Tax Year 2022 Child Tax Credit and Additional Child Tax Credit Credits and Deductions Gap Estimate for Filers Using IRS Administrative Data

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The views expressed in this paper are those of the authors and do not necessarily represent the views of the IRS.

Section 1. Introduction

Over the course of the last several decades, Congress has given the Internal Revenue Service (IRS) responsibility for administering a range of credits and deductions for individuals and businesses. The IRS conducts numerous education and outreach programs as well as releases other resources designed to help taxpayers understand and claim these tax benefits. However, many individuals and families remain unaware of particular credits and deductions or face barriers that deter them from claiming the full amount for which they are eligible. As part of its strategic operating plan, the IRS has pledged to help taxpayers understand and claim appropriate credits and deductions.¹

Credits and deductions are provisions that reduce the amount of taxes a taxpayer needs to pay or otherwise increases an amount that can be refunded to a U.S. citizen or resident based on certain eligibility criteria. Taxpayers can receive three general types of benefits:

- A tax deduction reduces the amount of income subject to tax.
- A non-refundable tax credit is a credit that reduces the amount of tax liability, but the amount of the credit may not exceed the taxpayer's tax liability. (For example, if a taxpayer is eligible for a non-refundable tax credit of \$1,500 and has \$1,000 in tax liability, the credit reduces the taxpayer's liability by only \$1,000.)
- A refundable tax credit is a credit that reduces the amount of tax liability and, if the amount of the credit exceeds the taxpayer's tax liability, the amount of the credit that exceeds the taxpayer's tax liability can be given as a refund to the taxpayer, even in cases where the taxpayer does not have any tax liability. (For example, if a taxpayer is eligible for a refundable tax credit of \$1,500 and has \$1,000 in tax liability, the credit reduces the taxpayer's liability by \$1,000, and the taxpayer will have an additional \$500 refunded.)

To design better strategies to support eligible taxpayers in claiming credits and deductions, the IRS and decision makers first need to understand where taxpayers are not fully claiming credits and deductions and the barriers that may impact claiming behavior. To ground these discussions, the IRS has begun developing approaches to measure uptake by eligible taxpayers and to estimate the share of eligible taxpayers who do not claim credits and deductions for which they are eligible. In the inaugural year of releasing aggregate estimates of the tax credits and deductions gap— the amount of credits and deductions for which taxpayers are eligible but did not claim, irrespective of whether those taxpayers filed

¹ Internal Revenue Service. "Internal Revenue Service Inflation Reduction Act Strategic Operating Plan, FY2023 – 2031." Page 36 https://www.irs.gov/pub/irs-pdf/p3744.pdf

tax returns— the IRS focused on a subset of fully or partially refundable credits for individuals. This working paper is part of that series of working papers and focuses on the Child Tax Credit (CTC) and Additional Child Tax Credit (ACTC). The IRS invites comments and recommendations on ways to improve the methodology used to measure the tax benefits gap for these credits.

As this work continues in the coming years, the IRS plans to expand the set of credits and deductions examined and continue to refine the methodologies used to estimate the tax benefit gap. This work will feed into other efforts by the IRS to increase awareness of credits and deductions and remove barriers to claiming. Overall, this will inform and complement other IRS's efforts to prevent inadvertent errors, fraud, and abuse.

Section 2. Background on the Child Tax Credits and Additional Child Tax Credit

The CTC is a partially refundable credit. The maximum nonrefundable credit is \$2,000 per qualifying child with no limit to the number of qualifying children. The maximum refundable portion, referred to as the ACTC, is limited to the lesser of the unused CTC or \$1,500 per child. The ACTC is further limited to the excess of 15% of earned income over a threshold amount (\$2,500 for 2022). A special rule applies to taxpayers with three or more qualifying children which allows a refundable credit based on social security taxes paid during the year. Taxpayers who File Form 2555, Foreign Earned Income, may not claim ACTC. Taxpayers may elect not to claim the ACTC. Like the Earned Income Tax Credit, the ACTC is not treated as income for purposes of determining eligibility for means tested federal benefits.

This report provides an estimate of the Tax Year 2022 Benefits Gap for apparently CTC- and/or ACTC- eligible filers who did not claim one or both of the credits (non-claimants), or who claimed a lower credit than they were apparently eligible for (underclaimants) and who had not been determined by the IRS to be ineligible to claim CTC (and therefore, ACTC). Tax Year 2022 was selected for this study because it was the most recent year for which we had complete data at the time the research began. We further restrict the population of interest to individuals who filed a timely Tax Year 2022 federal income tax return to set an objective timeframe for the study. Note: We do not consider potentially invalid or overstated claims.

As discussed in the Key Results section below, the total TY2022 CTC and ACTC Benefits Gap is estimated to be \$307.5 million compared to a total claimed CTC and ACTC of \$107 billion. The estimated Benefits Gap is primarily comprised of unclaimed CTC and ACTC (\$237 million), but IRS administrative data show that 70.5 million was underclaimed compared to the IRS-calculated CTC and ACTC.

Section 3. TY2022 Child Tax Credit Eligibility Rules

To be eligible to claim the CTC or ACTC, a taxpayer must meet the following tests:

- The taxpayer and spouse must have a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN) on or before the due date of the return including extensions. (IRC § 24(e)(2))
- The return must cover the full 12 months of the year for which it is filed except in the year of death of the taxpayer. (IRC § 24(f))
- The taxpayer or spouse must have not made a fraudulent or reckless CTC or ACTC claim on a prioryear return. The disallowance period is two years for a claim that is determined to be reckless and 10 years for a claim that is determined to be fraudulent. (IRC § 24(g))
- The taxpayer may file Form 1040, Form 1040-SR, or Form 1040-NR. The taxpayer may be a nonresident alien, but they must live in the United States for more than six months (because the child must live in the United States. (IRC § 24(c)(2)) Bona fide residents of Puerto Rico are eligible to claim an ACTC on Form 1040-PR or Form 1040-SS, but the credit is limited to the lesser of the ACTC calculated for all U.S. residents (Schedule 8812, Part II-A) and the ACTC calculated for taxpayers with three or more children (Schedule 8812, Part II-B) as long as they have at least one qualifying child. (IRC § 24(k)(2))

Section 4. Definition of Qualifying Child

For Child Tax Credit purposes, to be a qualifying child (QC), the child must be that taxpayer's dependent as defined in section 152(c) and be claimed on the taxpayer's return. In addition, the child must meet the following tests:

- 1) Social Security Number. The child must have a social security number that is valid for employment and was issued by the due date of the return. The taxpayer must include the child's social security number on the return. (IRC § 24(h)(7)) If a child is born and dies during the year, no SSN is required if the taxpayer attaches proof that the child was born alive during the year.
- 2) Age. The child must have not attained age 17 by the end of the year. (IRC 24(c)(1))

3) Residency. The child must have lived with the taxpayer for more than half the year. If the child is not a citizen of the United States, the child must have lived with the taxpayer in the 50 United States or the District of Columbia. (IRC § 152(c)(1)(B))

A child may meet the tests to be a QC for more than one taxpayer. In this case, tie-breaker rules determine who may claim the dependency exemption and, therefore, who may claim the child as a QC. (IRC § 152(c)(4)) The tie-breaker rules are summarized on the following table.

Tie-Breaker Rules

Child meets the test for:	Tiebreaker
Both parents*	If only one parent claims the child, there is no tiebreaker. The
	child is the QC for that parent.
	If both parents claim the child on separate returns, the child is the
	QC of the parent with whom the child lived longer. If the child
	lived with the parents the same amount of time, the child is the QC
	of the parent with the higher AGI.
Either or both parents* and one or	If one or both of the parents claim the child, see the tiebreaker
more non-parent	rules for both parents.
	If neither parent claims the child, the child is the QC of the non-
	parent who had the highest AGI, but only if that non-parent's AGI
	is higher than the highest AGI of any of the child's parents who
	could have claimed the child.
Two or more non-parents	The child is the QC of the individual who had the highest AGI for
	the year.

^{*&}quot;Parent" for this purpose includes only a biological or adoptive parent. It does not include a step-parent or foster parent.

Section 5. Calculation of the Child Tax Credit

For 2022, the maximum nonrefundable Child Tax Credit equals \$2,000 multiplied by the number of QCs. This amount is combined with the taxpayer's credit for other dependents (OD) before determining if any or all of the combined credit is phased out. All dependents for whom a CTC may not be claimed can be claimed for an OD tax credit. The phaseout for the combined CTC and OD credits begins at \$400,000 modified adjusted gross income (MAGI) for joint filers and \$200,000 for other filers. MAGI is calculated as follows:

Adjusted gross income on the income tax return

- + Excluded income from Puerto Rico
- + Amounts excluded or deducted from foreign earned income on Form 2555
- + Income from American Samoa excluded on Form 4563
- = Modified Adjusted Gross Income

The phaseout is calculated by subtracting the phaseout threshold for the filing status from MAGI. The excess is rounded up to a multiple of \$1,000 and then multiplied by 0.05. The result is subtracted from the combined credit amount to determine the CTC and OD tax credit that may be claimed on the return.

Example:

A married couple filing jointly has MAGI of \$451,023, three children who are QCs for CTC, and no other dependents. Their maximum CTC and OD tax credit of \$6,000 (3 QCs x \$2,000) is reduced to \$3,400 as follows:

\$451,023 MAGI

- <u>400,000</u> threshold

= \$ 51,023

 $$52,000 \times 0.05 = $2,600$

\$6,000 maximum credit - \$2,600 phaseout = \$3,400 allowed combined credit

Section 6. Calculation of the Additional Child Tax Credit

Unless the taxpayer filed Form 2555 or does not have more than \$2,500 in earned income (defined below), some or all of any unused CTC may be claimed as a refundable credit (ACTC).

To determine how much of the CTC is used against the tax, the tax liability before credits is reduced by certain nonrefundable credits in the following order:

- Foreign Tax Credit (Form 1116 if required)
- Child and Dependent Care Credit (Form 2441)
- Education Credits (Form 8863, line 19)
- Retirement Savings Contributions Credit (Form 8880)
- Credit for the Elderly or Disabled (Schedule R)
- Alternative Motor Vehicle Credit (Form 8910)
- Qualified Plug-In Motor Vehicle Credit (Form 8834)
- Partner's Refigured Tax Liability (Form 8978)
- Residential Energy Credits (Form 5695, line 30)
- Special rules apply to taxpayers with one or more QCs for CTC and who claim any of the following credits:
 - Mortgage Interest Credit (Form 8396)

- o Adoption Credit (Form 8839)
- o Residential Clean Energy Credit (Form 5695, Part 1)
- o District of Columbia First-Time Homebuyer Credit (Form 8859)

The Child Tax Credit is applied to any remaining tax liability and the lesser of the CTC or the amount applied to tax is claimed as the CTC.

Example:

A taxpayer has tax liability before credits of \$6,000, a Child and Dependent Care Credit of \$3,500, and a CTC credit of \$4,000. The tax liability after the Child and Dependent Care Credit is \$2,500 (\$6,000 - \$3,500). This means that \$2,500 of the \$4,000 CTC credit is used to offset the remaining tax liability. The taxpayer claims a CTC credit of \$2,500 on the return. The unused portion, \$1,500, may be allowed as a refundable credit (ACTC), subject to ACTC calculations below.

Step 1: Calculation for Everyone

ACTC equals the lower of

- 1) The unused Child Tax Credit
- 2) Number of QCs x \$1,500
- 3) (Earned income \$2,500) x 15%

"Earned income" is generally determined in the same manner as for the Earned Income Tax Credit where earned income equals the sum of taxable wages, salaries, tips, and other employee compensation plus net self-employment earnings that are subject to self-employment tax, disregarding the deduction for one half of the self-employment tax. (IRC § 32(c)(2)(A)(ii)) Unlike the Earned Income Tax Credit that allows a taxpayer and spouse to elect to include nontaxable combat pay if it results in a higher credit, nontaxable combat pay is considered earned income for ACTC. (IRC § 24(d)(1))

As with EITC, earned income does not include pension or annuity income (IRC § 32(c)(2)(B)(ii)), income earned as a nonresident (IRC § 32(c)(2)(B)(iii)), income earned while an inmate in a penal institution (IRC § 32(c)(2)(B)(iv)), or income earned in a sheltered workshop (IRC § 32(c)(2)(B)(v)). As with EITC, community property laws are disregarded for purposes of determining earned income. (IRC § 32(c)(2)(B)(i))

Step 2: Calculation for Taxpayers with Three or More QCs and all Bona Fide Residents of Puerto Rico

Taxpayers with three or more QCs and all bona fide residents of Puerto Rico who file Form 1040 to report U.S. source income may claim the credit calculated if it is higher than the Step 1 credit.

The Step 2 calculation is as follows:

Social security, Medicare, and Additional Medicare taxes from Forms W-2, boxes 4 and 6

- + Deductible part of self-employment tax (Form 1040, Schedule 1, line 15)
- + Social security and Medicare tax on unreported tip income (Form 1040, Schedule 2, line 5)
- + Uncollected social security and Medicare tax on wages (Form 1040, Schedule 2, line 6)
- + Uncollected social security and Medicare or RRTA tax on tips or group-term life insurance (Form 1040, Schedule 2, line 13)
- Earned Income Tax Credit (Form 1040, line 27)
- Excess social security and tier 1 RRTA tax withheld (Form 1040, Schedule 3, line 11)

Note: Bona fide residents are not eligible to claim EITC on Form 1040.

Section 7. Key Results

The TY2022 Benefits Gap for the Child Tax Credit and Additional Child Tax Credit is estimated to be \$307.5 million compared to a total claimed amount of just over \$107 billion. The Benefits Gap is primarily comprised of unclaimed CTC and ACTC, but IRS administrative data show that nearly \$70.5 million was underclaimed compared to the IRS-calculated CTC and ACTC.

Table 1: TY2022 E	stimated CTC/ACTC	Benefits Gap for	Filers Using IRS Ad	ministrative Data
Credit	Claimed	Underclaimed	Unclaimed	Benefits Gap (Underclaimed + Unclaimed)
CTC	\$76,000,000	\$54,000,000	\$79,000,000	\$133,000,000
ACTC	\$31,000,000	\$17,000,000	\$158,000,000	\$175,000,000
CTC/ACTC	\$107,000,000	\$71,000,000	\$237,000,000	\$307,000,000

Amounts may not add due to rounding. Source: RAAS CDW (10/23/2024)

Table 1A shows the distribution of the estimated CTC Benefits Gap by count of claimants and underclaimants. This table shows that the estimated Benefits Gap for CTC is \$133 million. The average underclaim for taxpayers who fail to claim CTC is \$1,842. The estimated average underclaim for taxpayers who claim CTC on their return but claim less than the IRS-calculated amount is \$810.

Table 1A: TY2022 Data	Estimated CTC Benefits	Gap for Filers Using II	RS Administrative
Group	Number of Returns	Claimed Amount	Benefits Gap
All returns	28,000,000	\$76,000,000,000	\$132,000,000
Underclaimants	67,000	ı	\$54,000,000
Nonclaimants	43,000		\$79,000,000

Amounts may not add due to rounding. Source: RAAS CDW (10/23/2024)

Table 1B shows the distribution of the estimated ACTC Benefits Gap by count of claimants and underclaimants. This table shows that the estimated Benefits Gap for ACTC is \$175 million. The average underclaim for taxpayers who fail to claim ACTC is \$1,365. The estimated average underclaim for taxpayers who claim ACTC on their return but claim less than the IRS-calculated amount is \$867.

Table 1B: TY202 Administrative D		Benefits Gap for Filers Usin	ng IRS
Group	Number of Returns	Claimed Amount	Benefits Gap
All returns	17,000,000	\$31,000,000,000	\$175,000,000
Underclaimants	19,000	-	\$17,000,000
Nonclaimants	116,000	-	\$158,000,000

Source: RAAS CDW (10/23/2024)

Taking a closer look at nonclaimants in Tables 2A and 2B, we see that generally taxpayers who file a return claim the CTC or ACTC to which they are apparently eligible. The distribution of nonclaimants by number of QCs is likely a reflection of family demographics rather than an indication that families with fewer children face more barriers to claiming CTC or ACTC.

	Y2022 Estimated CT nt of Tax Returns by	_	C		
Number of QCs	Number of Returns	Claimants	Nonclaimants	Participation Rate Among Filers (%)	
1	14,000,000	14,000,000	30,000	99.8	
2	10,000,000	10,000,000	10,000	99.9	
3	3,000,000	3,000,000	2,000	99.9	
4 or more	1,000,000	1,000,000	0	100%	

Source: RAAS CDW (10/23/2024)

Table 2B: TY2022 Estimated ACTC Benefits Gap Using IRS Administrative Data Count of Tax Returns by Number of QCs, Claimed vs. Unclaimed				
Number of QCs	Number of Returns	Claimants	Nonclaimants	Participation Rate Among Filers (%)
1	8,000,000	8,000,000	100,000	98.7
2	6,000,000	6,000,000	13,000	99.8
3	2,000,000	2,000,000	4,000	99.9
4 or more	1,000,000	1,000,000	-	99.9

Source: RAAS CDW (10/23/2024)

Tables 3A and 3B show that the large number of paid-prepared and software-prepared returns masks a lower participation rate for paper-filers. Taxpayers who prepare their own returns on paper may not apply the complex eligibility rules correctly, may not be able to obtain Schedule 8812 or be dissuaded from completing the complex form. Of course, they simply may not know they are eligible for the credit. Taxpayers who use a paid-preparer or prepare their returns using software may miss claiming CTC or ACTC because they skip the eligibility questions or don't answer the questions correctly. It is also possible that the software program that is used to prepare the return does not calculate earned income in the same way the IRS does.

Table 3A: TY2022 Estimat Count of Tax Returns by P	_	0		
	N. I. CD.			Participation Rate Among
Preparation Method	Number of Returns	Claimants	Nonclaimants	Filers (%)
Paid Preparer	16,000,000	15,000,000	29,000	99.8
Self-Prepared on Paper	77,000	74,000	3,000	96.7
Self-Prepared on Software	13,000,000	13,000,000	11,000	99.9

Source: RAAS CDW (10/23/2024)

Table 3B: TY2022 Estimat Count of Tax Returns by P				ıta
Preparation Method	Number of Returns	Claimed	Nonclaimants	Participation Rate Among Filers (%)
Paid Preparer	9,000,000	9,000,000	76,000	99.2
Self-Prepared on Paper	45,000	42,000	3,000	93.6
Self-Prepared on Software	8,000,000	7,000,000	37,000	99.5

Source: RAAS CDW (10/23/2024)

While the participation rate for taxpayers who prepare their own returns on paper is lower for both CTC and ACTC, it is still quite high, especially for the Child Tax Credit. That may be because the CTC is a nonrefundable credit that primarily benefits middle- and high-income taxpayers. Table 4 confirms that

over 63 percent of CTC nonclaimants had an AGI greater than \$50,000. Table 5 shows that only 3 percent of taxpayers who underclaimed ACTC had an AGI over \$50,000, and 87 percent had an AGI of \$30,000 or less.

Table 4: TY2022 Estimated	CTC Benefits G	ap Using IRS Adı	ministrative I	D ata	
CTC Nonclaimants by AGI	and Number of O	Qualifying Child	ualifying Children		
		Numb	er of Qualifyin	ng Children	
					4 or
	Nonclaimants	1	2	3	more
Total	43,000	30,000	10,000	2,000	*
Adjusted Gross Income					
<=\$0	*	*	*	*	*
\$1-\$50,000	16,000	12,000	3,000	1,000	*
\$50,001-\$100,000	12,000	9,000	2,000	1,000	*
\$100,001-150,000	4,000	3,000	1,000	*	*
\$150,001-200,000	2,000	1,000	*	*	*
\$200,001-250,000	2,000	2,000	*	*	*
\$250,001-300,000	1,000	*	*	*	*
\$300,001-350,000	*	*	*	*	*
\$350,001-400,000	*	*	*	*	*
> \$400,000	6,000	3,000	2,000	1,000	*

Totals may not add due to rounding and redaction.
*Redacted

Source: RAAS CDW (10/23/2024)

Table 5: TY2022 Estimat	ted ACTC Benefits (Gap Using IRS A	dministrative	e Data	
ACTC Nonclaimants by	AGI and Number of Qualifying Children				
		Num	ber of Qualify	ing Children	
	Nonclaimants	1	2	3	4 or more
Total	116,000	98,000	13,000	4,000	1,000
Adjusted Gross Income					
<=\$0	6,000	3,000	2,000	1,000	*
\$1 - \$10,000	21,000	18,000	2,000	1,000	*
\$10,001 - \$20,000	55,000	50,000	4,000	1,000	*
\$20,001 - \$30,000	19,000	17,000	2,000	*	*
\$30,001 - \$40,000	8,000	7,000	1,000	*	*
\$40,001 - \$50,000	3,000	2,000	1,000	*	*
\$50,001 - \$60,000	1,000	1,000	1,000	*	*
> \$ 60,000	2,000	1,000	*	*	*

Totals may not add due to rounding and redaction.

*Redacted

Source: RAAS CDW (10/23/2024)

Section 8. Maps

Maps 1 – 4 show how the CTC and ACTC Benefits Gap estimates are distributed across the states. Map 1 shows that the share of the estimated CTC Benefits Gap is less the \$5M for most states. California's \$32.2 million share is 25% of the total. Florida and Texas are the only other standouts, but their shares are around \$10 million each.

Map 2 shows how the CTC underclaimants (which includes both nonclaimants and taxpayers who claimed a smaller CTC than the IRS-calculated CTC) are distributed across the states. Not surprisingly, California, Florida, and Texas with the largest share of the dollar gap also have the most of the underclaimants. The other states all have less than 5,000 CTC underclaimants. Fourteen states (Alaska, Delaware, District of Columbia, Hawaii, Maine, Montana, New Hampshire, North Dakota, Rhode Island, South Dakota, West Virginia, Wyoming, and Vermont and Puerto Rico) have fewer than 500. It should be noted that the 14 states were the least populated states in 2022.²

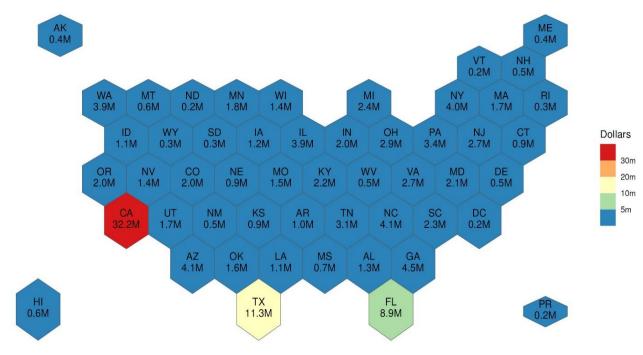
For ACTC, we see on Map 3 that California also has the highest share of the ACTC Benefits Gap (\$26.4 million but Texas is not far behind with a \$21.2 million share. Florida, New York, and Georgia, North Carolina, and Illinois are the only other states with a share greater than \$5 million.

Map 4 shows that California and Texas are home to most of the ACTC underclaimants, but Florida isn't far behind. Most states have fewer than 2,000 ACTC underclaimants, and 13 states and Puerto Rico have fewer than 500. With the exception of New Mexico that has about 1,000 underclaimants, these 13 states are the same states that had fewer than 500 CTC underclaimants.

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 $^{^2\} https://www2.census.gov/programs-surveys/popest/tables/2020-2023/state/totals/NST-EST2023-POP.xlsx$

Estimated TY2022 CTC Benefits Gap by State – Dollars



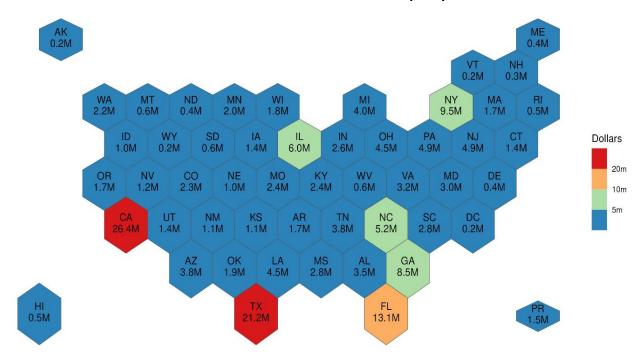
Map 2 - Estimated TY2022 CTC Nonclaimant and Underclaimant Filers by State

Estimated TY2022 CTC Underclaimants by State



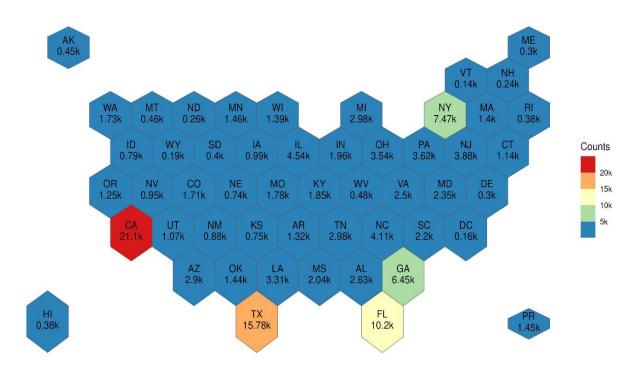
Map 3 - Estimated TY2022 ACTC Benefits Gap by State - Dollars

Estimated TY2022 ACTC Benefits Gap by State - Dollars



 $Map\ 4-TY2022\ ACTC\ Nonclaimant\ and\ Underclaimant\ Filers\ by\ State$

TY2022 ACTC Nonclaimant and Underclaimant Filers by State



Section 9. Methodology

Determining Eligibility

For taxpayers who claimed CTC and/or ACTC, we assume the taxpayer was eligible to claim the credit if the IRS-calculated credit is greater than \$0. If the claimed credit is less than the IRS-calculated credit, the taxpayer is considered an underclaimant and the underclaimed amount is included in the Benefits Gap estimate.

We use Internal Revenue Code (IRC) section 24 applicable to Tax Year 2022 and IRS Tax Year 2022 administrative data to determine potential eligibility for CTC and ACTC and have developed a calculator to calculate both credits. In the current method, these rules are applied to the population of TY2022 Form 1040 returns in five steps:

- 1) Identify returns that meet basic Benefits Gap criteria and pull administrative data
- 2) Identify dependents who appear to meet the tests to be a Qualifying Child
- 3) Calculate CTC and remove taxpayers where calculated CTC = \$0
- 4) Calculate ACTC and remove taxpayers where calculated ACTC = \$0

Note: Due to certain data limitations, it is difficult to precisely determine CTC and ACTC. Despite these limitations, however, validation of our calculator showed that we are able to replicate the computer-calculated CTC and ACTC amounts for nearly all filers who claimed one or both of the credits.

Step 1: Identify Returns that Meet Benefits Gap Study Requirements

The first step is to create a population file that includes tax returns that meet the basic criteria for the TY2022 Benefits Gap population study:

- Must have a valid SSN or ITIN
- Must have timely-filed a TY2022 return
- Did not claim CTC and ACTC
- Did not have a Schedule 8812 on file

Next, we pull a majority of the applicable administrative data that will be used for steps 2-5.

Residency. Taxpayers must reside in the 50 United States, the District of Columbia, or Puerto Rico. Returns that don't meet the test are removed.

Valid Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN). To qualify for CTC, both the primary and spouse must have either a valid SSN or ITIN.

Banned From Claiming CTC. We assume that taxpayers who are banned from claiming EITC are also ineligible to claim CTC.

Stage 2: Determine the Number of Qualifying Children

A second data pull is conducted to query dependent information related to dependents. Dependents who don't meet all tests are removed from consideration as a QC.

Valid SSN. Unlike the taxpayer and spouse who may have either an SSN or an ITIN, each dependent must have a valid SSN to be considered a QC for the child tax credit.

Dependent Not Claimed for CTC. To determine if a dependent was already claimed for CTC on another taxpayer's return, we create a list of all filers associated with the dependent and create an indicator for whether the taxpayer claimed CTC. Any dependent that was already claimed as a QC is removed.

Dependent Cannot File a Joint Return. Generally, a married dependent cannot be a QC if they filed a joint return. However, if the joint return was filed merely to receive a refund of withheld taxes, the joint return is not prohibited. We use a simple test to determine that the dependent was not required to file and had no other reason to file: No adjustments to income from Schedule 1, no Schedule A, no Qualified Business Income Deduction (Form 8995 or Form 8995-A) and Tax Refund = Total Withholding.

Tiebreaker Rule. In the event that more than one filer claimed a child's dependency exemption but none of them claimed the child for CTC, we use the tiebreaker rules to assign the dependent to return with the highest AGI. To do so, we link the dependent SSN to all matching filer SSNs and the adjusted gross income from each return. The return with the highest AGI wins the tie-breaker. If the "winning" return is the return in our file, the dependent is considered to meet this QC test.

Step 3: Calculating the Child Tax Credit

To qualify for the CTC, filers must have at least one qualifying child. There is no limit to the number of QCs for whom the CTC can be claimed. The CTC is calculated on Schedule 8812, Part I (see Figure 1 on page 16).

First, we calculate modified adjusted gross income (MAGI). MAGI is the sum of adjusted gross income, excluded income from Puerto Rican sources, foreign earned income and the housing exclusion from Form 2555, and income excluded by bona fide residents of American Samoa (Form 4563). Note: We did not have access to administrative data for Form 4563, so that adjustment was not made.

Figure 1. Tax Year 2022 Schedule 8812, Part I

(Forn Departm	eDULE 8812 n 1040) nent of the Treasury Revenue Service	Credits for Qualifying Children and Other Dependents Attach to Form 1040, 1040-SR, or 1040-NR. Go to www.irs.gov/Schedule8812 for instructions and the latest information.	Vour socia	OMB No. 1545-0074 2022 Attachment Sequence No. 47
ivairi e (5)) SHOWIT OF THE CUTT		Tour socia	i security flumber
Par	t I Child Ta	ax Credit and Credit for Other Dependents		
1	Enter the amour	nt from line 11 of your Form 1040, 1040-SR, or 1040-NR	. 1	
2a	Enter income fro	om Puerto Rico that you excluded 2a		
b	Enter the amour	nts from lines 45 and 50 of your Form 2555		
c	Enter the amour	nt from line 15 of your Form 4563		
d	Add lines 2a thr	ough 2c	. 2d	
3		2d	. 3	
4		ifying children under age 17 with the required social security number 4		
5		by \$2,000	. 5	
6		r dependents, including any qualifying children who are not under age		
		of have the required social security number		
		t include yourself, your spouse, or anyone who is not a U.S. citizen, U.S. national, or U.S. resid	lent	
_	alien. Also, do n	not include anyone you included on line 4.		
7		by \$500	. 7	
8		7	. 8	
9		at shown below for your filing status.		
		jointly—\$400,000 s statuses—\$200,000 }	9	
10	• All other filing Subtract line 9 f		. 9	
10	If zero or less.			
		ero and not a multiple of \$1,000, enter the next multiple of \$1,000. For		
		result is \$425, enter \$1,000; if the result is \$1,025, enter \$2,000, etc.	. 10	
11		by 5% (0.05)	. 11	
12		a line 8 more than the amount on line 11?		
		You cannot take the child tax credit, credit for other dependents, or additional child tax credit		
		I-A and II-B. Enter -0- on lines 14 and 27.		
		et line 11 from line 8. Enter the result.		
13	Enter the amour	nt from the Credit Limit Worksheet A	. 13	
14	Enter the smalle	r of line 12 or 13. This is your child tax credit and credit for other dependents	. 14	
	Enter this amo	unt on Form 1040, 1040-SR, or 1040-NR, line 19.		
	If the amour	t on line 12 is more than the amount on line 14, you may be able to take the addition	nal child	tax credit
	on Form 1	040, 1040-SR, or 1040-NR, line 28. Complete your Form 1040, 1040-SR, or 1040-N	R through	line 27
		(also complete Schedule 3, line 11) before completing Part II-A.		
For Do		ion Act Notice see your tay return instructions	O-b-did-	0040 /5 4040) 0000

Next, we calculate the CTC and Credit for Other Dependents (ODC) before limitations (\$2,000 x the number of QCs + \$500 x the number of other dependents (ODs) claimed on the return). The amount is the maximum CTC/ODC that may be claimed by the taxpayer.

The CTC/ODC begins to phase out at \$400,000 MAGI for married taxpayers filing jointly and \$200,000 MAGI for other taxpayers. The applicable phaseout threshold is subtracted from MAGI. If the result is less than or equal to zero, CTC/ODC is fully phased out. Otherwise, the difference between MAGI and the phaseout threshold is rounded up to the next multiple of \$1,000 (if not already a multiple of 1,000) and multiplied by 5% (0.05). This amount is subtracted from the maximum credit CTC/ODC to arrive at the allowable CTC/ODC.

The CTC/ODC credit is equal to the smaller of the allowable CTC/ODC and the tax liability calculated in Worksheet A (discussed below).

Credit Limit Worksheet A

Worksheet A (Figure 2 on page 19) is used to determine how much tax liability is left after applying other nonrefundable credits under an ordering rule. The Foreign Tax Credit (Form 1116), Credit for Child and Dependent Care Expense (Form 2441), Nonrefundable Education Credit (Form 8863), Retirement Savings Contribution Credit (Form 8880), Credit for the Elderly or Disabled (Schedule R), Alternative Motor Vehicle credit (Form 8910), Qualified Plug-in Motor Vehicle Credit (Form 8936), Partner's Additional Reporting Year Tax (Form 8978), and the Energy Efficient Home Improvement Credit (Form 5695, Part II) offset tax liability first.

If the taxpayer did not File Form 2555, Credit Limit Worksheet B (Figure 3 on page 20) is completed to further offset the tax liability by any Mortgage Interest Credit (Form 8396), Adoption Credit (Form 8839), Carry Forward of the DC First-Time Homebuyer Credit (Form 8859), and Residential Clean Energy Credit (Form 5695, Part 1) claimed on the return.

Step 4. Calculating the Additional Child Tax Credit

When the CTC/ODC credit equals the allowable CTC/ODC, the return is removed. When the claimed CTC/ODC is less than the claimed ODC/CTC, all or part of the unused CTC may be refundable. We follow the steps in Schedule 8812, page 2 (see Figure 4 on page 21) to calculate the ACTC unless otherwise indicated.

ACTC is limited to the smaller of the unused CTC/ODC and the maximum ACTC. The maximum ACTC equals \$1,500 x the number of QCs.

A further limitation is that taxpayer's must have at least \$2,500 in earned income to be eligible to claim ACTC (in TY2022). Earned income is generally defined as taxable wages, salaries, tips, and other taxable employee pay, net earnings form self-employment, and gross income received as a statutory employee. Because earned income for purposes of the ACTC is generally defined under IRC section 32 (Earned Income Tax Credit), we use the calculator developed for EITC with the modification that nontaxable combat is always included in earned income. We use administrative data from the following sources:

- Form 1040 Wage and self-employment deduction
- Form 1040 Schedule SE Tentative Earnings, Schedule SE Optional Method amount, and Church Wages
- Form 1040 Schedule C Profit/Loss amount minus Statutory W-2
- Form 1040 Schedule F Profit/Loss amount
- Form 1065 Schedule K-1 Partner Self-Employment Earnings Box 14, Code A amount

Form W-2, Box 12, Code Q – Nontaxable combat pay

To calculate earned income, wages and self-employment income and nontaxable combat pay from the sources above is summed. When Schedule SE is present, we use the self-employment reported on Schedule SE in lieu of the amounts from Schedule C, Schedule F, and Schedule K-1. The self-employment deduction from Form 1040, Schedule 1, line 15 is subtracted to arrive at earned income for ACTC purposes.

If earned income is \$2,500 or less, the return is removed from the ACTC file. If earned income is greater than \$2,500, earned income is excess of \$2,500 is multiplied by 15%. For taxpayers with fewer than three qualifying children or who are not bona fide residents of Puerto Rico, this amount becomes the ACTC. For taxpayers with three or more qualifying children and bona fide residents of Puerto Rico, this amount becomes the minimum ACTC.

Alternative Calculation of ACTC for Taxpayers who have three or more QCs and Bona Fide Residents of Puerto Rico

For taxpayers who have three or more QCs and all bona fide residents of Puerto Rico, ACTC will not be less than an alternative ACTC amount calculated based on employment and self-employment taxes paid (see Figure 5 on page 22). We calculated this amount as follows:

Social security, Medicare, and Additional Medicare taxes from Forms W-2, boxes 4 and 6

- + Deductible part of self-employment tax (Form 1040, Schedule 1, line 15)
- + Social security and Medicare tax on unreported tip income (Form 1040, Schedule 2, line 5)
- + Uncollected social security and Medicare tax on wages (Form 1040, Schedule 2, line 6)
- + Uncollected social security and Medicare or RRTA tax on tips or group-term life insurance (Form 1040, Schedule 2, line 13)
- Earned Income Tax Credit (Form 1040, line 27)
- Excess social security and tier 1 RRTA tax withheld (Form 1040, Schedule 3, line 11)

ACTC equals the larger of the minimum ACTC and the alternative ACTC amount.

Figure 2. TY2022 Credit Limit Worksheet A

Credit Limit Worksheet A

1.	Enter the amount from line 18 of your Form 1040, 1040-SR, or 1040-NR.
	Add the following amounts (if applicable) from:
	Schedule 3, line 1
	Schedule 3, line 2
	Schedule 3, line 3
	Schedule 3, line 4
	Schedule 3, line 6d
	Schedule 3, line 6e
	Schedule 3, line 6f
	Schedule 3, line 61
	Form 5695, line 30
	Subtract line 2 from line 1.
	Complete Credit Limit Worksheet B only if you meet all of the following.
	You are claiming one or more of the following credits. a. Mortgage interest credit, Form 8396. b. Adoption credit, Form 8839. c. Residential clean energy credit, Form 5695, Part I. d. District of Columbia first-time homebuyer credit, Form 8859.
	2. You are not filing Form 2555.
	3. Line 4 of Schedule 8812 is more than zero.
	If you are not completing Credit Limit Worksheet B, enter -0-; otherwise, enter the amount from Credit Limit Worksheet B.

Figure 3. TY2022 Credit Limit Worksheet B

Credit Limit Worksheet B

Before you begin:	√ Complete the Earned Income Worksheet, later, in these instructions. √ 1040 and 1040-SR filers. Complete line 27; Schedule 2, line 5; Schedule 2, Schedule 3, line 11 of your return if they apply to you.	
	1040-NR filers. Complete Schedule 2, line 5; Schedule 2, line 6; and Schedu of your return if they apply to you.	le 3, line 11
	sheet only if you meet each of the items discussed under line 3 of Credit Limit Worksheet ot filing Form 2555.	A, including
1	Enter the amount from Schedule 8812, line 12	1
2	Number of qualifying children under 17 with the required social security number: × \$1,500. Enter the result.	2
	TIP: The number of children you use for this line is the same as the number of children you used for line 4 of Schedule 8812.	
3	Enter your earned income from line 7 of the Earned Income Worksheet.	
4	I. Is the amount on line 3 more than \$2,500? No. Leave line 4 blank, enter -0- on line 5, and go to line 6. Yes. Subtract \$2,500 from the amount on line 3.]
5	Enter the result. Multiply the amount on line 4 by 15% (0.15) and enter the result.	5
•	 On line 2 of this worksheet, is the amount \$4,500 or more? No. If you are a bona fide resident of Puerto Rico and line 5 above is less than line 1 above, go to line 7. Otherwise, leave lines 7 through 10 blank, enter -0- on line 11, and go to line 12. 	. L
	Yes. If line 5 above is equal to or more than line 1 above, leave lines 7 through 10 blank, enter -0- on line 11, and go to line 12. Otherwise, go to line 7.	_
If married filing jointly, include your spouse's amounts with yours when completing lines 7 and 8.	If your employer withheld or you paid Additional Medicare Tax or Tier 1 RRTA taxes, use the Additional Medicare Tax and RRTA Tax Worksheet to figure the amount to enter; otherwise enter the following amounts. Social security tax withheld from Form(s) W-2, box 4, and Puerto Rico Form(s) 499R-2/W-2PR, box 21, and Medicare tax withheld from Form(s) W-2, box 6, and Puerto Rico Form(s) 499R-2/W-2PR, box 23.	
•	8. Enter the total of any amounts from— • Schedule 1, line 15; • Schedule 2, line 5; • Schedule 2, line 6; and • Schedule 2, line 13.	
9	Add lines 7 and 8. Enter the total.	
dit Limit Worksheet B	Continued	
10.	1040 and 1040-SR filers. Enter the total of the amounts from Form 1040 or 1040-SR, line 27, and Schedule 3, line 11. 1040-NR filers. Enter the amount from Schedule 3, line 11.	
11.	Subtract line 10 from line 9. If the result is zero or less, enter -0	
12.	Enter the larger of line 5 or line 11.	
13.	Enter the smaller of line 2 or line 12.	
14.	Is the amount on line 13 of this worksheet more than the amount on line 1? No. Subtract line 13 from line 1. Enter the result.	
	Yes, Enter -0 Next, figure the amount of any of the following credits that you are claiming. • Mortgage interest credit, Form 8396. • Adoption credit, Form 8839. • Residential clean energy credit, Form 5695, Part I. • District of Columbia first-time homebuyer credit, Form 8859. Then, go to line 15.	
15.	Enter the total of the amounts from— Schedule 3, line 6c Schedule 3, line 6g Schedule 3, line 6h, and Form 5695, line 15 Ente	r this amount on 4 of Credit Limit ksheet A.

Figure 4, TY2022 Schedule 8812, Page 2

Schedule 8812	Form 1040) 2022		Page 2	
Part II-A	Additional Child Tax Credit for All Filers			
Caution: If y	ou file Form 2555, you cannot claim the additional child tax credit.			
15 Check	this box if you do not want to claim the additional child tax credit. Skip Parts II-A and II-B. Enter -0- on line	27		
16a Subtra	Subtract line 14 from line 12. If zero, stop here; you cannot take the additional child tax credit. Skip Parts II-A			
and II	and II-B. Enter -0- on line 27			
b Numb				
Enter				
	Enter -0- on line 27			
	TIP: The number of children you use for this line is the same as the number of children you used for line 4.			
17 Enter	17 Enter the smaller of line 16a or line 16b			
	d income (see instructions)			
	xable combat pay (see instructions)			
19 Is the	amount on line 18a more than \$2,500?			
	o. Leave line 19 blank and enter -0- on line 20.			
_	es. Subtract \$2,500 from the amount on line 18a. Enter the result			
Next.				
■ N	No. If you are a bona fide resident of Puerto Rico, go to line 21. Otherwise, skip Part II-B and enter the smaller of line 17 or line 20 on line 27.			
_				
Y				
	Otherwise, go to line 21.			
Part II-B	Certain Filers Who Have Three or More Qualifying Children and Bona Fide Resident	s of I	ouerto Rico	
	eld social security, Medicare, and Additional Medicare taxes from Form(s) W-2,			
	4 and 6. If married filing jointly, include your spouse's amounts with yours. If			
	employer withheld or you paid Additional Medicare Tax or tier 1 RRTA taxes, see			
	ctions	.		
	the total of the amounts from Schedule 1 (Form 1040), line 15; Schedule 2 (Form			
	, line 5; Schedule 2 (Form 1040), line 6; and Schedule 2 (Form 1040), line 13 .	.		
	ines 21 and 22	.		
24 1040				
1040-	SR filers: Enter the total of the amounts from Form 1040 or 1040-SR, line 27,			
	and Schedule 3 (Form 1040), line 11.			
	NR filers: Enter the amount from Schedule 3 (Form 1040), line 11.	25		
	enter the smaller of line 17 or line 26 on line 27.			
	Additional Child Tax Credit	·		
27 This i	s your additional child tax credit. Enter this amount on Form 1040, 1040-SR, or 1040-NR, line 28.	27	0040 (Farme 4040) 0000	

Figure 5. TY2022 Additional Medicare tax and RRTA Tax Worksheet.

