
THE TAX-CREDIT SCHOLARSHIP AUDIT

Do Publicly Funded Private School Choice
Programs Save Money?

Martin F. Lueken, Ph.D.



ABOUT EDCHOICE

EdChoice is a nonprofit, nonpartisan organization dedicated to advancing full and unencumbered educational choice as the best pathway to successful lives and a stronger society. EdChoice believes that families, not bureaucrats, are best equipped to make K-12 schooling decisions for their children. The organization works at the state level to educate diverse audiences, train advocates and engage policymakers on the benefits of high-quality school choice programs. EdChoice is the intellectual legacy of Milton and Rose D. Friedman, who founded the organization in 1996 as the Friedman Foundation for Educational Choice.

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EXECUTIVE SUMMARY

This report follows up on previous work that examined the fiscal effects of private school voucher programs. It estimates the total fiscal effects of tax-credit scholarship programs—another type of private school choice program—on state governments, state and local taxpayers, and school districts combined. Based on a range of assumptions, these programs generated between \$1.7 billion and \$3.4 billion in taxpayer savings through the 2013–14 school year. That is equivalent to up to \$3,000 per scholarship student.

In general, tax-credit scholarships allow taxpayers to receive full or partial tax credits when they donate to nonprofits that provide students with private school scholarships. Eligible taxpayers can include both individuals and businesses. For

example, if an individual with a \$1,000 tax liability chooses to donate \$750 to a scholarship-granting organization, then she would owe \$250 in state taxes.

Some supporters of tax-credit scholarships argue that they give taxpayers more freedom than vouchers to support the types of education that align with their values and preferences. Vouchers, on the other hand, “compel taxpayers to financially support forms of education to which they may object.”¹

For the period covered in this analysis, there were 21 tax-credit scholarship programs operating in 17 states. Of those, I included 10 (covering seven states) in this report. All but two of the programs analyzed are the largest in the country. In total, the 10 programs I analyzed represent 93 percent of

all scholarships awarded in tax-credit scholarship programs today.

The programs analyzed in this report are:

1. Arizona Original Individual Income Tax Credit Scholarship Program
2. Arizona Low-Income Corporate Income Tax Credit Scholarship Program
3. Arizona Lexie’s Law for Disabled and Displaced Students Tax Credit Scholarship Program
4. Arizona “Switcher” Individual Income Tax Credit Scholarship Program
5. Florida Tax Credit Scholarship Program
6. Georgia Qualified Education Expense Tax Credit

7. Indiana School Scholarship Tax Credit
8. Iowa School Tuition Organization Tax Credit
9. Pennsylvania Educational Improvement Tax Credit Program
10. Rhode Island Tax Credits for Contributions to Scholarship Organizations

There are certain challenges and considerations that generally apply to evaluating the fiscal impact of any school choice program. Two key factors that apply to all programs:

1. variable costs per student, meaning those costs that are directly associated with a given student and that would not be spent if that student were not enrolled, and

TABLE 1 Cumulative Savings for Nine Tax-Credit Scholarship Programs from Inception through 2013–14 (adjusted for inflation)

Program Name	Lower Bound Estimates**		Upperbound***	
	Cumulative Savings	Cumulative Savings Per Student	Cumulative Savings	Cumulative Savings Per Student
* AZ Original Individual Income Tax Credit Scholarship Program	\$115,245,374	\$437	\$404,666,504	\$1,279
† AZ Low-Income Corporate Tax Credit Scholarship Program	\$103,672,167	\$2,305	\$114,660,115	\$2,549
† AZ Lexie’s Law for Disabled and Displaced Students Tax Credit Scholarship Program	\$8,242,969	\$8,081	\$8,710,894	\$8,540
† AZ “Switcher” Individual Income Tax Credit Scholarship Program	\$23,343,635	\$1,281	\$27,129,918	\$1,489
† FL Florida Tax Credit Scholarship Program	\$372,187,624	\$1,122	\$549,715,116	\$1,658
* GA Qualified Education Expense Tax Credit	\$12,157,986	\$298	\$84,854,903	\$1,734
† IA School Tuition Organization Tax Credit	\$280,431,828	\$3,600	\$461,037,947	\$5,919
† IN School Scholarship Tax Credit	\$60,053,738	\$4,098	\$95,413,746	\$5,426
* PA Educational Improvement Tax Credit Program	\$721,694,759	\$3,027	\$1,670,701,560	\$5,839
* RI Tax Credits for Contributions to Scholarship Organizations	\$8,224,009	\$3,355	\$21,330,308	\$7,252
Overall Total	\$1,705,254,090	\$1,650	\$3,438,221,011	\$3,001

Note: State-specific rates for switchers are based on annual private school enrollment data from the US Census Bureau.

*Assumptions about the share of scholarships given to students who receive multiple awards are applied to the following programs without this restriction: Ariz. Original Individual Income Tax Credit Program and programs in Ga., Penn., and R.I.

†Analysis assumes that students in these programs do not receive multiple scholarships; analysis includes Indiana in this group because only 22 out of 302 private schools in the program partner up with two SGOs, meaning students choosing to attend any of these 22 schools could potentially receive scholarships from both of their partner SGOs

** Lower bound estimates are based on assumptions that 25 percent of scholarships are awarded to multi-scholarship students and 60 percent of program participants are switchers

*** Upper bound estimates are based on assumptions that 10 percent of scholarships are awarded to multi-scholarship students and state-specific switcher rates

2. the number of students who would have attended public schools without the financial assistance from the tax-credit scholarship program (aka “switchers”).

In some states, there is also a third factor: the proportion of scholarships that are given to students who receive more than one scholarship. For the states that allow students to receive multiple scholarships, the analysis generates estimates based on the assumption that

scholarship-granting nonprofits give between 10 percent and 25 percent of all scholarships to multi-scholarship students, meaning they award 75 percent to 90 percent of all scholarships to single-scholarship students.

The reduction in state funds to school districts via school choice programs is usually identical to the reduction in state funds to school districts when students move from one public school district to another or when students move out of state.

TABLE 2

Annual Savings for Nine Tax-Credit Scholarship Programs from Inception through 2013–14 (adjusted for inflation)

School Year Ending	Lower Bound*	Upper Bound†
1998	(\$2,385,237)	(\$2,300,575)
1999	(\$13,087,109)	(\$10,904,466)
2000	\$8,542,954	\$19,590,033
2001	\$5,132,064	\$18,038,961
2002	\$28,083,307	\$71,534,650
2003	\$48,970,691	\$104,875,664
2004	\$31,447,468	\$91,359,267
2005	\$33,080,911	\$103,861,937
2006	\$23,373,129	\$104,379,318
2007	\$80,124,564	\$191,197,167
2008	\$157,801,855	\$305,323,565
2009	\$190,728,423	\$347,789,246
2010	\$182,600,280	\$320,145,492
2011	\$180,433,945	\$337,781,653
2012	\$189,483,138	\$376,058,360
2013	\$241,965,465	\$475,979,848
2014	-	\$583,510,894
Cumulative Total	\$1,705,254,090	\$3,438,221,011

Notes: State-specific rates for switchers are based on annual private school enrollment data from the US Census Bureau. Negative numbers in parentheses.

* Lower bound estimates are based on assumptions that 25 percent of scholarships are awarded to multi-scholarship students and 60 percent of program participants are switchers

† Upper bound estimates are based on assumptions that 10 percent of scholarships are awarded to multi-scholarship students and state-specific switcher rates

In addition, when state funds are reduced after a student leaves a school district, the originating district retains federal and local funds. Public K–12 education is the only enterprise in American society where service providers keep a portion of people’s money even after those people have determined they no longer want those services. For example, higher education institutions do not keep any funds, public or private, when students transfer. They lose Pell grants, tuition revenue, and state appropriations when students choose to leave.

Key findings from the analysis are:

Fiscal Impacts

- Depending on the assumptions applied, the 10 programs analyzed in this report generated cumulative net savings worth between \$1.7 billion and \$3.4 billion from when they were

launched to 2014 (see Table 1).

- These savings represent between \$1,650 and \$3,000 per scholarship student (see Table 1).
- Total cumulative savings from the 10 programs analyzed in this report grew every year as programs have expanded (see Table 2).
- The three largest programs (Arizona’s Original Individual Tax Credit Scholarship Program, the Florida Tax Credit Scholarship Program, and Pennsylvania’s Educational Improvement Tax Credit Program) generated roughly three quarters of all cumulative savings.
- In the last year of the analysis alone (SY 2013–14), the 10 programs generated combined savings worth between \$320 million and \$580 million.

TABLE 3

Percent of Students Who Must Switch from Public Schools for Program to Achieve Fiscal Neutrality*

Program Name	Lower bound estimate for break-even switcher rate**	Upper bound estimate for break-even switcher rate***
* AZ Original Individual Income Tax Credit Scholarship Program	43%	52%
† AZ Low-Income Corporate Tax Credit Scholarship Program	55%	56%
† AZ Lexie's Law for Disabled and Displaced Students Tax Credit Scholarship Program	21%	21%
† AZ "Switcher" Individual Income Tax Credit Scholarship Program	70%	73%
† FL Florida Tax Credit Scholarship Program	74%	81%
* GA Qualified Education Expense Tax Credit	72%	95%
† IA School Tuition Organization Tax Credit	13%	20%
† IN School Scholarship Tax Credit	12%	18%
* PA Educational Improvement Tax Credit Program	26%	45%
* RI Tax Credits for Contributions to Scholarship Organizations	30%	53%

Note: State-specific rates for switchers are based on annual private school enrollment data from the US Census Bureau.

*Assumptions about the share of scholarships given to students who receive multiple awards are applied to the following programs without this restriction: Ariz. Original Individual Income Tax Credit Program and programs in Ga., Penn., and R.I.

†Analysis assumes that students in these programs do not receive multiple scholarships; analysis includes Indiana in this group because only 22 out of 302 private schools in the program partner up with two SGOs, meaning students choosing to attend any of these 22 schools could potentially receive scholarships from both of their partner SGOs.

** Lower bound estimates are based on assumptions that 10 percent of scholarships are awarded to multi-scholarship students and state-specific switcher rates.

*** Upper bound estimates are based on assumptions that 25 percent of scholarships are awarded to multi-scholarship students and 60 percent of program participants are switchers.

- Under very conservative assumptions (that 60 percent of participants would have enrolled in public schools without the financial assistance these programs offer and that scholarship-granting nonprofits award 25 percent of scholarships to multi-scholarship students), the 10 programs still generated large cumulative net savings of \$1.7 billion from when they were launched to 2014. That's more than \$1,600 per scholarship student.
- The break-even switcher rates (the percent of scholarship users who would have enrolled in public school without a scholarship required for the program to be cost-neutral) for these programs vary greatly, from around 13 percent in Iowa and Indiana to up to 95 percent in Georgia (see Table 3).

Participation

- Since Arizona launched the first tax-credit scholarship program nearly 20 years ago, scholarship-granting nonprofits have awarded students nationwide more than 1.2 million tax-credit scholarships to pay tuition at a private school of their choice. When the programs excluded from this analysis are factored in, that number is only slightly larger.
- As with most private school choice programs, participation tends to ramp up in a program's first few years of operation. The tax-credit scholarship programs analyzed in this report awarded almost 28,000 scholarships to students in their first year. This amount more than tripled in the programs' fifth years, with more than 95,000 scholarships awarded. By their fifth years, seven out of 10 programs had funded more than 10,000 scholarships each.

INTRODUCTION

Nobel Laureate Economist Milton Friedman always prized freedom over efficiency as a basis for policy decisions.¹ In his mind, freedom was the end, and increased efficiency, a happy by-product. Allowing all parents to have the freedom to choose the best education for their children is an idea he successfully brought to the forefront of education policy discussions. Since the first modern-day school voucher program was introduced in Milwaukee in 1990, policymakers have tried several other concepts in efforts to expand private educational choice, including education savings accounts, individual tax credits and deductions, and tax-credit scholarships.

Tax-credit scholarships were offered as a way to constitutionally address some states' Blaine Amendment restrictions on the use of tax dollars. Blaine amendments are provisions in state constitutions introduced throughout the mid- to late-1800s that were originally designed to block aid to "sectarian" schools, which included Catholic schools with large immigrant populations at that time.²

Instead of using public funds collected from compulsory tax for children to attend private schools of their choice (as with school vouchers), tax-credit scholarship programs allow individuals and businesses to voluntarily make private donations to an organization that provides scholarships for children to attend private schools of their choice. For example, if an individual with a \$1,000 tax liability chooses to donate \$750 to a scholarship-granting organization (SGO), then she would owe \$250 in state taxes (assuming that each dollar donated generates one dollar in tax credits).

Proponents of tax-credit scholarship programs have offered other reasons for implementing these policies. The late Andrew Coulson argued that a key difference between vouchers and tax-credit scholarships is that the latter does not coerce anyone

to fund an education with which they do not agree.³ Moreover, he found that tax-credit scholarship programs did not impose "a substantial and statistically significant additional regulatory burden on participating private schools" as did vouchers.⁴

Since Arizona enacted the nation's first tax-credit scholarship program in 1997, these programs have enjoyed substantial growth. Today, there are 21 tax-credit scholarship programs operating in 15 states. SGOs across the country awarded at least 225,000 scholarships in SY 2015–16 worth about \$720.4 million.⁵ Therefore, it is important for policymakers to understand the effects of these programs on state and local school district budgets.

This report is an update of previous work that examined the fiscal effects of private school voucher programs. It estimates the total fiscal effects of tax-credit scholarship programs on state governments, state and local taxpayers, and school districts combined.

What Are Tax-Credit Scholarships?

Tax-credit scholarship programs allow individuals and/or corporations to make donations to scholarship granting organizations in return for tax credits that reduce their overall tax liability. SGOs then use donation proceeds to fund scholarships to students to offset tuition payments at a private school of the families' choosing.

By contrast, school voucher programs provide public funds, usually collected through taxes, to families in the form of a voucher to pay for full or partial tuition at a private school.⁶ Tax-credit scholarships are distinct from individual tax credits and deductions for private school costs. The latter are meant to reimburse taxpayers for at least some portion of out-of-pocket private school expenses they incur for their own children. In general, donations to SGOs under a tax-credit scholarship program cannot be made in exchange for any

tangible benefit to the donor, such as scholarships for their own children or relatives.

As with other types of school choice programs, there is substantial variation in how tax-credit scholarship programs operate. Most of these programs limit eligibility based on certain attributes of the applicants or their family while a few are universal or near-universal in eligibility. For instance, several programs limit participation based on household income (e.g. Florida and Indiana). Other programs target students with special needs (e.g. Arizona’s Lexie’s Law). Some programs require award recipients to have been enrolled in a public school during the academic year prior to applying for a scholarship (e.g. Georgia). At the other end of the eligibility spectrum, all Arizona K–12 students are eligible for the state’s Original Individual Income Tax Credit Program, and Montana recently enacted a tax-credit scholarship program in 2015 that is universal.⁷

There are several ways to control access and funding to tax-credit scholarship programs, including restrictions on the following:

1. Amount of individual scholarship awards
2. Value of the tax credit for each dollar donated
3. Amount of tax credits that individual donors may claim
4. Total amount of tax credits granted by the state in a given year.

For example, scholarships awarded via Florida’s program cannot exceed the lesser of \$5,886 or a school’s tuition and fees. This maximum scholarship limits access to schools with higher tuition, especially for low-income families. Some programs also limit the amount of tax credit claimed for each dollar donated. Most programs give tax credits on a dollar-for-dollar basis, while a handful of programs give between 50 cents and 75 cents for each dollar donated. A lower credit value dampens incentives to donate (or lowers the

amount that an individual is willing to donate). Almost all programs limit the total amount of tax credits granted in a given year; the cap ranges from \$1.5 million in Rhode Island to almost \$450 million in Florida. A lower cap supports fewer donations and, subsequently, fewer program participants.

Most programs also place requirements and restrictions on the SGOs. Most common are requirements that a certain portion of donations must be used for scholarships, which usually allow for a modest portion to cover administrative costs. Other typical scholarship organization requirements relate to data reporting, how scholarship decisions are made, certification, employee background checks, student testing, and financial auditing.⁸ While these requirements could affect participation of private schools, such a discussion is beyond the scope of this paper.

Previous Work on the Fiscal Effects of School Choice

In general, 90 percent of public K–12 education revenue comes from state and local sources. Moreover, educational spending comprises a significant portion of states’ general funds. The fiscal effects of school choice are often debated, where opponents claim that it siphons resources from public schools and supporters argue that it saves taxpayers money.

Policymakers usually want to know how a program affects their budgets. This section reviews the research that has examined the fiscal impact of tax-credit scholarship programs on taxpayers, state and/or local government, and public schools. For a review of the effects of these programs on a variety of other outcomes, including student achievement and private school enrollment, please see *A Win-Win Solution: The Empirical Evidence of School Choice*.⁹

In 2007, the Friedman Foundation for Educational Choice (now EdChoice) released its report, *School*

*Choice by the Numbers: The Fiscal Effects of School Choice Programs, 1990-2006.*¹⁰ In this report, Susan Aud estimated the fiscal impact of most of the 19 school choice programs in operation at the time, including three tax-credit scholarship programs. Overall, she estimated that there were about \$444 million in net fiscal savings from school choice programs between 1990 and 2006. The three largest tax-credit scholarship programs alone saved taxpayers cumulatively more than \$200 million. These programs saved taxpayers money because the cost of taxpayer support for these programs was substantially less than the variable cost of students attending a public school in the same state.

Seven years later, the Foundation released *The School Voucher Audit*, which built upon Aud's seminal research.¹¹ In *The School Voucher Audit*, Jeff Spalding estimated the net fiscal impact of 10 school voucher programs on state governments, taxpayers, and public schools.¹² This 2014 report looked at school voucher programs only and estimated \$1.7 billion in taxpayer savings. For consistency and to facilitate comparability, the methodology employed in this report closely followed the methods used in Spalding's *School Voucher Audit*. Methods used in both of these reports differ in significant ways from Aud's report, however, and they have already been explained extensively in *The School Voucher Audit*.¹³

For a variety of reasons, there has been much more published analysis of proposed school choice programs than of existing programs.¹⁴ For example, early work by Lips and Jacoby estimated the fiscal impact of Arizona's Original Individual Tax Credit Program during the program's first few years and estimated a fiscally neutral impact.¹⁵ Because this program does not have any prior enrollment requirements, a fiscal analysis should account for how many students receiving scholarships did not or would not have switched from public schools (i.e. students likely to enroll in a private school even without that financial aid). Not doing so could overstate the expected savings. Lips and Jacoby estimated that about 80 percent of scholarship recipients were currently private school students

or likely to attend private school, though the vast majority were from low-income households. The authors suggested it was likely that some portion of the scholarship recipients would have had to return to public schools without the financial assistance. This was confirmed by Vicki E. Murray, who analyzed student-level data and found that 66.8 percent of scholarship recipients' family incomes would qualify them for the corporate low-income scholarship program.¹⁶

More recently, Baylor economist Charles North estimated Arizona taxpayer savings from the individual tax-credit scholarship program (in calendar year 2008) and presented his findings during testimony to the Arizona legislature's Ad Hoc Committee on Private School Tuition Tax Credit Review. Though tax revenue forgone because of the program was \$55 million, he estimated savings to taxpayers at between \$100 million and \$242 million.¹⁷

A critical factor for estimating the fiscal impact of school choice programs is the number of students who leave public schools or who would have enrolled in public schools without financial assistance from the program (commonly referred to as "switchers.") While data on this group is usually not tracked at all, we can still get a sense about whether a program saves or costs taxpayers money by calculating the "break-even switcher rate," which is the proportion of scholarship recipients who would need to be switchers in order for a program to be fiscally neutral.

Robert Buschman and David Sjoquist examined the fiscal effects of Georgia's tax-credit scholarship program.¹⁸ Because they did not have data about the share of scholarship recipients who switched from public schools into the program, they estimated the rate of students moving from public to private schools necessary for the state government to break even (i.e. costs equal savings).¹⁹ They derived estimates for different average scholarship amounts and different values of the state grant. For instance, assuming scholarship awards average \$3,500 (slightly less than the average scholarship awarded in 2013) and after including local spending, the

break-even switcher rate was 66 percent scholarship recipients who switched from public schools.

In response to this analysis, Ben Scafidi, an economist at Kennesaw State University and Friedman Fellow at EdChoice, wrote why Buschman and Sjoquist significantly understated savings estimates from the program. First, Buschman and Sjoquist's estimate of state and local spending per student was significantly lower—by \$1,500—than the same figure reported by the Georgia Department of Education. Second, Georgia law requires scholarship students above kindergarten to be previously enrolled in public schools. Thus, the “switcher” rate in the Buschman and Sjoquist report was significantly underestimated and subsequently understated the impact estimates.²⁰

The Florida legislature's Office of Program Policy Analysis and Government Accountability (OPPAGA) conducted a fiscal analysis of the Florida Tax Credit Scholarship Program and estimated that the program saved state taxpayers \$36.2 million in FY 2009.²¹ Put another way, for each dollar of forgone revenue, the state saved \$1.44.

Andrew LeFevre estimated the cost to Pennsylvania taxpayers if all of the Educational Improvement Tax Credit (EITC) program participants re-entered public schools. The gap between the average cost of a public school student and the average scholarship award given through the EITC was more than \$13,000. The cost to educate the 38,600 EITC participants in 2009–10 would have been \$512 million.²² This estimate overstates the true impact, however, as not all of the students would likely have switched back to public schools.

Tax-Credit Scholarship Programs Under Analysis

For the period covered in this analysis, there were 21 tax-credit scholarship programs operating in 17 states. Of those, I included 10 (covering seven

states) in this report. All but two of the programs analyzed are the largest in the country. In total, the 10 programs I analyzed represent 93 percent of all scholarships awarded in tax-credit scholarship programs today.²³

The analysis employs similar inclusion criteria as those used in *The School Voucher Audit*. First, I examine only programs that were launched before 2014 because school finance data from the U.S. Department of Education and the U.S. Census Bureau were available only up to the 2013–14 school year.²⁴ Second, I examine only the programs with at least three years of data because the full impact of a tax-credit scholarship program usually takes time to materialize.²⁵

The programs analyzed in this report are:

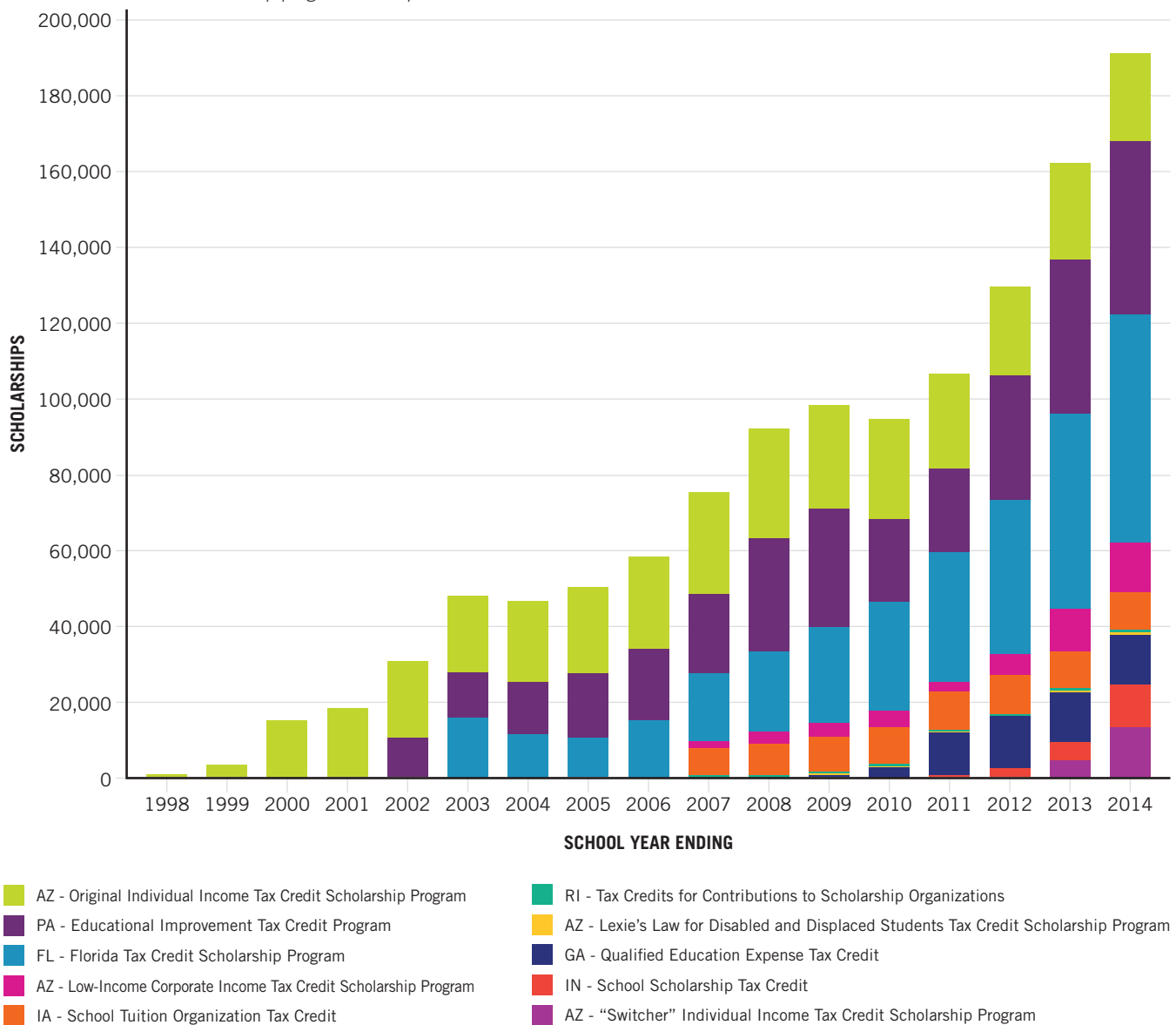
1. Arizona Original Individual Income Tax Credit Scholarship Program
2. Arizona Low-Income Corporate Income Tax Credit Scholarship Program
3. Arizona Lexie's Law for Disabled and Displaced Students Tax Credit Scholarship Program
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Tax-Credit Scholarship Program Participation

As Figure 1 demonstrates, tax-credit scholarship programs have enjoyed substantial popularity. Appendix 1 reports the number of scholarship awarded by program by year. The first tax-credit scholarship program, Arizona’s Original Individual Income Tax Credit Scholarship Program, launched

nearly 20 years ago.²⁶ In its first year, scholarship organizations awarded students 128 scholarships to pay tuition at private schools of their choice. Between then and 2014, those organizations have awarded more than 1.2 million tax-credit scholarships nationwide. When the programs excluded from this analysis are factored in, that number is slightly larger. Arizona’s “Original” tax-credit scholarship program, Florida’s program, and Pennsylvania’s EITC program are the largest in the U.S. in terms of

FIGURE 1 Scholarships Awarded in Tax-Credit Scholarship Programs SY 1997–98 to SY 2013–14
More than 1.2 million scholarships have been granted since the first tax-credit scholarship program was implemented in Arizona in 1997.



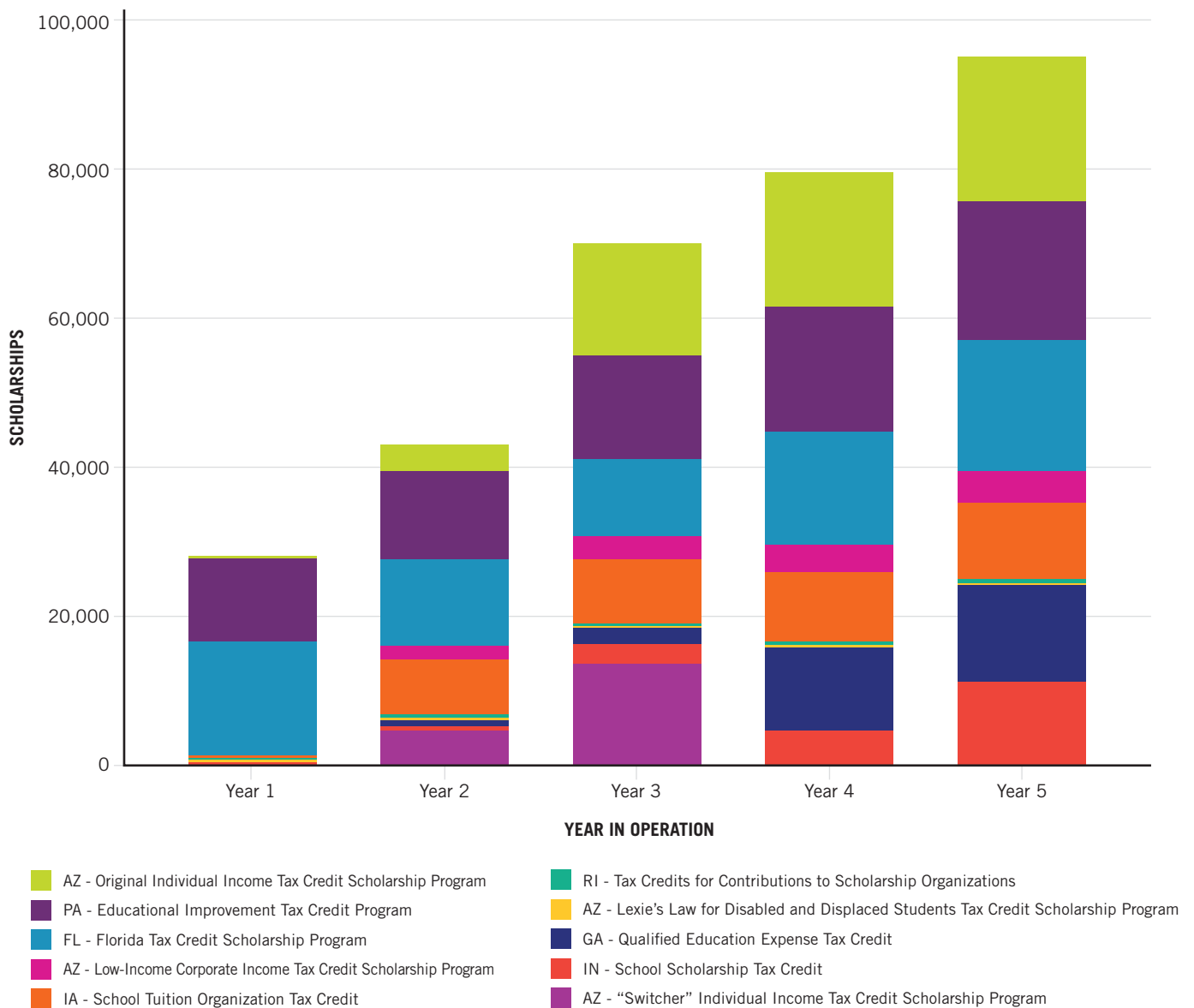
Note: Figures are based on assumption that one of every four scholarships is given to students already receiving an award.

student participation. Three out of every four tax-credit scholarship students in America are enrolled in one of these programs. These three programs are also the longest running in the country.

Figure 2 shows many school choice programs require some time to establish themselves. Almost 28,000 scholarships were awarded during the tax-credit scholarship programs' first years combined. This amount more than tripled in the programs' fifth

years, with more than 95,000 scholarships awarded. By their fifth year, all but three of the programs each awarded more than 10,000 scholarships. The number of students receiving scholarships during the fifth year of Rhode Island's program was lower than the number awarded in its first year, mostly due to its low credit cap. The other two low-growth programs are Arizona's "Lexie's Law" program and Arizona's "Low-Income" program.

FIGURE 2 Scholarships Awarded in Tax-Credit Scholarship Programs During First Five Years in Operation
The number of scholarships awarded increased 2.5 times after the programs' third years in operation.



Note: There are only three years of data available for the AZ "Switcher" Program.

Measuring the Fiscal Impact of Tax-Credit Scholarship Programs

Though tax credits impose a fiscal cost to governments because they reduce the amount of tax revenues received, tax-credit scholarship programs also produce a benefit for state and local government when students choose to leave or not enroll in public schools, which reduces the amount of taxpayer funds required to fulfill their district school funding formulas. Correspondingly, that also relieves public schools of the cost to educate those students. Thus, two key factors in the analysis are:

- 1) variable costs per student, meaning those costs that are directly associated with a given student and that would not be spent if that student were not enrolled, and
- 2) the number of students who would have attended public schools without the financial assistance from the tax-credit scholarship program.

For brevity, the report refers to this group throughout as simply “switchers.”²⁷ It’s important to note that this group also includes program participants enrolling in a school for the first time (usually kindergarten or first-grade students) who do not actually “switch” from a public school. Even though they haven’t enrolled in a school yet, they would have chosen to attend a public school in their first year without financial assistance.²⁸

This analysis uses short-run variable costs to generate estimates for programs’ fiscal impact.²⁹ A fundamental economic and accounting principle is that all costs become variable in the long run. Therefore, actual savings in the long run will be greater than those estimated in this report.

In some states, there is also a third factor: the proportion of scholarships that are given to students who receive more than one scholarship. States that allow multi-scholarship students are

Arizona, Georgia, Indiana, Pennsylvania, and Rhode Island.³⁰ The other states do not allow students to receive multiple awards; therefore, the count of scholarships reported will be the same as the number of students participating in their programs. Unfortunately, there were no data from which we could draw to directly estimate multiple scholarships awarded. Scholarship-granting organizations, however, are likely motivated to “spread the wealth” by helping as many students as possible rather than giving all or most of their money to just a small number of students. I make a reasonable attempt to account for these factors.

For the states that allow students to receive multiple scholarships, I make estimates based on the assumptions that SGOs award between 10 percent and 25 percent of all scholarships to multi-scholarship students, meaning they award 75 percent to 90 percent of all scholarships to single-scholarship students. The upper range of 25 percent will likely understate the fiscal impact estimates because the students likely to receive multiple scholarships are those with financial need. The 2013 poverty rate for students in private and public schools was 12.5 percent and 22.9 percent, respectively, which overlaps our range.³¹

Our variable cost estimates are derived from financial data from the National Center for Education Statistics and include the following three categorical expenditures: instruction expenditures, instruction support service expenditures, and student support services expenditures.³² This is the same accounting used in *The School Voucher Audit*. It is also more conservative than what other researchers have estimated for variable costs.³³

The reduction in state funds to school districts via school choice programs is usually identical to the reduction in state funds to school districts when students move from one public school district to another, or when students move out of state. In addition, when state funds are reduced after a student leaves a school district, the originating district retains federal and local funds. Public

State's Tax Revenue Lost Per Scholarship Recipient



Districts' Variable Spending Per Student Leaving Public School



Net Savings Per Student

K–12 education is the only enterprise in American society where service providers keep a portion of people's money even after those people have determined they no longer want those services. For example, higher education institutions do not keep any funds, public or private, when students transfer. They lose Pell grants, tuition revenue, and state appropriations when students leave.

A net fiscal benefit occurs when the amount of tax credits claimed by SGO donors is less than the cost savings that accrue from students who switch from public schools.³⁴

Unfortunately, both government organizations and individual scholarship organizations typically do not track data about switchers well, and sometimes data reported may not be reliable for various reasons.³⁵ Programs that have prior attendance requirements, however, are more likely to produce switchers. Moreover, all programs—even Arizona's "Original" program with no prior attendance requirement—are likely to give scholarships to switchers because doing so would optimize private schools' enrollment and revenue. To generate more accurate estimates, this analysis uses annual private school enrollment data from the U.S. Census Bureau to estimate these factors.

For programs that have no prior public school enrollment requirement, I use statewide private school enrollment rates and apply this rate to the number of participants to estimate the number of non-switchers.³⁶ For programs that have prior enrollment requirements, I first determine the percentage of private school students who are enrolled in grades not covered by this requirement, usually kindergarten and first grade.³⁷ Next, to generate an overall rate for students not

leaving public schools, I apply the private school enrollment share to the share of students not covered by the pre-enrollment requirement. Then, I apply this overall rate to the number of scholarship participants to estimate the number of students not leaving public schools. As noted above, private schools face an incentive to want scholarships to go to students from public schools in order to maximize their enrollment and revenue.³⁸ For this reason, our approach is cautious and may significantly understate fiscal savings.

I also make certain adjustments in the analysis for Arizona's "Lexie's Law" program, which serves only students with disabilities. The cost of educating students with disabilities is usually much higher than the cost of educating students in regular education programs.³⁹ Fortunately, a comprehensive study known as the Special Education Expenditure Project (SEEP) was conducted by the Center for Special Education Finance.⁴⁰ I use results from SEEP in my analysis of "Lexie's Law." For all other programs, it is possible for students with special needs to receive tax-credit scholarships. For simplicity, I assume students with disabilities do not participate in any of the other programs. To the extent that students with disabilities, in fact, received scholarships, the variable cost relief realized by public schools when students with disabilities leave will be significantly greater than the cost savings from a general education student.

There are certain challenges and considerations that generally apply to evaluating the fiscal impact of any school choice program. This section discussed the main ones and explained how the analysis accounts for them. Appendix 3 provides detailed discussion about other possible considerations.⁴¹

Formal Treatment for Measuring the Fiscal Impact

I formalize the fiscal impact of a tax-credit scholarship program below. The fiscal effect can be explained entirely by the following relationship:

$$\text{Net Impact} = \text{Cost Reduction from Switchers} - \text{Total Tax Credits Claimed}$$

That is, the net impact is the difference between the public school cost relief by switchers and the total state tax credits claimed for donations to SGOs.

Formally, the net impact of the tax-credit scholarship program can be expressed as follows:

$$NFI = (p \times C \times E) - (t \times E)$$

Where *NFI* equals the net fiscal impact; *p* denotes the share of scholarships given to switchers; *C* denotes the average variable cost to educate a student in a public school; *E* denotes the total number of scholarship recipients; and *t* denotes the average amount of tax credits awarded per program participant.

$(p \times C \times E)$ represents the savings to state government and school districts from students in the program who leave public schools. $(t \times E)$ represents the total cost.

Note *p*, the share of scholarships given to switchers, is not contained in the second expression, meaning that the cost of the program to state government, taxpayers, and school districts is independent of each participant’s prior educational setting. Thus, the cost is simply the total amount of tax credits given to donors, regardless of who receives the

scholarships. Where participants would enroll without financial assistance (i.e. public school vs. non-public school) is relevant for its effect on program savings. As more students leave public schools, state governments and school districts realize greater savings from the program.

From this equation, it is straightforward to derive an estimate of the percentage of school choice participants in a given program who must leave public schools in order for the program to be fiscally neutral (i.e. such that total savings from switchers equal the total cost of the tax support). I’ll refer to this rate as the “break-even switcher rate.”

The break-even switcher rate is simply:

$$p = t / C$$

That is, for a tax-credit scholarship program to be fiscally neutral, the percentage of switchers would need to equal the amount of public funds paid to subsidize each student divided by the variable cost savings from each student.

For most programs analyzed, I do not know the actual percentage of scholarship recipients who switched from public schools, though I make conservative assumptions about this component. As an ancillary analysis, I compute the break-even switcher rate for each program.

Where Do Fiscal Savings from Scholarship Programs Go?

State government will bear all the cost for a tax-credit scholarship program, while savings will be shared by the federal government, state government, and school districts. When school choice programs are enacted, however, it is

usually the case that savings do not automatically materialize as reductions in K–12 expenditures because public officials must actively make decisions to reduce such expenditures. When students leave public schools, officials have more room in their budgets to allocate resources for educating students that remain in those schools.

A potential by-product of school choice programs is that they result in more resources for each student remaining in a public school. This occurs when the variable cost savings per student is greater than the tax support of the school choice plan. The remainder can be spread over the students who remain, resulting in more resources for each student. Thus, while it may be the case that total revenue for a given public school may drop, it is usually not the case that revenue per student declines.

Savings to Federal Governments

The federal government will capture at least some of the savings associated with students switching to private schools. The two largest federal K–12 education programs are Title I and the Individuals with Disabilities Education Act (IDEA).⁴² Title I grants are based largely on census poverty estimates and education costs in each state.⁴³ IDEA allocations are based on characteristics of the general population rather than public school enrollment.⁴⁴ Grants from these two programs comprised 42 percent of federal K–12 education funds in 2012–13.⁴⁵ Because federal funds are not tied directly to enrollment, and because they comprise only about 10 percent of all K–12 funding, relatively very little savings from school choice programs will go back to the federal government. Most savings will flow to state governments and public schools.

Savings to State Governments

State governments will see their revenue decline by

the amount of credits awarded in a given year for donations to SGOs. This cost will be offset, however, by savings from a reduction in allocations to school districts. Because state funding is generally linked to student enrollment, any changes to enrollment will lead to corresponding changes to state aid (usually reflected in the following school year). Therefore, if students leave public schools, then state funding will also decline per the state’s school funding formula. Notably, these amounts can vary significantly by state and district.

State governments face several options with what they can do with the savings. They can hold the funds rather than spend them, meaning that state governments can subsequently lower taxes or save (and invest) the funds for future use. They can also choose to direct the savings to public schools or spend the savings on other public services. In general, savings to state governments from declining enrollment caused by school choice programs will outweigh the tax support, largely because scholarships funded by tax credits usually do not cover the full tuition at private schools. These savings are not explicitly observed, however, in budget reports.

Savings to Public School Districts

Schools feel the effects in at least two ways when students leave. First, state governments can choose to allocate some of their savings back to the school districts. This would partially offset the revenue decline experienced by schools when students choose to leave them—whether due to school choice, transferring to another public school district, moving out of state, graduating, or other reasons. Second, school districts save on variable costs associated with students who choose to leave public schools. They realize a savings if the variable costs attributable to students leaving is greater than the corresponding decrease in revenue.

School choice critics often argue that school choice siphons resources from public schools.⁴⁶ But their

logic paints school funding as a ratcheting wrench that works only one way: declining enrollment hurts schools because they lose revenue. Critics usually won't point out that this mechanism has another feature as well: Schools incur lower costs when enrollment declines. This mechanism also works in the other direction. When enrollment increases, schools incur higher costs but also receive more revenue to cover a portion of those costs. The ratcheting wrench has a toggle to work in reverse. Both costs and revenue vary with enrollment fluctuations that can occur for a variety of reasons additional to enacting a school choice program, such as moving to another public school district or moving out of state.⁴⁷

To be sure, dealing with budget cuts can be difficult for both public and private school officials, especially when large enrollment declines introduce the potential for cuts to personnel. Enrollment fluctuations are part of the public education landscape as students enter and leave districts freely, and school districts have long had to manage such changes. Moreover, budget fluctuations are an economic reality that every single enterprise in our society (e.g. families, grocery stores, small business, governments at all levels, private schools, and universities) must deal with on a regular basis. In contrast to public schools, which retain some funds for students who leave, private schools typically work with only the tuition received from their current enrollment. Some political forces argue, with a degree of success, that public schools should be inoculated from such reality. But, the truth is they cannot be. The introduction of new school choice options highlights that uncomfortable fact.

It's worth repeating a distinction made about savings generated by school choice. School choice generally results in economic savings, which is not the same as a reduction in expenditures. If K-12 expenditures do not drop after school choice is offered, it doesn't "prove" that the school choice program didn't generate savings. What is going on if we do not observe lower expenditures? Put simply, public officials are making choices to re-spend

the savings that school choice programs generate. In fact, public schools usually end up with more resources per student because they typically don't lose all funds previously spent on the students who leave. Public officials may simply be opting to spend the savings and carry on business as usual. For instance, in 2014, 9,532 students in Iowa who received scholarships to enroll in private schools originally came from public schools. Savings that year were about \$73 million. That was \$73 million that could have been directed to classrooms for the remaining 503,000 students enrolled in Iowa schools, generating an additional \$145 per student. We simply do not know, however, where these savings were directed.

Overall Results

All dollars reported throughout this report are adjusted for inflation and reported in 2014 U.S. dollars, except where noted otherwise. Figure 3 shows that in the first few years after Arizona started the nation's first tax-credit scholarship program, the program had a small negative fiscal impact. The program, which allows scholarships to be awarded to existing private school students, started producing a positive fiscal benefit in 2000. Since then, savings ramped up as Arizona expanded its offerings and other states enacted programs.

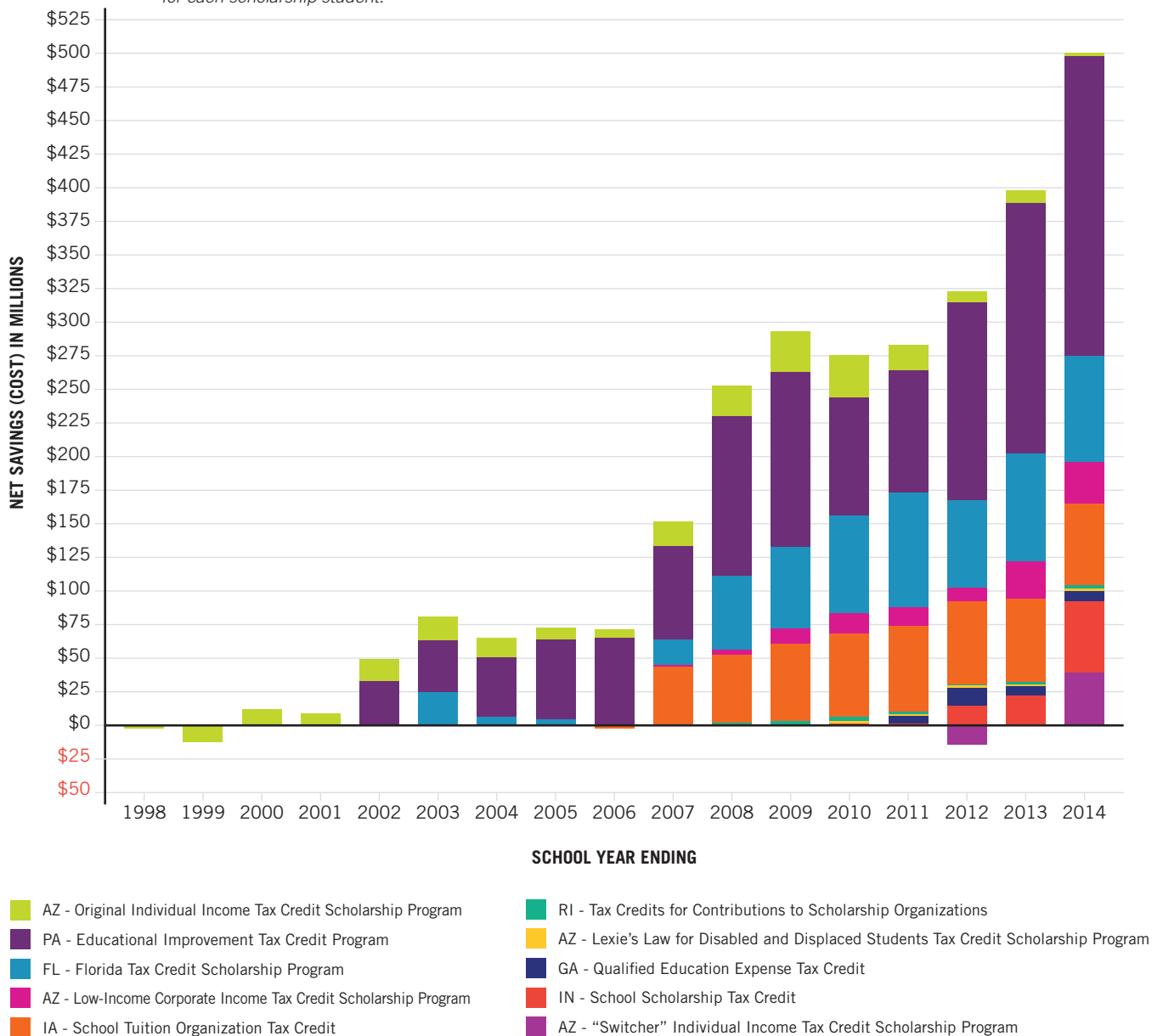
For all programs combined, net savings in 2009 were nearly \$300 million. Subsequently, there was a slight dip in 2010, most likely due to lagged effects of the Great Recession, but savings jumped afterwards. The programs combined generated more than \$580 million in savings in 2014.

Table 4 (on page 19) summarizes the cumulative fiscal impact for all tax-credit scholarship programs analyzed in this report from SY 1997-98 to SY 2013-14. It reports a range of estimates based on assumptions about the switcher rate (state specific or fixed rate) and share of scholarships awarded to students who receive more than one scholarship (10 percent or 25 percent). State-specific switcher rates are from annual private school enrollment

FIGURE 3

Savings from Tax-Credit Scholarship Programs, SY 1997–98 to SY 2013–14 (adjusted for inflation)

By 2014, nationwide cumulative net savings from tax-credit scholarship programs had reached \$3.4 billion, or \$3,000 for each scholarship student.



Note: For applicable programs, figure assumes that one of every four scholarships is given to students already receiving an award.

data from the U.S. Census. The lower-bound estimate assumes a 60 percent rate for switchers for programs without any pre-enrollment requirements.⁴⁸

The estimates represent an upper bound, lower bound, and in between. The set of assumptions are:

- 10 percent of scholarships awarded to students who receive multiple awards, state-specific rates for switchers (upper bound)
- 25 percent of scholarships awarded to students who receive multiple awards, state-specific rates for switchers (in between)

TABLE 4

Cumulative Savings for Nine Tax Credit-Scholarship Programs from Inception through 2013–14 (adjusted for inflation)

Program Name	Started	Cumulative Scholarship Count	10 percent of scholarships awarded to students receiving multiple awards, state-specific rates for switchers		25 percent of scholarships awarded to students receiving multiple awards, state-specific rates for switchers		25 percent of scholarships awarded to students receiving multiple awards, fixed 60 percent rate for switchers	
			Cumulative Savings	Cumulative Savings Per Student	Cumulative Savings	Cumulative Savings Per Student	Cumulative Savings	Cumulative Savings Per Student
* AZ Original Individual Income Tax Credit Scholarship Program	1997-98	351,593	\$404,666,504	\$1,279	\$212,867,580	\$807	\$115,245,374	\$437
† AZ Low-Income Corporate Tax Credit Scholarship Program	2005-06	44,986	\$114,660,115	\$2,549	\$114,660,115	\$2,549	\$103,672,167	\$2,305
† AZ Lexie's Law for Disabled and Displaced Students Tax Credit Scholarship Program	2008-09	1,020	\$8,710,894	\$8,540	\$8,710,894	\$8,540	\$8,242,969	\$8,081
† AZ "Switcher" Individual Income Tax Credit Scholarship Program	2011-12	18,216	\$27,129,918	\$1,489	\$27,152,727	\$1,491	\$23,343,635	\$1,281
† FL Florida Tax Credit Scholarship Program	2002-03	331,612	\$549,715,116	\$1,658	\$549,715,116	\$1,658	\$372,187,624	\$1,122
* GA Qualified Education Expense Tax Credit	2008-09	54,371	\$84,854,903	\$1,734	\$33,619,392	\$824	\$12,157,986	\$298
† IA School Tuition Organization Tax Credit	2006-07	77,893	\$461,037,947	\$5,919	\$461,037,947	\$5,919	\$280,431,828	\$3,600
† IN School Scholarship Tax Credit	2009-10	19,540	\$95,413,746	\$5,426	\$95,413,746	\$6,511	\$60,053,738	\$4,098
* PA Educational Improvement Tax Credit Program	2001-02	317,908	\$1,670,701,560	\$5,839	\$1,292,039,428	\$5,419	\$721,694,759	\$3,027
* RI Tax Credits for Contributions to Scholarship Organizations	2006-07	3,268	\$21,330,308	\$7,252	\$16,237,782	\$6,625	\$8,224,009	\$3,355
Overall Total		1,220,407	\$3,438,221,011	\$3,001	\$2,811,454,727	\$2,650	\$1,705,254,090	\$1,650

Note: State-specific rates for switchers are based on annual private school enrollment data from the US Census Bureau.

*Assumptions about the share of scholarships given to students who receive multiple awards are applied to the following programs without this restriction: Ariz. Original Individual Income Tax Credit Program and programs in Ga., Penn., and R.I.

†Analysis assumes that students in these programs do not receive multiple scholarships; analysis includes Indiana in this group because only 22 out of 302 private schools in the program partner up with two SGOs, meaning students choosing to attend any of these 22 schools could potentially receive scholarships from both of their partner SGOs

- 25 percent of scholarships awarded to students who receive multiple awards, fixed 60 percent rate for switchers (lower bound)

Together, all the tax-credit scholarship programs analyzed in this report generated cumulative net savings of between \$1.7 billion and \$3.4 billion through 2013–14. Those savings represent \$1,650–\$3,000 per student. Each program had a net positive cumulative fiscal impact.

Arizona’s “Original” program saved taxpayers between \$115 million and \$405 million, or about \$400 to \$1,300 per participant. Iowa, Florida, and Pennsylvania taxpayers saved between \$280

million and \$1.7 billion. Pennsylvania’s EITC program alone saved taxpayers between \$720 million and more than \$1.7 billion dollars, or up to \$5,800 per scholarship awarded, between 2002 and 2014. Smaller programs like Rhode Island’s Tax Credits for Contributions to Scholarship Organizations program and Arizona’s Lexie’s Law for Disabled and Displaced Students Tax Credit Scholarship Program saved taxpayers between \$8 million and \$21 million dollars.

Actual savings were likely much higher than the lower-bound estimates for at least two reasons. First, private schools are likely incentivized to maximize enrollment and would prefer granting

TABLE 5

Total Tax Support as Percent of State's Total K–12 Educational Costs, SY 2013–14

	Total tax support in SY 2014	Total revenue, all sources	Program cost as percent of total K–12 revenue
AZ	\$120,731,485	\$8,293,591,000	1.5%
FL	\$286,250,000	\$26,072,680,000	1.1%
GA	\$57,910,901	\$17,817,933,000	0.3%
IA	\$11,914,395	\$6,194,941,000	0.2%
IN	\$7,301,870	\$12,149,675,000	0.1%
PA	\$68,100,000	\$27,647,475,000	0.2%
RI	\$1,500,000	\$2,289,429,000	0.1%
Total	\$553,708,651	\$100,465,724,000	0.6%

Sources: See Appendix 5.

scholarships to students from public schools than to students currently enrolled in private schools. Second, scholarship organizations are likely to target students with financial need either as part of their mission, or as a program requirement, and these students are more likely to attend public schools if their financial assistance from the school choice program were removed.⁴⁹

These school choice programs have expanded the educational opportunities for countless families at a fraction of the cost for states to provide a public education.

Table 5 reports the total tax support provided for tax-credit scholarship programs in each state during SY 2013–14 as a share of the state’s total K–12 public education revenue. Critics of school choice often claim that these programs will siphon money away from public schools, but without providing any context. For all the controversy that surrounds school choice, it turns out that the costs associated with funding these programs amounts to a few drops in the ocean of public K–12 funding. Supporting Arizona’s four tax-credit scholarship programs comprises 1.5 percent of the \$8 billion that public schools in the state receive. In Florida, this share is just 1 percent. In each of the other states included in this report, the cost to support these programs is less than half of one percent of those states’ respective K–12 budgets.

TAX-CREDIT SCHOLARSHIP PROGRAM PROFILES



ORIGINAL INDIVIDUAL INCOME TAX CREDIT SCHOLARSHIP PROGRAM | ARIZONA

Arizona has four tax-credit scholarship programs. The Original Individual Income Tax Credit Scholarship Program is the oldest in the United States and universal in terms of eligibility. Students in grades K–12 or prekindergarten students identified with a disability under IDEA are eligible for the program. That means all Arizona K–12 students are eligible, regardless of where they enrolled prior to participating in the program. This makes the program the most accessible tax-credit scholarship program in the country. It is also the only program in this analysis that allows existing private school students to receive scholarships.

Individuals may make donations to school tuition organizations (STOs) and receive a dollar-for-dollar tax credit. For tax year 2016, single filers may claim up to \$545, while married couples filing jointly can claim up to \$1,090. The maximum amount of credits claimable increases each year per the Consumer Price Index. There is also no limit to the amount of credits granted by state governments. Scholarship amounts are determined by the STOs and are not limited.

Growth in the nation’s oldest tax-credit scholarship program was substantial in the early years of its existence, though the number of awards given out in recent years has declined. This could reflect growth in the state’s public charter school sector, the economic recession in 2008, or both. As Figure 4 demonstrates, it can take a few years before a positive fiscal impact is realized—especially when existing private school students are eligible. In the first two years, the amount of donations to the program were substantially disproportionate to the number of scholarships awarded. Subsequently, the average tax support was quite high in those years, leading to net negative fiscal impacts during those two years. Average tax support normalized by the third year.

To estimate the number of students who switched from public schools, the analysis relies on a Harvard University study that analyzed this program. The researcher, Vicki E. Murray, used student-level data and estimated that 66.8 percent of scholarship recipients from this program would have qualified for Arizona’s corporate low-income tax-credit scholarship program.⁵⁰ The analysis used this estimate as the rate for switchers. It is higher than the 20 percent rate found in Lips’ and Jacoby’s much earlier work, but it’s likely that many of the program participants would enroll in public schools without the financial assistance from the tax-credit scholarship program.⁵¹

The analysis also generated estimates based on assumptions that 10 percent and 25 percent of scholarships were given to students who received multiple awards. The figure and table reflect the more conservative assumption about multiple scholarships and are based on state-specific rates for switchers.

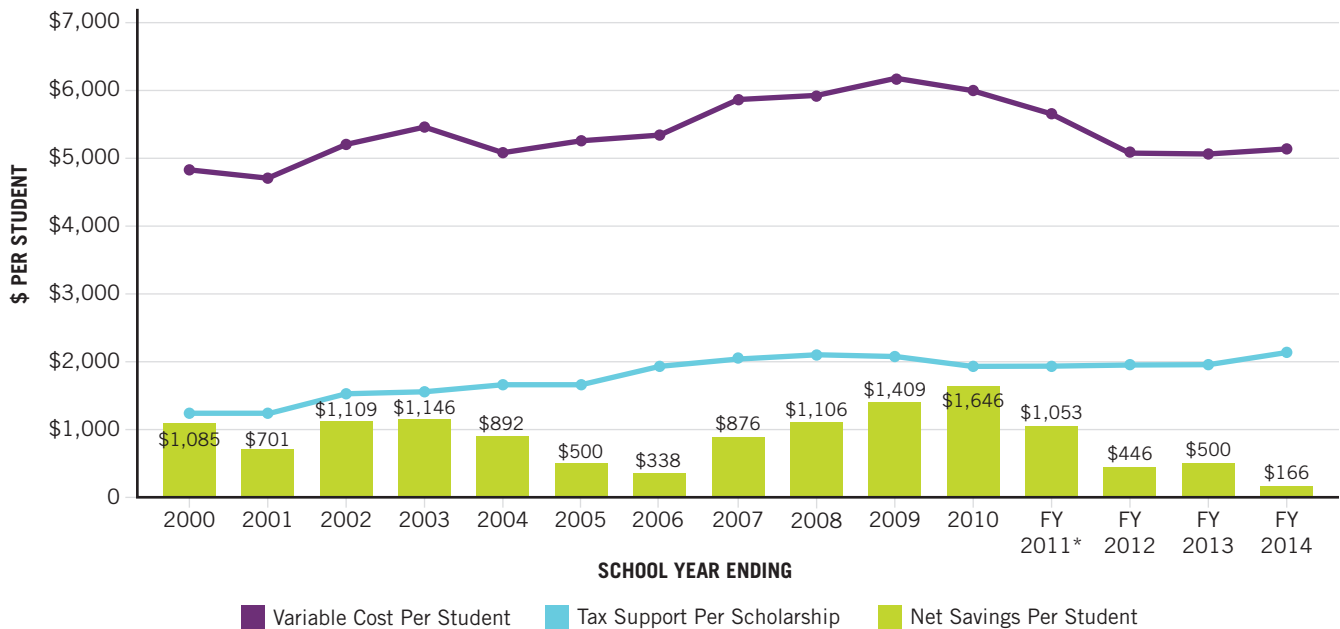
For the program to be fiscally neutral, between 43 percent and 52 percent of students must have switched from Arizona public schools (depending on the assumed share of scholarships given to students receiving more than one). For the program to have had an adverse fiscal impact, fewer scholarship students must have switched.

How to Read the Table

In FY 2014, STOs awarded students 23,157 scholarships (not shown). I assumed that 25 percent of those scholarships were given to students who received multiple awards, for instance, students participating in the Original and other Arizona tax-credit scholarship programs. Thus, 17,368 students participated in the program. The average amount

FIGURE 4

Arizona Original Individual Income Tax Credit Scholarship Program - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

Notes: To avoid distorting the chart, we omit 1998 and 1999 from the figure. During the first two years of the program, the amount of donations were disproportionate to the number of scholarships awarded because of startup challenges associated with informing parents about the program. Estimates are based on assumption that 25 percent of scholarships are awarded to students who receive more than one award.

* Because of the change to the reporting period, some of the scholarships and donations reported for FY 2011 were also reported for CY 2010; Because our Census data were not available prior to 2005, we used 2005's estimate for earlier years; we assume that 25 percent of scholarships are awarded to students who receive multiple scholarships.

† Assumption about switchers is based on Vicki E. Murray, *An Analysis of Arizona Individual Income Tax-Credit Scholarship Recipients' Family Income, 2009-10 School Year*, PEPG 10-18 (Cambridge, MA: Harvard Univ., Harvard Kennedy School, Program on Education Policy and Governance, 2010), https://www.hks.harvard.edu/pepg/PDF/Papers/PEPG10-18_Murray.pdf.

of these awards was \$2,145. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits given for donations made to STOs, or \$56,808,089. This implies the average taxpayer support was \$3,271 per participant.

Next, I computed savings. For Arizona, I assumed 66.8 percent of students in the program left or chose not to attend a public school (or would enroll in a public school if the program was eliminated). This implies that 11,602 students switched from public schools. With an average variable cost of \$5,146 per student, this enrollment shift generated \$59,699,167 in savings. Thus, the net impact in 2014 was \$2,891,078, or \$166 in savings per student participating in the program that year. Note that for the program to have been fiscally neutral in 2014, 64 percent of participating students must have switched from public schools.

FISCAL IMPACT

The nation's oldest tax-credit scholarship program saved Arizona taxpayers between \$115 million and \$405 million since its inception, or about \$400 to \$1,300 for every scholarship student. To be fiscally neutral, between 43 percent and 52 percent of students would have had to choose to leave or not attend public schools by using the program.

TABLE 6

Arizona Original Individual Income Tax Credit Scholarship Program - Overall Fiscal Effect (adjusted for inflation)

Calendar Year	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Scholarship Students	Average Scholarship Amount†	Average Tax Support Per Student (AZ Gov't)	Tax Support Cost of Scholarships (AZ Gov't)	% Share of Scholarship Students Switching from Public School‡	Scholarship Students Switching from Public School	Avg Variable Cost Per Student (AZ Schools)	Variable Cost Burden Relief (AZ Schools)	Total Net Savings	Net Savings Per Scholarship Student	
1998	96	\$1,178	\$27,471	\$2,637,207	66.8%	64	\$4,374	\$280,526	(\$2,356,681)	(\$24,549)	n/a
1999	2,405	\$973	\$8,142	\$19,583,070	66.8%	1,607	\$4,501	\$7,232,170	(\$12,350,900)	(\$5,135)	n/a
2000	11,311	\$1,236	\$2,152	\$24,335,256	66.8%	7,556	\$4,845	\$36,604,408	\$12,269,151	\$1,085	44%
2001	13,537	\$1,221	\$2,459	\$33,281,317	66.8%	9,043	\$4,730	\$42,766,898	\$9,485,581	\$701	52%
2002	14,687	\$1,534	\$2,376	\$34,888,863	66.8%	9,811	\$5,217	\$51,177,138	\$16,288,275	\$1,109	46%
2003	15,101	\$1,560	\$2,509	\$37,884,960	66.8%	10,087	\$5,472	\$55,194,313	\$17,309,353	\$1,146	46%
2004	15,860	\$1,661	\$2,517	\$39,911,125	66.8%	10,594	\$5,102	\$54,051,879	\$14,140,753	\$892	49%
2005	16,897	\$1,661	\$3,027	\$51,148,802	66.8%	11,287	\$5,280	\$59,596,114	\$8,447,312	\$500	57%
2006	18,509	\$1,932	\$3,237	\$59,903,046	66.8%	12,364	\$5,351	\$66,153,530	\$6,250,484	\$338	60%
2007	20,365	\$2,042	\$3,045	\$62,003,554	66.8%	13,604	\$5,869	\$79,845,020	\$17,841,466	\$876	52%
2008	21,245	\$2,104	\$2,860	\$60,761,827	66.8%	14,192	\$5,938	\$84,269,592	\$23,507,764	\$1,106	48%
2009	20,694	\$2,085	\$2,713	\$56,143,822	66.8%	13,824	\$6,171	\$85,306,751	\$29,162,929	\$1,409	44%
2010	19,825	\$1,945	\$2,365	\$46,882,898	66.8%	13,243	\$6,004	\$79,507,015	\$32,624,117	\$1,646	39%
FY 2011*	18,829	\$1,933	\$2,745	\$51,679,970	66.8%	12,578	\$5,685	\$71,505,601	\$19,825,631	\$1,053	48%
FY 2012	17,871	\$1,956	\$2,960	\$52,899,061	66.8%	11,938	\$5,100	\$60,878,284	\$7,979,223	\$446	58%
FY 2013	19,098	\$1,951	\$2,899	\$55,374,168	66.8%	12,757	\$5,089	\$64,926,210	\$9,552,042	\$500	57%
FY 2014	17,368	\$2,145	\$3,271	\$56,808,089	66.8%	11,602	\$5,146	\$59,699,167	\$2,891,078	\$166	64%
Cumulative Total									\$212,867,580	\$807	52%

Sources: See Appendix 5.

Notes: Negative numbers in parentheses. Estimates are based on assumption that 25 percent of scholarships are awarded to students who receive more than one award.

* Because of the change to the reporting period, some of the scholarships and donations reported for FY 2011 were also reported for CY 2010; Because our Census data were not available prior to 2005, we used 2005's estimate for earlier years; we assume that 25 percent of scholarships are awarded to students who receive multiple scholarships.

†The average scholarship amount reflects the average value of each award, not the average amount each student receives. It is not comparable with the average tax support per student.

‡ Assumption about switchers is based on Vicki E. Murray, *An Analysis of Arizona Individual Income Tax-Credit Scholarship Recipients' Family Income, 2009-10 School Year*, PEPG 10-18 (Cambridge, MA: Harvard Univ., Harvard Kennedy School, Program on Education Policy and Governance, 2010), https://www.hks.harvard.edu/pepg/PDF/Papers/PEPG10-18_Murray.pdf.



LOW-INCOME CORPORATE INCOME TAX CREDIT SCHOLARSHIP PROGRAM | ARIZONA

The Low-Income Corporate Income Tax Credit Scholarship Program allows school tuition organizations (STOs) to receive donations earmarked for granting scholarships to students from low-income families—up to 185 percent of eligibility for the federal free and reduced-price lunch program (\$83,167 for a household of four). Students must also meet one of the following criteria:

- is enrolled in kindergarten
- is enrolled in a program for students with disabilities
- was previously enrolled in a public school for at least 90 days during the previous year or a full semester during the current school year
- is a dependent of an active-duty member of the military stationed in Arizona
- is a prior recipient of the Original Individual Income Tax Credit Scholarship Program

State governments give tax credits on a dollar-for-dollar basis to corporations making donations to STOs. While there is no limit to how much a corporation may donate to an STO, the maximum tax credits the state will grant is \$51.6 million. This cap will increase by 20 percent annually. The scholarship amount is also capped at \$5,100 for grades K–8 and \$6,400 for grades 9–12.

Students with special needs are also eligible for this scholarship. To be overly cautious, I assume that no students with disabilities leave public schools. To the extent that some switchers have disabilities, estimated savings will be understated given the higher cost associated with this group.

Note that some of these students are multi-scholarship recipients, and the analysis already accounted for them in the previous analysis of Arizona’s Original Individual Income Tax Credit Scholarship Program.

I estimated that 99 percent of scholarship students chose to leave or not attend public school using private school enrollment data from the U.S. Census Bureau and based on the program’s prior enrollment eligibility requirement. This is based on the percent of private school kindergarteners as a share of all K–12 Arizona students. The analysis also generated lower-bound estimates by assuming that 60 percent of estimated kindergarteners in the program were switchers.

For the program to be fiscally neutral, 55 percent of scholarship students must have switched from Arizona public schools. For the program to have had an adverse fiscal impact, fewer scholarship students must have chosen to leave or not attend public schools.

How to Read the Table

In 2014, STOs awarded students 13,118 scholarships. The average amount of these awards was \$1,869 per scholarship. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits given for donations made to STOs, or \$35,831,808. This implies the average taxpayer support was \$2,731 per participant.

Next, I computed savings. Of the 13,118 students participating in the program, 13,045 students chose to leave or not attend public schools. With an average variable cost of \$5,146 per student, this enrollment

FIGURE 5

Arizona Low-Income Corporate Income Tax Credit Scholarship Program - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

shift generated \$67,125,437 in savings. Thus, the net impact in 2013–14 was \$31,293,629, or about \$2,386 in savings per student participating in the program that year. Note that for the program to have been fiscally neutral in 2013–14, about 53 percent of participating students must have been switchers.

FISCAL IMPACT

The Low-Income Corporate Income Tax Credit Scholarship Program has saved Arizona taxpayers between \$104 million and \$115 million, or about \$2,300 to \$2,500 per scholarship issued. To be fiscally neutral, 55 percent of students would have had to choose to leave or not attend public schools by using the program.

TABLE 7

Arizona Low-Income Corporate Income Tax Credit Scholarship Program - Overall Fiscal Effect
(adjusted for inflation)

Fiscal Year	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Number of Scholarships	Average Scholarship Amount	Average Tax Support Per Student (AZ Gov't)	Tax Support Cost of Scholarships (AZ Gov't)	% Share of Scholarship Students Switching from Public School	Scholarship Students Switching from Public School	Avg Variable Cost Per Student (AZ Schools)	Variable Cost Burden Relief (AZ Schools)	Total Net Savings	Net Savings Per Scholarship Student	
2007	1,947	\$2,710	\$5,712	\$11,121,712	99.4%	1,936	\$5,869	\$11,364,038	\$242,326	\$124	97%
2008	2,967	\$2,786	\$4,447	\$13,194,577	99.4%	2,950	\$5,938	\$17,518,591	\$4,324,014	\$1,457	75%
2009	3,652	\$2,382	\$3,268	\$11,935,181	99.4%	3,630	\$6,171	\$22,401,207	\$10,466,026	\$2,866	53%
2010	4,215	\$2,401	\$2,092	\$8,817,246	99.5%	4,194	\$6,004	\$25,179,002	\$16,361,756	\$3,882	35%
2011	4,578	\$1,596	\$2,615	\$11,972,987	99.5%	4,555	\$5,685	\$25,897,332	\$13,924,344	\$3,042	46%
2012	5,836	\$2,010	\$3,461	\$20,196,333	99.5%	5,805	\$5,100	\$29,603,689	\$9,407,356	\$1,612	68%
2013	11,653	\$1,549	\$2,604	\$30,344,223	99.5%	11,590	\$5,089	\$58,984,887	\$28,640,664	\$2,458	51%
2014	13,118	\$1,869	\$2,731	\$35,831,808	99.4%	13,045	\$5,146	\$67,125,437	\$31,293,629	\$2,386	53%
Cumulative Total									\$114,660,115	\$2,390	55%

Sources: See Appendix 5.



LEXIE'S LAW FOR DISABLED AND DISPLACED STUDENTS TAX CREDIT SCHOLARSHIP PROGRAM | ARIZONA

Lexie's Law was enacted to help Arizona children in foster care and children with disabilities receive educational services in a private school. To be eligible, students must either have a disability under the IDEA or are currently or have ever been in a foster care system. In addition, students must satisfy at least one of the following criteria:

- must be enrolled in a prekindergarten or kindergarten private school program for students with disabilities
- must have enrolled in a public school at least 90 days in the previous year or for the prior semester in the current school year
- must be a dependent of an active-duty member of the military

Scholarships in the "Lexie's Law" program are completely funded by donations from corporations. Donors receive a dollar tax credit for each dollar donated to a school tuition organization (STO). Though there is no limit on the amount of donations that may be made, the budget for the program is capped at \$5 million dollars per year. Scholarship amounts are capped at the lesser of private school tuition or 90 percent of the state funding for a student's originating public school.

To estimate the cost associated with "Lexie's Law" program participants, I use results from the Special Education Expenditure Project. Researchers estimated average current spending (excluding expenditures on school facilities) for special education students. On average, current expenditures for students with special needs is twice that of current expenditures for students without special needs. I apply this in the analysis by doubling the short-run variable costs per

student for students in Arizona.

Because public schools usually receive significantly more funding to educate students with special needs than private schools, I assume that the rate of students choosing to leave or not attend public schools is tied to the statewide private school enrollment rate (I use annual private school enrollment rates from the U.S. Census Bureau).

Some students in this program may have also received scholarships through other Arizona tax-credit scholarship programs, and the analysis for Arizona's Original Individual Income Tax Credit Scholarship Program already accounted for this.

For the program to be fiscally neutral, 21 percent of scholarship students must have switched from Arizona public schools. For the program to have had an adverse fiscal impact, fewer scholarship students must choose to leave or not attend public schools.

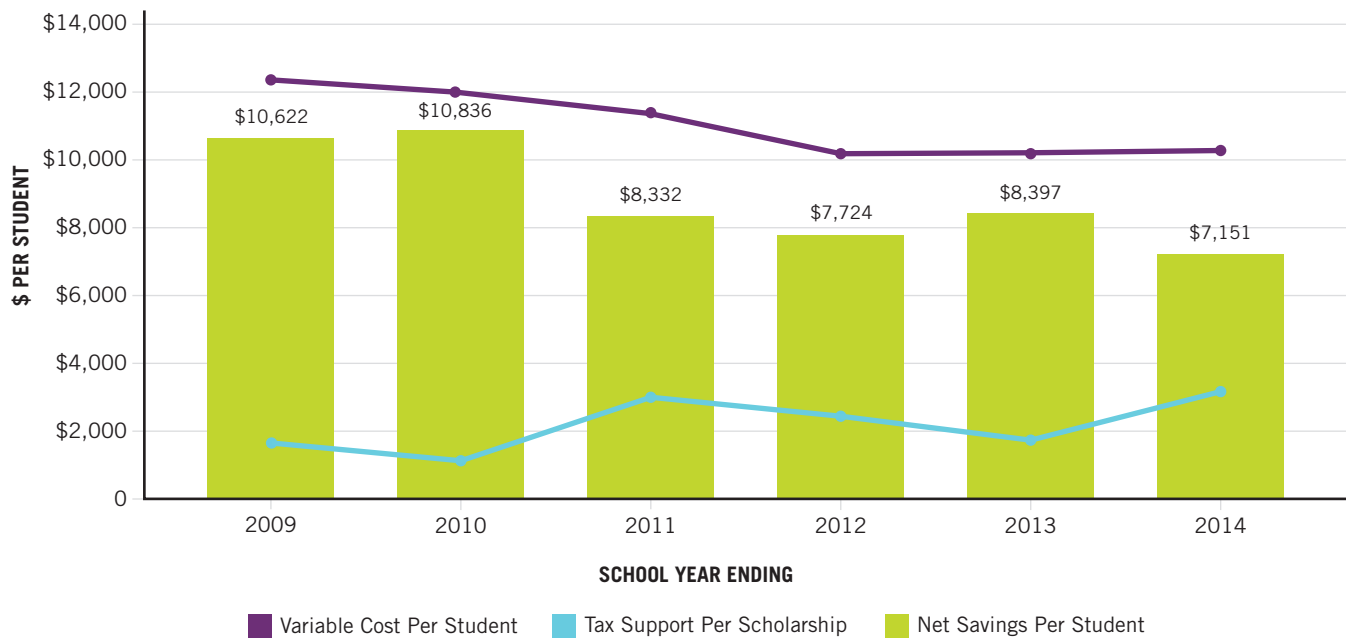
How to Read the Table

In 2013–14, STOs awarded 344 Lexie's Law scholarships. The average amount of these awards was \$4,664 per scholarship. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits given for donations made to STOs, or \$1,060,564. This implies the average taxpayer support was \$3,083 per participant.

Next, I computed savings. For this program, the analysis assumed 99.4 percent of students in the program left or chose not to attend a public school. Of the 344 students participating in the program, 342 students were switchers. With an average variable cost of \$10,291 per student, this enrollment

FIGURE 6

Arizona Lexie's Law for Disabled and Displaced Students Tax Credit Scholarship Program - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

*Because tax credits used in 2009 and 2010 were not releasable in the Arizona Income Tax Credits report by the Ariz. Dept. of Revenue, I assume these nominal amounts were the same as in 2011.

shift generated \$3,520,529 in savings. Thus, the net impact in 2013–14 was \$2,459,965, or about \$7,151 in savings per student participating in the program that year. For the program to have been fiscally neutral in 2013–14, 30 percent of participating students in this program must have chosen to leave or not attend public schools that year.

FISCAL IMPACT

The "Lexie's Law" program has saved the state and public schools up to \$8.7 million dollars, or about \$8,500 per participant. To be fiscally neutral, 21 percent of students would have had to choose to leave or not attend public schools.

TABLE 8

Arizona Lexie's Law for Disabled and Displaced Students Tax Credit Scholarship Program - Overall Fiscal Effect (adjusted for inflation)

Fiscal Year	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Number of Scholarships	Average Scholarship Amount	Average Tax Support Per Student (AZ Gov't)	Tax Support Cost of Scholarships (AZ Gov't)	% Share of Scholarship Students Switching from Public School	Scholarship Students Switching from Public School	Avg Variable Cost Per Student (AZ Schools)	Variable Cost Burden Relief (AZ Schools)	Total Net Savings	Net Savings Per Scholarship Student	
2009	114	\$6,053	\$1,646	\$187,591	99.4%	113	\$12,342	\$1,398,542	\$1,210,951	\$10,622	13%
2010	166	\$4,679	\$1,112	\$184,563	99.5%	165	\$12,007	\$1,983,257	\$1,798,694	\$10,836	9%
2011	60	\$1,202	\$2,982	\$178,916	99.5%	60	\$11,370	\$678,829	\$499,913	\$8,332	26%
2012	119	\$5,059	\$2,422	\$288,163	99.5%	118	\$10,199	\$1,207,279	\$919,115	\$7,724	24%
2013	217	\$3,424	\$1,726	\$374,556	99.5%	216	\$10,179	\$2,196,811	\$1,822,255	\$8,397	17%
2014	344	\$4,664	\$3,083	\$1,060,564	99.4%	342	\$10,291	\$3,520,529	\$2,459,965	\$7,151	30%
Cumulative Total									\$8,710,894	\$8,540	21%

Sources: See Appendix 5.

*Because tax credits used in 2009 and 2010 were not releasable in the Arizona Income Tax Credits report by the Ariz. Dept. of Revenue, I assume these nominal amounts were the same as in 2011.



"SWITCHER" INDIVIDUAL INCOME TAX CREDIT SCHOLARSHIP PROGRAM | ARIZONA

The “Switcher” program is Arizona’s fourth and newest tax-credit scholarship program. To be eligible for the program, students must meet one of the following criteria:

- has previously attended a public school for at least a full semester or at least 90 days
- has enrolled in preschool and identified by the school district as having a disability
- enrolled in kindergarten
- has a parent who is an active-duty military member stationed in Arizona
- is a previous recipient of a Low-Income Corporate Income Tax Credit Scholarship or “Switcher” Individual Income Tax Credit Scholarship who have remained in private school

Although the program is not means-tested, school tuition organizations (STOs) must consider financial need when awarding scholarships. Program rules prevent STOs from making decisions based on donor recommendations and individual donors from making contributions earmarked for their own dependents. Moreover, donors may not “trade” donations for their respective dependents.

The “Switcher” program was created as a supplement to the Original Individual Income Tax Credit Scholarship Program for individual taxpayers who claim the maximum credit amount from the Original program. These individuals may subsequently make donations to STOs in the “Switcher” program in return for a dollar-for-dollar tax credit worth up to \$542 for single filers and \$1,083 for married couples filing jointly.

Generally, STOs receive donations from the “Switcher” program late in a calendar year, so they distribute scholarships from those funds in the following year. This lag in receipt versus payout is common. Because of this lag, the amount of donations to the program in the first year was substantially disproportionate to the number of scholarships awarded. Subsequently, the average tax support was quite high in these years, leading to net negative fiscal impacts during the first year and a small fiscal benefit in the second year. Average tax support normalized more by the third year.

The analysis for Arizona’s “Original” program already accounted for the possibility that scholarships were given to students who received multiple awards, so the analysis for the “Switcher” program assumes STOs give each scholarship to a unique student.

To estimate the number of switchers, I applied the statewide private school enrollment rates using U.S. Census data to kindergarten enrollment, the only grade exempt from the pre-enrollment rule. To generate a lower-bound estimate, the analysis also assumed that 60 percent of estimated kindergarteners in the program were switchers.

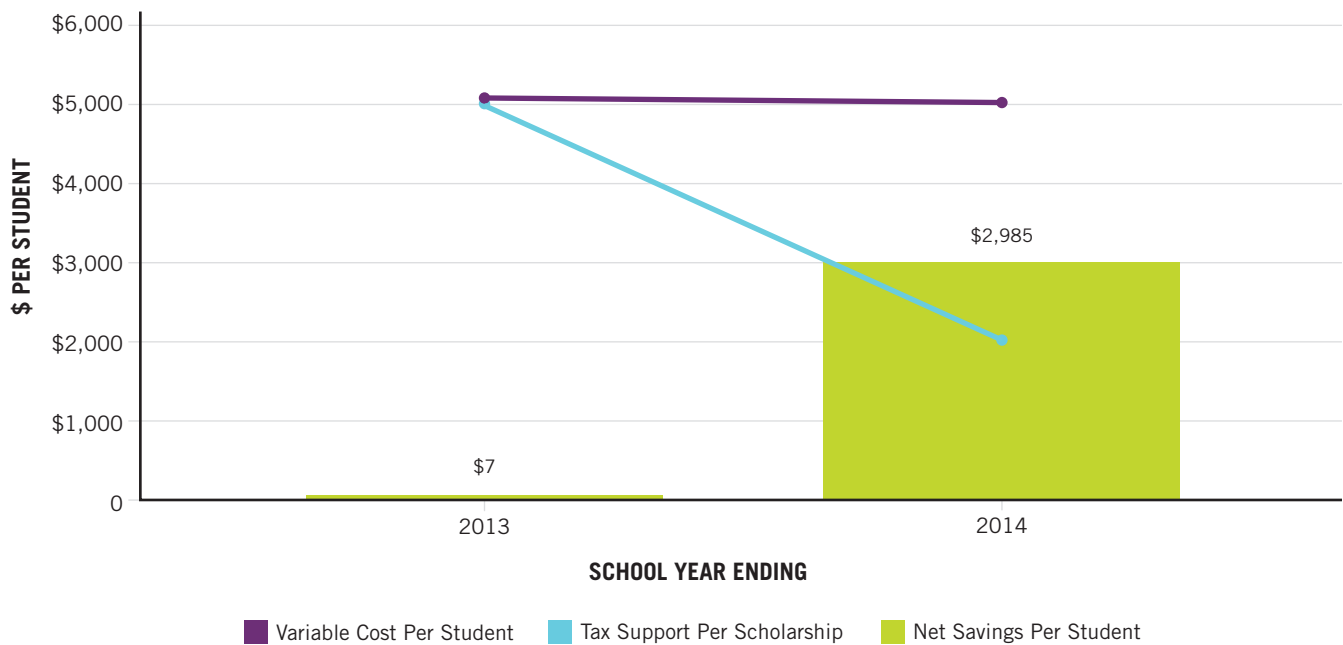
For the program to be fiscally neutral, about 70 percent of students must have chosen to leave or not attend Arizona public schools.

How to Read the Table

In 2013–14, STOs awarded 13,548 students scholarships. The average amount of these awards was \$1,339 per scholarship. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits given for donations made

FIGURE 7

Arizona "Switcher" Individual Income Tax Credit Scholarship Program - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

Note: In order to not distort the graph, we omit 2012 from the figure as no students were participating in the program at the time.

to STOs, or \$27,031,024. This implies the average taxpayer support was \$1,995 per participant.

Next, I computed savings. For this program, I assumed 99.4 percent of students in the program left or chose not to attend a public school. This implies that 13,471 students chose to leave or not attend public schools. With an average variable cost of \$5,009 per student, this enrollment shift generated \$67,476,960 in savings. Thus, the net impact in 2013–14 was \$40,445,936, or \$2,985 in savings per student participating in the program that year. Notably, for the program to have been fiscally neutral in 2013–14, 40 percent of participating students must have switched from public schools.

FISCAL IMPACT

The "Switcher" Individual Income Tax Credit Scholarship Program saved the state government and public schools between \$23 million and \$27 million, or about \$1,300 to \$1,500 per scholarship recipient. To be fiscally neutral, about 70 percent of students must have chosen to leave or not attend public schools.

TABLE 9

Arizona "Switcher" Individual Income Tax Credit Scholarship Program - Overall Fiscal Effect (adjusted for inflation)

Fiscal Year	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Number of Scholarships	Average Scholarship Amount	Average Tax Support Per Student (AZ Gov't)	Tax Support Cost of Scholarships (AZ Gov't)	% Share of Scholarship Students Switching from Public School	Scholarship Students Switching from Public School	Avg Variable Cost Per Student (AZ Schools)	Variable Cost Burden Relief (AZ Schools)	Total Net Savings	Net Savings Per Scholarship Student	
2012	0	\$0	\$0	\$13,350,771	99.3%	0	\$5,100	\$0	(\$13,350,771)	n/a	n/a
2013	4,668	\$1,019	\$5,051	\$23,577,773	99.4%	4,640	\$5,089	\$23,612,527	\$34,753	\$7	99%
2014	13,548	\$1,339	\$1,995	\$27,031,024	99.4%	13,471	\$5,009	\$67,476,960	\$40,445,936	\$2,985	40%
Cumulative Total									\$27,129,918	\$1,489	70%

Sources: See Appendix 5.

Notes: Generally donations are received late in a calendar year and scholarships are paid from those donations the following year. The lag in receipt vs. payout is standard. Negative numbers in parentheses.



FLORIDA TAX CREDIT SCHOLARSHIP PROGRAM | FLORIDA

The Florida legislature enacted and launched the Florida Tax Credit Scholarship Program in 2001. The state government provides tax credits on corporate income taxes and insurance premium taxes for donations made to scholarship funding organizations (SFOs). In turn, SFOs provide scholarships for low-income students and children in foster care. Students eligible for participating in the program include those who qualify for free and reduced-price lunch. In addition, students who are enrolled in public school or will enter kindergarten through fifth grade are also eligible. Up to 2012, the program required all scholarship recipients be previously enrolled in public school except those in kindergarten and first grade. This rule changed in 2013 so any students in kindergarten up to fifth grade could enroll in the program regardless of prior school enrollment. In 2014, the pre-public school enrollment requirement was removed entirely. Prior program participants from households whose income rises above the income limit can continue to participate in the program under certain circumstances. Students may not receive more than one scholarship.

The state gives a dollar-for-dollar tax credit to corporations that make donations to SFOs. In 2016–17, the state limits total credits granted to donors at \$559.1 million. Unused credits may be carried forward to the next fiscal year. The program also caps scholarships at the lesser of \$5,886 and a private school's tuition and fees.

A 2010 report from the Florida legislature's Office of Program Policy Analysis and Government Accountability (OPPAGA) cited data from the 2000 U.S. Census, which indicated that 5 percent of school-aged children who were living in households with an income below 185 percent of the federal poverty level attended private school.⁵² This rate

was used in *The School Voucher Audit's* analysis. To estimate the number of switchers, I used U.S. Census data from the American Community Survey for annual private school enrollment rates in Florida, which are more conservative than the estimate used by OPPAGA.⁵³ I then applied these rates to each year's number of students in grades exempt from the program's public school prior-enrollment requirement, obtained from quarterly reports by the Florida Department of Education.

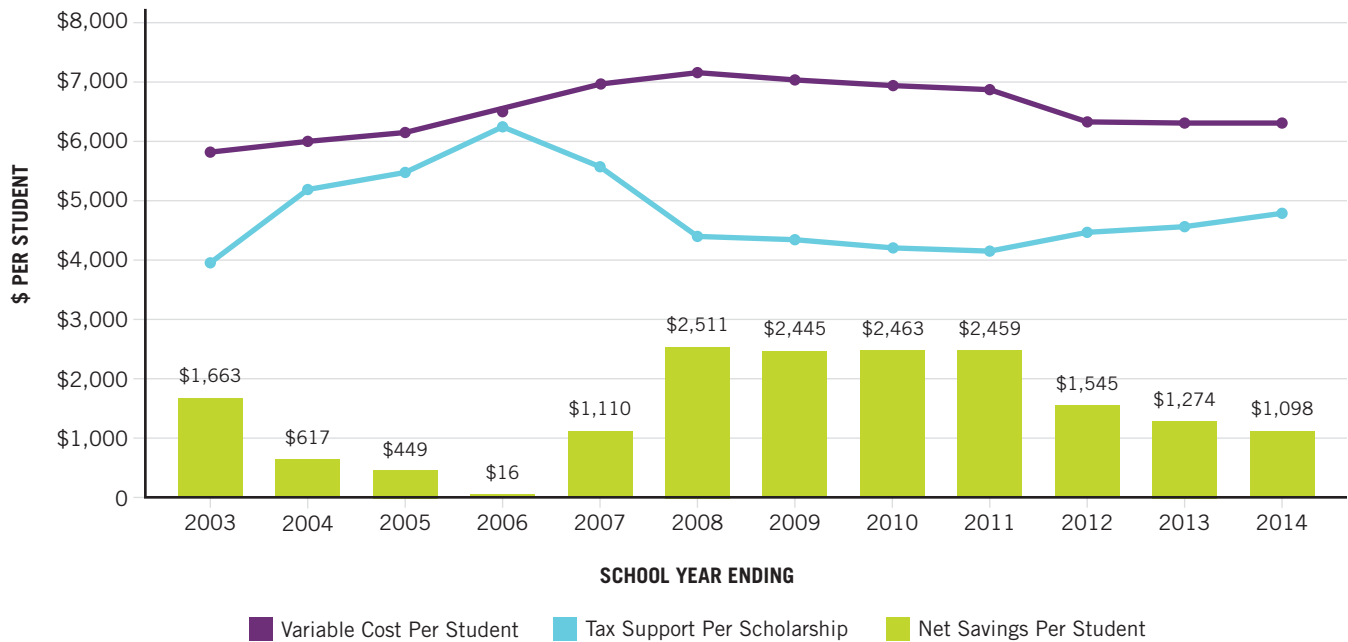
As with other programs, the analysis also generated lower-bound estimates by assuming that 60 percent of estimated kindergarteners and first graders in the program chose to leave or not attend public schools.

The savings reported in this analysis differ from the OPPAGA for two reasons. First, as described above, this analysis used a different and more conservative assumption about the number of switchers. Second, the OPPAGA report computed savings based on certain funding components in Florida's own school funding formula (it excluded discretionary local funding, federal funding, and components of the funding formula not based on student counts). Savings in this report is based on variable costs computed from NCES data and provides conservative estimates. Although the impact estimates are larger than OPPAGA's, it still likely understates actual savings.

For the program to be fiscally neutral, between 74 percent and 81 percent of scholarship students must have chosen to leave or not attend Florida public schools. For the program to have had an adverse fiscal impact, fewer scholarship students must have switched from public school.

FIGURE 8

Florida Tax Credit Scholarship Program - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

How to Read the Table

In 2013–14, 59,822 students received scholarships. The average amount of these awards was \$4,589 per scholarship. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits given for donations made to SFOs, or \$286,250,000. This was the credit cap for 2013–14 and implies the average taxpayer support was \$4,785 per participant.

Next, I computed savings. For Florida, I assumed 96.6 percent of students in the program left or chose not to attend a public school. This implies that 57,801 students switched from public schools. With an average variable cost of \$6,296 per student, this enrollment shift generated \$363,929,261 in savings. Thus, the net impact in 2013–14 was \$77,679,261, or \$1,299 in savings per student participating in the program that year. For the program to have been fiscally neutral in 2013–14, 76 percent of participating students must have switched from public schools.

FISCAL IMPACT

Florida's tax-credit scholarship program saved taxpayers between \$372 million and \$550 million since its inception in 2003, or \$1,100 to \$1,700 per scholarship recipient. To be fiscally neutral, 74 to 81 percent of students must have chosen to leave or not attend public schools.

TABLE 10

Florida Tax Credit Scholarship Program - Overall Fiscal Effect (adjusted for inflation)

School Year Ending	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Number of Scholarships	Average Scholarship Amount	Average Tax Support Per Student (FL Gov't)	Tax Support Cost of Scholarships (FL Gov't)	% Share of Scholarship Students Switching from Public School	Scholarship Students Switching from Public School	Average Variable Cost Per Student (FL Schools)	Variable Cost Burden Relief (FL Schools)	Total Net Savings	Net Savings Per Scholarship Student	
2003	15,585	\$4,128	\$3,937	\$61,353,222	96.6%	15,048	\$5,800	\$87,273,362	\$25,920,139	\$1,663	68%
2004	11,550	\$4,068	\$5,163	\$59,627,645	96.6%	11,152	\$5,985	\$66,751,503	\$7,123,858	\$617	86%
2005	10,549	\$4,212	\$5,465	\$57,650,610	96.6%	10,186	\$6,125	\$62,391,356	\$4,740,746	\$449	89%
2006	15,123	\$3,630	\$6,237	\$94,322,235	96.6%	14,606	\$6,475	\$94,568,596	\$246,361	\$16	96%
2007	17,819	\$3,800	\$5,582	\$99,474,060	96.4%	17,179	\$6,942	\$119,246,327	\$19,772,267	\$1,110	80%
2008	21,493	\$3,758	\$4,380	\$94,133,565	96.5%	20,732	\$7,144	\$148,108,554	\$53,974,990	\$2,511	61%
2009	24,871	\$3,932	\$4,322	\$107,495,854	96.6%	24,020	\$7,007	\$168,293,064	\$60,797,210	\$2,445	62%
2010	28,927	\$3,980	\$4,195	\$121,348,823	96.5%	27,927	\$6,897	\$192,601,525	\$71,252,701	\$2,463	61%
2011	34,550	\$3,944	\$4,153	\$143,470,610	96.7%	33,407	\$6,838	\$228,429,206	\$84,958,596	\$2,459	61%
2012	40,248	\$3,778	\$4,469	\$179,886,021	96.7%	38,930	\$6,298	\$245,168,893	\$65,282,872	\$1,622	71%
2013	51,075	\$4,118	\$4,556	\$232,714,810	96.7%	49,369	\$6,293	\$310,680,924	\$77,966,114	\$1,527	72%
2014	59,822	\$4,589	\$4,785	\$286,250,000	96.6%	57,801	\$6,296	\$363,929,261	\$77,679,261	\$1,299	76%
Cumulative Total									\$549,715,116	\$1,658	74%

Sources: See Appendix 5.

Notes: I use private school enrollment data from the US Census Bureau to generate switcher estimates by applying private enrollment rates to the number of scholarship students in Kindergarten and first grade, obtained from quarterly reports by the Fla. Dept. of Education.



QUALIFIED EDUCATION EXPENSE TAX CREDIT | GEORGIA

The Qualified Education Expense Tax Credit is open to students who attended a public school for at least six weeks immediately prior to receiving a scholarship and students enrolling in prekindergarten, kindergarten, or first grade. Although most private school students are not eligible for the program, nearly all (93 percent) of K–12 Georgia students would be eligible.

The program provides individuals and corporations a dollar-for-dollar tax credit for donations to a student scholarship organization (SSO). The law limits scholarship funding in two ways. First, it limits the amount of claimable tax credits for individuals and corporations. Second, the program is capped at \$58 million in tax credits per year. The law also caps scholarship amounts by the average state and local per-pupil K–12 expenditures (\$9,081 for 2016).

Prior to 2011, SSO data reporting requirements were very limited. SSOs reported only the value of tax credits approved and list of donors.⁵⁴ In 2011, the law was amended to require information related to scholarships, such as the number of scholarships and total amount awarded. Because these data are the minimum needed to generate an impact estimate, the analysis omits the years 2008–2010.⁵⁵

This analysis generated estimates based on assumptions that SSOs gave 10 percent and 25 percent of scholarships to multi-scholarship students. The figure and table in this section reflect the more conservative assumption about multiple scholarships and are based on state-specific rates for switchers.

Students who wish to participate in the program must have attended a public school for six weeks

prior to receiving a scholarship or be enrolled in any prekindergarten, kindergarten, or first grade. To estimate the number of switchers, I applied the statewide private school enrollment rate (from U.S. Census data) to enrollment in grades exempt from the pre-enrollment rule. To generate a lower-bound estimate, the analysis also used a 60 percent fixed rate for estimating the number of switchers.

For the program to be fiscally neutral, between 72 percent and 95 percent of students must have chosen to leave or not attend Georgia public schools.

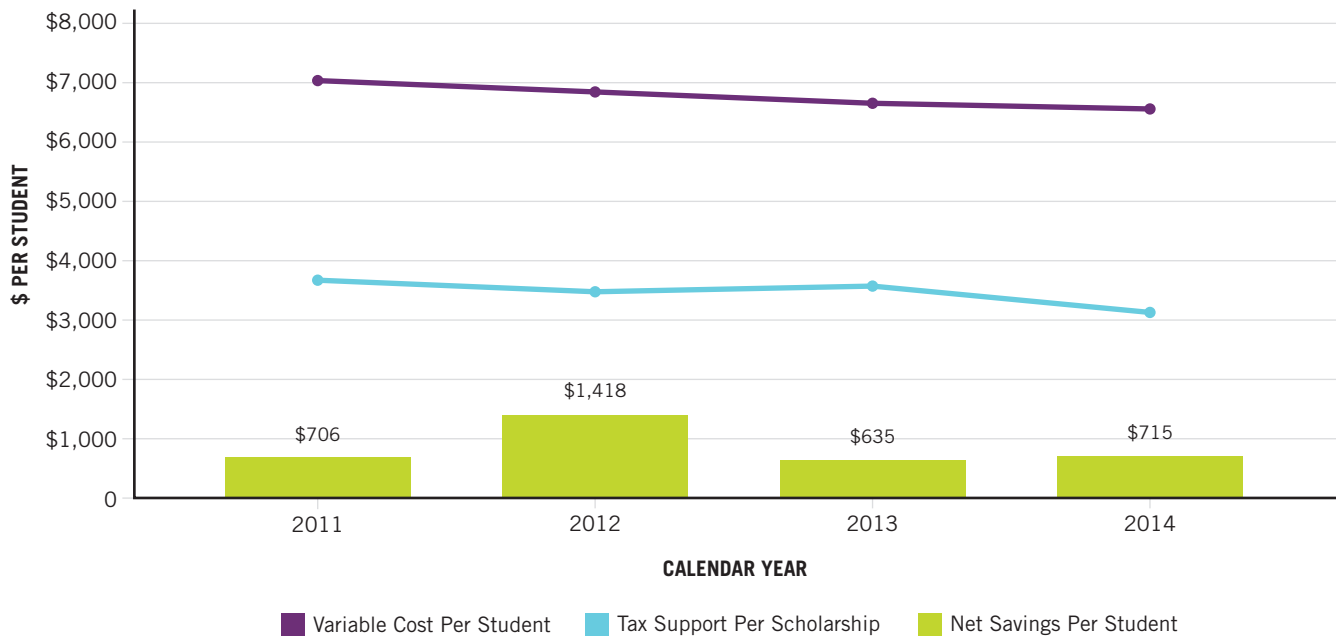
How to Read the Table

In 2014, SSOs gave out 13,428 scholarships (not shown). This table assumes that SSOs awarded 25 percent of those scholarships to multi-scholarship students. Thus, 10,071 students participated in the program. The average award amount was \$3,151 per scholarship. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits reimbursed for donors gifts to SSOs, or \$57,910,901. This implies the average taxpayer support was \$5,750 per participant.

Next, I computed savings. For Georgia, I assumed 98.5 percent of students in the program left or chose not to attend a public school (or would enroll in a public school if the program was eliminated). That implies that 9,920 students chose to leave or not attend public schools. With an average variable cost of \$6,564 per student, this enrollment shift generated \$65,108,282 in savings. Thus, the 2014 net impact was \$7,197,382, or \$715 in savings per student participating in the program that year. For the program to have been fiscally neutral in 2014,

FIGURE 9

Georgia Qualified Education Expense Tax Credit - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

Notes: Because the Ga. Dept. of Revenue did not report data during the years 2008-2010, I omit these years from the analysis; I assume that 25 percent of scholarships are awarded to students who receive multiple scholarships.

88 percent of participating students must have chosen to leave or not attend public schools.

FISCAL IMPACT

The Qualified Education Expense Tax Credit program saved Georgia taxpayers between \$12 million and \$85 million, or about \$300 to \$1,700 per scholarship recipient. To be fiscally neutral, 72 percent to 95 percent of students must have chosen to leave or not attend public schools.

TABLE 11

Georgia Qualified Education Expense Tax Credit - Overall Fiscal Effect (adjusted for inflation)

Tax Year	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Number of Scholarships	Average Scholarship Amount*	Average Tax Support Per Student (GA Gov't)	Tax Support Cost of Scholarships (GA Gov't)	% Share of Scholarship Students Switching from Public School	Scholarship Students Switching from Public School	Average Variable Cost Per Student (GA Schools)	Variable Cost Burden Relief (GA Schools)	Total Net Savings	Net Savings Per Scholarship Student	
2011	8,469	\$3,677	\$6,214	\$52,622,266	98.6%	8,352	\$7,016	\$58,597,613	\$5,975,346	\$706	89%
2012	9,964	\$3,493	\$5,330	\$53,102,015	98.6%	9,821	\$6,846	\$67,228,638	\$14,126,623	\$1,418	78%
2013	9,951	\$3,572	\$5,921	\$58,922,985	98.5%	9,803	\$6,656	\$65,243,026	\$6,320,041	\$635	89%
2014	10,071	\$3,151	\$5,750	\$57,910,901	98.5%	9,920	\$6,564	\$65,108,282	\$7,197,382	\$715	88%
Cumulative Total									\$33,619,392	\$874	87%

Sources: See Appendix 5.

Notes: Because the Ga. Dept. of Revenue did not report data during the years 2008-2010, I omit these years from the analysis; I assume that 25 percent of scholarships are awarded to students who receive multiple scholarships.

*The average scholarship amount reflects the average value of each award, not the average amount each student receives. It is not comparable with the average taxpayer cost per student.



SCHOOL SCHOLARSHIP TAX CREDIT | INDIANA

Indiana's School Scholarship Tax Credit is open to students with household incomes up to 200 percent of the federal free and reduced-price lunch program (\$89,910 for a family of four in 2016–17). The program also is open to current private school students.

The state may provide individuals and corporations 50 cents in tax credits for each dollar donated to scholarship-granting organizations (SGOs). The total number of tax credits the state may give out is capped at \$9.5 million in 2016–17. There is no limit, however, on the amount of tax credits that donors can claim.

The Indiana Department of Education has reported scholarship and tax credit data starting with school year 2011–12. I impute the prior two years with tax credit data from the Indiana Department of Revenue and scholarship data from the Friedman Foundation for Educational Choice's (now EdChoice) *ABCs of School Choice*. Participation in the first two years of the program was very small, but as the number of students enrolling in the program grew, savings to Indiana taxpayers also grew substantially. Small average scholarship awards largely drove these savings.

Because of the 50 percent tax credit rate, the tax support is significantly lower than scholarships awarded. It is possible for multiple SGOs to award students scholarships, though this occurrence is likely rare because most private schools partner up with only one SGO. Only 22 out of 302 private schools partner up with more than one SGO.⁵⁶ That means students who choose to attend any of those 22 schools could potentially receive scholarships from both of their partner SGOs. The analysis assumed that students receive no more than one scholarship

given that the number of such students is likely very low. It also generated lower-bound estimates based on assuming a 60 percent rate for switchers.

For the program to be fiscally neutral, just 13 to 18 percent of students must have chosen to leave or not attend Indiana public schools. This break-even switcher rate is as low as it is largely because Indiana's program has very low tax support.

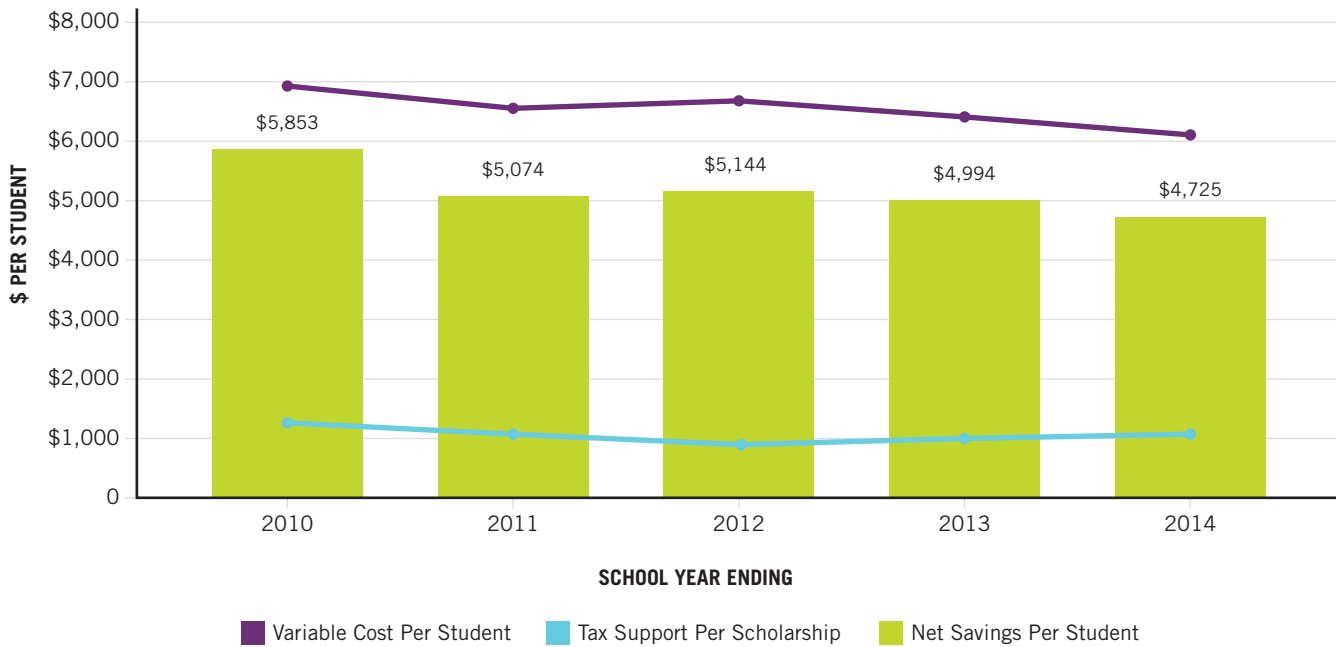
How to Read the Table

In 2013–14, Indiana SGOs awarded 11,067 students scholarships. The average amount of those awards was \$1,064 per scholarship. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits the state reimbursed donors to SGOs, or \$7,301,870. This implies the average taxpayer support was just \$660 per participant.

Next, I computed savings. For Indiana, I assumed 88.6 percent of students in the program left or chose not to attend a public school. That implies that 9,805 students were switchers. With an average variable cost of \$6,077 per student, this enrollment shift generated \$59,589,421 in savings. Thus, the 2013–14 net impact was \$52,287,551, or about \$4,725 in savings per student participating in the program that year. For the program to have been fiscally neutral in 2013–14, just 11 percent of participating students must have switched from public schools.

FIGURE 10

Indiana School Scholarship Tax Credit - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

FISCAL IMPACT

The School Scholarship Tax Credit program saved Indiana taxpayers between \$60 million and \$95 million since its launch in 2010, or between \$4,100 and \$5,400 per student. To be fiscally neutral, 12 to 18 percent of students must have chosen to leave or not attend public schools, depending on assumptions.

TABLE 12

Indiana School Scholarship Tax Credit - Overall Fiscal Effect (adjusted for inflation)

School Year Ending	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Number of Scholarships	Average Scholarship Amount	Average Tax Support Per Student (IN Gov't)	Tax Support Cost of Scholarships (IN Gov't)	% Share of Scholarship Students Switching from Public School	Scholarship Students Switching from Public School	Avg Variable Cost Per Student (IN Schools)	Variable Cost Burden Relief (IN Schools)	Total Net Savings	Net Savings Per Scholarship Student	
2010	386	\$1,289	\$349	\$134,840	89.4%	345	\$6,937	\$2,394,148	\$2,259,309	\$5,853	5%
2011	559	\$1,072	\$770	\$430,506	89.1%	498	\$6,559	\$3,266,727	\$2,836,221	\$5,074	12%
2012	2,890	\$907	\$794	\$2,293,863	89.1%	2,575	\$6,664	\$17,161,321	\$14,867,458	\$5,144	12%
2013	4,638	\$1,034	\$717	\$3,326,361	89.2%	4,136	\$6,405	\$26,489,569	\$23,163,207	\$4,994	11%
2014	11,067	\$1,064	\$660	\$7,301,870	88.6%	9,805	\$6,077	\$59,589,421	\$52,287,551	\$4,725	11%
Cumulative Total									\$95,413,746	\$4,883	12%

Sources: See Appendix 5.



SCHOOL TUITION ORGANIZATION TAX CREDIT | IOWA

Iowa's School Tuition Organization Tax Credit program provides scholarships to students from families with incomes up to 300 percent of the federal poverty level (\$72,900 for a family of four in 2016–17). Individuals can claim tax credits worth 65 cents for every dollar donated to a school tuition organization (STO). Each STO is limited in the amount of tax credits it grants—each STO's share is determined by enrollment. Corporate donors can receive tax credits worth up to 25 percent of the program's \$12 million cap. This cap is fixed and does not have an escalator.

The Iowa Department of Revenue tracks data related to scholarships and donations. As with all programs in this report, it does not keep track of where scholarship recipients were enrolled prior to participating in Iowa's tax-credit scholarship program. As such, this analysis used annual private school enrollment data from the U.S. Census to estimate the proportion of students who would have enrolled in a private school even without financial assistance.

In Iowa's program, students cannot receive scholarships from more than one STO because each school can only participate with one STO.⁵⁷ Thus, the number of scholarships reported equals the number of students participating in the program. This analysis also generated lower-bound estimates by assuming a fixed 60 percent rate for switchers.

The amount of donations in the first year is highly disproportionate to the number of students participating in the program. As with Arizona's "Original" program, we observe a net negative fiscal impact in the first year because of a very large average tax support (about \$18,000 per student). It's likely STOs received donations late in the year and

could not use those funds until the next school year. The average tax support normalized by the second year and resulted in savings.

For the program to be fiscally neutral, between just 13 percent and 20 percent of students must have chosen to leave or not attend Iowa public schools. Iowa has a low requirement for fiscal neutrality because of its very low tax support.

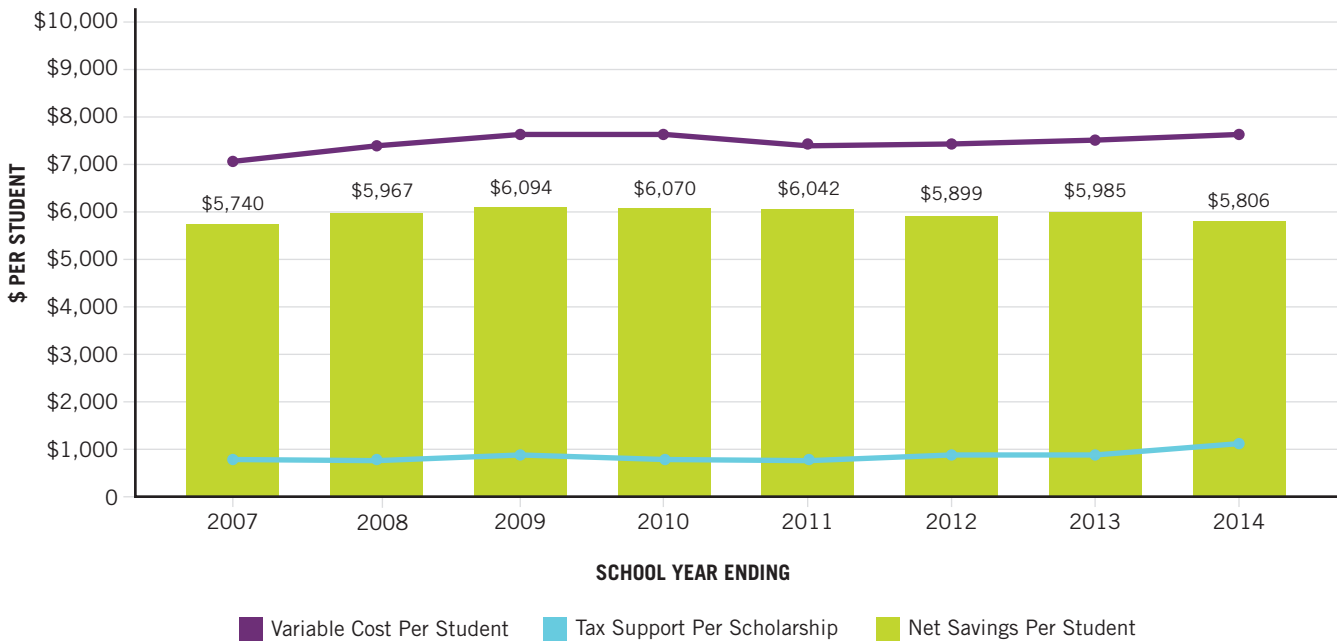
How to Read the Table

In 2013–14, STOs awarded scholarships to 10,494 students. The average amount of these awards was \$1,287 per scholarship. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits donors claimed for their gifts to STOs, or \$11,914,395. This implies the average taxpayer support was just \$1,135 per participant.

Next, I computed savings. For Iowa, I assumed 90.8 percent of students in the program left or chose not to attend a public school. This implies that 9,532 students were switchers. With an average variable cost of \$7,642 per student, this enrollment shift generated \$72,841,616 in savings. Thus, the 2013–14 net impact was \$60,927,221, or about \$5,800 in savings per student participating in the program that year. For the program to have been fiscally neutral in 2013–14, just 15 percent of participating students must have switched from public schools.

FIGURE 11

Iowa School Tuition Organization Tax Credit - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

FISCAL IMPACT

The Iowa School Tuition Organization Tax Credit saved Iowa taxpayers between \$280 million and almost \$461 million, or about \$3,600 to \$5,900 for each student participating in the program. To be fiscally neutral, 13 to 20 percent of students must have chosen to leave or not attend public schools.

TABLE 13

Iowa School Tuition Organization Tax Credit - Overall Fiscal Effect (adjusted for inflation)

Tax Year	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Number of Scholarships	Average Scholarship Amount	Average Tax Support Per Student (IA Gov't)	Tax Support Cost of Scholarships (IA Gov't)	% Share of Scholarship Students Switching from Public School	Scholarship Students Switching from Public School	Avg Variable Cost Per Student (IA Schools)	Variable Cost Burden Relief (IA Schools)	Total Net Savings	Net Savings Per Scholarship Student	
2006	161	\$1,071	\$18,234	\$2,935,604	90.4%	145	\$6,910	\$1,005,324	(\$1,930,280)	(\$11,989)	n/a
2007	7,519	\$579	\$740	\$5,564,825	91.5%	6,883	\$7,079	\$48,722,320	\$43,157,495	\$5,740	10%
2008	8,599	\$921	\$793	\$6,817,185	91.2%	7,845	\$7,409	\$58,125,629	\$51,308,445	\$5,967	11%
2009	9,451	\$1,064	\$865	\$8,172,602	90.9%	8,595	\$7,652	\$65,770,195	\$57,597,593	\$6,094	11%
2010	10,222	\$1,162	\$797	\$8,142,486	90.1%	9,211	\$7,620	\$70,192,606	\$62,050,120	\$6,070	10%
2011	10,588	\$1,087	\$745	\$7,892,314	91.4%	9,674	\$7,429	\$71,869,992	\$63,977,678	\$6,042	10%
2012	10,471	\$1,115	\$862	\$9,022,186	91.0%	9,529	\$7,429	\$70,794,898	\$61,772,712	\$5,899	12%
2013	10,388	\$1,239	\$856	\$8,891,921	91.0%	9,457	\$7,515	\$71,068,885	\$62,176,964	\$5,985	11%
2014	10,494	\$1,287	\$1,135	\$11,914,395	90.8%	9,532	\$7,642	\$72,841,616	\$60,927,221	\$5,806	15%
Cumulative Total									\$461,037,947	\$5,919	13%

Sources: See Appendix 5.

Notes: Negative numbers in parentheses. To avoid distorting the chart, we omit 2006 from the figure. In 2006, the amount of donations were disproportionate to the number of scholarships awarded, leading to very large average scholarship amounts in its first year.



EDUCATIONAL IMPROVEMENT TAX CREDIT PROGRAM | PENNSYLVANIA

The Educational Improvement Tax Credit (EITC) Program is one of two tax-credit scholarship programs in Pennsylvania. This analysis does not include the second program. The rules governing the EITC program are different from most tax-credit scholarship programs. An interesting and unique feature of the program is donors may claim tax credits for donations they make to public schools to help fund innovative programs in addition to funding scholarships for students to attend private schools of choice. Children are eligible to participate in the program if their household income is less than \$75,000 plus \$15,000 for each child in the household. Thus, the income-eligibility limit for an only child is \$90,000. The income-eligibility criterion for a student from a two-or-more-child household is \$105,000.

Corporations that make donations to one of three kinds of scholarship organizations may claim 75 cents for each dollar they donate. They may donate to scholarship organizations that provide private school scholarships, organizations that support innovative programs in public schools, or prekindergarten scholarship organizations. If a corporation commits to at least two years of donations, then the value of the tax credit increases to 90 percent. There is a limit on the amount of claimable tax credits for donors. In addition, the maximum amount of tax credits the state may give out each year is capped at \$100 million.

The EITC program has resulted in substantial savings to Pennsylvania taxpayers. This analysis accounts for the tax credits claimed for donations to organizations that provide private school scholarships, including scholarships for prekindergarten. It excludes tax credits awarded for donations used to fund public school programs.⁵⁸

The analysis generated estimates based on assumptions that scholarship organizations awarded 10 percent and 25 percent of scholarships to multi-scholarship students. The figure and table reflect the more conservative assumption about multiple scholarships and are based on state-specific rates for switchers.

Because there is no prior public school enrollment requirement for participants, these estimates are adjusted for the likelihood that not all scholarship recipients would enroll in public schools without the EITC program. I used annual private school enrollment data from the U.S. Census to estimate the proportion of students who would have enrolled in a private school even without financial assistance. This analysis also generated lower-bound estimates by assuming a fixed 60 percent rate for switchers.

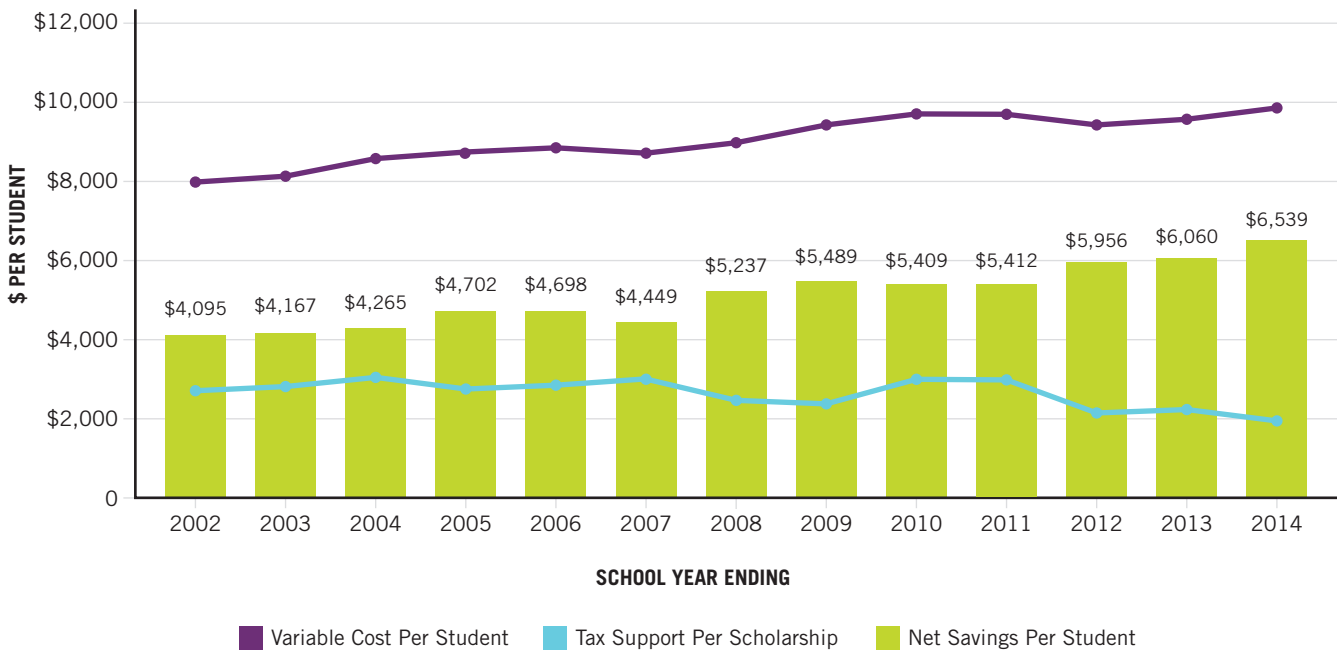
For the program to be fiscally neutral, 26 percent to 45 percent of scholarship students must be switchers.

How to Read the Table

In 2013–14, Pennsylvania scholarship organizations gave out 45,478 scholarships (not shown). The table assumes that SGOs awarded 25 percent of those scholarships to multi-scholarship students. Thus, 34,109 students participated in the program. The average amount of the awards was \$1,587 per scholarship. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits given for donations made to scholarship organizations, or \$68,100,000. This implies the average taxpayer support was \$1,997 per participant.

FIGURE 12

Pennsylvania Educational Improvement Tax Credit Program - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

Next, I computed savings. For Pennsylvania, I assumed 86.3 percent of students in the program left or chose not to attend a public school (or would enroll in a public school if the program was eliminated). This implies that 29,448 students were switchers. With an average variable cost of \$9,887 per student, this enrollment shift generated \$291,137,809 in savings. Thus, the net impact in 2013–14 was \$223,037,809, or \$6,539 in savings per student who participated in the program that year. For the program to have been fiscally neutral in 2013–14, 20 percent of participating students must have been switchers.

FISCAL IMPACT

The second longest running tax-credit scholarship program in the country, Pennsylvania’s Educational Improvement Tax Credit Program, has saved Pennsylvania taxpayers between \$722 million and \$1.7 billion, or \$3,000 to \$5,800 for each student participant. To be fiscally neutral, between 26 percent and 45 percent of students must have switched from public school.

TABLE 14

Pennsylvania Educational Improvement Tax Credit Program - Overall Fiscal Effect (adjusted for inflation)

Fiscal Year Ending	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Number of Scholarships	Average Scholarship Amount*	Average Tax Support Per Student (PA Gov't)	Tax Support Cost of Scholarships (PA Gov't)	% Share of Scholarship Students Switching from Public School	Scholarship Students Switching from Public School	Avg Variable Cost Per Student (PA Schools)	Variable Cost Burden Relief (PA Schools)	Total Net Savings	Net Savings Per Scholarship Student	
2002	8,250	\$1,446	\$2,712	\$22,370,828	85.6%	7,059	\$7,955	\$56,151,480	\$33,780,652	\$4,095	34%
2003	9,101	\$1,414	\$2,799	\$25,474,852	85.6%	7,787	\$8,142	\$63,401,801	\$37,926,948	\$4,167	34%
2004	10,350	\$1,377	\$3,051	\$31,581,510	85.6%	8,856	\$8,551	\$75,721,491	\$44,139,981	\$4,265	36%
2005	12,713	\$1,332	\$2,765	\$35,152,811	85.6%	10,877	\$8,727	\$94,922,889	\$59,770,078	\$4,702	32%
2006	13,950	\$1,290	\$2,845	\$39,690,857	85.5%	11,926	\$8,823	\$105,227,420	\$65,536,563	\$4,698	32%
2007	15,510	\$1,253	\$3,003	\$46,584,044	85.6%	13,281	\$8,703	\$115,591,919	\$69,007,875	\$4,449	35%
2008	22,519	\$1,208	\$2,466	\$55,527,178	85.8%	19,312	\$8,982	\$173,467,942	\$117,940,764	\$5,237	27%
2009	23,723	\$1,216	\$2,400	\$56,939,258	83.8%	19,885	\$9,412	\$187,158,612	\$130,219,354	\$5,489	26%
2010	16,170	\$1,133	\$2,968	\$47,986,440	86.5%	13,988	\$9,683	\$135,444,012	\$87,457,571	\$5,409	31%
2011	16,583	\$1,200	\$2,945	\$48,833,463	86.5%	14,341	\$9,663	\$138,570,335	\$89,736,871	\$5,412	30%
2012	24,634	\$1,045	\$2,189	\$53,926,901	86.5%	21,301	\$9,419	\$200,640,444	\$146,713,543	\$5,956	23%
2013	30,821	\$1,628	\$2,242	\$69,103,088	86.4%	26,635	\$9,607	\$255,874,507	\$186,771,419	\$6,060	23%
2014	34,109	\$1,587	\$1,997	\$68,100,000	86.3%	29,448	\$9,887	\$291,137,809	\$223,037,809	\$6,539	20%
Cumulative Total									\$1,292,039,428	\$5,419	32%

Sources: See Appendix 5.

Notes: Scholarship counts include PK students. Tax credits exclude credits given for donations to support innovative public school programs; I assume that 25 percent of scholarships are awarded to students who receive multiple scholarships.

*The average scholarship amount reflects the average value of each award, not the average amount each student receives. It is not comparable with the average taxpayer cost per student.



TAX CREDITS FOR CONTRIBUTIONS TO SCHOLARSHIP ORGANIZATIONS | RHODE ISLAND

Rhode Island's Tax Credits for Contributions to Scholarship Organizations program is an income-based program, meaning that eligible students must come from households with incomes that do not exceed 250 percent of the federal poverty level (\$60,750 for a family of four in 2016–17).

Corporations that make donations to scholarship-granting organizations may receive 75 cents in tax credits for each dollar donated. If a donor commits to two years of donations and if the amount of donations in the second year is at least 80 percent of the first year's donations, then the tax credit value increases to 90 percent. The amount of claimable tax credit by a donor is capped, and the program is limited to granting no more than \$1.5 million in tax credits each year.

Because the program does not prohibit students from receiving multiple scholarships, the analysis generated estimates based on assumptions that 10 percent and 25 percent of scholarships were given to students who received multiple awards. Given that participation in the program is very limited, however, it is very likely that all or most students were single-scholarship recipients, and the estimates reported here are, therefore, likely understated.

As there is no prior public school enrollment requirement for participants, I adjusted estimates for the likelihood that not all scholarship recipients were switchers. The analysis used annual private school enrollment data from the U.S. Census to estimate the proportion of students who would have enrolled in a private school even without financial assistance. It also generated lower-bound estimates by assuming a fixed 60 percent rate for switchers. The figure and table reflect the more conservative assumption about multiple scholarships and are based on state-specific rates for switchers.

Rhode Island's program has resulted in the highest savings for each scholarship recipient than any of the other programs. Its low tax credit cap, however, has severely limited participation in the program and, therefore, limited low-income students who might desire an alternative to their default education.

For the program to be fiscally neutral, 30 percent to 53 percent of scholarship students must have chosen to leave or not attend Rhode Island public schools.

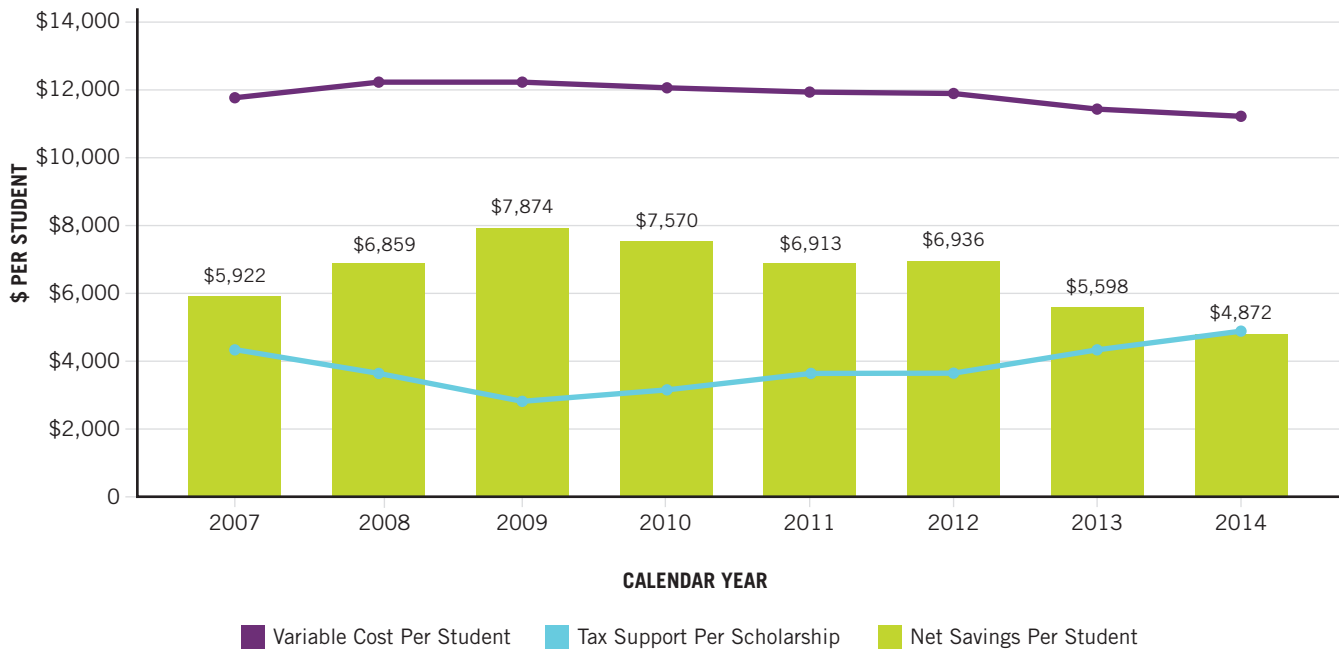
How to Read the Table

In 2014, SGOs awarded 411 scholarships (not shown). The table assumes that 25 percent of these scholarships were given to students receiving multiple awards. Thus, 308 students participated in the program. The average amount of these awards was \$4,048 per scholarship. This is not the cost of the program, however. To compute costs, I used the total amount of tax credits given for donations made to scholarship organizations, or \$1,500,000. This implies the average taxpayer support was \$4,866 per participant.

Next, I computed savings. For Rhode Island, I assumed 87.3 percent of students in the program left or chose not to attend a public school (or would enroll in a public school if the program was eliminated). This implies that 269 students were switchers. With an average variable cost of \$11,153 per student, this enrollment shift generated \$3,001,676 in savings. Thus, the net impact in 2014 was \$1,501,676, or \$4,872 in savings per student participating in the program that year. Notably, 44 percent of participating students must have switched from public schools for the program to have been fiscally neutral in 2014.

FIGURE 13

Rhode Island Tax Credits for Contributions to Scholarship Organizations - Net Savings Per Scholarship Student (adjusted for inflation)



Sources: See Appendix 5.

FISCAL IMPACT

The Tax Credits for Contributions to Scholarship Organizations program has saved Rhode Island taxpayers between \$8 million and \$21 million, or \$3,400 to \$7,300 for every scholarship student.⁵⁹ To be fiscally neutral, 30 percent to 53 percent of students must have been switchers.

TABLE 15

Rhode Island Tax Credits for Contributions to Scholarship Organizations - Overall Fiscal Effect (adjusted for inflation)

Calendar Year	Added Cost of Tax Support				Reduced Cost Burden on Public Schools				Net Impact		Break-Even Switcher Rate
	Number of Scholarships	Average Scholarship Amount*	Average Tax Support Per Student (RI Gov't)	Tax Support Cost of Scholarships (RI Gov't)	% Share of Scholarship Students Switching from Public School	Scholarship Students Switching from Public School	Avg Variable Cost Per Student (RI Schools)	Variable Cost Burden Relief (RI Schools)	Total Net Savings	Net Savings Per Scholarship Student	
2007	262	\$4,290	\$4,362	\$1,141,766	87.5%	229	\$11,750	\$2,691,764	\$1,549,998	\$5,922	37%
2008	304	\$5,901	\$3,620	\$1,099,548	85.4%	259	\$12,268	\$3,183,025	\$2,083,477	\$6,859	30%
2009	383	\$5,922	\$2,879	\$1,103,474	87.6%	336	\$12,275	\$4,121,320	\$3,017,846	\$7,874	23%
2010	345	\$2,440	\$3,147	\$1,085,666	88.4%	305	\$12,128	\$3,697,236	\$2,611,570	\$7,570	26%
2011	257	\$2,870	\$3,599	\$923,047	88.2%	226	\$11,919	\$2,696,159	\$1,773,111	\$6,913	30%
2012	287	\$2,845	\$3,599	\$1,031,107	88.8%	254	\$11,864	\$3,018,219	\$1,987,112	\$6,936	30%
2013	306	\$2,560	\$4,380	\$1,340,243	87.3%	267	\$11,427	\$3,053,235	\$1,712,991	\$5,598	38%
2014	308	\$4,048	\$4,866	\$1,500,000	87.3%	269	\$11,153	\$3,001,676	\$1,501,676	\$4,872	44%
Cumulative Total									\$16,237,782	\$6,625	36%

Sources: See Appendix 5.

Notes: Tax Support is computed as 90 percent of total donations received each year or the tax credit cap, whichever is less. The tax credit value for donors who have not committed to two years of donations is 75 percent of donations. Thus, estimated savings may actually be higher; we assume that 25 percent of scholarships are awarded to students who receive multiple scholarships.

*The average scholarship amount reflects the average value of each award, not the average amount each student receives. It is not comparable with the average taxpayer cost per student.

APPENDIX 1

Scholarships Awarded in Tax-Credit Scholarship Programs (SY 1997–98 to SY 2013–14)

School Year Ending	Arizona				Florida	Georgia	Iowa	Indiana	Pennsylvania	Rhode Island	Annual Total
	AZ - Original Individual Income Tax Credit Scholarship Program	AZ - Low Income Corporate Income Tax Credit Scholarship Program	AZ - Lexie's Law for Disabled and Displaced Students Tax Credit Scholarship Program	AZ - "Switcher" Individual Income Tax Credit Scholarship Program	FL - Florida Tax Credit Scholarship Program	GA - Qualified Education Expense Tax Credit	IA - School Tuition Organization Tax Credit	IN - School Scholarship Tax Credit	PA - Educational Improvement Tax Credit Program	RI - Tax Credits for Contributions to Scholarship Organizations	
1998	128	-	-	-	-	-	-	-	-	-	128
1999	3,207	-	-	-	-	-	-	-	-	-	3,207
2000	15,081	-	-	-	-	-	-	-	-	-	15,081
2001	18,049	-	-	-	-	-	-	-	-	-	18,049
2002	19,582	-	-	-	-	-	-	-	11,000	-	30,582
2003	20,134	-	-	-	15,585	-	-	-	12,135	-	47,854
2004	21,146	-	-	-	11,550	-	-	-	13,800	-	46,496
2005	22,529	-	-	-	10,549	-	-	-	16,950	-	50,028
2006	24,678	35	-	-	15,123	-	161	-	18,600	-	58,597
2007	27,153	1,940	-	-	17,819	-	7,519	-	20,680	349	75,460
2008	28,327	2,979	-	-	21,493	66	8,599	-	30,025	405	91,894
2009	27,592	3,640	114	-	24,871	883	9,451	-	31,630	511	98,692
2010	26,433	4,226	166	-	28,927	2,149	10,222	386	21,560	460	94,529
2011	25,105	2,124	60	-	34,550	11,292	10,588	559	22,110	342	106,730
2012	23,828	5,828	119	0	40,248	13,285	10,471	2,890	32,845	382	129,896
2013	25,464	11,096	217	4,668	51,075	13,268	10,388	4,638	41,095	408	162,317
2014	23,157	13,118	344	13,548	59,822	13,428	10,494	11,067	45,478	411	190,867
Total Scholarship Count	263,695	44,986	1,020	18,216	331,612	54,371	77,893	14,655	238,431	2,451	1,033,737

APPENDIX 2

Surveying Scholarship Organizations

To generate estimates about the proportion of scholarship recipients not leaving public schools, I sent surveys to 347 scholarship organizations that are participating in the programs under study. Of those, 50 responded.⁶⁰ I asked the scholarship organizations to report the number of first-time recipients (FTRs), the number of FTRs who enrolled in kindergarten, the number of FTRs who came from private schools, and the number of FTRs who came from public schools. I followed up with two reminders to non-respondents.

I can only speculate about the reasons for low response, but the most likely reason may simply be that those scholarship organizations did not and/or do not collect the requested data. Conversations with various scholarship-granting organization (SGO) officials revealed that they generally will collect only the data required of them per the state's tax-credit scholarship program.⁶¹ Alabama, which was not included in this report, is the only state that requires its SGOs to track where students were enrolled prior to entrance into the tax-credit scholarship program. None of the other states have this requirement. In addition, the only SGO operating in Florida during the sample period had collected the information I requested.⁶²

APPENDIX 3

Considerations and Complicating Factors

There are certain challenges and considerations that generally apply to evaluating the fiscal impact of any school choice program. Each state has its own unique way of funding public schools. These funding formulas are highly complex. In the school finance world there is an adage about individuals in each state who understand these formulas: You can count them on one hand.

How tax-credit scholarship programs—and school choice programs in general—interact with these formulas determine the fiscal impact on different taxpayers and school districts. It is not practical to account for each state’s funding formula in an analysis of tax-credit scholarship programs nationwide, especially given that these formulas can (and have) changed over time. Therefore, this report examined the total impact; this is the combined impact on the state treasury, taxpayers, and local school districts.

It could be the case that certain taxpayers in a given state incur disproportionate costs or savings by a program. This was the case with the school voucher program in Milwaukee and documented by University of Arkansas economist Robert M. Costrell, where Milwaukee taxpayers incurred a negative net fiscal impact while state and local taxpayers outside of Milwaukee experienced a positive net fiscal impact.⁶³ Note that this “funding flaw,” as it has sometimes been known, will be phased out by 2024–25.⁶⁴

A second general consideration was discussed in detail in the main body. Namely, it can be difficult or impossible to get information about the share of students who would have attended a private school even without financial assistance because these data usually aren’t tracked by the programs’ administration agencies or scholarship organizations. While I have done due diligence in making an effort to obtain such data, in most cases, I am only able to make conservative assumptions about this component of the analysis.

There are also some considerations that are unique to the evaluation of tax-credit scholarship programs that can bias impact estimates. First is the issue of students who receive multiple scholarships. I take this into consideration for states which do not prohibit students from receiving multiple scholarships. I generate estimates based on the assumption that between 10 percent and 25 percent of all scholarships are given to students receiving more than one award. These assumptions are likely conservative for at least a few reasons. SGOs’ missions are likely oriented around helping as many students as possible; therefore, they are likely to want to “spread the wealth” among as many students as possible. Additionally, parents may find it burdensome to complete multiple applications.

Second, most state governments report tax credit data on a calendar year basis. Arizona has an added layer of complication to measuring the fiscal impact because the reporting period changed from a calendar year to fiscal year in 2011. Some variables are reported on a calendar-year basis (e.g. scholarships awarded or donations approved) while other data necessary for the analysis are reported on a school-year basis (e.g. average variable costs). This could create a little measurement error, though any overstatement in savings estimates in one year would be exactly offset by an underestimate in savings from other years. Thus, over time this measurement error nets to zero.

APPENDIX 4

Tax-Credit Scholarship Program Tax Credit Caps (SY 1997-98 to SY 2013-14)

School Year Ending	Arizona		Florida	Georgia	Iowa	Indiana	Pennsylvania	Rhode Island
	AZ - Low Income Corporate Income Tax Credit Scholarship Program	AZ - Lexie's Law for Disabled and Displaced Students Tax Credit Scholarship Program	FL - Florida Tax Credit Scholarship Program	GA - Qualified Education Expense Tax Credit*	IA - School Tuition Organization Tax Credit	IN - School Scholarship Tax Credit	PA - Educational Improvement Tax Credit Program	RI - Tax Credits for Contributions to Scholarship Organizations*
2002	-	-	-	-	-	-	\$20,000,000	-
2003	-	-	\$50,000,000	-	-	-	\$20,000,000	-
2004	-	-	\$50,000,000	-	-	-	\$26,666,667	-
2005	-	-	\$50,000,000	-	-	-	\$29,333,333	-
2006	-	-	\$88,000,000	-	\$2,500,000	-	\$36,000,000	-
2007	\$10,000,000	-	\$88,000,000	-	\$5,000,000	-	\$36,000,000	\$1,000,000
2008	\$12,000,000	-	\$118,000,000	\$50,000,000	\$7,500,000	-	\$44,666,667	\$1,000,000
2009	\$14,400,000	\$5,000,000	\$118,000,000	\$50,000,000	\$7,500,000	-	\$44,666,667	\$1,000,000
2010	\$17,280,000	\$5,000,000	\$118,000,000	\$50,000,000	\$7,500,000	\$2,500,000	\$37,967,000	\$1,000,000
2011	\$20,736,000	\$5,000,000	\$140,000,000	\$50,000,000	\$7,500,000	\$2,500,000	\$40,202,400	\$1,000,000
2012	\$24,883,200	\$5,000,000	\$175,000,000	\$50,000,000	\$7,500,000	\$5,000,000	\$44,666,667	\$1,000,000
2013	\$29,859,840	\$5,000,000	\$229,000,000	\$58,000,000	\$8,750,000	\$5,000,000	\$60,000,000	\$1,500,000
2014	\$35,831,808	\$5,000,000	\$286,250,000	\$58,000,000	\$8,750,000	\$5,000,000	\$100,000,000	\$1,500,000

Sources: See Appendix 5.

Note: Ariz.'s "Original" and "Switcher" programs do not place limits on tax credits and are omitted from the table.

*This state collects data from scholarship organizations on a calendar-year basis.

APPENDIX 5

Sources for Table 5 and Tables and Figures in Tax-Credit Scholarship Program Profiles

ALL PROGRAMS:

“School Choice in America,” Friedman Foundation for Educational Choice, accessed Mar. 15, 2016, <http://www.edchoice.org/school-choice/school-choice-in-america>.

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Malik Crawford, Jonathan Church, and Bradley Akin, eds., *CPI Detailed Report: Data for August 2015* (Washington, DC: US Bureau of Labor Statistics, 2015), <http://www.bls.gov/cpi/cpid1508.pdf>.

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“Quarterly Reports,” Fla. Dept. of Education, accessed July 28, 2016, <http://www.fldoe.org/schools/school-choice/k-12-scholarship-programs/ftc/quarterly-reports.stml>.

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IOWA:

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INDIANA:

Ind. Dept. of Education, *Indiana School Scholarship Tax Credit Program Report: 2011-2012 through 2014-2015* (Indianapolis: Ind. Dept. of Education, 2015), <http://www.doe.in.gov/sites/default/files/choice/sgo-report-data-2011-2015.pdf>.

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PENNSYLVANIA:

Penn. Dept. of Community and Economic Development, data obtained through Right to Know Law request, data received May 27, 2016 and July 14, 2016.

RHODE ISLAND:

“Year End Summary for Scholarships Issued by SGO,” R.I. Division of Taxation, accessed Apr. 8, 2016, <http://www.tax.state.ri.us/Credits/2007summary.php>.

NOTES

1. Harvard economist Martin Feldstein provided an excellent example that relates to Friedman's treatment of social security in *Capitalism and Freedom*. Martin Feldstein, "Milton Friedman and Public Sector Economics" (panel, Univ. of Chicago, Nov. 8, 2002), <http://www.nber.org/feldstein/MiltonFriedmanPublicSectorEconomics.pdf>.

2. These efforts to prevent taxpayer money from flowing to "religious sects" (code well-known at the time as "Catholic") are rooted in anti-Catholic bigotry. In 1875, Congressman James G. Blaine introduced an amendment to the US Constitution which would have prohibited Catholic schools from receiving public funds they requested. The amendment passed in the House but failed in the Senate. Subsequently, others in states and Congressional territories joined Blaine's effort and managed to pass amendments to their own constitutions. Blaine amendments are widely cited by school choice opponents in efforts to prevent public funds from being used to support families who wish to withdraw their children from government schools and enroll their children in private schools. They are particularly problematic for voucher programs. While a handful of states with strict Blaine amendments have upheld their school voucher programs (e.g. Ind., Okla., and Wisc.), Blaine amendments continue to be used as a tool to strike down school choice programs, as currently in Mont., Nev., Fla., Ga., and Douglas County, Colo. For a concise history of Blaine Amendments and how they affect school choice, see EdChoice, "JAMES G. BLAINE: Who was he, and how is he affecting children's education today?" Friedman Foundation for Educational Choice blog, May 24, 2016, <http://www.edchoice.org/blog/james-g-blaine-affecting-childrens-education-today>.

3. Andrew J. Coulson, "A 'Winn' for Education and Freedom of Conscience," *The Blog, Huffington Post*, June 12, 2011, http://www.huffingtonpost.com/andrew-coulson/a-winn-for-education-and-_b_848035.html.

4. Andrew J. Coulson, "Do Vouchers and Tax Credits Increase Private School Regulation?," Cato Working Paper 1 (Washington, DC: Cato Institute, 2010), <http://object.cato.org/sites/cato.org/files/pubs/pdf/WorkingPaper-1-Coulson.pdf>.

5. "Fast Facts," Friedman Foundation for Educational Choice, accessed July 8, 2016, <http://www.edchoice.org/our-resources/fast-facts>; "School Choice in America," Friedman Foundation for Educational Choice, accessed July 8, 2016, <http://www.edchoice.org/school-choice/school-choice-in-america>.

6. Some refer to tax-credit scholarships as "neo-vouchers" because of the similarities between voucher and tax-credit scholarship programs. See Kevin G. Welner, *NeoVouchers: The Emergence of Tuition Tax Credits for Private Schooling* (Lanham, MD: Rowman & Littlefield, 2008).

7. The funding restrictions currently in place severely limit participation in Mont.'s program.

8. For more program details, see Friedman Foundation for Educational Choice, *The ABC's of School Choice: The Comprehensive Guide to Every Private School Choice Program in America*, 2016 ed. (Indianapolis: Friedman Foundation for Educational Choice, 2016), <https://www.edchoice.org/abcs>.

9. Greg Forster, *A Win-Win Solution: The Empirical Evidence on School Choice*, 4th ed. (Indianapolis: Friedman Foundation for Educational Choice, 2016), <http://www.edchoice.org/wp-content/>

[uploads/2016/05/A-Win-Win-Solution-The-Empirical-Evidence-on-School-Choice.pdf](http://www.edchoice.org/wp-content/uploads/2016/05/A-Win-Win-Solution-The-Empirical-Evidence-on-School-Choice.pdf).

10. Susan L. Aud, *School Choice by the Numbers: The Fiscal Effect of School Choice Programs, 1990-2006*, School Choice Issues in Depth (Indianapolis: Milton & Rose D. Friedman Foundation, 2007), <http://www.edchoice.org/wp-content/uploads/2015/09/Education-by-the-Numbers-Fiscal-Effect-of-School-Choice-Programs.pdf>.

11. Jeff Spalding, *The School Voucher Audit: Do Publicly Funded Private School Choice Programs Save Money?* (Indianapolis: Friedman Foundation for Educational Choice, 2014), <http://www.edchoice.org/wp-content/uploads/2015/07/The-School-Voucher-Audit-Do-Publicly-Funded-Private-School-Choice-Programs-Save-Money.pdf>.

12. Spalding's *School Voucher Audit* includes a detailed discussion about the differences in methods and results between his report and Aud's. Ibid.

13. For details, readers are encouraged to refer to the appendix in *The School Voucher Audit*. See note 12 above.

14. Examples of analyses on proposed programs include Michael Podgursky, Sarah Brodsky, and Justin P. Hauke, *The Fiscal Effects of a Tuition Tax Credit Program in Missouri*, Policy Study 12 (St. Louis: Show-Me Institute, 2008), http://showmeinstitute.org/sites/default/files/20080111_policy_study_12_0.pdf; David Stuit, *The Fiscal Impact of a Corporate and Individual Tax-Credit Scholarship Program on the State of Indiana*, School Choice Issues in the State (Indianapolis: Friedman Foundation for Educational Choice, School Choice Indiana, Indiana Non-Public Education Association, Indiana Catholic Conference, Educational Choice Charitable Trust; Washington, DC: Alliance for School Choice; New York: Agudath Israel of America, 2009), <http://www.edchoice.org/wp-content/uploads/2015/09/Fiscal-Impact-of-a-Corporate-and-Individual-Tax-Credit-Scholarship-Program-on-Indiana.pdf>; Brian Gottlob, *The Fiscal Impact of Tax-Credit Scholarships in Montana*, School Choice Issues in the State (Indianapolis: Friedman Foundation for Educational Choice; Laurel: Mont. Family Foundation, 2009), <http://www.edchoice.org/wp-content/uploads/2015/09/Fiscal-Impact-of-Tax-Credit-Scholarships-in-Montana.pdf>. A report on Ga.'s program challenged assumptions made in Gottlob's earlier fiscal impact analysis when the program was proposed. See Steve Suits and Katherine Dunn, *A Failed Experiment: Georgia's Tax Credit Scholarships for Private Schools* (Atlanta: Southern Education Foundation, 2011), <http://www.southerneducation.org/getattachment/12d045ec-6960-4715-82fb-26a2b94de61c/Test-Publication-2.aspx>. One essay reviewed three fiscal analyses by the Friedman Foundation for Educational Choice and challenged some of the assumptions made in those analyses, but it did not offer its own alternative impact estimates. See Luis Huerta, *Review of Three Tuition-Tax-Credit Voucher Reports from the Friedman Foundation* (Boulder: Univ. of Colo. at Boulder, School of Education, Education and the Public Interest Center; Tempe: Ariz. State Univ., Education Policy Research Unit, 2009), <http://nepc.colorado.edu/files/TTR-Huerta-Friedman-TaxCredit.pdf>.

15. Carrie Lips and Jennifer Jacoby, *The Arizona Scholarship Tax Credit: Giving Parents Choices, Saving Taxpayers Money*, Policy Analysis 414 (Washington, DC: Cato Institute, 2011), <https://object.cato.org/sites/cato.org/files/pubs/pdf/pa414.pdf>.

16. Vicki E. Murray, *An Analysis of Arizona Individual Income Tax-Credit Scholarship Recipients' Family Income, 2009-10 School Year*, PEPG 10-18 (Cambridge, MA: Harvard Univ., Harvard Kennedy School, Program on Education Policy and Governance, 2010), https://www.hks.harvard.edu/pepg/PDF/Papers/PEPG10-18_Murray.pdf.

17. Charles M. North, *Estimating the Savings to Arizona Taxpayers of the Private School Tuition Tax Credit*, special report prepared for the 49th Ariz. State Legislature's Ad Hoc Committee on Private School Tuition Tax Credit Review, Nov. 2009, http://acsto.org/_media/uploaded/e/0e1832055_estimating-the-savings.pdf.

18. Robert Buschman and David L. Sjoquist, *Georgia's Tax Credit Scholarship Program*, FRC Report 268 (Atlanta: Ga. State Univ., Andrew Young School of Policy Studies, Fiscal Research Center, 2014), <http://frc.gsu.edu/files/2014/06/Georgia-Tax-Credit-Scholarship-Nov2014.pdf>.

19. One difference between their approach and ours lies in the measure for savings per student leaving public school. They focus on the flow of state aid only, whereas my analysis relies on estimates for total short-run average variable costs based on data obtained from the National Center for Education Statistics (NCES).

20. Benjamin Scafidi, *Fiscal Analysis of Popular School Choice Program Underestimates Savings to Georgia Taxpayers and Needs to Be Fixed* (Atlanta: Ga. Public Policy Foundation, n.d.), <http://coles.kennesaw.edu/coles-overview/centers-and-institutes/education-economics-center/docs/Critique-of-FRC-Fiscal-Analysis-document-2.pdf>.

21. Office of Program Policy Analysis and Government Accountability, *Florida Tax Credit Scholarship Program Fiscal Year 2008-09 Fiscal Impact* (Tallahassee: Fla. Legislature, Office of Program Policy Analysis and Government Accountability, 2010), <https://www.stepupforstudents.org/wp-content/uploads/2015/09/2010-oppaga-research-memo.pdf>. A 2008 report by the Fla. Legislature's Office of Program Policy Analysis and Government estimated that Fla. taxpayers saved \$1.49 for each dollar given in tax credits. See Office of Program Policy Analysis and Government Accountability, *The Corporate Income Tax Credit Scholarship Program Saves State Dollars*, Report 08-68 (Tallahassee: Fla. Legislature, Office of Program Policy Analysis and Government Accountability, 2008), <http://www.oppaga.state.fl.us/reports/pdf/0868rpt.pdf>.

22. Andrew LeFevre, *A Decade of Success: Pennsylvania's Educational Improvement Tax Credit*, Policy Brief 23, no. 8 (Harrisburg, PA: Commonwealth Foundation, 2011), http://www.commonwealthfoundation.org/docLib/20110817_PB2308EITC.pdf.

23. This estimate is based on scholarships awarded in SY 2013–14.

24. Using NCES and Census data facilitates comparability across programs. The most recent year of financial data available from NCES is 2012–13. The Educational Finance Branch of the US Census Bureau issued its *Public Education Finances: 2014* report in June. These two sources of data are generated from the same survey form, the *F-33 Annual Survey of School System Finances*. Annually, the US Census Bureau releases these data first, which includes national and state financial aggregates plus data for the 100 largest school systems in the nation. The NCES releases the same data early the following year, plus additional data for all school districts. See “EISi Elementary/Secondary Information System,” National Center for Education Statistics, accessed July 15, 2016, <https://nces.ed.gov/ccd/elsi>; US Census Bureau, *Public Education Finances: 2014*, G14-ASPEF (Washington, DC: US Government Printing Office, 2016), <https://www2.census.gov/govs/school/14f33pub.pdf>.

25. Historically, these programs have grown rapidly in their first few years of existence, so it is prudent to analyze these programs once they have matured somewhat.

26. Ariz. also has the “Switcher” Individual Income Tax Credit Scholarship Program, which is included in this analysis. To distinguish between the two individual income tax-credit scholarship programs, I refer to these programs as the “Original” and “Switcher” programs.

27. Others also include “switchers” in their analyses. It's important to note, however, that this report's treatment of incorporating this group of students in the analysis is more inclusive than other analyses. That is, I account for the likelihood that students who haven't enrolled in schools yet would attend a public school if the tax credit program did not exist.

28. Note that even if we observe a student in a non-public school before receiving a scholarship, it could be the case that she would have entered a public school sometime in the future (e.g. beginning of high school) without the financial assistance from the program. In this case, she would generate savings from the point she leaves a public school. This scenario is indicative of the complexity with estimating the fiscal impact of school choice programs. It is impossible to know precisely who should be considered switchers vs. non-switchers.

29. Variable student costs in education are costs that change with enrollment. Examples include textbooks and supplies, software licenses, salaries and benefits for school personnel, and supplies for food services. I exclude other short-run variable and semi-variable costs such as transportation and food service. For an excellent and detailed discussion on educational fixed and variable costs, see Benjamin Scafidi, *The Fiscal Effects of School Choice Programs on Public School Districts* (Indianapolis: Friedman Foundation for Educational Choice, 2012), <http://www.edchoice.org/wp-content/uploads/2015/07/The-Fiscal-Effects-of-School-Choice-Programs.pdf>.

30. For Ariz. the analysis assumes that the number of scholarships awarded in the Lexie's Law for Disabled and Displaced Students Tax Credit Scholarship Program and the Low-Income Corporate Income Tax Credit Scholarship Program are the same as students participating. Students in these programs receiving multiple awards would likely get them through the Original Individual Tax Credit Scholarship Program. Students receiving multiple scholarships in Ind. are rare because almost all the SGOs are associated with only one private school. Out of 302 participating private schools, only 22 are associated with two SGOs, meaning that students from these 22 schools would be the only ones who could possibly receive two scholarships. For this reason, I assume that the number of scholarship awards reported in the data is the same as the number of students who participate in the program. For a list of participating private schools in Ind. and their SGOs, see Ind. Dept. of Education, *Schools Partnering with Scholarship Granting Organizations* (SGOs) (Indianapolis: Ind. Dept. of Education, 2016), <http://www.doe.in.gov/sites/default/files/choice/sgo-participating-schools-2015-updated-22916.pdf>.

31. Matt Bruenig, “Poverty Among K-12 Students Up More in Private Schools Than Public Schools,” *Policyschop* (blog), *Demos*, Jan. 21, 2015, <http://www.demos.org/blog/1/21/15/poverty-among-k-12-students-more-private-schools-public-schools>.

32. “EISi Elementary/Secondary Information System,” National Center for Education Statistics, accessed July 15, 2016, <https://nces.ed.gov/ccd/elsi>.

33. My estimates are lower than Scafidi's, who also includes costs for enterprise operations and food service in addition to the costs that comprise our variable cost estimates. Estimates are also below or within the range of what Bifulco and Rebeck estimate as variable costs for public schools in Albany and Buffalo. Their estimate variable costs

for Albany and Buffalo are, respectively, 66.3 percent and 54.6 percent of expenditures. Estimates in this report range from 53 percent to 68 percent of total expenditures, well within these other reported ranges. Scafidi, *The Fiscal Effects of School Choice Programs on Public School Districts*; Robert Bifulco and Randall Reback, "Fiscal Impacts of Charter Schools: Lessons from New York," *Education Finance and Policy* 9, no. 1 (Winter 2014), pp. 86-107, doi:10.1162/EDFP_a_00121.

34. All but one program caps the amount of tax credits that can be awarded in a program each year. This puts a ceiling on the cost of the program. Appendix 4 reports each program's total tax credit caps by year.

35. None of the states included in this report require scholarship organizations to track where students were enrolled prior to participating in a tax credit program. Alabama, which was omitted from my analysis, is the only state that does so. I sent surveys to scholarship organizations asking about where scholarship recipients came from before participating in the programs. Response rates were significantly low, however, to render the collected data unreliable. See Appendix 2 for details.

36. The analysis used data from the US Census Bureau's American Community Survey, which has provided annual enrollment estimates by grade and by state since 2005.

37. The analysis used private school enrollment data for kindergarten from the US Census Bureau's American Community Survey. Annual data are available from 2005, and prior years were imputed with 2005 estimates.

38. *Ceteris paribus*, an increase in the number of switchers implies higher enrollment (and therefore more revenue) for private schools.

39. Classes for students with disabilities tend to be much smaller and require specialists as well as specialized equipment and materials.

40. The study was mandated in the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA). For more information about the project, see "The Special Education Expenditure Project," Center for Special Education Finance, <http://www.csef-air.org>.

41. In *NeoVouchers: The Emergence of Tuition Tax Credits for Private Schooling*, Kevin Welner discusses how to measure the potential fiscal impact of tax-credit scholarship programs. He argues that there are potential additional costs associated with tax-credit scholarship programs beyond the costs factored in this report's analysis. What he suggests are hypothetical indirect costs of tax-credit scholarship programs. If one follows through with this logic, then other indirect costs or benefits associated with improving K-12 education should also be included in Welner's equation, such as potential benefits from lower incarceration rates and improved labor market outcomes due to increased high school graduation. For these reasons, I do not include these indirect costs in the analysis and account for only the direct costs of tax-credit scholarship programs. See Welner, *NeoVouchers*, p. 85.

42. US Dept. of Education, *10 Facts About K-12 Education Funding* (Washington, DC: US Dept. of Education, 2005), <http://www2.ed.gov/about/overview/fed/10facts/10facts.pdf>.

43. "Improving Basic Programs Operated by Local Educational Agencies (Title I, Part A)," US Dept. of Education, last modified Oct. 5, 2015, <http://www2.ed.gov/programs/titleiparta/index.html>.

44. "Special Education--Grants to States," US Dept. of Education, last

modified May 5, 2016, <http://www2.ed.gov/programs/osepgts/index.html>.

45. Based on author's calculations using data from the National Center for Education Statistics. "ELSi Elementary/Secondary Information System," National Center for Education Statistics, accessed July 15, 2016, <https://nces.ed.gov/ccd/elsi>.

46. For instance, Mike Stevens, a Republican Representative in S.Dak. who opposed a school choice bill passed earlier this year, claimed: "It's not just taking away (money) from education. We're at a point in the process where we're looking really hard (at funding needs for) all sorts of programs and dollars...This bill would siphon that money away." Randy Dockendorf, "A Focus on Funding," *Yankton (SD) Daily Press & Dakotan*, Feb. 28, 2016, ¶37, http://www.yankton.net/community/article_7e7fc004-de9f-11e5-8a6d-3b25275dc8ed.html. Mark Pudlow, spokesman for the Fla. Education Association made a similar claim: "We still have to turn the lights on in the school every day. The buses still have to run every day. Teachers have to be paid." Paul Pinkham and Abel Harding, "Concerns Raised Over Florida's Corporate Income Tax Credit Scholarship Program," *Florida Times Union* (Jacksonville, FL), Nov. 1, 2010, ¶57, <http://jacksonville.com/news/metro/2010-10-31/story/concerns-raised-over-scholarship-program>. "Opponents of [an education savings account] proposal say it would siphon off already scarce financial resources, often to the parents of students who would have attended private school anyway. This is important, because those students are not counted for the purposes of allocating state money." Randy Krehbiel, "School Choice a Sore Spot for Friends and Foes Alike," *Tulsa World*, Mar. 21, 2016, ¶18, http://www.tulsaworld.com/homepagelatest/school-choice-a-sore-spot-for-friends-and-foes-alike/article_f75327f3-dal1-574d-b20b-a87e0be4ad03.html.

47. Many states have "hold harmless" provisions in their school funding formulas. These features are designed to protect school districts from sudden and/or significant enrollment fluctuations. Depending on the state and circumstance, the fiscal impact on the state from a school choice program may be softened. Because my analysis ignores hold harmless provisions, my estimates may be somewhat overstated in the short run.

48. This assumption comports with prior survey research conducted by the Friedman Foundation (now EdChoice) which asked about schooling preferences, among other things. Out of 24 surveys and polls conducted between 2011 and 2015, between 27 percent and 54 percent of respondents in each study indicated that they would select a private school "to obtain the best education for their child." The median and average were 39 percent. Surveys asked participants: "If it were your decision and you could select any type of school, what type of school would you select in order to obtain the best education for your child?" The choices were regular public school, public charter school, private school, and home school. For example, 41 percent of respondents in an Ind. survey indicated private school for their choice. See entries in EdChoice's Polling Paper series at <https://www.edchoice.org/what-we-do/research>.

49. Ariz. law requires STOs to consider the financial need of applicants. Ariz. Rev. Stat. §43-1603, <http://www.azleg.gov/FormatDocument.asp?inDoc=/ars/43/01603.htm&Title=43&DocType=ARS>.

50. See note 16 above.

51. See note 17 above.

52. Office of Program Policy Analysis and Government Accountability, *Florida Tax Credit Scholarship Program Fiscal Year 2008-09 Fiscal Impact*.

53. In school years 2011–12 to 2013–14, the state approved one SFO to participate in the tax-credit scholarship program. I obtained detailed data from this SFO about where scholarship recipients were enrolled prior to participating in the program. In 2011–12, 12 percent of first time recipients came from a non-public school setting; in 2012–13 and 2013–14, 18 percent. These rates were adjusted for the likelihood that some of the students entering kindergarten for the first time would have enrolled in public school even in the absence of the tax-credit scholarship program. Notably, the 2011–12 rate is similar to the private enrollment share used from the US Census Bureau while the 18 percent rate for 2012–13 and 2013–14 is slightly higher than the US Census Bureau rate. This means that fiscal impact estimates generated from applying these rates will fall within the range of estimates reported here.

54. See note 19 above.

55. I sent a survey to SSOs in Ga. asking for scholarship information for 2008-2010. Unfortunately, only six out of 29 SSOs responded to my information request (including the SGO awarding the largest share of scholarships).

56. Ind. Dept. of Education, *Schools Partnering with Scholarship Granting Organizations (SGOs)*.

57. Amy Harris (chief economist and division administrator, Iowa Dept. of Revenue's Research and Analysis Division), e-mail message to author, June 7, 2016.

58. Data were obtained via an information request to the Pa. Dept. of Community and Economic Development, received July 14, 2016. About 65 to 70 percent of tax credits go to private school scholarships. The other portion is directed towards public school improvement initiatives.

59. Assuming that each student receives only one scholarship, estimated savings are up to \$25 million.

60. These respondents reported giving out 27,371 scholarships in total. This amount represents 14 percent of all scholarships given out in 2014.

61. Notably, Scaffidi used a similar process to make an estimate for Ga. GOAL Scholarship Program, Inc., the largest SSO in Ga. He estimated, conservatively, that 93.5 percent of GOAL scholarships went to students previously enrolled in public school or who began school in grades prekindergarten to kindergarten. See note 21 above.

62. In 2009, seven SFOs in Fla. were in operation. By 2011, they merged into one SFO, Step Up For Students. As these organizations merged, some data were lost and other data became murky due to differences in collection methods and defining data. While Step Up collected data for many years, only data since 2012 are reliable as it was the sole entity that collected data necessary for this analysis.

63. Robert M. Costrell, *The Fiscal Impact of the Milwaukee Parental Choice Program: 2010-2011 Update and Policy Options*, SCDP Milwaukee Evaluation Report 22 (Fayetteville: Univ. of Ark., Dept. of Education Reform, School Choice Demonstration Project, 2010).

64. Christina Pugh, *Private School Choice Programs*, Informational Paper 25 (Madison: Wisc. Legislative Fiscal Bureau, 2015), http://docs.legis.wisconsin.gov/misc/lfb/informational_papers/january_2015/0025_private_school_choice_programs_informational_paper_25.pdf.

ABOUT THE AUTHOR



Marty studied in the Department of Education Reform and received his doctorate in Education Policy from the University of Arkansas. He also earned a master's degree in Economics from the University of Missouri. In addition to school choice, his passions include researching teacher pensions.

Prior to joining EdChoice, Marty was the education research director at the Wisconsin Institute for Law & Liberty. His work there primarily focused on school choice policy in Wisconsin.

Marty received his bachelor's degree in Physical Education, with an emphasis in sports medicine, from Eastern Illinois University. After graduating, he moved to Yashio City in Japan, where he taught English in public junior high schools for five years. That experience shifted his interests to education policy in the United States. Upon his return, he set out to pursue graduate work that would best equip him for effectuating meaningful change in the education policy arena. His experiences in Japan ultimately led him to the education reform movement.

Marty grew up in St. Louis and currently lives in Indianapolis with his lovely wife, Gao, and spunky—and “sometimes” sassy—4-and-half-year-old daughter, Yoni.

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