## CRS Report for Congress

# Social Security Reform: Effect on Benefits and the Federal Budget of Plans Proposed by the President's Commission to Strengthen Social Security 

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# Social Security Reform: Effect on Benefits and the Federal Budget of Plans Proposed by the President's Commission to Strengthen Social Security 

## Summary

In 2001, President Bush established the President's Commission to Strengthen Social Security to make recommendations on ways to "modernize and restore fiscal soundness to the Social Security system" in accordance with six principles, one of which mandated the creation of voluntary personal retirement accounts. The Commission proposed three alternative reform models. Under all three proposals, workers could choose to invest in personal accounts and have their traditional Social Security benefit reduced by some amount. Model 1 would make no other changes to the program. Model 2 would slow program growth through one major provision that would index initial benefits to prices (rather than wages). Model 3 would slow program growth through a variety of measures, including one that would index initial benefits to projected increases in life expectancy. To mitigate the effects of traditional benefit reductions, Models 2 and 3 would guarantee a minimum benefit for low-wage earners and make changes designed to improve benefits for widow(er)s. The Social Security Administration prepared estimates of the effect of the Commission's reform models on benefit levels for future retirees and on the federal budget. Consistent with these estimates, this report illustrates initial monthly benefits for future retirees under each of the Commission's reform plans and three alternative measures of current law (benefits promised under current law, benefits payable within the system's current-law revenue projections and benefits paid to today's retirees). It also shows the projected effect on debt held by the public.

Under Model 1, if a worker's account earns a real rate of return higher than $3.5 \%$, benefits would exceed those promised under current law. Model 1 is not projected to restore long-range solvency to the system. Under Model 2, in most cases, projected benefits would be lower than levels promised under current law. Under all yield assumptions, projected benefits for low-wage earners would be higher than benefits payable under current law. Model 2 is projected to restore solvency to the system, although general revenue transfers would be required. Under Model 3, at the lower yield assumption, in most cases projected benefits would be lower than those promised under current law. At the higher yield assumptions, in most cases projected benefits would be higher than current-law promised benefits. Under all yield assumptions, projected benefits for low-wage earners would be higher than benefits payable under current law. Model 3 is projected to restore long-range solvency to the system, although general revenue transfers and a new dedicated revenue source for the program would be required. This new revenue source was not specified by the Commission.

Because the funding approach under the three plans draws from redirected payroll taxes and General Fund revenues, it would increase debt held by the public. For example, assuming either two-thirds or $100 \%$ of workers participate in personal accounts, under Model 2 additional borrowing is projected to peak at $\$ 2.5$ trillion and $\$ 4.7$ trillion (constant 2001 dollars), respectively.

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# Social Security Reform: Effect on Benefits and the Federal Budget of Plans Proposed by the President's Commission to Strengthen Social Security 

## Background

Congressional interest in Social Security reform is largely driven by the system's projected long-range financing problems, which are attributable primarily to ongoing and projected demographic changes. Rising program costs resulting from the retirement of the baby boom generation (persons born between 1946 and 1964) is the more immediate concern. In the longer term, projected increases in life expectancy and declining birth rates contribute to growing imbalances in the system as fewer workers will be supporting future recipients. The Social Security Trustees project that, between 2000 and 2025, the number of persons age 65 and older will increase by $76 \%$, while the number of workers paying into the system will increase by only $16 \%$. The ratio of covered workers to recipients is projected to decline from 3.3 today to 2.3 in 2025. In terms of financing, the Trustees project that the Social Security trust funds will be depleted by 2042 under the intermediate assumptions. Once the balances in the trust funds are depleted, annual tax revenue (payroll taxes and federal income taxes paid on benefits) is projected to cover approximately $73 \%$ of benefit payments (and less in later years). ${ }^{1}$ Over the next 75 years, on average, trust fund expenditures are projected to exceed income by $14 \%$. The long-range trust fund deficit is projected to equal $1.92 \%$ of taxable payroll. ${ }^{2}$

To many policy analysts, the important date in Social Security financing is not 2042, the point at which the trust funds are projected to become insolvent. Rather,

[^0]they focus on 2018, the point at which the system is projected to begin running annual cash-flow deficits (annual outgo would exceed annual tax revenue). Under current projections, the system would run cash-flow deficits each year from 2018 through 2077 (the end of the current projection period). In each of those years, money would have to be drawn from the General Fund of the Treasury to pay benefits and administrative expenses. ${ }^{3}$

Policymakers have considered a variety of ways to remedy the program's longrange funding problems. Some support maintaining the existing structure of the program through traditional measures, such as an increase in the retirement age or payroll taxes. Others favor redesigning the system to incorporate personal retirement accounts to supplement or replace traditional benefits. The range of options is reflected in the 1997 Social Security Advisory Council report. Unable to reach consensus on a single approach, the Council devised three different reform plans. Each plan received only partial Council endorsement. ${ }^{4}$ Congressional reform proposals introduced in recent years reflect a similar range of ideas. ${ }^{5}$ In the current Congress, H.R. 75 (Representative Shaw) would establish voluntary personal accounts (Social Security Guarantee Accounts) funded with general revenues. Account contributions would be equal to $4 \%$ of earnings, up to $\$ 1,000$ (the dollar limit on contributions would be indexed to average wage growth). ${ }^{6}$ Upon entitlement to retirement or disability benefits, workers would receive $5 \%$ of the account balance as a lump sum, and the remaining balance would be used to finance all or part of the worker's benefit. Under the proposal, the worker's benefit would be equal to the higher of a current-law Social Security benefit or a monthly annuity based on 95\% of the account balance. ${ }^{7}$

[^1]
## President's Commission to Strengthen Social Security

In May 2001, President Bush established the President's Commission to Strengthen Social Security (Executive Order 13210). The 16 -member Commission appointed by the President included eight Republicans and eight Democrats, all of whom had previously expressed public support for personal retirement accounts. The President directed the Commission to recommend ways to "modernize and restore fiscal soundness to the Social Security system" in accordance with the following six principles of reform:

- Modernization must not change Social Security benefits for retirees or near-retirees.
- The entire Social Security surplus must be dedicated to Social Security only.
- Social Security payroll taxes must not be increased.
- Government must not invest Social Security funds in the stock market.
- Modernization must preserve Social Security's disability and survivors components.
- Modernization must include individually controlled, voluntary personal retirement accounts, which will augment the Social Security safety net.

On December 21, 2001, the Commission issued its final report, Strengthening Social Security and Creating Wealth for All Americans. The report, which was unanimously approved by the Commission, includes three alternative plans for reforming Social Security. Under all three plans, workers could choose to invest in personal retirement accounts ${ }^{8}$ and their traditional Social Security benefit would be offset (the amount of the offset would vary under the three plans). The first plan (Model 1) would make no other changes to the program. The second plan (Model 2) is projected to slow the growth of Social Security benefits through one major provision that would index initial benefits to prices, rather than wages. The third plan (Model 3) would slow future program growth through a variety of measures. To mitigate the effects of benefit reductions, Models 2 and 3 would guarantee a minimum benefit for low-wage earners and make changes designed to improve benefits for widow(er)s.

The Commission described Model 1 as a "flexible framework" in which the personal account contributions might be financed entirely as a redirection of payroll tax revenue (a "carve-out"), entirely from the general revenue of the Treasury (an "add-on"), or a combination of the two. Under Model 2, a portion of existing payroll tax contributions would be used to fund the accounts (a "carve-out" funding approach). Under Model 3, workers could make additional payroll tax contributions to fund their accounts (an "add-on" funding approach) and receive matching contributions "carved out" of existing payroll taxes. These additional contributions

[^2]
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would be subsidized for lower-wage workers. According to the Commission's report, Model 1 would not restore solvency to the Social Security system. Models 2 and 3 are projected to restore solvency to the system on average over the next 75 years. However, annual cash-flow deficits are expected to occur at points during the projection period, and general revenues would be required to close the system's financing gap (in the case of Model 3, a new permanent revenue source would also be required). (See "Effect of Reform Models on the Federal Budget" below.)

## Commission Reform Models

Commission Model 1. Under Model 1, workers would be allowed to divert 2 percentage points of their Social Security payroll taxes ( $2 \%$ of taxable earnings) to a personal retirement account (or an equivalent amount could be drawn from the General Fund), and their traditional Social Security benefit would be reduced. The amount of the reduction would be equal to what the personal account would provide had it earned a $3.5 \%$ real rate of return (i.e., for purposes of determining the benefit offset, the account is assumed to earn $3.5 \%$ in real terms). In practice, the payment a worker would receive from his or her account would depend on the actual rate of return. Therefore, if the actual rate of return earned by the account is higher than $3.5 \%$, the worker's combined benefit (traditional Social Security benefit plus personal account) would exceed benefits promised under current law. Conversely, if the actual rate of return is lower than $3.5 \%$, the worker's combined benefit would be lower relative to promised current-law benefits. Model 1 would make no other changes to the program.

Commission Model 2. Under Model 2, workers would be allowed to divert 4 percentage points of their payroll taxes to a personal retirement account, up to an annual maximum of $\$ 1,000$ (indexed to average wage growth), ${ }^{9}$ and their traditional Social Security benefit would be reduced. The amount of the reduction would be equal to what the account would provide had it earned a $2 \%$ real rate of return (i.e., for purposes of determining the benefit offset, the account is assumed to earn $2 \%$ in real terms). The payment a worker would receive from his or her account, however, would depend on the actual rate of return. If the actual rate of return exceeds the assumed rate, the payment provided by the account would exceed the benefit offset. If the actual rate of return is lower than the assumed rate, the payment provided by the account would be smaller than the benefit offset.

In terms of traditional benefits, Model 2 would change the Social Security benefit formula in order to constrain the growth in initial benefits for future retirees. Under current law, initial benefits are indexed to the growth in average wages. Wage-indexing in the benefit formula results in benefit levels that provide each generation of workers a constant earnings replacement rate (i.e., initial benefits

[^3]replace approximately the same percentage of pre-retirement earnings for workers with equivalent lifetime earnings). ${ }^{10}$ By design, this feature of the program allows successive generations of workers to share increases in the standard of living when they retire. ${ }^{11}$ Model 2 would alter this aspect of the program by indexing initial benefits to price growth, rather than wage growth, beginning in 2009. ${ }^{12}$ Because wages are projected to grow faster than prices over time, a shift to price indexing would result in substantial benefit reductions and lower replacement rates for future retirees, thereby reducing Social Security's role as an earnings replacement program. ${ }^{13}$

To mitigate the effects of price indexing, Model 2 would provide a minimum benefit and make changes intended to improve benefits for widow(er)s. Workers who earn the minimum wage for at least 30 years would be guaranteed a benefit equal to $120 \%$ of the poverty level. Widow(er)s would receive $75 \%$ of the couple's combined pre-death benefit (compared to $50 \%-67 \%$ under current law). Although widow(er)s would receive a higher percentage of the couple's combined benefit, as benefits are reduced over time, eventually some widow(er)s would receive benefits under the plan that would be lower than those promised under current law.

Commission Model 3. Under Model 3, workers would be allowed to contribute an additional 1 percentage point of payroll taxes to a personal retirement account and receive a 2.5 percentage point matching contribution (up to $\$ 1,000$ annually) from current payroll taxes. Lower-wage workers would receive a partial "rebate"on their additional $1 \%$ contribution through a refundable tax credit. Workers who choose to participate in personal accounts would have their traditional Social Security benefit reduced. Under this plan, the reduction would be equal to what the account would provide had it earned a $2.5 \%$ real rate of return (i.e., for purposes of determining the benefit offset, the account is assumed to earn $2.5 \%$ in real terms). The payment a worker would receive from his or her account would depend on the actual rate of return. If the actual rate of return exceeds the assumed rate, the payment provided by the account would exceed the offset to traditional Social Security benefits. If the actual rate of return is lower than the assumed rate, the payment provided by the account would be less than the benefit offset.

[^4]Model 3 would reduce Social Security benefits for future retirees by slowing the growth in initial benefits to reflect projected increases in life expectancy. It would reduce benefits for higher-wage workers through other changes in the benefit formula (the third replacement factor in the benefit formula would be lowered gradually from $15 \%$ to $10 \%$ ). ${ }^{14}$ As under Model 2, it would provide a minimum benefit and make changes designed to improve benefits for widow(er)s. Workers who earn the minimum wage for at least 30 years would be guaranteed a benefit equal to $100 \%$ of the poverty level. Widow(er)s would receive $75 \%$ of the couple's combined predeath benefit (compared to $50 \%-67 \%$ under current law). As under Model 2, widow(er)s would receive a higher percentage of the couple's combined benefit. In addition, Model 3 would revise actuarial benefit adjustments for early/late retirement. Benefits for workers who retire early (before the "full retirement age" (FRA)) would decrease relative to current law, and benefits for workers who retire after the FRA would increase relative to current law. Finally, Model 3 calls for new (unspecified) dedicated revenue sources for Social Security.

Personal Account Structure. The Commission makes only broad recommendations on how personal accounts should be structured within the Social Security system. The Commission specifies that personal accounts should be administered by a government-appointed board, possibly modeled after the Thrift Savings Plan Board (which manages a defined contribution plan for federal workers) or the Federal Reserve Board. Once the account reaches a certain value, the worker should be allowed to transfer the account to a private provider. The Commission further recommends that workers invest in a broadly diversified portfolio of corporate stocks, corporate bonds and government bonds and that workers be allowed to change investment allocations no more than once every 12 months.

According to the Commission, workers should have access to their accounts only upon retirement, and they should be required to take account distributions as an annuity (a guaranteed payment for life) or as periodic payments. Lump-sum distributions should be allowed only on the portion of the account that exceeds the level of assets needed to provide the retired worker a combined benefit (traditional Social Security plus personal account) above the poverty level. Married couples who annuitize their account balance(s) should be required to purchase a two-thirds joint and survivor annuity which provides the surviving spouse with a benefit equal to two-thirds of the couple's combined pre-death benefit. Upon divorce, account assets attributable to contributions made during the marriage and earnings on account balances brought into the marriage should be divided equally (i.e., account balances brought into the marriage would not be shared). Finally, if a worker dies before

[^5]retirement, the account balance should be transferrable to the account of the surviving spouse (if applicable) or to the worker's estate.

It is important to note that Social Security benefit constraints prescribed under Models 2 and 3 would apply across-the-board to retirement, survivors and disability benefits, regardless of whether the worker chooses to participate in personal retirement accounts. However, the Commission acknowledged that the disability component of the program warrants more careful deliberation and recommended that reform of the disability program be considered separately.

## SSA Benefit Estimates

In January 2002, the Social Security Administration's (SSA's) Office of the Chief Actuary prepared benefit estimates for future retirees under each of the Commission's reform plans. ${ }^{15}$ These estimates are based on the intermediate assumptions of the 2001 Social Security Trustees report and additional assumptions made by the actuaries regarding returns on private securities, administrative expenses for personal accounts and annuities, and personal account participation rates.

Hypothetical Workers. The SSA actuaries provide benefit estimates for both one- and two-earner couples at different earnings levels retiring in 2012, 2022, 2032, 2042, 2052 and 2075. When viewing the following figures depicting these estimates, note that the jump from 10-year intervals from 2012 to 2052 to the 23-year interval in 2052 to 2075 tends to make the slope reflecting growth in benefit levels appear relatively steeper at the end of the projection period. (The change in intervals is noted with brackets on the figures.) Thus, one should not assume necessarily that there is some feature in a particular model that accelerates benefit growth in those years. In the case of a two-earner couple, both members are assumed to have equal earnings. In all cases, both members of a couple are assumed to retire at the same time at age 65 .

Illustrative Earnings Levels. Because Social Security benefit levels are based on a worker's earnings history, the SSA actuaries provide benefit estimates using four illustrative earnings patterns ("scaled" low earnings, "scaled" medium earnings, "scaled" high earnings and steady maximum earnings). ${ }^{16}$ The illustrative earnings patterns are defined as follows:

[^6]
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- Scaled Low Earner = Earnings of $\$ 15,875$ in 2002
- Scaled Medium Earner $=$ Earnings of $\$ 35,277$ in 2002
- Scaled High Earner $=$ Earnings of \$56,443 in 2002
- Steady Maximum Earner $=$ Earnings of $\$ 84,900$ in 2002

The scaled low earnings pattern approximates the average lifetime earnings of a steady low-wage earner (i.e., someone who always earned $45 \%$ of the national average wage). The scaled medium earnings pattern approximates the average lifetime earnings of a steady average-wage worker (i.e., someone who always earned the national average wage). The scaled high earnings pattern approximates the average lifetime earnings of a steady high-wage worker (i.e., someone who always earned $160 \%$ of the national average wage). The steady maximum earner is someone who always earned at least the maximum amount of earnings subject to the Social Security payroll tax (i.e., the taxable wage base).

Traditional Social Security benefits are based on average career earnings. Therefore, scaled and steady earnings patterns result in approximately the same level of benefits. Personal account accumulations, however, depend on the level of earnings in each year of a worker's career (among other factors). As such, scaled and steady earnings patterns result in different annuity values. The SSA actuaries use scaled earnings patterns, which they consider to be more representative of actual experience, to estimate future benefit levels under the reform models and current law.

Yield Assumptions. The SSA actuaries provide benefit illustrations under three alternative investment yields for the personal accounts (low yield, $50 \%$ equity yield and high yield). The low investment yield reflects the long-term rate on U.S. Treasury bonds. The " $50 \%$ equity yield" is designed to represent an average investment portfolio of $50 \%$ equity, $30 \%$ corporate bonds and $20 \%$ Treasury bonds. The high investment yield reflects a portfolio of $60 \%$ equity, $24 \%$ corporate bonds and $16 \%$ Treasury bonds. The actuaries used these assumptions to project the following illustrative yields:

- Low Yield $=3.0 \%$ Real Investment Yield
- $50 \%$ Equity Yield $=4.6 \%$ Real Investment Yield
- High Yield = 5.3\% Real Investment Yield

Estimates assume that, at the time of retirement, the entire balance in the personal account is converted to an inflation-indexed ${ }^{17}$ joint-and-two-thirds survivor annuity. ${ }^{18}$ Administrative expenses for personal accounts and annuities are assumed

[^7]to be equal to $0.3 \%$ of assets. Finally, projected monthly annuity values are based on the average life expectancy for the total U.S. population.

## General Issues Regarding Personal Accounts

Currently, there are about 151 million Social Security-covered workers (1999 estimate). If all covered workers under age 55 elected to participate in voluntary personal accounts, about 130 million personal accounts would be established within the Social Security system. Under Model 2, it is estimated that $\$ 62$ billion (with twothirds participation) and $\$ 92$ billion (with $100 \%$ participation) would be contributed to personal accounts by the federal government in the first year (2004). By comparison, there are 3.1 million participants in the federal Thrift Savings Plan (TSP), the largest employer-sponsored defined contribution plan. As of March 31, 2003, the TSP held assets totaling $\$ 104.5$ billion. In 2000, approximately 61 million Americans participated in employer-sponsored retirement plans or Individual Retirement Accounts (IRAs). ${ }^{19}$ According to one estimate, more than $\$ 4.5$ trillion is held in employer-sponsored defined contribution plans and IRAs. ${ }^{20}$

The actuaries' projections of changes in traditional benefits and personal account outcomes under the Commission's reform models are based on the intermediate demographic and economic assumptions of the 2001 Social Security Trustees Report. While projections are made on a 75 -year basis, annual fluctuations in these variables are typically projected for only the first 10 years. For the remainder of the 75 -year projection period, these factors are held steady at their "ultimate values" on the basis that changes in these factors over the long run average out to the ultimate values. Changes in average wage growth, inflation, interest rates and other variables are difficult to predict over a 75 -year period. Outcomes projected under the Commission's reform plans would vary to the extent that actual experience differs from the intermediate assumptions in the 2001 Trustees Report.

Individuals assume a degree of risk when personal account contributions are invested in equities. Personal account outcomes projected by the actuaries are based on a $3.0 \%, 4.6 \%$, or $5.3 \%$ real investment yield in each year of the investment period. In practice, year-to-year fluctuations in investment yields would affect the eventual balance in the account (the account balance could be higher or lower based on the actual annual returns). Actual personal account balances would depend on several factors including the length of the investment period, the level and timing of account contributions and investment yields, and administrative costs.

In addition, benefit levels under the proposals would be affected by the monthly annuity the personal account would provide. In practice, annuity values would be very sensitive to the annuitization rules specified in the law and regulations and to

[^8]the prevailing interest rates at the time the annuity is purchased. ${ }^{21}$ For example, the actuaries' projections assume that the entire account balance would be annuitized. If some workers were allowed to take part of the account balance as a lump sum, as recommended by the Commission, monthly annuity values would be lower. Furthermore, projected annuity values are based on average life expectancy for the total U.S. population, as opposed to life expectancy weighted by income and gender. Life expectancy adjusted for income would result in somewhat higher annuity payments for lower-paid workers and somewhat lower payments for higher-paid workers. Because women live longer than men on average, life expectancy adjusted by gender would result in somewhat lower payments for women and somewhat higher payments for men. ${ }^{22}$

## Illustration of Benefit Effects

Consistent with the benefit estimates prepared by the actuaries, this report illustrates initial monthly benefits for future retirees under each of the Commission's reform plans and current law (estimates are shown in constant 2001 dollars). It should be noted that the actuaries have constructed the benefit examples to reflect the amount payable on a worker's record. Therefore, in the case of a one-earner couple, the amount shown represents the combined benefit payable to the retired worker and spouse. In the case of a two-earner couple, the amount shown represents the benefit payable to each retired worker (or each member of the couple). For example, as shown in Figure 8, a two-earner couple with scaled low earnings retiring at age 65 in 2012 is projected to receive $\$ 734$ each under Model 2 based on a $3.0 \%$ real investment yield. As shown in Figure 11, under the same scenario, a one-earner couple is projected to receive a combined benefit of $\$ 1,093$.

Alternative Baselines. For comparison purposes, each figure shows initial monthly benefits projected under the Commission's reform plans and three alternative measures of current law:

- Benefits "Promised" Under Current Law
(benefits computed under the current-law benefit formula)
- Benefits "Payable" Under Current Law
(amount of current-law benefits that would be payable if benefits were adjusted to fit within the system's projected revenue)

[^9]
## - 2001 Benefit Levels

(benefits paid to today's retirees)
The reader must use caution when comparing these projected benefit levels. Neither "promised" benefits or proposed benefits are fully funded under current law. Both require additional revenue. Benefits projected under Models 2 and 3 require general revenue infusions. Benefits promised under current law imply the use of increased payroll taxes and/or general revenue infusions to pay benefits in full after 2037 (based on the 2038 insolvency date projected in the 2001 Trustees Report). In contrast, the current-law payable baseline does not allow for additional revenue sources, so benefits must be constrained to fit within projected revenue under current law. Therefore, it is hardly surprising that after 2037 benefits projected under the reform models and benefits promised under current law are always higher than benefits payable under current law. ${ }^{23}$

Several other points are worth keeping in mind when comparing projected benefit levels under the proposals and the alternative measures of current law. First, the estimates are based on the assumption that personal accounts would first be available in 2004 to workers who were under age 55 at the beginning of 2002 (i.e., workers born in 1948 or later). Therefore, among the illustrations shown here, only workers retiring in 2052 and 2075 at age 65 could experience a full career under the personal account system. Assuming workers begin investing in personal accounts at the start of their career, these individuals would have the advantage of longer periods over which to grow their accounts. This advantage would be offset by the second point, which is that under Models 2 and 3, the effects of proposed reductions in traditional Social Security benefits would be cumulative (e.g., price indexing initial benefits under Model 2). Therefore, younger cohorts would experience increasingly larger reductions in traditional benefits over the projection period.

Effect of Commission Model 1 on Benefit Levels. Under Model 1, the only change to current-law Social Security is the reduction in benefits that occurs when a worker chooses to participate in personal retirement accounts. This reduction is equal to what the personal account would provide had it earned a $3.5 \%$ real investment yield. How workers fare compared to current law is therefore entirely a function of the real investment yield on the personal account. If the account earns less than $3.5 \%$, the worker will do less well than under current law. If it earns more than $3.5 \%$, the worker will do better.

This is clearly shown in the benefit illustrations provided by the SSA actuaries. In all instances where the real investment yield is portrayed as $3 \%$, the illustrated couple does less well than under current law. In all instances where the real investment yield is portrayed as $4.6 \%$ or $5.3 \%$, the illustrated couple does better than under current law. The same conclusion applies if comparisons are made to the

[^10]baseline of Social Security benefits payable under current law. As an example of the effect of Model 1, Figure 7 shows projected benefit levels for two-earner couples with medium earnings under all three investment yield scenarios. (See Tables A-1 through A-3 in Appendix A.) Because of the simplicity and obvious effects of Model 1, and the fact that it has so little impact on the system's financing, this report focuses analysis on Models 2 and 3.

Effect of Commission Model 2 on Benefit Levels. Figures 8-31 illustrate the effects of Model 2 on future benefit levels for a range of hypothetical workers. ${ }^{24}$

Current-Law Promised Baseline. Under Model 2, early in the projection period, low-wage earners are projected to receive higher benefits than those promised under current law, even under the low-yield assumption. Under the $3.0 \%$ investment yield scenario, a two-earner couple retiring in 2022 is projected to receive benefits that are $11 \%$ higher than benefits promised under current law. For retirees in 2042 and later, proposed benefits would be lower than benefits promised under current law. Under the $4.6 \%$ and $5.3 \%$ investment yield scenarios, two-earner couples retiring in 2012 through 2052 are projected to receive higher benefits than promised under current law. However, by the end of the projection period, under all investment yield scenarios, low-wage earners would receive benefits below levels promised under current law. Depending on the investment yield assumption, reductions are projected to range from $7 \%$ to $28 \%$.

For workers at other wage levels, benefits are projected to be below levels promised under current law, except for two cases where they are unchanged. The largest reductions occur late in the projection period due to the cumulative effects of price indexing, the primary change in traditional benefits under Model 2. While retirees in 2012 are projected to receive benefits less than $1 \%$ below levels promised under current law, workers retiring in 2075 would experience reductions ranging from $16 \%$ to $42 \%$, depending on earnings level and investment yield assumption. For example, with a $5.3 \%$ investment yield, a two-earner couple with medium earnings retiring in 2075 is projected to receive a $16 \%$ lower benefit under the proposal. With a $3.0 \%$ investment yield, a two-earner couple with maximum earnings retiring in 2075 would receive a $42 \%$ lower benefit compared to levels promised under current law.

All workers would be subject to the reductions in traditional benefits projected under Model 2 whether or not they choose to participate in personal accounts. By the end of the projection period, traditional benefits would be significantly lower than benefits promised under current law, primarily due to the effect of price indexing over time. For example, traditional benefits are projected to be $35 \%$ lower for a twoearner couple with low earnings and $46 \%$ lower for a two-earner couple with maximum earnings. (See Table 1 below and Table A-4 in Appendix A.)

[^11]
## Table 1. Projected Change in Benefits Under Model 2 Relative to the Current-Law Promised Baseline

|  |  | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Retiring (age 65) | With no personal account | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner ( $\$ 15,875$ in 2002) |  |  |  |  |
| 2012 | $1 \%$ higher | 2\% higher | 2\% higher | 2\% higher |
| 2032 | 1\% lower | 2\% higher | 10\% higher | 11\% higher |
| 2075 | 35\% lower | 28\% lower | 10\% lower | 7\% lower |
| Steady maximum earner ( $\$ 84,900$ in 2002) |  |  |  |  |
| 2012 | 1\% lower | 1\% lower | 0.4\% lower | 0.3\% lower |
| 2032 | 18\% lower | 16\% lower | 12\% lower | 11\% lower |
| 2075 | 46\% lower | 42\% lower | 30\% lower | 27\% lower |

Note: Results are shown for 2-earner couples with equal earnings. Results for medium and high-wage earners and for one-earner couples are shown in the data tables in Appendix A.

Current-Law Payable Baseline. ${ }^{25}$ In all cases, workers with low earnings are projected to receive higher benefits under Model 2 relative to the current-law payable baseline. For example, with a $4.6 \%$ investment yield, a two-earner couple with low earnings retiring in 2012 is projected to receive a $2 \%$ higher benefit. Similar couples retiring in 2042 and 2075 would receive projected benefits that are $51 \%$ and $34 \%$ higher, respectively, than those payable under current law. This outcome is attributable to the minimum benefit guarantee for long-term low-wage earners and the way personal account contributions are structured under Model 2 (low-wage earners may contribute a larger percentage of their earnings because of the dollar limit on account contributions).

Except for two cases where benefits are unchanged, workers at other wage levels retiring early in the projection period (2012, 2022 and 2032) are projected to receive lower benefits compared to those payable under current law. Later in the projection period, in most cases, projected benefits would be higher than those payable under current law, primarily at the higher yield assumptions. For example, a two-earner couple with medium earnings retiring in 2042 is projected to receive a $9 \%$ to $33 \%$ higher benefit, depending on the investment yield. If the couple had maximum earnings, benefits are projected to be from $6 \%$ to $21 \%$ higher. By the end

[^12]of the projection period (2075), two-earner couples with medium, high and maximum earnings would receive projected benefits that are $10 \%, 12 \%$ and $13 \%$ lower, respectively, under the low-yield assumption. At the higher yield assumptions, however, projected benefits would be higher than those payable under current law. (See Table 2 below and Table A-6 in Appendix A.)

## Table 2. Projected Change in Benefits Under Model 2 Relative to the Current-Law Payable Baseline

|  | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: |
| Retiring (age 65) | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner (\$15,875 in 2002) |  |  |  |
| 2012 | 2\% higher | 2\% higher | 2\% higher |
| 2042 | 30\% higher | 51\% higher | 55\% higher |
| 2075 | 7\% higher | 34\% higher | 40\% higher |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |
| 2012 | 1\% lower | 0.4\% lower | 0.3\% lower |
| 2042 | 6\% higher | 19\% higher | $21 \%$ higher |
| 2075 | 13\% lower | 5\% higher | 9\% higher |

Note: Results are shown for 2-earner couples with equal earnings. Results for medium and high-wage earners and for one-earner couples are shown in the data tables in Appendix A.

2001 Benefit Levels. In all cases, Model 2 would result in projected benefit levels that are higher than those paid to today's retirees (as would benefits payable under current law). The amount of the projected change would vary considerably, depending on the worker's earnings level, year of retirement and investment yield. For example, benefits for a two-earner couple with low earnings retiring in 2012 are projected to be around $16 \%$ higher than those paid to today's retirees. A two-earner couple with low earnings retiring in 2075 is projected to receive $38 \%$ higher benefits under the $3.0 \%$ yield assumption and $81 \%$ higher benefits under the $5.3 \%$ yield assumption. Under the $4.6 \%$ yield scenario, a two-earner couple with maximum earnings retiring in 2012 would receive $21 \%$ higher benefits compared to the $49 \%$ higher benefits for a couple retiring in 2075. (See Table 3 below and Table A-7 in Appendix A.)

## Table 3. Projected Change in Benefits Under Model 2 Relative to 2001 Benefit Levels

|  | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: |
| Retiring (age 65) | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner (\$15,875 in 2002) |  |  |  |
| 2012 | 15\% higher | 16\% higher | 16\% higher |
| 2075 | $38 \%$ higher | 73\% higher | 81\% higher |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |
| 2012 | $21 \%$ higher | 21\% higher | 21\% higher |
| 2075 | 23\% higher | 49\% higher | 54\% higher |

Note: Results are shown for 2-earner couples with equal earnings. Results for medium and high-wage earners and for one-earner couples are shown in the data tables in Appendix A.

Effect of Commission Model 3 on Benefit Levels. Figures 32-55 illustrate the effects of Model 3 on future benefit levels for a range of hypothetical workers.

Current-Law Promised Baseline. Under Model 3, at the lower investment yield (3.0\%), projected benefits for workers at all wage levels retiring after 2032 would be lower than benefits promised under current law. For example, in 2075, benefits are projected to be $14 \%$ lower for a two-earner couple with low earnings and $18 \%$ lower for a two-earner couple with maximum earnings. At the higher yield assumptions, in most cases, workers at all wage levels are projected to receive higher benefits. For example, with a $5.3 \%$ investment yield, benefits are projected to be $9 \%$ higher for a two-earner couple with low earnings retiring in 2032 and $5 \%$ higher for similar workers retiring in 2075. By comparison, under the same yield assumption, a two-earner couple with maximum earnings is projected to receive a $1 \%$ lower benefit in 2032 and a 9\% higher benefit in 2075.

All workers would be subject to the reductions in traditional benefits projected under Model 3 whether or not they choose to participate in personal accounts. By the end of the projection period, traditional benefits would be significantly lower than benefits promised under current law, primarily due to the effect of slowing the growth in initial benefits to take into account projected increases in life expectancy. For example, traditional benefits are projected to be $22 \%$ lower for a two-earner couple with low earnings and $35 \%$ lower for a two-earner couple with maximum earnings. (See Table 4 below and Table A-8 in Appendix A.)

## Table 4. Projected Change in Benefits Under Model 3 Relative to the Current- Law Promised Baseline

|  |  | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Retiring <br> (age 65) | With no personal account | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |
| 2012 | $<1 \%$ higher | $1 \%$ higher | 2\% higher | $2 \%$ higher |
| 2032 | 4\% lower | 2\% higher | 8\% higher | 9\% higher |
| 2075 | 22\% lower | 14\% lower | 2\% higher | 5\% higher |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |
| 2012 | 1\% lower | $1 \%$ higher | 2\% higher | $2 \%$ higher |
| 2032 | 20\% lower | 10\% lower | 2\% lower | 1\% lower |
| 2075 | 35\% lower | 18\% lower | 4\% higher | 9\% higher |

Note: Results are shown for 2-earner couples with equal earnings. Results for medium and high-wage earners and for one-earner couples are shown in the data tables in Appendix A.

Current-Law Payable Baseline. Under Model 3, a two-earner couple with low earnings is projected to receive higher benefits compared to those payable under current law, under all three yield assumptions. For example, a two-earner couple with low earnings retiring in 2042 is projected to receive a $36 \%$ higher benefit at the lower yield assumption ( $3.0 \%$ ) and a $57 \%$ higher benefit at the higher yield assumption (5.3\%). For workers at other wage levels, benefits are projected to be lower than those payable under current law in most cases early in the projection period (2022 and 2032). Later in the projection period, however, benefits are projected to be higher relative to the current-law payable baseline. For example, benefits for a two-earner couple with maximum earnings retiring in 2042 are projected to be $25 \%$ higher with a $3.0 \%$ investment yield and $52 \%$ higher with a $5.3 \%$ investment yield. By 2075, benefits for a two-earner couple with maximum earnings are projected to be $22 \%$ and $63 \%$ higher under the $3.0 \%$ and $5.3 \%$ yield assumptions, respectively. (See Table 5 below and Table A-10 in Appendix A.)

## Table 5. Projected Change in Benefits Under Model 3 Relative to the Current-Law Payable Baseline

|  | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: |
| Retiring (age 65) | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner (\$15,875 in 2002) |  |  |  |
| 2012 | $1 \%$ higher | $2 \%$ higher | 2\% higher |
| 2042 | 36\% higher | 53\% higher | 57\% higher |
| 2075 | 29\% higher | 52\% higher | $57 \%$ higher |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |
| 2012 | 1\% higher | $2 \%$ higher | 2\% higher |
| 2042 | 25\% higher | 48\% higher | 52\% higher |
| 2075 | 22\% higher | 56\% higher | 63\% higher |

Note: Results are shown for 2-earner couples with equal earnings. Results for medium and high-wage earners and for one-earner couples are shown in the data tables in Appendix A.

2001 Benefit Levels. In all cases, benefits projected under Model 3 would be higher than benefits paid to today's retirees. The size of the projected increase would become larger over the course of the projection period. For example, for a two-earner couple with low earnings, benefits are projected to be $15 \%$ higher in 2012 and $97 \%$ higher in 2075 with a $4.6 \%$ investment yield. Under the $5.3 \%$ yield assumption, benefits for a two-earner couple with maximum earnings are projected to be $24 \%$ higher in 2012 and 131\% higher in 2075. (See Table 6 below and Table A-11 in Appendix A.)

## Table 6. Projected Change in Benefits Under Model 3 Relative to 2001 Benefit Levels

|  | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: |
| Retiring (age 65) | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner (\$15, 875 in 2002) |  |  |  |
| 2012 | 15\% higher | 15\% higher | 15\% higher |
| 2075 | 67\% higher | 97\% higher | 104\% higher |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |
| 2012 | 23\% higher | 24\% higher | 24\% higher |
| 2075 | $73 \%$ higher | 121\% higher | 131\% higher |

Note: Results are shown for 2-earner couples with equal earnings. Results for medium and high-wage earners and for one-earner couples are shown in the data tables in Appendix A.

## Effect of Reform Models on the Federal Budget

The SSA actuaries provided estimates of the net cash-flow requirements from general revenues over the next 75 years under current law and the Commission's reform plans (i.e., estimates include years of positive and negative cash flow). ${ }^{26}$ Assuming benefits promised under current law would be paid in full after the trust funds are exhausted in 2038 (under the intermediate assumptions in the 2001 Trustees Report), the general revenue requirements under current law are projected to be $\$ 4.2$ trillion (present value basis) over the 75 -year projection period. ${ }^{27}$ Net cash-flow requirements from the General Fund are projected to be lower under the Commission's reform plans.

## Projected Net Cash-Flow Requirements From General Revenues Over 75 Years

Current Law Promised: $\quad \$ 4.2$ trillion
Commission Model 2: $\quad \$ 2.2$ trillion
Commission Model 3: $\quad \$ 2.8$ trillion
Estimates for Models 2 and 3 assume 2/3 participation in personal accounts. Assuming two-thirds participation in personal accounts, Model 2 would require a projected $\$ 2.2$ trillion (present value

[^13]basis) over the projection period. ${ }^{28}$ Model 3 would require a projected $\$ 2.8$ trillion (present value basis) over the period. ${ }^{29}$

Under current law, the trust funds are projected to run annual cash-flow deficits in 2016-2075 (and beyond). ${ }^{30}$ Under Model 2, assuming two-thirds participation in personal accounts, annual cash-flow deficits are projected to occur in 2010-2058 (2006-2057 with $100 \%$ participation). ${ }^{31}$ Starting in 2029, projected annual cash-flow deficits under Model 2 would be lower than under the current-law promised baseline ( 2032 with $100 \%$ participation). ${ }^{32}$ Model 3 would require both temporary general revenue infusions and new dedicated revenues from an unspecified source (to be determined by Congress) to achieve positive cash flow by the end of the projection period. With these new dedicated revenues, which are projected to be equal to $0.63 \%$ of taxable payroll on average over the 75 -year projection

## First Year of Projected Annual Trust Fund Cash-Flow Deficits

Current Law: 2016
Model 2: 2010 (two-thirds)
2006 (100\%)
Model 3:* 2014 (two-thirds)
2011 (100\%)
*With new (unspecified) dedicated revenues. period, ${ }^{33}$ annual cash-flow deficits are projected to occur in 2014-2071 assuming two-thirds participation in personal accounts (2011-2061 with $100 \%$ participation). ${ }^{34}$ Because Model 3 would require new dedicated revenues from an unspecified source (in addition to specified temporary general revenue infusions), the following discussion focuses on Model 2.

Projected annual cash flow from the General Fund to the Social Security trust funds under Model 2, assuming two-thirds and $100 \%$ participation in personal accounts, is compared to both current-law baselines in Figures 1 and 2.

[^14]Figure 1. Model 2 (Two-Thirds Participation): Annual Cash Flow from the General Fund to the Social Security Trust Funds


Figure 2. Model 2 (100\% Participation): Annual Cash Flow from the General Fund to the Social Security Trust Funds


The change in publicly-held debt projected under Model 2 with $0 \%$, two-thirds and $100 \%$ participation in personal accounts is compared in Figure 3. Because a "carve-out" approach redirects payroll taxes to fund the accounts, one effect is to increase debt held by the public. This additional borrowing would occur from 20042051 assuming two-thirds participation in personal accounts and from 2004-2060 assuming $100 \%$ participation, and is projected to peak at $\$ 2.5$ trillion and $\$ 4.7$ trillion, respectively (constant 2001 dollars). ${ }^{35}$ These increases in publicly-held debt projected under the two scenarios illustrate the impact of personal account participation rates on Treasury borrowing (the higher the participation rate, the greater the negative effect on the unified federal budget over the coming decades).

Figure 3. Model 2: Projected Change in Debt Held by the Public


[^15]
## Near-Term Versus Long-Term Budget Perspective

It is also important to consider Social Security's long-range financing needs (both under current law and the Commission's reform models) in the context of the overall federal budget. The Congressional Budget Office projects that total federal spending will be $\$ 27$ trillion (nominal dollars) over the next 10 years (2004-2013) under current law. Combined spending for Social Security, Medicare and Medicaid would total a projected $\$ 12.7$ trillion (nominal dollars), increasing $78 \%$ over the period. By 2013, projected spending for these three programs would represent 53\% of the entire federal budget. Projected annual spending for these programs is shown in Figure 4.

Figure 4. Social Security, Medicare and Medicaid Outlays Projected Under Current Law, 2004-2013


Over the next several decades, total mandatory spending is projected to grow faster than Gross Domestic Product (GDP). The Office of Management and Budget (OMB) projects that mandatory spending (comprised primarily of Social Security, Medicare and Medicaid) will increase from 11.3\% of GDP in 2010 to $16.8 \%$ in 2040 under current law as shown in Figure 5. Social Security is projected to increase from $4.3 \%$ to $6.4 \%$ of GDP over the period. Medicare spending is projected to grow even faster from $2.6 \%$ of GDP in 2010 to $5.5 \%$ in 2040. Medicaid spending would increase from $1.9 \%$ of GDP to $3.2 \%$ over the 2010-2040 period (Figure 6). ${ }^{36}$

[^16]Figure 5. Mandatory and Discretionary Outlays Projected Under Current Law as a Percent of GDP, 2000-2040


Figure 6. Social Security, Medicare and Medicaid Outlays Projected Under Current Law as a Percent of GDP, 2000-2040


Based on the actuaries' projections, traditional benefit constraints such as price indexing combined with personal accounts (as under Model 2) are projected to eliminate the system's long-range actuarial deficit and improve the system's fiscal outlook over the "infinite horizon" (beyond the traditional 75-year projection period). Using a carve-out funding approach for personal accounts under Model 2 is projected to result in larger annual cash-flow deficits compared to current law for roughly 30 years, coinciding with a period of increasing fiscal pressure related to the aging of the U.S. population and significant projected growth in health care costs, among other factors. Supporters argue that, while the Commission's reform models are projected to increase the near-term fiscal burden, they would have positive fiscal effects over the long run. They argue that a partially advance-funded system would reduce the long-term cost of the program to the government and allow workers who choose to participate in personal accounts to make up for some or all of the reductions in traditional benefits that would be needed to bring the system into balance.

## For Additional Reading

CRS Report RL31086, Social Security: What Happens to Future Benefit Levels Under Various Reform Options, by David Koitz, Geoffrey Kollmann, and Dawn Nuschler.
CRS-25
Figure 7: Effect of Commission Model 1
on Benefit Levels for Two-Earner Couples
With Scaled Medium Earnings
CRS-26
Figure 7. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled Medium Earnings Under Commission Model 1 and Current Law
 he General Fund of the T reasury to pay scheduled benefits in full. "Current Law Payable reflects

$$
\begin{aligned}
& \text { Figures 8-31: } \\
& \text { Effect of Commission Model } 2 \\
& \text { on Benefit Levels for Future Retirees }
\end{aligned}
$$

CRS-28
Figure 8. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled Low Earnings Under Commission Model 2 and Current Law
(Assuming a 3.0\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-29
Figure 9. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled Low Earnings Under Commission Model 2 and Current Law
(Assuming a $4.6 \%$ Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-30
Figure 10. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled Low Earnings Under Commission Model 2 and Current Law
(Assuming a 5.3\% Real Investment Yield)
$\$ 1,400$ the General Fund of the Treasury to pay scheduled benefits in full. "Current Law Payable" reflects to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars
CRS-31

$$
\begin{aligned}
& \text { Figure 11. Comparison of Initial Monthly Social Security Benefit for a One-Earner } \\
& \text { Couple With Scaled Low Earnings Under Commission Model } 2 \text { and Current Law } \\
& \text { (Assuming a 3.0\% Real Investment Yield) } \\
& \$ 2,000 \\
& \$ 1,800 \\
& \$ 1,600 \\
& \$ 1,400 \\
& \$ 1,200 \\
& \$ 1,000 \\
& \$ 800 \\
& \$ 400 \\
& \$ 0
\end{aligned}
$$


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-32
Figure 12. Comparison of Initial Monthly Social Security Benefit for a One-Earner
Couple With Scaled Low Earnings Under Commission Model 2 and Current Law
(Assuming a 4.6\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-33


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.

> CRS-34
Figure 14. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled Medium Earnings Under Commission Model 2 and Current Law
(Assuming a 3.0\% Real Investment Yield)
$\$ 2,000$

 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-35

$$
\begin{aligned}
& \text { Figure 15. Comparison of Initial Monthly Social Security Benefit for a Two-Earner } \\
& \text { Couple With Scaled Medium Earnings Under Commission Model } 2 \text { and Current Law } \\
& \text { (Assuming a 4.6\% Real Investment Yield) }
\end{aligned}
$$


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
Figure 16. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled Medium Earnings Under Commission Model 2 and Current Law
(Assuming a 5.3\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-36
CRS-37
Figure 17. Comparison of Initial Monthly Social Security Benefit for a One-Earner
Couple With Scaled Medium Earnings Under Commission Model 2 and Current Law
(Assuming a 3.0\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-38

Source: Figure prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002. "Current Law Promised" reflects current law modified to allow borrowing from
 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-39
Figure 19. Comparison of Initial Monthly Social Security Benefit for a One-Earner
Couple With Scaled Medium Earnings Under Commission Model 2 and Current Law
(Assuming a $5.3 \%$ Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
the General Fund of the Treasury to pay scheduled benefits in full. "Current Law Payable" reflects to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-41

$$
\begin{aligned}
& \text { Figure 21. Comparison of Initial Monthly Social Security Benefit for a Two-Earner } \\
& \text { Couple With Scaled High Earnings Under Commission Model } 2 \text { and Current Law } \\
& \text { (Assuming a 4.6\% Real Investment Yield) }
\end{aligned}
$$

CRS-42

$$
\begin{aligned}
& \text { Figure 22. Comparison of Initial Monthly Social Security Benefit for a Two-Earner } \\
& \text { Couple With Scaled High Earnings Under Commission Model } 2 \text { and Current Law } \\
& \text { (Assuming a 5.3\% Real Investment Yield) }
\end{aligned}
$$ the General Fund of the Treasury to pay scheduled benefits in full. "Current Law Payable" reflects to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.



 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.

$$
\begin{array}{r}
\text { CRS-44 } \\
\begin{array}{c}
\text { Figure 24. Comparison of Initial Monthly Social Security Benefit for a One-Earner } \\
\text { Couple With Scaled High Earnings Under Commission Model } 2 \text { and Current Law } \\
\text { (Assuming a 4.6\% Real Investment Yield) }
\end{array} \\
\$ 4,500 \\
\$ 4,000 \\
\$ 3,500 \\
\$ 3,000 \\
\$ 2,500
\end{array}
$$


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-45


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-47

$$
\begin{aligned}
& \text { Figure 27. Comparison of Initial Monthly Social Security Benefit for a Two-Earner } \\
& \text { Couple With Steady Maximum Earnings Under Commission Model } 2 \text { and Current } \\
& \text { Law (Assuming a 4.6\% Real Investment Yield) } \\
& \$ 3,500
\end{aligned}
$$


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.

> CRS-48


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-50



CRS-51

шоуу ви!
 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-52

CRS-53
Figure 32. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled Low Earnings Under Commission Model 3 and Current Law


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-54
Figure 33. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled Low Earnings Under Commission Model 3 and Current Law
(Assuming a 4.6\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-55
Figure 34. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled Low Earnings Under Commission Model 3 and Current Law
(Assuming a 5.3\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-56
Figure 35. Comparison of Initial Monthly Social Security Benefit for a One-Earner
Couple With Scaled Low Earnings Under Commission Model 3 and Current Law
(Assuming a 3.0\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-57
CRS-58
Figure 37. Comparison of Initial Monthly Social Security Benefit for a One-Earner
Couple With Scaled Low Earnings Under Commission Model 3 and Current Law
(Assuming a 5.3\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-59
Two-Earner
Current Law
enefit for a
thly Social Security B
(Assuming a 3.0\% Real Investment Yield)
$\$ 2,000$

 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.

> CRS-60
Two-Earner
Current Law
for $a$
CRS-61

$$
\begin{aligned}
& \text { Figure 40. Comparison of Initial Monthly Social Security Benefit for a Two-Earner } \\
& \text { Couple With Scaled Medium Earnings Under Commission Model } 3 \text { and Current Law } \\
& \text { (Assuming a 5.3\% Real Investment Yield) }
\end{aligned} \$ 2,500 \text {, Model } 3 \text { ans Payable }
$$


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-62


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-63

Source: Figure prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002. "Current Law Promised" reflects current law modified to allow borrowing from
 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.

> CRS-64


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.

> CRS-65
Figure 44. Comparison of Initial Monthly Social Security Benefit for a Two-Earner
Couple With Scaled High Earnings Under Commission Model 3 and Current Law (Assuming a 3.0\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-66


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-67


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-69


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-70
CRS-71
Figure 50. Comparison of Initial Monthly Social Security Benefit for a Two-Earner Couple With Steady Maximum Earnings Under Commission Model 3 and Current Law (Assuming a 3.0\% Real Investment Yield)


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-72


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-73


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-74


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.
CRS-75



CRS-76


 to fit within the system's projected revenue. Projected benefits are shown in constant 2001 dollars.

## Appendix A. Data Tables

Table A-1. Commission Model 1: Percent Change in Proposed Benefits Relative to Benefits Promised Under Current Law

| Retired (age 65) | 3.0\% real yield |  | 4.6\% real yield |  | 5.3\% real yield |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |  |  |
| 2012 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2022 | -0.9 | -0.6 | 0.4 | 0.3 | 0.6 | 0.4 |
| 2032 | -2.2 | -1.5 | 1.6 | 1.1 | 2.3 | 1.6 |
| 2042 | -3.8 | -2.6 | 3.6 | 2.4 | 5.1 | 3.4 |
| 2052 | -4.6 | -3.1 | 4.7 | 3.1 | 6.6 | 4.5 |
| 2075 | -4.5 | -3.1 | 4.5 | 3.0 | 6.4 | 4.3 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |  |  |
| 2012 | -0.3 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2022 | -1.2 | -0.8 | 0.5 | 0.4 | 0.8 | 0.6 |
| 2032 | -3.0 | -2.0 | 2.1 | 1.4 | 3.1 | 2.1 |
| 2042 | -5.2 | -3.5 | 4.8 | 3.2 | 6.9 | 4.6 |
| 2052 | -6.2 | -4.2 | 6.3 | 4.2 | 8.9 | 6.0 |
| 2075 | -6.1 | -4.1 | 6.0 | 4.1 | 8.6 | 5.8 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |  |  |
| 2012 | -0.3 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2022 | -1.5 | -1.0 | 0.7 | 0.4 | 1.0 | 0.7 |
| 2032 | -3.6 | -2.4 | 2.6 | 1.8 | 3.8 | 2.5 |
| 2042 | -6.3 | -4.2 | 5.8 | 3.9 | 8.3 | 5.6 |
| 2052 | -7.5 | -5.1 | 7.6 | 5.1 | 10.8 | 7.3 |
| 2075 | -7.4 | -5.0 | 7.3 | 4.9 | 10.4 | 7.0 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |  |  |
| 2012 | -0.5 | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2022 | -1.9 | -1.3 | 0.7 | 0.5 | 1.2 | 0.8 |
| 2032 | -4.3 | -2.9 | 3.0 | 2.0 | 4.4 | 2.9 |
| 2042 | -8.0 | -5.4 | 7.5 | 5.1 | 10.7 | 7.3 |
| 2052 | -10.5 | -7.1 | 10.9 | 7.4 | 15.6 | 10.5 |
| 2075 | -10.2 | -6.9 | 10.5 | 7.1 | 15.0 | 10.1 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

Table A-2. Commission Model 1: Percent Change in Proposed Benefits Relative to Benefits Payable Under Current Law

| Retired (age 65) | 3.0\% real yield |  | 4.6\% real yield |  | 5.3\% real yield |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |  |  |
| 2012 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2022 | -0.9 | -0.6 | 0.4 | 0.3 | 0.6 | 0.4 |
| 2032 | -2.2 | -1.5 | 1.6 | 1.1 | 2.3 | 1.6 |
| 2042 | 31.5 | 33.2 | 41.7 | 40.1 | 43.8 | 41.5 |
| 2052 | 31.7 | 33.8 | 44.6 | 42.5 | 47.3 | 44.3 |
| 2075 | 42.4 | 44.6 | 55.9 | 53.7 | 58.7 | 55.6 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |  |  |
| 2012 | -0.3 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2022 | -1.2 | -0.8 | 0.5 | 0.4 | 0.8 | 0.6 |
| 2032 | -3.0 | -2.0 | 2.1 | 1.4 | 3.1 | 2.1 |
| 2042 | 29.7 | 32.0 | 43.4 | 41.2 | 46.2 | 43.1 |
| 2052 | 29.5 | 32.3 | 46.8 | 44.0 | 50.5 | 46.5 |
| 2075 | 40.1 | 43.0 | 58.2 | 55.2 | 62.0 | 57.9 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |  |  |
| 2012 | -0.3 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2022 | -1.5 | -1.0 | 0.7 | 0.4 | 1.0 | 0.7 |
| 2032 | -3.6 | -2.4 | 2.6 | 1.8 | 3.8 | 2.5 |
| 2042 | 28.2 | 31.0 | 44.7 | 42.2 | 48.2 | 44.5 |
| 2052 | 27.7 | 31.1 | 48.6 | 45.2 | 53.1 | 48.2 |
| 2075 | 38.2 | 41.7 | 60.1 | 56.5 | 64.7 | 59.7 |
| Steady maximum earner ( $\$ 84,900$ in 2002) |  |  |  |  |  |  |
| 2012 | -0.5 | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2022 | -1.9 | -1.3 | 0.7 | 0.5 | 1.2 | 0.8 |
| 2032 | -4.3 | -2.9 | 3.0 | 2.0 | 4.4 | 2.9 |
| 2042 | 25.8 | 29.4 | 47.1 | 43.7 | 51.5 | 46.7 |
| 2052 | 23.7 | 28.4 | 53.2 | 48.3 | 59.6 | 52.6 |
| 2075 | 33.9 | 38.9 | 64.8 | 59.7 | 71.5 | 64.3 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

Table A-3. Commission Model 1: Percent Change in Proposed Benefits Relative to 2001 Benefit Levels

| Retired (age 65) | 3.0\% real yield |  | 4.6\% real yield |  | 5.3\% real yield |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |  |  |
| 2012 | 13.3 | 12.7 | 13.5 | 12.9 | 13.6 | 12.9 |
| 2022 | 19.3 | 18.5 | 20.9 | 19.6 | 21.1 | 19.8 |
| 2032 | 24.9 | 24.2 | 29.7 | 27.4 | 30.6 | 28.0 |
| 2042 | 35.2 | 35.2 | 45.6 | 42.1 | 47.8 | 43.6 |
| 2052 | 47.6 | 48.0 | 62.0 | 57.6 | 65.1 | 59.7 |
| 2075 | 84.5 | 84.9 | 101.9 | 96.5 | 105.6 | 99.0 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |  |  |
| 2012 | 13.2 | 12.6 | 13.5 | 12.8 | 13.6 | 12.9 |
| 2022 | 18.9 | 18.2 | 21.0 | 19.7 | 21.4 | 19.9 |
| 2032 | 23.8 | 23.5 | 30.4 | 27.8 | 31.6 | 28.6 |
| 2042 | 33.3 | 33.9 | 47.3 | 43.2 | 50.2 | 45.2 |
| 2052 | 45.1 | 46.3 | 64.4 | 59.2 | 68.6 | 62.0 |
| 2075 | 81.4 | 82.8 | 104.8 | 98.4 | 109.8 | 101.8 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |  |  |
| 2012 | 15.1 | 14.6 | 15.5 | 14.8 | 15.6 | 14.9 |
| 2022 | 20.6 | 20.1 | 23.3 | 21.9 | 23.7 | 22.2 |
| 2032 | 25.2 | 25.1 | 33.2 | 30.5 | 34.8 | 31.5 |
| 2042 | 34.0 | 35.2 | 51.3 | 46.7 | 54.9 | 49.1 |
| 2052 | 45.6 | 47.5 | 69.4 | 63.4 | 74.5 | 66.8 |
| 2075 | 82.0 | 84.4 | 110.9 | 103.6 | 117.0 | 107.7 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |  |  |
| 2012 | 21.1 | 20.6 | 21.8 | 21.1 | 21.9 | 21.1 |
| 2022 | 29.1 | 28.7 | 32.6 | 31.0 | 33.1 | 31.4 |
| 2032 | 33.8 | 34.1 | 44.1 | 40.9 | 46.0 | 42.1 |
| 2042 | 41.4 | 43.6 | 65.3 | 59.5 | 70.3 | 62.8 |
| 2052 | 51.6 | 55.3 | 87.8 | 79.5 | 95.7 | 84.7 |
| 2075 | 89.7 | 94.2 | 133.4 | 123.4 | 143.0 | 129.7 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

CRS-81
Table A-4. Commission Model 2: Percent Change in Proposed Benefits for a Two-Earner Couple Relative to Benefits Promised Under Current Law

| Retired (age 65) | With no personal account | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |
| 2012 | 1.2 | 1.5 | 1.9 | 2.0 |
| 2022 | 9.2 | 10.6 | 13.2 | 13.7 |
| 2032 | -0.9 | 2.3 | 9.9 | 11.3 |
| 2042 | -10.0 | -4.7 | 10.1 | 13.2 |
| 2052 | -18.2 | -12.0 | 6.5 | 10.5 |
| 2075 | -34.5 | -28.4 | -10.4 | -6.6 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |
| 2012 | -0.9 | -0.5 | 0.0 | 0.0 |
| 2022 | -9.9 | -8.5 | -6.1 | -5.7 |
| 2032 | -18.2 | -15.2 | -8.3 | -7.0 |
| 2042 | -25.7 | -20.5 | -5.9 | -2.8 |
| 2052 | -32.5 | -26.1 | -6.3 | -2.0 |
| 2075 | -45.9 | -39.6 | -20.5 | -16.3 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |
| 2012 | -0.9 | -0.6 | -0.2 | -0.2 |
| 2022 | -9.9 | -8.9 | -7.0 | -6.7 |
| 2032 | -18.2 | -15.9 | -10.7 | -9.7 |
| 2042 | -25.7 | -21.8 | -10.7 | -8.4 |
| 2052 | -32.5 | -27.4 | -11.3 | -7.8 |
| 2075 | -45.9 | -40.9 | -25.4 | -22.0 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |
| 2012 | -0.9 | -0.7 | -0.4 | -0.3 |
| 2022 | -9.9 | -9.0 | -7.5 | -7.2 |
| 2032 | -18.2 | -16.3 | -12.0 | -11.2 |
| 2042 | -25.7 | -22.4 | -13.3 | -11.4 |
| 2052 | -32.5 | -28.4 | -15.8 | -13.1 |
| 2075 | -45.9 | -41.9 | -29.7 | -27.1 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

CRS-82
Table A-5. Commission Model 2: Percent Change in Proposed Benefits for a One-Earner Couple Relative to Benefits Promised Under Current Law

| Retired (age 65) | With no personal account | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |
| 2012 | 1.2 | 1.4 | 1.7 | 1.7 |
| 2022 | 9.2 | 10.0 | 11.9 | 12.2 |
| 2032 | -0.9 | 1.3 | 6.4 | 7.4 |
| 2042 | -10.0 | -6.4 | 3.6 | 5.7 |
| 2052 | -18.2 | -14.1 | -1.5 | 1.2 |
| 2075 | -34.5 | -30.4 | -18.2 | -15.6 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |
| 2012 | -0.9 | -0.6 | -0.3 | -0.3 |
| 2022 | -9.9 | -9.0 | -7.3 | -7.0 |
| 2032 | -18.2 | -16.2 | -11.5 | -10.7 |
| 2042 | -25.7 | -22.2 | -12.3 | -10.2 |
| 2052 | -32.5 | -28.1 | -14.8 | -11.9 |
| 2075 | -45.9 | -41.7 | -28.7 | -25.9 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |
| 2012 | -0.9 | -0.7 | -0.5 | -0.4 |
| 2022 | -9.9 | -9.2 | -7.9 | -7.7 |
| 2032 | -18.2 | -16.7 | -13.1 | -12.5 |
| 2042 | -25.7 | -23.0 | -15.5 | -14.0 |
| 2052 | -32.5 | -29.0 | -18.2 | -15.8 |
| 2075 | -45.9 | -42.5 | -32.0 | -29.7 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |
| 2012 | -0.9 | -0.7 | -0.5 | -0.5 |
| 2022 | -9.9 | -9.3 | -8.3 | -8.1 |
| 2032 | -18.2 | -16.9 | -14.0 | -13.5 |
| 2042 | -25.7 | -23.5 | -17.3 | -16.0 |
| 2052 | -32.5 | -29.7 | -21.2 | -19.4 |
| 2075 | -45.9 | -43.2 | -35.0 | -33.2 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

Table A-6. Commission Model 2: Percent Change in Proposed Benefits Relative to Benefits Payable Under Current Law

| Retired (age 65) | 3.0\% real yield |  | 4.6\% real yield |  | 5.3\% real yield |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |  |  |
| 2012 | 1.5 | 1.4 | 1.9 | 1.7 | 2.0 | 1.7 |
| 2022 | 10.6 | 10.1 | 13.2 | 11.9 | 13.7 | 12.2 |
| 2032 | 2.3 | 1.3 | 9.9 | 6.4 | 11.3 | 7.4 |
| 2042 | 30.3 | 28.0 | 50.6 | 41.7 | 54.8 | 44.5 |
| 2052 | 21.5 | 18.7 | 47.2 | 36.0 | 52.6 | 39.8 |
| 2075 | 6.8 | 3.8 | 33.6 | 22.0 | 39.3 | 25.8 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |  |  |
| 2012 | -0.5 | -0.6 | 0.0 | -0.3 | 0.0 | -0.3 |
| 2022 | -8.5 | -9.0 | -6.1 | -7.3 | -5.7 | -7.0 |
| 2032 | -15.2 | -16.2 | -8.3 | -11.5 | -7.0 | -10.7 |
| 2042 | 8.7 | 6.4 | 28.8 | 20.0 | 32.9 | 22.8 |
| 2052 | 2.1 | -0.7 | 29.4 | 17.7 | 35.3 | 21.7 |
| 2075 | -9.9 | -13.0 | 18.6 | 6.3 | 24.8 | 10.5 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |  |  |
| 2012 | -0.6 | -0.7 | -0.2 | -0.5 | -0.2 | -0.4 |
| 2022 | -8.9 | -9.2 | -7.0 | -7.9 | -6.7 | -7.7 |
| 2032 | -15.9 | -16.7 | -10.7 | -13.1 | -9.7 | -12.5 |
| 2042 | 7.0 | 5.3 | 22.2 | 15.5 | 25.3 | 17.7 |
| 2052 | 0.4 | -2.0 | 22.5 | 13.0 | 27.3 | 16.3 |
| 2075 | -11.8 | -14.3 | 11.3 | 1.4 | 16.4 | 4.8 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |  |  |
| 2012 | -0.7 | -0.7 | -0.4 | -0.5 | -0.3 | -0.5 |
| 2022 | -9.0 | -9.3 | -7.5 | -8.3 | -7.2 | -8.1 |
| 2032 | -16.3 | -16.9 | -12.0 | -14.0 | -11.2 | -13.5 |
| 2042 | 6.1 | 4.7 | 18.6 | 13.1 | 21.2 | 14.9 |
| 2052 | -1.1 | -2.9 | 16.3 | 8.8 | 20.1 | 11.4 |
| 2075 | -13.3 | -15.3 | 4.9 | -3.0 | 8.8 | -0.3 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

Table A-7. Commission Model 2: Percent Change in Proposed Benefits Relative to 2001 Benefit Levels

| Retired (age 65) | 3.0\% real yield |  | 4.6\% real yield |  | 5.3\% real yield |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |  |  |
| 2012 | 15.3 | 14.4 | 15.7 | 14.8 | 15.8 | 14.8 |
| 2022 | 33.1 | 31.3 | 36.3 | 33.5 | 36.8 | 33.8 |
| 2032 | 30.6 | 27.6 | 40.3 | 34.1 | 42.1 | 35.3 |
| 2042 | 34.0 | 29.9 | 54.8 | 43.8 | 59.1 | 46.7 |
| 2052 | 36.2 | 31.3 | 64.9 | 50.5 | 71.1 | 54.6 |
| 2075 | 38.3 | 32.8 | 73.1 | 55.9 | 80.5 | 60.9 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |  |  |
| 2012 | 12.9 | 12.1 | 13.5 | 12.5 | 13.5 | 12.5 |
| 2022 | 10.1 | 8.5 | 13.0 | 10.5 | 13.5 | 10.8 |
| 2032 | 8.2 | 5.6 | 17.0 | 11.5 | 18.6 | 12.6 |
| 2042 | 11.7 | 8.0 | 32.3 | 21.7 | 36.6 | 24.5 |
| 2052 | 14.4 | 9.8 | 45.0 | 30.1 | 51.6 | 34.6 |
| 2075 | 16.6 | 11.2 | 53.6 | 35.9 | 61.6 | 41.2 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |  |  |
| 2012 | 14.8 | 14.0 | 15.2 | 14.3 | 15.3 | 14.3 |
| 2022 | 11.6 | 10.2 | 13.9 | 11.7 | 14.3 | 12.0 |
| 2032 | 9.2 | 6.9 | 16.0 | 11.4 | 17.2 | 12.2 |
| 2042 | 11.9 | 8.7 | 27.8 | 19.2 | 31.0 | 21.4 |
| 2052 | 14.4 | 10.3 | 39.6 | 27.1 | 45.1 | 30.8 |
| 2075 | 16.2 | 11.5 | 46.7 | 31.9 | 53.3 | 36.3 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |  |  |
| 2012 | 21.0 | 20.2 | 21.4 | 20.4 | 21.4 | 20.4 |
| 2022 | 19.7 | 18.2 | 21.7 | 19.6 | 22.1 | 19.8 |
| 2032 | 17.0 | 14.7 | 23.0 | 18.7 | 24.2 | 19.5 |
| 2042 | 19.3 | 16.2 | 33.4 | 25.5 | 36.3 | 27.5 |
| 2052 | 21.2 | 17.5 | 42.6 | 31.7 | 47.2 | 34.8 |
| 2075 | 22.7 | 18.5 | 48.5 | 35.7 | 54.1 | 39.4 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

Table A-8. Commission Model 3: Percent Change in Proposed Benefits for a Two-Earner Couple Relative to Benefits Promised Under Current Law

| Retired (age 65) | With no personal account | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |
| 2012 | 0.2 | 1.2 | 1.6 | 1.6 |
| 2022 | 2.1 | 5.0 | 7.4 | 7.8 |
| 2032 | -3.9 | 1.5 | 8.1 | 9.4 |
| 2042 | -8.6 | -0.8 | 12.1 | 14.8 |
| 2052 | -13.1 | -4.4 | 11.9 | 15.3 |
| 2075 | -22.2 | -13.7 | 2.0 | 5.4 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |
| 2012 | -0.9 | 0.4 | 0.9 | 1.0 |
| 2022 | -8.0 | -4.1 | -0.9 | -0.4 |
| 2032 | -13.5 | -6.2 | 2.8 | 4.4 |
| 2042 | -17.7 | -7.2 | 10.3 | 13.9 |
| 2052 | -21.7 | -10.0 | 11.9 | 16.6 |
| 2075 | -29.9 | -18.5 | 2.7 | 7.2 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |
| 2012 | -1.0 | 0.6 | 1.1 | 1.2 |
| 2022 | -9.2 | -4.6 | -1.6 | -1.2 |
| 2032 | -15.5 | -7.0 | 1.3 | 2.8 |
| 2042 | -19.7 | -7.4 | 9.7 | 13.3 |
| 2052 | -23.6 | -9.9 | 12.6 | 17.5 |
| 2075 | -31.6 | -18.3 | 3.5 | 8.2 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |
| 2012 | -1.2 | 1.1 | 1.7 | 1.8 |
| 2022 | -11.9 | -6.1 | -3.2 | -2.8 |
| 2032 | -20.2 | -10.0 | -2.1 | -0.6 |
| 2042 | -24.1 | -9.0 | 7.9 | 11.4 |
| 2052 | -27.8 | -10.1 | 13.2 | 18.2 |
| 2075 | -35.4 | -18.2 | 4.3 | 9.2 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

Table A-9. Commission Model 3: Percent Change in Proposed Benefits for a One-Earner Couple Relative to Benefits Promised Under Current Law

| Retired (age 65) | With no personal account | Real investment yield on personal account |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 3.0\% | 4.6\% | 5.3\% |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |
| 2012 | 0.2 | 0.9 | 1.1 | 1.2 |
| 2022 | 2.1 | 4.1 | 5.7 | 5.9 |
| 2032 | -3.9 | -0.3 | 4.2 | 5.0 |
| 2042 | -8.6 | -3.4 | 5.4 | 7.2 |
| 2052 | -13.1 | -7.2 | 3.8 | 6.1 |
| 2075 | -22.2 | -16.5 | -5.8 | -3.6 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |
| 2012 | -0.9 | 0.0 | 0.3 | 0.4 |
| 2022 | -8.0 | -5.4 | -3.2 | -2.9 |
| 2032 | -13.5 | -8.5 | -2.5 | -1.4 |
| 2042 | -17.7 | -10.6 | 1.2 | 3.6 |
| 2052 | -21.7 | -13.8 | 1.0 | 4.1 |
| 2075 | -29.9 | -22.2 | -7.9 | -4.9 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |
| 2012 | -1.0 | 0.1 | 0.4 | 0.5 |
| 2022 | -9.2 | -6.1 | -4.1 | -3.8 |
| 2032 | -15.5 | -9.8 | -4.2 | -3.1 |
| 2042 | -19.7 | -11.4 | 0.2 | 2.6 |
| 2052 | -23.6 | -14.3 | 0.9 | 4.2 |
| 2075 | -31.6 | -22.6 | -7.9 | -4.7 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |
| 2012 | -1.2 | 0.4 | 0.8 | 0.8 |
| 2022 | -11.9 | -8.0 | -6.1 | -5.8 |
| 2032 | -20.2 | -13.4 | -8.0 | -7.0 |
| 2042 | -24.1 | -13.9 | -2.5 | -0.1 |
| 2052 | -27.8 | -15.9 | -0.1 | 3.3 |
| 2075 | -35.4 | -23.8 | -8.5 | -5.2 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

Table A-10. Commission Model 3: Percent Change in Proposed Benefits Relative to Benefits Payable Under Current Law

| Retired (age 65) | 3.0\% real yield |  | 4.6\% real yield |  | 5.3\% real yield |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |  |  |
| 2012 | 1.2 | 0.9 | 1.6 | 1.1 | 1.6 | 1.2 |
| 2022 | 5.0 | 4.1 | 7.4 | 5.7 | 7.8 | 5.9 |
| 2032 | 1.5 | -0.3 | 8.1 | 4.2 | 9.4 | 5.0 |
| 2042 | 35.6 | 32.2 | 53.4 | 44.2 | 57.1 | 46.6 |
| 2052 | 32.1 | 28.2 | 54.5 | 43.3 | 59.3 | 46.6 |
| 2075 | 28.7 | 24.6 | 52.2 | 40.5 | 57.2 | 43.8 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |  |  |
| 2012 | 0.4 | 0.0 | 0.9 | 0.3 | 1.0 | 0.4 |
| 2022 | -4.1 | -5.4 | -0.9 | -3.2 | -0.4 | -2.9 |
| 2032 | -6.2 | -8.5 | 2.8 | -2.5 | 4.4 | -1.4 |
| 2042 | 26.9 | 22.3 | 50.8 | 38.4 | 55.8 | 41.8 |
| 2052 | 24.3 | 19.1 | 54.5 | 39.5 | 61.0 | 43.8 |
| 2075 | 21.5 | 16.0 | 53.1 | 37.4 | 59.9 | 41.9 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |  |  |
| 2012 | 0.6 | 0.1 | 1.1 | 0.4 | 1.2 | 0.5 |
| 2022 | -4.6 | -6.1 | -1.6 | -4.1 | -1.2 | -3.8 |
| 2032 | -7.0 | -9.8 | 1.3 | -4.2 | 2.8 | -3.1 |
| 2042 | 26.6 | 21.2 | 50.1 | 37.0 | 54.9 | 40.3 |
| 2052 | 24.5 | 18.3 | 55.6 | 39.3 | 62.3 | 43.9 |
| 2075 | 21.9 | 15.5 | 54.4 | 37.4 | 61.5 | 42.2 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |  |  |
| 2012 | 1.1 | 0.4 | 1.7 | 0.8 | 1.8 | 0.8 |
| 2022 | -6.1 | -8.0 | -3.2 | -6.1 | -2.8 | -5.8 |
| 2032 | -10.0 | -13.4 | -2.1 | -8.0 | -0.6 | -7.0 |
| 2042 | 24.5 | 17.8 | 47.6 | 33.4 | 52.4 | 36.6 |
| 2052 | 24.2 | 16.2 | 56.3 | 37.9 | 63.3 | 42.7 |
| 2075 | 22.0 | 13.7 | 55.7 | 36.4 | 63.0 | 41.4 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

Table A-11. Commission Model 3: Percent Change in Proposed Benefits Relative to 2001 Benefit Levels

| Retired (age 65) | 3.0\% real yield |  | 4.6\% real yield |  | 5.3\% real yield |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple | 2-earner couple | 1-earner couple |
| Scaled low earner (\$15,875 in 2002) |  |  |  |  |  |  |
| 2012 | 14.9 | 13.8 | 15.3 | 14.1 | 15.4 | 14.2 |
| 2022 | 26.5 | 24.2 | 29.3 | 26.0 | 29.7 | 26.3 |
| 2032 | 29.6 | 25.7 | 38.0 | 31.3 | 39.6 | 32.4 |
| 2042 | 39.4 | 34.1 | 57.7 | 46.3 | 61.4 | 48.8 |
| 2052 | 48.0 | 41.8 | 73.2 | 58.6 | 78.5 | 62.1 |
| 2075 | 66.7 | 59.3 | 97.1 | 79.6 | 103.6 | 83.9 |
| Scaled medium earner (\$35,277 in 2002) |  |  |  |  |  |  |
| 2012 | 14.0 | 12.8 | 14.6 | 13.2 | 14.6 | 13.3 |
| 2022 | 15.5 | 12.9 | 19.2 | 15.4 | 19.9 | 15.8 |
| 2032 | 19.8 | 15.2 | 31.2 | 22.8 | 33.3 | 24.3 |
| 2042 | 30.4 | 24.0 | 55.0 | 40.4 | 60.1 | 43.8 |
| 2052 | 39.3 | 31.7 | 73.1 | 54.3 | 80.4 | 59.1 |
| 2075 | 57.3 | 48.3 | 98.3 | 75.6 | 107.0 | 81.4 |
| Scaled high earner (\$56,443 in 2002) |  |  |  |  |  |  |
| 2012 | 16.2 | 14.9 | 16.8 | 15.3 | 16.9 | 15.4 |
| 2022 | 16.9 | 14.0 | 20.5 | 16.4 | 21.1 | 16.8 |
| 2032 | 20.7 | 15.6 | 31.5 | 22.8 | 33.5 | 24.2 |
| 2042 | 32.4 | 25.1 | 56.9 | 41.4 | 62.0 | 44.8 |
| 2052 | 41.9 | 33.2 | 77.4 | 56.8 | 85.0 | 61.9 |
| 2075 | 60.6 | 50.2 | 103.5 | 78.7 | 112.7 | 84.9 |
| Steady maximum earner (\$84,900 in 2002) |  |  |  |  |  |  |
| 2012 | 23.2 | 21.5 | 23.9 | 22.0 | 24.0 | 22.0 |
| 2022 | 23.6 | 20.0 | 27.3 | 22.5 | 28.0 | 22.9 |
| 2032 | 25.8 | 19.6 | 36.9 | 27.0 | 39.0 | 28.4 |
| 2042 | 39.9 | 30.7 | 66.0 | 48.0 | 71.4 | 51.6 |
| 2052 | 52.2 | 40.7 | 91.6 | 66.9 | 100.2 | 72.7 |
| 2075 | 72.8 | 59.0 | 120.5 | 90.8 | 130.8 | 97.7 |

Source: Table prepared by CRS based on data from SSA, Office of the Chief Actuary, January 2002.

## Appendix B. General Accounting Office Analysis of Commission Reform Models

At the request of the Senate Committee on Aging, the General Accounting Office (GAO) issued a report ${ }^{37}$ that analyzes the reform models recommended by the President's Commission. The GAO report focused primarily on Model 2. The GAO used two alternative outcomes - one with universal (100\%) participation in personal accounts and one with no participation in personal accounts. The assumptions used regarding economic growth were those contained in the intermediate assumptions of the 2001 Trustees Report. Presumably, under these assumptions the projected average real rate of return on personal accounts invested in a broad mix of funds would be $4.6 \%$ (about $8 \%$ in nominal terms), the same as used in the intermediate rate of return scenario shown in SSA's benefit examples.

In terms of benefit adequacy and individual equity, the report found that under Model 2 future retirees who chose to participate in personal accounts would receive a combination of Social Security and personal account benefits that, despite the benefit offset, would be higher than for retirees who chose not to participate in personal accounts. If participation in personal accounts were universal, the combination of benefits would be higher than those that would be paid in the future if benefits were reduced to fit within the program's projected revenue. If participation in personal accounts were not universal, retirees who did not choose to participate in personal accounts eventually would receive benefits that would be lower than those that would be paid in the future if benefits were reduced to fit within the program's projected revenue. The cohort results under Model 3 are generally similar to Model 2.

In terms of the effect on the program financing, the GAO found that Model 2 would reduce the cost of the program and provide sustainable solvency, without general revenue subsidies and regardless of whether workers participate in personal accounts. However, if all workers chose to participate in personal accounts, over three decades of general revenue transfers would be needed to achieve trust fund solvency. Model 3 also restores solvency over the 75 -year period, regardless of whether workers participate in personal accounts, although general fund revenues are needed throughout the projection period to keep Social Security solvent. However, if participation in personal accounts were universal, at the end of the projection period the Social Security trust fund ratio would be declining, whereas if participation were zero, it would be rising.

[^17]
# Appendix C. Members of the President's Commission to Strengthen Social Security 

Co-Chairmen

## Patrick Moynihan (Democrat)

Former New York Senator and Chairman of the Senate Finance Committee
Dick Parsons (Republican)
Co-Chief Operating Officer of AOL/Time Warner

## Members

Leanne Abdnor (Republican)
Former Executive Director of the Alliance for Worker Retirement Security

## Sam Beard (Democrat)

Founder and President of Economic Security 2000

John Cogan (Republican)<br>Former OMB Deputy Director under President Reagan

## Robert Deposada (Republican)

Executive Director, Hispanic Business Roundtable and President and CEO of ONE Research and Marketing, Inc.

Bill Frenzel (Republican)
Former Minnesota Representative
Estelle James (Democrat)
Consultant with the World Bank, former World Bank lead economist in Policy Research Department

## Robert Johnson (Democrat)

CEO of Black Entertainment Television

## Gwendolyn King (Republican)

Former Commissioner of the Social Security Administration

## Olivia Mitchell (Democrat)

Professor at Wharton University, former co-chair of the 1994-96 Social Security Advisory Council's technical panel on retirement saving

Gerry Parsky (Republican)
Former Assistant Secretary of the Treasury under President Ford
Tim Penny (Democrat)
Former Minnesota Representative

Robert Pozen (Democrat)
Fidelity Investments
Thomas Saving (Republican)
Texas A\&M Director of Private Enterprise Research Center and a Social Security Public Trustee

## Fidel Vargas (Democrat)

Former mayor of Baldwin Park, California and current Vice President of Reliant Equity Investors

Executive Director: Charles P. Blahous
The full text of the Commission's reports and meeting transcripts are available on the Commission's web site at [http://www.csss.gov].


[^0]:    ${ }^{1}$ By 2075, projected annual tax revenue would cover only about two-thirds of benefits promised under current law.

    2 "Taxable payroll" is the amount of workers' earnings subject to the Social Security payroll tax. The Social Security payroll tax is $6.2 \%$ of earnings, up to a maximum. The amount of taxable earnings (the "taxable wage base") is indexed to average wage growth in the economy. In 2003, the taxable wage base is $\$ 87,000$. The Trustees project that the payroll tax would have to be increased on average by 1.92 percentage points over the period to eliminate the system's long-range funding gap. Alternatively, revenue would have to be raised by $15 \%$ or benefits would have to be reduced by $13 \%$ immediately. Policymakers also focus on the large imbalance between costs and revenues at the end of the 75-year projection period, when revenues would cover only two-thirds of promised benefits. Thus, as time goes by, the imbalance portrayed in future projections will continue to increase, requiring more remedial action than an immediate increase of 1.92 percentage points in the payroll tax.

[^1]:    ${ }^{3}$ The balance in the Social Security trust funds represents a form of "IOU" from the General Fund. These IOUs consist of federal securities credited to the trust funds in amounts equal to annual Social Security surpluses plus interest. Trust fund balances are projected to increase through 2027, peaking at $\$ 7.5$ trillion (nominal dollars). Beginning in 2028, the balance in the trust funds would be drawn down to meet program expenses until depletion in 2042 . Over a 14 -year period, the General Fund would have to come up with a projected $\$ 7.5$ trillion to cover IOUs credited to the Social Security trust funds.
    ${ }^{4}$ For more information, see CRS Report 97-81, Recommendations of the 1994-1996 Advisory Council on Social Security, by Geoffrey Kollmann.
    ${ }^{5}$ For more information, see CRS Issue Brief IB98048, Social Security Reform, by Geoffrey Kollmann and Dawn Nuschler; and CRS Report RL31086, Social Security: What Happens to Future Benefit Levels Under Various Reform Options, by David Koitz, Geoffrey Kollmann and Dawn Nuschler.
    ${ }^{6}$ The level of account contributions under H.R. 75 would be the same as under Commission Model 2.
    ${ }^{7}$ For more information, see CRS Congressional Distribution Memorandum, Social Security Reform Legislation in the 108 ${ }^{\text {th }}$ Congress: A Comparison of H.R. 75 and Current Law, by Dawn Nuschler.

[^2]:    ${ }^{8}$ For a discussion of issues related to the creation of personal retirement accounts under Social Security, see CRS Report RL30571, Social Security Reform: The Issue of Individual Versus Collective Investment for Retirement, by David Koitz.

[^3]:    ${ }^{9}$ The annual contribution limit creates a progressive system in which lower-wage earners would be allowed to contribute a higher percentage of their earnings. For example, a worker who earns $\$ 20,000$ a year would be allowed to contribute $\$ 800$ to a personal account ( $\$ 20,000 \times 4 \%=\$ 800$ ), or $4 \%$ of earnings. A worker who earns $\$ 80,000$ a year would be allowed to contribute $\$ 1,000$ to a personal account $(\$ 80,000 \times 4 \%=\$ 3,200$, subject to the annual limit of $\$ 1,000$ ), or $1.25 \%$ of earnings.

[^4]:    ${ }^{10}$ Under current law, long-range replacement rates are estimated at: $56 \%$ for low-wage earners (i.e., earnings equal to $45 \%$ of the average wage); $42 \%$ for average-wage earners; and $28 \%$ for maximum-wage earners (i.e., earnings at or above the maximum taxable wage).
    ${ }^{11}$ Once benefits begin, they are adjusted annually according to price growth. Annual cost-of-living adjustments allow benefits to maintain their purchasing power over time.
    ${ }^{12}$ There are different approaches to "price indexing." The mechanism used by the Social Security Administration (SSA) actuaries in estimating benefit levels under Model 2 involves downward adjustments in the "replacement factors" in the benefit formula, which are currently fixed at $90 \%, 32 \%$ and $15 \%$ (see footnote 14 for a description of the current-law benefit formula). Other components of the benefit formula ("average indexed monthly earnings" and "bend points") would remain indexed to average wage growth.
    ${ }^{13}$ While price indexing initial Social Security benefits would result in lower replacement rates for future retirees, benefits paid to future retirees would provide the same level of purchasing power as benefits paid to today's retirees.

[^5]:    ${ }^{14}$ Under the current benefit computation formula, three replacement factors are applied to three brackets of a worker's "average indexed monthly earnings" (AIME) to determine the basic monthly benefit amount. (To get the AIME, a worker's past earnings are indexed to reflect the growth in average wages over time, and an average monthly amount is computed based on the 35 highest years.) The two AIME amounts that separate the three brackets (called "bend points") are indexed to average wage growth. In 2003, the basic benefit formula is: $\mathbf{9 0 \%}$ of the first $\$ 606$ of AIME; plus 32\% of AIME over $\$ 606$ through $\$ 3,653$; plus $\mathbf{1 5 \%}$ of AIME over $\$ 3,653$. Under Model 3, the third replacement factor would be lowered gradually from $15 \%$ to $10 \%$.

[^6]:    ${ }^{15}$ SSA, Office of the Chief Actuary, Estimates of Financial Effects for Three Models Developed by the President's Commission to Strengthen Social Security, Jan. 31, 2002 (hereafter cited as SSA Actuarial Memorandum, Jan. 31, 2002). The SSA memorandum is included in the Commission's final report: Strengthening Social Security and Creating Personal Wealth for All Americans, Dec. 2001. See also, SSA Memorandum, Revisions of Estimated Unified Budget Effects and Summary General Revenue Requirements for Commission Models - Information, July 22, 2002. (Hereafter cited as SSA Actuarial Memorandum, July 22, 2002.)

    16 "Scaled" earnings patterns - in which earnings are relatively low early in a worker's career, increase steadily during mid-career, and decline somewhat toward the end of career - are considered more typical than steady earnings patterns in which workers have the same relative level of earnings each year throughout their careers.

[^7]:    ${ }^{17}$ The availability of inflation-indexed annuities is very limited in the current annuity market. The actuaries prepared a second set of estimates based on a variable annuity option, which results in higher projected initial monthly benefits. The actuaries consider the fixed annuity option to be the primary set of estimates. In their view, individuals would be less likely to choose the variable annuity option because payments could decline from one year to the next.
    ${ }^{18} \mathrm{~A}$ joint-and-two-thirds-survivor annuity provides the surviving spouse an amount equal to two-thirds of the couple's combined pre-death amount.

[^8]:    ${ }^{19}$ CRS Report RL31770, Retirement Savings Accounts: Early Withdrawals and Required Distributions, by Patrick J. Purcell.
    ${ }^{20}$ Estimate by Profit Sharing/401(k) Council of America cited in "A New Retirement Tactic for a New Tax Law," The Wall Street Journal, May 29, 2003.

[^9]:    ${ }^{21}$ For more information on annuitization issues, please refer to: CRS Report RL31324, Social Security Reform: The Effect of Economic Variability on Individual Accounts and Their Annuities, by Geoffrey Kollmann, Dawn Nuschler and Patrick Purcell.
    ${ }^{22}$ The use of "unisex" life expectancy tables is somewhat controversial. As a result of a 1983 Supreme Court decision, employer-sponsored retirement plans (such as the federal Thrift Savings Plan) must use unisex life expectancy tables to compute annuity payments. The Court held that the use of gender-specific life expectancy tables in employer-sponsored plans had violated Title VII of the Civil Rights Act of 1964 (Arizona Governing Commission for Tax Deferred Annuity \& Deferred Compensation Plans v. Norris, 463 U.S. 1073). The ruling does not apply to individually purchased annuities.

[^10]:    ${ }^{23}$ It can be said that it is unreasonable to portray a situation where no legislative action is ever taken to correct Social Security's financial imbalance, leading to precipitous benefit cuts in 2038. However, by definition "current law" means no change in the program's financing or benefit structure. Furthermore, to posit when or what action would be taken is purely speculative.

[^11]:    ${ }^{24}$ The projected benefit effects discussed below are for two-earner couples, the more typical case. Projected benefit effects for one-earner couples are shown in the figures and in the data tables in Appendix A.

[^12]:    ${ }^{25}$ In 2012, 2022 and 2032, benefits payable under current law would be the same as benefits promised under current law, because the system would be able to pay promised benefits in full until 2038 under intermediate assumptions of the 2001 Social Security Trustees Report. In 2042, 2052 and 2075, there would be substantial differences in projected benefit levels under the two current-law baselines.

[^13]:    ${ }^{26}$ Trust fund assets as of Jan. 1, 2001 (\$1 trillion) are not subtracted from the estimates.
    ${ }^{27}$ SSA Actuarial Memorandum, Jan. 31, 2002, p. 27.

[^14]:    ${ }^{28}$ SSA Actuarial Memorandum, July 22, 2002, table 4. Estimates assume that traditional benefit reductions would apply to retirement, survivors and disability benefits. If disability benefits were held harmless, given that disabled workers may not have sufficient time to grow their accounts, larger general revenue infusions would be required (and projected savings would be somewhat overstated). One study estimates that the additional 75 -year cost of transfers needed under Model 2 to protect the disability component would be $\$ 0.6$ trillion (present value basis) or $0.3 \%$ of taxable payroll (see Assessing the Plans Proposed by the President's Commission to Strengthen Social Security, by Peter A. Diamond and Peter R. Orszag, Tax Notes, July 29, 2002).
    ${ }^{29}$ SSA Actuarial Memorandum, July 22, 2002, table 4.
    ${ }^{30}$ Under the intermediate assumptions in the 2003 Trustees Report, the trust funds are projected to begin running cash-flow deficits in 2018.
    ${ }^{31}$ SSA Actuarial Memorandum, Jan. 31, 2002, p. 22.
    ${ }^{32}$ Ibid., pp. 68-69.
    ${ }^{33}$ Under the intermediate assumptions in the 2001 Trustees Report, the average long-range funding shortfall under the current system is projected to equal $1.86 \%$ of taxable payroll.
    ${ }^{34}$ SSA Actuarial Memorandum, Jan. 31, 2002, p. 22.

[^15]:    ${ }^{35}$ SSA Actuarial Memorandum, July 22, 2002, revised tables on pp. 57-58.

[^16]:    ${ }^{36}$ These CBO and OMB projections do not reflect the cost of Medicare prescription drug legislation (H.R. 1) currently before the Congress.

[^17]:    ${ }^{37}$ GAO Report GAO -03-310, Social Security Reform: Analysis of Reform Models Developed by the President's Commission to Strengthen Social Security.

