



November 2020

# KENTUCKY

# LABOR FORCE UPDATE

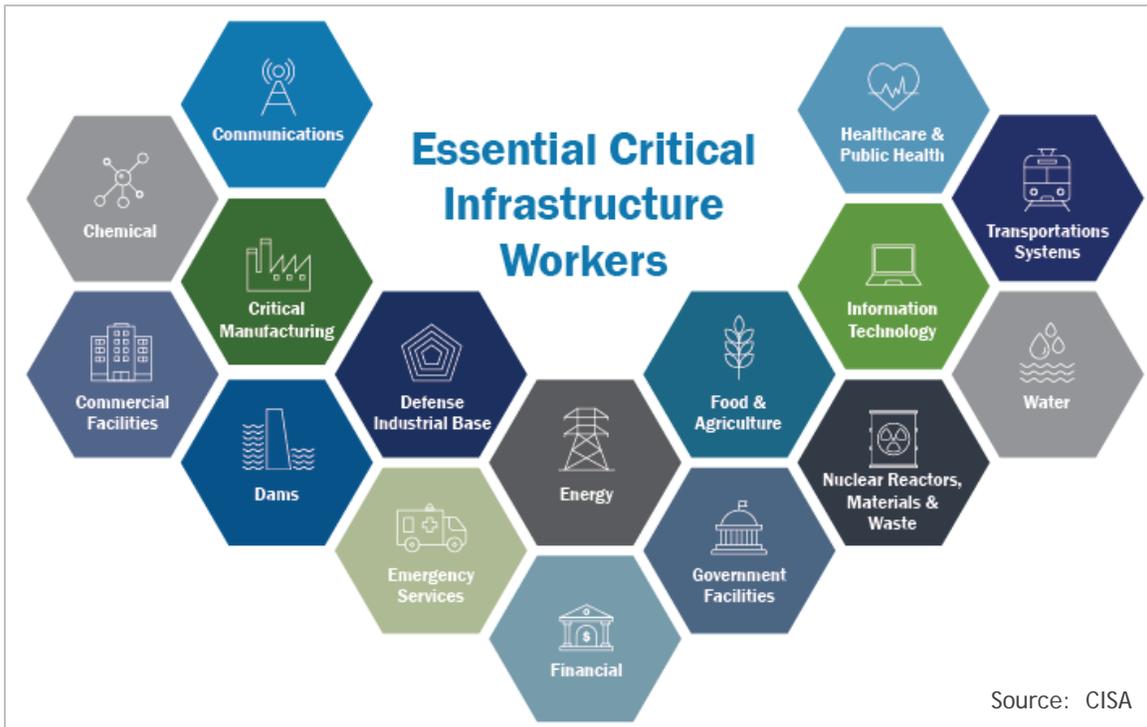
## Essential and Frontline Workers in Kentucky

Throughout the COVID-19 pandemic, we have relied on workers to keep the economy running. Deemed essential, these workers are located throughout the economy – stocking grocery shelves, providing medical care, making sure the lights stay on, picking up the trash and ensuring that the production and supply of goods is not interrupted. Many of these essential workers are required to report to work and, if they are on the frontline, they are potentially putting themselves at risk of exposure to COVID-19. This month, the *Labor Force Update* examines data on Kentucky’s essential and frontline workers.

### Essential Workers

The U.S. Department of Homeland Security's (DHS) Cybersecurity and Infrastructure Security Agency (CISA) identified a range of operations and services needed to “ensure continuity of functions critical to public health and safety, as well as economic and national security.”<sup>1</sup> During this public health emergency, CISA advises that these businesses stay open. The guidance includes descriptions of workers in 16 broad groups (shown below) which may encompass multiple industry sectors. For example, within Healthcare & Public Health, doctors, nurses and other caregivers are considered essential, as are those conducting research about COVID-19. Also essential are manufacturers and distributors of medical equipment, supplies and pharmaceuticals, as well as those providing cleaning, food service, security and other services in a hospital or other medical facility. However, not all medical professionals may be designated as critical such as Audiologists, Dental Hygienists, Oral Surgeons and Physical Therapist Aides, among others.

Nearly three-quarters of Kentucky workers are employed in critical occupations, the third highest share in the U.S.



Source: CISA

<sup>1</sup> Source: <https://www.cisa.gov/publication/guidance-essential-critical-infrastructure-workforce>

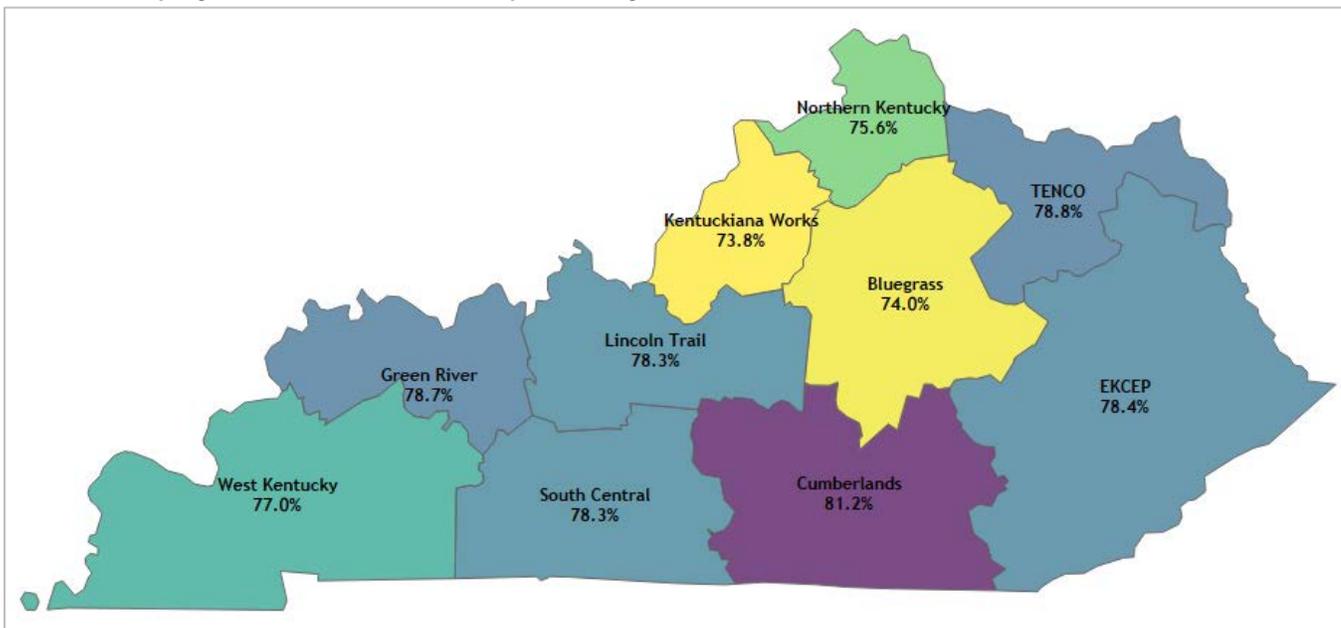


# Essential and Frontline Workers in Kentucky

The CISA memorandum does not provide a list of specific occupations considered critical infrastructure making it difficult to isolate specific workers who are considered essential. In its absence, the Council for Community and Economic Research (C2ER) and the Labor Market Information (LMI) Institute produced a list of Standard Occupation Classification (SOC) codes connected to industries identified by the DHS as critical infrastructure.<sup>2</sup> According to this analysis, critical occupation employment in Kentucky was estimated at 1.4 million workers, 74.4 percent of total occupational employment. Kentucky has the third highest share of workers employed in critical occupations in the U.S. following Mississippi (75.2 percent) and Indiana (74.6 percent). The U.S. average was 71.1 percent.

Using the list of critical occupations from the LMI Institute, there are 424 such occupations present in Kentucky. Data from the 2020 Occupational Employment Statistics (OES) program<sup>3</sup> provide employment and wage estimates for these occupations for the state and KYSTATS produces estimates for the Local Workforce Areas (LWA). The map below shows the share of total occupational employment in each LWA that is considered essential ranging from 73.8 percent in the Kentuckiana Works LWA to a high of 81.2 percent in the Cumberlands LWA. (Note: Occupational estimates were produced using data collected prior to the pandemic. For more details, see “Further Information” on page 6.)

Share of Employment in Essential Occupations by LWA



It should be noted that the essential designation does not account for the number of people needed to be working in an occupation. Nor does it account for industries that were shut down or had restricted operations. For example, Food Preparation and Serving Related Workers are considered essential. However, due to restaurant closures and restrictions on in-person dining, the number of people working in those positions was likely scaled down.

<sup>2</sup> Source: <https://www.imiontheweb.org/more-than-half-of-u-s-workers-in-critical-occupations-in-the-fight-against-covid-19/>

<sup>3</sup> Source: <https://kystats.ky.gov/KYLM>

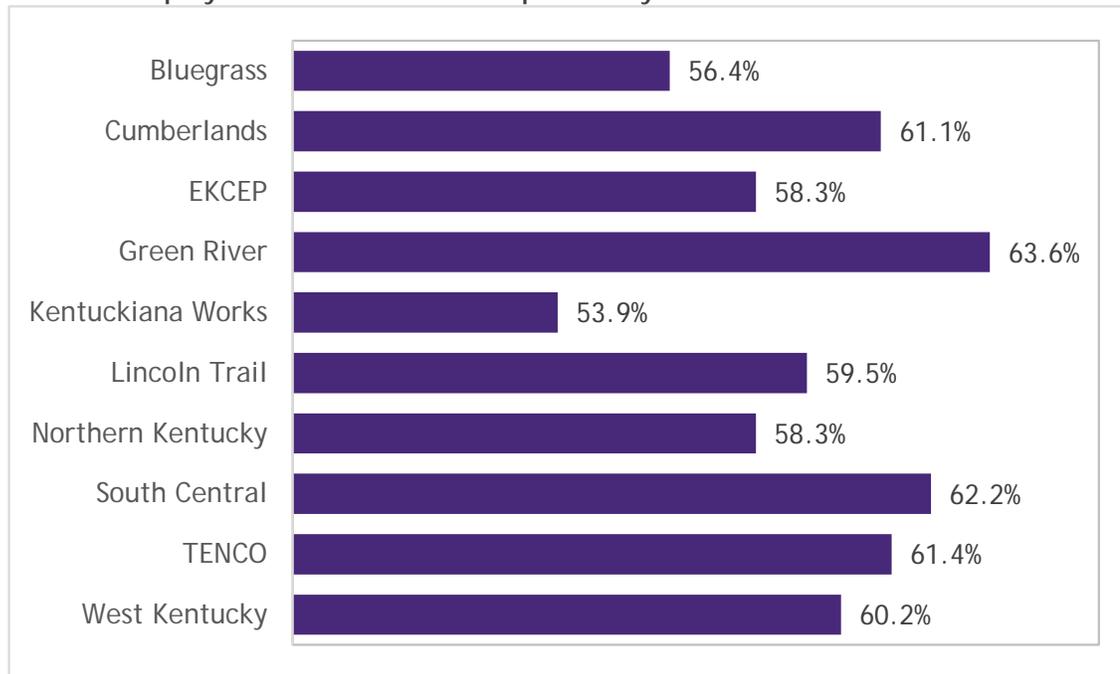


# Essential and Frontline Workers in Kentucky

## Frontline Workers

Many essential workers are able to work from home. Those essential workers that must report to work, despite potential risk to their health, are considered frontline workers. In a recent paper published by the National Bureau of Economic Research (NBER),<sup>4</sup> the authors identified which occupations can be performed at home in response to social distancing requirements. The authors found that 37 percent of jobs in the U.S. can be performed entirely at home. The remaining occupations require being at a worksite. In this analysis, essential workers who cannot work from home are considered frontline workers.

Share of Employment in Frontline Occupations by LWA



Using this framework, 296 of the 424 critical occupations in Kentucky are considered frontline with estimated employment of 1,066,122 (56.8 percent of the total). The adjacent chart shows this share for each LWA ranging from 53.9 percent in the Kentuckiana Works LWA to 63.6 percent in the Green River LWA.

Frontline workers are found in all sectors of the economy and include health care providers, emergency workers, truck drivers, cashiers at retail stores, janitors and maintenance workers as well as production and food processing workers and agricultural workers, among many others.



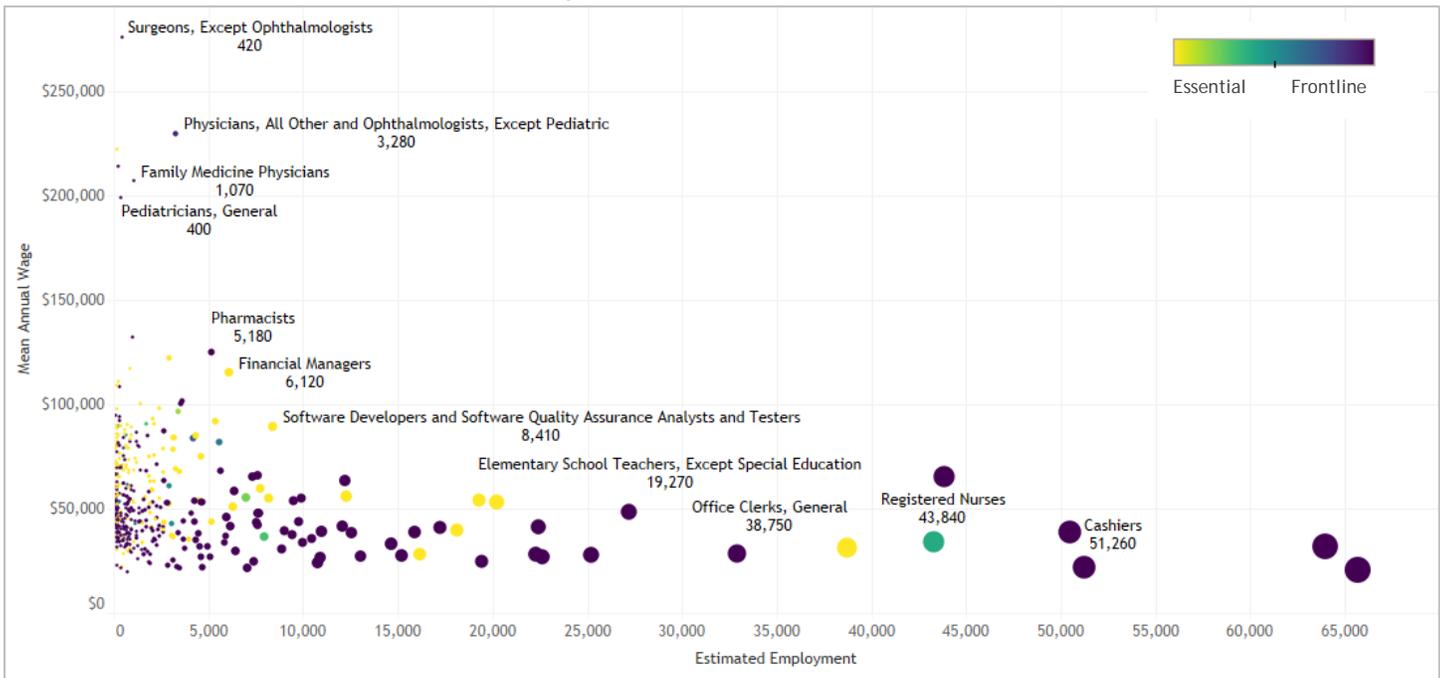
<sup>4</sup> Source: [https://www.nber.org/system/files/working\\_papers/w26948/w26948.pdf](https://www.nber.org/system/files/working_papers/w26948/w26948.pdf)



# Essential and Frontline Workers in Kentucky

The following chart shows employment in essential and frontline occupations as well as their average annual wages. The size of the bubble represents estimated employment and the color distinguishes essential (yellow) from frontline (purple) occupations. Green dots represent those occupations where a share of the workers can work from home but a share also must report to work as frontline workers as designated in the NBER study. The two largest purple bubbles to the lower right represent 65,690 Fast Food and Counter Workers and 63,980 Laborers and Freight, Stock and Material Movers. Of the ten occupations with the highest annual wages (\$100,000 or more), eight are in healthcare occupations, seven of which are frontline workers. The green dot with 43,270 employees is Customer Service Representatives. While the majority of workers in this occupation can work from home, 39 percent cannot and are on the frontline reporting to a worksite.

Essential and Frontline Workers in Kentucky

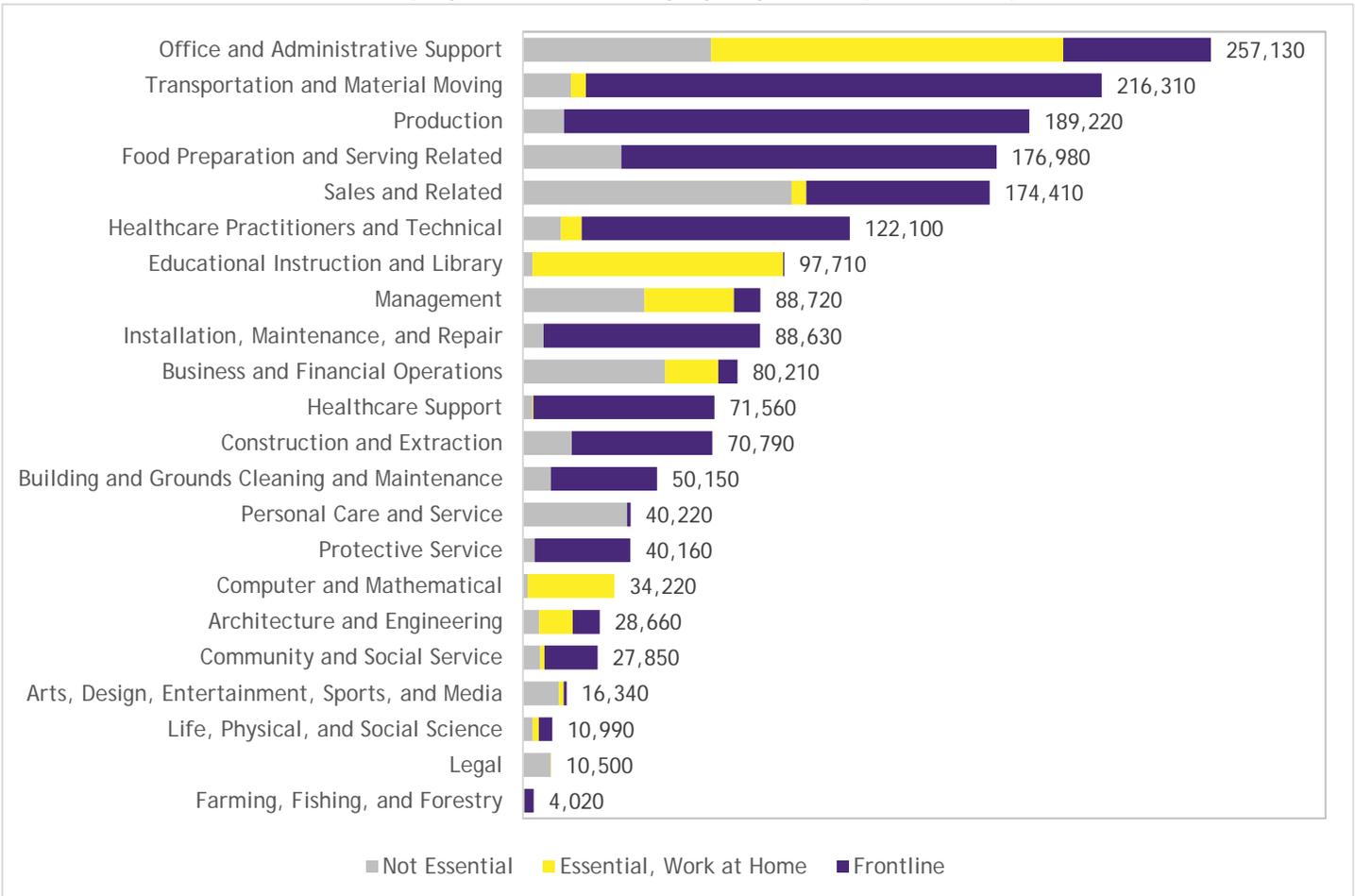


Occupations are grouped into 22 major categories. As shown in the following chart, the number and share of frontline workers in each group varies greatly. The majority of essential workers such as managers, educators, and those working in computers, finance, and law are largely able to work from home. Essential workers in agricultural, construction, and production cannot and are considered frontline. The occupational group with the highest estimated employment in Kentucky is Office and Administrative Support occupations with 257,130 workers. Of those, 186,850 are essential with 131,670 able to work from home and 55,180 are working on the frontline. The largest number of frontline workers is in Transportation and Material Moving occupations with 192,830 employees followed by Production occupations with 173,870 employees. In both of these groups, frontline workers make up the majority of employment. Frontline workers as a share of total employment is highest in Healthcare Support occupations with 95 percent of estimated employment.



# Essential and Frontline Workers in Kentucky

Total, Essential and Frontline Employment in Kentucky by Major Occupation Group



Healthcare workers are among the most recognizable frontline workers. Combined, Healthcare Practitioners and Technical occupations and Healthcare Support occupations make up 16 percent of all frontline workers. This group of workers includes high-paying practitioners such as doctors, nurses and pharmacists as well as support workers such as nursing assistants and home health aides.

Essential workers have been called on to keep our economy running and to keep us safe and well during the pandemic. A significant portion of these workers, frontline workers, cannot work remotely and may have a higher risk of being exposed to COVID-19.



# Essential and Frontline Workers in Kentucky

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## Further Information

The OES program has current employment and wage estimates for more than 700 occupations in Kentucky from accountants to zoologists for the state, while KYSTATS produces occupational and wage estimates for the ten LWAs. In addition to employment estimates, both annual and hourly wage estimates are provided for various wage levels: entry, mean, 25th percentile, median, 75th percentile, and experienced. These estimates are for wage and salary workers in nonfarm establishments. Self-employed persons are not included.

Employment and wage estimates published in 2020 were produced using data collected prior to the pandemic. These estimates utilize data collected from six survey panels which took place between November 2016 and May 2019.

You can find this information by visiting the KYSTATS Labor Market Information Report Library (<https://kystats.ky.gov/KYLMi>).



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## Kentucky Labor Force Update

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