October 11, 2016

Mr. Kent Conrad, Co-Chair
Mr. James B. Lockhart, III, Co-Chair
Commission on Retirement Security and Personal Savings
Bipartisan Policy Center
1225 Eye Street NW, Suite 1000
Washington, D.C. 20005
Dear Mr. Conrad and Mr. Lockhart:
I am writing in response to your request for updated estimates of the financial effects on Social Security of the plan released on June 9, 2016 by the Bipartisan Policy Center’s Commission on Retirement Security and Personal Savings. The estimates provided here reflect the intermediate assumptions of the 2016 Trustees Report. The Commission's plan includes twelve provisions with direct effects on the Social Security Trust Funds. For these updated estimates, the assumed effective dates for all provisions (except for the normal retirement age provision) are one year later than was assumed for our estimates of June 9, 2016. We have enjoyed working closely with Shai Akabas and other members of your team in developing this plan 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, Christopher Chaplain, Daniel Nickerson, Kyle Burkhalter, Michael Clingman, Anna Kirjusina, Katie Sutton, and Tiffany Bosley.

The enclosed tables provide estimates of the effects of the Commission's plan 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. In addition, tables 1 b and $1 \mathrm{~b} . \mathrm{n}$ provide estimates of the federal budget implications of the twelve provisions. Assuming enactment of the plan, we estimate that the combined OASI and DI Trust Funds would be fully solvent throughout the 75-year projection period, under the intermediate assumptions of the 2016 Trustees Report. In addition, under this plan the OASDI program would meet the further conditions for sustainable solvency, because projected combined trust fund reserves would be growing as a percentage of the annual cost of the program at the end of the long-range period.

Because the OASI and DI Trust Funds are separate legal entities, estimates for the combined trust funds are consistent with an intent to reallocate the total payroll tax rate as needed to equalize the years of reserve depletion and the actuarial status of the two separate trust funds.

The Commission's plan includes twelve basic provisions with direct effects on the OASDI program. The following list provides a brief description of these provisions.

1) Use an annualized "mini-PIA" formula beginning with retired worker beneficiaries becoming newly eligible in 2023, phased in over 5 years. The mini-PIA calculation would compute an individual average monthly indexed earnings (mini-AIME) and primary insurance amount (mini-PIA) for each year with taxable earnings.
2) Replace the current-law Windfall Elimination Provision (WEP) and Government Pension Offset (GPO) for most OASI benefits with a new calculation based on covered and non-covered earnings, beginning with individuals newly eligible in 2023.
3) Limit the spousal benefit paid on the account of a retired worker newly eligible in 2023 to the benefit received by the spouse of a newly-eligible retired worker with AIME at the $75^{\text {th }}$ percentile.
4) Compute retired worker and spouse benefits for those married when first starting benefits in 2023 or later using a specified joint-and-survivor annuity approach.
5) Beginning with retired worker beneficiaries newly eligible in 2023, add a new PIA bend point at the wage-indexed equivalent of the $50^{\text {th }}$ percentile of the AIME distribution for retired workers newly eligible in 2015, minus $\$ 100$. In addition, change the present-law first PIA bend point on a wage-indexed equivalent basis from $\$ 826$ to $\$ 1,050$ for 2015 and apply more progressive PIA factors.
6) Increase the OASDI taxable maximum by equal amounts over four years starting in 2018, reaching 203,700 for 2021, and index by growth in the average wage index (AWI) plus 0.5 percentage point annually thereafter. Additional earnings taxed are includable for AIME computations.
7) Increase the total OASDI payroll tax rate by 0.1 percentage point per year for 2018 through 2027, increasing the total rate from 12.4 percent for 2017 to 13.4 percent for 2027 and later.
8) After the normal retirement age (NRA) reaches age 67 for those attaining age 62 in 2022, increase it by 1 month every 2 years until the NRA reaches 69 for those attaining age 62 in 2070 . Also increase the age up to which delayed retirement credits may be earned from 70 to 72 on the same schedule.
9) Use the chain-weighted version of the Consumer Price Index for All Urban Consumers (C-CPI-U) to calculate the cost-of-living adjustment (COLA), beginning with the December 2017 COLA.
10) Beginning in 2018, extend student benefits to age 22 for children of disabled or deceased workers, if the child is a full-time student in high school or below, college, or vocational school.
11) Beginning in 2023, for single/head-of-household/married-filing-separate taxpayers with modified adjusted gross income (MAGI) of \$250,000 or more and for joint filers with MAGI of $\$ 500,000$ or more, include up to 100 percent of Social Security benefits (up from 85 percent) in income subject to federal personal income tax. All additional revenue would be credited to the OASI and DI Trust Funds.
12) Beginning in 2021, create a new Social Security Basic Minimum Benefit (BMB). This new minimum benefit would be available only after attaining NRA, and would be set at different levels for single persons and married couples. Individuals with adjusted gross income (AGI) above specified thresholds would have the BMB reduced or completely eliminated.

The balance of this letter provides a summary of the effects of the Commission's plan on the actuarial status of the OASDI program, our understanding of the specifications and intent of each
of the twelve 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 detailed description of these twelve provisions.

## Summary of Effects of the Plan on OASDI Actuarial Status

Figure 1 below illustrates the estimated trust fund ratio under present law and assuming enactment of the Commission's plan. The trust fund ratio is defined as the combined Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) Trust Fund reserves expressed as a percent of annual program cost. Assuming enactment of the plan, the combined OASI and DI Trust Funds would be fully solvent throughout the 75-year projection period, under the intermediate assumptions of the 2016 Trustees Report. In addition, because the projected trust fund ratio is increasing at the end of the period, the plan meets the conditions for sustainable solvency.

Figure 1. Present Law and Proposal OASDI Trust Fund Reserves as Percent of Annual Cost: 2016 TR Intermediate Assumptions


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 declining to 74 percent for 2090. Under the plan, the OASDI program would be solvent
throughout the 75-year projection period, and would have the ability to pay 100 percent of scheduled benefits on a timely basis for the foreseeable future.

Enactment of the twelve provisions of the Commission's plan would change the long-range OASDI actuarial deficit from 2.66 percent of taxable payroll under current law to a positive actuarial balance of 0.11 percent of payroll under the plan.

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 plan. Under the plan, projected expenditures equal the full cost of scheduled benefits throughout the long-range period.

Figure 2. Proposal and Present Law Cost, Expenditures, and Non-Interest Income as Percent of Taxable Payroll: 2016 TR Intermediate Assumptions


From 2018 through 2022, OASDI program cost under the plan is relatively close to the cost under current law. Starting in 2023, OASDI program annual cost under the plan becomes progressively lower than under current law. This difference increases rapidly through about 2040, and then increases gradually, reaching about 2.3 percent of current-law payroll by 2090. Beginning in 2018, non-interest income under the plan is projected to be higher than under current law, with the difference growing rapidly from 0.3 percent of current-law payroll for 2018 to 1.6 percent of current-law payroll for 2027, and then increasing gradually to 1.9 percent of current-law payroll for 2090. The plan improves the annual balance (non-interest income minus program cost) starting in 2018. The annual balance improves by 2.6 percent of payroll for 2034, with the improvement increasing to 4.2 percent of payroll for 2090. However, under the plan, the
annual balance is still negative throughout the long-range period. The annual deficit decreases from 1.1 percent of payroll for 2016 to 0.4 percent of payroll for 2020 and then fluctuates through the end of the long-range period, ultimately reaching 0.2 percent of payroll for 2090. Under current law, the projected annual deficit for 2090 is 4.3 percent of payroll.

On a present value basis over the 75-year projection period, about 56 percent of the improvement in the actuarial balance comes from increases in revenues (payroll taxes and taxation of benefits), and about 44 percent comes from reductions in cost. By comparison, for the $75^{\text {th }}$ projection year (2090), about 46 percent of the improvement in annual balance comes from revenue increases, and about 54 percent of the improvement comes from reduction in cost.

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 below illustrates these levels under both current law and the plan.

Figure 3. Proposal and Present Law Cost, Expenditures, and Non-Interest Income as Percent of GDP: 2016 TR Intermediate Assumptions


## Specification for Provisions of the Proposal

1) Use an annualized "mini-PIA" beginning with retired workers newly eligible in 2023.

For each of a retired worker's years of indexed earnings, compute an individual "mini-AIME" and an individual "mini-PIA." The applicable PIA under this provision would be the sum of the

40 highest individual mini-PIAs divided by 37. This provision would be phased in over five years, meaning that the benefit for retired workers becoming newly eligible in 2023 would equal 80 percent of the current-law PIA formula benefit plus 20 percent of the new mini-PIA-formula benefit, shifting proportions by 20 percentage points each year until the benefit is 100 percent based on the new mini-PIA formula for those attaining age 62 in 2027 and later. Benefits for disabled workers would be computed under the old PIA formula, and would not be changed for disabled workers converting to retired worker status at NRA.

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.23 percent of taxable payroll and would reduce the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.38 percent of payroll.
> 2) For most OASI benefits, replace the current Windfall Elimination Provision (WEP) and Government Pension Offset (GPO) with a new calculation based on covered and noncovered earnings, beginning with individuals newly eligible in 2023.

Under this provision, the current Windfall Elimination Provision (WEP) and Government Pension Offset (GPO) as applied for OASI benefits would be replaced with the approach proposed in the President's FY2017 Budget. The WEP replacement involves three components: (1) a "Super AIME" computed considering all earnings in Social Security Administration records (both OASDI covered and non-covered) up to the annual taxable maximum for each year, (2) a "Super PIA" based on the "Super AIME," and (3) the "Covered" AIME based only on OASDI covered earnings. The governing PIA for a worker (also applicable for his or her auxiliary beneficiaries) is then calculated as the Covered AIME multiplied by the ratio of the Super PIA to the Super AIME. The new computation will be effective for all payments on the record of a retired worker beneficiary becoming newly eligible for benefits on or after January 1, 2023. As under current law, upon the death of the worker, the governing PIA will revert to the standard PIA based solely on covered earnings.

For the GPO replacement, three components are used in the computation: (1) a "Super PIA" computed using both OASDI covered and non-covered earnings, (2) a standard PIA ("Covered PIA") based only on OASDI covered earnings, and (3) an age reduction factor. Each component is calculated using the beneficiary's own earnings record, without regard to insured status, as if entitlement to worker benefits begins at the same time as application of the offset. The new offset amount will be the difference between the Super PIA and Covered PIA, multiplied by the age reduction factor, if applicable. If the beneficiary is dually entitled, the offset will be deducted from the excess benefit payable as a spouse. The new offset will apply to benefits paid to a spouse, former spouse, or surviving spouse of an insured worker when the spouse is age 62 and older. The provision is effective for those attaining age 62 on or after January 1, 2023.

The new WEP and GPO formulas would not be applied for (1) DI benefits, (2) retired worker benefits after the conversion from disabled worker status at NRA, or (3) survivor benefits payable upon the death of a disabled worker.

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.06 percent of taxable payroll and would reduce the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.09 percent of payroll.
3) Limit the spousal benefit to that received by the spouse of the $75^{\text {th }}$-percentile worker beginning with retired workers newly eligible in 2023.

For this provision, the " $75^{\text {th }}$-percentile worker" is a retired worker newly eligible (age 62) in a given year who has an AIME at the $75^{\text {th }}$ percentile among all individuals attaining 62 in the year who are eligible for a retired worker benefit. For spouse benefits based on the accounts of retired workers newly eligible after 2023, the threshold used for those newly eligible in 2023 would be indexed by changes in the chain-weighted version of the Consumer Price Index for all Urban Consumers (C-CPI-U). This provision affects divorced spouses and young spouses as well as aged spouses of retired workers, but not spouses of disabled workers, including after the disabled worker converts to retired worker status when attaining NRA.

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.11 percent of taxable payroll and would reduce the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.21 percent of payroll.
4) Compute benefits on a joint-and-survivor annuity basis beginning with retired workers and spouses newly eligible in 2023.

For individuals attaining age 62 in 2023 and later who are married at the time they first become entitled to either a retired worker benefit or an aged spouse benefit (on a retired worker's account), benefits would be reduced while both spouses are alive to allow for increased survivor benefits, such that the expected present value of total benefits would be unchanged on a cohort basis. For those affected, the surviving spouse would receive 75 percent of the decedent's benefit plus whatever his or her own benefit would be if both individuals in the couple were still alive.

Because survivors of couples affected by this provision would receive higher benefits than under current law, this provision would also reduce the retired worker and aged spouse benefit such that, on a cohort basis, the expected amount of benefits paid from the worker's account (with all of the plan's provisions incorporated) would be actuarially equivalent in present value to the expected amount under current law.

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.02 percent of taxable payroll and would increase the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.21 percent of payroll.

## 5) Beginning with retired workers newly eligible in 2023, revise the PIA benefit formula.

This provision would add a new bend point that would fall between the two current-law PIA bend points. The new bend point would be calculated as would be applicable for new eligibility in 2015 at the $50^{\text {th }}$ percentile AIME level of retired workers newly eligible in 2015, minus $\$ 100$. This new bend point would be indexed by the average wage indexing series up to the year of first application, new eligibility in 2023, and for all subsequent years. In addition, this provision would move the current-law first bend point starting for those newly eligible in 2023 from the wage-indexed equivalent of $\$ 826$ in 2015 to the wage-indexed equivalent of $\$ 1,050$ in 2015 . The current PIA factors of 90 percent, 32 percent, and 15 percent would be changed to 95 percent, 32 percent (above the revised current-law first bend point and below the new bend point), 15 percent (above the new bend point and below the current-law second bend point), and 5 percent.

This change would be phased in over 10 years, from 2023 through 2032, on a weighted-average basis. That is, the PIA would be calculated as 90 percent of the current-law formula plus 10 percent of the plan formula for 2023, 80 percent of the current-law formula plus 20 percent of the plan formula for 2024, and so on. Disabled workers newly eligible in all future years would retain the current PIA formula computation (benefits both before and after conversion to retired worker benefit status at NRA).

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.04 percent of taxable payroll and would reduce the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.10 percent of payroll.
6) Increase the OASDI taxable maximum by equal amounts over four years starting in 2018, reaching $\$ 203,700$ for 2021, and index by the annual percentage increase in the AWI plus 0.5 percentage point after 2021.

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 is \$118,500 for 2016 and increases in the future with increases in the national average wage index (AWI). All covered earnings subject to the payroll tax are credited toward computation of benefits as well as attainment of insured status.

Under this provision, the taxable maximum would increase linearly from 2018 through 2021 until it equals $\$ 203,700$ for 2021. After 2021, the taxable maximum would be indexed to the annual percentage increase in the AWI plus 0.5 percentage point, a higher rate of increase than under current law. Additional earnings taxed would be includable in the AIME computation for benefit credit.

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.56 percent of taxable payroll and would reduce the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.63 percent of payroll.
7) Increase the OASDI payroll tax rate by 0.1 percentage point per year from 2018 through 2027 so that it equals 13.4 percent in years 2027 and later.

The payroll tax rate increase would be split evenly between the employer and employee share, and would be split between the OASI and DI Trust Funds in proportion to currently scheduled payroll tax rates.

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.88 percent of taxable payroll and would reduce the annual deficit for the $75^{\text {th }}$ projection year (2090) by 1.00 percent of payroll.
8) After the NRA reaches age 67 for those aged 62 in 2022, increase it by 1 month every 2 years until the NRA reaches 69.

Under current law, the NRA will increase from age 66 by 2 months per year for individuals attaining age 62 in 2017 through 2022, reaching the NRA of 67 for those aged 62 in 2022 and
later. Under this provision, the NRA would, after 2022, increase by 1 month every 2 years until it equals 69 for those attaining age 62 in 2070 and later. Also, the maximum age for accumulating delayed retirement credits would increase at the same rate, ultimately reaching 72 for those attaining 62 in 2070. This provision retains the earliest eligibility age for retired worker benefits at 62 .

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.50 percent of taxable payroll and would reduce the annual deficit for the $75^{\text {th }}$ projection year (2090) by 1.34 percent of payroll.

## 9) Use the chain-weighted version of the Consumer Price Index for All Urban Consumers (C-CPI-U) to calculate the cost-of-living adjustment (COLA), beginning with the December 2017 COLA.

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 assume this change to the C-CPI-U would decrease the COLA by an average of 0.3 percentage point per year. The new COLA would apply only to benefits paid from the OASI Trust Fund, including benefits to DI beneficiaries after they convert to retired worker status at normal retirement age.

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.47 percent of taxable payroll and would reduce the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.61 percent of payroll.
10) Beginning in 2018, extend student benefits to age 22 for children of disabled or deceased workers, if the child is a full-time student in high school, college, or vocational school.

Under current law, child benefits can be paid after attaining age 18 until attainment of age 19, if the child is a full-time attendee at secondary school or below. This provision would extend payment of student benefits up to attainment of age 22 for children of disabled or deceased workers, if the child is a full-time student in high school or below, college, or vocational school.

We estimate that enactment of this provision alone would increase the long-range OASDI actuarial deficit by 0.06 percent of taxable payroll and would increase the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.06 percent of payroll.
11) Beginning in 2023, for single/head-of-household/married-filing-separate taxpayers with modified adjusted gross income (MAGI) of $\$ 250,000$ or more and for joint filers with MAGI of $\$ 500,000$ or more, include up to $100 \%$ of Social Security benefits in taxable income.

Under current law, single tax filers with MAGI (approximately equal to adjusted gross income (AGI), plus non-taxable interest income and half of their Social Security benefit) greater than $\$ 25,000$ may have to pay income tax on up to 50 percent of their Social Security benefits. If MAGI exceeds $\$ 34,000$, up to 85 percent of benefits may be taxable. The income tax revenue from taxing up to 50 percent of Social Security benefits goes to the OASI and DI Trust Funds. The additional income tax revenue derived from taxing more than 50 percent of benefits, up to

85 percent, goes to the Hospital Insurance (HI) Trust Fund. The process is similar for joint tax filers, with $\$ 32,000$ and $\$ 44,000$ thresholds applying for possible taxation of up to 50 percent or 85 percent of the Social Security benefits, respectively. All threshold levels are fixed amounts and are not indexed to price inflation or average wage increases.

This provision would add an additional level of benefit taxation on the remaining 15 percent of Social Security benefits for taxpayers with MAGI exceeding thresholds of \$250,000 for single/head-of-household/married-filing-separate taxpayers and \$500,000 for joint filers in 2023. As a result, individuals with MAGI above these thresholds could be taxed on 100 percent of their Social Security benefits. These thresholds would be indexed by the AWI in subsequent years. Increased revenue from this provision would be credited to the OASI and DI Trust Funds. Current-law taxation of benefits of up to $85 \%$ of benefits would be unchanged for those with MAGI below these new $\$ 250,000 / \$ 500,000$ thresholds.

We estimate that enactment of this provision alone would reduce the long-range OASDI actuarial deficit by 0.01 percent of taxable payroll and would reduce the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.01 percent of payroll.

## 12) Beginning in 2021, create a Social Security Basic Minimum Benefit.

Eligibility for the Social Security Basic Minimum Benefit (BMB) would be limited to OASI beneficiaries who have attained NRA. The BMB would be calculated on a household basis and split equally among members of the household. In the case of a married couple, both spouses would need to claim any Social Security benefits to which they are eligible before they could receive the BMB. If both spouses have claimed and one is at NRA or above and the other has not yet attained NRA, only the half of the BMB for the spouse over NRA would be paid. The BMB amount for single beneficiaries would be equal to the higher of: (1) the BMB base ( $\$ 604$ in 2015), minus 70 percent of their current monthly OASI benefit (not including any BMB); and (2) zero. The BMB amount for married beneficiaries would be equal to the higher of: (1) the BMB base ( $\$ 906$ in 2015), minus 70 percent of the total household monthly OASI benefits (not including any BMB ); and (2) zero.

The BMB bases for single and married beneficiaries would be updated annually for changes in the AWI; therefore, if someone were already receiving the BMB, it would increase by more than the Social Security COLA amount for a subsequent year, whenever the AWI increase is larger. The BMB amount would be recalculated at least annually, whenever there is a change in Social Security benefits (e.g., annually for COLAs, upon conversion to a survivors benefit).

Single filers with AGI over \$30,000 and joint filers with AGI (including taxable Social Security benefits) over $\$ 45,000$ would be subject to a clawback of the BMB through personal income tax filings. Any BMB would be reduced by one dollar for every dollar of income above the thresholds. The thresholds (in 2015 dollars) would increase after 2015 by changes in the C-CPIU. Clawbacks would be credited back to the OASI Trust Fund.

We estimate that enactment of this provision alone would increase the long-range OASDI actuarial deficit by 0.19 percent of taxable payroll and would increase the annual deficit for the $75^{\text {th }}$ projection year (2090) by 0.24 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 each of the twelve provisions of the Commission's plan separately and on a combined basis. The table also includes estimates of the effect of each provision on the annual balance (the difference between income rate and the cost rate, expressed as a percent of current-law taxable payroll) for the $75^{\text {th }}$ projection year, 2090. 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 that affect benefit levels for beneficiaries retiring at age 65 in future years at five 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 $\$ 118,500$ for 2016). As a result, the provision to increase the taxable maximum does not affect benefit levels illustrated in these tables. Table B3 provides additional important information on characteristics of retired workers represented by these illustrations.

Table B1 compares the initial benefit levels, assuming retirement at age 65 under the provisions of the plan, to both scheduled and payable current-law benefit levels. Benefit amounts under the plan are generally lower than those scheduled in current law for hypothetical earners at age 65 in 2080. Hypothetical scaled earners with fewer years of earnings are reduced more because of the mini-PIA provision. The final two columns of this table show the level of scheduled benefits under the plan as a percentage of current-law scheduled and current-law payable benefits, respectively.

Table B2 compares the change in scheduled benefit levels at ages 65, 75,85 , and 95 under the plan to scheduled benefits under current law, assuming retirement at age 65. Table B2 shows that projected scheduled benefits at age 65 for the very-low and low scaled earners are generally lower under the Commission's plan than under current law, but become progressively higher than current-law scheduled levels after NRA due to the minimum benefit provision. For the medium, high, and maximum earners, who are not affected by the minimum benefit provision, benefits decrease relative to current-law scheduled levels above age 65 because of the change in 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 and low 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 has 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.

## 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 plan.

## Trust Fund Operations

Table 1 provides projections of the financial operations of the OASDI program under the plan and shows that the combined OASDI Trust Funds would be fully solvent throughout the 75-year projection period. The OASDI program would also be solvent for the foreseeable future (sustainably solvent), because the OASDI trust fund ratio is projected to rise by the end of the period, 2091. The table shows the annual cost and income rates, annual balances, and trust fund ratios (reserves as 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.

The actuarial balance for the OASDI program over the 75-year projection period is improved by 2.77 percent of taxable payroll, from an actuarial deficit of 2.66 percent of payroll under current law to a positive actuarial balance of 0.11 percent of taxable payroll.

## Program Transfers and Trust Fund Reserves

Column 4 of Table 1a provides a projection of the level of reserves for the theoretical combined OASI and DI Trust Funds, assuming enactment of the twelve Social Security provisions of the Commission's plan. These trust fund reserve amounts are expressed in present value dollars discounted to January 1, 2016. The table indicates that the provisions include no new specified transfers of general revenue to the trust funds. For purpose of comparison, the OASDI Trust Fund reserves, expressed in present value dollars, are also shown for the current-law Social Security program both without and with the added plan 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) cash flows and balances, assuming enactment of the twelve Social Security provisions of the Commission's plan. Table 1b.n provides the estimated nominal dollar effect of enactment of the plan on annual budget balances for years 2016 through 2026. 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 plan general fund transfers (zero for this plan). Column 2 shows the net changes in OASDI cash flow from all provisions of the plan.

We expect the net effect of the plan on unified budget cash flow (column 3) to be positive in years 2018 and later, reflecting savings to the long-range actuarial balance from provisions 1-9 and 11.

Column 4 of Table 1b indicates that the effect of implementing the Commission's plan is a reduction of the federal debt held by the public, reaching about $\$ 12.5$ trillion in present value at the end of the 75 -year projection period. Column 5 provides the projected effect of the plan 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 plan would have no expected direct effects on the on-budget cash flow, or on the total federal debt, in the future.

It is important to note that we base these estimates on the intermediate assumptions of the 2016 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 2016 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 percentage of GDP for both current law and assuming enactment of the twelve Social Security provisions of the Commission's plan. 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. Values in this table are expressed in present value dollars discounted to January 1, 2016.

For the 75-year (long-range) period as a whole, the current-law unfunded obligation of $\$ 11.4$ trillion is replaced by a positive trust fund reserve of $\$ 1.2$ trillion in present value assuming enactment of the Commission's plan. This change of $\$ 12.5$ trillion results from:

- A $\$ 7.1$ trillion increase in revenue (column 2), primarily from additional tax revenue, minus
- A $\$ 5.4$ trillion decrease in cost (column 3), primarily from increasing the NRA, calculating the COLA using the C-CPI-U rather than the CPI-W, and decreasing future benefits through changes in the PIA formula.

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

# Table A--Estimated Long-Range OASDI Financial Effects for the "Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan" 

| Provision | Estimated Change in Long-Range OASDI Actuarial Balance ${ }^{1}$ (as a percent of payroll) | Estimated Change in Annual Balance in $75^{\text {th }}$ year ${ }^{2}$ <br> (as a percent of payroll) |
| :---: | :---: | :---: |
| 1) Use an annualized "mini-PIA" formula beginning with retired worker beneficiaries newly eligible in 2023. For each indexed earnings year, compute an individual AIME and an individual PIA. Sum these individual PIAs for the 40 highest years of indexed earnings and divide that total amount by 37 to get the PIA for this provision. |  |  |
| Phase-in over five years, meaning that in 2023, 80 percent of the benefit would be based on the old 35 -year average PIA formula and 20 percent on the new mini-PIA formula, shifting by 20 percentage points each year until 100 percent is based on the new mini-PIA formula for those attaining age 62 in 2027. |  |  |
| Disabled worker benefits are unchanged under this provision.............. | 0.23 | 0.38 |
| 2) Replace the WEP and GPO with a revised reduction for most OASI benefits based on all earnings, beginning with beneficiaries newly eligible in 2023 . | 0.06 | 0.09 |
| 3) Limit the spousal benefit to that received by the spouse of the 75th percentile career-average worker, beginning with retired workers newly eligible in 2023. For future cohorts, this limit would be indexed for inflation annually using the chain-weighted version of the CPI-U. The provision affects divorced spouses and young spouses (retired workers) but not spouses of disabled workers.............. | 0.11 | 0.21 |
| 4) Enhance Survivors Benefits: Beginning for newly eligible retired workers and spouses in 2023, all claimants who are married would receive a specified joint-and-survivor annuity benefit (i.e., surviving spouses would receive 75 percent of the decedents' benefits, in addition to their own) that would be payable if both were still alive. Initial benefits would be actuarially adjusted to keep the expected value of benefits equivalent to what would otherwise be current law (i.e., with the other provisions of this package incorporated) .. | 0.02 | -0.21 |


| 5) For retired worker beneficiaries newly eligible in 2023 (excluding disabled workers), add a new bend point at the wage-indexed equivalent of the $500^{\text {th }}$ percentile of the AIME distribution minus $\$ 100$ (for 2015 eligibility) and change the PIA factors to $95 / 32 / 15 / 5$. Also move the current-law first bend point from the wage-indexed equivalent of $\$ 826$ in 2015 to $\$ 1,050$ in 2015. Phase this provision in over 10 years (2023-2032). The phase-in would work on a weighted-average basis: $90 \%$ of CL formula $+10 \%$ of proposal formula for 2023, $80 \%$ of CL formula $+20 \%$ of proposal formula for 2024, and so on . | 0.04 | 0.10 |
| :---: | :---: | :---: |
| 6) Increase the taxable maximum linearly over 4 years to $\$ 203,700$ for 2021. After 2021, index the taxable maximum to AWI plus 0.5 percentage point. Allow benefit credit on additional earnings taxed | 0.56 | 0.63 |

## Table A--Estimated Long-Range OASDI Financial Effects for the "Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan"

| Provision | Estimated Change in Long-Range OASDI Actuarial Balance ${ }^{1}$ (as a percent of payroll) | Estimated Change in Annual Balance in $75^{\text {th }}$ year ${ }^{2}$ <br> (as a percent of payroll) |
| :---: | :---: | :---: |
| 7) Increase the payroll tax rate by 0.1 percentage point per year for 2018 through 2027 so that it equals 13.4 percent for 2027 and later. The increase would be split evenly between the employer and employee share, and would be split between OASI and DI in proportion to currently scheduled payroll tax rates .. | 0.88 | 1.00 |
| 8) After the normal retirement age (NRA) reaches 67 for those attaining 62 in 2022, increase it by 1 month every 2 years until the NRA reaches 69. Also increase the age up to which the delayed retirement credit may be earned at the same rate (from 70 to 72 ). No change to earliest eligibility age. $\qquad$ | 0.50 | 1.34 |
| 9) Beginning in 2018 (December 2017), for OASI beneficiaries only (DI beneficiaries would only be affected when their benefit converts to OASI at NRA), the annual COLA would be based on the chainweighted version of the CPI-U. $\qquad$ | 0.47 | 0.61 |
| 10) Beginning in 2018, extend student benefits to age 22 for children of disabled or deceased workers if the child is in high school or below, college, or a vocational school (full-time) | -0.06 | -0.06 |
| 11) Beginning in 2023, for single/head-of-household/married-filingseparate taxpayers with MAGI of $\$ 250,000$ or more and joint filers with MAGI of $\$ 500,000$ or more, include up to the remaining 15 percent of Social Security benefits in taxable income (increased from up to 85 percent of benefits taxable under current law). In subsequent years, update these thresholds for growth in wages (AWI). Revenue from this provision would be credited to the Social Security trust funds. Current law taxation of up to 85 percent of Social Security benefits would remain unchanged.. | 0.01 | 0.01 |

## Table A--Estimated Long-Range OASDI Financial Effects for the "Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan"

|  | Estimated Change in <br> Long-Range OASDI <br> Actuarial Balance ${ }^{1}$ <br> (as a percent of payroll) | Estimated Change <br> in Annual Balance <br> in $75^{\text {th }}$ year ${ }^{2}$ |
| :--- | :--- | :--- |
| (as a percent of payroll) |  |  |$|$

${ }^{1}$ Under current law, the estimated long-range OASDI actuarial balance is -2.66 percent of taxable payroll.
${ }^{2}$ Under current law, the estimated $75^{\text {th }}$ year annual balance is -4.35 percent of taxable payroll.
Notes: All estimates are based on the intermediate assumptions of the 2016 OASDI Trustees Report.
Estimates of individual provisions appear on a stand-alone basis relative to current law, unless otherwise stated.
Social Security Administration
Office of the Chief Actuary
October 11, 2016

Table B1. Changes in Benefits for Hypothetical Workers Beginning Benefit Receipt at age 65 Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan

| Scheduled Benefit Level Percent Change at age 65 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> Attain <br> Age 65 | $\begin{gathered} \text { Present Law Scheduled } \\ \underline{\text { Monthly Benefits }{ }^{3}} \end{gathered}$ |  | Index NRA$1 \mathrm{Mth} / 2 \mathrm{Yrs}^{4}$ | Reduced COLA ${ }^{5}$ | Benefit <br> Formula ${ }^{6}$ <br> (Percent change) | Minimum Benefit ${ }^{7}$ | Total | Proposal Scheduled Benefit <br> Percent of Present Law: |  |
|  |  |  |  |  |  |  |  |  |  |
|  | (Wage-Indexed | (CPI-Indexed |  |  |  |  |  | Scheduled | Payable |
|  | 2015 Dollars) | 2015 Dollars) |  |  |  |  |  |  |  |
| Very-Low-AIME (\$12,280 for 2016 ${ }^{1}$ ) $\mathbf{3 0 - Y e a r ~ S c a l e d ~ E a r n e r ~ ( 8 . 9 \% ~ o f ~ R e t i r e e s ~}{ }^{2}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 718 | 718 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 660 | 812 | -1.3 | -0.9 | -7.5 | 0.0 | -9.4 | 91 | 91 |
| 2050 | 661 | 1,036 | -7.7 | -0.9 | 0.5 | 0.0 | -8.0 | 92 | 115 |
| 2080 | 665 | 1,469 | -13.5 | -0.9 | 0.5 | 0.0 | -13.8 | 86 | 115 |
| Very-Low-AIME (\$12,280 for 2016 ${ }^{\mathbf{1}}$ ) 20-Year Scaled Earner (5.2\% of Retirees ${ }^{\mathbf{2}}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 718 | 718 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 660 | 812 | -1.3 | -0.9 | -24.7 | 0.0 | -26.3 | 74 | 74 |
| 2050 | 661 | 1,036 | -7.7 | -0.9 | -18.7 | 0.0 | -25.6 | 74 | 93 |
| 2080 | 665 | 1,469 | -13.5 | -0.9 | -18.7 | 0.0 | -30.3 | 70 | 93 |
| Very-Low-AIME (\$12,280 for 2016 ${ }^{\mathbf{1}}$ ) $\mathbf{1 4 - Y e a r ~ S c a l e d ~ E a r n e r ~ ( 4 . 2 \% ~ o f ~ R e t i r e e s ~}{ }^{\mathbf{2}}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 718 | 718 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 660 | 812 | -1.3 | -0.9 | -36.1 | 0.0 | -37.5 | 62 | 62 |
| 2050 | 661 | 1,036 | -7.7 | -0.9 | -32.0 | 0.0 | -37.8 | 62 | 78 |
| 2080 | 665 | 1,469 | -13.5 | -0.9 | -32.0 | 0.0 | -41.6 | 58 | 78 |
| Low-AIME (\$22,105 for 2016 ${ }^{\mathbf{1}}$ ) 44-Year Scaled Earner (16.9\% of Retirees ${ }^{2}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 940 | 940 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 863 | 1,062 | -1.3 | -0.9 | 15.8 | 0.0 | 13.4 | 113 | 113 |
| 2050 | 865 | 1,356 | -7.7 | -0.9 | 25.5 | 0.0 | 14.8 | 115 | 144 |
| 2080 | 869 | 1,921 | -13.5 | -0.9 | 25.5 | 0.0 | 7.6 | 108 | 143 |
| Low-AIME (\$22,105 for 2016 ${ }^{\mathbf{1}}$ ) 30-Year Scaled Earner (4.4\% of Retirees ${ }^{2}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 940 | 940 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 863 | 1,062 | -1.3 | -0.9 | -4.8 | 0.0 | -6.8 | 93 | 93 |
| 2050 | 865 | 1,356 | -7.7 | -0.9 | 2.2 | 0.0 | -6.5 | 94 | 117 |
| 2080 | 869 | 1,921 | -13.5 | -0.9 | 2.2 | 0.0 | -12.3 | 88 | 117 |
| Low-AIME (\$22,105 for 2016 ${ }^{\mathbf{1}}$ ) 20-Year Scaled Earner ( $\mathbf{~ 2 ~} \mathbf{0} \%$ of Retirees ${ }^{2}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 940 | 940 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 863 | 1,062 | -1.3 | -0.9 | -20.0 | 0.0 | -21.7 | 78 | 78 |
| 2050 | 865 | 1,356 | -7.7 | -0.9 | -15.6 | 0.0 | -22.8 | 77 | 97 |
| 2080 | 869 | 1,921 | -13.5 | -0.9 | -15.6 | 0.0 | -27.6 | 72 | 96 |
| Medium-AIME (\$49,121 for 2016 ${ }^{\mathbf{1}}$ ) 44-Year Scaled Earner (29.2\% of Retirees ${ }^{\mathbf{2}}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 1,548 | 1,548 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 1,423 | 1,750 | -1.3 | -0.9 | 8.7 | 0.0 | 6.4 | 106 | 106 |
| 2050 | 1,425 | 2,234 | -7.7 | -0.9 | 11.9 | 0.0 | 2.4 | 102 | 128 |
| 2080 | 1,433 | 3,166 | -13.5 | -0.9 | 11.9 | 0.0 | -4.0 | 96 | 128 |
| Medium-AIME (\$49,121 for 2016 ${ }^{\mathbf{1}}$ ) 30-Year Scaled Earner (3.2\% of Retirees ${ }^{\text {2 }}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 1,548 | 1,548 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 1,423 | 1,750 | -1.3 | -0.9 | -10.4 | 0.0 | -12.3 | 88 | 88 |
| 2050 | 1,425 | 2,234 | -7.7 | -0.9 | -11.1 | 0.0 | -18.7 | 81 | 102 |
| 2080 | 1,433 | 3,166 | -13.5 | -0.9 | -11.1 | 0.0 | -23.7 | 76 | 101 |
| High-AIME (\$78,594 for 2016 ${ }^{\mathbf{1}}$ ) 44-Year Scaled Earner (19.8\% of Retirees ${ }^{\mathbf{2}}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 2,053 | 2,053 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 1,885 | 2,319 | -1.3 | -0.9 | 1.3 | 0.0 | -0.9 | 99 | 99 |
| 2050 | 1,888 | 2,960 | -7.7 | -0.9 | -3.5 | 0.0 | -11.7 | 88 | 111 |
| 2080 | 1,899 | 4,195 | -13.5 | -0.9 | -3.5 | 0.0 | -17.2 | 83 | 110 |
| Maximum-AIME (\$118,500 for 2016 ${ }^{\mathbf{1}}$ ) 43-Year Steady Earner (6.3\% of Retirees ${ }^{\mathbf{2}}$ ) |  |  |  |  |  |  |  |  |  |
| 2016 | 2,492 | 2,492 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 |
| 2030 | 2,308 | 2,839 | -1.3 | -0.9 | -3.1 | 0.0 | -5.1 | 95 | 95 |
| 2050 | 2,309 | 3,622 | -7.7 | -0.9 | -13.9 | 0.0 | -21.2 | 79 | 99 |
| 2080 | 2,317 | 5,119 | -13.5 | -0.9 | -13.7 | 0.0 | -26.0 | 74 | 98 |

${ }^{1}$ Average of highest 35 years of earnings wage indexed to 2016.
${ }^{2}$ Projected percent of new retired worker awards in 2050 closest to AIME levels and years of work.
${ }^{3}$ After the trust fund reserves deplete under present law continuing taxes are expected to be enough to pay about three fourths of scheduled benefits.
${ }^{4}$ After the NRA reaches 67 in 2022, increase it by 1 month every 2 years until NRA reaches age 69.
Starting Dec 2017, compute the COLA using the chained CPI-U, producing $0.3 \%$ lower annual COLAs on average.
${ }^{6}$ Beginning with newly eligible beneficiaries in 2023, change the PIA Formula to sum the highest 40 years of the amounts with the benefit formula applied to indexed individual years of earnings (mini PIA formula approach) divided by 37 , phasing in from 2023-2027. Starting in 2023 , change the bend points to $\$ 1,432 / \$ 4,385 / \$ 6,794$ and PIA factors to $95 \% / 32 \% / 15 \% / 5 \%$. Phase the new bend points and PIA factors in from 2023-2032.
Beginning in 2021, the Basic Minimum Benefit (BMB) would apply for beneficiaries who have attained NRA. For single/married beneficiares, the BMB amount is $\$ 604 / \$ 906-0.70^{*}$ total household monthly benefits in 2015, then wage indexed. The BMB is calculated at least annually, whenever there is a change in benefits. If MAGI is greater then $\$ 30,000$ if single and $\$ 45,000$ if married, any BMB above the limits would be reduced dollar for dollar. The threshold limits are as of 2015, then chained-CPI indexed. The Minimum Benefit Percent change is calculated after all other provisions, so that the Proposed Benefit Amount is at least the Minimum Benefit. The examples in this table calculate the BMB for single beneficiaries.

All estimates based on the intermediate assumptions of the 2016 Trustees Report.

| Year <br> Attain <br> Age 65 | Table B2. Changes in Benefits for Hypothetical Workers Beginning Benefit Receipt at age 65 Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan <br> Proposal Scheduled Benefit as Percent of Present Law Scheduled |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Age 65 | Age 75 | Age 85 | Age 95 |
| (Percent) |  |  |  |  |
| Very-Low-AIME (\$12,280 for 2016 ${ }^{\mathbf{1}}$ ) $\mathbf{3 0 - Y e a r ~ S c a l e d ~ E a r n e r ~ ( 8 . 9 \% ~ o f ~ R e t i r e e s ~}{ }^{2}$ ) |  |  |  |  |
| 2016 | 100.0 | 131.2 | 144.0 | 157.9 |
| 2030 | 90.6 | 131.3 | 144.0 | 158.3 |
| 2050 | 92.0 | 131.3 | 143.2 | 156.2 |
| 2080 | 86.2 | 128.4 | 139.8 | 152.7 |
| Very-Low-AIME (\$12,280 for 2016 ${ }^{\mathbf{1}}$ ) $\mathbf{2 0 - Y e a r ~ S c a l e d ~ E a r n e r ~ ( ~} 5.2 \%$ of Retirees ${ }^{\mathbf{2}}$ ) |  |  |  |  |
| 2016 | 100.0 | 131.2 | 144.0 | 157.9 |
| 2030 | 73.7 | 126.4 | 139.2 | 153.7 |
| 2050 | 74.4 | 126.2 | 138.3 | 151.4 |
| 2080 | 69.7 | 123.6 | 135.1 | 148.2 |
| Very-Low-AIME (\$12,280 for 2016 ${ }^{\mathbf{1}}$ ) 14-Year Scaled Earner (4.2\% of Retirees ${ }^{\mathbf{2}}$ ) |  |  |  |  |
| 2016 | 100.0 | 131.2 | 144.0 | 157.9 |
| 2030 | 62.5 | 123.1 | 136.1 | 150.6 |
| 2050 | 62.2 | 122.7 | 134.8 | 148.1 |
| 2080 | 58.4 | 120.2 | 131.9 | 145.1 |
| Low-AIME (\$22,105 for 2016 ${ }^{\mathbf{1}}$ ) 44-Year Scaled Earner (16.9\% of Retirees ${ }^{\text {2 }}$ ) |  |  |  |  |
| 2016 | 100.0 | 107.2 | 116.8 | 127.2 |
| 2030 | 113.4 | 113.2 | 122.6 | 133.2 |
| 2050 | 114.8 | 113.4 | 122.1 | 131.7 |
| 2080 | 107.6 | 110.3 | 118.7 | 128.2 |
| Low-AIME (\$22,105 for 2016 ${ }^{\mathbf{1}}$ ) 30-Year Scaled Earner (4.4\% of Retirees ${ }^{\text {² }}$ ) |  |  |  |  |
| 2016 | 100.0 | 107.2 | 116.8 | 127.2 |
| 2030 | 93.2 | 107.3 | 116.8 | 127.6 |
| 2050 | 93.5 | 107.1 | 116.0 | 125.8 |
| 2080 | 87.7 | 104.5 | 113.0 | 122.7 |
| Low-AIME (\$22,105 for 2016 ${ }^{\mathbf{1}}$ ) 20-Year Scaled Earner (2.0\% of Retirees ${ }^{\mathbf{2}}$ ) |  |  |  |  |
| 2016 | 100.0 | 107.2 | 116.8 | 127.2 |
| 2030 | 78.3 | 103.0 | 112.6 | 123.5 |
| 2050 | 77.2 | 102.4 | 111.4 | 121.3 |
| 2080 | 72.4 | 100.0 | 108.7 | 118.5 |
| Medium-AIME (\$49,121 for 2016 ${ }^{1}$ ) 44-Year Scaled Earner (29.2\% of Retirees ${ }^{2}$ ) |  |  |  |  |
| 2016 | 100.0 | 97.4 | 94.6 | 91.9 |
| 2030 | 106.4 | 103.3 | 100.3 | 97.4 |
| 2050 | 102.4 | 99.5 | 96.6 | 93.8 |
| 2080 | 96.0 | 93.2 | 90.6 | 87.9 |
| Medium-AIME (\$49,121 for 2016 ${ }^{\mathbf{1}}$ ) 30-Year Scaled Earner (3.2\% of Retirees ${ }^{\text {2 }}$ ) |  |  |  |  |
| 2016 | 100.0 | 97.4 | 94.6 | 91.9 |
| 2030 | 87.7 | 85.2 | 82.7 | 80.4 |
| 2050 | 81.3 | 79.0 | 76.7 | 74.5 |
| 2080 | 76.3 | 74.1 | 71.9 | 69.9 |
| High-AIME (\$78,594 for 2016 ${ }^{\mathbf{1}}$ ) 44-Year Scaled Earner (19.8\% of Retirees ${ }^{\text {² }}$ ) |  |  |  |  |
| 2016 | 100.0 | 97.4 | 94.6 | 91.9 |
| 2030 | 99.1 | 96.2 | 93.5 | 90.8 |
| 2050 | 88.3 | 85.8 | 83.3 | 80.9 |
| 2080 | 82.8 | 80.4 | 78.1 | 75.8 |
| Maximum-AIME (\$118,500 for 2016 ${ }^{\mathbf{1}}$ ) 43-Year Steady Earner (6.3\% of Retirees ${ }^{\mathbf{2}}$ ) |  |  |  |  |
| 2016 | 100.0 | 97.4 | 94.6 | 91.9 |
| 2030 | 94.9 | 92.1 | 89.5 | 86.9 |
| 2050 | 78.8 | 76.5 | 74.3 | 72.2 |
| 2080 | 74.0 | 71.9 | 69.8 | 67.8 |
| ${ }^{1}$ Average of highest 35 years of earnings wage indexed to 2016. |  |  |  |  |
| ${ }^{2}$ Projected percent of new retired worker awards in 2050 closest to AIME levels and years of work. |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| - Starting Dec 2017, compute the COLA using the chained CPI-U, producing $0.3 \%$ lower annual COLAs on average. |  |  |  |  |
| - Beginning in 2021, the Basic Minimum Benefit (BMB) would apply for beneficiaries who have attained NRA. For single/married beneficiares, the BMB amount is $\$ 604 / \$ 906$ $0.70 *$ total household monthly benefits in 2015, then wage indexed. The BMB is calculated at least annually, whenever there is a change in benefits. If MAGI is greater then $\$ 30,000$ if single and $\$ 45,000$ if married, any BMB above the limits would be reduced dollar for dollar. The threshold limits are as of 2015, then chained-CPI indexed. The Minimum Benefit Percent change is calculated after all other provisions, so that the Proposed Benefit Amount is at least the Minimum Benefit. The examples in this table calculate the BMB for single beneficiaries. |  |  |  |  |
| Other Changes:- After the NRA reaches 67 in 2022, increase it by 1 month every 2 years until NRA reaches age 69. |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Beginning with newly eligible beneficiaries in 2023, change the PIA Formula to sum the highest 40 years of the amounts with the benefit formula applied to indexed individual years of earnings (mini PIA formula approach) divided by 37, phasing in from 2023-2027. Starting in 2023, change the bend points to $\$ 1,419 / \$ 4,345 / \$ 6,732$ and PIA factors to $95 \% / 32 \% / 15 \% / 5 \%$. Phase the new bend points and PIA factors in from 2023-2032. |  |  |  |  |

## Table B3. Important Characteristics of Hypothetical Workers in 2007

## Percent of Beneficiaries Within Each Category That Are:

| Category | Dually Entitled ${ }^{2}$ | $\underline{\text { WEP }}{ }^{3}$ | Foreign Born | All Others ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: |
| Very-Low-AIME (\$12,280 for 2016 ${ }^{1}$ ): |  |  |  |  |
| 30-Year Scaled Earner (9.3\% of Retires) | 47 | 6 | 11 | 40 |
| $20-$-ear Scaled Earner (5.8\% of Retires) | 38 | 16 | 21 | 31 |
| 14-Year Scaled Earner (5.3\% of Retires) | 22 | 21 | 45 | 20 |
| Low-AIME (\$22,105 for 2016 ${ }^{1}$ ): |  |  |  |  |
| 44-Year Scaled Earner (13.1\% of Retires) | 15 | 2 | 6 | 78 |
| 30-Year Scaled Earner (5.9\% of Retires) | 16 | 9 | 18 | 59 |
| ${ }^{20}$-Year Scaled Earner (3.1\% of Retires) | 10 | 23 | 35 | 37 |
| Medium-AIME (\$49,121 for 2016 ${ }^{1}$ ): |  |  |  |  |
| 44-Year Scaled Earner (23.0\% of Retires) | 1 | 1 | 5 | 93 |
| 30-Year Scaled Earner (4.4\% of Retires) | 1 | 8 | 26 | 67 |
| High-AIME (\$78,594 for 2016 ${ }^{1}$ ): |  |  |  |  |
| 44-Year Scaled Earner (20.5\% of Retires) | 0 | 0 | 6 | 93 |
| Maximum-AIME (\$118,500 for 2016 ${ }^{1}$ ): |  |  |  |  |
| Steady Earner (9.4\% of Retires) | 0 | 0 | 7 | 93 |
| Note 1:Table B3 displays the percentages of these newly-entitled retired workers in 2007 that are closest to each of the illustrative examples. <br> Note 2: Percents based on tabulations of a 10-percent sample of newly entitled retired-worker beneficiaries in 2007 ( 169,725 records). We can be 95 percent confident that each of the values shown above is within 1.4 percentage points of the value we would find using 100 percent of the retirees in 2007. |  |  |  |  |
|  |  |  |  |  |
| Note 3: The sum of the percentages for each category (sum across rows) could be greater than 100 percent because some beneficiaries can be classified in more than one of the following groups: dually entitled, WEP, and foreign born. |  |  |  |  |
| ${ }^{1}$ Average of highest 35 years of earnings wage indexed to 2016. |  |  |  |  |
| ${ }^{2}$ Under current law, entitled to an additional benefit based on someone else's account. The dually entitled percent is a minimum value. Some beneficiaries that are not currently dually entitled could become dually entitled in the future. |  |  |  |  |
| ${ }^{3}$ Covered by pension from government employment and are subject to the windfall elimination provision (WEP). |  |  |  |  |
| ${ }^{4}$ Neither foreign born, subject to WEP, or dually entitled. |  |  |  |  |
| Office of the Chief Actuary, Social Security Administration |  |  |  | June 22, 2016 |

Table 1 - OASDI Cost Rate, Income Rate, Annual Balance, and Trust Fund Ratio
Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan

| Summarized Rates: OASDI |  |  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Actuarial | Year of reserve |  |  |  |  |  |
|  | Cost Rate | Income Rate | Balance | depletion |  |  |  |  |  |
| $2016-2090$ | $15.28 \%$ | $15.40 \%$ | $0.11 \%$ | N/A |  |  |  |  |  |


| Expressed as a percentage of present-law taxable payroll |  |  |
| :---: | :---: | :---: |
|  | Income | Annual |
| Cost Rate | Rate | Balance |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.04 | 0.29 | 0.25 |
| 0.00 | 0.54 | 0.53 |
| -0.03 | 0.75 | 0.78 |
| 0.06 | 0.94 | 0.88 |
| 0.04 | 1.05 | 1.02 |
| -0.06 | 1.15 | 1.22 |
| -0.14 | 1.26 | 1.39 |
| -0.24 | 1.35 | 1.60 |
| -0.35 | 1.45 | 1.80 |
| -0.45 | 1.55 | 2.01 |
| -0.56 | 1.56 | 2.12 |
| -0.65 | 1.56 | 2.21 |
| -0.73 | 1.57 | 2.30 |
| -0.81 | 1.57 | 2.38 |
| -0.88 | 1.57 | 2.46 |
| -0.94 | 1.58 | 2.52 |
| -1.00 | 1.58 | 2.58 |
| -1.05 | 1.59 | 2.63 |
| -1.09 | 1.59 | 2.69 |
| -1.13 | 1.60 | 2.73 |
| -1.16 | 1.60 | 2.76 |
| -1.18 | 1.61 | 2.79 |
| -1.19 | 1.62 | 2.81 |
| -1.19 | 1.62 | 2.82 |
| -1.19 | 1.63 | 2.82 |
| -1.19 | 1.64 | 2.83 |
| -1.19 | 1.65 | 2.83 |
| -1.19 | 1.65 | 2.84 |
| -1.19 | 1.66 | 2.85 |
| -1.19 | 1.67 | 2.86 |
| -1.19 | 1.67 | 2.87 |
| -1.20 | 1.68 | 2.88 |
| -1.22 | 1.69 | 2.90 |
| -1.23 | 1.69 | 2.93 |
| -1.26 | 1.70 | 2.96 |
| -1.29 | 1.71 | 3.00 |
| -1.33 | 1.71 | 3.04 |
| -1.36 | 1.72 | 3.08 |
| -1.40 | 1.72 | 3.12 |
| -1.44 | 1.73 | 3.17 |
| -1.48 | 1.73 | 3.21 |
| -1.52 | 1.74 | 3.26 |
| -1.56 | 1.74 | 3.30 |
| -1.59 | 1.75 | 3.34 |
| -1.63 | 1.75 | 3.38 |
| -1.66 | 1.76 | 3.42 |
| -1.70 | 1.76 | 3.46 |
| -1.73 | 1.77 | 3.49 |
| -1.76 | 1.77 | 3.53 |
| -1.79 | 1.78 | 3.56 |
| -1.82 | 1.78 | 3.60 |
| -1.85 | 1.79 | 3.63 |
| -1.88 | 1.79 | 3.67 |
| -1.92 | 1.79 | 3.71 |
| -1.95 | 1.80 | 3.75 |
| -1.98 | 1.81 | 3.78 |
| -2.00 | 1.81 | 3.81 |
| -2.02 | 1.82 | 3.83 |
| -2.03 | 1.82 | 3.85 |
| -2.04 | 1.83 | 3.87 |
| -2.05 | 1.83 | 3.88 |
| -2.05 | 1.84 | 3.89 |
| -2.06 | 1.84 | 3.90 |
| -2.06 | 1.85 | 3.91 |
| -2.06 | 1.86 | 3.92 |
| -2.08 | 1.86 | 3.94 |
| -2.10 | 1.87 | 3.96 |
| -2.12 | 1.87 | 3.99 |
| -2.16 | 1.88 | 4.03 |
| -2.19 | 1.88 | 4.07 |
| -2.21 | 1.89 | 4.10 |
| -2.24 | 1.89 | 4.13 |
| -2.25 | 1.90 | 4.15 |
| -2.26 | 1.90 | 4.17 |
| Summarized Rates: OASDI |  |  |
|  |  | Change in |
| Change in | Change in | Actuarial |
| Cost rate | Income Rate | Balance |
| -1.22\% | 1.55\% | 2.77\% |

Office of the Chief Actuary
Based on Intermediate Assumptions of the 2016 Trustees Report.
ocial Security Administration
${ }^{1}$ Under present law the year of combined Trust Fund reserve depletion is 2034

Table 1a - General Fund Transfers, OASDI Trust Fund Reserves, and Theoretical OASDI Reserves
Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan


Total 2016-2090
0.0

Based on the Intermediate Assumptions of the 2016 Trustees Report. Ultimate Real Trust Fund Yield of 2.7\%.

Table 1b-OASDI Changes \& Implications for Federal Budget and Debt of Specified Plan Provision Effects on OASDI ${ }^{1}$ (Present Value Dollars) Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan


Based on Intermediate Assumptions of the 2016 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.
Office of the Chief Actuary
Social Security Administration October 11, 2016

Table 1b.n - OASDI Changes \& Implications for Federal Budget and Debt of Specified Plan Provision Effects on OASDI ${ }^{1}$ (Nominal Dollars)
Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan


Based on Intermediate Assumptions of the 2016 Trustees Report.
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.
Office of the Chief Actuary
${ }^{1}$ Effects of tax provisions on the On-Budget are not reflected in this table.

Table 1c - Present Law and Proposal Cost, Expenditures, and Income: As Percent of Gross Domestic Product Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan

| Calendar Year | Present Law OASD |  |  |
| :---: | :---: | :---: | :---: |
|  | Cost <br> (1) | Expenditures (Payable) (2) | Non-Interest Income (3) |
| 2016 | 4.98 | 4.98 | 4.59 |
| 2017 | 4.91 | 4.91 | 4.62 |
| 2018 | 4.98 | 4.98 | 4.65 |
| 2019 | 5.05 | 5.05 | 4.68 |
| 2020 | 5.12 | 5.12 | 4.70 |
| 2021 | 5.18 | 5.18 | 4.72 |
| 2022 | 5.28 | 5.28 | 4.75 |
| 2023 | 5.39 | 5.39 | 4.77 |
| 2024 | 5.50 | 5.50 | 4.79 |
| 2025 | 5.60 | 5.60 | 4.81 |
| 2026 | 5.67 | 5.67 | 4.81 |
| 2027 | 5.73 | 5.73 | 4.81 |
| 2028 | 5.78 | 5.78 | 4.81 |
| 2029 | 5.83 | 5.83 | 4.81 |
| 2030 | 5.87 | 5.87 | 4.81 |
| 2031 | 5.91 | 5.91 | 4.80 |
| 2032 | 5.94 | 5.94 | 4.80 |
| 2033 | 5.96 | 5.96 | 4.80 |
| 2034 | 5.98 | 5.29 | 4.80 |
| 2035 | 5.98 | 4.79 | 4.79 |
| 2036 | 6.00 | 4.79 | 4.79 |
| 2037 | 6.01 | 4.79 | 4.79 |
| 2038 | 6.01 | 4.78 | 4.78 |
| 2039 | 6.00 | 4.78 | 4.78 |
| 2040 | 5.99 | 4.78 | 4.78 |
| 2041 | 5.97 | 4.77 | 4.77 |
| 2042 | 5.96 | 4.77 | 4.77 |
| 2043 | 5.94 | 4.77 | 4.77 |
| 2044 | 5.93 | 4.76 | 4.76 |
| 2045 | 5.92 | 4.76 | 4.76 |
| 2046 | 5.91 | 4.76 | 4.76 |
| 2047 | 5.90 | 4.76 | 4.76 |
| 2048 | 5.89 | 4.76 | 4.76 |
| 2049 | 5.88 | 4.75 | 4.75 |
| 2050 | 5.87 | 4.75 | 4.75 |
| 2051 | 5.87 | 4.75 | 4.75 |
| 2052 | 5.87 | 4.75 | 4.75 |
| 2053 | 5.88 | 4.75 | 4.75 |
| 2054 | 5.89 | 4.75 | 4.75 |
| 2055 | 5.90 | 4.74 | 4.74 |
| 2056 | 5.91 | 4.74 | 4.74 |
| 2057 | 5.92 | 4.74 | 4.74 |
| 2058 | 5.94 | 4.74 | 4.74 |
| 2059 | 5.95 | 4.74 | 4.74 |
| 2060 | 5.97 | 4.74 | 4.74 |
| 2061 | 5.98 | 4.73 | 4.73 |
| 2062 | 5.99 | 4.73 | 4.73 |
| 2063 | 6.01 | 4.73 | 4.73 |
| 2064 | 6.02 | 4.73 | 4.73 |
| 2065 | 6.03 | 4.72 | 4.72 |
| 2066 | 6.04 | 4.72 | 4.72 |
| 2067 | 6.06 | 4.72 | 4.72 |
| 2068 | 6.07 | 4.71 | 4.71 |
| 2069 | 6.08 | 4.71 | 4.71 |
| 2070 | 6.09 | 4.71 | 4.71 |
| 2071 | 6.10 | 4.70 | 4.70 |
| 2072 | 6.11 | 4.70 | 4.70 |
| 2073 | 6.12 | 4.70 | 4.70 |
| 2074 | 6.12 | 4.69 | 4.69 |
| 2075 | 6.13 | 4.69 | 4.69 |
| 2076 | 6.12 | 4.68 | 4.68 |
| 2077 | 6.12 | 4.68 | 4.68 |
| 2078 | 6.11 | 4.67 | 4.67 |
| 2079 | 6.11 | 4.67 | 4.67 |
| 2080 | 6.10 | 4.66 | 4.66 |
| 2081 | 6.09 | 4.66 | 4.66 |
| 2082 | 6.09 | 4.66 | 4.66 |
| 2083 | 6.09 | 4.65 | 4.65 |
| 2084 | 6.09 | 4.65 | 4.65 |
| 2085 | 6.09 | 4.64 | 4.64 |
| 2086 | 6.10 | 4.64 | 4.64 |
| 2087 | 6.11 | 4.64 | 4.64 |
| 2088 | 6.12 | 4.64 | 4.64 |
| 2089 | 6.13 | 4.63 | 4.63 |
| 2090 | 6.14 | 4.63 | 4.63 |

Based on Intermediate Assumptions of the 2016 Trustees Report.

| Proposal OASDI |  |  |
| :---: | :---: | :---: |
| Cost <br> (4) | Expenditures (Payable) <br> (5) | Non-Interest Income <br> (6) |
| 4.98 | 4.98 | 4.59 |
| 4.91 | 4.91 | 4.62 |
| 4.99 | 4.99 | 4.76 |
| 5.05 | 5.05 | 4.87 |
| 5.11 | 5.11 | 4.97 |
| 5.21 | 5.21 | 5.07 |
| 5.29 | 5.29 | 5.13 |
| 5.37 | 5.37 | 5.19 |
| 5.45 | 5.45 | 5.25 |
| 5.51 | 5.51 | 5.30 |
| 5.54 | 5.54 | 5.34 |
| 5.56 | 5.56 | 5.38 |
| 5.58 | 5.58 | 5.38 |
| 5.59 | 5.59 | 5.38 |
| 5.60 | 5.60 | 5.38 |
| 5.61 | 5.61 | 5.38 |
| 5.62 | 5.62 | 5.37 |
| 5.62 | 5.62 | 5.37 |
| 5.61 | 5.61 | 5.37 |
| 5.60 | 5.60 | 5.37 |
| 5.60 | 5.60 | 5.37 |
| 5.60 | 5.60 | 5.36 |
| 5.59 | 5.59 | 5.36 |
| 5.57 | 5.57 | 5.36 |
| 5.56 | 5.56 | 5.36 |
| 5.54 | 5.54 | 5.36 |
| 5.53 | 5.53 | 5.36 |
| 5.52 | 5.52 | 5.36 |
| 5.50 | 5.50 | 5.36 |
| 5.49 | 5.49 | 5.36 |
| 5.48 | 5.48 | 5.36 |
| 5.47 | 5.47 | 5.36 |
| 5.46 | 5.46 | 5.36 |
| 5.45 | 5.45 | 5.36 |
| 5.44 | 5.44 | 5.36 |
| 5.43 | 5.43 | 5.36 |
| 5.42 | 5.42 | 5.36 |
| 5.42 | 5.42 | 5.36 |
| 5.41 | 5.41 | 5.36 |
| 5.41 | 5.41 | 5.36 |
| 5.41 | 5.41 | 5.36 |
| 5.41 | 5.41 | 5.36 |
| 5.41 | 5.41 | 5.36 |
| 5.41 | 5.41 | 5.36 |
| 5.41 | 5.41 | 5.36 |
| 5.41 | 5.41 | 5.36 |
| 5.41 | 5.41 | 5.36 |
| 5.41 | 5.41 | 5.35 |
| 5.41 | 5.41 | 5.35 |
| 5.42 | 5.42 | 5.35 |
| 5.42 | 5.42 | 5.35 |
| 5.42 | 5.42 | 5.35 |
| 5.42 | 5.42 | 5.34 |
| 5.43 | 5.43 | 5.34 |
| 5.43 | 5.43 | 5.34 |
| 5.43 | 5.43 | 5.34 |
| 5.42 | 5.42 | 5.34 |
| 5.42 | 5.42 | 5.33 |
| 5.42 | 5.42 | 5.33 |
| 5.42 | 5.42 | 5.33 |
| 5.41 | 5.41 | 5.32 |
| 5.40 | 5.40 | 5.32 |
| 5.39 | 5.39 | 5.32 |
| 5.39 | 5.39 | 5.31 |
| 5.38 | 5.38 | 5.31 |
| 5.37 | 5.37 | 5.31 |
| 5.37 | 5.37 | 5.30 |
| 5.36 | 5.36 | 5.30 |
| 5.36 | 5.36 | 5.30 |
| 5.35 | 5.35 | 5.30 |
| 5.35 | 5.35 | 5.30 |
| 5.35 | 5.35 | 5.29 |
| 5.35 | 5.35 | 5.29 |
| 5.35 | 5.35 | 5.29 |
| 5.36 | 5.36 | 5.29 |

Table 1d - Change in Long-Range Trust Fund Reserves / Unfunded Obligation
Bipartisan Policy Center's Commission on Retirement Security and Personal Savings Plan

|  | (Billions of Dollars, Present Value on 1-1-2016) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Present Law OASDI |  |  | Basic |  | Proposal OASDT |
|  | Trust Fund Reserves / | Changes | Changes | Changes | Total Change | Trust Fund Reserves / |
|  | Unfunded Obligation | in OASDI | in OASDI | in OASDI | Through | Unfunded Obligation |
| Year | Through End of Year | Income | Cost | Cash Flow | End of Year | Through End of Year |
|  | (1) | (2) | (3) | (4) $=(2)-(3)$ | (5) = cumulative sum(4) | $(6)=(1)+(5)$ |
| 2016 | 2,741.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,741.0 |
| 2017 | 2,687.5 | 0.0 | 0.0 | 0.0 | 0.0 | 2,687.5 |
| 2018 | 2,625.9 | 19.8 | 2.6 | 17.2 | 17.2 | 2,643.1 |
| 2019 | 2,554.4 | 37.9 | 0.2 | 37.7 | 54.9 | 2,609.3 |
| 2020 | 2,471.7 | 54.0 | -2.3 | 56.2 | 111.2 | 2,582.8 |
| 2021 | 2,378.9 | 69.4 | 4.8 | 64.7 | 175.8 | 2,554.8 |
| 2022 | 2,270.6 | 78.8 | 2.7 | 76.1 | 251.9 | 2,522.5 |
| 2023 | 2,142.4 | 87.6 | -4.8 | 92.4 | 344.4 | 2,486.8 |
| 2024 | 1,994.9 | 96.4 | -10.5 | 106.9 | 451.3 | 2,446.2 |
| 2025 | 1,827.2 | 104.8 | -19.0 | 123.8 | 575.1 | 2,402.3 |
| 2026 | 1,645.4 | 113.4 | -27.3 | 140.7 | 715.8 | 2,361.2 |
| 2027 | 1,450.6 | 121.6 | -35.6 | 157.2 | 872.9 | 2,323.5 |
| 2028 | 1,244.3 | 121.9 | -43.4 | 165.3 | 1,038.2 | 2,282.5 |
| 2029 | 1,028.4 | 121.5 | -50.4 | 171.9 | 1,210.1 | 2,238.4 |
| 2030 | 804.8 | 120.7 | -56.5 | 177.1 | 1,387.2 | 2,192.0 |
| 2031 | 575.3 | 119.7 | -61.8 | 181.6 | 1,568.8 | 2,144.1 |
| 2032 | 341.0 | 118.6 | -66.5 | 185.1 | 1,753.9 | 2,094.9 |
| 2033 | 103.7 | 117.7 | -70.4 | 188.1 | 1,941.9 | 2,045.7 |
| 2034 | -134.7 | 116.7 | -73.6 | 190.3 | 2,132.3 | 1,997.5 |
| 2035 | -372.8 | 115.9 | -76.4 | 192.2 | 2,324.5 | 1,951.7 |
| 2036 | -612.3 | 115.1 | -79.0 | 194.0 | 2,518.5 | 1,906.2 |
| 2037 | -852.1 | 114.2 | -80.9 | 195.1 | 2,713.6 | 1,861.6 |
| 2038 | -1,090.4 | 113.6 | -82.1 | 195.7 | 2,909.4 | 1,819.0 |
| 2039 | -1,326.1 | 112.9 | -82.9 | 195.8 | 3,105.2 | 1,779.1 |
| 2040 | -1,558.1 | 112.4 | -82.6 | 195.0 | 3,300.2 | 1,742.0 |
| 2041 | -1,786.1 | 111.8 | -82.1 | 193.9 | 3,494.0 | 1,708.0 |
| 2042 | -2,010.0 | 111.2 | -81.3 | 192.6 | 3,686.6 | 1,676.6 |
| 2043 | -2,229.8 | 110.8 | -80.5 | 191.2 | 3,877.9 | 1,648.1 |
| 2044 | -2,445.4 | 110.3 | -79.5 | 189.9 | 4,067.7 | 1,622.3 |
| 2045 | -2,657.8 | 109.8 | -78.7 | 188.5 | 4,256.2 | 1,598.4 |
| 2046 | -2,866.7 | 109.3 | -78.0 | 187.3 | 4,443.5 | 1,576.7 |
| 2047 | -3,072.2 | 108.7 | -77.4 | 186.1 | 4,629.6 | 1,557.5 |
| 2048 | -3,274.5 | 108.1 | -77.0 | 185.2 | 4,814.8 | 1,540.3 |
| 2049 | -3,473.9 | 107.5 | -76.9 | 184.4 | 4,999.2 | 1,525.3 |
| 2050 | -3,670.6 | 107.0 | -76.9 | 183.9 | 5,183.0 | 1,512.4 |
| 2051 | -3,865.4 | 106.3 | -77.4 | 183.6 | 5,366.7 | 1,501.2 |
| 2052 | -4,059.0 | 105.6 | -78.0 | 183.7 | 5,550.3 | 1,491.3 |
| 2053 | -4,251.9 | 104.9 | -79.3 | 184.2 | 5,734.5 | 1,482.7 |
| 2054 | -4,444.5 | 104.1 | -80.7 | 184.8 | 5,919.3 | 1,474.8 |
| 2055 | -4,637.2 | 103.4 | -82.1 | 185.5 | 6,104.8 | 1,467.5 |
| 2056 | -4,830.5 | 102.6 | -83.5 | 186.1 | 6,290.8 | 1,460.4 |
| 2057 | -5,024.3 | 101.8 | -85.0 | 186.8 | 6,477.7 | 1,453.4 |
| 2058 | -5,218.8 | 101.0 | -86.5 | 187.5 | 6,665.2 | 1,446.4 |
| 2059 | -5,413.9 | 100.2 | -87.9 | 188.1 | 6,853.3 | 1,439.4 |
| 2060 | -5,609.6 | 99.4 | -89.1 | 188.5 | 7,041.8 | 1,432.2 |
| 2061 | -5,805.8 | 98.6 | -90.0 | 188.7 | 7,230.4 | 1,424.7 |
| 2062 | -6,002.5 | 97.8 | -91.0 | 188.9 | 7,419.3 | 1,416.9 |
| 2063 | -6,199.6 | 97.1 | -91.9 | 189.0 | 7,608.3 | 1,408.7 |
| 2064 | -6,397.1 | 96.3 | -92.7 | 189.0 | 7,797.3 | 1,400.3 |
| 2065 | -6,595.0 | 95.5 | -93.5 | 189.0 | 7,986.3 | 1,391.4 |
| 2066 | -6,793.3 | 94.8 | -94.0 | 188.7 | 8,175.1 | 1,381.8 |
| 2067 | -6,992.1 | 94.0 | -94.5 | 188.6 | 8,363.6 | 1,371.5 |
| 2068 | -7,191.4 | 93.3 | -95.1 | 188.4 | 8,552.0 | 1,360.7 |
| 2069 | -7,391.0 | 92.5 | -95.7 | 188.2 | 8,740.3 | 1,349.2 |
| 2070 | -7,591.0 | 91.8 | -96.3 | 188.1 | 8,928.3 | 1,337.3 |
| 2071 | -7,791.2 | 91.1 | -97.2 | 188.3 | 9,116.6 | 1,325.5 |
| 2072 | -7,991.1 | 90.4 | -97.8 | 188.2 | 9,304.8 | 1,313.8 |
| 2073 | -8,190.5 | 89.7 | -98.1 | 187.8 | 9,492.6 | 1,302.1 |
| 2074 | -8,389.1 | 89.0 | -98.2 | 187.1 | 9,679.8 | 1,290.6 |
| 2075 | -8,586.7 | 88.3 | -98.0 | 186.3 | 9,866.1 | 1,279.4 |
| 2076 | -8,782.6 | 87.6 | -97.7 | 185.3 | 10,051.3 | 1,268.7 |
| 2077 | -8,976.7 | 86.9 | -97.0 | 184.0 | 10,235.3 | 1,258.6 |
| 2078 | -9,168.8 | 86.3 | -96.3 | 182.5 | 10,417.8 | 1,249.1 |
| 2079 | -9,358.6 | 85.6 | -95.5 | 181.2 | 10,599.0 | 1,240.5 |
| 2080 | -9,546.2 | 85.0 | -94.8 | 179.8 | 10,778.8 | 1,232.7 |
| 2081 | -9,731.8 | 84.4 | -93.8 | 178.2 | 10,957.0 | 1,225.3 |
| 2082 | -9,915.6 | 83.7 | -93.1 | 176.8 | 11,133.8 | 1,218.2 |
| 2083 | -10,098.0 | 83.1 | -92.6 | 175.7 | 11,309.5 | 1,211.5 |
| 2084 | -10,279.3 | 82.4 | -92.5 | 174.9 | 11,484.4 | 1,205.1 |
| 2085 | -10,459.9 | 81.8 | -92.5 | 174.2 | 11,658.7 | 1,198.8 |
| 2086 | -10,639.8 | 81.1 | -93.1 | 174.1 | 11,832.8 | 1,193.0 |
| 2087 | -10,819.4 | 80.4 | -93.4 | 173.8 | 12,006.6 | 1,187.2 |
| 2088 | -10,998.8 | 79.7 | -93.5 | 173.3 | 12,179.9 | 1,181.1 |
| 2089 | -11,177.9 | 79.1 | -93.4 | 172.5 | 12,352.4 | 1,174.5 |
| 2090 | -11,356.8 | 78.4 | -93.1 | 171.5 | 12,523.9 | 1,167.1 |

Total 2016-2090
7074.3
-5449.6
12523.9

