# Tax Year 2022 Credits and Deductions Gap: Summary Report

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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.

# **Executive Summary**

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 increase the amount that can be refunded based on certain eligibility criteria. Taxpayers can receive three general types of credits and deductions:

- 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 taxpaver'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.

This report summarizes the first round of work the IRS has conducted to measure the 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 tax returns. An accompanying set of working papers discusses the methodologies in greater detail and provides additional results.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> 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

<sup>&</sup>lt;sup>2</sup> See for additional information:

Tax Year 2022 EITC Benefits Gap Estimate for Filers Using IRS Administrative Data https://www.irs.gov/pub/irs-soi/24rpeitcunderclaims.pdf

Tax Year 2022 CTC and ACTC Benefits Gap Estimates for Filers Using IRS Administrative Data https://www.irs.gov/pub/irs-soi/24rpctcunderclaims.pdf

TY2021 and TY2022 Education Tax Credit Underclaims for Filers and Nonfilers https://www.irs.gov/pub/irs-soi/24rpedtcunderclaims.pdf

While the credits and deductions gap includes eligible taxpayers regardless of whether they file a return, most of the estimates in this report focus only on the population that files a tax return. To provide additional context for these filer-only estimates, this summary report also includes estimates produced for the IRS by the Census Bureau of unclaimed EITC and CTC/ACTC in prior tax years, which include amounts left unclaimed by non-filers. Technical papers describing the methods used by the Census Bureau to produce these estimates are also included among the working papers.<sup>3</sup>

The analysis summarized in this report shows:

- Earned Income Tax Credit (EITC) [filers only]: \$56 billion claimed by taxpayers in Tax Year 2022; \$864 million estimated credit gap from 470,000 taxpayers who filed a tax return.
- Child Tax Credit (CTC) [filers only]: \$76 billion claimed by taxpayers in Tax Year 2022; \$133 million estimated credit gap from 110,000 taxpayers who filed a tax return.
- Additional Child Tax Credit (ACTC) [filers only]: \$31.0 billion claimed by taxpayers in Tax Year 2022; \$175 million estimated credit gap from 135,000 taxpayers who filed a tax return.
- American Opportunity Tax Credit (AOTC) and Lifetime Learning Credit (LLC)
  (Education Credits) [filers and non-filers]: \$12.7 billion claimed by taxpayers in TY22;
  \$6.3 billion estimated credit gap from 6.0 million taxpayers.

Table ES1: Summary of IRS Refundable Credit Gap Estimates, Tax Year 2022

	Number of Taxpayers with a Credit Gap* (thousands)	Number of Claimants (thousands)	Eligible Taxpayers with a Credit Gap as % of Claimants	Credit Gap (millions)	Dollars Claimed (millions)	Credit Gap as % of Dollars Claimed
Earned Income Tax Credit (filers only)	470	22,000	2%	893	56,000	1.5%
Child Tax Credit (filers only)	110	28,000	0.4%	133	76,000	0.2%
Additional Child Tax Credit (filers only)	135	17,000	0.8%	175	31,000	0.6%
Education Credits**	5,994	8,609	70%	6,316	12,700	50%

<sup>\*</sup>The credit gap includes both non-claimants and under-claimants

<sup>3</sup> See for additional information:

<sup>\*\*</sup>Filers and non-filers

EITC Participation Results and IRS-Census Match Methodology, Tax Year 2021
 <a href="https://www.irs.gov/pub/irs-soi/24rpeitcunderclaimsty2021census.pdf">https://www.irs.gov/pub/irs-soi/24rpeitcunderclaimsty2021census.pdf</a>
 <a href="https://www.irs.gov/pub/irs-soi/24rpeitcunder

CTC and ACTC Participation Results and IRS-Census Match Methodology, Tax Year 2020 https://www.irs.gov/pub/irs-soi/24rpctcunderclaimsty2020census.pdf

The Census Bureau's analysis shows:

- Earned Income Tax Credit [filers and non-filers]: \$38.4 billion modeled dollars eligible to be claimed for taxpayers in Tax Year 2020; \$5.9 billion estimated credit gap from 4.1 million taxpayers.<sup>4</sup>
- Child Tax Credit and Additional Child Tax Credit [filers and non-filers]: \$90.5 billion modeled dollars eligible to be claimed for taxpayers in Tax Year 2020; \$9.3 billion estimated credit gap from 2.4 million taxpayer.

Table ES2: Summary of Census Refundable Credit Gap Estimates, Tax Year 2020

	Number of Taxpayers with a Credit Gap (thousands)	Number of Modeled Eligible (thousands)	Taxpayers with a Credit Gap as % of Modeled Eligible	Credit Gap (millions)	Modeled Dollars Eligible to be Claimed (millions)	Credit Gap as % of Modeled Dollars Eligible to be Claimed
Earned Income Tax Credit*	4,100	20,100	20%	5,900	38,400	15%
Child Tax Credit)/Additional Child Tax Credit*	2,400	33,100	7%	9,300	99,800	9%

<sup>\*</sup>Filers and non-filers

This new effort to measure the credits and deductions gap complements the IRS's continuing efforts to measure the tax gap, which focuses on amounts underpaid to the government, as well as the IRS's reporting on improper payments, which focuses on overpayments. The IRS releases annual estimates of improper payments in accordance with the Payment Integrity Information Act of 2019 (PIIA) and Office of Management and Budget (OMB) memorandum M-21-19. For TY22, the IRS estimated nearly \$26 billion in improper payments for select refundable credits. <sup>5</sup> The IRS continues to leverage resources to deter and recover improper payments. The IRS endeavors to help every taxpayer pay exactly the right amount of tax. Estimating the prevalence of underclaims and expanding strategies to address underclaims is an important part of the IRS's holistic approach to tax compliance and continual efforts to improve taxpayer service.

The IRS plans to expand the set of credits and deductions for which it estimates gaps in the coming years and to refine the methodologies, as appropriate, used to estimate the credits and deductions 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.

<sup>&</sup>lt;sup>4</sup> The method is based on modeling from samples. It is possible the estimated eligible dollar amounts in this summary and Table ES2 are understated as the current weighting procedure used tends to underestimate the actual amount of EITC paid to taxpayers. For example, in tax year 2021 the understatement was about 9 percent (\$59 billion modeled paid versus \$65 billion actually paid).

<sup>&</sup>lt;sup>5</sup> PaymentAccuracy. Annual Improper Payments Datasets. <a href="https://www.paymentaccuracy.gov/payment-accuracy-the-numbers/">https://www.paymentaccuracy.gov/payment-accuracy-the-numbers/</a>

# Methodology

This report measures the extent of underclaim, which occurs when a taxpayer does not claim the full amount of tax credits and deductions for which they may be eligible. Terms and metrics included in this report include:

- (1) Claimants: Taxpayers who filed an income tax return and who claimed a credit
- (2) Filer Non-Claimants: Taxpayers who filed an income tax return, did not claim a credit, and we estimate they are eligible
- (3) Filer Under-Claimants: Taxpayers who filed an income tax return and claimed a credit but who did not claim the full amount we estimate they are eligible to claim. These are a subset of claimants.
- (4) Non-filer Under-claimants: Taxpayers who did not file an income tax return whom we estimate are eligible to claim a credit, were they to file an income tax return. Most non-filers will be non-claimants, except in scenarios where advanced credits have been issued.
- (5) Underclaim Amount: The difference between the amount of a tax credit for which a taxpayer who filed an income tax return is eligible and the amount of a tax credit claimed at the time of filing by that taxpayer.
- (6) Total Credits and Deductions Gap: The amount of a tax credit or deduction for which taxpayers are eligible but did not claim, irrespective of whether those taxpayers filed tax returns. That is, the sum of (i) the underclaim amount and (ii) the estimated amount of a tax credit or deduction for which non-filers are eligible to claim, were they to file an income tax return. In this report, this statistic aggregates amounts calculated as a part of the current analysis and may not be representative of the total gap for areas not calculated (e.g., non-filer underclaims).
- (7) Total Claims: The aggregate amount of a tax credit claimed on an original tax return, as filed by taxpayers. No adjustments are made for over-claims or for any disallowances or recovery of the credit when a taxpayer was subsequently determined by the IRS to be ineligible for the credit.

This initial report shares IRS estimates of the credits and deductions gap for the credits outlined above. For most of the credits, the IRS estimates focus only on the tax return filing population. Estimates for non-filers are included for the Education Tax Credits.

For each credit, we separately construct a credit calculator that estimates the amount of the particular tax credit for which the tax unit (i.e., household or group of individuals appearing on a single return) is eligible for Tax Year 2022. Estimates of eligibility and computations are based on the information available to the IRS on submitted tax returns and information returns (such as Form W-2 [Wage and Tax Statement] and Form 1098-T [Tuition Statement]).

For filers, we identify returns that appear to be eligible for the relevant tax credit. Then we run each return through the appropriate credit calculator to estimate the credit amount for which the return is eligible. Next, we subtract the estimated eligible credit amount from any amount that is claimed on the taxpayer's tax return to arrive at the estimated underclaim amount.

For non-filers, we first construct a counterfactual income tax return for each individual or taxpayer using their information returns and, in some cases, information from their prior year tax returns. This should be thought of as a possible tax return that the IRS might have received had the individual filed a return. As we did for filers, we identify individuals who appear to be eligible for the relevant credit and then run each counterfactual tax return through the appropriate credit calculator to estimate the credit amount for which the individual appears to be eligible.

The sum of this amount, where calculated, and the underclaim amount for filers described above is the credit gap for these credits. Some taxpayers may not be able to claim the full amount of a credit or deduction when they do not have sufficient tax liability. In these situations, we estimate the amount a taxpayer could claim based on actual or estimated tax liability. This report, therefore, presents credit gaps that we estimate could have been claimed.

For the IRS estimates, information is leveraged from Tax Year 2022 returns. All information reported by the taxpayer, including income, is considered correct and accurate. No adjustments to the data were made to account for misreporting, amendments to returns that may have occurred after our analysis period, or subsequent corrections made to values upon audit. The IRS may engage with taxpayers after the filing season to encourage uptake of credits or to recover improper payments from claimants deemed ineligible. The estimates included in this report do not reflect any post-filing actions that may impact claiming. Because of the complicated interactions of provisions in the tax code, an increase in the amount of one tax credit could result in the increase in the amount of a different tax credit if the latter credit were limited for some reason. The estimates provided in this report are not additive.

More detailed descriptions of methodologies as well as additional analyses can be found in the source working papers. Additional estimates from the Census Bureau for non-filers for Tax Year 2020 are included for the Earned Income Tax Credit and the Child Tax Credit/Additional Child Tax Credit. The methods for these estimates are not discussed in detail in this report, but can be found in the associated working papers.

# **Credit Gap by Credit**

# **Earned Income Tax Credit (EITC)**

The EITC is a refundable credit that benefits low- and moderate-income workers. Because the credit is refundable, taxpayers with no tax liability can still benefit from the credit. The amount of EITC each taxpayer can claim depends on several factors, including the presence and number of qualifying children (QCs) in the worker's household, filing status (i.e., whether married filing jointly or using another filing status), age, the worker's earned income, adjusted gross income, investment income, and immigration and work status in the United States. The EITC phases in as a percentage of one's earned income until the credit amount reaches its maximum level. When a taxpayer has income above set thresholds (phaseout income threshold), the credit gradually decreases to zero at a fixed rate.

In general, to be eligible for EITC for Tax Year 2022, one must have:

- Had earned income;
- Had investment income of \$10,300 or less;
- Had a Social Security Number (SSN) valid for employment issued on or before the due date of the tax return;
- Been a U.S. citizen or a resident alien all year;
- Not filed Form 2555, Foreign Earned Income, with one's income tax return to exclude foreign earned income or housing cost;
- Not been a QC of another taxpayer; and
- Not been banned from claiming the credit.

In general, to be a qualifying child for the EITC for Tax Year 2022, the child must<sup>6</sup>:

- Have had a SSN valid for employment issued on or before the due date of the tax return;
- Have been (i) any age and permanently and totally disabled at any time during the year;
   (ii) under age 19 and younger than the primary and secondary filer on the return; or (iii) under age 24 at the end of the year and a full-time student for at least 5 months of the year and younger than the primary and secondary filer on the return;
- Have been the taxpayer's son, daughter, stepchild, adopted child or foster child; brother, sister, half-brother, half-sister, stepsister or stepbrother; grandchild, niece or nephew; an adopted child lawfully placed with the taxpayer for legal adoption; or certain foster children;
- Lived with the taxpayer in the U.S. for more than half of 2022;
- Not have filed a joint return unless to claim a refund of withheld income tax; and
- Must have their name, age, and taxpayer identification number included on the taxpayer's return.

In general, in order to claim the EITC for Tax Year 2022 with no qualifying children, a taxpayer must:

- Have had their primary residence in the U.S. for more than half the tax year;
- Not have been claimed as a dependent of another taxpayer;
- Have been at least age 25 but under 65 or their spouse must have been at least age 25 but under age 65 before the close of the tax year.

Table 1: EITC Maximum Benefits by Maximum Adjusted Gross Income (AGI) and Number of Qualifying Children, Tax Year 2022

Children or relatives claimed	Maximum AGI to qualify for Full Credit (not Married Filing Jointly)	Maximum AGI to qualify for Full Credit (Married Filing Jointly)	Maximum Credit
Zero	\$16,480	\$22,610	\$560
One	\$43,492	\$49,622	\$3,733
Two	\$49,399	\$55,529	\$6,164
Three	\$53,057	\$59,187	\$6,935

### **Data and Methodology**

The estimated credit gap for the EITC in this report is limited to filers. First, we identified taxpayers that met the eligibility requirements for claiming EITC in Tax Year 2022. We used state, filing location, document code, and non-resident indicators to assure residency requirements were met. We exclude anyone that does not have a valid SSN, submits Form 2555 Foreign Earned Income, has been banned from EITC, or had a code that marked a return as ineligible. Second, we identified the number of qualifying children. We identified children listed on a return and then identified the children who appeared to meet the tests to be a

<sup>&</sup>lt;sup>6</sup> Although a child may meet the tests to be a qualifying child for more than one taxpayer, they can only be claimed once for purposes of claiming EITC. Tie-breaker rules exist to determine who may claim the child.

qualifying child. These included ensuring that these children had valid SSNs, met the age requirement, were not claimed on another tax return for EITC purposes, and did not independently file a joint return (unless exception criteria were met). Third, we confirmed eligibility rules based on the number of qualifying children (which may be zero), affirmed the investment income threshold was not exceeded, and calculated the amount of earned income for the purposes of credit calculations.

# **Description of Findings**

- For context, at the time of filing, 22 million taxpayers claimed a total of \$56 billion of EITC for Tax Year 2022. For Tax Year 2022, the EITC credit gap for filers is estimated to be \$893 million.
- Most of this credit gap—\$848 million of the \$893 million total and 452,000 of the 470,000 tax units that underclaimed—is estimated to come from eligible nonclaimants.
- The estimated 17,000 tax units that claimed the EITC—but not the full amount for which they were eligible—appeared to have been eligible for \$45 million of EITC but only claimed \$29 million.

As noted above, EITC analyses by the Census Bureau including non-filers for TY2020 estimated 4.1 million taxpayers underclaimed \$5.9 billion, or 15% when compared to modeled dollars eligible to be claimed.

Table 2: Summary of Earned Income Tax Credit Gap and Claims for Filers, Tax Year 2022

	Number of Tax Units (thousands)	Amount (\$ millions)
Total Underclaims - Filers	470	\$893
Non-Claimants	452	\$848
Under-Claimants	17	\$45
Total Credit Gap EITC – Filers	470	\$893
Total Claims	22,000	\$56,000

## Child Tax Credit (CTC)/Additional Child Tax Credit (ACTC)

The CTC is a partially refundable credit that may be claimed by taxpayers with at least one qualifying child. For Tax Year 2022, a taxpayer may claim a CTC of up to \$2,000 per qualifying child. Taxpayers receive the credit in two parts: the non-refundable portion that offsets tax liability (the CTC) and the remainder which is potentially refundable (ACTC). Taxpayers can receive the full credit if modified AGI does not exceed \$200,000 (or \$400,000 for married taxpayers filing a joint return). The maximum refundable portion, the Additional Child Tax Credit (ACTC), is limited to the lesser of (i) \$1,500 per child, (ii) 15 percent of earned income in excess of \$2,500 for 2022, or (iii) the amount not claimed as the nonrefundable CTC. A special rule applies to taxpayers with three or more qualifying children and all which allows a refundable credit based on employment and self-employment taxes paid during the year.

In general, to be a qualifying child for the CTC for Tax Year 2022, the child must

- Have been under age 17 at the end of the year;
- Have had a SSN valid for employment issued on or before the due date of the tax return;
- Have been the taxpayer's son, daughter, stepchild, eligible foster child, brother, sister, stepbrother, stepsister, half-brother, half-sister, or a descendent of one of these, e.g., a grandchild, niece, or nephew;

- Have not provided more than half their own financial support during the year;
- Have been properly claimed as a dependent on the taxpayer's return;
- Have lived with the taxpayer for more than half the year;
- Have not filed a joint return with their spouse for Tax Year 2022 or filed it only to claim a refund of withheld income tax or estimated tax paid; and
- Have been a U.S. citizen, U.S. national, or U.S. resident alien.

### **Data and Methodology**

The estimated credit gap for the CTC and ACTC in this report is limited to filers. Using Tax Year 2022 income tax returns, we estimate the underclaim amount for non-claimants and claimants. We also apply the special rule for taxpayers with three or more QCs (and all bona fide residents of Puerto Rico) that allows a minimum ACTC based on employment and self-employment taxes paid after being reduced, but not below zero, by claimed EITC. Puerto Rico residents are excluded from CTC by law.

# **Description of Findings** CTC

- For context, at the time of filing, 28 million taxpayers claimed a total of \$76 billion of CTC credits
- For Tax Year 2022, the CTC credit gap for filers is estimated to be \$133 million.
- Most of the dollar amount of this credit gap—\$79 million of the \$133 million total—is estimated to come from eligible non-claimants, but most of the tax units—67,000 of the 110,000 total—were under-claimants.
- The estimated 67,000 tax units that underclaimed the CTC appeared to have been eligible for \$145 million of CTC, but only claimed \$91 million.

#### ACTC

- For context, at the time of filing, 17 million taxpayers claimed a total of \$31 billion of ACTC credits.
- For Tax Year 2022, the ACTC credit gap for filers is estimated to be \$175 million.
- Most of this credit gap—\$158 million of the \$175 million total and 116,000 of the 135,000 tax units that underclaimed—is estimated to come from eligible non-claimants.
- The estimated 19,000 tax units that claimed the ACTC—but not the full amount for which they were eligible—appeared to have been eligible for \$56 million of ACTC but only claimed \$39 million.

As noted above, CTC/ACTC analyses by the Census Bureau including non-filers for TY2020 estimated 2.4 million taxpayers did not claim \$9.3 billion, or 9% when compared to modeled dollars eligible to be claimed.

Table 3: Summary of Child Tax Credit Gap and Claims for Filers, Tax Year 2022

	Number of Tax Units (thousands)	Amount (\$ millions)
Total Underclaims - Filers	110	\$133
Non-Claimants	43	\$79
Under-Claimants	67	\$54
Total Credit Gap CTC – Filers	110	\$133
Total Claims	28,000	\$76,000

Table 4: Summary of Additional Child Tax Credit Gap and Claims for Filers, Tax Year 2022

	Number of Tax Units (thousands)	Amount (\$ millions)
Total Underclaims – Filers	135	\$175
Non-Claimants	116	\$158
Under-Claimants	19	\$17
Total Credit Gap ACTC – Filers	135	\$175
Total Claims	17,000	\$31,000

# Education Credits American Opportunity Tax Credit (AOTC)/Lifetime Learning Credit (LLC)

The Internal Revenue Code contains two tax credits for qualified higher education expenses: the American Opportunity Tax Credit (AOTC) and the Lifetime Learning Credit (LLC). A taxpayer can only claim one of these, per student, on a given return. A taxpayer can claim both credits on the same return, but not for the same student or the same qualified expenses. The tentative AOTC amount, per eligible student, is 100 percent of the first \$2,000 of qualified tuition and related expenses and 25 percent of the next \$2,000 of qualified expenses, for a maximum amount of \$2,500. If the credit brings the amount of tax liability the taxpayer owes to zero, then forty percent of the remaining amount AOTC (up to \$1,000) may be refunded to the taxpayer. The tentative LLC amount, per eligible tax unit, is 20 percent of the first \$10,000 of qualified tuition and related expenses, and no portion of the LLC is refundable. For Tax Year 2022, taxpayers may claim full credit amounts if their modified AGI is \$80,000 or less (\$160,000 in the case of a married couple filing a joint return). No credit is allowed if the taxpayer's modified AGI is more than \$90,000 (\$180,000 in the case of a married couple filing a joint return).

In general, to be an eligible student for the AOTC for Tax Year 2022, one must:

- Have been pursuing a degree or other recognized education credential;
- Have been enrolled at least half time for at least one academic period beginning in Tax Year 2022:
- Not have finished the first four years of higher education at the beginning of Tax Year 2022:
- Not have claimed the AOTC or the former Hope credit for more than four years; and
- Not have a felony drug conviction at the end of Tax Year 2022.

In general, to be an eligible student for the LLC for Tax Year 2022, one must:

- Have been enrolled or taking courses at an eligible educational institution;
- Have been taking a higher education course or courses to get a degree or other recognized education credential or to get or improve job skills; and
- Have been enrolled for at least one academic period beginning in Tax Year 2022.

Qualified expenses for the AOTC include tuition, fees, and course materials while LLC qualified expenses only include tuition and fees. All AOTC eligible students are also LLC eligible. A taxpayer may claim only one credit per eligible student, but the taxpayer may claim both the AOTC and the LLC on the same return if the credits are for different eligible students.

# **Data and Methodology**

#### **Filers**

In order to estimate underclaims for education credits on income tax returns, we first need to identify students and then estimate, using information solely from those income tax returns and associated information returns, whether or not the students are eligible for the AOTC or LLC. We use Tax Year 2022 data from Form 1040, Individual Income Tax Return; Form 8863, Education Credits; and Form 1098-T, Tuition Statement. We identify students in two ways: (i) students who receive a Form 1098-T; and (ii) a taxpayer reported student listed on Form 8863 with an education credit claim. Note that students with an education credit claim on Form 8863 may not always have a Form 1098-T, and students with a Form 1098-T may not have any education credit claim.<sup>7</sup>

We assign a credit type (AOTC or LLC) to each student with a Form 1098-T. Students enrolled as graduate students or half-time are assigned to LLC. Students not enrolled in graduate school and enrolled at least half-time are assigned to AOTC.

Tax returns for non-claimants are missing key information needed to determine AOTC eligibility, such as degree-seeking status and number of years of postsecondary education. Because of this incomplete information, we consider in the associated working paper a range of AOTC eligibility assumptions. This summary report contains the "middle approach", which starts from the most permissive eligibility assumptions for the AOTC and then layers on two additional rules: (i) deny AOTC to any student with at least four observed AOTC claims on prior-year returns and (ii) deny AOTC to any student older than age 25.

#### Non-Filers

Student non-filers can be identified by a Form 1098-T that does not match to any filed tax return. Additional complexities arise around determining the appropriate tax unit and filing status for student non-filers and estimating the income associated with the tax return on which an education credit claim could have been made. The estimate of education credit underclaims for non-filers for Tax Year 2022 starts with the list of recipients of Forms 1098-T who were not listed as a primary, secondary, or dependent on a Tax Year 2022 income tax return processed before the end of April 2024. We link these non-filing students to individual tax returns from tax years 2023, 2021, and 2020. This allows us to construct for the student, using the filing status information from these adjacent-year tax returns and income information from Tax Year 2022 information returns, a counterfactual Tax Year 2022 return—a return that the IRS potentially could have received. For those not linked to a tax return in one of these years, we assume that the student would file a single return and could not be claimed as a dependent. Then, based on this information we estimate the tax liability and education credit underclaims for those student non-filers.

To calculate the underclaims for non-filers, we apply more specific assumptions, similar to what was described above to sort students on tax returns into the AOTC or LLC and calculate credit amounts. To account for variability on estimates due to imperfect knowledge about who is eligible for AOTC and LLC as well as uncertainty about total income and tax liability, we consider a range of assumptions and produce a range of estimates. This summary report contains the "middle ground" approach. For more information, see the associated working paper.

<sup>7</sup> See, for example, Cronin, Julie-Anne and Joseph Gray-Hancuch, "Barriers to Claiming Education Credits for Low-Income Students," Office of Tax Analysis Working Paper 125, June 2024, <a href="https://home.treasury.gov/system/files/131/WP-125.pdf">https://home.treasury.gov/system/files/131/WP-125.pdf</a>. Last accessed November 22, 2024.

# **Description of Findings**

- For context, at the time of filing, 8.6 million eligible tax returns claimed \$12.7 billion of education credits.
- For Tax Year 2022, the AOTC/LLC credit gap is estimated to be \$6.3 billion.
- Most of this credit gap—\$4.6 billion of the \$6.3 billion and 4.4 million of the 4.8 million tax unit filers that underclaimed—is estimated to come from eligible non-claimants.
- The estimated 362,000 tax units that claimed education credits—but not the full amount for which they were eligible—appear to have been eligible for \$1.1 billion of education credits but only claimed \$640 million of education credits.
- An estimated 1.2 million non-filers did not claim an estimated \$1.3 billion of education credits.

Table 5: Summary of Education Tax Credit Gap and Claims in TY2022

	Number of Tax Units (thousands)	Amount (\$ millions)
Total Underclaims - Filers	4,790	\$5,049
Non-Claimants	4,428	\$4,584
Under-Claimants	362	\$465
Total Underclaims - Non-filers	1,204	\$1,267
Total Credit Gap AOTC/LLC	5,994	\$6,316
Total Claims	8,609	\$12,700