

### September 2022

# KENTUCKY ABOR FORCE UPDATE

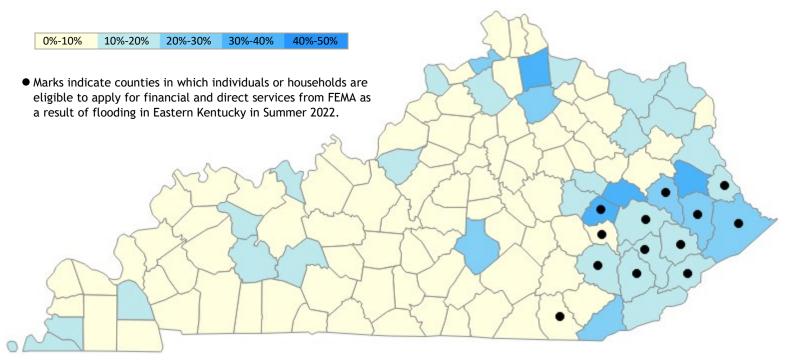
#### Flood-Susceptible Employment and Wages in Eastern Kentucky

In late July and early August 2022, communities throughout Eastern Kentucky were devastated by widespread flooding. Data releases from many sources in the labor market information ecosystem that will speak to the localized impacts of this flooding are forthcoming; but a proactive analysis of currently available data on the volume of business establishments, employment, and wages that exist within geographic areas particularly susceptible to flooding may serve to contextualize the extent to which those areas were economically vulnerable to this disaster.

The geocoded establishment, employment, and wage data used in this analysis represent conditions in March 2022, and are taken from KYSTATS' Quarterly Census of Employment and Wages (QCEW) program, which includes all businesses subject to Kentucky Unemployment Insurance law. To describe the extent to which a geographic area is susceptible to flooding, this analysis will also use the concept of Special Flood Hazard Areas (SFHAs) as defined by the Federal Emergency Management Agency (FEMA). Additionally, where applicable, a county will be referred to as having been affected by the 2022 floods if it is one of the 13 counties in which individuals or households are eligible to apply for financial and direct services from FEMA.

> In the Eastern Kentucky counties recently affected by flooding, more than one in six business establishments are located within a Special Flood Hazard Area (SFHA).

> Percentage of Total Business Establishments Located Within SFHAs, March 2022

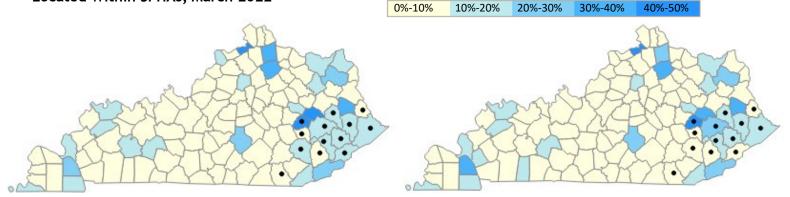


Source: Kentucky Center for Statistics (KYSTATS), Quarterly Census of Employment and Wages (QCEW), March 2022. SFHA and county geospatial data accessed from FEMA - DFIRM data files via the Kentucky Geoportal on 8/26/22.



### Flood-Susceptible Employment and Wages in Eastern Kentucky

Percentage of Total Covered Employment (Left) and Total Covered Wages (Right) Located Within SFHAs, March 2022



• Marks indicate counties in which individuals or households are eligible to apply for financial and direct services from FEMA as a result of flooding in Eastern Kentucky in Summer 2022.

Source: Kentucky Center for Statistics (KYSTATS), Quarterly Census of Employment and Wages (QCEW), March 2022. SFHA and county geospatial data accessed from FEMA - DFIRM data files via the Kentucky Geoportal on 8/26/22.

When compared to the state as a whole, 9 of the 13 counties affected by the 2022 floods have a higher-than-average proportion of: overall business establishments located within SFHAs, total covered jobs based in SFHAs, and total covered wages paid to workers in SFHAs. Further, when ranking all Kentucky counties, 6 of the affected counties rank in the overall top 15 across one or more of these metrics. For example, in Lee County, where a reported 80 businesses were displaced in 2021 during a separate flooding disaster, 34% of all active business establishments lie within SFHAs (the 4<sup>th</sup> highest percentage among all counties). These business establishments account for 48% of the county's jobs and 50% of all wages paid to workers across the county. In Perry County, which reportedly received 8" of rain in a 24-hour period in late July, 19% of all active business establishments lie within SFHAs, accounting for 15% of the county's jobs and 14% of the wages paid to all workers. See below for a table of these metrics for each of the 13 affected counties.

	Percent of Active	Rank	Percent of Total	Rank	Percent of Total Covered	Rank
	Business Establishments	(Among All	Covered Employment	(Among All	Wages Paid to Workers	(Among All
County	Within SFHAs	Counties)	Based in SFHAs	Counties)	Based in SFHAs	Counties)
Lee	34%	4	48%	1	50%	2
Magoffin	25%	8	20%	11	16%	19
Floyd	24%	9	18%	17	19%	14
Pike	22%	11	19%	15	16%	20
Perry	19%	12	15%	20	14%	24
Breathitt	18%	13	20%	13	24%	10
Martin	16%	17	6%	44	4%	45
Letcher	14%	23	10%	32	7%	39
Knott	13%	27	15%	21	13%	26
Clay	12%	29	11%	25	9%	31
Leslie	10%	36	3%	64	3%	65
Owsley	2%	90	0%	107	0%	105
Whitley	1%	102	2%	70	1%	87
2022 Flood Counties	17%	-	14%	-	13%	-
Kentucky (Statewide)	5%	-	5%	-	5%	-

Source: Kentucky Center for Statistics (KYSTATS), Quarterly Census of Employment and Wages (QCEW) March 2022 Data. SFHA and county geospatial data accessed from FEMA - DFIRM data files via the Kentucky Geoportal on 8/26/22.

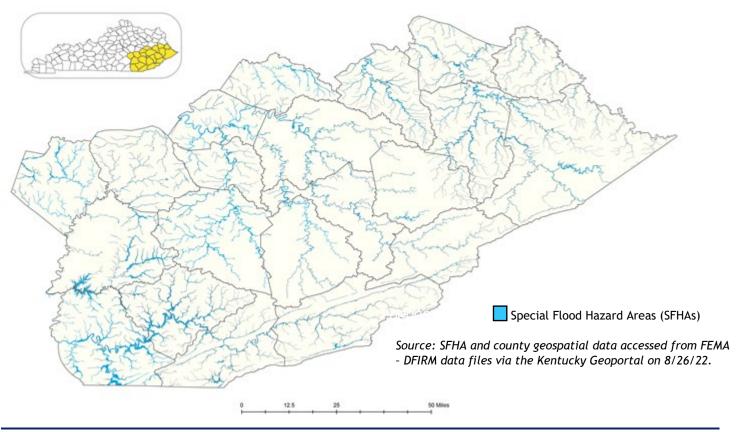
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## Flood-Susceptible Employment and Wages in Eastern Kentucky

#### **Summary and Future Research**

Currently available data indicate that the recent flooding throughout Eastern Kentucky occurred in counties where there is a proportionally higher number of businesses in SFHAs than most other areas of the state. The same is also true of total covered employment and of total covered wages within these counties, where nearly 1 in 7 jobs are based in a flood plain. Future research into the economic effects of this disaster will be enabled by the release of more contemporary data from various sources, including (but not limited to) the QCEW program and unemployment claims data from the Disaster Unemployment Assistance (DUA) program. Additionally, future analyses could be peformed by combining QCEW data with geospatial data capable of reflecting the *specific* areas affected by this disaster, rather than the geospatial data used here, which reflects all SFHAs (shown below for Southeastern Kentucky).



#### **Kentucky Labor Force Update**

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Kentucky Center for Statistics (KYSTATS)
Jessica Cunningham, Ph.D., Executive Director
Ashley Jones, Labor Market Information Branch Manager

Kentucky Center for Statistics 500 Mero Street, 5<sup>th</sup> Floor SC Frankfort, KY 40601 KYSTATS.KY.GOV

For requests and inquiries, contact Kimberly Gester • KGester@ky.gov • 502.782.3066

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