

**Estimated Federal Income Tax Benefit from the American
Opportunity Tax Credit, Lifetime Learning Tax Credit, and
the Student Loan Interest Deduction
For Taxable Year 2023**



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In taxable year 2023, taxpayers with current education expenses for themselves or a dependent may be eligible for one of two education credits. Taxpayers who make student loan payments may be eligible to deduct interest paid.

The **American opportunity tax credit (AOTC)** is available for up to four taxable years for students enrolled at least half-time who are pursuing a degree or credential. The AOTC has a maximum value of \$2,500 per student per year (up to \$10,000 in tax relief over four years). The credit provides a 100 percent match for the first \$2,000 of eligible expenses and a 25 percent match for the next \$2,000 of eligible expenses. Forty percent of the resulting credit, thus a maximum of \$1,000, is refundable and available to all taxpayers with expenses regardless of tax liability. The remaining 60 percent is nonrefundable.

In contrast, the **lifetime learning tax credit (LLTC)** is available for an unlimited number of years of education and does not require that the qualifying students be pursuing a degree or credential. The LLTC has a maximum value of \$2,000 per tax return. It is calculated as a 20 percent match of up to \$10,000 of expenses per return. Unlike the AOTC, it is nonrefundable and therefore it is not available to many low-income families.

Both credits phase out for taxpayers with modified adjusted gross income between \$80,000 and \$90,000 (between \$160,000 and \$180,000 for joint filers).¹ Only education spending net of other tax-preferred education assistance, such as grants, scholarships, or distributions from education savings accounts, qualifies for a credit. Qualifying expenses do not include living expenses, such as room and board. Taxpayers may claim at most one education tax credit per student per year.

The definition of eligible expenses differs between the two credits. Tuition and required fees are eligible expenses for either credit. The AOTC allows taxpayers to claim expenses for books and equipment (including books purchased at a bookstore) necessary for the course. The LLTC is more restrictive; taxpayers may only claim expenses for books and equipment required for enrollment (and purchased through the school as a condition of enrollment).

Taxpayers can claim the credits for their own expenses or the expenses of a dependent child or relative. Although in general a dependent child must be less than 19 years old, the age limit is extended through 23 years old for full-time students.² Thus in general, the education expenses of traditional college students can be claimed by their parents.

Taxpayers may be eligible for a **student loan interest deduction (SLID)**. Subject to income limitations, taxpayers may deduct up to \$2,500 of qualified student loan interest paid. In 2022 the deduction phases out with modified AGI between \$75,000 and \$90,000 (\$150,000 and \$180,000 for joint returns). The income limits are indexed for inflation. A deduction lowers the amount of

¹ For tax years prior to 2021, the phaseout range for the LLTC was lower than that for the AOTC, and a deduction for tuition and fees was available. The Consolidated Appropriations Act of 2021 repealed the deduction for tuition and fees (which had expired) and increased the phaseout range for the LLTC.

² The tax code defines a full-time student as a student who attends full-time for at least one day in each of five months, which is roughly one school term during the year. Schools set forth their definitions of full-time attendance as outlined in the Higher Education Act.

taxable income the taxpayer has; the deduction's tax value is generally equal to the taxpayer's marginal tax rate multiplied by the deducted amount.

This document presents tables that show the Federal income tax support families are estimated to receive from these provisions for 2023. The estimates do not include dependent filers, and they ignore changes in tax of less than \$5. Benefits are estimated using Treasury's Individual Tax Model (ITM). The ITM takes a stratified random sample of tax returns from a base year, forecasts the values of line items on the tax returns for 2023 and applies a very detailed tax calculator to analyze how changes in the tax system affect tax liability. The first table shows the combined benefit from the two credits and the deduction; subsequent tables address the credits and the deduction separately. Results are shown for tax units, which consist of all individuals on a given tax return. In some cases, membership in a tax unit is identical to the household or family, but in other cases membership will differ.

The tables answer the following questions: "how many tax units *benefit* from the provision(s), what is the total amount of benefit, and what is the average benefit per return?" Tax units are classified based on current law adjusted gross income. The amount of benefit is calculated by comparing estimated tax liability to what estimated tax liability would be in the absence of the provision (but with the law otherwise unchanged). For example, in absence of the AOTC, many current claimants would switch to the LLTC, thereby offsetting some of the increase in tax. A tax unit is considered to benefit if the increase to income tax liability exceeds \$5 when the benefit (or combination of benefits) is repealed. Because a deducted amount does not equal the tax amount of benefit from that deduction, the student loan interest deduction table also includes average claims for the tax units benefitting.³

³ The tax benefit of a deduction is generally the value of the deducted amount multiplied by the taxpayer's marginal tax rate. However, because a deduction could affect the income concept used for the calculation of other tax provisions, the net effect might be larger or smaller.

Table 1
Estimated Benefit from
the American Opportunity Tax Credit (AOTC), the Lifetime Learning Credit (LLTC),
and the Student Loan Interest Deduction (SLID)
Taxable Year 2023

Adjusted Gross Income	Tax Units Benefitting (Thousands)	Total Benefit (\$Millions)	Average Benefit (\$)
0 to < 15,000	2,325	1,860	800
15,000 to < 30,000	3,183	2,828	888
30,000 to < 40,000	2,250	1,905	847
40,000 to < 50,000	2,265	1,930	852
50,000 to < 60,000	1,807	1,380	764
60,000 to < 75,000	2,492	1,988	798
75,000 to < 100,000	2,626	2,367	901
100,000 to < 200,000	4,946	5,523	1,117
200,000 and over	0	0	0
Total ¹	21,971	19,853	904

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¹ Dependent returns are excluded from the calculations. Returns with a tax change of at least \$5 are included among the tax units benefitting. Returns with negative income are excluded from the lowest income class but included in the total line.

Table 2
Estimated Benefit from
the American Opportunity Tax Credit (AOTC) and the Lifetime Learning Credit (LLTC)

Taxable Year 2023

Adjusted Gross Income	Tax Units Benefitting (Thousands)	Total Benefit (\$Millions)	Average Benefit (\$)
0 to < 15,000	2,189	1,844	842
15,000 to < 30,000	2,523	2,710	1,074
30,000 to < 40,000	1,320	1,735	1,314
40,000 to < 50,000	1,136	1,704	1,500
50,000 to < 60,000	747	1,134	1,517
60,000 to < 75,000	1,019	1,537	1,509
75,000 to < 100,000	1,240	2,086	1,681
100,000 to < 200,000	2,602	4,770	1,834
200,000 and over	0	0	0
Total¹	12,848	17,591	1,369

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¹ Dependent returns are excluded from the calculations. Returns with a tax change of at least \$5 are included among the tax units benefitting. Returns with negative income are excluded from the lowest income class but included in the total line.

Table 3
Estimated Benefit from
the Lifetime Learning Tax Credit (LLTC)

Taxable Year 2023

Adjusted Gross Income	Tax Units Benefitting¹ (Thousands)	Total Benefit (\$Millions)	Average Benefit² (\$)
0 to < 15,000	56	6	108
15,000 to < 30,000	643	335	521
30,000 to < 40,000	482	357	740
40,000 to < 50,000	439	370	843
50,000 to < 60,000	345	310	898
60,000 to < 75,000	537	464	864
75,000 to < 100,000	581	472	813
100,000 to < 200,000	1,067	886	830
200,000 and over	0	0	0
Total ³	4,149	3,200	771

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¹ Dependent returns are excluded from the calculations. Returns with a tax change of at least \$5 are included among the tax units benefitting.

² Much of the drop in the average benefit for returns with AGI between \$75,000 and \$100,000 relative to returns in the next higher AGI category is due to the phaseout of the credit for unmarried taxpayers in this range.

³ Returns with negative income are excluded from the lowest income class but included in the total line.

Table 4
Estimated Benefit from
the American Opportunity Tax Credit (AOTC)

Taxable Year 2023

Adjusted Gross Income	Tax Units Benefitting¹ (Thousands)	Total Benefit² (\$Millions)	Average Benefit (\$)
0 to < 15,000	2,133	1,826	856
15,000 to < 30,000	1,880	1,766	940
30,000 to < 40,000	839	860	1,025
40,000 to < 50,000	706	804	1,138
50,000 to < 60,000	411	482	1,174
60,000 to < 75,000	502	601	1,196
75,000 to < 100,000	712	877	1,231
100,000 to < 200,000	1,684	1,974	1,172
200,000 and over	0	0	0
Total³	8,937	9,260	1,036

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¹ Dependent returns are excluded from the calculations. Returns with a tax change of at least \$5 are included among the tax units benefitting.

² Although the 8.9 million tax units claiming an AOTC claim 14.7 million of AOTC, in absence of the AOTC many would switch to the LLTC, thereby offsetting the potential tax increase.

³ Returns with negative income are excluded from the lowest income class but included in the total line.

Table 5
Estimated Benefit from
Refundability of American Opportunity Tax Credit (AOTC)

Taxable Year 2023

Adjusted Gross Income	Tax Units Benefitting¹ (Thousands)	Total Benefit² (\$Millions)	Average Benefit (\$)
0 to < 15,000	2,129	1,824	857
15,000 to < 30,000	1,738	1,518	873
30,000 to < 40,000	556	396	712
40,000 to < 50,000	306	250	817
50,000 to < 60,000	120	101	843
60,000 to < 75,000	63	58	933
75,000 to < 100,000	41	39	967
100,000 to < 200,000	16	17	1,036
200,000 and over	0	0	0
Total ³	5,039	4,272	848

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¹ Dependent returns are excluded from the calculations. Returns with a tax change of at least \$5 are included among the tax units benefitting; all returns, regardless of the level of benefit, are included among tax units with claims.

² Even though all 8.9 million tax units claiming an AOTC claim the 40 percent of the credit that is refundable, only those with insufficient tax liability to offset their full credit benefit from this refundability. Tax units with sufficient tax liability would receive their full credit even without refundability; they are therefore not included among the 5.0 million units benefitting from refundability.

³ Returns with negative income are excluded from the lowest income class but included in the total line.

Table 6
Estimated Claims and Benefits from
the Student Loan Interest Deduction (SLID)

Taxable Year 2023				
Adjusted Gross Income	Tax Units Benefitting¹ (Thousands)	Total Benefit (\$Millions)	Average Interest Claimed (\$)	Average Benefit² (\$)
0 to < 15,000	134	14	1,371	101
15,000 to < 30,000	769	106	1,147	138
30,000 to < 40,000	1,100	167	1,168	152
40,000 to < 50,000	1,334	223	1,333	167
50,000 to < 60,000	1,220	246	1,384	201
60,000 to < 75,000	1,720	450	1,391	262
75,000 to < 100,000	1,698	283	1,137	167
100,000 to < 200,000	3,039	762	1,284	251
200,000 and over	0	0		0
Total³	11,021	2,253	1,275	204

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¹ Dependent returns are excluded from the calculations. Returns with a tax change of at least \$5 are included among the tax units in this table. Average claims are restricted to those units receiving a benefit even though there are units that may have claimed the deduction even if no Federal tax benefit resulted.

² The decrease in the average benefit observed for tax units with AGI between \$75,000 and \$100,000 is largely due to the phaseout of the deduction for unmarried taxpayers in this income range.

³ Returns with negative income are excluded from the lowest income class but included in the total line.