

Missouri Labor

Supply

&

Demand

Analysis



Missouri Economic Research and Information Center



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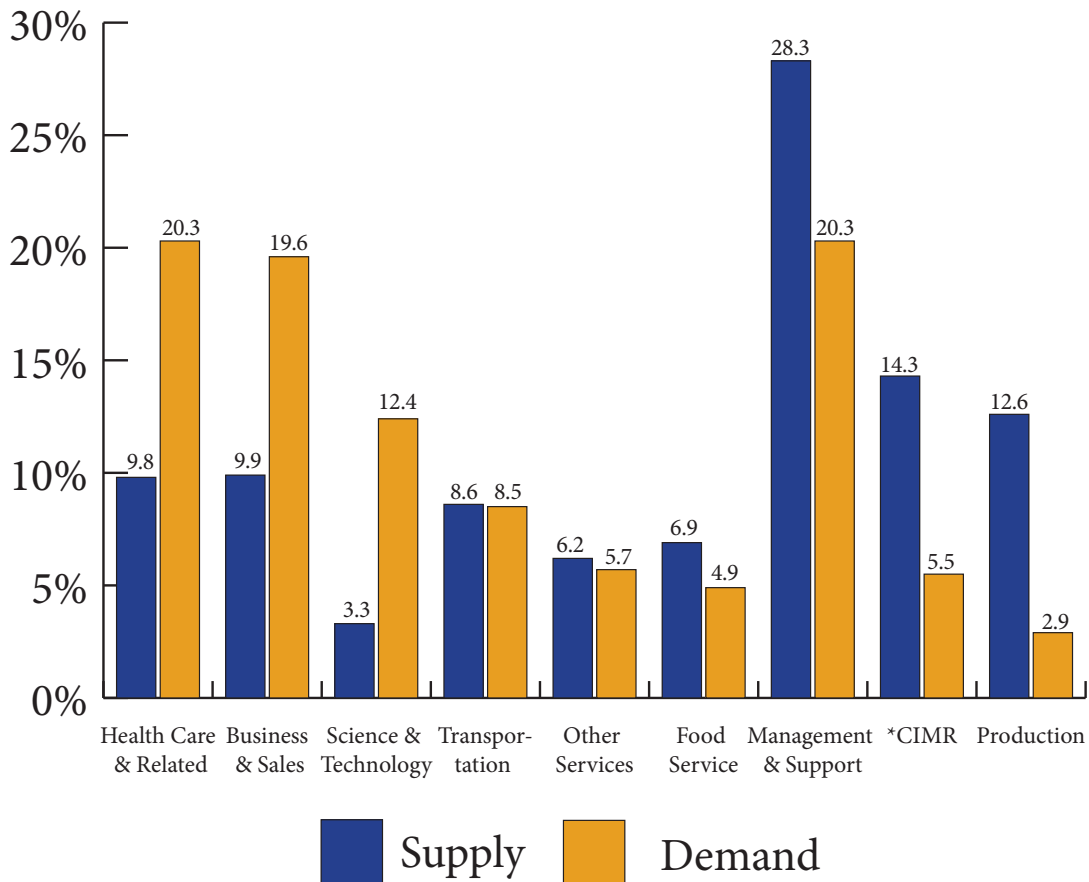
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This analysis takes job seeker information from people who registered with [jobs.mo.gov](http://jobs.mo.gov) in 2016, and compares it to employer job ads during the same time period. Research shows that, with training, employment opportunities exist that can bridge the gaps between labor supply and demand.

As in previous years, the large gap between employers and job seekers in *Health Care, Business & Sales* and *Science & Technology* continued to appear in 2016. In 2016 there were 107,840 active job seekers in Missouri's workforce data system. At the same time employers posted 386,578 online job ads according to data from Burning Glass Technologies (*see sources*). While no dataset can fully capture both markets, it does offer information about the relative gaps present in different job areas. In particular, Burning Glass can only capture job ads posted online. Jobs in industries such as construction and maintenance are often hired through word of mouth instead of formal job ads placed in the newspaper or on web sites, and therefore can be underrepresented. However, these two datasets still show that certain occupations are in high demand, with fewer people seeking them, whereas other jobs have a large supply but less job postings.

Reading from left to right, the chart below shows that jobs in *Health Care, Business & Sales* and *Science & Technology* are in high demand, however, not enough job seekers are pursuing those opportunities. These combined areas account for 52.3% of the job ads yet only 23% of job seekers are looking for these occupations. Top jobs in these fields include *Registered Nurses, Software Developers, and Wholesale & Manufacturing Sales Representatives*.

## Labor Supply and Demand 2016



\*Construction, Installation, Maintenance and Repair

From right to left, the chart indicates that a large percentage (26.9%) of job seekers are looking for work in *Production and Construction, Installation, Maintenance & Repair (CIMR)*, but only 8.4% of postings are in these fields.

# Labor Supply and Demand by State and Workforce Region

Missouri's largest supply and demand gaps were found in *Health Care, Business & Sales* and *Science & Technology*. *Transportation, Other Services, and Food Service* occupations had smaller gaps of 2% or less, indicating that these areas are more broadly aligned. The largest oversupplies were in *Production, Construction & Related, and Management & Support*, with gaps at 8% or larger.

Missouri	Total	Health Care & Related	Business & Sales	Science & Technology	Transportation	Other Services	Food Service	Management & Support	*CIMR	Production
Number of Job Ads	386,440	78,436	75,591	47,837	32,753	22,130	18,884	78,447	21,283	11,079
% of Job Ads	100%	20.3%	19.6%	12.4%	8.5%	5.7%	4.9%	20.3%	5.5%	2.9%
Number of Jobseekers	107,840	10,586	10,714	3,607	9,318	6,657	7,477	30,485	15,370	13,626
% of Jobs Sought	100%	9.8%	9.9%	3.3%	8.6%	6.2%	6.9%	28.3%	14.3%	12.6%
Gap	-	10.5%	9.6%	9.0%	-0.2%	-0.4%	-2.0%	-8.0%	-8.7%	-9.8%

\*Construction, Installation, Maintenance & Repair

Missouri's two largest Workforce Development Areas (WDAs) mirrored the state in having large gaps in *Health Care, Business & Sales* and *Science & Technology*. Large over supplies were in *Construction & Related, Management & Support* and *Production* occupations. The largest gap was *Science & Technology* in St. Louis, at 12.3%, indicating a large demand for jobs that are not being pursued.

KC WDA	Total	Health Care & Related	Business & Sales	Science & Technology	Other Services	Transportation	Food Service	*CIMR	Management & Support	Production
Number of Job Ads	94,686	19,541	17,767	11,356	5,589	8,587	3,683	5,628	19,790	2,745
% of Job Ads	100%	20.6%	18.8%	12.0%	5.9%	9.1%	3.9%	5.9%	20.9%	2.9%
Number of Jobseekers	16,986	1,703	1,584	594	982	1,570	1,109	2,394	5,024	2,026
% of Jobs Sought	100%	10.0%	9.3%	3.5%	5.8%	9.2%	6.5%	14.1%	29.6%	11.9%
Gap	-	10.6%	9.4%	8.5%	0.1%	-0.2%	-2.6%	-8.2%	-8.7%	-9.0%

St. Louis WDA	Total	Science & Technology	Business & Sales	Health Care & Related	Other Services	Food Service	Transportation	Production	Management & Support	*CIMR
Number of Job Ads	170,775	29,157	35,434	29,752	9,005	8,507	10,242	4,190	37,420	7,068
% of Job Ads	100%	17.1%	20.7%	17.4%	5.3%	5.0%	6.0%	2.5%	21.9%	4.1%
Number of Jobseekers	28,739	1,366	3,083	2,935	1,634	1,990	2,526	2,914	8,628	3,663
% of Jobs Sought	100%	4.8%	10.7%	10.2%	5.7%	6.9%	8.8%	10.1%	30.0%	12.7%
Gap	-	12.3%	10.0%	7.2%	-0.4%	-1.9%	-2.8%	-7.7%	-8.1%	-8.6%

\*Construction, Installation, Maintenance & Repair

Additional areas of the state (*see notes*) had large gaps for *Health Care* positions ranging from 8.8% in the Ozark Workforce Development Area (WDA) up to 30.8% in the South Central WDA. All regions also showed a demand for *Business & Sales* jobs and all areas had over supplies in *Construction & Related*, *Management & Support*, and *Production*.

Central WDA	Total	Health Care & Related	Business & Sales	Science & Technology	Transportation	Other Services	Food Service	*CIMR	Production	Management & Support
Number of Job Ads	32,038	8,817	5,797	2,504	3,098	2,059	1,532	1913	854	5,464
% of Job Ads	100%	27.5%	18.1%	7.8%	9.7%	6.4%	4.8%	6.0%	2.7%	17.1%
Number of Jobseekers	11,272	1,221	1,086	362	783	765	867	1,687	1,392	3,109
% of Jobs Sought	100%	10.8%	9.6%	3.2%	6.9%	6.8%	7.7%	15.0%	12.3%	27.6%
Gap	-	16.7%	8.5%	4.6%	2.7%	-0.4%	-2.9%	-9.0%	-9.7%	-10.5%

NE WDA	Total	Health Care & Related	Business & Sales	Transportation	Science & Technology	Other Services	Food Service	*CIMR	Management & Support	Production
Number of Job Ads	9,090	2,647	1,389	1,158	415	572	380	546	1,644	339
% of Job Ads	100%	29.1%	15.3%	12.7%	4.6%	6.3%	4.2%	6.0%	18.1%	3.7%
Number of Jobseekers	4,362	462	404	346	126	301	252	654	1,194	622
% of Jobs Sought	100%	10.60%	9.27%	7.93%	2.90%	6.90%	5.77%	15.00%	27.38%	14.26%
Gap	-	18.5%	6.0%	4.8%	1.7%	-0.6%	-1.6%	-9.0%	-9.3%	-10.5%

\*Construction, Installation, Maintenance & Repair

NW WDA	Total	Health Care & Related	Business & Sales	Transportation	Science & Technology	Other Services	Food Service	*CIMR	Management & Support	Production
Number of Job Ads	13,318	2,703	2,181	2,199	586	903	787	1,281	2,049	629
% of Job Ads	100%	20.3%	16.4%	16.5%	4.4%	6.8%	5.9%	9.6%	15.4%	4.7%
Number of Jobseekers	5,033	450	430	459	148	339	297	748	1,310	852
% of Jobs Sought	100%	8.9%	8.6%	9.1%	2.9%	6.7%	5.9%	14.9%	26.0%	16.9%
Gap	-	11.4%	7.8%	7.4%	1.5%	0.0%	0.0%	-5.2%	-10.6%	-12.2%

Ozark WDA	Total	Business & Sales	Health Care & Related	Science & Technology	Transportation	Other Services	Food Service	*CIMR	Production	Management & Support
Number of Job Ads	29,152	6,116	5,062	2,077	3,018	1,864	1,879	2,096	880	6,160
% of Job Ads	100%	21.0%	17.4%	7.1%	10.4%	6.4%	6.4%	7.2%	3.0%	21.1%
Number of Jobseekers	13,668	1,531	1,175	391	1,097	913	1,064	1,964	1,416	4,117
% of Jobs Sought	100%	11.2%	8.6%	2.9%	8.0%	6.7%	7.8%	14.4%	10.4%	30.1%
Gap	-	9.8%	8.8%	4.3%	2.3%	-0.3%	-1.3%	-7.2%	-7.3%	-9.0%



SC WDA	Total	Health Care & Related	Business & Sales	Science & Technology	Other Services	Food Service	Transportation	*CIMR	Production	Management & Support
Number of Job Ads	5,010	2,042	819	194	260	179	221	292	161	842
% of Job Ads	100%	40.8%	16.3%	3.9%	5.2%	3.6%	4.4%	5.8%	3.2%	16.8%
Number of Jobseekers	5,407	539	587	100	341	347	463	794	749	1,487
% of Jobs Sought	100%	10.0%	10.9%	1.8%	6.3%	6.4%	8.6%	14.7%	13.9%	27.5%
Gap	-	30.8%	5.5%	2.0%	-1.1%	-2.8%	-4.1%	-8.9%	-10.6%	-10.7%

SE WDA	Total	Health Care & Related	Business & Sales	Science & Technology	Transportation	Food Service	Other Services	*CIMR	Management & Support	Production
Number of Job Ads	10,632	2,926	2,094	376	1,167	742	579	776	1,624	348
% of Job Ads	100%	27.5%	19.7%	3.5%	11.0%	7.0%	5.4%	7.3%	15.3%	3.3%
Number of Jobseekers	10,321	1,032	935	196	1,097	686	627	1,582	2,449	1,716
% of Jobs Sought	100%	10.0%	9.1%	1.9%	10.6%	6.7%	6.1%	15.3%	23.7%	16.6%
Gap	-	17.5%	10.6%	1.6%	0.3%	0.3%	-0.6%	-8.0%	-8.5%	-13.4%

SW WDA	Total	Business & Sales	Health Care & Related	Transportation	Science & Technology	Other Services	Food Service	*CIMR	Management & Support	Production
Number of Job Ads	12,978	2,603	2,342	1,983	748	738	826	1,009	2,133	596
% of Job Ads	100%	20.1%	18.0%	15.3%	5.8%	5.7%	6.4%	7.8%	16.4%	4.6%
Number of Jobseekers	5,988	555	456	521	173	345	408	921	1,619	989
% of Jobs Sought	100%	9.3%	7.6%	8.7%	2.9%	5.8%	6.8%	15.4%	27.0%	16.5%
Gap	-	10.8%	10.4%	6.6%	2.9%	-0.1%	-0.5%	-7.6%	-10.6%	-11.9%

WC WDA	Total	Health Care & Related	Business & Sales	Transportation	Science & Technology	Other Services	Food Service	*CIMR	Management & Support	Production
Number of Job Ads	8,899	2,604	1,391	1,218	424	561	369	674	1,321	337
% of Job Ads	100%	29.3%	15.6%	13.7%	4.8%	6.3%	4.1%	7.6%	14.8%	3.8%
Number of Jobseekers	6,065	611	520	456	150	410	456	964	1,547	951
% of Jobs Sought	100%	10.1%	8.6%	7.5%	2.5%	6.8%	7.5%	15.9%	25.5%	15.7%
Gap	-	19.2%	7.1%	6.2%	2.3%	-0.5%	-3.4%	-8.3%	-10.7%	-11.9%

\*Construction, Installation, Maintenance & Repair

# Total Employment and Wages

Occupations in Missouri that had the highest average annual wage in 2015 were *Science & Technology* (\$75,169), *Management & Office Support* (\$49,865), and *Other Services* (\$47,791). *Management & Office Support* occupations had the highest total employment at over 570,000.

Job Fields	Total Employment	Average Annual Wage
Science & Technology	129,540	\$75,169
Management & Office Support	570,080	\$49,865
Other Services	277,600	\$47,791
Healthcare & Related	395,470	\$45,747
Business & Sales	408,070	\$45,331
Construction, Installation, Maintenance & Repair	296,920	\$40,360
Production	194,370	\$35,480
Transportation & Material Moving	178,290	\$33,450
Food Service	261,900	\$20,900
<b>Total</b>	<b>2,712,240</b>	<b>\$43,640</b>

Source: U.S. Bureau of Labor Statistics, 2015 Occupational Employment Statistics

# Projected Demand

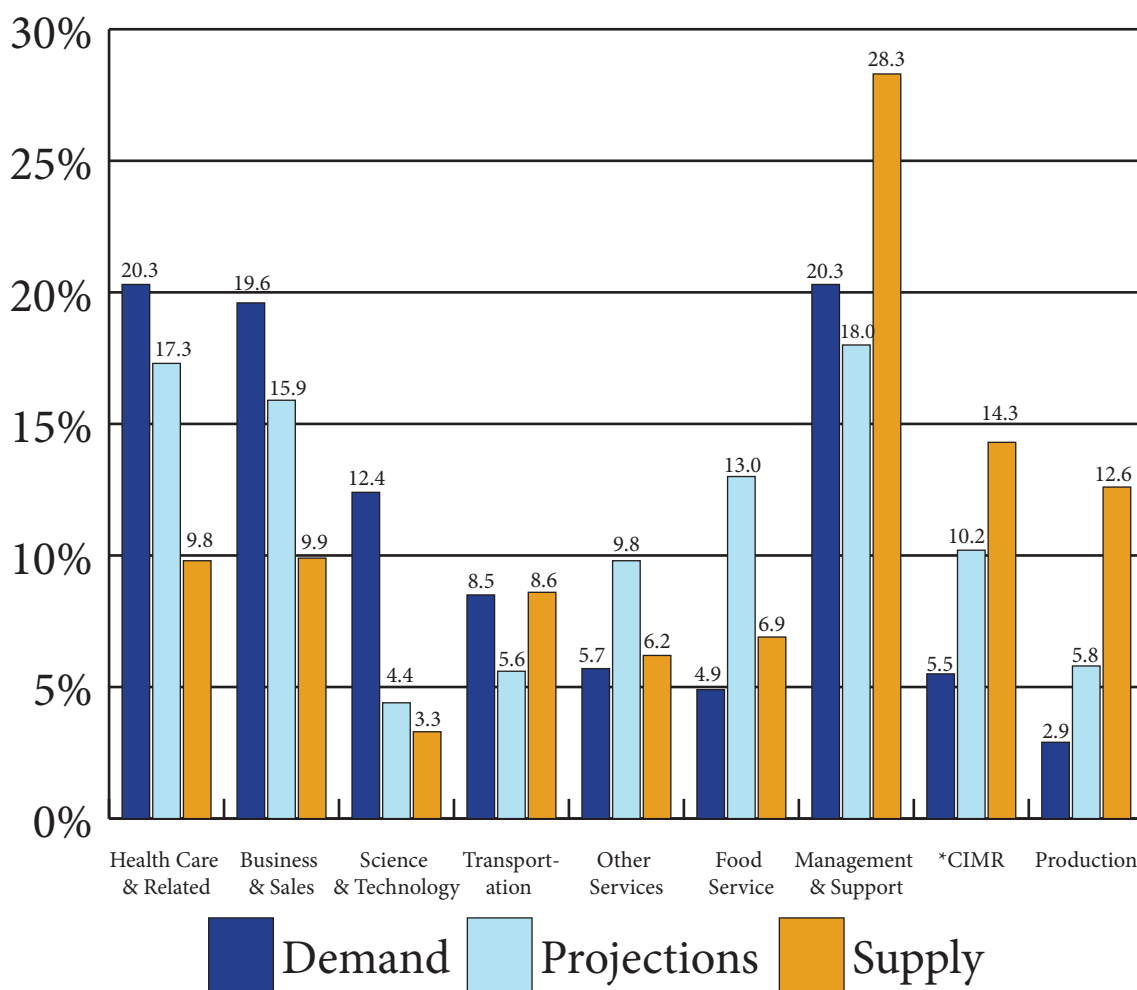
As Burning Glass can only capture job ads posted online, it can also be useful to look at occupational employment projections for a more complete look at the demand of occupation groups. Long-term employment projections measure the projected demand of occupations over a 10-year period, and looks at openings created by new job growth, as well as those created through the need for replacement workers. Replacement openings occur due to retirement, turnover, or transferring to another occupation. Overall about three-fourths (77%) of job demand over the ten-year period is projected to come from replacement openings, and about one-fourth (23%) will come from new job growth. Ten-year projections are estimated every 2 years for over 800 occupations across the state as part of a U.S. Department of Labor and state cooperative program.

Looking at the chart below, over one-third (36.9%) of projected total openings over the 10 year period come from jobs in the *Health Care & Related* and *Business & Sales* job families, both of which also had large supply and demand gaps. This indicates there is both an immediate and longer term need for workers in these occupations. The high *Science & Technology* demand could be a leading indicator of increased demand for tech jobs, but also may be overemphasized due to online bias. Technology jobs are more likely to be posted online than jobs in other areas, such as construction. However, with only 3.3% of jobseekers looking for work in these occupations, combined with a large current demand and strong projected growth, there are job opportunities in technology for workers wanting to expand their skill set.

*Other Services* showed a large long-term demand, making up 9.8% of total projected openings from 2014-2024. This job family includes *Education* occupations and the long-term demand is largely due to the anticipated need to replace teachers as they retire.

*Construction & Related* and *Production*, the occupation families with the largest over supply, were projected to comprise 16% of total job openings from 2014-2024. Eighty-five percent of the long-term job growth in *Production* is projected to come from replacement openings, with only 15% projected to come from new job growth. While *Production* and *Construction & Related* show greater long term demand, it is likely that the skills needed in these occupations are changing. As technology changes the way goods are produced, additional training and skills may be needed to be successful in these occupations.

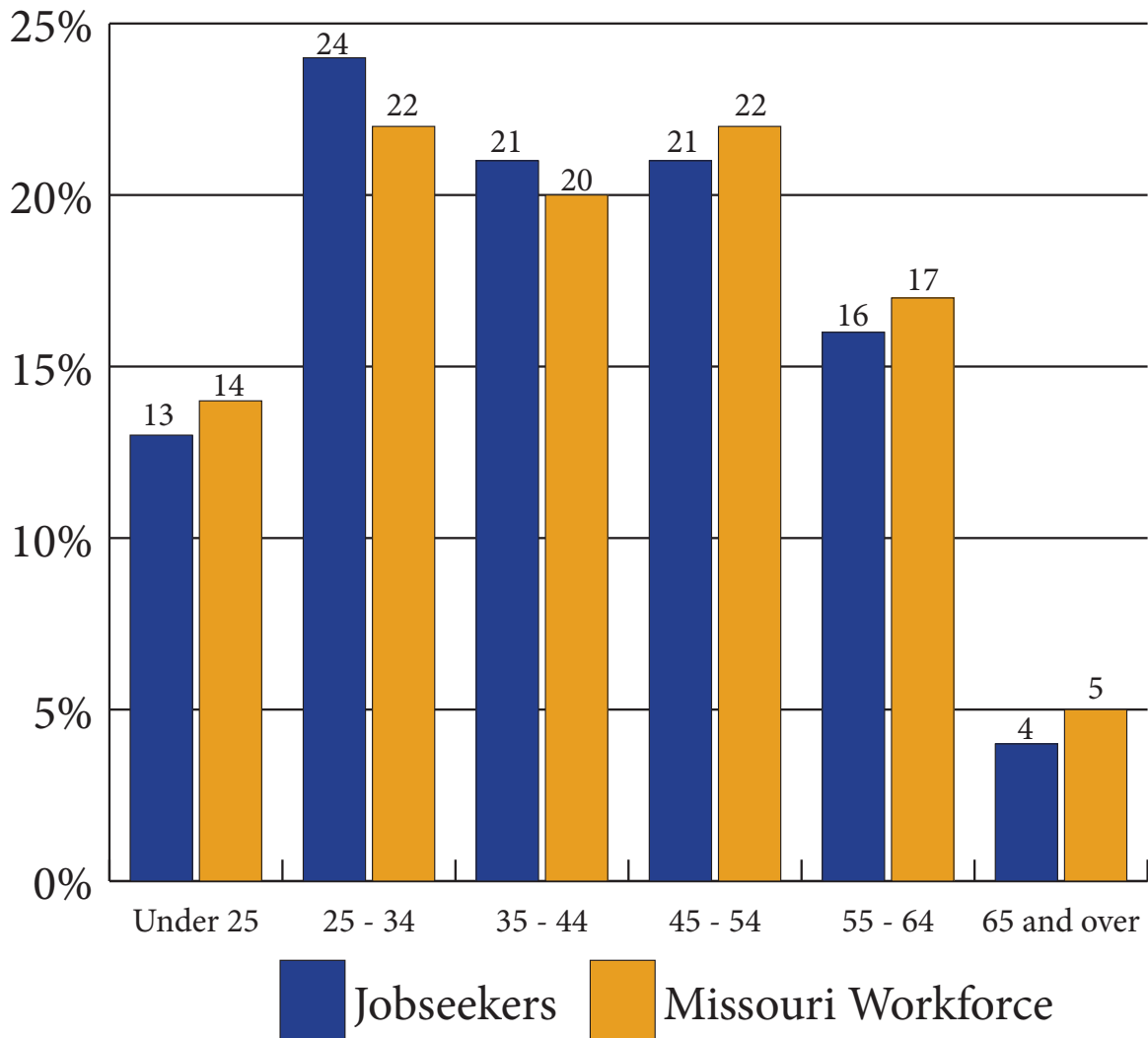
## Missouri Labor Supply and Demand 2016



# Supply Demographics

Out of the active job seekers in Missouri's workforce data system 51% were male and 49% were female. Nearly one-half (45%) of job seekers are between the ages of 25-44, similar to the current workforce share of 42%.

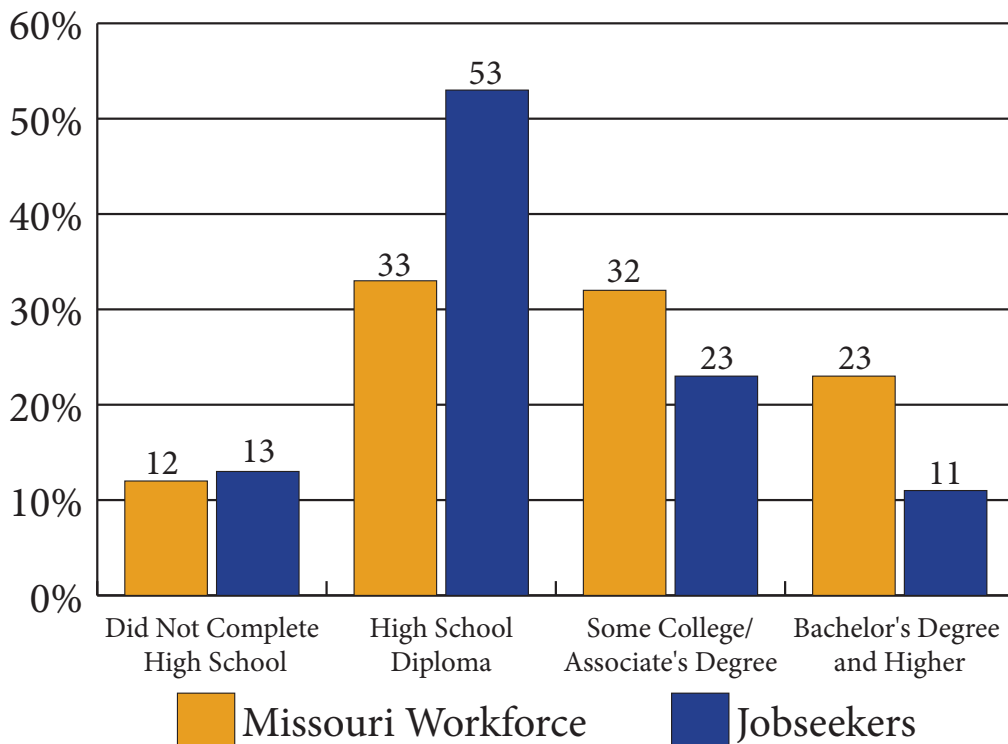
## Age of Jobseekers and Missouri Workforce



# Educational Attainment

Over one-half of the job seekers only have a high school diploma (53%) and slightly over one-third (34%) have sought higher education. Educational attainment for active job seekers is lower than educational attainment for the current Missouri workforce. For example, 55% of Missourians in the workforce have some college or higher compared to 34% of job seekers. Job seekers may need to seek further education or training to gain skills needed to fill gap areas.

## Educational Attainment of Jobseekers and Missouri Workforce



# Notes: Job Field Definition

After careful analysis, occupations with similar attributes were grouped into nine specific “Job Fields”. Occupational families not similar to *Business & Sales, CIMR, Food Service, Healthcare, Management & Office Support, Production, Science & Technology, and Transportation & Material Moving* were grouped into *Other Services*. The chart below illustrates those occupations and corresponding “Job Fields”.

Job Fields	Job Family	SOC CODE
Business & Sales	Business & Financial Operations	13-0000
	Sales & Related	41-0000
Construction, Installation, Maintenance & Repair	Building & Grounds Cleaning & Maintenance	37-0000
	Construction & Extraction	47-0000
	Installation, Maintenance, & Repair	49-0000
Food Service	Food Preparation & Serving	35-0000
Healthcare & Related	Community & Social Service	21-0000
	Healthcare Practitioners & Technical	29-0000
	Healthcare Support	31-0000
	Personal Care & Service	39-0000
Management & Office Support	Management	11-0000
	Office & Administrative Support	43-0000
Production	Production	51-0000
Science & Technology	Computer & Mathematical	15-0000
	Architecture & Engineering	17-0000
	Life, Physical & Social Sciences	19-0000
Transportation & Material Moving	Transportation & Material Moving	53-0000
Other Services	Legal	23-0000
	Education, Training, & Library	25-0000
	Arts, Design, Entertainment, Sports, & Media	27-0000
	Protective Service	33-0000
	Farming, Fishery, & Forestry	45-0000

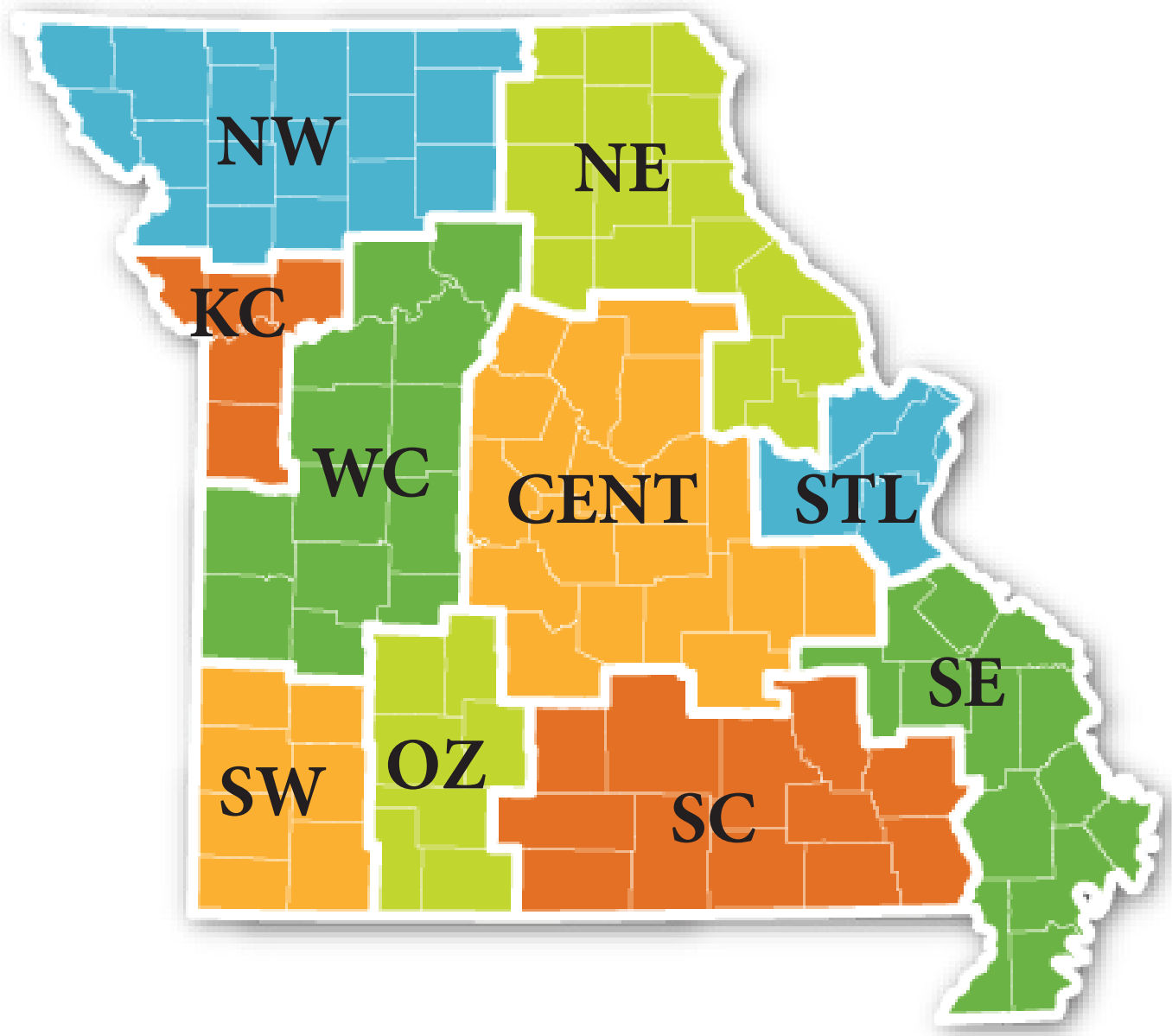


# Workforce Areas



For research purposes Missouri is divided into 10 Workforce Development Areas: Central, St. Louis, Kansas City, West Central, Southwest, Ozark, South Central, Southeast, Northeast, and Northwest. Labor supply and demand data is determined by comparing online job ads and jobseeker data in each region. Due to regional differences in economic makeup across the state, labor supply gaps may differ from region to region.





*Sources:*

*Burning Glass Technologies, Labor& Insight tool: Data for this analysis has been extracted using Burning Glass Technologies, Labor/Insight™ tool that collects information from over 35,000 web sources, including job boards, newspapers, large and small employer websites. Missouri Economic Research and Information Center (MERIC) uses this data to compile and publish reports for the State and Labor Market Regions. While this analysis presents a broad picture of hiring activity and serves as a measure of labor demand, it does not capture openings that are filled through other networks.*

*Jobs.mo.gov jobseeker database*

*U.S. Census Bureau, American Community Survey Estimates*

*U.S. Census Bureau, Quarterly Workforce Indicators*

*U.S. Bureau of Labor Statistics, 2015 Occupational Employment Statistics*

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