



January 2021

# KENTUCKY

## LABOR FORCE UPDATE

### Crossing State Lines: Postsecondary Employment Outcomes Outside KY

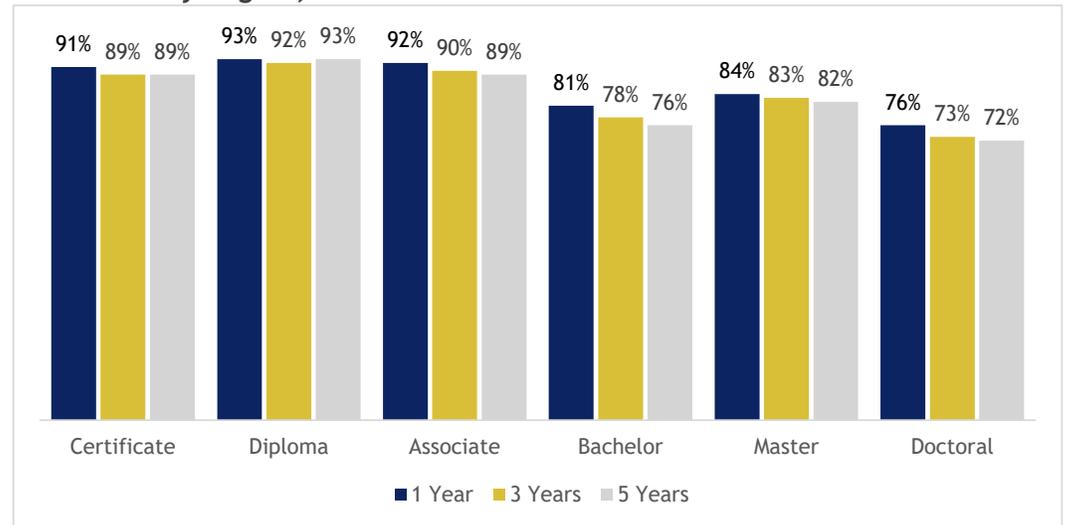
From the [Commuting Patterns Report](#), we know that nearly 41,000 residents from Boone, Campbell and Kenton counties commute to Hamilton County, Ohio for work. From the [Postsecondary Feedback Report \(PSFR\)](#), we know that nearly 42 percent of graduates from Northern Kentucky University are employed in Kentucky three years after graduation. What we have not known is how many graduates from Northern Kentucky University work in Hamilton County, Ohio. A new partnership between the Kentucky Center for Statistics (KYSTATS) and the Coleridge Initiative gets us closer to understanding how many graduates from Kentucky’s postsecondary institutions are employed in neighboring states.

The Coleridge Initiative provides a way for states with longitudinal data systems to collaborate and share information for research through its innovative Administrative Data Research Facility (ADRF). This partnership has enabled KYSTATS to examine employment and wage outcomes for postsecondary graduates from Kentucky institutions working within three neighboring states: Indiana, Ohio, and Tennessee. Results are published in the [Multi-State Postsecondary Report \(MSPSFR\)](#).

Modeled after the PSFR, the MSPSFR includes employment outcomes of postsecondary graduates for the 2014 to 2018 time period. One year outcomes include graduates from 2013 to 2017. Three year outcomes include graduates from 2013 to 2015. Five year outcomes include graduates from 2013.

The following chart shows the percent of this select group of graduates working in Kentucky one, three, and five years after graduating by degree level. Among those who earned a certificate in Kentucky and were employed one year later, 91 percent were employed in Kentucky and 9 percent were employed in Indiana, Ohio, or Tennessee. Over time, there was a decreasing share of graduates working in Kentucky and an increasing share working in these other three states. Graduates earning a master degree in Kentucky are more likely to be employed in Kentucky after graduation than those who earned either a bachelor degree or doctoral degree.

Share of Postsecondary Graduates Employed in Kentucky 1, 3, and 5 Years After Graduation by Degree, 2014-2018

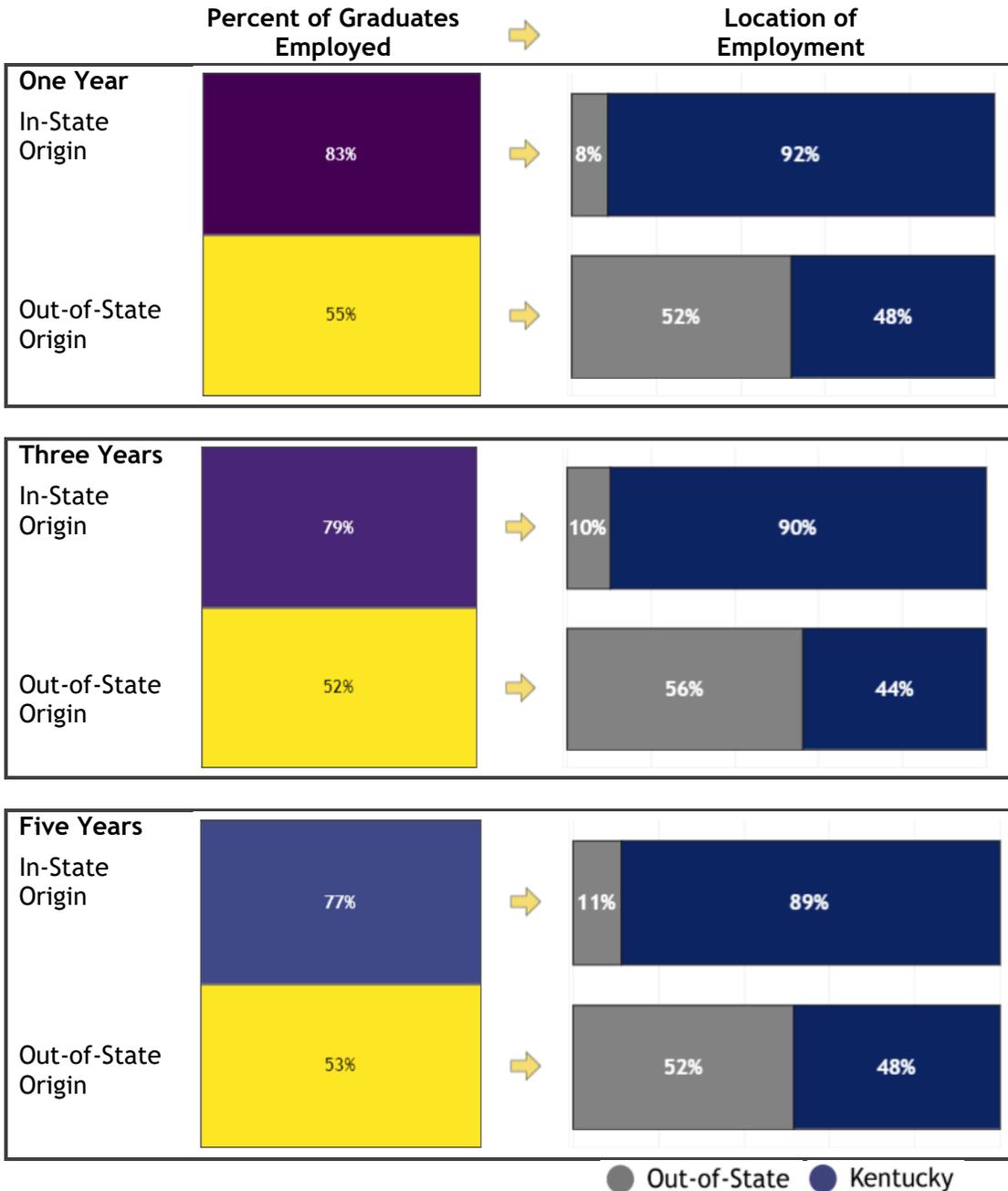


Note: Employment outcomes include all Kentucky graduates that were employed within Indiana, Kentucky, Ohio or Tennessee  
Source: KYSTATS, Mutistate Postsecondary Feedback Report (MSPSFR)



# Crossing State Lines: Postsecondary Employment Outcomes Outside Kentucky

Postsecondary Graduate Outcomes by Student Origin, 2014-2018



Between 2013 and 2017, more than three-quarters of graduates included in the MSPSFR were from Kentucky with the remaining share coming from out-of-state. Graduates from Kentucky were more likely to be employed in Kentucky one, three, and five years after graduation than out-of-state students. Nearly 80 percent of graduates from Kentucky were working in one of the four states one, three, and five years after graduation, with about 90 percent of them employed in Kentucky.

The employment outcomes of graduates from out-of-state were not as robust as a little more than half were employed in the four states included in the analysis. Of those with known employment outcomes, less than half were employed in Kentucky.

When looking at the outcomes in both the MSPSFR and the PSFR, it is useful to recall that there are many

Note: Employment outcomes include all Kentucky graduates that were employed within Indiana, Kentucky, Ohio or Tennessee, 2014-2018  
 Source: KYSTATS, Mutistate Postsecondary Feedback Report (MSPSFR)

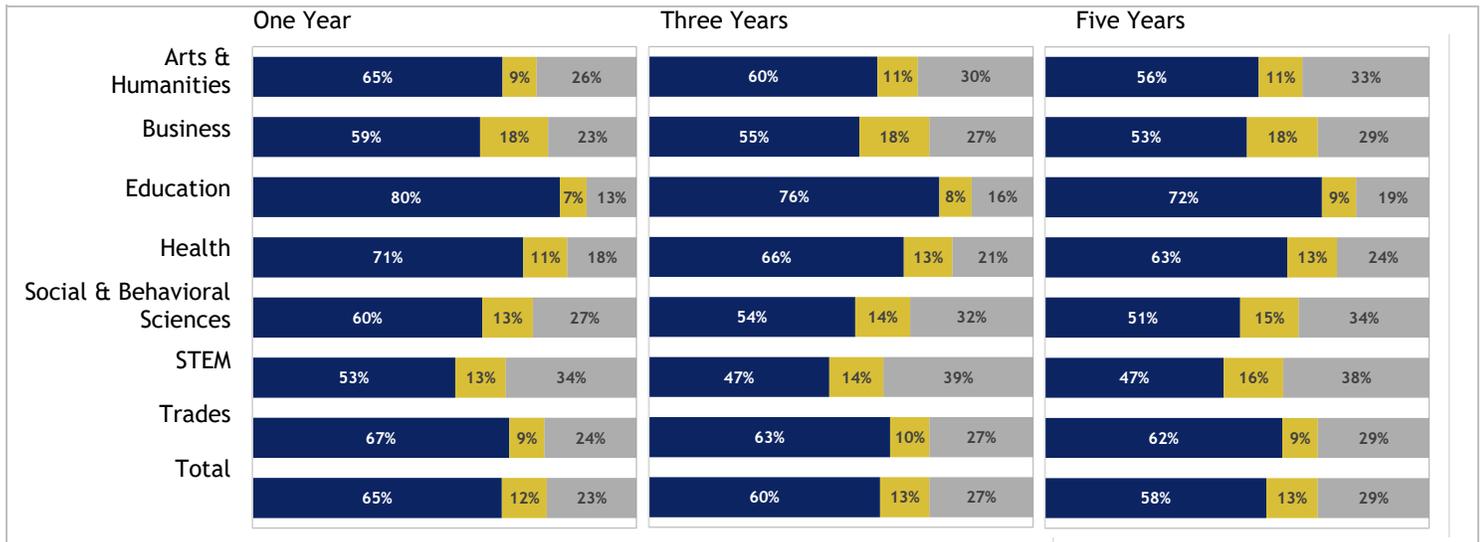
reasons graduates may not be employed in Kentucky including a return to school, self-employment, noncovered employment or unemployment. They may also have found employment in a state that is not included in the analysis.



# Crossing State Lines: Postsecondary Employment Outcomes Outside Kentucky

The largest share of postsecondary graduates with a degree in education were employed in Kentucky: 80 percent one year after graduation, 76 percent three years after, and 72 percent five years after. The group with the smallest share of graduates employed in Kentucky were degree holders who majored in science, technology, engineering or math (STEM). However, this group of graduates also had the largest share with unknown outcomes.

## Employment Outcomes by Location and Major Earned



■ Employed in KY ■ Employed in IN, OH or TN ■ Unknown Status

Note: Employment outcomes include all Kentucky graduates that were employed within Indiana, Kentucky, Ohio or Tennessee, 2014-2018

Source: KYSTATS, Mutistate Postsecondary Feedback Report (MSPSFR)

The following chart looks at the wages of employed graduates by degree and if they were employed in Kentucky or out-of-state. Among the seven types of majors, the only graduates employed in Kentucky that earned more on average were those with a degree in education. All other majors had higher median wages if employed in Indiana, Ohio, or Tennessee. Graduates with an education degree and employed in Kentucky had the highest median wages among all major groups working in the state one and three years after graduation, \$41,922 and \$45,114. Wages for graduates with STEM degrees were the highest in Kentucky five years after graduation at \$50,525.

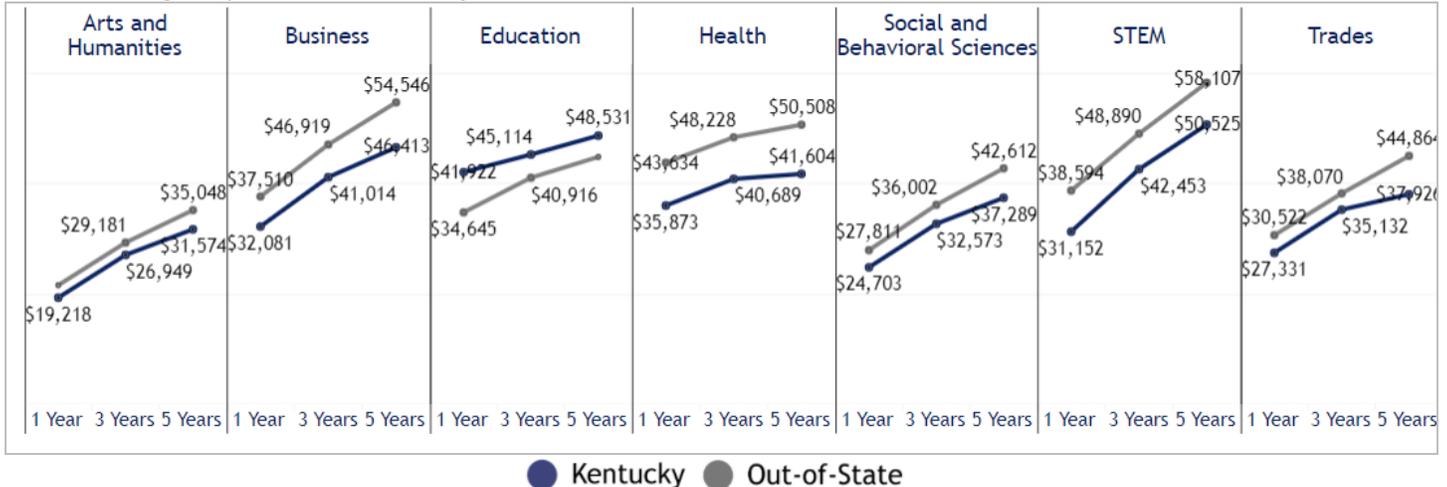


Source: Designed by Freepik.com



# Crossing State Lines: Postsecondary Employment Outcomes Outside Kentucky

Median Wages by Location and Major Earned



Note: Employment outcomes include all Kentucky graduates that were employed within Indiana, Kentucky, Ohio or Tennessee, 2014-2018  
 Source: KYSTATS, Mutistate Postsecondary Feedback Report (MSPSFR)

Graduates with a STEM degree that were working in Indiana, Ohio, or Tennessee had median wages of \$38,594 one year after graduation compared to \$31,152 for those employed in Kentucky, 24 percent higher. By five years after graduation, that gap had decreased to 15 percent indicating that STEM graduates in Kentucky had lower wages but they increased at a faster rate.

It should be noted that direct comparisons between the PSFR and MSPSFR should not be made due to differences in the cohort groups, how variables are defined, the treatment of missing data, redaction rules and other factors. The most significant difference is the number of graduates included. In the PSFR, all graduates from a postsecondary institution in Kentucky starting with the class of 2007 through 2015 are included. In the MSPSFR, only graduates from 2013 to 2017 are included. There are differences in redaction between the two studies. As well, linking employment records across states is complicated. For example, consider a person who works for one quarter in Kentucky during 2018 and three quarters in Ohio. In the PSFR, this person may be considered employed in Kentucky. However, in the MSPSFR, this person would be classified as employed in Ohio.

The MSPSFR is just the first outcome resulting from this partnership with the Coleridge Initiative. Future work will include a more in-depth analysis of Kentucky postsecondary graduates employed in Ohio. In addition, similar to the PSFR, we hope to provide employment and wage outcomes by postsecondary institution.



# KYSTATS NEWS

Visit the KYSTATS website (<https://kystats.ky.gov/>) to see new and updated reports including:



## Kentucky Future Skills Report

How many jobs will Kentucky need to fill during the next five years? What will those jobs pay? Do we have the right mix of workers and skills to fill those jobs? This interactive report provides data to help Kentuckians answer these questions.

[https://kystats.ky.gov/Reports/Tableau/2020\\_KFSR](https://kystats.ky.gov/Reports/Tableau/2020_KFSR)



## Economic Activity Report

This interactive report allows users to explore economic trends among industries, business establishments, and individuals in Kentucky.

<https://kystats.ky.gov/Reports/Tableau/EAR>



## Career and Technical Education Employer Connector

The Career and Technical Education (CTE) Employer Connector helps employers and educators find CTE programs closest to them. Users can filter information such as total current enrollment, eligible co-op students, and 12th grade enrollment by program, region, and distance.

<https://kystats.ky.gov/Reports/Tableau/CTESearchSystem>



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## Kentucky Labor Force Update

A monthly publication of the  
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](http://kystats.ky.gov)

For requests and inquiries, contact  
Kimberly Gester • [KGester@ky.gov](mailto:KGester@ky.gov) • 502.782.3066

Contributors to *Kentucky Labor Force Update* this month:  
Kimberly Gester and Vijaya Muniyandi

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