

CONSTRUCTING A CHILD TAX CREDIT THAT FITS EVERY STATE

Richard C. Auxier, David Weiner, and Nikhita Airi
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ABSTRACT

As of December 2023, 15 states offered a child tax credit (CTC) on their state individual income tax, but the structure and size of these credits varied significantly. This report summarizes and explains the policy levers involved in designing a state CTC, and it uses the Tax Policy Center state tax model to analyze multiple versions of a hypothetical CTC in four states that currently do not offer one: Illinois, Michigan, Nebraska, and Virginia. In each state, we adjusted the amount of the credit, applied different child age eligibility restrictions, limited and expanded the income eligibility requirements, and modeled both refundable and nonrefundable versions of the credit to show how different policy decisions affect both the credit's annual revenue cost and the distribution of its benefits.

The American Rescue Plan Act of 2021 (ARP) temporarily but significantly expanded the federal child tax credit (CTC). As a result, the child poverty rate fell from 9.7 percent in 2020 to 5.2 percent in 2021.¹ Research also showed that the expanded federal CTC helped families improve nutrition, decrease reliance on credit cards, and make long-term investments in education (Maag et al. 2022). In the years since this federal tax policy change, 12 states either enacted or expanded a state child tax credit.

As of December 2023, 15 total states offered a CTC on their state individual income tax. But the structure and size of these credits varied significantly. Credit amounts ranged from \$100 to \$1,750 per eligible child. Some credits were refundable and provided support to families with little or no earnings, while others were nonrefundable and only benefited households with taxable income. Some credits were broadly available to families while others were more narrowly targeted using the household's income or age of the child. But all 15 state credits targeted tax benefits at households with children.

A CTC is not the only way states can support families with children via the individual income tax. States have long offered personal exemptions for dependents that lower a household's taxable income, and thus tax liability, in accordance with its number of children.² In addition, 31 states and the District of Columbia (as of December 2023) offered a state earned income tax credit (EITC), a credit that provides larger benefits to eligible households with children.³ But enacting or expanding a state CTC allows state policymakers to more directly deliver cash benefits to children and their families. And a state CTC also gives policymakers the flexibility to both target and boost benefits to families with children. Specifically, state policymakers get to decide the amount of the credit, age eligibility rules for children, income limitations for the filer, and whether or not the credit is refundable.

This report summarizes and explains these policy levers plus, using the Tax Policy Center state tax model, it analyzes multiple versions of a hypothetical child tax credit in four states that currently do not provide one: Illinois, Michigan, Nebraska, and Virginia. In each state, we adjusted the amount of the credit, applied different child age eligibility rules, limited and expanded income eligibility restrictions for households, and modeled both refundable and nonrefundable credits to show how these policy decision affect both the credit's annual revenue cost and the distribution of its benefits.

The credits modeled ranged from low-cost options that provided small benefits to a few households to expensive credits that delivered thousands of dollars in annual tax cuts to roughly a fifth of each state's households.⁴ An appendix provides data on the annual revenue cost, average annual tax cut for recipients, share of households benefiting from the tax cut, and total tax benefit delivered to households earning less than \$30,000 in adjusted gross income (AGI) for all 36 hypothetical credits across the four states. Policymakers could also extend the benefits of a state CTC to filers with an Individual Taxpayer Identification Number (ITIN) instead of a Social Security number (i.e., mostly undocumented immigrants). This option is discussed, because some states have done this, but it is not modeled due to data limitations.

Although not comprehensive—state policymakers can and have enacted both more restrictive and more generous credits than the options modeled in this report—these examples can help policymakers understand the tradeoffs involved in crafting a state CTC. Specifically, while these are not policy recommendations, the following three lessons emerged from the CTC model runs:

- 1. A state’s existing tax policies can affect who benefits from a CTC.** A nonrefundable credit can only benefit households with taxable income, and traditional policies that reduce taxable income, such as a standard deduction, vary significantly across states. Thus, policymakers interested in a nonrefundable credit should learn how their state’s existing tax policies could prevent some low-income households from benefiting from a nonrefundable CTC. Additionally, state policymakers should be mindful of where they set the income phase-out level for their CTC. If that income range is similar to the phase-out range for other tax benefits, such as a state EITC, or public programs, like Supplemental Nutrition Assistance Program (SNAP) benefits, it could result in a household losing more value in benefits than they gain in income (i.e., elevated effective tax rates).
- 2. Age restrictions can help deliver large, broad benefits, but to a smaller share of families.** Every method for limiting the revenue cost of a state CTC comes with a tradeoff. Nonrefundable credits generally do not benefit low-income households, tight income phase-outs restrict the benefit to only low-income households, and small credit amounts provide relatively small tax cuts to recipients. Restricting the CTC to households with young children reduces the overall share of households benefiting from the credit, but it allows the state to provide a relatively large tax cut to households with a wide range of incomes for a reduced annual revenue cost (relative to proposals benefiting all children younger than age 17). Studies also show targeting relief at households with young children can provide a relatively large positive impact on poverty and material hardship (Ahmad and Landry 2023).
- 3. Most child tax credits provide a large share of their total tax benefit to middle-income households.** Middle-income households typically see a relatively large share of the total tax benefit from a CTC because the size of the tax cut is related to the number of eligible children in the household and not the household’s income level (as with individual income tax rate cuts). Further, although some policy levers prevent low-income households from benefiting (nonrefundable credits), and some prevent high-income households from benefiting (income phase-outs), a large share of middle-income households should benefit from a state CTC unless the income phase-out is set at a very low level.

Other reports on state child tax credits have discussed how these credits can effectively deliver cash benefits (Ahmad and Landry 2023) and reduce child poverty (Davis 2022). This report briefly discusses the trends and debates surrounding child tax credits, but its focus is the nuts and bolts of designing a state CTC, and the questions and tradeoffs state policymakers face when trying to get one enacted. Its goal is

demonstrating how pulling different policy levers—making credits more and less generous, with higher and lower revenue costs—can help policymakers in diverse states across the country construct a CTC that fits their state’s priorities and budget.

BOX 1

The federal child tax credit

The federal CTC was created in 1997 as part of the Taxpayer Relief Act. The original CTC was \$400 per eligible child, available for children younger than age 17, and a nonrefundable credit for most families. Over time, Congress increased the amount of the credit and made a large share of it refundable—known as the additional child tax credit, or ACTC. In 2017, the Tax Cuts and Jobs Act (TCJA) increased the total credit amount to \$2,000 per child and the ACTC to \$1,400 per child. Notably, under the TCJA rules, the ACTC is limited to 15 percent of a filer’s earned income above \$2,500, which means parents with very low levels of income cannot claim the credit or they can claim a reduced credit. Under TCJA rules, the credit’s value is reduced by 5 percent of adjusted gross income over \$200,000 for single parents and \$400,000 for married couples.

For tax year 2021, the ARP provided a one-year expansion of the federal CTC. The maximum credit amount was increased to \$3,600 for children younger than age 6 and \$3,000 for children ages 6 to 17. Additionally, the credit was made fully refundable so that all families, including those with little or no income, became eligible for the full credit. The ARP did not change the income phase-outs from the TCJA rules. In tax year 2022, the CTC returned to its TCJA parameters. Many provisions in the TCJA are currently set to expire after tax year 2025, including the TCJA’s CTC parameters. Thus, if Congress does not enact new legislation, the CTC will revert to its pre-TCJA rules and provide a smaller credit amount (\$1,000 per child) with tighter age and income restrictions in tax year 2026.

Sources: “What is the child tax credit?” Tax Policy Center, accessed on Jan. 2, 2024. <https://www.taxpolicycenter.org/briefing-book/what-child-tax-credit>.

THE POLICY LEVERS INSIDE A STATE CHILD TAX CREDIT

The 15 state child tax credits enacted as of December 2023 varied significantly in structure and size (table 1). That’s because policymakers considering a new or expanded state CTC must answer five major questions:

1. What is the dollar amount of the credit?
2. What are the age eligibility rules for children?
3. What are the income eligibility rules (i.e., the income phase-out threshold) for the taxpayer?
4. Is the credit refundable or nonrefundable?
5. Is the credit available to households with ITINs?

The answers to these questions define what types of households benefit from the credit, how much those eligible households receive from the credit, and how much the credit costs the state in revenue.

What is the dollar amount of the credit?

As of December 2023, state child tax credit amounts ranged from \$100 per eligible child in Arizona to \$1,750 per child in Minnesota. In total, six of the 15 states provided a credit amount of \$1,000 or more per child.

TABLE 1

State Child Tax Credits

Tax year 2023, as of December 2023

State	Maximum credit amount per child	Refundable	Eligible children younger than	Income phase-out begins (AGI)
Arizona	\$100	N	17	Single filers, \$200,000; Married filers, \$400,000
California	\$1,083 (per return)	Y	6	Based on California EITC eligibility (earnings)
Colorado	\$1,200	Y	6	Single filers, \$75,000; Married filers, \$85,000
Idaho	\$205	N	17	None
Maine	\$300	Y (2024)	17	Single filers, \$200,000; Married filers, \$400,000
Maryland	\$500	Y	6	All filers: \$15,000
Massachusetts	\$310	Y	13	None
Minnesota	\$1,750	Y	18	Single filers, \$29,500; Married filers, \$35,000
New Jersey	\$1,000	Y	6	All filers, \$30,000 (TI)
New Mexico	\$600	Y	19	All filers, \$25,000
New York	\$333	Y	17	Single filers, \$75,000; Married filers, \$110,000
Oklahoma	\$100	N	17	All filers, \$100,000
Oregon	\$1,000	Y	6	All filers: \$25,000
Utah	\$1,000	N	Only ages 1,2,or 3	Single filers, \$43,000; Married filers, \$54,000
Vermont	\$1,000	Y	6	All filers, \$125,000

Source: State income tax codes and forms.

Notes: A California household with no earned income that otherwise would qualify for the California EITC can claim the California CTC. The California CTC amount is for the tax return and not based on the number of eligible children on the return. California's CTC phase out is based on the filers earned income and not their AGI. California also has a nonrefundable credit for dependents that is not included in this table. Maine's credit is refundable starting in tax year 2024. New Jersey's phase out is based on the filer's New Jersey taxable income (TI) and not their AGI. A New Mexico family can claim a child younger than age 24 if that child is a student and qualifies as a dependent. A filer in New York can choose a flat \$100 credit or calculate their CTC as 33% of the pre-TCJA, \$1,000 federal CTC. In Oklahoma, the state CTC is 5% of the

federal CTC, but a household cannot claim it if they claim a state child and dependent care tax credit. Oregon and Utah use a state-modified version of AGI and not federal AGI for their phase-out levels. In Utah, a child must be ages 1, 2, or 3. A child who is younger than age one is not eligible for the Utah CTC.

In all states but one, a household received a credit for each eligible child on their tax return. For example, in Vermont the maximum CTC amount was \$1,000 per eligible child, so a household (eligible for the maximum credit) with two eligible children received a \$2,000 credit, and a household with four eligible children received a \$4,000 credit. The exception to the rule was California, where a filer claimed a single credit amount regardless of how many eligible children were on their return.⁵ Massachusetts previously only allowed a family to claim a maximum of two eligible children for its credit, but that restriction was eliminated in 2023.⁶

Most states provided their CTC as a flat amount, but New York and Oklahoma calculated their credit as a percentage of the federal CTC in 2023. New York's credit was 33 percent of the pre-TCJA CTC, which thus capped its maximum value at \$333 per child, but all eligible filers, including those with no income, could claim a minimum \$100 credit per child. Oklahoma offered a state CTC that was 5 percent of the filer's federal CTC amount, but the filer had to choose between that calculation and a calculation based on the filer's federal child and dependent care credit. Colorado previously calculated its CTC as a share of the federal CTC but switched to flat amount in 2023.⁷

What are the age eligibility rules for children?

The federal CTC is available to filers with eligible children younger than age 17, and five states used the same age cutoff for their state CTC. Additionally, Minnesota's credit was available to families with eligible children younger than age 18,⁸ and New Mexico's credit was available for children younger than age 19.⁹ Massachusetts limited its CTC to filers with eligible children younger than age 13.

In contrast, seven states restricted their CTC to households with young children: six states limited their credit to children younger than age 6, and Utah restricted its CTC to only children ages 1, 2, and 3 (i.e., a child younger than age one was not eligible for the CTC). Limiting the CTC by child age reduces the number of households who can claim the credit, but it can also let states target relatively large benefits at young children with a relatively lower annual revenue cost. Young children are often specifically targeted because evidence shows that a child's early years are crucial to their development (including long-term socioemotional and health outcomes). In addition, a family's economic resources matter more for younger than older children, and families with younger children often face more economic challenges (Maag and Isaacs 2017). Notably, six of the seven states that limited their CTC to younger children provided a max credit of \$1,000 or more.

What are the income eligibility rules (i.e., the phase-out threshold) for the taxpayer?

Other than Idaho and Massachusetts, all states prevented households with federal AGI above a certain threshold from claiming their state CTC. (Unless specifically noted, income amounts listed in this section are federal AGI.¹⁰) The income thresholds at which point a filer began to lose their CTC varied widely across states:

Maryland limited its credit to households with less than \$15,000, regardless of filing status, while Maine and Arizona both began to phase-out their credits at \$200,000 for a single filer and \$400,000 for a married couple.

Most states phased out their CTC over a range of income. For example, a Vermont household's credit was reduced by \$20 for every additional \$1,000 in income above the \$125,000 threshold (for all filers) until the credit was completely eliminated. Thus, Vermont has a 2 percent phase-out rate. The federal CTC phase-out rate is 5 percent. The level of income at which a specific household loses its CTC depends on the number of eligible children in that household. In Vermont, a household with one eligible child saw its \$1,000 credit completely phased out at \$175,000, but a family with two eligible children saw its \$2,000 credit fully phased out at \$225,000.

Alternatively, Colorado, New Jersey, and New Mexico provided different credit amounts to households in different income groups. For example, New Jersey's maximum \$1,000 credit was available to households with less than \$30,000 in New Jersey taxable income (regardless of filing status). For households with New Jersey taxable income between \$30,000 and \$40,000, the credit was \$800. The credit amount was sequentially reduced for households in higher ranges of New Jersey taxable income until the credit was completely eliminated for households with more than \$80,000 in New Jersey taxable income.¹¹ Colorado and New Mexico also reduced their credit amount in similar steps but used federal AGI instead of state taxable income for the reduction schedule. However, while New Jersey and Colorado prevented some high-earning households from accessing their credits, New Mexico's step down ended with all households earning more than \$350,000 in federal AGI getting a \$25 credit. Meanwhile, Maryland had a single income eligibility cliff, where a filer with less than \$15,000 in federal AGI got the CTC but a filer with AGI above that did not.

Broadly speaking, a phase-out is preferable to a cliff because one additional dollar of income over a cliff can cost a household its entire tax benefit. However, no matter how a state limits its CTC by income, policymakers should carefully consider where to draw that line. If a household loses a state CTC over a similar income range of income that it loses other public benefits that could create elevated effective tax rates. As a result, a household might lose more in benefits than it gains in income over that range, and that might discourage the household from working and earning more income (box 2).

BOX 2

Child tax credits and avoiding benefit cliffs and elevated effective tax rates

A benefit cliff occurs when one additional dollar of before-tax income results in losing more than one dollar of income in tax credits and other public benefits (Maag et al. 2012). As a result, a benefit cliff negates the value of additional earnings and can disincentivize an individual from working and earning more. Notably, SNAP benefits (i.e., food stamps) and the EITC (both federal and state) typically phase out for households earning between roughly \$20,000 and \$40,000. Thus, if a state CTC phases out along roughly the same level of income, a household could lose SNAP, EITC, and CTC benefits as they earn more income in this range.

In combination, such phase outs create elevated effective tax rates on relatively low levels of income, and can make it difficult for low-income families to move out of poverty. Families who receive public benefits broadly understand the risks of increased earnings, but the complexity and opacity of tax policy and public benefit rules makes planning around benefit cliffs very difficult, and many families are surprised after experiencing these cliff effects (Anderson et al. 2022).

Policymakers should be aware of how a new state CTC could interact with existing programs and work to prevent benefit cliffs from harming the households they want to assist. In general, a higher income threshold or a lower phase-out rate—that spreads the phase-out of the credit over a larger amount of income—could prevent high effective tax rates for these families. However, those policies also increase the revenue cost of the credit, so policymakers must navigate these issues while being mindful of budget constraints.

Is the credit refundable or nonrefundable?

Eleven state child tax credits were refundable and four were nonrefundable as of December 2023. (Maine is counted as having a refundable credit even though its credit does not become refundable until tax year 2024.) If a refundable tax credit exceeds a household’s state income tax liability, the household receives the excess amount as a refund payment from the state. In contrast, a nonrefundable credit can only offset a household’s state income tax liability. As such, a nonrefundable credit provides little or no benefit to many low-income households because they have little or no state taxable income.

For example, in tax year 2023, Arizona offered a standard deduction of \$13,850 for single filers and \$27,700 for married filers. Thus, a household in Arizona must have had income above those amounts (and possibly more if they benefited from other tax deductions and exemptions) before they could receive any benefit from the state’s nonrefundable CTC. This is not a criticism of those policies. Arizona’s relatively generous standard deduction amounts exempt many low-income households from paying a dollar in state income tax. But, simultaneously, it means many low-income households see little or no benefit from its nonrefundable CTC.

Making the credit refundable would let these low-income households enjoy the full tax benefit of the CTC. For example, Minnesota has similarly large standard deduction amounts, but because its CTC is refundable, families with little or no state taxable income still receive the full value of its CTC as a refund.

One important difference between most state refundable CTCs and the federal refundable CTC is that all 11 refundable state credits are “fully refundable.”¹² That is, a household in these states with an eligible child gets a CTC even if they have little or no income. In contrast, a household must have earned income of at least \$2,500 to get any benefit from the federal CTC and earned roughly \$25,000 to get the full federal refundable CTC. Thus, some low-income households in these states get a state CTC, but not a federal CTC.

Is the credit available to households with ITINs?

ITINs allow workers who lack a Social Security number to file and pay federal and state individual income tax. These filers are mostly undocumented immigrants. To claim the federal CTC, the child claimed on the tax return must have a Social Security number, but there is no Social Security number requirement for the filer. That is, if the filer or spouse uses an ITIN, but their child has a Social Security number, the household can benefit from the federal CTC. However, if the child does not have a Social Security number, then the household cannot claim the federal CTC regardless of what document the filer or spouse uses to file tax. This is notably different than the rules for the federal EITC, where every member of the tax-filing household must have a Social Security number to claim that benefit.

Most states offering a CTC go beyond the federal rules and allow households who use ITINs to claim the state CTC, including California, Colorado, Maryland, Minnesota, New Jersey, New Mexico, New York, Oregon, and Vermont. In these states, a household can still claim the state CTC even if the filer, spouse, or child has an ITIN. Making ITIN households eligible for the CTC can provide large benefits to newly eligible households, but it does not significantly affect the overall revenue cost estimate or the benefit distribution of the credit (Auxier 2022). The option to make all ITIN households eligible for the credit was not included in our model results because of data limitations.

MODELING A STATE CHILD TAX CREDIT FOR ILLINOIS, MICHIGAN, NEBRASKA, AND VIRGINIA

Using the Tax Policy Center state tax model (box 3), we modeled multiple versions of a child tax credit in Illinois, Michigan, Nebraska, and Virginia with the following parameters:

- 1. Credit amounts:** \$100, \$500, or \$1,000.
- 2. Age eligibility restrictions:** Available to children younger than age 6 or children younger than age 17.
- 3. Income (AGI) phase-out:** The CTC began to phase out at \$30,000 for single filers and \$60,000 for married filers, \$100,000 for single filers and \$200,000 for married filers, or \$200,000 for single filers and \$400,000 for married filers. We doubled the income levels for married filers to limit “marriage penalties.”¹³ Each credit had a 5 percent phase-out rate (i.e., the credit lost \$5 in value for every \$100 in federal AGI in excess of the specified threshold). The 5 percent phase-out rate is the same as the phase-out rate for the federal CTC.
- 4. Refundability:** A refundable credit or a nonrefundable credit. For the refundable credit, there was no income phase-in, so all eligible households earning under the income limitations claimed the credit.

BOX 3

The Tax Policy Center state tax model and assumptions in this report

The Tax Policy Center uses its state-of-the-art microsimulation model to analyze the revenue and distributional consequences of federal tax policies and major tax reform proposals. In 2016, the Tax Policy Center expanded the model to include state tax policies and interactions between state and federal tax systems.¹⁴ The Tax Policy Center state tax model provided the revenue and distributional estimates in this report.

In this analysis, we used calendar year 2022 income levels and tax year 2022 law (with some modifications) as the policy baseline. Notably, we incorporated some major individual income tax policy changes enacted in calendar year 2023 into our model for these four states. These included Michigan's 30 percent EITC, Virginia's higher standard deduction levels, and Nebraska's 3.99 percent top income tax rate. Policies that are set to take effect over multiple years were modeled as if they took effect immediately for simplicity. For example, Nebraska will lower its top individual income tax rate to 3.99 percent over multiple years, but we used the 3.99 percent tax rate in these model runs.

All average annual tax cuts for households were rounded to the nearest \$5. The model was updated with records from the Current Population Survey to reflect the nonfiling population. Because these state CTC proposals could benefit some households who currently do not file taxes (i.e., because they have little or no income and thus do not owe state tax) there is an inherent degree of uncertainty in these estimates.

Note: For more information on Nebraska's individual income tax rate reductions, please see, "Governor Pillen Signs Historic Tax Cuts Package," May 31, 2023. <https://governor.nebraska.gov/press/governor-pillen-signs-historic-tax-cuts-package>.

In total, we modeled 36 hypothetical child tax credit proposals in all four states. For each hypothetical CTC, we estimated the credit's annual revenue cost, the average annual tax cut for eligible families, the percentage of households in the state receiving a tax cut, and the share of the total tax benefit going to households by AGI group. Data for all 36 hypothetical credits are provided for each state in the appendix.

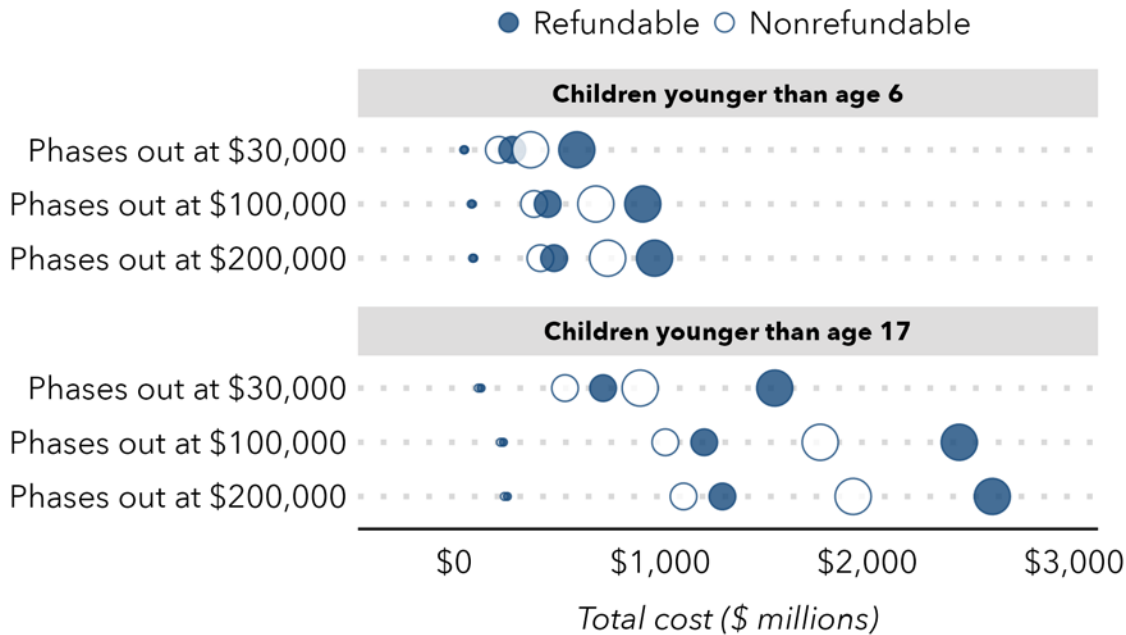
Annual revenue costs varied considerably across the 36 CTC proposals modeled, demonstrating the wide range of options available to state policymakers working within different budget constraints. The gap between the least and most expensive CTC proposals in annual revenue cost in the four states were \$48 million and \$2.6 billion in Illinois, \$27 million and \$1.8 billion in Michigan, \$4 million and \$400 million in Nebraska, and \$20 million and \$1.7 billion in Virginia.

Obviously, the size of each state's population affected those annual revenue estimates. If we look at the projected annual revenue costs as a share of each state's total tax collections in fiscal year 2022, the proposals ranged from roughly 0.1 percent to 5 percent in all four states.¹⁵ Thus, the relative cost of each specific CTC proposal was roughly similar across the four states.

Looking at one state's estimates—Illinois's estimates are highlighted in the graph below—shows that the simplest way for a state to limit the cost of its CTC is to offer a relatively small credit amount. Among our

modeled proposals, the \$100 credits typically had both the lowest revenue cost and little variation in cost regardless of the other policy parameters.

FIGURE 1
Annual Estimated Revenue Cost for the 36 CTC Proposals in Illinois



Source: Tax Policy Center state tax model.

Note: The size of circles corresponds to the credit amount: \$100 (small), \$500 (medium), or \$1,000 (large). The income phase-out thresholds listed are in AGI and only for single filers. The AGI thresholds were double for married filers in all CTC model runs.

Meanwhile, the revenue costs of the \$500 and \$1,000 credits were typically both more expensive and had more variable revenue costs depending on the credit’s age eligibility rules, income limitations, and refundability. In short, making the \$500 or \$1,000 credit available to all children younger than age 17, phasing the credit out at a relatively high level of income, and providing a refundable credit all increased the revenue cost—relative to a credit of the same amount with the opposite policy choices.

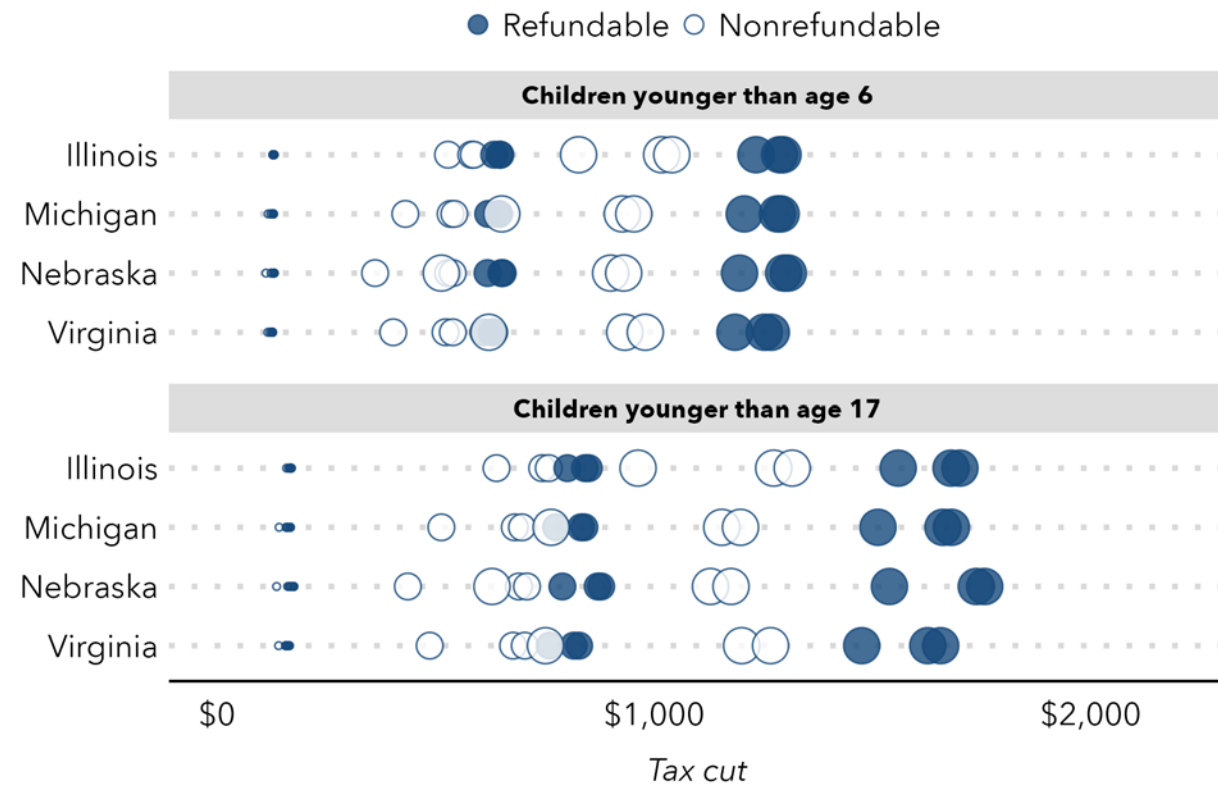
However, there were numerous permutations for these credits, and policymakers could pick and choose what to expand or limit to hit a revenue target. For example, in Illinois, a refundable \$100 credit available to children younger than age 17 that phased out at \$200,000 for single filers had roughly the same revenue cost (\$259 million) as a refundable \$500 credit restricted to children younger than age 6 that phased out at \$30,000 (\$283 million).

The average annual tax cut for households benefiting from a hypothetical CTC also ranged considerably across the proposals. There was some small variation in average tax cut for the same CTC proposal across the four states, but that was largely related to the number of children in those states (i.e., more children resulted in larger average annual tax cuts).

FIGURE 2

Average Annual Tax Cut for the 36 CTC Proposals in All Four States

Only among households getting a tax cut (i.e., does not include households seeing no tax change)



Source: Tax Policy Center state tax model.

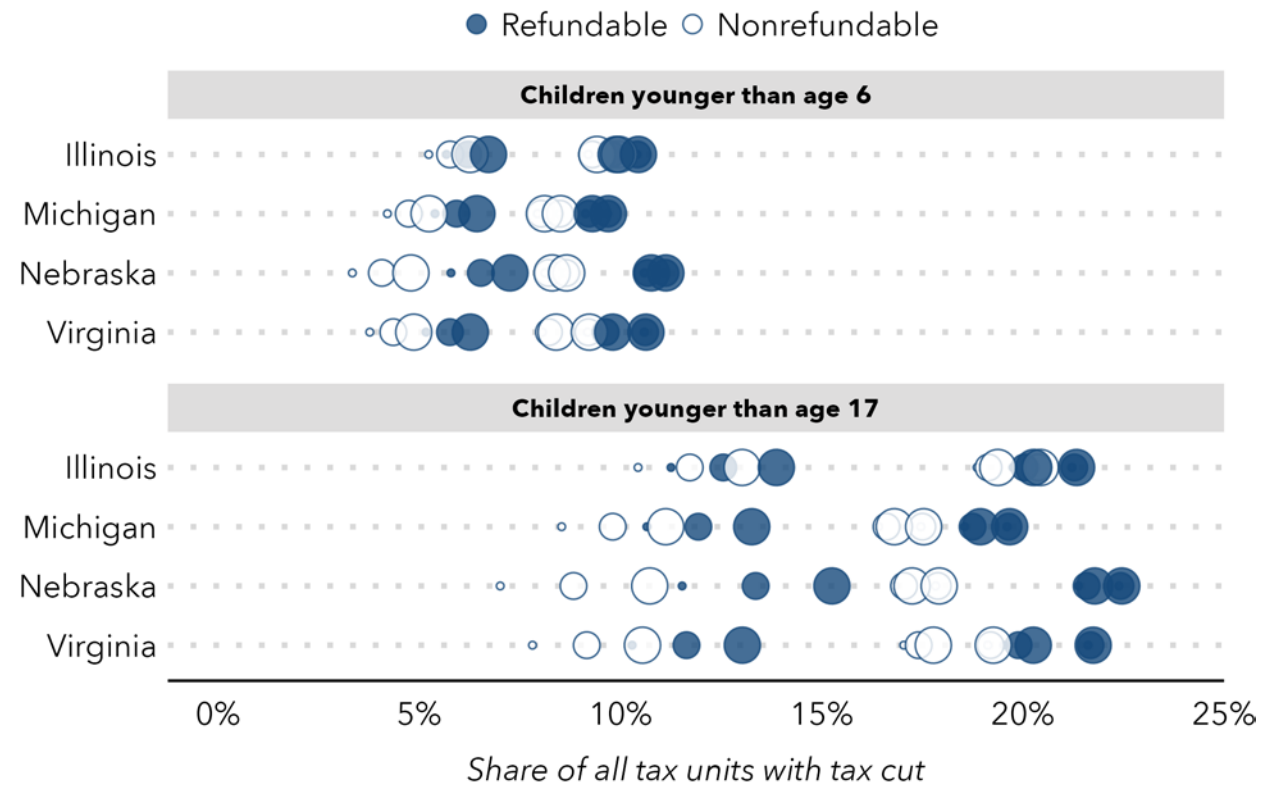
Note: The size of circles corresponds to the credit amount: \$100 (small), \$500 (medium), or \$1,000 (large).

As with the estimated revenue costs, the main driver of the average annual tax cut was the amount of the credit. In the graph above, the \$100, \$500, and \$1,000 credits are generally clustered together regardless of the other parameters—but with more separation for the larger credit amounts. Still, the other policy levers affected the average annual tax cut. For example, making the credit refundable and increasing the phase-out level of income make more households eligible for the credit and thus boosted the average annual tax cut. In particular, making the credit refundable significantly increased the average tax cut for many low-income families who get a small or no tax cut with a nonrefundable credit. And the age limitation both made more households eligible and affected the size of the average tax cut for some individual households. For example, with a \$500 CTC, a family with three children ages 4, 7, and 9 received a maximum \$500 tax cut when the credit was limited to children younger than age 6 but a \$1,500 tax cut when children younger than age 17 were eligible.

Across the four states, the share of each state’s households benefiting from the CTC proposals ranged from roughly 5 percent to 25 percent. The biggest policy lever for this outcome was age eligibility rules. Credits restricted to children younger than age 6 benefited about 5 to 10 percent of each state’s households, whereas credits available to children younger than age 17 benefited a fifth to a quarter of each state’s households.

Making the credit refundable and increasing the income phase-out limitations also increased the overall share of households benefiting from the CTC in each state, but these were small increases relative to age restrictions.

FIGURE 3
Percentage of Each State’s Households Receiving a Tax Cut from the 36 CTC Proposals



Source: Tax Policy Center state tax model.

Note: The size of circles corresponds to the credit amount: \$100 (small), \$500 (medium), or \$1,000 (large).

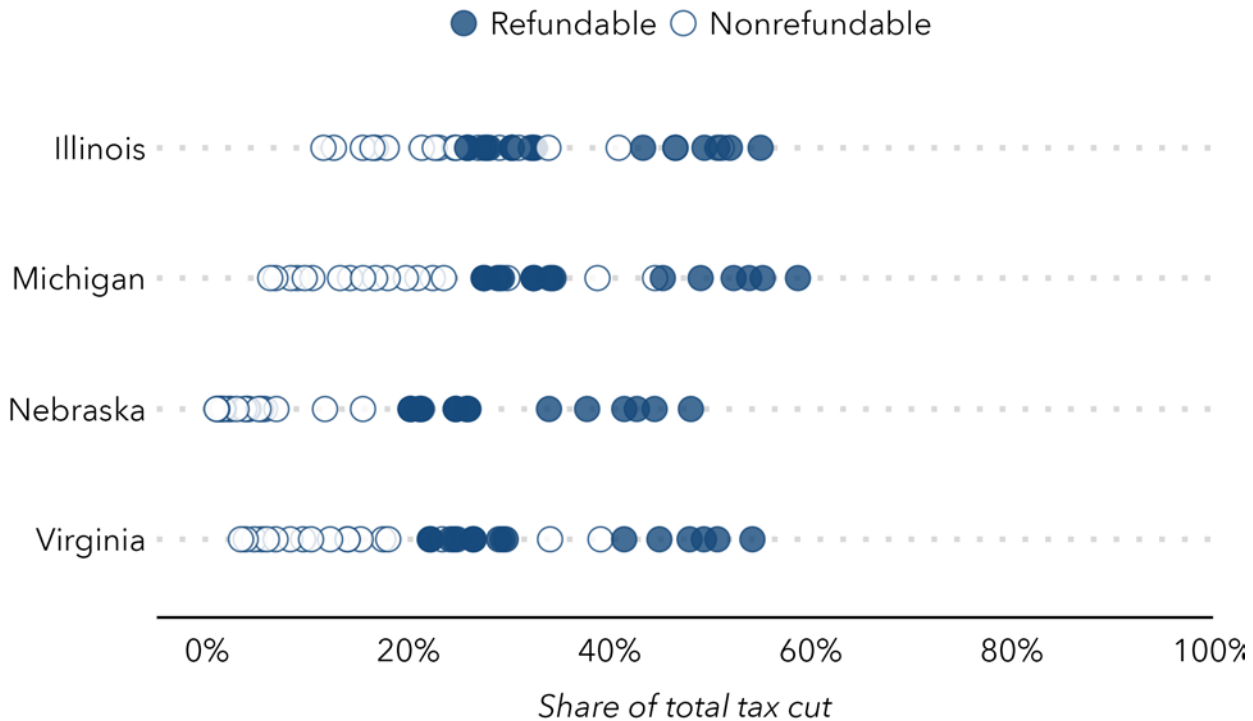
The share of households benefiting from the same CTC proposal varied somewhat across the four states because of each state’s existing tax policies and demographics. For example, the most restrictive CTC proposal provided a tax cut to fewer households in Nebraska (3 percent) than Illinois (5 percent) because Nebraska’s existing tax policies prevented many low-income households from benefiting from a nonrefundable credit. Alternatively, the most generous CTC proposal benefited more households in Nebraska (23 percent) than in the other three states because it had the largest share of households with eligible children.

Similarly, the share of the total tax cut benefit going to households in different income groups differed across both the proposals and the states. Making the CTC refundable was the most important policy lever for delivering benefits to low-income households because these households have little or no taxable income and cannot benefit from nonrefundable credits.

Across the four states, most nonrefundable credits delivered 20 percent or less of their total tax benefit to households earning less than \$30,000 in federal AGI—including multiple nonrefundable CTCs in Nebraska that

provided only 1 percent of their total tax benefit to such households. In contrast, all refundable credits delivered at least 20 percent of their total tax benefit to these households, and some refundable CTCs delivered a majority of their benefits to households earning less than \$30,000.

FIGURE 4
Share of Total Tax Cut Benefit Going to Households Earning Less than \$30,000



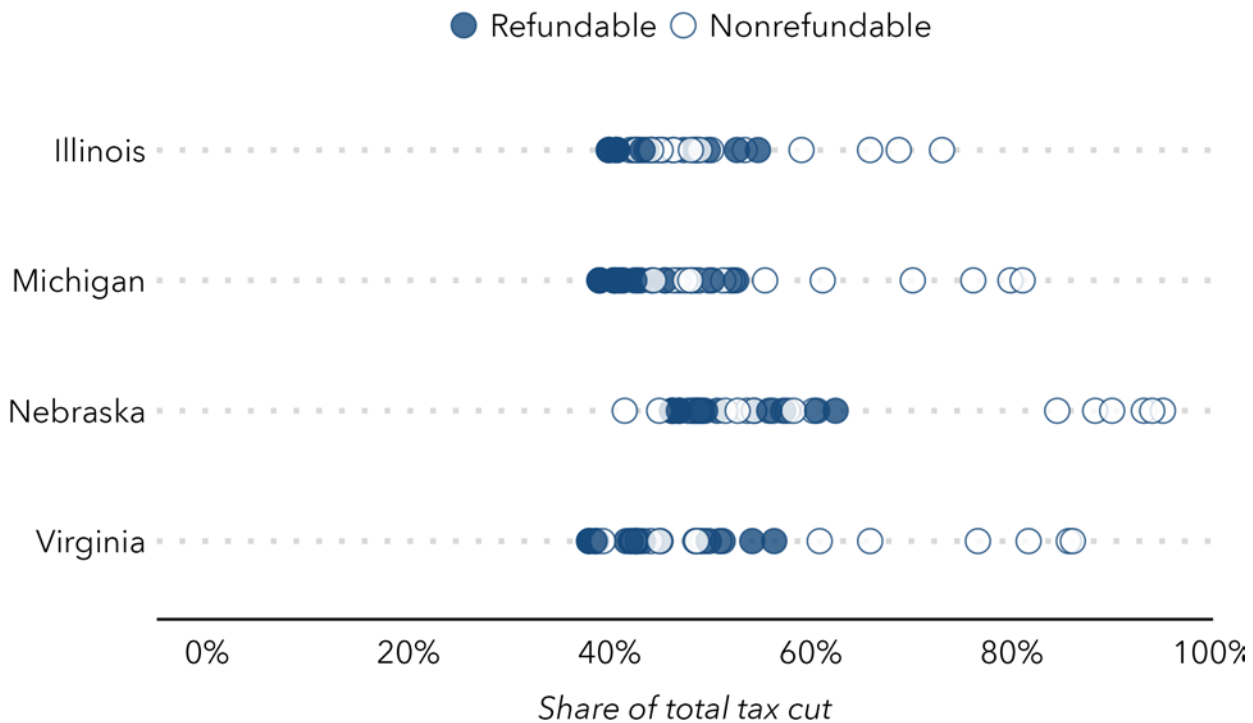
Source: Tax Policy Center state tax model.

Note: The size of circles does *not* correspond to the credit amount. All circles are the same size to help the reader see small differences.

But for most of the CTC proposals modeled, a large share of the total tax benefit went to households earning between \$30,000 and \$100,000 in federal AGI. Across the proposals in all four states, the smallest share of the total tax cut benefit going to these households was roughly 40 percent. Households earning in this income range generally saw the largest share of benefits—compared with households earning less than \$30,000 or more than \$100,000—because there are policy levers that prevent a state’s lowest-income households from benefiting from a CTC (nonrefundable credits) and policy levers that prevent a state’s highest-income households from claiming the CTC (relatively low-income phase-outs) but none of the policy levers we modeled excluded a large share of middle-income households. The exception would be enacting a very low-income phase-out threshold, such as Maryland’s CTC that is limited to households earning less than \$15,000.

FIGURE 5

Share of Total Benefit Going to Households Earning Between \$30,000 and \$100,000



Source: Tax Policy Center state tax model.

Note: The size of circles does not correspond to the credit amount. All circles are the same size to help the reader see small differences.

In sum, the revenue cost, average annual tax cut, share of households getting a tax cut, and income groups seeing the largest share of the benefit from the tax cut all highlight the tradeoffs facing policymakers looking to enact or expand a CTC. Smaller credit amounts, child age limitations, relatively low income phase-outs, and nonrefundable credits can all reduce the annual revenue cost, but they do so by providing smaller benefits to eligible families, delivering tax cuts to fewer households, or both.

THREE LESSONS FOR POLICYMAKERS DESIGNING A STATE CHILD TAX CREDIT

The range of CTC proposals modeled in these four states produced three lessons for policymakers in any state considering a new or expanded child tax credit.

1) A state's existing tax policies can affect who benefits from a child tax credit

A nonrefundable credit can only offset a household's income tax liability. Thus, if policymakers are interested in a nonrefundable CTC, they should examine how their state's standard deduction, personal exemption (or credit), and other policies could exclude low-income households from the credit's benefits. In the four states we modeled, Nebraska and Virginia offered relatively generous standard deduction amounts, while Illinois and

Michigan did not offer them at all. All four states offered a personal exemption or credit that was available to the filer, spouse, and eligible dependents.

TABLE 2
Notable Tax Policies in the Four States

Tax year 2022 (with exceptions; see notes)

	Illinois	Michigan	Nebraska	Virginia
Top individual tax rate	4.95%	4.25%	3.99%	5.75%
Standard deduction (single/married)	--	--	\$7,900/\$15,800	\$8,000/\$17,000
Personal exemption or credit	\$2,425 (e)	\$5,000 (e)	\$157 (c)	\$930 (e)
EITC match	20%	30%	10%	15%

Source: State individual income tax forms.

Notes: (c) = credit and (e) = exemption. The personal credit and personal exemptions were available for the filer, spouse, and all eligible dependents in all four states. The EITC in all four states was a refundable credit. In calendar year 2023, Nebraska passed a law that will lower its individual income tax rates over multiple years. For simplicity, we show the fully phased in tax rate in this table and use it in the state tax model even though it is not the tax rate for tax year 2022. Similarly, we updated the model to include Michigan’s increased EITC match and Virginia’s higher standard deduction amounts.

A relatively large standard deduction and personal exemption or credit is an effective way to reduce taxable income for households up and down the income ladder, and it can particularly help low-income households that ultimately report low or no taxable income and thus have low or no tax liability. But these policies also result in such households seeing little or no benefit from nonrefundable credits because nonrefundable credits can only reduce taxable income to zero.

Specifically, Nebraska provided a more generous standard deduction and personal exemption/credit (in combination) than Illinois, and as a result, a nonrefundable credit (such as the CTC proposal shown below) benefited fewer households in Nebraska than Illinois. Further, that difference was solely concentrated among the state’s lowest-income households.

For example, consider the CTC proposal offering a \$500 credit, available to children younger than age 17, and with phase-out starting at \$100,000 for single filers and \$200,000 for married filers. Among families with more than \$30,000 in AGI, there was little or no difference in the share of households benefiting from either the refundable or nonrefundable version of this CTC in both Nebraska and Illinois. That is because in both states the vast majority of these households had enough taxable income to fully benefit from a nonrefundable credit.

However, there were large differences in Nebraska and Illinois among households with less than \$30,000 in federal AGI when comparing refundable and nonrefundable versions of this CTC proposal. For example, among households earning \$10,000 to \$20,000, one-fifth of Nebraska households benefited from the refundable credit, while less than 1 percent of the same households benefited from the nonrefundable credit.

Meanwhile, in Illinois, there was little difference in the share of households benefiting from a refundable and nonrefundable credit in that income range. This difference was Nebraska’s existing tax policies prevented many of these low-income households from benefiting from a nonrefundable credit.

TABLE 3

Share of Households Benefiting from Refundable and Nonrefundable CTC

Proposal: \$500 credit, children younger than age 17, with phase-out starting at \$100,000 (single)

AGI	Illinois (NR)	Illinois (R)	Nebraska (NR)	Nebraska (R)
\$0 to \$10,000	5.8%	12.0%	0.0%	11.7%
\$10,001 to \$20,000	25.0%	25.8%	0.6%	20.2%
\$20,001 to \$30,000	27.3%	27.7%	12.2%	24.5%
\$30,001 to \$40,000	26.8%	27.1%	22.4%	26.8%
\$40,001 to \$50,000	23.6%	23.8%	22.4%	23.3%
\$50,001 to \$75,000	20.9%	21.2%	25.4%	25.6%
\$75,001 to \$100,000	21.7%	21.9%	28.0%	28.1%
\$100,001 to \$200,000	32.2%	32.4%	37.4%	37.5%
\$200,001 to \$500,000	6.6%	6.6%	6.8%	6.8%
\$500,001 or more	0.0%	0.0%	0.0%	0.0%
All	22.5%	23.3%	20.0%	25.0%

Source: Tax Policy Center state tax model.

Notes: (NR) = nonrefundable credit; (R) = refundable credit.

To benefit households with less than \$30,000 in AGI, policymakers would need to enact a refundable credit, because a refundable credit allows a household to receive the CTC as a refund if its credit is larger than its amount of tax owed. Some policymakers worry that fully refundable child tax credits could reduce employment among parents. However, while economic theory suggested that some parents might substitute CTC payments for earned income, most research to date finds that the expanded federal CTC in 2021, which let parents with little or no earned income claim the full credit and collect it on a monthly basis, did not reduce employment. And survey data show no meaningful changes in employment pre- and post-CTC expansion (Ananat et al. 2022; Pilkauskas et al. 2023) or significant employment differences between parents who did and did not receive the CTC (Hamilton et al. 2022; Karpman et al. 2022).

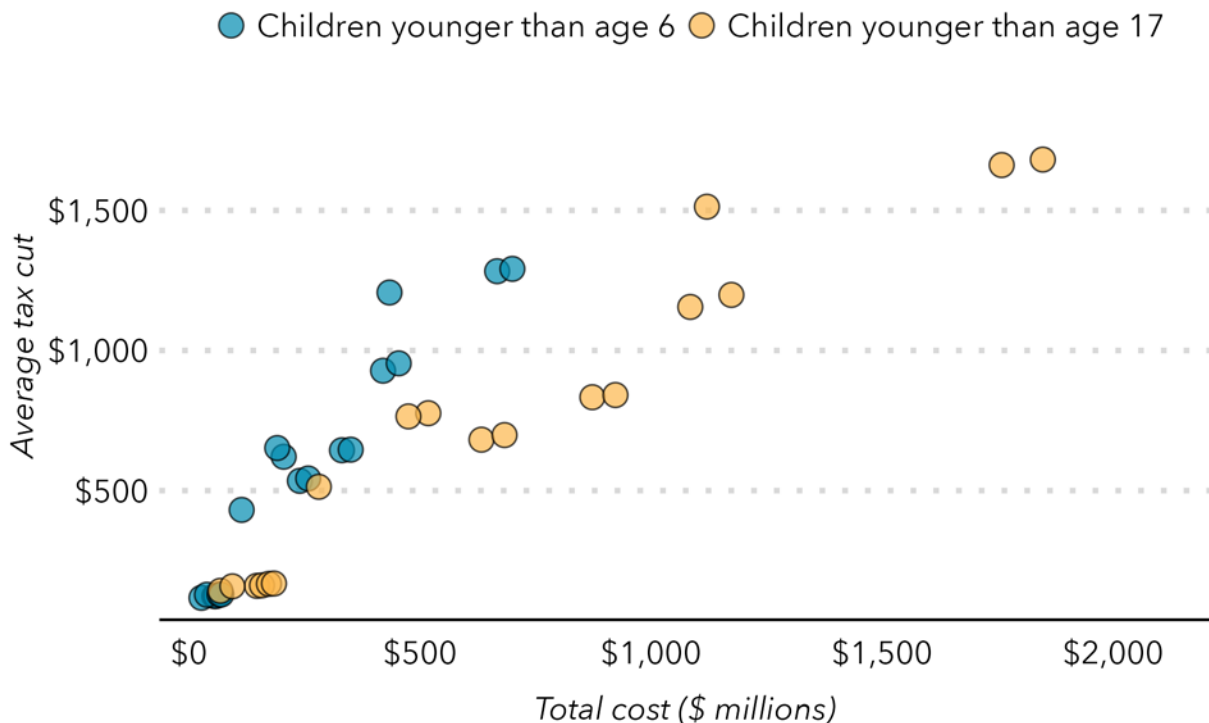
Additionally, policymakers should also study their existing tax system and other means-tested public benefits when designing an income phase out for their state CTC. For example, in many states both the EITC and SNAP benefits phase out between roughly \$20,000 and \$40,000 in AGI. If a state’s CTC phases out along the same range of income as its EITC or SNAP benefits, it could create elevated effective tax rates for some households, and thus result in some families losing more in benefits than they gain in income. That dynamic

could discourage some families from working or earning more income, or harm families who are unaware of how their income gains affect their state tax credits and benefits.

2) Age restrictions can help deliver large, broad benefits, but to a smaller share of families

Policymakers have multiple ways to limit the annual revenue cost of a child tax credit, but all options create tradeoffs. Keeping the amount of the credit low reduced its impact; the CTC proposals we modeled with a \$100 credit provided recipient households an average annual tax cut ranging from just \$110 to \$175. Making the credit nonrefundable prevented many low-income households from benefiting fully if at all from the CTC. Establishing a relatively low phase-out threshold limited the benefit to only the state’s lowest-income households. Restricting CTC eligibility to younger children reduced the overall share of households benefiting from the credit. However, by limiting the credit to younger children, a state can still provide a relatively large average annual tax cut to households earning a wide range of incomes for a relatively low annual revenue cost.

FIGURE 6
Revenue Cost and Average Annual Tax Cut for CTC proposals in Michigan



Source: Tax Policy Center state tax model.

Notes: The size of circles does *not* correspond to the credit amount. All circles are the same size to help the reader see small differences.

For example, in Michigan, a \$500 refundable CTC with a phase-out beginning at \$200,000 for single filers and limited to children younger than age 6 had a lower annual revenue cost (\$350 million) than all the CTC proposals available to all children younger than age 17 with four exceptions: the CTC proposals with a \$100 credit and the nonrefundable \$500 CTC with an income phase out starting at \$30,000—that is, the smallest and most restricted CTC proposals. Overall, that \$500 refundable CTC limited to children younger than age 6

provided an average annual tax cut of \$645 to eligible households, benefited 12 percent of Michigan households, and provided a similar share of benefits across income groups: 31 percent to households earning less than \$30,000, 40 percent to households earning between \$30,000 and \$100,000, and 29 percent to households earning more than \$100,000.

Of course, the revenue cost of that CTC is limited because families with only older children were not eligible and thus saw no benefit. If the policymakers' goal is helping *all* parents, then this is not a good option. But, looking at all 36 CTC proposals in Michigan (in the graph above), there are numerous examples of age-restricted CTCs providing a larger average annual tax cut than CTCs available to all children younger than age 17 at similar annual revenue costs.

3) Most child tax credits provide a large share of their total tax benefit to middle-income households

We modeled 144 total CTC proposals across the four states (36 CTC proposals in each state). Of those 144 CTC proposals, 90 percent provided at least 40 percent of their total tax benefit to households earning between \$30,000 and \$100,000 in federal AGI. Middle-income households saw a relatively large share of benefits from these CTC proposals because, unlike some other forms of individual income tax relief, the benefit was based on the household's number of eligible children and not its level of income. Further, while there are CTC policy levers that prevent low-income households from benefiting (nonrefundable credits) and high-income households from benefiting (income phase-outs), a large share of middle-income households should typically benefit from a CTC unless the income eligibility threshold is set at a very low level.

To highlight the difference between a CTC and other forms of income tax relief, we modeled an individual income tax rate cut in Virginia. The hypothetical income tax rate cut proposal we modeled reduced all three of Virginia's individual income tax rates by 5 percent (i.e., the state's top tax rate fell from 5.75 percent to 5.4625 percent). This proposal cost \$801 million in annual revenue.¹⁶ For roughly the same annual revenue cost (\$835 million), Virginia could create a \$500 refundable CTC, available to children younger than age 17, and phased-out at \$200,000 for single filers and \$400,000 for married filers. The two proposals provided notably different total tax benefits to households in different income groups.

Households with AGI between \$30,000 and \$100,000 received 39 percent of the benefit from the proposed CTC and 21 percent of the benefit from the income tax rate reduction.

Additionally, only 1 percent of the total tax benefit from the hypothetical income tax rate cut went to households with less than \$30,000 in AGI. As noted earlier, this is because Virginia's standard deduction and personal exemption eliminates taxable income for most of these households and thus prevents them from paying state income tax. Although those existing policies benefit these households, they also prevent them from benefiting from an income tax rate reduction (or a nonrefundable credit). In contrast, the refundable CTC

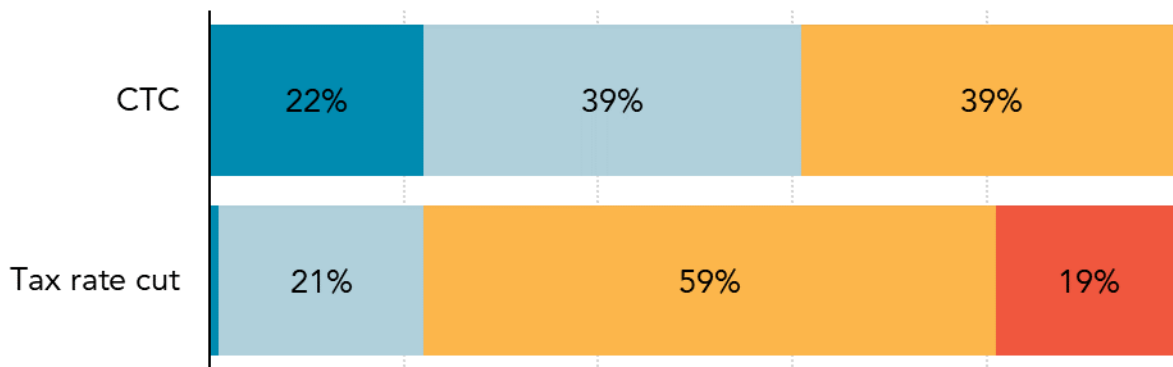
proposal provided 22 percent of its total tax benefit to households with AGI below \$30,000 because refundable tax credits can deliver a tax rebate to households with little or no taxable income.

FIGURE 7

Comparing the Share of Benefits from an Income Tax Rate Cut and CTC in Virginia

Share of total benefits going to different AGI groups for an income tax rate cut and CTC proposal

■ \$0 to \$30,000 ■ \$30,001 to \$100,000 ■ \$100,001 to \$500,000 ■ \$500,001+



Source: Tax Policy Center state tax model.

Notes: "Tax rate cut" reduces each of Virginia's three individual income tax rates by 5% (i.e., the state's top tax rate falls from 5.75% to 5.4625%). "CTC" creates a refundable \$500 credit, available to children younger than age 17, that phases out at \$200,000 for single filers and \$400,000 for married filers. "Tax rate cut" provided 1% of its total tax benefit to households with less than \$30,000 in AGI. "CTC" did not provide any benefit to households with more than \$500,000 in AGI.

On the other side of the income spectrum, the income tax rate cut provided 19 percent of its total benefit to households earning more than \$500,000 because these Virginia households have the most income, pay the most in individual income tax, and thus benefit the most from an income tax rate cut. Meanwhile, because the CTC has an income phase-out, these high-income households saw no benefit from the CTC. But the CTC still provided 39 percent of its benefit to households with AGI between \$100,000 and \$500,000 because the income phase-out threshold was set at a relatively high level.

A similar dynamic in the distribution of benefits occurred in the other three states when we compared a 5 percent across-the-board income tax rate reduction to a CTC proposal with a similar revenue cost. In general, an income tax rate reduction disproportionately benefits households with high levels of income (and thus high levels of tax payment), while a CTC typically delivers a large share of its total benefit to low- or middle-income households (depending on its design, and particularly the income phase-out threshold).

However, a CTC proposal does not benefit *all* low- or middle-income households, just those with eligible children. The CTC proposal discussed above provided a tax cut to 22 percent of Virginia households, while the income tax rate cut benefited 68 percent of Virginia households. Thus, policymakers could consider pairing a CTC with other policies that either benefit a broader share of households (e.g., higher standard deduction or

income tax rate cut) or target benefits at households who do not benefit from the CTC (e.g., expanding EITC benefits for “childless” workers¹⁷).

The challenge is finding a set of reforms that both achieve these policy goals and fit fiscal restraints.

CONCLUSION

States are increasingly using child tax credits to deliver cash benefits directly to children and their families. As of December 2023, 15 states offered a CTC, with 12 states either enacting or expanding a CTC since the ARP temporarily but significantly expanded the federal CTC in 2021. And many states now provide eligible families significant cash benefits with these credits, with five states offering a refundable CTC of \$1,000 or more per eligible child.

However, state child tax credits vary significantly across states, with some providing broad benefits and others targeting support at specific households. That is because the CTC provides policymakers with four major policy levers to adjust the credit’s annual revenue cost and distribution of benefits: the amount of the credit, age eligibility rules for children, income limitations for the filer, and whether or not the credit is refundable. As this report has shown, there are numerous ways policymakers can adjust these four policy levers to craft a credit for their state.

The levers create policy tradeoffs, though. Lowering the credit amount, restricting the child age eligibility, enacting a low-income threshold phase-out, and making the credit nonrefundable can all lower the annual revenue cost of the CTC, but they all do so by limiting the size of the tax cut for eligible households or excluding some families from the benefit. Making these policies more generous increases benefits to eligible families or broadens the support across more households, but at a higher annual revenue cost.

But there is no need to make all four policy levers more or less generous. As we see in the Tax Policy Center state tax model estimates for various credits in Illinois, Michigan, Nebraska, and Virginia, policymakers can pick and choose numerous variations of a state CTC, each with different revenue costs and distribution of benefits according to their own specific fiscal circumstances and policy priorities.

In all states, policymakers should be mindful of the state’s existing tax policies and how they could interact with a new CTC; understand that age restrictions can help deliver large, broad benefits, but to a smaller share of families; and know that most CTC proposals will provide a large share of total tax benefits to middle-income households. But policymakers also have a great deal of control over the design and impact of a new or expanded CTC, giving lawmakers in every state the opportunity to construct a state CTC that fits their priorities and budget.

APPENDIX A

TABLE A1

Tax Policy Center State Tax Model Results for Illinois's 36 CTC Proposals

Credit Amount	Refundability	Phaseout Thresholds		Revenue Cost (Millions)	Households Benefiting (%)	Average Annual Tax Cut	Share to Households <\$30k
		Single	Married				
Age eligibility: children younger than age 6							
\$100	NR	\$30,000	\$60,000	\$48	5.2%	\$128	51.1%
		\$100,000	\$200,000	\$84	9.2%	\$128	29.1%
		\$200,000	\$400,000	\$91	9.9%	\$128	26.9%
	R	\$30,000	\$60,000	\$53	5.7%	\$131	55.0%
		\$100,000	\$200,000	\$90	9.7%	\$130	32.6%
		\$200,000	\$400,000	\$97	10.4%	\$130	30.3%
\$500	NR	\$30,000	\$60,000	\$218	5.8%	\$529	40.9%
		\$100,000	\$200,000	\$388	9.3%	\$582	23.1%
		\$200,000	\$400,000	\$419	9.9%	\$588	21.3%
	R	\$30,000	\$60,000	\$283	6.2%	\$635	52.0%
		\$100,000	\$200,000	\$454	9.8%	\$647	32.4%
		\$200,000	\$400,000	\$485	10.4%	\$649	30.3%
\$1,000	NR	\$30,000	\$60,000	\$371	6.3%	\$828	31.0%
		\$100,000	\$200,000	\$687	9.4%	\$1,018	16.8%
		\$200,000	\$400,000	\$744	10.0%	\$1,041	15.5%
	R	\$30,000	\$60,000	\$595	6.7%	\$1,234	49.4%
		\$100,000	\$200,000	\$914	9.9%	\$1,288	32.2%
		\$200,000	\$400,000	\$971	10.4%	\$1,296	30.3%
Age eligibility: children younger than age 17							
\$100	NR	\$30,000	\$60,000	\$119	10.4%	\$159	46.6%
		\$100,000	\$200,000	\$226	18.9%	\$167	24.6%
		\$200,000	\$400,000	\$245	20.3%	\$168	22.6%
	R	\$30,000	\$60,000	\$132	11.3%	\$164	50.7%
		\$100,000	\$200,000	\$240	19.8%	\$169	28.0%
		\$200,000	\$400,000	\$259	21.2%	\$170	25.9%
\$500	NR	\$30,000	\$60,000	\$538	11.7%	\$640	33.9%
		\$100,000	\$200,000	\$1,023	19.1%	\$744	17.9%
		\$200,000	\$400,000	\$1,111	20.4%	\$760	16.4%
	R	\$30,000	\$60,000	\$722	12.6%	\$802	46.6%
		\$100,000	\$200,000	\$1,211	20.0%	\$842	27.8%
		\$200,000	\$400,000	\$1,299	21.3%	\$851	25.9%
\$1,000	NR	\$30,000	\$60,000	\$901	13.0%	\$964	24.8%
		\$100,000	\$200,000	\$1,772	19.4%	\$1,274	12.6%
		\$200,000	\$400,000	\$1,931	20.4%	\$1,317	11.6%
	R	\$30,000	\$60,000	\$1,552	13.9%	\$1,559	43.3%
		\$100,000	\$200,000	\$2,444	20.3%	\$1,680	27.5%
		\$200,000	\$400,000	\$2,604	21.3%	\$1,701	25.8%

Source: Tax Policy Center state tax model.

Notes: NR = nonrefundable credit; R = refundable credit. The "Phaseout Thresholds" are adjusted gross income. In each estimate, the CTC had a 5 percent phase-out rate that began at that AGI threshold amount. "Average Annual Tax Cut" was only for households eligible for the CTC. "Share to Households < \$30k" is share of the CTC's total tax benefit going to households with federal AGI less than \$30,000.

APPENDIX A

TABLE A2

Tax Policy Center State Tax Model Results for Michigan 36 CTC Proposals

Credit Amount	Refundability	Phaseout Thresholds		Revenue Cost (Millions)	Households Benefiting (%)	Average Annual Tax Cut	Share to Households <\$30k
		Single	Married				
Age eligibility: children younger than age 6							
\$100	NR	\$30,000	\$60,000	\$27	4.2%	\$117	44.5%
		\$100,000	\$200,000	\$55	7.9%	\$123	22.4%
		\$200,000	\$400,000	\$59	8.5%	\$124	20.9%
	R	\$30,000	\$60,000	\$39	5.4%	\$128	58.7%
		\$100,000	\$200,000	\$66	9.1%	\$129	34.4%
		\$200,000	\$400,000	\$70	9.7%	\$129	32.5%
\$500	NR	\$30,000	\$60,000	\$114	4.7%	\$431	29.9%
		\$100,000	\$200,000	\$240	8.0%	\$535	14.2%
		\$200,000	\$400,000	\$258	8.5%	\$543	13.2%
	R	\$30,000	\$60,000	\$205	5.9%	\$621	55.2%
		\$100,000	\$200,000	\$331	9.2%	\$644	34.2%
		\$200,000	\$400,000	\$350	9.7%	\$646	32.5%
\$1,000	NR	\$30,000	\$60,000	\$191	5.2%	\$652	19.8%
		\$100,000	\$200,000	\$420	8.1%	\$928	9.0%
		\$200,000	\$400,000	\$454	8.5%	\$954	8.3%
	R	\$30,000	\$60,000	\$434	6.4%	\$1,207	52.3%
		\$100,000	\$200,000	\$667	9.3%	\$1,283	34.1%
		\$200,000	\$400,000	\$700	9.7%	\$1,291	32.4%
Age eligibility: children younger than age 17							
\$100	NR	\$30,000	\$60,000	\$68	8.5%	\$142	38.8%
		\$100,000	\$200,000	\$147	16.4%	\$160	18.0%
		\$200,000	\$400,000	\$158	17.5%	\$162	16.7%
	R	\$30,000	\$60,000	\$94	10.7%	\$158	53.9%
		\$100,000	\$200,000	\$173	18.6%	\$167	29.3%
		\$200,000	\$400,000	\$184	19.6%	\$168	27.5%
\$500	NR	\$30,000	\$60,000	\$281	9.8%	\$514	23.5%
		\$100,000	\$200,000	\$633	16.6%	\$682	10.5%
		\$200,000	\$400,000	\$683	17.5%	\$698	9.7%
	R	\$30,000	\$60,000	\$518	11.9%	\$776	49.1%
		\$100,000	\$200,000	\$873	18.7%	\$833	29.1%
		\$200,000	\$400,000	\$923	19.6%	\$841	27.5%
\$1,000	NR	\$30,000	\$60,000	\$475	11.1%	\$765	15.5%
		\$100,000	\$200,000	\$1,085	16.8%	\$1,155	6.8%
		\$200,000	\$400,000	\$1,174	17.5%	\$1,198	6.3%
	R	\$30,000	\$60,000	\$1,121	13.3%	\$1,513	45.3%
		\$100,000	\$200,000	\$1,759	18.9%	\$1,662	28.9%
		\$200,000	\$400,000	\$1,848	19.7%	\$1,681	27.5%

Source: Tax Policy Center state tax model.

Notes: NR = nonrefundable credit; R = refundable credit. The "Phaseout Thresholds" are adjusted gross income. In each estimate, the CTC had a 5 percent phase-out rate that began at that AGI threshold amount. "Average Annual Tax Cut" was only for households eligible for the CTC. "Share to Households < \$30k" is share of the CTC's total tax benefit going to households with federal AGI less than \$30,000.

APPENDIX A

TABLE A3

Tax Policy Center State Tax Model Results for Nebraska's 36 CTC Proposals

Credit Amount	Refundability	Phaseout Thresholds		Revenue Cost (Millions)	Households Benefiting (%)	Average Annual Tax Cut	Share to Households <\$30k
		Single	Married				
Age eligibility: children younger than age 6							
\$100	NR	\$30,000	\$60,000	\$4	3.3%	\$112	15.5%
		\$100,000	\$200,000	\$10	8.1%	\$124	5.8%
		\$200,000	\$400,000	\$11	8.6%	\$125	5.4%
	R	\$30,000	\$60,000	\$8	5.8%	\$129	48.1%
		\$100,000	\$200,000	\$14	10.6%	\$131	26.0%
		\$200,000	\$400,000	\$15	11.1%	\$131	24.7%
\$500	NR	\$30,000	\$60,000	\$15	4.1%	\$362	6.9%
		\$100,000	\$200,000	\$44	8.2%	\$529	2.3%
		\$200,000	\$400,000	\$48	8.6%	\$540	2.2%
	R	\$30,000	\$60,000	\$41	6.5%	\$619	44.5%
		\$100,000	\$200,000	\$71	10.7%	\$651	25.9%
		\$200,000	\$400,000	\$74	11.1%	\$654	24.7%
\$1,000	NR	\$30,000	\$60,000	\$25	4.8%	\$513	4.1%
		\$100,000	\$200,000	\$76	8.3%	\$901	1.4%
		\$200,000	\$400,000	\$82	8.7%	\$931	1.3%
	R	\$30,000	\$60,000	\$88	7.3%	\$1,196	41.5%
		\$100,000	\$200,000	\$142	10.8%	\$1,297	25.8%
		\$200,000	\$400,000	\$148	11.1%	\$1,308	24.7%
Age eligibility: children younger than age 17							
\$100	NR	\$30,000	\$60,000	\$10	7.0%	\$136	11.7%
		\$100,000	\$200,000	\$29	16.8%	\$167	4.0%
		\$200,000	\$400,000	\$31	17.8%	\$169	3.7%
	R	\$30,000	\$60,000	\$19	11.5%	\$162	42.7%
		\$100,000	\$200,000	\$38	21.4%	\$175	21.3%
		\$200,000	\$400,000	\$40	22.4%	\$176	20.2%
\$500	NR	\$30,000	\$60,000	\$39	8.8%	\$437	5.1%
		\$100,000	\$200,000	\$120	17.0%	\$691	1.7%
		\$200,000	\$400,000	\$129	17.9%	\$710	1.6%
	R	\$30,000	\$60,000	\$107	13.4%	\$791	37.8%
		\$100,000	\$200,000	\$191	21.6%	\$872	21.2%
		\$200,000	\$400,000	\$200	22.4%	\$879	20.2%
\$1,000	NR	\$30,000	\$60,000	\$69	10.7%	\$630	2.9%
		\$100,000	\$200,000	\$198	17.2%	\$1,130	1.0%
		\$200,000	\$400,000	\$214	17.9%	\$1,177	0.9%
	R	\$30,000	\$60,000	\$238	15.3%	\$1,539	34.0%
		\$100,000	\$200,000	\$384	21.8%	\$1,738	21.1%
		\$200,000	\$400,000	\$400	22.5%	\$1,757	20.2%

Source: Tax Policy Center state tax model.

Notes: NR = nonrefundable credit; R = refundable credit. The "Phaseout Thresholds" are adjusted gross income. In each estimate, the CTC had a 5 percent phase-out rate that began at that AGI threshold amount. "Average Annual Tax Cut" was only for households eligible for the CTC. "Share to Households < \$30k" is share of the CTC's total tax benefit going to households with federal AGI less than \$30,000.

APPENDIX A

TABLE A4

Tax Policy Center State Tax Model Results for Virginia's 36 CTC Proposals

Credit Amount	Refundability	Phaseout Thresholds		Revenue Cost (Millions)	Households Benefiting (%)	Average Annual Tax Cut	Share to Households <\$30k
		Single	Married				
Age eligibility: children younger than age 6							
\$100	NR	\$30,000	\$60,000	\$20	3.8%	\$117	39.1%
		\$100,000	\$200,000	\$45	8.1%	\$122	17.5%
		\$200,000	\$400,000	\$52	9.2%	\$123	15.3%
	R	\$30,000	\$60,000	\$30	5.2%	\$127	54.2%
		\$100,000	\$200,000	\$55	9.5%	\$127	29.7%
		\$200,000	\$400,000	\$62	10.6%	\$127	26.5%
\$500	NR	\$30,000	\$60,000	\$81	4.4%	\$403	23.4%
		\$100,000	\$200,000	\$200	8.2%	\$523	9.5%
		\$200,000	\$400,000	\$231	9.2%	\$540	8.3%
	R	\$30,000	\$60,000	\$163	5.8%	\$610	50.7%
		\$100,000	\$200,000	\$282	9.6%	\$630	29.4%
		\$200,000	\$400,000	\$313	10.6%	\$635	26.5%
\$1,000	NR	\$30,000	\$60,000	\$140	4.9%	\$622	14.0%
		\$100,000	\$200,000	\$364	8.4%	\$933	5.4%
		\$200,000	\$400,000	\$420	9.2%	\$980	4.7%
	R	\$30,000	\$60,000	\$345	6.3%	\$1,186	48.0%
		\$100,000	\$200,000	\$571	9.8%	\$1,253	29.0%
		\$200,000	\$400,000	\$627	10.6%	\$1,269	26.4%
Age eligibility: children younger than age 17							
\$100	NR	\$30,000	\$60,000	\$51	7.8%	\$141	34.1%
		\$100,000	\$200,000	\$125	17.0%	\$158	14.0%
		\$200,000	\$400,000	\$142	19.1%	\$161	12.2%
	R	\$30,000	\$60,000	\$75	10.3%	\$157	49.4%
		\$100,000	\$200,000	\$149	19.5%	\$164	24.9%
		\$200,000	\$400,000	\$166	21.6%	\$166	22.2%
\$500	NR	\$30,000	\$60,000	\$207	9.2%	\$487	18.0%
		\$100,000	\$200,000	\$548	17.4%	\$678	6.8%
		\$200,000	\$400,000	\$629	19.2%	\$705	5.9%
	R	\$30,000	\$60,000	\$412	11.6%	\$762	45.0%
		\$100,000	\$200,000	\$755	19.9%	\$817	24.5%
		\$200,000	\$400,000	\$835	21.7%	\$829	22.2%
\$1,000	NR	\$30,000	\$60,000	\$368	10.5%	\$752	10.3%
		\$100,000	\$200,000	\$992	17.8%	\$1,201	3.8%
		\$200,000	\$400,000	\$1,135	19.3%	\$1,267	3.4%
	R	\$30,000	\$60,000	\$894	13.0%	\$1,476	41.5%
		\$100,000	\$200,000	\$1,533	20.3%	\$1,627	24.2%
		\$200,000	\$400,000	\$1,675	21.7%	\$1,657	22.1%

Source: Tax Policy Center state tax model.

Notes: NR = nonrefundable credit; R = refundable credit. The "Phaseout Thresholds" are adjusted gross income. In each estimate, the CTC had a 5 percent phase-out rate that began at that AGI threshold amount. "Average Annual Tax Cut" was only for households eligible for the CTC. "Share to Households < \$30k" is share of the CTC's total tax benefit going to households with federal AGI less than \$30,000.

- ¹ US Census Bureau, Expansions to Child Tax Credit Contributed to 46% Decline in Child Poverty Since 2020," Sept. 13, 2022, <https://www.census.gov/library/stories/2022/09/record-drop-in-child-poverty.html>.
- ² Arkansas, Delaware, Iowa, Nebraska, and Oregon offer a personal credit that is available to the filer, spouse, and dependents. While children benefit from these personal credits, they function more like personal exemptions because they are relatively small and not specifically targeted at children. Thus, they are not included in our count of state child tax credits.
- ³ "How do state earned income tax credits work?" Briefing Book, Tax Policy Center, accessed Dec. 4, 2023, <https://www.taxpolicycenter.org/briefing-book/how-do-state-earned-income-tax-credits-work>.
- ⁴ The unit of analysis for this paper is nondependent tax units. We use "households" in the text for simplicity. Most actual households consist of a single tax unit but some contain more than one tax unit (e.g., parents who file as a couple and an older child who earns enough income to file separately). We use "households" to describe these separate tax units.
- ⁵ "Young Child Tax Credit," State of California Franchise Tax Board, accessed on Sept. 4, 2023, <https://www.ftb.ca.gov/file/personal/credits/young-child-tax-credit.html>.
- ⁶ "Healey-Driscoll Administration Celebrates Tax Cut Savings for Children and Families," Mass.gov, Oct. 5, 2023, <https://www.mass.gov/news/healey-driscoll-administration-celebrates-tax-cut-savings-for-children-and-families>.
- ⁷ "HB23-1112. Earned Income And Child Tax Credits," Colorado General Assembly, accessed on Dec. 4, 2023, <https://leg.colorado.gov/bills/hb23-1112>.
- ⁸ Minnesota's age cutoff is children younger than age 18 in part because its child tax credit was consolidated with the state's previous earned income tax credit, and the state EITC used age 18 as its age cutoff.
- ⁹ New Mexico's age cutoff is children younger than age 19 because its eligibility is based on the federal definition of "dependent" under the federal personal exemption rules. Thus, a New Mexico family can also claim children younger than age 24 for its state CTC if those children are students and others qualify as a dependent (same as the federal personal exemption rules).
- ¹⁰ The federal CTC income rules are more complicated. The federal CTC phases-in with earned income (i.e., wages, salaries, tips, and other taxable employee pay) and phases out with federal AGI. And the nonrefundable part of the CTC phases-in with the filer's federal tax liability. Most states use federal AGI for their income phase-out. The exceptions are California (earned income), New Jersey (taxable income), Oregon (state-modified AGI), and Utah (state-modified AGI).
- ¹¹ "Child Tax Credit," New Jersey Treasury Division of Taxation, accessed on Jan. 29, 2024, <https://www.nj.gov/treasury/taxation/individuals/childtaxcredit.shtml>.
- ¹² New York's refundable CTC is calculated as a share of the pre-TCJA CTC, so there is an income phase-in for their state credit, but filers with little or no income can still claim a \$100 credit at minimum.
- ¹³ "What are marriage penalties and bonuses?" Briefing Book, Tax Policy Center, accessed on Jan. 30, 2024, <https://www.taxpolicycenter.org/briefing-book/what-are-marriage-penalties-and-bonuses>.
- ¹⁴ The state tax model is based on the Tax Policy Center federal tax model with the data base reweighted to be representative by state. See Khitatrakun, Surachai, Gordon B. Mermin, and Norton Francis. 2016. "Incorporating State Analysis into the Tax Policy Center's Microsimulation Model: Documentation and Methodology." Washington, DC: Tax Policy Center. <https://www.taxpolicycenter.org/publications/incorporating-state-analysis-tax-policy-centers-microsimulation-model-documentation-and>
- ¹⁵ States have sources of revenue other than tax, such as charges, fines, and fees, plus federal transfers. We used total tax collections because Census reported 2022 state tax collection data for all four states at the time of publication.
- ¹⁶ The actual revenue cost for this proposal and the share of benefits going to the state's highest income households could be higher because of Virginia's pass-through entity (PTE) tax that allows some residents to file at the entity level rather than as an individual so they can benefit from the federal state and local tax deduction. That provision was not fully

NOTES

incorporated into our state tax model when these estimates were made. For more on state PTE taxes, please see "Understanding Revenue Implications For State Pass-Through-Entity Taxes," published on Jan. 19, 2023, <https://www.taxpolicycenter.org/taxvox/understanding-revenue-implications-state-pass-through-entity-taxes>.

- ¹⁷ Auxier, Richard. "District of Columbia Shows How to Expand the EITC For Childless Workers," Tax Policy Center, Feb. 29, 2019, <https://www.taxpolicycenter.org/taxvox/district-columbia-shows-how-expand-eitc-childless-workers>.

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ABOUT THE AUTHORS

Richard C. Auxier is a principal policy associate in the Urban-Brookings Tax Policy Center. His work focuses on state and local tax policy, budgets, and other finance issues. He also serves as an adviser to the DC Policy Center's Alice M. Rivlin Initiative for Economic Policy & Competitiveness. Before joining Urban, Auxier was on the staff of the 2013 DC Tax Revision Commission and helped write the commission's final report on recommendations for improving the District's tax system. He also was previously a researcher and editor at the Pew Research Center. Auxier attended the University of Maryland for his undergraduate degree and his master's degree in public policy.

David Weiner has worked on tax policy issues for 30 years, first at the US Department of Treasury, and then at the Congressional Budget Office, where he headed the Tax Analysis Division. He currently works as a consultant with the Tax Policy Center, focusing on modeling state income taxes. He has a Master of Public Policy degree from the University of Michigan.

Nikhita Airi is a research associate in the Urban-Brookings Tax Policy Center and a contributor to the Urban Institute's State and Local Finance Initiative. Her research focuses on the earned income tax credit and child tax credit, state income and sales taxes, and federal grants to state and local governments. Airi holds a BA in economics from Reed College.

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