Kentucky Economic Analysis PY 2022

Prepared for



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Prepared by



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The Program Year (PY) 2022 Kentucky Economic Analysis report is produced by the Workforce Intelligence Branch of the Kentucky Center for Statistics (KYSTATS) to provide a detailed analysis of the economy and workforce of the Commonwealth and its ten Local Workforce Areas (LWAs). This report is compiled in accordance with Training and Employment Guidance Letter (TEGL) No. 01-22, issued by the U.S. Department of Labor, Employment and Training Administration (ETA).

This analysis provides an in-depth review of Kentucky's labor market conditions and economy, including population, demographics, workforce, and industrial and occupational employment trends and activities. The report also compares the state's economic outcomes relative to the nation as a whole.

The primary focus of this report includes the years 2012 to 2022. Projection estimates for occupations covers the years 2020 to 2030.

To better understand the diversity of Kentucky's economy, this report also provides demographic and economic information on the Commonwealth's ten LWAs, shown in Figure 1 below. The designation of LWAs was mandated in the Workforce Innovation and Opportunity Act of 2014 (WIOA).

Like the counties that comprise them, these ten LWAs can vary significantly in terms of unemployment, occupational employment and growth, population, and educational attainment. Generally speaking, the more populous and urban LWAs have higher educational levels, greater employment growth and lower unemployment rates when compared to the more rural LWAs.

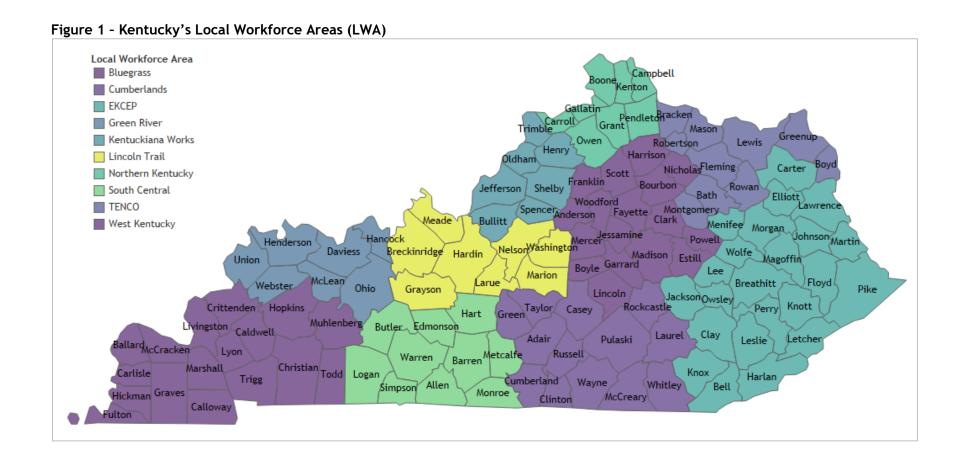
Multiple data sources are used in this report. Measures of the overall economy include Gross Domestic Product (GDP) and personal income, which come from the U.S. Bureau of Economic Analysis (BEA). Population and population projections are from the Kentucky State Data Center at the University of Louisville. Other demographic information is from the U.S. Census Bureau's 2020 Census and the American Community Survey (ACS). ACS 5-year estimates (2017-2021) provide information on economic and demographic characteristics at the county-level. Data for all 120 counties are aggregated to provide estimates at the LWA level.

Labor force data are from Bureau of Labor Statistics (BLS) programs. Information on the United States labor force comes from the Current Population Survey (CPS). Additional labor force data for Kentucky and the ten LWAs come from the Local Area Unemployment Statistics (LAUS) program administered by the Workforce Intelligence Branch at KYSTATS.

Data from the BLS Quarterly Census of Employment and Wages (QCEW) program are used to measure covered industry employment and wage growth over time.

Occupational estimates are available for more than 700 detailed occupations produced by the Occupational Employment and Wage Statistics (OEWS) program and KYSTATS.







At the beginning of 2020, key economic indicators reflected economic growth (see GDP and Personal Income), rising employment, and unemployment rates at their lowest in 20 years (see Civilian Labor Force). However, in March, the global COVID-19 pandemic resulted in state-issued social distancing orders and a subsequent economic recession. Though many workers were able to work remotely, many others were laid off as businesses closed or suspended operations to slow the spread of the virus. There were an unprecedented number of initial unemployment claims filed during 2020 (see Unemployment Insurance Claims). Though every sector of the state economy experienced job loss during 2020, the effects were not even across industries or regions (see Covered Employment and Wages).

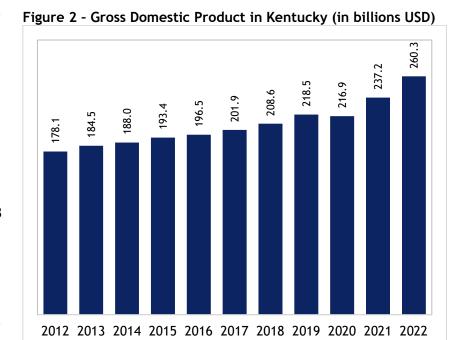
Though dramatic, the recession itself was short and the economic recovery began almost as quickly. Similar to the initial COVID downturn, Kentucky's post-COVID recovery has been uneven across industries and Local Workforce Areas. Economic indicators have been mixed as well. By 2022 Kentucky's annual unemployment rate of 3.9% was the lowest in history; however, the state's labor force participation rate continued to flounder at 57.8%. This report provides an analysis of an economy in rebound.



GDP, produced by the BEA, measures the value of the goods and services produced in the U.S., states, and Metropolitan Statistical Areas (MSA). GDP estimates are also available by industry.

Kentucky's GDP was \$260.3 billion in 2022, a 9.7 percent increase from 2021. The growth rate of GDP is an indicator of a region's overall economic health. Figure 3 compares the annual change in GDP for the U.S. and Kentucky since 2012. Kentucky's GDP has been growing at a

slower rate



Source: U.S. Bureau of Economic Analysis, "Annual Gross Domestic Product (GDP) by State," (accessed August 2023)

than the U.S. However, in 2020, the GDP of Kentucky fell 0.7 percent from 2019, slightly less than the U.S. decrease of 1.5 percent. By 2021, GDP growth had returned, and in 2022, Kentucky's year-over-year GDP percent increase exceeded that of the U.S. for the second time in the last decade.

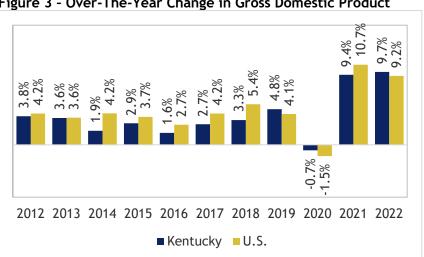


Figure 3 - Over-The-Year Change in Gross Domestic Product

Source: U.S. Bureau of Economic Analysis, "Annual Gross Domestic Product (GDP) by State," (accessed August 2023)



Kentucky GDP dropped sharply in the second quarter of 2020 as businesses closed in response to coronavirus. GDP fell to 2017 levels but began to recover in the third quarter. However, by the fourth quarter of 2020, GDP exceeded pre-COVID levels, and has continued to rise to \$267.3 billion in the fourth quarter of 2022.

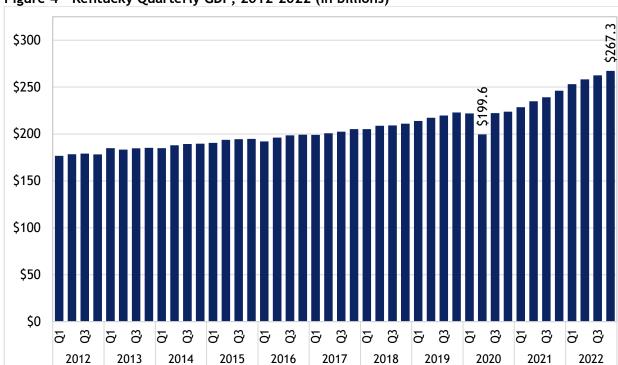
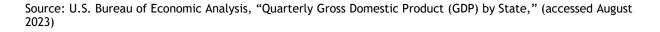


Figure 4 - Kentucky Quarterly GDP, 2012-2022 (in billions)





GDP is classified into three major categories: Private Goods Producing, Private Service Providing, and Government. Compared to the U.S., a larger percentage of Kentucky's economy is made up of private, goods producing industries and government, while private, service providing industries comprise a smaller percentage of total GDP. Further examination of the data at this level shows the shift between Goods Producing Sectors and Service Providing Sectors. As shown in Figure 5, 68.1 percent of U.S. GDP in 2012 was from private service providing industries. This increased to 70.4 percent in 2022. In Kentucky, 63.9 percent of the state's GDP was attributed to private service providing industries in 2022, an increase of 4.6 percentage points from the 59.3 percent recorded in 2012, but still below the U.S. average.

Kontucky

Figure 5 - U.S. and Kentucky GDP for Public and Private Sectors, 2012-2022

United	States		
2012	18.6%	68.1%	13.3%
2013	18.9%	67.9%	13.1%
2014	18.8%	68.2%	12.9%
2015	18.0%	69.2%	12.8%
2016	17.3%	69.9%	12.8%
2017	17.7%	69.7%	12.6%
2018	17.9%	69.7%	12.4%
2019	17.5%	70.3%	12.2%
2020	16.6%	70.6%	12.8%
2021	17.1%	70.9%	12.1%
2022	18.0%	70.4%	11.6%

Kentuck	ку		
2012	25.8%	59.3%	15.0%
2013	26.6%	58.7%	14.7%
2014	25.7%	59.8%	14.5%
2015	24.9%	60.8%	14.3%
2016	23.8%	62.3%	13.9%
2017	24.5%	62.0%	13.5%
2018	23.8%	62.6%	13.5%
2019	24.1%	62.7%	13.2%
2020	23.0%	63.4%	13.6%
2021	23.0%	64.0%	13.0%
2022	23.7%	63.9%	12.4%

Private, Goods Producing Industries Private, Service Providing Industries Government Source: U.S. Bureau of Economic Analysis, "Annual Gross Domestic Product (GDP) by State," (accessed Aug 2023). Yearly percentages may not add up to 100 percent due to rounding.

As mentioned above, Kentucky's economy relies more heavily on private, goods producing industries than does the U.S. economy. In 2022, nearly one-quarter of the state's GDP was attributed to private goods producing industries, 23.7 percent, which was down from a peak of 26.6 percent (2013) in the years between 2012 and 2022. The U.S. share declined from 18.6 percent to 18.0 percent between 2012 and 2022, and the gap between the U.S. and Kentucky narrowed. In 2012, there was a difference of 7.1 percentage points, which fell to 5.7 percentage points by 2022.

Government as a share of GDP was also higher in Kentucky than in the U.S., 12.4 percent in 2022 compared to 11.6 percent in the U.S. This share declined for both the U.S. and Kentucky, but Kentucky experienced a larger drop, 2.6 percentage points since 2012.

Figure 6 examines the contribution individual economic sectors made towards the state GDP in 2012 and 2022. In 2012, four sectors made up just over half of the state's GDP: Manufacturing, Government, Real Estate and Rental and Leasing, and Health Care and Social Assistance together accounted for 53% of Kentucky GDP. By 2022, the combined share of GDP for these four sectors had fallen to 49.2%. During this period, the largest gains in GDP on a percentage basis were found

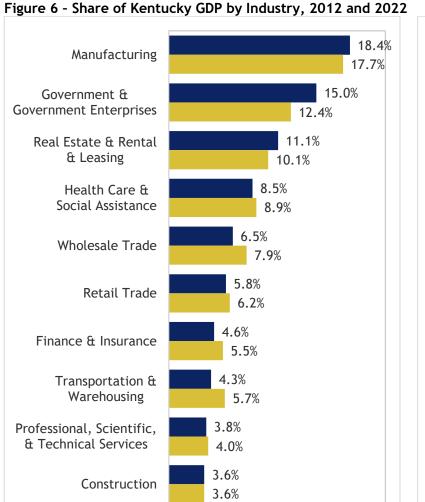


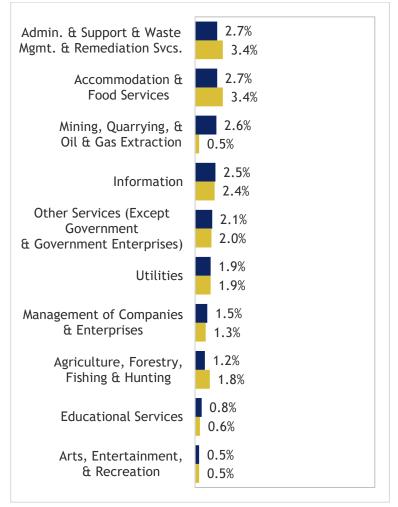
in the Wholesale Trade (1.4%), Transportation and Warehousing (1.4%), and Finance & Insurance (0.9%) sectors.

Manufacturing was the largest contributor to state GDP in both 2012 and 2022, decreasing from 18.4 percent to 17.7 percent of total GDP over that period. Nationally, manufacturing decreased its contribution to GDP from 11.9 percent to 11.0 percent over this same period. The second largest contributor to Kentucky GDP was Government, which also made up a declining share of state GDP as discussed above.

In addition to Manufacturing and Government, several other sectors experienced a declining share of GDP since 2012, but the Mining, Quarrying, and Oil and Gas Extraction sector was the only sector in which GDP decreased over that period. In 2012, this sector contributed \$4.61 billion to state GDP, 2.6 percent of total GDP. In 2022, this dropped to \$1.37 billion, 0.5 percent of state GDP.







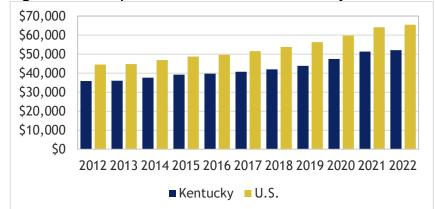
Source: U.S. Bureau of Economic Analysis, "Annual Gross Domestic Product (GDP) by State," (accessed August 2023)



While GDP is a measure of the economic health of the state, a metric that measures the economic well-being of its residents is personal income. Personal income includes wages, employer provided supplements such as insurance, proprietors' income, dividends, interest, rents, and government benefits. Personal income does not include capital gains or losses from investments. Per capita personal income allows for comparison across states or with the U.S.

Kentucky residents received \$235 billion in personal income in 2022, an increase of 1.7 percent from 2021, but lower than the national increase of 2.4 percent. Personal income has grown at a compound annual growth rate (CAGR) of 4.1 percent per year in Kentucky since 2012 compared to U.S. growth of 4.5 percent over the same period.

Figure 7 - Per Capita Personal Income for Kentucky



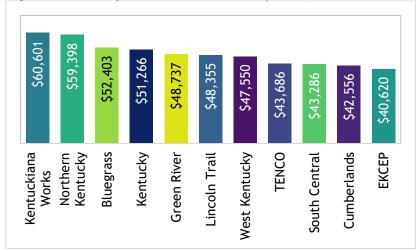
Source: U.S. Bureau of Economic Analysis, "Personal Income Summary," (accessed August 2023)

A comparison of per capita income in the U.S. and Kentucky is shown in Figure 7. In 2022, Kentucky's per capita income reached \$52,109. For the U.S., per capita income was \$65,423. For most of the last decade,

the gap has widened. In 2022, Kentucky's per capita personal income was 79.6 percent of the U.S. average, down from 80.5 percent in 2012. While per capita income is growing in Kentucky at a compound annual rate of 3.8 percent, it remains lower than the U.S. average and is growing at a slower rate (U.S. CAGR of 3.9 percent).

Personal income, population, and per capita personal income data are available at the county level through 2021. As shown in Figure 8, when these 2021 estimates are aggregated by LWA, Kentuckiana Works, Northern Kentucky, and Bluegrass LWAs had higher per capita personal income than the state overall.

Figure 8 - Per Capita Personal Income by LWA, 2021

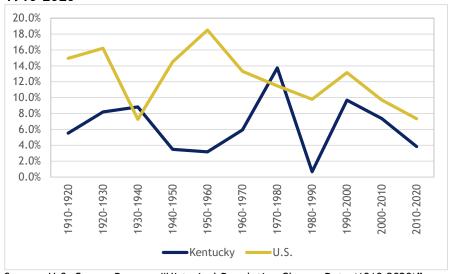


Source: U.S. Bureau of Economic Analysis, "Personal Income Summary," (accessed August 2023)



In 2020, Kentucky's population surpassed 4.5 million residents. However, population growth in the Commonwealth has lagged national rates for decades. Between 1910 and 2020, Kentucky's population growth rate exceeded the national average twice, first between 1930 to 1940 and most recently between 1970 and 1980. In 2020, Kentucky's population increased 3.8 percent since 2010, half of the national rate of 7.4 percent.

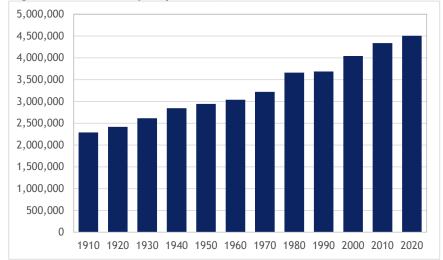
Figure 9 - Change in Population by Decade, Kentucky and the U.S., 1910-2020



Source: U.S. Census Bureau, "Historical Population Change Data (1910-2020)", (accessed June 2021)

Between 1970 and 1980, the state added 442,071 residents, the most growth in any decade between 1910 and 2020. The next largest growth occurred between 1990 and 2000 with 356,473 additional residents. Between 2010 and 2020, Kentucky's population grew by an additional 166,469 residents, the smallest population increase since the ten-year period from 1980 to 1990.

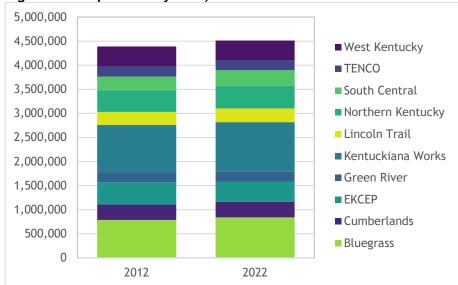
Figure 10 - Kentucky Population, 1910-2020



Source: U.S. Census Bureau, "Historical Population Change Data (1910-2020)", (accessed June 2021)



Figure 11 - Population by LWA, 2012-2022



Source: U.S. Census Bureau, "County Population by Characteristics:" 2010-2020 and 2020-2022, (accessed August 2023)

Three of the 10 LWAs decreased in population between 2012 and 2022 with the largest decrease occurring in EKCEP with 38,738 fewer residents. West Kentucky and Green River also decreased in population over this time frame. The largest population increase occurred in the Bluegrass LWA with 52,389 additional residents. More than half of Kentucky's population is concentrated in three LWAs: Bluegrass

(18.6 percent), Kentuckiana Works (22.6 percent), and Northern Kentucky (10.5 percent).

Counties with the largest absolute growth were:

- Boone (15,637 residents)
- Fayette (14,285)
- Jefferson (21,597)

- Scott (10,123)
- Warren (22,407)

The five counties with the largest absolute decreases were:

- Bell County (-4,720 residents)
- Floyd County (-4,164)
- Harlan County (-3,024)

- Letcher County (-3,116)
- Pike County (-8,319)

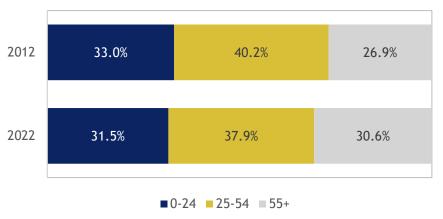


Age

Kentucky's population is older than the nation as a whole. In 2022, the median age of the Kentucky population was 39.4, slightly older than the U.S. median of 38.9.

A closer look at population by age group shows that the share of the Kentucky population that is between the ages of 25 and 54 (gold bars in Figure 12), considered

Figure 12 - Kentucky Population by Age Group, 2012 to 2022



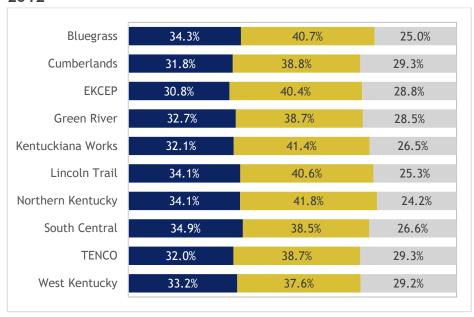
Source: U.S. Census Bureau, "County Population by Characteristics:" 2010-2020 and 2020-2022 (accessed August 2023)

prime age workers, has declined. In 2012, 40.2 percent of Kentucky's population was between the ages of 25 and 54. This fell to 37.9 percent by 2022, a loss of 53,454 prime age workers (a 3.0 percent decrease). The share of Kentucky's population over the age of 55 increased over this same period, up to 30.6 percent in 2022 from 26.9 percent in 2012, an additional 202,229 residents. The share of young people, those under the age of 25 in Kentucky, decreased slightly since 2012. In 2022, there were 1,422,431 residents under the age of 25.

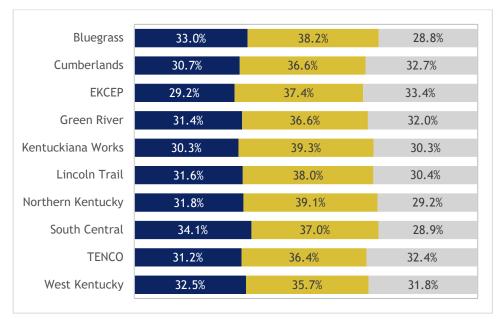


Figure 13 - Population by Age Group by LWA, 2012 to 2022

2012



2022



■ 0-24 ■ 25-54 ■ 55+

Source: U.S. Census Bureau, "County Population by Characteristics:" 2010-2020 and 2020-2022 (accessed August 2023)

In all the LWAs, the share of the population over the age of 55 grew between 2012 and 2022. Growth in this group was highest in the Lincoln Trail and Northern Kentucky LWAs. In 2012, 25.3 percent of the Lincoln Trail LWA population was over the age of 55. This increased 5.1 percentage points to 30.4 percent in 2022. Northern Kentucky experienced a 5.0 percentage point increase, up to 29.2 percent in 2022 from 24.2 percent in 2012. The LWA with the highest share of its population over the age of 55 in 2022 was EKCEP at 33.4 percent.

The prime age population was 37.9 percent in the state in 2022, down from 40.2 percent in 2012. The EKCEP LWA experienced the largest decline in share for this population group, down 3.0 percentage points between 2012 and 2022.

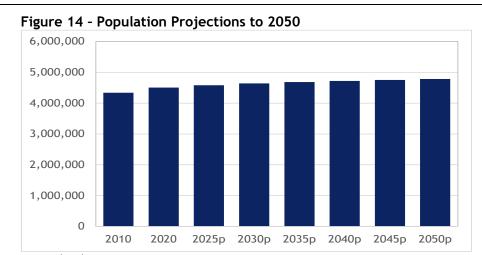


There were four LWAs where the share of their population between the ages of 25 and 54 exceeded the state average of 37.9 percent in 2022 - Bluegrass (38.2 percent), Kentuckiana Works (39.3 percent), Lincoln Trail (38.0 percent), and Northern Kentucky (39.1 percent).

South Central LWA had the largest share of residents younger than 25, 34.1 percent in 2022, as compared to 31.5 percent for the state.

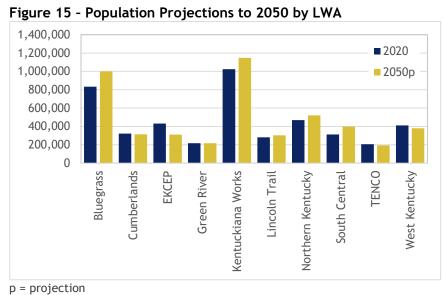
Population Projections

According to the Kentucky State Data Center, the state population is projected to reach nearly 4.8 million residents by 2050. As shown in Figure 14, this is an increase of more than 279,000 residents between 2020 and 2050, a CAGR of 0.2 percent per year.



p = projection

Source: Kentucky State Data Center, "Population Projections by Sex and Five-Year Age Group," (accessed August 2022)



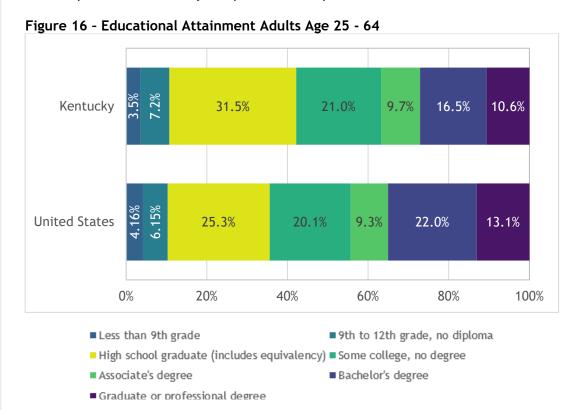
Source: Kentucky State Data Center, "Population Projections by Sex and Five-Year Age Group," (accessed August 2022) Similar to recent trends, the majority of the population growth through 2050 is projected to occur within the two largest LWAs: Bluegrass and Kentuckiana Works. The South Central LWA is also expected to experience strong growth, surpassing growth in the Northern Kentucky LWA. Population growth will outpace the state CAGR (0.2 percent) in these areas with 0.6 percent annual growth in the Bluegrass LWA, 0.4 percent growth in

Kentuckiana Works LWA, and 0.8 percent per year growth in South Central LWA. Four LWAs are projected to experience population declines between 2020 and 2050: Cumberlands (-0.1 percent per year), EKCEP (-1.1 percent per year), TENCO (-0.2 percent per year), and West Kentucky (-0.3 percent per year).



The educational attainment of the adult working-age population (those between the ages of 25 and 64) is often used as an indicator of the skills of the workforce. For example, the share of the population with at least a bachelor's degree shows the potential supply of workers for occupations requiring those credentials for entry.

When comparing the educational attainment of Kentucky residents in this age range, the largest group is comprised of those who have attained a high school diploma or equivalent (31.5 percent), with the second largest group being those who have attended some college but did not earn a degree (21.0 percent). A little over one-quarter of Kentucky adults (27.1 percent) have at least a bachelor's degree compared to 35.1 percent in the U.S. The share of adults that have not completed high school was 10.7 percent in Kentucky compared to 10.3 percent in the U.S.



Source: U.S. Census Bureau, American Community Survey, 2017-2021 Five-Year Estimates, "Educational Attainment," (accessed July 2023)



Figure 17 - Share of Kentucky Adults (25-64) with at least a High School Diploma by LWA

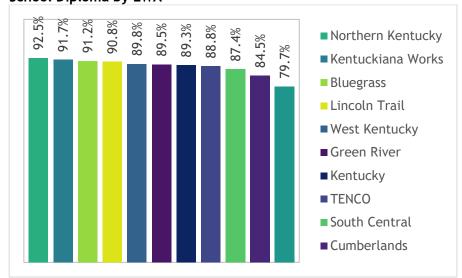
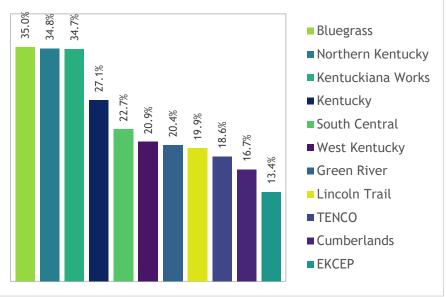


Figure 17 shows the percentage of Kentucky adults with at least a high school degree by LWA. Six LWAs have the same or larger share than the state average of 89.3 percent.

Source: U.S. Census Bureau, American Community Survey, 2017-2021 Five-Year Estimates, "Educational Attainment," (accessed August 2023)

There are three LWAs with a higher share of the adult population with at least a bachelor's degree than the state average of 27.1 percent: Bluegrass (35%), Northern Kentucky (34.8%), and Kentuckiana Works (34.7%). The remaining seven LWAs have a lower percentage of bachelor's degree completers, the lowest being EKCEP with 13.4 percent of the adult population with at least a bachelor's degree.

Figure 18 - Share of Kentucky Adults (25-64) with at least a Bachelor's Degree by LWA



Source: U.S. Census Bureau, American Community Survey, 2017-2021 Five-Year Estimates, "Educational Attainment," (accessed July 2023)

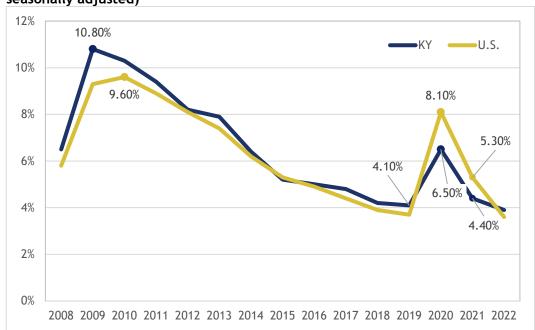


LAUS defines the civilian labor force as the civilian non-institutional population over the age of 16 that is either working or actively looking for work. Retirees and students without jobs, for example, are not included. The civilian non-institutional population includes those residing in the 50 states and the District of Columbia who do not live in institutions (for example, correctional facilities, long-term care hospitals, or nursing homes) and who are not on active duty in the Armed Forces. Persons are classified as unemployed if they do not have a job, have actively looked for work in the prior four weeks, and are currently available to work. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.

The LAUS program produces monthly and annual estimates of the civilian labor force, employment, unemployment, and unemployment rate for the state and substate areas. The unemployment rate is calculated as the unemployed percent of the civilian labor force. Employment estimates include agricultural workers, self-employed persons, unpaid family workers, private household workers, and those temporarily absent from work for reasons such as illness, vacation, or labor management disputes. National unemployment rates are from the Current Population Survey program, which is conducted by the Bureau of Census for the Bureau of Labor Statistics.

During the previous recession, Kentucky's unemployment rate peaked in 2009 at 10.8 percent. The U.S. rate peaked at 9.6 percent in 2010, 1.2 percentage points lower. During the 2020 economic downturn, Kentucky's unemployment rate was 6.5 percent, 1.6 percentage points lower than the U.S. average of 8.1 percent. Unemployment rates fell each year after 2020, averaging 3.6 percent in the U.S. and 3.9 percent in Kentucky in 2022, the lowest in the commonwealth's history.

Figure 19 - Annual Unemployment Rates, U.S. and KY, 2008-2022 (not seasonally adjusted)

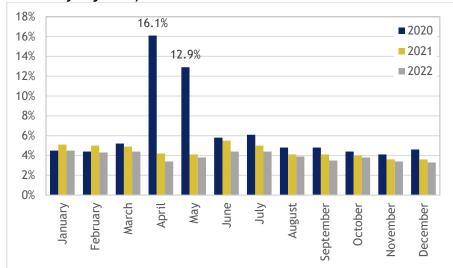


Source: KYSTATS, Labor Market Information Branch, Local Area Unemployment Statistics (LAUS) Report, (accessed August 2023)



Looking at annual averages masks the turmoil experienced in the economy each month as the pandemic took hold and during the subsequent economic recovery. Figure 20 shows monthly unemployment rates from 2020 to 2022. The Kentucky monthly unemployment rate in April 2020 nearly quadrupled the January 2020 rate and was still more than triple that rate in May 2020. Monthly rates fell significantly after May 2020, but did not

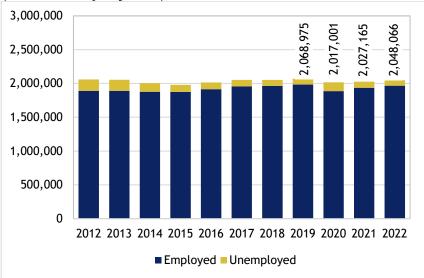
Figure 20 - Monthly Unemployment Rates for KY, 2020-2022 (not seasonally adjusted)



Source: KYSTATS, Labor Market Information Branch, Local Area Unemployment Statistics (LAUS) Report, (accessed August 2023)

consistently fall below pre-Covid levels until January 2022.

Figure 21 - Kentucky Civilian Labor Force, 2012 to 2022 (not seasonally adjusted)

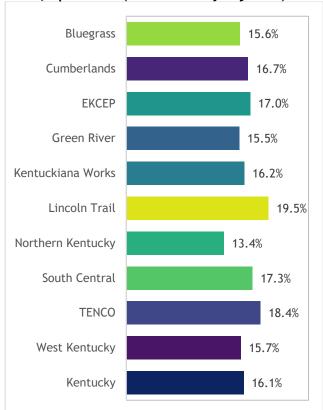


Source: KYSTATS, Labor Market Information Branch, Local Area Unemployment Statistics (LAUS) Report, (accessed August 2023)

The civilian labor force includes the employed and the unemployed. Between 2012 and 2015, the labor force declined, losing over 80,000 people. By 2019, the labor force had added back approximately 89,000 people reaching 2,068,975. However, COVID-19 impacts reduced the workforce to 2,017,001 in 2020. By 2022, the civilian labor force had yet to fully recover to pre-COVID levels, still 21,000 people lower than in 2019.



Figure 22 - Unemployment Rates in Kentucky LWAs, April 2020 (not seasonally adjusted)



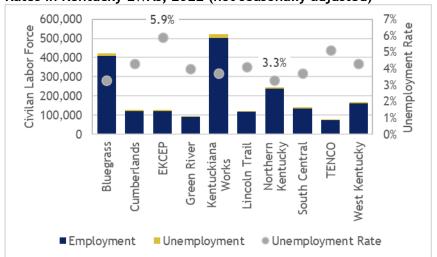
Source: KYSTATS, Labor Market Information Branch, Local Area Unemployment Statistics (LAUS) Report, (accessed August 2023)

The impact of the pandemic, as measured by unemployment rates, was not uniform across the state. The three largest LWAs - Bluegrass, Kentuckiana Works, and Northern Kentucky - made up 57.7 percent of the average annual employment in Kentucky during 2020 but had a disproportionately smaller share of the unemployed, 53.9 percent, indicating that unemployment hit the smaller LWAs harder.

Lincoln Trail had the highest unemployment rate in April 2020 at 19.5 percent, 3.4 percentage points higher than the state. Northern Kentucky's was 2.7 percentage points lower than the state average of 16.1 percent.

The rate of recovery also varied by region. As shown in Figure 23, the average annual unemployment rate in 2022 ranged from a low of 3.3 percent in the Northern Kentucky LWA (a 10.1 percentage point difference from April 2020) to a high of 5.9 percent in the EKCEP LWA (an 11.1 percentage point difference from April 2020).

Figure 23 - Average Civilian Labor Force and Unemployment Rates in Kentucky LWAs, 2022 (not seasonally adjusted)



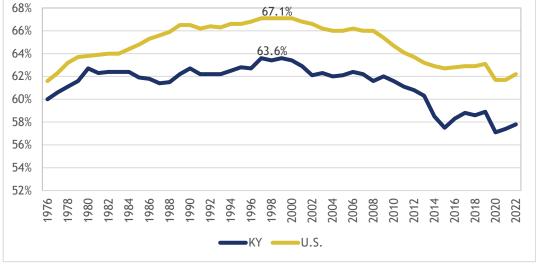
Source: KYSTATS, Labor Market Information Branch, Local Area Unemployment Statistics (LAUS) Report, (accessed August 2023)



The Labor Force Participation Rate (LFPR) is a key measure of the labor market - providing information on the share of the overall population in the labor force. The LFPR is the civilian labor force (employed plus unemployed) as a percent of the civilian non-institutional population.

The annual U.S. LFPR peaked from 1997 to 2000 at 67.1 percent, (not seasonally adjusted). By 2020, the U.S. rate had dropped to 61.7 percent. In Kentucky, the not seasonally adjusted LFPR peaked in 1997, and again in 1999, at 63.6 percent. Similar to U.S. trends, the LFPR in Kentucky decreased over the last decade, dropping to its lowest point of 57.1 percent in 2020. Although Kentucky's LFPR rebounded, it has not returned to pre-COVID levels.

Figure 24 - Annual Labor Force Participation Rate (not seasonally adjusted)
68%
67.1%

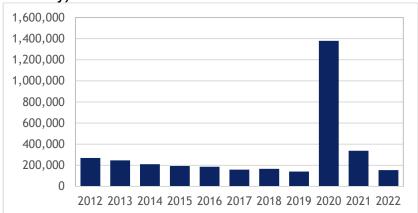


Source: KYSTATS, Labor Market Information Branch, Local Area Unemployment Statistics (LAUS) Report, "Labor Force Participation Rate," (accessed August 2023)



Although Unemployment Insurance (UI) claims are not a representation of total unemployment, they are another way to assess the labor market. Initial claims can be an indicator of emerging unemployment, whereas continued claims indicate the level of difficulty the unemployed encounter finding a new job.

Figure 25 - Initial Unemployment Insurance Claims in Kentucky, 2012-2022



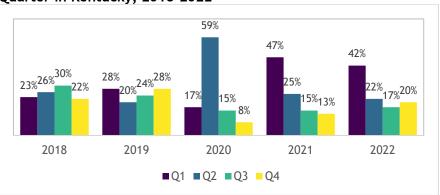
Source: U.S. Department of Labor, Employment and Training Administration, "ETA 5159, Claims and Payment Activities" (accessed August 2023)

As shown in Figure 25, the number of initial UI claims filed in 2020 reached nearly 1.4 million. UI initial claims fell by more than a million in 2021 to 338,002, then back to pre-COVID levels in 2022 at 154,854. There was a change in UI eligibility adopted in

response to the COVID-19 pandemic in 2020. UI was expanded to include individuals typically not covered by UI including the self-employed, independent contractors, freelance workers, substitute teachers, and childcare workers employed by religious affiliated organizations and non-profits. In addition, workers that left employment due to risk of exposure or the need to care for a family member affected by COVID-19 were also eligible.

During 2020, the largest share of initial claims, 59 percent, were filed in the second guarter (April through June). In contrast, by 2022, the largest share of initial

Figure 26 - Share of Initial Unemployment Insurance Claims by Quarter in Kentucky, 2018-2022

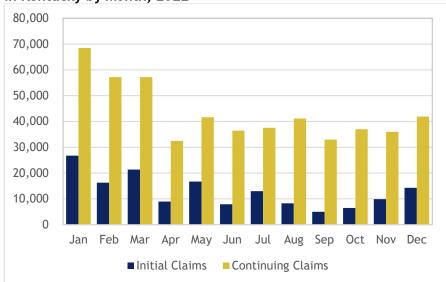


Source: U.S. Department of Labor, "ETA 5159, Claims and Payment Activities" (accessed August 2023). Totals may not add up to 100 percent due to rounding.

claims was filed in the first quarter (January through March) continuing a pattern that began in 2021. As in 2021, the percentage of claims filed in the first quarter claims was significantly larger than in any other quarter that year and was almost 15 percentage points higher than any other share of initial claims in the first quarter during the pre-COVID years (2018 - 2019), which ranged from 23 percent to 28 percent. Similar trends occurred in the U.S.



Figure 27 - Initial and Continuing Unemployment Insurance Claims in Kentucky by Month, 2022



Source: U.S. Department of Labor, Employment and Training Administration,

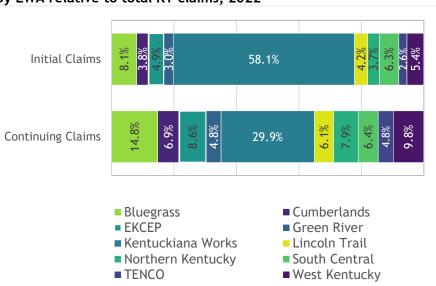
"ETA 5159, Claims and Payment Activities" (accessed August 2023)

In January, initial unemployment insurance claims in Kentucky peaked with 26,753 claims. Continuing claims also peaked in January at 68,500 and remained above 57,000 through March. Continuing claims ebbed and flowed during the remainder of 2022, staying roughly between 32,000 and 42,000 claims per month.

Among Kentucky's regions, UI claims in 2022 were concentrated in the larger LWAs. Over 58 percent of all initial claims were made in the Kentuckiana Works LWA, followed by 8.1 percent in Bluegrass LWA. Just under 30 percent of continuing claims were made in Kentuckiana Works LWA. The fewest initial claims were made in the TENCO LWA (2.6 percent of the total, or 4.032 initial claims). The Green River and TENCO LWAs had the

fewest continuing

Figure 28 - Initial and Continuing Unemployment Insurance Claims by LWA relative to total KY claims, 2022



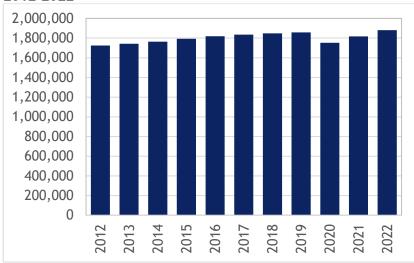
Source: Kentucky Unemployment Insurance (UI), Office of Employment and Training, UI Quality Control Branch, Unemployment claims data (accessed August 2023). Percentages may not add up to 100% due to rounding.

claims during 2022 (4.8 percent of the statewide total in each LWA; about 22,000 continuing claims per LWA).



The QCEW program publishes quarterly employment and wages by industry sector for employers covered by the UI program. Data are aggregated from single establishments into industries organized by the North American Industry Classification System (NAICS).

Figure 29 - Average Annual Covered Employment in Kentucky, 2012-2022



Source: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023)

In 2022, the average annual employment in Kentucky increased 3.5 percent after a similar increase in 2021. Following the 2020 decrease of 105,000 jobs in Kentucky, 64,000 iobs were added in both 2021 and 2022, for a combined twoyear total increase of 1,880,556 jobs in Kentucky.

Between 2012 and 2019, job growth in the U.S., measured by year-overyear changes in employment in the QCEW program, was higher than the rate of job growth in Kentucky. The rate of job loss in the U.S. between 2019 and 2020 was also greater, 6.1 percent compared to 5.6 percent in

Figure 30 - Change in Average Annual Covered Employment from Prior Year, 2012 to 2022

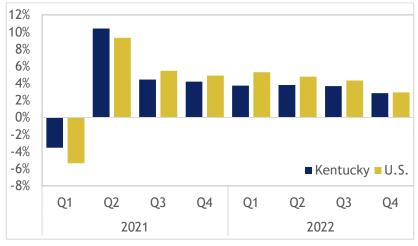


Sources: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023) and U.S. Bureau Labor Statistics, QCEW for the U.S., (accessed August 2023)

Kentucky. The 2021 recovery was stronger in Kentucky, a 3.7 percent increase compared to 3.4 percent in the U.S. However, in 2022, Kentucky (3.5 percent) again fell behind the U.S. pace of job growth (4.3 percent).



Figure 31 - Change in Covered Employment by Quarter, 2021 to 2022



Sources: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023) and U.S. Bureau Labor Statistics, QCEW for the U.S., (accessed August 2023)

Because work is typically seasonal, changes in employment were examined by quarter to the same guarter in the previous year. Job growth occurred in the second quarter of 2021 for both Kentucky (10.4 percent) and the U.S. (9.3 percent) as the economy rebounded from the disruptions from the pandemic. Employment continued to increase over the next six quarters for both Kentucky and the U.S., although by gradually decreasing amounts as Kentucky's growth slightly lagged that of the U.S.

Table 1 shows employment by the 20 major industry sectors in Kentucky in five-year increments from 2012 to 2022. In 2022, the sectors with the largest number of jobs included Government, Health Care and Social Assistance, and Manufacturing and Retail Trade. The largest sector, Government with 280,202 jobs, experienced a decline of 25,071 jobs over this decade. Over this same time period, Health Care and Social Assistance added over 33,000 jobs while Manufacturing added more than 27,000 jobs. The largest increase in jobs, however, was in the Transportation and Warehousing sector, which added almost 46,000 jobs over the same period.

Only four sectors experienced a declining number of jobs since 2012. Twelve of the 20 sectors experienced stronger growth than the state (CAGR of 0.9%). Two sectors experienced a compound annual growth rate over 4 percent. The Utilities sector increased at a CAGR of 6.4 percent between 2012 and 2022, increasing to 1,897 jobs in the sector, and the Transportation and Warehousing sector saw jobs increase at a CAGR of 4.8 percent.

Several sectors experienced job losses during these ten years. Besides Government (as discussed above), Mining, Quarrying, and Oil and Gas Extraction lost 12,214 jobs between 2012 and 2022, Information saw a decrease of 5,420 jobs, and Other Services (except Public Administration) fell by 3,997 jobs.



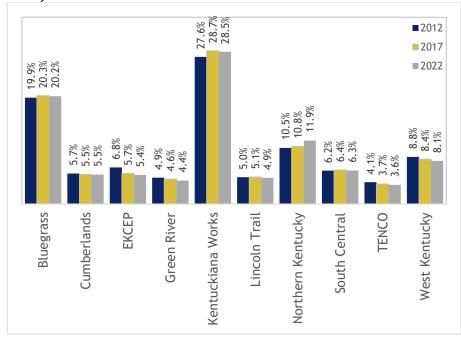
Table 1 - Covered Employment by Major Industry Sector in Kentucky, 2012, 2017, & 2022

	Employment			Chang	Change Since 2012		
Industry Sector	2012	2017	2022	Absolute	Percent	CAGR	
Accommodation and Food Services	155,087	173,596	172,232	17,145	11.1%	1.1%	
Administrative and Support and Waste Management and Remediation Services	101,320	116,289	119,100	17,780	17.5%	1.6%	
Agriculture, Forestry, Fishing, and Hunting	6,985	7,935	8,130	1,145	16.4%	1.5%	
Arts, Entertainment, and Recreation	18,668	21,824	22,372	3,704	19.8%	1.8%	
Construction	65,325	76,144	82,571	17,246	26.4%	2.4%	
Educational Services	12,110	12,452	13,279	1,169	9.7%	0.9%	
Finance and Insurance	67,909	73,074	72,026	4,117	6.1%	0.6%	
Government	305,273	294,422	280,202	-25,071	-8.2%	-0.9%	
Health Care and Social Assistance	226,303	242,876	259,395	33,092	14.6%	1.4%	
Information	25,839	21,988	20,419	-5,420	-21.0%	-2.3%	
Management of Companies and Enterprises	18,859	19,170	20,349	1,490	7.9%	0.8%	
Manufacturing	220,273	246,242	247,571	27,298	12.4%	1.2%	
Mining, Quarrying, and Oil and Gas Extraction	17,516	7,188	5,302	-12,214	-69.7%	-11.3%	
Other Services (except Public Administration)	48,019	45,977	44,022	-3,997	-8.3%	-0.9%	
Professional, Scientific, and Technical Services	65,840	72,176	83,433	17,593	26.7%	2.4%	
Real Estate and Rental and Leasing	17,528	18,862	20,474	2,946	16.8%	1.6%	
Retail Trade	202,725	214,970	207,062	4,337	2.1%	0.2%	
Transportation and Warehousing	77,229	93,140	123,136	45,907	59.4%	4.8%	
Utilities	2,193	3,551	4,090	1,897	86.5%	6.4%	
Wholesale Trade	69,213	72,571	74,875	5,662	8.2%	0.8%	
Total All Industries	1,724,350	1,834,913	1,880,556	156,206	9.1%	0.9%	

Source: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023)



Figure 32 - Concentration of Covered Employment by LWA, 2012, 2017, & 2022



Source: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023)

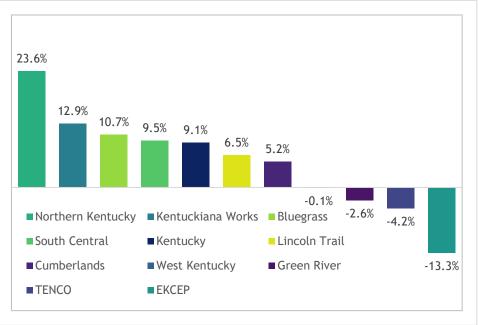
Similar to the civilian labor force statistics, OCEW data indicate that employment is concentrated in the LWAs with the largest population base: Bluegrass. Kentuckiana Works, and Northern Kentucky. This concentration is also growing as illustrated in Figure 32. In 2012, 27.6 percent of Kentucky's overall employment was in the Kentuckiana Works LWA. This increased to 28.7 percent in 2017 until dropping a bit in 2022 to 28.5 percent. Over the same ten-year period, Northern Kentucky and Bluegrass also

increased their employment share. The growth in Bluegrass was very similar to Kentuckiana Works with a slight decrease from 2017 to 2022. However, Northern Kentucky grew each five-year period, and had the largest percentage gain of the three, from 10.5 percent to 11.9 percent. Together, these three areas comprised 60.6 percent of the overall covered employment in the Commonwealth in 2022, up from 58.0 percent in 2012. Several LWAs experienced declining concentrations of employment over the same period. EKCEP suffered the largest drop in employment (15,760 jobs) as well as employment concentration, dropping from 6.8 percent in 2012 to 5.4 percent in 2022.



Between 2012 and 2022, employment grew 9.1 percent throughout Kentucky, increasing by 156,206 jobs. Four of the LWAs experienced growth rates higher than the state as a whole. The areas with the largest growth were Northern Kentucky at 23.6 percent (42,648 jobs) and Kentuckiana Works at 12.9 percent (61,228 jobs).

Figure 33 - Change in Covered Employment by LWA, 2012-2022



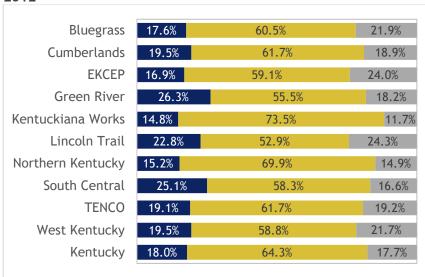
Source: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023)

Of the remaining six LWAs, four showed declining employment over this time period. But even though overall employment decreased, there were still sectors in those LWAs that experienced growth. For example, in EKCEP, which saw the largest decline in overall employment, the following sectors saw growth between 2012 and 2022: Health Care and Social Assistance, Utilities, Educational Services, and Accommodation and Food Services.

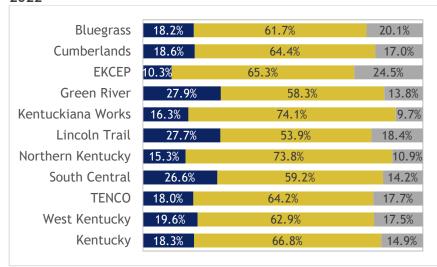


Figure 34 – Share of Covered Employment by Major Industry Groups, 2012 and 2022

2012



2022



■Goods producing ■Service providing ■Government

Source: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023)

employment in this group (74.1 percent).

In 2012, 18.0 percent of all Kentucky employment was in Goods Producing sectors. This includes:

- Agriculture, Forestry, Fishing, and Hunting
- Construction
- Manufacturing
- Mining, Quarrying, and Oil and Gas Extraction.

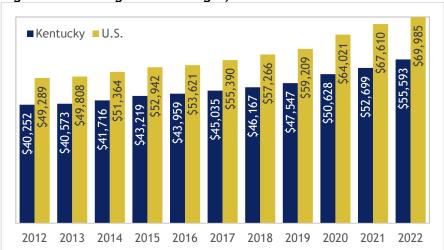
The LWAs with more than 20 percent of employment in this major industry group in 2012 were Green River, Lincoln Trail, and South Central. By 2022, this share had increased to more than 26 percent employment in each of these three LWAs.

Service Providing sectors include all other sectors except for Government. This major group makes up most of the employment in all LWAs to varying extents. From 2012 to 2022, employment in Service Providing industries in Kentucky grew from 64.3 percent to 66.8 percent. The LWA with the lowest share of employment in this supersector during 2022 was Lincoln Trail (53.9 percent of employment) while Kentuckiana Works had the largest share of

Employment in Government decreased from 17.7 percent in 2012 throughout Kentucky to 14.9 percent by 2022. LWAs with more than 20 percent of 2022 employment in Government were Bluegrass and EKCEP.



Figure 35 - Average Annual Wages, 2012 to 2022



Source: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023)

The average annual wage for covered workers in Kentucky grew 5.5 percent in 2022, reaching \$55,593. This compares to an average annual wage for U.S. covered workers of \$69,985 which was an increase of 3.5 percent from 2021. The gap between the average wage in Kentucky and the U.S. overall widened during this ten-year span. In 2012, the average annual wage for Kentucky covered workers was 81.7

percent of the U.S. average. By 2022, this had fallen to 79.4 percent. Average annual wages are growing faster in the U.S. than they are in Kentucky.

As shown in Figure 36, the highest average annual wage for covered workers during 2022 in Kentucky was \$117,365 in the Management of Companies and Enterprises sector followed by Utilities at \$102,681. Combined, employment in these two industries made up 1.3 percent of total covered employment. Industries with the lowest average annual wages were Accommodation and Food Services (\$21,635) and Arts, Entertainment, and Recreation (\$31,962). Combined, these two sectors accounted for 10.3 percent of jobs in 2022.

Industry sectors paying higher wages than the state average (\$55,593) in 2022 include:

- Construction
- Finance and Insurance
- Health Care and Social Assistance
- Information
- Management of Companies and Enterprises
- Manufacturing

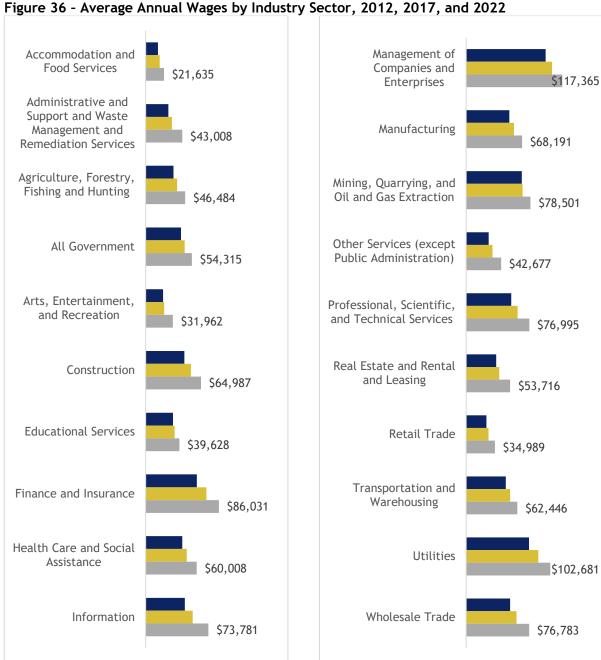
- Mining, Quarrying, and Oil and Gas Extraction
- Professional, Scientific, and Technical Services
- Transportation and Warehousing
- Utilities
- Wholesale Trade

Sectors that experienced faster wage growth than the state between 2012 and 2022 (38.1 percent) include:

- Accommodation and Food Services (50.4%)
- Administrative and Support and Waste Management and Remediation Services (60.8%)
- Agriculture, Forestry, Fishing and Hunting (42.1%)
- Arts, Entertainment, and Recreation (56.7%)
- Construction (42.8%)
- Finance and Insurance (42.9%)

- Health Care and Social Assistance (39.7%)
- Information (59.9%)
- Other Services (except Public Administration) (55.2%)
- Professional, Scientific, and Technical Services (40.2%)
- Real Estate and Rental and Leasing (46.3%)
- Retail Trade (42.0%)
- Wholesale Trade (43.4%)



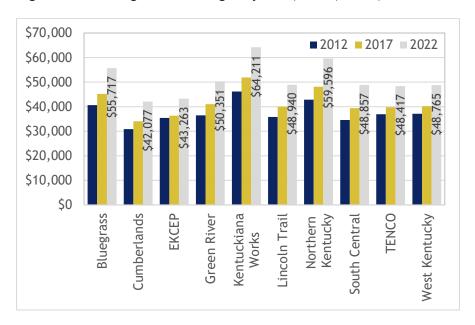


Source: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023)



Average annual wages grew in all of the LWAs between 2012 and 2022. The highest wages were paid in Kentuckiana Works, reaching \$64,211 in 2022, a 39.1 percent increase from 2012. The next highest wage was paid in Northern Kentucky at \$59,596 per year, also a 39.1 percent increase from 2012. These two LWAs as well as South Central had higher growth rates than the state growth of 38.1 percent between 2012 and 2022. The lowest average annual wages were

Figure 37 - Average Annual Wages by LWA, 2012, 2017, and 2022



Source: KYSTATS, Labor Market Information Branch, Quarterly Census of Employment and Wages (QCEW), "Employment and Wages by Industry," (accessed August 2023)

paid in the Cumberlands LWA, averaging \$42,077 in 2022. EKCEP followed with an average of \$43,263. Wage growth was also the slowest in EKCEP over this time frame, 22.2 percent since 2012.



In addition to understanding employment and wages by industry sector, similar estimates are available by more than 700 detailed occupations produced by the OEWS program. The OEWS survey is designed to create detailed, cross-sectional, employment and wage estimates, providing a "snapshot" of occupational employment and wages for a particular area and time. It is not designed to be used as a time series.

Figure 38 - Share of Occupational Employment by Median Hourly Wage in Kentucky, 2023



Note: Total does not sum to 100 percent since several occupations did not have a median hourly wage.

Source: KYSTATS, Labor Market Information Branch,
Occupational Employment and Wage Statistics (OEWS),
"2023 Statewide Wage & Employment" (accessed August 2023)

According to occupational employment and wage estimates, Kentucky's median wage across all occupations was \$19.32 per hour compared to the U.S. median hourly wage across all occupations of \$22.26.

Figure 38 displays the distribution of wage estimates across all occupations in the Kentucky labor market. Of the nearly 1.9 million estimated jobs in Kentucky, the majority, 53.2 percent, paid between \$10 and \$20 per hour. For the jobs earning above \$20 per hour, there were 24.6 percent paying between \$20 and \$30 per hour and another 17.2 percent paying more than \$30 per hour.

The OEWS estimates categorize occupations into 22 major groups. As shown in Table 2 below, the median wage was higher in Kentucky than the

same group nationally for two groups: Transportation and Material Moving Occupations (\$18.42 per hour in Kentucky compared to \$18.24 in the U.S.), and Production occupations (\$19.26 per hour in Kentucky compared to \$19.19 in the U.S.).

In those occupational groups where the United States had a higher median hourly wage, the largest differences were seen in Legal, Computer and Mathematical, and Management Occupations.



Table 2 - Comparison of Median Hourly Earnings for Major Occupational Group

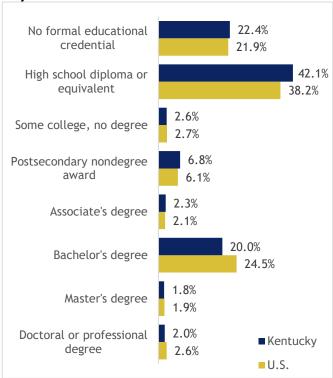
SOC		Median Ho	ourly Wage	Estimated Employment
Code	Major Occupational Group	U.S.	Kentucky	in Kentucky
00-0000	Total	\$22.26	\$19.32	1,899,390
11-0000	Management	\$51.62	\$40.37	111,880
13-0000	Business and Financial Operations	\$36.95	\$30.66	83,620
15-0000	Computer and Mathematical	\$48.29	\$36.11	38,610
17-0000	Architecture and Engineering	\$40.24	\$35.00	26,860
19-0000	Life, Physical and Social Science	\$35.74	\$28.94	13,080
21-0000	Community and Social Services	\$23.74	\$21.53	30,670
23-0000	Legal	\$45.76	\$30.32	10,240
25-0000	Education, Training and Library	\$27.64	\$24.16	95,060
27-0000	Arts, Design, Entertainment, Sports and Media	\$27.90	\$21.00	16,500
29-0000	Healthcare Practitioners and Technical	\$37.38	\$31.03	134,630
31-0000	Healthcare Support	\$16.16	\$15.66	69,570
33-0000	Protective Service	\$21.85	\$16.74	38,640
35-0000	Food Preparation and Serving-Related	\$14.25	\$11.67	164,770
37-0000	Building and Grounds Cleaning and Maintenance	\$16.28	\$14.03	49,710
39-0000	Personal Care and Service	\$15.07	\$13.18	36,960
41-0000	Sales and Related	\$16.96	\$14.33	163,160
43-0000	Office and Administrative Support	\$19.67	\$17.99	244,890
45-0000	Farming, Fishing and Forestry	\$16.33	\$15.94	3,030
47-0000	Construction and Extraction	\$24.31	\$22.91	68,490
49-0000	Installation, Maintenance and Repair	\$24.08	\$23.67	85,140
51-0000	Production	\$19.19	\$19.26	185,670
53-0000	Transportation and Material Moving	\$18.24	\$18.42	228,210

Source: KYSTATS, Labor Market Information Branch, Occupational Employment and Wage Statistics (OEWS), "2023 Statewide Wage & Employment" and BLS, "Occupational Employment and Wage Statistics, May 2022" (accessed August 2023)

The occupational groups in Kentucky with the largest estimated employment were Office and Administrative Support, Transportation and Material Moving, Production, Food Preparation and Serving Related occupations, and Sales and Related.



Figure 39 - Employment by Level of Education, May 2022



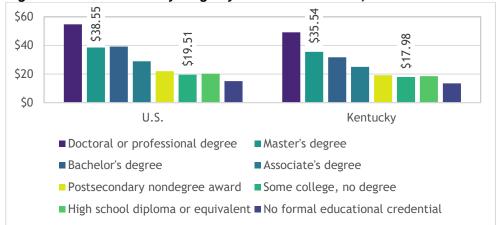
Sources: KYSTATS, Labor Market Information Branch, Occupational Employment and Wage Statistics (OEWS), "2023 Statewide Wage & Employment" and BLS, "U.S. Occupational Employment and Wage Statistics, May 2022"and "Typical Entry-Level Educational Requirement Data, May 2022," (accessed August 2023) The BLS publication, "Typical Entry-Level Educational Requirement Data, May 2022" presents employment and wage data for occupations by the typical education required for entry. As shown in Figure 39, 42.1 percent of Kentucky employment is in occupations that require a high school diploma or equivalent for entry. This compares to 38.2 percent in the U.S. At the same time, the share of employees in occupations that require a bachelor's degree or higher is lower in Kentucky (20.0 percent) than in the U.S. (24.5 percent).

The median hourly wage by level of education (Figure 40) shows that Kentucky employees make less per hour than U.S. employees, a difference that grows with education. An employee in an occupation that requires a high school diploma for entry in Kentucky earns 91.5 percent of U.S. workers with the same entry requirements. For occupations requiring a bachelor's degree, Kentucky employees with a median hourly wage of \$31.74, earn 80.9 percent of the median U.S. wage (\$39.22 per hour). In the U.S., employees in jobs requiring a bachelor's degree make nearly twice the median

hourly wage than those employed in jobs requiring a high school diploma (\$20.21 per hour). In Kentucky, that ratio is lower at 1.7 (\$18.50 per hour).

Table 3 provides information on the five largest occupations in Kentucky by education typically required for entry. Median hourly wages by levels of experience are also provided from the 2023 **OEWS** estimates published by KYSTATS.





Sources: KYSTATS, Labor Market Information Branch, Occupational Employment and Wage Statistics (OEWS), "2023 Statewide Wage & Employment" and BLS "Typical Entry-Level Educational Requirement Data, May 2022," (accessed September 2023)



Table 3 - Largest Occupations in Kentucky by Typical Education Required for Entry, 2023

	Largest Occupations in Kentucky by Typical Educa				Hourly Wa	ge	
SOC		Estimated -		25 th		75 th	
Code	Standard Occupational Classification (SOC) Title	Employment	Entry	Percentile	Median	Percentile	Experienced
Less than	high school						
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	57,340	\$12.91	\$15.20	\$18.24	\$21.33	\$21.94
41-2011	Cashiers	46,490	\$8.55	\$10.01	\$11.72	\$13.39	\$14.95
41-2031	Retail Salespersons	44,610	\$9.70	\$10.86	\$13.14	\$15.67	\$21.00
35-2011	Cooks, Fast Food	42,480	\$8.75	\$9.84	\$10.56	\$12.33	\$13.42
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	24,350	\$10.60	\$11.69	\$13.87	\$16.23	\$18.68
53-7065	ol diploma or equivalent Stockers and Order Fillers	50,090	\$11.82	\$13.53	\$16.54	\$18.59	\$23.79
51-2090	Miscellaneous Assemblers and Fabricators	49,590	\$14.69	\$16.68	\$18.81	\$23.63	\$30.33
43-4051	Customer Service Representatives	35,830	\$11.90	\$13.79	\$16.92	\$20.59	\$24.24
43-9061	Office Clerks, General	27,490	\$10.20	\$13.24	\$15.89	\$19.24	\$23.62
31-1120	Home Health and Personal Care Aides	23,170	\$10.28	\$11.05	\$13.54	\$17.41	\$20.94
	dary non-degree award		.	***	*** * .		*
53-3032	Heavy and Tractor-Trailer Truck Drivers	28,210	\$16.76	\$20.65	\$23.34	\$29.32	\$36.43
31-1131	Nursing Assistants	19,000	\$11.85	\$13.79	\$15.52	\$17.14	\$17.96
31-9092	Medical Assistants	12,690	\$13.47	\$14.64	\$17.04	\$18.24	\$20.84
29-2061	Licensed Practical and Licensed Vocational Nurses	10,370	\$18.48	\$21.91	\$23.66	\$26.93	\$28.41
49-3023	Automotive Service Technicians and Mechanics	8,600	\$11.76	\$13.85	\$17.31	\$23.20	\$29.15



					Hourly Wa	ge	
SOC		Estimated _		25 th	,	75 th	
Code	Standard Occupational Classification (SOC) Title	Employment	Entry	Percentile	Median	Percentile	Experienced
Some coll	ege, no degree						
43-3031	Bookkeeping, Accounting, and Auditing Clerks	25,180	\$12.95	\$16.04	\$19.79	\$23.89	\$29.17
25-9045	Teaching Assistants, Except Postsecondary	13,960	N/A	N/A	N/A	N/A	N/A
15-1232	Computer User Support Specialists	7,050	\$16.90	\$19.49	\$23.43	\$29.36	\$35.87
43-4151	Order Clerks	1,330	\$10.66	\$13.35	\$15.91	\$18.00	\$22.07
49-2011	Computer, Automated Teller, and Office Machine Repairers	1,300	\$15.41	\$17.53	\$19.09	\$22.71	\$26.65
Associate		2.540	Ć04 F7	624.40	Ć20.25	632	ća., 20
29-2034	Radiologic Technologists and Technicians	3,560	\$21.57	\$24.10	\$29.35	\$32.64	\$36.20
29-1126	Respiratory Therapists	3,070	\$23.16	\$25.09	\$29.33	\$31.02	\$35.33
23-2011	Paralegals and Legal Assistants	2,800	\$17.13	\$18.68	\$23.47	\$28.18	\$35.47
25-2011	Preschool Teachers, Except Special Education	2,720	\$10.78	\$12.09	\$18.59	\$24.27	\$28.88
15-1231	Computer Network Support Specialists	2,570	\$19.36	\$22.92	\$29.13	\$36.10	\$47.53
Bachelor'	s degree						
11-1021	General and Operations Managers	48,190	\$17.27	\$23.83	\$35.61	\$52.79	\$80.44
29-1141	Registered Nurses	44,970	\$26.98	\$30.25	\$36.44	\$38.94	\$47.38
25-2021	Elementary School Teachers, Except Special Education	17,860	N/A	N/A	N/A	N/A	N/A
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	12,330	N/A	N/A	N/A	N/A	N/A
13-2011	Accountants and Auditors	11,840	\$20.88	\$25.88	\$31.18	\$41.07	\$50.62



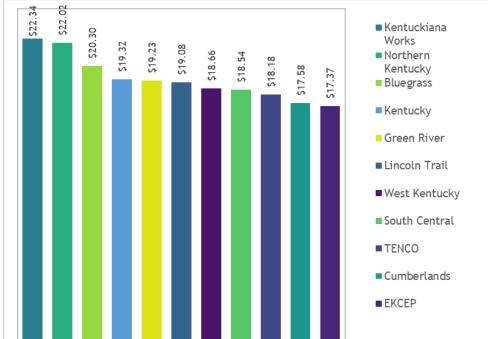
					Hourly Wa	ge	
SOC		Estimated -		25 th		75 th	
Code	Standard Occupational Classification (SOC) Title	Employment	Entry	Percentile	Median	Percentile	Experienced
Master's c	legree						
21-1012	Educational, Guidance, and Career Counselors and Advisors	4,520	\$17.29	\$21.61	\$29.21	\$34.46	\$39.20
29-1171	Nurse Practitioners	4,520	\$35.71	\$47.01	\$50.30	\$59.37	\$62.30
11-9032	Education Administrators, Kindergarten through Secondary	4,480	N/A	N/A	N/A	N/A	N/A
29-1127	Speech-Language Pathologists	2,630	\$25.84	\$30.39	\$37.73	\$48.02	\$55.49
25-9031	Instructional Coordinators	2,410	\$20.17	\$24.32	\$30.66	\$37.67	\$46.58
Doctoral c	or professional degree						
23-1011	Lawyers	6,070	\$23.08	\$27.63	\$39.69	\$60.16	\$82.27
29-1051	Pharmacists	5,320	\$47.35	\$57.88	\$62.35	\$67.53	\$77.04
29-1123	Physical Therapists	3,420	\$26.37	\$36.00	\$41.21	\$48.22	\$54.99
25-1199	Postsecondary Teachers, All Other	2,290	N/A	N/A	N/A	N/A	N/A
29-1215	Family Medicine Physicians	1,990	\$58.86	\$80.96	\$103.46	>\$115.00	>\$115.00

N/A = Not available

Sources: KYSTATS, Labor Market Information Branch, Occupational Employment and Wage Statistics (OEWS), "2023 Statewide Wage & Employment" "and BLS, "Typical Entry-Level Educational Requirement Data, May 2022," (accessed August 2023)







Source: KYSTATS, Labor Market Information Branch, Occupational Employment and Wages Statistics (OEWS), "2023 Statewide Wage & Employment" and "2023 LWA Wage &

Employment," (accessed August 2023) lowest median hourly wage for all occupations was \$17.37 in the EKCEP LWA followed by Cumberlands LWA at \$17.58 per hour.

Table 4 provides estimated employment and median hourly wages for the major occupation groups for each LWA. The five occupations with the highest estimated employment for each LWA are presented in Table 5.

The median hourly wage for all occupations per LWA ranged from a low of \$17.37 to a high of \$22.34, as shown in Figure 41. For most LWAs the median hourly wage fell into a range from roughly \$18 to \$20. However, at the upper end of the spectrum, two LWAs, Kentuckiana Works and Northern Kentucky, each had a median hourly wage that exceeded \$22. Conversely, the



Table 4 - Est. Employment and Median Hourly Wage by Occupational Group and LWA, 2023

Tuble 1	Est. Employment and Median Hour	Blueg		Cumbe		EKC	EP		een ver	Kentuc Wor	
SOC		_Est.	Median Hourly	_Est.	Median Hourly	Est.	Median Hourly	_Est.	Median Hourly	Est.	Median Hourly
Code	Major Occupational Group	Emp. 377,050	Wage \$20.30	Emp. 110,010	Wage \$17.58	Emp. 106,400	Wage \$17.37	Emp. 83,170	Wage \$19.23	Emp. 532,140	Wage \$22.34
00-0000	Total	23,450	\$40.07	5,240	\$36.53	6,130	\$35.83	4,370	\$39.78	33,800	\$48.22
11-0000	Management	18,200	\$30.62	2,760	\$27.78	2,850	\$26.86	2,760	\$30.54	28,230	\$32.45
13-0000	Business and Financial Operations		\$33.36	•			\$25.30		\$34.36		\$40.42
15-0000	Computer and Mathematical	8,460		1,200	\$27.03	830		870		15,970	
17-0000	Architecture and Engineering	6,600	\$35.82	810	\$30.77	1,090	\$25.97	1,190	\$34.29	8,050	\$38.88
19-0000	Life, Physical, and Social Science	4,430	\$30.08	440	\$28.02	700	\$26.91	500	\$29.87	2,950	\$30.78
21-0000	Community and Social Service	6,360	\$23.31	2,410	\$19.71	3,890	\$19.28	1,210	\$21.72	7,800	\$24.96
23-0000	Legal	2,700	\$33.01	310	\$29.16	560	\$29.33	330	\$27.73	3,640	\$32.09
25-0000	Educational Instruction and Library	19,680	\$25.67	7,090	\$24.95	9,340	\$24.37	4,540	\$24.33	19,830	\$30.02
27-0000	Arts, Design, Entertainment, Sports, and Media	4,020	\$22.64	800	\$16.15	620	\$15.68	530	\$19.11	5,230	\$24.81
29-0000	Healthcare Practitioners and Technical	29,260	\$32.37	8,580	\$30.71	10,660	\$30.05	6,040	\$31.88	37,590	\$37.27
31-0000	Healthcare Support	13,430	\$17.18	5,450	\$14.90	5,670	\$14.50	3,410	\$15.82	18,660	\$17.70
33-0000	Protective Service	9,000	\$18.04	2,400	\$17.34	3,250	\$15.89	1,650	\$15.89	9,420	\$17.23
35-0000	Food Preparation and Serving Related	35,160	\$12.59	9,410	\$11.20	10,000	\$11.06	7,060	\$11.96	41,340	\$13.56
37-0000	Building and Grounds Cleaning and Maintenance	10,610	\$14.88	3,140	\$13.64	2,730	\$12.21	2,410	\$14.36	13,660	\$15.29
39-0000	Personal Care and Service	9,450	\$14.04	1,960	\$11.84	1,790	\$11.72	1,500	\$12.79	10,650	\$14.30
41-0000	Sales and Related	30,050	\$14.85	9,820	\$13.38	10,230	\$12.55	6,740	\$14.11	44,570	\$16.95
43-0000	Office and Administrative Support	47,450	\$18.71	15,390	\$15.56	14,190	\$15.77	9,780	\$18.66	69,450	\$19.74
45-0000	Farming, Fishing, and Forestry	1,070	\$16.47	230	\$14.91	200	\$13.44	200	\$17.51	350	\$18.64
47-0000	Construction and Extraction	13,130	\$23.48	2,880	\$21.00	4,460	\$22.64	3,570	\$23.71	17,670	\$24.47
49-0000	Installation, Maintenance, and Repair	14,820	\$24.50	4,210	\$20.73	4,270	\$20.25	4,360	\$25.49	23,060	\$25.97
51-0000	Production	35,130	\$22.26	11,510	\$17.87	4,660	\$16.78	11,330	\$20.52	48,760	\$22.35
53-0000	Transportation and Material Moving	34,590	\$18.20	13,970	\$17.47	8,300	\$15.92	8,820	\$17.99	71,460	\$21.70



		Linc		North		Sou				We	
		Tra	ail Median	Kentı		Cent		TEN	ICO Median	Kentı	
SOC		Est.	Hourly	Est.	Median Hourly	Est.	Median Hourly	Est.	Hourly	Est.	Median Hourly
Code	Major Occupational Group	Emp.	Wage	Emp.	Wage	Emp.	Wage	Emp.	Wage	Emp.	Wage
00-0000	Total	91,420	\$19.08	223,100	\$22.02	118,290	\$18.54	69,040	\$18.18	152,330	\$18.66
11-0000	Management	5,130	\$39.84	12,630	\$46.76	6,210	\$38.37	3,740	\$36.77	8,230	\$38.54
13-0000	Business and Financial Operations	4,510	\$33.54	10,900	\$32.97	3,520	\$29.10	2,000	\$28.31	5,120	\$29.38
15-0000	Computer and Mathematical	1,720	\$39.62	4,420	\$40.69	1,020	\$34.09	600	\$31.65	1,730	\$32.47
17-0000	Architecture and Engineering	1,170	\$32.59	2,770	\$38.45	1,660	\$34.21	660	\$30.65	2,340	\$32.78
19-0000	Life, Physical, and Social Science	440	\$31.74	1,270	\$30.61	550	\$26.62	320	\$28.21	1,200	\$29.43
21-0000	Community and Social Service	1,380	\$21.13	2,230	\$23.18	1,650	\$21.89	1,440	\$19.71	2,080	\$20.70
23-0000	Legal	370	\$30.05	920	\$31.09	510	\$30.40	260	\$29.86	550	\$30.25
25-0000	Educational Instruction and Library	5,220	\$24.36	9,100	\$25.30	7,050	\$24.75	4,450	\$24.63	8,060	\$24.29
27-0000	Arts, Design, Entertainment, Sports, and Media	550	\$19.56	1,750	\$23.51	910	\$18.41	420	\$17.88	1,080	\$18.23
29-0000	Healthcare Practitioners and Technical	4,800	\$31.11	12,090	\$36.06	7,430	\$30.53	6,130	\$31.49	10,660	\$31.13
31-0000	Healthcare Support	3,200	\$15.42	5,920	\$17.89	4,680	\$15.66	3,290	\$14.57	5,190	\$15.35
33-0000	Protective Service	1,710	\$17.73	4,240	\$19.23	2,210	\$16.48	1,410	\$17.56	2,840	\$18.66
35-0000	Food Preparation and Serving Related	8,210	\$11.39	19,560	\$13.68	11,210	\$11.58	7,080	\$11.25	14,940	\$11.20
37-0000	Building and Grounds Cleaning and Maintenance	2,280	\$14.57	5,210	\$16.28	2,810	\$14.04	1,850	\$13.94	3,930	\$13.86
39-0000	Personal Care and Service	1,630	\$13.47	3,970	\$14.37	2,090	\$12.46	1,310	\$11.57	2,440	\$12.93
41-0000	Sales and Related	7,810	\$13.94	18,800	\$17.77	10,600	\$13.72	6,570	\$13.30	14,160	\$13.44
43-0000	Office and Administrative Support	10,830	\$18.01	30,030	\$20.84	13,290	\$17.48	7,880	\$16.56	18,330	\$17.44
45-0000	Farming, Fishing, and Forestry	80	\$14.64	120	\$15.21	240	\$20.11	110	\$16.08	350	\$17.53
47-0000	Construction and Extraction	3,730	\$22.60	6,510	\$24.25	4,340	\$23.04	3,200	\$23.53	6,720	\$23.04
49-0000	Installation, Maintenance, and Repair	4,310	\$23.50	11,390	\$25.78	5,400	\$23.64	3,010	\$22.96	8,420	\$25.09
51-0000	Production	13,540	\$19.48	19,740	\$20.44	18,150	\$19.29	6,550	\$19.75	14,710	\$18.93
53-0000	Transportation and Material Moving	8,790	\$17.75	39,530	\$20.45	12,760	\$17.00	6,760	\$16.66	19,260	\$18.34

Source: KYSTATS, Labor Market Information Branch, "2023 LWA Wage & Employment," (accessed August 2023)



SOC Code Standard Occupational Classification (SOC) Title Emp. Was Bluegrass 00-0000 Total all occupations 377,050 \$20 29-1141 Registered Nurses 10,110 \$38 11-1021 General and Operations Managers 9,880 \$36 35-2011 Cooks, Fast Food 9,150 \$10.0 41-2031 Retail Salespersons 8,800 \$13 51-2090 Miscellaneous Assemblers and Fabricators 8,730 \$20.0	ly ge
CodeStandard Occupational Classification (SOC) TitleEmp.WasBluegrass00-0000Total all occupations377,050\$2029-1141Registered Nurses10,110\$3811-1021General and Operations Managers9,880\$3635-2011Cooks, Fast Food9,150\$1041-2031Retail Salespersons8,800\$13	ge
Bluegrass 00-0000 Total all occupations 377,050 \$20.3 29-1141 Registered Nurses 10,110 \$38.3 11-1021 General and Operations Managers 9,880 \$36.4 35-2011 Cooks, Fast Food 9,150 \$10.4 41-2031 Retail Salespersons 8,800 \$13.5	
00-0000 Total all occupations 377,050 \$20.3 29-1141 Registered Nurses 10,110 \$38.3 11-1021 General and Operations Managers 9,880 \$36.4 35-2011 Cooks, Fast Food 9,150 \$10.4 41-2031 Retail Salespersons 8,800 \$13.5	
29-1141 Registered Nurses 10,110 \$38.3 11-1021 General and Operations Managers 9,880 \$36.4 35-2011 Cooks, Fast Food 9,150 \$10.4 41-2031 Retail Salespersons 8,800 \$13.5	30
35-2011 Cooks, Fast Food 9,150 \$10.0 41-2031 Retail Salespersons 8,800 \$13.0	
41-2031 Retail Salespersons 8,800 \$13.	61
	94
51-2090 Miscellaneous Assemblers and Fabricators 8,730 \$20.	58
	64
Cumberlands	
00-0000 Total all occupations 110,010 \$17.	58
53-7065 Stockers and Order Fillers 3,620 \$16.	
41-2011 Cashiers 3,520 \$11.3	
35-2011 Cooks, Fast Food 3,170 \$10.	
43-4051 Customer Service Representatives 3,140 \$14.0	
29-1141 Registered Nurses 2,770 \$32.	
EKCEP	
00-0000 Total all occupations 106,400 \$17.	37
41-2011 Cashiers 4,460 \$10.	71
29-1141 Registered Nurses 3,280 \$32.2	24
35-2011 Cooks, Fast Food 3,040 \$10.	38
11-1021 General and Operations Managers 2,700 \$30.2	28
41-2031 Retail Salespersons 2,680 \$12.	97
Green River	
00-0000 Total all occupations 83,170 \$19.3	23
41-2011 Cashiers 2,250 \$11.	
53-7062 Laborers and Freight, Stock, and Material Movers, Hand 2,080 \$17.	54
29-1141 Registered Nurses 2,070 \$38.	10
41-2031 Retail Salespersons 1,960 \$13.8	
11-1021 General and Operations Managers 1,940 \$35.0	
Kentuckiana Works	
00-0000 Total all occupations 532,140 \$22.	34
53-7062 Laborers and Freight, Stock, and Material Movers, Hand 23,380 \$22.0	
51-2090 Miscellaneous Assemblers and Fabricators 18,910 \$23.	55
	51
11-1021 General and Operations Managers 13,380 \$39.	60
11-1021 General and Operations Managers 13,380 \$39.1 29-1141 Registered Nurses 13,300 \$39.0 53-7065 Stockers and Order Fillers 13,220 \$18.0	



SOC Code	Standard Occupational Classification (SOC) Title	Est. Emp.	Median Hourly Wage
Lincoln T	·	LIIIp.	wage
00-0000	Total all occupations	91,420	\$19.08
51-2090	Miscellaneous Assemblers and Fabricators	4,000	\$19.59
41-2011	Cashiers	2,640	\$11.62
35-2011	Cooks, Fast Food	2,610	\$10.81
41-2031	Retail Salespersons	2,300	\$13.48
11-1021	General and Operations Managers	2,280	\$32.16
Northern 00-0000	Kentucky Total all occupations	223,100	\$22.02
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	10,210	\$19.24
53-7065	Stockers and Order Fillers	10,140	\$19.07
11-1021	General and Operations Managers	5,460	\$39.78
35-2011	Cooks, Fast Food	4,860	\$11.59
41-2031	Retail Salespersons	4,490	\$14.34
South Ce 00-0000	ntral Total all occupations	118,290	\$18.54
51-2090	Miscellaneous Assemblers and Fabricators	4,880	\$19.22
41-2011	Cashiers	3,350	\$11.43
41-2031	Retail Salespersons	3,160	\$12.99
35-2011	Cooks, Fast Food	2,960	\$10.79
11-1021	General and Operations Managers	2,870	\$31.27
TENCO 00-0000	Total all occupations	69,040	\$18.18
41-2011	Cashiers	2,480	\$11.11
35-2011	Cooks, Fast Food	2,050	\$10.80
41-2031	Retail Salespersons	1,930	\$12.98
29-1141	Registered Nurses	1,900	\$36.81
11-1021	General and Operations Managers	1,750	\$31.03
West Ken	•	152 220	¢10 44
00-0000 41-2011	Total all occupations Cashiers	152,330 4,920	\$18.66 \$11.53
41-2011		4,920	\$13.03
53-7065	Retail Salespersons Stockers and Order Fillers	4,270	\$15.30
11-1021	General and Operations Managers	3,960	\$33.15
35-2011	Cooks, Fast Food	3,850	\$10.66
33-2011	COOKS, I dSt I OOU	3,030	÷10.00

Source: KYSTATS, Labor Market Information Branch, "2023 LWA Wage & Employment," (accessed August 2023)



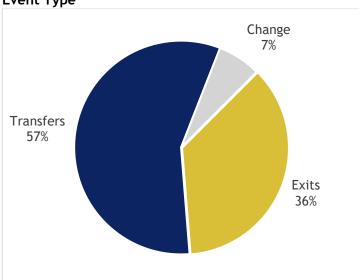
Long-term occupational employment projections reflect predicted employer demand for labor over a ten-year period. Projections are available at the major and specific SOC levels. Occupational employment projections include estimates on projected job openings resulting from three events:

- Individuals transferring among occupations (e.g., a career change)
- Individuals exiting the workforce (e.g., retirement)
- Economic growth (or decline)

The projections also include information on the typical education, training and experience needed for entry, and on-the-job training typically needed to reach competency in the occupation from the BLS publication "Education and Training Assignments by Detailed Occupation."

Please be advised that the 2020-2030 Long-Term Occupational Projections published by the Kentucky Center for Statistics (KYSTATS) are partially derived from industry projections that are produced using an annual time-series of industry employment data which includes 2020. As such, the effects of the COVID pandemic on industry employment are reflected in the base year employment of the 2020-2030 Long-Term Occupational Projections.

Figure 42 - Projected Job Openings in Kentucky by Event Type

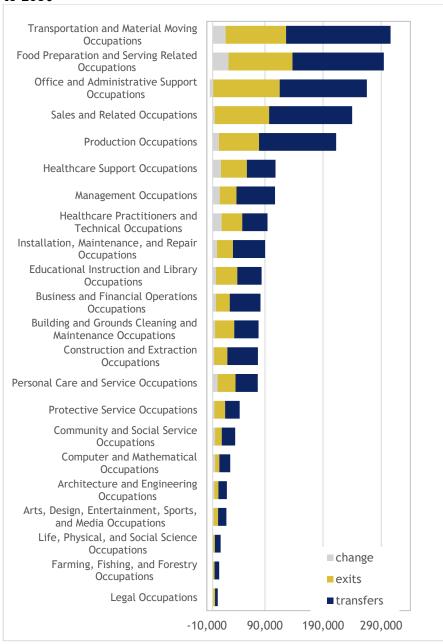


Source: KYSTATS, Labor Market Information Branch, "2020-2030 KY Occupational Outlook," (accessed August 2023)

In Kentucky, the job market is expected to experience over 2.3 million job openings between 2020 and 2030, with most openings attributed to workers transferring between occupations. These transfers are expected to account for 57 percent of the total job openings between 2020 and 2030, 1.32 million openings. An estimated 837,328 exits are projected to occur over this period as individuals leave the labor force. Economic growth accounts for the remaining 7 percent of projected openings (151,514 openings) between 2020 and 2030.



Figure 43 - Total Job Openings by Major Occupational Group, 2020 to 2030



The most projected job openings between 2020 and 2030 are in Transportation and Material Moving occupations. This occupational group is projected to have 306,053 projected openings, the most of any occupational group.

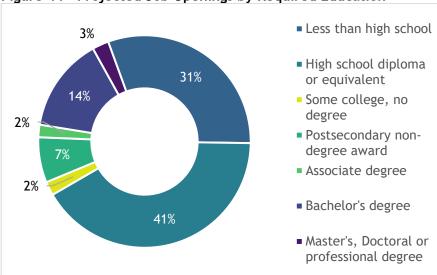
Food Preparation and Serving Related occupations are estimated to have the next largest number of openings (294,584 jobs). This group also has the most anticipated growth with 27,178 jobs.

Only one occupation group is expected to have negative growth between 2020 and 2030: Office and Administrative Support occupations (-5,085 jobs).

Source: KYSTATS, Labor Market Information Branch, "2020-2030 KY Occupational Outlook," (accessed August 2023)



Figure 44 - Projected Job Openings by Required Education



Source: KYSTATS, Labor Market Information Branch, "2020-2030 KY Occupational Outlook," (accessed Aug 2023)

Compared to current requirements, there will be more job openings in the next decade for those with lower levels of educational attainment. One-quarter (28 percent) of all projected job openings in Kentucky from 2020 to 2030 will require an education beyond a high school diploma or equivalent award. Among all projected openings, 30.8 percent typically require less than high school completion, and 41.4 percent require only a high school diploma or equivalent award. This is partially explained by the high numbers of exits from the workforce and high

numbers of transfers to other occupations expected among occupations requiring these levels of education.

Every occupation in Kentucky is expected to have openings between 2020 and 2030. Recall that job openings come from people transferring between jobs, exiting the labor force, or growth in the occupation. There are 504 occupations that are projected to grow between 2020 and 2030, resulting in a total increase of 166,627 openings. While 25 percent of the employment growth will be in occupations requiring a bachelor's degree or higher for entry, 64 percent will require a high school diploma or less. Occupations that have the largest projected growth include:

- Cooks, Restaurant (8,287)
- Home Health and Personal Care Aides (7,907)
- Laborers and Freight, Stock, and Material Movers, Hand (7,203)
- General and Operations Managers (4,656)
- Waiters and Waitresses (4,550)

There are 148 occupations that will have fewer jobs in 2030 than 2020. In total, employment (not accounting for exits or transfers) is projected to decrease by 17,745 in these occupations, the majority of which require a high school diploma or less education. The occupations expected to experience the largest declines include:

- Cashiers (-2,966)
- Secretaries and administrative assistants, except legal, medical, and executive (-2,088)
- Office clerks, general (-991)
- Executive Secretaries and Executive Administrative Assistants (-916)
- Bookkeeping, Accounting, and Auditing Clerks (-857)



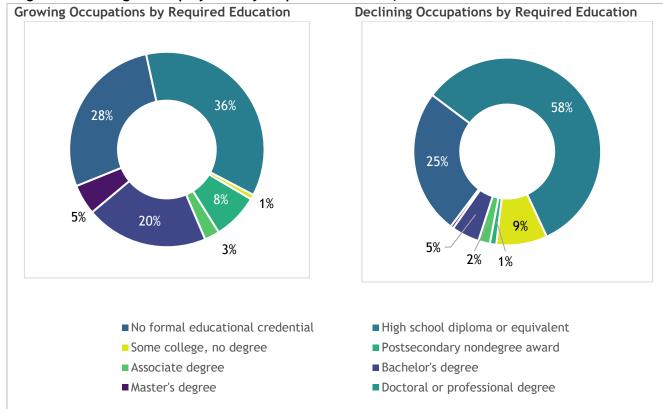


Figure 45 - Change in Employment by Required Education, 2020-2030

Source: KYSTATS, Labor Market Information Branch, "2020-2030 KY Occupational Outlook," (accessed August 2023)

High school diplomas and bachelor's degrees are the two levels of educational attainment that typically grant workers entry to the widest variety of occupations, with the former qualifying workers for 266 unique occupations across the state, and the latter granting access to 145 additional occupations. Advanced postsecondary degrees (Master's, Doctoral, and other professional degrees) grant access to 85 occupations that lower levels of educational attainment do not.

Occupations can be classified as high, moderate, or basic skill by typical education required for entry.

- High skill occupations include occupations requiring more than a bachelor's degree. This also includes occupations requiring a master's degree or a doctoral or professional degree.
- Moderate skill occupations include occupations requiring an associate degree, postsecondary nondegree award, or some college with no degree.
- Basic skill occupations include occupations requiring either a high school diploma or equivalent or no formal education.

The occupations with the most projected job openings for each skill group are shown in Table 6. Among high skill occupations, the most openings will occur in General and Operations Managers with an expected 43,136 openings by 2030. The median wage for this occupation was \$74,070 in 2022.



Table 6 - Most Job Openings by Skill Classification

				Job Op	enings		
SOC		_Est.		_	C.		Median
Code	SOC Title (Code)	Emp.	Exits	Transfers	Change	Total	Wage
Basic Skill 53-7062		(0.00(27 074	EE 422	7 202	00 500	¢27.020
	Laborers and Freight, Stock, and Material Movers, Hand	60,096	27,874	55,423	7,203	90,500	\$37,930
41-2031	Retail Salespersons	50,659	29,367	43,386	3,732	76,485	\$27,330
51-2090	Miscellaneous Assemblers and Fabricators	48,591	19,310	36,116	4,026	59,452	\$39,130
41-2011	Cashiers	43,455	35,706	40,184	-2,966	72,924	\$24,380
53-7065	Stockers and Order Fillers	36,934	21,858	37,457	2,935	62,250	\$34,400
Moderate							
53-3032	Heavy and Tractor-Trailer	30,236	12,761	21,131	1,851	35,743	\$48,540
	Truck Drivers						
43-3031	Bookkeeping, Accounting, and Auditing Clerks	25,755	14,841	12,932	-857	26,916	\$41,150
31-1131	Nursing Assistants	21,732	14,515	12,837	1,880	29,232	\$32,280
25-9045	Teaching Assistants, Except Postsecondary	13,435	6,192	6,469	818	13,479	\$28,040
31-9092	Medical Assistants	12,230	5,474	9,969	2,221	17,664	\$35,450
High Skill							
11-1021	General and Operations Managers	44,616	9,375	29,105	4,656	43,136	\$74,070
29-1141	Registered Nurses	43,315	12,067	11,379	3,825	27,271	\$75,800
13-1198	Project Management Specialists	17,187	4,081	8,629	818	13,528	Ψ73,000
13-1170	and Business Operations	17,107	7,001	0,027	010	13,320	
	Specialists, All Other						
25-2021	Elementary School Teachers,	16,587	5,222	6,818	858	12,898	\$57,390
	Except Special Education	,	ŕ	,		•	,
13-2011	Accountants and Auditors	11,653	3,349	7,119	729	11,197	\$64,860
N/A - Not	21 - 1-1 -	· · · · · · · · · · · · · · · · · · ·					

N/A = Not available

Source: KYSTATS, Labor Market Information Branch, "2020-2030 KY Occupational Outlook," and Occupational Employment and Wage Statistics (OEWS), "2023 Statewide Wage & Employment" (accessed August 2023)

Kentucky's ten LWAs are expected to experience uneven growth, with nine of the 10 LWAs growing by at least 6.8 percent by 2030. EKCEP is projected to grow by 3.6 percent over this same time frame. The fastest growing areas, Kentuckiana Works, Northern Kentucky, and Green River are projected to experience growth of 10.1 percent, 9.5 percent, and 8.9 percent, respectively.





Figure 46 - Projected Job Openings by LWA, 2020 to 2030

Source: KYSTATS, Labor Market Information Branch, "2020-2030 KY Occupational Outlook," (accessed August 2023)

The following table presents total projected job openings for the LWAs (Table 7). Current and projected employment as well as total openings and contributions to openings are shown.

Table 7 - Job Openings by LWA

	2020	2030				
	Estimated	Projected				Total
LWA	Employment	Employment	Change	Exits	Transfers	Openings
Bluegrass	377,184	408,870	31,686	169,248	262,034	462,968
Cumberlands	111,481	120,045	8,564	52,357	78,766	139,687
EKCEP	106,123	109,992	3,869	48,723	70,519	123,111
Green River	85,269	92,85 l	7,582	38,621	59,870	106,073
Kentuckiana Works	529,579	583,218	53,639	235,338	372,517	661,494
Lincoln Trail	92,746	100,138	7,392	41,287	64,329	113,008
Northern Kentucky	211,825	231,872	20,047	96,395	153,037	269,479
South Central	115,530	125,036	9,506	53,136	81,425	144,067
TENCO	67,724	72,318	4,594	31,273	46,845	82,712
West Kentucky	155,504	166,023	10,519	70,219	108,961	189,699

Source: KYSTATS, Labor Market Information Branch, "2020-2030 KY Occupational Outlook," (accessed August 2023)

The following images are from the Occupational Outlook, an interactive dashboard which explores 2020-2030 long-term occupational projections for Kentucky and its LWAs, augmented with education and training requirement data. The highlighted region on the map indicates the area for which projections are being displayed.

The bar graph in the upper right displays the total number of projected job openings for a specific area in the next ten years, and the projected levels of each type of event that can produce an opening (Exits, Transfers, and Change).

The 'Educational Attainment' section provides context for the percent of projected job openings in a given area that require each level of educational attainment. Two additional bar charts show the



cumulative percentage of openings above the median wage and the share of projected openings above a selected wage (the default setting is the state median wage for all occupations \$39,183).

At the bottom of the dashboard, the total projected openings and median wage estimates are provided for the five occupations by educational attainment expected to produce the most job openings in the next ten years in the selected area.

The Full Occupation Listing dashboard provides users with a sortable list of all available occupations. Clicking on any field name will automatically sort the list of occupations by that field in descending order, and a second click will sort in ascending order. The 'Area' and 'Typical Education Required' filters will filter the table appropriately. The 'Group' filter will limit the table to only those occupations within each of the major SOC groups (e.g., Production Occupations, or Legal Occupations). The 'Keyword' search bar allows users to filter the table to only those occupations with titles containing the entered text.



Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030 Kentucky

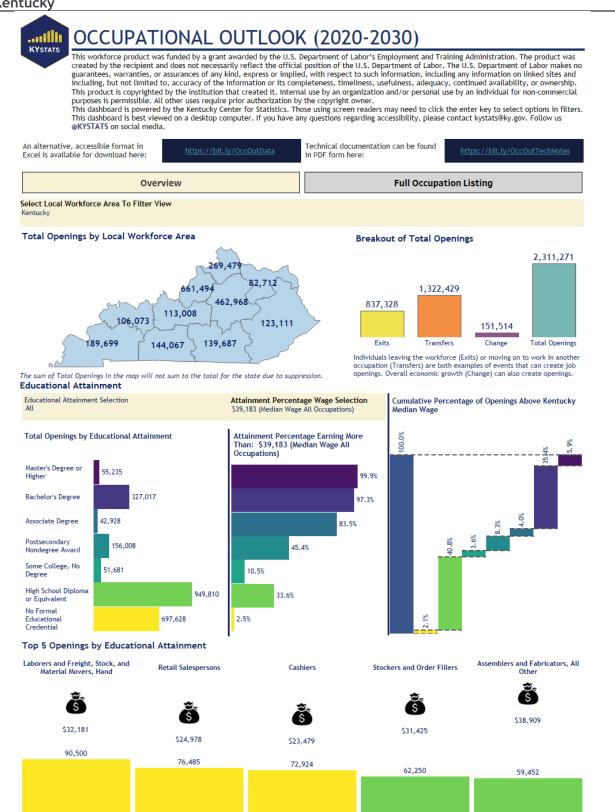




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030 Bluegrass LWA

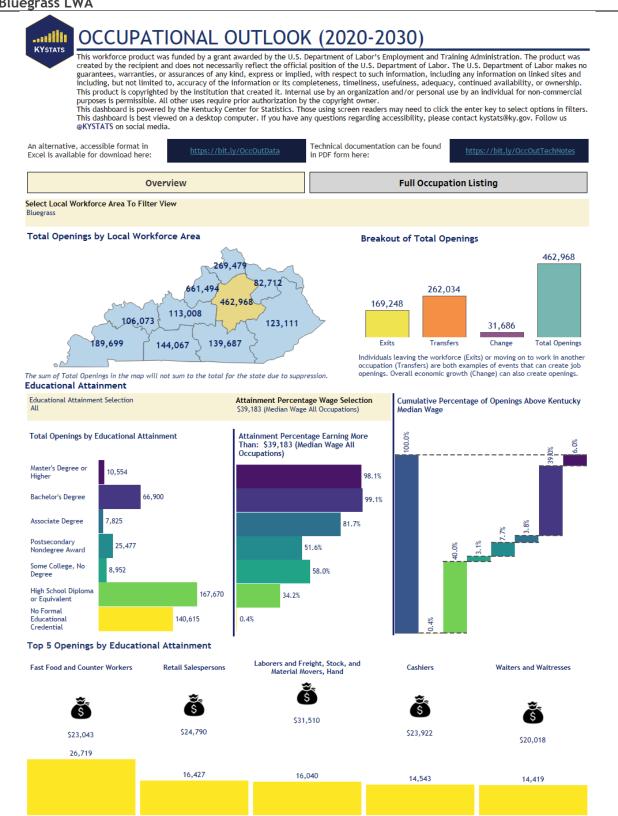




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030

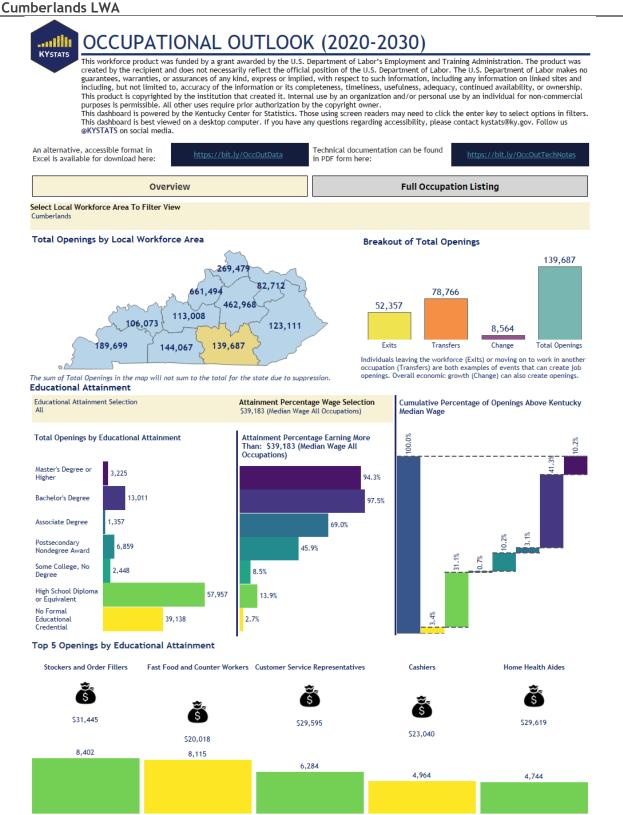




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030 EKCEP LWA

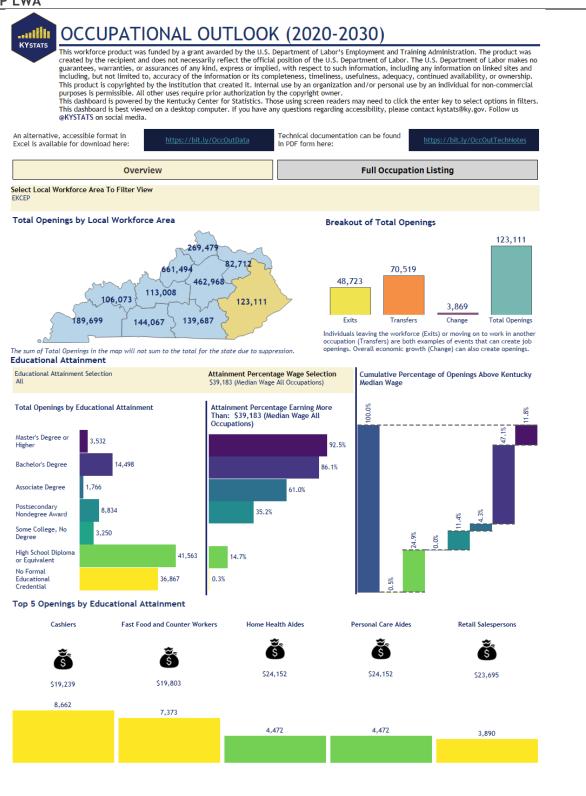




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030 Green River LWA

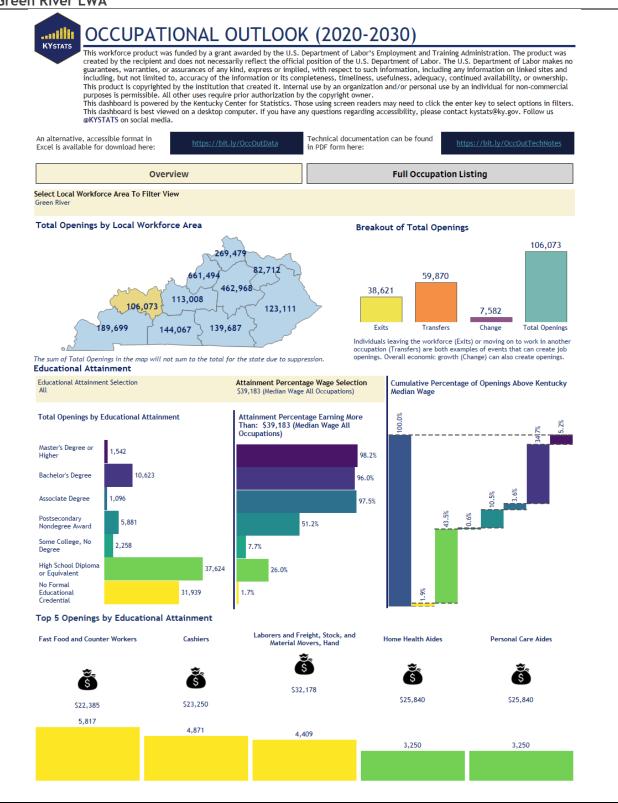




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030 Kentuckiana Works LWA

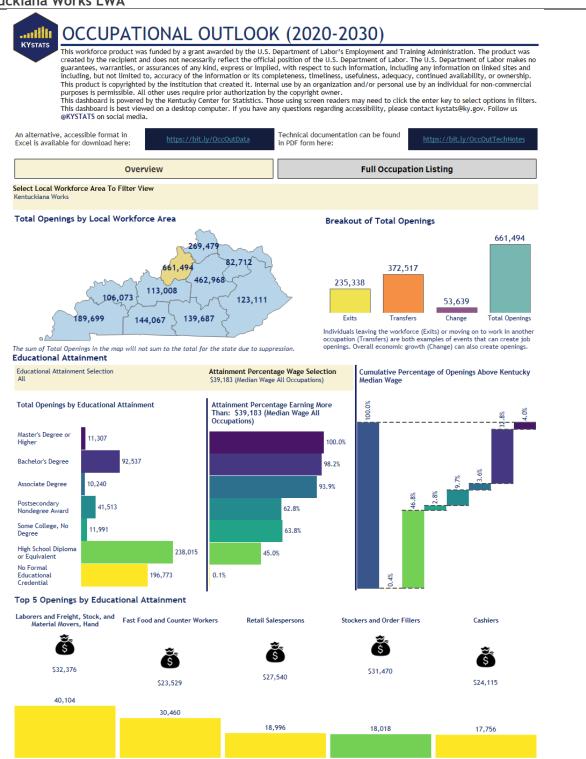




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030

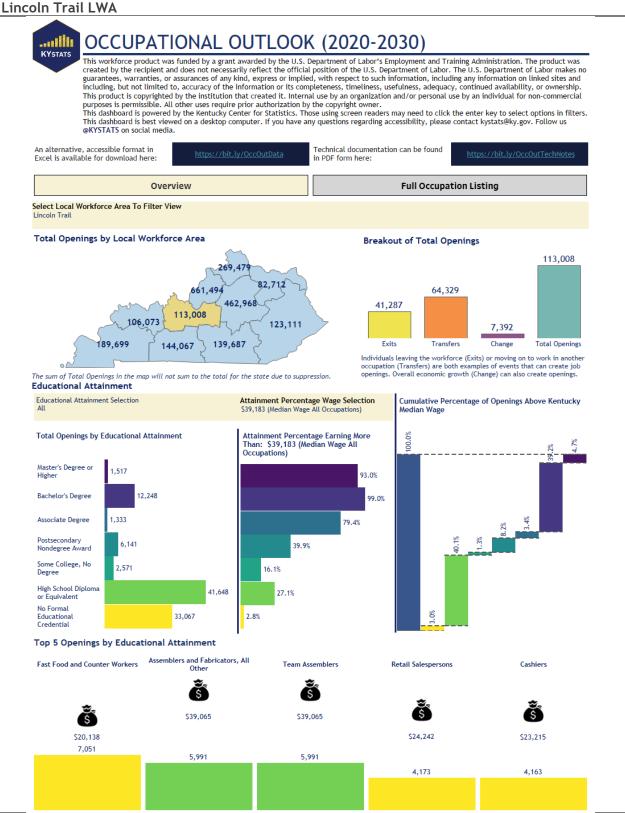




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030

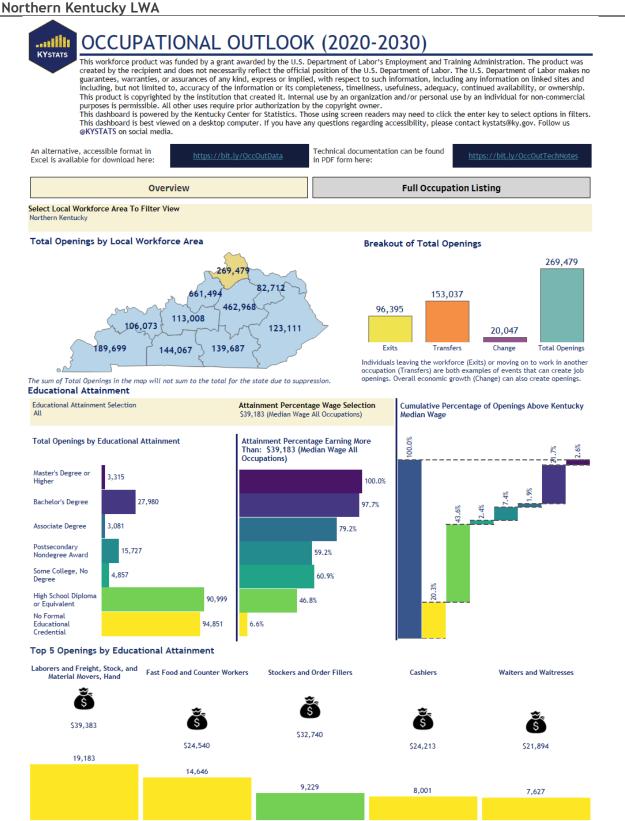




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030

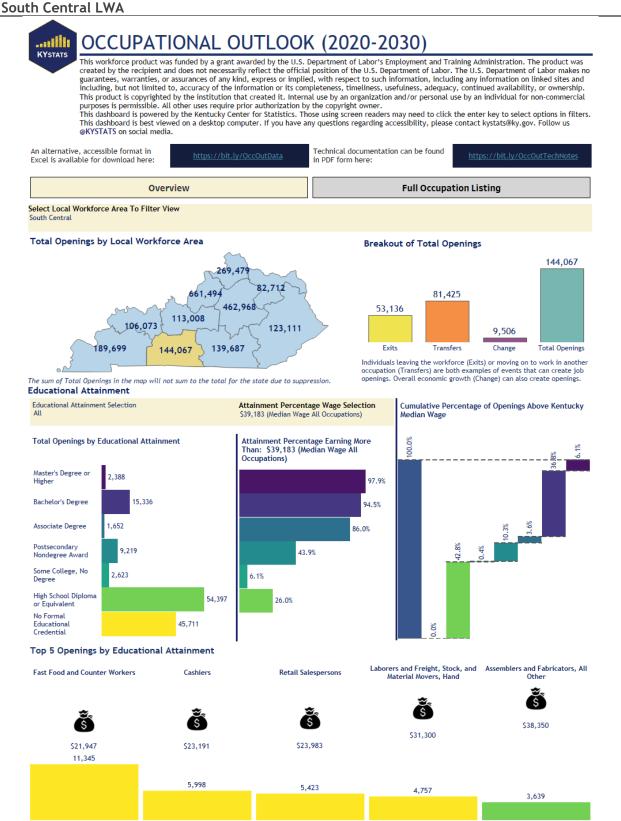




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030 TENCO LWA

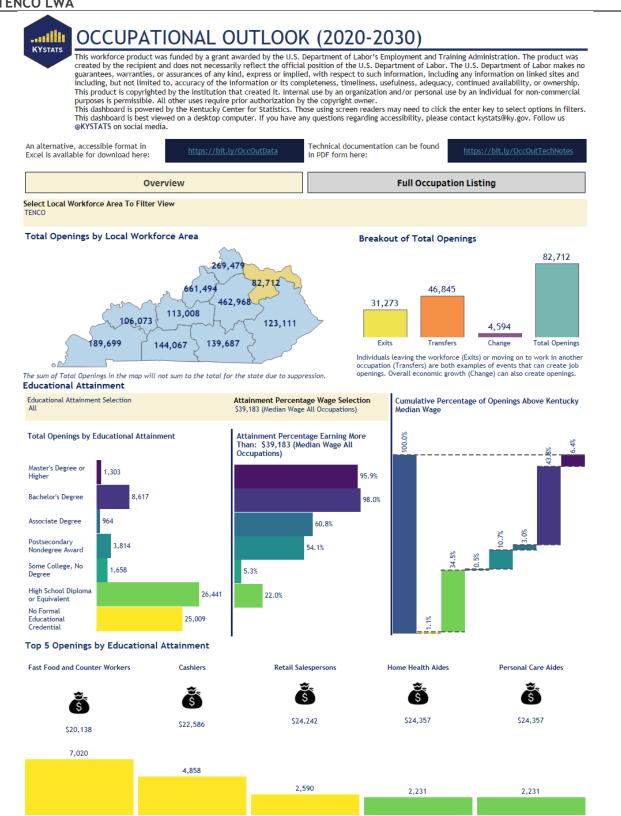
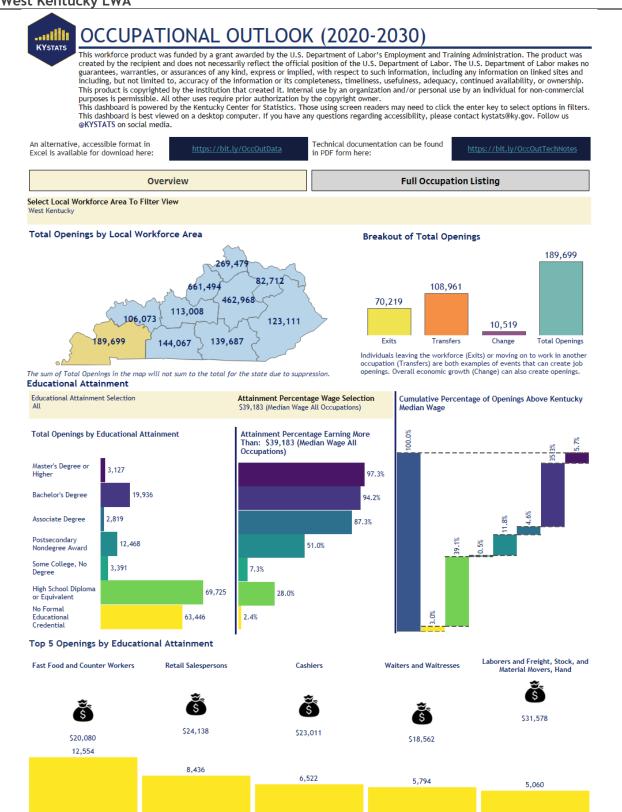




Figure 47 - Kentucky Occupational Outlook by LWA, 2020 to 2030 West Kentucky LWA



Source: KYSTATS, Labor Market Information Branch, "2020-2030 KY Occupational Outlook," (accessed September 2023)

