

Memorandum

March 31, 2005

TO:	Honorable Charles Rangel House Committee on Ways and Means
FROM:	Laura Haltzel Specialist in Social Security Domestic Social Policy Division

SUBJECT: Estimated Social Security Benefit Levels Under President Bush's 2005 Individual Accounts Proposal Combined with a Proposal to Price-Index Social Security Benefits

As requested, this memorandum provides estimates of the Social Security benefits under President Bush's 2005 individual accounts (IA) proposal when combined with priceindexed Social Security benefits. The parameters for the President's proposal are taken from three sources: (1) the manuscript of the February 2, 2005 press briefing on the proposal; (2) the official White House description of the proposal issued February 2, 2005;¹ and, (3) the February 3, 2005 Social Security memorandum from Chief Actuary Stephen Goss to Charles Blahous of the National Economic Council.² It is important to note that at the time of this Congressional Research Service (CRS) memorandum's development, the President has only provided information on the IA component of his reform proposal and not yet outlined any changes to current-law scheduled benefits. As more details of the plan become available, these estimates may need to be revised. Similarly, the Social Security Administration's actuarial memorandum only covers the effect of the IA plan through 2015. In order to prepare these estimates for those retiring many years in the future, we assume that the IA contribution limit continues to increase over the full work history of each worker according to the method outlined in the actuarial memorandum. The information on how the priceindexing of Social Security benefits might work is taken from a 1998 Social Security Administration memorandum by then Deputy Chief Actuary Stephen Goss.³

¹ "Strengthening Social Security for the 21st Century," accessed on Feb. 7, 2005 at [http://www.whitehouse.gov/infocus/social-security/200501/strengthening-socialsecurity.html].

² Social Security Administration, "Preliminary Estimated Financial Effects of a Proposal to Phase In Personal Accounts — INFORMATION," Memorandum to Charles P. Blahous, Special Assistant to the President for Economic Policy, National Economic Council from Stephen C. Goss, Chief Actuary, Feb. 3, 2005.

³ Social Security Administration, Memorandum from Stephen C. Goss, Deputy Chief Actuary, to (continued...)

As the remainder of the memorandum will explain, we estimate that with each younger cohort that faces the combined effect of price indexing and an individual account benefit offset, the real value of the Social Security benefit remaining becomes smaller. Based on the assumptions and methodology we have utilized, for a scaled high-wage hypothetical worker born in 2006, the combined reduction under the price-indexing scenario and the individual account benefit offset is enough to fully eliminate the worker's Social Security defined benefit. Thus, this worker's entire Social Security income would be comprised of the assets in the worker's IA. This trend would be likely to apply to scaled average-wage and scaled low-wage workers in the long-run. All estimates were prepared using the 2004 Social Security Trustees Report intermediate scenario assumptions as the original March 18, 2005 CRS analysis conveyed to you was completed prior to the release of the 2005 Social Security Trustees Report.

The President's Social Security Individual Accounts Proposal

Individual Account Contributions. Under the President's proposal, individuals born in 1950 and later would have the option to participate in a system of IAs. Workers born in years 1950 through 1965 could first participate in 2009. Workers born in years 1966 through 1978 could first participate in 2010. Workers born in years 1979 and later could first participate in 2011. Those who choose to participate would be able to divert 4% of their Social Security covered wages into an individual account up to a dollar-based maximum contribution limit. The actual maximum dollar amount of contributions would be gradually increased, such that low-earners would be able to immediately contribute a full 4% of earnings to their IA, while higher earners would initially have their contributions capped. In 2009, the first year of account availability, the cap on contributions would be \$1,000. This cap would increase by \$100 each year and then be increased by the growth in the national average wage. For example, in 2010, the contribution limit would be equal to \$1,100 increased by the growth in average wages between 2007 and 2008, for an estimated contribution limit of \$1,145. The actuarial memorandum only covers the years through 2015, and the contribution limit rises using this method each year until then. Although it is not specified in the actuarial memorandum, the February 2, 2005, press briefing implies that this contribution limit would continue to rise after 2015 under these same assumptions. The estimates in this memorandum are developed under this assumption.

Social Security Benefit Reduction Based on "Shadow" Individual Account. If a worker chooses to participate in an IA, in exchange for the reduction in contributions to the Social Security system, he or she would accept a future reduction to the Social Security defined benefit that would otherwise be paid to him or her. This future benefit reduction is based on the contributions made to the worker's individual account. For each *actual* account that a worker contributes to and receives upon retirement, there is also a *hypothetical* "shadow" account that exists only as an accounting mechanism. The "shadow" account records all of the contributions made to the actual account and assumes that they are invested in such a way as to earn an annual real rate of return (the rate one would earn after adjusting for inflation) of 3%, equal to what SSA actuaries project one would earn by investing in government bonds.

 $^{^{3}}$ (...continued)

Harry C. Ballantyne, Chief Actuary, "Modification of the Social Security benefit Formula to Provide for CPI Indexing Across Generations — INFORMATION," Nov. 24, 1998.

Upon retirement, the account balance of this "shadow" account is converted into a hypothetical CPI-indexed monthly annuity. This hypothetical annuity is used to reduce, or offset, the Social Security defined benefit. If a worker's actual account obtained a real rate of return greater than 3% (net of administrative costs), the balance of the actual account would be higher than that of the "shadow" account. Thus, while the defined benefit would be reduced by the annuity based on the "shadow" account, an annuity from the actual account would be larger and would more than offset the reduction to the defined benefit. On the other hand, if a worker's actual account obtained a real rate of interest lower than 3% (net of administrative costs), the balance of the actual account would be lower than that of the shadow account. Thus, while the defined benefit would be reduced by the annuity from the actual account would be lower than that of the shadow account. Thus, while the defined benefit would be reduced by the annuity based on the "shadow" account would be lower than that of the shadow account. Thus, while the defined benefit would be reduced by the annuity based on the "shadow" account would be reduced by the annuity based on the "shadow" account would be reduced by the annuity based on the "shadow" account would be reduced by the annuity based on the "shadow" account would be reduced by the annuity based on the "shadow" account. Thus, while the defined benefit would be reduced by the annuity based on the "shadow" account, an annuity from the actual account would be smaller and would not offset the reduction to the defined benefit.

Individual Account Distributions. Workers would not be permitted to access their IA balances prior to retirement. Upon retirement, the receipt of aged widow(er) benefits, or conversion from disabled worker to retirement benefits, the IA accumulation would be available to the beneficiary. Individuals would be required to annuitize or take in phased withdrawals whatever portion of the IA balance needed, such that, when the annuity or withdrawal amount is combined with the reduced Social Security defined benefit, the worker's total monthly benefit would equal at least 100% of the federal poverty threshold. The annuity purchased or phased withdrawals taken must be CPI-indexed so that the annual amounts increase with inflation and, thus, retain purchasing power. If after the purchase of this annuity or estimation of phased withdrawals the worker still has a balance in his or her IA, the worker would have the option to withdraw the remainder as a lump-sum or pass it on as an inheritance. The plan makes no provision for a minimum benefit amount if the combined remaining Social Security benefit and IA annuity or phased withdrawal are less than 100% of the federal poverty threshold. Neither does it provide specifically for an individual who takes phased withdrawals rather than an annuity outliving his or her assets, nor for instances in which the IA assets decline in value due to possible market declines and making further withdrawals impossible.

Price-Indexing Social Security Benefits

Background. There are two steps in calculating a Social Security retirement benefit. The first step is to calculate the worker's Average Indexed Monthly Earnings (AIME). In this step, all of a worker's earnings are indexed using the increase in the national average wage from the year in which they were earned up to age 60. Any earnings after age 60 are left unindexed. The highest 35 years of earnings are selected and the average monthly earnings level for these years is the AIME. The second step is to calculate the worker's Primary Insurance Amount (PIA), the basic Social Security benefit for a worker who retires at the full retirement age. The PIA formula in 2005 is:

- 90% of the first \$627 of the AIME, *plus*
- 32% of the AIME over \$627 and through \$3,779, plus
- 15% of the AIME over \$3,779.

The 90%, 32% and 15% figures are referred to as the PIA 'factors.' These factors represent the percentage of the worker's Average Indexed Monthly Earnings (AIME) that are replaced by Social Security. The \$627 and \$3,779 figures are referred to as the PIA 'bendpoints.' Under current law, the PIA factors do not change from year to year, but the PIA bendpoints increase annually with the national average wage.

Indexing the bendpoints to wage growth assures that the PIA replaces the same percentage of pre-retirement earnings, known as the 'replacement rate,' across generations. Thus, two workers retiring 10 years apart who have comparable earnings histories would have the same percentage of pre-retirement earnings replaced by Social Security. To achieve this goal, the PIA formula was designed to provide benefits that increase across generations at approximately the rate of the national average wage. This is accomplished by indexing the bendpoints to average wage growth.

How Price-Indexing Works. Certain Social Security reform proposals (e.g. Model 2 of the President's 2001 Commission to Strengthen Social Security) seek to reduce the growth in future Social Security benefits by altering the Social Security PIA formula. In the method of price indexing described by the Social Security Office of the Actuary, the PIA *factors* would be modified each year by multiplying them by the ratio of Consumer Price Index (CPI) increase to average wage increase in the second prior year. Because of increases in labor productivity, wages are expected to grow at a faster rate than prices in the long run. Consequently, "price indexing" would result in slower growth of Social Security benefits relative to those under current law. Each year, the 90%, 32% and 15% factors would be reduced by a small amount, approximately 1% per year under the intermediate scenario assumptions used in the 2004 Social Security Trustees Report. Wages used to calculate the AIME and the PIA bendpoints would continue to be indexed to increases in the national average wage. It is important to note, as the Social Security actuaries point out, "that this approach would cause benefit levels to diminish indefinitely relative to present law."

As mentioned below, these results hinge on the assumptions used for the rate of growth in the national average wage as well as the rate of growth of the CPI. The Social Security actuaries assume a long-term growth rate in wages of 3.9% and a long-term growth rate in the CPI of 2.8%. Thus, according to the proposal, the PIA formula factors would be reduced each year. However, looking at the historical rates that existed for someone retiring in 2005 (from 1962 through 2005), there have been 14 years when the CPI increase exceeded the average wage increase. This occurred in 1970, 1974, 1975, 1977, 1979 through 1982, 1989 through 1991, 1993, 2001, and 2002. In such years, the PIA factors would *increase* rather than decrease. How these years of reversed growth are treated, either freezing the formula factors at the previous year's level or actually increasing the PIA formula factors in line with these results, would alter the effect of the proposal. For the entire period from 1962 through 2004, however, wages rose at an average rate of 5.1% per year while prices rose at an average rate of 4.4% per year.

Methodology

As per your request, we assume that all workers retire at age 65 rather than at the full retirement age of 67. Under current law, all hypothetical workers of the birth cohorts we provide estimates for would receive a 13% reduction in Social Security benefits due to early retirement relative to what they would have received by retiring at the full retirement age of 67. All estimates were prepared using the 2004 Social Security Trustees Report intermediate scenario assumptions as the original CRS analysis was completed prior to the release of the 2005 Social Security Trustees Report.

⁴ Social Security Administration, Memorandum from Stephen C. Goss, Deputy Chief Actuary, to Harry C. Ballantyne, Chief Actuary, "Modification of the Social Security benefit Formula to Provide for CPI Indexing Across Generations — INFORMATION," Nov. 24, 1998.

Individual Accounts. All individual account estimates are based on the President's proposal specifications as outlined above. To estimate the account balances of the actual and hypothetical "shadow" accounts for those retiring many years in the future, we assume that the IA contribution limit continues to increase over the full work history of each worker according to the method outlined in the actuarial memo. If further details emerge that alter this contribution rate, these estimates would need to be recalculated accordingly. We estimate the account balances for the actual IA, which the worker will receive in full, using both the "expected" real rate of return specified by the Social Security actuaries (4.9%) as well as the "low-yield" or "risk-adjusted" real rate of return specified by the actuaries (3.0%), both reduced by the estimated administrative fee of 30 basis points per year for actual rates of return of 4.6% and 2.7% respectively. The hypothetical account balance is estimated using the 3.0% rate of return specified in the proposal. This account balance is used to calculate the offset to the Social Security defined benefit. Because the hypothetical account rate of return is not reduced by administrative fees while the actual risk-adjusted rate of return is reduced by administrative fees, the hypothetical account balance will exceed that of the risk-adjusted actual account in every case. Although the President's IA plan automatically shifts workers of a certain age into a "life-cycle portfolio", these estimates assume no change in the asset allocation or interest rates for those nearing retirement as the Social Security actuaries make no distinction in rates of return for these individuals. A lifecycle fund invests more heavily in bonds as a worker ages. Therefore, the expected rate of return would decline. Similarly, these estimates do not assume a different rate of return for contributions in the year that they are made. The administration of current-year contributions has not yet been specified. Thus, we assume, as the actuaries do, that the same long-term interest rates apply to contributions in the year that they are made.

To calculate the monthly CPI-indexed annuity for both the actual and hypothetical "shadow" accounts, we rely on annuity factors provided to us by the Social Security Administration actuaries. Although the President's IA plan does not require annuitization, but allows individuals to take programmed withdrawals from their IAs, we have followed the Social Security Administration's practice of assuming universal annuitization as it is not clear which type of worker might opt for programmed withdrawals. Because we are using hypothetical workers with no spouses or other dependents, the annuity levels calculated for both the actual and hypothetical accounts are based on the purchase of a unisex CPI-indexed single-life annuity assuming an inflation rate of 2.8% per year and a nominal interest rate of 5.884% per year.

We estimate the effect of the proposal both on workers who would contribute to the IA for their entire career as well as those whose careers would be split between the current-law system and the IA system. As requested, we provide Social Security benefit estimates for scaled low-wage workers, scaled average-wage workers, and scaled high-wage workers, as defined by the Social Security Office of the Chief Actuary.⁵ It is assumed that these workers follow typical lifetime earnings patterns that would produce a Social Security benefit equivalent to that of workers with career earnings of either: (1) a "low" wage (45% of a wage equal to Social Security's "average wage series"); (2) an "average wage" (a wage equal to

⁵ Social Security Administration. Office of the Actuary. *Internal Rates of Return Under the OASDI Program for Hypothetical Workers*. Actuarial Note No. 144, June 2001. The pattern in these "scaled" earnings histories shows relatively low earnings at the beginning of the career, fairly rapid growth through the middle of the career, and a gradual tapering off of earnings at the end of the career.

Social Security's "average wage series"); or, (3) a "high" wage (160% of a wage equal to Social Security's "average wage series"). For example, based on projections in the 2004 Trustees Report, a worker retiring in 2005 would have had *career average earnings* of \$15,776 for a scaled "low" earner, career average earnings of \$35,057 for a scaled "average" earner and career average earnings of \$56,091 for a scaled "high" earner.⁶ These scenarios are for illustration only and are not meant to fully represent every possible scenario that actual workers may experience. For example, by relying on stylized workers, we have assumed no gaps in employment. If present, these gaps would reduce both the Social Security benefit and the IA balance of these workers. However, because under a system of individual accounts the earlier contributions are made the more interest they accrue, the timing of gaps in employment has a greater effect on individual account balances than they would on the traditional Social Security benefit level.

Price-Indexing. Benefit estimates under price-indexing assume that the CPI-indexing provision would first become effective for those reaching age 62 in 2012, so as to not affect those age 55 and over in 2005 as the President has pledged.

Results

To show the combined effect of the IA proposal and price indexing over time, we estimate the remaining Social Security scheduled benefit for the following hypothetical workers:

- For a worker age 41 today, we assume that the worker is born in 1964, begins work at age 21 in 1985, begins contributing to the IA in 2009, and retires at age 65 in 2029. Thus, this worker has a career of 44 years, but only 20 of them are spent contributing to the IA and the worker's PIA would only be subject to 14 years of reduction due to price indexing.
- 2) For a worker age 31 today, we assume that the worker is born in 1974, begins work at age 21 in 1995, begins contributing to the IA in 2010, and retires at age 65 in 2039. As a result, although this worker would also have a career of 44 years, 29 of them would be spent contributing to the IA and the worker's PIA would have 24 years of reduction due to price indexing.
- 3) For a worker age 21 today, we assume that the worker is born in 1984, begins work at age 21 in 2005, begins contributing to the IA in 2011, and retires at the full retirement age of 65 in 2049. As a result, this worker would spend 38 years out of a 44-year work history contributing to the IA and the worker's PIA would have 34 years of reduction due to price indexing.

⁶ Career average earnings levels are defined for retired workers as the highest 35 years of earnings, indexed for growth in average wages to the year prior to benefit entitlement. This concept is similar to that of the AIME, except that career average earnings for these scaled workers are indexed to the year prior to entitlement instead of two years prior to eligibility and earnings are averaged on an annual rather than a monthly basis. Thus, the indexing year for the 2005 retiree is 2004, and the 2004 average wage index is the basis for the career average earnings levels for each hypothetical worker.

- 4) For an individual age 11 today, we assume that he or she is born in 1994, begins work at age 21 in 2015, begins contributing to the IA in 2015, and retires at age 65 in 2059. This worker and all younger cohorts would contribute to the IA in each year of their 44-year work histories. This worker's PIA would also have 44 years of reduction due to price indexing.
- 5) To estimate the effect of the IA proposal on those born in 2005, we assume that the worker begins work at age 21 in 2026, begins contributing to the IA in 2026, and retires at age 65 in 2070. This worker would also contribute to the IA for 44 years, but would face 55 years of reduction in the PIA due to price indexing.
- 6) To estimate the effect of the IA proposal on those born in 2012, we assume that the worker begins work at age 21 in 2033, begins contributing to the IA in 2033, and retires at age 65 in 2077. This worker would contribute to the IA for 44 years, but would face 62 years of reduction in the PIA due to price indexing. This cohort represents the long-term effects of price indexing Social Security benefits and the interaction with the IA.

Table 1 illustrates how a scaled low-wage earner's current-law scheduled benefit, the current-law benefit reduced by price indexing, the size of the benefit offset from the "shadow" account, the current-law benefit reduced by both price indexing and the "shadow" account offset, and the possible individual account annuity amounts vary by birth cohort. Table 2 provides the same estimates for a scaled average-wage earner and Table 3 provides these estimates for a scaled high-wage earner. All three tables show the same trends as younger birth cohorts become affected: a flat real Social Security benefit under the price-indexing scenario; an increased real Social Security "shadow" account benefit offset; a declining real Social Security benefit after reductions for both the price-indexing and "shadow" account annuity; and increasing real individual account annuity levels. Figure 1 shows the interaction of these multiple changes for scaled average-wage earners of different birth cohorts.

With each younger cohort, the percent reduction in current-law Social Security scheduled benefits increases as a result of the price-indexing provision. For example, the worker age 41 today would see a 15% reduction in scheduled benefits, while a worker born in 2012 would experience a 49% reduction in scheduled benefits. With each younger cohort, the value of the "shadow" account annuity also rises. This rise is due to three variables: 1) the rise in real wages, and thus real contributions to the accounts; 2) the increasing number of years of contributions to the accounts and the effect of more years of interest (up to the point where each future cohort would contributed to the IA for each of their 44 work years, the 1990 birth cohort); and 3) the higher value of interest accumulated due to higher wages. The combined reduction in the Social Security benefit from the price-indexing and the IA benefit offset leads to a declining Social Security defined benefit with each new birth cohort. As the 2012 cohort illustrates, eventually the Social Security benefit would be completely offset by the combined reduction under price indexing and the reduction from the "shadow" IA benefit offset. Although the estimated IA balances and thus the IA annuity amounts also rise for these later cohorts, this increase is not enough to fully offset the reduction in Social Security benefits. The combined IA annuity plus the Social Security benefit reduced for price indexing and for the IA offset provide a total Social Security income level that is less than that promised under current law. An example of this trend is highlighted in **Table 4**.

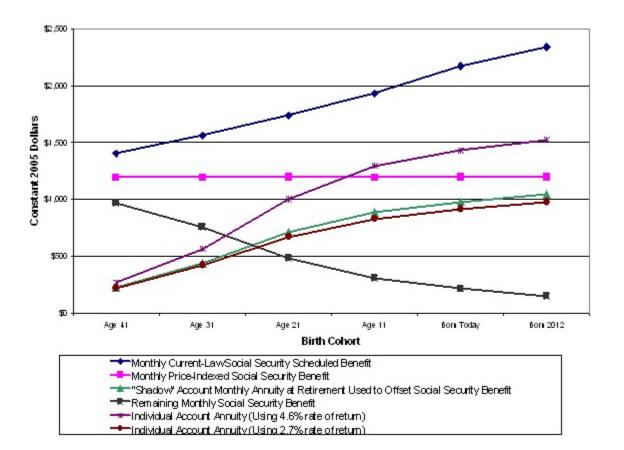


Figure 1. Effect of President's Individual Account Proposal and a Price Indexing Proposal on Combined Social Security Income of a Scaled Low-Wage Earner, by Birth Cohort

Source: Based on estimates prepared by the Congressional Research Service (CRS).

Table 4 shows the results of the analysis for the cohort of individuals born in 2006, who would start work in 2027 and retire at age 65 in 2071. For this birth cohort, the combined Social Security income under the President's IA proposal and a price indexing proposal would be between 21% and 49% lower than Social Security benefits scheduled under current law, depending on whether a 4.6% or 2.7% real rate of return is assumed. Under the 4.6% rate of return scenario, the percent benefit reduction would be larger for scaled low earners than for scaled high earners. This difference would occur because the 4% of earnings that high earners would be able to contribute to their IAs has a larger dollar value and would be able to take advantage of the 1.6 percentage point difference between the 4.6% rate of return on the IA and the 3.0% rate of return used to calculate the IA benefit offset. This advantage would be removed under the "risk-adjusted" interest rate of 3.0% as there is no percentage point difference to be utilized to enhance the higher earner's IA.

We estimate that the 2006 cohort would be the first to have some earners whose Social Security benefit, after being reduced by price indexing and the "shadow" account offset, is reduced to zero. For these individuals, their entire Social Security income would be comprised solely of their individual account proceeds. This elimination of the Social Security defined benefit is restricted to high earners in 2006, as this group has high enough contributions to the individual account to create high reductions under the "shadow" account

benefit offset. Although the 75-year limit on SSA's actuarial projections precludes us from examining the birth cohorts for which scaled average or scaled low earners would have their entire Social Security defined benefit eliminated by the combination of these reductions, it is clear that eventually the factors that led to this result for high earners would also eventually lead to the same result for these groups.

Table 1. Scaled Low Earners: Estimated Current-Law Social Security Scheduled Benefit, Social Security Benefitwith Price Indexing, "Shadow" Account Benefit Offset, Resulting Social Security Benefit, and Potential IndividualAccount Annuities, by Birth Cohort, in Constant 2005 Dollars

	Born in 2012	Born Today	Age 11 Today	Age 21 Today	Age 31 Today	Age 41 Today
Monthly Current-Law Social Security Scheduled Benefit	\$1,418	\$1,316	\$1,171	\$1,053	\$946	\$851
Monthly Price-indexed Social Security Benefit	\$724	\$724	\$723	\$724	\$723	\$723
"Shadow" Account Monthly Annuity at Retirement Used to Offset Social Security Benefit (First year, increasing with CPI each year of life expectancy)	\$470	\$441	\$400	\$323	\$213	\$120
Remaining Monthly Social Security Price-Indexed Benefit After Reduction by "Shadow"Annuity	\$254	\$282	\$324	\$400	\$510	\$603
Individual Account Annuity (Using 4.6% real rate of return)	\$686	\$643	\$583	\$454	\$277	\$144
Individual Account Annuity (Using 2.7% real rate of return)	\$439	\$412	\$373	\$304	\$203	\$116

Source: Estimates by the Congressional Research Service.

Note: The worker born in 2012 retires in 2077. The worker born today retires in 2070. The worker age 11 today retires in 2059. The worker age 21 today retires in 2049. The worker age 31 retires in 2039. The worker age 41 retires in 2029. All workers are assumed to retire early at age 65 and are thus subject to a 13% reduction in Social Security benefits relative to what they would receive by retiring at the full retirement age of 67. Please refer to accompanying memorandum for detailed description of methodology used.

Table 2. Scaled Average Earners: Estimated Current-Law Social Security Scheduled Benefit, Social Security Benefitwith Price Indexing, "Shadow" Account Benefit Offset, Resulting Social Security Benefit, and Potential IndividualAccount Annuities, by Birth Cohort, in Constant 2005 Dollars

	Born in 2012	Born Today	Age 11 Today	Age 21 Today	Age 31 Today	Age 41 Today
Monthly Current-Law Social Security Scheduled Benefit	\$2,341	\$2,173	\$1,933	\$1,738	\$1,562	\$1,404
Monthly Price-indexed Social Security Benefit	\$1,195	\$1,195	\$1,194	\$1,195	\$1,194	\$1,194
"Shadow" Account Monthly Annuity at Retirement Used to Offset Social Security Benefit (First year, increasing with CPI each year of life expectancy)	\$1,045	\$980	\$888	\$713	\$440	\$227
Remaining Monthly Social Security Price-Indexed Benefit After Reduction by "Shadow"Annuity	\$150	\$214	\$306	\$481	\$754	\$968
Individual Account Annuity (Using 4.6% real rate of return)	\$1,524	\$1,430	\$1,296	\$1,000	\$565	\$267
Individual Account Annuity (Using 2.7% real rate of return)	\$976	\$916	\$830	\$671	\$421	\$220

Source: Estimates by the Congressional Research Service.

Note: The worker born in 2012 retires in 2077. The worker born today retires in 2070. The worker age 11 today retires in 2059. The worker age 21 today retires in 2049. The worker age 31 retires in 2039. The worker age 41 retires in 2029. All workers are assumed to retire early at age 65 and are thus subject to a 13% reduction in Social Security benefits relative to what they would receive by retiring at the full retirement age of 67. Please refer to accompanying memorandum for detailed description of methodology used.

Table 3. Scaled High Earners: Estimated Current-Law Social Security Scheduled Benefit, Social Security Benefitwith Price Indexing, "Shadow" Account Benefit Offset, Resulting Social Security Benefit, and Potential IndividualAccount Annuities, by Birth Cohort, in Constant 2005 Dollars

	Born in 2012	Born Today	Age 11 Today	Age 21 Today	Age 31 Today	Age 41 Today
Monthly Current-Law Social Security Scheduled Benefit	\$3,094	\$2,872	\$2,555	\$2,297	\$2,065	\$1,856
Monthly Price-indexed Social Security Benefit	\$1,579	\$1,579	\$1,579	\$1,578	\$1,578	\$1,579
"Shadow" Account Monthly Annuity at Retirement Used to Offset Social Security Benefit (First year, increasing with CPI each year of life expectancy)	\$1,672	\$1,569	\$1,421	\$987	\$559	\$275
Remaining Monthly Social Security Price-Indexed Benefit After Reduction by "Shadow"Annuity	\$0	\$10	\$157	\$592	\$1,019	\$1,304
Individual Account Annuity (Using 4.6% real rate of return)	\$2,438	\$2,288	\$2,073	\$1,349	\$702	\$319
Individual Account Annuity (Using 2.7% real rate of return)	\$1,562	\$1,466	\$1,328	\$932	\$536	\$267

Source: Estimates by the Congressional Research Service.

Note: The worker born in 2012 retires in 2077. The worker born today retires in 2070. The worker age 11 today retires in 2059. The worker age 21 today retires in 2049. The worker age 31 retires in 2039. The worker age 41 retires in 2029. All workers are assumed to retire early at age 65 and are thus subject to a 13% reduction in Social Security benefits relative to what they would receive by retiring at the full retirement age of 67. Please refer to accompanying memorandum for detailed description of methodology used.

Table 4. Hypothetical Worker Born in 2006: Estimated Effect of President's Individual Account Proposal PLUS Price-Indexed Social Security Benefits on the Social Security Scheduled Benefit and Total Social Security Income by Typeof Earner, in Constant 2005 Dollars

	"Expected" Individual Account (Real 4.6% rate of return)			"Risk-Adjusted" Individual Account (Real 2.7% rate of return)		
	Scaled Low Earner	Scaled Average Earner	Scaled High Earner	Scaled Low Earner	Scaled Average Earner	Scaled High Earner
Monthly Current-Law Social Security Scheduled Benefit	\$1,330	\$2,197	\$2,903	\$1,330	\$2,197	\$2,903
Monthly Price-Indexed Social Security Benefit	\$724	\$1,195	\$1,579	\$724	\$1,195	\$1,579
"Shadow" Account Monthly Annuity at Retirement Used to Offset Social Security Benefit (First year, increasing with CPI each year of life expectancy)	\$445	\$989	\$1,583	\$445	\$989	\$1,583
Remaining Monthly Social Security Price-Indexed Benefit After Reduction by "Shadow"Annuity	\$279	\$205	\$ 0	\$279	\$205	\$ 0
Individual Account Annuity	\$649	\$1,443	\$2,309	\$416	\$924	\$1,479
Combined Social Security Income (Social Security benefit reduced for price indexing and "shadow" account benefit offset PLUS IA annuity)	\$928	\$1,648	\$2,309	\$694	\$1,130	\$1,479
Percent Decrease in Social Security Income Compared to Current-Law Scheduled Benefit	- 30%	- 25%	- 21%	- 48%	- 49%	- 49%
Percent of Social Security Income Derived From IA	70%	88%	100%	60%	82%	100%

Source: Estimates by the Congressional Research Service.

Note: Workers born in 2006 retire at age 65 in 2071. Please refer to accompanying memorandum for detailed description of methodology used.