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Estimating the Realized Gains of the Expanded Child Tax Credit in California

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California Policy Lab

Abstract

This report uses state tax and safety net enrollment data from tax year (TY) 2019 to simulate the impacts of the 2021 Child Tax Credit (CTC), expanded under the American Rescue Plan Act (ARPA), on children enrolled in safety net programs in California. We find the number of children eligible for the CTC in the safety net caseload rose 67% under the ARPA. Put differently: we estimate that one quarter of all children enrolled in the Supplemental Nutrition Assistance Program (SNAP) or the Temporary Assistance for Needy Families (TANF) in California became newly eligible for the CTC under the ARPA. As a result, an additional \$3.6 billion in CTC was made available to children enrolled in safety-net programs through the ARPA.

While not all eligible children received the CTC, because they were not claimed on a tax return, the ARPA CTC reached three-quarters of eligible children enrolled in safety net programs. It also had wide reach into California's most vulnerable communities, including those in California's poorest regions and across all racial and ethnic groups. The families of children enrolled in safety net programs with earnings above \$5,000 received 90-95% of the intended gains of the ARPA.

To ensure equitable distribution of the CTC, future efforts should focus on increasing access to children residing in households with little to no income, Spanish-speaking households, children living in rural communities, and children living in mixed-status immigration households. If all eligible families earning less than \$10,000 were to file tax returns, we estimate that they would receive a total of \$2.36 billion—almost half of the total payments that would be made if all eligible children were on a tax return.

Introduction

In 2019, despite a long and robust economic recovery, 9.1 million American children lived in families with income below the poverty line. Overall 12.5 percent of children were poor, higher than the poverty rate for all persons (11.7 percent). The risk of child poverty is not shared equally across the population. Black and Hispanic children are more likely to be poor than white children, children living with one (or no) biological parent are more likely to be poor compared to those living with two biological parents, and children living with parents with lower education levels are at higher risk of being poor.¹

The National Academy of Science, Engineering and Medicine (NASEM) report “Roadmap to Reducing Child Poverty” concluded that the societal costs of child poverty are high: “there is considerable uncertainty about the exact size of the costs of child poverty. Nevertheless,

¹ Numbers from Fox 2020 and report the Supplemental Poverty Measure, published annually by the U.S. Census Bureau. They capture the percent of the population in poverty after social safety net transfers (in cash, tax, and in kind) are accounted for.

whether these costs to the nation amount to 4.0 or 5.4 percent of GDP — roughly between \$800 billion and \$1.1 trillion annually in terms of the size of the U.S. economy in 2018 — it is likely that significant investment in reducing child poverty will be very cost-effective over time.” (NASEM 2019, p. 90)

Compared to other OECD countries, the U.S. invests less in the social safety net for children and has higher child poverty rates (Aizer, Hoynes, Lleras-Muney 2022). Yet the U.S. has made important progress in reducing child poverty and current policies are effective in reducing child poverty. The Earned Income Tax Credit (EITC) and the Child Tax Credit (CTC) have the largest anti-poverty impact on children and are estimated to reduce child poverty by 5.5 percentage points (Fox 2020). Also important are Supplemental Nutrition Assistance Program (SNAP), Social Security, and Supplemental Security Income.

The CTC began in 1997 as a modest \$500-per-child tax credit. Following a series of Congressional expansions over the next two decades the CTC has grown into the largest child cash or near-cash benefit in the US². However, the combination of a minimum income requirement and lack of full refundability has left the poorest families ineligible for the full benefit. In 2018, the Tax Cuts and Job Act (TCJA) expanded the CTC, significantly increasing the maximum credit to \$2,000 and extending eligibility to single (married) filers with incomes up to \$200,000 (\$500,000). The TCJA also lowered the income requirement to \$2,500 and increased the refundable portion of the credit to \$1,400. Nonetheless, under the TCJA, the poorest third of children receive either no credit or only a partial amount. More than 53% of Black and 50% of Hispanic children received less than the full credit amount compared to 23% of white children³. Overall, expanding the CTC to cover the poorest families remains a significant opportunity for reducing child poverty. In fact, it was a central policy recommendation in the NASEM report whose goal was reducing child poverty by half in 10 years (NASEM 2019).

The American Rescue Plan Act (ARPA) expanded the CTC for one year only, for Tax Year (TY) 2021. Congress increased the credit to \$3,600 for children under the age of 6, \$3,000 for older children, expanded the credit to cover 17-year-olds, eliminated the minimum income requirement, and for the first time extended the credit to children who live in very low income and no income households. The payment also shifted to a monthly schedule, so almost all families with children received half the credit for 2021 in monthly installments between July and December 2021, the balance being paid when families filed their tax returns in early 2022.

To receive the CTC, an adult must file a tax return and claim a child on that return. However, there has long been a concern that families who do not routinely file tax returns – those with low

² Hahn, Heather, Cary Lou, Julia Isaacs, Eleanor Lauderback, Hannah Daly and C. Eugene Steurle, “Kids Share 2021: Report on Federal Expenditures on Children Through 2021 and Future Projections,” Urban Institute, 2021.

³ Collyer, Sophie, David Harris and Christopher Wimer. 2019. Left Behind: The One-Third of Children in Families Who Earn Too Little to Get the Full Child Tax Credit. Columbia University Poverty & Social Policy Brief, 3(6), May 13.

levels of earned (or unearned) income and without a legal tax filing obligation – will not receive the CTC and other anti-poverty tax credits despite being eligible. This concern was exacerbated during the pandemic, when the federal government used previous years' tax returns to automate an advanced delivery of the CTC, along with the stimulus payments. If families had not filed a return in 2019 or 2020, they would have needed to do so in order to receive these credits.

This brief uses state administrative data from California, including safety-net enrollment data linked to state tax filing data and quarterly earnings data, to estimate which low-income Californian children received the expanded CTC, understand which children did not receive these credits because they were not claimed on a tax return, and how children are most impacted by the 2021 expansion of the Child Tax Credit.

We find that while the ARPA CTC reached 76% of eligible California children enrolled in the Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF), with 1.2 million children receiving \$3.8 billion in the ARPA CTC. The number of children eligible for the CTC in the safety-net caseload rose 67% under ARPA from the TCJA. Put differently: one quarter of all children enrolled in SNAP or TANF in California became newly eligible for the CTC under ARPA. As a result, an additional \$3.6 billion in CTC was made available to children enrolled in SNAP and TANF through ARPA.

The expanded CTC has had wide reach into some of California's most vulnerable communities, including children who live in California's poorest regions, and those who live in mixed-immigration status households. Tax units with children enrolled in SNAP and TANF with earnings above \$5,000 realized 90-95% of the gains of the ARPA. Tax units with no earnings gained the most under ARPA, with an average of \$5,300 of realized gains (accounting for filing patterns) per tax unit.

However, we estimate that the ARPA CTC did not reach a quarter of children enrolled in SNAP and TANF in CDSS programs. These children live in households that stand to gain the most from receiving the ARPA CTC: including households with wage earnings under \$10,000. Only 58% of the potential ARPA CTC gains will reach children from tax units with no earnings. If all eligible tax units earning less than \$10,000 were to file tax returns, we estimate that they would receive a total of \$2.36 billion — almost half of the total payments that would be made if all eligible children were claimed. Efforts to improve equitable distribution of future iterations of the CTC should focus on understanding the barriers faced by these children and their families in accessing the CTC.

California is an important state to be doing this work. This brief demonstrates the potential of using linked state administrative data to track and analyze the efficacy of providing anti-poverty policies through the tax code with the requisite tax filing requirement. While Congressional action is currently stalled on the CTC, states like California are continuing to use the tax code to deliver cash aid to families, including a newly-refundable young child tax credit and the state inflation relief stimulus checks. We are at a crucial policy moment: investing now in figuring out

how to use the tax code to deliver aid to all will pay long-term dividends in the government's ability to deliver cash assistance routinely and quickly.

Research Methods and Data

Data:

As part of our analysis, we construct a unique dataset that includes the tax filing status, earnings, and demographic characteristics of children and adults who receive SNAP and TANF benefits in California.⁴ The resulting dataset provides a snapshot of California children who receive safety-net assistance, allowing us to estimate how many of these children stand to benefit from different tax credits because they are newly eligible, as well as how many might miss out because they are not claimed on a tax return. Multiple state agencies contributed to this effort, particularly the Franchise Tax Board (FTB) and the California Department of Social Services (CDSS).

To construct our dataset, we first link anonymized, individual-level safety-net enrollment records to individual tax records using a one-way cryptographic technique known as hashing. We apply a series of rules (outlined [here](#)) to conduct exact and fuzzy matches based on enrollees' social security number, name, and date of birth. Our sample covers all Californians enrolled in SNAP or TANF between January 2018 and June 2020. We capture individual tax filing status in August 2020, which includes all TY 2019 returns submitted before then. For every CDSS enrollee, we construct an indicator for whether they either filed or were claimed as a dependent on a 2019 tax return.

Safety-net enrollment records from the CDSS include demographic and administrative information that we use to identify and describe individuals who did and did not appear on a 2019 tax return. The data associates each individual with an assistance unit, or case, which we sometimes refer to as an enrollee's "family" or "household," but which functionally groups together individuals who jointly receive benefits, regardless of their relationship. For each individual in a case, we observe characteristics such as age, gender, race/ethnicity, primary language, and program(s) of enrollment.

Our dataset also includes information on individuals' quarterly wage earnings, provided by the Employment Development Department (EDD). The EDD data contain actual wage earnings for all adults in our sample, so long as they earn more than \$50 in a given quarter.⁵ We observe enrollees' earnings during their period of enrollment, as well as for the six quarters before and after their enrollment in CDSS programs. The data do not include self-employment and other non-wage income. For each adult, we determine their total wage earnings in TY 2019 by adding up their four quarters of earnings for that calendar year.

⁴ In California, SNAP and TANF are called CalFresh and CalWORKs, respectively. In this brief, we refer to these programs as SNAP and TANF.

⁵ We assume that adults whose quarterly earnings record is missing have \$0 in wage earnings that quarter.

Methodology:

Using this linked dataset, we estimate the number of children enrolled in CDSS programs who are likely to receive the CTC, those that are at-risk of not receiving the CTC, and the amounts of CTC benefits that would be awarded to under the ARPA compared to the TCJA (current law). Since CTC eligibility depends on tax unit composition and income level, we first group children and adults in our sample into tax units. The key empirical challenge is that, by definition, we do not observe tax units for non-filers — that is, we do not know with whom a non-filing adult would have jointly filed a tax return, nor which children they would have claimed as dependents.

We therefore define *likely* tax units for California safety-net enrollees. Our algorithm defers to observed tax returns whenever possible, and supplements with information on the CDSS case when necessary. For adults who filed a tax return in TY 2019, and for children who were claimed as dependents on a return, we simply group individuals who appeared on the same tax return into a single tax unit. For adults who did *not* file, and for children who were *not* claimed on a TY 2019 return, we assume that their hypothetical tax unit comprises all the members of their CDSS case who also did not appear on a return. That is, we group together non-filers into prospective tax units with other non-filers from the same CDSS case. We refer to children who are not claimed as dependents on a tax return as “at-risk” of missing out on the CTC.

For adults that appear on a return, we use the tax filing status listed on their return; for adults who do not file a return, we assume a filing status based on the number of other non-filing adults on their case. For example, if a case has only one non-filing adult and at least one unclaimed child, we assume head of household status. If a CDSS case has more than one non-filing adult along with unclaimed children, we assume married filing jointly status.

We estimate each constructed tax unit’s aggregate income using the linked wage data. To do so, we sum up observed 2019 wage earnings for adults in a tax unit, which proxies for the adjusted gross income (AGI) on this return.⁶ We then develop indicators of CTC eligibility under the ARPA and the TCJA by using our estimated tax unit earnings (AGI), filing status, and counts of the number of children in the tax unit.⁷ Applying the criteria specified by the ARPA and the TCJA, we compare the size of the credits a tax unit would receive under the two policy regimes.

Note that when calculating and comparing benefit amounts from the TCJA CTC versus the ARPA CTC, we exclude all children who we are unable to “pair” with at least one adult – and therefore unable to calculate wage earnings for the tax unit. This means we exclude the following groups of children from the analysis:

- We observe a child on a CDSS case and on a tax return, but no adults on their tax return appear in the CDSS data (and therefore we do not observe the adult earnings)
- We observe a child on a CDSS case (and not on a tax return), but we observe no adults on that case. These “child-only” cases may result because other adults in the household do not meet safety-net eligibility due to the immigration status of their parents.

⁶ Unfortunately, we do not directly observe AGI in our current dataset.

⁷ We separately calculate the number of children under 5 years old (who receive larger credits under the ARPA), and children aged 17 years old (who are ineligible for the CTC under the TCJA).

- We observe a child on a CDSS case who is not claimed on a tax return and all adults on their CDSS case do appear on a tax return (and therefore there are no adults in the CDSS case to join with the child to form a tax filing unit).

Comparing Likely Child Tax Credit Recipients to Non-recipients

Our sample includes 2.3 million California children enrolled in SNAP and TANF, about 29% of all children in the state (see Table 1). We estimate that 1.75 million of these children were claimed on a 2019 tax return and have automatically received the ARPA CTC. In other words, by distributing payments through the tax system, we estimate that the expanded CTC reached 76% of eligible California children enrolled in SNAP and TANF. This also means that nearly one quarter (24%) of children enrolled in safety-net programs may have missed out on the ARPA CTC. To better understand the efficacy of the CTC and its delivery method, we compare the children who likely received and are at-risk of not receiving the credit, focusing on their personal demographic and tax unit characteristics.

Likely Recipients:

Table 1 describes the children whose tax units have likely received the ARPA CTC (column 3, labeled “Likely CTC Recipients”). Among children who are likely CTC recipients, over three quarters (78%) come from tax units with positive wage earnings⁸; on average, the adults who claim these children earned \$18,600 in 2019 (median \$15,000). Over half (61%) of children whose tax units received the CTC are identified as Hispanic, while 13% are identified as White and 10% are identified as Black. Most of the remaining children do not have an identified race/ethnicity, or have an unspecified race/ethnicity. Almost half (48%) of the children who receive the ARPA CTC appear on a CDSS case with a single adult.

The CTC has had wide reach into some of California’s most vulnerable communities. Roughly 19% of children in our sample appear on a “child-only” CDSS case — cases where children are eligible for safety-net benefits but parents (and other co-resident family members) are not, often due to their immigration status. Among these children, over 67% received the credit. In California’s highest poverty regions, including the North Coast and San Joaquin Valley, over 70% of children enrolled in safety-net programs received the credit (Table 2). That the ARPA CTC has successfully reached some of the neediest and most disadvantaged children in California points to the potential for future efforts to direct anti-poverty relief to families via the tax code.

Likely Non-recipients:

We next summarize the characteristics of California children who are at-risk of not receiving the expanded CTC.

We estimate that a third of children with no adults on their CDSS case (generally due to mixed-immigration status) are at-risk of not getting the CTC, compared to 24% of all children (Table 1).

⁸ For these calculations we exclude the 792,788 children who we cannot assign to a tax unit with earnings.

About 4-in-5 of at-risk children (82%) come from likely tax units that either do not contain an adult enrolled in CDSS programs (47%), or from a tax unit on which the adults have no earnings (35%).

Additionally, children who did not receive the CTC reside in tax units with lower earnings than those who received the CTC: their tax units have total earnings of on average \$5,400, while more than two-thirds have no earnings at all (Table 1). Figure 1 illustrates the stark distribution of at-risk children across income brackets. We estimate that 42% of children from tax units with no wage earnings have not received the ARPA CTC. Among children from tax units reporting positive earnings below \$5,000, 25% have not received the credit. By contrast, at earnings levels above \$5,000, the at-risk share is much lower, ranging from 5-11%. This comparison makes clear that California's poorest and potentially most vulnerable children are most at-risk of not receiving the expanded CTC.

We also find that children from some of the most marginalized backgrounds in California are at the greatest risk of not receiving the expanded CTC. Over 30% of children identified as American Indian or Alaska Native and 27% of children identified as Black are likely to miss out on the CTC (Table 1). Interestingly, 24% of Hispanic children are at-risk, identical to the risk for all children. We also find striking patterns when we consider the primary language of children's CDSS assistance units, or cases. Our estimates indicate that over 29% of children from Spanish-speaking households are at-risk of not receiving the CTC, while only 22% of children from English-speaking households are at-risk (Figure 2).

Across racial and ethnic backgrounds, children who live in rural communities face a higher risk of not receiving the CTC than children from urban communities. Figure 3, which visualizes this pattern, shows a particularly marked disparity between urban and rural Asian-American children and urban and rural Black children. Despite these differences, Table 2 indicates that the rates of receipt of the CTC overall are quite similar across California geographic regions.

We also observe differences in access to the CTC across children of different family compositions (Figure 4). Among children in CDSS cases with one adult and no other children, 26% are at-risk for not receiving the CTC compared to 22% for those living with two adults. Children in child-only cases (cases where a child is eligible for SNAP and TANF but no adult in their household is, often due to immigration status) are at highest risk of not receiving the CTC at 33%. Of the children in child-only SNAP and TANF cases at-risk of not receiving the CTC, 86% are identified in the data as Hispanic (Table 3). Children in child-only cases that live in certain urban areas, especially children in the Los Angeles Basin, the East Bay, and the Bay Peninsula, are at higher risk for not receiving the CTC (36%), as opposed to 25% across the entire caseload.

Overall, the more than half a million children who we estimate to not have received the ARPA CTC can be classified into three groups (Figure 5). About 26% of all at-risk children live in child-only SNAP and TANF cases. The most common reason for a child-only case is mixed immigration status households –where the child has a Social Security number and is eligible for

a number of safety-net benefits but their parents do not. Another 28% of children are at-risk despite having an adult in their CDSS case who filed a tax return. The data provides little insight into why these children remain unclaimed. Most of these adults (83%) are under the age of 40, with 60% earning below \$10,000 a year. Among the remaining children, 46%, live with an adult in the CDSS assistance unit who did not file a tax return.

Estimating the Gains from the CTC expansion

The CTC expansion brought about three major changes: it greatly increased credit amounts, made them fully refundable, and expanded the credit to 17-year-old children. Critically, full refundability meaningfully expanded access to the CTC for California SNAP and TANF families by: 1) extending the expanded, fully refundable credit to children in families earning less than \$2,000, including children in families with no earnings, and 2) eliminating the credit phase-in for low-income families.⁹

Table 4 shows how these shifts impacted the number of children eligible for the CTC as well as the total potential benefit payments. In the table, we present these calculations for all eligible children and likely-recipient children. We then compare the number of recipients and total payments under the TCJA and the ARPA. As discussed in the methods section, we can only estimate CTC amounts for children who have an adult on their likely tax unit, and for whom we observe earnings (e.g. three situations where we are unable to “pair” a child with an adult, and are therefore unable to observe the presence or absence of family earnings in the section above).

Among our California safety-net sample, we estimate that the number of children eligible for the CTC rose by fully 67% under the ARPA, from 908,000 eligible children under the TCJA to 1,518,000 eligible children under the ARPA. Put differently, one quarter of all children enrolled in SNAP or TANF in California became newly eligible for the CTC under the ARPA. We estimate that, had all eligible children been claimed on a 2019 tax return, over \$4.77 billion in CTC payments would have been distributed to these 1.5 million children. By contrast, under the TCJA, the 908,000 eligible children would have received a total of \$1.19 billion in CTC payments, assuming all were successfully claimed on tax returns. That difference represents a potential gain of \$2,363 per child eligible for the ARPA CTC.

However, almost a quarter of these potential gains remain unrealized because not all eligible children received the ARPA CTC. Specifically, we estimate that a total of \$3.85 billion in CTC payments reached children in our sample, or a gain of \$1,803 per child eligible for the ARPA. Of the 610,000 children eligible for the ARPA CTC but not the TCJA CTC, only 381,000 (62%) actually benefited from the expansion. That leaves over \$900 million in ARPA CTC payments undistributed.

⁹ Under the TCJA, the CTC is phased in at 15% for earnings over \$2,500.

Figure 6 describes tax units' realized gains by their 2019 wage earnings. While the ARPA CTC expanded eligibility for the credit substantially for the most vulnerable children – especially those with little to no income – these are also the children who are the least likely to be claimed on a tax return. We estimate that only 58% of the potential ARPA CTC gains will reach children from tax units with no earnings. Tax units with earnings below \$5,000 are expected to receive only three-quarters (74%) of their potential gains, while those with earnings above \$5,000 will likely receive between 90 and 95% of their potential gain.

At the same time, despite being the most at-risk of not receiving the CTC, we expect that children from the lowest-earning tax units in our sample will benefit the most from the ARPA eligibility changes. Figure 7 summarizes what we expect to be the average realized gains per tax unit from the ARPA CTC by earnings level (realized gains include those tax units that filed in 2019). Children in tax units with no earnings gain the most, at an average of \$5,299 extra per tax unit. Those whose tax units have positive earnings but earn less than \$5,000 also have very large gains of \$4,729 per tax unit. Gains among higher-earning tax units are much lower, ranging from \$2,950 to \$3,500 on average.

Table 5 reveals a similar pattern in the distribution of potential gains from the ARPA CTC by earnings group. If all eligible tax units earning less than \$10,000 were to file tax returns, we estimate that they would receive a total of \$2.36 billion — almost half of the total payments that would be made if all eligible children were claimed. Those same tax units would otherwise receive only \$165 million under the TCJA, or just 7% of what they are eligible for under the ARPA. Two-thirds of that difference stems entirely from the fact that the ARPA expands eligibility to tax units with no earnings. At the same time, only 58% of children from these no-earnings tax units were claimed as dependents, with the 270,000 unclaimed children forgoing a total of \$620 million in CTC benefits. These findings underscore the prevalence of potential tax units with no earnings, as well as their relatively low likelihood to file tax returns, two factors which could limit the equitability of future efforts to distribute aid via the tax code.

Limitations

As stated above, we run into two limitations when trying to estimate household income for non-filing households. We are unable to measure household income or calculate pre-pandemic CTC amounts for children who we cannot pair with an adult. We therefore exclude those children and their families from analyses that involve income. In addition, while we are able to observe wage earnings for all adults enrolled in safety net programs, we also do not observe self-employment income, and therefore may underestimate income for some households.

Using state tax data comes with three limitations. First, while California tax filing data captures data on the vast majority of taxes filed federally, we do not observe returns where California filers file a federal form, but not a state tax return.¹⁰

Second, during the COVID crisis, the IRS opened other ways to gain access to payments. In April 2020, the IRS created a non-filer portal – which was created to help non-filers claim the federal stimulus through a simplified tax filing process. We do not observe these returns in our data. The IRS reopened this portal in April 2021, and partnered with Code for America to launch GetCTC.org. This was designed to increase access to the expanded CTC. Through a data match with the GetCTC.org data, we observe that roughly 30,000 non-filers in the CDSS data appeared on a 2021 return filed through the non-filer portal – and of those, less than a third of cases contained a child who was unclaimed on a TY2018 or TY2019 tax return.

Third, we do not have TY 2020 or 2021 data. Children can receive the ARPA CTC if they have filed either a TY 2019, 2020, or 2021 return. Presumably there will be some adults who claim children in TY 2020, but did not in TY 2019. It is important to note that the pandemic saw a shift in patterns of filing, [with a 9% increase](#) in tax returns filed in TY 2019 (versus TY 2018). This increase seems to be most pronounced in TY 2019, and [less so in subsequent tax filing seasons](#). We capture some, but not all, of that increase using the state tax data.

Conclusion

In this brief, we estimate the reach of the expanded CTC included in 2021 as part of the American Rescue Plan. We study the population of children enrolled in SNAP and TANF in California and use state administrative data, including safety-net enrollment data linked to state tax-filing data and quarterly earnings data. With this linked administrative data, we estimate which low-income Californian children did and did not gain access to the expanded CTC and how the 2021 expansion translated to increases in tax credit amounts across California safety-net families.

Overall, we estimate that the expanded CTC reached 76% of eligible California children enrolled in SNAP or TANF cases. The CTC expansion had wide reach into some of California's most vulnerable communities – 66% of children in child-only cases (reflecting potential families with mixed-immigration status) received the it and over 70% of children enrolled in safety-net programs in some of California's highest-poverty regions (e.g. San Joaquin Valley, North Coast) received it.

In aggregate, the number of children eligible for the CTC in the safety-net population increased by 610,000, representing a 67% increase compared to prior (and current) law. Notably, one quarter of all children enrolled in SNAP or TANF in California became newly eligible for the CTC under ARPA. Overall, we estimate that \$3.8 billion in tax payments reached California safety-

¹⁰ Prior to the pandemic, we estimate that roughly 5% of Californians who filed a federal tax return did not file a state tax return, and that roughly 10% of those with incomes below the filing threshold who filed a federal return did not file a state return.

net children, an increase of \$2.7 billion over 2020 law. Those with no earnings gained the most under ARPA, with an average of \$5,300 of realized gains per tax unit.

However, 24% of the potential gains, or \$851 million, from the ARPA CTC remain unrealized due to non-filing or non-claiming.

Our estimates highlight the need to improve equitable distribution of future CTCs. Children at the highest risk of not receiving the CTC are those with the lowest income levels (and hence the lowest rates of tax filing). Forty-two percent of children in families with no earnings and 25% of those with earnings below \$5,000 are at-risk of not receiving the credit, compared to 5-11% of those with earnings over \$5,000. Those that we predict to be at-risk of not receiving the expanded CTC averaged \$5,400 annual earnings versus \$18,000 among those who received it. Notably, if all eligible tax units earning less than \$10,000 were to file tax returns, we estimate that they would receive a total of \$2.36 billion — almost half of the total payments that would be made if all eligible children were claimed.

Rates of CTC receipt also vary across demographic groups. One-third of children in child-only cases are at-risk of not receiving the expanded CTC. Children in Spanish-speaking households are at higher risk of not being claimed than those residing in English speaking ones. Native American children are at elevated risk compared to other race and ethnicity groups. We also find that children living in rural areas are at higher risk of not receiving the CTC – with particularly large urban/rural differences for Asian-American and Black children.

This research comes at a critical time. At the federal level, as well as across states, we are expanding our use of tax credits for economic stimulus and anti-poverty policies. If we want to generate equitable policies both in design and implementation, we need to understand who is left behind by a system that is built around tax filing – and how best to deliver assistance to them.

Table 1: Children by Likely Reciprocity Status

	Children in California Safety Net Programs				
	Total Children in CDSS	Likely at-risk of not receiving CTC	Likely CTC recipients	Share receiving CTC within category	Share of all children receiving CTC
Overall	2,311,270	557,554	1,753,716	76%	100%
<u>Earnings Bracket</u>					
No earnings	466,617	196,286	270,331	58%	15%
\$0 to \$5000	160,008	40,261	119,747	75%	7%
\$5000 to \$10000	121,780	12,871	108,909	89%	6%
\$10000 to \$15000	123,094	8,390	114,704	93%	7%
\$15000 to \$20000	118,998	6,563	112,435	94%	6%
\$20000 to \$25000	117,295	5,492	111,803	95%	6%
\$25000 to \$30000	108,623	5,119	103,504	95%	6%
\$30000 to \$35000	87,020	4,780	82,240	95%	5%
More than \$35000	215,047	14,362	200,685	93%	11%
Children on cases with missing adult earnings	792,788	263,430	529,358	67%	30%
Mean earnings		\$5,417	\$18,617		
Median earnings		\$0	\$14,937		
<u>Race/Ethnicity</u>					
American Indian or Alaska Native	8,468	2,601	5,867	69%	0.3%
Asian	82,973	12,937	70,036	84%	4%
Black	239,927	64,490	175,437	73%	10%
Hispanic	1,388,935	327,479	1,061,456	76%	61%
Native Hawaiian or Other Pacific Islander	6,896	1,641	5,255	76%	0.3%
White	313,755	78,766	234,989	75%	13%
Other	142,633	35,809	106,824	75%	6%
No response/data	127,683	33,831	93,852	74%	5%
<u>CDSS Case Structure</u>					
1 Adult - 1 Child	283,255	72,300	210,955	74%	12%
1 Adult - 2+ Child	804,330	182,027	622,303	77%	35%
2+ Adults - 1 Child	140,382	30,662	109,720	78%	6%
2+ Adults - 2+ Children	647,652	128,483	519,169	80%	30%
Child-only	435,651	144,082	291,569	67%	17%

Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Table 2: Number of children and percent at risk of not accessing CTC, by region

	Number of Children			Share receiving CTC by region	Share of all children receiving CTC
	Total Children	Likely at-risk of not receiving CTC	Likely CTC recipients		
Bay-Peninsula	79,375	21,015	58,360	73.5%	3.3%
Capital	154,348	35,529	118,819	77.0%	6.8%
East Bay	95,561	24,498	71,063	74.4%	4.1%
Inland Empire	353,445	76,665	276,780	78.3%	15.8%
Los Angeles Basin	606,645	157,780	448,865	74.0%	25.6%
Middle Sierra	6,630	1,534	5,096	76.9%	0.3%
North Bay	59,199	15,029	44,170	74.6%	2.5%
North Central Coast	49,831	12,585	37,246	74.7%	2.1%
North Coast	8,617	2,579	6,038	70.1%	0.3%
North State	43,565	11,448	32,117	73.7%	1.8%
Orange	129,327	31,007	98,320	76.0%	5.6%
San Joaquin Valley and Associated Counties	474,106	106,733	367,373	77.5%	20.9%
South Central Coast	36,065	9,381	26,684	74.0%	1.5%
Southern Border	173,462	43,071	130,391	75.2%	7.4%
Ventura	41,094	8,700	32,394	78.8%	1.8%
Total	2,311,270	557,554	1,753,716		

Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Table 3: Children in child-only cases by likely reciprocity status

	Number of children			Share receiving CTC by category	Share of receiving children on child only cases
	All children on child-only cases	Likely at-risk of not receiving CTC	Likely CTC recipients		
All children on child only cases	435,194	143,819	291,375	67%	100%
<u>Race/ethnicity</u>					
Hispanic	372,360	123,666	248,694	67%	85%
All other race/ethnicity	62,834	20,153	42,681	68%	15%
<u>Region</u>					
Bay-Peninsula	21,684	7,628	14,056	65%	5%
Capital	15,866	5,074	10,792	68%	4%
East Bay	17,084	6,055	11,029	65%	4%
Inland Empire	46,859	14,527	32,332	69%	11%
Los Angeles Basin	140,418	51,094	89,324	64%	31%
Middle Sierra	440	113	327	74%	0%
North Bay	12,003	3,624	8,379	70%	3%
North Central Coast	18,041	5,334	12,707	70%	4%
North Coast	644	224	420	65%	0%
North State	2,907	896	2,011	69%	1%
Orange	36,815	11,527	25,288	69%	9%
San Joaquin Valley and Associated Counties	78,042	23,864	54,178	69%	19%
South Central Coast	12,292	3,868	8,424	69%	3%
Southern Border	20,477	6,965	13,512	66%	5%
Ventura	11,622	3,026	8,596	74%	3%

Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Table 4: Gains from ARPA compared to TCJA, Number of Children and Total Payments

	Eligible Children			Likely Recipient Children		
	Under ARPA	Under TCJA	Gain	Under ARPA	Under TCJA	Gain
Number of Children	1,518,482	908,081	610,401	1,224,358	843,248	381,110
CTC Payments (millions)	\$4,774	\$1,186	\$3,588	\$3,846	\$1,109	\$2,737

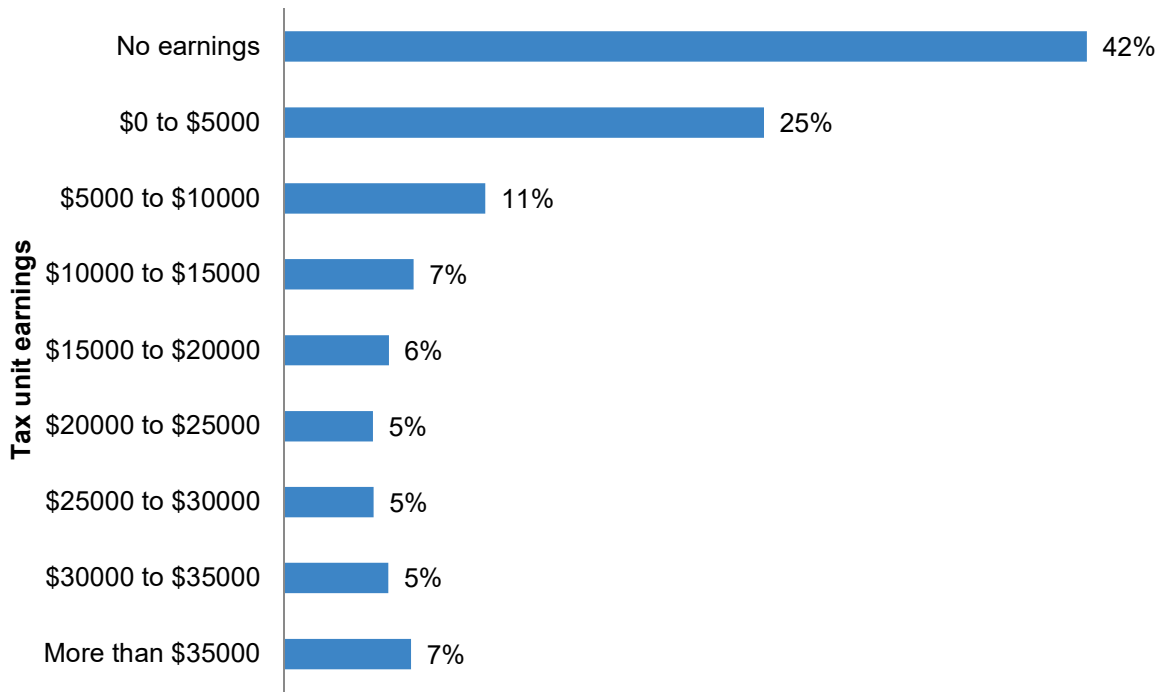
Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Table 5: Gains from ARPA compared to TCJA, by Earnings

	Eligible Children			Likely Recipient Children		
	Under ARPA	Under TCJA	Gain	Under ARPA	Under TCJA	Gain
<u>Number of Children by Earnings</u>						
No earnings	466,617	0	466,617	270,331	0	270,331
\$0 to \$5000	160,008	62,342	97,666	119,747	51,448	68,299
\$5000 to \$10000	121,780	115,995	5,785	108,909	103,898	5,011
\$10000 to \$15000	123,094	117,018	6,076	114,704	109,150	5,554
\$15000 to \$20000	118,998	113,247	5,751	112,435	107,075	5,360
\$20000 to \$25000	117,295	111,262	6,033	111,803	106,152	5,651
\$25000 to \$30000	108,623	102,868	5,755	103,504	98,077	5,427
\$30000 to \$35000	87,020	82,299	4,721	82,240	77,838	4,402
More than \$35000	215,047	203,050	11,997	200,685	189,610	11,075
Total	1,518,482	908,081	610,401	1,224,358	843,248	381,110
<u>Total CTC Payments by Earnings (millions)</u>						
No earnings	\$1,464	\$0	\$1,464	\$844	\$0	\$844
\$0 to \$5000	\$508	\$35	\$473	\$379	\$29	\$351
\$5000 to \$10000	\$386	\$130	\$256	\$345	\$117	\$229
\$10000 to \$15000	\$389	\$164	\$225	\$363	\$153	\$210
\$15000 to \$20000	\$375	\$159	\$217	\$355	\$150	\$205
\$20000 to \$25000	\$369	\$156	\$213	\$351	\$149	\$203
\$25000 to \$30000	\$340	\$144	\$196	\$324	\$137	\$187
\$30000 to \$35000	\$272	\$115	\$157	\$257	\$109	\$148
More than \$35000	\$672	\$284	\$387	\$627	\$265	\$361
Total	\$4,774	\$1,186	\$3,588	\$3,846	\$1,109	\$2,737
Gain per ARPA eligible child			\$2,363			\$1,803

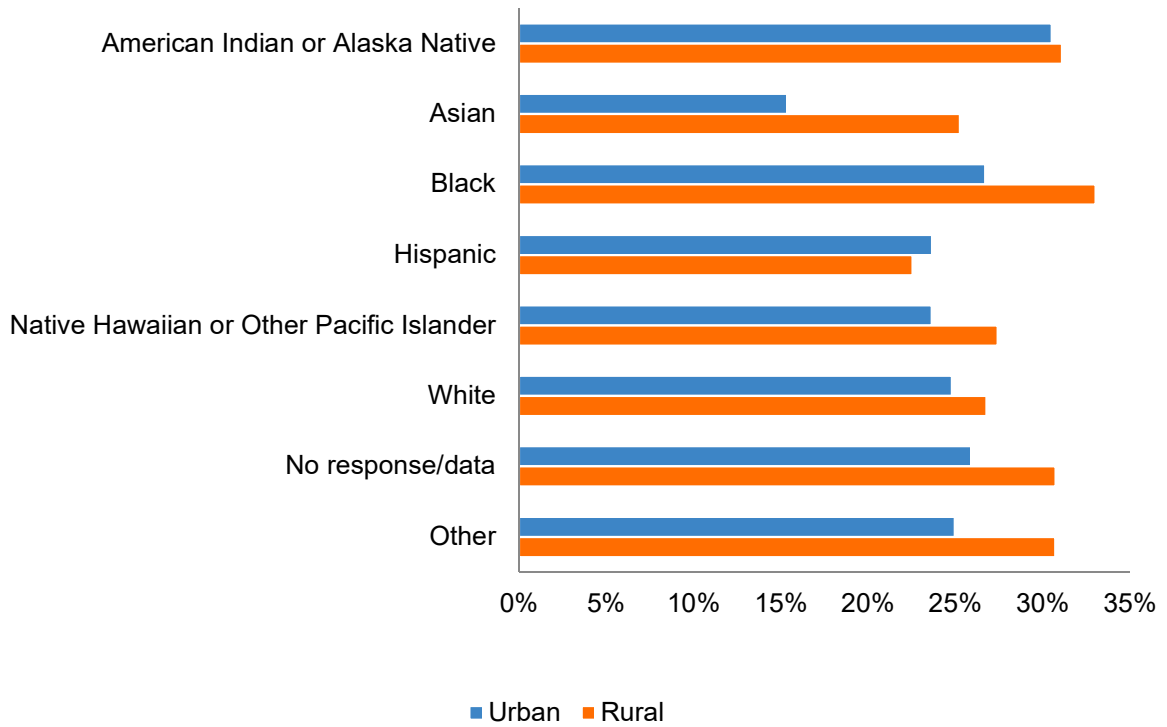
Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Figure 1: Percent of children at-risk of not receiving the CTC within each wage earnings category



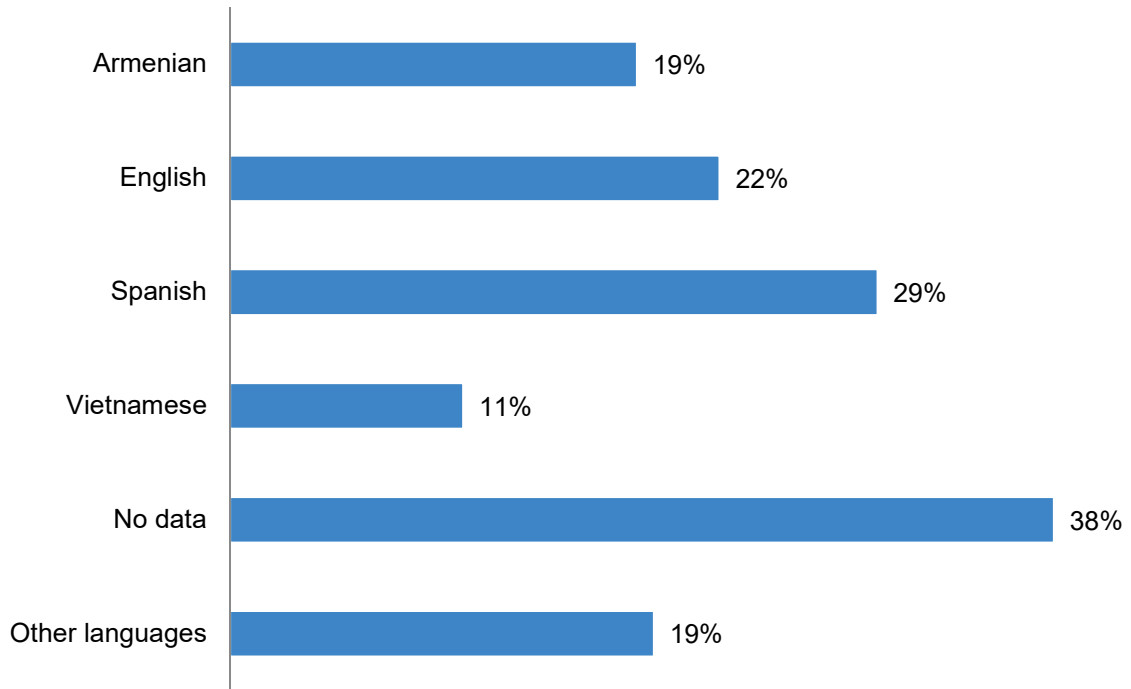
Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Figure 2: Percent of children at risk of not receiving the CTC within each language category



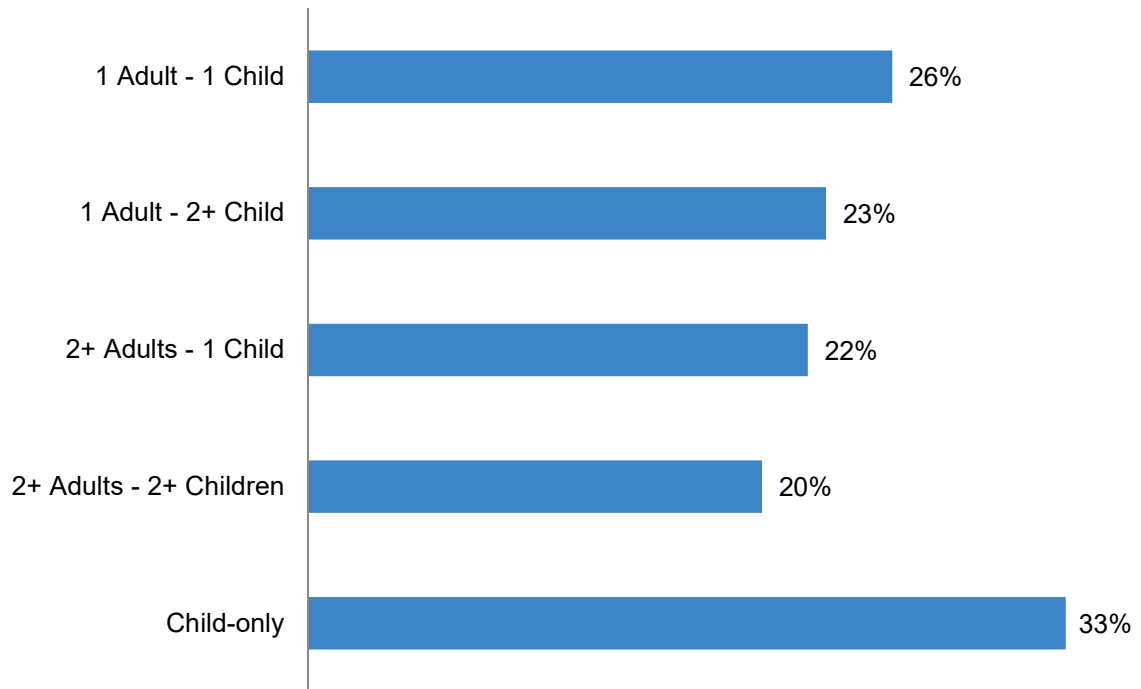
Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Figure 2: Percent of children at-risk of not receiving the CTC within each race/ethnicity and geography category



Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Figure 4: Percent of children at-risk within each case composition category



Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

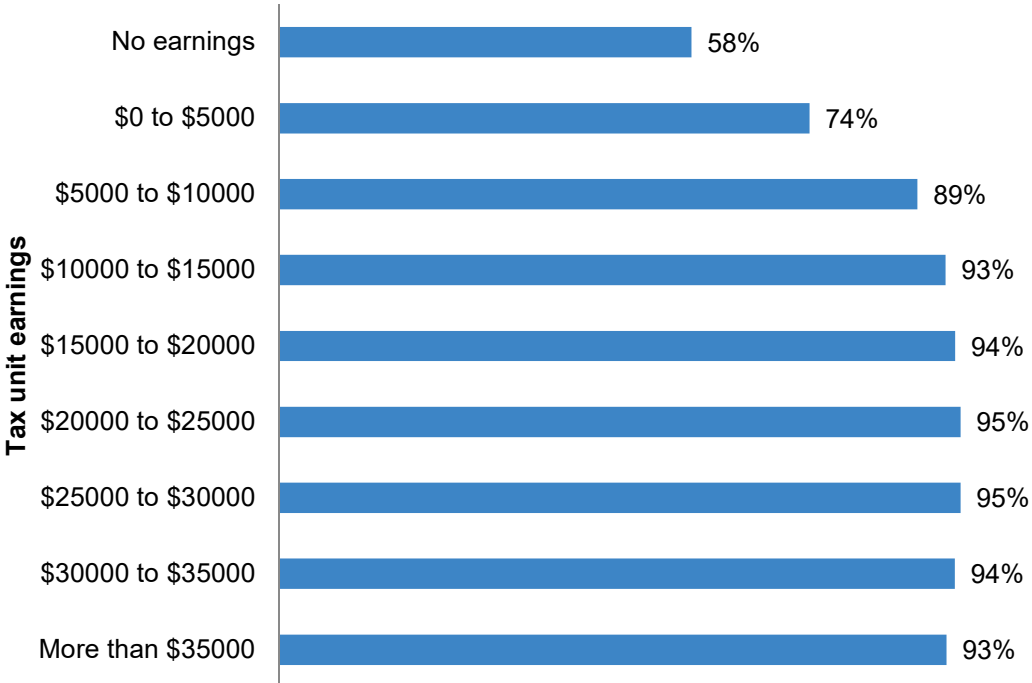
Figure 5: Who do at-risk children live with?



- Lives with an adult who did not file
- Lives with an adult who filed, but did not claim them
- Lives with an adult who does not appear on their case

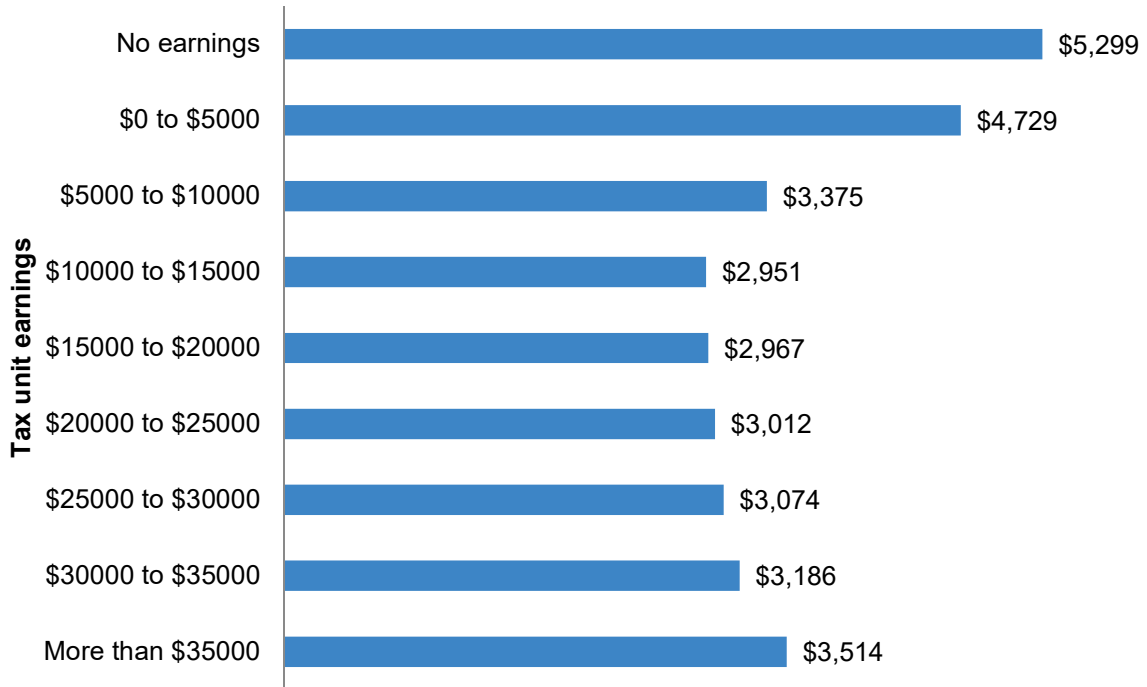
Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Figure 6: Share of ARPA CTC likely received, by tax unit earnings



Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)

Figure 7: Average realized gain from ARPA CTC, by tax unit earnings



Source: California Department of Social Services data (2019–20) and Franchise Tax Board data (TY 2019)