



**SOCIAL SECURITY**  
Office of the Chief Actuary

April 23, 2015

The Honorable Peter DeFazio  
United States House of Representatives  
Washington, D.C. 20515

Dear Representative DeFazio:

I am writing in response to your request for estimates of the financial effects on Social Security of H.R. 1984, the *Fair Adjustment and Income Revenue for Social Security Act*, which you introduced today. This Bill (hereafter referred to as the proposal) includes three provisions with direct effects on the Social Security Trust Funds. We have enjoyed working closely with Arlen Weiner of your staff in developing this proposal to meet your goals.

The enclosed tables provide estimates of the effects of the three provisions 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 1b and 1b.n provide estimates of the Federal budget implications of the six provisions. Assuming enactment of the proposal, the projected trust fund reserve depletion years for the OASI Trust Fund, the DI Trust Fund, and the combined OASDI Trust Fund would all be extended to 2057 under the intermediate assumptions of the 2014 Trustees Report. Under current law the projected trust fund reserve depletion years for these trust funds are 2034, 2016, and 2033, respectively.

We base all estimates on the intermediate assumptions of the 2014 Trustees Report. The estimates and analysis provided here reflect the combined effort of many in the Office of the Chief Actuary, but most particularly Alice Wade, Christopher Chaplain, Daniel Nickerson, Jason Schultz, Kyle Burkhalter, Katie Sutton, Tiffany Bosley, and Karen Glenn.

The proposal includes the following three provisions (listed by section number in the Bill) with direct effects on the OASDI program:

*Section 2. Eliminate the OASDI taxable maximum starting in 2016, thus the 12.4 percent OASDI payroll tax rate would apply to all OASDI covered earnings. No benefit credit would be provided based on additional earnings subject to the OASDI payroll tax.*

*Section 3. Reallocate payroll tax revenues between the OASI and DI Trust Funds to better equalize their actuarial status. The intent is for the projected trust fund reserves of the individual OASI and DI Funds to reach depletion in the same year, 2057. To achieve this under the intermediate assumptions of the 2014 Trustees Report, the DI Trust Fund would*

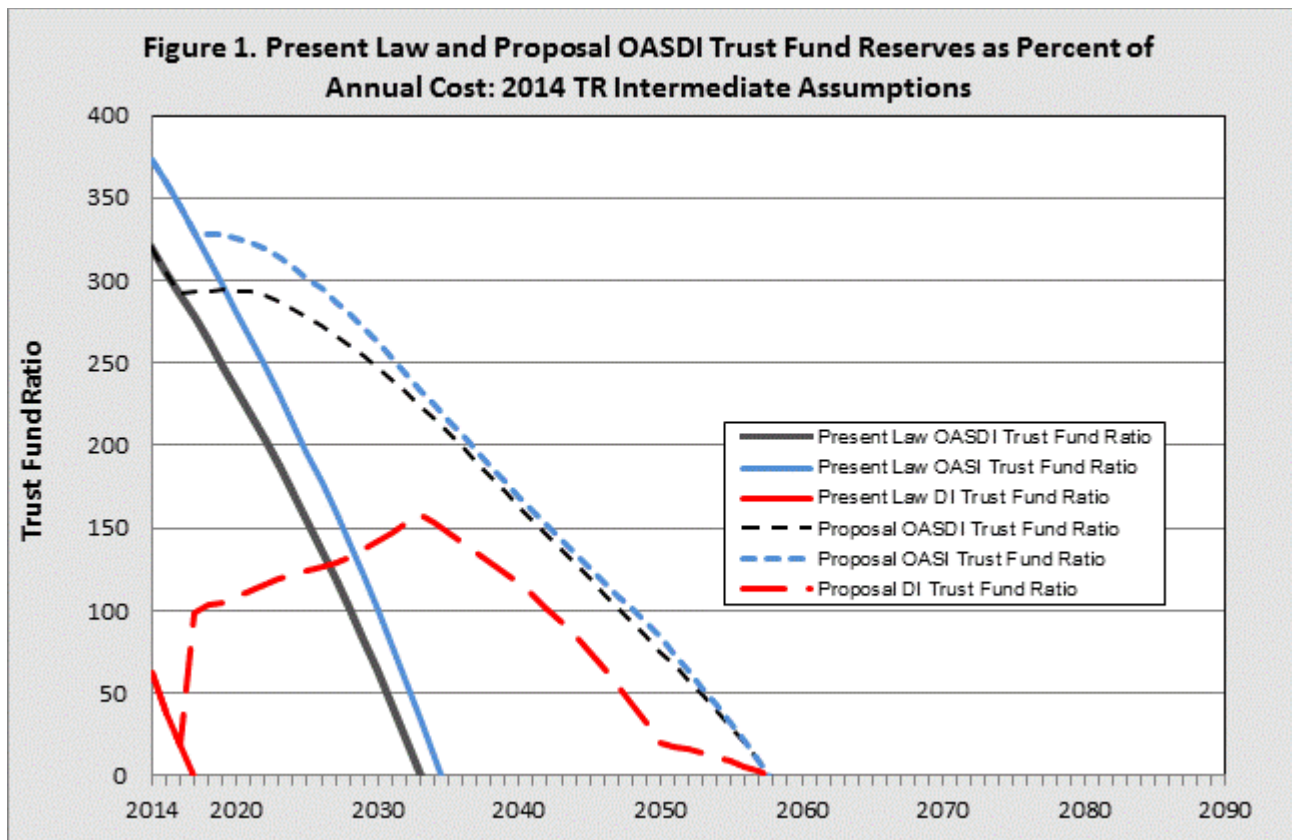
receive all additional revenue from the proposal for the one year 2016, and a reallocation of 0.2 percentage point (0.1 percentage point for employees and employers, each) would apply from the DI scheduled rate to the OASI scheduled rate for years 2033-2049. In all other years the OASDI payroll tax rate would be allocated as in present law.

*Section 4. Use the Consumer Price Index for the Elderly (CPI-E) to calculate the cost-of-living adjustment (COLA), beginning with the December 2017 COLA. We assume this change would increase the COLA by an average of 0.2 percentage point per year.*

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 provision, and descriptions of our detailed financial estimates for trust fund operations, benefit levels, and implications for the Federal budget.

**Summary of Effects of the Proposal on OASDI Actuarial Status**

Figure 1 below illustrates the estimated change in the Old-Age and Survivors Insurance (OASI) Trust Fund reserves, Disability Insurance (DI) Trust Fund reserves, and the combined OASDI and DI Trust Fund reserves, expressed as a percent of annual program cost, assuming enactment of the three provisions of this proposal. Assuming enactment, the OASI, DI, and OASDI Trust Fund reserves would all be expected to deplete in 2057 under the intermediate assumptions of the 2014 Trustees Report.



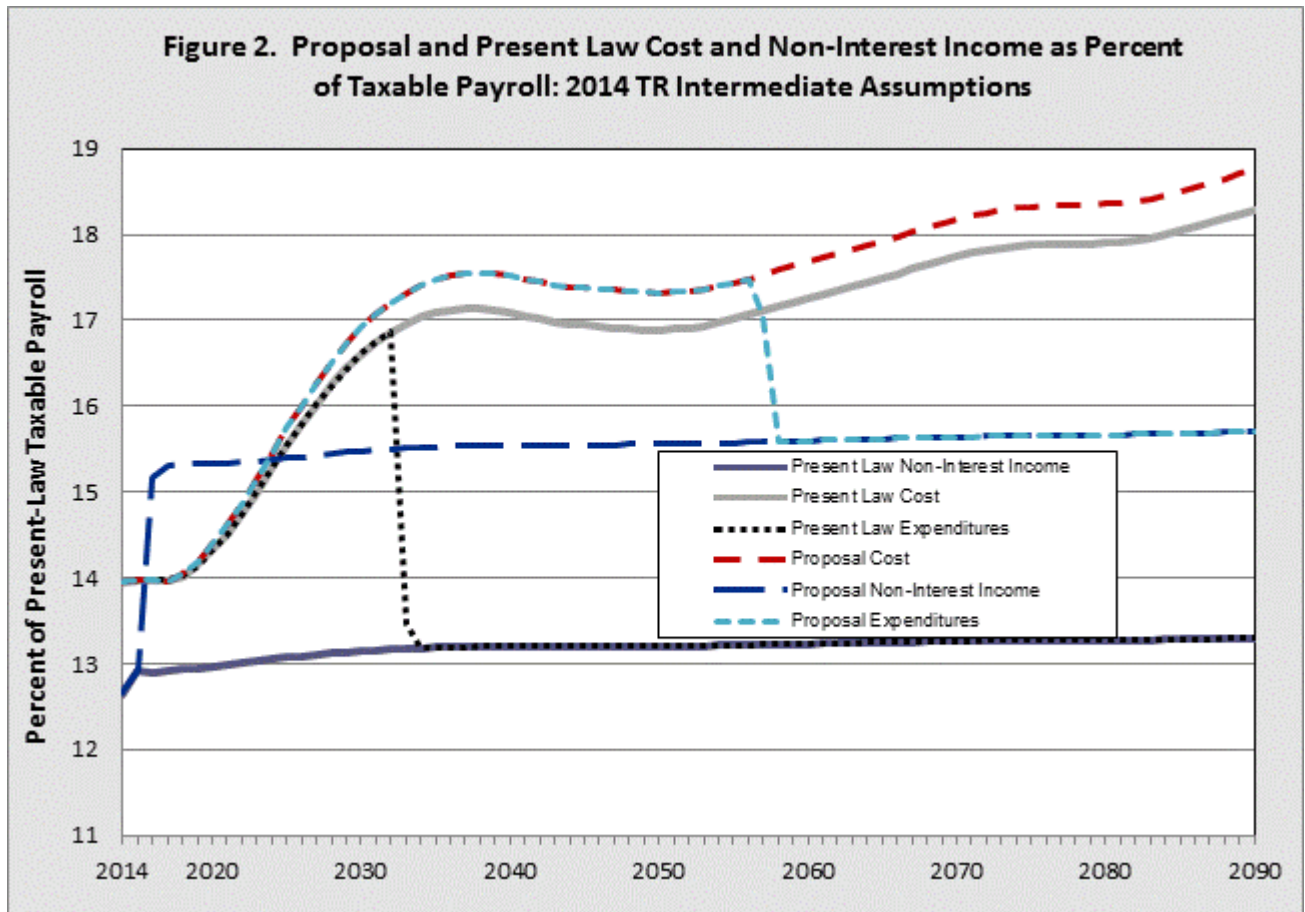
Note: *Trust Fund Ratio* for a given year is the ratio of reserves in the trust fund at the beginning of the year to the cost of the program for the year.

For the combined OASI and DI Trust Funds, under current law, 77 percent of scheduled benefits are projected to be payable in 2033 after reserve depletion, declining to 72 percent by 2088. Under the proposal, the projected level of reserves for the theoretical combined OASI and DI Trust Funds would deplete in 2057, 24 years later than under current law. In 2057, after depletion, 88 percent of scheduled benefits would be payable, declining to 83 percent payable in 2088. Enactment of this proposal would reduce the long-range (75-year) actuarial deficit by 1.94 percent of taxable payroll, from a deficit of 2.88 percent of payroll under present law to a deficit of 0.94 percent of payroll under the proposal.

For the DI Trust Fund, under current law, 81 percent of scheduled benefits are projected to be payable in 2016 after reserve depletion, declining to 80 percent by 2088. Under the proposal, the projected level of reserves for the DI Trust Fund would deplete in 2057, 41 years later than under current law. After reserve depletion in 2057, 97 percent of scheduled benefits would be payable, declining to 94 percent payable in 2088. Enactment of this proposal would reduce the long-range actuarial deficit of the DI Trust Fund by 0.28 percent of taxable payroll, from a deficit of 0.33 percent of payroll under present law to a deficit of 0.05 percent of payroll under the proposal.

For the OASI Trust Fund, under current law, 75 percent of scheduled benefits are projected to be payable in 2034 after reserve depletion, declining to 70 percent by 2088. Under the proposal, the reserves for the OASI Trust Fund are projected to deplete in 2057, 23 years later than under current law. In 2057, after depletion, 87 percent of scheduled benefits would be payable, declining to 82 percent payable in 2088. Enactment of this proposal would reduce the long-range actuarial deficit of the OASI Trust Fund by 1.67 percent of taxable payroll, from a deficit of 2.55 percent of payroll under present law to a deficit of 0.89 percent of payroll under the proposal.

Figure 2 illustrates annual projected levels of cost, expenditures, and non-interest income as a percent of the present-law taxable payroll for the combined OASI and DI Trust Funds. The projected level of cost reflects the full cost of scheduled benefits under both present law and the proposal. Under the proposal, projected expenditures equal the full cost of scheduled benefits through 2056, but then are lower than the full scheduled benefit cost when trust fund reserves deplete in 2057.



Beginning in 2018, projected OASDI program cost is higher under the proposal than under current law. This difference in program cost increases over the projection period to about 0.46 percent of present-law payroll for 2088. The projected annual income rate under the proposal is higher than under current law, with the difference being relatively stable at about 2.40 percent of payroll. The proposal improves the projected annual balance (non-interest income minus program cost) by 1.91 percent of payroll for 2045, with the improvement rising to 1.94 percent of payroll for 2088.

Under the proposal, the projected OASDI annual balance is positive for years 2016 through 2023, and is negative thereafter. Annual deficits would increase to 2.01 percent of payroll for 2038, then decline to 1.77 percent of payroll for 2050, and increase thereafter, reaching 2.96 percent of payroll for 2088. The projected annual deficit under current law is 4.90 percent of payroll for 2088.

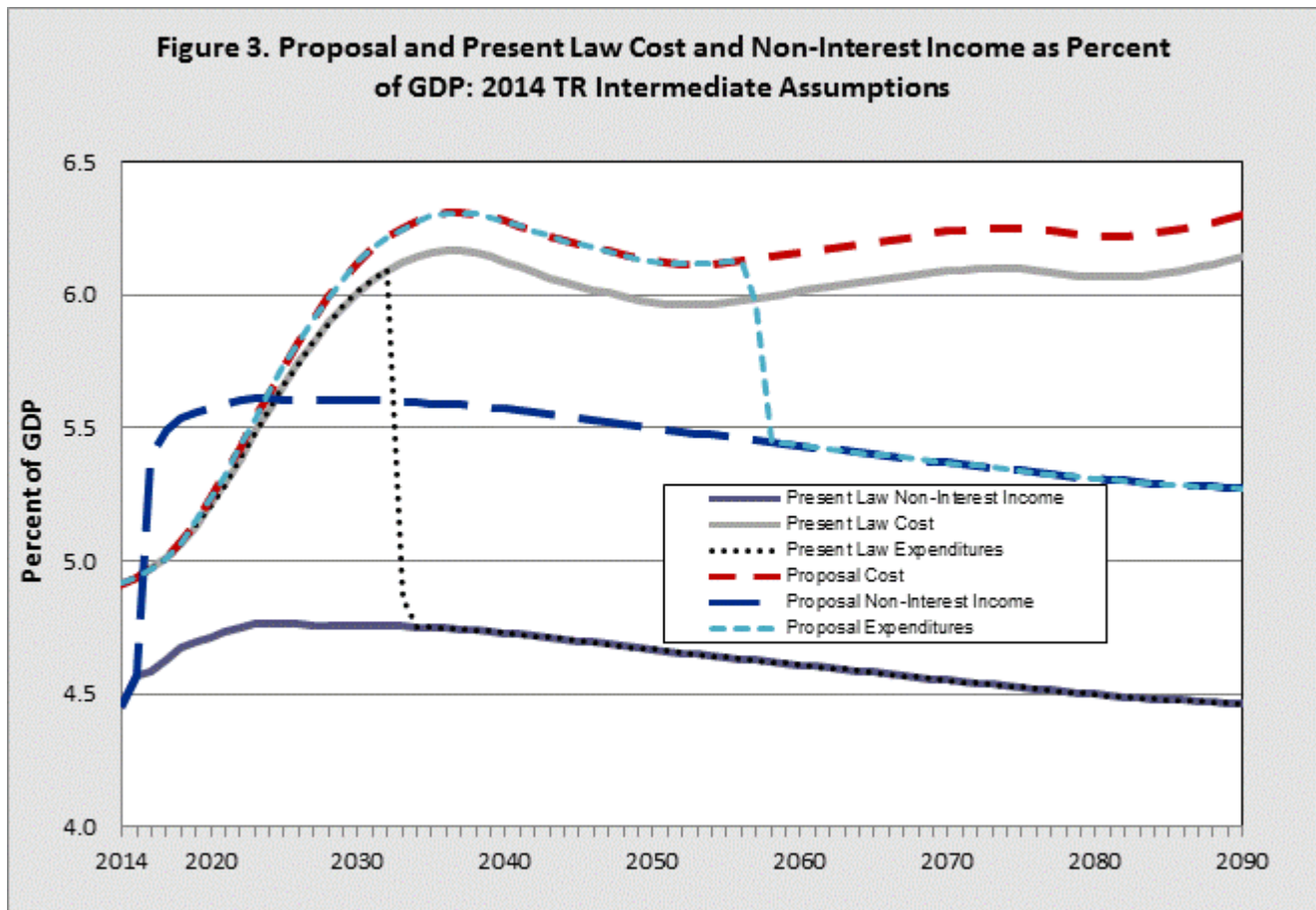
Beginning in 2018, projected OASI program cost is higher under the proposal than under current law. This difference in projected program cost increases over the long-range period to 0.43 percent of present-law payroll for 2088. The annual income rate under the proposal would be higher than under current law, with the difference generally at 2.00 percent of payroll, except in the years of tax-rate reallocation of 0.2 percent from the DI to OASI. The proposal improves the projected annual balance by 2.03 percent of payroll for 2018, with the improvement slowly declining (except in years of reallocation) to 1.63 percent of payroll for 2088.

Under the proposal, the projected OASI annual balance is positive for years 2017 through 2023, and is negative thereafter, reaching 2.82 percent of payroll for 2088. The projected OASI annual deficit under current law is 4.45 percent of payroll for 2088.

Projected DI program cost is slightly higher under the proposal than under current law starting in 2019, but never by more than 0.03 percent of present-law payroll. The projected annual income rate for 2016 is 2.27 percent of payroll higher under the proposal than under current law for 2016, when all additional revenues under the proposal go to the DI Trust Fund. The projected increase in the income rate under the proposal is generally about 0.34 percent of payroll for the rest of the period, except for the 2033-2049 reallocation years. Enactment of the proposal would improve the annual balance by 2.27 percent of payroll for 2016, by about 0.10 percent for the 2033-2049 reallocation years, and by a little over 0.30 percent of payroll for years after 2049.

Under the proposal, the projected DI annual balance is positive from 2016 through 2032, and is negative thereafter, reaching -0.14 percent of payroll for 2088. The projected DI annual deficit under current law is 0.46 percent of payroll for 2088.

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 projected levels under both current law and the proposal.



## **Specification for Provisions of the Proposal**

### *Section 2. Eliminate the OASDI taxable maximum starting in 2016.*

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 \$117,000 for 2014 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 this provision, all covered earnings in excess of the present-law taxable maximum would be taxable starting in 2016. Therefore, all covered earnings above and below the present-law taxable maximum would be taxed at the 12.4 percent payroll tax rate for 2016 and later. However, no benefit credit would result from additional earnings subject to the OASDI payroll tax under the current-law taxable maximum.

We estimate that enactment of this provision alone would decrease the long-range OASDI actuarial deficit by 2.31 percent of taxable payroll and would decrease the annual deficit for the 75<sup>th</sup> projection year (2088) by 2.47 percent of payroll.

### *Section 3. Reallocate revenues between OASI and DI Trust Funds*

In order to roughly equalize the actuarial status of the individual OASI and DI Trust Funds, this provision would reallocate payroll tax revenues between the two Trust Funds for selected years. In order to avoid depletion of the DI Trust Fund reserves in the next few years, all of the additional payroll tax revenue from eliminating the taxable maximum would be allocated to the DI Trust Fund for the one year 2016, while the OASI Trust Fund tax revenue would be unchanged from current law for that year. With the elimination of the taxable maximum for 2016 and later, and allocation to the DI Trust Fund for just 2016 of all of the added revenue from the elimination of the taxable maximum, the DI Trust Fund would not deplete in 2016 and the DI Trust Fund ratio would improve rapidly, to over 100 percent of annual cost for 2018.

Without any other revenue reallocation of the OASDI payroll tax rate after 2016, the DI Trust Fund would remain solvent throughout the 75-year projection period and the OASI Trust Fund reserves would deplete in 2055. Therefore, to equalize the reserve depletion years for the OASI and DI Trust Funds under the intermediate assumptions of the 2014 Trustees Report, a payroll tax rate reallocation of 0.2 percentage point (0.1 percentage point for employees and employers, each) from DI to OASI would be applied for years 2033 through 2049. Under the overall proposal, both the DI and OASI Trust Fund ratios would decline to reserve depletion (for both trust funds) in 2057.

Reallocation of revenues has very little effect on the status of the combined OASI and DI Trust Funds. Enactment of this provision alone would change the long-range OASDI actuarial deficit and the annual deficit for the 75<sup>th</sup> projection year (2088) by an amount that is estimated to be negligible, that is, by less than 0.005 percent of payroll.

*Section 4. Use CPI-E to calculate the 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 estimate that using the Consumer Price Index for the Elderly (CPI-E), instead of the CPI-W, beginning with the December 2017 COLA would increase the 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 0.37 percent of taxable payroll and would increase the annual deficit for the 75<sup>th</sup> projection year (2088) by 0.54 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 three provisions of the proposal 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 present-law taxable payroll) for the 75<sup>th</sup> projection year, 2088. 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 present-law taxable maximum level (equivalent to \$117,000 for 2014). 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 the illustrative retiring workers.

Table B1 compares the initial benefit levels assuming retirement at age 65 under the provisions of the proposal to both scheduled and payable present-law benefit level. All benefit amounts under the proposal are higher than those scheduled in current law, especially for the very low and low hypothetical earners with at least 30 years of earnings (due largely to the minimum benefit provision). The final two columns of this table show the level of scheduled benefits under the proposal as a percentage of present-law scheduled and present-law payable benefits, respectively.

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

#### Trust Fund Operations

**Table 1-OASDI** provides projections of the financial operations of the OASDI program and shows that the combined OASDI Trust Funds would deplete in 2057. 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 present law in these cost rates, income rates, and 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 improves by 1.94 percent of taxable payroll, from an actuarial deficit of 2.88 percent of payroll under current law to a positive actuarial balance of 0.94 percent of taxable payroll.

**Table 1-OASI and Table 1-DI** provide similar projections for the individual OASI and DI Trust Funds. The reserves of each Trust Fund would deplete in 2057. The actuarial balance for the OASI program over the 75-year projection period improves by 1.67 percent of taxable payroll, from an actuarial deficit of 2.55 percent of payroll under current law to a deficit of 0.89 percent of taxable payroll. The actuarial balance for the DI program over the 75-year projection period improves by



0.28 percent of taxable payroll, from an actuarial deficit of 0.33 percent of payroll under current law to a deficit of 0.05 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. These trust fund reserve amounts are expressed in present value dollars discounted to January 1, 2014. 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 proposal general fund transfers (zero in this case) in columns 6 and 7.

Note that negative values in columns 4, 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 three Social Security provisions of this proposal. **Table 1b.n** provides the estimated nominal dollar effect of enactment of the proposal on annual budget balances for years 2014 through 2024. All values in these tables represent the amount of *change* from the level projected under current law for the combined OASDI Trust Fund and 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 obtained by additional borrowing from the public.

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

We expect the net effect of the proposal on unified budget cash flow (column 3) to be positive in years 2016 and later, reflecting the elimination of the taxable maximum starting in 2016.

Column 4 of Table 1b indicates that the effect of implementing the three provisions is a reduction of the Federal debt held by the public, reaching about \$7.5 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.

It is important to note that we base these estimates on the intermediate assumptions of the 2014 Trustees Report and thus 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 2014 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 present law and assuming enactment of the six Social Security 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. Values in this table are expressed in present value dollars discounted to January 1, 2014.

For the 75-year (long-range) period as a whole, the present-law unfunded obligation of \$10.6 trillion is reduced to \$3.0 trillion in present value. This change of \$7.5 trillion results from:

- An \$8.8 trillion increase in revenue (column 2), from additional payroll tax, *minus*
- A \$1.3 trillion increase in cost (column 3), primarily from calculating the COLA using the CPI-E rather than the CPI-W.

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

Sincerely,



Stephen C. Goss  
Chief Actuary

Enclosures