



**SOCIAL SECURITY**  
Office of the Chief Actuary

January 31, 2018

The Honorable Thomas A. Garrett, Jr.  
United States House of Representatives  
Washington, D.C. 20515

Dear Representative Garrett:

Enactment of H.R. 4584, the “Student Security Act of 2017”, which you introduced on December 7, 2017, would provide individuals with the option of partial student loan “forgiveness” in exchange for voluntarily raising key eligibility ages for Social Security retired worker benefits, specifically the earliest eligibility age (EEA) and the normal retirement age (NRA). We have enjoyed working with Elliott Harding and Hallie Pence of your staff in the development of the Bill, and have produced the estimates included here reflecting our understanding of the intended effects of enactment of the Bill. Development of these estimates reflects the efforts of many in our office, but particularly Karen Glenn, Chris Chaplain, Daniel Nickerson, and Kyle Burkhalter.

Under current law, individuals can first begin receiving Social Security retirement benefits at age 62 (the EEA). The age at which retirement benefits equal the primary insurance amount is the NRA, which under current law is gradually increasing, and will be age 67 for those attaining age 62 in 2022 and later. H.R. 4584 (hereafter referred to as the Bill) specifies that for every \$550 (in 2018 dollars) in student loan balance that a person chooses to have forgiven, his or her EEA and NRA would be increased by one month. Our understanding of the intent of the Bill is that the student loan forgiveness program would be first implemented in 2019, allowing any eligible individual who has previously graduated with a degree or ceased full time enrollment the opportunity to have a portion of any outstanding eligible Federal Direct loan forgiven in that year. For eligible individuals graduating with a degree or ceasing full time enrollment in each year 2020 through 2033, forgiveness of a portion of the loan would be allowed in that year, and in the 4 years after completion of education. The increases in EEA and NRA are limited to a maximum of 73 months, equivalent to \$40,150 in student loan forgiveness in 2018 dollars. We understand that the intent of the Bill is that the \$550 level would increase after 2018 based on changes in the national average wage index. In developing our estimates, we have assumed that one-half of eligible student loan amounts would be forgiven with this offer. The General Fund of the Treasury would incur the cost of the student loan amounts forgiven.

The estimates provided in this letter reflect the intermediate assumptions of the 2017 Trustees Report. Accordingly, as shown in the attached Table 1, we estimate that the long-range OASDI

actuarial deficit would decrease from 2.83 percent of payroll under current law to 2.52 percent of payroll assuming enactment of the Bill.

The only direct effects of the Bill on the OASI and DI Trust Funds are the increases to individuals' EEA and NRA, which on balance lower benefit cost for the OASDI program. However, the cost of student loan amounts forgiven would be incurred by the General Fund of the Treasury, so the effects of the Bill for the General Fund of the Treasury would be a cost. On a budget accounting basis, the operations of the OASI and DI Trust Funds are considered "off-budget," while the other operations of the federal government which are financed through the General Fund of the Treasury are considered "on-budget". The "unified budget" incorporates both the off-budget and on-budget financial operations.

Table 1b shows "off-budget", "unified budget" and "on-budget" effects of the Bill on a present value basis (amounts discounted to January 1, 2017 using the projected Trust Fund interest rates). Column 2 shows the annual cash flow off-budget effects to the combined OASI and DI Trust Funds from the EEA and NRA increases. Columns 3 through 5 represent the unified budget effect from loan forgiveness from the General Fund and the EEA and NRA increases. Column 4 shows that we estimate a net \$160 billion present value increase in publicly held debt in 2019, rising to \$584 billion in 2033, from the amounts of student loan forgiveness financed by the General Fund. The overall change to debt held by the public improves through the end of the projection period, and by 2091 we estimate a \$726 billion in present value decrease in publicly held debt, as the increases in EEA and NRA result in less benefits paid in the latter part of the projection period. Columns 6 through 8 represent only the "on-budget" effect from the student loan forgiveness program. For years 2019 and 2020 the annual cash flow effects are large, reflecting amounts forgiven from existing student loan holders. Effects are smaller through the program's sunset in 2037, as individuals become new student loan holders and some choose to have their student loan amounts forgiven. Overall, we estimate a \$706 billion in present value increase in publicly held debt from loan forgiveness.

Table 1b.n shows the same information, but in nominal dollars. In this table, we show nominal dollar effects through 2027.

Please let me know if we may be of any further assistance on this or any other matter related to Social Security.

Sincerely,

A handwritten signature in black ink that reads "Stephen C. Goss". The signature is written in a cursive style with a large initial 'S' and a long, sweeping underline.

Stephen C. Goss, ASA, MAAA  
Chief Actuary

Enclosures

**Table 1 - OASDI Cost Rate, Income Rate, Annual Balance, and Trust Fund Ratio**  
**H.R. 4584, the "Student Security Act of 2017," introduced by Representative Garrett**  
**(Note that the only effect of the Bill on the OASDI program results from the increase in EEA/NRA.)**

Year	Proposal			Trust Fund Ratio 1-1-year	Change from Present Law		
	Expressed as a percentage of present-law taxable payroll				Expressed as a percentage of present-law taxable payroll		
	Cost Rate	Income Rate	Annual Balance		Cost Rate	Income Rate	Annual Balance
2017	13.41	13.03	-0.38	298	0.00	0.00	0.00
2018	13.49	12.93	-0.56	287	0.00	0.00	0.00
2019	13.70	12.95	-0.75	273	0.00	0.00	0.00
2020	13.85	12.96	-0.89	259	0.00	0.00	0.00
2021	14.01	12.99	-1.02	245	-0.01	0.00	0.01
2022	14.24	13.02	-1.22	230	-0.02	0.00	0.02
2023	14.52	13.05	-1.47	215	-0.03	0.00	0.03
2024	14.78	13.08	-1.70	200	-0.05	0.00	0.05
2025	15.04	13.10	-1.93	184	-0.06	0.00	0.06
2026	15.29	13.14	-2.16	167	-0.08	0.00	0.08
2027	15.52	13.15	-2.37	150	-0.10	0.00	0.10
2028	15.74	13.17	-2.57	133	-0.11	0.00	0.11
2029	15.94	13.18	-2.76	116	-0.13	0.00	0.13
2030	16.12	13.20	-2.93	98	-0.14	0.00	0.14
2031	16.29	13.21	-3.08	81	-0.16	0.00	0.16
2032	16.44	13.22	-3.22	62	-0.17	0.00	0.17
2033	16.56	13.23	-3.34	43	-0.18	0.00	0.18
2034	16.66	13.23	-3.43	24	-0.19	0.00	0.19
2035	16.73	13.24	-3.49	4	-0.20	0.00	0.20
2036	16.78	13.24	-3.54	----	-0.21	0.00	0.21
2037	16.80	13.25	-3.56	----	-0.22	0.00	0.21
2038	16.80	13.25	-3.55	----	-0.22	0.00	0.22
2039	16.76	13.25	-3.52	----	-0.24	0.00	0.23
2040	16.72	13.24	-3.47	----	-0.25	0.00	0.24
2041	16.66	13.24	-3.42	----	-0.26	0.00	0.25
2042	16.59	13.24	-3.35	----	-0.27	0.00	0.27
2043	16.53	13.24	-3.29	----	-0.28	0.00	0.28
2044	16.47	13.23	-3.23	----	-0.29	0.00	0.29
2045	16.41	13.23	-3.18	----	-0.31	0.00	0.30
2046	16.36	13.23	-3.13	----	-0.32	0.00	0.32
2047	16.31	13.23	-3.08	----	-0.34	0.00	0.33
2048	16.26	13.23	-3.04	----	-0.35	0.00	0.35
2049	16.22	13.23	-2.99	----	-0.37	0.00	0.36
2050	16.18	13.23	-2.96	----	-0.38	0.00	0.38
2051	16.15	13.23	-2.93	----	-0.40	-0.01	0.40
2052	16.14	13.23	-2.91	----	-0.42	-0.01	0.41
2053	16.13	13.23	-2.90	----	-0.44	-0.01	0.43
2054	16.14	13.23	-2.91	----	-0.45	-0.01	0.45
2055	16.15	13.23	-2.92	----	-0.47	-0.01	0.46
2056	16.17	13.23	-2.94	----	-0.48	-0.01	0.48
2057	16.20	13.24	-2.96	----	-0.50	-0.01	0.49
2058	16.22	13.24	-2.98	----	-0.52	-0.01	0.51
2059	16.27	13.24	-3.02	----	-0.52	-0.01	0.51
2060	16.31	13.25	-3.06	----	-0.52	-0.01	0.51
2061	16.36	13.25	-3.11	----	-0.52	-0.01	0.51
2062	16.40	13.25	-3.15	----	-0.52	-0.01	0.51
2063	16.45	13.26	-3.19	----	-0.52	-0.01	0.52
2064	16.49	13.26	-3.23	----	-0.52	-0.01	0.52
2065	16.54	13.26	-3.28	----	-0.53	-0.01	0.52
2066	16.58	13.26	-3.32	----	-0.54	-0.01	0.53
2067	16.63	13.27	-3.36	----	-0.54	-0.01	0.53
2068	16.68	13.27	-3.41	----	-0.55	-0.01	0.54
2069	16.73	13.27	-3.45	----	-0.55	-0.01	0.54
2070	16.77	13.28	-3.50	----	-0.55	-0.01	0.55
2071	16.81	13.28	-3.53	----	-0.56	-0.01	0.55
2072	16.85	13.28	-3.57	----	-0.56	-0.01	0.55
2073	16.88	13.28	-3.60	----	-0.57	-0.01	0.55
2074	16.93	13.28	-3.64	----	-0.55	-0.01	0.54
2075	16.97	13.28	-3.69	----	-0.53	-0.01	0.52
2076	17.00	13.28	-3.72	----	-0.51	-0.02	0.50
2077	17.03	13.28	-3.75	----	-0.50	-0.02	0.48
2078	17.04	13.28	-3.76	----	-0.48	-0.02	0.46
2079	17.05	13.28	-3.77	----	-0.47	-0.02	0.45
2080	17.05	13.27	-3.78	----	-0.46	-0.02	0.43
2081	17.06	13.27	-3.79	----	-0.45	-0.03	0.42
2082	17.07	13.27	-3.80	----	-0.43	-0.02	0.41
2083	17.09	13.27	-3.82	----	-0.42	-0.02	0.39
2084	17.12	13.27	-3.85	----	-0.40	-0.02	0.38
2085	17.16	13.28	-3.88	----	-0.39	-0.02	0.37
2086	17.20	13.28	-3.92	----	-0.38	-0.02	0.36
2087	17.25	13.28	-3.97	----	-0.36	-0.02	0.34
2088	17.31	13.29	-4.02	----	-0.35	-0.02	0.33
2089	17.37	13.29	-4.08	----	-0.33	-0.02	0.32
2090	17.43	13.29	-4.14	----	-0.32	-0.02	0.30
2091	17.49	13.30	-4.20	----	-0.30	-0.02	0.29
2092	17.56	13.30	-4.26	----	-0.29	-0.02	0.27

Summarized Rates: OASDI				
	Cost Rate	Income Rate	Actuarial Balance	Year of reserve depletion <sup>1</sup>
2017 - 2091	16.35%	13.83%	-2.52%	2035

Summarized Rates: OASDI		
Change in Cost rate	Change in Income Rate	Change in Actuarial Balance
-0.31%	-0.01%	0.31%

Based on Intermediate Assumptions of the 2016 Trustees Report.  
<sup>1</sup> Under present law the year of combined Trust Fund reserve depletion is 2034.

**Table 1b - OASDI Changes & Implications for Federal Budget and Debt of Specified Plan Provision Effects on OASDI<sup>1</sup> (Present Value Dollars)**  
**H.R. 4584, the "Student Security Act of 2017," introduced by Representative Garrett**

*Billions of Present Value Dollars as of 1-1-2017*

Year	Specified General Fund Transfers to OASDI (1)	Basic Changes in OASDI Cash Flow (2)	Change in Annual Unified Budget Cash Flow <sup>1</sup> (3)	Change in Debt Held by Public at End of Year (4)	Change in Annual Unified Budget Balance (5)	Change in Annual On Budget Cash Flow <sup>2</sup> (6)	Change in Total Federal Debt End Of Year (7)	Change in Annual On Budget Balance (8)
2017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019	0.0	0.0	-160.5	160.5	-160.5	-160.5	160.5	-160.5
2020	0.0	0.2	-126.0	286.5	-130.8	-126.2	286.7	-131.0
2021	0.0	0.6	-53.2	339.8	-61.9	-53.9	340.6	-62.5
2022	0.0	1.3	-53.6	393.4	-64.1	-54.9	395.5	-65.4
2023	0.0	2.0	-54.0	447.3	-66.5	-56.0	451.5	-68.6
2024	0.0	3.7	-19.0	466.4	-33.8	-22.8	474.3	-37.6
2025	0.0	5.0	-17.9	484.3	-33.8	-22.9	497.2	-39.1
2026	0.0	6.5	-16.7	501.0	-33.9	-23.1	520.3	-40.8
2027	0.0	7.8	-15.5	516.5	-34.9	-23.3	543.6	-43.5
2028	0.0	9.1	-14.3	530.7	-35.8	-23.4	567.0	-46.1
2029	0.0	10.3	-13.0	543.7	-36.8	-23.3	590.4	-48.8
2030	0.0	11.4	-11.7	555.5	-37.8	-23.2	613.5	-51.5
2031	0.0	12.3	-10.6	566.0	-38.9	-22.9	636.4	-54.2
2032	0.0	13.1	-9.4	575.5	-38.3	-22.5	658.9	-55.0
2033	0.0	13.8	-8.4	583.9	-37.7	-22.2	681.1	-55.8
2034	0.0	14.4	1.7	582.2	-28.1	-12.7	693.9	-47.4
2035	0.0	15.0	9.0	573.2	-20.7	-6.0	699.9	-41.4
2036	0.0	15.4	11.6	561.6	-17.7	-3.9	703.8	-39.6
2037	0.0	15.9	14.0	547.6	-14.6	-1.9	705.7	-37.7
2038	0.0	16.3	16.3	531.3	-11.6	0.0	705.7	-36.0
2039	0.0	17.0	17.0	514.4	-10.1	0.0	705.7	-36.0
2040	0.0	17.5	17.5	496.8	-8.7	0.0	705.7	-36.0
2041	0.0	18.1	18.1	478.7	-7.2	0.0	705.7	-36.0
2042	0.0	18.8	18.8	460.0	-5.6	0.0	705.7	-36.0
2043	0.0	19.4	19.4	440.5	-4.0	0.0	705.7	-36.0
2044	0.0	20.1	20.1	420.4	-2.3	0.0	705.7	-36.0
2045	0.0	20.9	20.9	399.5	-0.5	0.0	705.7	-36.0
2046	0.0	21.6	21.6	377.9	1.3	0.0	705.7	-36.0
2047	0.0	22.4	22.4	355.5	3.2	0.0	705.7	-36.0
2048	0.0	23.2	23.2	332.2	5.1	0.0	705.7	-36.0
2049	0.0	24.1	24.1	308.2	7.1	0.0	705.7	-36.0
2050	0.0	24.9	24.9	283.3	9.2	0.0	705.7	-36.0
2051	0.0	25.8	25.8	257.5	11.4	0.0	705.7	-36.0
2052	0.0	26.7	26.7	230.8	13.6	0.0	705.7	-36.0
2053	0.0	27.5	27.5	203.3	15.7	0.0	705.7	-36.0
2054	0.0	28.2	28.2	175.1	17.8	0.0	705.7	-36.0
2055	0.0	28.9	28.9	146.2	20.0	0.0	705.7	-36.0
2056	0.0	29.5	29.5	116.7	22.1	0.0	705.7	-36.0
2057	0.0	30.2	30.2	86.5	24.2	0.0	705.7	-36.0
2058	0.0	30.7	30.7	55.8	26.3	0.0	705.7	-36.0
2059	0.0	30.5	30.5	25.2	27.7	0.0	705.7	-36.0
2060	0.0	30.3	30.3	-5.1	29.0	0.0	705.7	-36.0
2061	0.0	30.0	30.0	-35.1	30.2	0.0	705.7	-36.0
2062	0.0	29.7	29.7	-64.8	31.5	0.0	705.7	-36.0
2063	0.0	29.5	29.5	-94.3	32.8	0.0	705.7	-36.0
2064	0.0	29.3	29.3	-123.6	34.1	0.0	705.7	-36.0
2065	0.0	29.3	29.3	-152.9	35.6	0.0	705.7	-36.0
2066	0.0	29.2	29.2	-182.1	37.0	0.0	705.7	-36.0
2067	0.0	29.2	29.2	-211.3	38.5	0.0	705.7	-36.0
2068	0.0	29.1	29.1	-240.4	39.9	0.0	705.7	-36.0
2069	0.0	29.0	29.0	-269.4	41.3	0.0	705.7	-36.0
2070	0.0	28.9	28.9	-298.3	42.7	0.0	705.7	-36.0
2071	0.0	28.9	28.9	-327.2	44.1	0.0	705.7	-36.0
2072	0.0	28.8	28.8	-356.1	45.5	0.0	705.7	-36.0
2073	0.0	28.5	28.5	-384.6	46.7	0.0	705.7	-36.0
2074	0.0	27.4	27.4	-412.0	47.0	0.0	705.7	-36.0
2075	0.0	26.1	26.1	-438.1	47.1	0.0	705.7	-36.0
2076	0.0	24.8	24.8	-463.0	47.1	0.0	705.7	-36.0
2077	0.0	23.6	23.6	-486.6	47.2	0.0	705.7	-36.0
2078	0.0	22.5	22.5	-509.1	47.3	0.0	705.7	-36.0
2079	0.0	21.6	21.6	-530.7	47.5	0.0	705.7	-36.0
2080	0.0	20.7	20.7	-551.3	47.7	0.0	705.7	-36.0
2081	0.0	19.8	19.8	-571.2	47.9	0.0	705.7	-36.0
2082	0.0	19.0	19.0	-590.1	48.1	0.0	705.7	-36.0
2083	0.0	18.2	18.2	-608.3	48.2	0.0	705.7	-36.0
2084	0.0	17.4	17.4	-625.7	48.4	0.0	705.7	-36.0
2085	0.0	16.6	16.6	-642.3	48.5	0.0	705.7	-36.0
2086	0.0	15.9	15.9	-658.3	48.7	0.0	705.7	-36.0
2087	0.0	15.2	15.2	-673.4	48.7	0.0	705.7	-36.0
2088	0.0	14.4	14.4	-687.9	48.7	0.0	705.7	-36.0
2089	0.0	13.6	13.6	-701.5	48.7	0.0	705.7	-36.0
2090	0.0	12.9	12.9	-714.4	48.6	0.0	705.7	-36.0
2091	0.0	12.1	12.1	-726.4	48.5	0.0	705.7	-36.0
Total 2017-2091	0.0	1,432.1	726.4			-705.7		

Based on Intermediate Assumptions of the 2017 Trustees Report.  
 Ultimate Real Trust Fund Yield of 2.7%.

Note: Changes reflect the budget scoring convention that presumes benefits not payable after reserve depletion would nonetheless be paid, based on transfers from the General Fund of the Treasury resulting in additional borrowing from the public.

<sup>1</sup> Effects of tax provisions on the On-Budget are not reflected in this table.

<sup>2</sup> On budget cash flow only includes student loan forgiveness.

**Table 1b.n - OASDI Changes & Implications for Federal Budget and Debt of Specified Plan Provision Effects on OASDI<sup>1</sup> (Nominal Dollars)**  
**H.R. 4584, the "Student Security Act of 2017," introduced by Representative Garrett**

Year	Billions of Nominal Dollars							
	Specified General Fund Transfers 10 OASDI (1)	Basic Changes in OASDI Cash Flow (2)	Change in Annual Unified Budget Cash Flow <sup>1</sup> (3)	Change in Debt Held by Public at End of Year (4)	Change in Annual Unified Budget Balance (5)	Change in Annual On Budget Cash Flow <sup>2</sup> (6)	Change in Total Federal Debt End Of Year (7)	Change in Annual On Budget Balance (8)
2017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019	0.0	0.0	-172.7	175.5	-175.5	-172.7	175.5	-175.5
2020	0.0	0.2	-139.7	323.0	-147.6	-139.9	323.3	-147.8
2021	0.0	0.7	-60.8	395.2	-72.2	-61.6	396.2	-72.9
2022	0.0	1.5	-63.2	472.4	-77.2	-64.7	474.9	-78.7
2023	0.0	2.5	-65.7	555.1	-82.7	-68.2	560.2	-85.3
2024	0.0	4.7	-24.0	598.8	-43.7	-28.6	608.8	-48.6
2025	0.0	6.5	-23.3	644.1	-45.3	-29.8	661.1	-52.3
2026	0.0	8.7	-22.4	691.1	-47.0	-31.2	717.7	-56.6
2027	0.0	11.0	-21.7	741.4	-50.3	-32.6	780.2	-62.6
Total 2018-2027		35.8	-593.6			-629.4		

Based on Intermediate Assumptions of the 2017 Trustees Report.  
 Ultimate Real Trust Fund Yield of 2.7%.

Note: Changes reflect the budget scoring convention that presumes benefits not payable after reserve depletion would nonetheless be paid, based on transfers from the General Fund of the Treasury resulting in additional borrowing from the public.

<sup>1</sup>Unified budget cash flow includes effect of student loan forgiveness and increase in EEA/NRA.

<sup>2</sup>On budget cash flow only includes student loan forgiveness.

Office of the Chief Actuary  
 Social Security Administration  
 January 31, 2018