SOCIAL SECURITY

Office of the Chief Actuary

April 10, 2019

The Honorable Ted Deutch
United States House of Representatives
Washington, D.C. 20515

The Honorable Mazie K. Hirono
United States Senate
Washington, D.C. 20510

Dear Representative Deutch and Senator Hirono:

I am writing in response to your request for estimates of the financial effects on the Social Security (OASDI) program assuming enactment of the "Protecting and Preserving Social Security Act," which you introduced today in both the House of Representatives and the Senate. These Bills (hereafter referred to as the proposal) include three provisions with direct effects on the Social Security trust funds. We have enjoyed working closely with Joel Richard and Ben Strand of your staffs in developing this proposal to meet your goals. The estimates and analysis provided here reflect the combined effort of many in the Office of the Chief Actuary, but most particularly Karen Glenn, Chris Chaplain, Daniel Nickerson, Kyle Burkhalter, Anna Kirjusina, Katie Sutton, and Tiffany Bosley.

The enclosed tables provide estimates of the effects of enacting the three provisions of the proposal on the cost, income, and combined trust fund reserves for the Old Age, Survivors, and Disability Insurance (OASDI) program, as well as estimated effects on retired worker benefit levels for selected hypothetical workers and effects on payroll tax levels. In addition, tables 1b and 1b.n provide estimates of the federal budget implications of the three provisions. We estimate that the effects of enacting the proposal would be sufficient to extend the projected year of reserve depletion for the combined OASI and DI Trust Funds from 2034 to 2053, under the intermediate assumptions of the 2018 Trustees Report.

The proposal includes three basic provisions with direct effects on the OASDI program. The following list identifies each provision with the corresponding section number in the proposal:

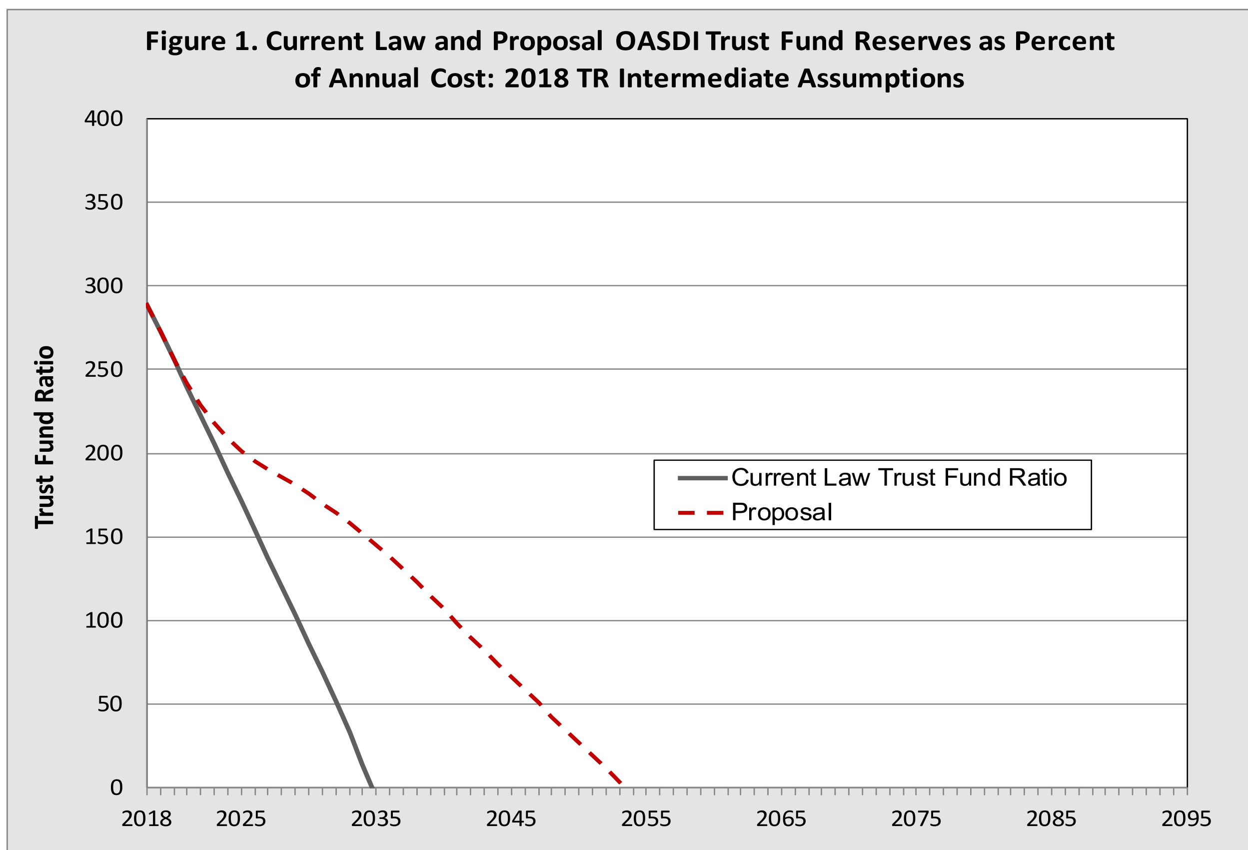
Section 102. Use the Consumer Price Index for the Elderly (CPI-E) increase rather than the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) increase to calculate the cost-of-living adjustment (COLA), effective for December 2021 and later COLAs.

> *Section 201 and Section 202. Eliminate the OASDI taxable maximum in 2020 with the tax rate above the current law maximum increasing in seven approximately equal steps starting for 2020 and reaching the full 12.4 percent for 2026 and later. Establish a second component of the primary insurance amount using a secondary average indexed monthly earnings ("AIME+") reflecting only additional earnings taxed above the current-law taxable maximum.*

The balance of this letter provides a summary of the effects of the three provisions on the actuarial status of the OASDI program, our understanding of the specifications and intent of each of the three provisions, and descriptions of our detailed financial estimates for trust fund operations, benefit levels, and implications for the federal budget. See the "Specification for Provisions of the Proposal" section of this letter for a more detailed description of these three provisions.

<u>Summary of Effects of the Proposal on OASDI Actuarial Status</u>

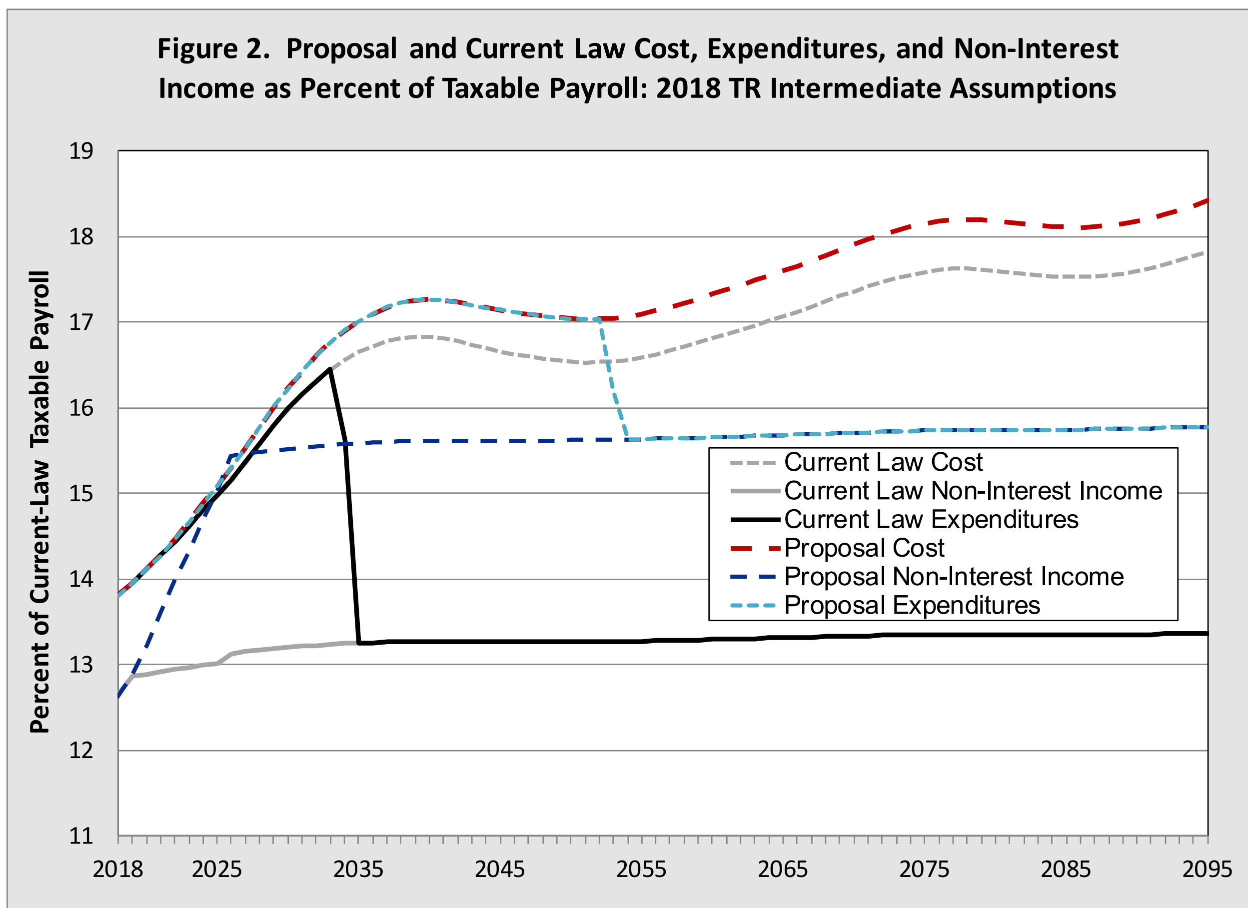
Figure 1 illustrates the projected OASDI trust fund ratio through 2092 under current law and assuming enactment of the proposal. The trust fund ratio is defined as the combined OASI and DI Trust Fund reserves expressed as a percent of annual program cost. Assuming enactment of the proposal, we estimate the year of depletion of the combined OASI and DI Trust Fund reserves would be extended from 2034 under current law to 2053, under the intermediate assumptions of the 2018 Trustees Report.



Note: *Trust Fund Ratio* for a given year is the ratio of reserves in the combined OASI and DI Trust Funds at the beginning of the year to the cost of the program for the year.

Under current law, 79 percent of scheduled benefits are projected to be payable on a timely basis in 2034 after depletion of the combined trust fund reserves, with the percentage payable equal to 79 percent for 2053 and declining to 74 percent for 2092. Under the proposal, the OASDI program would be able to pay 100 percent of scheduled benefits through 2052, and 91 percent in 2053 after combined trust fund reserve depletion, with the percentage payable declining to 86 percent in 2092. Enactment of the three provisions of this proposal would reduce the long-range OASDI actuarial deficit of 2.84 percent of taxable payroll under current law to 1.08 percent of payroll under the proposal.

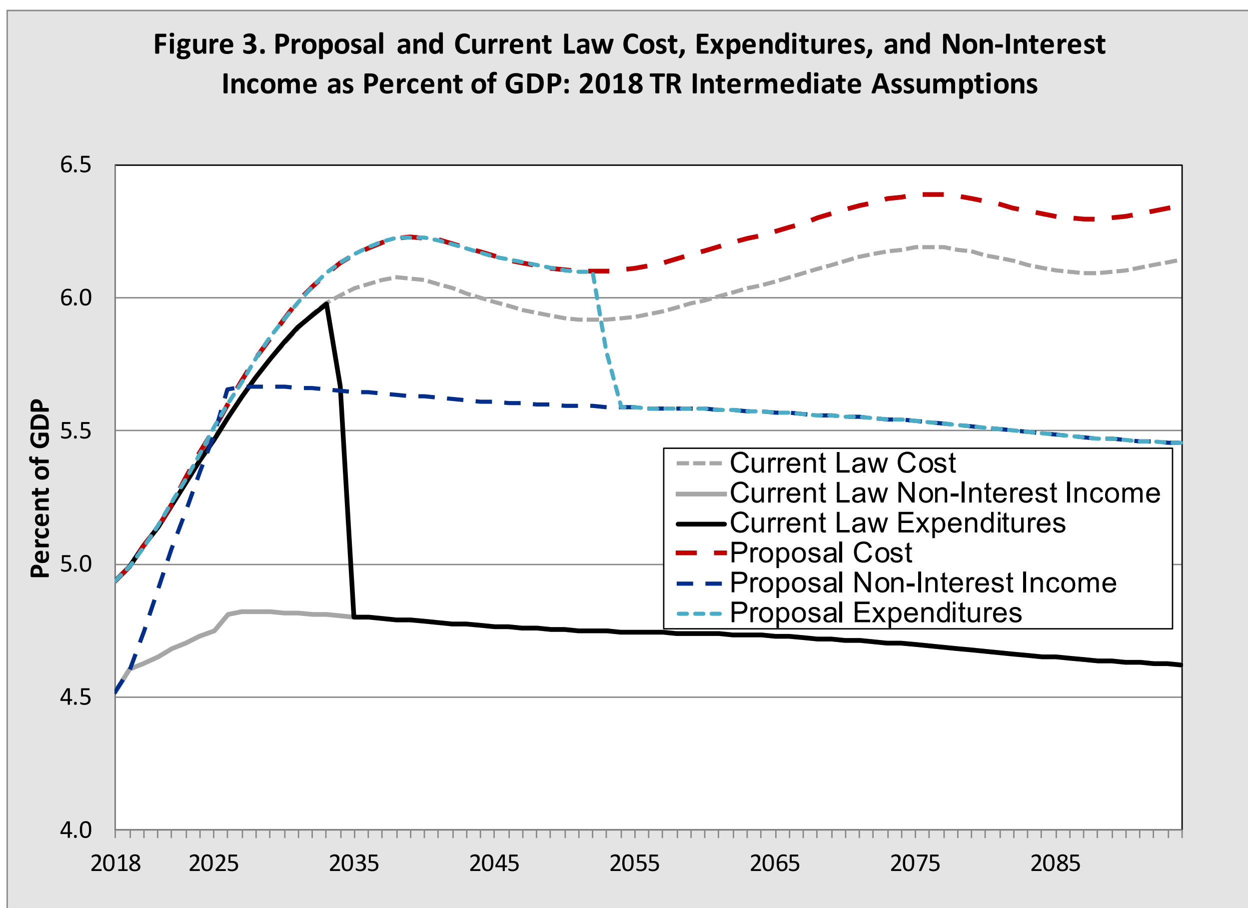
Figure 2 illustrates annual projected levels of cost, expenditures, and non-interest income as a percent of the current-law taxable payroll. The projected level of cost reflects the full cost of scheduled benefits under both current law and the proposal. Under the proposal, projected expenditures equal the full cost of scheduled benefits through 2052, the year prior to combined trust fund reserve depletion.



OASDI program cost is higher under the proposal than under current law, starting in 2022. This difference in program cost increases from 0.03 percent of current-law payroll for 2022 to about 0.5 percent of current-law payroll for 2043, and thereafter increases more gradually, reaching 0.6 percent of current-law payroll by 2092. Beginning in 2020, non-interest income under the proposal is also higher than under current law, with the difference growing from 0.3 percent of

current-law payroll for 2020 to 2.3 percent of current-law payroll for 2026, and thereafter increasing very gradually, reaching 2.4 percent of current-law payroll by 2092. The proposal improves the annual balance (non-interest income minus program cost) by 2.0 percent of payroll for 2034, with the improvement declining to 1.8 percent of payroll for 2092. Under the proposal, the annual deficit declines (improves) from 1.2 percent of current-law payroll for 2018 and becomes positive by 2026. The annual balance becomes negative again in 2027 and the annual deficit generally increases (becomes more negative) to 2.5 percent of payroll for 2092. Under current law, the projected annual deficit for 2092 is 4.3 percent of payroll.

It is also useful to consider the projected cost, expenditures, and income for the OASDI program expressed as a percentage of Gross Domestic Product (GDP). Figure 3 illustrates these levels under both current law and the proposal.



<u>Specification for Provisions of the Proposal</u>

Section 102. Use the CPI-E increase rather than the CPI-W increase to calculate the COLA, effective for December 2021 and later COLAs.

Under current law, the annual cost-of-living adjustment (COLA) applied to Social Security benefits is calculated using the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). We estimate that using the Consumer Price Index for the Elderly (CPI-E)

increase rather than the CPI-W increase in each year beginning with the December 2021 COLA would increase the effective COLA by 0.2 percentage points per year on average.

We estimate that enactment of this provision alone would increase the long-range OASDI actuarial deficit by 0.39 percent of taxable payroll and would increase the annual deficit for the 75th projection year (2092) by 0.54 percent of payroll.

> *Section 201 and Section 202. Eliminate the OASDI taxable maximum in 2020 with the tax rate above the current law maximum increasing in seven approximately equal steps starting for 2020 and reaching the full 12.4 percent for 2026 and later. Establish a second component of the primary insurance amount using a secondary average indexed monthly earnings ("AIME+") reflecting only additional earnings taxed above the current-law taxable maximum.*

Under current law, payroll taxes totaling 12.4 percent apply to OASDI covered earnings in a year up to the contribution and benefit base, or taxable maximum. This taxable maximum was $128,400 for 2018 and increases in the future in line with increases in the national average wage index (AWI). All covered earnings subject to the payroll tax are also potentially creditable toward computation of potential benefits as well as attainment of insured status.

Under these provisions, all covered earnings above the current-law taxable maximum would be subject to payroll tax. The rate would increase in seven approximately equal steps, starting at 1.8 percent (12.4 x 1/7) for 2020 and reaching 12.4 percent for 2026 and later. The primary insurance amount (PIA) would be determined in two components. The first component would be computed exactly as under current law, based on the average indexed monthly earnings (AIME), limited to earnings up to the level of the current-law OASDI taxable maximum ($128,400 for 2018) for each year. The second component of the PIA would be computed using the "AIME+", which would be equal to the sum of the indexed earnings subject to payroll tax that are in excess of the current-law taxable maximum for the 35 years with the highest indexed excess taxable amounts, divided by 420. Excess taxable earnings for years 2020 through 2026 would be multiplied by 1/7, 2/7, …, 6/7, 1, respectively, to account for the level of the applicable payroll tax rate in each year. The second component of the PIA would be equal to 3 percent of AIME+ up to $10,133 (equal to ($250,000-$128,400)/12) and 0.25 percent for AIME+ above this level for beneficiaries becoming newly eligible in 2020. For beneficiaries becoming newly eligible for benefits after 2020, the "bend point" of $10,133 would be indexed by the national average wage index (AWI) in the same manner as for the bend points in the first component of the PIA.

We estimate that enactment of just these two provisions (Sections 201 and 202), eliminating the OASDI taxable maximum in this manner and the resulting increase in benefit credit, would reduce (improve) the long-range OASDI actuarial deficit by 2.15 percent of taxable payroll and would decrease the annual deficit for the 75th projection year (2092) by 2.36 percent of payroll. These estimates include the cost of increased benefits based on the additional taxed earnings, which alone would increase the long-range OASDI actuarial deficit by 0.05 percent of taxable payroll and would increase the annual deficit for the 75th projection year by 0.10 percent of payroll.

Detailed Financial Results for the Provisions of the Proposal

Summary Results by Provision

Table A provides estimates of the effects on the OASDI long-range actuarial balance for the three provisions of the proposal separately and on a combined basis. The table also includes estimates of the effect of the provisions on the annual balance (the difference between the income rate and the cost rate, expressed as a percent of current-law taxable payroll) for the 75th projection year, 2092. Interaction among individual provisions is reflected only in the total estimates for the combined provisions.

Benefit Illustrations

Tables B1 and B2 provide illustrative examples of the projected change in benefit levels under the three provisions of the proposal for beneficiaries retiring and starting benefit receipt at age 65 in future years at six selected earnings levels, with selected numbers of years of work. The "Maximum-AIME Steady Earner" is assumed to have earnings at ages 22 through 64 that equal the current-law taxable maximum level (equivalent to $128,400 for 2018) and the "Twice Maximum-AIME Steady Earner" is assumed to have earnings at ages 22 through 64 that equal twice the current-law taxable maximum level (equivalent to $256,800 for 2018). As a result, the provision to tax and credit earnings above the current-law taxable maximum affects only the "Twice Maximum-AIME Steady Earner" benefit level. **Table B3** provides additional important information on characteristics of retired workers represented by these illustrations for the year 2007.

The first several columns of Table B1 compare the initial scheduled benefit levels, assuming retirement at age 65 under the provisions of the proposal, to scheduled current-law benefit levels. All scheduled benefit amounts under the proposal are higher than those scheduled in current law. The final three columns of this table show the level of scheduled benefits under the proposal as a percentage of current-law scheduled benefits, the level of scheduled benefits under the proposal as a percentage of current-law payable benefits, and the level of payable benefits under the proposal as a percentage of current-law payable benefits, respectively. Because combined OASI and DI Trust Fund reserves deplete in 2053 under the proposal, in 2080 the "proposal payable to current law payable" column is lower than the "proposal scheduled to current law payable" column.

Table B2 compares the change in scheduled benefit levels at ages 65, 75, 85, and 95 under the proposal to scheduled benefits under current law, assuming retirement and start of benefit receipt at age 65. Table B2 shows that projected scheduled benefits under the provisions of this proposal increase in relation to current-law scheduled benefits between ages 65 and 95, because of the change in computing the COLA.

The hypothetical workers represented in these tables reflect average career-earnings patterns of workers who started receiving retirement benefits under the Social Security program in recent years. The tables subdivide workers with very low, low, and medium career-average earnings levels by their numbers of years of non-zero earnings.

Table B3 provides information helpful in interpreting the benefit illustrations in Tables B1 and B2. Percentages in Table B3 are based on tabulations from a 10-percent sample of newly-entitled retired workers in 2007. Table B3 displays the percentages of these newly-entitled retired workers in 2007 that are closest to each of the illustrative examples and are:

1) "Dually Entitled", meaning they received a higher spouse or widow(er) benefit based on the career earnings of their husband or wife,
2) "WEP" (Windfall Elimination Provision), meaning that they received a reduced benefit due to having a pension based on earnings that were not covered under the OASDI program (primarily certain government workers), and they had less than 30 years of substantial earnings that were taxable under the OASDI program,
3) "Foreign Born", meaning that they entered the Social Security coverage area after birth (and generally after entering working ages), and
4) "All Others", meaning they had none of the three characteristics listed above.

The extent to which retired-worker beneficiaries represented by each of the illustrative examples have any of the characteristics listed above (dually entitled, WEP, foreign born) is important because such individuals are less dependent on the OASDI benefit that relates to their own career-average earnings level. It should be noted that the distributions shown in Table B3 for retirees in 2007 will be changing somewhat for beneficiaries becoming entitled as retired-worker beneficiaries in the future.

Payroll Tax Effects

Table T compares the scheduled payroll tax levels under the provisions of the proposal to scheduled current-law payroll tax levels. Under the proposal, the payroll tax rate of 12.4 percent would apply to all covered earnings above the current-law taxable maximum in 2026 and later. As a result, the worker with earnings at twice the current-law taxable maximum would have payroll tax contributions increased by 100 percent for 2030, 2050, and 2080. All other workers shown in the table earn at or below the current law taxable maximum, so their payroll tax contributions would not change.

Detailed Tables Containing Annual and Summary Projections

Enclosed with this letter are **tables 1, 1a, 1b, 1b.n, 1c, and 1d,** which provide annual and summary projections for the proposal.

Trust Fund Operations

Table 1 provides projections of the financial operations of the OASDI program assuming enactment of the proposal and shows that the year of reserve depletion for the combined OASI and DI Trust Funds would be extended by 19 years, from 2034 under current law to 2053. The table shows the annual cost and income rates, annual balances, and trust fund ratios (reserves as a percent of annual program cost) for OASDI, as well as the change from current law in these cost

rates, income rates, and annual balances. Included at the bottom of this table are summarized rates for the 75-year (long-range) period.

For 2020 and later, the proposal improves the annual balance (non-interest income minus program cost). The improvement in the annual balance increases from 0.3 percent of current-law payroll for 2020 to 2.2 percent for 2026, and thereafter decreases gradually, reaching 1.8 percent by 2092. Under the proposal, the annual deficit declines (improves) from 1.2 percent of current-law payroll for 2018 and becomes positive for 2026. The annual balance becomes negative again in 2027 and generally decreases (becomes more negative) thereafter. The annual deficit is 1.7 percent of payroll for 2040, 1.7 percent for 2060, and 2.5 percent for 2092. Under current law, the projected annual deficit for 2092 is 4.3 percent of payroll.

The actuarial balance for the OASDI program over the 75-year projection period is improved by 1.76 percent of taxable payroll, from an actuarial deficit of 2.84 percent of payroll under current law to a deficit of 1.08 percent of taxable payroll under the proposal.

Program Transfers and Trust Fund Reserves

Column 4 of **Table 1a** provides a projection of the level of reserves for the combined OASI and DI Trust Funds, assuming enactment of the three provisions of the proposal. These trust fund reserve amounts are expressed in present value dollars discounted to January 1, 2018. The table indicates that the provisions include no new specified transfers of general revenue to the combined OASI and DI Trust Funds. For purpose of comparison, the combined OASI and DI Trust Fund reserves, expressed in present value dollars, are also shown for the current-law Social Security program both without and with the added proposal general fund transfers (zero in this case) in columns 6 and 7.

Note that negative values in columns 6 and 7 represent the “unfunded obligation” for the program through the year. The unfunded obligation is the present value of the shortfall of revenue needed to pay full scheduled benefits on a timely basis from the date of trust fund reserve depletion through the end of the indicated year. Gross Domestic Product (GDP), expressed in present value dollars, is shown in column 5 for comparison with other values in the table.

Effect of the Social Security Provisions on the Federal Budget

Table 1b shows the projected effect, in present value discounted dollars, on the federal budget (unified-budget and on-budget) annual cash flows and balances, assuming enactment of the three provisions of the proposal. Table **1b.n** provides the estimated nominal dollar effect of enactment of the proposal on annual budget balances for years 2018 through 2028. All values in these tables represent the amount of *change* from the level projected under current law. In addition, changes reflect the *budget scoring convention* that presumes benefits, not payable under the law after depletion of trust fund reserves, would still be paid using revenue provided from the General Fund of the Treasury. The reader should be cautioned that this presumption of payment of benefits beyond the resources of the trust funds is prohibited under current law and is also inconsistent with all past experience under the Social Security program.

Column 1 of Table 1b shows the added proposal general fund transfers (zero for this proposal). Column 2 shows the net changes in OASDI cash flow from all provisions of the proposal.

We project the net effect of the proposal on unified budget cash flow (column 3) to be positive in years 2020 and later. The elimination of the taxable maximum starting in 2020 and the phased-in increase to a 12.4 payroll tax rate from 2020-2026 on the additional earnings, more than offsets the additional benefits from these additional earnings taxed and the switch from the CPI-W to the CPI-E for the Social Security COLA.

Column 4 of Table 1b indicates that the effect of implementing the proposal is a reduction of the theoretical federal debt held by the public, reaching about $8.7 trillion in present value at the end of the 75-year projection period. Column 5 provides the projected effect of the proposal on the annual unified budget balances, including both the cash flow effect in column 3 and the additional interest on the accumulated debt in column 4. Columns 6 and 7 indicate that the provisions of this proposal would have no expected direct effects on the on-budget cash flow, or on the total federal debt, in the future.

The estimates provided in these tables do not include any direct or indirect effects from provisions in this proposal on other federal programs (such as Supplemental Security Income). In addition, it is important to note that we base these estimates on the intermediate assumptions of the 2018 Trustees Report, so these estimates are not consistent with estimates made by the Office of Management and Budget or the Congressional Budget Office based on their assumptions. In particular, all present values are discounted using trust fund yield assumptions under the intermediate assumptions of the 2018 Trustees Report.

Annual Trust Fund Operations as a Percent of GDP

Table 1c provides annual cost, annual expenditures (amount that would be payable), and annual tax income for the OASDI program expressed as a percent of GDP for both current law and assuming enactment of the three provisions of the proposal. Showing the annual trust fund cash flows as a percent of GDP provides an additional perspective on these trust fund operations in relation to the total value of goods and services produced in the United States. The relationship between income and cost is similar when expressed as a percent of GDP to that when expressed as a percent of taxable payroll (Table 1).

Effects on Trust Fund Reserves and Unfunded Obligations

Table 1d provides estimates of the changes in trust fund reserves and unfunded obligations on an annual basis. Values in this table are expressed in present value dollars discounted to January 1, 2018.

For the 75-year (long-range) period as a whole, the current-law unfunded obligation of $13.2 trillion is reduced to $4.5 trillion in present value. This change of $8.7 trillion results from:

- A $10.7 trillion net increase in revenue (column 2), primarily from additional payroll tax revenue, *minus*
- A $2.0 trillion net increase in cost (column 3), primarily from the change in computing the COLA and additional benefits from earnings taxed above the current-law taxable maximum.

We hope these estimates are helpful. Please let me know if we may provide further assistance.

Sincerely,

Stephen C. Goss, ASA, MAAA
Chief Actuary

Enclosures