# SOCIAL SECURITY 

## MEMORANDUM

Date: September 10, 2003
Refer To: TCC
To: Stephen C. Goss, Chief Actuary
From: Chris Chaplain, Actuary
Alice H. Wade, Deputy Chief Actuary
Subject: Estimated Long-Range OASDI Financial Effect of a Proposal Developed by Representative Nick Smith--INFORMATION

This memorandum provides the estimated effect on the long-range OASDI financial status of a proposal developed by Representative Nick Smith. This proposal is closely related to the "Retirement Security Act" (H.R. 5734) which was introduced in the $107^{\text {th }}$ Congress by Representative Nick Smith on November 14, 2002. Additional clarifications and modifications of H.R. 5734, which make up this proposal, were provided by Kurt Schmautz of Representative Smith's staff.

## Proposal Summary

The proposal would (1) modify the OASDI benefit formula for most beneficiaries; (2) allow for voluntary investments through redirected payroll taxes in Personal Retirement Savings Accounts (PRSAs), which would reduce each participating worker's OASI benefits based on the value of the PRSA accumulated at a specified interest rate; and (3) transfer specified amounts from the General Fund of the Treasury to the OASDI Trust Funds in fiscal years 2007 through 2013.

This memorandum provides a detailed description of the provisions of the proposal and provides estimates of the financial effect due to changes in the OASDI program. Tables at the end of this memorandum present estimates of the financial operations of the combined Trust Funds of the Old-Age and Survivors Insurance (OASI) and the Disability Insurance (DI) programs, aggregate flows and accumulations for personal accounts, effects on annual Federal unified budget balances, and cash flows from the General Fund of the Treasury to the OASDI Trust Funds. Because participation in the PRSA program would be optional, estimates are presented in this memorandum for three different levels of participation--0 percent, 67 percent, and 100 percent.

Initial participation in the personal accounts would be expected to be below 100 percent because the benefit offset for participants would exceed the annuity distribution from the accumulation in a conservatively invested personal account (for example, an account invested solely in long-term U.S. Treasury bonds). Workers would be expected to understand that there is a substantial possibility that they might realize a net real annual rate on PRSA holdings that
is less than the rate used for benefit offset purposes (real rate provided by long-term Treasury bonds plus 0.7 percent). In this event, workers would receive lower total Social Security benefits and PRSA income, than they would have received from Social Security benefits without participation in the PRSA plan. Thus, we believe that 67 percent participation is the more likely scenario, especially in the near term. However, with the proposal's increasing reductions in the basic Social Security levels and the increasing portion of payroll taxes that can be redirected to the PRSA, even low yields on PRSAs will ultimately result in more retirement benefits for participants because offsets are limited by the size of the basic Social Security benefit.

Taken as a whole, the proposal would improve the long-range actuarial balance by an estimated 2.10 percent of taxable payroll for 100-percent participation in PRSAs, by an estimated 2.38 percent of taxable payroll for the 67-percent participation level, and by an estimated 3.80 percent of taxable payroll assuming no participation. In addition, all participation levels would be expected to result in sustainable solvency for the foreseeable future, as trust fund ratios are projected to be rising substantially at the end of the 75 -year projection period.

Estimates of the long-range actuarial balance above indicate that participation in the PRSA results in lower levels of OASDI Trust Fund assets through the projection period. This results from the fact that PRSA contributions redirected from the trust funds to the PRSAs are followed by offsets against OASI benefits with some delay. If the PRSAs and the OASDI Trust Funds are viewed as components of a larger "total system", then total system assets would include both the trust fund and the PRSA assets. As described later in this memorandum, and shown in attached tables, expected total system assets are larger with PRSA participation (or more participation).

All estimates are based on the intermediate assumptions of the 2003 OASDI Trustees Report, as well as the additional assumptions noted in this memorandum.

## Personal Retirement Savings Accounts (PRSAs)

## Specification of PRSAs

For those workers choosing to participate in the PRSA program, initial contributions (redirected payroll taxes) would be deposited in an Interim Investment Fund (IIF). Each worker chooses from one of the three investment accounts available in the IIF. These accounts have differing portfolio allocations of common stocks and corporate bonds. The default investment account is invested 60 percent in common stock and 40 percent in corporate bonds and the other two accounts are invested 40 percent stocks/ 60 percent bonds and 80 percent stocks/ 20 percent bonds. Common stock investments would replicate some broad stock index (such as the Wilshire 5000), while corporate bond investments would be held in a portfolio containing "a diverse range of corporate bonds, taking into full account the opposing considerations of risk and maximizing return."

Once a worker's IIF account balance reaches \$2,500 in 2005 dollars (with such amount adjusted in subsequent years by the same cost of living adjustment used for Social Security benefits), the
worker can elect to have his account balance transferred into a PRSA. The PRSA offers a broad range of regulated investment-company mutual funds approved by the Secretary of the Treasury. Such mutual funds would be required to replicate a broad-based index of domestic stocks, domestic bonds (corporate or government), or foreign stocks, and would be determined "not to involve high risks to the investor".

Account contributions would be collected using the existing structure for collecting OASDI payroll tax contributions. In addition, account contributions in both the IIF and the PRSA would be managed by a central authority in a manner similar to that of the Federal Employee Thrift Savings Plan. The central authority would maintain individual account records and would make account transactions in aggregate amounts when dealing with the private investment firms.

While the IIF and PRSAs are distinct investment accounts, the proposal provisions with regard to distributions and Social Security benefit offset are the same. Therefore, we will use the term "PRSAs" throughout this memorandum to signify monies held in both the IIF and in PRSAs, unless specifically noted otherwise.

## Level and Financing of Contributions to PRSA

For each worker choosing to participate, the proposal would redirect portions of OASDI payroll tax contributions into a PRSA. For years 2005 through 2025, 2.5 percent of each participating worker's taxable earnings (or 20.16 percent of the worker's combined employee, employer, and self-employment payroll taxes at present-law tax rates) would be redirected. For years 2026 through 2038, 2.75 percent of each participating worker's taxable earnings would be redirected. For years after 2038, the portion redirected would be determined with the intent that the balance left in the OASDI Trust Funds should trend stably toward 15 percent of the estimated annual expenditures (that is, a 15 percent "trust fund ratio"). However, no more than 8 percent of each participating worker's taxable earnings (or 64.52 percent of the combined employee, employer, and self-employment tax at present-law tax rates) can be redirected in any year after 2038. The portion of payroll tax redirected for each participating worker is intended to be stable or rising over time. In addition, certain low-earners who elect to participate in the PRSA could receive an additional credit (up to \$300) to their PRSA.

Redirected payroll taxes would be shared equally between married spouses. Any divorce would end future earnings sharing between the previously married couples.

Each participating worker (and spouse) can make additional voluntary cash contributions, beyond that of the redirected payroll taxes, up to $\$ 2,000$ yearly into the PRSAs. Workers can also transfer money into the PRSAs as specified rollover contributions from other designated trusts and from other eligible retirement plans. ${ }^{1}$

[^0]
## PRSA Accumulations

PRSA portfolios are to be invested, both prior to retirement benefit entitlement and after benefit entitlement, in approved mutual funds. We assume that the aggregate investment portfolio of all PRSAs will on average be distributed in a manner about equivalent to 60 percent equities and 40 percent high-grade corporate bonds. This average assumed investment portfolio is somewhat more aggressive than for some other proposals because of the relatively high specified offset yield rate (see next section). An annual administrative expense charge of 30 basis points is assumed on average.

The long-term ultimate average real yield on stock investments made in the future is assumed to be 6.5 percent, the same as used for other proposals over the past year. This assumed equity yield is somewhat less than the 7-percent real yield that was assumed for the 1994-96 Advisory Council. This reduction in expected average yield is consistent with both (1) a growing consensus among economists that the market may value equities at somewhat higher average price-to-earnings ratios in the future based on broader access and a reduction in the perceived level of risk, and (2) the Trustees' increase in the assumed real yield on Treasury bonds from the level assumed in 1995.

The ultimate real yield on long-term high-grade corporate bonds is assumed to average 3.5 percent, or 0.5 percentage point higher than the 3.0 percent real yield for U.S. Government longterm securities assumed for the 2003 Trustees Report. This spread between corporate and U.S. Government bond yields is consistent with the spread experienced over the past 40 or 70 years, on average. It should be noted, however, the spread has been much smaller over the past 20 years. The expected ultimate average real portfolio yield for the base projection would thus be 5.00 percent, net of administrative expense,

$$
(0.6 * 6.5 \%+0.4 * 3.5 \%-0.3 \%=5.0 \%)
$$

## Account Distributions and Benefit Offset

Under the proposal, workers could take life annuities or periodic regulated distributions, but not lump sums, from their PRSAs starting as early as age 59 1/2. However, CPI-indexed life annuities are required to be purchased from the PRSA to the extent needed, so that monthly annuity payments, when added to the Social Security benefit, provide for total payments that are not less than the monthly poverty level amount for the applicable year. Any remaining PRSA balances may be used either to purchase life annuities or to make periodic scheduled withdrawals designed to last at least through the beneficiary's expected remaining life.

The proposal does not allow for distributions from the PRSAs in the event of disability. If the worker dies before OASI benefit entitlement, the proceeds of the PRSA go to the worker's estate, regardless of whether the worker is survived by a spouse.

For each PRSA holder, OASI benefits payable to such individual will be reduced according to a hypothetical account accumulation and annuity computation using a specified "offset yield rate." The offset yield rate for each year for this plan is the actual realized yield from long-term U.S. bonds (the intermediate assumptions of the OASDI Trustees Report would be used for future years) plus 0.7 percent.

The hypothetical account accumulation of an individual at entitlement to retired worker, aged spouse, or aged survivor benefits would be equal to the amount of contributions credited each year to that individual's PRSA from redirected payroll taxes (and from $1 / 2$ of the low-earner additional credit of up to \$300), accumulated using the specified offset yield rate for each past year. The benefit offset for this individual would be computed as a CPI-indexed single life annuity purchased with this hypothetical accumulation. The offset annuity would be based on the expected future unisex mortality, inflation, and real interest rates used for the intermediate assumptions of the most recent OASDI Trustees Report.

If this hypothetical offset annuity exceeds the OASI benefit, then no Social Security benefits are paid. It should be emphasized that no benefit offset is computed or applied for benefits from the DI Trust Fund.

This provision provides a financial gain for workers who realize an actual net return on their PRSA amounts that is, on average, higher than the average offset rate. On the other hand, workers who realize an average net return that is lower than the offset rate can be disadvantaged by their participation in the PRSA, especially if the present value of expected OASI benefits exceeds the hypothetical accumulation of the PRSA amounts. In this scenario, a worker's combined PRSA and Social Security proceeds would be less than the Social Security benefit that would be payable without the PRSA participation.

## Taxation of PRSAs and Distributions

Funds accumulate in the PRSAs (and in the IIF) on a tax-deferred basis. Workers also receive a Federal income tax deduction of 50 percent of their optional additional cash contributions of up to $\$ 2,000$ yearly.

Amounts actually distributed from PRSAs (excluding the amounts transferred into the PRSAs as specified rollover contributions from other designated trusts and from other eligible retirement plans) receive the same taxation treatment as Social Security benefits do under current law. Revenue from personal income tax on the distributions would be transferred to the OASI and HI Trust Funds in the same manner as for revenue from taxed OASDI benefits under current law. For workers who die before OASI entitlement, PRSA amounts that go to the estate of the deceased worker are not taxed.

## Benefit Provisions

## Adjustments to Benefit Formula with Specified Minimum Benefits

The provisions of this proposal would modify the benefit formula in several ways. First, the proposal provides for a new third bend point, to be set initially at about \$4,315 in 2004 (that is equal to about 116 percent of the second bend point). The 15 -percent formula factor that initially would apply above the new third bend point would decline by 2 percentage points per year until reaching 5 percent in 2009. Second, the current law second bend point and the new third bend point described above would, starting for new eligibles in 2005 and later, be indexed by changes in the consumer price index rather than by changes in the Social Security average wage index. Third, starting with new eligibles in 2005, the proposal stipulates multiplying the 32 -percent formula factor by 0.98 per year and the 15 -percent by 0.975 per year. Additionally, the 5-percent factor, that applies to amounts over the new third bend point and is applicable to new eligibles in 2009 and later, is reduced by multiplying the factor by 0.975 per year for new eligibles starting in 2010. Ultimately, the combined effect of reducing the benefit formula factors and increasing the bend points more slowly than under current law would be to gradually move toward a flat Social Security benefit based on 90 percent of the average indexed monthly earnings (AIME) below the current-law first bend point (\$616 for individuals first eligible for benefits in 2004).

The proposal does provide limits on reductions in the PIA for workers currently near retirement age, near-term survivor benefits, and for most disabled workers. For example, retired workers born before 1943 (and survivor accounts where the death of the worker was before 2005) are not affected by the above benefit formula adjustments. Retired workers, who were born between 1943 and 1956 and have annual average indexed earnings less than \$25,000 in 2005 nominal dollars, cannot have their PIA reduced below the "Maximum Percentage Reduction in PIA" specified in the following table.

# Maximum Percentage Reduction in PIA for Near-Term Retired Workers and Survivors Under a Proposal Developed by Representative Nick Smith 

|  | Average Annual Career Earnings |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5000 | 0000 | 15000 | 0000 | 21000 | 22000 | 23000 | 24000 | 25000 |
| Eligibilit | AIME (in 2005 wage-indexed dollars) |  |  |  |  |  |  |  |  |
| Year ${ }^{1}$ | 417 | 833 | 1250 | 1667 | 1750 | 1833 | 1917 | 2000 | 2083 |
| 2005 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 |
| 2006 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 |
| 2007 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 |
| 2008 | 2.0 | 2.0 | 2.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 |
| 2009 | 3.0 | 3.0 | 3.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 |
| 2010 | 4.0 | 4.0 | 4.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 |
| 2011 | 5.0 | 5.0 | 5.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| 2012 | 6.0 | 6.0 | 6.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 | 11.0 |
| 2013 | 7.0 | 7.0 | 7.0 | 7.0 | 8.0 | 9.0 | 10.0 | 11.0 | 12.0 |
| 2014 | 8.0 | 8.0 | 8.0 | 8.0 | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 |
| 2015 | 9.0 | 9.0 | 9.0 | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 |
| 2016 | 10.0 | 10.0 | 10.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 |
| 2017 | 11.0 | 11.0 | 11.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 |
| 2018 | 12.0 | 12.0 | 12.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |

${ }^{1}$ In general, the eligibility year is the year of attainment of age 62 for retired worker benefits and the year of death of the deceased worker for survivor benefits.

The proposal contains two benefit "guarantees" for disability beneficiaries. For a disabled worker with an AIME below \$1,667 (in 2004 nominal dollars), the proposal would not change the benefit formula from current law. For a disabled worker with an AIME above $\$ 1,667$, the proposal stipulates a minimum benefit based on using an AIME of \$1,667 in the current-law benefit formula. The $\$ 1,667$ threshold would be indexed in years after 2004 to changes in SSA's average wage index. These benefit "guarantees" depend upon passage of Appropriation Acts by Congress that would provide reimbursement to the Disability Trust Fund for the cost of these guarantees. For the estimates in this memorandum, Appropriation Acts covering the cost of these guarantees are assumed to be passed in a timely manner.

Upon conversion from disability benefits to retirement benefits at normal retirement age (NRA), the proposal would compute benefits based on a weighted average computation of the prior disability benefit level and retirement-only benefit level. The weights in the weighted average computation would be based on the proportion of years during ages 22 through 61 in which the worker was disabled. For workers disabled at a relatively early age, their PIA upon attaining retirement age would be very close to the PIA they were receiving as a disability beneficiary just before retirement. For workers disabled close to normal retirement age, their

PIA upon attaining NRA would be closer to the retired worker PIA under the proposal without the disability benefit "guarantees."

The combined effect of these benefit-level provisions is an estimated improvement in the actuarial balance of 3.12 percent of taxable payroll.

## Increase in Normal Retirement Age

The normal retirement age would be increased at the rate of two months per year for 2000 through 2011, when it would reach age 67 for persons attaining age 62 in 2011 (thus eliminating the hiatus under current law). After 2011, the normal retirement age would be increased one month every two years. The estimated long-range financial effect of this provision alone is an improvement in the actuarial balance of 0.64 percent of taxable payroll.

## Cover All Newly Hired State and Local Government Employees

This provision would require that State and local government employees, newly hired in 2004 and later, be covered under the Social Security program beginning in 2005. This provision alone would improve the OASDI long-range actuarial balance by an estimated 0.20 percent of taxable payroll.

## Increase Benefits for Widowed Individuals

This provision would provide a 10-percent increase in the benefits of individuals who are in a "widowed state" and receiving aged surviving spouse benefits or retired worker benefits. This provision is applicable to all qualifying "widowed" individuals receiving benefits in 2004 or later. The long-range OASDI actuarial balance would decrease by an estimated 0.31 percent of taxable payroll under this provision alone.

## Accelerate the Delayed Retirement Credit (DRC)

Under current law, the delayed retirement credit gradually increases to a high of 8 percent per year, for workers attaining age 66 in 2009 or later. This provision would raise the current-law DRC to 8 percent per year for workers who attain normal retirement age after 2004. This provision alone is estimated to have a negligible effect on the OASDI actuarial balance--in this case, a decrease in the actuarial balance of less than 0.005 percent of taxable payroll.

## Credit Up to 5 Child Care Dropout Years

Under this provision, workers could have up to 5 additional years excluded in determining their AIME, for years in which they lived substantially throughout the year with a child under the age of 13. In order to qualify for this provision, the year must be includable in the worker's
computation base years (without regard to this provision), and the worker must have no earnings for that year. Both parents could claim a dropout year for the same child in the same year. However, a year cannot be a child care dropout year if the number of benefit computation years falls below two. The provision is effective for computation base years 2004 and later; it is not retroactive to years before 2004. The long-range OASDI actuarial balance under this provision alone would decrease by an estimated 0.08 percent of taxable payroll.

## Eliminate the Family Maximum for Disabled Children Aged 18 or Older

Under current law, disabled adult children aged 18 or older can qualify for OASDI benefits if they are children of an entitled retired worker, entitled disabled worker, or an otherwise eligible survivor of a deceased, insured worker. However, such benefits may be reduced if more than one dependent on an account exists because of the family maximum provision, which sets a maximum total benefit that can be paid from a given worker's account.

Under this provision, disabled children aged 18 or older would have their benefits computed without regard to the family maximum. The provision would apply with respect to benefits in 2004 and later. This provision alone would decrease the long-range OASDI actuarial balance by an estimated 0.01 percent of taxable payroll.

## Additional Specified Transfers to and from the General Fund of the Treasury

Several provisions of this proposal call for additional specified or conditional transfers between the General Fund of the Treasury and the OASDI Trust Funds, as follows:

- Require transfers from the General Fund to the trust funds for fiscal years 2007 through 2013. Amounts indicated in the law are $\$ 21$ billion for 2007, $\$ 47$ billion for 2008, $\$ 78$ billion for 2009, $\$ 106$ billion for 2010, $\$ 147$ billion for 2011, $\$ 184$ billion for 2012, and \$283 billion for 2013.
- Subject to passage of Appropriation Act, provide annual reimbursements from the General Fund to the Disability Insurance Trust Fund for the cost increase resulting from establishing minimum benefit guarantees for disability beneficiaries. For the estimates provided in this memorandum, annual Appropriation Acts covering this additional cost are assumed to be passed in a timely manner. As stated earlier in the "Adjustments to Benefit Formula with Specified Minimum Benefits" section, individuals with AIMEs below \$1,667 (in 2004 dollars) would receive benefits based on the present-law benefit formula. In addition, individuals with AIMEs at $\$ 1,667$ or higher (in 2004 dollars) would receive no lower than the PIA computed using an AIME of $\$ 1,667$ (in 2004 dollars) in the present-law benefit formula.
- Provide for transfers from the trust funds to the General Fund in any year after 2018 where the annual aggregate amount of redirected payroll taxes to PRSAs is greater than 5 percent of Social Security taxable payroll, subject to certain conditions. The transfer amount would be (if positive): payroll tax revenues to the trust funds for the year (excluding amounts
redirected to PRSAs) minus 50 percent of projected benefits for the year minus 5 percent of taxable payroll. If this amount is negative, no transfers would occur. The total amounts transferred to the General Fund under this provision (in present value) are limited to the present value of the total transfers from the General Fund to the trust funds in years 2007 through 2013.


## Annual Estimates of Trust Fund Operations, Estimated Effects on the Unified Budget Balance, and Cash Flow between the Trust Funds and the General Fund of the Treasury

Provided below are summarized descriptions of the attached tables, some of which have been referenced throughout this memorandum. For a more detailed description of tables 1 through 3d, please see our January 31, 2002 memorandum (pp. 21-26) on financial effects of the three models developed by the President's Commission to Strengthen Social Security. This memorandum is available on the Internet at http://www.ssa.gov/OACT/solvency/PresComm_20020131.pdf.

The attached tables 1 through 3 provide projected OASDI financial effects of this proposal under each of the following three different assumed participation levels:

- 0-percent worker participation in the PRSA program (tables 1, 1a, 1b, and 1c ),
- 67-percent worker participation in the PRSA program (tables 2 , $2 \mathrm{a}, 2 \mathrm{~b}$, and 2 c ), and
- 100-percent worker participation in the PRSA program (tables 3, 3a, 3b, and 3c).

Estimates for the basic provisions (0-percent participation) represent the aggregate financial effects assuming no voluntary participation in personal accounts. Estimates presented for 67percent participation are based on the assumption that two-thirds of all potential personal account contributions are made by two-thirds of the workers at every level of earnings. If more than two-thirds of high earners participated and less than two-thirds of the remaining earners participated, results would be different. Due to the nature of the personal account contributions and the benefit offset provisions, aggregate financial estimates are sensitive to the precise distribution of participation rates by earnings level. As discussed in the "Proposal Summary" section, we believe that 67 percent participation in personal accounts is the more likely scenario.

## OASDI Trust Fund Operations

Table A provides a brief description of the plan provisions and provides estimates of the effect of each provision, as well as the effect of all provisions combined, on the long-range actuarial balance assuming a 100-percent participation level. Table B provides similar information assuming a 67-percent participation rate. Tables A and B show that for the basic provisions (0percent participation), the combined effect of enacting the benefit provisions would improve the long-range OASDI actuarial balance by an estimated 3.80 percent of taxable payroll. In addition, table A shows that the long-range OASDI actuarial balance under the proposal, assuming 100-percent worker participation, would improve by an estimated 2.10 percent of taxable payroll. Table B, assuming 67-percent worker participation, displays that the longrange actuarial balance would improve by an estimated 2.38 percent of taxable payroll.

Tables 1, 2, and 3 show estimated annual and summarized income rates, cost rates, and balances under the proposal assuming the different participation levels. In addition, the tables show the trust fund ratio for each year, as well as changes in contribution rates to the OASDI Trust Funds.

## Additional Aggregate Values for Trust Funds and Personal Accounts

Tables 1a, 2a, and 3a show estimated trust fund balances at the end of each year under current law and under the proposal. The "IA/Annuity Assets EOY" column shows the total PRSA and annuity account assets at the end of each year, assuming that the accounts accumulate at the assumed average net yield rate ( 5.00 percent real). The final two columns show aggregate PRSA contributions and disbursements for each year. All of these amounts appear on a present value basis as of January 1, 2003.

Annual dollar flows and accumulations of the personal accounts are presented in the last three columns of these tables. These estimates are based on very specific assumptions that all personal account assets are converted to CPI-indexed life annuities at retirement (see description in the section on assumptions above). In practice, many individuals would likely annuitize only part of their personal account accumulation so estimated annuity assets are overstated to some degree. Total personal account and annuity assets (referred to as "IA/Annuity Assets EOY" in the tables) include both the assets of personal accounts held prior to retirement, and the assets held by the annuity provider after retirement. If the personal accounts are considered as a part of "Social Security", it is reasonable to combine the amounts of trust fund assets and personal accounts for a representation of total system assets.

The first three columns of tables 2a1 and 3a1 display the total PRSA and annuity account assets, annual PRSA contributions, and annual PRSA disbursements that are shown in tables 2a and 3a, respectively. The amounts listed in these three columns are used in determining estimates of income from taxation of benefits. For the accumulation phase of the individual accounts, workers are assumed to maintain PRSAs that would have an average distribution of 60 percent in equities and 40 percent in corporate bonds. Based on the rates of return assumed for stocks and bonds, this implies an average annual real yield rate of 5.0 percent, after deducting 0.3 percent assumed for administrative expense. During the distribution or annuity phase, the net real yield is assumed to be the same as long-term U.S. Treasury bonds (3 percent).

Due to the large degree of uncertainty associated with both the average portfolio distribution and future returns on equity and corporate bonds, tables 2a1 and 3a1 display estimates of individual account assets for two alternative variations on the expected account yield during the accumulation phase. The low yield reflects an account yield equal to the assumed real return on long-term government bonds (3 percent), less the administration expense factor both before and after annuitization. This illustration is consistent with assuming that individuals will:

- Invest more conservatively (100 percent in Treasury bonds),
- Realize lower-than-expected returns on account assets (by 2.3 percentage points), or
- View accounts on a "risk-adjusted" basis where all assets are assumed to have an ultimate real risk-adjusted return of 3 percent.

The second variation of the yield assumption is referred to as high yield and is consistent with assuming that individuals will:

- Invest more heavily in equity (70 percent rather than 60 percent) and less in bonds, or
- Realize higher-than-expected returns on account assets ( 0.3 percentage point higher on all assets or 0.5 percentage point higher on equities for an ultimate real equity yield of 7 percent).
For the second variation, the net real yield during the distribution or annuity phase is assumed to be the same as long-term U.S. Treasury bonds (3 percent).


## Effects on Annual Federal Unified Budget Balances

Tables $1 \mathrm{~b}, 2 \mathrm{~b}$, and 3 b provide a rough estimate of the effects of the proposal on the annual Federal unified budget balance for each calendar year through 2078. All amounts in this table appear in constant 2003 dollars (that is, dollar amounts that are indexed back to 2003 based on the consumer price index (CPI)). The first three columns in these tables include sources of changes to the unified budget balance, as follows:

- Annual aggregate OASDI payroll taxes plus credits for low-earners funded by General Fund transfers that are redirected to PRSAs -- these amounts result in a reduction to the unified budget balance because the monies go into personal accounts;
- Estimated annual amounts of OASDI benefit offset based on hypothetical accumulations of earlier deposits to personal accounts (including accumulations of half of the credits for low-earners)-- an increase to the unified budget balance because these proceeds reduce Social Security benefit payments; and
- Other changes in OASDI cash flow (as compared to present law) from the other benefit provisions (but not from transfers between the General Fund and the Trust Fund).

The last three columns present the aggregate effects on the unified budget:

- Change in the annual unified budget cash flow, which is simply the sum of the sources of unified budget balance changes identified above;
- Change in debt held by the public, as of the end of each year, which represents the cumulative change in the unified budget cash flows, with interest (at the assumed rates earned by the Trust Funds); and
- Change in annual unified budget balance, which includes changes in both unified budget cash flow and in interest on the publicly held debt.

These unified-budget estimates are based on the intermediate assumptions of the 2003 Trustees Report, including the trust-fund interest assumption, and thus are not consistent with projections made by CBO and OMB (which use different assumptions). However, differences in payroll and benefit estimates are not large during the first 10 projection years so these values can be viewed as very rough approximations of the magnitude of effects on the unified budget balances through this period.

## Annual Cash Flows from the General Fund of the Treasury to the OASDI Trust Fund

A fourth set of tables (tables 1c, 2c, and 3c) provide the estimated annual net cash flow from the General Fund of the Treasury to the OASDI Trust Funds. All values in these tables are expressed in constant 2003 dollars (i.e., dollar amounts that are indexed back to 2003 based on the CPI).

For comparison purposes, cash flow estimates are provided in tables 1 c , 2 c , and 3 c for three different cases:

- The proposal described in this memorandum, including the General Fund transfers in 2007 through 2013 as well as General Fund reimbursement to protect current-law disability benefits in some cases, as discussed earlier;
- Present Law OASDI modified to allow borrowing from the General Fund to pay scheduled benefits; and
- Present Law OASDI where only benefits payable with current financing provisions are paid (no General Fund borrowing).

For each of these cases, three columns are provided. The first column shows estimates of the amount of borrowing needed from the General Fund to pay benefits or estimates of the amount of transfers from the General Fund as appropriate to the plan. The second column is the estimated total net cash flow from the General Fund to the Trust Funds under the plan, including transfers and borrowing. The third column is the total net cash flow for years starting with 2003 through the end of the given year, including accumulated interest cash flows for the period.

# /s/ <br> Chris Chaplain 

/s/

Alice H. Wade

Attachments

# Table A--Estimated Long-Range OASDI Financial Effect of a Proposal Developed by Representative Nick Smith <br> (Assumes 100\% worker participation in establishing Personal Retirement Savings Accounts) 

## Provision

(as a percent of payroll)
Raise the normal retirement age by two months per year for those age 62 through 2011, then increase by one month every two years thereafter.

Provide a third bend point in 2004 with a factor declining 2 percentage points per year until reaching 5 percent in 2009; index the second and third bend points by the CPI, and gradually phase down the 32, 15 and 5 percent factors. Limit reduction for older OASI workers and near term survivor benefits. Provide for no change from present law for lower-earner disability cases and a minimum benefit for higher-earner disability cases

Reimburse the DI Trust Fund annually for additional payments resulting from guaranteeing presentlaw benefits for lower earner disabled workers and a specified minimum benefit for higher-earner disabled workers.

Transfer the following amounts from the Treasury to the OASDI Trust Funds in fiscal years 20072013: $\$ 21$ billion in 2007, $\$ 47$ billion in 2008, $\$ 78$ billion in 2009, $\$ 106$ billion in 2010, $\$ 147$ billion in 2011, $\$ 184$ billion in 2012, and $\$ 283$ billion in 2013. 0.26

Beginning in 2005, cover state and local government employees newly hired in 2004 or later...................... 0.20
Increase benefit payable to all widowed individuals by 10 percent beginning in 2004.................................. -0.31
Set the delayed retirement credit to 8 percent for all months after 2004...................................................... ${ }^{\text {// }}$
Provide up to 5 child care dropout years for workers with no earnings who are living with a child
under age 13--effect.......................................................................... 0.08
Beginning in 2003, eliminate the family maximum for disabled children aged 18 or older........................... $\underline{\underline{-0.01}}$
Subtotal, benefit provisions (including interaction) .................................................................................... 3.80

Establish personal retirement savings accounts and specific General Fund transfers:

- Redirect 2.5 percentage points of taxable payroll in 2005-25, 2.75 percentage points in 2026-2038. After 2038, redirect OASDI income in excess of the amount needed to cover annual program costs and maintain a minimal contingency reserve in the trust funds ( $15 \%$ trust fund ratio)
- Reduce OASI benefit levels by the value of PRSA contributions accumulated at an assumed annual rate of the yield on trust fund assets plus 0.7 percentage points.
$\qquad$
Total for proposal
Note: All estimates are based on the intermediate assumptions of the 2003 OASDI Trustees Report.
$\underline{1 / T o t a l s}$ for individual provisions exclude interaction.
$\underline{\underline{2} /}$ Decrease in actuarial balance that is negligible, i.e., less then 0.005 percent of taxable payroll.
Social Security Administration
Office of the Chief Actuary
September 10, 2003


# Table B--Estimated Long-Range OASDI Financial Effect of a Proposal Developed by Representative Nick Smith (Assumes 67\% worker participation in establishing Personal Retirement Savings Accounts) 

| Provision | Estimated Change in <br> Long-Range OASDI <br> Actuarial Balance 1/ <br> (as a percent of payroll) |
| :---: | :---: |
| Raise the normal retirement age by two months per year for those age 62 through 2011, then increase by one month every two years thereafter. $\qquad$ | 0.64 |
| Provide a third bend point in 2004 with a factor declining 2 percentage points per year until reaching 5 percent in 2009; index the second and third bend points by the CPI, and gradually phase down the 32, 15 and 5 percent factors. Limit reduction for older OASI workers and near term survivor benefits. Provide for no change from present law for lower-earner disability cases and a minimum benefit for higher-earner disability cases | 3.12 |
| Reimburse the DI Trust Fund annually for additional payments resulting from guaranteeing presentlaw benefits for lower earner disabled workers and a specified minimum benefit for higher-earner disabled workers. $\qquad$ | 0.10 |
| Transfer the following amounts from the Treasury to the OASDI Trust Funds in fiscal years 20072013: $\$ 21$ billion in 2007, $\$ 47$ billion in 2008, $\$ 78$ billion in 2009, $\$ 106$ billion in 2010, $\$ 147$ billion in 2011, $\$ 184$ billion in 2012, and $\$ 283$ billion in 2013... | 0.26 |
| Beginning in 2005, cover state and local government employees newly hired in 2004 or later..................... | 0.20 |
| Increase benefit payable to all widowed individuals by 10 percent beginning in 2004............................... | -0.31 |
| Set the delayed retirement credit to 8 percent for all months after 2004................................................. | 2/ |
| Provide up to 5 child care dropout years for workers with no earnings who are living with a child under age 13--effective for computation base years after 2004. | -0.08 |
| Beginning in 2003, eliminate the family maximum for disabled children aged 18 or older......................... | -0.01 |
| Subtotal, benefit provisions (including interaction) ........................................................................... | 3.80 |
| Establish personal retirement savings accounts and specific General Fund transfers: <br> - Redirect 2.5 percentage points of taxable payroll in 2005-25, 2.75 percentage points in 2026-2038. After 2038, redirect OASDI income in excess of the amount needed to cover annual program costs and maintain a minimal contingency reserve in the trust funds ( $15 \%$ trust fund ratio) |  |
| - Reduce OASI benefit levels by the value of PRSA contributions accumulated at an assumed annual rate of the yield on trust fund assets plus 0.7 percentage points | -1.42 |
| Total for proposal | 2.38 |

Note: All estimates are based on the intermediate assumptions of the 2003 OASDI Trustees Report.
1 / Totals for individual provisions exclude interaction.
$\underline{2} /$ Decrease in actuarial balance that is negligible, i.e., less then 0.005 percent of taxable payroll.
Social Security Administration
Office of the Chief Actuary
September 10, 2003

Table 1--Financial Effects of the Representative Nick Smith Proposal--Basic Plan
PRSA proceeds go to estate if worker dies before entitlement


Based on Intermediate Assumptions of the 2003 Trustees Report.
1/ Includes payroll tax contributions plus reimbursement for minimum DI benefits plus specified General Fund transfers.

| IA proc <br> Ultimate Real Trust Fund Interest Rate Ultimate Real PRSA Rate for Offset |  |  | $\begin{gathered} \text { worker } \\ 3.00 \\ 3.70 \end{gathered}$ | fore entitlement <br> Assumed PRSA Partic | n Rate | 0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Present Law Trust Fund Assets, End of Year | Proposal Trust Fund Assets, End of Year |  | IA/Annuity Assets, End of Year | PRSA <br> Contributions in Year | PRSA <br> Disbursements in Year 1 |
| (In Billions of Present Value Dollars as of 1/1/2003) |  |  |  |  |  |  |
| 2003 | 1,453 | 1,453 |  |  |  |  |
| 2004 | 1,529 | 1,528 |  | 0 | 0.0 | 0.0 |
| 2005 | 1,611 | 1,600 |  | 0 | 0.0 | 0.0 |
| 2006 | 1,695 | 1,682 |  | 0 | 0.0 | 0.0 |
| 2007 | 1,779 | 1,783 |  | 0 | 0.0 | 0.0 |
| 2008 | 1,861 | 1,903 |  | 0 | 0.0 | 0.0 |
| 2009 | 1,937 | 2,039 |  | 0 | 0.0 | 0.0 |
| 2010 | 2,007 | 2,189 |  | 0 | 0.0 | 0.0 |
| 2011 | 2,071 | 2,358 |  | 0 | 0.0 | 0.0 |
| 2012 | 2,128 | 2,548 |  | 0 | 0.0 | 0.0 |
| 2013 | 2,174 | 2,729 |  | 0 | 0.0 | 0.0 |
| 2014 | 2,211 | 2,792 |  | 0 | 0.0 | 0.0 |
| 2015 | 2,237 | 2,850 |  | 0 | 0.0 | 0.0 |
| 2016 | 2,251 | 2,901 |  | 0 | 0.0 | 0.0 |
| 2017 | 2,254 | 2,946 |  | 0 | 0.0 | 0.0 |
| 2018 | 2,245 | 2,985 |  | 0 | 0.0 | 0.0 |
| 2019 | 2,224 | 3,018 |  | 0 | 0.0 | 0.0 |
| 2020 | 2,191 | 3,044 |  | 0 | 0.0 | 0.0 |
| 2021 | 2,147 | 3,063 |  | 0 | 0.0 | 0.0 |
| 2022 | 2,092 | 3,076 |  | 0 | 0.0 | 0.0 |
| 2023 | 2,027 | 3,085 |  | 0 | 0.0 | 0.0 |
| 2024 | 1,954 | 3,089 |  | 0 | 0.0 | 0.0 |
| 2025 | 1,873 | 3,089 |  | 0 | 0.0 | 0.0 |
| 2026 | 1,785 | 3,085 |  | 0 | 0.0 | 0.0 |
| 2027 | 1,690 | 3,080 |  | 0 | 0.0 | 0.0 |
| 2028 | 1,589 | 3,072 |  | 0 | 0.0 | 0.0 |
| 2029 | 1,483 | 3,062 |  | 0 | 0.0 | 0.0 |
| 2030 | 1,372 | 3,052 |  | 0 | 0.0 | 0.0 |
| 2031 | 1,259 | 3,041 |  | 0 | 0.0 | 0.0 |
| 2032 | 1,144 | 3,031 |  | 0 | 0.0 | 0.0 |
| 2033 | 1,026 | 3,022 |  | 0 | 0.0 | 0.0 |
| 2034 | 908 | 3,014 |  | 0 | 0.0 | 0.0 |
| 2035 | 789 | 3,008 |  | 0 | 0.0 | 0.0 |
| 2036 | 671 | 3,004 |  | 0 | 0.0 | 0.0 |
| 2037 | 552 | 3,002 |  | 0 | 0.0 | 0.0 |
| 2038 | 435 | 3,002 |  | 0 | 0.0 | 0.0 |
| 2039 | 319 | 3,005 |  | 0 | 0.0 | 0.0 |
| 2040 | 204 | 3,010 |  | 0 | 0.0 | 0.0 |
| 2041 | 91 | 3,017 |  | 0 | 0.0 | 0.0 |
| 2042 | ----- | 3,026 |  | 0 | 0.0 | 0.0 |
| 2043 | ----- | 3,038 |  | 0 | 0.0 | 0.0 |
| 2044 | ----- | 3,052 |  | 0 | 0.0 | 0.0 |
| 2045 | ----- | 3,068 |  | 0 | 0.0 | 0.0 |
| 2046 | ----- | 3,085 |  | 0 | 0.0 | 0.0 |
| 2047 | ----- | 3,104 |  | 0 | 0.0 | 0.0 |
| 2048 | ----- | 3,125 |  | 0 | 0.0 | 0.0 |
| 2049 | ----- | 3,147 |  | 0 | 0.0 | 0.0 |
| 2050 | ----- | 3,171 |  | 0 | 0.0 | 0.0 |
| 2051 | ----- | 3,195 |  | 0 | 0.0 | 0.0 |
| 2052 | ----- | 3,221 |  | 0 | 0.0 | 0.0 |
| 2053 | ----- | 3,247 |  | 0 | 0.0 | 0.0 |
| 2054 | ----- | 3,275 |  | 0 | 0.0 | 0.0 |
| 2055 | ----- | 3,303 |  | 0 | 0.0 | 0.0 |
| 2056 | ----- | 3,332 |  | 0 | 0.0 | 0.0 |
| 2057 | ----- | 3,361 |  | 0 | 0.0 | 0.0 |
| 2058 | ----- | 3,392 |  | 0 | 0.0 | 0.0 |
| 2059 | --- | 3,423 |  | 0 | 0.0 | 0.0 |
| 2060 | ---- | 3,454 |  | 0 | 0.0 | 0.0 |
| 2061 | ---- | 3,487 |  | 0 | 0.0 | 0.0 |
| 2062 | ---- | 3,520 |  | 0 | 0.0 | 0.0 |
| 2063 | ----- | 3,553 |  | 0 | 0.0 | 0.0 |
| 2064 | ----- | 3,587 |  | 0 | 0.0 | 0.0 |
| 2065 | ----- | 3,621 |  | 0 | 0.0 | 0.0 |
| 2066 | ----- | 3,656 |  | 0 | 0.0 | 0.0 |
| 2067 | ----- | 3,691 |  | 0 | 0.0 | 0.0 |
| 2068 | ----- | 3,727 |  | 0 | 0.0 | 0.0 |
| 2069 | ----- | 3,762 |  | 0 | 0.0 | 0.0 |
| 2070 | ----- | 3,798 |  | 0 | 0.0 | 0.0 |
| 2071 | ----- | 3,833 |  | 0 | 0.0 | 0.0 |
| 2072 | ----- | 3,868 |  | 0 | 0.0 | 0.0 |
| 2073 | ----- | 3,903 |  | 0 | 0.0 | 0.0 |
| 2074 | ----- | 3,938 |  | 0 | 0.0 | 0.0 |
| 2075 | ----- | 3,973 |  | 0 | 0.0 | 0.0 |
| 2076 | - | 4,008 |  | 0 | 0.0 | 0.0 |
| 2077 | ----- | 4,042 |  | 0 | 0.0 | 0.0 |
| Based on Intermediate Assumptions of the 2003 Trustees Report. <br> 1/ Excludes proceeds of PRSAs that go to the worker's estate if the worker dies before entitlement. |  |  |  | titlement. | Office of the Actuary <br> Social Security Administration <br> September 9, 2003 |  |

Table 1b--PRSA Contributions, Offsets to OASDI Trust Funds from PRSAs, and Budget Effects

| IA proceeds go to estate if worker dies before entitlement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ultimate Real Trust Fund Interest Rate Ultimate Real PRSA Rate for Offset |  |  | 3.00 | Assumed PRSA Participation Rate |  |  |  |
|  |  |  | 3.70 |  |  |  | 0\% |
| Year | Contributions to PRSA by Federal Government Based on Earnings | Offsets to OASDI Trust Funds from PRSAs | Other Changes <br> in OASDI Cash Flow 1/ | Change in Annual Unified Budget Cash Flow | Change in Debt Held by Public (end of year) | Change in Annua Unified Budget Balance |  |
| (In Billions of Constant 2003 Dollars) |  |  |  |  |  |  |  |
| 2004 | 0.0 | 0.0 | -0.7 | -0.7 | 0.7 | -0.7 |  |
| 2005 | 0.0 | 0.0 | -11.2 | -11.2 | 12.3 | -11.6 |  |
| 2006 | 0.0 | 0.0 | -8.4 | -8.4 | 21.3 | -9.4 |  |
| 2007 | 0.0 | 0.0 | -5.5 | -5.5 | 27.6 | -6.9 |  |
| 2008 | 0.0 | 0.0 | -2.3 | -2.3 | 30.8 | -4.1 |  |
| 2009 | 0.0 | 0.0 | 1.8 | 1.8 | 30.0 | 0.0 |  |
| 2010 | 0.0 | 0.0 | 7.0 | 7.0 | 23.7 | 5.4 |  |
| 2011 | 0.0 | 0.0 | 13.3 | 13.3 | 10.7 | 12.3 |  |
| 2012 | 0.0 | 0.0 | 20.5 | 20.5 | -10.1 | 20.5 |  |
| 2013 | 0.0 | 0.0 | 28.6 | 28.6 | -39.9 | 30.1 |  |
| 2014 | 0.0 | 0.0 | 37.3 | 37.3 | -79.5 | 40.8 |  |
| 2015 | 0.0 | 0.0 | 46.5 | 46.5 | -129.9 | 52.7 |  |
| 2016 | 0.0 | 0.0 | 56.4 | 56.4 | -191.9 | 65.8 |  |
| 2017 | 0.0 | 0.0 | 66.9 | 66.9 | -266.6 | 80.2 |  |
| 2018 | 0.0 | 0.0 | 77.9 | 77.9 | -354.8 | 96.0 |  |
| 2019 | 0.0 | 0.0 | 89.2 | 89.2 | -457.2 | 112.8 |  |
| 2020 | 0.0 | 0.0 | 100.8 | 100.8 | -574.8 | 130.8 |  |
| 2021 | 0.0 | 0.0 | 112.7 | 112.7 | -708.1 | 150.1 |  |
| 2022 | 0.0 | 0.0 | 124.7 | 124.7 | -857.8 | 170.3 |  |
| 2023 | 0.0 | 0.0 | 136.7 | 136.7 | -1,024.3 | 191.5 |  |
| 2024 | 0.0 | 0.0 | 149.2 | 149.2 | -1,208.7 | 214.2 |  |
| 2025 | 0.0 | 0.0 | 161.7 | 161.7 | -1,411.5 | 238.0 |  |
| 2026 | 0.0 | 0.0 | 174.8 | 174.8 | -1,633.9 | 263.5 |  |
| 2027 | 0.0 | 0.0 | 188.5 | 188.5 | -1,877.1 | 290.8 |  |
| 2028 | 0.0 | 0.0 | 202.4 | 202.4 | -2,141.9 | 319.4 |  |
| 2029 | 0.0 | 0.0 | 215.9 | 215.9 | -2,428.5 | 349.0 |  |
| 2030 | 0.0 | 0.0 | 229.2 | 229.2 | -2,737.4 | 379.6 |  |
| 2031 | 0.0 | 0.0 | 243.3 | 243.3 | -3,070.1 | 412.4 |  |
| 2032 | 0.0 | 0.0 | 257.7 | 257.7 | -3,427.6 | 446.9 |  |
| 2033 | 0.0 | 0.0 | 272.3 | 272.3 | -3,810.9 | 483.1 |  |
| 2034 | 0.0 | 0.0 | 286.6 | 286.6 | -4,220.5 | 520.6 |  |
| 2035 | 0.0 | 0.0 | 300.2 | 300.2 | -4,656.3 | 558.7 |  |
| 2036 | 0.0 | 0.0 | 313.9 | 313.9 | -5,119.3 | 598.7 |  |
| 2037 | 0.0 | 0.0 | 327.7 | 327.7 | -5,610.5 | 640.3 |  |
| 2038 | 0.0 | 0.0 | 341.6 | 341.6 | -6,130.6 | 683.6 |  |
| 2039 | 0.0 | 0.0 | 355.4 | 355.4 | -6,680.6 | 728.6 |  |
| 2040 | 0.0 | 0.0 | 368.5 | 368.5 | -7,260.6 | 774.6 |  |
| 2041 | 0.0 | 0.0 | 382.6 | 382.6 | -7,872.6 | 823.4 |  |
| 2042 | 0.0 | 0.0 | 397.3 | 397.3 | -8,517.9 | 874.7 |  |
| 2043 | 0.0 | 0.0 | 412.5 | 412.5 | -9,198.3 | 928.5 |  |
| 2044 | 0.0 | 0.0 | 428.3 | 428.3 | -9,915.4 | 985.0 |  |
| 2045 | 0.0 | 0.0 | 443.8 | 443.8 | -10,670.0 | 1,043.4 |  |
| 2046 | 0.0 | 0.0 | 460.5 | 460.5 | -11,464.4 | 1,105.2 |  |
| 2047 | 0.0 | 0.0 | 477.7 | 477.7 | -12,300.4 | 1,169.9 |  |
| 2048 | 0.0 | 0.0 | 495.3 | 495.3 | -13,179.6 | 1,237.5 |  |
| 2049 | 0.0 | 0.0 | 513.5 | 513.5 | -14,103.9 | 1,308.1 |  |
| 2050 | 0.0 | 0.0 | 531.5 | 531.5 | -15,074.5 | 1,381.4 |  |
| 2051 | 0.0 | 0.0 | 550.3 | 550.3 | -16,093.5 | 1,458.1 |  |
| 2052 | 0.0 | 0.0 | 569.4 | 569.4 | -17,162.8 | 1,538.1 |  |
| 2053 | 0.0 | 0.0 | 588.8 | 588.8 | -18,284.2 | 1,621.3 |  |
| 2054 | 0.0 | 0.0 | 608.5 | 608.5 | -19,459.4 | 1,707.8 |  |
| 2055 | 0.0 | 0.0 | 628.1 | 628.1 | -20,690.1 | 1,797.5 |  |
| 2056 | 0.0 | 0.0 | 647.8 | 647.8 | -21,978.0 | 1,890.5 |  |
| 2057 | 0.0 | 0.0 | 667.6 | 667.6 | -23,325.0 | 1,987.1 |  |
| 2058 | 0.0 | 0.0 | 687.4 | 687.4 | -24,732.7 | 2,087.1 |  |
| 2059 | 0.0 | 0.0 | 707.2 | 707.2 | -26,203.2 | 2,190.8 |  |
| 2060 | 0.0 | 0.0 | 727.1 | 727.1 | -27,738.2 | 2,298.2 |  |
| 2061 | 0.0 | 0.0 | 747.2 | 747.2 | -29,340.0 | 2,409.7 |  |
| 2062 | 0.0 | 0.0 | 767.6 | 767.6 | -31,010.8 | 2,525.4 |  |
| 2063 | 0.0 | 0.0 | 788.5 | 788.5 | -32,753.3 | 2,645.7 |  |
| 2064 | 0.0 | 0.0 | 809.6 | 809.6 | -34,569.7 | 2,770.4 |  |
| 2065 | 0.0 | 0.0 | 831.2 | 831.2 | -36,462.9 | 2,900.1 |  |
| 2066 | 0.0 | 0.0 | 853.1 | 853.1 | -38,435.5 | 3,034.6 |  |
| 2067 | 0.0 | 0.0 | 875.4 | 875.4 | -40,490.2 | 3,174.3 |  |
| 2068 | 0.0 | 0.0 | 898.3 | 898.3 | -42,630.2 | 3,319.3 |  |
| 2069 | 0.0 | 0.0 | 921.6 | 921.6 | -44,858.4 | 3,469.8 |  |
| 2070 | 0.0 | 0.0 | 943.3 | 943.3 | -47,175.7 | 3,623.9 |  |
| 2071 | 0.0 | 0.0 | 965.2 | 965.2 | -49,585.2 | 3,783.5 |  |
| 2072 | 0.0 | 0.0 | 987.5 | 987.5 | -52,089.8 | 3,948.9 |  |
| 2073 | 0.0 | 0.0 | 1,010.0 | 1,010.0 | -54,692.8 | 4,120.1 |  |
| 2074 | 0.0 | 0.0 | 1,032.9 | 1,032.9 | -57,397.4 | 4,297.6 |  |
| 2075 | 0.0 | 0.0 | 1,056.0 | 1,056.0 | -60,207.0 | 4,481.4 |  |
| 2076 | 0.0 | 0.0 | 1,079.4 | 1,079.4 | -63,125.0 | 4,671.6 |  |
| 2077 | 0.0 | 0.0 | 1,103.1 | 1,103.1 | -66,155.0 | 4,868.5 |  |
| 2078 | 0.0 | 0.0 | 1,127.0 | 1,127.0 | -69,300.4 | 5,072.3 |  |
| cluding d on Int | effect of general fund ediate Assumptions o | sfers to the Trus 2003 Trustees | which do not aff | unified budget. | Office of the Actuary Social Security Administration September 9, 2003 |  |  |

Table 1c--Cash Flow from the General Fund of the Treasury to the OASDI Trust Funds--Constant 2003 Dollars 1/

| IA proceeds go to estate if worker dies before entitlement |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ultimate Real Trust Fund Interest Rate Ultimate Real PRSA Rate for Offset |  |  | 3.00 |  | Assumed PRSA Participation Rate |  |  | 0\% |
|  |  |  |  | 3.70 |  |  |  |  |  |
|  | Estimate for Nick Smith Proposal |  |  | Estimate for Modified Present Law with Borrowing to Pay Scheduled Benefits |  |  | Estimate for Present Law with Only Payable Benefits |  |  |
|  | Additional | Cash Flow |  |  |  |  |  | Net Annual |  |
|  | General | from General | Total to | Borrowing | Cash Flow | Total to | Borrowing | Cash Flow | Total to |
|  | Fund | Fund to | End Of Year | Needed | from General | End Of Year | Needed | from General | End Of Year |
|  | Iransters $2 /$ | Trust Funds | with Interest | In Year 3/ | Fund | with Interest | In Year 3/ | Fund | with Interest |
| Year | (billio | $f$ Constant 200 |  | (billion | of Constant 2003 |  |  | nstant 2003\$) |  |
| 2003 | 0 | -79 | -82 | 0 | -79 | -82 | 0 | -79 | -82 |
| 2004 | 0 | -84 | -171 | 0 | -84 | -172 | 0 | -84 | -172 |
| 2005 | 0 | -80 | -259 | 0 | -91 | -271 | 0 | -91 | -271 |
| 2006 | 6 | -89 | -358 | 0 | -97 | -380 | 0 | -97 | -380 |
| 2007 | 26 | -94 | -467 | 0 | -100 | -494 | 0 | -100 | -494 |
| 2008 | 49 | -97 | -581 | 0 | -99 | -612 | 0 | -99 | -612 |
| 2009 | 74 | -98 | -701 | 0 | -96 | -731 | 0 | -96 | -731 |
| 2010 | 98 | -99 | -824 | 0 | -92 | -848 | 0 | -92 | -848 |
| 2011 | 127 | -100 | -952 | 0 | -86 | -963 | 0 | -86 | -963 |
| 2012 | 165 | -98 | -1,082 | 0 | -77 | -1,072 | 0 | -77 | -1,072 |
| 2013 | 163 | -95 | -1,213 | 0 | -66 | -1,173 | 0 | -66 | -1,173 |
| 2014 | 1 | -91 | -1,343 | 0 | -54 | -1,264 | 0 | -54 | -1,264 |
| 2015 | 1 | -86 | -1,472 | 0 | -39 | -1,343 | 0 | -39 | -1,343 |
| 2016 | 1 | -79 | -1,598 | 0 | -23 | -1,406 | 0 | -23 | -1,406 |
| 2017 | 1 | -71 | -1,720 | 0 | -5 | -1,453 | 0 | -5 | -1,453 |
| 2018 | 1 | -63 | -1,836 | 0 | 15 | -1,482 | 0 | 15 | -1,482 |
| 2019 | 1 | -54 | -1,947 | 0 | 35 | -1,490 | 0 | 35 | -1,490 |
| 2020 | 1 | -44 | -2,051 | 0 | 56 | -1,477 | 0 | 56 | -1,477 |
| 2021 | 1 | -34 | -2,147 | 0 | 79 | -1,440 | 0 | 79 | -1,440 |
| 2022 | 1 | -23 | -2,236 | 0 | 101 | -1,379 | 0 | 101 | -1,379 |
| 2023 | 1 | -15 | -2,318 | 0 | 122 | -1,295 | 0 | 122 | -1,295 |
| 2024 | 2 | -6 | -2,394 | 0 | 142 | -1,187 | 0 | 142 | -1,187 |
| 2025 | 2 | 1 | -2,465 | 0 | 163 | -1,055 | 0 | 163 | -1,055 |
| 2026 | 2 | 8 | -2,530 | 0 | 183 | -899 | 0 | 183 | -899 |
| 2027 | 2 | 14 | -2,591 | 0 | 203 | -717 | 0 | 203 | -717 |
| 2028 | 3 | 20 | -2,648 | 0 | 222 | -510 | 0 | 222 | -510 |
| 2029 | 3 | 24 | -2,703 | 0 | 240 | -279 | 0 | 240 | -279 |
| 2030 | 3 | 28 | -2,756 | 0 | 256 | -23 | 0 | 256 | -23 |
| 2031 | 3 | 29 | -2,809 | 0 | 272 | 256 | 0 | 272 | 256 |
| 2032 | 4 | 28 | -2,864 | 0 | 286 | 558 | 0 | 286 | 558 |
| 2033 | 4 | 27 | -2,922 | 0 | 298 | 882 | 0 | 298 | 882 |
| 2034 | 4 | 24 | -2,985 | 0 | 310 | 1,228 | 0 | 310 | 1,228 |
| 2035 | 5 | 21 | -3,053 | 0 | 320 | 1,595 | 0 | 320 | 1,595 |
| 2036 | 5 | 17 | -3,128 | 0 | 330 | 1,982 | 0 | 330 | 1,982 |
| 2037 | 5 | 11 | -3,210 | 0 | 338 | 2,390 | 0 | 338 | 2,390 |
| 2038 | 6 | 5 | -3,302 | 0 | 346 | 2,818 | 0 | 346 | 2,818 |
| 2039 | 6 | -2 | -3,403 | 0 | 353 | 3,265 | 0 | 353 | 3,265 |
| 2040 | 7 | -9 | -3,514 | 0 | 359 | 3,733 | 0 | 359 | 3,733 |
| 2041 | 7 | -16 | -3,636 | 0 | 366 | 4,222 | 0 | 366 | 4,222 |
| 2042 | 8 | -24 | -3,770 | 74 | 373 | 4,732 | 0 | 298 | 4,656 |
| 2043 | 8 | -32 | -3,916 | 380 | 380 | 5,265 | 0 | 0 | 4,796 |
| 2044 | 9 | -40 | -4,075 | 387 | 387 | 5,822 | 0 | 0 | 4,940 |
| 2045 | 10 | -47 | -4,246 | 396 | 396 | 6,405 | 0 | 0 | 5,088 |
| 2046 | 11 | -55 | -4,429 | 405 | 405 | 7,014 | 0 | 0 | 5,240 |
| 2047 | 11 | -62 | -4,627 | 414 | 414 | 7,651 | 0 | 0 | 5,398 |
| 2048 | 12 | -70 | -4,838 | 424 | 424 | 8,317 | 0 | 0 | 5,560 |
| 2049 | 13 | -78 | -5,063 | 435 | 435 | 9,015 | 0 | 0 | 5,726 |
| 2050 | 14 | -85 | -5,302 | 446 | 446 | 9,744 | 0 | 0 | 5,898 |
| 2051 | 16 | -91 | -5,555 | 458 | 458 | 10,508 | 0 | 0 | 6,075 |
| 2052 | 17 | -98 | -5,822 | 471 | 471 | 11,308 | 0 | 0 | 6,257 |
| 2053 | 18 | -104 | -6,104 | 484 | 484 | 12,146 | 0 | 0 | 6,445 |
| 2054 | 20 | -110 | -6,401 | 497 | 497 | 13,022 | 0 | 0 | 6,638 |
| 2055 | 21 | -117 | -6,713 | 510 | 510 | 13,938 | 0 | 0 | 6,838 |
| 2056 | 22 | -123 | -7,041 | 524 | 524 | 14,895 | 0 | 0 | 7,043 |
| 2057 | 24 | -129 | -7,386 | 537 | 537 | 15,895 | 0 | 0 | 7,254 |
| 2058 | 26 | -136 | -7,748 | 550 | 550 | 16,938 | 0 | 0 | 7,472 |
| 2059 | 27 | -143 | -8,128 | 563 | 563 | 18,026 | 0 | 0 | 7,696 |
| 2060 | 29 | -151 | -8,526 | 575 | 575 | 19,159 | 0 | 0 | 7,927 |
| 2061 | 31 | -158 | -8,945 | 588 | 588 | 20,339 | 0 | 0 | 8,164 |
| 2062 | 32 | -166 | -9,384 | 601 | 601 | 21,568 | 0 | 0 | 8,409 |
| 2063 | 34 | -173 | -9,843 | 614 | 614 | 22,848 | 0 | 0 | 8,662 |
| 2064 | 36 | -180 | -10,324 | 628 | 628 | 24,180 | 0 | 0 | 8,921 |
| 2065 | 38 | -188 | -10,827 | 642 | 642 | 25,566 | 0 | 0 | 9,189 |
| 2066 | 40 | -195 | -11,353 | 657 | 657 | 27,009 | 0 | 0 | 9,465 |
| 2067 | 42 | -202 | -11,901 | 672 | 672 | 28,512 | 0 | 0 | 9,749 |
| 2068 | 44 | -209 | -12,474 | 687 | 687 | 30,075 | 0 | 0 | 10,041 |
| 2069 | 46 | -217 | -13,071 | 703 | 703 | 31,701 | 0 | 0 | 10,342 |
| 2070 | 48 | -222 | -13,692 | 719 | 719 | 33,393 | 0 | 0 | 10,653 |
| 2071 | 50 | -227 | -14,337 | 736 | 736 | 35,153 | 0 | 0 | 10,972 |
| 2072 | 52 | -233 | -15,007 | 753 | 753 | 36,983 | 0 | 0 | 11,301 |
| 2073 | 54 | -238 | -15,702 | 770 | 770 | 38,885 | 0 | 0 | 11,640 |
| 2074 | 56 | -244 | -16,424 | 787 | 787 | 40,863 | 0 | 0 | 11,990 |
| 2075 | 58 | -249 | -17,174 | 805 | 805 | 42,918 | 0 | 0 | 12,349 |
| 2076 | 60 | -255 | -17,951 | 823 | 823 | 45,052 | 0 | 0 | 12,720 |
| 2077 | 62 | -260 | -18,758 | 840 | 840 | 47,270 | 0 | 0 | 13,101 |
| 1 / Including redemption of Trust Fund assets as of 1-1-2003. <br> $\overline{2} /$ Includes reimbursement for minimum DI benefits and specified transfers from FY 2007-2013. |  |  |  |  |  |  | Office of the Actuary Social Security Administration September 9, 2003 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\underline{2}$ / Includes reimbursement for minimum DI benefits and specified transfers from FY 2007-2013. <br> $\underline{\overline{3}} /$ Trust Funds are assumed to borrow from the General Fund of the Treasury. |  |  |  |  |  |  |  |  |  |  |

Table 2--Financial Effects of the Representative Nick Smith Proposal Assuming a 67\% PRSA Participation Rate
PRSA proceeds go to estate if worker dies before entitlement
$\begin{array}{ll}\text { Ultimate Real Trust Fund Interest Rate } & 3.00 \\ \text { Ultimate Real PRSA Rate for Offset } & 3.70\end{array}$
Assumed PRSA Participation Rate
67\%


Based on Intermediate Assumptions of the 2003 Trustees Report.
1/ Net of Benefit Cost Reductions from PRSA Offsets.
$\underline{\underline{2} /}$ Includes payroll tax contributions plus reimbursement for minimum DI benefits plus specified General Fund transfers (expressed as a percent of taxable payroll) Social Security Administration September 9, 2003

Table 2a--Trust Fund Asset Comparison and PRSA Information of the Representative Nick Smith Proposal


IA proceeds go to estate if worker dies before entitlement
Ultimate Real Trust Fund Interest Rate 3.00
Based on Intermediate Assumptions of the 2003 Trustees Report
1/ Reflects the assumed actual yield rate for PRSA accounts under the proposal.
ㄹ/ Excludes proceeds of PRSAs that go to the worker's estate if the worker dies before entitlement.

Invest 70\% Stocks, 30\% Corporate Bonds

| TA/Annuity | PRSA | PRSA |
| ---: | ---: | ---: |
| Assets, | Contributions | Disbursements |
| End of Year | in Year | in Year 2// |

(In Billions of Present Value Dollars as of $1 / 1 / 2003$ )

| 2003 |  |
| :--- | ---: |
| 2004 | 0 |
| 2005 | 80 |
| 2006 | 162 |
| 2007 | 245 |
| 2008 | 328 |

$\begin{array}{rr}0.0 & 0.0 \\ 79.8 & 0.0\end{array}$

| 0.0 | 0.0 |
| :---: | :---: |
| 79.8 | 0.0 |
| 79.6 | 0.1 |
| 79.2 | 0.2 |
| 78.6 | 0.4 |
| 77.9 | 0.7 |
| 77.2 | 1.1 |
| 76.3 | 1.5 |
| 75.4 | 2.0 |
| 74.5 | 2.6 |
| 73.6 | 3.2 |
| 72.6 | 3.9 |
| 71.6 | 4.7 |
| 70.6 | 5.6 |
| 69.6 | 6.4 |
| 68.6 | 7.3 |
| 67.6 | 8.3 |
| 66.7 | 9.2 |
| 65.7 | 10.2 |
| 64.7 | 11.3 |
| 63.7 | 12.3 |
| 62.8 | 13.4 |
| 67.3 | 14.5 |
| 66.3 | 15.6 |
| 65.3 | 16.8 |
| 64.4 | 18.0 |
| 63.4 | 19.2 |
| 62.5 | 20.4 |
| 61.6 | 21.6 |
| 60.7 | 22.8 |
| 59.8 | 24.0 |
| 58.9 | 25.2 |
| 58.0 | 26.4 |
| 57.2 | 27.7 |
| 56.3 | 28.9 |
| 68.9 | 30.1 |
| 76.7 | 31.3 |
| 84.2 | 32.5 |
| 95.7 | 33.7 |
| 106.9 | 35.0 |
| 117.6 | 36.3 |
| 128.0 | 37.6 |
| 134.0 | 39.0 |
| 131.8 | 40.3 |
| 129.7 | 41.7 |
| 127.6 | 43.0 |
| 125.5 | 44.3 |
| 123.4 | 45.7 |
| 121.4 | 47.0 |
| 119.4 | 48.3 |
| 117.4 | 49.6 |
| 115.5 | 50.8 |
| 113.6 | 52.1 |
| 111.8 | 53.4 |
| 110.0 | 54.6 |
| 108.2 | 55.8 |
| 106.4 | 57.0 |
| 104.7 | 58.1 |
| 103.0 | 59.3 |
| 101.3 | 60.4 |
| 99.6 | 61.5 |
| 98.0 | 62.6 |
| 96.4 | 63.6 |
| 94.8 | 64.7 |
| 93.2 | 65.6 |
| 91.7 | 66.6 |
| 90.2 | 67.5 |
| 88.7 | 68.4 |
| 87.2 | 69.3 |
| 85.7 | 70.1 |
| 84.3 | 71.0 |
| 82.9 | 71.7 |
| 81.5 | 72.5 |
| 80.1 | 73.2 |



| 0.0 | 0.0 | 0 | 0.0 |
| :---: | :---: | :---: | :---: |
| 79.8 | 0.0 | 80 | 79.8 |
| 79.6 | 0.1 | 159 | 79.6 |
| 79.2 | 0.2 | 237 | 79.2 |
| 78.6 | 0.4 | 314 | 78.6 |
| 77.9 | 0.7 | 391 | 77.9 |
| 77.2 | 1.1 | 465 | 77.2 |
| 76.3 | 1.5 | 538 | 76.3 |
| 75.4 | 2.0 | 610 | 75.4 |
| 74.5 | 2.6 | 680 | 74.5 |
| 73.6 | 3.2 | 748 | 73.6 |
| 72.6 | 3.9 | 814 | 72.6 |
| 71.6 | 4.7 | 878 | 71.6 |
| 70.6 | 5.6 | 940 | 70.6 |
| 69.6 | 6.5 | 1,000 | 69.6 |
| 68.6 | 7.5 | 1,058 | 68.6 |
| 67.6 | 8.6 | 1,114 | 67.6 |
| 66.7 | 9.8 | 1,167 | 66.7 |
| 65.7 | 11.0 | 1,218 | 65.7 |
| 64.7 | 12.3 | 1,267 | 64.7 |
| 63.7 | 13.6 | 1,314 | 63.7 |
| 62.8 | 15.1 | 1,359 | 62.8 |
| 67.3 | 16.6 | 1,406 | 67.3 |
| 66.3 | 18.1 | 1,452 | 66.3 |
| 65.3 | 19.8 | 1,495 | 65.3 |
| 64.4 | 21.4 | 1,535 | 64.4 |
| 63.4 | 23.2 | 1,573 | 63.4 |
| 62.5 | 25.0 | 1,609 | 62.5 |
| 61.6 | 26.9 | 1,642 | 61.6 |
| 60.7 | 28.8 | 1,673 | 60.7 |
| 59.8 | 30.8 | 1,702 | 59.8 |
| 58.9 | 32.9 | 1,728 | 58.9 |
| 58.0 | 35.0 | 1,752 | 58.0 |
| 57.2 | 37.1 | 1,774 | 57.2 |
| 56.3 | 39.3 | 1,794 | 56.3 |
| 68.9 | 41.5 | 1,824 | 68.9 |
| 76.7 | 43.8 | 1,861 | 76.7 |
| 84.2 | 46.1 | 1,904 | 84.2 |
| 95.7 | 48.5 | 1,957 | 95.7 |
| 106.9 | 51.0 | 2,019 | 106.9 |
| 117.6 | 53.5 | 2,090 | 117.6 |
| 128.0 | 56.2 | 2,170 | 128.0 |
| 134.0 | 58.8 | 2,255 | 134.0 |
| 131.8 | 61.4 | 2,335 | 131.8 |
| 129.7 | 64.0 | 2,411 | 129.7 |
| 127.6 | 66.5 | 2,484 | 127.6 |
| 125.5 | 69.0 | 2,552 | 125.5 |
| 123.4 | 71.5 | 2,617 | 123.4 |
| 121.4 | 74.0 | 2,678 | 121.4 |
| 119.4 | 76.4 | 2,736 | 119.4 |
| 117.4 | 78.8 | 2,790 | 117.4 |
| 115.5 | 81.1 | 2,840 | 115.5 |
| 113.6 | 83.4 | 2,887 | 113.6 |
| 111.8 | 85.7 | 2,931 | 111.8 |
| 110.0 | 87.9 | 2,971 | 110.0 |
| 108.2 | 90.1 | 3,008 | 108.2 |
| 106.4 | 92.3 | 3,041 | 106.4 |
| 104.7 | 94.4 | 3,072 | 104.7 |
| 103.0 | 96.5 | 3,099 | 103.0 |
| 101.3 | 98.5 | 3,123 | 101.3 |
| 99.6 | 100.5 | 3,145 | 99.6 |
| 98.0 | 102.5 | 3,163 | 98.0 |
| 96.4 | 104.5 | 3,179 | 96.4 |
| 94.8 | 106.3 | 3,191 | 94.8 |
| 93.2 | 108.2 | 3,201 | 93.2 |
| 91.7 | 110.0 | 3,209 | 91.7 |
| 90.2 | 111.8 | 3,214 | 90.2 |
| 88.7 | 113.5 | 3,216 | 88.7 |
| 87.2 | 115.2 | 3,215 | 87.2 |
| 85.7 | 116.9 | 3,213 | 85.7 |
| 84.3 | 118.6 | 3,208 | 84.3 |
| 82.9 | 120.2 | 3,200 | 82.9 |
| 81.5 | 121.8 | 3,191 | 81.5 |
| 80.1 | 123.4 | 3,179 | 80.1 |


| 0 | 0.0 | 0.0 |
| :---: | :---: | :---: |
| 81 | 79.8 | 0.0 |
| 163 | 79.6 | 0.1 |
| 245 | 79.2 | 0.2 |
| 329 | 78.6 | 0.4 |
| 414 | 77.9 | 0.7 |
| 499 | 77.2 | 1.1 |
| 584 | 76.3 | 1.5 |
| 670 | 75.4 | 2.0 |
| 755 | 74.5 | 2.6 |
| 841 | 73.6 | 3.2 |
| 926 | 72.6 | 3.9 |
| 1,011 | 71.6 | 4.7 |
| 1,096 | 70.6 | 5.6 |
| 1,180 | 69.6 | 6.5 |
| 1,263 | 68.6 | 7.6 |
| 1,346 | 67.6 | 8.7 |
| 1,428 | 66.7 | 9.8 |
| 1,509 | 65.7 | 11.1 |
| 1,589 | 64.7 | 12.4 |
| 1,668 | 63.7 | 13.8 |
| 1,745 | 62.8 | 15.3 |
| 1,827 | 67.3 | 16.8 |
| 1,906 | 66.3 | 18.5 |
| 1,985 | 65.3 | 20.2 |
| 2,061 | 64.4 | 22.0 |
| 2,136 | 63.4 | 23.8 |
| 2,209 | 62.5 | 25.7 |
| 2,279 | 61.6 | 27.7 |
| 2,348 | 60.7 | 29.8 |
| 2,414 | 59.8 | 31.9 |
| 2,478 | 58.9 | 34.1 |
| 2,539 | 58.0 | 36.3 |
| 2,598 | 57.2 | 38.6 |
| 2,653 | 56.3 | 40.9 |
| 2,719 | 68.9 | 43.3 |
| 2,791 | 76.7 | 45.8 |
| 2,868 | 84.2 | 48.3 |
| 2,954 | 95.7 | 50.9 |
| 3,049 | 106.9 | 53.6 |
| 3,152 | 117.6 | 56.4 |
| 3,264 | 128.0 | 59.3 |
| 3,380 | 134.0 | 62.2 |
| 3,492 | 131.8 | 65.0 |
| 3,601 | 129.7 | 67.9 |
| 3,707 | 127.6 | 70.6 |
| 3,809 | 125.5 | 73.4 |
| 3,907 | 123.4 | 76.1 |
| 4,002 | 121.4 | 78.8 |
| 4,093 | 119.4 | 81.5 |
| 4,181 | 117.4 | 84.1 |
| 4,265 | 115.5 | 86.6 |
| 4,346 | 113.6 | 89.2 |
| 4,423 | 111.8 | 91.6 |
| 4,497 | 110.0 | 94.1 |
| 4,568 | 108.2 | 96.5 |
| 4,635 | 106.4 | 98.9 |
| 4,699 | 104.7 | 101.2 |
| 4,760 | 103.0 | 103.5 |
| 4,817 | 101.3 | 105.7 |
| 4,872 | 99.6 | 107.9 |
| 4,928 | 98.0 | 110.0 |
| 4,982 | 96.4 | 112.1 |
| 5,032 | 94.8 | 114.2 |
| 5,079 | 93.2 | 116.2 |
| 5,124 | 91.7 | 118.2 |
| 5,165 | 90.2 | 120.2 |
| 5,203 | 88.7 | 122.1 |
| 5,238 | 87.2 | 123.9 |
| 5,270 | 85.7 | 125.8 |
| 5,299 | 84.3 | 127.6 |
| 5,325 | 82.9 | 129.4 |
| 5,348 | 81.5 | 131.1 |
| 5,368 | 80.1 | 132.9 |

Office of the Actuary
Social Security Administration
September 9, 2003

Table 2b--PRSA Contributions, Offsets to OASDI Trust Funds from PRSAs, and Budget Effects

| IA proceeds go to estate if worker dies before entitlement |  |  |  |
| :--- | :---: | :---: | :---: |
| Ultimate Real Trust Fund Interest Rate | 3.00 | Assumed PRSA Participation Rate |  |
| Ultimate Real PRSA Rate for Offset | 3.70 |  |  |



Table 2c--Cash Flow from the General Fund of the Treasury to the OASDI Trust Funds--Constant 2003 Dollars $\underline{1} /$


1/ Including redemption of Trust Fund assets as of 1-1-2003.
2/ Includes reimbursement for minimum DI benefits and specified transfers from FY 2007-2013.
3/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Office of the Actuary
Social Security Administration
September 9, 2003

Table 3--Financial Effects of the Representative Nick Smith Proposal Assuming a 100\% PRSA Participation Rate
PRSA proceeds go to estate if worker dies before entitlement


Based on Intermediate Assumptions of the 2003 Trustees Report.
1/ Net of Benefit Cost Reductions from PRSA Offsets.
2/ Includes payroll tax contributions plus reimbursement for minimum DI benefits plus specified General Fund transfers (expressed as a percent of taxable payroll).

Office of the Chief Actuary
Social Security Administration
September 9, 2003

Table 3a--Trust Fund Asset Comparison and PRSA Information for the Representative Nick Smith Proposal

| IA proceeds go to estate if worker dies before entitlement |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Ultimate Real Trust Fund Interest Rate | 3.00 |  |  |  |
| Ultimate Real PRSA Rate for Offset | 3.70 | Assumed PRSA Participation Rate | $\mathbf{1 0 0 \%}$ |  |


|  | Present Law | Proposal |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trust Fund | Trust Fund | IA/Annuity | PRSA | PRSA |
|  | Assets, | Assets, | Assets, | Contributions | Disbursements |
| Year | End of Year | End of Year | End of Year | in Year | in Year 1/ |


|  |  | (In Billions of Present Value Dollars as of $1 / 1 / 2003$ ) |
| :--- | :--- | :---: |
| 2003 | 1,453 | 1,453 |
| 2004 | 1,529 | 1,528 |
| 205 | 1,611 | 1,495 |
| 2006 | 1,695 | 1,471 |

IA proceeds go to estate if worker dies before entitlement
Ultimate Real Trust Fund Interest Rate 3.00
Ultimate Real PRSA Rate for Offset 3.70
Assumed PRSA Participation Rate
100\%

|  | Invest 60\% Stocks, 40\% Corporate Bonds 1/ |  |  | Invest All in Govt Bonds (2.7\% Net Yield) |  |  | Invest 70\% Stocks, 30\% Corporate Bonds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TA/Annuity | PRSA | PRSA | IA/Annuity | PRSA | PRSA | IA/Annuity | PRSA | PRSA |
|  | Assets, | Contributions | Disbursements | Assets, | Contributions | Disbursements | Assets, | Contributions | Disbursements |
| Year | End of Year | in Year | in Year $\underline{\underline{2}}^{\text {/ }}$ | End ot Ye | in Year | in Year ${ }^{\text {d }}$ | End ot Y | in Year | in Year ${ }^{\text {/ }}$ |
| (In Billions of Present Value Dollars as of 1/1/2003) |  |  |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |  |  |
| 2004 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| 2005 | 121 | 119.7 | 0.0 | 120 | 119.7 | 0.0 | 121 | 119.7 | 0.0 |
| 2006 | 243 | 119.4 | 0.1 | 238 | 119.4 | 0.1 | 244 | 119.4 | 0.1 |
| 2007 | 367 | 118.7 | 0.3 | 356 | 118.7 | 0.3 | 368 | 118.7 | 0.3 |
| 2008 | 491 | 117.9 | 0.6 | 472 | 117.9 | 0.6 | 494 | 117.9 | 0.6 |
| 2009 | 617 | 116.9 | 1.1 | 586 | 116.9 | 1.1 | 621 | 116.9 | 1.1 |
| 2010 | 742 | 115.8 | 1.6 | 698 | 115.8 | 1.6 | 748 | 115.8 | 1.6 |
| 2011 | 868 | 114.5 | 2.2 | 808 | 114.5 | 2.2 | 876 | 114.5 | 2.2 |
| 2012 | 994 | 113.1 | 3.0 | 915 | 113.1 | 3.0 | 1,004 | 113.1 | 3.0 |
| 2013 | 1,119 | 111.7 | 3.9 | 1,020 | 111.7 | 3.9 | 1,133 | 111.7 | 3.9 |
| 2014 | 1,244 | 110.3 | 4.8 | 1,122 | 110.3 | 4.8 | 1,261 | 110.3 | 4.8 |
| 2015 | 1,368 | 108.9 | 5.9 | 1,221 | 108.9 | 5.9 | 1,389 | 108.9 | 5.9 |
| 2016 | 1,492 | 107.4 | 7.1 | 1,317 | 107.4 | 7.1 | 1,517 | 107.4 | 7.1 |
| 2017 | 1,614 | 105.9 | 8.4 | 1,410 | 105.9 | 8.4 | 1,644 | 105.9 | 8.4 |
| 2018 | 1,736 | 104.4 | 9.8 | 1,500 | 104.4 | 9.7 | 1,770 | 104.4 | 9.8 |
| 2019 | 1,856 | 102.9 | 11.3 | 1,587 | 102.9 | 11.0 | 1,895 | 102.9 | 11.3 |
| 2020 | 1,974 | 101.4 | 12.9 | 1,670 | 101.4 | 12.4 | 2,019 | 101.4 | 13.0 |
| 2021 | 2,092 | 100.0 | 14.7 | 1,751 | 100.0 | 13.8 | 2,142 | 100.0 | 14.8 |
| 2022 | 2,207 | 98.5 | 16.5 | 1,828 | 98.5 | 15.3 | 2,264 | 98.5 | 16.6 |
| 2023 | 2,320 | 97.0 | 18.4 | 1,901 | 97.0 | 16.9 | 2,384 | 97.0 | 18.6 |
| 2024 | 2,432 | 95.6 | 20.5 | 1,971 | 95.6 | 18.5 | 2,502 | 95.6 | 20.7 |
| 2025 | 2,541 | 94.2 | 22.6 | 2,038 | 94.2 | 20.1 | 2,618 | 94.2 | 22.9 |
| 2026 | 2,656 | 100.9 | 24.8 | 2,110 | 100.9 | 21.8 | 2,740 | 100.9 | 25.3 |
| 2027 | 2,768 | 99.4 | 27.2 | 2,178 | 99.4 | 23.5 | 2,860 | 99.4 | 27.7 |
| 2028 | 2,877 | 98.0 | 29.6 | 2,242 | 98.0 | 25.2 | 2,977 | 98.0 | 30.3 |
| 2029 | 2,984 | 96.5 | 32.2 | 2,303 | 96.5 | 26.9 | 3,092 | 96.5 | 32.9 |
| 2030 | 3,088 | 95.1 | 34.8 | 2,360 | 95.1 | 28.7 | 3,204 | 95.1 | 35.7 |
| 2031 | 3,189 | 93.7 | 37.5 | 2,414 | 93.7 | 30.5 | 3,313 | 93.7 | 38.6 |
| 2032 | 3,286 | 92.4 | 40.4 | 2,464 | 92.4 | 32.4 | 3,419 | 92.4 | 41.6 |
| 2033 | 3,380 | 91.1 | 43.3 | 2,510 | 91.1 | 34.2 | 3,522 | 91.1 | 44.7 |
| 2034 | 3,471 | 89.7 | 46.3 | 2,553 | 89.7 | 36.0 | 3,621 | 89.7 | 47.8 |
| 2035 | 3,558 | 88.4 | 49.3 | 2,593 | 88.4 | 37.8 | 3,717 | 88.4 | 51.1 |
| 2036 | 3,641 | 87.1 | 52.5 | 2,629 | 87.1 | 39.7 | 3,809 | 87.1 | 54.5 |
| 2037 | 3,719 | 85.8 | 55.7 | 2,661 | 85.8 | 41.5 | 3,896 | 85.8 | 57.9 |
| 2038 | 3,794 | 84.5 | 58.9 | 2,690 | 84.5 | 43.3 | 3,980 | 84.5 | 61.4 |
| 2039 | 3,871 | 89.9 | 62.3 | 2,723 | 89.9 | 45.1 | 4,066 | 89.9 | 65.0 |
| 2040 | 3,949 | 93.8 | 65.7 | 2,757 | 93.8 | 46.9 | 4,152 | 93.8 | 68.7 |
| 2041 | 4,027 | 97.6 | 69.1 | 2,793 | 97.6 | 48.7 | 4,239 | 97.6 | 72.5 |
| 2042 | 4,105 | 101.2 | 72.7 | 2,830 | 101.2 | 50.4 | 4,325 | 101.2 | 76.3 |
| 2043 | 4,183 | 104.7 | 76.3 | 2,868 | 104.7 | 52.2 | 4,412 | 104.7 | 80.3 |
| 2044 | 4,261 | 108.0 | 79.9 | 2,908 | 108.0 | 54.0 | 4,498 | 108.0 | 84.3 |
| 2045 | 4,339 | 111.2 | 83.7 | 2,949 | 111.2 | 55.8 | 4,584 | 111.2 | 88.4 |
| 2046 | 4,416 | 114.2 | 87.3 | 2,990 | 114.2 | 57.5 | 4,668 | 114.2 | 92.4 |
| 2047 | 4,492 | 117.1 | 90.8 | 3,033 | 117.1 | 59.1 | 4,752 | 117.1 | 96.3 |
| 2048 | 4,568 | 119.9 | 94.2 | 3,076 | 119.9 | 60.6 | 4,836 | 119.9 | 100.1 |
| 2049 | 4,644 | 122.5 | 97.5 | 3,121 | 122.5 | 62.1 | 4,919 | 122.5 | 103.7 |
| 2050 | 4,719 | 125.0 | 100.7 | 3,166 | 125.0 | 63.5 | 5,001 | 125.0 | 107.2 |
| 2051 | 4,794 | 127.4 | 103.7 | 3,211 | 127.4 | 64.8 | 5,082 | 127.4 | 110.7 |
| 2052 | 4,869 | 129.7 | 106.7 | 3,258 | 129.7 | 66.1 | 5,163 | 129.7 | 113.9 |
| 2053 | 4,943 | 131.9 | 109.5 | 3,305 | 131.9 | 67.3 | 5,244 | 131.9 | 117.1 |
| 2054 | 5,017 | 133.9 | 112.2 | 3,352 | 133.9 | 68.5 | 5,324 | 133.9 | 120.2 |
| 2055 | 5,091 | 135.9 | 114.9 | 3,401 | 135.9 | 69.6 | 5,403 | 135.9 | 123.1 |
| 2056 | 5,164 | 137.8 | 117.4 | 3,449 | 137.8 | 70.7 | 5,483 | 137.8 | 125.9 |
| 2057 | 5,238 | 139.5 | 119.8 | 3,498 | 139.5 | 71.8 | 5,562 | 139.5 | 128.6 |
| 2058 | 5,311 | 141.2 | 122.1 | 3,547 | 141.2 | 72.8 | 5,640 | 141.2 | 131.3 |
| 2059 | 5,384 | 142.8 | 124.4 | 3,597 | 142.8 | 73.8 | 5,719 | 142.8 | 133.8 |
| 2060 | 5,457 | 144.3 | 126.5 | 3,647 | 144.3 | 74.8 | 5,797 | 144.3 | 136.2 |
| 2061 | 5,530 | 145.7 | 128.6 | 3,697 | 145.7 | 75.7 | 5,876 | 145.7 | 138.5 |
| 2062 | 5,603 | 147.1 | 130.6 | 3,747 | 147.1 | 76.7 | 5,954 | 147.1 | 140.8 |
| 2063 | 5,677 | 148.3 | 132.5 | 3,797 | 148.3 | 77.7 | 6,032 | 148.3 | 142.9 |
| 2064 | 5,750 | 149.4 | 134.4 | 3,847 | 149.4 | 78.6 | 6,111 | 149.4 | 145.0 |
| 2065 | 5,825 | 147.0 | 136.2 | 3,893 | 147.0 | 79.5 | 6,192 | 147.0 | 147.0 |
| 2066 | 5,897 | 144.6 | 138.0 | 3,935 | 144.6 | 80.5 | 6,271 | 144.6 | 149.0 |
| 2067 | 5,967 | 142.2 | 139.7 | 3,975 | 142.2 | 81.4 | 6,347 | 142.2 | 150.8 |
| 2068 | 6,033 | 139.9 | 141.3 | 4,010 | 139.9 | 82.3 | 6,420 | 139.9 | 152.6 |
| 2069 | 6,096 | 137.5 | 142.9 | 4,042 | 137.5 | 83.2 | 6,490 | 137.5 | 154.3 |
| 2070 | 6,156 | 135.3 | 144.4 | 4,071 | 135.3 | 84.1 | 6,557 | 135.3 | 156.0 |
| 2071 | 6,213 | 133.0 | 145.9 | 4,096 | 133.0 | 85.0 | 6,621 | 133.0 | 157.6 |
| 2072 | 6,268 | 130.8 | 147.3 | 4,118 | 130.8 | 85.9 | 6,683 | 130.8 | 159.2 |
| 2073 | 6,319 | 128.6 | 148.8 | 4,137 | 128.6 | 86.7 | 6,742 | 128.6 | 160.7 |
| 2074 | 6,368 | 126.4 | 150.2 | 4,153 | 126.4 | 87.6 | 6,798 | 126.4 | 162.2 |
| 2075 | 6,414 | 124.3 | 151.5 | 4,165 | 124.3 | 88.4 | 6,851 | 124.3 | 163.7 |
| 2076 | 6,456 | 122.2 | 152.9 | 4,175 | 122.2 | 89.3 | 6,901 | 122.2 | 165.2 |
| 2077 | 6,496 | 120.2 | 154.3 | 4,181 | 120.2 | 90.1 | 6,949 | 120.2 | 166.7 |
| / Reflects the assumed actual yield rate for PRSA accounts under the proposal. |  |  |  |  |  |  | Office of the Actar |  |  |
|  |  |  |  |  |  |  | Social Security AdministrationSeptember 9, 2003 |  |  |
| Excludes proceeds of PRSAs that go to the worker's estate if the worker dies before entitlement. September 9,2003 |  |  |  |  |  |  |  |  |  |

Table 3b--PRSA Contributions, Offsets to OASDI Trust Funds from PRSAs, and Budget Effects


Table 3c--Cash Flow from the General Fund of the Treasury to the OASDI Trust Funds--Constant 2003 Dollars 1/

Ultimate Real Trust Fund Interest Rate Ultimate Real PRSA Rate for Offset
Year

2004 (bill


Assumed PRSA Participation Rate
100\%

| Estimate for Present Law <br> with Only Payable Benefits |  |  |
| ---: | ---: | ---: |
| Borrowing | Net Annual |  |
| Needed | Cash Flow | Total |
| In Year 3/ | from General | End Of Year |
| (billions of Constant 2003\$) | with Intere |  |

-82
-172
-271


[^0]:    ${ }^{1}$ These plans are defined in Section 402( c )(8) of the Internal Revenue Code, and include individual retirement accounts (IRAs) and other retirement annuity plans defined in the Code.

