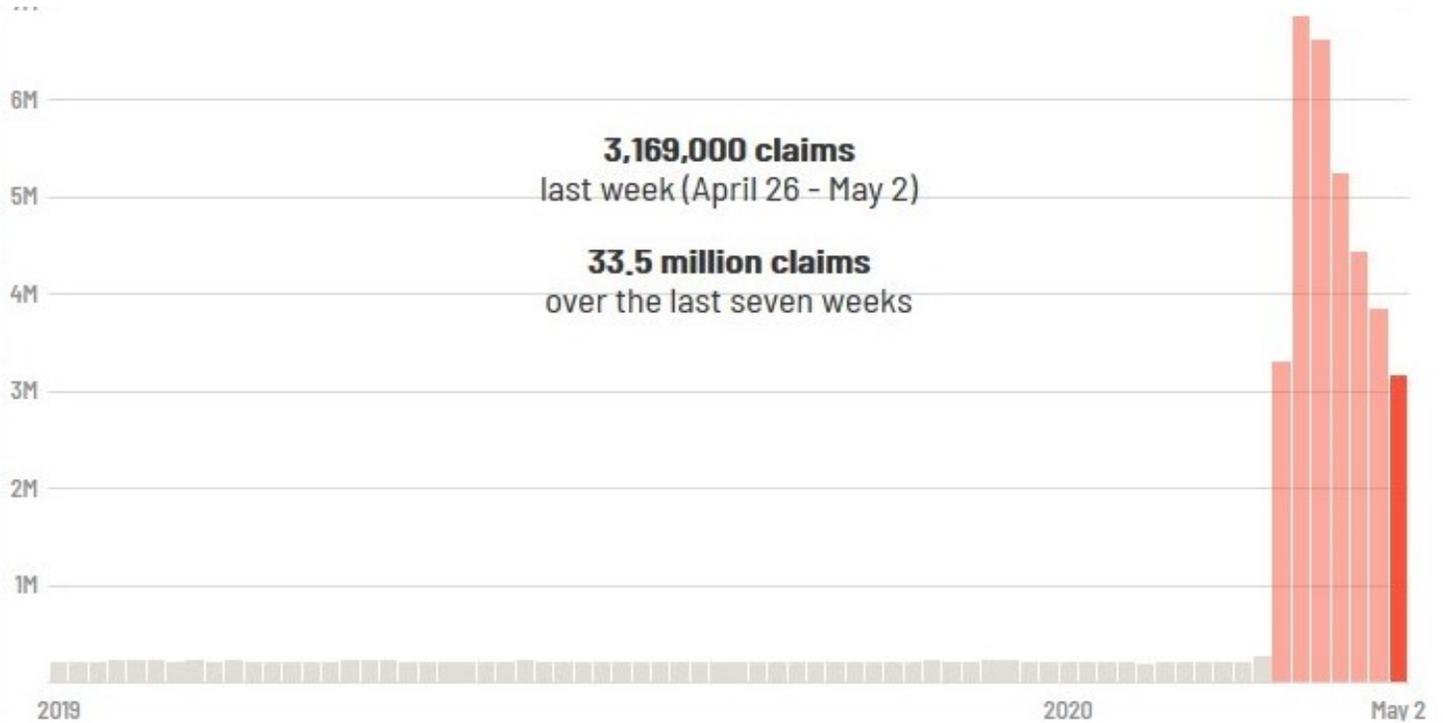
in the metro area since the pandemic began is a record high, the number per 1,000 workers at 119 is close to the statewide average and merely half of the national average.

Hopefully, as the economy continues to open up in stages, the number of unemployed workers will soon return to the pre-crisis

level.

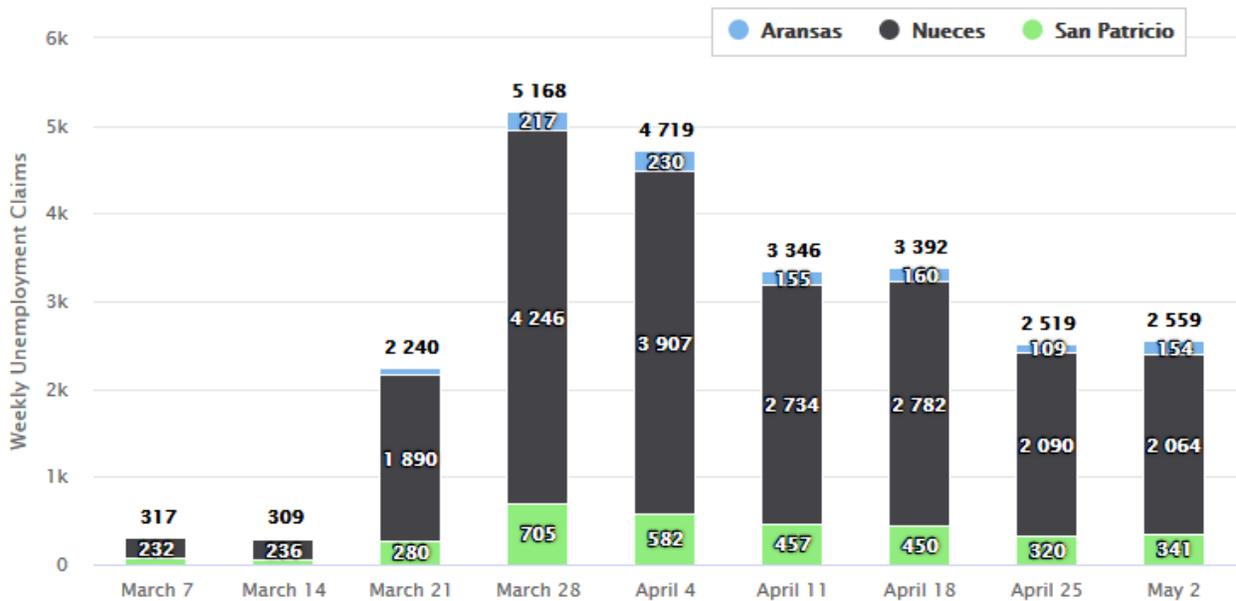
All told, instead of a V-shaped rebound, economic recovery will likely take the shape of a Nike swoosh.

U.S. Initial Unemployment Claims



Source: CNN.

Weekly Unemployment Claims in Corpus Christi MSA



Source: Texas Workforce Commission.