

these attempts were successful until HB 349 was signed into law in July 2021.² Nationally, 22 states beyond Missouri operate a tax-credit program, and about 330,000 students received a program-based scholarship in 2021.³

Missouri's ESA program is a tax-credit scholarship program that delineates student eligibility by a variety of criteria. To be eligible for the ESA program, a student must live in a Missouri county with a charter form of government or a city with at least 30,000 residents. Students must also have an individualized education plan (IEP) or a family income of no more than 200% of that necessary to qualify for free or reduced-price school lunch (FRPL). Application priority will first be granted to students with an IEP or whose family income is 100% of the FRPL threshold, then to students with a family income of no more than 200% of the FRPL threshold.⁴ Income of about \$50,000 or less would qualify a family of four for the first wave of priority access (nearly \$100,000 or less in family income would qualify a family of four for second priority access).5

To qualify, students must also have been enrolled in a public school for at least one semester in the previous twelve months or be starting kindergarten or first grade. When Indiana first introduced its own voucher program in 2011, it had a similar requirement. Students must have been enrolled in a public school for two semesters prior to receiving a scholarship or previously received a scholarship from the state's tax-credit scholarship program. Indiana has since introduced more ways for students to qualify, including for students who have already received a voucher, students with a disability, students zoned to attend a school graded as an "F" regardless of if they attend private or public school, and for students with a sibling who received a scholarship.⁶ These additional qualification pathways in Indiana can help mitigate the number of students who may switch from private school to public school to qualify. Missouri may also run into the same problem, especially at the beginning of the program's implementation as current private school students could be interested in a scholarship.

Missouri's ESA program allows individuals and corporations to receive a state tax credit for donating to scholarship-granting organizations which will then distribute funds to eligible students. If student applications outpace available funds, scholarships will be awarded via a lottery system. Those who donate will receive a tax-credit of up to 50% of their state tax liability, and no more than \$50 million in tax credits may be awarded per year.

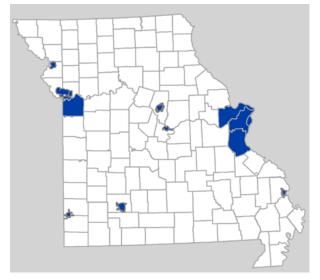
Who May Be Likely to Participate?

Previous research on private school choice participation offers insight into what may happen in Missouri once the ESA program is in operation. Numerous studies have found that eligible Black students are more likely than eligible white students to apply for and use vouchers, a similar form of private school choice.⁷ With regards to income, evidence is mixed on whether higher-income eligible families or lower-income eligible families are more likely to participate.⁸ However, factors beyond income appear to predict the likelihood of participation. For example, there is some evidence that applicants⁹ and participants¹⁰ may be somewhat more advantaged in terms of their parental education. Finally, program participation often depends on students first being accepted into their private school of choice. In the case of Missouri's ESA, the location requirements will impact who applies for the program, as students who would otherwise be eligible for the program and likely to participate may not live in one of the specified qualifying areas.

Missouri's ESA Program — Qualifying and Non-Qualifying Areas

There are four charter counties in the state: Jackson County, Jefferson County, St. Charles County, and St. Louis County. All four counties are located within a metropolitan area: Jackson County contains the majority of Kansas City, and the remaining three charter counties are in the St. Louis region (Figure 1).

Figure 1: Charter Counties and Eligible City Locations



Cities meeting the 30,000-population requirement include: Cape Girardeau, Columbia, Jefferson City, Joplin, Kansas City, Liberty, Springfield, St. Joseph, and St. Louis City (Figure 1).¹¹ Below we compare eligible counties and cities to nearby counties and near-eligible cities on the following characteristics: median income; the percent of white and nonwhite residents; educational attainment including residents with less than a high school degree, those with a high school degree or equivalent and higher, and those with a bachelor's degree or higher; and student poverty. Student poverty is measured as the percent of preschool to 12th grade students who live below the federal poverty line.¹²

Kansas City Region

Kansas City qualifies through the bill's population

requirement. Most of the city lies in Jackson County, but portions of it cross into Platte, Clay, and Cass Counties. Residents in the remainder of Jackson County are also eligible because of its charter status. Comparisons between Kansas City, Jackson County, and the surrounding counties are difficult to conduct because of these overlapping boundaries. On its own, Kansas City had just under one third of its students in poverty, nearly 45% of its residents were nonwhite, and the median income was around \$54,000 (Table 1).

Out of all the counties in the immediate region, Jackson County had the highest percent of nonwhite residents and the third highest percentage of residents with a bachelor's degree or higher, at about 32% (Table 2). Despite its non-charter status, Johnson County is similar to Jackson County in terms of median income and educational attainment, but Jackson County had about 11 percentage points more PK-12 students below the poverty line. Jackson County also exhibited similarities with other counties, including similar educational attainment with Clay County.

Ray County, bordering Jackson County to the northwest, had the lowest educational attainment in the region with just under 15% of residents holding a bachelor's degree or higher, and the highest percentage of residents with less than a high school degree, almost 12%. Though the geographic requirement incorporates Jackson County, the Kansas City-area county with the highest percentage of nonwhite residents, it also excludes counties like Ray and Lafayette Counties, areas with lower overall educational attainment.

St. Louis Area Counties

The charter counties of Jefferson County, St. Charles County, and St. Louis County are located in the St. Louis metro area. Residents of St. Louis City also

Table 1: Kansas City Qualifying Areas

| | Median Income | Nonwhite | White | Less than HS | HS or above | BA or above | PK-12 students in poverty |
|-------------------|------------------|----------|--------|-----------------|----------------|----------------|------------------------------|
| Kansas City | \$54,194 | 44.84% | 55.16% | 10.05% | 89.95% | 35.25% | 23.21% |
| Jackson County | \$55,134 | 37.81% | 62.19% | 9.39% | 90.61% | 31.64% | 21.34% |

Table 2: Bordering Counties to Jackson County

| | Median Income | Nonwhite | White | Less than HS | HS or above | BA or above | PK-12 students in poverty |
|---------------------|------------------|----------|--------|-----------------|----------------|----------------|------------------------------|
| Cass County | \$69,433 | 12.03% | 87.97% | 7.58% | 92.42% | 26.35% | 11.27% |
| Clay County | \$70,510 | 18.88% | 81.12% | 6.66% | 93.34% | 33.21% | 9.78% |
| Johnson County | \$55,273 | 14.24% | 85.76% | 7.52% | 92.48% | 28.87% | 10.30% |
| Lafayette County | \$58,766 | 8.03% | 91.97% | 9.45% | 90.55% | 20.25% | 17.69% |
| Platte County | \$80,393 | 18.99% | 81.01% | 4.21% | 95.79% | 43.13% | 7.51% |
| Ray County | \$61,957 | 6.34% | 93.66% | 11.88% | 88.12% | 14.62% | 16.15% |

qualify for the ESA program because the city meets the population requirement. Unlike Kansas City, St. Louis City's boundaries do not cross over into any neighboring counties.

In the St. Louis area, every non-eligible bordering county had a higher percentage of students below the federal poverty line than did charter counties (Tables 3 and 4) (St. Louis City is included as a comparison). St. Francois County and Warren County both had about one fifth of their students below the poverty line, whereas Jefferson, St. Charles, and St. Louis Counties had a smaller percentage, about 13% or less, of their students below the poverty line. Most notably, of all counties in the St. Louis area, Washington County had the highest percentage of students in poverty at about 25%, the lowest median income of about \$41,000, and the highest percent of residents – nearly one in four – with less than a high school degree.

The range of median incomes in the bordering counties extends lower than the median incomes of the qualifying areas. Washington's median income was \$41,483. The highest median income among bordering counties was roughly \$64,000 in Lincoln County, lower than the highest median income in the charter counties, nearly \$85,000 in St. Charles County. In the St. Louis area, there are non-eligible bordering counties with lower median incomes and a higher percent of students in poverty than in the eligible charter counties.

Table 3: St. Louis Qualifying Areas

| | Median Income | Nonwhite | White | Less than HS | HS or above | BA or above | PK-12 students in poverty |
|-----------------------|------------------|----------|--------|-----------------|----------------|----------------|------------------------------|
| St. Louis City | \$43,896 | 56.36% | 43.64% | 12.24% | 87.76% | 36.33% | 33.23% |
| St. Charles County | \$84,978 | 12.86% | 87.14% | 5.21% | 94.79% | 38.86% | 6.60% |
| St. Louis County | \$67,420 | 33.96% | 66.04% | 6.50% | 93.50% | 43.65% | 13.14% |
| Jefferson County | \$65,454 | 5.59% | 94.41% | 10.86% | 89.14% | 20.41% | 11.01% |

Table 4: Bordering Counties to St. Louis Area

| | Median Income | Nonwhite | White | Less than HS | HS or above | BA or above | PK-12 students in poverty |
|-------------------------|------------------|----------|--------|-----------------|----------------|----------------|---------------------------|
| Franklin County | \$57,214 | 4.98% | 95.02% | 11.57% | 88.43% | 20.92% | 15.63% |
| Lincoln County | \$64,196 | 6.97% | 93.03% | 10.50% | 89.49% | 16.84% | 14.50% |
| St. Genevieve County | \$60,129 | 4.34% | 95.66% | 10.59% | 89.41% | 19.73% | 16.92% |
| St. Francois County | \$46,466 | 8.23% | 91.77% | 12.24% | 87.76% | 36.33% | 19.93% |
| Warren County | \$60,125 | 8.33% | 91.67% | 11.31% | 88.69% | 19.12% | 21.52% |
| Washington County | \$41,483 | 5.76% | 94.24% | 23.06% | 76.94% | 9.89% | 24.54% |

Qualifying Cities

The ESA bill's 30,000 population minimum extends to residents in cities outside the Kansas City and St. Louis areas. The additional qualifying cities are Columbia, Joplin, St. Joseph, Springfield, Jefferson City, Cape Girardeau, and Liberty. The next seven largest cities with populations just under the minimum are Belton, Gladstone, Nixa, Raymore, Rolla, Sedalia, and Warrensburg. Lee's Summit was also identified as a qualifying city; however, the majority of the city lies in eligible Jackson County, so we exclude it from the following comparisons. When comparing cities meeting the population requirement with those that do not, there are some differences in demographic characteristics but there are also similarities that make it challenging to identify a clear divide between the two groups (see Tables 5 and 6).

The percent of nonwhite residents in the qualifying cities ranges from 13% to 28%. In the largest seven non-qualifying cities, every city but Nixa (at 9%) fell

Table 5: Qualifying Cities

| | Population | Median Income | Nonwhite | White | Less than HS | HS or above | BA or above | PK-12 students in poverty |
|-------------------|------------|------------------|----------|--------|-----------------|----------------|----------------|---------------------------|
| Springfield | 167,051 | \$36,856 | 14.67% | 85.33% | 9.55% | 90.45% | 27.35% | 24.89% |
| Columbia | 121,230 | \$51,276 | 25.51% | 74.49% | 4.77% | 95.23% | 52.22% | 13.98% |
| St. Joseph | 75,913 | \$48,197 | 18.39% | 81.61% | 12.63% | 87.37% | 20.46% | 26.73% |
| Joplin | 50,386 | \$45,449 | 16.65% | 83.35% | 10.44% | 89.56% | 26.48% | 21.19% |
| Jefferson City | 42,919 | \$52,253 | 27.50% | 72.50% | 8.90% | 91.10% | 32.55% | 19.77% |
| Cape Girardeau | 39,566 | \$45,733 | 21.22% | 78.78% | 8.54% | 91.46% | 34.96% | 26.15% |
| Liberty | 31,328 | \$76,577 | 13.14% | 86.86% | 5.08% | 94.92% | 38.57% | 8.23% |

Table 6: Near-Qualifying Cities

| | Population | Median Income | Nonwhite | White | Less than HS | HS or above | BA or above | PK-12 students in poverty |
|------------------|------------|------------------|----------|--------|-----------------|----------------|----------------|------------------------------|
| Gladstone | 27,126 | \$59,018 | 21.69% | 78.31% | 6.29% | 93.71% | 30.22% | 18.83% |
| Belton | 23,425 | \$62,754 | 16.81% | 83.19% | 10.56% | 89.44% | 18.91% | 16.71% |
| Sedalia | 21,633 | \$39,804 | 20.15% | 79.85% | 14.97% | 85.03% | 15.80% | 23.91% |
| Nixa | 21,544 | \$58,402 | 9.39% | 90.61% | 7.26% | 92.74% | 31.21% | 6.64% |
| Raymore | 21,196 | \$84,697 | 19.19% | 80.81% | 2.94% | 97.06% | 37.51% | 5.59% |
| Rolla | 20,169 | \$37,600 | 15.29% | 84.71% | 9.02% | 90.98% | 35.81% | 24.47% |
| Warrens- burg | 20,139 | \$46,315 | 18.95% | 81.05% | 5.42% | 94.58% | 40.66% | 6.87% |

within a similar range, 15% to 22%. Five of the qualifying cities had around one fifth or more of their students in poverty. Two non-qualifying cities had about a quarter of their students in poverty and four of the cities had 16% or more of their students in poverty. One may identify differences between specific cities but there is little to distinguish the groups of qualifying and non-qualifying cities along these characteristics.

Between the two groups, the two most similar cities are Springfield and Rolla. Both had a median income of around \$37,000, a similar percentage of nonwhite residents, and roughly the same percentage of students in poverty. Rolla, the home of Missouri University of Science and Technology, however, had a higher percentage of residents with a bachelor's degree or higher. On the other hand, Liberty and Raymore are similar in that they both had the highest median incomes, \$76,577 and \$84,697, respectively, less than 10% of their students were in poverty, and at least 90% of their populations had a high school degree or higher.

Highest Poverty Counties

Since geographic limits are based on charter status and population, areas with the highest percent of students in poverty may be excluded from the program. Table 7 lists the counties with the highest shares of PK-12th grade students below the federal poverty line, none of which are charter counties or contain cities that meet the population minimum. We note, however, that the federal poverty line is not a direct measure of students who would qualify for the program since the federal poverty income threshold is lower than that necessary to qualify for priority access to scholarships through HB 349. For reference, incomes of about \$26,000 or lower are below the federal poverty line for a family of four.¹³

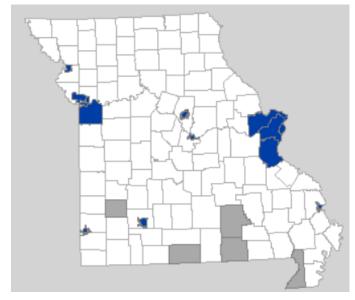
Ozark County contains the highest percentage, more than half, of students below the federal poverty line. The remaining counties, Dade, Dunklin, Oregon and Shannon Counties all had more than one third of their students below the poverty line. By contrast, the average percent of students in poverty for the four charter counties is 14%. The counties with the highest percentages of student poverty also have lower

| | PK-12 students in poverty | Median Income | Nonwhite | White | Less than HS | HS or above | BA or above |
|-------------------|------------------------------|------------------|----------|--------|--------------|-------------|-------------|
| Ozark County | 50.35% | \$31,947 | 4.71% | 95.29% | 17.68% | 82.32% | 10.99% |
| Dade County | 36.26% | \$40,399 | 6.29% | 93.71% | 12.82% | 87.18% | 12.69% |
| Dunklin County | 35.61% | \$36,380 | 19.63% | 80.37% | 23.74% | 76.26% | 13.82% |
| Shannon County | 35.54% | \$34,265 | 6.13% | 93.87% | 20.01% | 79.99% | 14.87% |
| Oregon County | 34.90% | \$33,601 | 5.96% | 94.04% | 16.92% | 83.08% | 14.57% |

Table 7: Highest Poverty Counties

educational attainment than eligible charter counties; some of the counties had around one fifth or more of their residents with less than a high school degree and none of these five counties had more than 15% of their residents with a bachelor's degree. Students in these counties with the highest rates of student poverty and lower educational attainment, all located in the southern half of the state, would not be eligible for an ESA (Figure 2). In fact, 93 of Missouri's 114 counties have higher student poverty rates than the average student poverty rate (14%) in the four charter counties.

Figure 2: Eligible Areas (in blue) and Highest Poverty Counties (in gray)



Conclusion

Since HB 349 requires students to live in a qualifying area, students outside of these areas who would otherwise be eligible through special education identification or financial need cannot access a taxcredit scholarship. While there are some differences among qualifying and non-qualifying areas, similarities remain. In some instances, non-qualifying areas exhibit greater need than qualifying areas based on factors like median income or the percent of students in poverty. This finding also is important in light of our other recent work showing that the program's geographic eligibility restriction is quite unpopular among Missouri's registered voters.¹⁴

While there are, of course, other measures that could be used to analyze differences between qualifying and non-qualifying areas, measures of median income, educational attainment, nonwhite population, and the proportion of students in poverty provide meaningful data useful to describe the aggregate characteristics of eligible and ineligible areas in the state. In short, the geographic requirement does not consider an area's relative need because the charter status or population minimum is not directly tied to area or student characteristics. As a result, our analyses indicate the highest-poverty counties are excluded from the program. As Missouri begins implementing its ESA program, we will start to see how its use may compare to that identified in previous research and if its eligibility regulations remain as we have described above or are changed in the future to include a greater share of Missouri's students.

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Notes

¹ Mo. 97th Gen. Assemb. S.B. 17. 1st Regular Session (2012). Modifies Provisions related to education. https://www.senate.mo.gov/13info/BTS_Web/Bill.aspx?SessionType=R&BillID=16944735

² Mo. 101st Gen. Assemb. H.B. 349. 1st Reg. Sess. (2020). Establishes the "Missouri Empowerment Scholarship Accounts Program." https://house.mo.gov/Bill.aspx?bill=HB349&year=2021&code=R

³ School Choice Fast Facts. *EdChoice*. https://www.edchoice.org/school-choice/fast-facts/.

⁴ Mo. 101st Gen. Assemb. H.B. 349. 1st Reg. Sess. (2020). Establishes the "Missouri Empowerment Scholarship Accounts Program." https://house.mo.gov/Bill.aspx?bill=HB349&year=2021&code=R

⁵ Missouri Department of Elementary and Secondary Education. Attachment A: Eligibility Criteria for Free and Reduced Price Lunch Meals. https://dese.mo.gov/media/pdf/attachment-eligibility-criteria-free-and-reduced-price-meals.

⁶ Catt, A. & Rhinesmith, E. Why Indiana Parents Choose. *EdChoice*. 2017. https://www.edchoice.org/wpcontent/uploads/2017/09/Why-Indiana-Parents-Choose-2.pdf

⁷ See for example: Campbell, D. E., West, M. R., & Peterson, P. E. (2005). Participation in a national, means-tested school voucher program. *Journal of Policy Analysis and Management*, 24(3), 523–541; Figlio, D., Hart, C. M. D., & Metzger, M. (2010). Who uses a means-tested scholarship, and what do they choose? *Economics of Education Review*, 29(2), 301–317; Fleming, D. J., Cowen, J. M., Witte, J. F., & Wolf, P. J. (2015). Similar students, different choices: Who uses a school voucher in an otherwise similar population of students? *Education and Urban Society*, 47(7), 785–812; Goldhaber, D. D., Brewer, D. J., Eide, E. R., & Rees, D. I. (1999). Testing for sample selection in the Milwaukee school choice experiment. *Economics of Education Review*, 18(2), 259–267; Howell, W. G. (2004). Dynamic selection effects in a meanstested, urban school voucher program. *Journal of Policy Analysis and Management*, 23, 225–250; Leal, D. L. (2004). Latinos and school vouchers: Testing the "minority support" hypothesis. *Social Science Quarterly* (Wiley-Blackwell), 85(5), 1227–1237; Witte, J. F., & Thorn, C. A. (1996). Who chooses? Voucher and interdistrict choice programs in Milwaukee. *American Journal of Education*, 104(3), 186–217.

⁸ Ibid.

⁹ Chakrabarti, R. (2013). Do vouchers lead to sorting under random private school selection? Evidence from the Milwaukee voucher program. *Economics of Education Review*, 34, 191–218. https://doi.org/10.1016/j.econedurev.2013.01.009

¹⁰ Fleming et al., 2015; Goldhaber et al., 1999; Witte & Thorn, 1996

¹¹ City eligibility was determined via the Curmoests.xlsx file available at https://mcdc.missouri.edu/population-estimates/ (7/2020 estimates). We do not know at this time what estimates will be used to determine eligibility.

¹² Data from all tables are from the U.S. Census Bureau. American Community Survey Data (2009-2019), tables B03002, B14006, B15003, and B19013.

The percent of Preschool-12th grade students in poverty is how many students fall under the federal poverty line.

¹³ United States Census Bureau. Poverty Thresholds. Poverty thresholds by Size of Family and Number of Children. https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html.

¹⁴ Shelton, A., Burrola, A., Anglum, J. C., Rhinesmith, E. (2021). "Voter Support for the MO Empowerment Scholarship Accounts Program". *SLU PRiME Center*. Volume 3, Issue 11. November, 2021. Retrieved from: https://prime-center.squarespace.com/s/Poll-3-Policy-Brief.pdf