# SOCIAL SECURITY 

## MEMORANDUM

Date:
February 15, 2005
Refer To: TCA
To: Representative Sam Johnson
From: Stephen C. Goss, Chief Actuary
Alice H. Wade, Deputy Chief Actuary
Subject: Estimated Long-Range OASDI Financial Effects of a Proposal for Individual Social Security Investment -- INFORMATION

This memorandum presents long-range estimates of the financial effects of the plan you have developed for individual investment accounts that would provide retirement income under the Social Security program. This memorandum includes a description of the plan, reflecting the intent of and specifications for the plan, as provided by Kathleen Black of your staff. While the provisions of the plan described in this memorandum are consistent with the intent of your recently introduced bill Individual Social Security Investment Program Act of 2005 (H.R. 530), some of the effective dates in the plan description below are based on your earlier bill (H.R. 4895 submitted to the $108^{\text {th }}$ Congress). Some of these effective dates differ by one or two years from those now specified in HR 530. In the interest of providing timely analysis, we are providing estimates with these qualifications. The estimates should be regarded as preliminary, but provide a good indication of the nature of the plan and its potential effects. All estimates are based on the intermediate assumptions of the 2004 Trustees Report, as well as additional assumptions described below.

The plan would offer to workers under age 55 on January 1, 2005 a combination of recognition bonds based on accrued benefit obligations plus an individual account contribution of 6.2 percent of future taxable earnings redirected from the OASDI payroll tax. For those who do not choose this option, current law benefits will continue, but will be based on a price indexed benefit formula. Older workers will remain in the current program without change, and future workers will be automatically enrolled in the individual account program. A minimum benefit financed with general revenue would be available to those participating in the individual account program. In addition, disability and young survivor benefits for these participants would continue unchanged. General revenue transfers would be provided as needed to maintain trust fund solvency during the period of transition. Enactment of this plan would eliminate the Social Security long-range actuarial deficit and meet the criteria for sustainable solvency. The program would be expected to remain solvent throughout the 75-year projection period and for the foreseeable future beyond.

Estimates for this proposal reflect the development of several innovations in our methods and substantial work by Chris Chaplain, Jason Schultz, and others from the Office of the Chief Actuary. Further development and refinement of these methods will allow for improvements in the estimates in the future.

## 1. Description of Proposal

## Individual Account (IA) Program - Participation

Beginning January 1, 2005, the proposal specifies that:

- Individuals born in 1949 and earlier (those 55 or older as of January 1, 2005) would stay in the current system and receive full scheduled benefits.
- All individuals eligible for disabled worker and young survivor benefits as of January 1, 2005 would stay in the current system and receive full scheduled benefits.
- Individuals born in years 1950 through 1982, who are not eligible for disabled worker or young survivor benefits as of January 1, 2005, would be offered the following choice:
a. Stay with the current OASDI program, subject to a CPI-indexed PIA formula starting with those eligible for benefits in 2012, or
b. Participate in the IA program. For these individuals, a recognition bond would be granted for the accrued retired worker benefit obligation earned as of January 1, 2005 and an individual account (IA) would be established, with contributions of 6.2 percent of OASDI taxable earnings starting in 2005.
- All individuals born in 1983 and later (those 21 or younger as of January 1, 2005) would participate in the IA program, with contributions of 6.2 percent of OASDI taxable earnings starting in 2005.


## IA Program - Recognition bonds

Recognition bonds will be issued on January 1, 2005, for those individuals born in years 1950 through 1982 who choose to participate in the IA plan. The recognition bond will be a zerocoupon Treasury bond maturing on the date of attaining the normal retirement age (NRA) ${ }^{1}$ for the original recipient of the bond. The redemption value of the bond at maturity will be explicitly stated on the bond in dollars. It will be calculated using the present value (discounted at the trust fund yield rate to the redemption date or NRA) of expected retired worker benefit obligations accrued prior to January 1, 2005 assuming the worker will survive to the NRA and retire at that time. The accrued benefit obligation would be based on a computation of the Primary Insurance Amount (PIA) that would be payable for entitlement to a disabled-worker benefit as of January 1, 2005, increased by assumed growth in the average wage thereafter up to the redemption date. To reflect the fact that the worker would have only contributed for a

[^0]portion of the potential full career as of January 1, 2005, the PIA used for computing the recognition bond value would be multiplied by:
(Worker’s age at the beginning of 2005 minus 22) / 45.
The actual redemption value of the recognition bond would be set equal to the expected amount (present value as of NRA) of future retired worker benefits based on this adjusted PIA assuming the worker survives to NRA with certainty, using unisex mortality, wage and CPI increases, and trust-fund yields at the levels projected for the current Trustees Report at bond issuance.

Three specifications for the calculation of the recognition bond redemption value described above are particularly notable. First, the recognition bond value will be based on potential retired worker benefits only. Spouse, widow(er) and child benefits that may be payable based on the worker's earnings under current law would not be reflected in the recognition bond redemption value. Second, the redemption value of the recognition bonds will be fixed on January 1, 2005 assuming all workers at that time will survive to reach their NRA and receive retirement benefits starting at that time. Some workers who would receive a recognition bond in 2005 will die before attaining their NRA, but the bond will retain its full redemption value in any case. Third, the redemption value will be set in 2005 based on the then current assumptions for future wage growth and future mortality rates after reaching NRA. Actual wage growth (and interest rates) may turn out to be substantially different from what is assumed in 2005, and the life span of individuals will vary considerably. Thus, the redemption bond value will only approximate the actual value of specified benefits based on earnings prior to January 1, 2005 and the difference will vary significantly.

Recognition bonds would, upon issuance, be deposited in the worker's individual account. The recognition bond would be marketable in a regulated secondary market; the proceeds of sale of the bond would be required to be retained in the individual account. No payment would be made by the Federal Government prior to the redemption date of each bond. The value of redemption bonds in the secondary market would be determined by market forces with a full understanding that precisely the face value of the bond would be paid to the holder upon maturity. The bonds would not be indexed in any way to reflect actual wage growth, CPI changes, or interest rates between issuance and redemption.

## IA Program -Financing \& IA accounts

The OASDI combined payroll tax rate would remain at 12.4 percent. However, for those who choose to participate in the IA program (and all workers born after 1982), 6.2 percent of OASDI taxable earnings (the employee portion) would be deposited in an IA beginning in 2005. The portion not directed to an IA would be retained for the trust funds to cover recognition bond redemptions and OASDI benefits. Transfers from the General Fund of the Treasury would be provided to reimburse the trust funds for the cost of providing a minimum benefit (described below) starting in 2012. Additional revenue needed for the OASDI Trust Funds in the early decades after implementation would be provided in the form of transfers from the General Fund of the Treasury, on an as needed basis. The amount transferred from the General Fund of the Treasury to the OASDI Trust Funds in any year would be determined as the amount needed to
ensure that the combined trust fund assets do not at any time within the year fall below 100 percent of annual OASDI program cost.

Individual account contributions redirected for any year to the IAs of a married couple, both of whom are participating, would be combined, and then divided equally between them for deposit in their separate individual accounts. Allocations during marriage would be unaffected by divorce; divorce would terminate all connection between the future IA contributions of previously married couples.

IA accumulations are assumed to be held in accounts with record-keeping by a central administrative authority (CAA) that will offer options for investment, maintain individual records, interface with account holders, and combine assets of all accounts for the purpose of making investments with private investment companies (such as Fidelity, Vanguard, etc.). This approach is important for the purpose of keeping the cost of administering the accounts as low as possible.

The default portfolio allocation for accounts would be 60 percent in broad indexed equity funds and 40 percent in corporate bond funds. However, given the uncertainty and volatility of investments in equity and bond markets, we assume that many workers will choose an investment portfolio that is less heavily weighted toward equities (see assumptions below). A variety of index funds would be offered by the CAA with annual options by the account holder to alter the portfolio.

## IA Program - IA disbursement \& benefit payments

For those participating in the IA program, a minimum monthly annuity/benefit equal to a specified percent of poverty (before any reduction for retirement before normal retirement age, NRA) would apply for all workers becoming eligible for benefits after 2004. The specified percent of poverty would equal 100 percent for workers with 35 years or more of work (quarters of coverage equal to at least 3.5 times the number of elapsed years), decreasing to 0 percent for workers with 10 years of work (quarters of coverage equal to the number of elapsed years). The poverty level is that for aged individuals, increased by the CPI thereafter. The annual poverty level for aged individuals is $\$ 8,825$ in 2003. This minimum guarantee, referred to as a minimum PIA, would require purchase of a CPI-indexed life annuity at retirement with all IA assets, including any recognition bond. If an individual's IA assets are not enough to provide the minimum monthly annuity/benefit, then the difference would be provided by the OASDI Trust Funds. However, the General Fund of the Treasury would reimburse the OASDI Trust Funds for the cost of this payment.

The minimum targeted life annuity is 100 percent of poverty. IA accumulations in excess of what is needed to purchase a life annuity equal to 100 percent of poverty would be available to the retiree for any desired purpose. IA contributions are accumulated tax free. Upon distribution, IA balances, including recognition bond amounts, are exempt from taxation. In addition, if at any age, the CPI-indexed life annuity that could be purchased at age 62 with the current assets in an individual's IA account is expected to be greater than 100 percent of poverty (assuming the IA assets were thereafter invested solely in Treasury bonds), then the individual
would no longer be required to contribute 6.2 percent of taxable earnings to the IA. At that point the individual would no longer contribute to the OASDI program, but the employer would continue to contribute 6.2 percent of the employee's taxable earnings. Self employed workers would pay one half of the tax rate. Additionally at this point in time, the individual would be required to purchase an annuity equal to 100 percent of poverty or to invest the cost of this level annuity in a fixed-income portfolio of assets, i.e. bonds.

For those in the IA plan, present law scheduled disabled worker benefits would be payable up to NRA, with the minimum PIA applying to those who become eligible for benefits in 2012 and later. Auxiliary benefits to children and spouses with child in care would be paid on the account of a disabled worker. Young survivor benefits (child and spouse with child in care) would also be payable based on present law scheduled benefits, with the minimum PIA applying for those who become eligible for benefits in 2012 and later. However, no spouse or non-disabled child benefits would be payable on the accounts of retired worker beneficiaries or accounts of deceased workers (except for the young survivor benefits mentioned above).

At attainment of NRA, disabled worker beneficiaries would convert to retired worker status. Those participating in the IA plan would then be required to purchase a CPI-indexed life annuity not less than the value of the continuation of the disabled-worker benefit (disability benefit prior to conversion with cost-of-living adjustment). If the individual's IA accumulations, including any recognition bond, are insufficient for the purpose, then the OASDI Trust Funds would provide the difference. The OASDI Trust Funds would be reimbursed from the General Fund of the Treasury for the portion of any individual's benefit attributed to providing the minimum PIA.

IA accumulations including any recognition bonds are transferred to the individual account of the surviving spouse (if any) upon death of a worker. A portion of this transfer will be reserved to pay for any potential young survivor benefits. If there is no surviving spouse, then the IA accumulation, less any reserve for potential child survivor benefits, goes to the worker's estate.

CPI-indexed life annuities purchased with IA accumulations (including recognition bonds) are assumed to be provided through the CAA.

## Individuals not in the IA program

All individuals born in 1949 and earlier (those 55 or older as of January 1, 2005), as well as those currently entitled to disabled worker or young survivor benefits on January 1, 2005, would remain in the current OASDI program and receive full scheduled benefits in current law. For those individuals born in 1950 through 1982 who remain in the current OASDI program (do not choose to participate in the IA program), all benefit payments (including disability and young survivors) would be subject to a CPI-indexed PIA formula starting for those eligible for benefits in 2012. The benefit formula would modify the primary insurance amount (PIA) formula factors ( 90,32 , and 15 ) starting in 2012, reducing them successively by the measured real wage growth in the second prior year. Modified PIA factors would be applicable for OASDI beneficiaries becoming eligible for benefits in 2012 and later. This provision would result in increasing benefit levels for individuals with equivalent lifetime earnings across generations (relative to the average wage level) at the rate of price growth (increase in the CPI), rather than at
the rate of growth in the average wage level as in current law. Calculation of the average indexed monthly earnings (AIME) used in computing the PIA would be unaffected by this provision. In addition, the minimum PIA would not apply to these individuals.

## 2. Assumptions Used for Financial Estimates

The estimates presented in this memorandum are based on the intermediate assumptions of the 2004 Trustees Report plus several additional assumptions relating to specific provisions of this proposal.

## Participation in the Individual Account Program

Workers who are at ages 22 through 54 and are not disabled on January 1, 2005 will have the option of choosing to participate in the individual-account/recognition-bond plan. The default option is to remain in the current OASDI program. For the oldest of these workers, most will receive more total benefits from staying in the current system than from switching to the IA plan. This is particularly true for those who are in good health and have potential family members who may become eligible for an auxiliary benefit based on the workers earnings record. The recognition bond reflects an expected accrued benefit for the worker only after reaching NRA and does not include any amount corresponding to potential auxiliary benefits. Moreover, the recognition bond amount is computed with a factor to diminish the normal PIA computation by approximately 11 percent to recognize a longer potential work history than under the current system. Thus, even workers with no family members who are relatively healthy (as will be most of this group as the disabled are not included) and relatively old would expect more benefits from the current system for past contributions than from the recognition bonds.

These factors suggest that workers at age 54 on January 1, 2005 will be relatively unlikely to select the IA/recognition-bond option. We assume that 10 percent of those at this age will opt for the IA plan. For younger workers, however, recognition bonds will represent a smaller and smaller portion of their expected future benefit; the CPI-indexed benefit formula will present a smaller and smaller potential benefit from the current system; and potential IA contributions will have longer and longer to accumulate. Thus, we assume that younger workers will be increasingly likely to opt for the IA plan and that 100 percent participation will occur for those under age 41 on January 1, 2005. Participation rates for workers between ages 40 and 54 are assumed to be decline linearly from 100 to 10 percent.

## Individual Account Investments

As indicated above, the default portfolio allocation for individual accounts would be 60 percent in broad indexed equity funds and 40 percent in corporate bond funds. However, given the uncertainty and volatility of investments in equity and bond markets, we assume that many workers will choose an investment portfolio that is less heavily weighted toward equities.

This proposal would replace retirement and aged survivor benefits from the current system completely with the IA and recognition bond accumulations. For many workers this account will represent their primary or only potential source of income in retirement. As a result we expect that workers participating in the IA plan will invest somewhat more conservatively on average than indicated in the default portfolio. We assume that the average portfolio will be 50 percent in equity funds, 30 percent in corporate bond funds, and 20 percent in government (Treasury) bonds. Due to the relatively large size of IAs under this proposal and the specification that accounts and annuities will be managed through a central administrative authority, we assume that administrative expenses will be relatively low, ultimately averaging about 0.25 percent of assets per year. The "expected" average annual real yield on IA investments before retirement is assumed to be 4.65 percent ( 6.5 X $0.5+3.5$ X $0.3+3.0 \mathrm{X} 0.2-0.25$ ).

Note that for estimates reflecting a low-yield assumption we assume that all investments will have an average real yield equal to that expected for long-term treasury bonds, or 3 percent in real terms. Therefore, the assumed net real yield after administrative expenses would be 2.75 percent. These estimates provide projections on a "risk-adjusted" basis. Risk-adjusted returns omit any expected return in excess of that for Treasury bonds, because the excess reflects the premium demanded by the market for taking on the increased volatility associated with equities and corporate bonds.

CPI-indexed life annuities purchased from the central administrative authority are assumed to provide an average annual expected real return of 3 percent net of administrative expenses. For the low yield assumption, the net real yield is assumed to be 2.75 percent. For the purpose of illustrations of individual account and annuity assets in this memorandum, we assume that all IA assets will be used to purchase annuities. While the proposal allows for much of the account to be disbursed in other ways for many workers, this variation would not affect the financial estimates presented in this memorandum.

Future returns on IA assets will vary considerably depending both on individual portfolio choices and variation in future returns on specific investments. The average annual real return on long term Treasury bonds is assumed to be 3 percent, consistent with the 2004 Trustees Report. Corporate bonds are assumed to have an average real yield that is about 3.5 percent.

The expected long-term ultimate average annual real yield for equities is assumed to be 6.5 percent. This is somewhat lower than the historical real equity yield over the last several decades. A consensus exists among economists that equity pricing, as indicated by price-toearnings ratios, may average somewhat higher in the long-term future than in the long-term past. This is consistent with broader access to equity markets and the belief that equities may be viewed as somewhat less "risky" in the future than in the past. Equity pricing will vary in the future as in the past. Price-to-earnings ratios were very high through 1999, and are now lower. The average ultimate real equity yield assumed for estimates in this memorandum is consistent with an average ultimate level of equity pricing somewhat above the average level of the past.

The assumption for an ultimate real equity yield of 7 percent that was used by the Office of the Chief Actuary until 2001 was developed in 1995 with the 1994-6 Advisory Council. At that time, the Trustees assumption for the ultimate average real yield on long-term Treasury bonds
was 2.3 percent. Real yields on corporate bonds are believed to bear a close relationship to Treasury bond yields of similar duration. The 2004 Trustees Report includes the assumption that the ultimate real yield on long-term Treasury bonds will average 3 percent, or 0.7 percentage point higher than assumed in 1995. This increase in the assumed bond yield is consistent with a reduction in the perceived risk associated with equity investments.

It should be noted that the precise effects on the yields of equities and corporate bonds is not clear when implementing a plan that would result in a large demand for these securities. This demand would likely be at least partially offset by reductions in demand for other investment mechanisms. For the purpose of these estimates, it is assumed that there will be no net dynamic feedback effects on the economy or on the financial markets.

## 3. Benefit Levels under the Proposal

Tables B1 and B2 show projected potential benefits under the proposal for two-earner and oneearner married couples, respectively. While a range of potential benefit levels is shown, actual investment returns and total benefit levels could vary considerably, reaching levels both well above and below the range presented.

Table B1 presents monthly benefit levels for one spouse of a two-earner couple. Table B2, however, presents monthly benefit levels for the total married one-earner couple. Effects for single workers (never married) would be more similar to those of the two-earner couples. Potential benefits include both OASDI benefit payments and potential annuity payments based on IA accumulations (including recognition bond values). For these illustrations, it is assumed that workers will retain their recognition bonds essentially until maturity, although some may be expected to sell the bonds on a secondary market even at a relatively young age and invest the proceeds in some other financial security. For simplicity, recognition bonds are assumed to be available for annuitization at age 65. In fact this would be possible by selling the bonds on the secondary market.

Benefits are illustrated for workers retiring at age 65 with various lifetime earnings patterns. These patterns include average career indexed earnings at about 45 percent of the level of the SSA economy wide average wage for the scaled low earner, 100 percent of this level for the scaled medium earner, 160 percent for the scaled high earner, and earnings steadily at the level of the OASDI taxable maximum for the maximum earner ${ }^{2}$.

The first three columns provide projected benefits scheduled under current law (column 1), payable under current law (column 2), and scheduled under the proposal for those who do not participate in the IA plan (column 3). In 2045, the CPI-indexed benefit under the proposal for non-IA participants would be close to the level payable under current law for two-earner couples.

[^1]The next 5 columns develop the expected total retirement payment under the proposal prior to application of the guaranteed minimum for those in the IA plan. The projected annuity based on the recognition bond would be progressively smaller for subsequent generations who would have had fewer potential work years prior to 2005. Potential IA annuities assuming full annuitization are shown with both an IA accumulation at a low (risk-adjusted) yield and the expected yield for the expected average portfolio. These amounts are summed to show total payments prior to application of the minimum benefit under both investment return assumptions.

The final three columns show the available minimum benefit payment (100 percent of poverty), and the total potential payments under the proposal expressed as a percentage of the current-law scheduled benefit level. For the scaled low earner, the proposal minimum benefit would be expected to provide an increment for retirees at age 65 through 2035. Proposal expected total benefits for the scaled low two-earner couple would decline from 94 percent of current-law scheduled benefits for those retiring at age 65 in 2015, to 72 percent for those retiring at age 65 in 2055. For the low-earner one-earner couple, proposal expected benefits would decline from 90 to 66 percent of the present-law scheduled level.

Medium and higher two-earner couples with expected IA returns would fall short of the CPIindexed PIA initially, but would exceed that level starting with those retiring in 2035. Older workers would be expected to strongly consider staying in the current program, consistent with our assumption of low participation by the older eligible workers.

While benefits for a scaled medium earner who experienced the low yields consistent with risk adjusted returns would fare little if any better than the CPI-indexed alternative benefit, the scaled high earner retiring in 2045 and later and experiencing the low yields would beat the CPIindexed benefit. In addition, by 2055 the maximum earner retiree would even beat the presentlaw scheduled benefit.

Table B2 shows that benefit levels for the one-earner couple would be considerably lower than those for the two earner couple. Only for the one-earner steady maximum couple retiring at 65 in 2055 would expected returns exceed the present-law scheduled benefit.

## 4. Financial Effects of the Proposal

Tables 1, 1a, 1b, 1b.c, 1c, and 1d illustrate the expected financial implications of enactment of the proposal under the assumptions described above. These effects are described briefly below. Additional tables 2, 2a, 2b, 2b.c, 2c, and 2d provide similar estimates using the low-yield (riskadjusted) returns on individual account assets described above.

The proposal would replace OASDI retirement and aged survivor benefits with an individual account that would be financed with one half of the payroll tax rate ( 6.2 percent). This change would apply to all workers under age 22 on January 1, 2005, and to others under age 55 on that date who choose to accept a recognition bond in place of the benefit obligation based on past contributions. Disability and young survivor benefits would be retained as in current law through the normal retirement age. A minimum benefit (PIA) guarantee equal to a specified
percent of the poverty level (100 percent for those with at least 35 years of work) would be financed through reimbursements from the General Fund of the Treasury. Those, who do not choose to participate in the IA program, would remain in the current program and be subject to a CPI-indexed PIA formula that provides slower growth in benefits across generations than does the current wage-indexed benefit formula.

## Cash Flow and Solvency

In part because the recognition bonds for voluntary participants would mature on the date each worker would attain their normal retirement age, substantial general revenue transfers would be needed to maintain solvency of the OASDI Trust Fund. Table 1 indicates that transfers are expected to be needed from 2013 through 2045, peaking at 9.7 percent of payroll in 2028, and totaling $\$ 6.8$ trillion in present value (see table 1a.)

After 2045, the OASDI program would be expected to operate with substantial annual positive cash flow (see annual balance on table 1 and the first four columns of table 1c). Table 1 shows that the OASDI Trust Fund would grow at an increasing rate as a percentage of annual program cost after 2045. The large and rising trust fund ratios ${ }^{3}$ reflect both the small residual amount of payments made from the OASDI program, and the increasing size of trust fund assets. The OASDI program would clearly satisfy the criteria for sustainable solvency under the proposal.

Relative to current law, net cash flow from the OASDI Trust Fund to the General Fund of the Treasury would be substantially diminished through 2038. After 2038, however, cash flow from the trust funds to the Treasury would be increased over the current program modified to permit borrowing. ${ }^{4}$ The proposal is expected to produce positive cash flow from the trust funds beginning 2046.

## Total System Assets

Table 1a provides estimates of expected OASDI Trust Fund assets under the proposal in column 5 , and estimated individual account (and annuity) assets in column 6. All IA assets are assumed to be fully annuitized in a CPI-indexed life annuity for the purpose of these illustrations. For the purpose of these illustrations, married individuals are assumed to choose a joint $\& 2 / 3$ survivor annuity ${ }^{5}$. The sum of these amounts may be referred to as total system assets under this proposal. By 2078, expected total system assets are expected to reach over $\$ 70$ trillion in constant 2004 dollars, or more than double the size of the OASDI Trust Fund ( $\$ 27$ trillion), if all transfers expected under the proposal were provided to current OASDI program (see column 9).

Table 2a, with low-yield assumptions (risk-adjusted) shows that total system assets under the proposal would be over $\$ 50$ trillion. This amount is still higher than the assets under the current

[^2]OASDI program with the same general revenue transfers as under the proposal (\$28 trillion). This is because of the gradual reduction and eventual elimination under the proposal of retirement benefits other than the individual account annuities.

## Recognition Bonds and Effects on the Unified Budget

Tables $1 \mathrm{~b}, 1 \mathrm{~b} . \mathrm{c}, 2 \mathrm{~b}$, and $2 \mathrm{~b} . \mathrm{c}$ show expected effects on the unified budget of the Federal Government from enactment of this proposal. It should be noted that these effects are not comparable to the effects that would be estimated by the Office of Management and Budget (OMB) and the Congressional Budget Office (CBO), at least in part because the Trustees assumptions used for estimates presented here differ from those of OMB and CBO.

Column 1 shows the projected IA contributions redirected from the trust funds starting in 2005. These contributions, along with distributions upon maturity of recognition bonds starting in 2016 (column 2) represent increased expenditures from the unified budget. Generally lower benefit payments from the OASDI program are reflected in column 3 and would be reductions in expenditures. These changes are combined to produce the net change in unified budget annual cash flow in column 4.

The implications for the size of the federal debt held by the public are shown in column 5. Debt would be increased substantially through the 75-year period, but the increment would be decreasing toward the end of the period.

The net effect on annual unified budget balances, including the debt service from prior year effects on cash flow, is shown in column 6. Negative effects on unified budget balances would gradually decline and reverse to positive changes starting in 2070 under the expected yield scenario and starting in 2072 under the low yield scenario.

## Change in Long-Range Trust Fund Assets/Unfunded Obligation

Tables 1d and 2d provide estimates of the amount of assets in the combined OASI and DI Trust Funds at the end of each year, in present discounted value. Negative values do not indicate levels of trust fund assets as the program does not have borrowing authority. Instead, negative values reflect the magnitude of the unfunded obligation of the program through the end of the year. The first column presents these estimates under present law, where the unfunded obligation is $\$ 3.7$ trillion through 2078, the end of the 75 -year long-range period.

Columns 2 through 5 show the annual effects of the components of the proposal that move the OASDI program to elimination of the unfunded obligation. These include:

- The change in the OASDI basic benefits,
- IA contributions redirected from the trust funds to the individual accounts,
- Recognition bond payments from the trust funds to the individual accounts, and
- General Fund transfers needed to reimburse the trust funds for providing the minimum benefit level and to maintain solvency in 2013 through 2045.

The combination of the annual effects in columns 2 through 5 is accumulated in column 6 , showing effect on projected trust fund assets, or on the unfunded obligation, through the end of each year. Column 7 shows the resulting trust fund asset levels projected under the proposal. The overall effect of the proposal is to transform the projected \$3.7 trillion long-range unfunded obligation for the program under current law into an expected positive trust fund balance of $\$ 1.8$ trillion at the end of the period.


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Table 1 Johnson Proposal: IA for <55 on 1-1-2005. RB for 21-54 on 1-1-2005


Table 1a Proposal GF Transfers, OASDI Trust Fund Assets, Individual Account Assets, and Theoretical OASDI Assets

| Calendar | Proposal General Fund Transfer(GF)/Reimburse |  |  |  | Total OASDI <br> Trust Fund <br> Assets at End of Year | Expected Individual Account Assets ${ }^{1}$ End of Year (6) |  | Theoretical Social Security ${ }^{2}$ with Borrowing Authority: <br> Net OASDI TF Assets End of Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Transfers | Reimburse | Total in | Accumulated |  |  |  |  |  |
|  | for | Minimum | Constant | as of |  |  |  | Without GF | With GF Transfer |
|  | Solvency | Benefit | 2004\$ | End of Year |  |  | GDP | Transfer | (amount for Prop) |
|  | (1) | (2) | (3) | (4) |  |  | (7) | (8) | (9) |
| Year | Billions PV as of 1-1-2004 |  | Billions of Constant 2004\$ |  | Billions of Constant 2004 Dollars |  |  |  |  |
| 2004 | 0.0 | 0.0 | 0.0 | 0 | 1,684 | 0 | 11,544 | 1,684 | 1,684 |
| 2005 | 0.0 | 0.0 | 0.0 | 0 | 1,647 | 195 | 11,911 | 1,840 | 1,840 |
| 2006 | 0.0 | 0.0 | 0.0 | 0 | 1,581 | 423 | 12,246 | 1,998 | 1,998 |
| 2007 | 0.0 | 0.0 | 0.0 | 0 | 1,498 | 673 | 12,562 | 2,156 | 2,156 |
| 2008 | 0.0 | 0.0 | 0.0 | 0 | 1,399 | 943 | 12,870 | 2,315 | 2,315 |
| 2009 | 0.0 | 0.0 | 0.0 | 0 | 1,279 | 1,237 | 13,171 | 2,473 | 2,473 |
| 2010 | 0.0 | 0.0 | 0.0 | 0 | 1,141 | 1,555 | 13,466 | 2,631 | 2,631 |
| 2011 | 0.0 | 0.0 | 0.0 | 0 | 983 | 1,899 | 13,752 | 2,790 | 2,790 |
| 2012 | 0.0 | 0.0 | 0.0 | 0 | 804 | 2,266 | 14,024 | 2,944 | 2,944 |
| 2013 | 62.0 | 0.1 | 82.9 | 83 | 684 | 2,656 | 14,285 | 3,091 | 3,174 |
| 2014 | 179.9 | 0.1 | 247.1 | 332 | 708 | 3,072 | 14,547 | 3,230 | 3,563 |
| 2015 | 189.8 | 0.2 | 268.3 | 610 | 732 | 3,514 | 14,804 | 3,360 | 3,970 |
| 2016 | 223.3 | 0.3 | 324.7 | 952 | 747 | 3,983 | 15,061 | 3,478 | 4,431 |
| 2017 | 247.8 | 0.4 | 371.0 | 1,351 | 761 | 4,479 | 15,322 | 3,584 | 4,935 |
| 2018 | 271.5 | 0.4 | 418.7 | 1,810 | 775 | 5,003 | 15,586 | 3,675 | 5,486 |
| 2019 | 290.4 | 0.5 | 461.3 | 2,326 | 785 | 5,552 | 15,842 | 3,750 | 6,076 |
| 2020 | 308.6 | 0.5 | 505.0 | 2,901 | 793 | 6,128 | 16,100 | 3,805 | 6,706 |
| 2021 | 301.6 | 0.6 | 508.4 | 3,496 | 797 | 6,730 | 16,354 | 3,841 | 7,337 |
| 2022 | 306.4 | 0.6 | 532.0 | 4,133 | 797 | 7,357 | 16,610 | 3,857 | 7,990 |
| 2023 | 308.6 | 0.7 | 552.0 | 4,809 | 794 | 8,010 | 16,861 | 3,851 | 8,660 |
| 2024 | 307.1 | 0.7 | 565.9 | 5,519 | 790 | 8,689 | 17,117 | 3,823 | 9,342 |
| 2025 | 302.1 | 0.8 | 573.5 | 6,258 | 786 | 9,392 | 17,372 | 3,773 | 10,031 |
| 2026 | 290.3 | 0.8 | 567.9 | 7,014 | 766 | 10,119 | 17,634 | 3,700 | 10,714 |
| 2027 | 322.6 | 0.9 | 649.9 | 7,874 | 753 | 10,871 | 17,903 | 3,604 | 11,478 |
| 2028 | 320.7 | 0.9 | 665.4 | 8,776 | 736 | 11,647 | 18,174 | 3,486 | 12,262 |
| 2029 | 312.2 | 1.0 | 667.5 | 9,707 | 715 | 12,446 | 18,451 | 3,346 | 13,053 |
| 2030 | 300.8 | 1.0 | 662.6 | 10,661 | 691 | 13,267 | 18,733 | 3,184 | 13,845 |
| 2031 | 292.9 | 1.0 | 664.6 | 11,645 | 666 | 14,110 | 19,022 | 3,000 | 14,646 |
| 2032 | 263.5 | 1.1 | 616.1 | 12,611 | 643 | 14,974 | 19,319 | 2,796 | 15,406 |
| 2033 | 237.9 | 1.1 | 573.5 | 13,562 | 624 | 15,859 | 19,622 | 2,570 | 16,133 |
| 2034 | 210.2 | 1.1 | 522.2 | 14,491 | 601 | 16,764 | 19,929 | 2,325 | 16,817 |
| 2035 | 186.2 | 1.1 | 476.9 | 15,403 | 579 | 17,687 | 20,243 | 2,062 | 17,465 |
| 2036 | 163.0 | 1.2 | 430.3 | 16,295 | 556 | 18,629 | 20,564 | 1,780 | 18,075 |
| 2037 | 140.4 | 1.2 | 382.3 | 17,166 | 532 | 19,588 | 20,892 | 1,481 | 18,647 |
| 2038 | 121.3 | 1.2 | 340.7 | 18,022 | 516 | 20,562 | 21,226 | 1,165 | 19,187 |
| 2039 | 98.1 | 1.2 | 284.3 | 18,847 | 493 | 21,551 | 21,562 | 833 | 19,680 |
| 2040 | 80.1 | 1.2 | 239.9 | 19,652 | 475 | 22,552 | 21,904 | 485 | 20,137 |
| 2041 | 62.7 | 1.2 | 194.3 | 20,436 | 461 | 23,564 | 22,252 | 120 | 20,556 |
| 2042 | 45.1 | 1.2 | 144.8 | 21,194 | 445 | 24,585 | 22,605 | -262 | 20,932 |
| 2043 | 29.5 | 1.2 | 98.9 | 21,929 | 428 | 25,613 | 22,961 | -662 | 21,267 |
| 2044 | 13.4 | 1.2 | 48.2 | 22,635 | 405 | 26,647 | 23,322 | -1,080 | 21,555 |
| 2045 | 1.3 | 1.1 | 8.2 | 23,322 | 392 | 27,682 | 23,687 | -1,516 | 21,806 |
| 2046 | 0.0 | 1.1 | 4.0 | 24,026 | 419 | 28,719 | 24,055 | -1,972 | 22,053 |
| 2047 | 0.0 | 1.1 | 4.0 | 24,751 | 491 | 29,755 | 24,426 | -2,449 | 22,302 |
| 2048 | 0.0 | 1.1 | 4.0 | 25,497 | 606 | 30,788 | 24,799 | -2,946 | 22,551 |
| 2049 | 0.0 | 1.0 | 4.0 | 26,266 | 763 | 31,812 | 25,174 | -3,465 | 22,801 |
| 2050 | 0.0 | 1.0 | 4.0 | 27,058 | 1,027 | 32,822 | 25,552 | -4,008 | 23,050 |
| 2051 | 0.0 | 1.0 | 4.0 | 27,874 | 1,311 | 33,817 | 25,936 | -4,577 | 23,297 |
| 2052 | 0.0 | 0.9 | 4.0 | 28,714 | 1,616 | 34,797 | 26,324 | -5,172 | 23,542 |
| 2053 | 0.0 | 0.9 | 3.9 | 29,579 | 1,941 | 35,768 | 26,721 | -5,795 | 23,785 |
| 2054 | 0.0 | 0.9 | 3.9 | 30,470 | 2,286 | 36,730 | 27,123 | -6,447 | 24,024 |
| 2055 | 0.0 | 0.8 | 3.8 | 31,388 | 2,651 | 37,683 | 27,528 | -7,130 | 24,259 |
| 2056 | 0.0 | 0.8 | 3.8 | 32,334 | 3,035 | 38,625 | 27,939 | -7,845 | 24,489 |
| 2057 | 0.0 | 0.8 | 3.7 | 33,308 | 3,438 | 39,556 | 28,354 | -8,594 | 24,714 |
| 2058 | 0.0 | 0.7 | 3.7 | 34,311 | 3,862 | 40,476 | 28,775 | -9,378 | 24,933 |
| 2059 | 0.0 | 0.7 | 3.6 | 35,343 | 4,305 | 41,383 | 29,204 | -10,196 | 25,147 |
| 2060 | 0.0 | 0.7 | 3.5 | 36,407 | 4,771 | 42,279 | 29,639 | -11,052 | 25,355 |
| 2061 | 0.0 | 0.6 | 3.5 | 37,503 | 5,256 | 43,162 | 30,078 | -11,946 | 25,557 |
| 2062 | 0.0 | 0.6 | 3.4 | 38,631 | 5,760 | 44,032 | 30,526 | -12,880 | 25,751 |
| 2063 | 0.0 | 0.6 | 3.3 | 39,794 | 6,285 | 44,890 | 30,978 | -13,857 | 25,937 |
| 2064 | 0.0 | 0.5 | 3.2 | 40,991 | 6,829 | 45,736 | 31,438 | -14,876 | 26,114 |
| 2065 | 0.0 | 0.5 | 3.1 | 42,224 | 7,394 | 46,570 | 31,906 | -15,940 | 26,283 |
| 2066 | 0.0 | 0.5 | 3.0 | 43,493 | 7,981 | 47,431 | 32,379 | -17,050 | 26,443 |
| 2067 | 0.0 | 0.5 | 3.0 | 44,801 | 8,590 | 48,284 | 32,861 | -18,208 | 26,594 |
| 2068 | 0.0 | 0.4 | 2.9 | 46,148 | 9,224 | 49,127 | 33,359 | -19,414 | 26,734 |
| 2069 | 0.0 | 0.4 | 2.8 | 47,535 | 9,881 | 49,962 | 33,859 | -20,670 | 26,865 |
| 2070 | 0.0 | 0.4 | 2.7 | 48,964 | 10,563 | 50,790 | 34,366 | -21,978 | 26,986 |
| 2071 | 0.0 | 0.4 | 2.6 | 50,435 | 11,270 | 51,612 | 34,882 | -23,340 | 27,096 |
| 2072 | 0.0 | 0.3 | 2.5 | 51,951 | 12,003 | 52,427 | 35,404 | -24,756 | 27,195 |
| 2073 | 0.0 | 0.3 | 2.4 | 53,512 | 12,762 | 53,238 | 35,931 | -26,230 | 27,282 |
| 2074 | 0.0 | 0.3 | 2.3 | 55,120 | 13,550 | 54,044 | 36,464 | -27,762 | 27,357 |
| 2075 | 0.0 | 0.3 | 2.2 | 56,775 | 14,365 | 54,848 | 37,006 | -29,356 | 27,419 |
| 2076 | 0.0 | 0.3 | 2.2 | 58,481 | 15,210 | 55,649 | 37,555 | -31,014 | 27,467 |
| 2077 | 0.0 | 0.2 | 2.1 | 60,237 | 16,086 | 56,450 | 38,112 | -32,736 | 27,501 |
| 2078 | 0.0 | 0.2 | 2.0 | 62,047 | 16,993 | 57,249 | 38,677 | -34,527 | 27,520 |
| 2079 | 0.0 | 0.2 | 1.9 | 63,910 | 17,932 | 58,049 | 39,245 | -36,387 | 27,523 |

Based on Intermediate Assumptions of the 2004 Trustees Report
${ }^{1}$ Including annuity assets, assuming all annuitize fully.
${ }^{2}$ Theoretical Social Security is the current Social Security program with the assumption that the law is modified to permit borrowing from the General Fund of the Treasury.

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Table 1b Proposal Effects on Unified Budget



Table 1b.c. Proposal Effects on Unified Budget

|  | Individual Account Contribution Rate: 6.2\% Benefit Offset: 0.0\% |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount(\%) |  | Other |  | ange in |  |
|  | Contributed to | Recognition | Changes | Annual | Debt Held | Annual |
|  | IA by Fed Gov: | Bond | in OASDI | Unified Budget | by Public | Unified Budget |
|  | 100 | Distributions | Cashflow ${ }^{1}$ | Cashflow | (EOY) | Balance |
|  | (1) | (2) | (3) | (4)=(3)-(1)-(2) | (5) | (6) |
| Year | (Billions of Constant 2004 \$) |  |  |  |  |  |
| 2005 | 188.0 | 0.0 | 0.0 | -188.0 | 191.2 | -193.1 |
| 2006 | 211.5 | 0.0 | 0.0 | -211.5 | 411.7 | -227.4 |
| 2007 | 223.6 | 0.0 | 0.0 | -223.6 | 649.4 | -251.6 |
| 2008 | 234.7 | 0.0 | 0.0 | -234.7 | 904.1 | -276.1 |
| 2009 | 245.9 | 0.0 | 0.0 | -245.9 | 1,177.2 | -301.9 |
| 2010 | 257.1 | 0.0 | 0.0 | -257.1 | 1,469.5 | -328.9 |
| 2011 | 268.5 | 0.0 | 0.0 | -268.5 | 1,782.1 | -357.5 |
| 2012 | 278.9 | 0.0 | 3.3 | -275.6 | 2,110.9 | -382.6 |
| 2013 | 288.5 | 0.0 | 4.5 | -284.0 | 2,457.8 | -410.0 |
| 2014 | 299.8 | 0.0 | 6.5 | -293.3 | 2,824.9 | -440.0 |
| 2015 | 309.7 | 0.0 | 9.6 | -300.2 | 3,210.5 | -469.0 |
| 2016 | 320.0 | 49.2 | 18.3 | -350.9 | 3,660.1 | -544.5 |
| 2017 | 329.9 | 83.3 | 31.9 | -381.3 | 4,155.3 | -603.2 |
| 2018 | 339.7 | 120.0 | 48.0 | -411.7 | 4,697.8 | -664.8 |
| 2019 | 348.6 | 158.0 | 67.0 | -439.6 | 5,284.9 | -725.0 |
| 2020 | 357.4 | 196.1 | 89.2 | -464.4 | 5,914.7 | -784.5 |
| 2021 | 366.3 | 197.2 | 111.8 | -451.7 | 6,550.6 | -808.1 |
| 2022 | 374.8 | 222.8 | 139.2 | -458.4 | 7,212.3 | -851.8 |
| 2023 | 382.7 | 246.9 | 169.5 | -460.1 | 7,895.6 | -892.0 |
| 2024 | 390.4 | 266.3 | 203.0 | -453.8 | 8,593.0 | -925.1 |
| 2025 | 397.6 | 282.7 | 239.6 | -440.6 | 9,298.0 | -952.1 |
| 2026 | 404.9 | 301.9 | 278.3 | -428.5 | 10,011.9 | -980.6 |
| 2027 | 412.0 | 396.8 | 324.9 | -484.0 | 10,803.4 | -1,079.0 |
| 2028 | 418.7 | 435.9 | 370.0 | -484.6 | 11,619.3 | -1,125.6 |
| 2029 | 425.4 | 461.5 | 415.7 | -471.2 | 12,446.1 | -1,159.2 |
| 2030 | 431.9 | 484.0 | 464.2 | -451.7 | 13,277.9 | -1,187.0 |
| 2031 | 438.5 | 512.1 | 511.8 | -438.8 | 14,121.6 | -1,222.1 |
| 2032 | 445.0 | 489.0 | 562.8 | -371.2 | 14,921.9 | -1,201.5 |
| 2033 | 451.5 | 467.5 | 608.9 | -310.0 | 15,684.2 | -1,185.0 |
| 2034 | 458.1 | 445.2 | 654.2 | -249.2 | 16,407.7 | -1,166.7 |
| 2035 | 465.0 | 425.8 | 698.8 | -192.0 | 17,094.8 | -1,149.7 |
| 2036 | 472.1 | 406.0 | 741.9 | -136.2 | 17,745.9 | -1,132.2 |
| 2037 | 479.2 | 383.0 | 783.8 | -78.4 | 18,357.8 | -1,110.5 |
| 2038 | 486.5 | 360.1 | 824.2 | -22.4 | 18,931.3 | -1,088.4 |
| 2039 | 493.3 | 334.6 | 863.2 | 35.3 | 19,463.4 | -1,062.4 |
| 2040 | 500.2 | 309.8 | 901.0 | 91.0 | 19,955.0 | -1,035.9 |
| 2041 | 507.3 | 284.2 | 938.0 | 146.5 | 20,404.9 | -1,007.3 |
| 2042 | 514.4 | 258.4 | 974.2 | 201.4 | 20,812.7 | -977.0 |
| 2043 | 521.6 | 234.7 | 1,009.2 | 252.9 | 21,180.4 | -947.6 |
| 2044 | 528.9 | 210.8 | 1,042.8 | 303.1 | 21,508.2 | -917.3 |
| 2045 | 536.2 | 187.3 | 1,083.8 | 360.4 | 21,787.7 | -877.4 |
| 2046 | 543.5 | 163.0 | 1,116.3 | 409.8 | 22,025.4 | -842.7 |
| 2047 | 550.9 | 137.3 | 1,146.7 | 458.6 | 22,220.8 | -806.3 |
| 2048 | 558.3 | 111.2 | 1,174.7 | 505.2 | 22,374.7 | -769.7 |
| 2049 | 565.7 | 83.8 | 1,200.3 | 550.7 | 22,487.0 | -731.8 |
| 2050 | 573.1 | 0.2 | 1,229.6 | 656.2 | 22,495.6 | -629.7 |
| 2051 | 580.7 | 0.0 | 1,258.6 | 677.8 | 22,482.6 | -608.0 |
| 2052 | 588.3 | 0.0 | 1,287.3 | 699.0 | 22,447.7 | -585.5 |
| 2053 | 596.1 | 0.0 | 1,315.6 | 719.5 | 22,390.9 | -562.3 |
| 2054 | 603.9 | 0.0 | 1,343.5 | 739.6 | 22,312.0 | -538.4 |
| 2055 | 611.8 | 0.0 | 1,371.3 | 759.5 | 22,210.6 | -513.3 |
| 2056 | 619.8 | 0.0 | 1,399.2 | 779.4 | 22,085.9 | -487.0 |
| 2057 | 627.8 | 0.0 | 1,426.9 | 799.1 | 21,937.5 | -459.5 |
| 2058 | 636.0 | 0.0 | 1,454.2 | 818.2 | 21,765.3 | -431.2 |
| 2059 | 644.3 | 0.0 | 1,481.2 | 837.0 | 21,568.8 | -401.9 |
| 2060 | 652.6 | 0.0 | 1,510.5 | 857.8 | 21,345.3 | -369.0 |
| 2061 | 661.1 | 0.0 | 1,536.4 | 875.3 | 21,097.3 | -338.0 |
| 2062 | 669.7 | 0.0 | 1,562.9 | 893.3 | 20,823.6 | -305.2 |
| 2063 | 678.3 | 0.0 | 1,590.1 | 911.7 | 20,523.0 | -270.3 |
| 2064 | 687.1 | 0.0 | 1,616.7 | 929.6 | 20,195.3 | -234.4 |
| 2065 | 696.0 | 0.0 | 1,643.2 | 947.2 | 19,839.8 | -197.3 |
| 2066 | 705.0 | 0.0 | 1,670.5 | 965.4 | 19,455.2 | -157.9 |
| 2067 | 714.2 | 0.0 | 1,698.4 | 984.2 | 19,040.0 | -116.3 |
| 2068 | 723.6 | 0.0 | 1,726.9 | 1,003.3 | 18,593.0 | -72.6 |
| 2069 | 733.1 | 0.0 | 1,755.2 | 1,022.1 | 18,113.5 | -27.3 |
| 2070 | 742.7 | 0.0 | 1,783.0 | 1,040.3 | 17,601.1 | 19.3 |
| 2071 | 752.4 | 0.0 | 1,811.2 | 1,058.8 | 17,054.6 | 68.0 |
| 2072 | 762.2 | 0.0 | 1,839.6 | 1,077.4 | 16,472.8 | 118.9 |
| 2073 | 772.1 | 0.0 | 1,868.4 | 1,096.3 | 15,854.3 | 172.1 |
| 2074 | 782.1 | 0.0 | 1,897.6 | 1,115.5 | 15,197.8 | 227.8 |
| 2075 | 792.2 | 0.0 | 1,927.3 | 1,135.1 | 14,501.8 | 286.0 |
| 2076 | 802.5 | 0.0 | 1,957.4 | 1,154.9 | 13,764.7 | 346.8 |
| 2077 | 812.8 | 0.0 | 1,988.0 | 1,175.1 | 12,985.0 | 410.4 |
| 2078 | 823.3 | 0.0 | 2,019.0 | 1,195.7 | 12,161.0 | 476.8 |
| 2079 | 833.9 | 0.0 | 2,050.6 | 1,216.7 | 11,291.0 | 546.3 |

Based on the Intermediate Assumptions of the 2004 Trustees Report
With Ultimate Real Trust Fund Interest Rate of 3.0\%
Ultimate Real IA Yield Rate of $4.65 \%$
Annuity Net Real Yield Rate of 3.0\%
${ }^{1}$ Excluding GF transfers and reimbursement

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Table 1c OASDI Cash Flow to General Fund of the Treasury--- Proposal vs. Theoretical OASDI


Table 1d Change in Long-Range Trust Fund Assets / Unfunded Obligation


Based on the Intermediate Assumptions of the 2004 Trustees Report
With Ultimate Real Trust Fund Interest Rate of 3.0\%
Ultimate Real IA Yield Rate of 4.65\%
Annuity Net Real Yield Rate of 3.0\%
${ }^{1}$ Include reimbursement for minimum benefit

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Table 2 Johnson Proposal: Sensitivity Analysis--Low Yield=LT Treasury Bond


Table 2a Proposal GF Transfers, OASDI Trust Fund Assets, Individual Account Assets, and Theoretical OASDI Assets

| Calendar Year | Proposal General Fund Transfer(GF)/Reimburse |  |  |  | Total OASDI Trust Fund Assets at End of Year | Low Yield Individual Account Assets ${ }^{1}$ at End of Year |  | Theoretical Social Security ${ }^{2}$ with Borrowing Authority: <br> Net OASDI TF Assets End of Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Transfers <br> for <br> Solvency <br> (1) | Reimburse | Total in | Accumulated |  |  |  |  |  |
|  |  | Minimum | Constant | as of |  |  |  | Without GF | With GF Transfer |
|  |  | Benefit | 2004\$ | End of Year |  |  | GDP | Transfer | (amount for Prop) |
|  |  | (2) | (3) | (4) |  |  | (7) | (8) | (9) |
|  | Billions PV as of 1-1-2004 |  | Billions of Constant 2004\$ |  | Billions of Constant 2004 Dollars |  |  |  |  |
| 2004 | 0.0 | 0.0 | 0.0 | 0 | 1,684 | 0 | 11,544 | 1,684 | 1,684 |
| 2005 | 0.0 | 0.0 | 0.0 | 0 | 1,647 | 193 | 11,911 | 1,840 | 1,840 |
| 2006 | 0.0 | 0.0 | 0.0 | 0 | 1,581 | 416 | 12,246 | 1,998 | 1,998 |
| 2007 | 0.0 | 0.0 | 0.0 | 0 | 1,498 | 656 | 12,562 | 2,156 | 2,156 |
| 2008 | 0.0 | 0.0 | 0.0 | 0 | 1,399 | 912 | 12,870 | 2,315 | 2,315 |
| 2009 | 0.0 | 0.0 | 0.0 | 0 | 1,279 | 1,185 | 13,171 | 2,473 | 2,473 |
| 2010 | 0.0 | 0.0 | 0.0 | 0 | 1,141 | 1,477 | 13,466 | 2,631 | 2,631 |
| 2011 | 0.0 | 0.0 | 0.0 | 0 | 983 | 1,789 | 13,752 | 2,790 | 2,790 |
| 2012 | 0.0 | 0.0 | 0.0 | 0 | 804 | 2,117 | 14,024 | 2,944 | 2,944 |
| 2013 | 62.0 | 0.1 | 82.9 | 83 | 684 | 2,461 | 14,285 | 3,091 | 3,174 |
| 2014 | 179.9 | 0.1 | 247.1 | 332 | 708 | 2,823 | 14,547 | 3,230 | 3,563 |
| 2015 | 189.8 | 0.2 | 268.3 | 610 | 732 | 3,203 | 14,804 | 3,360 | 3,970 |
| 2016 | 223.3 | 0.3 | 324.7 | 952 | 747 | 3,599 | 15,061 | 3,478 | 4,431 |
| 2017 | 247.8 | 0.4 | 371.1 | 1,352 | 761 | 4,014 | 15,322 | 3,584 | 4,935 |
| 2018 | 271.5 | 0.4 | 418.7 | 1,811 | 775 | 4,446 | 15,586 | 3,675 | 5,486 |
| 2019 | 290.4 | 0.5 | 461.3 | 2,326 | 785 | 4,894 | 15,842 | 3,750 | 6,076 |
| 2020 | 308.6 | 0.5 | 505.0 | 2,901 | 793 | 5,356 | 16,100 | 3,805 | 6,706 |
| 2021 | 301.6 | 0.6 | 508.5 | 3,496 | 797 | 5,833 | 16,354 | 3,841 | 7,337 |
| 2022 | 306.4 | 0.7 | 532.1 | 4,133 | 797 | 6,324 | 16,610 | 3,857 | 7,990 |
| 2023 | 312.1 | 0.7 | 558.5 | 4,816 | 800 | 6,828 | 16,861 | 3,851 | 8,667 |
| 2024 | 307.1 | 0.8 | 566.1 | 5,527 | 796 | 7,345 | 17,117 | 3,823 | 9,350 |
| 2025 | 298.6 | 0.9 | 567.1 | 6,259 | 785 | 7,874 | 17,372 | 3,773 | 10,032 |
| 2026 | 290.3 | 0.9 | 568.1 | 7,015 | 766 | 8,414 | 17,634 | 3,700 | 10,715 |
| 2027 | 322.6 | 1.0 | 650.2 | 7,876 | 752 | 8,964 | 17,903 | 3,604 | 11,480 |
| 2028 | 320.7 | 1.1 | 665.8 | 8,778 | 734 | 9,525 | 18,174 | 3,486 | 12,264 |
| 2029 | 312.2 | 1.2 | 667.9 | 9,709 | 713 | 10,094 | 18,451 | 3,346 | 13,055 |
| 2030 | 300.8 | 1.2 | 663.1 | 10,664 | 689 | 10,673 | 18,733 | 3,184 | 13,847 |
| 2031 | 296.0 | 1.3 | 672.3 | 11,656 | 670 | 11,259 | 19,022 | 3,000 | 14,656 |
| 2032 | 263.5 | 1.4 | 616.8 | 12,622 | 647 | 11,852 | 19,319 | 2,796 | 15,418 |
| 2033 | 236.1 | 1.5 | 569.9 | 13,571 | 622 | 12,452 | 19,622 | 2,570 | 16,141 |
| 2034 | 210.2 | 1.5 | 523.2 | 14,501 | 599 | 13,058 | 19,929 | 2,325 | 16,827 |
| 2035 | 189.2 | 1.6 | 485.6 | 15,422 | 583 | 13,669 | 20,243 | 2,062 | 17,484 |
| 2036 | 163.0 | 1.7 | 431.7 | 16,316 | 558 | 14,286 | 20,564 | 1,780 | 18,096 |
| 2037 | 141.3 | 1.8 | 386.2 | 17,192 | 536 | 14,906 | 20,892 | 1,481 | 18,673 |
| 2038 | 121.3 | 1.9 | 342.6 | 18,050 | 518 | 15,530 | 21,226 | 1,165 | 19,215 |
| 2039 | 100.0 | 1.9 | 292.0 | 18,884 | 499 | 16,157 | 21,562 | 833 | 19,717 |
| 2040 | 80.9 | 2.0 | 244.8 | 19,695 | 482 | 16,785 | 21,904 | 485 | 20,180 |
| 2041 | 62.7 | 2.1 | 197.0 | 20,483 | 465 | 17,414 | 22,252 | 120 | 20,603 |
| 2042 | 46.9 | 2.2 | 153.7 | 21,251 | 452 | 18,042 | 22,605 | -262 | 20,989 |
| 2043 | 30.3 | 2.2 | 104.8 | 21,993 | 435 | 18,669 | 22,961 | -662 | 21,331 |
| 2044 | 15.4 | 2.3 | 58.9 | 22,712 | 415 | 19,295 | 23,322 | -1,080 | 21,632 |
| 2045 | 2.5 | 2.4 | 16.9 | 23,410 | 403 | 19,917 | 23,687 | -1,516 | 21,894 |
| 2046 | 0.0 | 2.5 | 8.7 | 24,121 | 426 | 20,535 | 24,055 | -1,972 | 22,149 |
| 2047 | 0.0 | 2.5 | 9.2 | 24,854 | 493 | 21,150 | 24,426 | -2,449 | 22,406 |
| 2048 | 0.0 | 2.6 | 9.7 | 25,610 | 602 | 21,758 | 24,799 | -2,946 | 22,664 |
| 2049 | 0.0 | 2.7 | 10.2 | 26,388 | 754 | 22,360 | 25,174 | -3,465 | 22,923 |
| 2050 | 0.0 | 2.7 | 10.7 | 27,191 | 1,011 | 22,951 | 25,552 | -4,008 | 23,182 |
| 2051 | 0.0 | 2.7 | 11.2 | 28,017 | 1,288 | 23,533 | 25,936 | -4,577 | 23,441 |
| 2052 | 0.0 | 2.8 | 11.7 | 28,870 | 1,585 | 24,106 | 26,324 | -5,172 | 23,698 |
| 2053 | 0.0 | 2.8 | 12.2 | 29,748 | 1,902 | 24,673 | 26,721 | -5,795 | 23,953 |
| 2054 | 0.0 | 2.8 | 12.6 | 30,653 | 2,238 | 25,234 | 27,123 | -6,447 | 24,206 |
| 2055 | 0.0 | 2.8 | 13.1 | 31,586 | 2,592 | 25,789 | 27,528 | -7,130 | 24,456 |
| 2056 | 0.0 | 2.8 | 13.5 | 32,547 | 2,966 | 26,339 | 27,939 | -7,845 | 24,701 |
| 2057 | 0.0 | 2.8 | 13.8 | 33,537 | 3,358 | 26,883 | 28,354 | -8,594 | 24,943 |
| 2058 | 0.0 | 2.8 | 14.2 | 34,557 | 3,769 | 27,422 | 28,775 | -9,378 | 25,180 |
| 2059 | 0.0 | 2.8 | 14.5 | 35,609 | 4,200 | 27,955 | 29,204 | -10,196 | 25,412 |
| 2060 | 0.0 | 2.8 | 14.8 | 36,692 | 4,652 | 28,483 | 29,639 | -11,052 | 25,640 |
| 2061 | 0.0 | 2.7 | 15.0 | 37,807 | 5,123 | 29,006 | 30,078 | -11,946 | 25,861 |
| 2062 | 0.0 | 2.7 | 15.2 | 38,957 | 5,613 | 29,524 | 30,526 | -12,880 | 26,077 |
| 2063 | 0.0 | 2.6 | 15.3 | 40,141 | 6,122 | 30,038 | 30,978 | -13,857 | 26,284 |
| 2064 | 0.0 | 2.6 | 15.4 | 41,360 | 6,650 | 30,548 | 31,438 | -14,876 | 26,484 |
| 2065 | 0.0 | 2.5 | 15.4 | 42,616 | 7,199 | 31,055 | 31,906 | -15,940 | 26,676 |
| 2066 | 0.0 | 2.4 | 15.4 | 43,910 | 7,768 | 31,558 | 32,379 | -17,050 | 26,860 |
| 2067 | 0.0 | 2.3 | 15.3 | 45,243 | 8,360 | 32,059 | 32,861 | -18,208 | 27,035 |
| 2068 | 0.0 | 2.3 | 15.2 | 46,615 | 8,975 | 32,557 | 33,359 | -19,414 | 27,202 |
| 2069 | 0.0 | 2.2 | 15.1 | 48,029 | 9,613 | 33,054 | 33,859 | -20,670 | 27,359 |
| 2070 | 0.0 | 2.1 | 14.9 | 49,485 | 10,276 | 33,550 | 34,366 | -21,978 | 27,507 |
| 2071 | 0.0 | 2.0 | 14.7 | 50,984 | 10,963 | 34,045 | 34,882 | -23,340 | 27,645 |
| 2072 | 0.0 | 1.9 | 14.5 | 52,528 | 11,676 | 34,539 | 35,404 | -24,756 | 27,772 |
| 2073 | 0.0 | 1.8 | 14.2 | 54,118 | 12,415 | 35,034 | 35,931 | -26,230 | 27,888 |
| 2074 | 0.0 | 1.7 | 13.9 | 55,756 | 13,181 | 35,530 | 36,464 | -27,762 | 27,993 |
| 2075 | 0.0 | 1.6 | 13.6 | 57,442 | 13,975 | 36,027 | 37,006 | -29,356 | 28,085 |
| 2076 | 0.0 | 1.5 | 13.2 | 59,178 | 14,799 | 36,525 | 37,555 | -31,014 | 28,165 |
| 2077 | 0.0 | 1.5 | 12.9 | 60,967 | 15,652 | 37,025 | 38,112 | -32,736 | 28,230 |
| 2078 | 0.0 | 1.4 | 12.5 | 62,808 | 16,536 | 37,528 | 38,677 | -34,527 | 28,281 |
| 2079 | 0.0 | 1.3 | 12.1 | 64,704 | 17,452 | 38,033 | 39,245 | -36,387 | 28,317 |
| tal 2004-78 | 6,805.1 | 118.3 |  |  |  |  |  |  |  |

Based on Intermediate Assumptions of the 2004 Trustees Report
${ }^{1}$ Including annuity assets, assuming all annuitize fully.
${ }^{2}$ Theoretical Social Security is the current Social Security program with the assumption that the law is modified to permit borrowing from the General Fund of the Treasury.

Office of the Actuary
Social Security Administration
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Table 2b Proposal Effects on Unified Budget



Based on the Intermediate Assumptions of the 2004 Trustees Report
With Ultimate Real Trust Fund Interest Rate of 3.0\%
Ultimate Real IA Yield Rate of 2.75\%
Annuity Net Real Yield Rate of $2.75 \%$
${ }^{1}$ Excluding GF transfers and reimbursement

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Table 2 b.c. Proposal Effects on Unified Budget
Individual Account Contrin

|  | Individual Account Contribution Rate: 6.2\% Benefit |  |  | et: 0.0\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Amount(\%) |  | Other | Change in |  |  |
| Contributed to | Recognition | Changes | Annual | Debt Held | Annual |
| IA by Fed Gov: | Bond | in OASDI | Unified Budget | by Public | Unified Budget |
| 100 | Distributions | Cashflow ${ }^{1}$ | Cashflow | (EOY) | Bala |

(1) Distribution
(3) (4)=(3)-(1)-(2)
(5)
(6)

| Year | (1) | (2) | $(3)$ <br> (Billions of Constant 2004 <br> 2005 <br> 2006 |
| :---: | :---: | :---: | :---: |
|  | 188.0 | 0.0 | 0.0 |
| 211.5 | 0.0 | 0.0 |  |


| -188.0 | 191.2 | -193.1 |
| :--- | :--- | :--- |
| -211.5 | 411.7 | -227.4 |
| -223.6 | 649.4 | -251.6 |
| -234.7 | 904.1 | -276.1 |


| 2007 | 223.6 | 0.0 |
| :--- | :--- | :--- |
| 2008 | 234.7 | 0.0 |
| 2009 | 245.9 | 0.0 |


| 2010 | 245.9 | 0.0 |
| :--- | :--- | :--- |
| 2011 | 268.5 | 0.0 |
| 2012 | 278.9 | 0.0 |
|  | 288.5 | 0.0 |


| 2013 | 288.5 | 0.0 |
| :--- | ---: | ---: |
| 2014 | 299.8 | 0.0 |
| 2015 | 309.7 | 0.0 |
| 2016 | 320.0 | 49.2 |


| 2017 | 329.9 | 49.2 |
| :--- | ---: | ---: |
| 2018 | 339.7 | 120.0 |
| 2019 | 348.6 | 158.0 |
| 2020 | 357.4 | 196.1 |


| 2020 | 357.4 | 196.1 |
| :--- | :--- | :--- |
| 2021 | 366.3 | 197.2 |
| 2022 | 374.8 | 222.8 |
| 2023 | 382.7 | 246.9 |
| 2024 | 390.4 | 266.3 |


| 2024 | 390.4 | 266.3 |
| :--- | :--- | :--- |
| 2025 | 397.6 | 282.7 |
| 2026 | 404.9 | 301.9 |
| 2027 | 412.0 | 396.8 |
| 2028 | 418.7 | 435.9 |

Table 2c OASDI Cash Flow to General Fund of the Treasury--- Proposal vs. Theoretical OASDI

| Year | Proposal |  |  |  | Theoretical Social Security with PAYGO Transfers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Amount of Cash-Flow from the OASDI Trust Funds to the General Fund of the Treasury During the Year ${ }^{1}$ |  |  |  | Net Amount of Cash-Flow from the OASDI Trust Funds to the General Fund of the Treasury During the Year ${ }^{1}$ |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Percent of Payroll | Billions of Dollars |  |  | Percentof Payroll | Billions of Dollars |  |  |
|  |  | Current \$ | 1/1/2004 PV | Const 2004 \$ |  | Current \$ | 1/1/2004 PV | Const 2004 \$ |
| 2004 | 1.4 | 65 | 63 | 65 | 1.4 | 65 | 63 | 65 |
| 2005 | -2.1 | -102 | -94 | -101 | 1.9 | 89 | 82 | 87 |
| 2006 | -2.4 | -122 | -106 | -118 | 1.9 | 97 | 85 | 94 |
| 2007 | -2.5 | -132 | -110 | -125 | 2.0 | 105 | 87 | 99 |
| 2008 | -2.7 | -147 | -115 | -135 | 2.0 | 109 | 86 | 100 |
| 2009 | -3.0 | -171 | -127 | -152 | 1.8 | 105 | 78 | 93 |
| 2010 | -3.2 | -193 | -136 | -168 | 1.7 | 103 | 73 | 89 |
| 2011 | -3.4 | -217 | -145 | -183 | 1.6 | 101 | 67 | 85 |
| 2012 | -3.7 | -244 | -154 | -200 | 1.4 | 91 | 58 | 75 |
| 2013 | -4.0 | -277 | -166 | -221 | 1.1 | 79 | 47 | 63 |
| 2014 | -4.3 | -312 | -177 | -243 | 0.9 | 65 | 37 | 50 |
| 2015 | -4.6 | -349 | -187 | -264 | 0.6 | 48 | 25 | 36 |
| 2016 | -5.7 | -450 | -228 | -331 | 0.3 | 27 | 14 | 20 |
| 2017 | -6.4 | -529 | -253 | -379 | 0.0 | 4 | 2 | 3 |
| 2018 | -7.1 | -613 | -277 | -427 | -0.3 | -22 | -10 | -15 |
| 2019 | -7.8 | -701 | -299 | -474 | -0.6 | -51 | -22 | -35 |
| 2020 | -8.5 | -789 | -318 | -520 | -0.9 | -84 | -34 | -55 |
| 2021 | -8.5 | -824 | -314 | -528 | -1.2 | -119 | -45 | -76 |
| 2022 | -8.8 | -891 | -320 | -555 | -1.5 | -155 | -56 | -97 |
| 2023 | -9.0 | -953 | -324 | -578 | -1.8 | -195 | -66 | -118 |
| 2024 | -9.1 | -1,005 | -323 | -593 | -2.1 | -236 | -76 | -139 |
| 2025 | -9.1 | -1,048 | -317 | -601 | -2.4 | -279 | -85 | -160 |
| 2026 | -9.2 | -1,092 | -313 | -610 | -2.7 | -324 | -93 | -181 |
| 2027 | -10.2 | -1,262 | -341 | -685 | -3.0 | -370 | -100 | -201 |
| 2028 | -10.3 | -1,335 | -341 | -705 | -3.2 | -416 | -106 | -220 |
| 2029 | -10.2 | -1,381 | -333 | -710 | -3.4 | -463 | -112 | -238 |
| 2030 | -10.1 | -1,415 | -322 | -707 | -3.6 | -510 | -116 | -255 |
| 2031 | -10.0 | -1,462 | -314 | -711 | -3.8 | -558 | -120 | -271 |
| 2032 | -9.1 | -1,394 | -283 | -659 | -4.0 | -606 | -123 | -287 |
| 2033 | -8.4 | -1,331 | -255 | -612 | -4.1 | -653 | -125 | -300 |
| 2034 | -7.6 | -1,260 | -228 | -564 | -4.2 | -699 | -127 | -313 |
| 2035 | -6.9 | -1,191 | -204 | -518 | -4.3 | -744 | -127 | -324 |
| 2036 | -6.2 | -1,116 | -180 | -473 | -4.4 | -788 | -127 | -334 |
| 2037 | -5.5 | -1,029 | -157 | -424 | -4.4 | -831 | -127 | -343 |
| 2038 | -4.8 | -938 | -135 | -376 | -4.5 | -873 | -126 | -350 |
| 2039 | -4.1 | -835 | -114 | -325 | -4.5 | -915 | -124 | -357 |
| 2040 | -3.4 | -729 | -94 | -276 | -4.5 | -956 | -123 | -363 |
| 2041 | -2.8 | -617 | -75 | -227 | -4.5 | -1,000 | -121 | -369 |
| 2042 | -2.2 | -500 | -57 | -179 | -4.5 | -1,045 | -120 | -375 |
| 2043 | -1.6 | -386 | -42 | -135 | -4.5 | -1,091 | -118 | -381 |
| 2044 | -1.1 | -268 | -27 | -91 | -4.5 | -1,139 | -116 | -387 |
| 2045 | -0.5 | -123 | -12 | -41 | -4.5 | -1,189 | -115 | -393 |
| 2046 | 0.0 | 5 | 0 | 2 | -4.6 | -1,241 | -113 | -399 |
| 2047 | 0.5 | 138 | 12 | 43 | -4.6 | -1,297 | -112 | -405 |
| 2048 | 0.9 | 271 | 22 | 82 | -4.6 | -1,355 | -110 | -412 |
| 2049 | 1.3 | 405 | 31 | 120 | -4.6 | -1,417 | -109 | -419 |
| 2050 | 2.3 | 754 | 55 | 217 | -4.6 | -1,483 | -108 | -427 |
| 2051 | 2.4 | 818 | 56 | 229 | -4.6 | -1,555 | -107 | -435 |
| 2052 | 2.5 | 880 | 57 | 240 | -4.7 | -1,634 | -106 | -445 |
| 2053 | 2.6 | 941 | 58 | 249 | -4.7 | -1,717 | -105 | -455 |
| 2054 | 2.6 | 1,002 | 58 | 258 | -4.8 | -1,805 | -104 | -465 |
| 2055 | 2.7 | 1,062 | 58 | 266 | -4.8 | -1,899 | -104 | -476 |
| 2056 | 2.7 | 1,123 | 58 | 274 | -4.9 | -1,999 | -103 | -487 |
| 2057 | 2.8 | 1,185 | 58 | 281 | -4.9 | -2,104 | -102 | -499 |
| 2058 | 2.8 | 1,247 | 57 | 288 | -5.0 | -2,214 | -102 | -511 |
| 2059 | 2.8 | 1,310 | 57 | 294 | -5.0 | -2,328 | -101 | -522 |
| 2060 | 2.9 | 1,385 | 57 | 302 | -5.1 | -2,447 | -100 | -534 |
| 2061 | 2.9 | 1,446 | 56 | 307 | -5.1 | -2,574 | -100 | -547 |
| 2062 | 2.9 | 1,507 | 55 | 311 | -5.2 | -2,709 | -99 | -560 |
| 2063 | 2.9 | 1,571 | 54 | 316 | -5.2 | -2,854 | -98 | -574 |
| 2064 | 2.9 | 1,635 | 53 | 320 | -5.3 | -3,003 | -98 | -587 |
| 2065 | 2.9 | 1,703 | 52 | 324 | -5.3 | -3,157 | -97 | -600 |
| 2066 | 2.9 | 1,775 | 52 | 328 | -5.4 | -3,319 | -96 | -614 |
| 2067 | 2.9 | 1,851 | 51 | 333 | -5.4 | -3,489 | -96 | -628 |
| 2068 | 2.9 | 1,934 | 50 | 339 | -5.5 | -3,665 | -95 | -641 |
| 2069 | 2.9 | 2,019 | 49 | 344 | -5.5 | -3,847 | -94 | -655 |
| 2070 | 2.9 | 2,105 | 49 | 349 | -5.6 | -4,037 | -93 | -669 |
| 2071 | 2.9 | 2,195 | 48 | 354 | -5.6 | -4,235 | -92 | -682 |
| 2072 | 2.9 | 2,288 | 47 | 359 | -5.7 | -4,442 | -92 | -696 |
| 2073 | 2.9 | 2,386 | 46 | 364 | -5.7 | -4,660 | -91 | -710 |
| 2074 | 2.9 | 2,487 | 46 | 369 | -5.7 | -4,888 | -90 | -725 |
| 2075 | 2.9 | 2,593 | 45 | 374 | -5.8 | -5,127 | -89 | -740 |
| 2076 | 2.9 | 2,703 | 44 | 379 | -5.8 | -5,377 | -88 | -755 |
| 2077 | 2.9 | 2,819 | 44 | 385 | -5.9 | -5,640 | -87 | -770 |
| 2078 | 2.9 | 2,940 | 43 | 390 | -5.9 | -5,915 | -87 | -785 |
| 2079 | 2.9 | 3,066 | 42 | 396 | -6.0 | -6,203 | -86 | -801 |
| Total 2004-78 |  |  | -6,678 |  |  |  | -5,225 |  |
| ${ }^{1}$ Equals net in less the Amo plan (PAYG | in special Tr neral Fund rs) | Bonds by specifie | Trust Funds the proposal | in the theoretic |  |  | fice of the Actua cial Security Ad bruary 11, 2005 | inistration |

Table 2d Change in Long-Range Trust Fund Assets / Unfunded Obligation

|  | Individual Account Contribution Rate: 6.2\% $\quad$ Benefit Offset: 0.0\% |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Present Law OASDI Trust Fund Assets or if Negative, Unfunded Obligation Through EOY | Basic Changes in OASDI Cash flow (2) | Amount(\%) Contributed to IA by Fed Gov: | Recognition Bond Distributions | General Fund Transfers ${ }^{1}$ | $\begin{array}{r} \text { Total Change } \\ \text { Through EOY } \\ (6)=(2)-(3)-(4)+(5) \tag{1} \end{array}$ | Proposal OASDI Trust Fund Assets/ Unfunded Obligation Through EOY |
| Year |  |  | (Billions | \$, Present Valu | on 1-1-2004) |  |  |
| 2005 | 1,674.6 | 0.0 | 175.8 | 0.0 | 0.0 | -175.8 | 1,498.9 |
| 2006 | 1,759.0 | 0.0 | 191.2 | 0.0 | 0.0 | -367.0 | 1,392.1 |
| 2007 | 1,845.5 | 0.0 | 196.5 | 0.0 | 0.0 | -563.4 | 1,282.1 |
| 2008 | 1,930.8 | 0.0 | 201.0 | 0.0 | 0.0 | -764.4 | 1,166.4 |
| 2009 | 2,008.4 | 0.0 | 205.2 | 0.0 | 0.0 | -969.6 | 1,038.8 |
| 2010 | 2,080.8 | 0.0 | 208.9 | 0.0 | 0.0 | -1,178.5 | 902.3 |
| 2011 | 2,148.0 | 0.0 | 212.5 | 0.0 | 0.0 | -1,391.0 | 757.0 |
| 2012 | 2,205.6 | 2.6 | 214.8 | 0.0 | 0.0 | -1,603.2 | 602.4 |
| 2013 | 2,252.4 | 3.4 | 216.1 | 0.0 | 62.1 | -1,753.8 | 498.6 |
| 2014 | 2,289.0 | 4.7 | 218.4 | 0.0 | 180.0 | -1,787.5 | 501.5 |
| 2015 | 2,314.3 | 6.8 | 219.4 | 0.0 | 190.0 | -1,810.1 | 504.2 |
| 2016 | 2,327.9 | 12.6 | 220.3 | 33.9 | 223.6 | -1,828.1 | 499.8 |
| 2017 | 2,329.7 | 21.3 | 220.7 | 55.7 | 248.2 | -1,835.0 | 494.7 |
| 2018 | 2,319.7 | 31.1 | 220.6 | 77.9 | 271.9 | -1,830.4 | 489.2 |
| 2019 | 2,297.6 | 42.2 | 219.8 | 99.6 | 290.9 | -1,816.8 | 480.9 |
| 2020 | 2,263.7 | 54.5 | 218.8 | 120.1 | 309.2 | -1,791.9 | 471.8 |
| 2021 | 2,218.5 | 66.4 | 217.7 | 117.2 | 302.2 | -1,758.2 | 460.2 |
| 2022 | 2,162.6 | 80.2 | 216.3 | 128.5 | 307.0 | -1,715.8 | 446.8 |
| 2023 | 2,096.4 | 94.9 | 214.4 | 138.3 | 312.9 | -1,660.7 | 435.7 |
| 2024 | 2,020.7 | 110.3 | 212.3 | 144.9 | 307.9 | -1,599.8 | 420.9 |
| 2025 | 1,936.1 | 126.4 | 210.0 | 149.3 | 299.5 | -1,533.2 | 402.9 |
| 2026 | 1,843.3 | 142.5 | 207.6 | 154.8 | 291.3 | -1,461.8 | 381.5 |
| 2027 | 1,743.3 | 161.4 | 205.1 | 197.5 | 323.6 | -1,379.4 | 363.9 |
| 2028 | 1,637.0 | 178.5 | 202.3 | 210.6 | 321.7 | -1,292.1 | 344.9 |
| 2029 | 1,525.4 | 194.7 | 199.6 | 216.5 | 313.4 | -1,200.2 | 325.2 |
| 2030 | 1,409.4 | 211.0 | 196.7 | 220.4 | 302.0 | -1,104.3 | 305.1 |
| 2031 | 1,289.5 | 225.8 | 193.9 | 226.5 | 297.3 | -1,001.6 | 288.0 |
| 2032 | 1,166.5 | 241.0 | 191.0 | 210.0 | 264.8 | -896.7 | 269.8 |
| 2033 | 1,041.2 | 253.1 | 188.2 | 194.9 | 237.6 | -789.1 | 252.2 |
| 2034 | 914.6 | 263.9 | 185.4 | 180.2 | 211.7 | -679.0 | 235.6 |
| 2035 | 787.2 | 273.6 | 182.7 | 167.3 | 190.8 | -564.5 | 222.7 |
| 2036 | 659.9 | 282.0 | 180.1 | 154.9 | 164.7 | -452.8 | 207.0 |
| 2037 | 533.0 | 289.1 | 177.5 | 141.8 | 143.0 | -340.0 | 193.0 |
| 2038 | 407.2 | 295.1 | 174.9 | 129.5 | 123.2 | -226.2 | 181.0 |
| 2039 | 282.7 | 299.9 | 172.2 | 116.8 | 101.9 | -113.3 | 169.4 |
| 2040 | 159.8 | 303.8 | 169.5 | 105.0 | 83.0 | -1.1 | 158.7 |
| 2041 | 38.4 | 306.9 | 166.9 | 93.5 | 64.8 | 110.2 | 148.6 |
| 2042 | -81.4 | 309.3 | 164.4 | 82.6 | 49.1 | 221.8 | 140.4 |
| 2043 | -199.5 | 311.0 | 161.8 | 72.8 | 32.5 | 330.7 | 131.1 |
| 2044 | -316.0 | 311.8 | 159.3 | 63.5 | 17.7 | 437.5 | 121.4 |
| 2045 | -430.8 | 314.4 | 156.8 | 54.7 | 4.9 | 545.3 | 114.5 |
| 2046 | -544.1 | 314.3 | 154.3 | 46.3 | 2.5 | 661.6 | 117.5 |
| 2047 | -655.8 | 313.2 | 151.8 | 37.8 | 2.5 | 787.7 | 131.9 |
| 2048 | -766.0 | 311.3 | 149.4 | 29.8 | 2.6 | 922.5 | 156.6 |
| 2049 | -874.8 | 308.7 | 146.9 | 21.8 | 2.7 | 1,065.2 | 190.4 |
| 2050 | -982.4 | 306.9 | 144.5 | 0.1 | 2.7 | 1,230.2 | 247.8 |
| 2051 | -1,089.0 | 304.8 | 142.2 | 0.0 | 2.7 | 1,395.6 | 306.5 |
| 2052 | -1,194.8 | 302.5 | 139.9 | 0.0 | 2.8 | 1,561.0 | 366.3 |
| 2053 | -1,299.7 | 300.0 | 137.6 | 0.0 | 2.8 | 1,726.3 | 426.6 |
| 2054 | -1,403.9 | 297.3 | 135.3 | 0.0 | 2.8 | 1,891.2 | 487.3 |
| 2055 | -1,507.4 | 294.5 | 133.1 | 0.0 | 2.8 | 2,055.5 | 548.1 |
| 2056 | -1,610.3 | 291.6 | 130.9 | 0.0 | 2.8 | 2,219.1 | 608.7 |
| 2057 | -1,712.7 | 288.7 | 128.7 | 0.0 | 2.8 | 2,381.9 | 669.2 |
| 2058 | -1,814.4 | 285.5 | 126.6 | 0.0 | 2.8 | 2,543.6 | 729.3 |
| 2059 | -1,915.3 | 282.3 | 124.5 | 0.0 | 2.8 | 2,704.2 | 788.9 |
| 2060 | -2,015.6 | 279.4 | 122.5 | 0.0 | 2.8 | 2,864.0 | 848.4 |
| 2061 | -2,115.1 | 275.9 | 120.4 | 0.0 | 2.7 | 3,022.2 | 907.1 |
| 2062 | -2,214.1 | 272.5 | 118.5 | 0.0 | 2.7 | 3,179.0 | 964.9 |
| 2063 | -2,312.6 | 269.2 | 116.5 | 0.0 | 2.6 | 3,334.3 | 1,021.7 |
| 2064 | -2,410.5 | 265.7 | 114.6 | 0.0 | 2.6 | 3,488.0 | 1,077.5 |
| 2065 | -2,507.7 | 262.2 | 112.7 | 0.0 | 2.5 | 3,640.1 | 1,132.5 |
| 2066 | -2,604.1 | 258.9 | 110.8 | 0.0 | 2.4 | 3,790.6 | 1,186.5 |
| 2067 | -2,699.9 | 255.6 | 109.0 | 0.0 | 2.3 | 3,939.6 | 1,239.6 |
| 2068 | -2,794.9 | 252.4 | 107.2 | 0.0 | 2.3 | 4,087.0 | 1,292.1 |
| 2069 | -2,889.1 | 249.1 | 105.4 | 0.0 | 2.2 | 4,232.8 | 1,343.7 |
| 2070 | -2,982.5 | 245.7 | 103.7 | 0.0 | 2.1 | 4,376.9 | 1,394.4 |
| 2071 | -3,075.0 | 242.4 | 102.0 | 0.0 | 2.0 | 4,519.4 | 1,444.4 |
| 2072 | -3,166.6 | 239.2 | 100.3 | 0.0 | 1.9 | 4,660.1 | 1,493.5 |
| 2073 | -3,257.4 | 235.9 | 98.7 | 0.0 | 1.8 | 4,799.2 | 1,541.8 |
| 2074 | -3,347.3 | 232.7 | 97.0 | 0.0 | 1.7 | 4,936.6 | 1,589.3 |
| 2075 | -3,436.4 | 229.6 | 95.4 | 0.0 | 1.6 | 5,072.4 | 1,635.9 |
| 2076 | -3,524.7 | 226.5 | 93.8 | 0.0 | 1.5 | 5,206.5 | 1,681.9 |
| 2077 | -3,612.1 | 223.4 | 92.3 | 0.0 | 1.5 | 5,339.1 | 1,727.0 |
| 2078 | -3,698.7 | 220.4 | 90.8 | 0.0 | 1.4 | 5,470.1 | 1,771.4 |
| Total 2004-78 |  | 14,764.5 | 12,023.9 | 4,194.9 | 6,923.4 |  |  |

Based on the Intermediate Assumptions of the 2004 Trustees Report
With Ultimate Real Trust Fund Interest Rate of 3.0\%
Ultimate Real IA Yield Rate of 2.75\%
Annuity Net Real Yield Rate of 2.75\%

[^3]
## Table B1. Monthly Retirement Benefits at Age 65 Under Sam Johnson Proposal

Benefits for one spouse of a two-earner couple -- Spouse same age with similar earnings

|  | Constant | 2004 Dolla |  |  |  |  | Proposal To | tal Annuity | Proposal Worker | Proposal Inclu | otal Annuity g Minimum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Proposal |  | IA Annuity | IA Annuity | Withou | ut Minimum | Minimum | as \% of P | Sched Ben |
|  | Present | Present | without IA | Proposal | with Low | with | with Low | with | Annuity-- | with Low | with |
| Year | Law | Law | CPI- | Recognition | (risk adj) | Expected | (risk adj) | Expected | Up to 100\% | (risk adj) | Expected |
| Attain | Scheduled | "Payable" | Indexed | Bond | IA Yield | 1 I Yield | 1 A Yield | IA Yield | of Poverty | IA Yield | IA Yield |
| Age 65 | Benefit | Benefit | Benefit | Annuity | (2.75 real) | (4.65 real) | (2.75 real) | (4.65 real) | at NRA $^{1}$ | (2.75 real) | (4.65 real) |
|  |  |  |  |  |  | ed Low Ear |  |  |  |  |  |
| 2015 | 772 | 772 | 764 | 560 | 58 | 64 | 618 | 624 | 724 | 93.8 | 93.8 |
| 2025 | 796 | 796 | 708 | 362 | 158 | 195 | 520 | 557 | 672 | 84.5 | 84.5 |
| 2035 | 885 | 885 | 708 | 204 | 289 | 397 | 493 | 602 | 672 | 76.0 | 76.0 |
| 2045 | 986 | 710 | 709 | 47 | 435 | 661 | 482 | 708 | 672 | 68.2 | 71.8 |
| 2055 | 1,099 | 769 | 710 NA | 0 | 507 | 791 | 507 | 791 | 672 | 61.2 | 72.0 |
|  |  |  |  |  | Scale | Medium E | arner |  |  |  |  |
| 2015 | 1,272 | 1,272 | 1,259 | 923 | 129 | 142 | 1,051 | 1,065 | 724 | 82.7 | 83.7 |
| 2025 | 1,311 | 1,311 | 1,167 | 596 | 351 | 434 | 947 | 1,030 | 672 | 72.2 | 78.6 |
| 2035 | 1,458 | 1,458 | 1,166 | 337 | 641 | 883 | 978 | 1,220 | 672 | 67.1 | 83.7 |
| 2045 | 1,625 | 1,170 | 1,168 | 78 | 966 | 1,469 | 1,044 | 1,546 | 672 | 64.3 | 95.2 |
| 2055 | 1,810 | 1,267 | 1,170 NA | 0 | 1,127 | 1,757 | 1,127 | 1,757 | 672 | 62.3 | 97.1 |
|  |  |  |  |  | Sca | d High Ear |  |  |  |  |  |
| 2015 | 1,687 | 1,687 | 1,669 | 1,224 | 206 | 228 | 1,430 | 1,452 | 724 | 84.7 | 86.1 |
| 2025 | 1,739 | 1,739 | 1,547 | 791 | 562 | 695 | 1,352 | 1,485 | 672 | 77.8 | 85.4 |
| 2035 | 1,933 | 1,933 | 1,546 | 447 | 1,026 | 1,413 | 1,472 | 1,860 | 672 | 76.2 | 96.2 |
| 2045 | 2,155 | 1,551 | 1,549 | 103 | 1,546 | 2,350 | 1,649 | 2,453 | 672 | 76.5 | 113.9 |
| 2055 | 2,400 | 1,680 | 1,551 NA | 0 | 1,803 | 2,812 | 1,803 | 2,812 | 672 | 75.1 | 117.2 |
|  |  |  |  |  | Stead | Maximum | arner |  |  |  |  |
| 2015 | 2,042 | 2,042 | 2,020 | 1,481 | 369 | 405 | 1,850 | 1,887 | 724 | 90.6 | 92.4 |
| 2025 | 2,124 | 2,124 | 1,889 | 966 | 871 | 1,062 | 1,837 | 2,028 | 672 | 86.5 | 95.5 |
| 2035 | 2,365 | 2,365 | 1,891 | 546 | 1,550 | 2,111 | 2,096 | 2,658 | 672 | 88.6 | 112.4 |
| 2045 | 2,634 | 1,896 | 1,894 | 126 | 2,462 | 3,773 | 2,588 | 3,899 | 672 | 98.3 | 148.0 |
| 2055 | 2,928 | 2,050 | 1,893 NA | 0 | 2,972 | 4,724 | 2,972 | 4,724 | 672 | 101.5 | 161.3 |

Based on the intermediate assumptions of the 2004 Trustees Report
IA is assumed to be invested $50 \%$ in equity index fund, $30 \%$ in Corporate Bond fund, $20 \%$ Treasury Bonds, 25 basis points annual administrative cost
Expected equity yield is 6.5 percent real, Corporate bond yield 3.5 percent real, Treasury Bond yield 3 percent real
IA annuities are assumed to be joint and $2 / 3$ survivor life annuities, CPI indexed, $3 \%$ net expected real yield (2.75\% net risk adjusted real yield)
Recognition Bonds are assumed to be equivalent to the present value at NRA of the retired worker benefit times (age on 1-1-2005-22)/45
${ }^{1}$ For 35-year ( 140 QC) workers. Scales to 0 for 40 QCs. Assume 140 QCs for example.
OCACT/SSA February 5, 2005

## Table B2. Monthly Retirement Benefits at Age 65 Under Sam Johnson Proposal

## Total benefits for one-earner married couple

|  | Constant | 2004 Dolla |  |  |  |  | Proposal To | tal Annuity | Proposal Worker | Proposal Including P | otal Annuity p Minimum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Proposal |  | IA Annuity | IA Annuity | Withou | ut Minimum | Minimum | as \% of P | Sched Ben |
|  | Present | Present | without IA | Proposal | with Low | with | with Low | with | Annuity-- | with Low | with |
| Year | Law | Law | CPI- | Recognition | (risk adj) | Expected | (risk adj) | Expected | Up to 100\% | (risk adj) | Expected |
| Attain | Scheduled | "Payable" | Indexed | Bond | IA Yield | IA Yield | IA Yield | IA Yield | of Poverty | IA Yield | IA Yield |
| Age 65 | Benefit | Benefit | Benefit | Annuity | (2.75 real) | (4.65 real) | (2.75 real) | (4.65 real) | at $\mathrm{NRA}^{1}$ | (2.75 real) | (4.65 real) |
|  |  |  |  |  | Sca | ed Low Earn |  |  |  |  |  |
| 2015 | 1,152 | 1,152 | 1,139 | 560 | 58 | 64 | 618 | 624 | 724 | 89.7 | 90.0 |
| 2025 | 1,195 | 1,195 | 1,063 | 362 | 158 | 195 | 520 | 557 | 672 | 78.0 | 79.6 |
| 2035 | 1,310 | 1,310 | 1,048 | 204 | 289 | 397 | 493 | 602 | 672 | 70.1 | 74.3 |
| 2045 | 1,460 | 1,051 | 1,050 | 47 | 435 | 661 | 482 | 708 | 672 | 62.5 | 70.3 |
| 2055 | 1,627 | 1,139 | 1,051 NA | 0 | 507 | 791 | 507 | 791 | 672 | 56.9 | 65.6 |
|  |  |  |  |  | Scal | Medium E | rner |  |  |  |  |
| 2015 | 1,897 | 1,897 | 1,877 | 923 | 129 | 142 | 1,051 | 1,065 | 724 | 65.9 | 66.3 |
| 2025 | 1,969 | 1,969 | 1,752 | 596 | 351 | 434 | 947 | 1,030 | 672 | 58.2 | 60.3 |
| 2035 | 2,159 | 2,159 | 1,727 | 337 | 641 | 883 | 978 | 1,220 | 672 | 53.8 | 59.4 |
| 2045 | 2,406 | 1,732 | 1,730 | 78 | 966 | 1,469 | 1,044 | 1,546 | 672 | 49.6 | 64.3 |
| 2055 | 2,680 | 1,876 | 1,732 NA | 0 | 1,127 | 1,757 | 1,127 | 1,757 | 672 | 46.1 | 65.6 |
|  |  |  |  |  | Sca | d High Ear |  |  |  |  |  |
| 2015 | 2,516 | 2,516 | 2,489 | 1,224 | 206 | 228 | 1,430 | 1,452 | 724 | 57.2 | 57.7 |
| 2025 | 2,612 | 2,612 | 2,323 | 791 | 562 | 695 | 1,352 | 1,485 | 672 | 51.8 | 56.9 |
| 2035 | 2,862 | 2,862 | 2,289 | 447 | 1,026 | 1,413 | 1,472 | 1,860 | 672 | 51.4 | 65.0 |
| 2045 | 3,190 | 2,297 | 2,294 | 103 | 1,546 | 2,350 | 1,649 | 2,453 | 672 | 51.7 | 76.9 |
| 2055 | 3,553 | 2,487 | 2,297 NA | 0 | 1,803 | 2,812 | 1,803 | 2,812 | 672 | 50.7 | 79.1 |
|  |  |  |  |  | Steady | Maximum E | arner |  |  |  |  |
| 2015 | 3,044 | 3,044 | 3,012 | 1,481 | 369 | 405 | 1,850 | 1,887 | 724 | 60.8 | 62.0 |
| 2025 | 3,190 | 3,190 | 2,837 | 966 | 871 | 1,062 | 1,837 | 2,028 | 672 | 57.6 | 63.6 |
| 2035 | 3,502 | 3,502 | 2,801 | 546 | 1,550 | 2,111 | 2,096 | 2,658 | 672 | 59.9 | 75.9 |
| 2045 | 3,900 | 2,808 | 2,804 | 126 | 2,462 | 3,773 | 2,588 | 3,899 | 672 | 66.4 | 100.0 |
| 2055 | 4,336 | 3,035 | 2,803 NA | 0 | 2,972 | 4,724 | 2,972 | 4,724 | 672 | 68.5 | 108.9 |

Based on the intermediate assumptions of the 2004 Trustees Report
IA is assumed to be invested $50 \%$ in equity index fund, $30 \%$ in Corporate Bond fund, $20 \%$ Treasury Bonds, 25 basis points annual administrative cost
Expected equity yield is 6.5 percent real, Corporate bond yield 3.5 percent real, Treasury Bond yield 3 percent real
IA annuities are assumed to be joint and $2 / 3$ survivor life annuities, CPI indexed, $3 \%$ net expected real yield ( $2.75 \%$ net risk adjusted real yield) Recognition Bonds are assumed to be equivalent to the present value at NRA of the retired worker benefit times (age on 1-1-2005-22)/45
${ }^{1}$ For 35 -year ( 140 QC) workers. Scales to 0 for 40 QCs. Assume 140 QCs for example.
OCACT/SSA February 5, 2005


[^0]:    ${ }^{1}$ The normal retirement age is the age that full benefits are payable. This age is 66 for those born in 1950 to 1954; is 66 and 2 months for those born in 1955; is 66 and 4 months for those born in 1956; is 66 and 6 months for those born in 1957; is 66 and 8 months for those born in 1958; is 66 and 10 months for those born in 1959; and is 67 for those born in 1960 and later.

[^1]:    ${ }^{2}$ Actuarial note 2004.3 provides details about the calculation of the scaled earner factors. Actuarial note 2004.3 is located at the following internet site: http://www.ssa.gov/OACT/NOTES/ran3/an2004-3.pdf.

[^2]:    ${ }^{3}$ The trust fund ratio for a year is calculated as (1) the level of assets at the beginning of the year divided by (2) program cost during the year, excluding recognition bonds.
    ${ }^{4}$ Without this modification to permit borrowing, the current program would presumably operate with reduced benefits based on available tax revenue after the OASDI Trust Funds exhaust in 2042.
    ${ }^{5}$ Two-thirds of the benefit level continues to the survivor.

[^3]:    Office of the Actuary
    Social Security Administration
    February 11, 2005

