

Boone Indicators Dashboard Special Report: Economic Opportunity

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Prepared by:

Institute of Public Policy
Truman School of Public Affairs
University of Missouri



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EXECUTIVE SUMMARY

Economic opportunity in Boone County, Missouri, can be framed around five key ingredients, based on the work of Raj Chetty and colleagues: residential integration, income equity, family stability, quality public schools, and social capital¹. With key investments in these five categories, residents and families in Boone County, the City of Columbia, and the Columbia Public School District can move toward greater equity, which will allow our community to become a place where everyone has the opportunity to thrive.

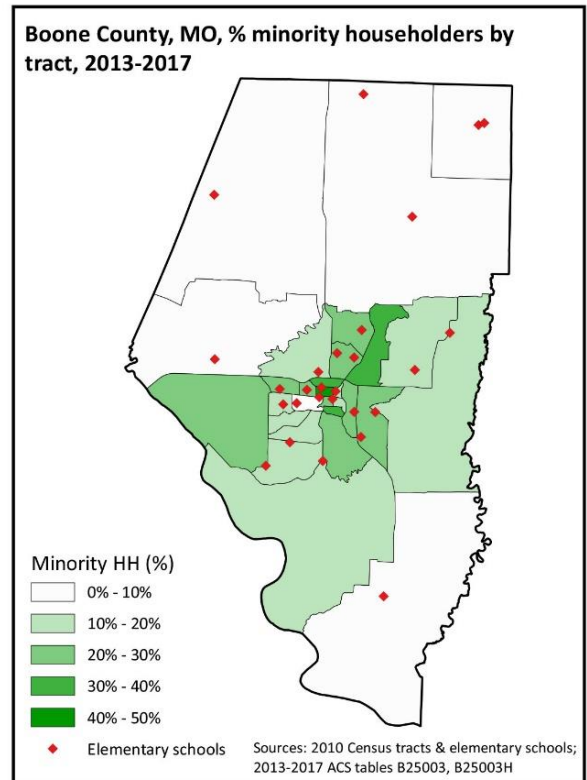
RESIDENTIAL INTEGRATION

Neighborhoods that are integrated across income, race, ethnicity and age hold greater economic opportunity for all. The lead indicator selected for this category is the *percentage of minority householders by tract* in Boone County, see the map at right. In addition to the high levels of racial segregation, Boone County also has high levels of economic segregation. Neighborhoods in Columbia are also highly segregated which leads to segregation within schools.

The most recent estimate indicates that almost a third of total households in Boone County (31.6%) were spending over 30% of their income on housing. Spending more than 30% of income on housing is considered an economic burden.

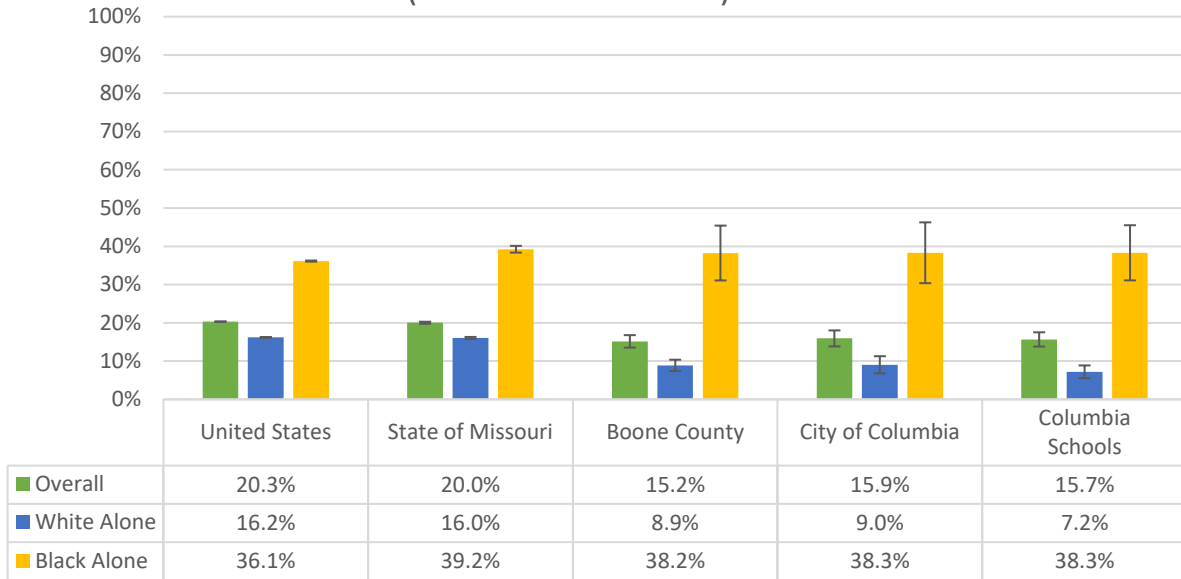
INCOME EQUITY

Communities with greater income equity enable all residents to thrive. The lead indicator selected for this category is *child poverty rate by race* in Boone County, see Figure 1. Boone County has an overall child poverty rate of 15.2%. However, at every geographic level, Black children have a much higher rate of poverty, with an estimated 38.2% of Black children in Boone County in poverty. This compares to 8.9% of White children.



Boone County has an unemployment rate of 2.6%, compared with 3.8% in the state. When analyzed by race, the current unemployment rates are much higher for people of color with 5.7% of Black individuals and 4.5% of Asians in Boone County unemployed. The median family income for White households is \$79,477, whereas for Black households it is \$35,801, a difference of \$43,676.

Figure 1. Child Poverty Rate by Race, 2013-2017
(ACS 5-Year Estimate)

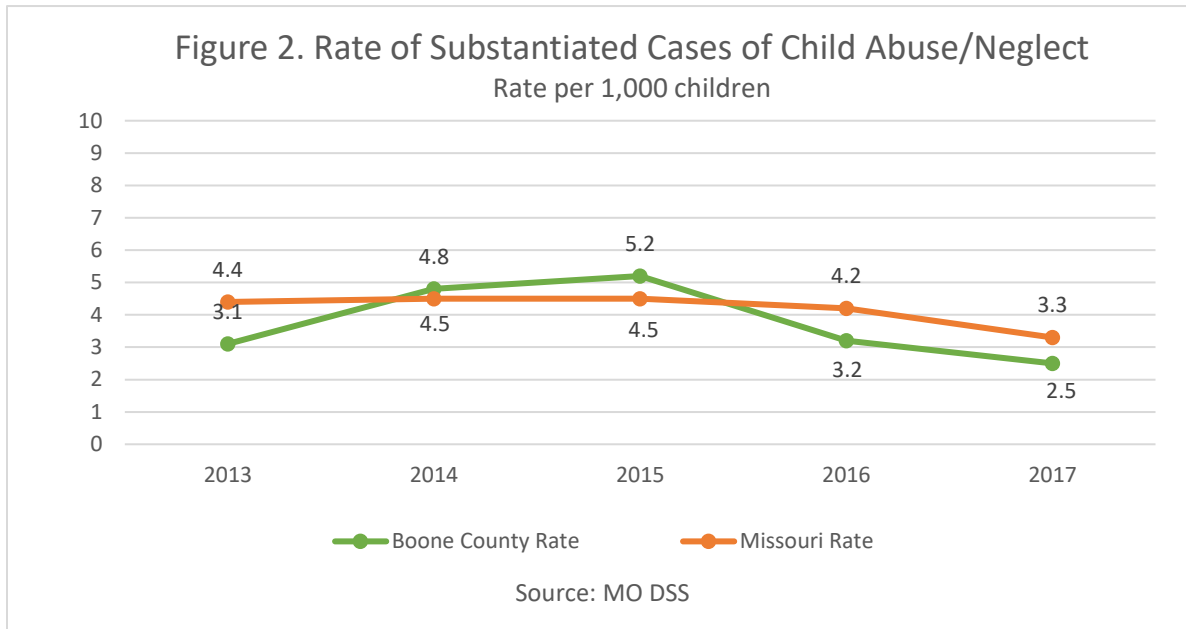


Source: American Community Survey

One pathway to higher incomes is through education. Earnings increase for every level of education achieved in each geography considered. Earnings for people with higher education are compressed in Boone County, the City of Columbia and the Columbia Public School district boundaries. For example, median earnings for people with graduate degrees in the U.S. is approximately \$69,903 compared to \$54,235 in Boone County, a difference of \$15,668.

FAMILY STABILITY

Greater family stability, as measured by housing, job security and family structure, reduces stress and allows children to meet their highest potential when they become adults. The lead indicator for family stability in Boone County is *substantiated child abuse and neglect cases* in Boone County, see Figure 2. Both Missouri and Boone County reported declines in the number and rate of substantiated child abuse and neglect, with Missouri decreasing slightly from 4.5 cases per 1,000 children in 2015 to 3.3 in 2017. In the same time period, Boone County decreased from 5.2 cases per 1,000 children in 2015 to 2.5 in 2017.



Consistent with the state of Missouri, infant mortality rates from 2007 to 2017 were more than twice as high for the Black population than White in Boone County. From 2013 to 2017, the rate of low birth weight for full-term infant births in Boone County was 5.26 for Black infants, and 1.92 for White infants, per 100 resident live births.

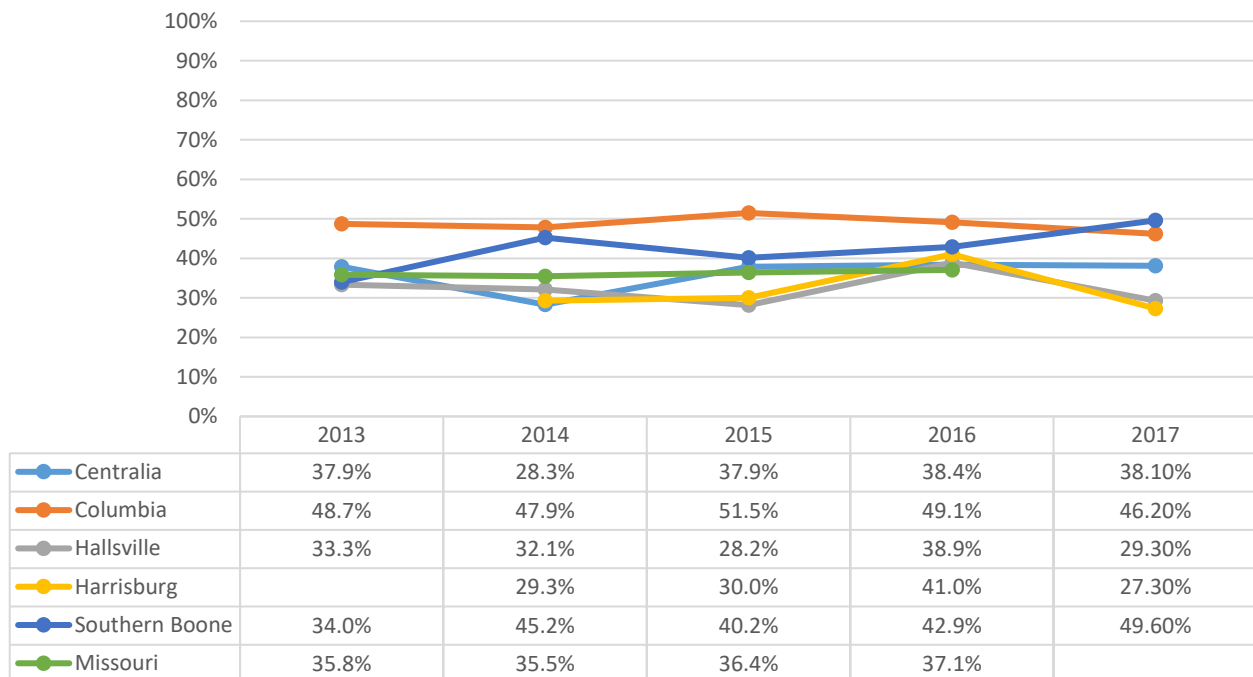
Half of all prisoners in the U.S. are parents, and the number of children with a mother in prison increased 131% from 1991 to 2007.

QUALITY PUBLIC SCHOOLS

High quality public schools provide opportunities for children to grow into adults with better opportunities for further education and employment with higher pay. The lead indicator selected for this category is the *rate of high school graduates in Boone County entering two and four-year colleges or employment*, see Figure 3. Many students in the county, about 60-72% are attending 2 or 4-year colleges. Smaller numbers, 9-33% are entering employment after graduation. Most Boone County school districts have higher four-year graduation rates compared to the state average of 89.2%. Columbia has the lowest rate at 88.4%, and falls below the state average.

Figure 3. Percentage of Boone County Graduates Entering 4-Year College, 2013-2017

(Harrisburg suppressed 2013; Sturgeon suppressed all years)

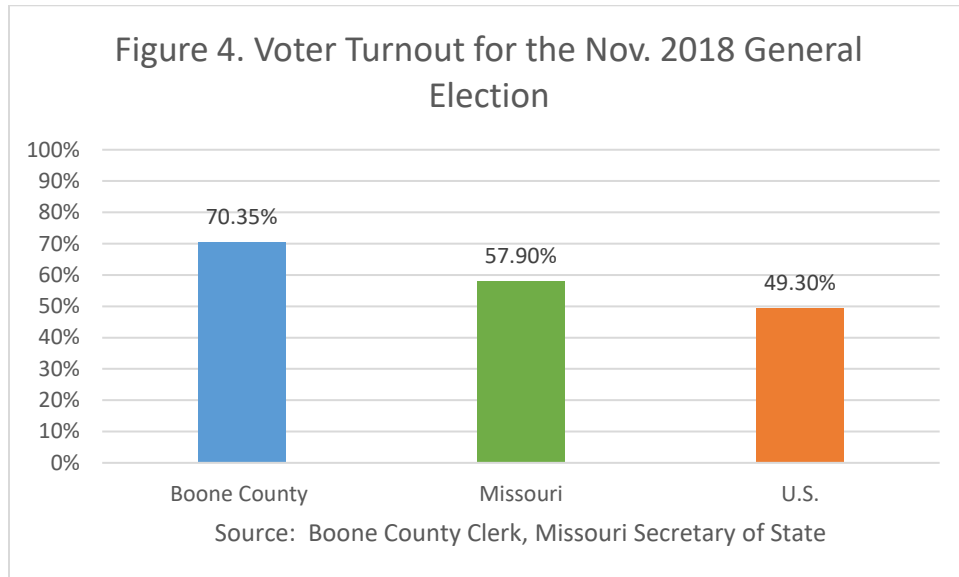


Source: MO DESE

There are racial disparities in assessment scores for Columbia Public Schools. Third grade language arts MAP scores show 28.8% of Black students scoring proficient or advanced on the MAP test, compared to 70% of White students. This trend continues through each of the MAP tests analyzed. The largest gap is seen in language arts in grade six where 66.7% of White students are proficient or advanced whereas only 15.6% of Black students are, a gap of 51.1%.

SOCIAL CAPITAL

Similar to economic capital, which can be leveraged into access to credit for starting a business or buying a home, social capital includes the social connections we have that can lead to employment and other economic opportunities. The more connections that exist in a community, both formal and informal, the greater the economic opportunity for everyone, particularly those with lower incomes and fewer resources. The lead indicator for this category is *voter turnout in Boone County*, see Figure 4. Voter turnout in Boone County was 70.35%, exceeding turnout rates for Missouri and the United States.



Feelings of safety are an important measure of connectedness among neighbors, which is one piece of social capital. From County Level Study data collected in 2016, approximately 85% of Boone County residents consider their neighborhood to be extremely or quite safe.

Infrastructure such as sidewalks can help connect members of a community. In Columbia, most citizens reported they are satisfied or very satisfied with the availability of sidewalks in the city. In the 2018 City of Columbia Survey, 92% of residents felt safe walking in their neighborhood during the day and 62% felt safe walking in their neighborhood at night.

METHODOLOGY

This report consists of the most recent and relevant publicly available data. These data are published regularly or routinely to allow for ongoing benchmarking and tracking. For each mobility category, one data point was selected as an indicator to benchmark and monitor change on an ongoing basis. The selected data point was relevant to the category, could potentially impact intergenerational mobility, and was agreed upon by the funders. When available, margins of error are included with ACS data. In some circumstances of low counts, data have been suppressed for reliability and confidentiality. Additionally, the analysts excluded data sources or indicators that have been found to be unstable for less-populated geographies.

Data sources include:

- American Community Survey (ACS)
- Boone County
- Bureau of Labor Statistics (BLS)
- City of Columbia (CPS)
- Columbia Public Schools
- Missouri Department of Corrections (MODOC)
- Missouri Department of Elementary and Secondary Education (MODESE)
- Missouri Department of Social Services (MODSS)
- Missouri Kids Count
- Missouri Public Health Information Management System (MOPHIMS)

SUMMARY REPORT

INTRODUCTION

This report examines data related to economic opportunities in Boone County, Missouri, utilizing the most recent publicly available data. This report is framed using research conducted by Raj Chetty and colleagues that identifies barriers to intergenerational mobility in five categories: residential integration, income equity, family stability, quality public schools, and social capital.² Intergenerational mobility is defined as the ability for the next generation to achieve better economic and social outcomes than the previous one.

The data source and year are provided for each indicator. Unless otherwise noted, American Community Survey 5-year estimates (2013-2017) are the most recently released. See the methodology section for more details regarding data sources and collection.

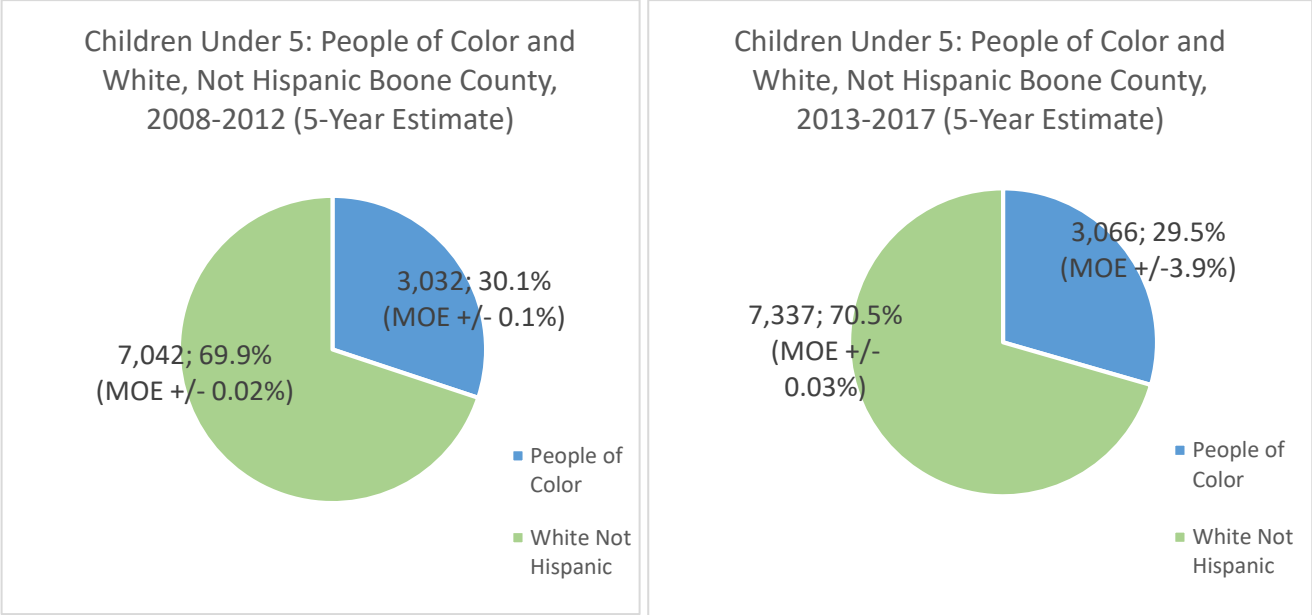
THE CHILD POPULATION OF COLUMBIA AND BOONE COUNTY

According to the American Community Survey (ACS) 5-year estimates, there are approximately 35,656 children under 18 in the county. Approximately 14% of Boone County's population is age 5-17, compared with 16.7% in Missouri and the U.S. About 6% of the Boone County population is under 5.

To analyze the child and youth population, this report groups data into categories of people of color and White, not Hispanic. People of color includes those who are White and Hispanic, as well as other people of color, including Black/ African American, Asian, Native American and additional communities of color. The small size of the Hispanic population prevents disaggregation by ethnicity for many indicators.

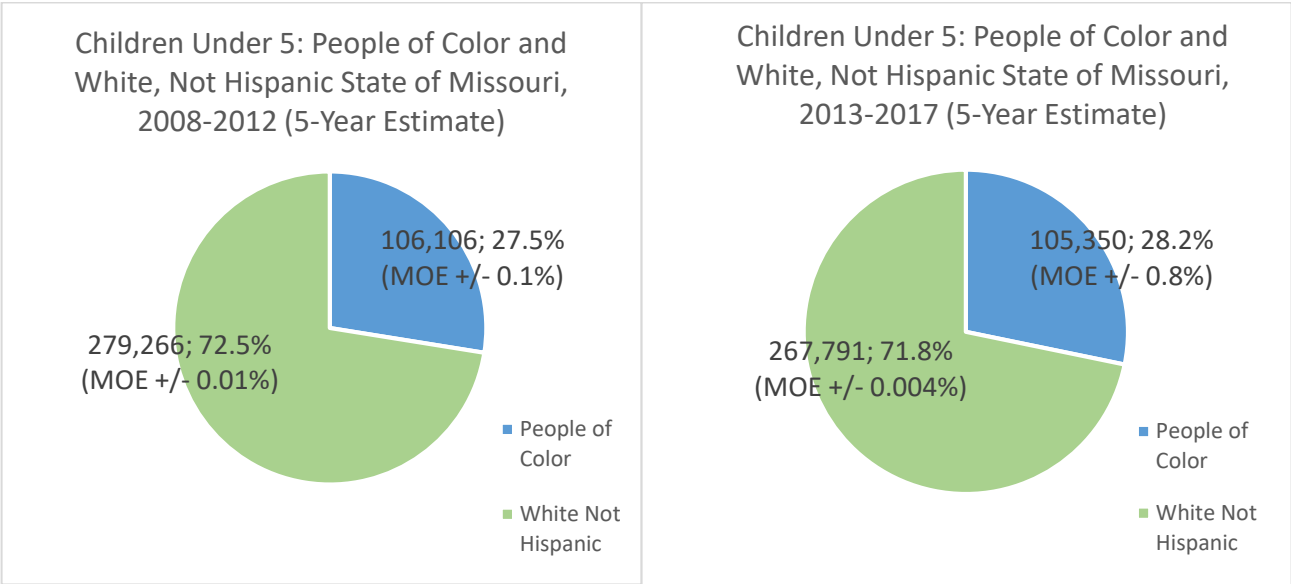
In Boone County 29.5% of children under 18 are people of color according to ACS 5-year data. In the United States, there is more diversity with more than half of children under five (50.4%) and 48.1% of the 5-17 year old population being people of color. The level of diversity in Boone County has remained relatively constant between the 2008-2012 and 2013-2018 5 Year estimates, see Figure 5.

Figure 5. Boone County Children Under 5



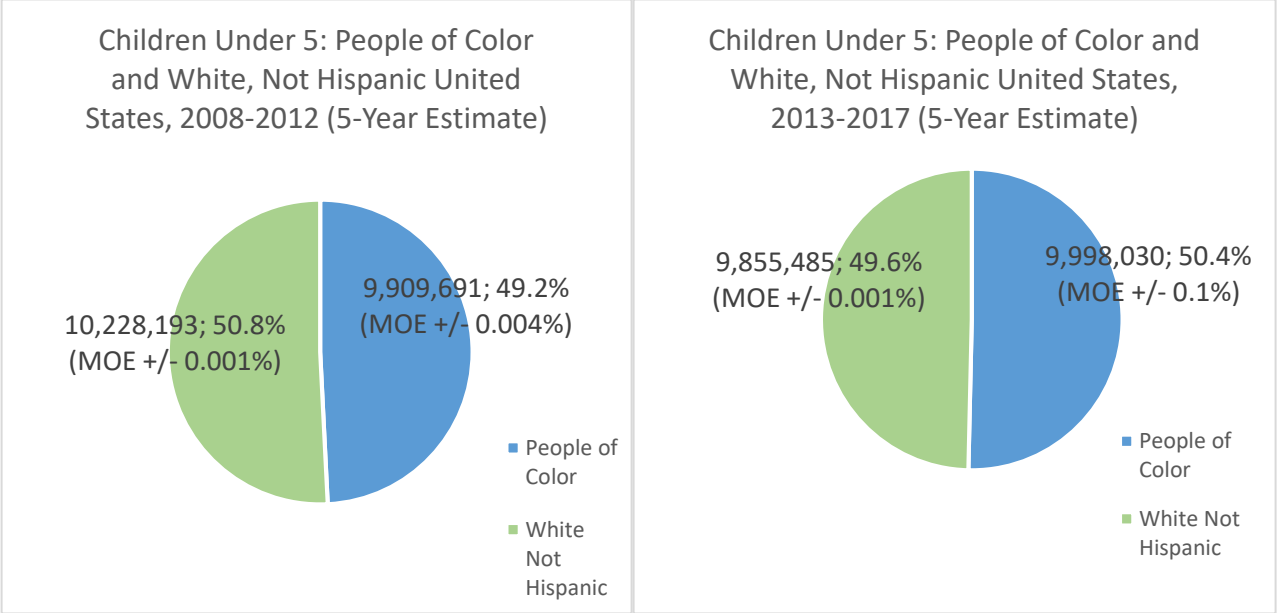
Missouri is slightly less diverse than Boone County, but the rate of people of color and White not Hispanic are very similar in both Missouri and Boone County, see Figure 6.

Figure 6. Missouri Children Under 5



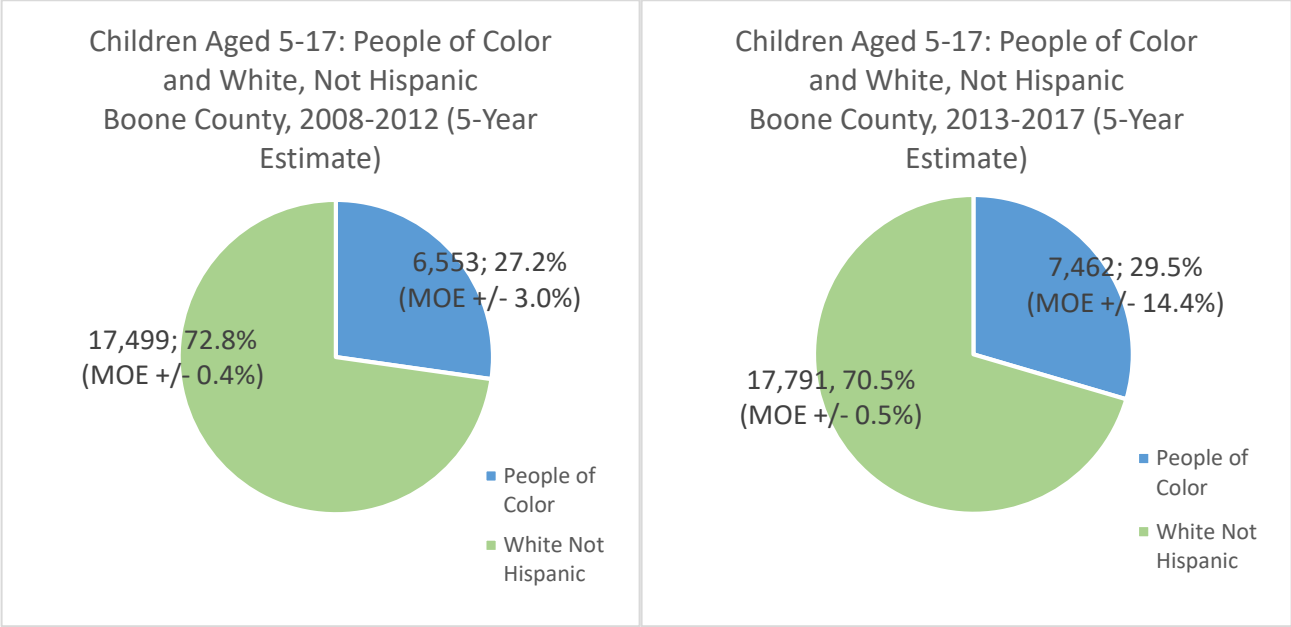
The most recent 5-year estimate (2013-2017) shows that the United States is moving toward a “Majority Minority” country, see Figure 7. For the first time, more than half of the population under 5 is comprised of people of color. As children age to adulthood, they will comprise the majority of the population in the country.

Figure 7. U.S. Children Under 5



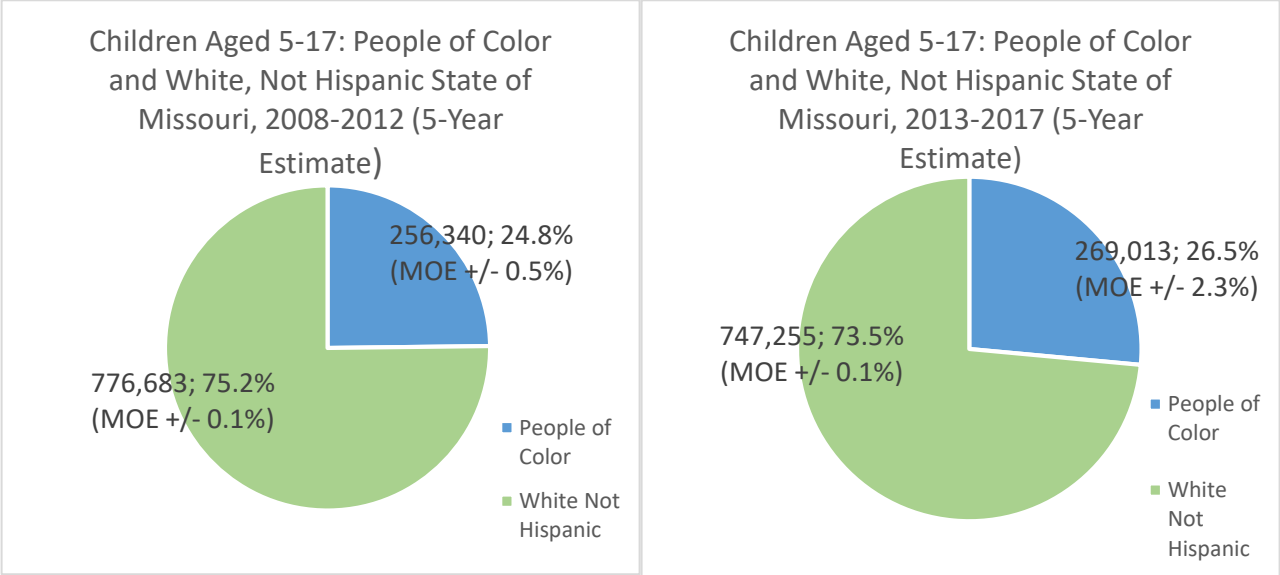
Demographic change is happening more slowly in Boone County than the United States as a whole. The 2013-2017 estimated rate of people of color for children aged 5-17 is the same as children under 5 during the same time period, see Figure 8.

Figure 8. Boone County Children 5-17



The change in the proportion of people of color who are children aged 5-17 is within the margin of error in the two most recent 5-year estimates for Missouri. In other words, the proportion of both people of color and White not Hispanic is remaining constant in Missouri, unlike the United States, see Figure 9.

Figure 9. Missouri Children 5-17



Unlike Boone County and Missouri, the children aged 5-17 in the U.S. became more diverse between the 2008-2012 and 2013-2017 5-year estimate time periods, changing from 45.4% to 48.1% people of color, see Figure 10. This change is larger than the margin of error. For all children under 18 in the United States, 48.7% are people of color and 51.3% are White, see Figure 11.

Figure 10. U.S. Children 5-17

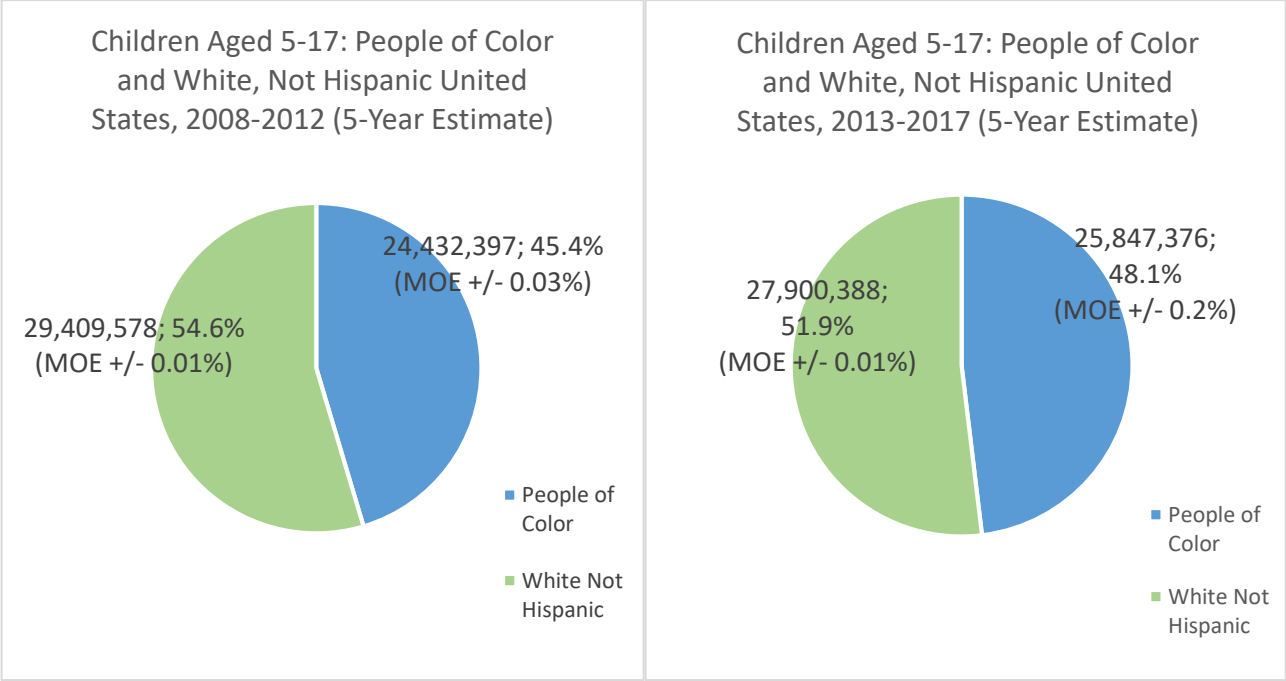
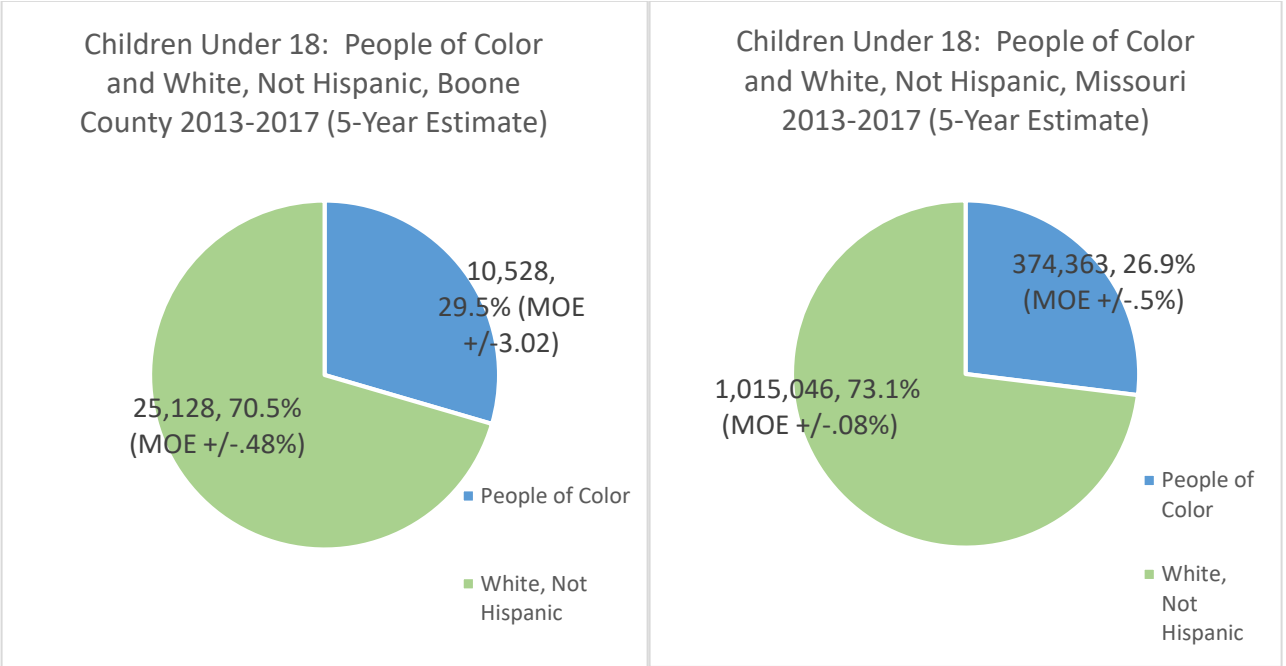
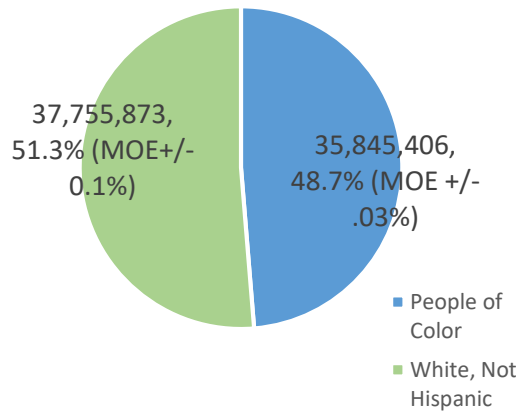


Figure 11. Children under 18, Boone, Missouri, U.S.



Children Under 18: People of color
and White, Not Hispanic, United
States 2013-2017 (5-Year Estimate)



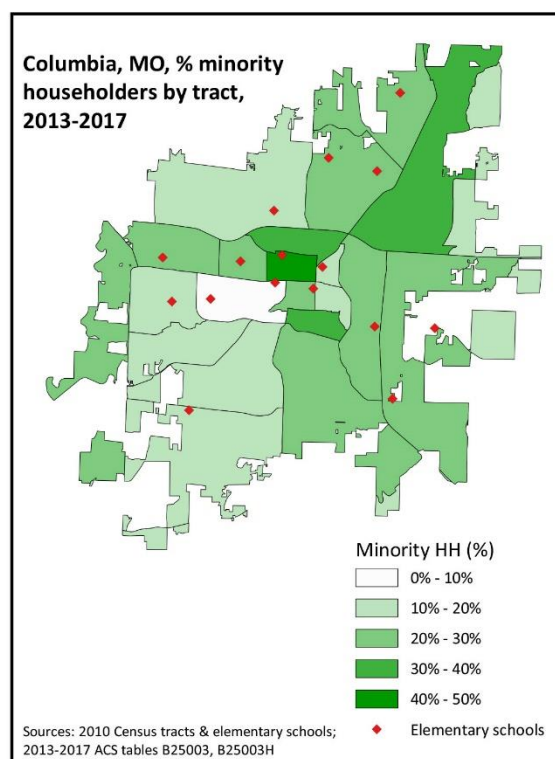
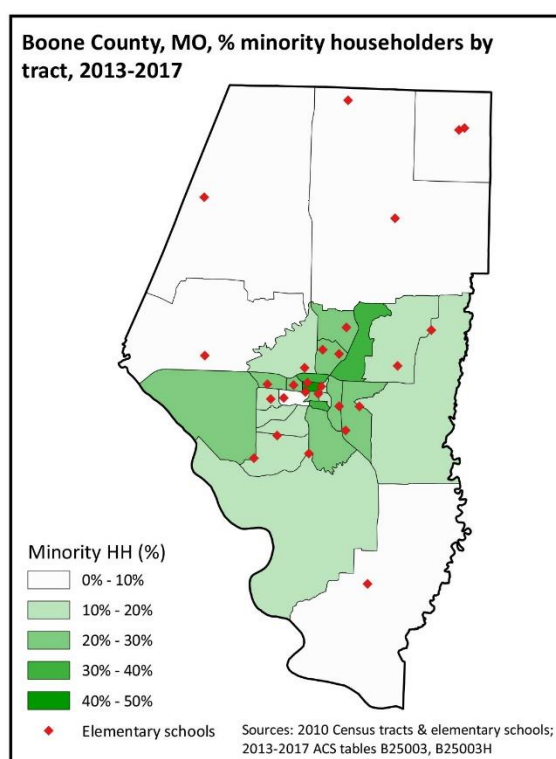


EXPLORE RESIDENTIAL INTEGRATION

The research conducted by Raj Chetty and his colleagues indicates that racial and economic residential segregation is a significant barrier to upward mobility, because of reduced access to education, career, and community resources. Higher levels of residential integration can improve educational attainment, as well as health and economic outcomes for the community.³

The lead indicator selected for this category is the *percentage of minority householders by tract in Boone County*, see Figure 12. (Minority householders include those who are White and Hispanic.)

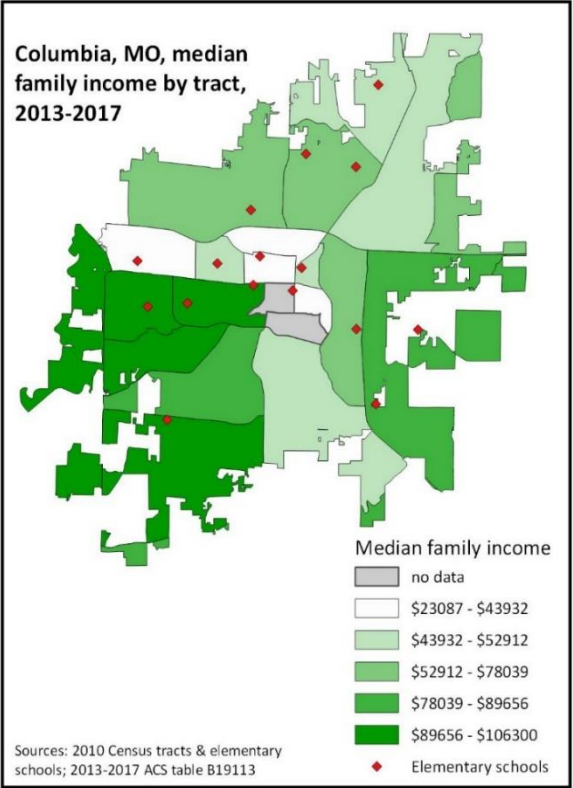
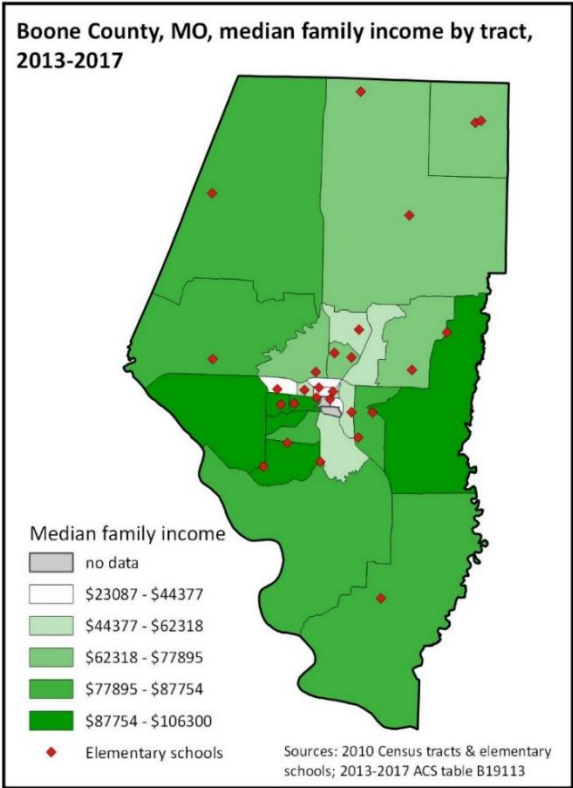
Figure 12. Boone County and Columbia Percent Minority by Tract



While none of Boone County's census tracts are "majority minority," there are significant disparities in the percentage of the population in each tract that are people of color. In addition to the high levels of racial segregation shown in this map, Boone County also has high levels of economic segregation. Individuals with higher incomes tend to reside outside of the central city and in the more rural portions of the county.

The map also includes elementary school locations, to give a sense of where schools are located relative to populations that are more diverse, see Figure 13. Neighborhoods in Columbia are also highly segregated which leads to segregation within schools.

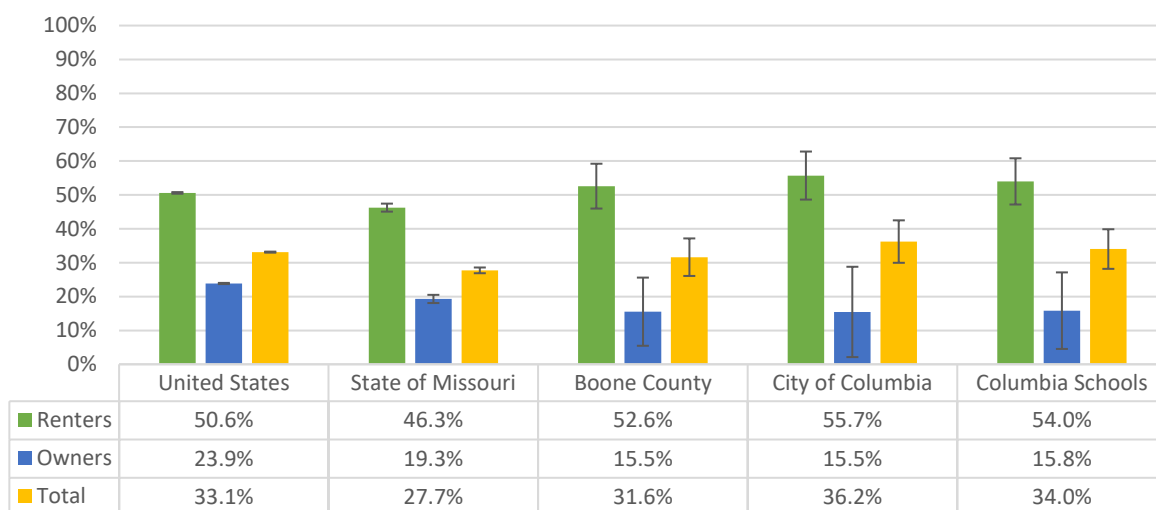
Figure 13. Boone County and Columbia Median Family Income by Tract



Affordable Housing

The cost of housing and the availability of affordable housing play a significant role in residential segregation. In Boone County, according to 5-year ACS data, 31.6% of total households were spending over 30% of their income on housing, similar to the U.S. rate, but higher than the Missouri rate of 27.7%, see Figure 14.

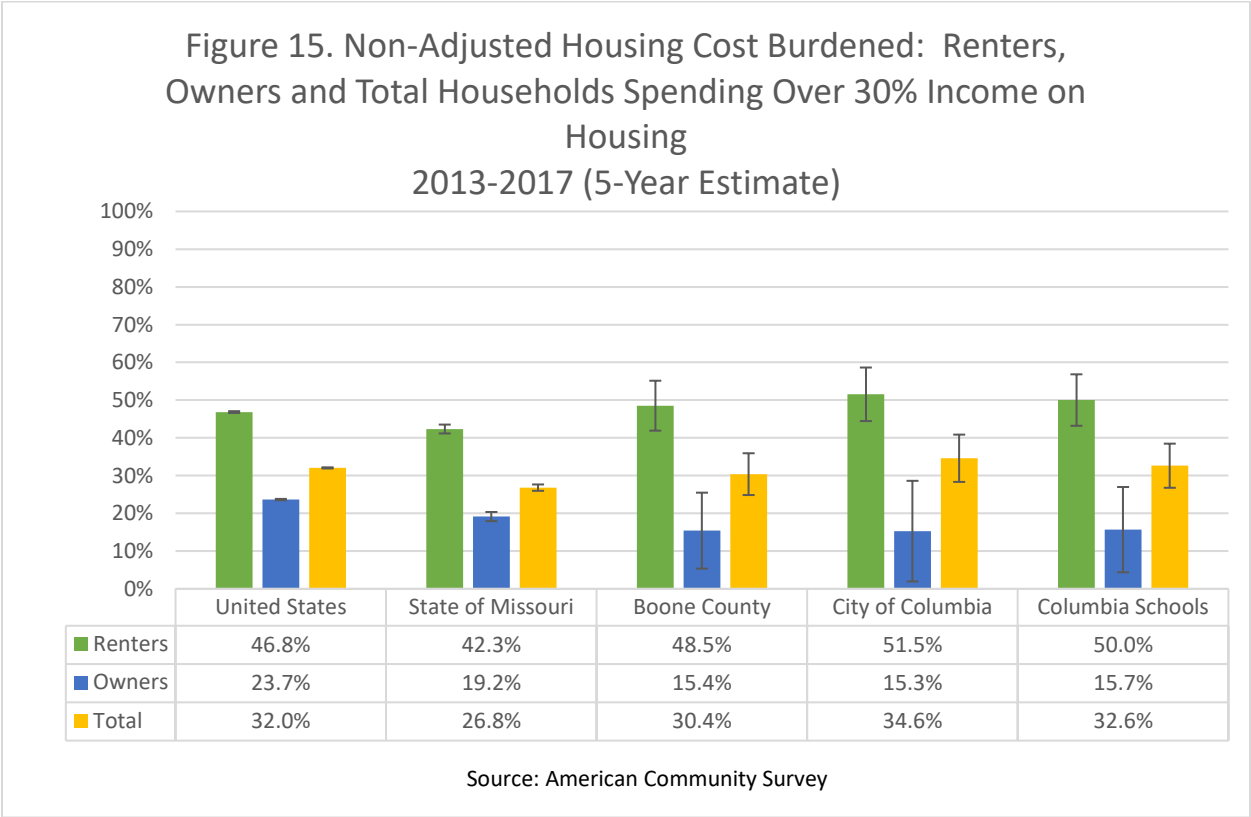
Figure 14. Adjusted Housing Cost Burdened: Renters, Owners and Total Households Spending Over 30% Income on Housing 2013-2017 (5-Year Estimate)



Source: American Community Survey

For those renting in Boone County, 52.6% of renting households were spending over 30% of their income on housing, according to 5-year ACS adjusted data. In the City of Columbia, the rate is 55.7%, higher than the state and the U.S. College students are included in these data, and in 2017, approximately 79% of the University of Missouri's total enrollment of 30,820 lived off campus.⁴ Figures are adjusted by removing households for whom income or housing cost is unknown from the denominator. These figures are provided by the Missouri Census Data Center.

Non-adjusted housing cost burden, shows similar circumstances, but with lower overall percentages, see Figure 15. The denominator for these rates includes all households, instead of just those for whom housing costs and incomes are known. Thus, the rates are lower. These are the officially released data from the US Census Bureau.



Because of the historical nature of racial and economic segregation, policy and program solutions can seem inadequate to address the issue. According the Urban Institute, what is needed is a “sustained commitment to changing the geography of opportunity in America.”⁵ There are a variety of policy and program opportunities designed to improve residential integration. The Urban Institute suggests investing in poor neighborhoods, eliminating barriers to upward mobility and using housing subsidies as strategies to tackle segregation.⁶

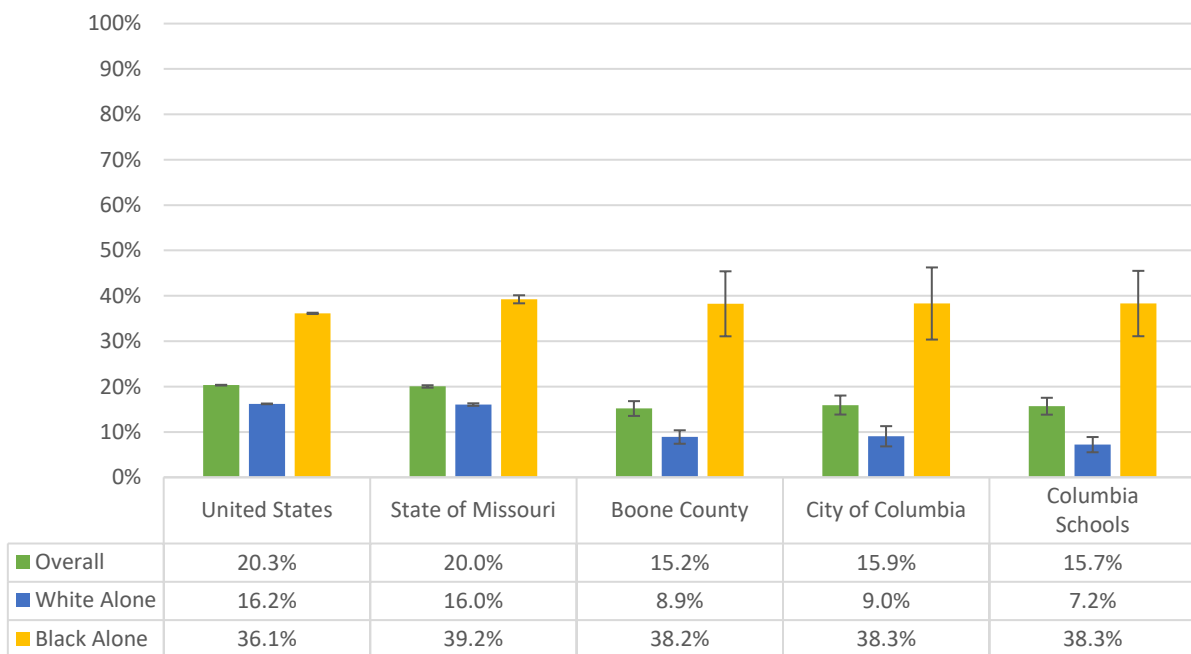


EXPLORE INCOME EQUITY

Income equity describes an ideal where everyone in a community has adequate resources to meet their basic needs and enjoy a high quality of life. In contrast, income inequality refers to the extent to which income is distributed in an uneven manner among the population. The Chetty model indicates that high levels of income inequality limit intergenerational mobility due to lack of resources and opportunities. Income inequality has been steadily increasing in the U.S. in the past 30 years, due to changes in technology and trade and subsequent falling wages.⁷ This summary looks at measures of inequality such as children and families in poverty, the Gini index, and earnings, and also examines contributing factors to inequality such as unemployment rates by race and earnings by educational attainment.

The lead indicator selected for this category is *child poverty rate by race in Boone County*, see Figure 16. According to ACS, 5-year estimates, overall in Missouri and the U.S., approximately 20% of children are in poverty. Boone County has a lower overall child poverty rate at 15.2%. However, at every geographic level, Black children have a much higher rate of poverty, with approximately 38.2% of Black children in Boone County in poverty, compared to just 8.9% of White children.

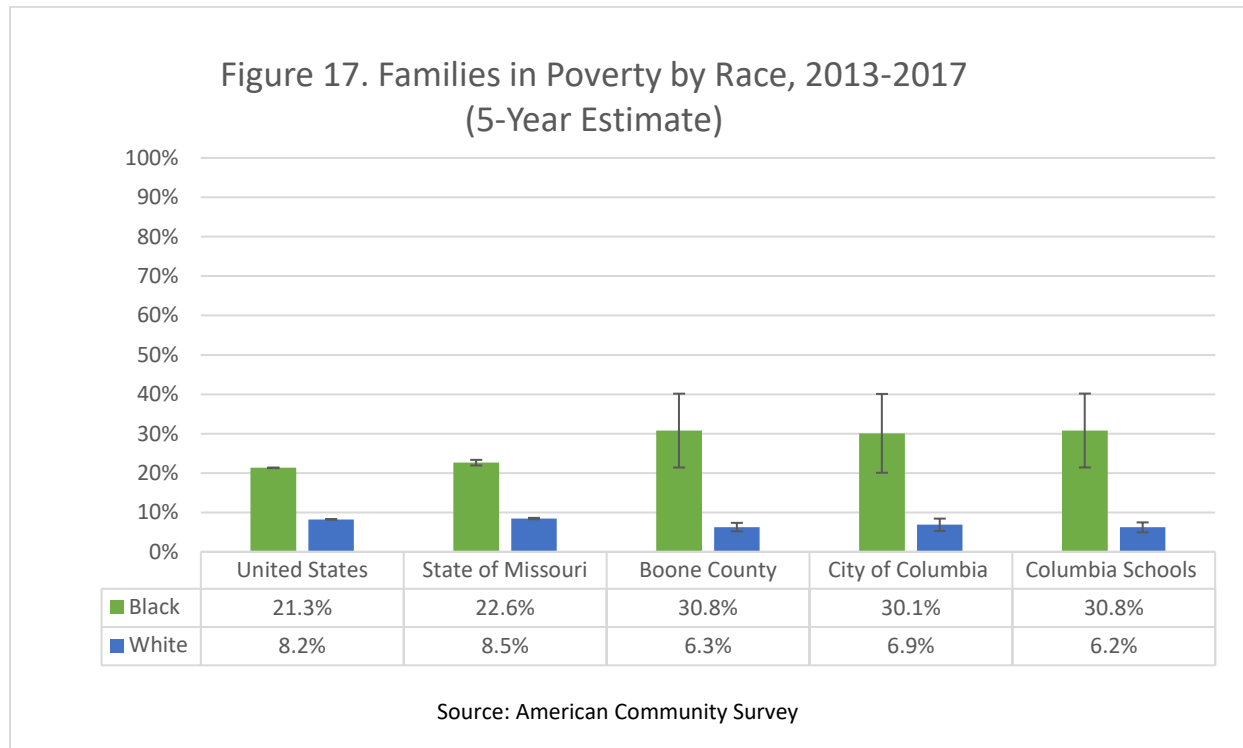
Figure 16. Child Poverty Rate by Race, 2013-2017
(ACS 5-Year Estimate)



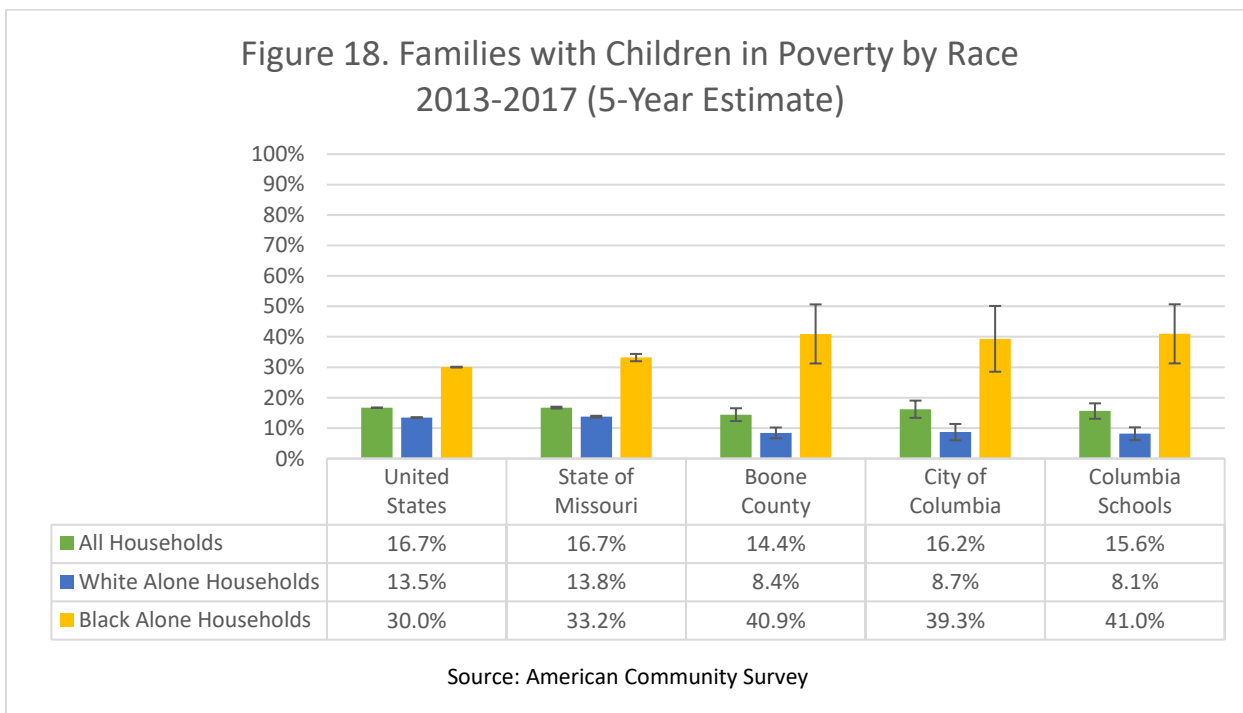
Source: American Community Survey

Families in Poverty

According to ACS 5-year estimates, in Boone County, Black families are much more likely to be living in poverty than White families, as is true in Missouri and the United States, see Figure 17.

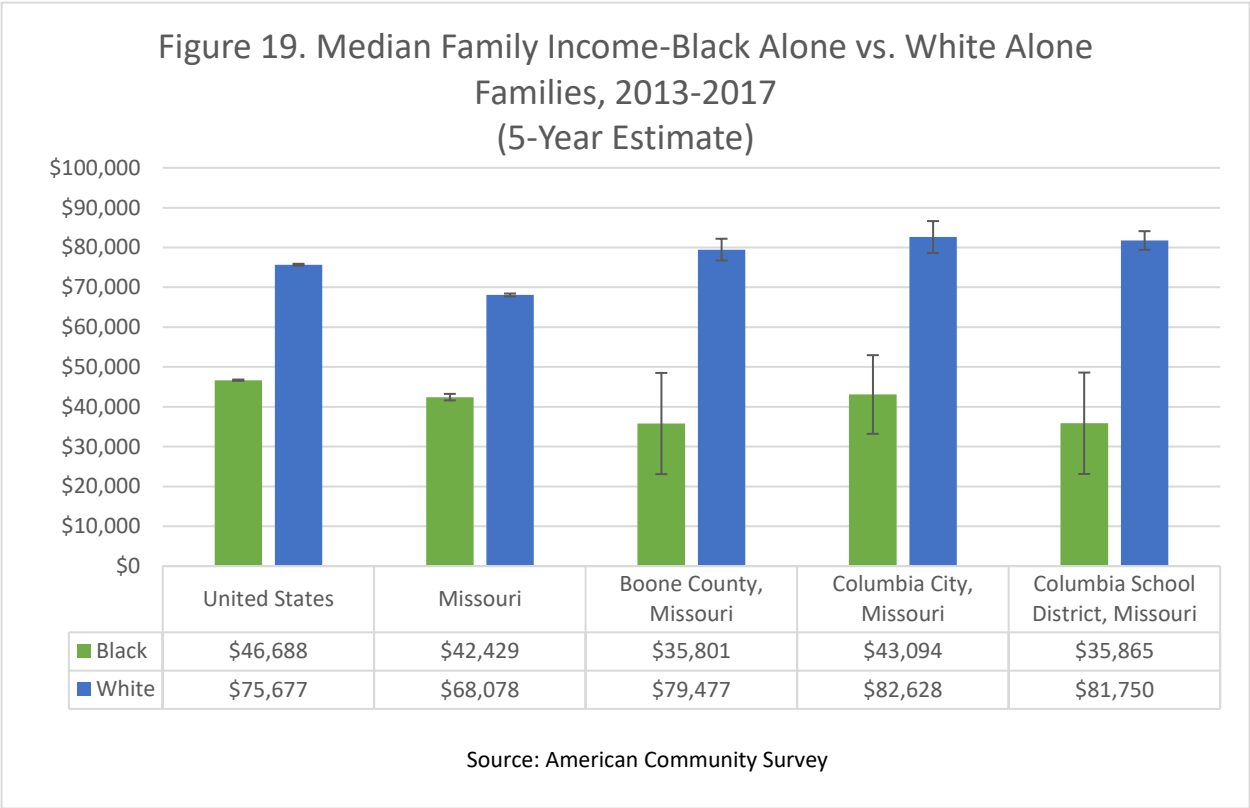


Also, Black families with children are also much more likely to be living in poverty, with 40.9%, than White families, with 8.4%, see Figure 18.

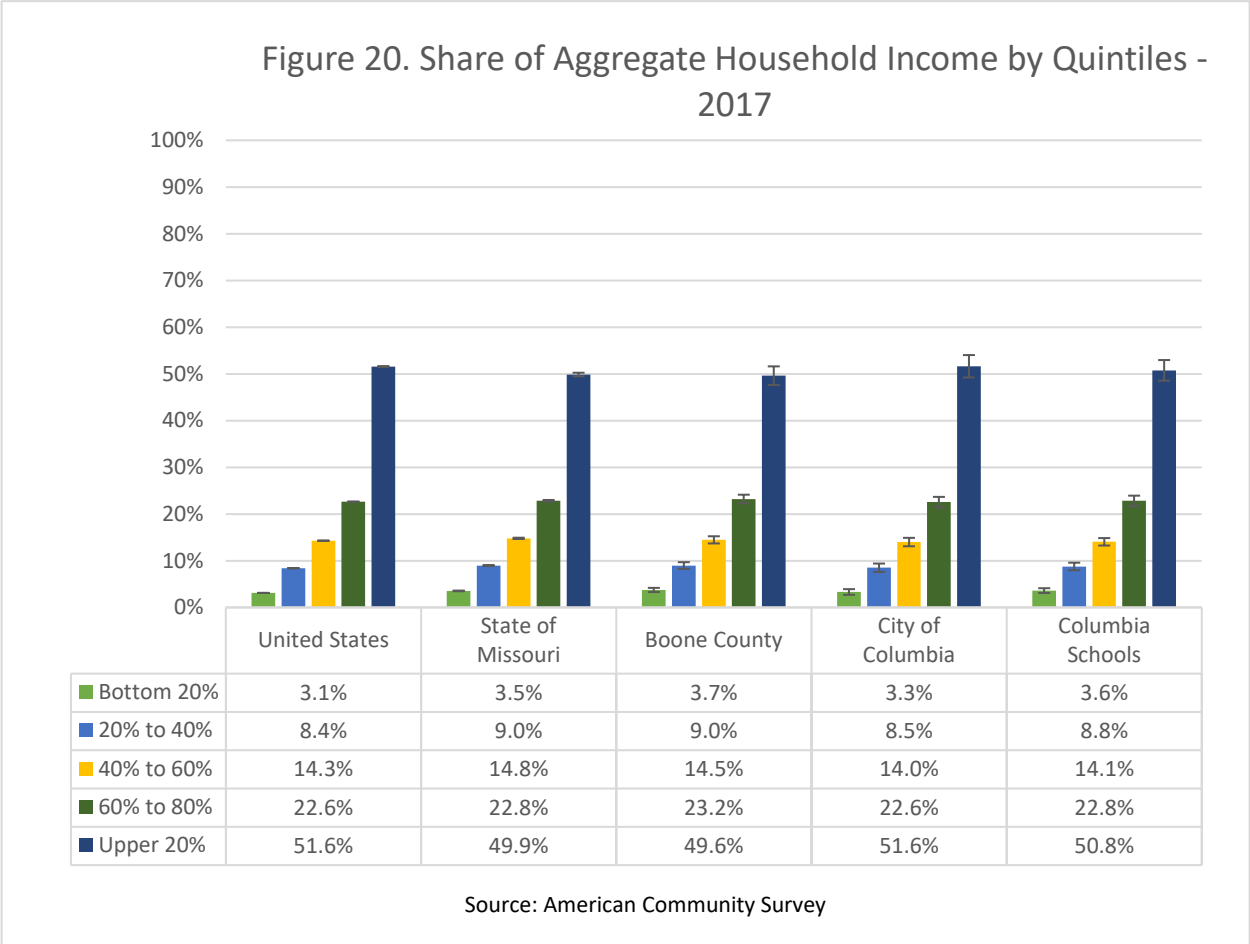


Family and Household Income

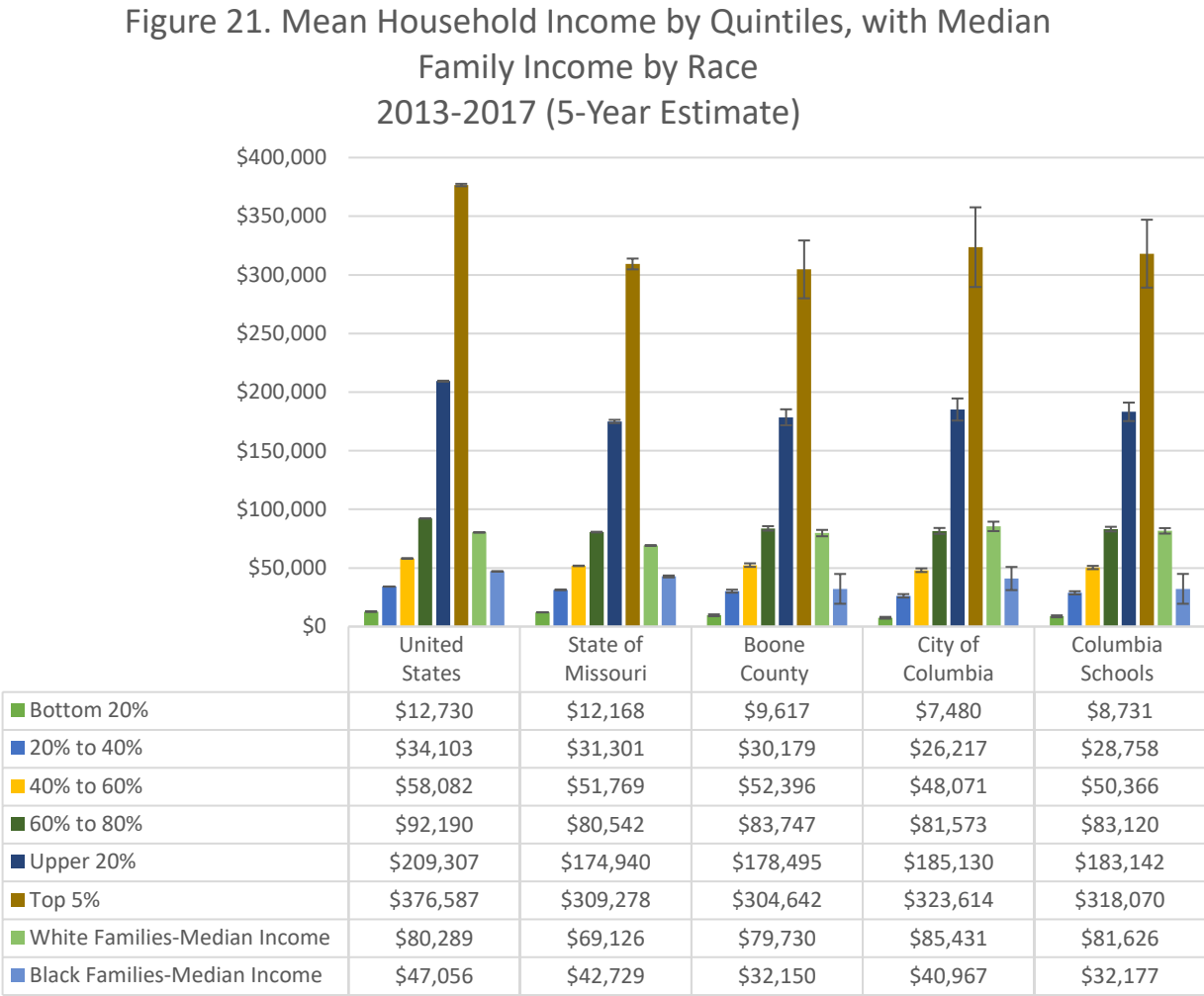
ACS 5-year data on median family income by race in Boone County indicates that the median family income for White households is \$79,477 and for Black households it is \$35,801, a difference of \$43,676. In the state, the gap is \$25,649 and in the U.S., the gap is \$28,989, see Figure 19.



Households in the Upper 20% income bracket enjoy around half of the community’s income at every geographical level. Households in the Bottom 20% income bracket must meet their basic needs on under 4% of the income available in the community, making it difficult to secure stable housing, food, health care and other basic needs. Households widely considered middle class—in the two brackets between 40%-80% earn less than half of the income in every geography, see Figure 20.



In Boone County, the mean income for households in the top 20% income bracket is nearly 20 times higher than those in the lowest 20% income bracket--\$178,495 compared to \$9,617, see Figure 21. Better distribution of income would create better economic opportunities for Boone County residents.

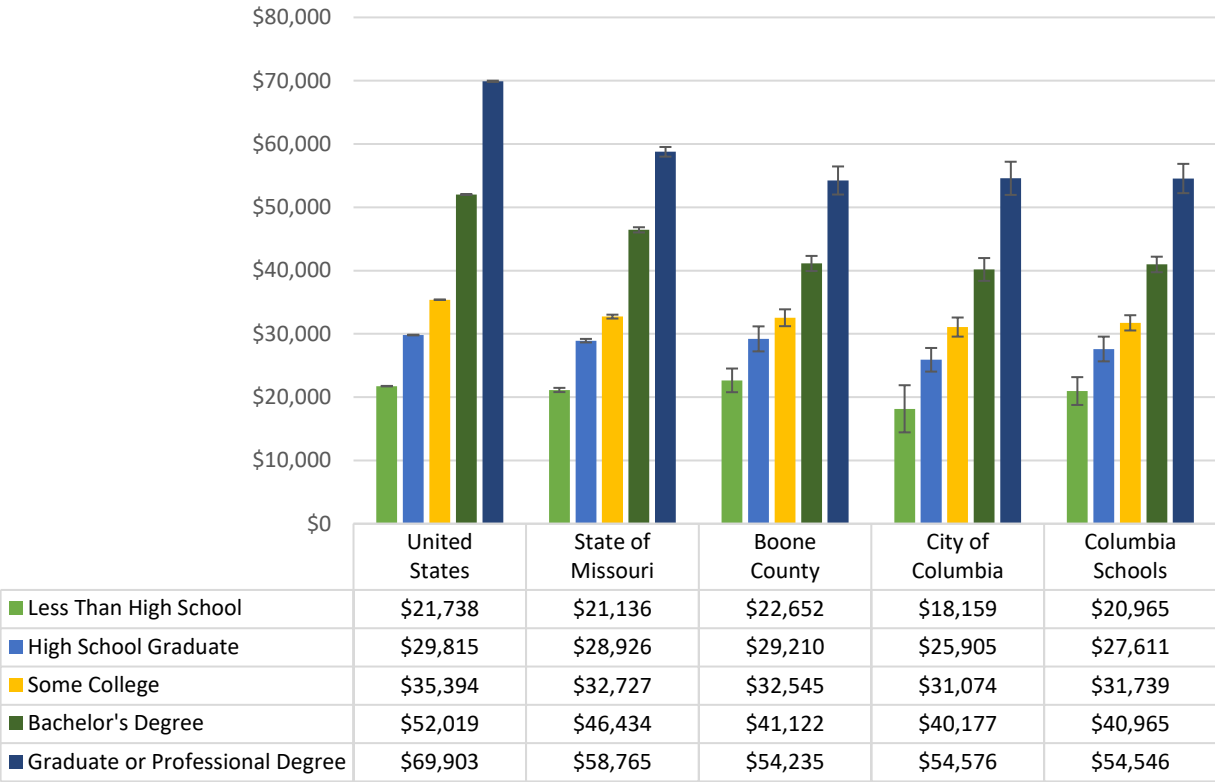


Source: American Community Survey

Earnings and Poverty Rate by Education

Wages are compressed for people with higher levels of education in Boone County. Median earnings for people with graduate degrees in the U.S. is approximately \$69,903 compared to \$54,235 in Boone County, a difference of \$15,668, see Figure 22.

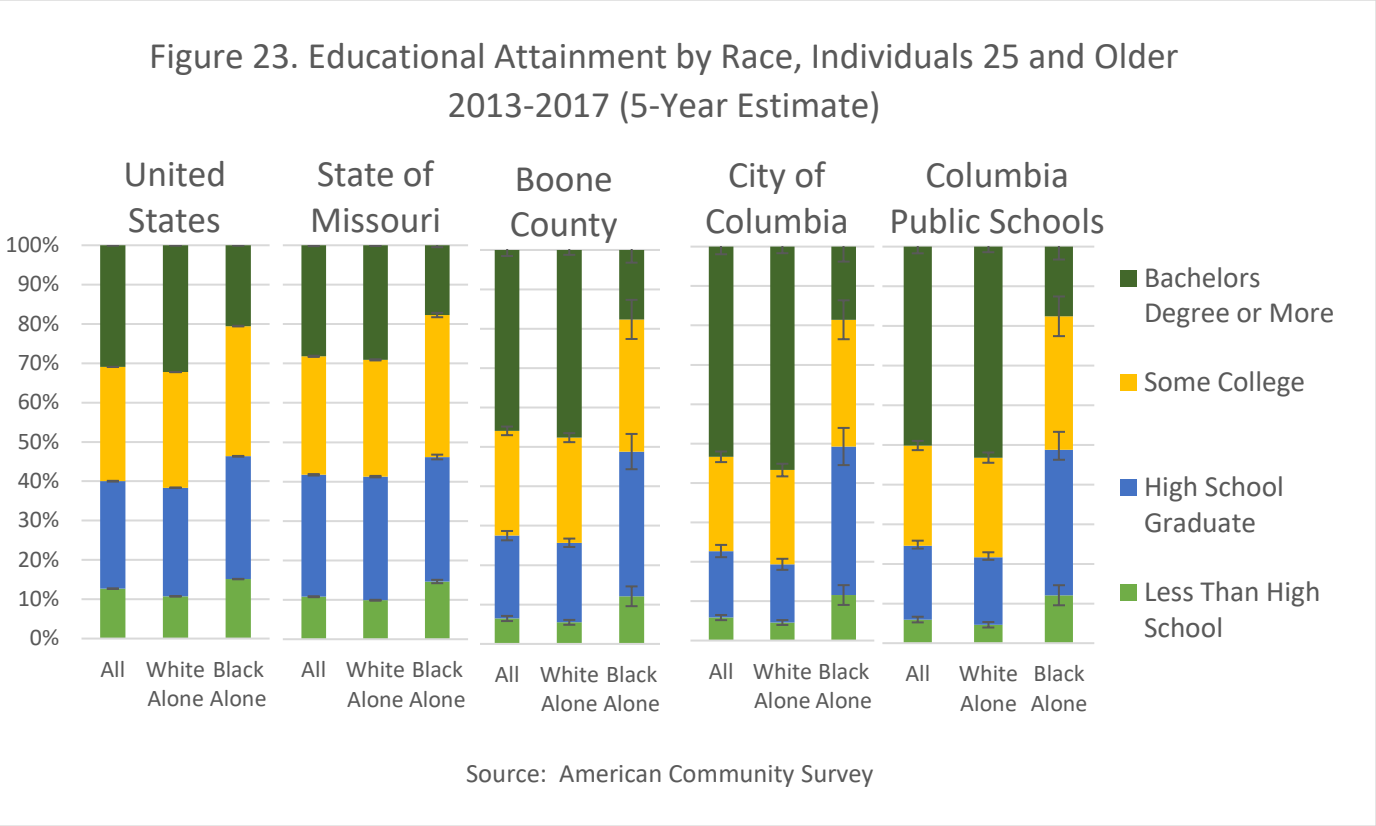
Figure 22. Median Earnings by Educational Attainment, Individuals 25 and Older 2013-2017 (5-Year Estimate)



Source: American Community Survey

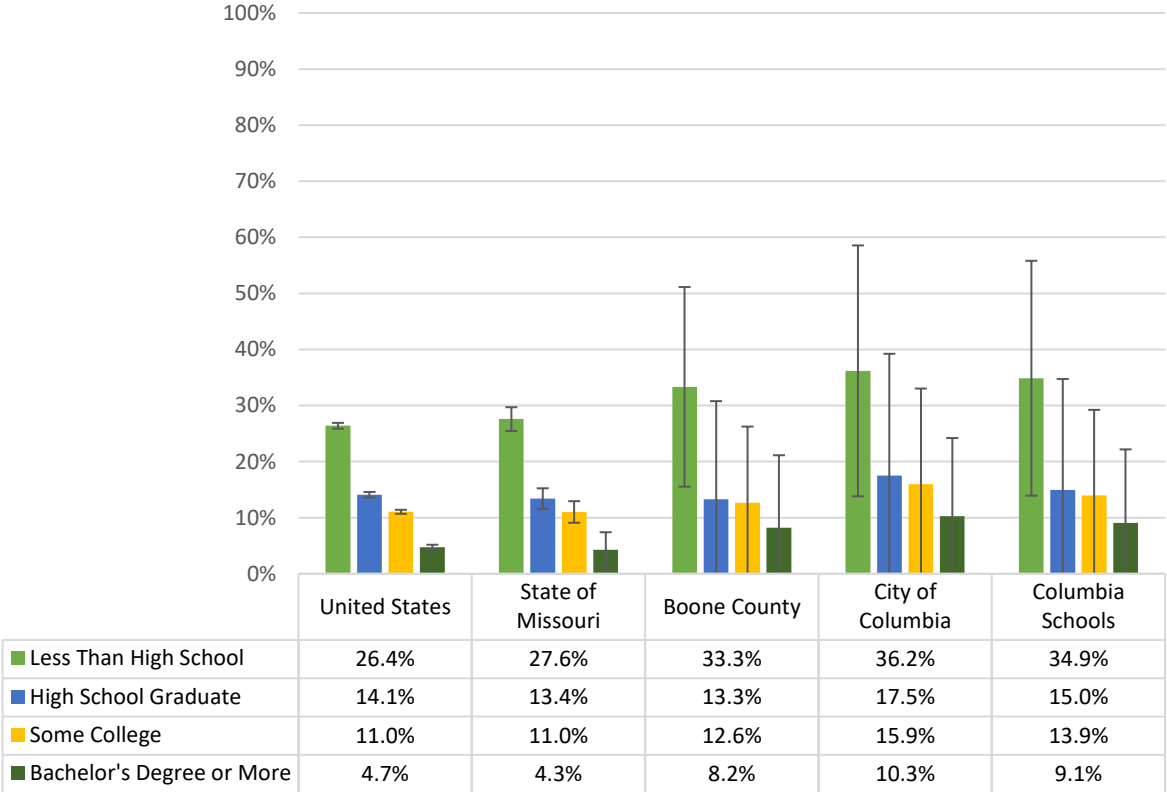
There are significant disparities between Black residents and White residents in terms of educational attainment, at the local, state and national levels. White residents tend to have higher levels of education than their Black counterparts.

As is expected for a college town, individuals over age 25 in Columbia, Boone County and Columbia Public School boundaries have significantly higher rates of bachelor’s and advanced degrees compared with the State of Missouri and the United States, see Figure 23. Higher education is not equally distributed among race groups, however. Black residents do not enjoy the same high rates of bachelor’s or advanced degrees as their White counterparts. Bachelor’s degrees or more are held at about the same rate in the US, Missouri and locally among Black residents.



Poverty rates are directly related to the level of education achieved. While the margins of error for local geographies are too wide to make conclusions, data for the state of Missouri and the United States are compelling, see Figure 24.

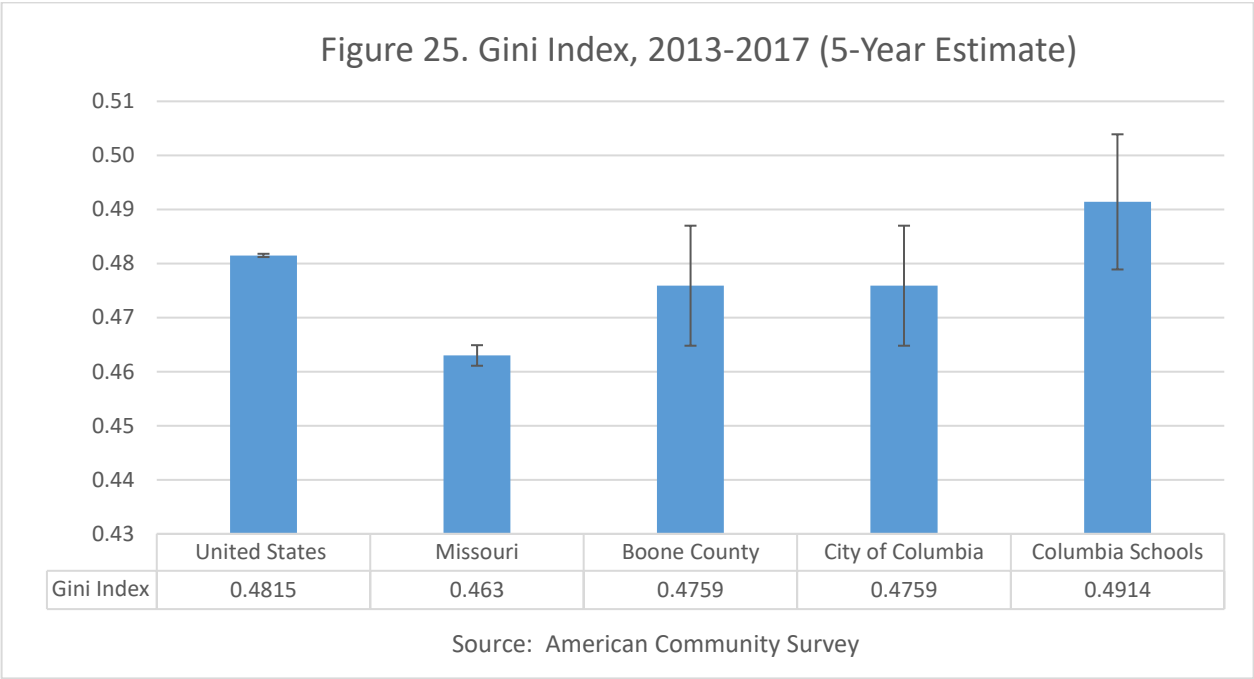
Figure 24. Poverty Rate by Educational Attainment
2013-2017 (5-Year Estimate)



Source: American Community Survey

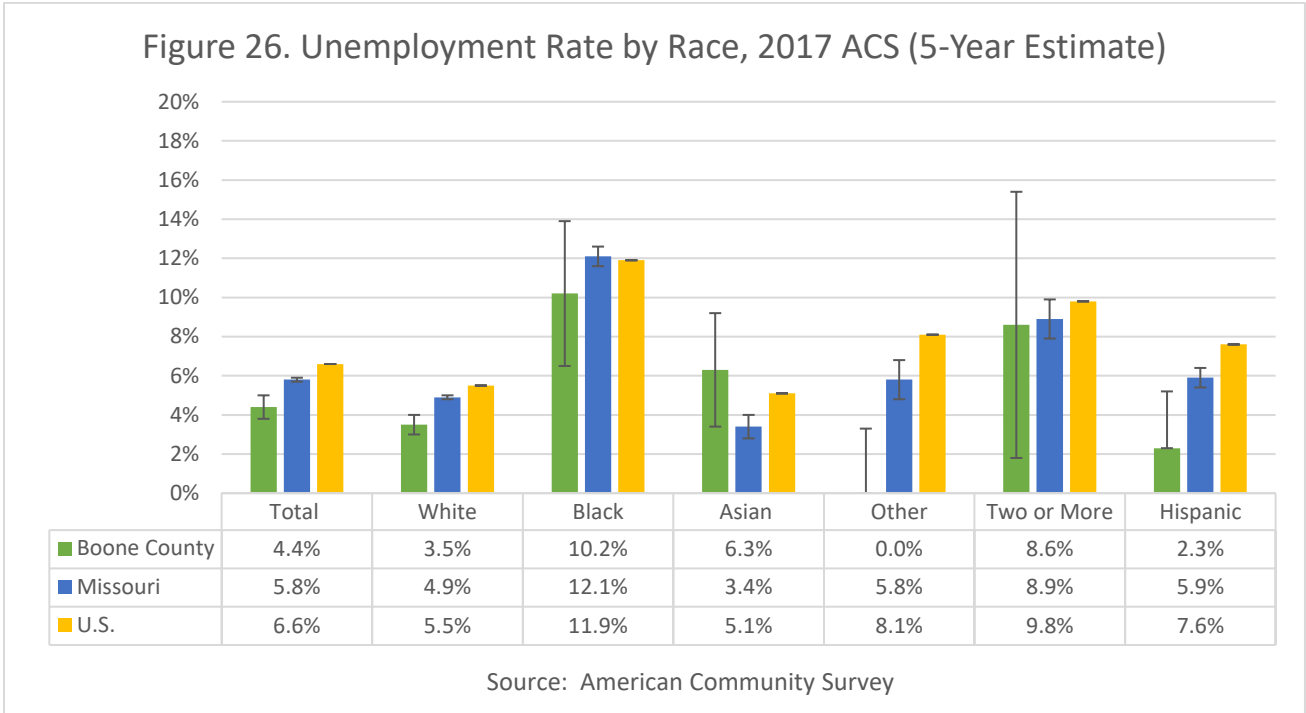
The Gini Index

Another indicator to explore in this section is the Gini index, which provides a measure of income inequality. Gini index scores closer to zero indicate that more equality exists in income distribution, whereas a score of 100 signifies perfect inequality. According to 2013-2017 5-year estimates, Boone County had a Gini index score of 47.59 compared to Missouri’s 46.3 score and the U.S. score of 48.15, see Figure 25. However, the margin of error for the Columbia Gini index estimate means we cannot be certain exactly how income inequality compares to the United States.



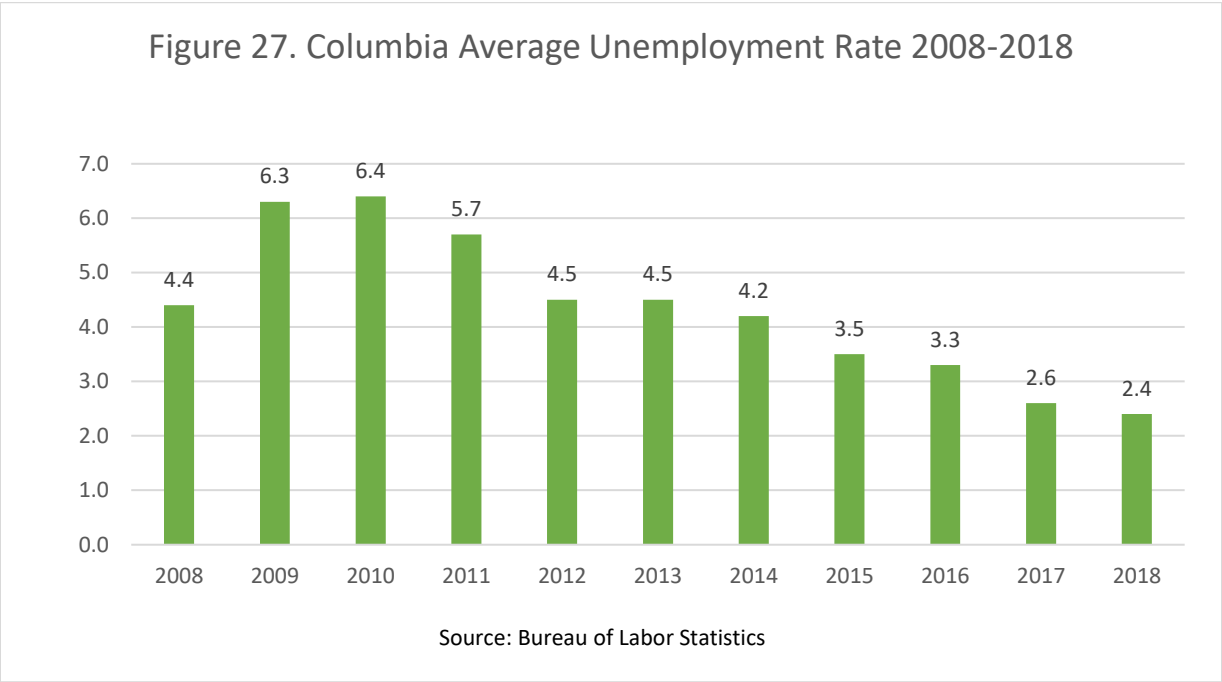
Unemployment

Unemployment in Boone County, which can be a contributing factor to creating income inequality, was 4.4%, compared with 5.8% in the state, as of the 2017 ACS 5-year estimates, see Figure 26.



When analyzed by race, the current county unemployment rates are much higher for people of color with 10.2% of Black individuals and 6.3% of Asians in Boone County unemployed, compared to 3.5% of White residents. However, with large margins of error, it hard to be certain about the size of the gap. Comparatively, 12.1% of Black Missourians and 4.9% of White Missourians are unemployed, with much lower margins of error.

Based on data from the last decade, Columbia is experiencing historically low unemployment rates, see Figure 27. While this report does not have the margins of error for this data, it follows disparity trends in Boone County.



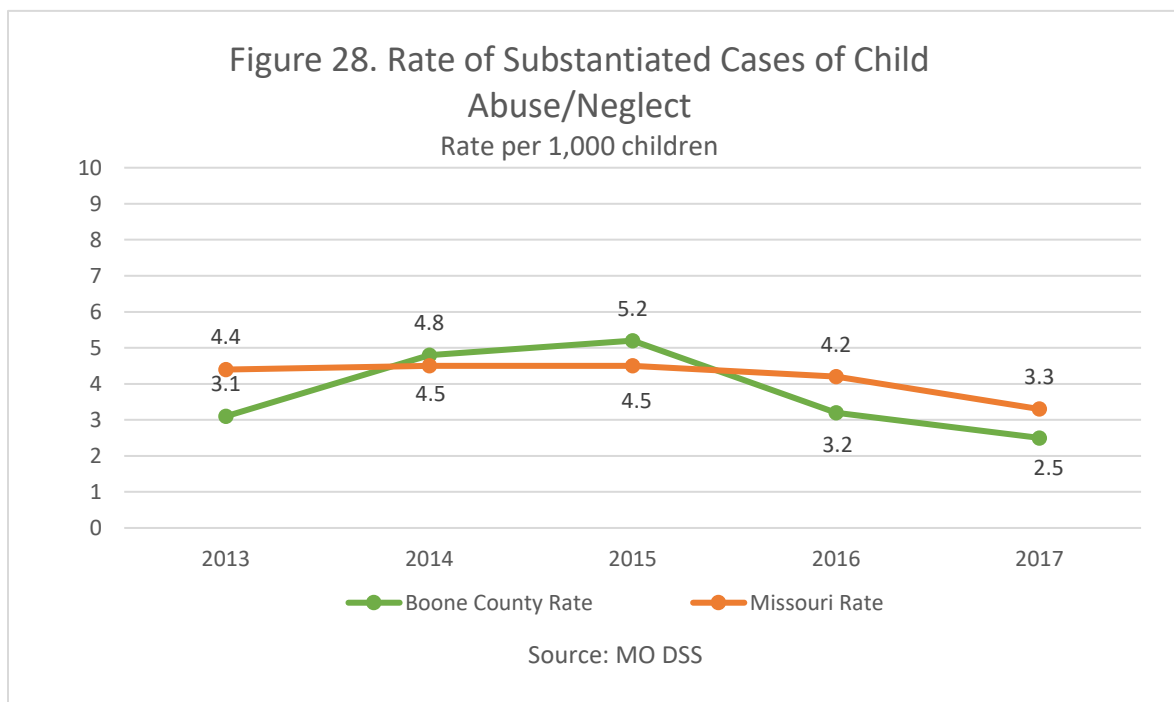
The data in this section examine indicators that measure inequality and contributing factors of income inequality in Boone County. According to researchers from the Haas Institute at UC Berkeley, “Public policy can help to reduce inequality and address poverty without slowing U.S. economic growth.”⁸ There are a variety of policy and program opportunities designed to address income inequality. Suggestions include: fiscal policies to achieve full employment, raising the minimum wage, improving education and training opportunities, investing in infrastructure and human capital and improving access to quality childcare.⁹



EXPLORE FAMILY STABILITY

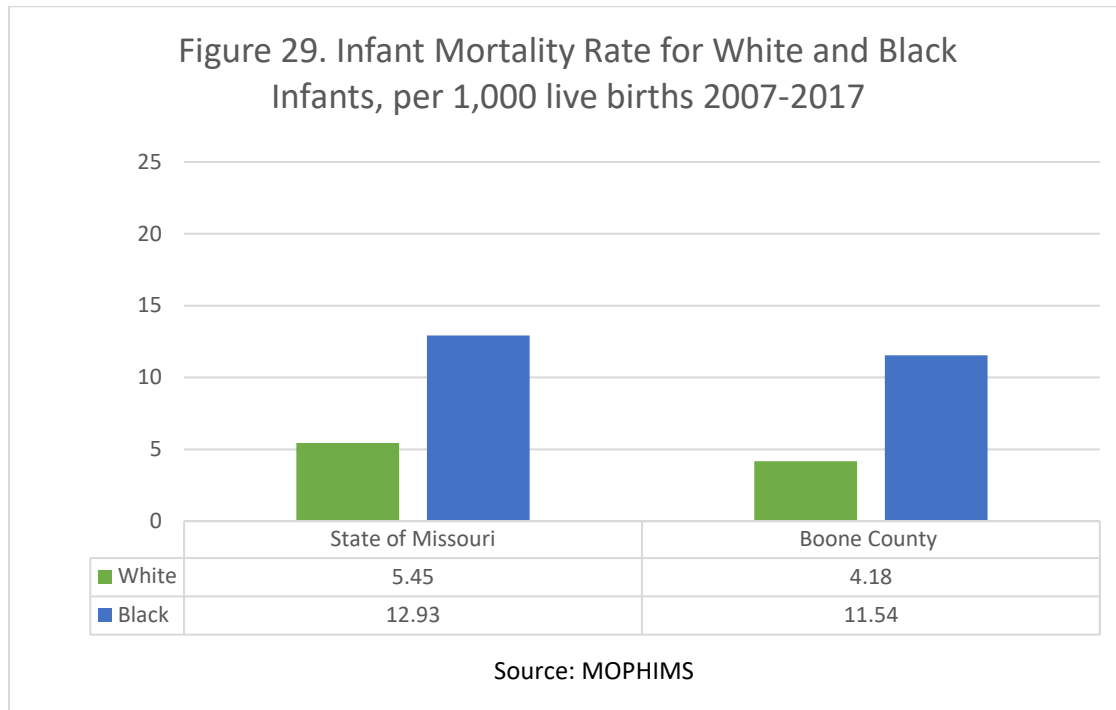
Raj Chetty and co-authors recognize family stability as one of, if not the most, important aspect in predicting children's outcomes. They determined that there is a correlation between family structure and upward mobility at multiple levels. Greater family stability, as measured by housing, job security and family structure, reduces stress and allows children to meet their highest potential when they become adults.

As a measure of family stability and stress in Boone County, the lead indicator for this section is *substantiated child abuse and neglect cases*, see Figure 28, compiled from the Missouri Department of Social Services data during the years 2007-2016. Both Missouri and Boone County reported declines in the number and rate of substantiated child abuse and neglect cases, with Missouri decreasing slightly from 4.5 cases per 1,000 children in 2015 to 3.3 in 2017. In the same time period, Boone County decreased from 5.2 cases per 1,000 children in 2015 to 2.5 in 2017.

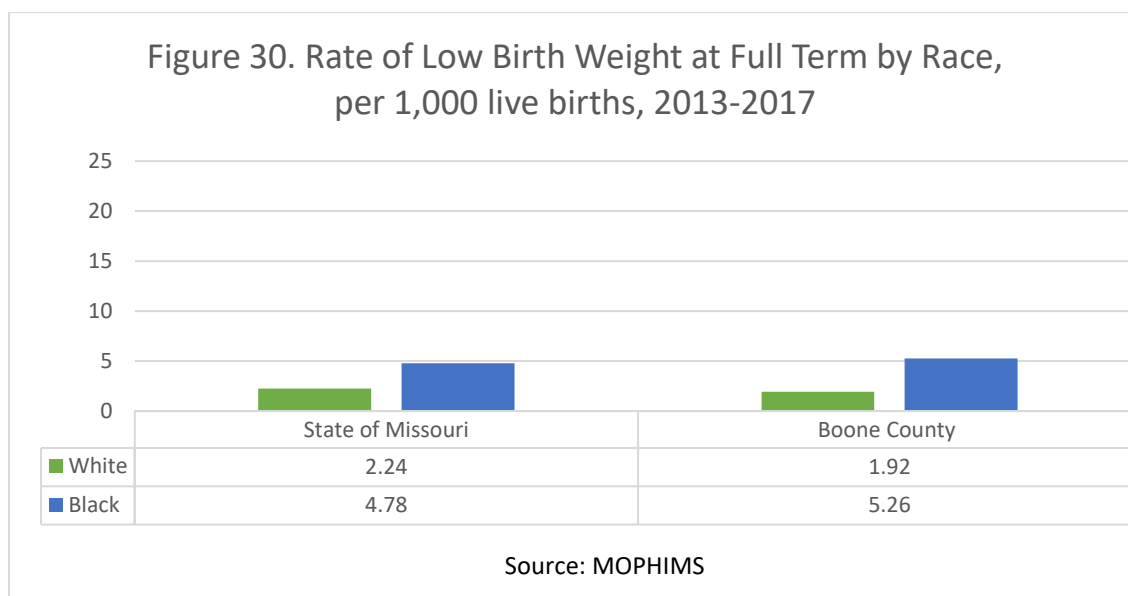


Infant Mortality and Births

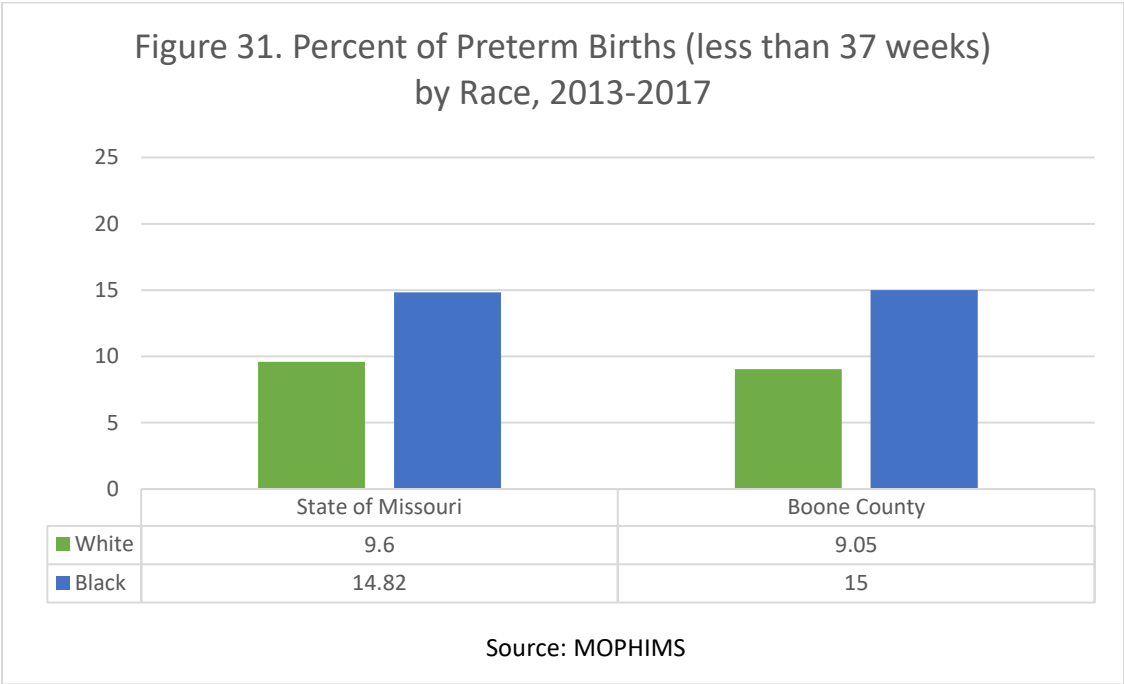
Consistent with the state of Missouri, infant mortality rates from 2007 to 2017 were more than twice as high for Black infants than White infants in Boone County, see Figure 29. The Department of Health and Senior Services MOPHIMS database indicates that the infant mortality rate in Boone County was 11.54 and 4.18 per 1,000 live births for Black and White populations, respectively.



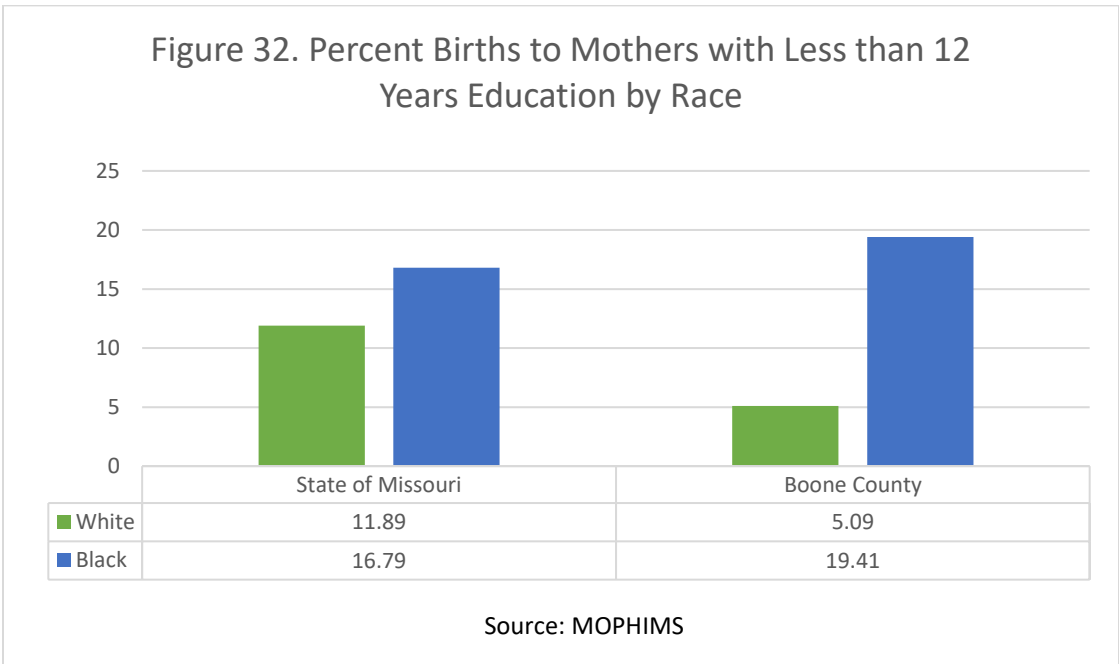
From 2013 to 2017, the rate of infants born after the 37th completed week gestation and weighing less than 2,500 grams (the definition of full term and low birth weight) in Boone County was 5.26 for Blacks and 1.92 for Whites, per 1000 resident live births with known birth weight and gestational age, see Figure 30. The infant mortality and low birth weight rates provide evidence that there are significant disparities based on race in Boone County.



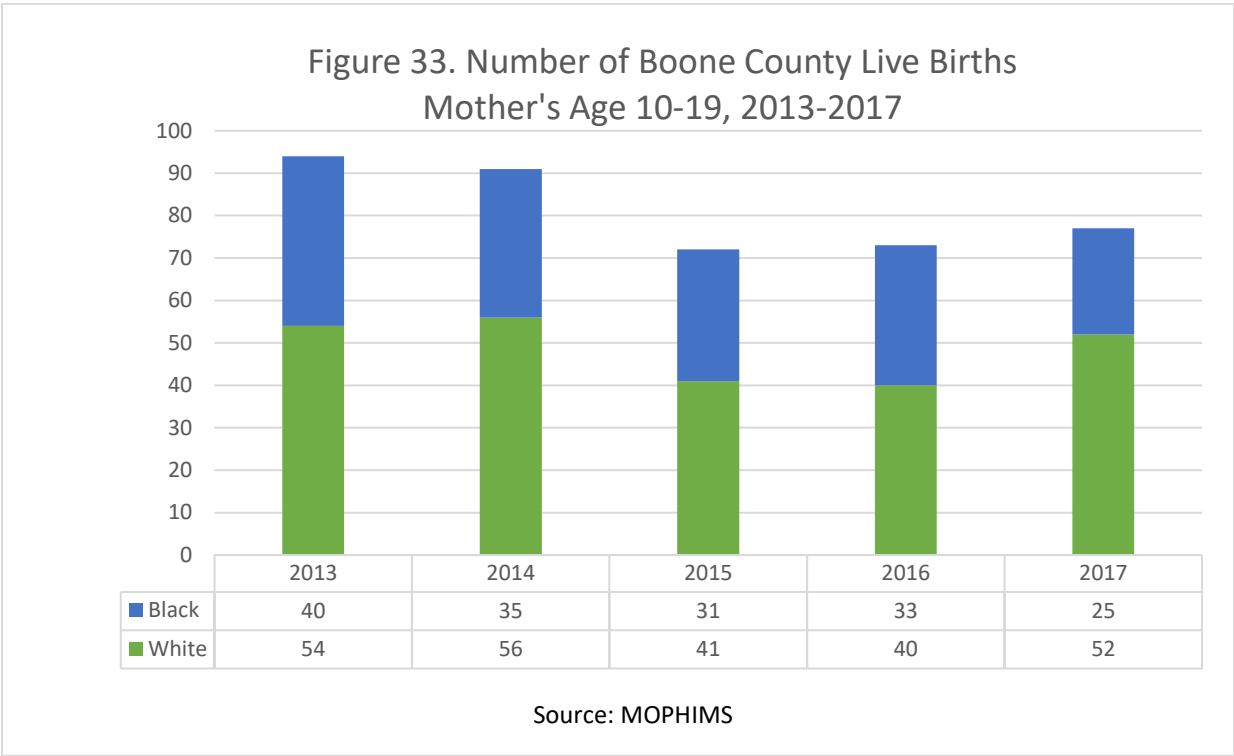
MOPHIMS data reports the rate of Black and White preterm births shows a higher rate of Black infants born at less than 37 weeks completed gestation for both Boone County and the state of Missouri, see Figure 31.



MOPHIMS data on the rate of Black and White infants born to mothers with education status less than 12 years, shows the Boone County rate higher than state rate of Black infants born to mothers with less than 12 years of education, while the rate Boone County for White infant births is lower than the state rate, see Figure 32.

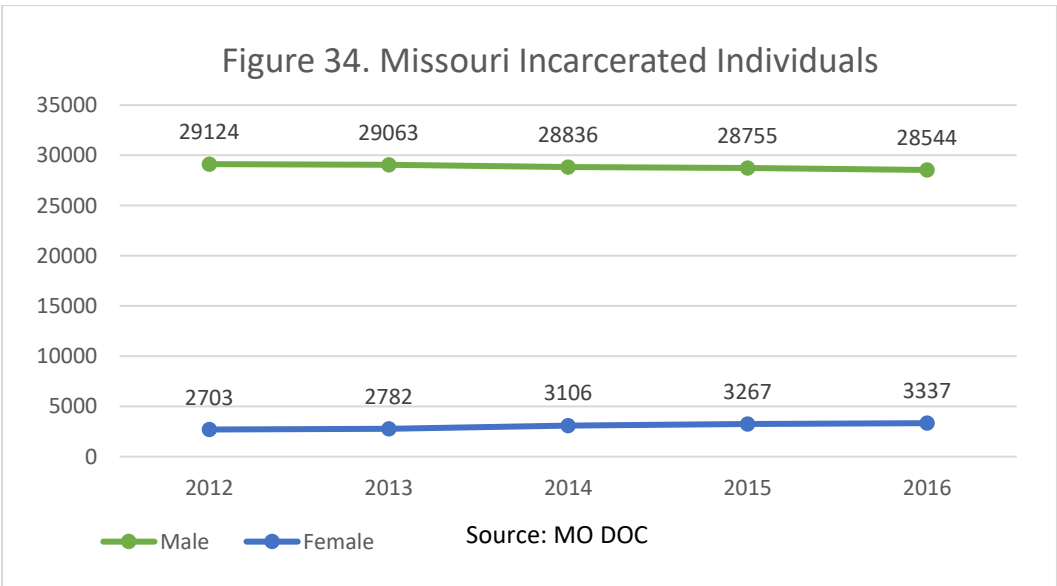


MOPHIMS data also indicates the number of Boone County live births with a maternal age of 10-19 years show a higher number of births to White teen mothers than Black teen mothers between the years 2013 and 2017, see Figure 33.



Incarceration

Incarceration of parents also has a negative impact on family stability. As the population housed in Missouri Department of Corrections residential facilities increases, the number of incarcerated women increases as well. The Missouri Department of Corrections Annual Report indicates that there were 2,703 incarcerated females in 2012 compared to 3,337 in 2016, while the number of men has decreased slightly, see Figure 34.

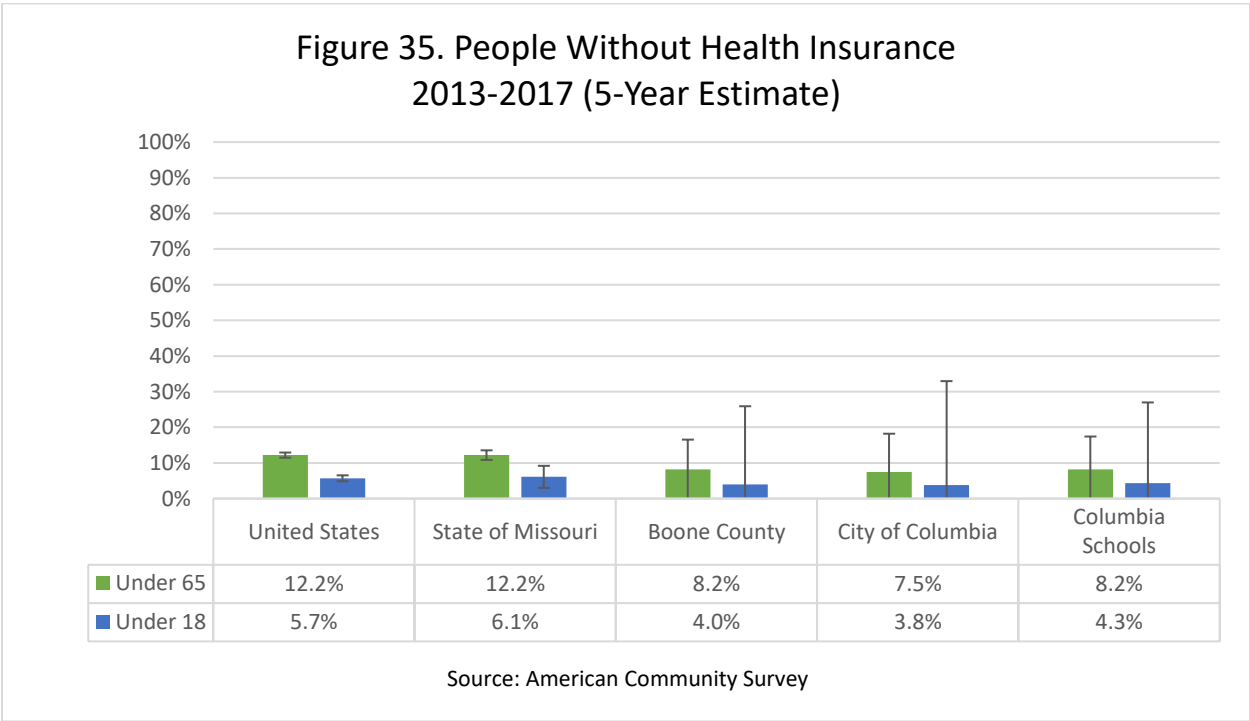


Findings from the University of Missouri Center for Family Policy and Research 2016 report show that over half of all prisoners in the U.S. are parents, and that the number of children with a mother in prison increased 131% from 1991 to 2007.

The Center for Family Policy and Research recommends support for incarcerated individuals, their families, and their children while imprisoned and during reentry through programs like Building Strong Families, Amachi Missouri, and Girl Scouts Beyond Bars.

Health Insurance

People without health insurance are an indicator of families that are at high risk for economic crisis resulting from a health condition. Since most people receive health insurance for their families through their employer, it also indicates the share of the population that are unemployed or employed in jobs that do not offer benefits. The margins of error are too wide in the local context to make comparisons between the different geographies, see Figure 35.



According to the Economic Mobility Project, family and household stability is linked to healthy child development and favorable outcomes, whereas “Instability disrupts routines and undermines the parent-child relationship which is essential to cognitive as well as social development.”¹⁰ There are a variety of policy and program opportunities designed to address family stability. Some examples include, Medicaid expansion, increasing knowledge of parenting and child development, providing strategic support in times of crisis, and fostering community and neighborhood connections.¹¹



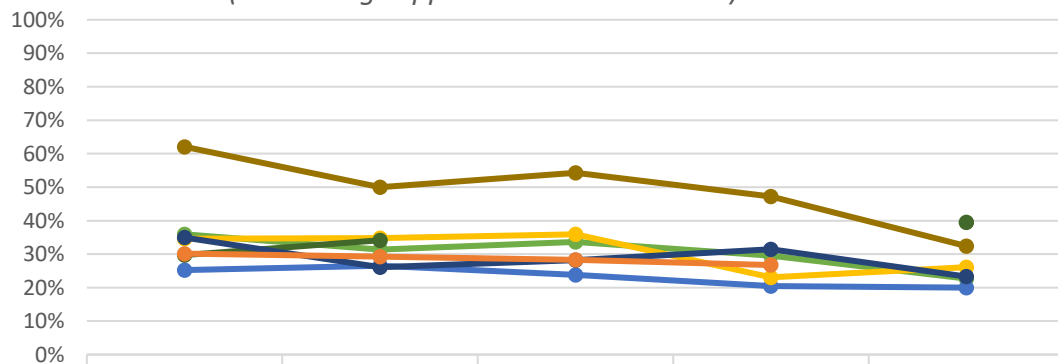
EXPLORE THE QUALITY OF PUBLIC SCHOOLS

Quality public schools produce well-educated young adults who can access higher education and employment opportunities, thereby improving economic outcomes and increasing intergenerational mobility. The quality of public schools is undermined by segregation by race and income, inequitable allocation of resources, and a lack of strong interaction and connections within the school and the community.^{12,13}

The lead indicator selected for this category is the *rate of high school graduates in Boone County entering two and four-year colleges or employment*, see Figures 36-38. These data are based on surveys of high school students upon graduation and was retrieved from the Missouri Department of Elementary and Secondary Education (DESE) for 2013-2017. Most students in the county, about 60-72%, attended 2 or 4-year colleges. Smaller numbers, ranging from 9-33%, entered employment after graduation.

The percentage of graduates entering 2-year colleges has been declining in the county and state since 2013. This may be caused by the increase in graduates entering 4-year colleges (below).

Figure 36. Percentage of Boone Graduates Entering
2-Year College, 2013-2017
(Harrisburg suppressed 2015 and 2016)

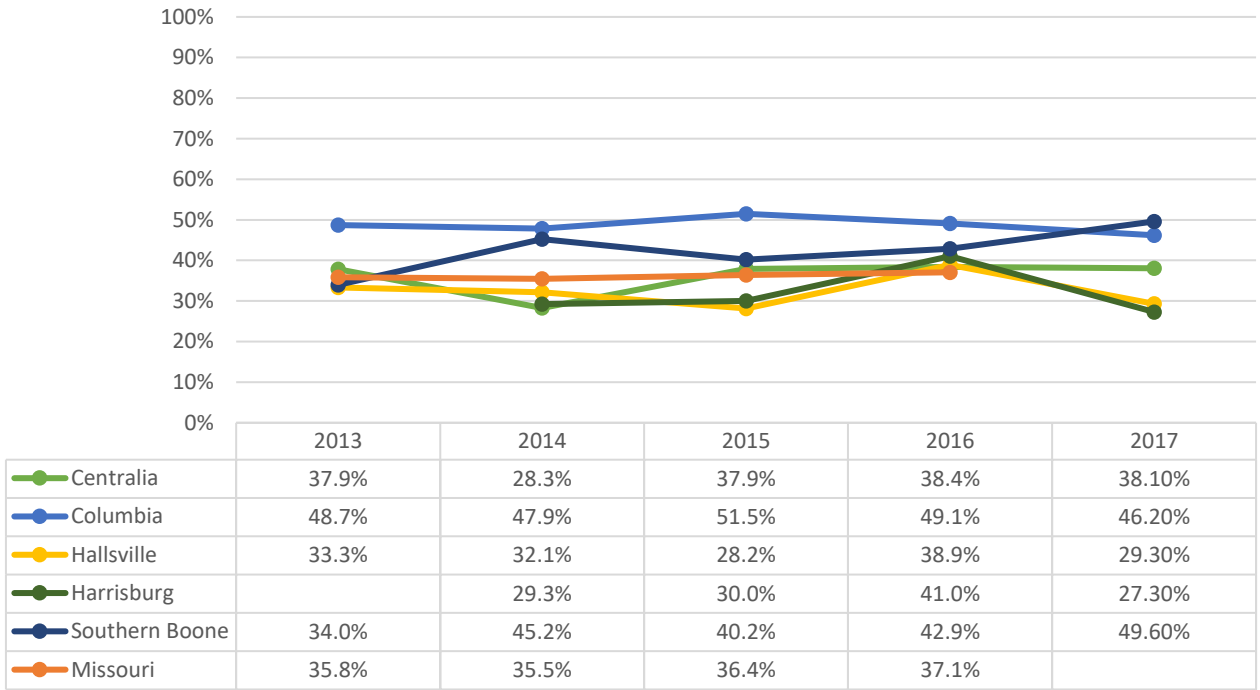


	2013	2014	2015	2016	2017
Centralia	35.9%	31.3%	33.7%	29.5%	22.70%
Columbia	25.2%	26.5%	23.8%	20.5%	20%
Hallsville	34.6%	34.8%	35.9%	23.1%	26.10%
Harrisburg	29.7%	34.1%			39.40%
Southern Boone	35.0%	26.1%	28.2%	31.4%	23.30%
Sturgeon	62.1%	50.0%	54.3%	47.2%	32.40%
Missouri	30.2%	29.2%	28.3%	26.7%	

Source: MO DESE

The percentage of graduates entering 4-year colleges has been growing in the state, and Southern Boone, and holding relatively steady in other districts, except for Harrisburg which has seen more volatility in the data and a recent large decline.

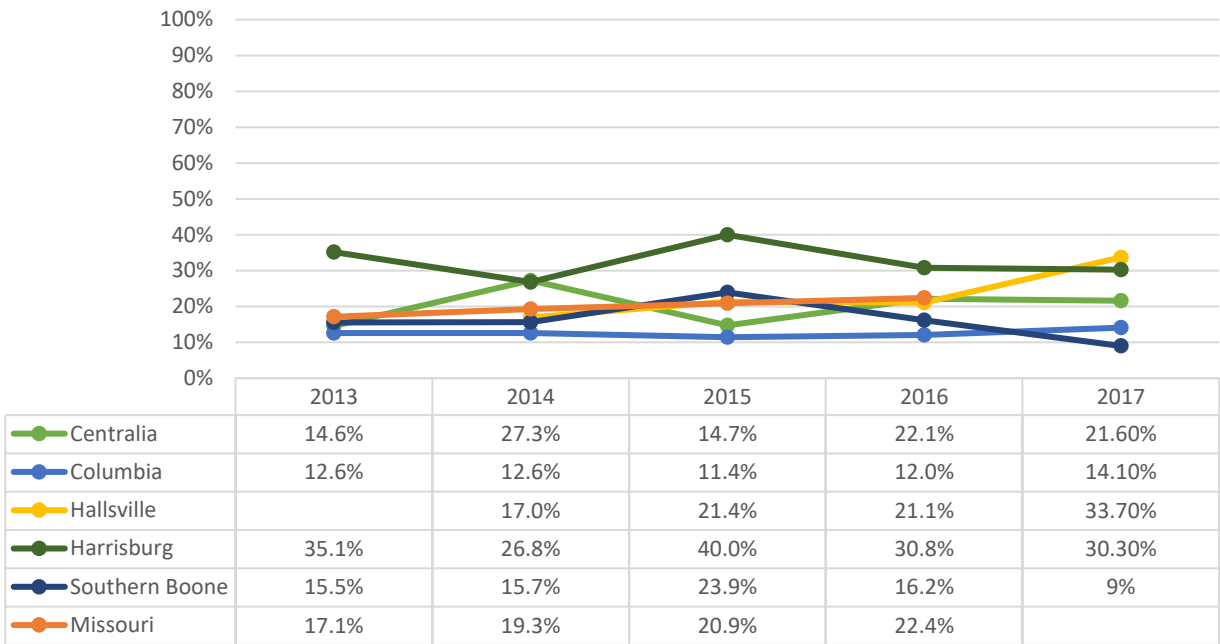
Figure 37. Percentage of Boone Graduates Entering 4-Year College, 2013-2017
(Harrisburg suppressed 2013; Sturgeon suppressed all years)



Source: MO DESE

These percentages have been increasing slightly in the state and in the last year in Hallsville, however they have remained fairly consistent since 2015 for all other districts.

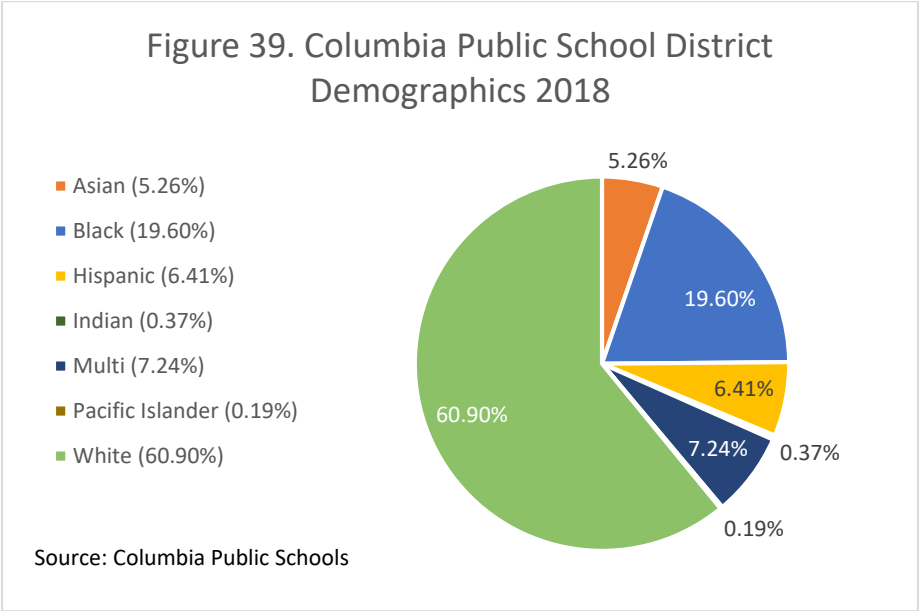
Figure 38. Percentage of Boone County Graduates
Entering Employment, 2013-2017
(Sturgeon suppressed all years)



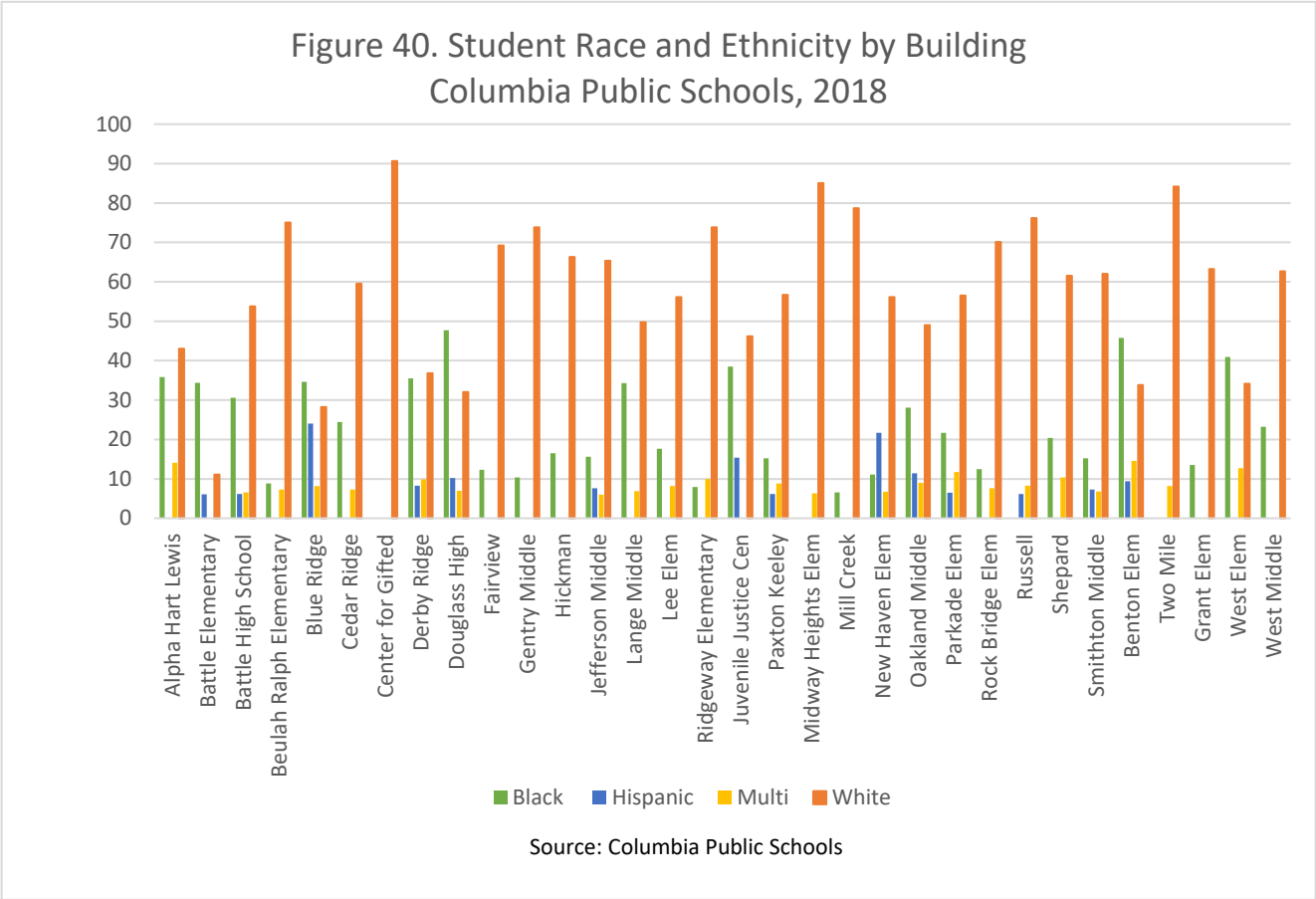
Source: MO DESE

Demographic Data

The lead indicator is the end result of a student’s public school education, but the analysis starts much earlier with a look at school populations and performance. Demographic data for the Columbia Public School District for 2018 indicates that 60.9% of the students are White, 19.6% are Black, and more than 19% belong to other categories including two or more races and Hispanic, see Figure 39.



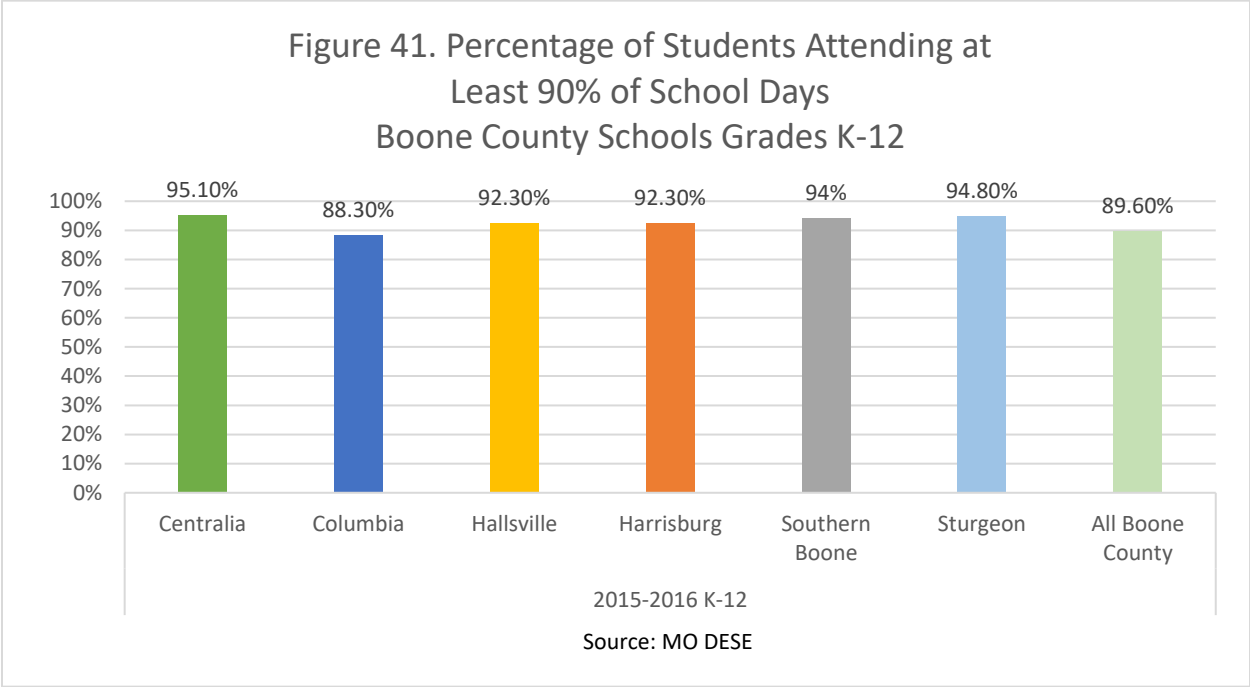
Columbia Public Schools also provided demographic data for each of their schools in 2018; the following, Figure 40 shows the demographic breakdown by school. Columbia Public Schools has recently adopted a redistricting plan for the 2020 school year in preparation for a new middle school.



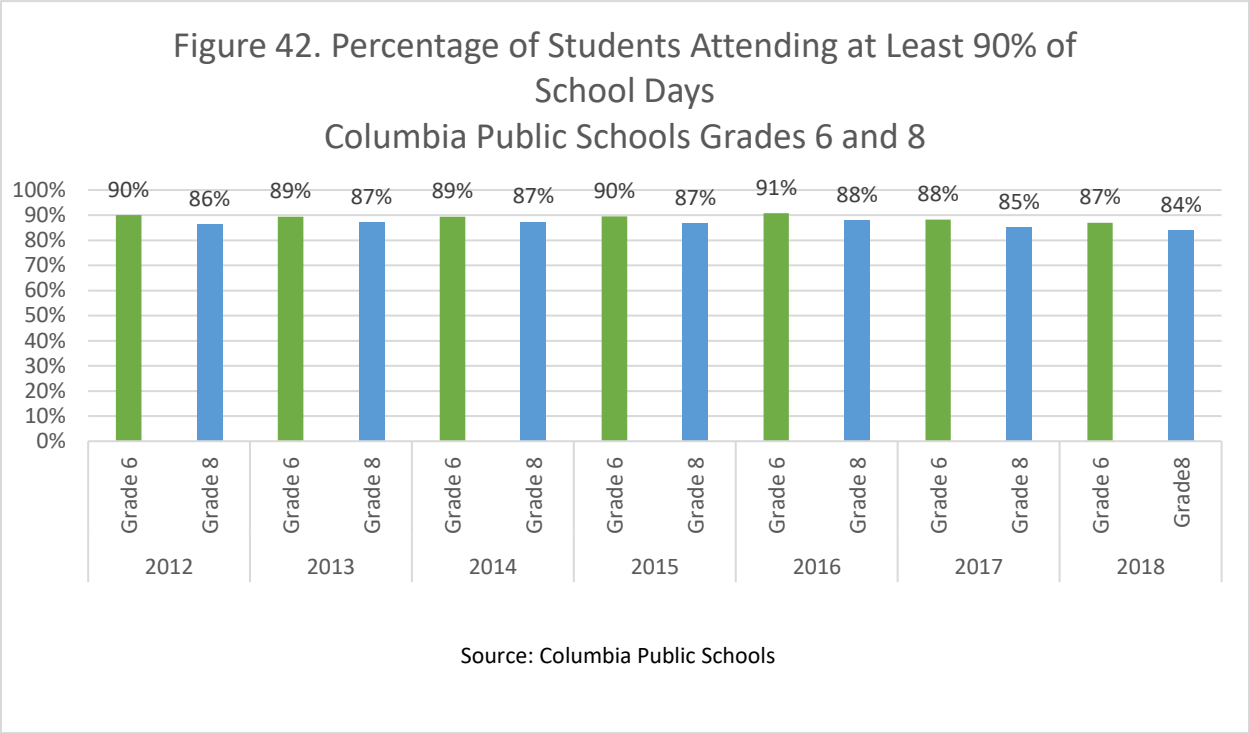
As previously mentioned, Columbia neighborhoods are highly segregated, which leads to segregation in schools, however, school districting policies may have contributed to further segregation. The Urban Institute has published a recent report that examined school segregation in the country and developed a tool to examine local attendance zones and neighborhood and school segregation. Using data from the National Center of Education Statistics for 2013, the interactive tool produced by Vox indicates that schools in the Columbia Public School District are less integrated than if students attended the school nearest to their home.^{14,15}

Student Attendance

In the absence of direct measures of school quality, this report examines student performance and attendance data as indicators of school quality. According to DESE data, in Boone County as a whole, 89.6% of students attended at least 90% of school days in 2016. Columbia had the lowest rate with 88.3% attending at least 90% and Centralia had the highest with 95.1%, see Figure 41.

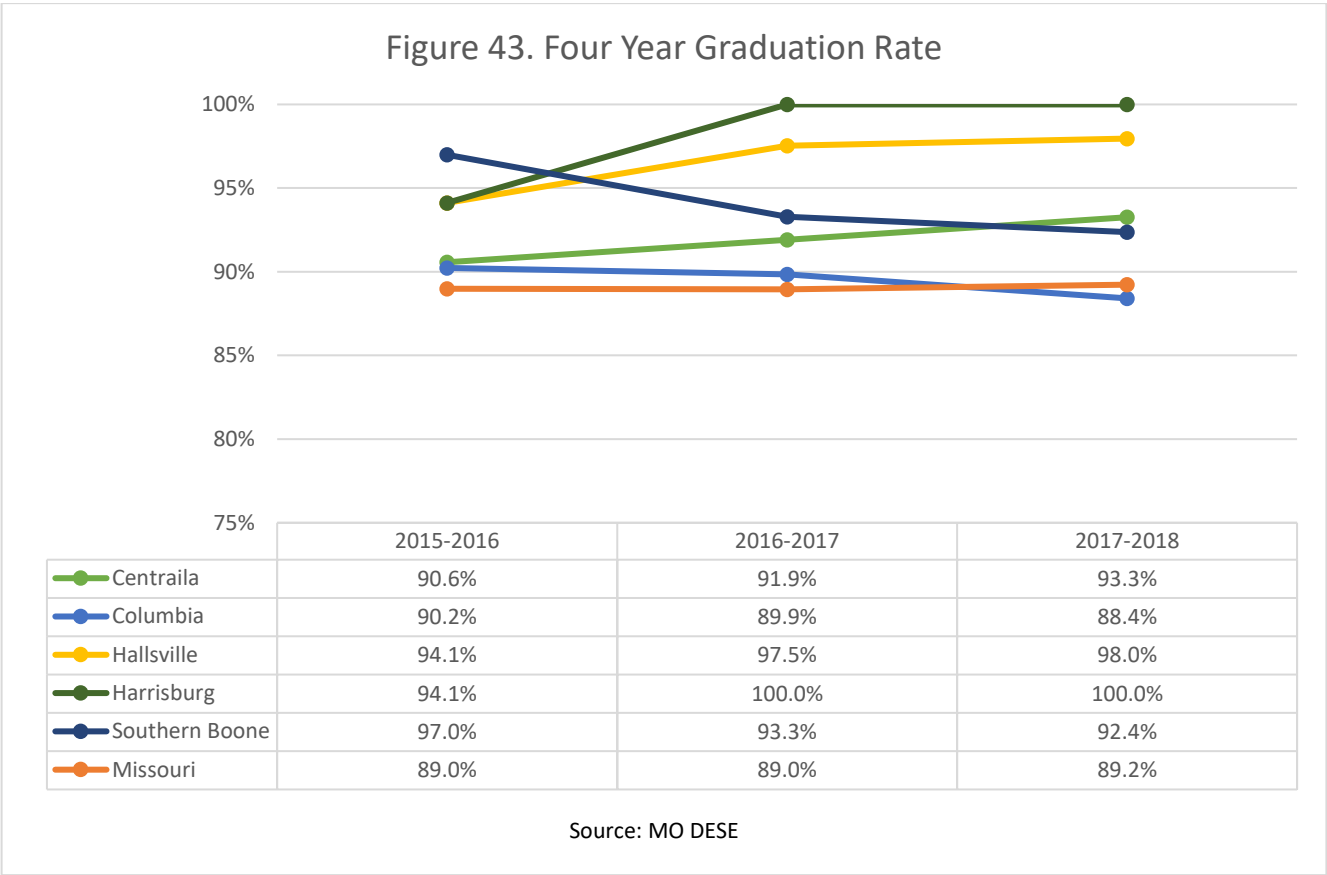


Eighth grade students in Columbia Public Schools have slightly lower attendance rates than sixth graders. In 2018, the lowest percentage of students, 84%, attended at least 90% of school days, see Figure 42.

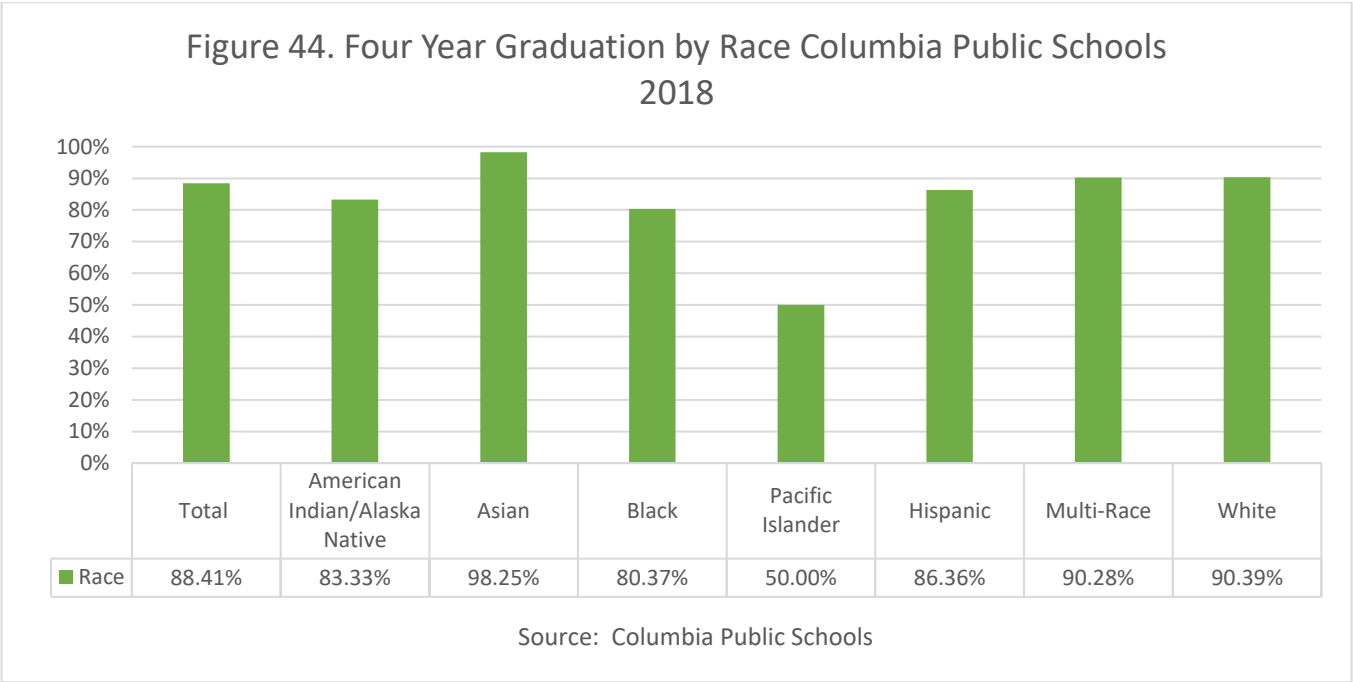


Graduation

When looking at four-year graduation rates reported by DESE, most Boone County school districts had higher graduation rates compared to the state average of 89.2%, see Figure 43. Columbia had the lowest rate at 88.4%, and fell below the state average. Harrisburg had the highest graduation rate, with 100% of their student graduating within four years in both 2017 and 2018.

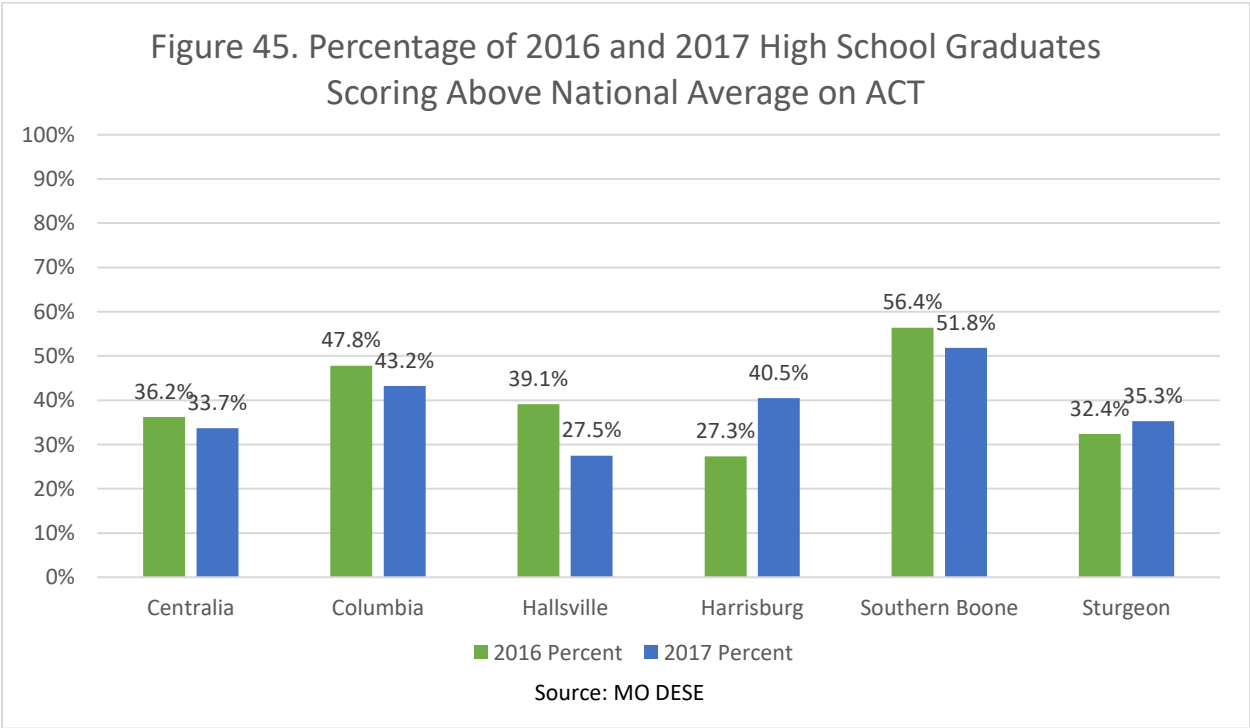


In Columbia Public Schools, minority students have lower four year graduation rates than the district average and their white counterparts, see Figure 44.

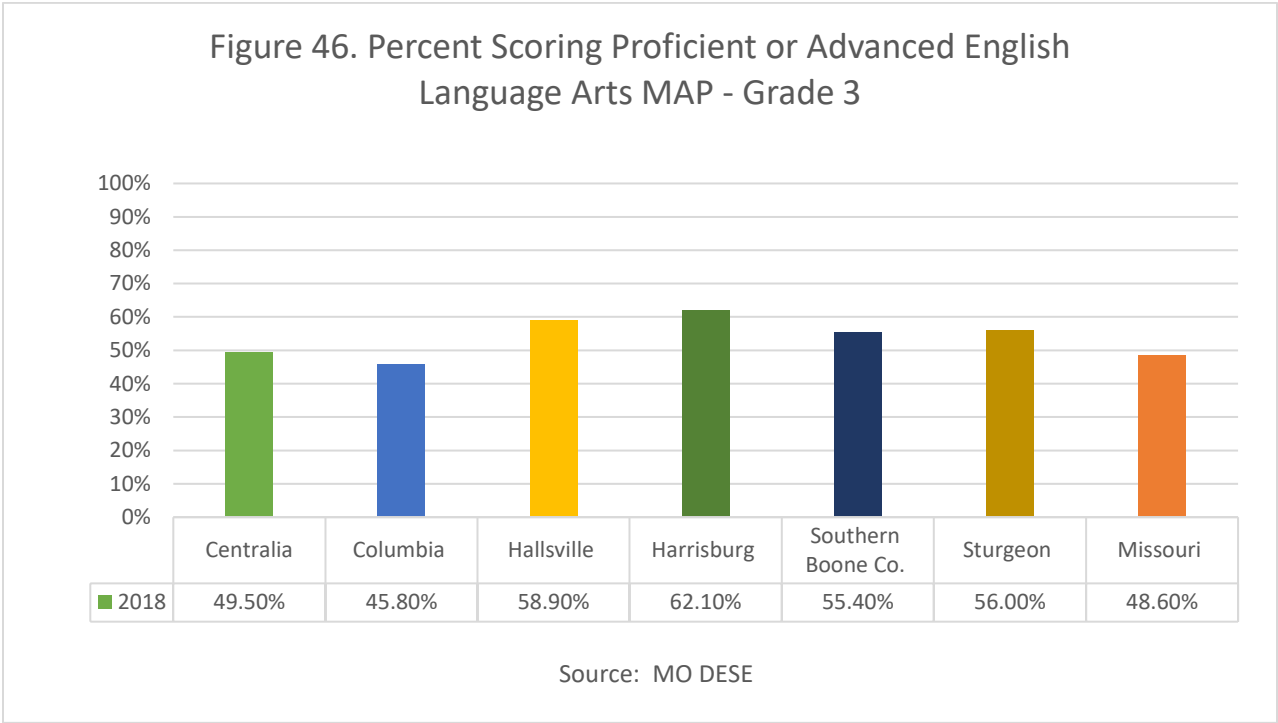


Student Performance

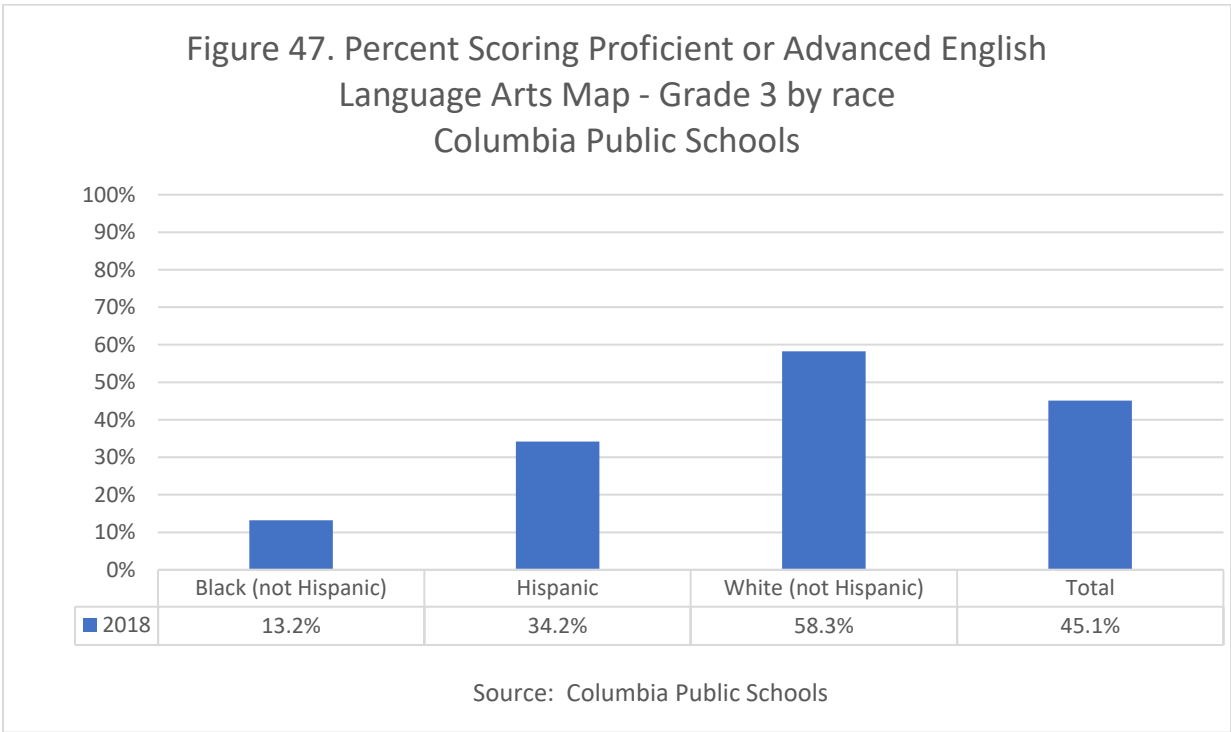
According to DESE data, on average, Boone County schools had many students scoring above the national average on the ACT. Within each school district these percentages ranged from a low of 27.5% for 2017 in Hallsville to a high of 51.8% in 2017 in Southern Boone School District, see Figure 45.



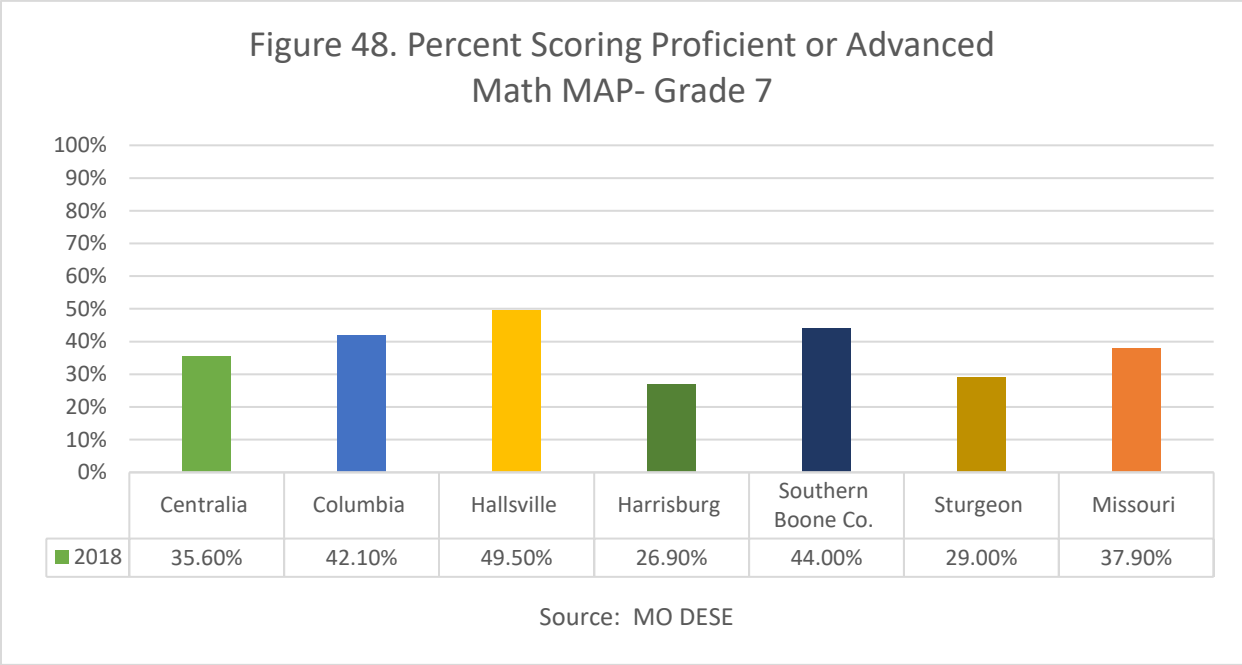
The following are graphs for proficient or advanced MAP scores in language arts for grades three and math for grade seven in Boone County school districts. In 2018, third grade MAP in language arts ranged from a low of 45.8% proficient in Columbia to a high of 62.1 in Harrisburg, see Figure 46.



There are differences in MAP scores by race. When examining the 2018 MAP scores in the Columbia Public Schools, Black students had lower scores compared to their White counterparts, see Figure 47.



MAP scores for math for 7th grade students in the county indicated the highest scores were in Hallsville with 49.5% of student proficient or advanced and lowest in Sturgeon where only 29% scored proficient or advanced, see Figure 48.



This section examined school demographics, attendance, and performance as indicators of the quality of public schools in the county. According to the Economic Mobility Project of the Pew Charitable Trusts, “Education policy is important to the discussion of mobility because it serves both as an end and a means to an end of eliminating inequalities.”¹⁶ Outcomes can be improved for children that can have an impact for generations. There are a variety of policy and program opportunities designed to address quality public schools. Some examples include, research based tools, increased tutoring and learning time, college preparatory experiences, and support and higher pay for classroom teachers.^{17,18}

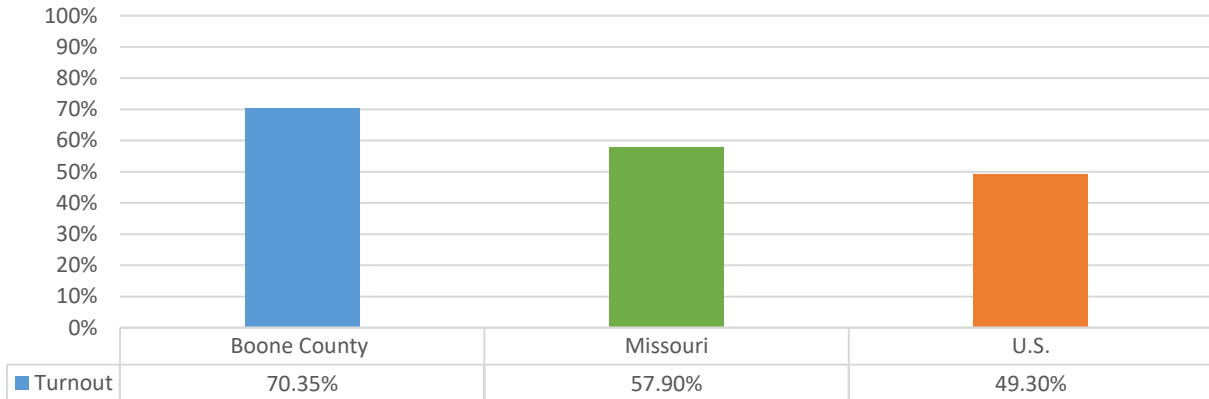


EXPLORE SOCIAL CAPITAL

Through his research of community zones and intergenerational mobility, Raj Chetty and his colleagues have found that greater social capital leads to greater intergenerational mobility. Similar to economic capital, which can be leveraged into access to credit for starting a business or buying a home, social capital includes the social connections we have that can lead to employment and other economic opportunities. The more connections that exist in a community, both formal and informal, the greater the economic opportunity for everyone, particularly those with lower incomes and fewer resources. Social ties between individuals allow them to build bonds, bridges, and links that represent greater access to resources and opportunities that can improve individual and community outcomes.¹⁹ There are not a lot of indicators that exist and good data sources for measuring social capital in Columbia and Boone County. One solution would be to expand the City of Columbia survey to include the rest of County to increase data for benchmarking and monitoring.

The lead indicator selected to exemplify greater social capital is *voter turnout in Boone County*. Based on data provided from the Boone County Clerk and Missouri Secretary of State's Office. Voter turnout in Boone County was 70.35%, exceeding turnout rates for Missouri and the United States, see Figure 49.

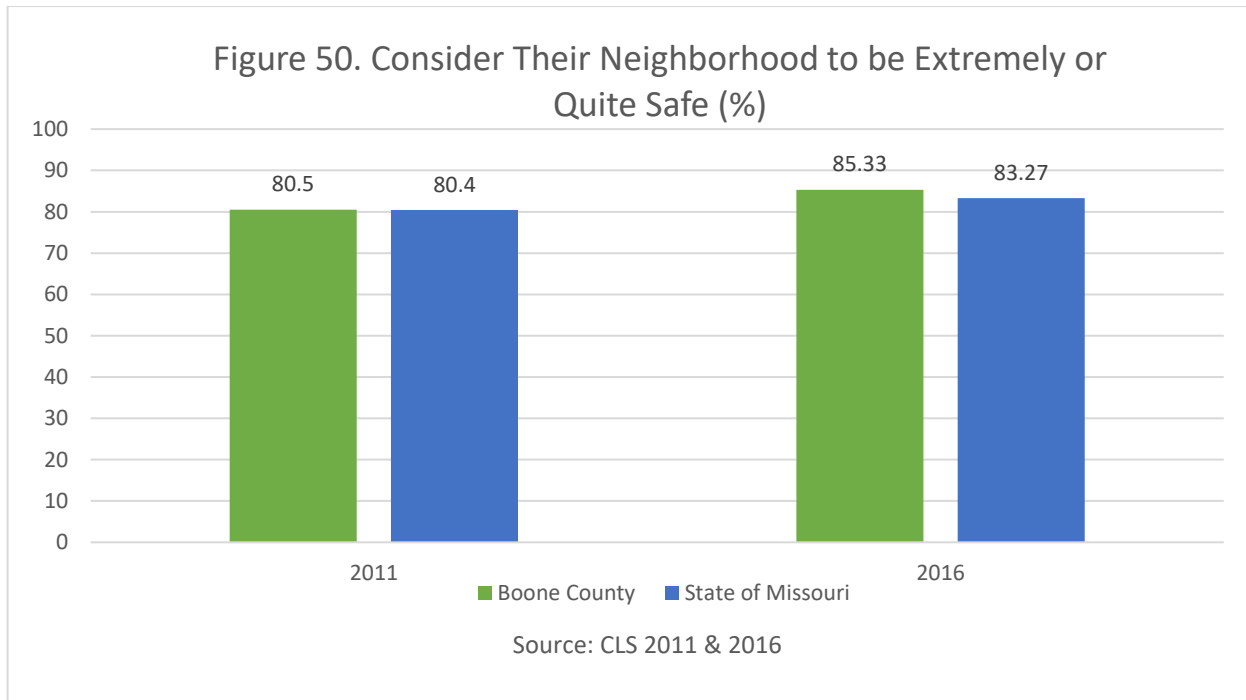
Figure 49. Voter Turnout for the Nov. 2018 General Election



Source: Boone County Clerk, Missouri Secretary of State

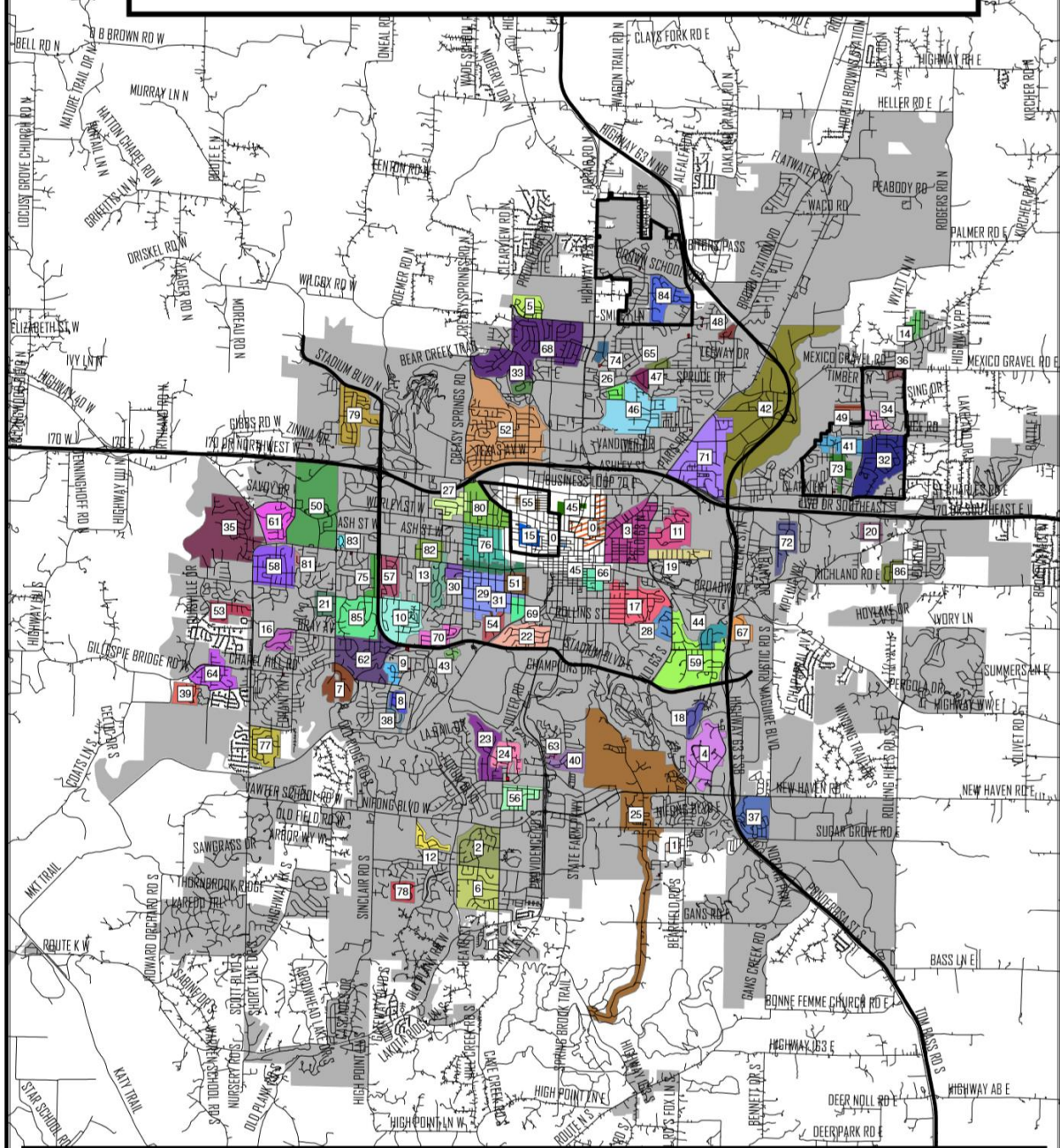
Neighborhood Safety

Another important influence on achieving greater social capital is citizens' perception of safety in the neighborhood where they reside. A feeling or perception of safety indicates a sense of community and helps to increase opportunity for intergenerational mobility. In the 2018 City of Columbia Survey, 92% of residents felt safe walking in their neighborhood during the day and 62% felt safe walking in their neighborhood at night. From County Level Study data collected in 2016, approximately 85% of Boone County residents consider their neighborhood to be extremely or quite safe. In the state as a whole, approximately 83% consider their neighborhood to be extremely or quite safe, see Figure 50.



Across the City of Columbia, there are 86 active neighborhood association organizations. Neighborhood associations can help grow social networks and cooperation among neighbors and increase social capital.²⁰ There are a variety of policy and program opportunities designed to increase social capital. Some examples include, building school and community partnerships, strengthening civic education and involvement, developing stronger community networks, and mobilizing religious institutions to anchor and create connections in a community.²¹

City of Columbia, Missouri Neighborhood Associations 2017



- 1-Bearfield Meadows 2-Bedford Walk 3-Benton-Stephens 4-Bluff Creek Estates 5-Brookside Square 6-Cedar Lake 7-Chapel Hill Estates 8-Chapel Hill Lake 9-Chapel Woods 10-College Park 11-Country Club Estates
- 12-Country Club Fairways 13-County House Branch 14-Deer Ridge 15-Douglas Park 16-Dubradis 17-East Campus 18-East Pointe 19-East Walnut 20-Eastland Hills 21-Fairview 22-Grasslands 23-Green Meadows
- 24-Creenbriar Trail Ridge 25-Grindstone Rock Quarry 26-Haden Park 27-Highland Park 28-Hinkson Creek Valley 29-Historic Old Southwest 30-Historic Sunset Lane 31-Hominy Branch 32-Hominy Branch
- 33-Hunters Gate 34-Indian Hills 35-King's Meadow 36-Lake Shiro Estates 37-Lenoir Woods 38-Limerick Lakes 39-Longview 40-Meadows 41-Meadowdale 42-Mexico Gravel 43-Miles Manor 44-Moon Valley Heights
- 45-North Central 46-Northland-Parker 47-Oakland Manor 48-Oaks 49-Oakview Drive 50-Park DeVille 51-Park Hill 52-Parkade 53-Quail Creek 54-Quarry Heights 55-Ridgeway 56-Rockbridge 57-Rockingham
- 58-Rothwell Heights 59-Shepard Boulevard 60-Shoe Factory District 61-Smitthton Ridge 62-Southwest Hills 63-Stadium Heights 64-Stonecrest 65-Tanglewood 66-Tenth Hitt Elm Locust 67-Timberhill Road
- 68-Vanderveen Crossing 69-Westmount 70-Westwinds Park 71-White Gate 72-Woodridge 73-Zaring 74-Spencer's Crest 75-Bourn Avenue 76-West Ash 77-Katy Lake Estates 78-Heritage Estates
- 79-Valley View Gardens 80-Worley Street Park 81-Coventry Court 82-Gary Atkins 83-Off Broadway Condominiums 84-Arcadia 85-Lakeshore Estates 86-Bay Hills

CONCLUSION

This report was designed to analyze specific indicators of generational mobility in five categories: residential integration, income equity, family stability, quality public schools, and social capital. While significant disparities have been identified throughout the report, opportunities for policy and program solutions were also highlighted. With key investments and a dedication to addressing the disparities analyzed here, progress can be made to impact generational mobility in the county.

REFERENCES

- ¹ Chetty, Raj, N. Hendren, P. Kline, and E. Saez. (2014). Quarterly Journal of Economics 129 (4): 1553-1623. *Where is the land of opportunity: The Geography of Intergenerational Mobility in the United States*.
- ² *ibid*
- ³ Gaitan, V. (2018). How Housing Matters. *How Housing Can Determine Educational, Health, and Economic Outcomes*. Available at: <https://howhousingmatters.org/articles/housing-can-determine-educational-health-economic-outcomes/>
- ⁴ U.S. News and World Report College Rankings.(2017). *University of Missouri*. Available at: <https://www.usnews.com/best-colleges/university-of-missouri-2516/student-life>
- ⁵ Turner, M.A. (2015). Urban Wire. *Tackling the legacy of neighborhood segregation*. Available at: <https://www.urban.org/urban-wire/tackling-legacy-neighborhood-segregation>
- ⁶ *Ibid*.
- ⁷ Baranoff, O. (2015). World Economic Forum. *What's caused the rise in income inequality in the US*. Available at: <https://www.weforum.org/agenda/2015/05/whats-caused-the-rise-in-income-inequality-in-the-us/>.
- ⁸ Powell, J. (2014). Haas Institute for a Fair and Inclusive Society. *Six policies to reduce economic inequality*. Available at: <https://haasinstitute.berkeley.edu/six-policies-reduce-economic-inequality>
- ⁹ Bernstein, J. (2015) Talk Poverty. *10 Solutions to Fight Economic Inequality*. Available at: <https://talkpoverty.org/2015/06/10/solutions-economic-inequality/>
- ¹⁰ Kronstadt, J., M. Favreault. *Families and Economic Mobility*. Available at: <https://www.urban.org/sites/default/files/alfresco/publication-pdfs/1001158-Families-and-Economic-Mobility.PDF>
- ¹¹ Center for the Study of Social Policy. (2019). *Strengthening Families*. Available at: <https://cssp.org/our-work/project/strengthening-families/>
- ¹² Schneider, J. (2017). Harvard Graduate School of Education. *What Makes a Great School?* Available at: <https://www.gse.harvard.edu/news/uk/17/10/what-makes-great-school>.
- ¹³ Shafer, L. (2018). Harvard Graduate School of Education. *What Makes a Good School Culture?* Available at: <https://www.gse.harvard.edu/news/uk/18/07/what-makes-good-school-culture>
- ¹⁴ Urban Institute (2018). *Segregated Neighborhoods, Segregated Schools?* Available at: <https://www.urban.org/features/segregated-neighborhoods-segregated-schools>
- ¹⁵ Chang, A. (2018). Vox. *We can draw school zones to make classrooms less segregated. This is how well your district does*. Available at: <https://www.vox.com/2018/1/8/16822374/school-segregation-gerrymander-map>
- ¹⁶ Grawe, N. *Education and Economic Mobility*. Available at: <https://www.urban.org/sites/default/files/publication/31161/1001157-education-and-economic-mobility.pdf>
- ¹⁷ Southeast Comprehensive Center. (2019). *Boosting North Carolina School Turnaround Efforts*. Available at: <https://southeast-cc.org/content/boosting-north-carolina-school-turnaround-efforts>
- ¹⁸ Partelow, L., C. Brown. (2018) *7 Great Education Policy Ideas for Progressives in 2018*. Center for American Progress. Available at: <https://www.americanprogress.org/issues/education-k-12/reports/2018/03/28/448156/7-great-education-policy-ideas-progressives-2018/>
- ¹⁹ Claridge, T. (2017). *How to Measure Social Capital*. Available at: <https://www.socialcapitalresearch.com/measure-social-capital/>.
- ²⁰ Ruef, M. (2016). *Neighborhood Associations and Social Capital*. Available at: https://www.researchgate.net/publication/303819190_Neighborhood_Associations_and_Social_Capital
- ²¹ Amselem, M.C. (2013). *Rebuilding Social Capital through Community Institutions*. The Heritage Foundation. Available at: <https://www.heritage.org/poverty-and-inequality/report/rebuilding-social-capital-through-community-institutions>