

Where Jobs Are Being Lost or At-Risk due to COVID-19 in Harris County, TX

Methodology Note

Kinder Institute Houston Community Data Connections team

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To understand the employment impact of COVID-19, we adapted methodology developed by [the Urban Institute](#) and used the [Texas Workforce Commission's unemployment claims data](#) for the weeks of March 21 to April 18 to examine the sudden jump in joblessness by industry at the local level. Note that the Urban Institute produced census tract-level estimates of low-income job loss. The Kinder Institute's analysis includes high-income job loss such as those in the oil and gas industry.

We used the [community tabulation areas \(CTAs\)](#) as the neighborhood boundaries. The CTAs developed by the Kinder Institute are designed to serve as approximations of neighborhoods, based specifically on census geographic boundaries, to facilitate the aggregation of census data to geographies larger than census tracts, but smaller than counties.

Specifically, to estimate the number of job losses by neighborhood in Harris County, we apply the Texas Workforce Commission's unemployment claims data by industry to neighborhoods in Harris County. We use the 2019 Q3 employment data by industry from the Quarterly Census of Employment and Wages as a pre-COVID-19 employment baseline.

We then apply the calculated state-by-industry job loss ratio estimates to the [Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics \(LODES\) Residence Area Characteristic data](#) to estimate each neighborhood's job losses.

As an example, if the retail trade industry has lost 20 percent of its jobs and the mining and oil extraction industry has lost 10 percent. In a neighborhood with 100 jobs, 50 of which are in retail trade, and 50 of which are mining and oil extraction, we estimate total job loss as $50 \times 20\% + 50 \times 10\% = 15$.

The demographics indicators in the dashboard can be found at the [Kinder HCDC dashboard](#).

The job loss numbers are estimates and may not be comparable to actual job loss/pay-cuts in each neighborhood. We highly recommend interpreting these results as relative job loss levels, which can be used to inform nonprofits, foundations, and government for targeted support where it's most needed.

[The Houston Community Data Connections](#) team at the Kinder Institute is available to answer your organization's data-related questions and serve as a resource for nonprofits, government agencies, and community leaders. If you have any feedback or questions, [please let us know](#).