

## COLORADO TUITION PROGRAM DEDUCTION

EVALUATION SUMMARY | JANUARY 2022 | 2022-TE6

TAX TYPE Deduction
YEAR ENACTED 2000
REPEAL/EXPIRATION DATE None

REVENUE IMPACT \$25.7 million (Tax Year 2018)

Number of Taxpayers 64.262

KEY CONCLUSION: The deduction provides taxpayers with an incentive to encourage and support saving for higher education; however, other benefits of saving provide a larger financial benefit and may play a greater role in individuals' decisions to save. Additionally, only about half of the amount contributed to 529 accounts was deducted by taxpayers, indicating that the deduction was not a significant factor for many account contributors who did not claim the deduction.

### WHAT DOES THIS TAX EXPENDITURE DO?

The Colorado Tuition Program Deduction (529 Deduction) allows individuals, estates, and trusts to deduct an amount equivalent to their total contributions to a 529 account from their taxable income. The deduction is capped at \$20,000 and \$30,000 per taxpayer, per beneficiary for single and joint filers, respectively.

### WHAT IS THE PURPOSE OF THIS TAX EXPENDITURE?

Statute and enacting legislation do not state the deduction's purpose; therefore, we could not definitively determine the General Assembly's original intent. Based on our review of research on tax incentives for saving for higher education, federal and state regulations, and the current operation of the expenditure, our evaluation considered a potential purpose: to encourage and support individuals to save for higher education.

### WHAT POLICY CONSIDERATIONS DID THE EVALUATION IDENTIFY?

The General Assembly may want to consider:

- Establishing a statutory purpose and performance measures for the deduction.
- Reviewing the effectiveness of the deduction.



# COLORADO TUITION PROGRAM DEDUCTION

### **EVALUATION RESULTS**

#### WHAT IS THE TAX EXPENDITURE?

Section 529 of the Internal Revenue Code allows states, state agencies, and education institutions to sponsor qualified tuition program savings accounts (529 accounts) that assist individuals in saving funds for higher education expenses. In Colorado, 529 accounts are administered by CollegeInvest, a state enterprise within the Department of Higher Education. 529 accounts are often used by parents to save money for their childrens' higher education expenses; however, an individual can establish a 529 to benefit anyone, including themselves, and any individual, not just the account holder, can make contributions to a 529 account. Interest earned on contributions to 529 accounts is exempt from federal taxable income as long as any funds distributed from the account are used for qualified education expenses, such as tuition, fees, books, supplies, equipment, and room and board at a qualified educational institution. Because Colorado uses federal taxable income as the starting point for determining Colorado taxable income, interest earned on 529 accounts is effectively exempt for state tax purposes as well.

The Colorado Tuition Program Deduction (529 Deduction) [Section 39-22-104(4)(i)(II), C.R.S.] allows individuals, estates, and trusts who make contributions to beneficiaries' 529 accounts to deduct from their Colorado taxable income an amount equal to the total contributions made. Beginning in Tax Year 2022, the deduction is capped at \$20,000 annually per taxpayer, per beneficiary for single filers and \$30,000 per taxpayer, per beneficiary for joint filers. For example, a single filer with two children could deduct \$20,000 per child's account, resulting in a total of \$40,000 in a given tax year. The cap is also adjusted annually

for an amount equivalent to the increase in tuition, room, and board at state institutions of higher education.

The 529 Deduction was created in Calendar Year 2000 by House Bill 00-1274 and was first available to taxpayers beginning in Tax Year 2001. House Bill 21-1311, which was passed during the 2021 Legislative Session, amended the 529 Deduction to establish the annual deduction cap.

To claim the deduction, taxpayers must create a 529 account through CollegeInvest, which is responsible for tracking taxpayers' contributions to 529 accounts and reporting contribution amounts to the Department of Revenue (Department) [Section 39-22-104(i)(V), C.R.S.]. Taxpayers report their contribution amounts on Line 8 and calculate their total subtractions on Line 20 of their 2020 Subtractions from Income Schedule (Form DR 0104AD). Taxpayers then report and deduct the sum of their total subtractions on Line 8 of their 2020 Colorado Individual Income Tax Return (Form DR 0104). The deduction is applied to taxpayers' taxable income and is not refundable, so taxpayers can only use it to the extent that they have taxable income. If the available deduction exceeds a taxpayers' taxable income, taxpayers cannot carry the excess amount forward to future tax years.

### WHO ARE THE INTENDED BENEFICIARIES OF THE TAX EXPENDITURE?

Statute does not state the intended beneficiaries of the 529 Deduction. Based on the operation of the deduction, we inferred that the intended beneficiaries are taxpayers who make eligible contributions to 529 accounts and individuals whose educational expenses are paid through 529 accounts. The deduction benefits contributors by reducing their taxable income by the amount contributed, up to the cap. Account beneficiaries may also benefit to the extent that the deduction encourages individuals to contribute funds towards their educational expenses. As of Fiscal Year 2021, there were 384,160 accounts

established through CollegeInvest's 529 program and about \$1.2 billion in annual contributions were made to these accounts.

### WHAT IS THE PURPOSE OF THE TAX EXPENDITURE?

Statute and the enacting legislation for the 529 Deduction do not explicitly state its purpose; therefore, we could not definitively determine the General Assembly's original intent. Based on the operation of the deduction; conversations with stakeholders and our review of literature on tax incentives for saving for higher education; and IRS and Department regulations; we considered a potential purpose: to encourage and support individuals to save for higher education.

## IS THE TAX EXPENDITURE MEETING ITS PURPOSE AND WHAT PERFORMANCE MEASURES WERE USED TO MAKE THIS DETERMINATION?

We could not definitively determine whether the 529 Deduction is meeting its purpose because no purpose is provided for it in statute or its enacting legislation. However, we found that it is likely meeting the purpose we considered in order to conduct this evaluation to a limited extent. Specifically, the deduction provides some financial support to individuals saving for higher education expenses and helps CollegeInvest market 529 accounts, but other financial benefits of saving are larger and may be more influential to individuals considering whether to save for higher education expenses. Further, we found that most individuals who contribute to CollegeInvest 529 accounts do not claim the deduction, indicating that the deduction may not be important to many individuals who contribute to 529 accounts.

Statute does not provide quantifiable performance measures for this tax expenditure. Therefore, we created and applied the following performance measure to determine the extent to which the deduction is meeting its potential purpose:

Performance measure: To what extent does the 529 Deduction encourage individuals to save for higher education?

RESULT: We found that the 529 Deduction likely acts as a modest additional incentive to encourage individuals to save for higher education, but other benefits of saving may play a larger role in individuals' savings decisions. The deduction is frequently used by taxpayers, with 64,262 taxpayers claiming deductions for about \$554 million in 529 account contributions in Tax Year 2018. As discussed, the deduction generally decreases a taxpayer's Colorado taxable income by the amount they contribute to a 529 account during the year. Therefore, based on the state income tax rate of 4.55 percent in Tax Year 2021, the deduction can lower a taxpayer's tax liability by \$4.55 for every \$100 they contribute to a 529 account, assuming the taxpayer has sufficient tax liability to offset. While this provides some financial support to individuals saving for higher education and may have encouraged some individuals to save, there are several additional benefits that likely also serve as an incentive to save for higher education.

- Investment earnings—Individuals saving money for higher education have a range of options to invest their savings, including 529 accounts, which allows them to earn interest and capital gains on their contributions.
- Tax-free distributions—When taxpayers take funds out of a 529 account to pay for eligible educational expenses, they are not subject to federal or state income taxes on the account earnings that are typically owed on non-529 account investments.
- Avoidance of college loan financing costs—To the extent individuals are able to save for higher education expenses, they are able to reduce the amount of college loan debt that they or their beneficiaries will have to repay, thereby saving the interest that they would otherwise owe. Individuals utilizing other vehicles for saving, such as a regular

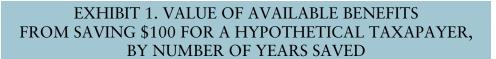
savings account, benefit from finance cost savings, not just those that save within 529 accounts.

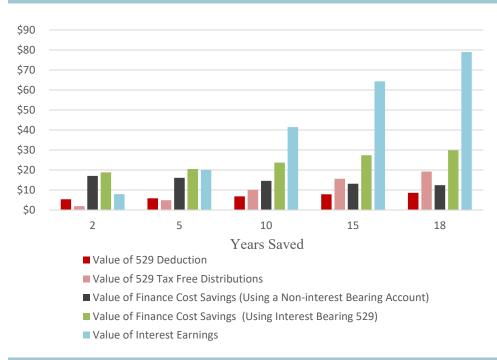
To assess the relative importance of each of these factors to taxpayers' decisions to save for higher education, we calculated the value of the deduction and the value of each of the incentives to save listed above that a hypothetical individual saving for higher education might consider. We made the following assumptions for our analysis:

- The individual saves \$100.
- The individual can earn 5 percent annually on the amount saved by investing in an interest bearing account, either using a 529 account or other investment vehicle.
- If not using a 529 account for saving, the individual would be subject to a 15 percent federal capital gains tax and 4.55 percent state income tax on any investment earnings at the time the funds are withdrawn for educational expenses.
- The individual or their beneficiary would otherwise incur student loan debt equivalent to the amount saved that would be repaid over 10 years at a 3.73 percent interest rate, which was the published rate for Federal Direct student loans as of Academic Year 2021-2022.
- To calculate the potential value of the 529 Deduction, we assumed the individual increases the amount saved in their 529 account equivalent to the \$4.55 tax benefit associated with the deduction.

To account for the time value of savings, we calculated the value provided by saving for several time intervals. We calculated these values using "net present value," which provides the current value of benefits that will be realized in future years by discounting the future benefits to account for the time value of money. For the purposes of our analysis, we used a 2 percent discount rate for our net present value calculations, to approximate the inflation rate in recent years. Exhibit 1 compares the value of the 529 Deduction to the value of other available benefits,

which the saver could receive depending on the type of account they choose to use.





SOURCE: Office of the State Auditor analysis based on the operation of the 529 Deduction.

As shown, the 529 Deduction provides a relatively small additional incentive compared to the other benefits offered by saving. For example, an individual who contributes \$100 to a 529 account that earns 5 percent interest and saves for 18 years before withdrawing it for higher education expenses would see a \$137 benefit, of which, about \$9 would come from the deduction. If the same individual saved the same amount in a non-interest bearing account, meaning that they would be ineligible for the deduction, this decision would still have a value of about \$12 based on avoiding the cost of student loan interest. However, the deduction may be a more significant incentive for individuals who plan to save for a shorter period of time since most of the other benefits of saving are relatively smaller when the funds are saved for less time. For example, the deduction makes up about 16 percent of the total value of

saving if the funds are withdrawn after 2 years, but only about 6 percent of the value if the funds are saved for 18 years. Although the relative benefit of the deduction would vary from this example based on the specific performance of individuals' investments and tax liability, generally, for most taxpayers the other potential benefits of saving significantly outweigh the benefit provided by the deduction.

Despite its smaller monetary value compared to other benefits of saving, the 529 Deduction may be more effective, for every dollar benefit received, at encouraging individuals to save than the other incentives in our analysis. Based on our review of economic research, tax benefits that are available to taxpayers sooner generally have a stronger impact on taxpayer decision-making than benefits that are not realized for several years. Additionally, benefits that are more certain tend to be more influential. CollegeInvest also reported that the deduction is a helpful marketing tool that it has found to be influential in its efforts to encourage individuals to save for higher education. According to its marketing survey, 93 percent of individuals indicated that the deduction was very important in their decision to open a 529 account with CollegeInvest. Therefore, the deduction may be more influential to taxpayers, relative to its monetary value, than other benefits because it provides a benefit in the same tax year that the money is saved and its value is relatively easy for taxpayers to determine.

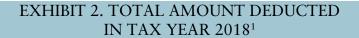
In comparison, other benefits of saving may not be realized for years or decades after the money is saved. Further, the amount of some of the benefits may be less certain and more difficult for taxpayers to determine and consider in their decision-making. In particular, earnings received by investing the funds saved in the 529 account are uncertain because they are subject to the performance of the investments, with a risk of the investments losing value.

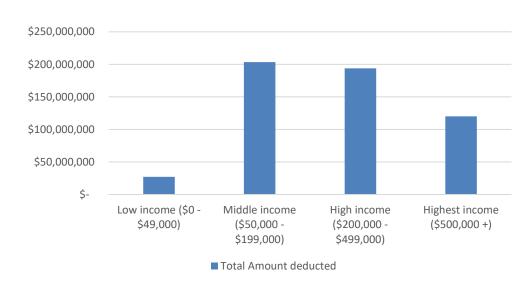
Additionally, we found that 529 account contributors did not claim a deduction for a substantial portion of their contributions, indicating that the 529 Deduction is likely not providing any additional incentive for some contributors. Specifically, there were about \$988 million in

contributions made to CollegeInvest 529 accounts in Fiscal Year 2018, but taxpayers only claimed the deduction for \$554 million in Tax Year 2018, about 56 percent, of the total contributions. It is likely that some of the contributors were not able to use the deduction because they are residents of other states. For example, CollegeInvest reported that about 9 percent of account owners were out-of-state, which would likely make them unable to use the deduction unless they file income taxes in Colorado. In addition, some non-account holders who contributed to 529 accounts were also likely non-residents, though we lacked data necessary to determine the location of these individuals. It is also possible that some contributors lacked sufficient taxable income to use the deduction, which could be the case for contributors with lowerincomes. Other contributors may not have been aware of the deduction, or may have been aware of it at the time of their contribution but later forgot to claim it, although we could not quantify the extent to which this occurred.

### WHAT ARE THE ECONOMIC COSTS AND BENEFITS OF THE TAX EXPENDITURE?

Based on our review of Department data, we found that 64,262 taxpayers claimed the 529 Deduction in Tax Year 2018, resulting in about \$25.7 million in foregone revenue to the State and an average benefit of about \$400 per taxpayer. Additionally, we found that taxpayers with higher incomes, who likely have more income available for saving, tend to contribute more and receive a larger tax benefit from the exemption than those with lower incomes. Specifically, taxpayers with annual incomes at or above \$200,000, claimed about 58 percent of the total tax benefit of the deduction, nearly \$15 million, while making up about 31 percent of claimants. In contrast, taxpayers with incomes below \$50,000 claimed about 5 percent of the benefits, about \$1.3 million, and made up about 11 percent of all claimants. EXHIBIT 2 provides the total amount deducted in Tax Year 2018, by income level.

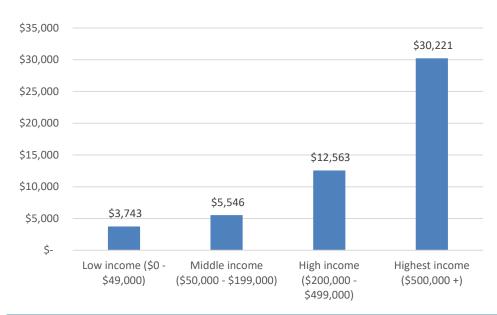




SOURCE: Office of the State Auditor's analysis of Department of Revenue data. <sup>1</sup>Excludes claimants with negative federal taxable income.

Similarly, taxpayers with higher incomes tended to claim much larger average annual deductions. Specifically, those earning over \$500,000 (roughly the top 1 percent of earners in Colorado) claimed an average deduction amount of about \$30,000. In comparison, taxpayers who had less than \$50,000 in federal taxable income deducted on average about \$3,700. EXHIBIT 3 shows the average 529 deduction by income level.

### EXHIBIT 3. AVERAGE DEDUCTION AMOUNTS BASED ON INCOME LEVELS IN TAX YEAR 2018



SOURCE: Office of the State Auditor's analysis of Department of Revenue data.

As shown, taxpayers with higher incomes tended to contribute more to their 529 accounts and claimed larger average deductions. However, due to the cap introduced in House Bill 21-1311, going forward, some taxpayers' deductions will be limited and the 529 Deduction's revenue impact to the State will likely decrease beginning in Tax Year 2022. As discussed, starting in Tax Year 2022, single-filer taxpayers will be limited to deducting \$20,000 and joint-filers will be limited to deducting \$30,000 annually per taxpayer, per beneficiary. Based on data provided by the Department, we estimate that in Tax Year 2018 about 3,700 taxpayers deducted amounts greater than the cap that will go into effect in Tax Year 2022, which resulted in about \$5.3 million in forgone state revenue in Tax Year 2018. Of the 3,700 joint and single filers that deducted amounts greater than the cap, about 2,600 taxpayers had a federal taxable income of \$200,000 or more. If the number of claimants and their contributions remain the same, the State would see a corresponding reduction in the amount of foregone state revenue due to the 529 Deduction as a result of the cap.

In addition, we found that although the deduction may help offset the cost of college for beneficiaries, this benefit is relatively small in comparison to the typical cost of higher education. Specifically, based on school tuition, room, and board data for Academic Year 2017-2018 from the National Center for Education Statistics, we estimated the average cost of attending an in-state public college in Colorado for 4 years starting in Academic Year 2017-2018 would cost about \$94,000. After adjusting for annual tuition inflation of 6 percent, we estimated the cost of the same hypothetical college in Colorado would cost nearly \$270,000 for 4 years starting in Academic Year 2036-2037. In comparison, if taxpayers received an annual tax benefit from the deduction of about \$400 per year, the average tax benefit of the deduction in Tax Year 2018, through 18 years of saving, they would receive a total benefit of \$7,200 or about 3 percent of the total cost of 4 years of tuition, room, and board at an in-state college starting in Academic Year 2036-2037. Further, it is likely that many individuals do not save for 18 years and do not save an additional amount equivalent to the tax benefit they receive from the deduction, so this example likely overstates the typical benefit it provides.

### WHAT IMPACT WOULD ELIMINATING THE TAX EXPENDITURE HAVE ON BENEFICIARIES?

If the 529 Deduction was eliminated, individuals contributing to 529 accounts that previously claimed the deduction would experience an annual increase of about \$400 in their tax liabilities, based on the average amount deducted by taxpayers in Tax Year 2018. For a taxpayer claiming the average deduction amount over 18 years, eliminating the deduction would result in about \$7,200 in lost tax savings. While taxpayers would still be able to receive the exemption from federal and state income taxes on interest earned on contributions, repealing the deduction could result in taxpayers deciding not to save, making fewer contributions to CollegeInvest 529 accounts, or utilizing other saving vehicles. Collectively, this could reduce the number of individuals and families saving for higher education in Colorado, though we could not quantify this potential impact.

Although the 529 Deduction provides a smaller financial benefit than other benefits of saving, it may act as a stronger incentive for Colorado residents to establish a 529 account through CollegeInvest, an incentive that would no longer exist if the deduction was eliminated. In a 2015 customer survey conducted by CollegeInvest, about 75 percent of 529 account holders said that if the 529 Deduction were eliminated, they would "investigate other options" to save for higher education and 63 percent indicated they would "likely close their CollegeInvest accounts." Although other states' 529 accounts offer benefits similar to those offered by CollegeInvest, without the 529 Deduction, Colorado residents would no longer have the additional incentive to save through CollegeInvest. Therefore, eliminating the deduction could have a negative impact on CollegeInvest.

#### ARE THERE SIMILAR TAX EXPENDITURES IN OTHER STATES?

There are 49 states plus the District of Columbia that provide a 529 education savings plan, the exception being Wyoming, which partners with Colorado to offer 529 accounts to its residents. However, only 42 other states and the District of Columbia have an income tax and can therefore offer an income tax deduction. Of these states, 31 states and the District of Columbia provide a deduction for contributions made to 529 accounts, and three states provide a credit for contributions. Specifically, we found the following:

STATES WITH DEDUCTION CAPS AND CARRYFORWARDS—Of the 31 other states that offer a deduction, 28 states limit their deductions with a cap. States that cap the deduction amount typically cap the amount that can be deducted on a per-taxpayer, per-beneficiary, or a per-taxpayer/per-beneficiary basis. Per-taxpayer deduction caps limit the amount that can be deducted from a taxpayer's taxable income by the total amount contributed by the taxpayer to one or more 529 accounts. On the other hand, per-taxpayer/per-beneficiary caps limit the amount that can be deducted by the amount a taxpayer contributes to only one single 529 account, meaning the taxpayer can deduct contribution amounts up to

the cap for every beneficiary's account they contribute to. For example, Colorado's cap allows joint filers to deduct up to \$30,000 from their taxable income for each account they contribute to and, therefore, could deduct \$90,000 if they made \$30,000 in contributions to three different accounts. In contrast to Colorado, most states either limit deduction amounts based on total contributions made by the taxpayer or contributions made to a single beneficiary account. Moreover, Colorado has the highest cap, followed by Pennsylvania's per beneficiary cap of \$15,000 for single filers and \$30,000 for joint filers. Illinois, Mississippi, and Oklahoma limit their deduction with a per taxpayer cap of \$10,000 for single filers and \$20,000 for joint filers. The average cap among states that limit deduction amounts is \$4,974 for single and \$8,596 for joint filers. Finally, 11 of the 28 states that have instituted caps allow unused deduction amounts to be carried forward to future tax years. Seven states limit the carryforward period to between 4 and 10 years while the remaining 4 states do not limit the number of years the deduction can be carried forward.

STATES WITH CREDITS FOR CONTRIBUTIONS TO 529 ACCOUNTS—Three states provide credits for contributions made to 529 accounts, as follows:

- Indiana provides a credit of 20 percent of contributions up to \$1,000 annually.
- Utah provides a credit for 4.95 percent of contributions up to \$2,070 for single and \$4,140 for joint beneficiaries, with a max credit amount of \$102 for single filers and \$205 for joint filers.
- Vermont provides a credit for 10 percent of the first \$2,500 in contributions for single filers and \$5,000 for joint filers, with a max credit amount of \$250 per taxpayer, per beneficiary.

### ARE THERE OTHER TAX EXPENDITURES OR PROGRAMS WITH A SIMILAR PURPOSE AVAILABLE IN THE STATE?

We identified the following tax expenditures and programs designed to encourage individuals to save for higher education:

INCOME TAX CREDIT FOR EMPLOYER 529 CONTRIBUTIONS [Section 39-22-539, C.R.S.]—This provision allows Colorado employers who make contributions to a qualified tuition plan owned by an employee to take a credit against their Colorado state income tax liability equal to 20 percent of the total contributions made, up to \$500 per employee who receives a contribution. We conducted an evaluation of the Income Tax Credit for Employer 529 Contributions, which can be found in the Office of the State Auditor 2020 Tax Expenditures Compilation Report.

ACHIEVING A BETTER LIFE EXPERIENCE (ABLE)—This program offers tax-advantaged savings plans for people living with disabilities. Eligible individuals and families can save up to \$100,000 through Colorado ABLE saving accounts without affecting other public assistance provided to disabled persons. The earnings gained in Colorado ABLE accounts are considered nontaxable income on federal tax returns when spent on qualified expenses such as education; housing; transportation; employment training and support; personal support services; health care; and expenses that improve health, independence, and quality of life.

MATCHING GRANT PROGRAM—This program was created in 2004 and helps low to middle income families save for higher education expenses by matching up to \$1,000 of eligible Colorado residents' contributions to a 529 savings account each year for up to 5 years. Applicants must have income at or below 600 percent of the federal poverty level, which is equivalent to a family of four with a combined annual income of \$159,000 and below. Additionally, applicants must be Colorado residents and first apply when the beneficiary is younger than 9 years old, and the beneficiary must be claimed as a dependent. Over the last

5 years, CollegeInvest matched 4,057 families' contributions resulting in nearly \$1.8 million in grants and about \$445 in grants per family.

FIRST STEP PROGRAM—Created by House Bill 19-1280 in 2019, this program provides every child born or adopted in Colorado on or after January 1, 2020, a \$100 contribution towards their CollegeInvest 529 savings account once the parent or legal guardian opens an account naming the child as the beneficiary and applies for the program prior to the child turning 5 years old. Children are eligible for the \$100 contribution if they are a U.S. citizen or resident alien with a social security number or federal tax identification number. CollegeInvest has provided \$13,530 in total contributions to 1,353 families since the program started.

## WHAT DATA CONSTRAINTS IMPACTED OUR ABILITY TO EVALUATE THE TAX EXPENDITURE?

CollegeInvest could not provide location information on non-account holders who contributed to 529 accounts. As a result of this data constraint, we could not assess how many 529 account contributors were likely ineligible for the deduction because they reside outside of Colorado.

## WHAT POLICY CONSIDERATIONS DID THE EVALUATION IDENTIFY?

THE GENERAL ASSEMBLY MAY WANT TO CONSIDER AMENDING STATUTE TO ESTABLISH A STATUTORY PURPOSE AND PERFORMANCE MEASURES FOR THE 529 DEDUCTION. Statute and the enacting legislation for the deduction do not state its purpose or provide performance measures for evaluating its effectiveness. Therefore, for the purposes of our evaluation, we considered a potential purpose for the deduction: to encourage and support individuals to save for higher education. We identified this purpose based on the operation of the deduction, conversations with stakeholders, research on the topic, and Department regulations. We also developed a performance measure to assess the extent to which the deduction is meeting this potential purpose.

However, the General Assembly may want to clarify its intent for the deduction by providing a purpose statement and corresponding performance measure(s) in statute. This would eliminate potential uncertainty regarding the deduction's purpose and allow our office to more definitively assess the extent to which it is accomplishing its intended goal(s).

THE GENERAL ASSEMBLY MAY WANT TO REVIEW THE EFFECTIVENESS OF THE DEDUCTION. As discussed, we found that the deduction provides financial support to individuals saving for higher education expenses, with an average tax benefit of about \$400 annually to current beneficiaries. Additionally, the deduction likely acts an as incentive for Colorado residents to contribute to an account administered by CollegeInvest, instead of saving through another state's 529 program. Further, CollegeInvest reported that the deduction acts as a helpful marketing tool in its efforts to encourage individuals to save for higher education and that children with access to a college savings account are more likely to enroll in higher education institutions. However, we also found that other benefits of saving through a 529 account, such as earning tax-free interest on contributions, and avoiding student loan debt, provide larger financial benefits than the deduction and may, therefore, be more important to individuals considering saving for higher education expenses. Further, we found that individuals only claimed the deduction for about 56 percent of the amount contributed to CollegeInvest 529 accounts in Fiscal Year 2018, indicating that it is not a significant factor for many individuals who contribute to 529 accounts and do not claim the deduction.