

## COVID-19: Geographic & Demographic Differences in Economic Pain

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**TAKEAWAYS:** Current policy actions to slow the spread of COVID-19 disproportionately affect the economy of Corpus Christi. Compared with a typical U.S. city, social distancing affects relatively more businesses and employees in the area with a sizable hospitality sector. A stay-at-home order affects the livelihoods of relatively more of the area workforce that cannot work remotely. As a result, the public health crisis has led to social injustice locally as the Hispanic population and the working poor suffer more economic injury than others do. This is the second article of a series that concerns the economic implications of the coronavirus outbreak.

**A**cross the United States, the primary measure for communities to slow the spread of COVID-19 is social distancing, which includes all actions that reduce close contacts among people, including implementing orders to stay at home for residents, close schools, prohibit public gatherings, and quarantine infected individuals.

A vast majority of states, including Texas, have issued statewide stay-at-home orders. These shelter-in-place mandates have sent most “nonessential” employees home, while residents can only obtain “essential” services in person, such as medical care and groceries.

It is conceivable that the coronavirus knows no border and does not discriminate anyone, but the blanket social distancing mandate across the nation has created disparate economic impacts among different communities and different industries.

In this newsletter, we show that such one-size-fits-all policy has disproportionately affected the Corpus Christi’s economy, and much of its Hispanic population, particularly the working poor, is feeling more economic pain than others from business closures. These localized perspectives can potentially help policymakers design programs to more effectively mitigate the damage of social distancing on the economy.

### Low Infection Rate

As of April 13th, a cumulative total of 85 COVID-19 cases were confirmed among the three counties of the Corpus Christi metro area (2 in Aransas County, 76 in Nueces County, and 7 in San Patricio County). Along with zero deaths, this number translates into about 19 cases per 100,000 residents.

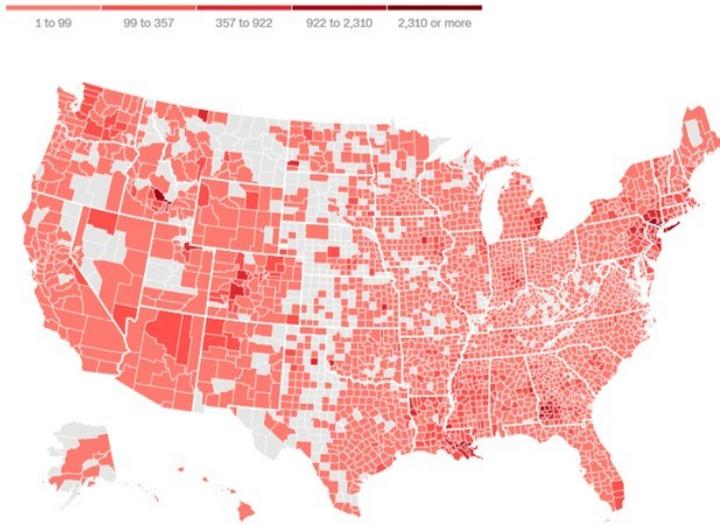
This relatively low caseload, about half of the U.S. average, is arguably attributable to the community practice of social distancing. But a map of reported cases across the nation also reveals lowest coronavirus infection rates within a nearly vertical band of counties from the Coastal Bend region of the Texas Gulf Coast northward up to North Dakota.

The reason behind the slowest virus spread within this central U.S. region is unclear. If not for the common practice of social distancing, then this finding might instead highlight the relative less potential public health benefit of the same statewide mandates for these communities over their negative side-effects on their local economies.

### Travel Destination Lockdown

Along with social distancing within the community, the state and many cities have effectively been on lockdown for visitors. The city and its coastal communities, such as Port Aransas and Rockport, are popular vacation destinations, especially during

**Confirmed cases per 100K residents, by county**



Source: CNN, data accessed online at <https://www.cnn.com/interactive/2020/health/coronavirus-us-maps-and-cases/> on 4/13/2020.

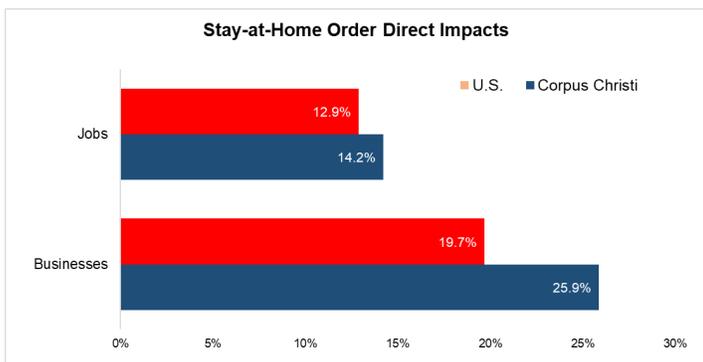
the Spring Break month.

The region’s stay-at-home executive orders have direct impacts on its hospitality industry, the major economic engine in normal times. To minimize travel-related spread of the coronavirus disease, Corpus Christi mayor has urged tourists not to visit the area.

Spending by out-of-town visitors helps support 15 percent of all jobs in the metro area, according to a recent study for the [Corpus Christi Convention and Visitors Bureau](#). Excluding short-term rentals, employment in the area’s nearly 200 hotels and motels in the lodging industry is 13 percent greater than that employment share in a typical U.S. city.

More so, the relative size of employment among all food service businesses, such as restaurants and bars, is 32 percent greater than that nationwide. So, it is conceivable that shutting down hotels and motels and prohibiting restaurants’ dine-in services generate more economic tolls on Corpus Christi than elsewhere.

In the [previous newsletter](#), we showed projections for affected business and jobs corresponding to the state and local executive orders issued on March 30. To provide a relative perspective of policy impacts, we repeat the same projections of affected businesses and jobs for the U.S. based on the distributions of businesses and employment nationwide. The results of this exercise represent the economic impacts in a typical U.S. community.



Our exercises reveal disproportionately more economic costs for the Corpus Christi metro area than elsewhere in the nation. The same stay-at-home orders affect about 6 percentage points more of businesses in the Corpus Christi metro area. An estimate of 14 percent of the local workforce is subjected to the policy actions, compared to slightly less than 13% nationwide.

**Remote Work in Corpus Christi**

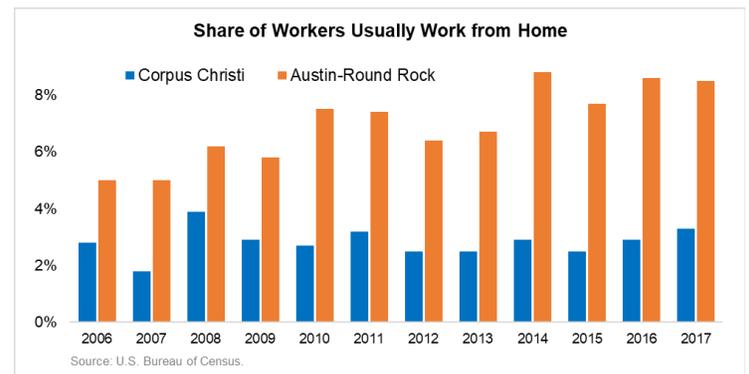
The shelter-in-place orders have sent most non-essential workers home. While some employees can transition to working remotely, workers who can only perform their work in person will likely be laid off or terminated altogether. So, how a blanket social distancing policy affects the regional economy depends in part on its workforce demographics and industry makeup.

Advances in telecommunications, especially Wi-Fi and broadband internet technologies, have helped a growing number of American workers, especially the self-employed, telecommute or work from home. According to the Census’ American Community Survey data, the share of U.S. workers that “usually work from home” increased from below 4 percent in 2006 to about 4 percent a decade later.

The prevalence of telecommuting, however, has not happened in Corpus Christi. According to Census data, the share of local workforce usually working from home dropped from a peak of 3.7% in 2008 to 3.3% in 2017. This steady pattern contrasts the upward trend for the workforce in the Austin-Round Rock metro area. The latter’s 8.7% share of remote workers in 2017, the highest among all Texas metro areas, reflects the growth of employment in management and professional services instead of brick-and-mortar establishments in the manufacturing and retail industries.

In contrast to Austin, the makeup of Corpus Christi’s industries does not seem to be conducive to remote work. To understand this, we compare the relative sizes of local employment in different industries against the proportions of U.S. workforce working from home in these industries.

The relative employment sizes are measured by local quotients, which are the shares of industry employment locally relative to the corresponding shares of industry employment nationwide. For example, a location quotient of 4.3 for the local mining industry,



which includes oil and gas extraction, means that mining related employment is about four times as large in Corpus Christi as in a typical U.S. city.

The comparison reveals that Corpus Christi’s workforce tends to be more concentrated in industries that remote work is not a viable option, such as government, entertainment, lodging, and food services. The area lags the rest of the nation in industries in which relatively more employees work remotely, such as business administration, professional services, and information.

It is clear that work from home is not an option for a relatively large segment of the Corpus Christi workforce. Restaurant wait staff can only serve diners physically. Salespersons in a brick-and-mortar retail store interact with customers on site. An executive order to close their businesses means sidelining those workers with no income.

**Working from Home for Everyone?**

Historical data on remote work, however, provide an inaccurate assessment of the workforce that can work remotely. Many tasks that are performed only in the workplace during normal times might be accomplished during the current pandemic. For example, bank staff who typically meet customers in person can continue to provide their services online or via email. K-12 teachers have also begun to hold online classes with students.

To better understand the types of jobs that are compatible with

remote work, we follow [a method](#) suggested by Dallas Fed economist, Yichen Su, who looked at the Department of Labor’s database for certain remote-compatibility factors of each occupation. Accordingly, an occupation is remote-compatible if its work meets the following five criteria: (i) involves frequent use of email; (ii) does not require physical proximity with other people closer than arm’s length; (iii) involves sitting at least half of the time; (iv) does not involve significant physical movement, such as kneeling, crouching, and crawling; and (v) does not involve significant body motions, such as bending, or twisting of the body.

The first two aspects that speak for themselves. Occupations that require physical contact with customers, such as dentists, are incompatible with remote work. Likewise, jobs that involve a lot of standing or body movement, such as flight attendants and building cleaners, are unlikely to be performed from home. The accompanying bar chart shows examples of remote-compatible and not remote-compatible occupations based on their scorings for each of the five characteristics.

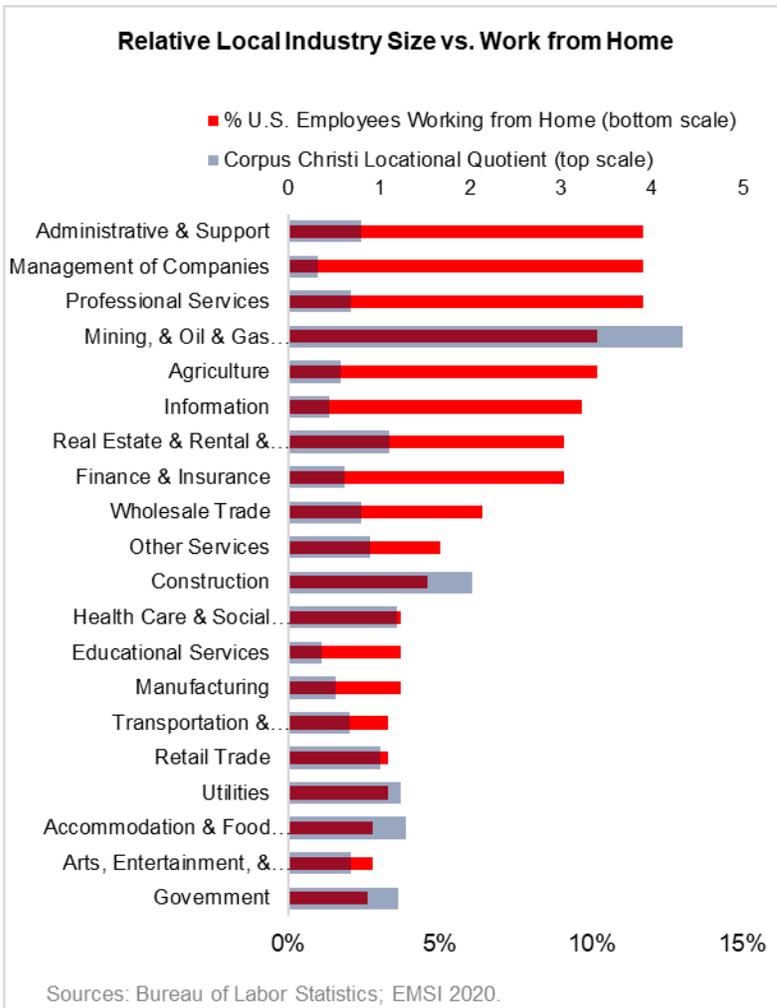
Based on Su’s [list](#) of 400 occupations that are compatible and incompatible with remote work and their associated scores, we estimate the remote-compatible workforce for Corpus Christi. For the metro area as a whole, 35% of the workforce is considered remote compatible. This local workforce share is lower than the corresponding figures for other metro areas in Texas, especially in comparison with Austin’s 48% share. The proportion of U.S. workers holding a remote-compatible job is 39%.

Corpus Christi has the smaller proportion of remote-compatible workers among major metro areas in Texas. This means that it has the largest share of local workforce that is vulnerable to business closures as a result of the statewide stay-at-home order.

**Social Injustice**

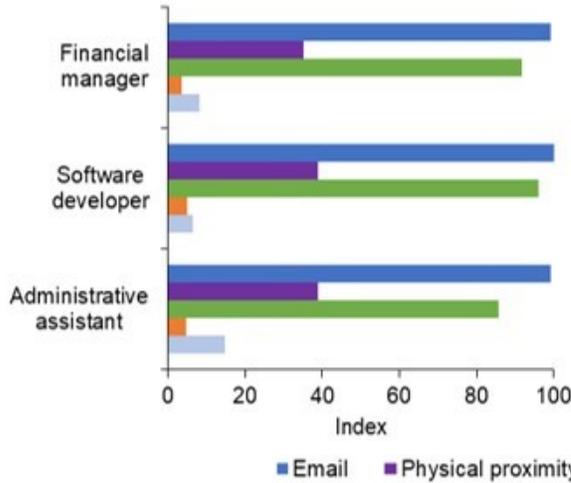
Within the Texas state, females are more likely to have jobs for which working remotely is an option. People with a college degree are also more likely to be in jobs that are adaptable to remote working. On the other hand, about two-thirds of jobs in Texas and in the U.S. are incompatible with working remotely. In particular, low-income workers and Hispanics are much less likely to work in remote-compatible jobs.

A breakdown of Corpus Christi’s workforce by demographics yields the same message. Female workers are significantly more likely to work remotely, while local Hispanics are less likely than whites to work from home. Other than demographic differences, there is substantial variation across the three counties in the metro areas. Relatively more jobs can be done at home in Nueces County than in the other counties. The finding of geographic and demographic differences means that government relief programs can more effectively revitalize the economy if policymakers also take these perspectives into consideration.

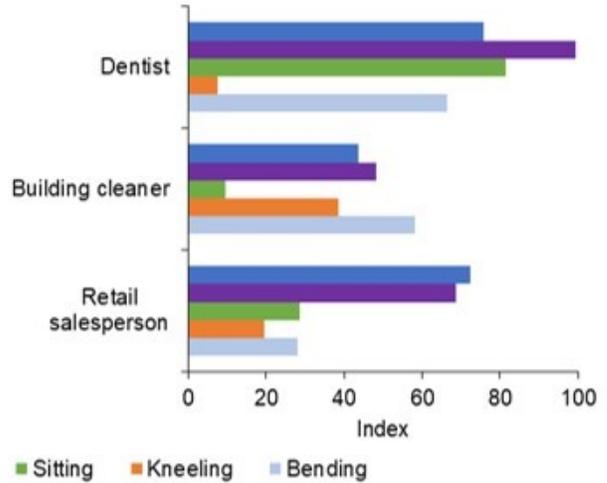


# Examples of Occupational Characteristics

A. Remote-compatible

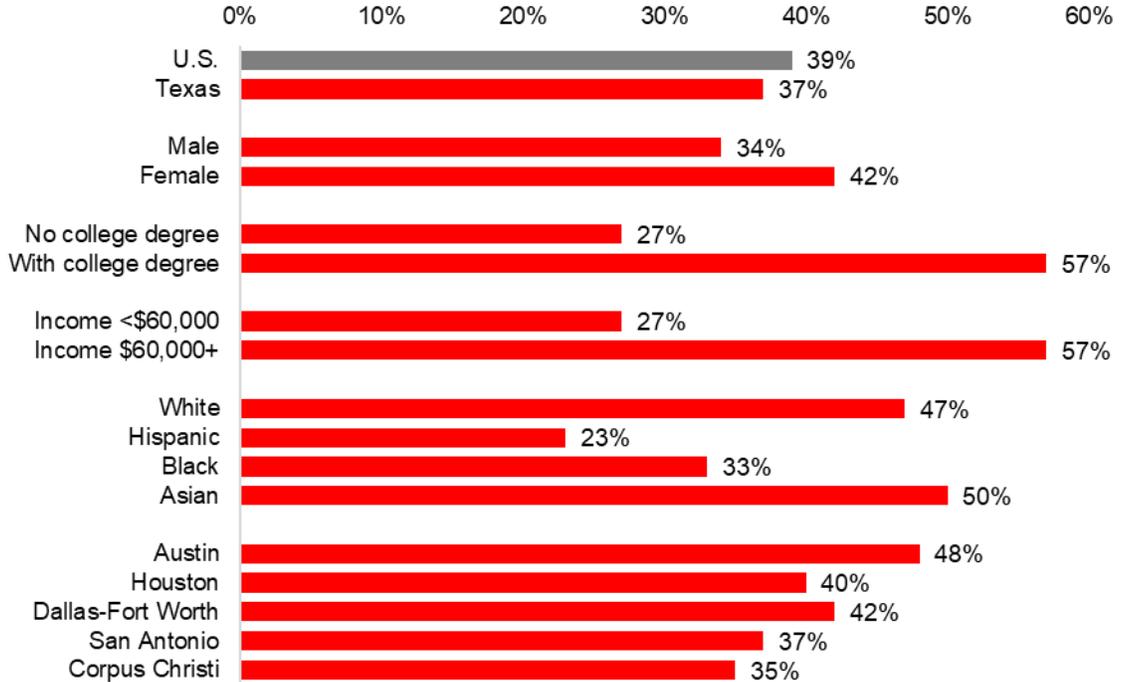


B. Not remote-compatible



Source: Yichen Su, "Working from Home During a Pandemic: It's Not for Everyone," *Dallas Fed Economics*, Chart 1. Accessed online at <https://www.dallasfed.org/research/economics/2020/0407>.

## Texas Workers Who Can Work at Home



Sources: Yichen Su, "Working from Home During a Pandemic: It's Not for Everyone," *Dallas Fed Economics*, 2020; and author's calculations.

## Corpus Christi Workers Who Can Work at Home

