

Community and Economic Development Initiative of Kentucky

Understanding Labor Trends

Alison Davis April 2016



Food and Environment

The US Labor Force

- The labor force continues to age.
 - The median age of the labor force was 37.7 in 1994, 40.3 in 2004, 41.9 in 2014, and is projected to be 42.4 in 2024.
 - At the same time, the overall labor force participation rate is projected to decrease from 62.9 % in 2014 to 60.9 % in 2024.
- The labor force participation rate for youth (ages 16 to 24) is projected to decrease from 55.0% in 2014 to 49.7% in 2024.
 - The youth age group is projected to make up 11.3% of the civilian labor force in 2024 as compared with 13.7% in 2014.
 - In contrast, the labor force participation rate for the 65-and-older age group is projected to increase from 18.6% in 2014 to 21.7% in 2024. This older age group is projected to represent 8.2% of the civilian labor force in 2024 as compared with 5.4% in 2014.
- Labor force diversity is projected to increase, with white non-Hispanics making up 59.6% of the civilian labor force in 2024, compared with 64.6% in 2014.





The Unemployed

- In March, the unemployment rate (5.0%) and the number of unemployed persons (8.0 million) were little changed. Both measures have shown little movement since August.
- Among the major worker groups, the unemployment rates for adult men (4.5%), adult women (4.6%), teenagers (15.9%), Whites (4.3%), Blacks (9.0%), Asians (4.0%), and Hispanics (5.6%) showed little or no change in March.
- The number of long-term unemployed (those jobless for 27 weeks or more) was essentially unchanged at 2.2 million in March and has shown little movement since June. In March, these individuals accounted for 27.6% of the unemployed.





Fastest Growing Occupations

2014-24, projected



FASTEST GROWING, OVERALL

Fast-growing occupations show how the economy is changing; 4 of the 5 fastest growing occupations are related to healthcare.



OCCUPATIONS WITH MOST NEW JOBS

Occupations adding the most jobs show that there will be more opportunities for employment in healthcare, retail trade, and food services.

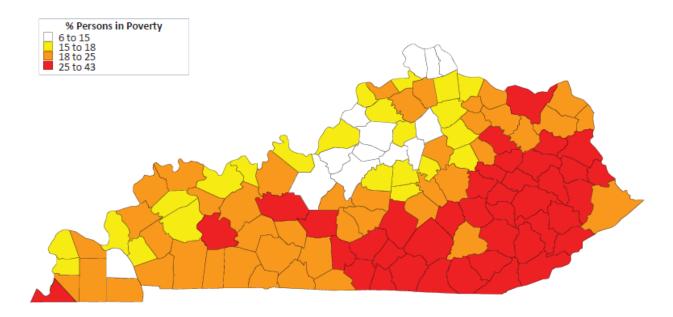






Kentucky Economic Trends

Estimated County Poverty Rates, 2013

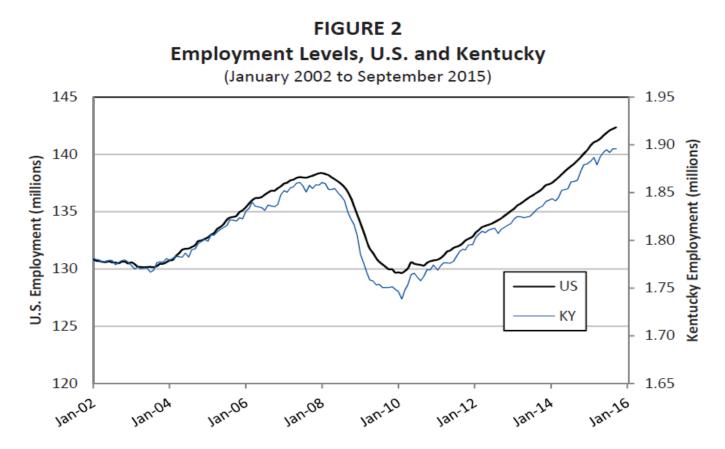


Source: U.S. Census Bureau, Small Area and Income Esimates (SAIPE)





Employment Levels

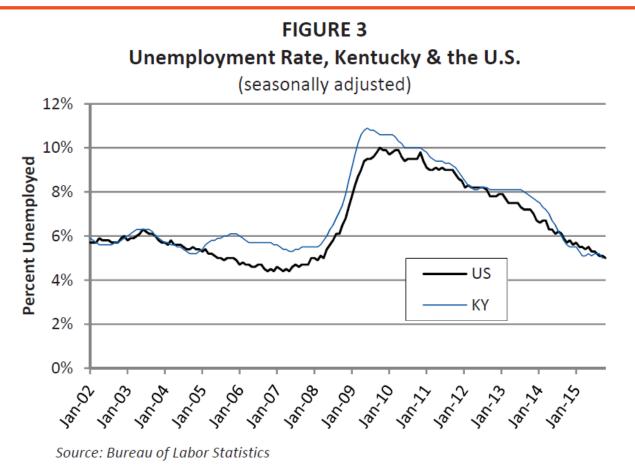


Source: Bureau of Labor Statistics





Unemployment Rate







GDP and Employment Forecast

	TABLE 1 Forecast for 2016		
	2015 Forecast	2015 Actual or Best Available	2016 Forecast
Real GDP Growth—U.S.	2.6%	2.2%	2.25%
Unemployment Rate—U.S.	5.3%	5.3%	4.8%
Inflation—U.S.	2.2%	0.2%	2.0%
Employment Growth—U.S. Growth in Manufacturing	2.2%	2.0%	2.25%
Employment—U.S.	0.5%	0.9%	0.5%
Real GDP Growth—Kentucky	2.0%		2.0%
Unemployment Rate—Kentucky	6.0%	5.2%	4.8%
Employment Growth—Kentucky Growth in Manufacturing	2.0%	1.8%	2.0%
Employment—Kentucky	0.5%	2.8%	0.5%



Employment Growth by Industry

TABLE 2						
U.S. Employment Growth by Major and Select Industries (1,000s of workers)						
			2012 to 2022 Change			
Industry Sector	2012	2022	Number	Percent		
Total	145,355.8	160,983.7	15,627.9	10.8%		
Goods-producing, excluding agriculture	18,360.3	19,554.2	1,193.9	6.5%		
Mining	800.5	921.7	121.2	15.1%		
Coal Mining	86.6	83.2	-3.4	-3.9%		
Construction	5,640.9	7,263.0	1,622.1	28.8%		
Manufacturing	11,918.9	11,369.4	-549.5	-4.6%		
Beverage Manufacturing	192.2	188.2	-4.0	-2.1%		
Utilities	554.2	497.8	-56.4	-10.2%		
Wholesale trade	5,672.8	6,143.2	470.4	8.3%		
Retail trade	14,875.3	15,966.2	1,090.9	7.3%		
Transportation and warehousing	4,414.7	4,742.0	327.3	7.4%		
Information	2,677.6	2,612.4	-65.2	-2.4%		
Financial activities	7,786.3	8,537.3	751.0	9.6%		
Professional and business services	17,930.2	21,413.0	3,482.8	19.4%		
Educational services	3,346.9	4,022.2	675.3	20.2%		
Health care and social assistance	16,971.8	21,965.9	4,994.1	29.4%		
Leisure and hospitality	13,745.8	15,035.0	1,289.2	9.4%		
Other services	6,174.5	6,823.4	648.9	10.5%		
Federal government	2,814.0	2,406.5	-407.5	-14.5%		
State and local government	19,103.2	20,032.2	929.0	4.9%		
Agriculture wage and salary	1,306.9	1,281.8	-25.1	-1.9%		
Animal Production and Aquaculture	485.7	474.9	-10.8	-2.2%		
Source: Employment Projections Program, U.S. Department of Labor, U.S. Bureau of Labor						





Employment by Education

TABLE 4 U.S. Employment by Summary Education and Training Assignment, 2012 and Projected 2022							
(thousands)							
	Emplo	yment	2012 to 20				
Education, Work Experience, and on-the-job Training (typical entry-level education)	2012	2022	Number	Percent	Median Annual Wage <i>,</i> 2012*		
Total, all occupations	145,355.8	160,983.7	15,628.0	10.8	\$34,750		
Doctoral or professional degree	4,002.4	4,640.8	638.4	16.0	\$96,420		
Master's degree	2,432.2	2,880.7	448.5	18.4	\$63,400		
Bachelor's degree	26,033.0	29,176.7	3,143.6	12.1	\$67,140		
Associate's degree	5,954.9	7,000.9	1,046.0	17.6	\$57,590		
Postsecondary non-degree award	8,554.2	9,891.2	1,337.1	15.6	\$34,760		
Some college, no degree	1,987.2	2,212.2	225.0	11.3	\$28,730		
High school diploma or equivalent	58,264.4	62,895.2	4,630.8	7.9	\$35,170		
Less than high school	38,127.6	42,286.0	4,158.4	10.9	\$20,110		
Source: Occupational Employment Statistics program, U.S. Department of Labor, Bureau of Labor Statistics.							





Education

Comparing Education Indicators for Kentucky, United States, and the Top 15 States, 2009-2015 (numbers are percentages)						
Education Indicators	Kentucky	U.S.	Average for Top 15 States ⁺			
HS Diploma or Higher (2014)	88.3	88.3	91.6			
Two-Year Degree (2014)	9.5	9.0	9.5			
Bachelor's Degree or Higher (2014)	25.1	32.2	38.3			
Adj. Cohort HS Grad Rate (2014)	87.5	81.4ŧ	85.9*			
ACT % College/Career Ready (2015)	21.0	28.0	36.6			
8th Grade Math NAEP (2015)	27.7	32.1	40.6*			
8th Grade Reading NAEP (2015)	36.1	32.7	39.2*			
8th Grade Science NAEP (2011)	34.0	31.8	39.0*			
4th Grade Math NAEP (2015)	40.5	39.4	45.9*			
4th Grade Reading NAEP (2015)	40.4	34.8	40.7*			
4th Grade Science NAEP (2009)	44.7	33.7	41.2*			
AP Exam Mastery (2014)	17.9	21.6	24.9			
 ⁺The top 15 states are statistically significantly higher than Kentucky (using a 90% confidence interval): CO, CT, IA, MA, MD, ME, MN, ND, NE, NH, NJ, VA, VT, WA & WI. ⁺The U.S. rate is for 2012-2013. 						

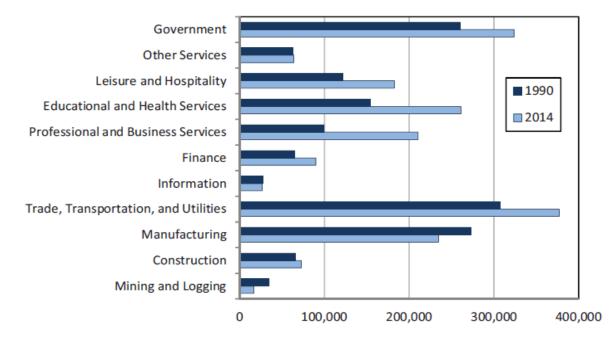
*This is the average of the state averages—not a weighted average of these 15 states. Note: HS Diploma, Two-Year Degree, and Bachelor's Degree are for those between 25 and 54, the prime working age. The NAEP data reflect the percentage of public students scoring proficient or higher, and the U.S. data represents the National Public.





Employment by Sector

Employment in Major Economic Sectors, Kentucky 1990 and 2014



Source: U.S. Department of Labor, Bureau of Labor Statistics





Wage Ratio – Urban vs Rural

1.40 1.35 1.30 1.25 1.20 1.15 1.10 Metro compared to "Mostly Rural" 1.05 Metro compared to "Somewhat Rural" 1.00

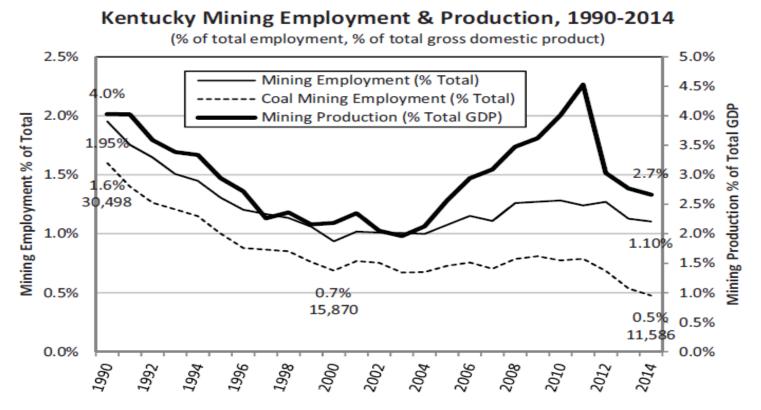
Wage Ratio in Kentucky by Geographic Area, 1969-2013 (Ratio Between Beale Codes 9-8-7, 6-5-4, and 3-2-1)

Source: Bureau of Economic Analysis, CA34, Wage and Salary Summary





Mining Employment

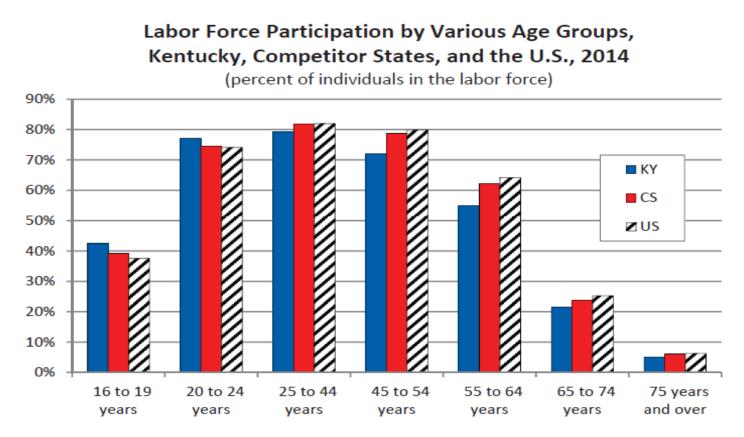


Source: Bureau of Economic Analysis & Energy Information Administration, Annual Coal Report, various years, and Kentucky Coal Facts 2015





Labor Force Participation



Source: 2014 American Community Survey 1-Year Estimate





Occupation Trends

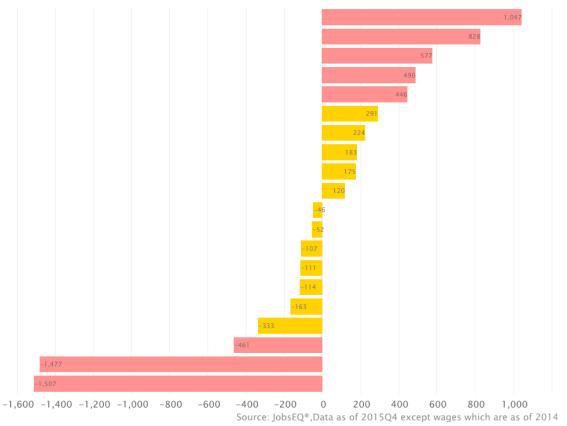


	Employment	Avg Wages	Unemp Rate	Replacement Demand	Growth Demand	Avg. Annual Growth Percent
Total - All Occupations	2,000,722		i	537,714	91,074	
Office and Administrative Support Occupations	291,830	\$32,000	4.3%	65,111	4,447	0.2%
Sales and Related Occupations	202,107	\$33,800	5.1%	66,636	9,462	0.5%
Production Occupations	178,397	\$35,100	5.2%	46,587	-7,607	-0.4%
Food Preparation and Serving Related Occupations	170,243	\$19,600	7.7%	65,877	7,796	0.4%
Transportation and Material Moving Occupations	165,354	\$32,100	6.8%	43,992	4,971	0.3%
Management Occupations	128,177	\$89,300	1.4%	47,462	1,897	0.1%
Healthcare Practitioners & Technical Occupations	118,449	\$67,900	1.4%	26,527	16,581	1.3%
Education, Training, and Library Occupations	115,413	\$47,700	1.9%	24,669	4,849	0.4%
Construction and Extraction Occupations	86,624	\$42,100	7.8%	16,432	8,351	0.9%
Business and Financial Operations Occupations	83,968	\$60,000	2.5%	19,154	6,031	0.7%
Installation, Maintenance, and Repair Occupations	79,255	\$41,800	3.3%	19,716	4,102	0.5%
Building and Grounds Maintenance Occupations	67,568	\$22,800	7.5%	15,486	3,504	0.5%
Personal Care and Service Occupations	62,784	\$22,400	5.1%	18,578	6,719	1.0%
Healthcare Support Occupations	55,053	\$26,700	5.7%	12,247	9,898	1.7%
Computer and Mathematical Occupations	42,384	\$64,700	3.2%	6,586	4,686	1.1%
Protective Service Occupations	32,589	\$34,000	4.5%	7,617	804	0.2%
Community and Social Service Occupations	31,915	\$39,800	2.1%	7,099	2,846	0.9%
Architecture and Engineering Occupations	29,277	\$71,100	2.2%	7,655	411	0.1%
Arts, Design, Entertainment, Sports Occupations	26,067	\$41,900	2.9%	9,204	233	0.1%
Life, Physical, and Social Science Occupations	12,837	\$53,900	3.2%	4,093	748	0.6%
Legal Occupations	12,322	\$74,100	1.2%	2,466	687	0.5%





Potential Occupation Gaps



Occupation Gaps

Potential Occupation Gaps over 10 Years in Kentucky

Healthcare Practitioners and Technical Occupations (\$68,700) Construction and Extraction Occupations (\$39,700) Healthcare Support Occupations (\$26,400) Management Occupations (\$80,400) Personal Care and Service Occupations (\$22,300) Building and Grounds Cleaning and Maintenance Occupations (\$22,800) Business and Financial Operations Occupations (\$58,100) Community and Social Service Occupations (\$40,000) Computer and Mathematical Occupations (\$61,200) Installation, Maintenance, and Repair Occupations (\$40,400) Farming, Fishing, and Forestry Occupations (\$27,100) Legal Occupations (\$73,500) Architecture and Engineering Occupations (\$68,900) Protective Service Occupations (\$33,200) Transportation and Material Moving Occupations (\$32,200) Sales and Related Occupations (\$33,400) Food Preparation and Serving Related Occupations (\$19,700) Education, Training, and Library Occupations (\$47,400) Office and Administrative Support Occupations (\$31,200) Production Occupations (\$34,600)

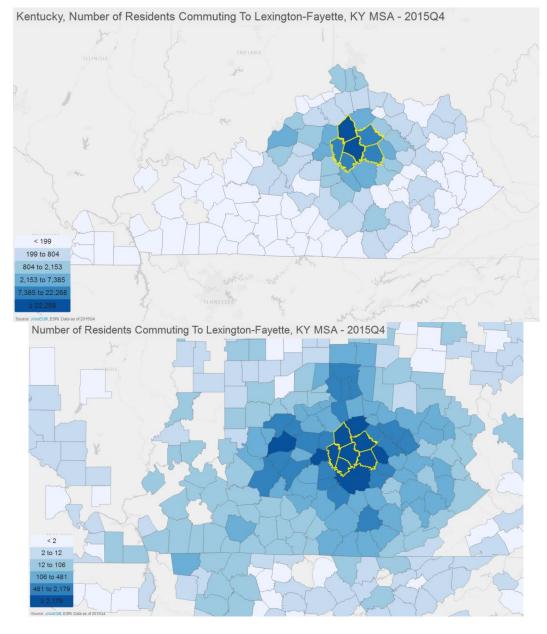




Commuting Patterns

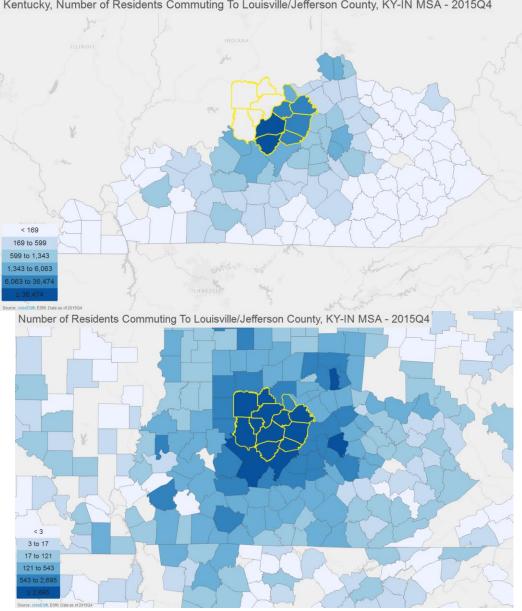


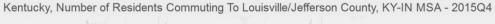
















Future needs







		Regional	10-Year	10-Year	
	Current	Average	Replacement	Growth	10-Y
Title	Employment	Wage ¹	Demand	Demand	De
Total	233,799		53,540	37,866	
Healthcare Practitioners and Technical Occupations	80,570	\$70,300	18,775	12,963	
Healthcare Support Occupations	43,934	\$26,800	9,974	8,399	
Office and Administrative Support Occupations	35,719	\$30,800	7,072	5,274	
Personal Care and Service Occupations	20,629	\$20,800	4,230	3,917	
Community and Social Service Occupations	12,686	\$37,000	2,919	2,232	
Management Occupations	8,142	\$86,000	2,297	1,218	
Food Preparation and Serving Related Occupations	6,651	\$21,600	2,078	773	
Education, Training, and Library Occupations	6,423	\$36,400	1,660	545	
Building and Grounds Cleaning and Maintenance Occupations	5,782	\$21,000	1,442	631	
Business and Financial Operations Occupations	3,670	\$57,900	815	530	
Installation, Maintenance, and Repair Occupations	1,734	\$39,500	462	239	
Transportation and Material Moving Occupations	1,603	\$29,200	384	237	
Life, Physical, and Social Science Occupations	1,125	\$56,300	381	221	
Computer and Mathematical Occupations	1,422	\$61,000	219	246	
Sales and Related Occupations	839	\$36,800	279	140	
Production Occupations	1,260	\$27,900	255	91	
Protective Service Occupations	858	\$25,400	136	87	
Arts, Design, Entertainment, Sports, and Media Occupations	423	\$48,000	87	88	

College of Agriculture, Food and Environment



10-Year Industry/Occupation Mix for Retail Trade, Private in Kentucky, Baseline							
Title	Current Employment	Regional Average Wage ¹	10-Year Replacement Demand	10-Year Growth Demand	10-Year Total Demand		
Total	210,161		69,172	10,718	79,890		
Sales and Related Occupations	116,871	\$24,700	43,823	6,523	50,346		
Office and Administrative Support Occupations	35,015	\$29,400	9,717	1,800	11,518		
Transportation and Material Moving Occupations	13,871	\$27,300	3,979	361	4,340		
Installation, Maintenance, and Repair Occupations	10,570	\$34,200	3,019	192	3,212		
Food Preparation and Serving Related Occupations	6,851	\$19,400	2,462	498	2,960		
Healthcare Practitioners and Technical Occupations	8,056	\$63,100	1,295	306	1,601		
Management Occupations	4,874	\$92,900	1,302	242	1,543		
Production Occupations	5,084	\$29,000	1,219	292	1,511		
Building and Grounds Maintenance Occupations	2,018	\$22,800	437	277	714		
Business and Financial Operations Occupations	1,770	\$58,000	469	148	617		
Arts, Design, Entertainment, Sports Occupations	1,365	\$31,100	527	-36	491		
Personal Care and Service Occupations	1,077	\$23,300	391	14	405		
Protective Service Occupations	759	\$30,000	140	23	163		
Computer and Mathematical Occupations	467	\$56,900	76	81	156		
Healthcare Support Occupations	610	\$23,300	115	-26	89		
Construction and Extraction Occupations	413	\$35,900	72	4	76		





Key themes



ONE WAY



Important Issues Moving Forward

- Minimum Wage Laws
- Labor Force Participation Rate
- Substance Abuse Issues
- Affordable Care Act





Any Questions?

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