



# ESSAY

FEBRUARY 2019



## CREATING PATHWAYS FOR SELF-SUFFICIENCY: A FREE-MARKET FRAMEWORK FOR POVERTY AND WELFARE POLICY

*By Emily Stahly*

### KEY FINDINGS

- Based on economic mobility data, about one third of children born into poverty in Missouri will stay in poverty their entire lives.
- Each person who lives in poverty their entire life will collect over \$250,000 in lifetime benefits. Multiply that by the thousands of people living in cyclical poverty, and the cost to taxpayers is in the billions.
- For children growing up in poverty, a quality education can be critical to a more financially stable future.
- A system that better prepares low-income students for college or a career can break cycles of poverty and save taxpayers billions of dollars in the long run.

ADVANCING LIBERTY WITH RESPONSIBILITY  
BY PROMOTING MARKET SOLUTIONS  
FOR MISSOURI PUBLIC POLICY

## INTRODUCTION

High rates of child poverty coupled with low rates of expected upward mobility present unique challenges. Improving upward mobility should be a priority for policymakers, because even a small percentage of the population in poverty and receiving public assistance throughout their lives presents a significant cost to taxpayers.

As I documented in the companion piece to this essay, there are pockets of intergenerational poverty that contribute to the growth in entitlement spending in Missouri even though child poverty and overall poverty rates in the state have declined in recent years.<sup>1</sup> While providing a safety net for those in need is important, continued growth in welfare spending will either crowd out other priorities like infrastructure and education or require the state to collect more in taxes—either of which would be detrimental to economic growth in Missouri.

Although there is no panacea for poverty, there is a better way forward than a status quo whereby thousands of people are dependent on public assistance and welfare spending takes up an ever-increasing portion of the state's budget. Missouri has policy options that could create surer paths for self-sufficiency for children in our state regardless of the economic class into which they were born.

After estimating the potential cost of intergenerational poverty arising from means-tested benefits for recipients' entire lives, this essay will look closely at one path out of poverty—a high quality education—and how Missouri could put more children on that path.

## WELFARE SPENDING AND INTERGENERATIONAL MOBILITY

In Missouri, public welfare spending made up 18.4 percent of total state and local expenditures in FY2004—above the national average of 17.6 percent. By FY2015, the percentage of Missouri's expenditures going to welfare had grown to 19.5 percent while the national average had risen to 21.5 percent.<sup>2</sup> Moreover, the state's public welfare spending per capita increased from \$994 in FY 2004 to \$1,404 in FY2015.<sup>3</sup>

For fiscal year 2018, the Missouri General Assembly appropriated \$9.37 billion for the Department of Social Services (DSS), of which over \$8 billion went to MO HealthNet (the state's Medicaid program) alone.<sup>4</sup> Another roughly \$650 million went to the Family Support Division, which administers other welfare programs.<sup>5</sup> According to DSS, in fall 2018 there were 991,362 people enrolled in MO HealthNet services.<sup>6</sup>

Within the Family Support Division's budget, the largest expenditure, other than administrative and operation costs, was for Temporary Assistance for Needy Families (TANF). It is important to note that Medicaid and TANF are partially funded by the federal government, but they are included in Missouri's state budget. Supplemental Nutrition Assistance Program (SNAP) benefits, however, are fully funded by the federal government and are not included as part of Missouri's state budget, even though they are administered by the state. According to DSS, in fall 2018, there were 764,121 monthly SNAP recipients and 14,615 families receiving TANF.<sup>7</sup>

When considering only a basic welfare package of Medicaid, TANF, and SNAP, how much can low-income families expect to receive in benefits, on average? In Missouri, annual Medicaid spending per enrollee is about \$3,200 for a child and \$3,100 for an adult who is not elderly or disabled.<sup>8</sup> The TANF average monthly payment is \$225, or \$2,700 annually, per qualifying household. The average monthly SNAP benefit is \$122 per person, or \$1,464 annually.<sup>9</sup>

Thus, based on the numbers above, a single parent with one child would receive, on average, about \$12,000 per year and a single parent with two children would receive \$16,600. Married couples who qualify for Medicaid would receive about \$16,500 per year if they have one child and about \$21,000 if they have two. If only the children qualify for Medicaid, then the family would receive, on average, around \$10,500 with one child and \$15,000 with two children.

Again, the federal government covers most of the entitlement spending in Missouri, albeit with public tax dollars. For fiscal year 2018 over \$4 billion in federal funds went to Medicaid in Missouri, while the state's general

revenue accounted for about \$1.53 billion and other funds covered the remaining \$2.52 billion.<sup>10</sup>

One condition that can hamper efforts to control welfare spending is the inability of those born into poverty to escape it. Although Missouri's child poverty rate (18.6 percent) is essentially the same as that of the nation as a whole (18.4 percent), recent U.S. Census Bureau data identify areas of the state where child poverty is more than double the statewide rate.<sup>11</sup> In addition, nearly half of the low-income children in Missouri live in counties where the chance of getting out of poverty as an adult is less than in the rest of the state—or what are referred to as “low mobility” counties. If Missouri could improve rates of mobility in these pockets of poverty, the cost savings could be substantial.

A recent study by Raj Chetty, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez estimates rates of mobility, what they refer to as absolute mobility, for the likelihood that a child born to parents at the 25th percentile of income will have escaped poverty by age 30. This was done by examining de-identified tax records from the Internal Revenue Service for people born between 1980 and 1982 and comparing their household income when they were children to their household income as adults.<sup>12</sup> These data are reported by “commuting zone,” some of which contain multiple counties and reflect a local economy.

For this study, I wanted to learn how many of the children born into poverty in Missouri will remain in poverty throughout their adult lives, and the potential impact to Missouri's taxpayers of such persistent poverty. In order to estimate the potential cost of just one generation of low-income children remaining in poverty throughout adulthood, I used the rates of mobility by commuting zone to estimate the percentage of those children who grew up in households at or below the 25th income percentile who are living above the poverty line as adults, as well as the percentage who are still living below it. Although Chetty et al.'s data are based on children born in the early 1980s, the earliest comparable data for Missouri are from the late eighties. However, according to Chetty et al.'s analysis, rates of mobility are very stable and, therefore, the estimates for the early 1980s should still hold for the late eighties.

Although there are no commuting zone-level estimates for children living in poverty, the Census Bureau does have county-level data, based on the Small Area Income Poverty Estimates (SAIPE), from as early as 1989.<sup>13</sup> Using the county/commuting zone crosswalk in the dataset from Chetty et al., I converted the county-level data to commuting zones.

According to Census data, approximately 237,000 children were living in poverty in Missouri in 1989.<sup>14</sup> I expanded the rates of mobility to include all children living in households at each of the percentiles at or below the 25th percentile.<sup>15</sup> I then averaged these mobility rates. After applying the relevant rates of mobility to the commuting zone data, I estimated that 159,200 of the 237,000 children living in poverty in 1989 would be expected to have incomes above the federal poverty line at age thirty, while 77,800 are predicted to still be in poverty as adults.

In 1989, these subjects were between 0 and 17 years old, so today they would be between 30 and 47 years old. I assumed that the group still living in poverty as adults is evenly distributed across age cohorts and that mobility in and out of the state is balanced. Using an estimate of \$10,000 in annual means-tested benefits per person, I calculated an estimated lifetime means-tested benefit for each cohort in the group, from 2019 to the age of 70 (see Table 1).<sup>16</sup>

Although this estimate requires making several general assumptions, the point is that each adult who was in poverty as a child in 1989 and stays in poverty his entire life is likely to still receive between \$150,000 and \$250,000 in lifetime benefits (in 2018 dollars). As a group, just this one cohort of low-income children from 1989 could yet receive nearly \$16 billion in taxpayer-funded entitlements through adulthood. Again, the caveat must be made that these public dollars are mostly federal, although several billion will come from Missouri state taxpayers.

I then altered my calculations by improving the assumed rates of mobility for each of the commuting zones by 10 percent. This reduced the number of low-income children expected to be below the poverty line as adults by about 16,000. This modest improvement alone could reduce the amount of this group's means-tested benefits by over \$3



**Table 1: Estimated lifetime means-tested benefits for Missouri residents living below the poverty line as children who are expected to remain in poverty throughout adulthood based on estimated rates of upward mobility for those growing up in households at or below the 25th income percentile**

Age in 2018	Years until age 70	2018 estimated total means-tested benefit	Total estimated lifetime benefit	Total estimated lifetime benefit for age cohort†	Total estimated lifetime benefit for age cohort if mobility rates improve by 10 percent	Difference
30	40	\$10,000	\$231,148	\$999,088,004	\$794,715,230	\$204,372,774
31	39	\$10,000	\$228,082	985,837,721	784,175,417	201,662,305
32	38	\$10,000	\$224,925	972,189,930	773,319,409	198,870,522
33	37	\$10,000	\$221,672	958,132,705	762,137,720	195,994,985
34	36	\$10,000	\$218,323	943,653,764	750,620,581	193,033,183
35	35	\$10,000	\$214,872	928,740,454	738,757,928	189,982,526
36	34	\$10,000	\$211,318	913,379,745	726,539,395	186,840,350
37	33	\$10,000	\$207,658	897,558,214	713,954,306	183,603,908
38	32	\$10,000	\$203,888	881,262,038	700,991,665	180,270,373
39	31	\$10,000	\$200,004	864,476,976	687,640,144	176,836,832
40	30	\$10,000	\$196,004	847,188,363	673,888,078	173,300,285
41	29	\$10,000	\$191,885	829,381,091	659,723,450	169,657,641
42	28	\$10,000	\$187,641	811,039,601	645,133,883	165,905,718
43	27	\$10,000	\$183,270	792,147,866	630,106,629	162,041,238
44	26	\$10,000	\$178,768	772,689,379	614,628,557	158,060,823
45	25	\$10,000	\$174,131	752,647,138	598,686,143	153,960,995
46	24	\$10,000	\$169,355	732,003,629	582,265,457	149,738,173
47	23	\$10,000	\$164,436	710,740,815	565,352,150	145,388,666
<b>Total</b>				<b>\$15,592,157,435</b>	<b>\$12,402,636,142</b>	<b>\$3,189,521,293</b>

\* All dollar amounts adjusted to 2018, using CPI to adjust average 2012 total benefit and assuming a 3 percent discount going forward.

† Assumes that the nearly 78,000 children are equally distributed by age.

Source: Author's calculations using Chetty R, Hendren N, Kline P, Saez E. "Where Is the Land of Opportunity? The Geography of Intergenerational Poverty in the United States."; Small Area Income and Poverty Estimates (SAIPE): State and County Estimates for 1989, United States Census Bureau.

billion over the course of their lives. Next I considered how Missouri has attempted to rein in entitlement spending and what the state might try going forward.

## MISSOURI'S DIRECT ANTI-POVERTY EFFORTS

Public assistance programs comprise nearly a third of the state's budget, and in recent years there have been several attempts at reforming major assistance programs.

For example, in 2015, Missouri's General Assembly passed Senate Bill 24, which modified provisions regarding the Temporary Assistance for Needy Families (TANF) program. The governor vetoed the bill, but the General Assembly overrode the veto and the bill became law.<sup>17</sup> Some major provisions of the law include:

- Providing a standard orientation for benefit applicants so they understand the “rules, requirements, work activities and consequences if program requirements are not satisfied”;
- Requiring applicants to sign a participation agreement and create an account on jobs.mo.gov unless they are exempt from work activities;
- Creating the Cash Diversion Program that allows applicants to opt for a “lump-sum cash grant for short-term needs in lieu of ongoing monthly TANF payments”;
- Specifying sanction policies for non-cooperation that begin with face-to-face meetings and can end with a full-family sanction and a closed case;
- Establishing a New Spouse Disregard, which allows for active TANF recipients to disregard “all income and resources” of a new spouse for six consecutive months without affecting their eligibility;
- Reducing the lifetime limit for receipt of TANF benefits from 60 months to 45 months unless the recipient is approved for a hardship extension;
- Creating a database to track and record TANF recipients' work activities.<sup>18</sup>

The number of individuals receiving TANF benefits has dropped significantly from about 110,000 in January 2012 and held steady at about 30,000 individuals from

June 2016 to June 2017.<sup>19</sup> The DSS reported closing nearly 4,000 cases for reaching the 45-month lifetime limit during fiscal years 2016 and 2017. Additionally, 8,549 families received the full family sanctions for non-compliance described above, of which 1,072 families resolved the sanctions within these two years.<sup>20</sup>

Many criticized Senate Bill 24 as being overly harsh, particularly given the number of people who either received sanctions for not complying with work requirements or reached the lifetime limit. However, it seems that the dramatic drop in the number of people receiving TANF benefits is not solely or even mostly because of the tighter restrictions—the number of TANF recipients had been declining steadily since 2012 before Senate Bill 24 was implemented. The unemployment rate was at an 18-year low of 3.0 percent as of November 2018, and the poverty rate in Missouri has also decreased.<sup>21</sup> In 2012, the poverty rate was 16.2 percent and approximately 948,000 individuals were in poverty.<sup>22</sup> By 2017, the poverty rate had dropped to 13.4 percent or about 796,000 individuals—over 150,000 fewer people in poverty than five years earlier.<sup>23</sup>

During the 2018 legislative session, several bills were introduced that sought to impose work requirements on recipients of the Supplement Nutrition Assistance Program (SNAP), with the exception of certain groups like heads of households with young children, those in rehabilitation for drugs or alcohol, and college students.<sup>24</sup> While House Bill 1486 passed the House, it did not make it out of the Senate before the end of the session.

There have been calls to expand eligibility for Medicaid.<sup>25</sup> There has been a proposal to request a “global waiver” from the federal government and functionally make Medicaid funds into a block grant, allowing for greater flexibility in how Missouri administers Medicaid.<sup>26</sup> This proposal has been introduced in several legislative sessions but has not passed.

## LOOKING BEYOND ENTITLEMENT PROGRAMS TO IMPROVE INTERGENERATIONAL MOBILITY

Policymakers could act to improve outcomes for those born into poverty in areas other than entitlement programs. Even if there are limits to how much more Missouri can reform current welfare programs—whether

because of the political climate or federal regulations—pursuing policies in other areas can help those in poverty achieve economic independence, thus reducing the need for welfare in our state.

In the research discussed earlier, Chetty et al. found five factors that correlated (in either direction) with upward mobility: de facto racial and income segregation, income inequality, school quality, social capital, and family structure.<sup>27</sup> Of these five factors, the provision of a high-quality education to Missouri children through policies that emphasize parental empowerment could feasibly be addressed by the Missouri state legislature. This section will briefly discuss these policies.

### Elementary and Secondary School Quality

A quality education can offer a path to financial stability to children growing up in poverty. In Missouri, however, children growing up in poverty face three major obstacles to receiving a good education: poor preparation at the elementary and secondary education levels, a lack of effective pathways and preparation for careers, and, for college-bound students, a lack of social and financial support needed to complete college. As taxpayers, we spend substantial public dollars on education and should be getting a better return on our investment by having students leave school prepared to support themselves.

In their analysis of various factors relating to economic mobility, Chetty et al. found a strong correlation between school quality—as measured by third through eighth grade math and English standardized test scores and dropout rates—and upward mobility. Recent performance on math and reading tests indicate that Missouri’s students’ scores have made little progress over the last decade.

The National Assessment of Education Progress (NAEP), also known as The Nation’s Report Card, is administered every two years to state-representative samples in each state and allows for comparisons over time and among states. In 2017, the proportion of Missouri fourth graders scoring *Proficient or above* in reading was 36.5 percent, and it was 40.3 percent in math; these scores were less than one percentage point different than the 2009 results.<sup>28</sup> The fraction of eighth graders who scored *Proficient or above* in reading increased from 34.3 percent to 35.4 percent between 2009 and 2017, but the percentage of eighth

graders who met that benchmark in math dropped from 35.5 percent in 2009 to 30.3 percent in 2017.

Moreover, there are significant gaps in scores between students who are eligible for free and reduced-price lunch (FRPL)—those with household incomes of up to 185 percent of the federal poverty line—and those who are not. The NAEP tests are on a 500-point scale, and eligible students scored, on average, 24 points below non-eligible students on the fourth and eighth grade math tests. In terms of proficiency, just 16 percent of Missouri eighth graders who were FRPL-eligible were *Proficient or above* in mathematics in 2017, compared to 42 percent of those who were not eligible. In reading, there was a 26-point gap for fourth graders and a 22-point gap for eighth graders.<sup>29</sup> Such large gaps between lower-income students and their peers are troubling.

Clearly, there is room for improvement in Missouri’s K-12 system, particularly for students who are in poverty. Research consistently indicates that the availability of programs like charter schools and education savings accounts (ESAs) would be particularly helpful for students from low-income families.<sup>30</sup> Fortunately, a course access program was signed into law in 2018 which allows students to take classes, online and at no additional cost, that their own school does not offer.<sup>31</sup> However, with charter schools in Kansas City and St. Louis being the only form of school choice in the state, Missouri leaves much to be desired in providing low-income parents private and public school choice options.

The lack of school choice in Missouri does not stem from a lack of demand among families—national surveys show that school choice programs are popular with parents. According to the *2017 Schooling in America Survey* from EdChoice, 77 percent of households with annual incomes less than \$40,000 favored ESAs, 67 percent have a favorable view of vouchers, 61 approve of tax-credit scholarships, and 64 percent have a positive opinion of charter schools. There is a demand among low-income parents for more educational opportunities for their children but not the supply to match.<sup>32</sup>

### High School Completion/Dropout Rates

Dropout rates correlate negatively with upward mobility, and most of Missouri’s school districts’ dropout rates

decreased or stayed the same in the last decade; however some districts in the Kansas City and St. Louis metro areas experienced large increases. Among districts with such increases, the dropout rates ranged from 18.4 percent in St. Louis City to 4.7 percent in Raytown, which is twice as high as the statewide average of 2.1 percent in 2017.<sup>33</sup>

Dropping out of high school leads to another significant problem: disconnected or idle youth. Disconnected youth are people ages 16 to 24 who are not attending school and are not working either full- or part-time. According to the Annie E. Casey Foundation's KIDS COUNT Data Center, there were 78,000 disconnected youth in Missouri in 2016. These young people are unlikely to have the skills necessary to reach the middle class as adults.<sup>34</sup>

Not only is engaging this group of young people in work or school important to improve their quality of life—for instance, improving their health—but it could also reduce costs to the state, since disconnected youth are more likely to receive public assistance and be involved in criminal activity. One study estimates that each disconnected youth imposes a taxpayer burden of \$13,900 in lost taxes, public health care costs, engagement with the criminal justice system, and welfare, and a social burden of \$37,450 which includes lost gross earnings, additional health expenditures from their poor health, and costs from crime every year.<sup>35</sup> While the number of disconnected youth has decreased from its peak of 109,000 people in 2010, there is still significant room for improvement in making sure Missouri's youth stay in school and can find gainful employment.<sup>36</sup>

## College Readiness

In recent years, Missouri's business leaders have expressed their concerns about the preparedness of our state's students. Many are unsatisfied with the education system and believe that students graduating from high school, community college, or 4-year colleges are not ready to enter the workforce.<sup>37</sup>

While some argue that employers should raise wages if they want to attract more skilled workers—and there is something to this argument<sup>38</sup>—business stakeholders have a point that current students are not being adequately prepared in the classroom, especially in math and science.

When looking at ACT scores and how well graduates from Missouri high schools perform in college, business leaders are correct to question whether students are being well-equipped in school.

For the past few years, over 90 percent of Missouri's high school graduates have taken the ACT college entrance exam. Thus, the ACT offers insight into students' aptitude and how Missouri stacks up to the rest of the nation. In 2017, nearly 92 percent of Missouri high school seniors took the ACT and had an average composite score of 20.2, while the national average was 21.0.<sup>39</sup> In 2018, 100 percent of the graduating class took the ACT but the average composite score dropped to 20 compared to national average of 20.8.<sup>40</sup> It is worth noting that most states do not require that all public high school graduates to take the ACT; thus Missouri's 100 percent participation rate partially contributes to the lower average composite score.

In addition to providing a composite score, ACT reports the percentage of students who scored at or above the college-readiness benchmark for each subject area. The college-readiness benchmark scores are the minimum scores needed to have a 50 percent chance of obtaining a B or higher or a 75 percent chance of obtaining a C or higher in the corresponding credit-bearing college courses, based on the actual performance of students on the ACT and how well they did in college.<sup>41</sup> The benchmark scores are 18 for English, 22 for math, 22 for reading, 23 for science, and 26 for STEM (a combination of the math and science scores).

In 2017, only 23 percent of Missouri test-takers met all four of the benchmarks and only 35 percent met at least three. For the STEM benchmark, only 16 percent of Missouri test-takers scored high enough to indicate they were prepared for college-level STEM courses, whereas 21 percent of nationwide test-takers met the STEM benchmark.

In Missouri, the problems are especially pronounced for black students, among whom only 5 percent met all four college readiness benchmarks in Missouri in 2017. For the STEM benchmark, just 3 percent of black students scored high enough to indicate they were ready for college-level math and science.<sup>42</sup>



While ACT does not release data for low-income students by state, it does take a closer look at certain groups of “underserved learners,” which include students who would be the first in their families to attend college, come from low-income families, and identify as racial or ethnic minorities at the national level. The data show that the more of these criteria students met, the lower their ACT scores. For students who met one of these underserved criteria, 14 percent met two college readiness benchmarks, and 26 percent met three or four. Of the students who met all three criteria, just 9 percent met two benchmarks and another 9 percent met three or four. The same pattern held true for the STEM, with only 2 percent of those students who met all three criteria meeting the benchmark.<sup>43</sup>

Another way to measure college readiness is by looking at the percentage of students who must repeat high school-level courses after enrolling in college—remedial course taking. The number of Missouri graduates who enrolled in remedial courses—which do not count toward their degree—points to problems with the instruction they received in high school. Of the 21,833 first-time freshmen enrolled in college for the 2016 fall semester who DESE followed up with, 5,800 students (26.6 percent) took at least one remedial college course. This number improved in 2017, when 22.6 percent of the 22,160 first-time freshmen enrolled in at least one remedial course.<sup>44</sup>

Remedial courses are costly in terms of extra tuition—during the 2011–2012 school year, students and families in the United States spent almost \$1.5 billion on remedial classes—and add to the time it takes a student to earn their degree.<sup>45</sup> In addition, researchers have found that students taking remedial courses in their first year are 74 percent more likely to drop out of college.<sup>46</sup>

For low-income students who decide to go to college, ensuring they are academically prepared is critical. While in college, these students also may need additional supports to overcome challenges that would otherwise disrupt their college career. Missouri should consider how to improve the likelihood these students will graduate, since college graduation rates for low-income students and those who are the first in their families to attend college are very low. Nationally, only 19 percent of students who graduated from a high-poverty high school in 2010 (schools in which at least 75 percent of students qualify for free or reduced-price lunch) had completed a bachelor’s degree six years later in 2016.<sup>47</sup>

Low-income or first-generation students can be derailed by obstacles that students from middle class families with resources and knowledge don’t need to navigate. Investing additional resources to help these students could make a significant difference in whether or not they are able to complete their degrees. Practices have emerged recently that may show promise for Missouri students if the state chooses to pursue them.

Nine major charter school networks that predominantly serve low-income students have been tracking the completion rates of their students and have achieved rates that are three to five times the national college completion rate of just 9 percent for students from low-income families (defined as families in the lowest family income quartile). Students who graduate from a Knowledge is Power Program (KIPP) charter network middle school or enroll in a KIPP high school in ninth grade are completing college at a rate of 38 percent. Another large network of charter schools, YES Prep Public Schools, has determined that 46.7 percent of their graduates earned a bachelor’s degree within six years of enrolling in college.<sup>48</sup> IDEA Public Schools, which serves almost exclusively low-income students, has had 100 percent college acceptance and nearly 100 percent college matriculation, including for their first-generation college students, for 11 years.<sup>49</sup> They estimate that over 35 percent of their students graduate with a bachelor’s degree within six years.<sup>50</sup> Out of these high-performing networks, only KIPP operates schools in Kansas City and St. Louis.

How have they been able to achieve these results for low-income students? KIPP established the KIPP Through College program when its administrators discovered that their graduates were admitted and enrolled in college but struggled to complete their degrees. KIPP Through College provides social support that helps students and their families navigate academic and non-academic issues as they are applying to schools and when they are attending. KIPP has a systematic approach that prepares students for college by helping them find the best fit financially and academically and ensuring that they have strong applications for both admission and financial aid. The support continues once they are accepted to a school.<sup>51</sup> Students receive a checklist to help them cover nonacademic aspects of school that first-generation students may not be aware of, and KIPP connects them with alumni of the charter network to talk with students who come from similar backgrounds.<sup>52</sup>



The program costs about \$2,000 per student per year, but KIPP estimates that it will cut costs to about \$1,600 per student as its alumni population grows.<sup>53</sup> While this program is not necessarily cheap, it has a large payoff by graduating low-income students at over four times the average rate of their low-income peers nationwide. Considering the significant amount of public dollars that are invested in education, especially for low-income students, rounding out support for these students with programs like KIPP Through College makes sense if they are able to attain a college degree, find employment upon graduating, and begin paying taxes.

In addition to the social supports like those offered by KIPP Through College, small retention scholarships can also be effective in helping low-income students complete their degrees. Even after larger scholarships and loans, students are sometimes unable to continue to enroll in classes because they have outstanding balances in their student accounts. To help students bridge this gap, Georgia State University established the Panther Retention Scholarship that provides grants as small as \$300 so students can stay in school and do not have to stop their studies and risk dropping out.<sup>54</sup>

Staff at Georgia State analyze a list of students who are on track for graduation but may be at risk of dropping out because of small balances for tuition and fees that they don't have the means to pay. Students who meet certain criteria are offered grants, which average \$900 per student, and must meet with financial counselors to help them plan the rest of their college career. Among seniors who received the grant, 61 percent graduated within two semesters and 82 percent either had graduated or were still enrolled one year after receiving the grant.<sup>55</sup>

Other institutions have adopted similar grants and scholarships, and by boosting their graduation and retention rates some universities report a net increase in revenue. Because students stay enrolled, tuition and outside scholarships continue to go to the school. Georgia State University calculated a 200 percent return on investment from continued tuition and fees and the University of Akron “recovered over \$700,000 of revenue each year for the university” by preventing students from dropping out.<sup>56</sup>

Different models and variations of retention grants allow institutions to create programs that fit the needs of their

student bodies, and Missouri colleges and universities should consider incorporating them into their financial aid portfolio. Missouri State University offers a few emergency funding options including a Senior Degree Completion Grant that is designed to help get low-income seniors who have exhausted other available aid across the finish line.<sup>57</sup> While retention or emergency scholarships may require some extra investment, a well-designed program that helps students complete their degrees could benefit students, universities, and taxpayers.

### Career Readiness

Of course, college isn't the right track for every high school graduate. Missouri should consider improving its delivery of career and technical education (CTE) in a way that could more effectively meet the needs and interests of low-income students and help them get a head start on a career or earning college credit—both of which would save them time and money upon graduating from high school. Not only could enhancing vocational education in Missouri help these students, but it also would benefit employers in the state looking for more skilled workers. In fact, in a 2017 essay published by the Show-Me Institute, Gail Heyne Hafer and Rik Hafer argued that “focusing on education policies that increase the number of people who obtain some training and/or education beyond high school instead of trying to increase the percentage of the adult population who obtain a bachelor's degree may, in the end, be more productive in promoting the future economic well-being of Missouri's citizens.”<sup>58</sup>

Currently in Missouri, participation in career and technical education can range from taking a single business course to earning an industry recognized credential (IRC) in fields as varied as nursing and welding. Missouri has some high schools, such as South and North Tech High Schools in St. Louis County, that offer over 20 “majors” each. Policymakers should consider expanding this model throughout the state.

During the 2016–17 school year, almost 68 percent of Missouri's roughly 267,000 high school students completed at least one course from a career education program, but only about 4.7 percent of those CTE participants received an IRC.<sup>59</sup> An IRC signals that a student has the industry-required skills and can transition to a better-paying job immediately after leaving high school. A vast majority of those high school students

took career or technical courses at their traditional, or comprehensive, high school while (during the 2015–16 school year) only 16 percent enrolled in programs or courses at an area career center that served one or more districts.<sup>60</sup>

Massachusetts serves as an example of high-quality vocational education that is responsive to the needs of employers and students alike. There, some students participate in CTE at their traditional high school, but there are also 36 Regional Vocational and Technical High Schools (RVTs)—27 of which are run semi-independently of school districts—where all the students participate in CTE. Unlike traditional high schools where students may take one or two CTE courses, students in RVTs alternate weeks between classroom instruction and work in a technical shop.

RVTs offer a variety of areas of study, including automotive technology, programming and web development, and cosmetology. Along with intense vocational training, students at RVTs have the same graduation requirements as those in comprehensive (or traditional) high schools and must complete four years of both English and math, three years of both lab-based science and history, two years of the same foreign language, one year of fine arts, and five additional core classes.<sup>61</sup>

A recent study by Shaun Dougherty of Vanderbilt University examined the direct impact of RVTs on student performance and differentiated between higher- and lower-income student results. By examining the outcomes of about 2,000 students who scored just above and just below the admittance threshold for three oversubscribed schools, Dougherty was able to account for selection bias since students chose to attend these schools rather than being randomly assigned to them.<sup>62</sup>

In general, the RVTs had higher graduation rates than comprehensive high schools, and they also had higher proportions of both low-income students (37.2 percent compared to 19.7 percent) and students with identified disabilities (26.9 percent compared to 14.7 percent).<sup>63</sup>

When estimating the impact of these schools, Dougherty found that low-income students were about 32

percentage points more likely to graduate on time and 13 percentage points more likely to earn an industry recognized credential (IRC) if they attended an RVTs over a comprehensive high school. Students not in poverty attending an RVTs were approximately 23 percentage points more likely to graduate and 11 percentage points more likely to earn an IRC than their peers at traditional high schools.<sup>64</sup> On the other hand, he found that RVTs attendance did not have an effect on student performance on the state math and reading tests taken at the end of 10th grade.<sup>65</sup>

While simply transplanting Massachusetts's model to Missouri may not be feasible or desirable, there are key features of the Massachusetts system that could improve CTE in Missouri:

- These schools are autonomous—whether they would operate as charter schools or under the oversight of one or more counties, they should be independent from local school districts so they can have maximum flexibility in implementing programs that fit the needs of the students and their communities.
- These schools are schools of choice—not all schools must be all things to all students for Missouri to have a more effective K-12 system. Students and their families should be able to make decisions about which kind of school would best fit their needs, interests, and future goals.
- Employers' and business leaders' involvement is active and ongoing—stakeholders have been vocal in Missouri about wanting a better-prepared workforce, but to make high-quality CTE schools effective, they must be invested at each step, from establishing schools to ensuring curriculum is up to date. This model also allows for public-private partnerships.

For low-income students, getting a jump start on vocational training or college credit and having access to more educational opportunities could help them enter a career that would allow them to support themselves and their families. Reshaping Missouri's K-12 education system to be more responsive and directly accountable to students, families, and communities should be a priority for our state's leaders.

## CONCLUSION

Policymakers in Missouri have numerous opportunities to study and pursue comprehensive reforms in welfare and education that could help those growing up in poverty or those with incomes near the poverty line achieve financial stability and independence. Simply increasing welfare benefits such as expanding Medicaid will do little to solve poverty in the long run if individuals are not able to provide for themselves and their families.

Breaking cycles of poverty will require improving our state's education system through policies (including those considered in this essay) that may in turn require the investment of additional public dollars. If such policies are implemented effectively, however, the cost savings from moving people off of welfare could be substantial. Improving upward mobility in Missouri so people are not dependent on public assistance their entire lives has the potential to save billions of dollars in welfare expenditures in the long run. Many states and communities are making headway in moving people up and out of poverty, and Missouri should consider what is working in other areas and what could be effective in Missouri. While government will never be able to totally eradicate poverty, policymakers, community leaders, and stakeholders should work together to identify and address obstacles to self-sufficiency and ensure there are paths out of poverty and toward prosperity for Missourians.

---

*Emily Stahly is an analyst at the Show-Me Institute.*

---

## NOTES

1. Stahly, E "Intergenerational Poverty in Missouri: Describing and Estimating the Scope of Cyclical Poverty." Show-Me Institute, February 2018.
2. "State and Local General Expenditures, Percentage Distribution." Tax Policy Center, Urban Institute and Brookings Institution. Available at: <https://www.taxpolicycenter.org/statistics/state-and-local-general-expenditures-percentage-distribution>. Accessed September 28, 2018.
3. "State and Local General Expenditures, Per Capita." Tax Policy Center, Urban Institute and Brookings Institution. Available at: <https://www.taxpolicycenter.org/statistics/state-and-local-general-expenditures-capita>. Accessed September 28, 2018.
4. Fiscal Year 2018 Totals by Department. Office of Administration Division of Budget & Planning. Available at: [https://oa.mo.gov/sites/default/files/FY\\_2018\\_Totals\\_by\\_Department-Web.pdf](https://oa.mo.gov/sites/default/files/FY_2018_Totals_by_Department-Web.pdf). Accessed September 28, 2018; Fiscal Year 2018 Department of Social Services Total. Office of Administration, Division of Budget & Planning. Available at: [https://oa.mo.gov/sites/default/files/FY\\_2018\\_EB\\_Social\\_Services.pdf](https://oa.mo.gov/sites/default/files/FY_2018_EB_Social_Services.pdf). Accessed September 28, 2018.
5. Fiscal Year 2018 Department of Social Services Total. Office of Administration, Division of Budget & Planning. Available at: [https://oa.mo.gov/sites/default/files/FY\\_2018\\_EB\\_Social\\_Services.pdf](https://oa.mo.gov/sites/default/files/FY_2018_EB_Social_Services.pdf). Accessed September 28, 2018.
6. "Quick Facts about Missouri Department of Social Services." Missouri Department of Social Services. Available at: <https://dss.mo.gov/mis/cqfacts/>. Accessed October 19, 2018.
7. Ibid.
8. "Medicaid Spending per Enrollee (Full or Partial)." Henry J. Kaiser Family Foundation. Available at: <https://www.kff.org/medicaid/state-indicator/medicaid-spending-per-enrollee/?currentTimeframe=0&selectedRows=%7B%22states%22:%7B%22missouri%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>. Accessed September 28, 2018.
9. "Annual Data Report: Fiscal Year 2017." Missouri Department of Social Services, Family Support Division. Available at: <https://dss.mo.gov/re/pdf/fsd/2017-missouri-family-support-annual-report.pdf>. Accessed September 28, 2018.

10. Fiscal Year 2018 Department of Social Services Total. Office of Administration, Division of Budget & Planning. Available at: [https:// oa.mo.gov/sites/default/files/FY\\_2018\\_EB\\_Social\\_Services.pdf](https://oa.mo.gov/sites/default/files/FY_2018_EB_Social_Services.pdf). Accessed September 28, 2018.
11. U.S. Census Bureau, 2017 American Community Survey 1-year estimates. [https://factfinder.census.gov/bkmk/table/1.0/en/ACS/17\\_1YR/S1701/0400000US29.05000](https://factfinder.census.gov/bkmk/table/1.0/en/ACS/17_1YR/S1701/0400000US29.05000)
12. Chetty R, Hendren N, Kline P, Saez E. "Where is the Land of Opportunity? The Geography of Intergenerational Poverty in the United States." The Equality of Opportunity Project. Available at: [http://www.equality-of-opportunity.org/assets/documents/mogility\\_geo.pdf](http://www.equality-of-opportunity.org/assets/documents/mogility_geo.pdf). Accessed September 28, 2018.
13. Small Area Income and Poverty Estimates (SAIPE): State and County Estimates for 1989, U.S. Census Bureau. <https://www.census.gov/data/datasets/1989/demo/saipe/1989-state-and-county.html>
14. State and County Estimates for 1989. United States Census Bureau. Available at: <https://www.census.gov/data/datasets/1989/demo/saipe/1989-state-and-county.html>. Accessed December 5, 2018.
15. This was done by using the slope and intercept data for the absolute mobility rate at the 25th percentile to calculate the same rates for each percentile between 1 and 24.
16. The estimate of \$10,000 is based on an estimated average annual benefit for the lowest income quintile of \$8,800 in 2012, adjusted for inflation using the Consumer Price Index to 2018. <https://www.census.gov/data/datasets/1989/demo/saipe/1989-state-and-county.html>. This average is per household and reflects that fact those living in poverty have a variety of household sizes and characteristics.
17. Lear M. "Missouri legislature completes override of veto of welfare changes." *Missourinet*. Available at: <https://www.missourinet.com/2015/05/05/missouri-legislature-completes-override-of-veto-of-welfare-changes/>. Accessed October 19, 2018.
18. "TANF – Senate Bill 24 Annual Report," Federal Fiscal Year 2017. Missouri Department of Social Services. Available at: <https://dss.mo.gov/reports/Temporary-Assistance-SB-24/files/TANF-SB24-2017.pdf>. Accessed October 19, 2018.
19. Performance Management Monthly Report June 2018. Missouri Department of Social Services. Available at: <https://dss.mo.gov/reports/dashboards/files/DSS-Dashboard-2018-06.pdf>. Accessed October 19, 2018; "TANF – Senate Bill 24 Annual Report," Federal Fiscal Year 2017. Missouri Department of Social Services.
20. "TANF – Senate Bill 24 Annual Report," Federal Fiscal Year 2016. Missouri Department of Social Services. Available at: <https://dss.mo.gov/reports/Temporary-Assistance-SB-24/files/TANF-SB24-2016.pdf>. Accessed October 19, 2018; "TANF – Senate Bill 24 Annual Report," Federal Fiscal Year 2017. Missouri Department of Social Services.
21. Missouri Unemployment Rate 2000-2018, Local Area Unemployment Statistics. Bureau of Labor Statistics. Accessed January 22, 2019.
22. U.S. Census Bureau, 2012 American Community Survey, 1-Year Estimates.
23. U.S. Census Bureau, 2017 American Community Survey, 1-Year Estimates.
24. Missouri House Bill 1846, 2018, Regular Session. *Legiscan*. Available at: <https://legiscan.com/MO/bill/HB1846/2018>. Accessed October 19, 2018; Missouri House Bill 1486, 2018, Regular Session. *Legiscan*. Available at: <https://legiscan.com/MO/bill/HB1486/2018>. Accessed October 19, 2018; Missouri Senate Bill 561, 2018, Regular Session. *Legiscan*. Available at: <https://legiscan.com/MO/bill/SB561/2018>. Accessed October 19, 2018.
25. Liss S. "Is there renewed hope for Medicaid expansion in Missouri?" *St. Louis Post-Dispatch*. Available at: [https://www.stltoday.com/news/local/govt-and-politics/is-there-renewed-hope-for-medicaid-expansion-in-missouri/article\\_6c444f4c-8507-5dbf-a824-6721e78ed430.html](https://www.stltoday.com/news/local/govt-and-politics/is-there-renewed-hope-for-medicaid-expansion-in-missouri/article_6c444f4c-8507-5dbf-a824-6721e78ed430.html). Accessed October 19, 2018.



26. Ishmael P. "Medicaid Waiver Request a Great Idea." Show-Me Institute. Available at: <https://showmeinstitute.org/blog/health-care/medicaid-waiver-request-great-idea> . Accessed October 19, 2018; Senate Bill 562, 2018, Regular Session. *Legiscan*. Available at: <https://legiscan.com/MO/bill/SB562/2018>. Accessed October 19, 2018.
27. Chetty et al. Executive Summary. "Where is the Land of Opportunity? The Geography of Intergenerational Poverty in the United States." The Equality of Opportunity Project. Available at: [http://www.equality-of-opportunity.org/assets/documents/mogility\\_geo.pdf](http://www.equality-of-opportunity.org/assets/documents/mogility_geo.pdf). Accessed September 28, 2018.
28. U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 and 2017 Mathematics, and Reading Assessments.
29. Ibid.
30. DeAngelis CA, Erickson HH. "What Leads to Successful School Choice Programs? A Review of the Theories and Evidence." Available at <https://www.cato.org/cato-journal/winter-2018/what-leads-successful-school-choice-programs-review-theories-evidence>. Accessed October 19, 2018.
31. Sitter P. "State to expand virtual K-12 course access." *News Tribune*. Available at: <http://www.newstribune.com/news/local/story/2018/jun/23/state-to-expand-virtual-k-12-course-access/731741/>. Accessed October 19, 2018.
32. DiPerna P, Shaw, M, Catt AD. "2017 Schooling in America: Public Opinion on K-12 Education, Parent Experiences, School Choice, and the Role of the Federal Government." EdChoice. Available at: <https://www.edchoice.org/wp-content/uploads/2017/11/2017-Schooling-In-America-by-Paul-DiPerna-Michael-Shaw-and-Andrew-D-Catt-1.pdf>. Accessed October 19, 2018.
33. "Students: District Annual Dropout Rate." Missouri Comprehensive Data System. DESE. Available at: <https://apps.dese.mo.gov/MCDS/home.aspx>. Accessed December 5, 2018.
34. Youth not attending school and not working by age group: Missouri. Kids Count Data Center. Available at: <https://datacenter.kidscount.org/data/tables/9292-youth-not-attending-school-and-not-working-by-age-group?loc=27&loct=2#detail/2/27/false/870,573,869,36,868,867,133,38,35/any/18399,18400>. Accessed October 19, 2018.
35. Belfield CR, Levin HM, Rosen R. "The Economic Value of Opportunity Youth." Available at: <https://files.eric.ed.gov/fulltext/ED528650.pdf>. Accessed October 19, 2018.
36. Youth not attending school and not working by age group: Missouri. Kids Count Data Center.
37. Hall M. "State business, education leaders decry student workforce prep." *Columbian Missourian*. Available at: [https://www.columbiamissourian.com/news/higher-education/state-business-education-leaders-decry-student-workforce-prep/article\\_ea6617ae-8524-11e8-92a3-bbb1f2c5ff6a.html](https://www.columbiamissourian.com/news/higher-education/state-business-education-leaders-decry-student-workforce-prep/article_ea6617ae-8524-11e8-92a3-bbb1f2c5ff6a.html). Accessed November 19, 2018.
38. Strain MR. "Don't Fall for Employers' Whining About a 'Skills Gap.'" *Bloomberg*. Available at: <https://www.bloomberg.com/view/articles/2018-05-17/-skills-gap-can-be-narrowed-with-higher-wages>. Accessed November 19, 2018.
39. "Students: Entrance Exams: District ACT Report." Missouri Comprehensive Data System. DESE. Available at: [https://apps.dese.mo.gov/MCDS/Reports/SSRS\\_Print.aspx](https://apps.dese.mo.gov/MCDS/Reports/SSRS_Print.aspx). Accessed December 5, 2018. According to the ACT Profile Report for the state, Missouri's average composite score was 20.4 while DESE reported 20.2 for the 2016-2017 school year.
40. "The Condition of College and Career Readiness: National 2018." ACT, Inc. Available at: <https://www.act.org/content/dam/act/unsecured/documents/cccr2018/National-CCCR-2018.pdf>. Accessed October 19, 2018.
41. "The ACT Profile Report – State: Graduating Class 2017 Missouri." ACT, Inc. Available at: [https://www.act.org/content/dam/act/unsecured/documents/cccr2017/P\\_26\\_269999\\_S\\_S\\_N00\\_ACT-GCPR\\_Missouri.pdf](https://www.act.org/content/dam/act/unsecured/documents/cccr2017/P_26_269999_S_S_N00_ACT-GCPR_Missouri.pdf) . Accessed October 19, 2018.

42. Ibid.
43. "The Condition of College and Career Readiness 2017: National." ACT, Inc. Available at: [https://www.act.org/content/dam/act/unsecured/documents/cccr2017/CCCR\\_National\\_2017.pdf](https://www.act.org/content/dam/act/unsecured/documents/cccr2017/CCCR_National_2017.pdf). Accessed October 19, 2018.
44. Missouri Department of Higher Education. High School Graduate Performance Report Table I. Available at: <https://dhe.mo.gov/data/hsgradreport.php>. Accessed November 27, 2018.
45. Douglas-Gabriel D. "Remedial classes have become a hidden cost of college." *The Washington Post*. Available at: [https://www.washingtonpost.com/news/grade-point/wp/2016/04/06/remedial-classes-have-become-a-hidden-cost-of-college/?noredirect=on&utm\\_term=.34ced5cbe88b](https://www.washingtonpost.com/news/grade-point/wp/2016/04/06/remedial-classes-have-become-a-hidden-cost-of-college/?noredirect=on&utm_term=.34ced5cbe88b). Accessed October 19, 2018.
46. Nguyen BM, Dannenberg M. "Out of Pocket: The High Cost of Inadequate High Schools and High School Student Achievement on College Affordability." *EducationPost*. Available at: <http://educationpost.org/wp-content/uploads/2016/04/EdReformNow-O-O-P-v7.pdf>. Accessed October 19, 2018.
47. "High School Benchmarks 2017: National College Progression Rates." National Student Clearinghouse Research Center. Available at: <https://nscresearchcenter.org/wp-content/uploads/2017HSBenchmarkReport-1.pdf>. Accessed October 19, 2018.
48. Whitmire R. "Exclusive: Data Show Charter School Students Graduating from College at Three to Five Times National Average." *The 74 Million*. Available at: <https://www.the74million.org/article/exclusive-data-shows-charter-school-students-graduating-college-at-three-to-five-times-national-average/>. Accessed October 19, 2018.
49. IDEA Public Schools. "IDEA Class of 2017 Achieves Nearly 100% College Matriculation Rate." Available at: <https://www.ideapublicschools.org/news-events/idea-class-of-2017-achieves-nearly-100-college-matriculation-rate>. Accessed November 19, 2018.
50. Whitmire R. "Exclusive: Data Show Charter School Students Graduating from College at Three to Five Times National Average."
51. KIPP Through College. KIPP. Available at: <https://www.kipp.org/approach/kipp-through-college/>. Accessed October 19, 2018.
52. Bermudez C. "It's Bigger Than Teaching, It's Love: How KIPP is Getting Students to and through College." *EducationPost*. Available at: <http://educationpost.org/its-bigger-than-teaching-its-love-how-kipp-is-getting-students-to-and-through-college/>. Accessed October 19, 2018.
53. Whitmire R. "KIPP NYC College Prep: Tracking Students Through Graduation – and Then Through College – Like No one Else in America." *The 74 Million*. Available at: <https://www.the74million.org/article/kipp-nyc-college-prep-tracking-students-through-graduation-and-then-through-college-like-no-one-else-in-america/>. Accessed October 19, 2018.
54. "Panther Retention Grants: A Strategic Approach." Georgia State University. Available at: <https://success.gsu.edu/initiatives/panther-retention-grants/>. Accessed October 19, 2018.
55. Ibid.
56. "Foiling the Drop-out Trap: Completion Grant Practices for Retaining and Graduating Students." Coalition of Urban Serving Universities, Association of Public & Land-Grant Universities. Available at: <http://www.aplu.org/projects-and-initiatives/urban-initiatives/coalition-of-urban-serving-universities/aplu-usu-dropout-trap-full.pdf>. Accessed October 19, 2018.
57. Financial Aid, Emergency Funding. Missouri State University. Available at: <https://www.missouristate.edu/FinancialAid/339577.htm>. Accessed October 19, 2018.
58. Hafer GH and Hafer R. "Education, Income, and Social Behavior Across Missouri." Show-Me Institute, May 2017. Available at: <https://showmeinstitute.org/sites/default/files/20170322%20-%20Education%20and%20Outcomes%20-Hafer.pdf>. Accessed February 5, 2019.
59. "2016–2017 Career Education in Missouri." Missouri Department of Elementary and Secondary Education. Available at: <https://dese.mo.gov/sites/default/files/cte-mce-fact-sheet.pdf>. Accessed October 19, 2018.

60. “Career Education Program/Course Enrollment Data 2015–16.” Missouri Department of Elementary and Secondary Education. Available at: <https://dese.mo.gov/sites/default/files/cte-mce-enrollment-report-2016.pdf>. Accessed December 5, 2018.
61. Dougherty SM. “The Effect of Career and Technical Education on Human Capital Accumulation: Casual Evidence from Massachusetts.” *Education and Finance Policy*. Available at: [https://www.mitpressjournals.org/doi/pdf/10.1162/edfp\\_a\\_00224](https://www.mitpressjournals.org/doi/pdf/10.1162/edfp_a_00224). Accessed October 19, 2018.
62. Ibid, Table 1. Summary Statistics.
63. Ibid.
64. Ibid Table 6. Instrumental Variables Estimates of the Effect of Attending an RVST on Student Outcomes.
65. Ibid.



**5297 Washington Place | Saint Louis, MO 63108 | 314-454-0647**  
**3645 Troost Avenue | Kansas City, MO 64109 | 816-561-1777**

**Visit Us:**  
[showmeinstitute.org](http://showmeinstitute.org)

**Find Us on Facebook:**  
Show-Me Institute

**Follow Us on Twitter:**  
@showme

**Watch Us on YouTube:**  
Show-Me Institute