

May 9, 2022

To Interested parties  
From Sean Williams, Legislative Analyst  
Subject Income tax modeling; dependent care credit expansion

## Executive summary

This memo contains modeling results for three proposals included in the House omnibus tax bill (H.F. 3669, the third engrossment): the expansion of the student loan credit; the expansion of the Social Security subtraction; and the \$325 child rebate proposal. In addition the memo includes combined modeling results for the two proposals affecting tax year 2021: the student loan credit and social security subtraction expansions.

## Background: House modeling capabilities

House Research can model some individual income tax proposals using the House Income Tax Simulation (HITS) model, version 7.1. The model uses a stratified sample of 2019 individual income tax returns, and forecasts changes in tax years 2021 to 2025 based on the November forecast from Minnesota Management and Budget (MMB).

The House, Senate, Department of Revenue (DOR), and MMB all use the same model to estimate certain income tax proposals, but DOR has a broader sample of high-income returns than the other agencies. This may result in differences between House Research modeling and DOR revenue estimates.

The model can only estimate tax policy changes if the data needed to model the provision is included on a tax return. All of the data used by the model comes from amounts that taxpayers entered on a state or federal income tax return.

HITS model estimates are not precise and are subject to several sources of error. The model relies on a sample of income tax records, which introduces sampling error into the estimates. Estimates for years outside of the sample year are based on the November economic forecast produced by MMB—this introduces forecasting error into the model. For some tax system components for which the model does not have precise data, the model uses imperfect assumptions about taxpayers to interpolate missing numbers; this process also introduces error.

House Research modeling results are preliminary, and cannot replace formal estimates from the Department of Revenue.

## Proposals modeled

The HITS model has the capacity to model three income tax proposals in the House omnibus tax bill.

1. **Student Loan Credit:** Increasing the maximum credit to \$1,400 and making the credit refundable, effective for tax year 2022.
2. **Social Security Subtraction:** Allowing a 100% subtraction for federally taxable Social Security benefits, for taxpayers with adjusted gross incomes of \$75,000 (for married taxpayers filing joint returns) or \$58,600 (for single and head of household taxpayers). Effective for tax year 2022.
3. **\$325 Child Rebate:** Allowing a \$325 refundable income tax rebate for “qualifying children” ages 16 and younger, effective retroactively to tax year 2021.

In addition to these three proposals, I modeled the combined effects of the student loan credit and Social Security subtraction expansions.

## Modeling results

### Proposal 1: Student loan credit expansion

The HITS model estimates that the student loan credit expansion in the House bill would reduce revenues by approximately \$39.0 million in tax year 2022. About 29,100 returns would see an average tax decrease of \$747.

Tables 1 and 2 show the distribution of tax decreases by income and size of change.

**Table 1: Student loan credit expansion; distribution by income  
House Omnibus Tax Bill (H3669-3), Tax Year 2022**

Income (AGI)	Decreases			
	# of Returns	Total (\$1,000)	% of Total Decrease	Average Decrease (\$)
Under \$50,000	20,000	14,500	49.7%	724
\$50,000 to \$100,000	13,500	10,000	34.4%	743
\$100,000 to \$150,000	3,700	3,000	10.4%	812
\$150,000 to \$250,000	1,300	1,200	4.1%	931
\$250,000 to \$500,000	500	400	1.2%	773
\$500,000 and above	0	40	0.1%	1,313
<b>Total</b>	<b>39,000</b>	<b>29,100</b>	<b>100.0%</b>	<b>747</b>

**Table 2: Student loan credit expansion; distribution by size of change  
House Omnibus Tax Bill (H3669-3), Tax Year 2022**

\$ of Change	Increases		Decreases	
	Returns	% of Total Returns	Returns	% of Total Returns
1 to 25	0	0	200	0
26 to 50	0	0	100	0
51 to 100	0	0	1,800	0.1
101 to 250	0	0	3,300	0.1
251 to 500	0	0	4,200	0.1
501 to 750	0	0	4,300	0.1
751 to 1000	0	0	20,800	0.7
1001 +	0	0	4,200	0.1
<b>Total Change</b>	<b>0</b>	<b>0</b>	<b>39,000</b>	<b>1.3</b>

### Proposal 2: Social Security subtraction expansion

The HITS model estimates that the Social Security subtraction expansion in the House bill would reduce revenues by approximately \$111.9 million in tax year 2022. About 282,000 returns would see an average tax decrease of \$397.

Tables 3 and 4 show the distribution of tax decreases by income and size of change.

**Table 3: Social Security subtraction expansion; distribution by income  
House Omnibus Tax Bill (H3669-3), Tax Year 2022**

Income (AGI)	Decreases			
	# of Returns	Total (\$1,000)	% of Total Decrease	Average Decrease (\$)
Under \$50,000	106,800	18,200	16.3%	171
\$50,000 to \$100,000	157,100	90,800	81.2%	578
\$100,000 to \$150,000	18,100	2,800	2.5%	156
\$150,000 to \$250,000	0	0	0.0%	0
\$250,000 to \$500,000	0	0	0.0%	0

Income (AGI)	Decreases			
	# of Returns	Total (\$1,000)	% of Total Decrease	Average Decrease (\$)
\$500,000 and above	0	0	0.0%	0
<b>Total</b>	<b>282,000</b>	<b>111,900</b>	<b>100.0%</b>	<b>397</b>

**Table 4: Social Security subtraction expansion; distribution by size of change House Omnibus Tax Bill (H3669-3), Tax Year 2022**

\$ of Change	Increases		Decreases	
	Returns	% of Total Returns	Returns	% of Total Returns
1 to 25	0	0	50,700	1.7
26 to 50	0	0	6,600	0.2
51 to 100	0	0	12,900	0.4
101 to 250	0	0	46,200	1.6
251 to 500	0	0	66,000	2.2
501 to 750	0	0	48,200	1.6
751 to 1000	0	0	38,700	1.3
1001 +	0	0	12,900	0.4
<b>Total Change</b>	<b>0</b>	<b>0</b>	<b>282,000</b>	<b>9.6</b>

### **Proposal 3: \$325 child rebate (tax year 21)**

The HITS model estimates that the \$325 child rebate proposed in the House bill would reduce revenues by approximately \$302.5 million in tax year 2021. About 550,800 returns would see an average tax decrease of \$549.

The Department of Revenue's estimate for the proposal assumes that some taxpayers who did not file a tax year 2021 return may file a return for the purposes of claiming the rebate. These taxpayers would presumably be individuals who did not file a return due to a lack of an individual income tax liability in 2021 (e.g. because their incomes were lower than the standard deduction or they had significant nontaxable income). The HITS model is based on a stratified sample of income tax returns; as a result, the model cannot account for individuals who did not file returns—the Department of Revenue applied an after-model adjustment for such individuals.

Tables 5 and 6 show the distribution of tax decreases by income and size of change.

**Table 5: Child rebate; distribution by income  
House Omnibus Tax Bill (H3669-3), Tax Year 2021**

Income (AGI)	Decreases			
	# of Returns	Total (\$1,000)	% of Total Decrease	Average Decrease (\$)
Under \$50,000	238,200	115,400	38.2%	484
\$50,000 to \$100,000	184,100	111,700	36.9%	607
\$100,000 to \$150,000	128,200	75,400	24.9%	589
\$150,000 to \$250,000	300	0	0.0%	97
\$250,000 to \$500,000	0	0	0.0%	0
\$500,000 and above	0	0	0.0%	0
<b>Total</b>	<b>550,800</b>	<b>302,500</b>	<b>100.0%</b>	<b>549</b>

**Table 6: Child rebate; distribution by size of change  
House Omnibus Tax Bill (H3669-3), Tax Year 2021**

\$ of Change	Increases		Decreases	
	Returns	% of Total Returns	Returns	% of Total Returns
1 to 25	0	0	1,600	0.1
26 to 50	0	0	1,600	0.1
51 to 100	0	0	2,300	0.1
101 to 250	0	0	5,400	0.2
251 to 500	0	0	274,200	9.4
501 to 750	0	0	177,800	6.1
751 to 1000	0	0	63,800	2.2
1001 +	0	0	24,000	0.8
<b>Total Change</b>	<b>0</b>	<b>0</b>	<b>550,800</b>	<b>18.8</b>

**Proposal 4: Combined effects of the student loan credit and Social Security subtraction expansions, tax year 2022**

The HITS model estimates that the student loan credit and Social Security subtraction provisions in the House bill would reduce revenues by approximately \$141.0 million in tax year 2022. About 320,800 returns would see an average tax decrease of \$439.

Tables 7 and 8 show the distribution of tax decreases by income and size of change.

**Table 7: Student loan credit and Social Security subtraction; combined effects by income  
House Omnibus Tax Bill (H3669-3), Tax Year 2022**

Income (AGI)	Decreases			
	# of Returns	Total (\$1,000)	% of Total Decrease	Average Decrease (\$)
Under \$50,000	126,800	32,700	23.2%	258
\$50,000 to \$100,000	170,500	100,800	71.5%	591
\$100,000 to \$150,000	21,800	5,800	4.1%	269
\$150,000 to \$250,000	1,300	1,200	0.9%	931
\$250,000 to \$500,000	500	400	0.2%	773
\$500,000 and above	0	40	0.0%	1,313
<b>Total</b>	<b>320,800</b>	<b>141,000</b>	<b>100.0%</b>	<b>439</b>

**Table 8: Student loan credit and Social Security subtraction; combined effects by size of change  
House Omnibus Tax Bill (H3669-3), Tax Year 2022**

\$ of Change	Increases		Decreases	
	Returns	% of Total Returns	Returns	% of Total Returns
1 to 25	0	0	50,800	1.7
26 to 50	0	0	6,700	0.2
51 to 100	0	0	14,600	0.5
101 to 250	0	0	49,400	1.7
251 to 500	0	0	70,200	2.4

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501 to 750	0	0	52,600	1.8
751 to 1000	0	0	59,400	2
1001 +	0	0	17,200	0.6
<b>Total Change</b>	<b>0</b>	<b>0</b>	<b>320,800</b>	<b>10.9</b>

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