

Missouri Jobs by Education and Skill Levels

Missouri has a wide range of occupations that require various levels of education and skill. This report will highlight the employment, openings, and wages of occupations based on education and skill level during the projection period of 2016 to 2026. Generally, occupations requiring lower education and skill levels produce the most job opportunities, but occupations requiring higher education and skill levels have faster growth and higher wages.

Jobs by Education Level

Education categories represent the typical education level most workers need to enter an occupation, as determined by the Bureau of Labor Statistics. Education is very important in terms of median wages, as well as the risk of unemployment. Individuals with an education of less than a high school degree have an average unemployment rate of 10.2% versus a rate of 2.1% for those who have an education of a bachelor's degree or higher.

Employment by Education Level

Among the different education categories, occupations that typically require a high school diploma or less make up a majority of employment in Missouri, with over 1.9 million jobs in 2016. This represents 64.1% of total employment in 2016, with a slight drop to 63% projected by 2026. Occupations that typically require a bachelor's degree represent 20.4% of total employment in 2016, with a slight increase to 21.1% projected by 2026.

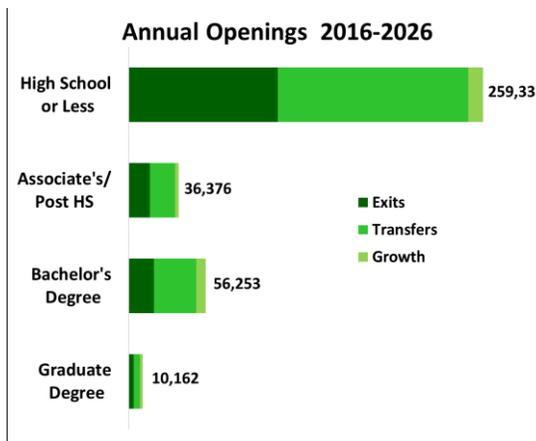
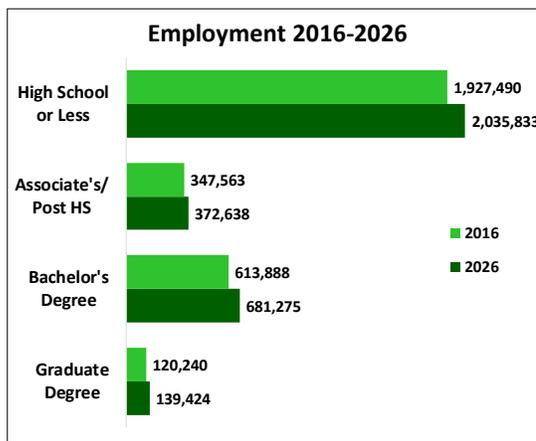
Openings by Education Level

Total job openings are divided into growth openings, exit openings and transfer openings. Growth openings are the result of an occupation growing between the base year and projected year. Exit openings occur when workers leave the workforce entirely. Transfer openings occur when workers leave their occupation for a different one. Across all the education categories, most of the openings are a result of transfers, followed by exits. Therefore, there will be a continued need to replace workers that either leave the workforce entirely or move to a different occupation along their career pathway.

Missouri Unemployment by Education

Educational Attainment	Unemployment Rate
Less than high school	10.2%
High school (includes equivalency)	5.1%
Some college/associate's degree	4.4%
Bachelor's degree or higher	2.1%

Population aged 25-64. U.S. Census Bureau, 2016 American Community Survey 1-Year Estimate



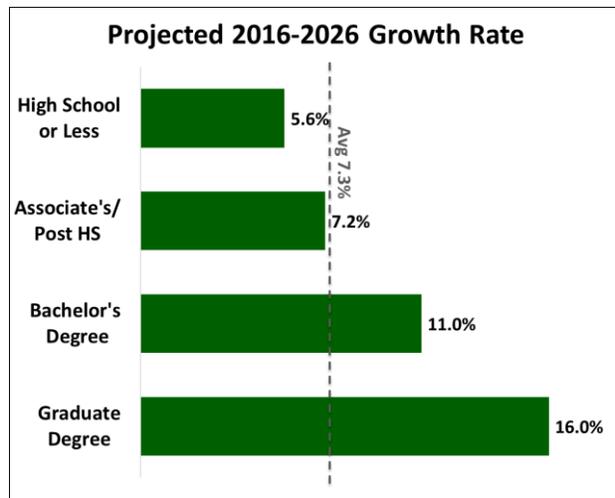
Missouri Jobs by Education and Skill Levels

There are projected to be over 362,000 annual total openings between 2016 and 2026. Occupations that typically require a high school diploma or less are projected to account for 71.6% of these openings. The large numbers of openings in occupations that require lower levels of educational attainment is partly due to the high turnover rate in those occupations. A large number of individuals in these occupations are just starting on their career paths and are more likely to move to other occupations, while individuals in occupations that require higher levels of education are more likely to be farther along in their career paths and less likely to leave their jobs.

Generally, occupations that require higher levels of education have a greater percentage of their openings coming from growth, as compared to occupations requiring lower levels of education. Graduate degree occupations have the highest percentage of their openings coming from growth, with 18.9%. While occupations that typically require a bachelor's degree only account for 15.5% of total openings during the projection period, they make up 30.6% of all growth openings.

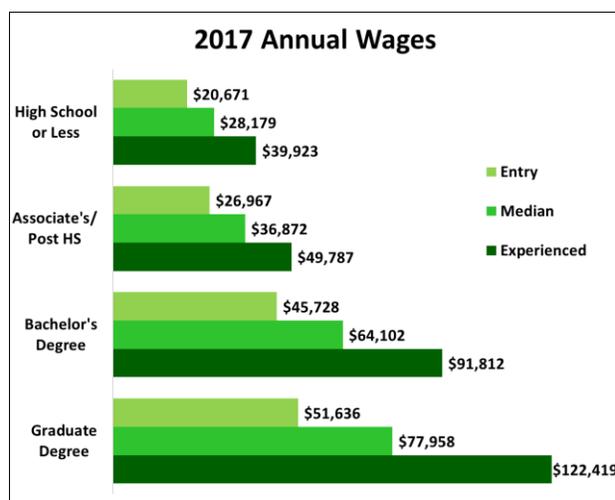
Growth Rate by Education Level

While occupations that typically require a graduate degree have less total employment when compared to the other education categories, they are projected to have the highest percentage of growth between 2016 and 2026, with a growth rate of 16%. This is over twice the 7.3% average growth rate for all occupations in the state. The growth in occupations that typically require a graduate degree is largely fueled by the *Healthcare Practitioners* and *Education* major occupation groups. Occupations that typically require a bachelor's degree have the next highest growth rate at 11%.



Wages by Education Level

Generally, occupations that require more education earn higher wages. Occupations that typically require a graduate degree earn, as a group, a median annual income of \$77,958. This is 177% higher than the median annual income of \$28,179 for occupations that typically require a high school diploma or less. Occupations that typically require a bachelor's degree earn a median annual income of \$64,102, which is 127% higher than the median annual income of \$28,179 for occupations that typically require a high school diploma or less.



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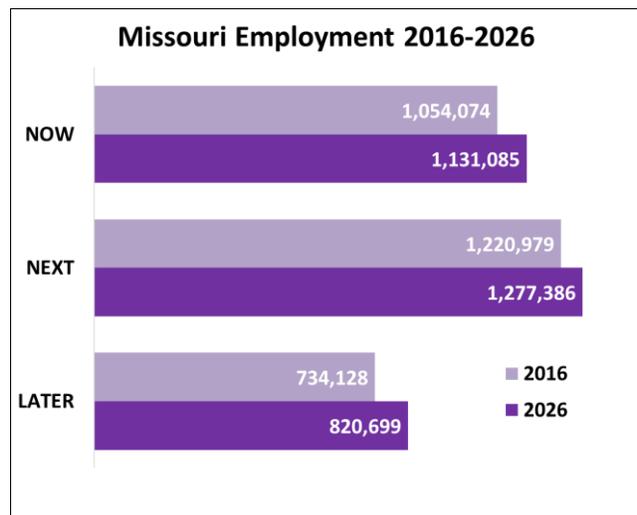
The difference in income is even greater when examining experienced level wages. Occupations that require a graduate degree earn experienced level wages that are 206% higher than experienced level wages for occupations requiring a high school diploma or less, while occupations requiring a bachelor's degree earning 130% more than occupations requiring a high school diploma or less.

Jobs by Skill Level

Occupations are divided into NOW, NEXT, and LATER categories based on skill level. NOW occupations require the least amount of preparation with a typical educational requirement of a high school diploma or less, no experience, on-the-job training of less than one month, and little vocational preparation. NEXT occupations typically require moderate training or experience, with occupations at the higher end of the NEXT category requiring extensive experience, apprenticeships, non-degree certificates, or associate's degrees. LATER occupations require the most amount of preparation, with a bachelor's degree typically required for entry.

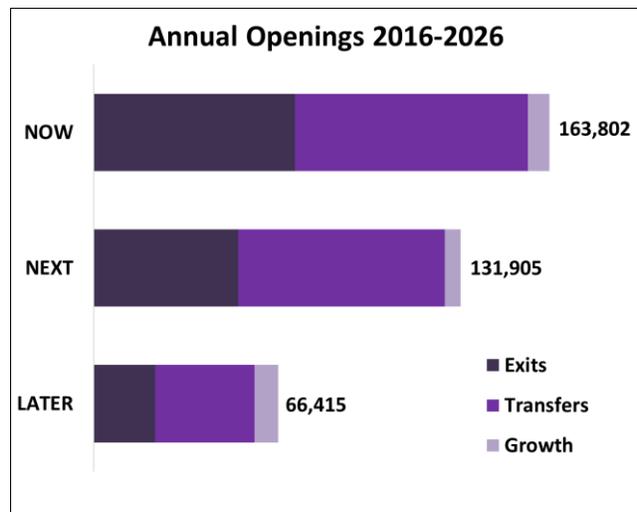
Employment by Skill Level

Among the NOW, NEXT, and LATER categories, The NEXT category has the largest employment with almost 1.2 million jobs in 2016. This represents 40.6% of total employment in 2016. By 2026, this percentage is projected to drop slightly to 39.6%. NOW occupations have the second highest employment with over one million jobs and 35% of the total employment in 2016. By 2026, the percentage of NOW occupations of total employment is projected to remain the same, at 35%.



Openings by Skill Level

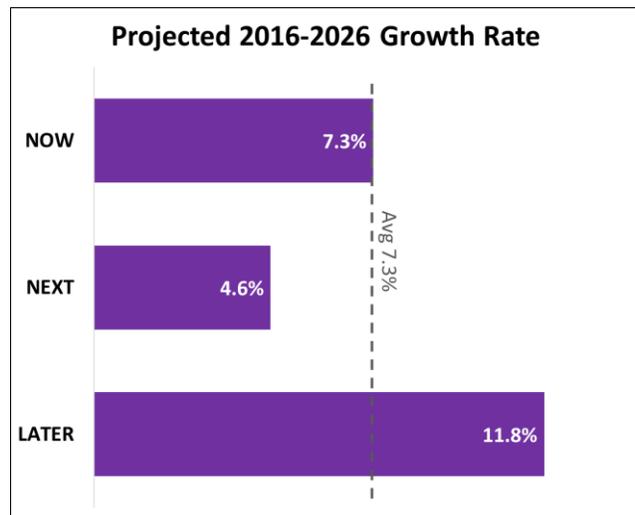
There are projected to be over 362,000 total annual job openings between 2016 and 2026. NOW occupations are projected to account for 45.2% of these openings. Of the over 163,000 total annual openings for NOW occupations, 4.7% are from actual new job growth. LATER occupations are projected to have 13% of their openings coming from new job growth. Across all three skill levels, the majority of openings are transfer openings.



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Growth Rate

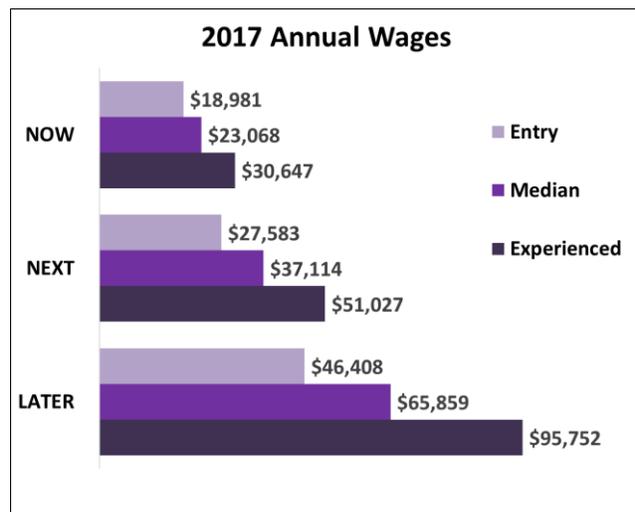
LATER occupations are projected to have the highest growth rate, at 11.8%. This is higher than the average growth rate of 7.3% for all occupations. The major occupational groups of *Healthcare Practitioners, Management, and Business and Financial* are projected to contribute the most jobs to the LATER occupations growth rate. The *Computer and Mathematical* major occupational group has the highest projected growth rate, among LATER occupations, at 19.5%.



Wages

LATER occupations earn the highest wages, with a median annual income of \$65,859. This is 185% higher than the median wage for NOW occupations, and 77.5% higher than the median wage for NEXT occupations. Average entry-level wages for LATER occupations are 144% higher than entry wages for NOW occupations and 68.2% higher than entry wages for NEXT occupations.

The difference in wages between skill levels is higher when comparing experienced level wages. The average experienced level wages for LATER occupations, at \$95,752, is 212% higher than the experienced level wage for NOW occupations and 87.6% higher than the experienced level wage for NEXT occupations.



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Conclusion

In general, occupations that require higher levels of education and skill have higher wages and faster projected growth, while occupations that have lower education or skill levels have a greater number of job openings. Even though occupations that require lower levels of education and skill are not expected to have high growth rates, the high turnover rate in these occupations ensures a large number of job openings during the projection period. This high demand for lower education and skill occupations is not unique to Missouri but is common across other state and national economies. These jobs can be the entry point for higher skill jobs such as NEXT or LATER occupations, that offer higher wages.

Data Sources: Bureau of Labor Statistics typical education and training requirement categories; Missouri Economic Research and Information Center (MERIC) Long-Term Occupational Projections; Bureau of Labor Statistics Occupational Employment and Wage Survey

MISSOURI ECONOMIC RESEARCH AND INFORMATION CENTER

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