

STRENGTHENING
SOCIAL SECURITY
AND CREATING
PERSONAL WEALTH FOR
ALL AMERICANS



Report of the President's Commission
December 2001



Strengthening Social Security and Creating Personal Wealth for All Americans

**Report of the President's Commission
December 21, 2001**

The President's Commission to Strengthen Social Security

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Introduction By the Co-Chairs

From the first, Social Security was a work in progress. It remains so now. In 1939, just four years after enactment, the Administration and Congress added major provisions. FDR called for more. As he signed the 1939 Amendments he stated: "we must expect a great program of social legislation, as such as is represented in the Social Security Act, to be improved and strengthened in the light of additional experience and understanding." He urged an "active study" of future possibilities.

One such possibility – personal retirement accounts that would endow workers with a measure of wealth – has emerged as the central issue in the ongoing national debate over social insurance.

There are a number of reasons for this. The first is the most obvious, if perhaps the least commented upon: Social Security retirement benefits are no longer the bargain they once were. There is nothing sinister about this. Early retirees benefited from the fixed formula of retirement benefits. For years the Social Security Administration would distribute photographs of Ida May Fuller of Ludlow, Vermont, who having paid \$24.75 in Social Security taxes lived to age 100 and collected \$22,889 in benefits.

In Miss Fuller's time there were almost 42 covered workers for each Social Security beneficiary. We are now down to 3.4 workers per beneficiary. As a result, Social Security as a retirement measure has become a poor investment. It is, even so, an essential *insurance* program. Widows and dependent children are very reliant on dependent benefits. For widows, widowers, singles and children, the monthly check can be a steady, stabilizing factor in life. That said, however, Social Security's actuaries estimate that, for a single male worker born in 2000 with average earnings, the real annual return on his currently-scheduled contributions to Social Security will be only 0.86 percent. This is not what sends savers to savings banks. For workers who earn the maximum amount taxed (currently \$80,400, indexed to wages) the real annual return is *minus* 0.72 percent¹.

This should come as no surprise. Demography is a kind of destiny. The founders of Social Security always assumed it would be supplemented by individual forms of savings. (In his original Message to Congress, President Roosevelt envisioned pensioners owning annuities.) In the first instance, savings took the form of housing; government subsidies were created in the 1930s, followed by the enormous influence of Veterans Administration mortgages following World War II. By 2000, two-thirds – 67.4 percent – of Americans owned their homes.

The Crash of '29 left an indelible mark on the generation that lived through it -- and for that matter, the

¹OACT/SSAprojections, May 27, 2001, Table 9.

one that followed, such that direct investment in markets was slow in returning. But eventually it did. Partly as a consequence of 1929, we have learned a great deal about how a modern economy works. During the Depression, the Federal government did not even calculate the unemployment rate; it was taken every ten years in the Census. Today, our economic statistics are extraordinary in range and accuracy, and since enactment of the Employment Act of 1946 economic policies have, on balance, been successful. The great swings in economic activity have been radically mitigated. In November 2001, the Dating Committee of the National Bureau of Economic Research gave out its judgment that the period of economic expansion that began in March 1991 ended in March 2001. Such a ten-year period of uninterrupted growth is something never before recorded. There will continue to be ups and downs, and all manner of risks, but in the main the modern market economy appears to have settled down to impressive long-term growth².

The post-World War II growth period was reflected, naturally enough, in the stock market. More important, a new form of investment, the mutual fund, was developed which enabled small savers to "pool" their investments over a range of stocks and bonds. As reported by the Investment Company Institute, "As of May, 2001, 93.3 million individuals, representing 52 percent of all U.S. households owned mutual funds." Further, "Nearly half of mutual fund shareholders have household financial assets below \$100,000; 29 percent have less than \$50,000."

The surge in mutual fund ownership began in the early 1980s. One of the more notable innovations was the development of a similar fund, the Thrift Savings Plan, as part of the retirement arrangements for Federal employees. The legislation was enacted quietly by Congress and signed by President Reagan in 1986. In terms of the markets, the timing could not have been better. The results have been stunning, as the Commission learned from testimony by the Director of the Federal Retirement Thrift Investment Board, Roger Mehle. Three funds were available, in whatever combination the employee chose. A "G" Fund is invested in short-term non-marketable U.S. Treasury securities specially issued to the TSP. An "F" Fund is invested in a commercial bond index; and a "C" Fund is invested in an equity index fund. The compound rates of return for the closing decade of the last century were as follows:

G Fund	6.7 percent
F Fund	7.9 percent
C Fund	17.4 percent

Actual trading is contracted out and administrative expenses are minimal: 50 cents for every \$1,000 of G Fund account balance, 70 cents for the F Fund, and 60 cents for the C Fund. (Additional funds are now being developed and offered.) As of September 2001, 86.6 percent of all Federal employees participated in the program. It is a singular success.

² Even as the Commission proceeded, the Congress, at the behest of railroads and railroad unions, overwhelmingly adopted legislation which, as described by The New York Times, "would allow the federally administered railroad pension system to take its assets out of government bonds for the first time and invest the money on Wall Street" (The New York Times, November 27, 2001). The House vote was 369-33; the Senate vote 90-9. Unlike the recommendations contained in this report, and the principles outlined in the Commission's Executive Order, this legislation would effect collective investment of a Trust Fund as opposed to personal accounts. The Commission does not advocate collective investment, but does believe that Social Security recipients should have the benefit of such investment returns from personal accounts.

Martha Derthick's classic study *Policy Making for Social Security* begins with a quotation from Arthur Altmeyer, who was chief executive of the program from 1937 to 1953:

Social Security will always be a goal, never a finished thing because human aspirations are infinitely expandable... just as human nature is infinitely perfectible. (p. 17)

This would not quite have been the view of the Founders, who thought human nature to be anything but "infinitely perfectible." Hence checks and balances were needed to make up for the "defect of better motives." And indeed some things, notably demography, proved anything but perfectible. The Social Security tax (F.I.C.A. for Federal Insurance Contribution Act) began at two percent and has been raised more than twenty times, reaching the present 12.4 percent. This is a regressive tax that is paid on the first dollar of income by rich and poor alike. In fact, as of 1997, 79 percent of American households paid more in payroll taxes than in income taxes³.

One egregious failing of the present system is its effect on minorities with shorter life spans than the white majority. For black men age 20, only some 65 percent can be expected to survive to age 65. Thus, one of every three black youths will pay for retirement benefits they will never collect. No one intends this; and with time the gap may close. But it is not closed now. And because Social Security provides no property rights to its contributors – the Supreme Court has twice so ruled – a worker could easily work forty years then die and own not a penny of the contributions he has made for retirement benefits he will never collect. There are, to be sure, survivors and dependents benefits, but many workers die before eligibility for these is established. Disability insurance was added during the Eisenhower Administration so that workers are covered during their working years. But far too many never receive any retirement benefits and leave no estate.

Similarly, the present Social Security program can prove unjust to women, especially divorced women who too often share nothing of the benefits acquired by a previous spouse. It is time we addressed this matter. There are a number of legitimate approaches that simply need to be worked out, with the plain objective of equal treatment.

As the early administrators of Social Security anticipated – and very much hoped for – the program steadily evolved. Health insurance (Medicare) was enacted in the 1960s. By the 1990s, the time had come for Personal Retirement Accounts. (As with much else in social insurance, other nations had preceded us.) In the mode of earlier innovations, the subject was first broached in academic circles, notably by economists such as Harvard's Martin Feldstein. In the fall of 1997, the Clinton Administration began to analyze proposals to create a system of individual retirement accounts, either as part of Social Security or outside of it. By early 1998, working groups were formed within Treasury and other departments to study issues related to such proposals.

A primary issue was how a feasible system of accounts could be administered and what would be the associated costs. In the spring of 1999 the Treasury had contracted a study by the State Street Bank entitled, "Administrative Challenges Confronting Social Security Reform." The sum of it was that the

³ Congressional Budget Office, "Effective Federal Tax Rates, 1979-1997," October 2001, p. xxi.

task was feasible – the Thrift Savings Accounts were already in place – and the cost modest. Accenture (formerly known as Andersen Consulting) produced similar findings. In 1998 and 1999 a range of similar measures were introduced in Congress. None were enacted, but there was now a striking new item on the national agenda.

In the course of the Republican presidential primary campaign of 2000, then Governor George W. Bush gave a major address on Social Security, proclaiming it "the single most successful government program in American history...a defining American promise." He went on to discuss Personal Retirement Accounts that would, in the words of a Democratic Senator, "take the system to its 'logical completion.'" Then-Governor Bush envisioned a program that would "give people the security of ownership," the opportunity "to build wealth, which they will use for their own retirement and pass on to their children." He cited a range of legislators, Republican and Democrat, who shared this general view, including Senator Bob Kerrey, who had recently stated: "It's very important, especially for those of us who have already accumulated wealth, to write laws to enable other people to accumulate it." Governor Bush then added:

Ownership in our society should not be an exclusive club. Independence should not be a gated community. Everyone should be a part owner in the American dream.

In his address, then-Governor Bush insisted that "personal accounts are not a substitute for Social Security," but a supplement, a logical completion. He proposed several measures necessary to ensure the long-term fiscal viability of Social Security itself. Among them was the following:

Reform should include personal retirement accounts for young people – an element of all the major bipartisan plans. The idea works very simply. A young worker can take some portion of his or her payroll tax and put it in a fund that invests in stocks and bonds. We will establish basic standards of safety and soundness, so that investments are only in steady, reliable funds. There will be no fly-by-night speculators or day trading. And money in this account could only be used for retirement, or passed along as an inheritance.

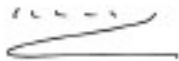
Personal retirement accounts within Social Security could be designed and financed in a number of ways, some of which are analyzed by the Commission in detail in the pages that follow. To illustrate the power of personal accounts, however, let us offer the following example. This approach would establish an opportunity for all people with earnings to set up a personal retirement account, on a voluntary basis. These accounts could be financed by the individual worker voluntarily adding one percent of his pay on top of the present 6.2 percent employee share of the Social Security payroll tax. The Federal government could match the employee's contribution with a matching one percent of salary, drawn from general revenues. The result would be retirement savings accounts for all participating American workers and their families, which might or might not interact directly with the Social Security system, depending on design choices that are discussed further in Chapter 4. The cost to the Federal government would be approximately \$40 billion per year, depending on rates of participation. The magic of compound interest now commences to work its wonders.

To illustrate what a participant might anticipate from setting aside one percent of his or her pay, matched with the government's one percent, we can forecast the situation of a "scaled medium earner" entering the workforce at age 21 and retiring at age 65 in the year 2052⁴. Assume a portfolio choice – there should be choices – roughly that of the current Thrift Savings Plan: 50 percent corporate equity, 30 percent corporate bonds, and 20 percent U.S. Treasury bonds. Real yields are assumed to be 6.5 percent for equities, 3.5 percent for corporate bonds, and 3 percent for Treasury bonds. Also assume that this worker pays 0.3 percent of his account assets for annual administrative costs. At retirement, she or he will have an expected portfolio worth \$523,000 (\$101,000 in constant 2001 dollars). A two-earner family could easily have an expected net "cash" worth of \$1 million.

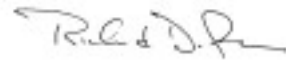
As the Commission's interim report has shown, Social Security is in need of an overhaul. The system is not sustainable as currently structured. The final report demonstrates that there are several different approaches that national policymakers could take to address the problem, and we hope the pages that follow will provide sufficient analysis and suggestion to prompt a reasoned debate concerning how best to strengthen Social Security.

In the accompanying report, the Commission recommends that there be a period of discussion, lasting for at least one year, before legislative action is taken to strengthen and restore sustainability to Social Security. Regardless of how policymakers come to terms with the underlying sustainability issues, however, one thing is clear to us: the time to include personal accounts in such action has, indeed, arrived. The details of such accounts are negotiable, but their need is clear. The time for our elected officials to begin that discussion, informed by the findings in this report, is now.

Carpe diem!



Daniel Patrick Moynihan



Richard D. Parsons

Co-Chairmen, President's Commission to Strengthen Social Security
December 21, 2001

⁴Today, a scaled medium earner earns \$35,277 annually.

Executive Summary

Findings

Social Security will be strengthened if modernized to include a system of voluntary personal accounts. Personal accounts improve retirement security by facilitating wealth creation and providing participants with assets that they own and that can be inherited, rather than providing only claims to benefits that remain subject to political negotiation. By allowing investment choice, individuals would be free to pursue higher expected rates of return on their Social Security contributions. Furthermore, strengthening Social Security through personal accounts can add valuable protections for widows, divorced persons, low-income households and other Americans at risk of poverty in old age.

Partial advance funding of Social Security should be a goal of any effort to strengthen the system. Advance funding within Social Security can best be accomplished through personal accounts rather than direct government investment. Personal accounts offer numerous economic benefits, including a likely increase in national saving, as well as an improvement in incentives for labor force participation.

Personal accounts can be administered in an efficient and cost effective manner. This report outlines specific measures that would effectively balance desires for low administrative costs along with consumer choice and efficient financial markets. Accounts should be structured so as to allow inheritability and to strengthen the protection of spouses.

Personal accounts can also contribute towards the fiscal sustainability of the Social Security system. While there are multiple paths to fiscal sustainability that are consistent with the President's principles for Social Security reform, we have chosen to include three reform models in the report that improve the fiscal sustainability of the current system, are costed honestly, and are preferable to the current Social Security system.

Under the current system, benefits to future retirees are scheduled to grow significantly above the level received by today's retirees, even after adjusting for inflation. The cost of paying these benefits will substantially exceed the amount of payroll taxes collected. To bring the Social Security system to a path of fiscal sustainability—an essential task for any reform plan—there are differing approaches. The Commission believes that no matter which approach is taken, personal accounts can increase expected benefits to future participants in the Social Security system.

Each of the three reform plans abides by the President's Principles for reform.

The President's Principles

The President directed the Commission to propose Social Security reform plans that will strengthen Social Security and improve its fiscal sustainability, while meeting several principles:

- 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.

Unifying Elements of the Three Reform Plans

- The Commission has developed three alternative models for Social Security reform that feature personal accounts as a central component. Under all three reform plans, future retirees can expect to receive benefits that are at least as high as those received by today's retirees, even after adjusting for inflation.
- All three models include a voluntary personal retirement account that would permit participants to build substantial wealth and receive higher expected benefits than those paid to today's retirees. Thus, all of the plans would enhance workers' control over their retirement benefits with accounts that they own and can use to produce retirement income, or pass on to others in the form of an inheritance.
- Because the Commission believes that the benefits currently paid to low-wage workers are too low, it has included a provision in two of the three plans that would enhance the existing Social Security system's progressivity by *significantly increasing benefits for low-income workers above what the system currently pays*. This provision will raise even more of our low-income elderly – most of whom are women – out of poverty. Two of the three models also boost survivor benefits for below-average income widows and widowers.
- The Commission set a goal of moving the Social Security system toward a fiscally sustain-

able course that reduces pressure on the remainder of the federal budget and can respond to economic and demographic changes in the future. The three reform models outlined here are therefore transparently scored in terms of plan provisions, effects on workers' expected costs and benefits, and effects on Trust Fund operations as well as the unified federal budget. We also identify clearly how large the personal account assets may be expected to grow as the system evolves.

- All three reform models improve the fiscal sustainability of the program, though some move farther than others. Model 1 would require additional revenues in perpetuity in order to pay scheduled Social Security benefits under the plan. Model 3 prescribes an amount of additional revenues needed to pay scheduled benefits under the plan, an amount smaller than that required under Model 1. Model 2 does not require permanent additional funding.
- All three models also require transitional investments to move to a system that includes Personal Accounts. These transitional investments advance fund future benefits, thus substantially reducing the cost on future generations.
- All three models reduce the long-term need for general revenues as compared to the current, unsustainable system. In two of the three plans (Models 2 and 3), the system's cash flow needs are met so that the benefits promised by each plan can be paid as retirees need them.
- All three of the models are expected to increase national saving, though some would do so more than others.
- The Commission concludes that building substantial wealth in personal accounts can be and should be a viable component of strengthening Social Security. We commend our three models to the President, the Members of Congress and to the American public in order to enrich national understanding of the opportunities for moving forward.

Three Reform Models

The three models for Social Security reform devised by the Commission demonstrate how alternative formulations for personal accounts can contribute to a strengthened Social Security system.

Reform Model 1 establishes a voluntary personal account option but does not specify other changes in Social Security's benefit and revenue structure to achieve full long-term sustainability.

- Workers can voluntarily invest 2 percent of their taxable wages in a personal account.
- In exchange, traditional Social Security benefits are offset by the worker's personal account contributions compounded at an interest rate of 3.5 percent above inflation.
- No other changes are made to traditional Social Security.

- Expected benefits to retirees rise while the annual cash deficit of Social Security falls by the end of the valuation period.
- Workers, retirees, and taxpayers continue to face uncertainty because a large financing gap remains requiring future benefit changes or substantial new revenues.
- Additional revenues are needed to keep the trust fund solvent starting in the 2030s.

Reform Model 2 enables future retirees to receive Social Security benefits that are at least as great as today's retirees, even after adjusting for inflation, and increases Social Security benefits paid to low-income workers. Model 2 establishes a voluntary personal account without raising taxes or requiring additional worker contributions. It achieves solvency and balances Social Security revenues and costs.

- Workers can voluntarily redirect 4 percent of their payroll taxes up to \$1000 annually to a personal account (the maximum contribution is indexed annually to wage growth). No additional contribution from the worker would be required.
- In exchange for the account, traditional Social Security benefits are offset by the worker's personal account contributions compounded at an interest rate of 2 percent above inflation.
- Workers opting for personal accounts can reasonably expect combined benefits greater than those paid to current retirees; greater than those paid to workers without accounts; and greater than the future benefits payable under the current system should it not be reformed.
- The plan makes Social Security more progressive by establishing a minimum benefit payable to 30-year minimum wage workers of 120 percent of the poverty line. Additional protections against poverty are provided for survivors as well.
- Benefits under the traditional component of Social Security would be price indexed, beginning in 2009.
- Expected benefits payable to a medium earner choosing a personal account and retiring in 2052 would be 59 percent above benefits currently paid to today's retirees. At the end of the 75-year valuation period, the personal account system would hold \$12.3 trillion (in today's dollars; \$1.3 trillion in present value), much of which would be new saving. This accomplishment would need neither increased taxes nor increased worker contributions over the long term.
- Temporary transfers from general revenue would be needed to keep the Trust Fund solvent between 2025 and 2054.
- This model achieves a positive system cash flow at the end of the 75-year valuation period under all participation rates.

Reform Model 3 establishes a voluntary personal account option that generally enables workers to reach or exceed current-law scheduled benefits and wage replacement ratios. It achieves solvency by adding revenues and by slowing benefit growth less than price indexing.

- Personal accounts are created by a match of part of the payroll tax – 2.5 percent up to \$1000 annually (indexed annually for wage growth) – for any worker who contributes an additional 1 percent of wages subject to Social Security payroll taxes.
- The add-on contribution is partially subsidized for workers in a progressive manner by a refundable tax credit.
- In exchange, traditional Social Security benefits are offset by the worker's personal account contributions compounded at an interest rate of 2.5 percent above inflation.
- The plan makes the traditional Social Security system more progressive by establishing a minimum benefit payable to 30-year minimum wage workers of 100 percent of the poverty line (111 percent for a 40-year worker). This minimum benefit would be indexed to wage growth. Additional protections against poverty are provided for survivors as well.
- Benefits under the traditional component of Social Security would be modified by:
 - adjusting the growth rate in benefits for actual future changes in life expectancy,
 - increasing work incentives by decreasing the benefits for early retirement and increasing the benefits for late retirement, and
 - flattening out the benefit formula (reducing the third bend point factor from 15 to 10 percent).
- Benefits payable to workers who opt for personal accounts would be expected to exceed scheduled benefit levels and current replacement rates.
- Benefits payable to workers who do not opt for personal accounts would be over 50 percent higher than those currently paid to today's retirees.
- New sources of dedicated revenue are added in the equivalent amount of 0.6 percent of payroll over the 75-year period, and continuing thereafter.
- Additional temporary transfers from general revenues would be needed to keep the Trust Fund solvent between 2034 and 2063.

Specifications of Commission Reform Models

Personal Accounts	Model 1	Model 2	Model 3
Personal Account Size	2%	4% up to \$1000 annually (indexed to wages each year)	1% new contribution plus 2.5% up to \$1000 annually (indexed to wages each year)
Voluntary	Yes	Yes	Yes
Additional contributions required?	This is a generic 2% plan that can be done with or without contributions	None	1% of wages required to participate (subsidized through income tax)
Real return that makes person better off with accounts than without (SS defined benefit offset rate)	3.5%	2.0%	2.5%
Accounts owned by participants?	Yes	Yes	Yes
Accounts can be bequeathed to heirs?	Yes	Yes	Yes
Participants can choose from a mix of low-cost, diversified portfolios?	Yes	Yes	Yes
Contributions and account earnings splitting in case of divorce?	Yes	Yes	Yes

Specifications of Commission Reform Models

Traditional Social Security Benefits	Model 1	Model 2	Model 3
New minimum benefit	None	By 2018, a 30-year minimum wage worker is guaranteed benefit equal to 120% of poverty level, inflation indexed.	By 2018, a 30-year minimum wage worker is guaranteed benefit equal to 100% of poverty level (111% for a 40-year worker), then rising with national wage growth.
Widow/Widower benefits	No changes	Increased to 75% of couple benefits (versus 50% to 67% today) for lower wage couples	Increased to 75% of couple benefits (versus 50% to 67% today) for lower wage couples
Changes to growth rate of traditional benefit for future retirees	None specified	Indexed to inflation instead of wages starting for those turning 62 in 2009.	Indexed to gains in average life expectancy (results in average annual growth of 0.5% over inflation)
Additional changes to traditional benefit formula	None specified	None specified	<ol style="list-style-type: none"> 1. Reduce benefit for early retirement and increase benefit for late retirement 2. Gradually decrease bend point factor for highest income bend point from 15% to 10% starting in 2009

Reform Model 1: Increase in Total Benefits for Account Holders Relative to Current Retirees

Retirement Year	Annual Benefit Levels in 2001 Dollars		
	Low-wage Worker	Medium-wage Worker	High-wage Worker
2001	\$7,644	\$12,624	\$16,392
2032	\$10,140	\$16,944	\$22,620
Percent increase over current retiree	32%	34%	38%
2052	\$9,624*	\$16,476*	\$22,428*
Percent increase over current retiree	26%	31%	37%

* Assumes the current system will pay benefits affordable under current law: \$8,568, \$14,148, and \$18,696, for low, average, and high earners respectively. Currently scheduled benefits are \$11,832, \$19,536, and \$25,812 respectively, but the system is projected to be 27.6% underfunded in 2052. Assuming that currently scheduled benefits are met, the total expended benefit with personal accounts would be: \$12,888, \$21,864 and \$29,544 respectively.

Reform Model 2: Increase in Total Benefits for Account Holders Relative to Current Retirees

Retirement Year	Annual Benefit Levels in 2001 Dollars		
	Low-wage Worker	Medium-wage Worker	High-wage Worker
2001	\$7,644	\$12,624	\$16,392
2032	\$11,160	\$15,444	\$19,680
Percent increase over current retiree	46%	22%	20%
2052	\$13,608*	\$20,016*	\$24,684*
Percent increase over current retiree	78%	59%	51%

* Assumes the current system will pay benefits affordable under current law: \$8,568, \$14,148, and \$18,696, for low, average, and high earners respectively. Currently scheduled benefits are \$11,832, \$19,536, and \$25,812 respectively, but the system is projected to be 27.6% underfunded in 2052.

Reform Model 3: Increase in Total Benefits for Account Holders Relative to Current Retirees

Retirement Year	Annual Benefit Levels in 2001 Dollars		
	Low-wage Worker	Medium-wage Worker	High-wage Worker
2001	\$7,644	\$12,624	\$16,392
2032	\$10,932	\$17,412	\$22,620
Percent increase over current retiree	43%	38%	38%
2052	\$14,112*	\$23,796*	\$31,668*
Percent increase over current retiree	85%	88%	93%

* Assumes the current system will pay benefits affordable under current law: \$8,568, \$14,148, and \$18,696, for low, average, and high earners respectively. Currently scheduled benefits are \$11,832, \$19,536, and \$25,812 respectively, but the system is projected to be 27.6% underfunded in 2052.

Summary of Fiscal Sustainability Results Assuming 2/3 Participation in Personal Accounts (PA)

	Model 1 ¹	Model 2	Model 3	Current Law
Expected PA assets at end of 2075 (\$PV trillions)	\$1.1	\$1.3	\$1.6	N/A
Gain in Social Security 'system' assets at end of 205 (increase in trust fund + expected PA assets; \$PV trillions)	\$0.5	\$4.8	\$5.0	N/A
Reductions in Cash Flow Requirements From General Revenue^{2,3} Relative to Present Law				
Reduction in 75-year total (sum of annual amounts in \$2001 trillions)	\$1.7	\$14.8	\$11.3	\$0.0
Percent reduction versus current law (in \$2001)	7.7%	68.1%	52.2%	0.0%
Reduction in 75-year total (\$PV trillions)	-\$0.2	\$2.3	\$1.7	\$0.0
Percent reduction versus current law (in PV)	-3.8%	45.0%	33.9%	0.0%
Social Security Cashflow				
With Dedicated General Revenue				
Positive by end of valuation window?	No	Yes	Yes ⁴	No
Income Rate (excluding GR transfer)—Cost rate in 2075 (% of payroll)	-4.56	1.41	0.12 ⁴	-6.05
Without Dedicated General Revenue³				
Positive by end of valuation window?	No	Yes	No	No
Income Rate (excluding GR transfer)—Cost rate in 2075 (% of payroll)	-4.56	1.41	-0.75	-6.05

Summary of Fiscal Sustainability Results Assuming 2/3 Participation in Personal Accounts (PA)

	Model 1 ¹	Model 2	Model 3	Current Law
Improvement in Actuarial Balance Over 75-year Period				
Improvement with general revenue transfer (% of payroll)	-0.32	1.99	1.88	0
Percent improvement with general revenue transfer	-17%	107%	101%	
Improvement without general revenue transfer (% of payroll) ³	-0.32	1.15	0.87 ⁵	0
Percent improvement without general revenue transfer	-17%	62%	47%	
Transition Investment				
Assuming Current Law Surplus Not Used for Financing⁶				
\$PV trillions	\$1.1	\$0.9	\$0.4	
As % of GDP over years included in calculation	0.36%	0.49%	0.25%	
Includes Current Law Surplus Available for Financing⁷				
\$PV Trillions	\$0.7	\$0.4	\$0.1	N/A
As % of GDP over years included in calculation	0.29%	0.33%	0.10%	N/A

Notes

- 1 Model 1 does not include additional transfers for balance.
- 2 Cash flow requirements are defined as general revenue required in any year to maintain solvency in the absence of dedicated revenues.
- 3 Taxes on benefits and PRA distributions are treated as Social Security revenues, not general revenue.
- 4 Includes new dedicated sources of revenue; see text.
- 5 Improvement in actuarial balance would be +1.50 if new dedicated sources of revenue are included; see text.
- 6 Unified budget concept: difference between income and cost of proposed model versus present law.
- 7 Reflects extent to which negative balance in any year is more negative than under current law.

Chapter 1 Strengthening Social Security Through Personal Accounts

Introduction

In President Bush's Executive Order establishing the Commission to Strengthen Social Security, he instructed the Commission to submit "bipartisan recommendations to modernize and restore fiscal soundness to the Social Security system."

The Commission has reviewed dozens of possible future courses for Social Security, including several developed by outside experts, and projections developed by the Office of the Chief Actuary of the Social Security Administration.

These examinations have led us to the following conclusions concerning the establishment of personal accounts within the Social Security system.

Summary of Findings

Social Security will be strengthened if modernized to include a system of voluntary personal accounts.

Retirement security will be increased through personal accounts because they would facilitate wealth creation for individual participants.

Financial security is enhanced by asset ownership. Correspondingly, retirement security for Social Security participants will be enhanced by ownership of assets accumulated through the Social Security system, relative to a claim to benefits that must remain subject to political negotiation.

Social Security should be extended to include inheritable assets.

Strengthening Social Security to include personal accounts can add valuable protections for widows, divorced persons, low-income households and other Americans at risk of poverty in old age.

Personal accounts would permit individuals to seek a higher rate of return on their Social Security contributions, offering higher total expected benefits to individuals with accounts than those lacking them.

Partial advance funding of Social Security should be a goal of any effort to strengthen the system.

Advance funding within Social Security can best be accomplished through personal accounts rather than direct government investment.

The Commission finds that the establishment of personal accounts is likely to lead to an increase in national saving.

The Commission believes that the establishment of personal accounts will improve incentives for labor force participation.

Finding: It is the finding of the President's bipartisan commission that Social Security will be strengthened if modernized to include a system of voluntary personal accounts.

Specifically, the Commission finds that the Social Security system would be strengthened through personal accounts regardless of the level of benefits promised from, and the level of revenues committed to, the Social Security system. These are decisions that are yet to be made by the Congress and the President, involving trade-offs elucidated later in this report.

However, whether additional revenues are committed to the Social Security system or benefit growth is brought to a level that can be sustained within currently projected revenues, the Commission finds that the creation of personal accounts will enhance retirement security, for reasons outlined on the following pages.

In other words, changes in benefit growth are not proposed to finance personal accounts. Changes in benefit growth are required to bring Social Security towards solvency without tax increases; personal accounts can allow workers to recover most, if not all, of the changes in scheduled benefits.

Finding: Retirement security will be increased through personal accounts because they would facilitate wealth creation for individual participants.

Approximately half of United States households save nothing in an average year, and millions hold no appreciable financial assets. Establishing personal accounts within Social Security would advance a highly progressive principle: accumulating assets for the half of American households who have not compiled this measure of wealth after contributing 12.4 percent of their wages to support the Social Security system.

This 12.4 percent of wages paid into Social Security currently buys for these Americans an inflation-indexed annuity upon retirement, as well as insurance against disability and protections for dependents and survivors. The Commission believes these protections should be continued. Projections show that if a portion of this 12.4 percent is contributed to personal accounts, these protections can continue, while at the same time establishing the progressive result of creating a measure of wealth through financial asset ownership for millions of Americans who do not now enjoy it.

In testimony before the Commission, Professor Michael Sherraden of Washington University stated that:

For the vast majority of households, the pathway out of poverty is not through income and consumption but through saving and accumulation.... When people begin to accumulate assets, their thinking and behavior changes as well. Accumulating assets leads to important psychological and social effects that are not achieved in the same degree by receiving and spending an equivalent amount of regular income.

Accumulating research shows that asset accumulation has positive effects on individual well-being that extend far beyond the income those assets provide. In other words, personal accounts can be more than simply a way to provide Social Security benefits. By saving and accumulating assets in an account, individuals and their families benefit in other ways as well.

Examples:

- Several studies show that asset-holding has a substantial positive effect on long-term health and marital stability, even when controlling for income, race and education⁵.
- Among participants in trial programs of individual development accounts, 84 percent report feeling more economically secure, 59 percent report being more likely to make educational plans, and 57 percent report being more likely to plan for retirement because they are involved in an asset-building program⁶.

⁵ Galligan, R. J. & Bahr, S.J. (1978). Economic well-being and marital stability: Implications for income maintenance programs. *Journal of Marriage and the Family*, 283-290; Hampton, R. L. (1982). Family life cycle, economic well-being and marital disruption in black families. *California Sociologist*, 5, 16-32 South, S. J. & Spitze, G. (1986). Determinants of divorce over the marital life course. *American Sociological Review*, 51, (4), 583-590.

⁶ Moore, A., Beverly, S., Schreiner, M., Sherraden, M., Lombe, M., Cho, E., Johnson, L. & Vonderlack, R. (2001). Saving, IDA programs, and effects of IDAs: A survey of participants. *Downpayments on the American Dream Policy Demonstration: A national demonstration of Individual Development Accounts*. Washington University in St. Louis, George Warren Brown School of Social Work, Center for Social Development.

- Individuals with investment assets, and their children, perform better on educational tests and reach higher educational attainment, even after accounting for income⁷.
- Single mothers and their children are less likely to live in poverty if the mother came from a family with asset holdings, even after controlling for education and socio-economic status⁸.
- Saving patterns are passed on from parents to children; parents who save are more likely to have children who save, even after other factors are counted⁹.
- Among individuals with experimental Individual Development Accounts, 93 percent say they feel more confident about the future and 85 percent more in control of their lives because they are saving. Approximately half of account holders report that having accounts makes them more likely to have good relationships with family members, and 60 percent say that they are more likely to make educational plans for their children because they are saving¹⁰.

Moreover, recent research has concluded that individuals with personal defined contribution accounts would voluntarily choose to save more than individuals with a comparable defined benefit plan. This is important, given the importance of reforming Social Security in a manner that increases national saving¹¹. The authors find that "interest in leaving a bequest ... is positively related to the proportion of pension wealth received as lump sums rather than annuities. Thus, it appears that lump-sum payments affect intended as well as unintended bequests." Moreover, "workers react very differently to their defined contribution accumulations than they do to the present value of annuity pensions. They do not reduce their other saving in anticipation of payments from defined contribution plans as they do in response to promised Social Security and defined benefit pension payments. Finally, the most significant increase in lump-sum pension accumulations occurs in the middle and lower quintiles of the wealth distribution, so that the increase in bequests should help to reduce wealth inequality."¹² "Asset poverty" is of particular concern to minorities. Sherraden reported to the Commission that while the median income of whites versus African Americans is 1.6-to-1, the median net worth ratio is 11-to-1. Similar disparities exist between whites and Hispanics.

The benefits of personal asset ownership could not be achieved either through the Social Security system as currently structured or through government investment of the trust fund in the stock market.

⁷ Mayer, S. (1997). *What money can't buy: Family income and children's life chances*. Cambridge: Harvard University Press; Hill, M.S. & Duncan, G.J., (1987). Parental family income and the socioeconomic attainment of children. *Social Science Research*, 6, 39-73.

⁸ Cheng, L. (1995). Asset holding and intergenerational poverty vulnerability in female-headed families. Paper presented at the Seventh International Conference of The Society for the Advancement of Socio-Economics, April 7-9, Washington, DC.

⁹ Pritchard, ME, Meyers, BK, & Cassidy, D (1989). Factors associated with adolescent saving and spending patterns. *Adolescence* 24 (95), 711-723.

¹⁰ Moore et al., 2001.

¹¹ Alicia H. Munnell, Mauricio Soto, Annika Sundén, and Catherine Taylor, "The Impact Of The Shift To Defined Contribution Plans On Bequests And Living Standards In Retirement," Prepared for "The Role and Impact of Gifts and Estates," Conference Sponsored by the Center for Retirement Research at Boston College, Woodstock, VT, October 21-23, 2001

¹² Munnell, et al, p.3

Finding: Financial security is enhanced by asset ownership. Correspondingly, retirement security for Social Security participants will be enhanced by ownership of assets accumulated through the Social Security system, relative to a claim to benefits that must remain subject to political negotiation.

Throughout the history of Social Security, benefit formulas have been statutorily altered numerous times. Benefits have been expanded when deemed affordable to do so, and reduced in response to financial pressures. The large projected Social Security funding shortfall virtually ensures that benefits from the traditional Social Security system will remain at risk of being reduced, compromising the retirement security of participants.

The Social Security Administration points out that:

There has been a temptation throughout the program's history for some people to suppose that their FICA payroll taxes entitle them to a benefit in a legal, contractual sense. That is to say, if a person makes FICA contributions over a number of years, Congress cannot, according to this reasoning, change the rules in such a way that deprives a contributor of a promised future benefit.¹³

However, the SSA notes, "Congress clearly had no such limitation in mind when crafting the law."

"Like all federal entitlement programs," the Social Security Administration acknowledges, "Congress can change the rules regarding eligibility--and it has done so many times over the years. The rules can be made more generous, or they can be made more restrictive. Benefits which are granted at one time can be withdrawn, as for example with student benefits, which were substantially scaled-back in the 1983 Amendments."

By contrast, assets held in personal accounts would be more secure. The owner could choose the level of risk to which such assets are to be subjected through investment policies, but there is little substantial risk that these assets will be taken away, other than through the normal process of income taxation. Personal accounts, which would give workers a legal right to their assets and the benefits derived from them, thus provide a substantially stronger guarantee than does the current unsustainable program.

International experience bears out this judgment. At the Commission's San Diego public hearing, Anita Schwartz of the World Bank noted that in many countries where participation in personal accounts was voluntary, many workers opted for a personal account even when "on paper" it appeared that they would have received higher benefits through the traditional system. For instance, Schwartz noted that experts in Uruguay had projected that less than 15 percent of the 600,000 participants in the traditional social security system would opt for personal accounts, but that when the choice came, more than two-thirds actually did so. One reason, Schwartz said, is that many people feel more secure with an asset than with an entitlement: an account that is their own property is perceived to be safer than an untenable government promise to be fulfilled decades in the future.

Retirement security is also enhanced by diversification of risk. Personal accounts would diversify the

¹³ Social Security Administration website; <http://www.ssa.gov/history/nestor.html>

risk inherent in the Social Security system by allowing individuals to split between political risks (the risk of reductions in government-paid benefits) and financial risks (risk of depreciation of personally-held assets.) Workers demanding absolute security can, through personal accounts, have risk substantially below that of the current system simply by choosing to invest in government bonds.

In short, with a personal account each worker would have a legal right to his benefits and could choose the combination of risk and return to which his age, circumstances and temperament make him most comfortable.

Finding: Social Security should be extended to include inheritable assets.

Almost one in five 20-year-olds will not live to age 65. Among African American males, this percentage is even higher. While Social Security offers survivors benefits to spouses who have reached retirement age and to children under the age of 16, Social Security – which constitutes the total saving for many lower-income workers – offers no opportunity for workers to build and pass on any substantial wealth to their heirs, even if the worker died prior to receiving any benefits at all. The only lump sum wealth Social Security provides to pass on is a one-time payment of a \$255 death benefit.

The Commission recommends that Social Security preserve its current system of survivor benefits, but supplement these insurance protections with a system of personal accounts whose assets could be passed on to a spouse or heirs. Inheritable assets would improve Social Security’s treatment of demographic groups with lower incomes and shorter life expectancies and enhance prospects for asset accumulation and wealth-building in underserved communities.

Social Security effectively annuitizes the contributions a worker pays in over the course of his lifetime, converting them from a lump sum of wealth into an entitlement to specified monthly payments for life. This Social Security annuity provides valuable protections against outliving one’s assets, but it also

pays the highest lifetime benefits to individuals who live the longest. Since longevity is correlated with income, poorer workers will tend to die younger and therefore receive fewer benefit payments.

Moreover, since lower-income workers are almost totally reliant upon Social Security for income in retirement, this means they have very little inheritable wealth to pass on to their heirs.

The combination of these two factors can be particularly harmful to African Americans, who on average have both lower incomes and shorter life expectancies than other Americans.

African Americans Hold Substantially Less Wealth At Retirement

Percentile	Total Net Worth		Financial Assets	
	All	African American	All	African American
10	\$150	\$0	\$0	\$0
20	\$8,000	\$0	\$0	\$0
30	\$28,005	\$700	\$600	\$0
50	\$77,800	\$17,000	\$8,000	\$0
70	\$154,000	\$45,000	\$36,000	\$1,000
90	\$384,000	\$114,600	\$152,000	\$11,000
95	\$618,000	\$182,000	\$275,000	\$32,300

Source: James P. Smith, "Wealth and Inequality Among Older Americans," RAND Corporation Working Paper Series, 95-06, April 1995, p. 20.

If lower-income workers had the option to receive at least part of their Social Security benefits as a sum of wealth that could be passed on at their death, younger generations might have opportunities to attend college or start a business that would otherwise be unavailable to them. These opportunities would further contribute to an easing of asset inequality in the United States.

Finding: Strengthening Social Security to include personal accounts can add valuable protections for the segments of American society at greatest risk of poverty in old age.

Poverty among the elderly tends to be concentrated among women, single individuals, and ethnic and racial minorities. A properly designed individual account program should assist each of these groups.

Widows would be assisted by allowing for inheritable personal accounts in addition to Social Security's current, or a strengthened, widow's benefit.

Divorced persons would be assisted by the establishment, for the first time, of joint property rights in Social Security benefits accumulated during marriages that last for less than ten years.

Single working women would be assisted by the creation of an element that lacks Social Security's current redistribution away from single earners to married couples.

Lower-income groups would be assisted by the opportunity to build financial assets with a portion of the 12.4 percent of their wages that are currently contributed to Social Security.

Demographic groups with shorter life expectancies would benefit from adding inheritable assets to Social Security's current survivors' protections.

Finding: Partial advance funding of Social Security should be a goal of any effort to strengthen the system.

This Commission agrees with the unanimous finding of the 1994-96 Social Security Advisory Council that partial advance funding of Social Security benefits is desirable. Advance funding raises national saving, increasing the nation's capital stock and productive capacity and reducing Social Security's financial burden on future generations.

As detailed in our Interim Report, the current system operates primarily as an income transfer program in which every penny of benefits paid each year comes from taxes collected or money borrowed from the public in that year.

Over the next 50 years, the number of workers available to support each Social Security beneficiary will drop from 3.4-to-1 to only 2-to-1. The cost of supporting the current system will increase 69 percent¹⁴ during that period, with a corresponding deterioration in Social Security's equitable treatment of different generations.

To ensure that Social Security's financing burdens are equitably shared, it is imperative that a portion of these revenues be devoted to advance funding. The resulting increase in national saving will raise the country's capital stock, and therefore boost our productivity and output. In essence, increased national saving increases the size of the economic pie that is available for everyone, old and young alike, to consume in the future.

¹⁴2001 OASDI Trustees Report (Washington, DC, Government Printing Office), p.44. Intermediate projections show 2001 cost rate of 10.5 and a 2050 cost rate of 17.79.

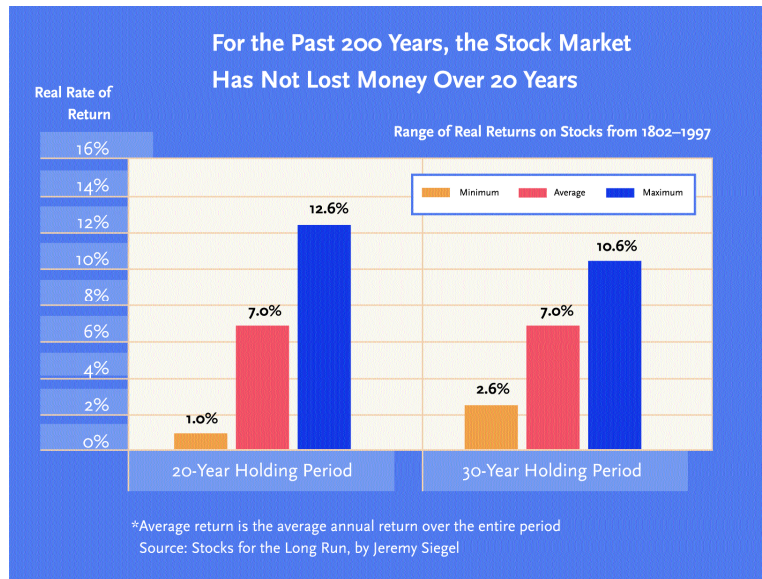
Finding: Personal accounts would permit individuals to seek a higher rate of return on their Social Security contributions, offering higher total expected benefits to individuals with accounts than those lacking them. This finding holds true regardless of the other steps taken to balance the traditional system.

Any properly constructed personal account option should increase expected benefits for Social Security participants. This is true regardless of the overall resources devoted to the program. Under plans that retain the current payroll tax, an individual opting for a personal account can expect higher overall benefits than one who does not choose an account. Similarly, under plans that increase revenues available to the system, individuals opting for a personal account can expect to receive higher benefits than those choosing not to have such an account.

It is relatively straightforward to show that, for a given level of funding, a personal account system can offer higher total expected benefits than the current system. However, confusion occasionally arises when comparisons are made between two different plans that employ different levels of tax revenue. For example, scheduled benefits for the current system could be provided only if significant tax increases are enacted. It is not an equal comparison to assume these tax revenues will materialize

for the current system, but not for a specific personal account system. For comparisons to be meaningful, all factors other than the presence of the account must be held constant. When that is the case, individuals with personal accounts can expect higher total benefits than those without.

Going forward, the nation faces a range of choices to bring the existing Social Security system to a path of fiscal sustainability. For purposes of illustration, In Chapter 4, the Commission shows the effects of one approach to balancing the Social Security system without tapping additional tax revenues, as well as the total cost of meeting the unsustainable current pace of benefit growth through additional revenues. Regardless of the path chosen by policy makers, the Commission's projections show that individuals who are given the opportunity to invest in personal accounts should expect increases in total benefits.

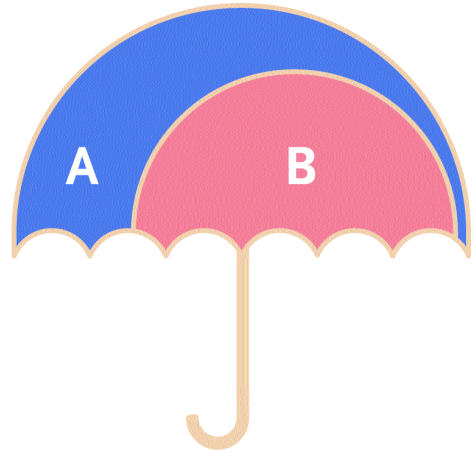


The opportunity to receive a higher rate of return derives from the gains that come from returns on capital. Over a working lifetime, the compounding of these returns – sometimes referred to as the "miracle of compound interest" – can make an enormous difference in an individual's level of wealth. Because of the impact of compound interest, diversified personal accounts can be expected to grow rapidly.

The Commission recommends that personal accounts augment the Social Security safety net by increasing total benefits relative to what the current system can pay.



Today, all of a retiree's retirement protections come from the traditional system.



In the future, workers could have the option to receive some of their benefits from a personal account – "Social Security Part B" – while still receiving benefits from the traditional system – "Social Security Part A." The total of these two parts will provide greater protections from poverty than the current system can provide.

Finding: Advance funding within Social Security can best be accomplished through personal accounts rather than direct government investment.

The Commission agrees that advance funding cannot be reliably accomplished through a Social Security Trust Fund invested wholly by the federal government. While it is theoretically possible to build up a fund in this manner, the past two decades have taught our nation a clear lesson about how unlikely this is in practice. The availability of Social Security surpluses provided the government with an opportunity to use these surpluses to finance other government spending, rather than saving and investing them for the future. A failure to increase national saving means that future taxpayers will bear a higher tax burden without the benefit of the increase in productivity that such saving might have stimulated.

This Commission strongly believes that investment in private securities should be handled through personal accounts rather than direct government investment, for several reasons:

- When people own the personal account assets themselves, the assets are less likely to be diverted for non-Social Security purposes.
- Personal accounts allow every participant to choose an investment portfolio that is consistent with his or her preferences, while central government investment essentially forces everyone into a "one size fits all" portfolio.
- Government investment will likely be subject to pressures for investment based on non-financial criteria, which may threaten account performance. These political forces might lead to intense lobbying and campaign contributions designed to influence investment policy, which would be bad for the government as well as the economy. There are many examples of this occurring in other contexts:

The California public pensions system's decision to divest its tobacco stocks cost retirees an estimated half billion dollars.

Government investment of pension funds in other countries has resulted in returns averaging below those available from standard bank accounts, according to the World Bank.

The argument over political restrictions over centrally-controlled investment has already begun in the United States. When the Clinton administration suggested investing Social Security reserves in the private market, several union leaders sent a letter to Congress expressing their opposition to investment of such funds in corporations that engaged in practices opposed by the labor unions.

- Government investment of personal accounts could place the government in a position to interfere with corporate decision-making.
- Government investment can lead to serious conflicts of interest. For example, the government would be simultaneously regulating and investing in the same companies, or even filing lawsuits against such companies.

Finding: The Commission finds that the establishment of personal accounts is likely to lead to an increase in national saving.

The Commission believes that establishing personal accounts will lead to increased national saving. This would apply under almost any reasonable proposal to establish personal accounts.

The first reason is that, to a first approximation, if the federal government would otherwise save 100 percent of the money that would be saved in personal accounts, then establishing personal accounts would not increase national saving. If the government would otherwise spend such Social Security revenues, then establishing personal accounts would increase net government saving. It is impossible to know with precision the degree to which the federal government would otherwise save Social Security revenues that are to be deposited in personal accounts. The most that can be said is that as a matter of historical record, the government has not tended to save this money. To the extent to which this pattern would continue in the future, saving this money in personal accounts would increase net saving.

Finding: The Commission believes that the establishment of personal accounts will improve incentives for labor force participation.

The nation's ability to support its retiree population is directly related to the ratio of those in the workforce to those in retirement. Accordingly, the maintenance of an adequate supply of labor is a critical element of Social Security reform. However having to pay additional Social Security taxes is a deterrent to work, particularly for those who derive no additional benefit when they pay these taxes.

Numerous studies indicate that Social Security has led to earlier retirement in the US. For instance, Social Security rules impose a large "implicit" tax on labor supply around the Normal Retirement Age, and the tax is high at even younger ages for some workers¹⁵. Importantly, these implicit taxes on labor are in addition to the tax levied via the U.S. income tax system. High tax rates provide an incentive for individuals to retire rather than to remain in the labor force.

The effect of Social Security on labor supply is not limited to issues relative to the retirement decision. Research suggests that workers do not fully understand the complex linkage between the taxes they pay and the benefits they receive¹⁶. As a result, the Social Security payroll tax may have the effect of increasing the marginal tax rate faced by individuals working throughout their lives. Since the payroll tax is larger than the income tax for the large majority of U.S. households, the marginal tax rates created by the Social Security system are an important issue.

High tax rates on labor distort both the supply of labor and the form of compensation that individuals receive, resulting in what economists call a "deadweight loss" to the economy¹⁷. These distortions are a drain on the nation's economy, reducing output and growth and making it that much more difficult to finance the provision of future retirement benefits.

Relative to the current system, contributions to personal accounts are less likely to discourage work. Personal account contributions are less likely to be viewed as a tax, because the money is deposited into an account that is owned by each system participant. Because workers perceive a direct link between the contributions and future benefits, their labor supply decisions throughout their work life are less likely to be distorted¹⁸. Near retirement, workers may perceive that accumulations in their accounts will grow, and the annuities they can purchase will increase, if they work and contribute longer. This may encourage them to stay in the labor force – an incentive that becomes particularly important as Baby Boomers retire.

Chapter 2 Administration of Personal Accounts

Summary of Findings

Personal accounts can be administered in an efficient and cost effective manner.

The adoption of a "mixed" two-tier structure most effectively balances desires for low administrative costs along with consumer choice and efficient financial markets.

The Governing Board should investigate ways to reduce the time that it takes to credit contributions to personal accounts, without increasing employer compliance costs.

Investment allocations should be allowed to be changed not more than once during a 12-month period; but access to account information should be immediate.

The Governing Board must bear the primary responsibility for providing participants with the necessary financial information. Non-profit organizations are encouraged to continue their efforts in this area.

Participants in Tier I should be able to choose one of three indexed balanced funds (conservative, medium, and growth) or any combination of five index funds, patterned after the current TSP funds, as well as an inflation-protected bond fund.

A standard fund should be established for those individuals who do not select a fund in Tier I.

Private-sector account administrators in Tier II may offer the same funds as in Tier I, and possibly other broadly diversified mutual funds certified by the governing Board according to appropriate criteria.

Pre-retirement access to funds in personal accounts should not be allowed; accounts may be bequeathed by those who die before they receive retirement benefits.

At retirement, personal account distributions should be permitted to be taken as an annuity or as gradual withdrawals, and balances above a threshold can also be taken as a lump-sum distribution. The threshold amount should be chosen so that the yearly income received from an individual's defined benefit plus the joint (if married) annuity keeps both spouses safely above the poverty line

during retirement, taking into account expected lifetimes and inflation.

All account balances attributable to contributions during marriage, and all earnings on account balances brought into marriage, should be divided equally in the event of divorce. Account balances brought into marriage would not be shared.

Upon retirement, a joint and survivor two-thirds annuity (as under Social Security) should be required unless both spouses agree to an alternative arrangement.

To isolate the Governing Board from political risk, Congress should follow the models of the Thrift Savings Plan and the Federal Reserve Board when designing the Board structure.

Equity shares in the mixed system should be voted by fund managers.

Background

The Commission sought to determine whether personal accounts could be implemented in a cost-effective manner that gives Americans a good value for the services they receive. We have concluded that personal accounts can be administered in an efficient and effective manner. Non-partisan experts in Executive Branch departments helped in the evaluation of design options for personal accounts.

Finding: Personal accounts can be administered in an efficient and cost effective manner.

International experience is consistent with this finding. More than 20 countries spanning five continents have now created personal accounts to either augment or replace their public pension systems. Personal accounts have been created by a diverse set of governments including those of Argentina, Australia, Chile, Hong Kong, Mexico, Poland, Switzerland and the United Kingdom. Numerous other countries, including Russia and China, are also now in the process of creating personal accounts. Even Sweden – a country traditionally offering a large amount of publicly provided welfare – has also recently added personal accounts to its public pension program. Experience in the United States with 401(k) plans and Individual Retirement Accounts¹⁹ has given U.S. financial providers a tremendous amount of experience in administering personal accounts. The United States – the country whose approach to Social Security was copied throughout the world during the 20th century – is now behind in modernizing its social security system for the 21st century.

Both the international experience and the Commission's own examination have provided two valuable lessons. First, personal accounts can be administered in a cost-effective fashion. Second, the design details are important. The United Kingdom's system, for example, has been criticized for high administrative costs and 'account churning.' The U.K. government has recently re-reformed this system to help solve these problems.

¹⁹ Individual Retirement Arrangements (IRAs) are also sometimes referred to as "Investment Retirement Accounts."

The General Structure of Personal Accounts

Personal accounts can be structured in several different ways. The ideal administrative structure must balance several goals. First, administrative fees must be reasonable and proportional to the services that are provided to the owners of personal accounts. Second, investment choices must be designed to reduce the risk for individual account holders, especially for those who currently do not participate in financial markets, by requiring that investments be made in broadly diversified portfolios. Third, workers and retirees must be given some flexibility in the choice of personal accounts that they own in order to realize the benefits of competition. Fourth, personal account owners are entitled to have their contributions credited to their personal accounts in a timely and accurate fashion, but without imposing additional compliance costs on employers. Fifth, the government must be diligent in ensuring that any personal account system is operating efficiently and fairly.

At one end of the administrative structure spectrum is the so-called "centralized" approach. Under this approach, payroll collections are transferred to a government-appointed central administrator using the existing Social Security payroll tax system. Workers have a choice among a limited number of low-cost, diversified investment indexed funds, like under the Thrift Savings Plan (TSP), which is a retirement plan for many federal and military workers. The central administrator keeps all records and invests worker contributions according to their preferences. These indexed funds purchase stocks in numerous companies and the amount invested in each company is proportional to the company's value relative to that of other companies in the fund. Like TSP, a Governing Board contracts fund management to multiple private managers on a competitive basis.

The centralized approach is sensible to implement in the short term but is probably not the best approach in the long run. The centralized approach does not incorporate the market discipline that might be necessary to provide workers and retirees with good value and choices. Consumers who are unhappy with their fund manager could not "vote with their feet" by moving to another provider. Deregulation in the telephone industry and the airline industry provide ample evidence that consumers like choice even for relatively homogenous products and that choice generally leads to lower prices and better services. A "one-size-fits-all" approach, therefore, is not the best approach.

At the opposite end of the administrative spectrum is the "decentralized" approach. One version of this approach includes existing 401(k) programs that are offered by many large and medium-size employers. Under this approach, payroll collections are transferred directly from employers to private-sector investment funds that satisfy diversification and other requirements. Workers make investment choices through their employers, and workers can choose from a wide range of private-sector funds, switching funds if they so desire. The government must still interact with each fund and employer in order to enforce compliance.

The decentralized approach, though, faces its own problems. First, the cost of compliance would increase for employers that do not currently offer 401(k) programs, including many small employers. Even those companies that do offer 401(k) programs often use only one fund complex; in the decentralized approach, some workers might wish to invest in a fund from a different complex. To prevent

compliance costs from increasing, employers must be allowed to continue to submit contributions through the existing payroll tax system, which requires some centralization. Second, some standard fund must be available to those who do not make a selection. Third, close to 28 million Americans in the year 2000 had wages and salaries below \$5000. Many of these people are students and teenagers who will earn larger incomes in the future, but even small transaction fees could be large relative to account balances for many people, an unacceptable outcome. While caps on transaction fees could be used to pool administrative costs across participants, such caps could also stifle innovation.

Finding: The adoption of a "mixed" two-tier structure most effectively balances the desire for low administrative costs along with consumer choice and efficient financial markets.

The Commission recommends the adoption of a "mixed" two-tier structure that adopts the best features from both the centralized and decentralized approaches. Under the mixed approach, collections are transferred to a central administrator using the existing payroll tax system. The central administrator verifies that the correct amount of contributions is submitted for each worker. Investments for each employee are made through the central administrator (as in the centralized plan). Initially, all collections are invested into "Tier I" of the program. In Tier I, workers choose from a range of funds that are currently offered by the Thrift Savings Plan, plus three additional balanced funds and an inflation-protected bond fund discussed below. When employees have accumulated a threshold account balance (say, initially, \$5000), however, they are allowed to invest that threshold balance plus subsequent contributions in a range of "Tier II" qualified private-sector funds. Multiple private-sector funds are allowed but they must satisfy stringent rules as determined by the Governing Board²⁰. The funds must be very diversified and reflect the performance of many companies spanning all major commercial sectors. Moreover, the share of the fund invested in each corporation cannot exceed strict limits as established by the Governing Board. The Governing Board chooses the threshold amount that is required for people to move their balances into Tier II so that it would be feasible for such accounts to be charged low transaction costs without the need for price caps. Within three years after the creation of personal accounts, the Governing Board must produce a plan that is necessary for Tier II to be fully functional; within 5 years, it must implement the rules and administrative support, including personnel, hardware and software, for Tier II.

Funds in both Tiers cannot charge sales "loads" or other marketing fees on entry or exit. Instead, all fees must be included in one annual charge and clearly stated as a percentage of assets. These restrictions provide added protection to low-income workers. Fund selection is made through the central administrator, which will list key information about each fund, as determined by the Governing Board, including fees. Competition, on the basis of past fund performance, along with information provided by the Governing Board, will provide participants with a basis for comparison and choice in both Tier 1 and Tier 2. The Governing Board must have broad authority to provide workers with informative advice, and to implement reasonable changes in either Tier that it believes is in the best interest of workers and retirees. It must also be able to make recommendations to Congress on larger, structural changes that the Board believes is necessary to make the system more efficient.

²⁰ With "passively managed" funds, the amount of stock that is invested in any particular corporation is simply based on the market value of that corporation relative to others in the index. "Actively managed" funds, though, require more investor judgment by fund managers who try to pick under-valued companies. Since funds must be broadly diversified, the practical distinction between passively managed and actively managed funds is diminished.

Finding: The Governing Board should investigate ways to reduce the time that it takes to credit contributions to personal accounts, without increasing employer compliance costs.

Using the current payroll contribution system, it would take about 15 months on average before payroll contributions are credited to personal accounts. This delay is known as the "reconciliation period." This reconciliation period is much longer than that in private-sector 401(k) plans. The reason for the difference is that, while firms send employee taxes to the government throughout the year²¹, firms do not actually identify the employees for whom the tax payments are made until the end of the year. Since many smaller firms file their returns on paper rather than electronically, it then takes the government several additional months to process this information²². We propose that the aggregate pool of contributions be invested in government bonds until information on contributions by individuals is reconciled with aggregate employer payments²³. Personal accounts are then credited with the contribution amount and the bond yield earned during this reconciliation period.

While shortening the reconciliation process would allow people to more quickly invest in higher-yielding assets, the Commission does not recommend any immediate change in the current reconciliation process for two reasons. First, since 1978, firms have not been required to identify employees in their tax reporting until after the end of the year in order to keep reporting costs to a minimum²⁴. Personal account administration should not, therefore, add any burden to small employers. Second, quicker reconciliation would have little actual effect on the retirement benefits of most people. A person who wishes quicker access to stocks could simply hold more stocks using their previously reconciled contributions, or using assets held outside of the new personal retirement saving accounts²⁵.

The Governing Board should, however, investigate ways of accelerating the reconciliation process without imposing higher costs on employers. Faster reconciliation could increase confidence in the personal account system by allowing employees to quickly verify that their contributions have been invested. Many firms are already capable of being able to match tax contributions to their employees on a quarterly basis. These firms would have the incentive to offer this service as a benefit to their employees, provided that the central administrator, in turn, credited personal accounts in a timely manner²⁶.

²¹ Even here, though, firms differ significantly in how frequently they pay taxes. Very large firms pay daily while smaller firms pay quarterly. Many self-employed workers pay taxes annually.

²² On average, the initial postings of employee earnings (W2 records) are 99% complete nine months after the end of the relevant liability year (seven months after Form W-2's are required to be filed with the government). Thus, contributions would be, on average, held 15 months before posting (e.g., contributions collected in January 2001 would be 99% posted by September 2002). The initial posting of self-employed earnings (Schedule SE) are 99% complete one year and nine months after the end of the relevant liability year (eleven and a half months after reports are required to be filed with the government).

²³ This process effectively happens automatically throughout the tax year, as the government changes its debt issuance with tax receipts on a fairly continual basis. Hence, no extra mechanism is necessary here.

²⁴ Beginning in 1978, firms were no longer required to engage in quarterly reconciliation of their tax payments with the employees for whom the payments were made. The change to annual reconciliation was instituted in order to reduce the costs on both employers and the government by allowing employers more time to identify and correct errors before reporting.

²⁵ Only young people with no outside assets and who wish to hold only stocks would feel "constrained" by slower reconciliation. However, the impact on their welfare from having to hold bonds in place of even more stocks for a short duration would be small.

²⁶ One option may be to expand the Electronic Federal Tax Payment System (EFTPS) to allow for matching of tax payments to employees.

Finding: Investment allocations should be allowed to be changed not more than once during a 12-month period; but access to account information should be immediate.

Personal retirement accounts are intended to supply retirement income and, therefore, should encourage people to think long term about their investments. Personal accounts should not encourage short-sighted activities such as "day trading" or "market timing" that simply lead to higher transaction costs for most people. We, therefore, recommend that changes in investment allocations be limited to once a year. Account statements should be mailed annually and reflect the newest investment allocations. Investment returns must be credited to the account on a daily basis. Moreover, account balance information must be accessible at any time through the Internet or automated calling. The efficiency of this system must be diligently monitored by the Governing Board, which must be empowered to make changes to the system. The enabling legislation should require that the Governing Board seek congressional approval only for larger, structural changes.

Finding: The Governing Board must bear the primary responsibility for providing participants with the necessary financial information. Non-profit organizations are encouraged to continue their efforts in this area.

Financial information must be distributed to people with personal retirement accounts. Indeed, one of the exciting outcomes of creating personal accounts is that it will give people who do not currently have personal retirement accounts the incentive to increase their financial understanding, which could encourage them to save more in general. The Governing Board, employers, or fund administrators could provide financial information, as could non-profit organizations. However, we believe that the primary responsibility lies with the Governing Board, possibly with assistance from the Securities and Exchange Commission. Utilizing the Governing Board will reduce compliance costs on employers. Moreover, people will have confidence that the provided information is objective, and the quality of financial education will not differ between employers.

Investment Choices

Personal account investment options must be designed to ensure that people invest in a broadly diversified portfolio of corporate stocks, corporate bonds and government bonds so that they can achieve the best possible returns with a reasonable amount of market risk. Moreover, if workers are not comfortable making choices among various options, they should be provided with a balanced standard fund.

Finding: Participants in Tier I should be able to choose one of three indexed balanced funds (conservative, medium, and growth) or any combination of five index funds, patterned after the current TSP funds, as well as an inflation-protected bond fund.

In Tier I, participants will be able to choose between investing their contributions in a balanced fund or any combination of the five index funds that are currently offered by the Thrift Savings Plan for federal workers. Fund management services would be auctioned off to several private-sector providers in order to provide low fees and to avoid any single fund manager holding too much money.

A balanced fund is invested into a certain percent of corporate stocks, corporate bonds and government bonds. A conservative balanced fund holds a relatively larger amount of government and high-grade corporate bonds, while a growth balanced fund holds a higher proportion of stocks. The holdings of the medium balanced fund fall between the conservative and growth funds. The stock fund itself must also be very diversified and reflect the performance of many companies spanning all major commercial sectors²⁷. The Thrift Savings Plan includes several funds: the Government Securities Investment (G) Fund; Fixed Income Index Investment (F) Fund; Common Stock Index Investment (C) Fund; Small Capitalization Stock Index Investment (S) Fund; and the International Stock Index Investment (I) Fund³¹. In addition to these funds, the government should create an Inflation Protected Bond Fund that allows participants to invest in Treasury Inflation Protected Securities (TIPS). TIPS allow participants to protect the purchasing power of the wealth that they have accumulated in their personal accounts.

The diversification requirement for stock holdings helps minimize the impact that any single corporate stock or commercial sector has on the total return to the qualified fund. A fund that, therefore, is heavily weighted in the stock of a particular corporation or sector would not qualify. While the U.S. capital market currently allows for a large amount of diversification, the Governing Board should study how international stocks provide additional diversification for participants.

²⁷ Examples include the Standard and Poor's 500 Index, which includes 500 of the most widely held U.S.-based common stocks, chosen by Standard and Poor for market size, liquidity, and sector representation. The Wilshire 5000 Total Market Index represents the broadest index for the U.S. equity market. It includes the performance of all U.S.-headquartered equity securities (now more than 7,000 with readily available price data).

²⁸ The G Fund specializes in short-term U.S. Treasury securities issued solely to the TSP. The F Fund strives to match the returns of the overall U.S. bond market. The C Fund holds large-company stocks and tracks the Standard & Poor's 500 Index. The S Fund consists of medium- and small-company stocks, which tracks the performance of the Wilshire 4500 stock index, now consisting of over 6000 companies. The I Fund is invested in a diverse set of major corporations located in Australia, Europe and the Far East.

Finding: A standard fund should be established for those individuals who do not select a fund in Tier I.

For those individuals who fail to choose a Tier-I fund, their contributions must be invested into a standard fund on their behalf. Empirical evidence suggests that many participants in private-sector 401(k) plans also base their investment decisions on the design of the standard fund²⁹. It is likely, therefore, that many participants will look to the standard fund as a benchmark for their own investment decisions in a Social Security system augmented with personal accounts. The standard fund, therefore, must be chosen appropriately. If the standard fund, for example, is too conservative by holding mostly bonds, then some participants will not be able to enjoy the higher expected returns from a fund with more stocks. At the same time, the standard fund must be appropriate for the participant's age, as younger people should invest relatively more in stocks. The growth balanced fund discussed earlier, therefore, would be an appropriate standard fund for young workers; the medium fund for middle-age workers; the conservative fund for older workers. However, the standard fund must also be consistent with any promises that are made with respect to personal accounts. If the government, for example, promises that the personal accounts will produce a minimum return or benefit, provided that the personal account is invested in a particular balanced fund, then that fund should be the standard.

²⁹ James Choi, David Laibson, Brigitte Madrian, and Andrew Metrick, "Defined Contribution Pensions: Plan Rules, Participant Decisions and the Path of Least Resistance," Forthcoming in NBER Tax Policy and the Economy, 2001.

Finding: Private-sector fund managers in Tier II may offer the same funds as in Tier I, and possibly other broadly diversified mutual funds certified by the governing Board according to appropriate criteria.

Upon reaching a threshold amount in their personal accounts in Tier I, participants can invest that threshold balance and subsequent contributions with a private-sector provider. Private-sector funds, therefore, provide competition and choice, thereby preventing a government monopoly over fund design. Tier-II funds, though, must meet very strict diversification requirements as established by the Governing Board. Other requirements might include registration with the U.S. Securities and Exchange Commission or appropriate banking/insurance regulator and other standards established by the Governing Board. Stock funds must be very diversified and reflect the performance of many companies spanning all major commercial sectors. Moreover, the amount of the fund invested in any particular corporation must not exceed strict limits as established by the Board. Some leeway must be given in order to allow firms offering funds to innovate and to provide a reasonable level of choice. All innovation, however, must be partly constrained by the need for all stock funds to hold a diverse set of assets.

Access to Funds in Personal Accounts

The access to funds in personal accounts that should be allowed must balance several important goals. First, workers should not be allowed to consume funds in their personal accounts in such a manner that would leave them impoverished during retirement and then dependent on the government for additional resources. While personal accounts are intended to provide workers with ownership over real assets, it is important to remember that ownership engenders certain responsibilities, including not being allowed to impose additional costs on taxpayers. Second, people with below-average life expectancies, including the lifetime poor, must no longer be forced to contribute too much during their working years exclusively to a retirement system from which they will receive few annuity benefits upon retirement. Personal accounts must provide a variety of withdrawal options at retirement, including the ability to leave some assets to loved ones upon death. This bequest option is currently missing from Social Security.

Finding: Pre-retirement access to funds in personal accounts should not be allowed; accounts may be bequeathed by those who die before they receive retirement benefits.

While prohibiting pre-retirement access might seem very restrictive at first glance, it is important to recognize that even among people facing difficult circumstances during pre-retirement years, most are still expected to spend some years in retirement. Difficulties in pre-retirement years do not justify facing even greater difficulties during retirement due to a lack of resources. While some people might suggest that accounts should be accessible in some "hard cases" (e.g., disability) we believe that those needs are best handled with other government policy, and not with funds set aside for retirement. Furthermore, allowing for pre-retirement access in the "hard cases" potentially opens Pandora's Box for less discriminating account access in the future. In the same way that Social Security benefits cannot be accessed before retirement or used as collateral for a loan, neither should assets held in personal accounts be available for other purposes.

However, unlike Social Security, assets held in personal retirement accounts can be bequeathed to heirs if the account owner dies before retirement. In this way, wealth accumulation in the family need not be cut short with the death of the primary earner.

Finding: At retirement, personal account distributions can be taken as an annuity or as gradual withdrawals, and balances above a threshold can also be taken as a lump-sum distribution. The threshold amount is chosen so that the yearly income received from an individual's defined benefit plus the joint (if married) annuity keeps both spouses safely above the poverty line during retirement, taking into account expected lifetimes and inflation.

The primary purpose of personal retirement savings accounts is to provide retirement income and wealth that can be passed on to family members and heirs. Pensioners, therefore, should not extract all of their resources at the point of retirement and then depend on government programs for additional retirement income (e.g., the Supplemental Security Income [SSI] program). Instead, individuals should have an immediate right to their money only to the extent that they can continue to support themselves.

People with personal accounts should, therefore, be required to take at least some of their money as an annuity or as gradual withdrawals. An annuity pays a fixed stream of money until the person dies. The Governing Board is required to make available different types of annuities, including inflation-indexed annuities that automatically incorporate protection against inflation; standard annuities without that automatic protection would have to pay more in terms of purchasing power early in retirement in order to protect against poverty later in retirement. Other forms of annuities incorporate the ability to leave a bequest if the holder dies before a certain length of time. A gradual withdrawal plan allows people to receive back their money bit by bit over their expected remaining lifetime. Any money left at death can be fully bequeathed. But because it is not an annuity, there is a chance that the person will outlive their resources. The withdrawal schedule, therefore, must be chosen to be long enough in order to cover the expected lifetimes of the retiree and spouse, and to maintain purchasing power, given the probable rate of inflation.

Only when it can be reasonably assured that retirees can enjoy retirement outside of poverty will they be allowed to take money from their accounts as lump-sum payments. Some observers, though, might object to this restriction on the grounds that people should be allowed full access to their funds if they can prove that they have other private resources that they can use in order finance retirement. There are several difficulties, however, with this argument. First, if people have additional resources to consume, then they can simply consume those resources first; they don't need to first consume assets from their personal retirement accounts. Second, the government cannot prevent people from consuming resources from other sources and then qualifying for additional income subsidies (e.g., SSI). Third, verification of outside resources would require a new, costly and intrusive administrative governmental structure. Fourth, allowing wealthier people greater access to their personal retirement savings account seems like a regressive policy.

Protection of Spouses

In many marriages, one of the two partners takes on a less active role in the formal labor market in order to devote time and energy to maintain the home and family. Traditionally, many women have performed these vital duties by either completely exiting the labor market or taking lower-paying jobs, while men have remained in the workforce. Upon divorce or death of the primary earner, many spouses, therefore, have been left with few assets. Moreover, they often have little opportunity to acquire more assets as they face a hard time re-entering the workforce, since the skills that they acquired before marriage are now outdated.

Former spouses and survivors, therefore, must be protected under any personal retirement account program. First, divorce too often spells the beginning of financial insecurity for spouses with a limited work history. Personal account ownership, therefore, must help provide former spouses better protection relative to Social Security and provide them with a fairer sharing of assets that recognizes their contributions to the household. Second, widows and widowers today too often fail to live in financial security during retirement. Personal account ownership, therefore, must help provide better protection to survivors.

Finding: All account balances attributable to contributions during marriage, and all earnings on account balances brought into marriage, should be divided equally in the event of divorce. Account balances brought into marriage would not be shared.

Social Security currently recognizes that some spouses may contribute more towards fostering a positive home environment, choosing to earn less outside of the home. Consequently, a spouse has the option of either claiming a retirement benefit based on his or her own work history or a benefit equal to one half of that of his or her spouse. In the event of divorce, spouses continue to be eligible for this benefit option if the marriage has lasted ten or more years.

Most marriages, though, last less than ten years, leaving low-earning spouses ineligible for a Social Security spousal benefit and, therefore, uncompensated for years spent either out of the labor force or working in a limited capacity. In addition, Social Security requires a divorced spouse to be unmarried to qualify for retirement benefits based on the former spouse's social security record, thus nullifying these Social Security claims in the case of remarriage, regardless of how long the marriage may have lasted.

We, therefore, recommend protecting low-earning spouses by mandating that both spouses' account growth be shared equally in the case of divorce³⁰. Spouses whose marriages have lasted longer period of time, and hence have given up more by being absent from the job market, will benefit more by sharing in the larger earnings on all account balances. Only initial balances brought into the marriage are not shared.

³⁰ Account balances accrued prior to marriage are not shared because of the complications and potential inequity of splitting balances if such a policy were to be applied to a person having had multiple marriages/divorces.

Finding: Upon retirement, a two-thirds joint and survivor annuity should be required unless both spouses agree to an alternative arrangement that is consistent with the distribution rules discussed earlier.

Social Security currently requires married couples to receive a joint and survivor annuity at retirement. The annuity is 'joint' because it protects both spouses from outliving their resources by continuing to pay income until both spouses die. Social Security pays a survivor two-thirds of the previous household benefit after a spouse dies provided that the secondary-earner qualified for Social Security based on the earnings of his or her spouse. (The reduction in benefit is not larger because household expenses typically decrease by less than fifty percent when one of the spouses dies.) If, however, both spouses qualified for Social Security based on their own earnings, then the household could lose up to half of their combined benefit. We recommend that a two-thirds joint and survivor annuity should be required unless both spouses agree to an alternative arrangement that is consistent with the findings in the last section. For example, some spouses may not want to fully annuitize their personal account balances in order to be able to leave assets to their loved ones.

Finding: To isolate the Governing Board from political risk, Congress should follow the models of the Thrift Savings Plan and the Federal Reserve Board when designing the Board structure.

The Governing Board should be structured with one overriding goal in mind—to ensure that the personal accounts system is administered so as to maximize value to participants. Achieving that goal requires that the governing Board be insulated from political pressures as much as possible.

One model for a Governing Board is found in the Thrift Savings Plan (TSP). The TSP is headed by five part-time Board members appointed by the President, including a chairman with a 4-year term; two members with 3-year terms that are chosen in consultation with the House and the Senate, respectively; and two members with 2-year terms. The TSP Board's has a strict fiduciary responsibility to holders of individual TSP accounts. Neither the Congress nor the President controls the Board's budget. The Board appoints a full-time Executive Director who serves as chief executive officer. Each of these six fiduciaries is required to act solely in the interest of plan participants and must have substantial experience, training, and expertise in the management of financial investments and pension benefit plans. These safeguards have helped ensure that the TSP remains unwavering to outside political pressures.

Another possible model for a Governing Board is the Federal Reserve (FR) Board, the entity that controls the U.S. Federal Reserve System. This Board is made up of seven members that are appointed by the President and confirmed by the Senate, each with a 14-year term. Opportunities for new Board appointments arise only once every two years. Like the TSP Board, the FR Board has a funding source that is independent of Congress and the President. The long staggered terms for FR Board members arguably give the Board even greater insulation from politics than has the TSP Board.

In contrast, investments made by public sector pension plans have often been manipulated by political pressures. Appointments to pension boards in many states and countries often include ex-officio members and other appointees serving at political behest. In pension plans for state and local employees in the United States, for example, state boards have demonstrated a preference for in-state investments and have avoided investments in socially unpopular companies, rather than maximizing financial returns for participants. State boards have even adjusted plan accounting practices so that contributions fluctuate for budgetary reasons unrelated to the pension system's needs. Internationally, government-ran pension plans face similar problems, including a home-bias in investment choices and the use of investments as social policy. Evidence indicates that these pension plans have earned markedly inferior rates of return, due to government intervention.³¹

Public sector pension plans are much more susceptible to political influence than the TSP or FR model because benefit liabilities in public pension systems are not directly linked to the investment performance of the public pension's reserves (or 'trust fund'). Instead, benefits are typically based on a worker's previous wage earnings. As a result, politicians can invest in socially popular enterprises while claiming that they are not placing the benefits for current voters in direct jeopardy. Inferior returns instead accrue as a hidden liability on future taxpayers, with only a possible imperfect link to reduced

³¹ Augusto Iglesias and Robert Palacios, "Managing Public Pension Reserves – Part I: Evidence from the International Experience," Pension Reform Primer, The World Bank, January 2000.

future benefits to those alive today. In sharp contrast, a restriction on investments held in personal accounts would directly reduce the expected retirement benefit of personal account owners. Since the cost of political interference is much more explicit and directly applicable to owners of personal accounts, the temptation for political interference is significantly reduced.

Finding: Equity shares in the mixed system should be voted by fund managers.

When people buy company stock directly, they become part owners of the company and gain a legal right to help determine the direction of the company, including its investment and marketing decisions. However in the case of investors in a mutual fund, the fund managers almost always directly vote the proxies of the fund. We recommend that the fund managers vote the equity shares for Tier I and Tier II, as under the Thrift Savings Plan today. Fund managers have a legal fiduciary obligation to vote their shares to the benefit of plan participants. Fund managers are in the best position to utilize the vote to further the financial interests of fund participants. While, in theory, the Governing Board could vote the shares in Tier I, we are concerned that they might face undue political influence in terms of their appointments or term renewals. Another option would be not to vote the shares in Tier I at all (or, equivalently, vote them in proportion to the other shares). To be sure, this approach would likely produce efficient business decisions as well. However, we are concerned that, if personal accounts someday become large enough, a minority of shareholders (possibly the directors and officers in the firm) could gain controlling interest in some firms in which they would not otherwise hold a controlling interest.

Chapter 3

Achieving a Fiscally Sustainable Social Security System

Summary of Findings

The Commission recommends that there be a period of discussion, lasting at least one year, before legislative action to strengthen Social Security.

Action should be taken soon to place Social Security on a fiscally sustainable course.

There are many paths to fiscal sustainability. All of them require some combination of changing the rate of benefit growth or committing additional revenues generated by taxation or by the proceeds of investment.

Social Security proposals should be evaluated using several important measures of fiscal sustainability.

Transition investments in personal accounts are not "costs," but investments in a fiscally sustainable Social Security system.

Personal accounts can reduce the long-term cost growth of the Social Security system, thus contributing to fiscal sustainability.

It is not necessary to change benefits for current or near-term retirees.

Benefits can continue to grow at least as fast as inflation within current Social Security system tax levels.

The Fiscal Problems Facing Social Security

The Commission's Interim Report explained in detail the origin, scope, and extent of the problems facing the current Social Security system. As an income transfer program, Social Security's financial health is sensitive to demographic changes determining the ratio of contributors to recipients. In particular, increasing life expectancies and a decline in birth rates have contributed to a gradual "aging" of the population, reducing the number of workers available to support each beneficiary.

When the United States had a rapidly growing workforce supporting a small elderly population, Social Security seemed sustainable. For instance, in 1960, there were more than five workers paying into Social Security for every individual collecting benefits. However, the burden placed on individual workers increases when fewer new workers are paying into Social Security and a larger population of beneficiaries is collecting from it. Already, demographic changes have reduced the worker-to-beneficiary ratio to 3.4-to-1. By 2050 it will be just 2-to-1. In other words, the relative burden on a worker in 2050 will be two-and-a-half times larger than the burden on a similar worker in 1960.

As a result of these trends, beginning in 2016, Social Security will collect less in tax revenues than needed to pay full promised benefits. Between 2016 and 2038, Social Security will redeem bonds held in its Trust Fund make up the difference, requiring that the U.S. Treasury find the resources to redeem these bonds. These resources must come from higher taxes, public borrowing, or reductions in other spending programs. Social Security's deficits start small but grow rapidly, reaching \$318 billion in 2035 (in 2001 dollars). The cost of paying benefits will rise from 10.5 percent of taxable earnings today to almost 18 percent in 2035.

Absent Congressional action, the Trust Funds will be exhausted in 2038. At that time, Social Security system's dedicated revenue will be enough to cover only 74 percent of promised benefits. To pay full promised benefits would require an increase in the total tax rate from payroll and benefit taxation from the current 12.4 percent to 17.8 percent. By 2075, the tax rate necessary to fund full promised benefits would equal 19.4 percent of payroll, a 57 percent increase over today's payroll tax rate.

Social Security's fiscal problem exists independently of the debate over whether personal accounts should be part of a reformed system. With or without personal accounts, policymakers must answer a fundamental question: How much of the nation's output should be spent on government support of senior citizens? Those who believe that the share devoted to the elderly should continue to consume a larger and larger share of the nation's output have a responsibility to identify where the money will come from. Those who believe that growth in spending should be restrained have a responsibility to explain exactly how they would change Social Security's benefit structure to achieve this.

Fiscal Sustainability Findings

Finding: The Commission recommends that there be a period of discussion, lasting at least one year, before legislative action to strengthen Social Security.

Social Security is necessarily complex, touching on many aspects of individuals' lives and doing so over the course of generations. Action to strengthen and modernize Social Security is much needed – but it should not be undertaken in haste. Congress, the President and the public should take the time necessary to consider the consequences of the options under consideration, as well as the consequences of inaction. The Commission hopes that its efforts will be useful in this regard. Nevertheless, after this period of national discussion, steps should and must be taken to keep the President's charge to strengthen Social Security for today's seniors and generations to come.

Finding: Action should be taken soon to place Social Security on a fiscally sustainable course.

In the very near term, Social Security's finances are strong, with cash flow surpluses expected for the next fifteen years. By acting now, lawmakers have an important opportunity to address the program's long-run financing problems while more options are available. The existence of short-term surpluses makes it easier to finance a transition to a more sustainable system, while still maintaining our commitment to current and near-term retirees.

The financing problem facing Social Security will not go away. A failure to act will only make the problems facing the system more difficult to address. It is true that there are no easy solutions to the financial problems facing Social Security, but it is equally true that a failure to act will only serve to make the solutions more difficult to achieve down the road.

In summary, the longer that action to strengthen Social Security is postponed, the more certain it is that necessary measures will include painful benefit reductions or tax increases.

Finding: There are many paths to fiscal sustainability. All of them require some combination of changing the rate of benefit growth or committing additional revenues generated by taxation or by the proceeds of investment.

Despite the complexity of Social Security benefit and tax rules, the financing problem facing the program is really quite simple. The projected growth in system revenues is insufficient to cover the projected growth in benefits.

Conceptually, the solution to this problem is equally simple. Either revenues dedicated to Social Security must increase faster than currently scheduled, or traditional benefits must grow more slowly than currently scheduled, or some combination.

The need for tough choices to restore fiscal sustainability is real, and it exists independently of whether personal accounts are part of the solution or not. Those who oppose personal accounts must choose between increasing taxes or slowing benefit growth while providing participants with no opportunities to strengthen their retirement security in other ways.

Whatever path to fiscal sustainability is chosen, voluntary personal retirement accounts offer individuals the opportunity to pursue higher expected returns by investing in a low cost, diversified portfolio. As such, even though personal accounts do not eliminate the need for tough fiscal choices, they do provide individuals with an opportunity to pursue higher rates of return, and therefore provide higher expected benefits, than the same system without accounts.

³² In the context of the Trustees' Report, the implied target also includes a contingency reserve of one year of Social Security outflows, or a Trust Fund ratio of 1.

Finding: Social Security proposals should be evaluated using several important measures of fiscal sustainability.

In accordance with the Executive Order establishing this Commission, the Commission developed a number of criteria for assessing reform proposals. One of these criteria is "movement of the Social Security system toward a fiscally sustainable course that reduces pressure on the remainder of the federal budget and can withstand economic and demographic changes." This section describes several measures that the Commission uses to identify improvements in system sustainability, along with a discussion of the strengths and limitations of each measure. In practice, we propose that all reform plans be scored along each of these dimensions, so that the tradeoffs between the outcomes can be assessed and evaluated in a clear and comparable form.

1. Positive Annual System Cash Flow Within Valuation Period:

Each year Social Security faces an obligation to pay benefits, and it also generates revenue through its own dedicated tax. When the system has a positive annual cash flow, it has sufficient income to cover its costs that year. When the cash flow becomes negative, the system must redeem Trust Fund assets (or draw on interest on those assets) if available, or cut benefits, unless reform of some sort is enacted.

Positive annual cash flows are a useful metric of whether the program is self-financing. Other measures – such as solvency and actuarial balance – can be manipulated by governmental bookkeeping. They are also subject to continued argument over their meaning and utility. Positive annual cash flows are also easy to measure and to understand. The system is either taking in more money than it must spend, or it is not.

Social Security's self-financing design is an important component of its policy basis and its political support. Self-financing helps to ensure fiscal discipline, by assuring that the program's benefits and dedicated revenues remain aligned. Social Security's separate accounting is also an important protection for the program, helping to ensure that all of its dedicated revenues are ultimately used to pay Social Security benefits.

The current system faces cash flow deficits that are anticipated to grow continually, exceeding 6 percent of the nation's payroll by 2075. This is an annual shortfall in 2075 of \$1.36 trillion dollars (in constant 2001 dollars). The Commission believes that any reform proposal must, at a minimum, reduce the size of these cash flow deficits. The Commission also looks more favorably on plans that eliminate these deficits completely by the end of the 75-year valuation period.

Two key advantages to this measure are: 1) it is perhaps the most direct measure of the extent to which the program is self-financing in the long run; and 2) it is simple to explain to the public, since it does not rely on an understanding of the complexities of Trust Fund accounting. One disadvantage of this measure is that it does not indicate how the program is to be financed in the period before it reaches self-financing status. Thus, this measure is not, by itself, sufficient to ensure the long-term sustainability of the system.

2. Improvement in System Solvency:

The Office of the Actuary considers program "solvency" at any point in time in which the OASDI Trust Funds have a positive balance.³² Under the Intermediate projections of the Social Security Trustees, the present system is projected to enter insolvency in the year 2038 and never regain solvent status. Solvency is important insofar as it affords the SSA the legal authority to make benefit payments. Without a positive Trust Fund balance, Social Security is authorized to pay benefits only from its dedicated tax revenue.

However, solvency is a narrow measure of the nation's ability to pay Social Security benefits since it does not indicate the system's long-run financial health nor does it consider the broader budgetary implications of paying for benefits.

As an illustration of the limitations of the solvency measure, solvency could be achieved in an accounting sense by issuing new bonds to the Trust Fund or raising the interest rate on existing Trust Fund bonds. However such an approach would not produce additional real resources needed to pay benefits. Thus solvency could be technically consistent with requiring future generations to make large general revenue transfers that they may not desire or be able to afford. In this sense, improving solvency is not sufficient to achieve long run fiscal sustainability.

3. Reduce Rate of Growth in Long-Term System Costs as a Percent of GDP:

Social Security currently consumes 4.2 percent of the nation's gross domestic product, or GDP. If additional revenues were to be devoted to Social Security to pay benefits under the scheduled benefit formula, that fraction would have to rise to 6.7 percent of GDP by the year 2075.

In the future, Medicare is also likely to command an increasing share of the nation's resources, leaving less room in the budget to absorb Social Security's rising costs. Combined, Social Security and Medicare are expected to absorb more than 15 percent of the nation's output by the year 2075 unless these systems are made more sustainable. For comparison, all personal income taxes paid to the federal government today total approximately 9 percent of GDP.

An advantage to measuring a reform's effect on the growth rate of system costs as a percent of GDP is that it recognizes that Social Security expenditures are a claim on the resources provided by taxpayers, in direct competition with other spending priorities. The limitation of this approach is that it does not consider system revenues, and thus represents only part of the equation. Therefore, while reducing the rate of growth in system costs is compatible with long-run fiscal sustainability, it does not necessarily achieve it on its own.

4. Improvements in 75-year Actuarial Balance:

Social Security actuaries calculate the actuarial balance of the OASDI programs as the present value of Social Security system expected revenues minus present value of scheduled expenditures over the peri-

od in question. Social Security actuaries are required by Congress to make long-term calculations, and the Office of the Actuary has typically used a 75-year valuation period for this long-term analysis. The current system is not in actuarial balance. The 75-year shortfall is equivalent, on average, to 1.86 percent of the nation's taxable payroll. This measure is a convenient shorthand for quantifying the magnitude of the financing shortfall, averaged over the valuation period.

However, this measure suffers from many important disadvantages. First, the measure is largely indifferent as to the timing of the cash outlays and cash receipts. As such, it treats a dollar of Social Security revenue the same whether that dollar was spent on Social Security benefits, saved, or spent on non-Social Security spending.

A second disadvantage is that this measure conceals trends in shortfalls. For example, the 1.86 percent actuarial deficit of the current system hides the fact that Social Security has surpluses today but will experience even larger shortfalls in 75 years -- exceeding 6 percent of taxable payroll.

A third disadvantage is that the 75-year time horizon is arbitrary since it ignores what happens to system finances in years outside the valuation period. For example, we could eliminate the actuarial deficit by immediately raising the payroll tax by 1.86 percent of payroll. However, as we move one year into the future, the valuation window is shifted by one year, and we will find ourselves in an actuarial deficit once more. This deficit would continue to worsen as we put our near term surplus years behind us and add large deficit years into the valuation window. This is sometimes called the "cliff effect" because the measure can hide the fact that in year 76, system finances immediately "fall off the cliff" into large and ongoing deficits.

A fourth disadvantage is that the criterion of actuarial balance is biased against programs that advance fund the system through personal accounts. This is because the value of the assets invested in personal accounts is not included as part of the calculation. Thus, many reforms that would improve the long-term financial footing of the system would appear to worsen it by this measure. In this sense, improvements in 75-year balance are useful but not the only measure that can be used to achieve fiscal sustainability.

5. Gain in System Assets By the End of the Valuation Period:

Current projections show that benefits specified under current law would leave Social Security underfunded by about \$3.157 trillion or about \$21,000 per current worker (in present value.) An important measure of the contribution of a Social Security reform proposal to the health of the Social Security system is the extent to which a given reform can reduce the size of this unfunded liability. This measure should include and quantify the assets held in personal accounts as well as by the Social Security Trust Fund.

6. Reductions in general revenue requirements relative to current law:

Under present law, the Social Security system would require substantial additional revenue to cover

scheduled benefits. The extent to which these pressures are reduced is another important measure of the efficacy of a reform proposal.

7. Actuarial Balance Not Deteriorating at the End of Valuation Period:

The actuarial balance measure described under measure 4 can exhibit a "cliff effect," in which system finances deteriorate rapidly in the year following the close of the valuation period. This is an outcome to be avoided. A way to address this problem would be to ensure that the actuarial balance is moving in the positive direction by the end of the valuation period.

One metric which can help assess this is the Trust Fund ratio, which measures the ratio of the OASDI Trust Fund balance relative to the benefits paid out in that year. A stable or rising Trust Fund ratio indicates that the actuarial balance is not deteriorating.

8. Transition Investments:

Although transition investments are not in and of themselves a measure of fiscal sustainability, the total transition investment required under each alternative in Chapter 4 will be quantified as well. Transition investments are an issue that arises as a consequence of a move from a pay-as-you-go financing structure to one that includes partial advance funding. Chapter 4 defines the concept of transition investment, and explains how it is calculated with respect to each Reform Model.

Finding: Transition investments in personal accounts are not "costs," but investments in a fiscally sustainable Social Security system.

The Commission strongly endorses the President's principle that benefits for current retirees and persons nearing retirement should not be changed. This commitment to ensure full benefits to current and near-retirees raises the issue of so-called "transition costs."

The current Social Security program is financed primarily on a "pay-as-you-go" basis, meaning that most of the payroll taxes paid by today's workers are used to finance benefits for today's beneficiaries. For the next 15 years, the program is expected to bring in more revenue than is required to pay benefits in each year.

Under a personal account program, workers would be given the option to invest a portion of their payroll taxes in accounts that they would own. Like any sound investment program, investing in personal accounts requires additional resources up front. During the transition to a personal accounts program, tax revenues invested in the accounts would no longer be available to finance traditional benefit payments, although during a period of program surpluses additional revenues exist to finance the accounts.

Therefore, funds must temporarily be found to finance personal account investment while simultaneously paying benefits to retirees. Over time, these investments in personal accounts offer financial returns to the Social Security program via reductions in the rate of growth of system costs, to retirees in the form of higher expected benefits, or both.

The temporary increase in resources needed to fund the investment in personal accounts is sometimes referred to as the "transition cost." This terminology is often misunderstood, however, because it ignores the corresponding returns on these investments. To focus only on the "cost" of the investment while disregarding the benefits is to count only one side of the equation.

A simple analogy illustrates: Suppose an individual had a \$90,000 home mortgage with a monthly payment of \$600 over 30 years. By paying an extra \$100 monthly, the individual could pay off his mortgage in full within 20 years and thereafter have an "extra" \$600 per month to spend on other things. This additional \$100 monthly payment is an investment that brings rewards, not a cost.

Likewise, consider a business that retains profits in order to develop a new and lucrative technology. These retained profits could have been paid to shareholders, so retaining them for investment could be considered a "cost." But this cost pays itself back in the future in the form of higher profits.

In short, if the extra saving proposed for Social Security personal accounts is considered a "cost," then any person who saves or sacrifices for the future for any reason pays a similar cost. It is often said that Americans should "save and invest for the future." The so-called "transition costs" associated with personal accounts for Social Security are precisely that: saving and investing for the future, to reduce the need to raise taxes, cut benefits, or curtail other necessary government initiatives. The more Americans can save for the future, the better off we will be in the long run.

Measuring the Revenue Needed to Invest in the Transition

Clearly, the resources needed to finance the movement to personal accounts cannot be viewed in isolation from the substantial benefits they bring. It is also important, however, to obtain an accurate measurement of the financing needs associated with a specific plan. In particular, it is essential to distinguish transition investments associated with personal accounts from the additional revenue required to address the fiscal problems already besetting the Social Security system. Solutions to fill the existing fiscal gap must be found regardless of whether personal accounts are established.

The current Social Security program faces long-term, growing deficits requiring either new revenue or a reduction in the rate of benefit growth. Opponents of reform often argue, incorrectly, that personal accounts cause the benefit changes or revenue increases required to fix the current system. This is simply and unequivocally false. Benefit or revenue changes are required without personal accounts, and over the long term these could well be larger in the absence of personal accounts than if such accounts are established. Funds needed to establish personal accounts represent "transition" funding only to the extent that costs might rise over and above the financing needed to keep the current program solvent.

In addition, Social Security's traditional 75-year actuarial window artificially overstates the cost impact of personal accounts because it counts the "cost" of funding accounts within the 75-year period while ignoring benefits paid by those accounts outside of 75 years. Longer measurement periods or alternate accounting methods that measure both the costs and the benefits from personal accounts show that accounts strengthen Social Security rather than weakening it.

The short-term availability of Social Security surpluses will make transition financing even easier, if action is taken soon. For the past 20 years, Social Security surpluses have been used primarily to fund other government spending. If, instead, these surpluses are put into personal accounts, they are more likely to be used for their intended purpose of funding future Social Security benefits. According to Intermediate projections of the Social Security Trustees, Social Security is expected to run cash surpluses totaling \$811 billion in present value between now and 2016. The Commission believes that these resources should be used to fund the transition to personal accounts, rather than to finance other government spending programs.

Finding: Personal accounts can reduce the long-term cost growth of the Social Security system, thus contributing to fiscal sustainability.

All of the plans presented by the Commission provide individuals the option to invest in personal accounts. In all cases, these accounts are at least partially financed by a redirection of payroll tax revenue from the existing system. In return for the opportunity to pursue higher expected returns through personal accounts, individuals who choose the account agree to forgo the benefit that would have been financed by these payroll taxes (plus interest).

Therefore, every dollar invested in a personal account reduces the cost of future Social Security payments by one dollar, plus the offset rate of interest that is proposed for each plan (ranging from 2 percent to 3.5 percent after inflation). Total expected benefits to the worker are increased by the compounded difference between the offset rate of interest for the Reform Model and the expected rate of return earned by the personal account. So long as the personal account earns a return higher than the offset rate, both Social Security and the individual come out ahead.

Finding: It is not necessary to change benefits for current or near-term retirees.

The President has made a firm commitment that all current and near-retirees will not have their benefits changed. This commitment can and will be kept. The Commission has structured every proposal to be consistent with this charge. No proposal changes benefits in any way for any individual aged 55 or over.

The Commission finds that there are many feasible ways to restore Social Security to fiscal sustainability without touching the benefits of current or near-term retirees.

Finding: Benefits can continue to grow at least as fast as inflation within current Social Security system tax levels.

Restoring fiscal sustainability to Social Security does not require that we "cut" benefits below those paid to today's retirees. In fact, every Commission Reform Model will increase benefits at least as fast as inflation, ensuring that no future generation of retirees receives less purchasing power than today's retirees. Hence, fears that benefits will be cut or retirees thrown into poverty are simply false.

How is it possible to restore sustainability without cutting benefits or raising taxes? It is because the current benefit formula increases the starting benefit from year to year at the rate of wage growth, which is generally faster than is required to maintain purchasing power. This rate of benefit growth is not affordable given current system revenues. Fortunately, current payroll tax rates are sufficient to afford benefits that grow at least as fast as inflation.

Two of the three Reform Models presented in this report would peg the future rate of growth of benefits within the traditional Social Security system to a new rate that is sustainable within the revenues allotted to each program. None would reduce benefits below those paid to today's retirees. All would pay higher benefits than those paid today, and in particular would target benefit increases for the low-income workers and widows who need them the most. Those who choose personal accounts would expect substantially higher benefits.

³³ The Commission noted that financing benefits under a wage indexed system would require an 80 percent increase in the payroll tax rate. (Report of the Consultant Panel on Social Security, August 1976, 94th Congress 2nd Session, page 6.)

What is "Wage Indexation" of Benefits?

Under the current Social Security system, the initial benefits received by each cohort of new retirees rises at the rate of wage growth. (Following retirement, benefits rise annually to preserve purchasing power against inflation.) This wage indexation was not part of the original Social Security system. Until 1977, Congress had no formal policy of protecting beneficiaries from cost of living increases or replacing a certain percentage of pre-retirement earnings. Instead, Congress prevented the purchasing power of benefits from eroding via ad hoc adjustments in benefit levels, applied to persons currently on the rolls and to initial benefits for future retirees. In each of the more than dozen instances in which benefits were adjusted, the Congressional rationale was to preserve the purchasing power of benefits. In 1972, Congress replaced its policy of granting ad hoc increases with a policy that permanently indexed benefits to inflation.

An error in the 1972 law led to a major debate over indexing of benefits. All sides to the debate agreed that benefits following retirement years should be indexed to the cost of living. There was considerably less agreement about how initial benefits should be indexed over time. A special commission created by the Senate Finance and House Ways and Means committees rejected indexing initial benefits to wage growth, primarily because it was unaffordable.³⁹ Instead, the commission recommended an alternative policy under which initial benefits would more closely track increases in prices than in wages. Commentators at the time argued that such a policy preserved the affordability of Social Security while granting Congress the ability to adjust benefits as needed in the context of the times.

Congress ignored the commission's warnings and in 1977 adopted the current policy of indexing initial benefits to wage growth. Since this policy's enactment, the Social Security Board of Trustees has issued 24 annual reports assessing Social Security's financial status. All but two of these reports, those issued in 1983 and 1984 following congressional enactment of the Greenspan Commission recommendations, have declared that without major tax increases the Social Security program is insolvent and will be unable to deliver its promised benefits.

As this historical record makes clear, wage-indexing of initial benefits coupled with existing demographic trends has never been fiscally sustainable.

Chapter 4 Alternative Paths to Fiscal Sustainability

Summary of Findings

There are multiple paths to fiscal sustainability within the President's principles for Social Security reform.

The Reform Models presented in this chapter would contribute varying levels of progress to Social Security's long-term sustainability. Each has been transparently analyzed not only for its effects on Trust Fund operations, but on the unified federal budget as a whole.

Each of the actuarially solvent Reform Models (Models 2 and 3) presented would effect benefit increases for widows and for low-income workers, above current law, whether or not these individuals had participated in personal accounts.

Each of the Reform Models presented shows that, across the full spectrum of choices for balancing the traditional Social Security system, a personal account element would permit higher benefits to be paid than would be possible within equal revenue devoted to current system.

The Commission commends Congressional sponsors of actuarially sound reform proposals, and requests that any criticism of these and other proposals be accompanied by constructive alternatives.

Executive Summary

Findings:

The Commission agrees that personal accounts are fundamental to Social Security reform. While there are multiple paths to fiscal sustainability that are consistent with the President's principles for Social Security reform, we have chosen to include three reform models in the report that improve the fiscal sustainability of the current system, are costed honestly, and are preferable to the current Social Security system.

Under the current system, the benefits to future retirees are scheduled to grow significantly above the benefits received by today's retirees, even after adjusting for inflation. The cost of paying these benefits will significantly exceed the amount of payroll taxes collected. To bring the Social Security system to a path of fiscal sustainability — an essential task for any reform plan — there are differing approaches. The Commission believes that no matter which approach is taken, personal accounts can enhance benefits expected by future participants in the Social Security system.

Unifying Elements of the Three Reform Plans

- The Commission has developed three alternative models for Social Security reform that feature personal accounts as a central component. Under all three reform plans, future retirees can expect to receive benefits that are at least as high as those received by today's retirees, even after adjusting for inflation.
- All three models include a voluntary personal retirement account that would permit participants to build substantial wealth and receive higher expected benefits than those paid to today's retirees. Thus, all of the plans would enhance workers' control over their retirement benefits with accounts that they own and can use to produce retirement income, or pass on to others in the form of an inheritance.
- Because the Commissioners believe that the benefits currently paid to low-wage workers are too low, we have included a provision in two of the three plans that would enhance the existing Social Security system's progressivity by *significantly increasing benefits for low-income workers above what the system currently pays*. This provision will raise even more of our low-income elderly — most of whom are women — out of poverty. Two of the three models also boost survivor benefits for below-average income widows and widowers.

- The Commission has set a goal of moving the Social Security system toward a fiscally sustainable course that reduces pressure on the remainder of the federal budget and can respond to economic and demographic changes in the future. The three reform models outlined here are therefore transparently scored in terms of plan provisions, effects on workers' expected costs and benefits, and effects on Trust Fund operations as well as the unified federal budget. We also identify clearly how large the personal account assets may be expected to grow as the system evolves.
- All three of the models improve the fiscal sustainability of the program, though some move farther than others. Model 1 would require additional revenues in perpetuity in order to pay scheduled Social Security benefits under the plan. Model 3 prescribes an amount of additional revenues needed to pay scheduled benefits under the plan, an amount that is smaller than that required under Model 1. Model 2 does not require permanent additional funding.
- All three models also require transitional investments to move to a system that includes Personal Accounts. These transitional investments advance fund future benefits, thus substantially reducing the cost on future generations.
- All three reduce the long-term need for general revenues as compared to the current, unsustainable, system. In two of the three plans (Models 2 and 3), the system's cash flow needs are met so that the benefits promised by each plan can be paid as retirees need them.
- All three of the models are expected to increase national saving, though some more than others.
- The Commission concludes that building substantial wealth in personal accounts can be and should be a viable component of strengthening Social Security. We commend our three models to the President, Members of Congress and to the American public in order to enrich national understanding of the opportunities for moving forward.

The President's Principles

The President directed the Commission to propose Social Security reform plans that will strengthen Social Security and increase its fiscal sustainability, while meeting several principles:

- 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.

Understanding the "Benchmarks"

In analyzing any plan for reforming Social Security, it is important to be clear about the benchmarks for comparison. Benchmarks could include:

- Benefits currently paid to retirees ("currently paid benefits").
- Benefits payable in the future given projected tax revenues ("payable benefits").
- Currently scheduled benefits from the existing system, which cannot be paid by existing payroll tax revenues ("scheduled benefits").

Each of these benchmarks is significantly different. For example, workers and retirees have a reasonable understanding of benefits currently paid to retirees, so this is a concept we view as useful and understandable. It is more complex to explain "payable benefits" given that this requires forecasting future payroll taxes, and future retirement patterns. In general "payable benefits" would be expected to be higher than benefits currently paid to retirees, even after making necessary adjustments as a result of shortfalls arising in 2038 and thereafter. Finally, "scheduled benefits" refers to what the system might deliver if tax revenue were raised to keep the system solvent, which would require nearly a 50 percent payroll tax hike by 2075. In general, this report argues that "scheduled benefits" cannot be paid without adding substantially more revenue to the system. In this report, we find the most useful comparison is either to "currently paid" or to "payable benefits."

Three Reform Models

The three models for Social Security reform devised by the Commission demonstrate how alternative formulations for personal accounts can contribute to a strengthened Social Security system.

Reform Model 1 establishes a voluntary personal account option but does not specify other changes in Social Security's benefit and revenue structure to achieve full long-term sustainability.

- Workers can voluntarily invest 2 percent of their taxable wages in a personal account.
- In exchange, traditional Social Security benefits are offset by the worker's personal account contributions compounded at an interest rate of 3.5 percent above inflation.³⁴
- No other changes are made to traditional Social Security.
- Expected benefits to workers rise while the annual cash deficit of Social Security falls by the end of the valuation period.
- Workers, retirees, and taxpayers continue to face uncertainty because a large financing gap remains requiring future benefit changes or substantial new revenues.

³⁴ In practice, this could be computed in one of several ways including (a) 3.5 percent above the realized inflation rate for each year and (b) 0.5 percent above the realized market yield on long-term Treasury bonds for each year.

- Additional revenues are needed to keep the trust fund solvent starting in the 2030s.

Reform Model 2 enables future retirees to receive Social Security benefits that are at least as great as today's retirees, inflation adjusted, and, in addition, increases the Social Security benefits paid to low-income workers. Model 2 establishes a voluntary personal account, without raising taxes or requiring additional worker contributions. It achieves solvency and balances Social Security revenues and costs.

- Workers can voluntarily redirect 4 percent of their payroll taxes up to \$1000 (indexed annually to wage growth) to a personal account. No additional contribution from the worker would be required.
- In exchange, traditional Social Security benefits are offset by the worker's personal account contributions compounded at an interest rate of 2 percent above inflation.³⁵
- Workers who opt for personal accounts can reasonably expect to receive a combined benefit greater than benefits paid to current retirees and also greater than the future benefits payable under the current system.
- The plan makes the system more progressive, by increasing the minimum benefit payable to 30-year minimum wage workers to 120 percent of the poverty line. Additional protections against poverty are provided for survivors as well.
- Benefits under the traditional component of Social Security would be price indexed, beginning in 2009.
- Expected benefits payable to a medium earner electing a retirement account would be 59 percent above benefits currently paid to today's retirees by 2052. At the end of the 75-year valuation period, the personal account system would hold \$12.3 trillion (in today's dollars; \$1.3 trillion in present value), much of which would be new saving, an accomplishment that would not need increased taxes or increased worker contributions over the long term.
- Temporary transfers from general revenue would be needed to keep the Trust Fund solvent between 2025 and 2054.
- This model achieves a positive system cash flow at the end of the 75-year valuation period under all participation rates.

³⁵ In practice, this could be computed in one of several ways including (a) 2 percent above the realized inflation rate for each year and (b) 1 percent below the realized market yield on long-term Treasury bonds for each year.

Reform Model 3 establishes a voluntary personal account option that generally enables workers to reach or exceed current-law scheduled benefits and wage replacement ratios. It achieves solvency by adding revenues and increasing benefits at a rate faster than inflation, but slower than wage growth.

- Personal accounts are created by a match of part of the payroll tax – 2.5 percent up to \$1000 annually – for any worker who contributes an additional 1 percent of wages subject to Social Security payroll taxes.
- The add-on is partially subsidized for workers in a progressive manner by a refundable tax credit.
- In exchange, traditional Social Security benefits are offset by the worker's personal account contributions compounded at an interest rate of 2.5 percent above inflation.³⁶
- The plan makes the traditional Social Security system more progressive, by increasing the minimum benefit for a 30-year minimum wage workers to 100 percent of the poverty line (111 percent for a 40-year worker). The minimum benefit would be indexed to wage growth. Additional protections against poverty are provided for survivors as well.
- Benefits under the traditional component of Social Security would be adjusted by:
 - adjusting the growth rate in benefits for actual future changes in life expectancy,
 - increasing work incentives by decreasing the benefits for early retirement and increasing the benefits for late retirement, and
 - flattening out the benefit formula (reducing the third bend point factor from 15 to 10 percent).
- Benefits payable to workers who opt for personal accounts would be expected to exceed scheduled benefit levels and current replacement rates.
- New sources of dedicated revenue are added in the equivalent amount of 0.6 percent of payroll over the 75-year period, and continuing thereafter.
- Additional temporary transfers from general revenues would be needed to keep the Trust Fund solvent between 2034 and 2063.

³⁶In practice, this could be computed in one of several ways including (a) 2.5 percent above the realized inflation rate for each year and (b) 0.5 percent below the realized market yield on long-term Treasury bonds for each year.

Specifications of Commission Reform Models

Personal Accounts	Model 1	Model 2	Model 3
Personal Account Size	2%	4% up to \$1000 annually (indexed to wages each year)	1% new contribution plus 2.5% up to \$1000 annually (indexed to wages each year)
Voluntary	Yes	Yes	Yes
Additional contributions required?	This is a generic 2% plan that can be done with or without contributions	None	1% of wages required to participate (subsidized through income tax)
Real return that makes person better off with accounts than without (SS defined benefit offset rate)	3.5%	2.0%	2.5%
Accounts owned by participants?	Yes	Yes	Yes
Accounts can be bequeathed to heirs?	Yes	Yes	Yes
Participants can choose from a mix of low-cost, diversified portfolios?	Yes	Yes	Yes
Contributions and account earnings splitting in case of divorce?	Yes	Yes	Yes

Specifications of Commission Reform Models

Traditional Social Security Benefits	Model 1	Model 2	Model 3
New minimum benefit	None	By 2018, a 30-year minimum wage worker is guaranteed benefit equal to 120% of poverty level, inflation indexed.	By 2018, a 30-year minimum wage worker is guaranteed benefit equal to 100% of poverty level (111% for a 40-year worker), then rising with national wage growth.
Widow/Widower benefits	No changes	Increased to 75% of couple benefits (versus 50% to 67% today) for lower wage couples	Increased to 75% of couple benefits (versus 50% to 67% today) for lower wage couples
Changes to growth rate of traditional benefit for future retirees	None specified	Indexed to inflation instead of wages starting for those turning 62 in 2009.	Indexed to gains in average life expectancy (results in average annual growth of 0.5% over inflation)
Additional changes to traditional benefit formula	None specified	None specified	<ol style="list-style-type: none"> 1. Reduce benefit for early retirement and increase benefit for late retirement 2. Gradually decrease bend point factor for highest income bend point from 15% to 10% starting in 2009

Reform Model 1: Increase in Total Benefits for Account Holders Relative to Current Retirees

Retirement Year	Annual Benefit Levels in 2001 Dollars		
	Low-wage Worker	Medium-wage Worker	High-wage Worker
2001	\$7,644	\$12,624	\$16,392
2032	\$10,140	\$16,944	\$22,620
Percent increase over current retiree	32%	34%	38%
2052	\$9,624*	\$16,476*	\$22,428*
Percent increase over current retiree	26%	31%	37%

* Assumes the current system will pay benefits affordable under current law: \$8,568, \$14,148, and \$18,696, for low, average, and high earners respectively. Currently scheduled benefits are \$11,832, \$19,536, and \$25,812 respectively, but the system is projected to be 27.6% underfunded in 2052. Assuming that currently scheduled benefits are met, the total expended benefit with personal accounts would be: \$12,888, \$21,864 and \$29,544 respectively.

Reform Model 2: Increase in Total Benefits for Account Holders Relative to Current Retirees

Retirement Year	Annual Benefit Levels in 2001 Dollars		
	Low-wage Worker	Medium-wage Worker	High-wage Worker
2001	\$7,644	\$12,624	\$16,392
2032	\$11,160	\$15,444	\$19,680
Percent increase over current retiree	46%	22%	20%
2052	\$13,608*	\$20,016*	\$24,684*
Percent increase over current retiree	78%	59%	51%

* Assumes the current system will pay benefits affordable under current law: \$8,568, \$14,148, and \$18,696, for low, average, and high earners respectively. Currently scheduled benefits are \$11,832, \$19,536, and \$25,812 respectively, but the system is projected to be 27.6% underfunded in 2052.

Reform Model 3: Increase in Total Benefits for Account Holders Relative to Current Retirees

Retirement Year	Annual Benefit Levels in 2001 Dollars		
	Low-wage Worker	Medium-wage Worker	High-wage Worker
2001	\$7,644	\$12,624	\$16,392
2032	\$10,932	\$17,412	\$22,620
Percent increase over current retiree	43%	38%	38%
2052	\$14,112*	\$23,796*	\$31,668*
Percent increase over current retiree	85%	88%	93%

* Assumes the current system will pay benefits affordable under current law: \$8,568, \$14,148, and \$18,696, for low, average, and high earners respectively. Currently scheduled benefits are \$11,832, \$19,536, and \$25,812 respectively, but the system is projected to be 27.6% underfunded in 2052.

Fiscal Sustainability Results

In accordance with the Executive Order establishing this Commission, the report uses a number of criteria to assess improvements to the Social Security system's fiscal sustainability. Results are outlined in the text, and summarized in the table following this summary. As a rule, reform models that include Personal Accounts require some investment during an initial period, with greater expected benefits in the medium and long term. The Commission Report therefore evaluates both transition investments and the status of system assets after the implementation of the various reform models. In addition, several other fiscal sustainability criteria are provided.

Expected Personal Account Assets and Gain in System Assets by End of Valuation Period

Current projections show that benefits specified under current law would leave Social Security underfunded by about \$3.157 trillion or about \$21,000 per current worker (in present value). An important measure of the contribution of a Social Security reform proposal to the health of the economy is the extent to which a given reform can reduce the size of this unfunded obligation. We emphasize this measure as it quantifies the contribution of personal accounts plans to our nation's long-term economic well-being,

Each of the models developed here improves this situation, to some degree. Line 1 of the table shows that in today's dollars, Model 1 would be projected to have Personal Account assets of \$10.3 trillion in 2075 (\$1.1 trillion in present value); Model 2 would have \$12.3 trillion (\$1.3 trillion present value), and Model 3 would have \$15.3 trillion (\$1.6 trillion present value). The overall gain in system assets, inclusive of Trust Fund balances, is reported in Line 2. Here we see that each model improves on the current system's projected debt in present value terms, in Model 1 by \$0.5 trillion, in Model 2 by \$4.8 trillion, and in Model 3 by \$5.0 trillion.

Reductions in General Revenue Requirements Relative to Present Law

Each year Social Security faces an obligation to pay benefits, and it also generates revenue through its own dedicated payroll tax as well as taxation of benefits and interest on Trust Fund assets. Under present law, the system would require substantial additional revenue to cover scheduled benefits. Each of the Commission's proposed models improves fiscal sustainability by ultimately requiring less additional revenues to cover benefits. Line 3 of the table indicates that Model 2 would effect the largest reductions relative to current law. Specifically, additional revenue requirements over the next 75 years are 45 percent lower for Model 2, and 34 percent lower for Model 3 (in present value terms). Model 1 would create a 4 percent increase in present value terms, but an 8 percent improvement in real dollars. (The difference is due to the fact that Model 1's improvements over current law are late in the valuation period, and are thus discounted the most using a present-value calculation.)

Social Security Cashflow Patterns Relative to Present Law

In years when the Social Security system has a positive annual cash flow, it has sufficient income to cover its costs. Positive annual cash flows are a useful metric of whether the program is self-financing and are an easy measure to understand. Social Security's separate accounting is also an important protection for the program, helping to ensure that all of its dedicated revenues are ultimately used to pay Social Security benefits without additional general revenue. The current system faces cash flow deficits beginning in 2016 that will grow continually, exceeding 6 percent of the program's taxable payroll by 2075. This is an annual shortfall in 2075 of \$673 billion in constant 2001 dollars.

The three models described in this Report reduce the size of anticipated cash flow deficits by the end of the 75-year valuation period, as illustrated in Line 4 of the table. Model 1 does not eliminate the cashflow shortfall without additional general revenue by 2075. This is also the case for Model 3, but with the addition of new permanent revenue discussed in the text, cashflow would turn positive by that year. Model 2 has a positive cashflow of 1.41 percent of payroll within the valuation window, without the need for permanent revenue increases.

Improvement in Actuarial Balance Over 75-Year Period

Social Security actuaries calculate the actuarial balance of the OASDI program as the present value of Social Security system expected revenues minus the present value of scheduled expenditures over the period in question. Social Security actuaries are required by Congress to make long-term calculations, and the Office of the Actuary has typically used a 75-year valuation period for this long-term analysis. By this standard, the current system is not in actuarial balance with a 75-year shortfall equivalent to 1.86 percent of taxable payroll on average.

Line 5 of the table reports improvements in the system's actuarial balance through 2075 under each of the models, with and without additional sources of long-term revenue. Actuarial balance is achieved by Model 2 but only after the temporary addition of general revenue between 2025 and 2054. Achieving actuarial balance under Model 3 requires the addition of both temporary and permanent sources of revenue as specified in the text. Model 1 does not achieve balance.

Transition investment and Long-Term System Costs as a Percent of GDP

Social Security currently consumes 4.2 percent of the nation's gross domestic product, or GDP. If additional revenues were to be devoted to Social Security to pay benefits under scheduled benefit formulas, this fraction must rise to 6.7 percent of GDP by the year 2075. In the text of the Report, we show how each reform influences the growth rate of system costs as a percent of GDP. Thus we recognize that Social Security expenditures are a claim on real economic resources provided by taxpayers, in direct competition with other spending priorities.

The three models developed by the Commission require varying degrees of investment to move the system toward sustainability. Improving Social Security's finances for the long run involves an investment over a shorter period, followed by a longer period during which the system reaps returns. There is no well-defined way to measure the transition investment, so we offer the measures displayed in the table. Each of these answers the question, "How large is the investment required from the Unified Budget to finance a move from the current unsustainable system to the proposed model that includes personal accounts?" This is reflected in difference between the additional budgetary resources needed to insure that all benefits are paid over the investment period. The first panel under Line 6 computes the present value of these resources, assuming that current social security surpluses would not be available for financing; the second panel includes such surpluses. In both cases we also report the figures as a percent of Gross Domestic Product over the years included in the calculations.

A further discussion of transition investment is provided in the Methodology section of this chapter.

Assuming surpluses would not be available for transition financing, Model 1's transition cost is \$1.1 trillion, Model 2's is \$0.9 trillion, and Model 3's is \$0.4 trillion. If current surpluses were available, the costs would decline to \$0.7 trillion for Model 1, \$0.4 trillion for Model 2, and \$0.1 trillion for Model 3. As a percentage of GDP, the latter values are remarkably small, at 0.29 percent, 0.33 percent, and 0.10 percent respectively.

Summary of Fiscal Sustainability Results Assuming 2/3 Participation in Personal Accounts (PA)

	Model 1 ¹	Model 2	Model 3	Current Law
Expected PA assets at end of 2075 (\$PV trillions)	\$1.1	\$1.3	\$1.6	N/A
Gain in Social Security 'system' assets at end of 2075 (increase in trust fund + expected PA assets; \$PV trillions)	\$0.5	\$4.8	\$5.0	N/A
Reductions in Cash Flow Requirements From General Revenue^{2,3} Relative to Present Law				
Reduction in 75-year total (sum of annual amounts in \$2001 trillions)	\$1.7	\$14.8	\$11.3	\$0.0
Percent reduction versus current law (in \$2001)	7.7%	68.1%	52.2%	0.0%
Reduction in 75-year total (\$PV trillions)	-\$0.2	\$2.3	\$1.7	\$0.0
Percent reduction versus current law (in PV)	-3.8%	45.0%	33.9%	0.0%
Social Security Cashflow				
With Dedicated General Revenue				
Positive by end of valuation window?	No	Yes	Yes ⁴	No
Income Rate (excluding GR transfer)—Cost rate in 2075 (% of payroll)	-4.56	1.41	0.12 ⁴	-6.05
Without Dedicated General Revenue³				
Positive by end of valuation window?	No	Yes	No	No
Income Rate (excluding GR transfer)—Cost rate in 2075 (% of payroll)	-4.56	1.41	-0.75	-6.05

Summary of Fiscal Sustainability Results Assuming 2/3 Participation in Personal Accounts (PA)

	Model 1 ¹	Model 2	Model 3	Current Law
Improvement in Actuarial Balance Over 75-year Period				
Improvement with general revenue transfer (% of payroll)	-0.32	1.99	1.88	0
Percent improvement with general revenue transfer	-17%	107%	101%	
Improvement without general revenue transfer (% of payroll) ³	-0.32	1.15	0.87 ⁵	0
Percent improvement without general revenue transfer	-17%	62%	47%	
Transition Investment				
Assuming Current Law Surplus Not Used for Financing⁶				
\$PV trillions	\$1.1	\$0.9	\$0.4	
As % of GDP over years included in calculation	0.36%	0.49%	0.25%	
Includes Current Law Surplus Available for Financing⁷				
\$PV Trillions	\$0.7	\$0.4	\$0.1	N/A
As % of GDP over years included in calculation	0.29%	0.33%	0.10%	N/A

Notes

- 1 Model 1 does not include additional transfers for balance.
- 2 Cash flow requirements are defined as general revenue required in any year to maintain solvency in the absence of dedicated revenues.
- 3 Taxes on benefits and PRA distributions are treated as Social Security revenues, not general revenue.
- 4 Includes new dedicated sources of revenue; see text.
- 5 Improvement in actuarial balance would be +1.50 if new dedicated sources of revenue are included; see text.
- 6 Unified budget concept: difference between income and cost of proposed model versus present law.
- 7 Reflects extent to which negative balance in any year is more negative than under current law.

Personal Accounts and Social Security Reform

Finding: The Commission concludes that there are multiple paths to fiscal sustainability that are in keeping with the President's principles for Social Security reform.

The Commission has developed three reform models that are compatible with the President's principles that also move Social Security toward fiscal sustainability. All three models include a personal account element that would permit participants to build substantial wealth, diversify their retirement portfolios, and receive higher expected benefits than those paid to today's retirees. All three models improve fiscal sustainability, though some move farther than others. All three require an investment to strengthen Social Security, but all three reduce the long-term need for general revenue as compared to the current, unsustainable system. Two of the three models enhance Social Security's progressivity by increasing benefits for low-income workers above what the system currently pays. Two of the three models also boost survivor benefits for poor widows and widowers. All of the plans would enhance workers' control over real retirement accounts that they own and can pass on as an inheritance. These features will benefit women and minorities, as well as all low-income workers. In all three plans, the system's cash flow needs are met so as to ensure that promised benefits can be paid as retirees need them.

The Commission set a goal of moving the Social Security system toward a fiscally sustainable course that reduces pressure on the remainder of the federal budget and can withstand economic and demographic changes in the future. The three reform models outlined here are therefore transparently scored in terms of plan provisions, effects on workers' expected costs and benefits, and effects on Trust Fund operations as well as the unified federal budget. We also identify clearly how large the personal account balances may be expected to grow as the system evolves.

The Commission concludes that building substantial wealth in personal accounts can be and should be a viable component of strengthening Social Security. We commend our three models to the American public in order to enrich national understanding of the opportunities for moving forward.

Process

The Commission is a bipartisan group, and each member brought to the task an understanding of the Social Security program and an expressed willingness to seek bipartisan recommendations that meet the President's charge. All of the Commission's work has complied with regulations regarding the group's deliberations and meetings. The Commission has worked together 7 months, held 8 public meetings, heard testimony from 34 people, met with numerous members of Congress and the public, and worked with experts from the Social Security Administration.

Methodology

Rate of Return/Portfolio Assumptions

The Commission believes it is important to use a consistent set of conservative assumptions to evaluate plans. To this end, all three plans scored in this report utilize a common set of assumptions about personal account portfolios, rates of return, and administrative costs.

For the main results presented herein, an individual investing in personal accounts is assumed to hold a portfolio consisting of 50 percent equities, 30 percent corporate bonds, and 20 percent government bonds. Individuals are assumed to annually rebalance their portfolios to maintain these portfolio shares throughout life.

In the pre-retirement period, a portfolio of 50 percent stocks and 50 percent bonds may be considered quite conservative, particularly for younger workers. Analysis by the non-partisan Employee Benefits Research Institute indicates that in 1999, the average 401(k) retirement plan portfolio allocation was over 70 percent in equities. For workers under the age of 40, over 80 percent of assets were held in equities.

Other more recent sources of data indicate a similar propensity for investors to hold a portfolio that is more heavily weighted towards equities. In June 2001, participants in TIAA-CREF, a leading retirement plan for college professors and researchers, held an average of 58 percent of their portfolios in equity, suggesting that even in the face of a year-long market downturn in equities participants chose to hold the majority of their portfolio in equities. A similar story is told by the federal Thrift Savings Plan, in which 62 percent of plan assets were held in equities in the first half of 2001.

The Commission's projections use the rates of return on these assets recommended by the Office of the Actuary of the Social Security Administration. Equities are assumed to provide an ultimate expected real rate of return of 6.5 percent.³⁷ Corporate and Treasury bonds are assumed to provide a real rate of return of 3.5 percent and 3.0 percent respectively. Administrative costs are assumed to equal 30 basis points (0.3 percent of the account balance). If the accounts were to be structured according to a Thrift Savings Plan model, actual expenses would likely be lower than this. The overall expected real return for this 50-50 portfolio, net of expenses, is therefore a conservative 4.6 percent.

This portfolio return is much lower than that used in many academic and policy studies of personal accounts. For perspective, the historical real rate of return on US equities averaged 7.75 percent between

³⁷ By "real return" is meant return in excess of the rate of inflation.

1926-2000. Using a higher portfolio return would obviously increase benefits to a level higher than those reported here.

In the primary results presented here, the individual is assumed to convert to a variable annuity upon retirement that is invested in the same underlying portfolio as during the accumulation phase. The variable annuity is priced using an "assumed interest rate" of 4.6 percent after inflation. Therefore, if the underlying investment portfolio provided an actual rate of return that was equal to its expected return, the variable annuity's value would increase in line with the expected rate of inflation. In those periods when the portfolio beats its expectation, benefits will increase faster than inflation. In those periods when the portfolio return falls short of its expectation, the real value of benefits would decline. As with the accumulation phase, the decision to invest in variable annuities involves a trade-off between the higher expected rates of return and the higher volatility of equities.

Because the current Social Security system pays benefits entirely as an inflation-indexed annuity, some analysts have suggested that personal account balances should be converted to inflation-indexed annuities in the retirement phase. Results for inflation-indexed annuities are presented in the data appendix.

However, it is reasonable to assume that some equity exposure in the retirement phase may in fact be optimal for most retirees. In every plan presented in this report, the personal account annuity supplements an inflation-indexed annuity that is provided by the traditional defined benefit portion of Social Security. This defined benefit portion of retirement income should be considered part of the overall retirement portfolio. Therefore, while equities may make up 50 percent of the variable annuity portfolio, they comprise a far smaller share of the overall Social Security retirement income portfolio.

As a stylized example, consider a situation in which the traditional defined benefit from Social Security is expected to account for 60 percent of total retirement income, and the variable annuity is expected to account for the other 40 percent. Then the individual's overall retirement income portfolio is essentially invested in 60 percent inflation-indexed securities, 20 percent corporate and government bonds, and only 20 percent equities. In this example, the variable annuity portfolio assumption would be equivalent to assuming an 80 percent bond, 20 percent equity portfolio.

How the Account Offset Functions

For workers who choose personal accounts, benefits from the traditional system are offset at a given interest rate (3.5 percent in reform model 1; 2 percent in option 2; and 2.5 percent in option three).

The offset functions in the following way: contributions to the account are compounded at the stated offset interest rate, producing a notional total at retirement. This notional total is converted to a monthly annuity payment, which offsets the individual's traditional Social Security benefit. As long as the personal account earns a higher average rate of return than the offset rate, benefits derived from the account will exceed benefits offset from the traditional system and the individual's total income will increase. Under this formulation, the individual need not master the complexities of Social Security's benefit calculation. He knows that he is getting more benefits than he is giving up if his personal account return exceeds the offset interest rate.

Offsets under the plans are not taken from the personal accounts, and do not in any way depend on the assets in the accounts when the individual retires. The offsets are a function of the initial contributions to the accounts and represent a voluntary choice to invest those contributions in personal account benefits instead of "buying" benefits from the traditional Social Security system. None of the models reviewed by the Commission involve such reductions in Social Security benefits at the point of retirement. Individuals would retain ownership over 100 percent of the proceeds in their personal accounts, and no adjustments to traditional Social Security benefits would be made as a function of the accumulations in the accounts. The adjustment depends only on contributions to the account and the offset interest rate charged on these contributions.

Why Not Construct the Offset Simply as a Flat Percentage of Benefits? Constructing a Simple Personal Account Election

Under some proposals, participants electing personal accounts would have the opportunity to invest a flat percentage of their earnings in a personal account in exchange for a flat percentage reduction in their traditional Social Security benefits. The Commission found three reasons why such proposals might be problematic under our criteria.

First, the traditional Social Security benefit formula is progressive. Accordingly, benefits for low-income workers represent a higher percentage of their lifetime earnings than for high-income individuals. For this reason, a flat offset formulation would mean larger relative reductions in traditional benefit for low-income workers, thereby reducing the program's overall progressivity.

The Commission's Interim Report identified several ways in which Social Security's apparent progressivity is reduced by factors such as differences in life expectancies between upper and lower-income workers. Further reducing system progressivity would exacerbate these difficulties.

The Commission stresses that these concerns do not mean that flat percentage offsets should be ruled out as a policy option. We note, however, that such a design would likely require additional policy changes in order to reach distributional goals.

A second reason is the fact that a contribution to a personal account would produce more in benefits if that contribution has a longer period of time in which to compound. Accordingly, a contribution at age 50 should not produce the same percentage offset as an equal contribution at age 25, which a flat percentage offset would do.

A third reason is simplicity. Workers do not know in advance what their Social Security benefits will be, but they should have a readily-understood standard by which to choose whether to opt for a personal account.

Participation Rates in Personal Accounts

Construction of a voluntary personal account option raises the analytical question of what participation rates to assume. Traditionally, the Social Security Office of the Actuary produces alternative projections that show the effects of both 0 percent and 100 percent participation in the accounts.

In practice, however, participation will be somewhere between these extreme bounds of 0 percent and 100 percent. For that reason, the Commission has settled on an illustrative participation rate of 67 percent, though projections for 100 percent participation are included in the data appendix.

In reality, each of these Reform Models would likely inspire different participation rates. Reform Model 1, for example, would exact a steeper benefit offset in exchange for personal account benefits than would either Model 2 or 3. Model 3, unlike Models 1 and 2, would require additional out-of-pocket contributions to the account. These factors, among other design features, would influence participation rates. Participation rates for Model 2 would likely be highest because no additional out-of-pocket contributions would be required, and the offset rate would be the lowest for the three plans.

Values in Dollars: Current, Constant, and Present-Value

Over a 75-year time horizon, the value of a dollar varies considerably, in inflation-adjusted terms, and in present-value terms. There is no one "correct" way to portray dollar figures, and the Office of the Social Security Actuary makes use of each of current dollars, constant (inflation-adjusted) dollars, and present-value analyses.

For the most part, the Commission report avoids use of current dollars, which neglect the effects of inflation. Real (constant 2001 inflation-adjusted) dollars will be used in most instances when reference is made to an annual amount. When measuring amounts that must be summed over a long-term time horizon, such as 75 years, the Commission report will use present values, discounted at the Treasury yield rate.³⁸

³⁸There are exceptions to these conventions in the report, which reflect the limitations on data available at the time the report was released.

Charts: Financial Operations of the Social Security System

Each Reform Model will be analyzed according to its projected effects on the finances of the Social Security system as a whole, as well as its effect on beneficiaries.

For each Model, annual cost and income rates will be shown for each year as a percentage of Social Security's annual taxable payroll.

Measuring Transition Financing Under the Three Reform Models

During the drafting of this report, it has become clear that there is a pressing need for a clear and concise summary measure of the transition investment associated with each Reform Model developed by the Commission.

The Summary Table included in the Executive Summary shows a simple "bottom line" figure for the transition investment under each Reform Model. Further details are included in the separate discussions of each Model.

The figures in the Executive Summary are taken from the projections of the Office of the Social Security Actuary. In every year where financing needs are greater under the Reform Model than they would be under current law, that year is identified as a "transition year." All required extra financing is added up for each transition year, and the sum is given on the table.

These numbers show only one side of the equation: by contrast, the benefits of advance funding, manifested in reduced costs when the transition is over, are not included.

Transition investments are shown two ways. The total transition investment is shown, as well as the transition investment above and beyond what is already accounted for by projected Social Security surpluses under each model. It can be fairly presumed that Social Security surpluses under each model would be used to fund transition investments and that the only "net" new required transition investment would be that beyond what is already available from such cash surpluses.

As indicated earlier, the resources needed to finance a transition to personal accounts cannot be viewed in isolation from the benefits created by personal accounts. Saving and investing for the future requires that some consumption be forgone in the short term in order to meet obligations in the long term. Each of the three reform models presented would result in a different period of time before new saving and investment would pay off in reduced costs.

It is extremely important that different "transition" terms not be confused. Some frameworks would involve a "transition loan" to the Social Security Trust Fund to preserve its solvency until a period of permanent surpluses is reached -- a loan that would not begin for more than two decades from now. This is different from what many observers mean when they refer to a plan's "transition" effects. For example, some refer to the "transition" effects of creating personal accounts over the next ten years, even though no "transition loans" would be required during that period in order to ensure solvency. By this definition, the "transition" is simply the period in which the new system's cash requirements are greater than the current system's. It is this latter definition that shall be referred to in these sections concerning "transition" financing.

Relationship to the Lockbox: For purposes of clarity, the Commission notes that the Social Security "lockbox," as it was intended to operate before recent national security developments, was intended to wall off both Social Security cash and interest surpluses. The figures above reference cash surpluses alone. If both cash and interest surpluses were protected in the future, then transition financing needs would be postponed considerably beyond the years indicated above.

Impact on the Unified Federal Budget

Each proposal will have different effects on the unified federal budget as a whole. Under current projections, spending on Social Security would grow at an unsustainable pace that would crowd out many other forms of government spending. It is therefore important that any reform proposal have a positive long-term effect on the federal government's ability to produce the resources necessary to fund Social Security benefits within the federal budget.

Each of these models would have different effects on the federal budget over time. For all three of the models, the move towards personal accounts would have short-term transition challenges to be followed by long-term gains. For two of the models, changes to bring balance to the pay-as-you-go Social Security system would themselves have positive effects on the federal budget throughout the valuation period. The interaction between these elements produces each proposal's unique effects on federal budget projections.

The Office of the Social Security Actuary has produced estimates of the net impact of each proposal on the unified federal cash budget, which are presented in the accompanying discussions.

The Role of Congressional Proposals in the Commission's Analysis and Reporting

Many members of Congress have offered plans to sustain Social Security with personal accounts, and the Commission has studied and evaluated these in substantial detail. Commission members have particularly appreciated the work of Congressmen Jim Kolbe (R-AZ), Charles Stenholm (D-TX), Nick Smith (R-MI), Jim DeMint (R-SC) and Richard Arney (R-TX) in presenting constructive proposals for the Commission's consideration. The Commission applauds the effort that many Members of Congress have demonstrated by working diligently to develop comprehensive, actuarially-scored proposals.

Congressional sponsors of proposals as well as other sponsors of serious comprehensive reform proposals are entitled to have their plans understood and discussed. This entails that plans be compared to the proper baseline of an imbalanced Social Security program in which benefits would be precipitously reduced or taxes precipitously raised when the Trust Fund became insolvent.

They are properly compared not to an unrealistic baseline in which all promised benefits materialize

without collection of the necessary tax revenue, but to two actual alternatives: 1) a Social Security system that will become insolvent, or 2) a system in which tax revenues are increased to sustain the scheduled benefit level. We urge that, for credibility, critics of our reform plans or those of others should be expected to offer comprehensive reform alternatives of their own.

How the Commission's Reform Models Improve Social Security's Treatment of Women

While Reform Model 1 retains the current system's protections for women by making no changes to current benefit schedules, Reform Models 2 and 3 would make targeted improvements in the treatment of women.

Both models institute new protections against poverty for low-income workers, among whom women are disproportionately represented. By 2018, Reform Model 2 would guarantee that an individual who worked for at least 30 years at the minimum wage would retire with an income at least 120 percent of the poverty line. Reform Model 3 would guarantee that such a worker retired with an income at least 100 percent of the poverty line (111 percent for a 40-year worker). These are new protections against poverty in old age that do not exist in the current program.

Reform Models 2 and 3 would also increase benefits for widows, who suffer among the highest poverty rates in retirement. Currently, a widow's benefits are reduced by between one-third and one half relative to the total benefits she and her spouse received. Under these new protections, widows of below-average wage earners would receive 75 percent of their total couple's benefit, thereby reducing poverty for this vulnerable population.

Finally, under the current system a woman who is divorced prior to ten years of marriage receives no credit toward benefits based on her husband's earnings. As the average divorce takes place prior to the tenth year of marriage, this deprives many women of benefits they would otherwise have received. All three Reform Models go some way toward addressing this problem by dictating that personal account assets accumulated during marriage, as well as all earnings on account assets brought into marriage, would be split equally between husband and wife in the event of divorce. This would ensure that divorced women would not leave a marriage without any assets or wealth.

Reform Model 1: Voluntary Personal Account and Offset, Combined with No Change to Traditional Social Security System

The Model:

Reform Model 1 establishes a voluntary personal account by permitting workers to invest a specified amount such as 2 percent of their taxable wages in a personal account. In exchange for the benefits generated by the personal account, traditional Social Security benefits would be offset by the amount of personal account contributions, compounded at a real interest rate of 3.5 percent.

Reform Model 1 would permit policymakers to separate the issues of permanent fiscal sustainability and personal accounts. Specifically, it would provide policymakers with an opportunity to establish personal accounts in a manner that simultaneously makes a modest contribution to long-term sustainability, and also offers improved treatment of beneficiaries.

This option would be relevant if Congress decided to act on creating personal accounts with or without also acting to restore fiscal sustainability. In the particular example scored here, individuals would be given the opportunity to invest 2 percent of their taxable wages in a personal account. This framework, however, could be adapted to allow for accounts that are of different size or construction. The accounts could be made larger, or smaller. They could be funded in a progressive fashion (with a higher contribution rate based on the first dollars of earnings than on higher earnings amounts). Some have proposed that such accounts be supplemented with extra contributions for younger workers or that such accounts be funded from general revenues. (One approach to this would be the idea proposed by former Senators Moynihan and Kerrey, which they denoted "Kidsave.") Others have suggested that the accounts be made larger, with the requirement that a certain amount be invested in federal securities as a means of limiting the total size of the transition investment. Though the plan scored here envisions a 2 percent account for all wage earners, any of the above variations could be fit within this framework.

Another variation on this general framework would be to supplement traditional Social Security benefits with voluntary personal accounts, established and financed by the mechanism described by the co-chairs in their introduction to this report. Under this option, workers would be given the opportunity to invest an additional one percent of their pay in a personal account, and to receive a one percent match from general revenues. Such accounts may or may not interact directly with the Social Security system, depending on the design of the personal account. Structured purely as a supplementary "add-on" account, the accounts would produce additional income for participants, without affecting the underlying finances of Social Security. It would also be possible to design such accounts to play a role in funding a portion of existing Social Security benefit promises, and thereby to use the accounts to help shore up the finances of traditional Social Security.

Key Elements of Model 1:

Personal Accounts

Workers would be given the opportunity to invest 2 percentage points of their taxable wages in a personal account. In exchange for this, traditional Social Security benefits would be offset by the amount of personal account contributions, compounded at a real interest rate of 3.5 percent. So long as the yield on the personal accounts exceeded this 3.5 percent real rate, workers would anticipate receiving higher total retirement benefits by electing the personal account.

Projected Benefits

Traditional Social Security benefits would be offset by the amount of personal account contributions, compounded at a real interest rate of 3.5 percent.

Model 1 is a flexible framework. It can be molded to fit the particular desires of policymakers with respect to such factors as the size of the accounts, whether to establish a progressive funding mechanism for the accounts, and whether to act simultaneously to ensure fiscal sustainability.

The Commission projections suggest that individuals opting for personal accounts can expect higher benefits under Model 1 than payable under the current system. The program's fiscal challenges would remain qualitatively similar to current law.

Under Model 1, further actions would be required by Congress in order to ensure a fiscally sustainable system. Accordingly, projections of total benefits are less certain than would be the case under Models 2 and 3. If future action to restore sustainability to Social Security affects the growth of benefit levels in the traditional system, this would affect participants in personal accounts with respect to their benefits provided from the traditional system.

Under current law, additional revenue would be required in order to sustain full scheduled benefits, or else benefits would be suddenly reduced by 27 percent in 2038. Accordingly, benefits for those who opt for personal accounts under Model 1, as well as for those who do not, are shown on the accompanying charts with recognition of this uncertainty: after 2038, two lines are shown – the level of current benefit promises, as well as the level of benefits that would actually be paid under current law.

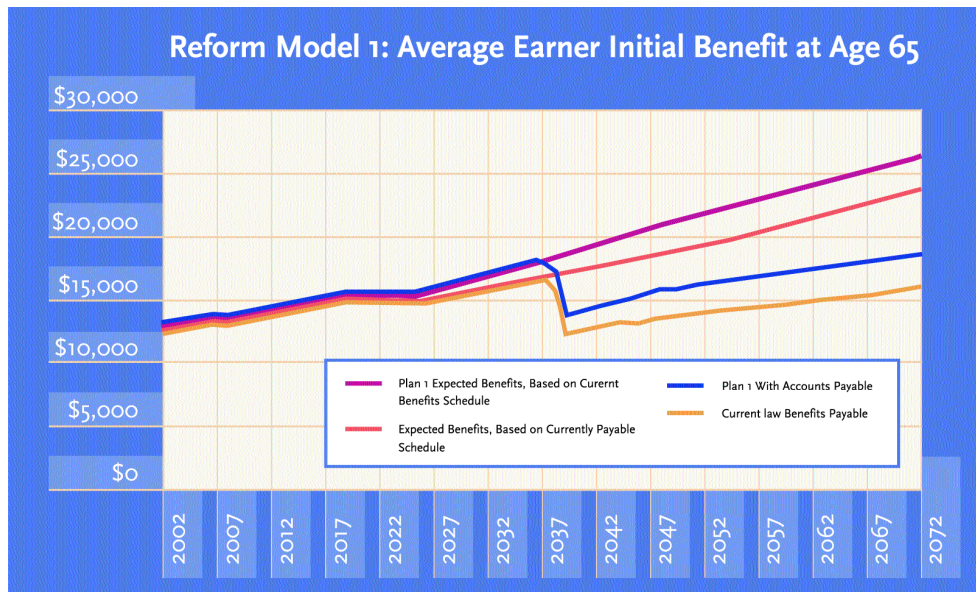
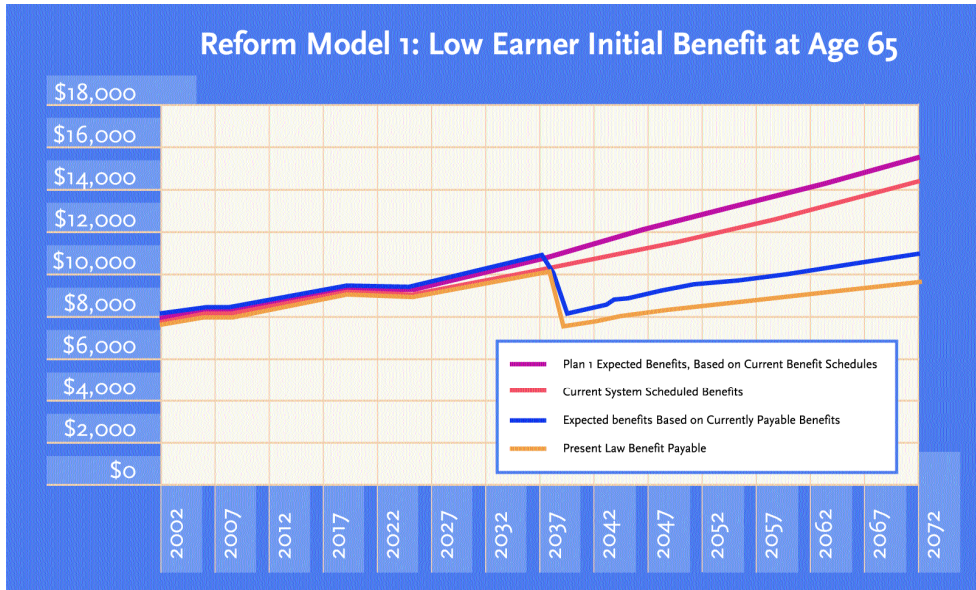
When fully phased in, expected benefits for a medium earner would be approximately 12 percent higher for individuals who opt to participate in accounts relative to benefits scheduled under the current system. In comparison to a scenario in which the current system delivers only those benefits payable under current law, the expected gain from the personal account option would be 16 percent. By 2075, \$1.1 trillion in assets (present value) are projected to have been accumulated in the personal accounts under the operating assumption of two-thirds participation. A fuller explanation of benefit projections is provided below.

Plan 1: Two Percent Personal Account, No Changes to Underlying System

Relative Earnings		Reform Model Benefits				
		Today's Benefit Levels	Current Law Benefit	Expected Benefit With Account	Increase Relative to Today's Benefit	Additional Increase Due to Account
2032						
	Low	\$7,644	\$9,756	\$10,140	\$2,496	\$384
	Medium	\$12,624	\$16,116	\$16,944	\$4,320	\$828
	High	\$16,392	\$21,288	\$22,620	\$6,228	\$1,332
2052						
	Low	\$7,644	\$8,568*	\$9,624*	\$1,980	\$1,056
	Medium	\$12,624	\$14,148*	\$16,476*	\$3,852	\$2,328
	High	\$16,392	\$18,696*	\$22,428*	\$6,036	\$3,732

* \$11,832, \$19,536, and \$25,812 are currently scheduled for low, medium, and high earners respectively, but the system is projected to be 27.6% underfunded in 2052. Under the assumption that currently scheduled benefits are met, then the total expected benefit with personal accounts would be \$12,888, \$21,864, and \$29,544 respectively.

** Expected benefits with accounts assume individual invests in a 50/50 stock/bond portfolio earning an annual real rate of return, net of administrative expenses, of 4.6%. Upon retirement, the individual is assumed to have converted to a variable annuity invested in the same portfolio. Actual benefits may be higher or lower than those reported here depending on realized investment returns.



Fiscal Sustainability Assessment

Model 1 as scored does not change the qualitative financing challenge facing the system within the valuation period. It devotes a transition investment to the system in the first four decades, and it would improve the program's annual cash flows from 2043 onward.

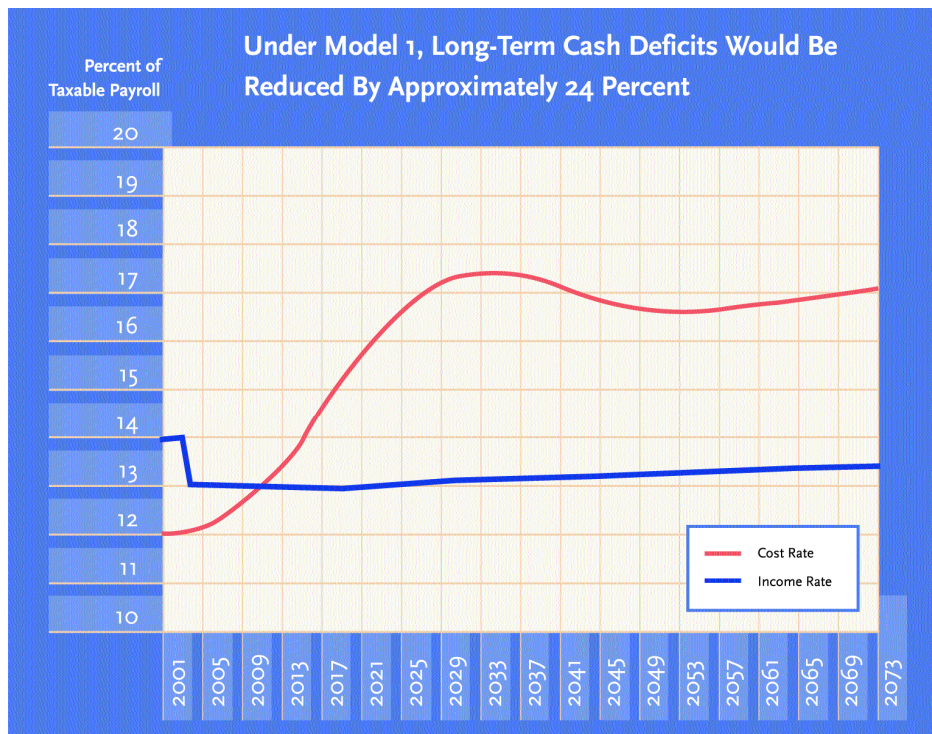
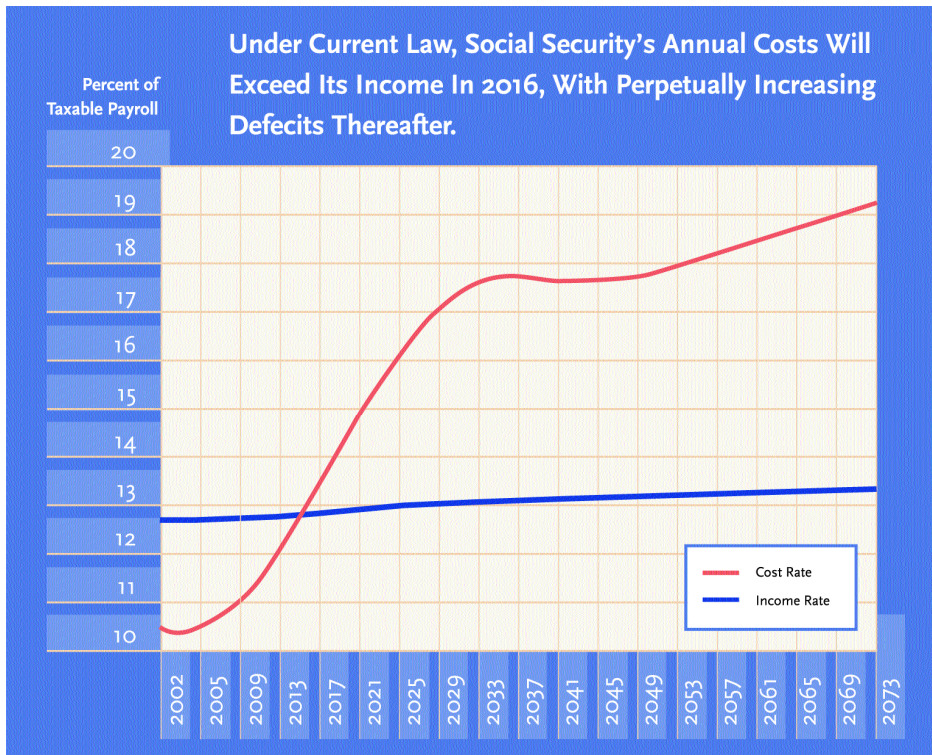
Within the basic framework of a two percent account with a 3.5 interest rate offset, many basic measures below show the same results whether the Model is scored as a two percent contribution from payroll taxes (with a larger commitment of general revenues to the Trust Fund) or a one percent contribution from payroll taxes in combination with a one percent contribution from general revenues (with a somewhat smaller commitment of general revenues to the Trust Fund.) Only for the solvency and actuarial balance measures are these treated differently, so both constructions are shown in these measures for purposes of illustration.

Positive Annual System Cash Flow Within Valuation Period:

Under current law, Social Security faces perpetually rising cash flow shortfalls. As the following chart shows, these deficits are projected to begin in 2016, rise to 4 percent of taxable payroll within thirty years, and reach 6 percent of taxable payroll by 2075. Model 1 reduces the shortfall by approximately 1.5 percentage points by the end of the period, an improvement of approximately 24 percent. However it does not eliminate these permanent deficits within the 75-year valuation period, nor would it return the system to positive annual cash flow within that time.

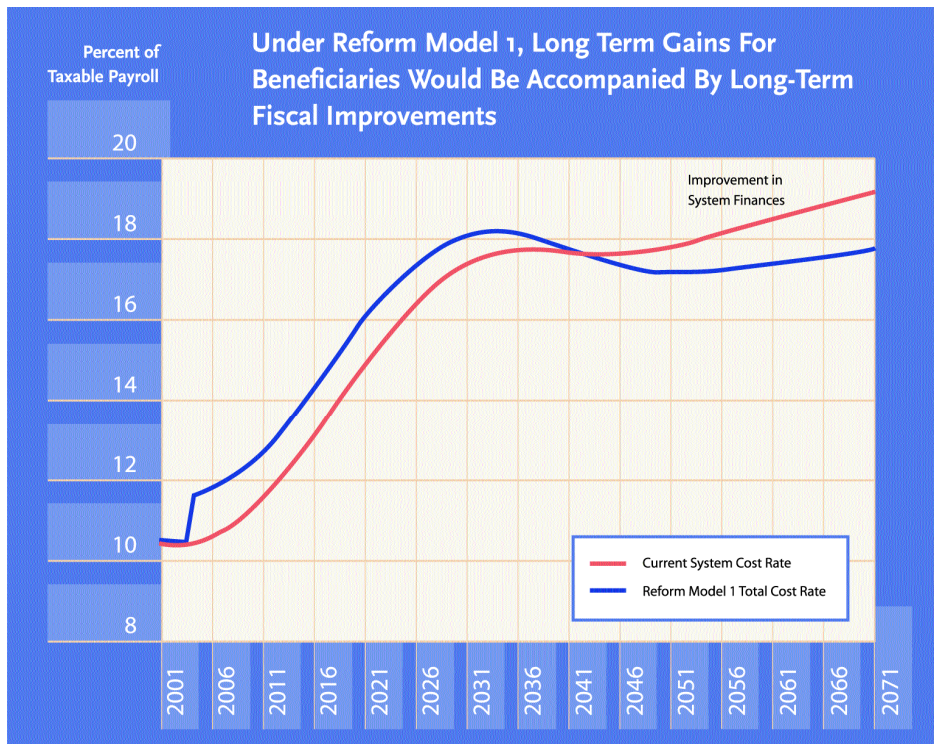
Under Reform Model 1, the present value of the program's cash deficits over the next 75 years would remain qualitatively the same as under current law – a slight increase of \$200 Billion in present value, or a 3.8 percent change. Reform Model 1 would increase expected benefits for participants but would not significantly alter the size of Social Security's fiscal imbalances within the valuation period. It would, however, distribute the financing burdens more equitably across generations, with some of the mounting outyear cash burdens moved closer in time. Outside the valuation window, the picture would improve substantially relative to current law.

If Reform Model 1 were structured as a 1 percent investment of payroll taxes accompanied by a 1 percent match from general revenues, the present value of the cash deficits within Social Security would be measured as having diminished. This, however, could give a misleading impression that such a method of financing would diminish the total costs of Reform Model 1. It would not. Counting the cost of a 1 percent match from general revenues would bring the total cost of Reform Model 1 up to the same figures given above.



Reductions in the Rate of Growth in Long-Term System Costs as a Percent of GDP:

Social Security's burden on future taxpayers is usefully measured by its expenditures as a percentage of taxable payroll. As shown previously, under current law Social Security's burden on future taxpayers is projected to rise quickly during the next thirty years, from its current level of 10.5 percent of taxable payroll to over 17 percent of taxable payroll by 2030. Thereafter, the burden continues to grow, albeit at a somewhat slower pace. By 2075, the burden will exceed 19 percent of taxable payroll. Model 1's policies would have little beneficial long-term impact on the growth in Social Security's burden. The model's expenditures would reach a maximum of 18.2 percent of taxable payroll in 2034, assuming a 67 percent participation rate, including the amount of annual investments in personal accounts. Relative to GDP, costs by 2075 would have grown 16 percent less than under current law. In the following years, Model 1's policies would gradually reduce system costs relative to current law.



Improvements in 75-Year Actuarial Balance:

If structured as a 2 percent contribution from payroll taxes, the 75-year actuarial balance would be projected to have worsened by 0.32 percent of payroll over the valuation period. Improvements in actuarial balance would occur only after the 75-year valuation period. If structured as a 1 percent payroll tax contribution matched by a 1 percent contribution from general revenues, it would be deemed to have improved by 0.29 percent. It is important to note, however, that this is an artifact of the method of computing solvency and that the two methods of construction are identical in terms of their effects on beneficiaries and taxpayers. Either way, the total revenues required to achieve solvency would be exactly the same. This example highlights the limitations of this traditional measure of the fiscal health of the program.

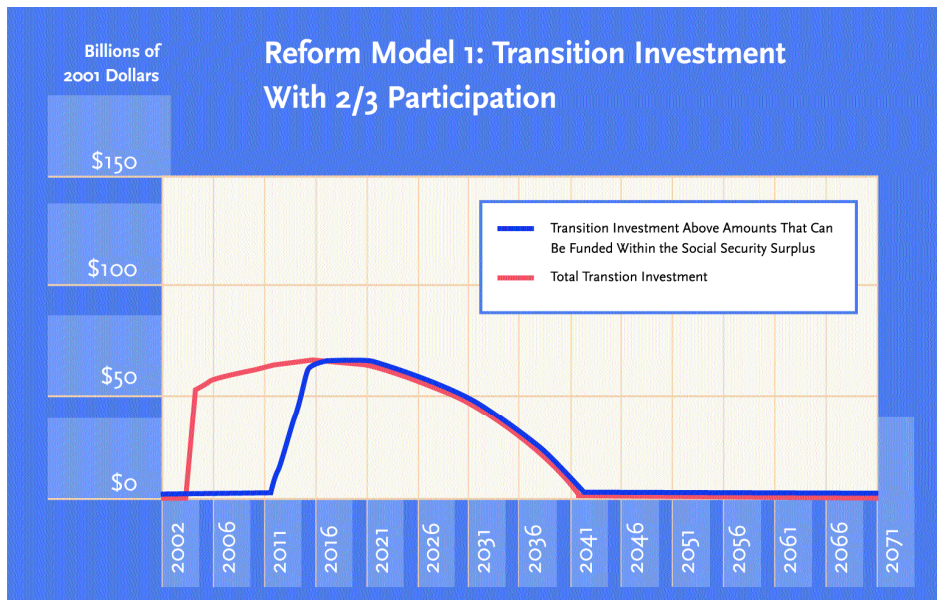
Improvement in System Solvency:

Despite a slight improvement in long-term fiscal pressures, Reform Model 1 would increase short-term revenue requirements to maintain Trust Fund liquidity. If structured as a contribution of 2 percent from payroll taxes, these additional revenue requirements to maintain Trust Fund liquidity would be needed starting in 2030. If structured as a 1 percent contribution from payroll taxes plus a 1 percent match from general revenues, they would be needed starting in 2034. (Note again that revenues required to retain liquidity in the Trust Fund, an issue that would not arise for decades, are a different concept than the "transition investment" as explained in the Methodology section.)

Transition Financing

For Reform Model 1, no new "transition" cash would be needed before 2012 when the investment in personal accounts for the first time exceeds current-law surpluses. The "transition" financing requirements begin comparatively small – \$12 billion annually in 2012 – and they would grow to a maximum of \$64 billion annually from 2016-2018. Thereafter the amount of new cash requirements for the new system would diminish, until in 2043, the new system would be permanently less expensive than the old.

These figures presume that only Social Security cash surpluses are available to provide transition financing. Through 2043, a total of \$1.1 trillion in transition investments would be required, in present value terms. Assuming that Social Security cash surpluses are available to provide such financing, the remaining transition investment required would be approximately \$700 billion in present value terms. Were Congress to "lockbox" both cash and interest surpluses as previously intended, transition financing needs would be postponed by additional years.



Impact on Unified Federal Budget:

Reform Model 1 would take the longest of the three plans to have a net positive impact on the annual federal cash budget, doing so only after 2043, assuming 67 percent participation. By 2075, the net positive effect would be \$162 billion in constant 2001 dollars. The largest annual negative effect that this Reform Model would have on the federal cash operations would be approximately \$64 billion in 2001 dollars, annually, from 2014-2018. This is considerably less than the current Social Security surplus, if interest is included.

Reform Model 2: Voluntary Progressive Personal Accounts Combined with an Inflation-Indexed but More Progressive Traditional System

The Model

Reform Model 2 establishes a voluntary personal account, without raising taxes or requiring additional worker contributions. Model 2 enables all future retirees to receive an inflation adjusted Social Security benefit that is at least as great as today's retirees. Model 2 establishes new poverty protections beyond what the current program provides. As a result, the purchasing power of the benefit expected by a low-wage worker in 2052 would be approximately 75 percent higher than the Social Security benefit received today by a retiree with a low-wage work history. The approach eliminates Social Security's permanent deficits and places the program firmly on a fiscally sustainable path within the 75-year window.

Key Elements:

Personal Accounts

Workers who have not yet reached age 55 (as of January 1, 2002) would be given the opportunity, starting in 2004, to redirect 4 percentage points of their payroll taxes, up to an annual maximum of \$1,000, to a personal account. The amount of the maximum annual contribution of \$1,000 (as of 2002) would be indexed annually by wage growth.

In exchange for the benefits generated by the personal account, traditional Social Security benefits would be offset by the amount of personal account contributions compounded at a real interest rate of 2 percent. So long as the career-average net yield on the personal account exceeds this 2 percent real rate, a worker would receive higher total retirement benefits by opting for the personal account. *Even the most conservative portfolio available, consisting only of government bonds returning about 3 percent annually, would likely exceed the offset rate and result in higher total benefits.*

Traditional Social Security Benefits

Benefits in the traditional Social Security system would be indexed to price inflation rather than national wage growth beginning in 2009. The wage-indexing policy, instituted in 1977, has never been fiscally sustainable. Twenty-two of the 24 Social Security Trustees Reports issued since the policy was adopted have declared the program to be insolvent. The new price-indexing policy slows the growth in future benefits. But, it ensures that future retirees will receive inflation-adjusted benefits that are at least as high as the benefits received by today's retirees.³⁹

New poverty protections are established. A new minimum benefit provision would increase benefits for a 30-year minimum wage earner by approximately 40 percent by 2018 relative to the price indexed benefit level.

Benefit growth for lower-wage workers would be accelerated relative to current law between 2009 and 2018. Thereafter, these initial benefits would grow at the rate of inflation. By 2018, a 30-year minimum wage worker would receive benefits in an amount at least 20 percent above the poverty line, a protection that does not exist in the current system.

Benefits for widows would be increased to as much as 75 percent of the combined benefits that would be received by the couple if both were still alive, versus 50-67 percent under current law. To target this benefit increase to widows most in need, benefits under this provision would be increased only to the level of the benefit received by an average retired worker beneficiary.

Transition Transfers

In order to maintain the ability to pay benefits throughout the 75-year period, additional revenue would likely be needed (in years 2025 through 2054 under the assumptions used for these estimates). The Reform Model would provide for transfers from the General Fund of the Treasury in amounts needed for such years. However, because of substantial expected cash flow surpluses later in the period, and beyond, these transfers could be repaid.

³⁹ In practice, the policy would be implemented by multiplying the PIAbend point factors (the bend points would remain indexed to wages) by the ratio of the Consumer Price Index to the Average Wage Index in successive years.

Benefits

Under Model 2, workers who opt for personal accounts can expect to receive retirement benefits that are higher than either the inflation adjusted level of benefits currently paid to retirees, or the benefits the existing system can afford in the future.

The accompanying table displays expected benefit levels of workers who choose personal accounts and compares these levels to benefits received by current retirees. All benefits are in 2001 dollars. For workers who are currently aged 35 and who retire in 2032, the purchasing power of benefits is expected to be 17-32 percent higher than the purchasing power of benefits received today. For a younger worker who enters the workforce in 2009 when Model 2 price-indexing policy begins, benefits are expected to be 51-78 percent higher.

Under Model 2, the Social Security system is designed to become more progressive than the current program. As the accompanying table shows, for each future retiree cohort, low-wage workers expect the largest benefit increases and high-wage workers expect the smallest increases. This greater progressivity results from two policies. First, workers can redirect 4 percentage points up to a limit, set initially at \$1,000. A worker earning \$25,000 can redirect 4 percentage points of the payroll taxes on his entire salary. A worker earning \$50,000, however, can redirect only 2 percentage points of the payroll taxes on his salary. Accumulations in personal accounts are assumed to be used to purchase variable annuities at retirement. Second, as part of Model 2's improved protections against poverty, benefit levels paid to all low-wage workers are raised.

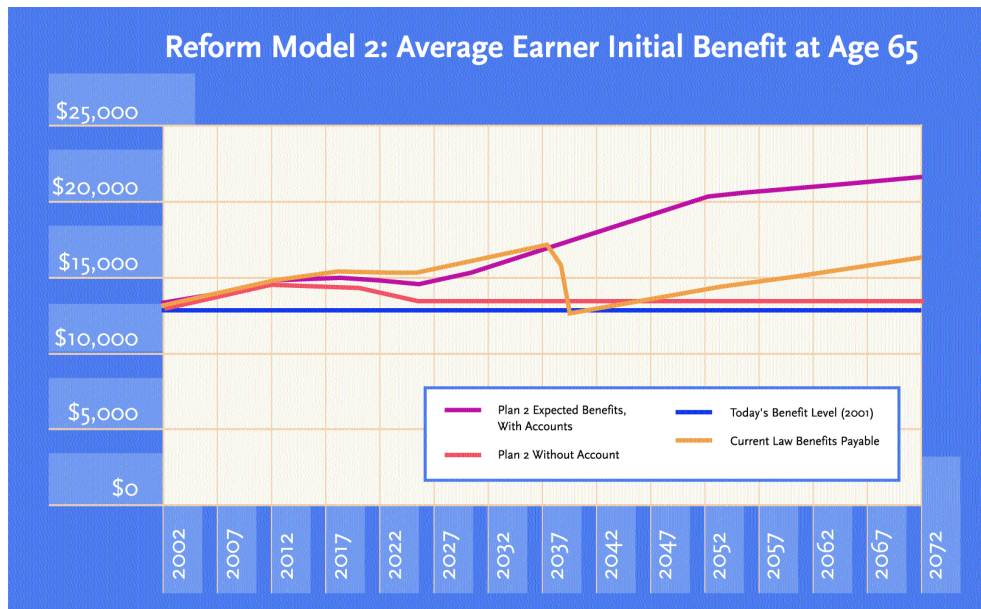
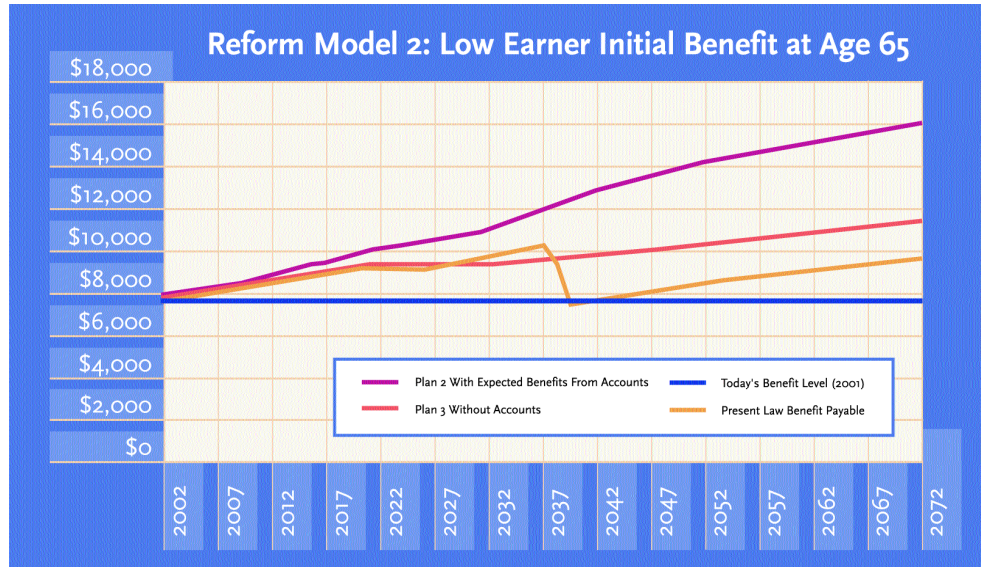
For workers who do not opt for personal accounts, initial benefit levels would grow with inflation. That is, a medium-wage worker could expect the same initial benefit in real terms, (increased by the rate of inflation) as was received by a medium-wage worker in the previous year. The exception to this would be for lower-wage workers, who would benefit from the Reform Model's added protections against poverty. A low-wage worker in 2052 would receive benefits that are 27 percent higher in real terms than those received by a low-wage worker today.

Plan 2: Price Indexed System

Relative Earnings		Reform Model Benefits			
		Today's Benefit Levels	Current Law Benefit	Expected Benefit With Account	Increase Relative to Today's Benefit
2032					
Low	\$7,644	\$9,756	\$10,728	\$3,084	\$1,056
Medium	\$12,624	\$16,116	\$14,772	\$2,148	\$1,584
High	\$16,392	\$21,288	\$19,008	\$2,616	\$1,596
2052					
Low	\$7,644	\$8,568*	\$12,600	\$4,956	\$2,928
Medium	\$12,624	\$14,148*	\$18,300	\$5,676	\$5,112
High	\$16,392	\$18,696*	\$22,884	\$6,492	\$5,472

* \$11,832, \$19,536, and \$25,812 are currently scheduled for low, medium, and high earners respectively, but the system is projected to be 27.6% underfunded in 2052. For 2032, promised and payable benefits are identical.

** Expected benefits with accounts assume individual invests in a 50/50 stock/bond portfolio earning an annual real rate of return, net of administrative expenses, of 4.6%. Upon retirement, the individual is assumed to have converted to a variable annuity invested in the same portfolio. Actual benefits may be higher or lower than those reported here depending on realized investment returns



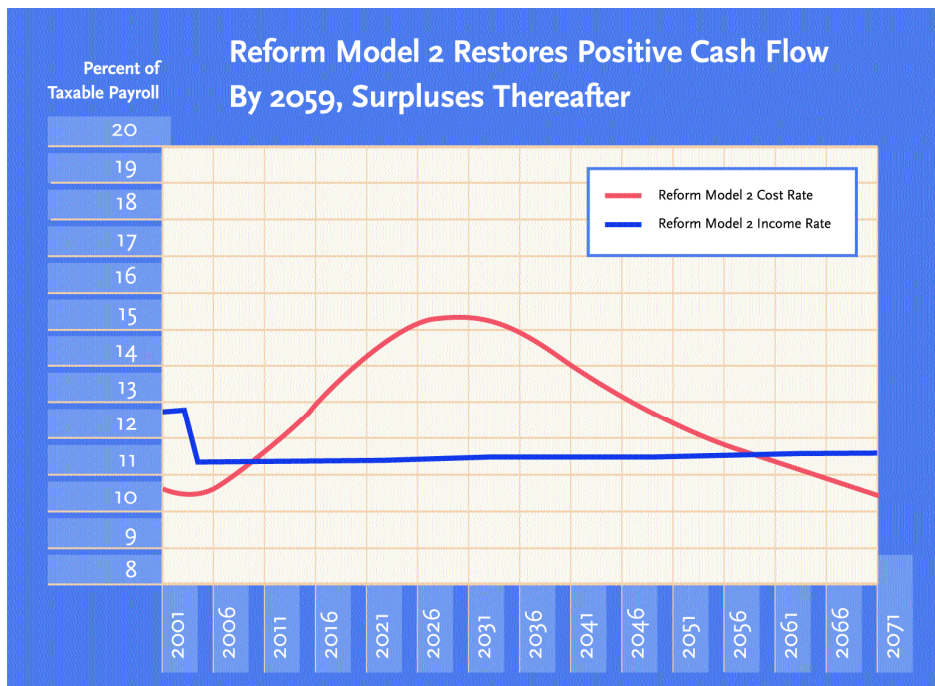
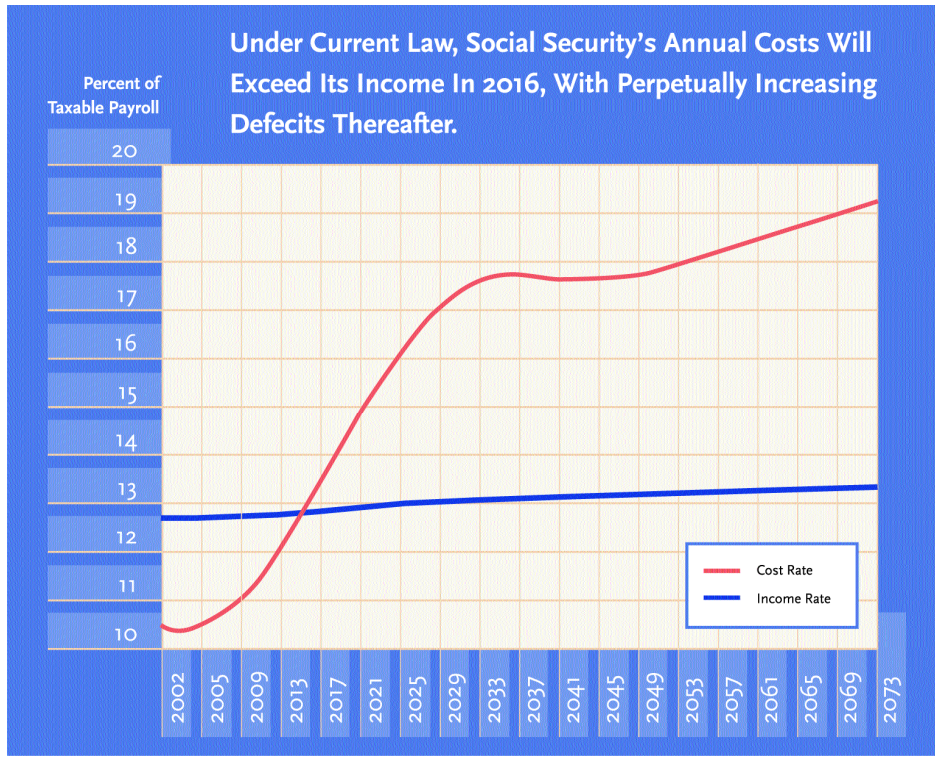
Fiscal Sustainability Assessment

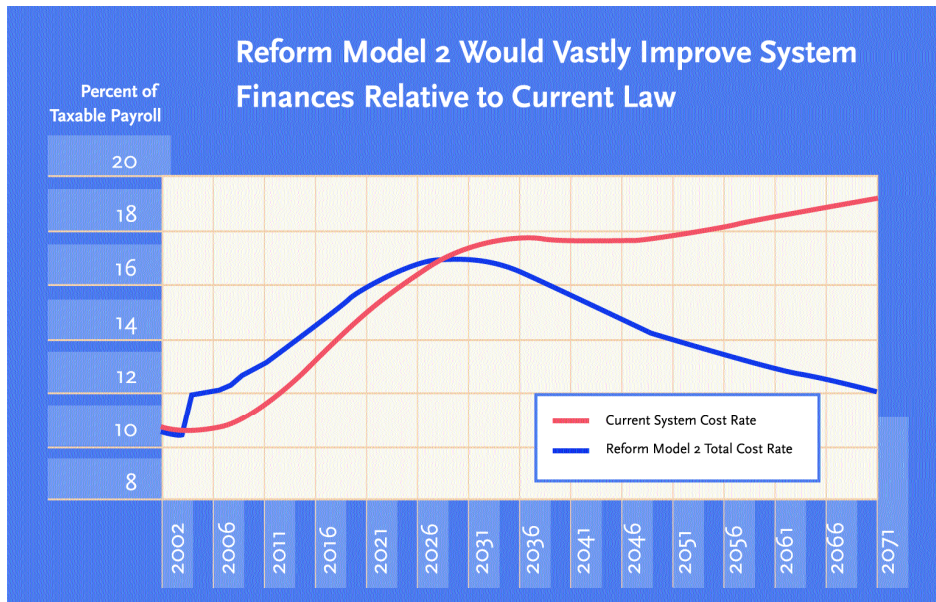
Model 2 significantly improves Social Security's financial health and greatly reduces its burden on future workers. Of the three models presented in this report, Reform Model 2 makes the most progress toward fiscal sustainability in the sense of reducing the need for additional revenues. This section of the report assesses Model 2's progress against the fiscal sustainability criteria adopted by the Commission.

Positive Annual System Cash Flow Within Valuation Period:

Under current law, Social Security faces perpetually rising cash flow shortfalls. As shown previously, these deficits are projected to begin in 2016, rise to 4 percent of taxable payroll within thirty years, and reach 6 percent of taxable payroll by 2075. Model 2 eliminates these permanent deficits by the end of the 75-year valuation period due to restraint in benefit growth and financially attractive personal accounts, without relying on general revenue transfers, or higher taxes. As the following chart shows, under Model 2 Social Security deficits peak at 4 percent of taxable payroll in 2029 and decline rapidly thereafter. The program's annual deficits would be eliminated by the year 2059. During the following years, the current Social Security program's perpetually rising deficits under current law would be replaced by perpetually rising surpluses.⁴⁰

⁴⁰ Personal accounts would be highly attractive under this framework, providing significantly higher benefits without additional taxes. As a result, participation rates may exceed 67 percent. A higher participation rate would accelerate slightly the return to permanent cash surpluses and increase the size of the surpluses at the end of the valuation period.





Reductions in the Rate of Growth in Long-Term System Costs as a Percent of Payroll and GDP:

Social Security's burden on future taxpayers is usefully measured by its expenditures as a percentage of taxable payroll. As previously shown, under current law Social Security's burden on future taxpayers is projected to rise quickly during the next thirty years, from its current level of 10.5 percent of taxable payroll to over 17 percent of taxable payroll by 2030. Thereafter, the burden continues to grow, albeit at a somewhat slower pace. By 2075, the burden will exceed 19 percent of taxable payroll. Model 2's policies would initially slow the growth in Social Security's burden. The reform model's expenditures to pay traditional Social Security benefits would reach a maximum of 15.4 percent of taxable payroll in 2030. (Under Commission projections, an additional 1.6 percent of national payroll would be invested in personal accounts.) In the following years, Model 2's policies would gradually reduce Social Security's burden. By the end of the valuation period in 2075, the program's expenditures as a percent of GDP would fall below its level today.

Improvements in 75-Year Actuarial Balance:

The price-indexing policy, coupled with Model 2's increases in traditional benefits for low-wage workers and survivors, but without personal accounts, brings the program into long-term actuarial balance. That is, the actuarial deficit of -1.86 percent of payroll is eliminated entirely. The addition of personal accounts and benefit offsets creates an actuarial imbalance of 0.7 percent of payroll for the current valuation period. However, it would increase the size of system cashflow surpluses that appear late in the valuation period and beyond that would restore actuarial balance in the future. This imbalance for the current valuation period stems, in part, from the fact contributions from workers who opt for personal accounts are counted as a reduction in Social Security revenue, but much of the benefit reductions that result from these redirected contributions occurs beyond the valuation period, and hence, is not reflected in the actuarial balance. The Office of the Social Security Actuary has identified the amount of revenues that are necessary to maintain solvency (the ability to pay benefits) throughout the next 75 years and thus assure actuarial balance under Model 2 under the Commission's assumptions for participation in the accounts. Without such general revenues, Model 2 would be projected to reduce Social Security's actuarial imbalance by 62 percent, from its current 1.86 percent of payroll to 0.71 percent of payroll. With this temporary transition financing, the Reform Model would maintain solvency through the period and restore actuarial balance. It should be noted that the Social Security system would be in a position to repay the temporary transition financing due to permanent cash surpluses beginning in 2059.

Improvement in System Solvency:

Social Security's finances would be greatly improved. Model 2 would significantly reduce the amount of general revenue required to finance benefit payments. Without reform, Social Security is expected to

require over \$20 trillion of additional revenues (in 2001 dollars) to finance its benefit payments over the 75-year valuation period. Model 2 is projected to reduce the requirement by 68 percent. The reduction is less when measured in present value terms (45 percent) since the major portion of savings generated by the model's benefit growth restraint occurs during the latter half of the 75-year valuation period.

Model 2 includes a temporary transfer of general revenues to ensure that solvency is achieved and full benefits can be paid. Under current projections, these transfers would begin in 2025 and would continue until 2054. The largest transfers would occur during the years 2030-2040 and, during this decade they would average 1.2 percent of Gross Domestic Product. These transfers are projected to be about 6 percent of the non-social security portion of the federal budget. Thus, the transfers would produce a strain on the rest of the federal budget, but not an unmanageable one. After 2040, the required transfers would decline quickly.

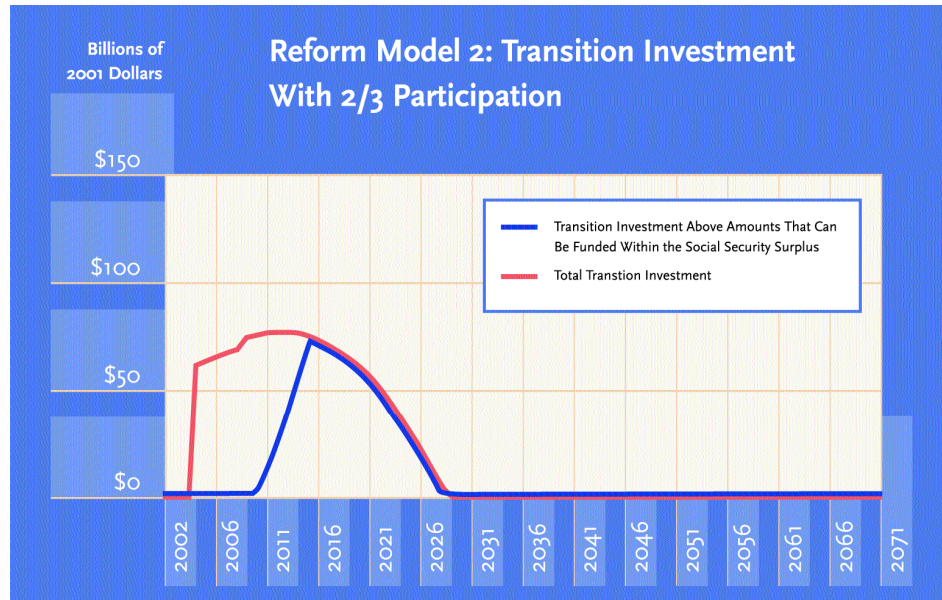
Transition Financing

Reform Model 2 would significantly reduce fiscal pressures on the rest of the federal government relative to current law.

For Reform Model 2, no new "transition" cash would be needed before 2010 when the investment in personal accounts for the first time exceeds current-law surpluses. The "transition" financing requirements begin comparatively small – \$4 billion in real dollars as of 2010 – and they would grow to a maximum of \$73 billion (in 2001 dollars) in the years 2015-16. Thereafter the amount of new cash requirements for the new system would diminish, until in 2029, the new system would be permanently less expensive than the old.

In sum, the total transition investments under Reform Model 2 would be approximately \$900 billion in present-value terms. The amount required beyond that which is already accounted for by projected Social Security cash surpluses under Model 2 is approximately \$400 billion in present-value terms.

Again, all of the figures above presume that only Social Security cash surpluses are available to provide transition financing. Were Congress to "lockbox" both cash and interest surpluses as previously intended, transition financing needs would be postponed by additional years.



Impact on Unified Federal Budget

Reform Model 2 would have a net positive impact on the federal cash operations by 2029, with positive gains increasing throughout the valuation period and reaching \$816 billion annually (in 2001 dollars) by 2075. The largest negative impacts on the federal budget would be \$78 Billion (in 2001 dollars) in years 2012-2013. If no one opted for personal accounts, net improvements in the federal budget balance would be positive almost throughout the valuation period, but less by 2075 than under Commission assumptions for participation.

Advantages of Reform Model 2:

- All workers would expect to benefit from personal accounts (due to the low 2 percent offset rate), but lower-wage workers would benefit the most, because of the progressive formula for funding the accounts.
- Those who opt for personal accounts would not be required to pay any additional money.
- Reform Model 2 would significantly raise low-wage workers' benefits relative to current law. The bill would establish a new poverty protection so that no lifetime low-wage participant would face poverty in old age. Benefits for minimum wage workers with at least 30 years of labor force attachment would be raised to 120 percent of the poverty line, even if they do not opt for personal accounts. A low-wage workforce entrant today who opts for personal accounts can expect to receive combined Social Security benefits equal to those received by an average retiree today, even after adjusting for inflation.
- Social Security's permanent deficits would be eliminated without reliance on permanent general revenue transfers.
- Reform Model 2 would significantly increase benefits for widows, who are among the elderly at greatest risk of poverty.
- Social Security's burden on future generations would be significantly reduced, returning to today's levels within the valuation period.

Reform Model 3: Voluntary Add-On Accounts With Matches from Payroll Taxes Overlaying a Traditional System Balanced with a Blend of Revenue and Outlay Changes

The Model

Reform Model 3 is based on the premise that restoring Social Security to solvency is essential, but maintaining scheduled benefits and existing wage replacement rates is also important. Reconciling these two objectives for those who elect personal accounts requires additional revenues. These revenues would take the form of dedicated revenue transfers, starting at 0.34 percent of program taxable payroll, rising to 0.86 percent of taxable payroll by 2075, and averaging 0.63 percent throughout the 75-year valuation period. Congress would be able to choose from a variety of sources for making such revenues available to the Social Security system.⁴¹

Key Elements:

Personal Accounts

Workers who are under age 55 at the beginning of 2002 would be given the opportunity to invest in voluntary personal accounts beginning in 2004. The deposit in personal accounts would be triggered by a voluntary contribution of an additional 1 percent of the participant's wages, matched by a 2.5 percent contribution (up to an annual maximum of \$1,000, which would be indexed each year to national wage growth) from their current payroll taxes. The requirement that the personal account be triggered by a voluntary contribution of an additional 1 percent of pay will increase national savings. The voluntary contribution would be subsidized in a progressive manner by rebating a portion of the amount through a refundable tax credit.

In exchange for the benefits generated by the personal account, traditional Social Security benefits would be offset by the amount of personal account contributions from the match compounded at a real interest rate of 2.5 percent. Accordingly, *even if individuals invested only in government bonds returning 3 percent, their total retirement benefits will likely increase due to the accounts.*

⁴¹ Some members of the Commission believed that a substantial portion of this 0.63% should come from an increase in the payroll tax base, while leaving the payroll tax rate the same. They suggested that the payroll tax base should be stabilized as a percentage of the total U.S. wage bill closer to its level during the last two decades. However, this suggestion was deemed inconsistent with the principles in the executive order establishing the Commission and was therefore not included in the final version of this plan.

Traditional Social Security Benefits

Initial Social Security benefits would grow at a rate that is expected to be approximately halfway between wage indexing and price indexing. This approach would maintain intergenerational equity by holding roughly constant the relative amount of lifetime benefits from Social Security as longevity increases, without raising Social Security's normal retirement age.⁴²

Work would be rewarded and early retirement penalized by changing the actuarial adjustments for early and late retirement to reflect additional payroll taxes contributed. This change is designed to encourage labor force participation among workers age 62-70. The policy would be phased in from 2009 through 2013.

The 15 percent bend point factor, affecting the participants with the highest incomes, would be gradually reduced to 10 percent from 2009 through 2028. This policy is designed to achieve savings from persons who can most afford to forgo some Social Security benefits.

As in Model 2, benefit growth for lower-wage workers would be accelerated relative to current law between 2009-2018. By 2018, a worker who works for 30 years at the minimum wage would be eligible for a benefit at least as high as the poverty level, and would increase relative to poverty for subsequent retirees. For a 40-year minimum wage worker, this benefit would equal 111 percent of the poverty level, and would increase relative to poverty for subsequent retirees.

As in Model 2, benefits for widows of couples with below-average earners would be increased to as much as 75 percent of the combined benefits that would be received by the couple if both were still alive, versus 50-67 percent under current law. To target this benefit increase to widows most in need, benefits under this provision would be increased only to the level of the benefit received by an average retired worker beneficiary.

Transition Transfers

In addition to the dedicated revenue transfers described above, additional revenue would be needed, as in Model 2. In order to maintain the ability to pay benefits throughout the 75-year period, additional revenue would likely be needed (in years 2034 through 2063 under the assumptions used for these estimates). The plan would include transfers from the General Fund of the Treasury in amounts needed for such years. However, if expected cash flow surpluses later in the valuation period and beyond materialize as a result of the provision of additional revenues under this Reform Model, these transfers could be repaid.

Benefits

Under Model 3, workers who opt for personal accounts can expect to receive retirement benefits significantly higher than either the inflation adjusted level of benefits currently paid to retirees, or the

⁴²The adjustment would be based on actual changes in period tables 10 years prior. For example, the increased life expectancy between 2010 and 2015 would be used to adjust the initial benefits downward over 2020-2025. This gradual adjustment process would give people ample time to compensate by planning to work longer or save more privately.

benefits that are currently scheduled by the existing program.

The table below displays expected benefit levels of workers who choose personal accounts and compares these levels to benefits received by current retirees. All benefits are in 2001 dollars. For workers who are currently age 35 and retire in 2032, the purchasing power of benefits is expected to be 38-43 percent higher than the purchasing power of benefits received today. For a younger worker who enters the workforce in 2009 when Model 3 benefit formula changes begin, benefits are expected to be 85-93 percent higher. These higher benefits are made possible in part by the additional one percent worker contribution required for participation in the personal accounts.

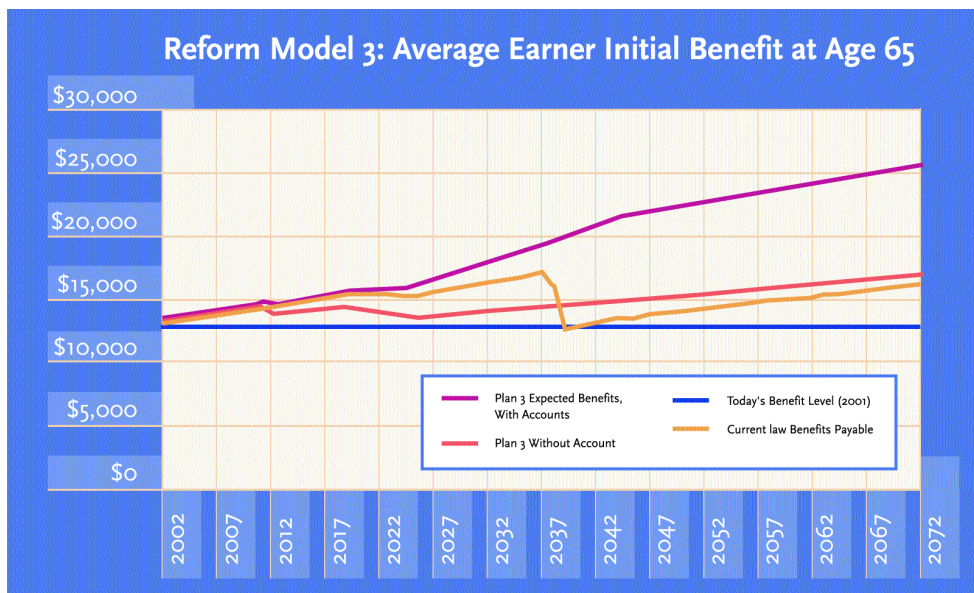
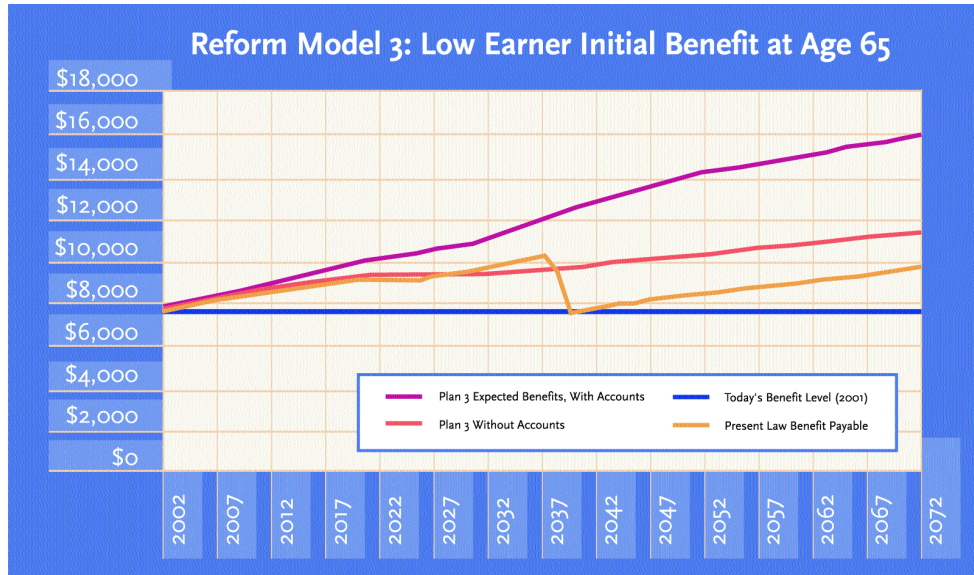
For workers who do not opt for personal accounts, initial benefit levels would grow at a rate that is roughly halfway between inflation and wage growth. The exception to this would be for lower-wage workers, who would benefit from the Reform Model's added protections against poverty. A low-wage worker in 2052 would receive benefits that are 35 percent higher in real terms than those received by a low-wage worker today.

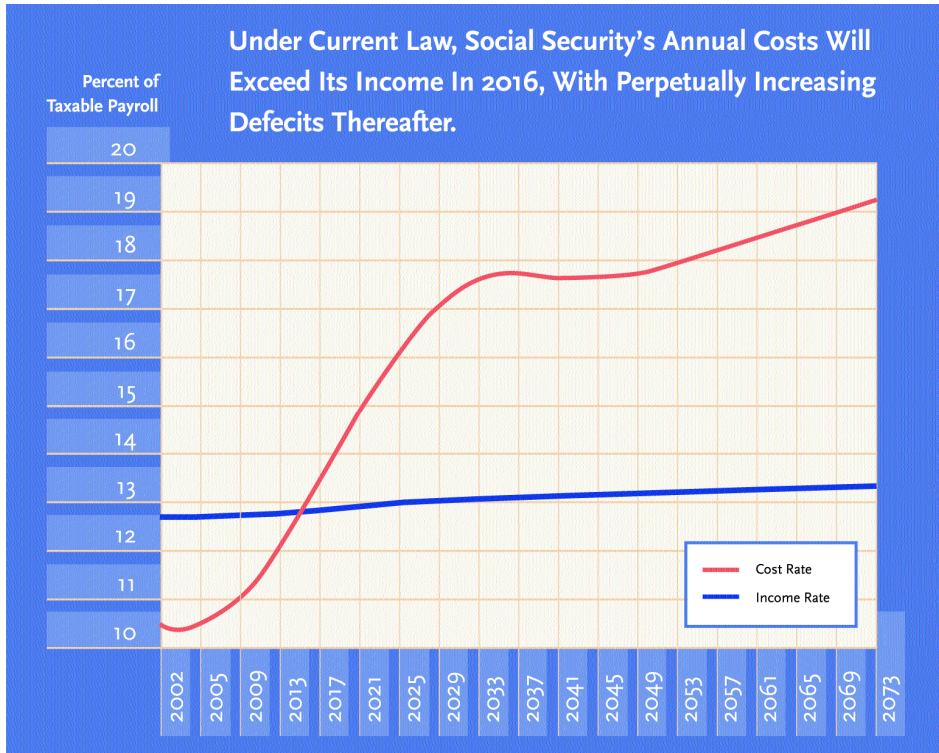
Plan 3: One Percent 'Add-on' Contribution Allows for Benefit Growth Exceeding Currently Scheduled Benefits

Relative Earnings	2032	Today's Benefit Levels	Current Law Benefit	Reform Model Benefits		
				Expected Benefit With Account	Increase Relative to Today's Benefit	Additional Increase Due to Account
Low		\$7,644	\$9,756	\$10,932	\$3,288	\$1,560
Medium		\$12,624	\$16,116	\$17,412	\$4,788	\$3,456
High		\$16,392	\$21,288	\$22,620	\$6,228	\$4,632
2052						
Low		\$7,644	\$8,568*	\$14,112	\$6,468	\$3,828
Medium		\$12,624	\$14,148*	\$23,796	\$11,172	\$8,496
High		\$16,392	\$18,696*	\$31,668	\$15,276	\$11,952

* \$11,832, \$19,536, and \$25,812 are currently scheduled for low, medium, and high earners respectively, but the system is projected to be 27.6% underfunded in 2052. Under the assumption that currently scheduled benefits are met, then the total expected benefit with personal accounts would be \$12,888, \$21,664, and \$29,544 respectively.

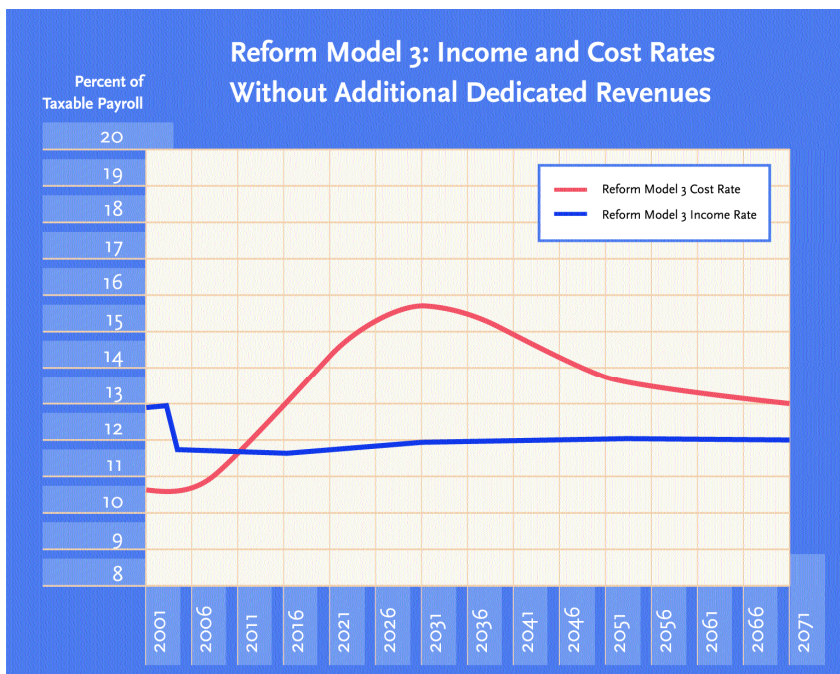
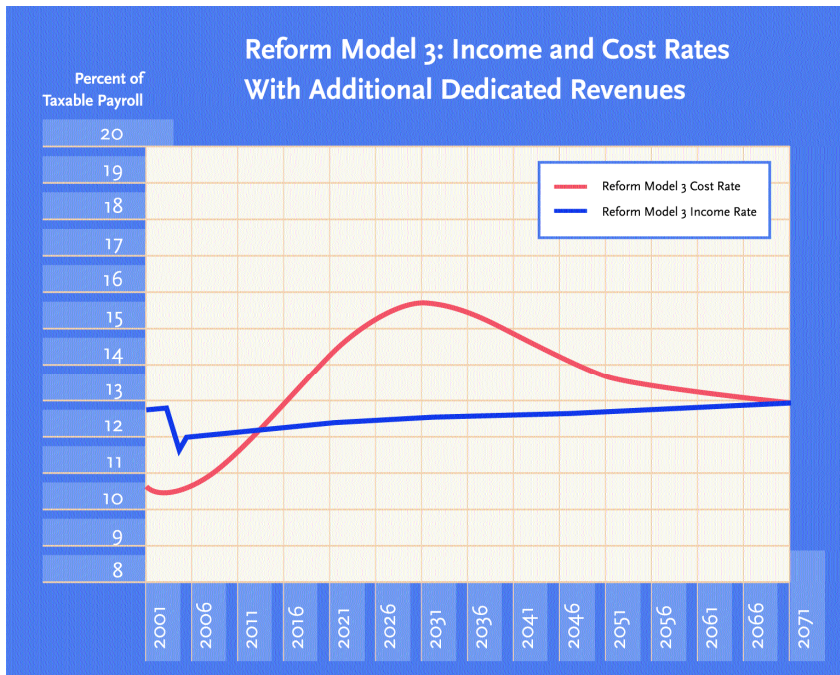
** Expected benefits with accounts assume individual invests in a 50/50 stock/bond portfolio earning an annual real rate of return, net of administrative expenses, of 4.6%. Upon retirement, the individual is assumed to have converted to a variable annuity invested in the same portfolio. Actual benefits may be higher or lower than those reported here depending on realized investment returns.





Fiscal Sustainability Assessment

Model 3 significantly improves Social Security's financial health and greatly reduces its burden on future workers. This section of the report assesses the Model 3's progress against the fiscal sustainability criteria adopted by the Commission.

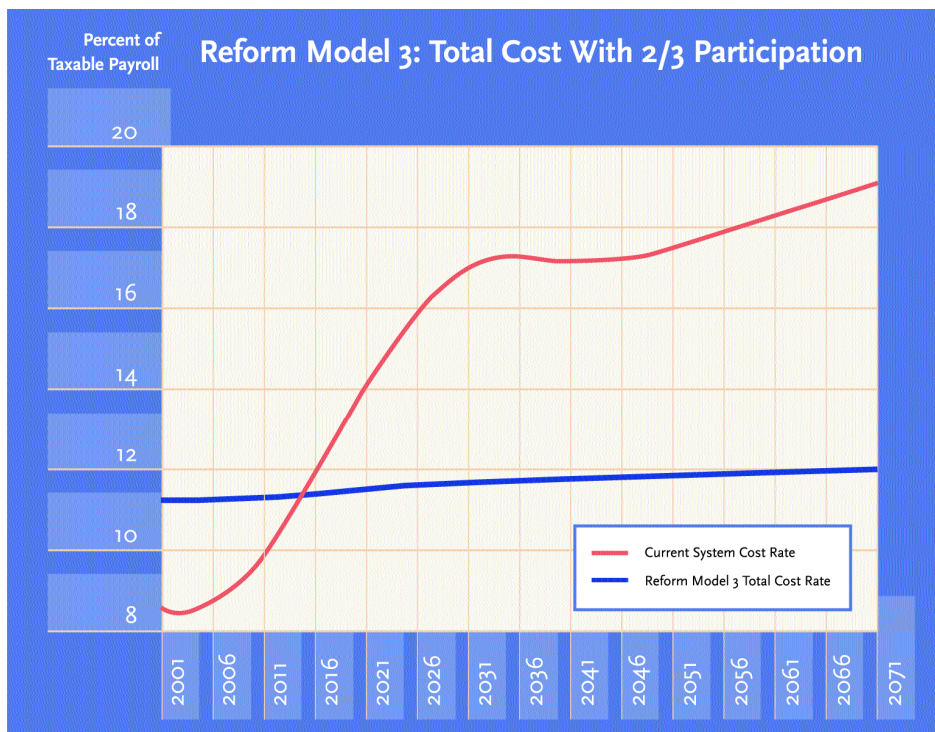


Positive Annual System Cash Flow Within Valuation Period:

Under current law, Social Security faces perpetually rising cash flow shortfalls. As shown previously, these deficits are projected to begin in 2016, rise to 4 percent of taxable payroll within thirty years, and reach 6 percent of taxable payroll by 2075.

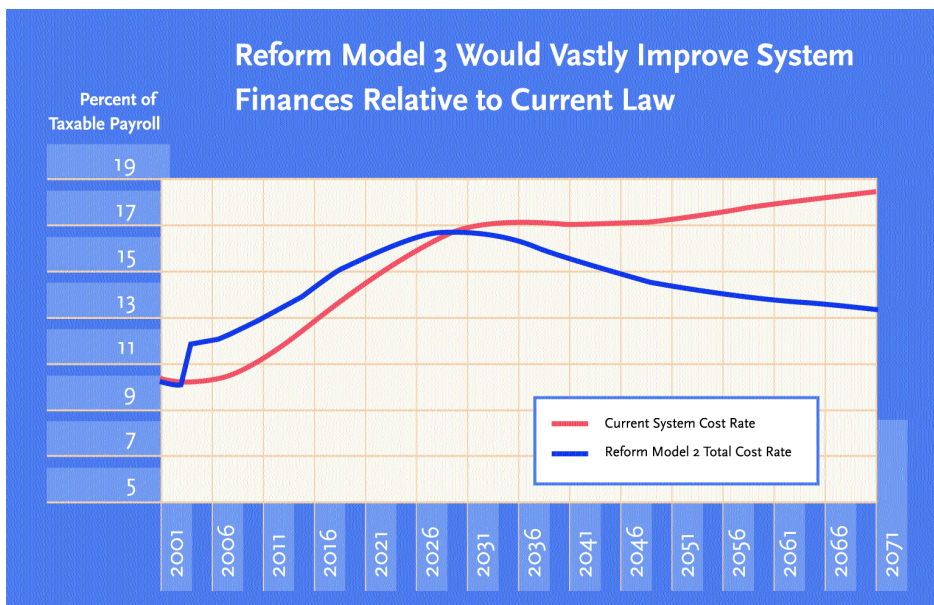
Model 3 contains a provision to permanently transfer new revenues to the Social Security program. As noted earlier, these revenues would take the form of dedicated revenue transfers, starting at 0.34 percent of national taxable payroll, and rise to 0.86 percent of taxable payroll by 2075. Over the entire 75-year valuation period, the permanent revenue transfer would average 0.63 percent of taxable payroll. Congress would be able to choose from a variety of sources for making such revenues available to the Social Security system. Including this revenue transfer in the projections for Model 3 would improve Social Security's cash flow position markedly. Social Security deficits would peak at just over 3 percent of taxable payroll in 2030 and the deficits would be eliminated in 2072.

Because Model 3's projections of solvency depend on the provision of additional revenues to the Social Security program, we also present cash flow projections for Model 3 that recognize the financing from additional revenues that would remain for Congress to determine. As the chart shows, Social Security deficits would then peak at 3.85 percent of taxable payroll in 2030 and decline rapidly thereafter, falling to 0.75 percent of payroll by the end of the valuation period.



Reductions in the Rate of Growth in Long-Term System Costs as a Percent of Taxable Payroll and GDP.

Social Security's burden on future taxpayers is usefully measured by its expenditures as a percentage of taxable payroll. As previously shown, under current law Social Security's burden on future taxpayers is projected to rise quickly during the next thirty years, from its current level of 10.5 percent of taxable payroll to over 17 percent of taxable payroll by 2030. Thereafter, the burden continues to grow, albeit at a somewhat slower pace. By 2075, the burden will exceed 19 percent of taxable payroll. Model 3's policies would initially slow the growth in Social Security's burden. The reform model's expenditures for traditional Social Security benefits would reach a maximum of 15.6 percent of taxable payroll in 2032 (with another 1.3 percent of the nation's taxable wages invested annually in personal accounts). In the following years, Model 3's policies would gradually reduce Social Security's burden. By the end of the valuation period in 2075, the program's expenditures as a percent of GDP would fall to a level lower than today.



Improvements in 75-Year Actuarial Balance:

Under Model 3, a combination of added revenues and changes to benefit growth would, in the absence of individual accounts, eliminate entirely the current-law actuarial deficit of -1.86 percent of payroll. The introduction of personal accounts results in an actuarial imbalance of 0.37 percent for the current valuation period. This imbalance stems, in part, from the fact contributions from workers who opt for personal accounts are counted as a reduction in Social Security revenue, but benefit reductions that result from these redirected contributions occur beyond the valuation period, and hence, are not counted as a reduction in costs. Temporary transition financing would be provided to maintain solvency (i.e., the ability to pay benefits each year) and would thus restore actuarial balance, which the Social Security system would be in a position to begin repaying after 2072, on the assumption that new revenues had been raised and devoted to Social Security.

Without general revenues, Model 3 would be projected to cut Social Security's actuarial imbalance almost in half, from its current level of -1.86 percent of payroll to -0.99 percent of payroll. The provision for permanent dedicated general revenue transfer further reduces the actuarial imbalance, to -0.37 percent of taxable payroll. Finally, the provision for temporary general revenue transfers to ensure Social Security's liquidity throughout the 75-year valuation period is projected to bring the Social Security trust fund into long-term actuarial balance.

Improvement in System Solvency:

Model 3 is projected to significantly improve Social Security's burden on the general fund of the U.S. Treasury by reducing the amount of general revenue required to finance benefit payments. Without reform, Social Security is expected to require over \$20 trillion of additional revenues (in 2001 dollars) to finance its benefit payments over the 75-year valuation period. Model 3 is projected to reduce the requirement by about 52 percent, or \$11 trillion (in 2001 dollars). The percent reduction in the burden is less, about 34 percent, when measured in present value terms. This is because the major portion of savings generated by the model's benefit growth restraint occurs during the latter half of the 75-year valuation period.

Model 3 includes a temporary transfer of general revenues to ensure that solvency is achieved and full benefits can be paid. Under current projections, these transfers would begin in 2034 and would continue until 2065. The largest transfers would occur during the years 2035-2040 and would peak at 2.5 percent of total taxable wages, or less than 1 percent of GDP. After 2040, the required transfers would decline quickly.

Transition Financing

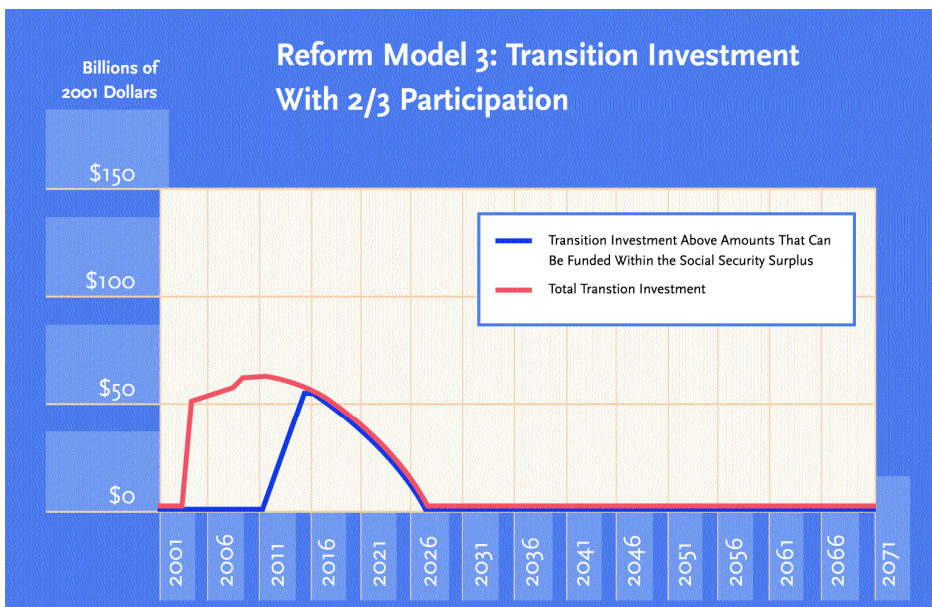
Reform Model 3 employs infusions of general revenues, with effects on the unified federal budget as described on the following page. Beyond these infusions, no new "transition" cash would be needed before 2012, assuming 67 percent participation, when the investment in personal accounts for the first time exceeds current-law surpluses. The "transition" financing requirements begin comparatively small – \$12 billion in real dollars 2012 – and would grow to a maximum of \$54 billion in real dollars in 2015-16. Thereafter the amount of new cash requirements for the new system would diminish, until in 2028, the new system would be no longer requires additional temporary transition financing. The system, however, would continue to rely on permanent infusions of general revenues throughout the valuation period, and the model's net impact on the federal budget would turn positive in 2029, as shown on the following page.

In all, Reform Model 3 would require approximately \$400 billion (present-value) in total transition financing. Beyond that which would be available from projected Social Security cash surpluses under the plan, the figure would be approximately \$100 billion (in present value.)

Again, all of the figures above presume that only Social Security cash surpluses are available to provide transition financing. Were Congress to "lockbox" both cash and interest surpluses as previously intended, transition financing needs would be postponed by additional years.

Impact of Reform Model 3 on the Unified Federal Budget

Assuming 67 percent participation, Reform Model 3 would have a net positive impact on federal cash operations by 2029, reaching \$558 billion (in 2001 dollars) by 2075. The largest negative impacts on the federal budget would be \$67 Billion in 2011-2012.



Advantages of Model 3:

- Workers who opt for PRAs can reasonably expect to receive total Social Security benefits (including their PRA) exceeding current law promised benefits. Workers who do not opt for the PRA will receive larger benefits than are affordable under the present system.
- Revenues to the Social Security system are enhanced, in order to maintain current replacement rates (ratio of average benefits to average wages) for those who opt to participate in the accounts.
- The primary source of additional revenue is a voluntary 1 percent add-on to the new PRAs, subsidized by a progressive refundable tax credit. The add-on is matched by a redirection of part of the payroll tax—2.5 percent up to an annual maximum of \$1000 (indexed annually to wage growth) -- to the PRA.
- The add-on directly increases household saving and national saving, to the extent that add-on contributions do not displace other pre-existing saving. If saving increases, productivity and output would be increased.
- Some permanent transfers of new revenues are added from dedicated sources to the pay-as-you-go Social Security system.
- Intergenerational equity is maintained by holding constant the present value of lifetime benefits from Social Security as longevity increases.
- Work incentives are augmented by rewarding delayed retirement and by steeper actuarial penalties for early retirement.
- The obligations of future generations to pay unfunded obligations are dramatically reduced.
- The transition burden is kept manageable by the fact that some of the PRA comes from an add-on and by charging a 2.5 percent offset interest rate.
- Progressivity is enhanced and poverty reduced: The pay-as-you-go benefit is "flattened out" for higher earners, a new minimum benefit increases pensions of low earners and a higher survivors benefit helps alleviate poverty among the very old.

The Role of Guarantees

Finding: The Commission has chosen not to include guarantees in any of the three plans presented here. Advocates of guarantees in a voluntary personal accounts retirement system should carefully assess both the costs and the benefits of any such guarantee to holders of personal accounts, taxpayers, and retirement security over the long term.

Every public and private retirement system must continually balance the risks and rewards of alternative approaches to structuring and financing benefits for retirees. For example, unfunded systems, including the current U.S. Social Security system, are sensitive to demographic change, economic fluctuations, and political risk. The aging of the population and the declining ratio of workers to retirees places fiscal pressure on unfunded systems, leading to the risk to beneficiaries that benefits may be reduced in order to balance system finances.

Personal accounts holding real financial assets reduce the risk that participants face under an unfunded Social Security system. Personal accounts are owned by workers, and they provide an opportunity to diversify pension investments. However, investing in capital markets may expose participants to fluctuations in the value of their pension assets.

Concern about market volatility has prompted some analysts and policy makers to explore the possibility of "guarantees" of pension accumulations. In many cases, the desire for a "guarantee" is premised on the mistaken notion that the current Social Security system provides a guaranteed benefit. This is untrue. While the defined benefit formula does not subject individuals to financial market uncertainty, the formula itself can be changed and has been changed in the US numerous times in the past. This political risk to benefits is all the more real because the Social Security system faces perpetual financing deficits starting in the middle of the next decade, such that currently scheduled benefits cannot be paid.

With personal accounts, the simplest way for individuals to protect their retirement accumulations is to select low volatility investments in their portfolio. For example, an extremely risk averse individual will have the opportunity to invest in a conservative portfolio of bonds if he or she wishes. In fact, one of the great advantages of personal accounts is that individuals have the freedom to choose a portfolio that is best suited to their individual preferences over risk and return.

There are also other forms of personal account guarantees that policymakers could include in a reformed system. One approach promises that participants would receive no less than their lifetime contributions to the personal account, also known as a "principal guarantee". This type of format was recently adopted in Germany and Japan, where retiring plan members must at least be paid back their contributions at retirement. Depending on the exact format of a principal guarantee, it might be relatively inexpensive to provide. Another guarantee could promise that a retiree would receive his or her contributions plus the rate of inflation at retirement. As long as assets such as inflation-indexed bonds were available to back these promises, it is clear that such promises could be met relatively inexpensively.

A different form of guarantee might promise participants they will receive their contributions plus some minimum rate of return. For example, the design might promise participants that they will receive their contributions plus a return on government bonds (e.g., the returns on a 10-year Treasury bond index fund).

Alternative forms of guarantees might be structured such as a return on a corporate or diversified index bond fund. Some would argue that such a guarantee would be inexpensive inasmuch as US stock returns have historically been higher than bond returns. That is, over the past century, long-term investors in the United States have consistently earned a higher rate of return on a stock market index than they would have earned on a bond market index. Nevertheless, stocks are more volatile than bonds, so a guarantee would still have some cost.

Providing a guarantee of this sort is clearly valuable to plan participants, since investors receive a floor of protection against the chance of a market loss. These benefits derive from risk-sharing across cohorts and eliminating negative outcomes for particular cohorts. However, it follows that more valuable guarantees must also represent a larger liability to the sponsoring entity, be it a private sector group (such as a plan sponsor, insurer, or financial services firm), or a government entity. Over the last decade, the Congressional Budget Office (CBO) and the General Accounting Office (GAO) have both taken the position that government guarantees should be evaluated and their budgetary impact made clear. If a pension guarantee were to be included in a Personal Account plan proposal, it is necessary to estimate and recognize the financial cost of such a proposal.

The Commission agrees that both the benefits and costs of any explicit guarantee must be clearly identified in all proposals, whether or not these costs would be explicitly charged to participants in the Social Security program. Modern finance theory provides a number of option pricing modes that can be used to compute the "price" of a financial guarantee. This cost will depend on the amount that a worker contributes over his lifetime, the portfolio in which the assets are invested, and the nature of the guarantee benchmark. For example, the value and the price of a guarantee will be higher for portfolios that are more heavily weighted towards equities.

There are also several ways that Personal Account guarantees could be paid for. One option would be for private companies to offer participants the option to elect a self-financed guaranteed investment account. The financial services provider might offer a "guaranteed return account" as one investment

choice people could elect in their accumulation portfolios if they were willing to pay a "guarantee premium." In this case, people who desired a guaranteed investment product would pay a premium reflective of the value of the guarantee. There is also the concept of "financial collars," where individuals give up some portion of their upside returns to the provider in exchange for protection from downside returns below an agreed-upon level. Personal accounts are likely to spawn new financial products to fit the needs of each individual.

Alternatively, the cost of guarantees might be passed on to future taxpayers. In essence, this approach finances the guarantee through borrowing or future taxes "as needed," i.e., whenever the revenue is required to fulfill the guarantee. This approach imposes an unfunded obligation on future generations, which reverses some of the salutary aspects of advance funding through personal accounts.

If guarantee costs were passed on to future taxpayers, instead of having participants self-finance them, it would mean that future taxes would be needed when guarantees were "in the money." One concern is that the guarantor may be asked to pay out precisely when economic conditions times are bleak. Then taxpayers might be unable or unwilling to raise taxes on themselves to cover the guarantees, even if promises had been made in the past.

The Role of Supplemental Security Income In Social Security Reform

Several of the Social Security reform plans described in this report include minimum benefit provisions designed to ensure that lifetime low-earning workers may still count on a Social Security defined benefit that will keep them out of poverty. The current Social Security system does not provide this protection.

In addition, Commission members remain concerned that some people may reach old age without having worked in paid employment over their lifetimes. They might have engaged in unpaid work such as child rearing, or they may have experienced illness or other life events preventing them from engaging in paid employment for many years. Social Security does provide some protection through spousal benefits, survivor benefits, and benefits for disabled workers and their families. Nevertheless, because it is an earnings-based program, Social Security was not designed to provide universal income protection for every conceivable set of life circumstances. It is the judgment of the Commission that this role should be handled by a revised and updated Supplemental Security Income (SSI) program.

Enacted in 1972, SSI today is a means-tested income assistance program that provides monthly cash payments to needy aged, blind and disabled persons, in accordance with uniform, nationwide, eligibility requirements. Congress conceived of SSI as a guaranteed minimum income to supplement Social Security. SSI provides a safety net for those who reach old age with little or no Social Security entitlement. The maximum federal SSI benefit for individuals is \$531 in 2001. This is equivalent to about three-quarters of the elderly individual poverty threshold.⁴³ States supplement the maximum federal benefit to varying degrees. The average payment across all states was \$110 in 1999. SSI recipients are also generally eligible for Medicaid and are also eligible for food stamps. Total federal benefit outlays for SSI in fiscal year 2001 were \$28 billion.

A fully thought-out plan for reforming Social Security would do well to take account of how the defined benefit and personal retirement account components of Social Security interact with SSI. This Commission believes that changes in the SSI program should be devised to create a more cohesive retirement income security system, one that achieves an optimal balance of rewarding work, promoting individual saving, and providing an adequate retirement income safety net. It is the position of this Commission that a comprehensive retirement security system should provide improved poverty protection for the aged, either through SSI or some combination of Social Security and SSI.

This Commission recommends that Social Security reform plans should also encompass reforms in

⁴³ Couples in which both members are eligible for SSI receive a maximum federal benefit equivalent to about 90 percent of the elderly couple poverty threshold.

SSI policy, to improve retirement incomes for those persons who might not otherwise attain poverty-level income in old age. While the Commission did not have sufficient time to review the SSI program in detail, members believe that SSI program parameters should be re-examined to ensure that these provisions remain consistent both with the original objectives of the SSI program and with the objectives of a reformed Social Security system. Under a Social Security reform plan that involves personal retirement accounts, it would be necessary to examine whether these income and resource limits of SSI remain appropriate.

Treatment of Disability Insurance In Social Security Reform

The primary objective of this Commission has been to reform the Social Security retirement program. Although the Disability Insurance (DI) program faces financial problems similar to the Old-Age and Survivors Insurance (OASI) program, the nature of the issues facing the DI program are far more complex. As a practical matter, determining whether an individual is disabled for DI purposes is often a complicated and subjective process. Moreover, some basic features of the DI program are at odds with current thinking on disability policy, which emphasizes the importance of supporting disabled individuals' efforts to be self-sufficient when possible. The Commission's short life span has not allowed time for the careful deliberation necessary to develop sound reform plans for the disability program. Because of the complexity and sensitivity of the issues involved, we recommend that the President address the DI program through a separate policy development process.

The Commission recognizes the close integration between the DI and OASI programs. At the same time, changes in Social Security's defined benefit structure and the role of personal accounts may have different implications for DI and OASI beneficiaries. DI beneficiaries may not have their full adult lives in which to accumulate a retirement account, so this is a rationale for maintaining their traditional benefits. However, if benefits were changed for OASI but not DI, this might lead to an increase in DI applicants. The Commission urges the Congress to consider the full range of options available for addressing these concerns. In the absence of fully developed proposals, the calculations carried out for the Commission and included in this report assume that defined benefits will be changed in similar ways for the two programs. *This should not be taken as a Commission recommendation for policy implementation.*

In lieu of specific DI policy recommendations, this Commission has applied changes in defined benefits to DI recipients as well as OASI recipients in the reform plans presented in this report. This action recognizes the close integration between the two programs and is consistent with the historical relationship between DI and OASI defined benefits. Nevertheless, the Commission recognizes that changes in Social Security's defined benefit structure and the role of personal accounts may have different implications for DI and OASI beneficiaries. The Commission urges the Congress to consider the full range of options available for addressing these implications.

The DI and OASI programs are closely linked because they serve a unified purpose: to provide protection against the loss of earnings due to retirement, death, or disability. As such, the Primary Insurance Amount formula used to calculate benefits is the same for both programs. These two programs are also

linked in that their finances are affected in similar ways by demographic changes. The Baby Boom generation is entering the age brackets that experience relatively high rates of disability. As a result, DI program outlays are projected to increase as a percent of payroll by 45 percent over the next 15 years, and DI costs will exceed DI tax revenue starting in 2009.

Nevertheless, a reformed Social Security system must take into account the fact that a planned retirement is a very different life event from an unplanned onset of disability. Personal retirement accounts are intended to partially replace the defined benefit component in Social Security. DI beneficiaries with abbreviated work histories might have relatively low account balances. Some may argue that this justifies isolating the DI defined benefit structure from any changes that would affect OASI defined benefits. On the other hand, testimony provided to the Commission indicated that many DI beneficiaries feel strongly that a parallel program structure should be maintained across both DI and OASI. Also, if the gap between OASI and DI benefits payable at a given age were to become large, incentives would increase for workers nearing retirement to seek to qualify for DI as a way to maximize income. This would put further pressure on DI program finances and could also raise equity concerns, if DI beneficiaries were able to receive higher total Social Security income than OASI beneficiaries. Further analysis is needed to determine the optimal approach to balancing these adequacy and equity concerns.

While both OASI and DI face financial shortfalls due to demographic changes, other factors affect the DI program that are more complex and may require a unique set of solutions. It has been decades since a comprehensive review of the DI program has occurred. There are indications that the standards used to determine disability vary across geographic regions and across different levels of the adjudicative process, which raises questions about the overall consistency and fairness of the program for claimants. In addition, fundamental questions exist as to whether the program adequately reflects Congressional intent and current thinking on disability policy. Technology, the economy, and social attitudes about disability have changed dramatically in the past 50 years. The law has only begun to respond to these changes. In 1999, for example, Congress passed the Ticket to Work and Work Incentives Improvement Act, a bill that provides improved access to return-to-work services for disabled beneficiaries and expands access to federally funded medical care for a period of time after they return to work. The philosophy behind this law is that some disabled beneficiaries can work and want to work, but they are discouraged from doing so because they lack access to rehabilitative services and medical care. While this law was a step in the right direction, further analysis is necessary to determine what more could be done to help DI applicants and beneficiaries who want to remain in, or return to, the workforce.

Additional Savings Incentives

The Commission believes that retirement security is best achieved through a combination of Social Security, work-based pensions, and personal savings. For many working individuals, however, work-based pensions are not available. For others (often the same workers), annual income earned is insufficient to allow much, if any, personal saving. For those earners, the Commission recommends enactment of additional savings incentives, especially policies targeted to younger workers and low-income workers.

Participation from Outside Parties

A Federal Register notice invited testimony from the public at the Commission's public hearings. We requested that witnesses present their views for modernizing and restoring fiscal sustainability to the Social Security program. Overall, the Commission held seven public meetings and heard testimony from more than thirty witnesses. The Commission thanks all those who presented constructive suggestions for the Commission's consideration.

The Commission also notes that several witnesses who were especially critical of personal retirement accounts were specifically asked to offer alternative plans. The Commission offered to have Social Security's actuaries score the plans so that we could fairly compare them with the other constructive suggestions received. The Commission regrets that it has not yet received plans from some witnesses who offered to provide them.

Acknowledgements

Olivia Mitchell wishes to thank Domenic Cuocco, Emanuel Derman, Neil Doherty, William Frey, Marie-Eve Lachance, Alexander Muermann, Beth Soldo, and Jeffrey Walker.

The Executive Director of the Commission, Chuck Blahous, wishes to thank each of the sixteen members of the President's Commission to Strengthen Social Security, for their tireless work, for their integrity, and for their dedication to fulfilling the charge put forth in the President's Executive Order. He would like to extend special thanks to the following staff members whose efforts were crucial to the completion of this project:

Jeffrey Brown, Steve Goss, Andrew Biggs, Kent Smetters, Randy Clerihue, Andrew Sacher, Lynda Blount, Michael Anzick, Diana Meredith, David Podoff, Edwina Rogers, Marty Smith, Alice Wade, Bonnie Doyle, Chris Smith, John Hambor, Don Oellerich, Ann Combs, Paul Zurawski, Kerry Newman, Sean Randall, Michael Roberts, and Nan Filler, as well as the Social Security Administration, the National Economic Council, the Council of Economic Advisers, the Office of Management and Budget, and the Departments of Treasury, Health and Human Services, and Labor, for providing the services of additional professional staff and interns to the work of the Commission.

Appendix

Charts: Income Cost Rates, 0 and 100% Participation

Charts: Transition Investment

Table: Plan 1 Variable Annuity

Table: Plan 1 Fixed Annuity

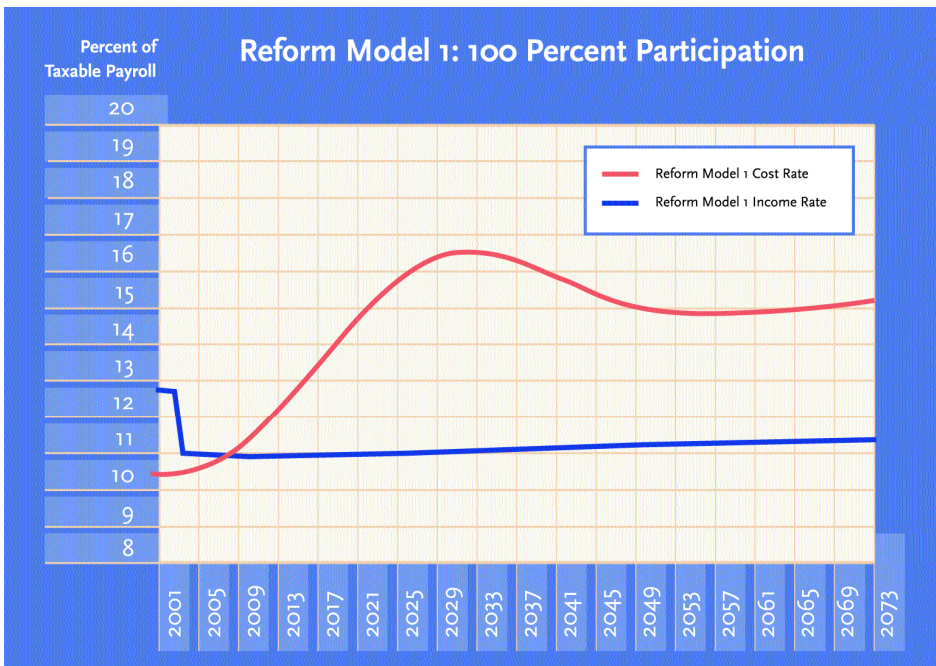
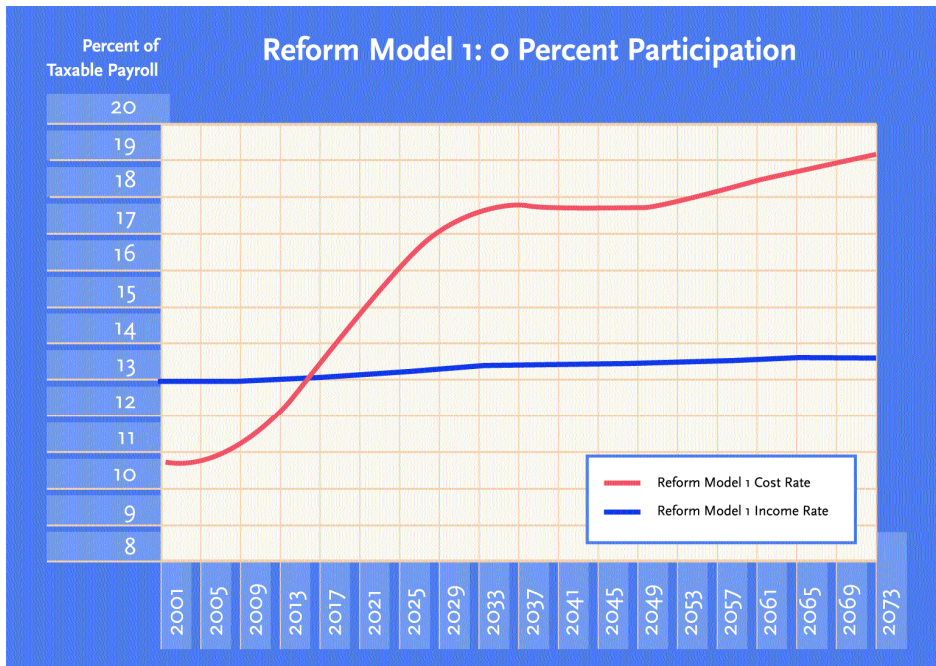
Table: Plan 2 Variable Annuity

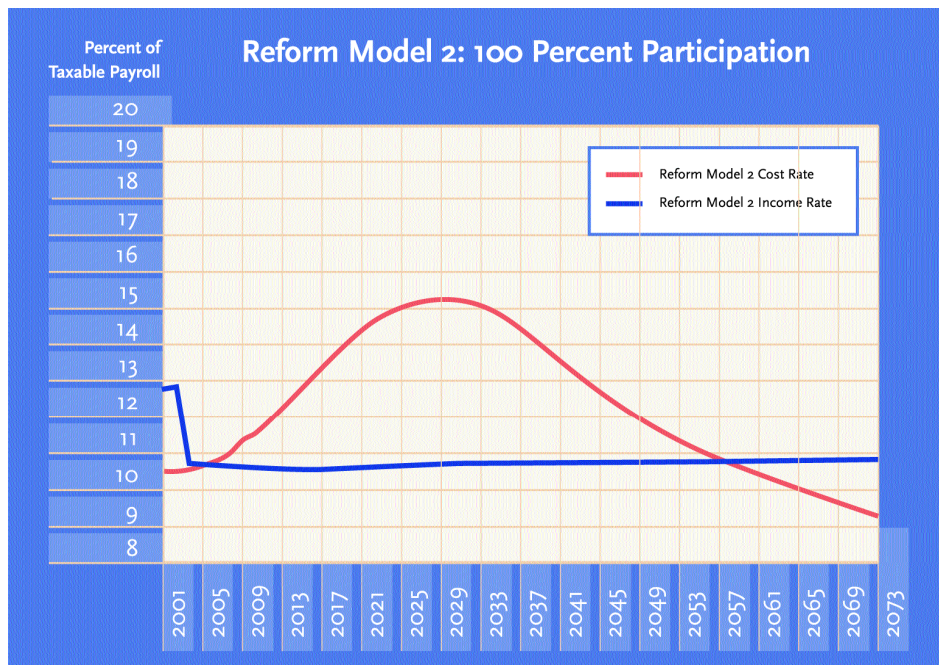
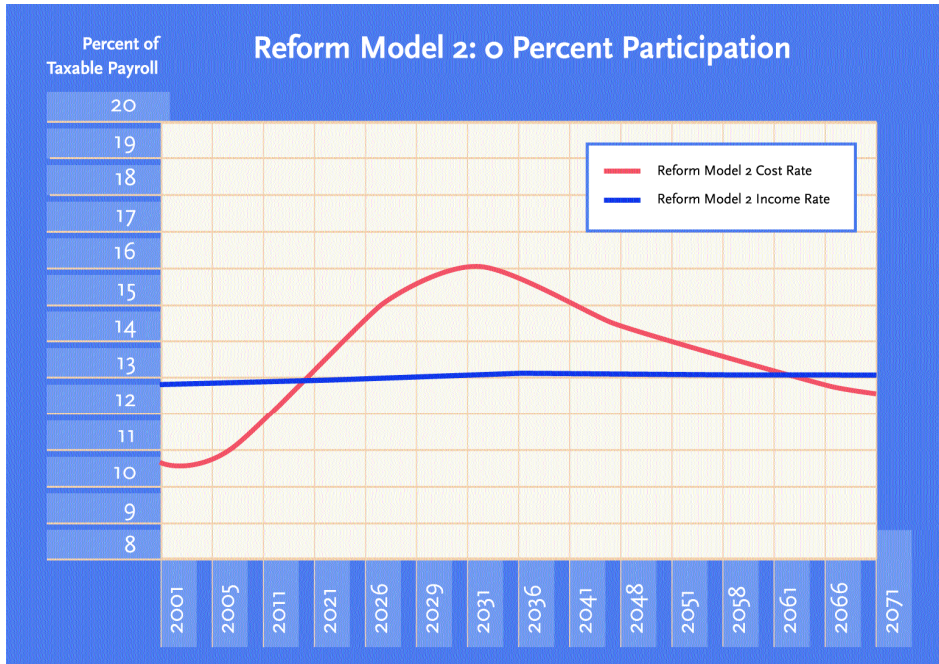
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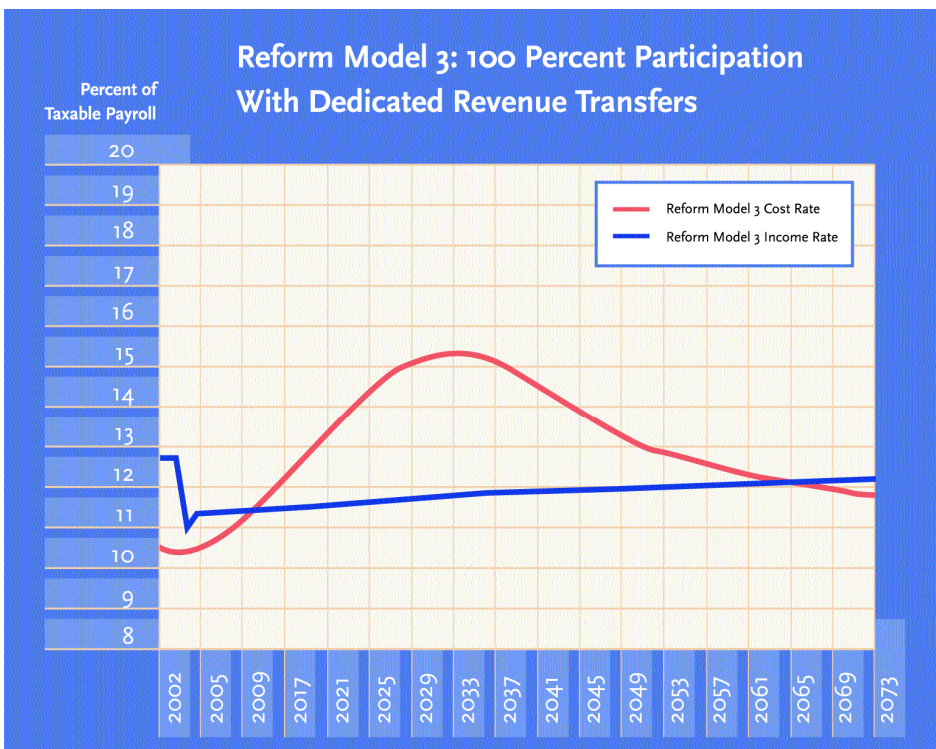
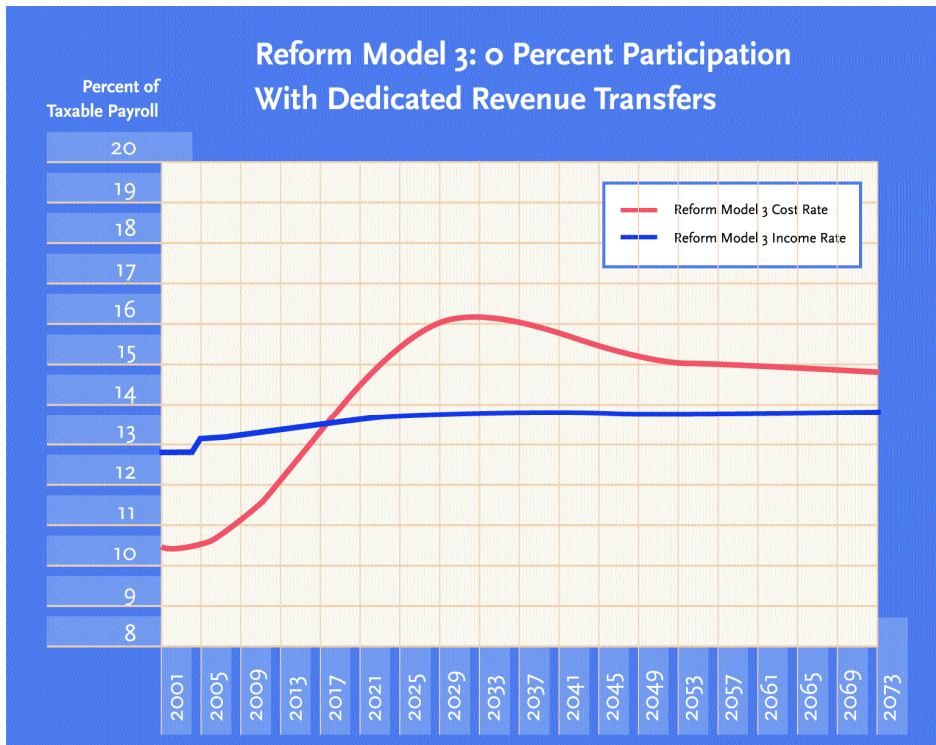
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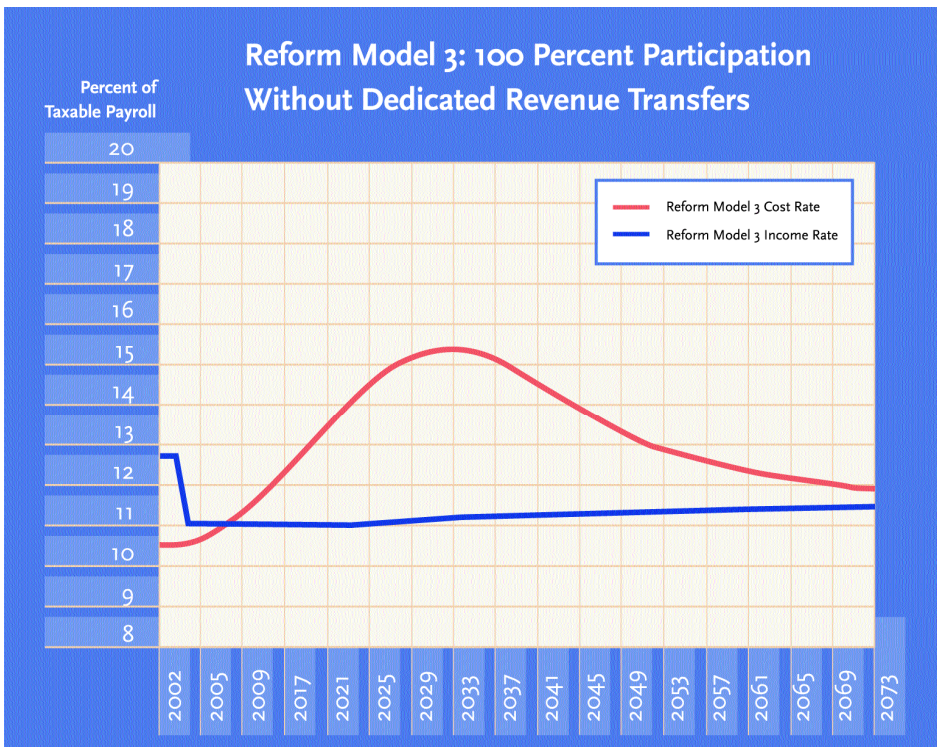
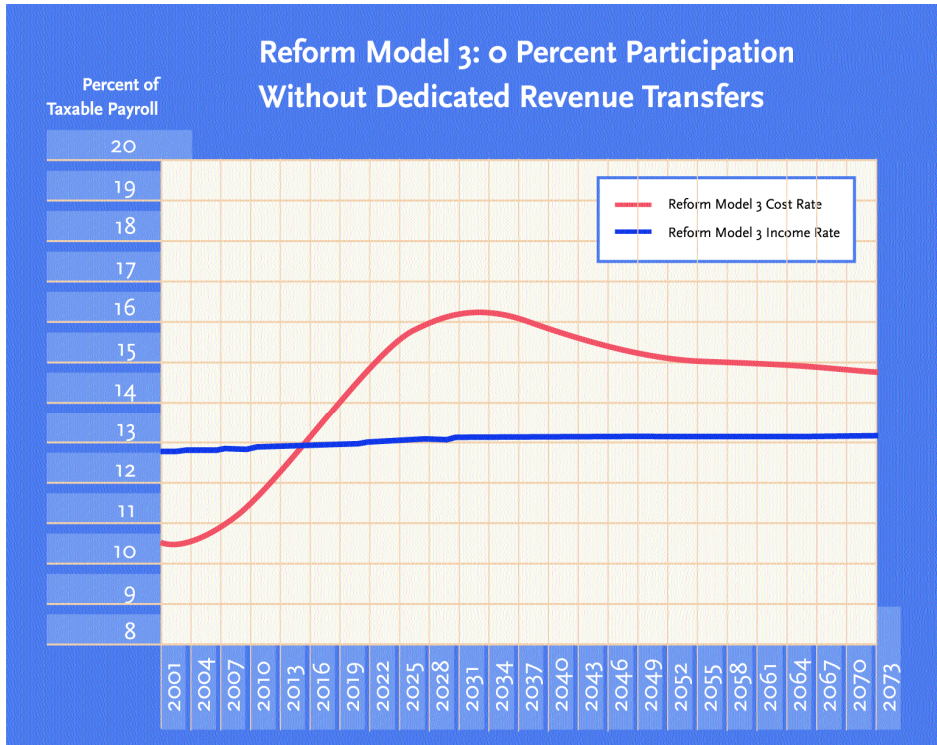
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Charts: Income Cost Rates, 0 and 100% Participation

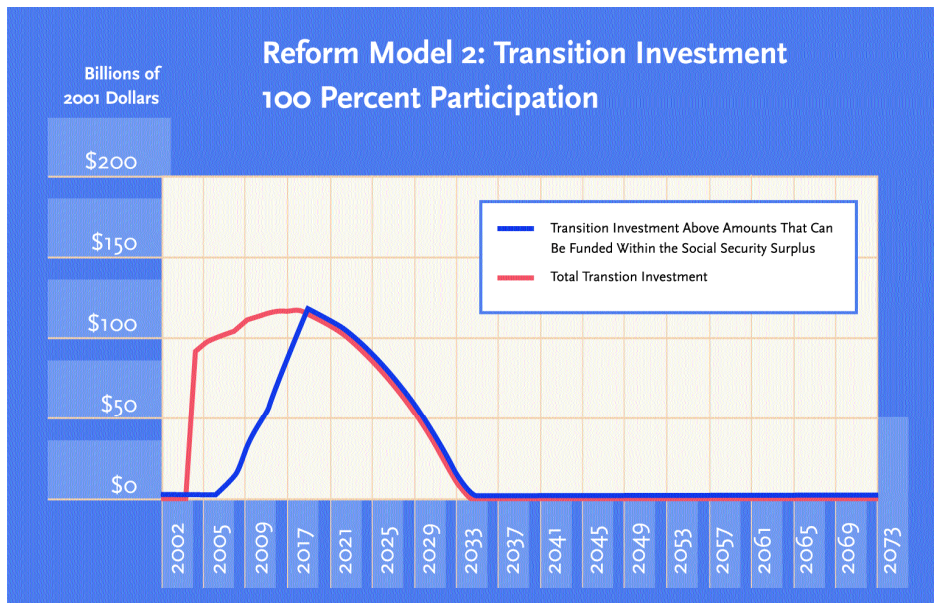
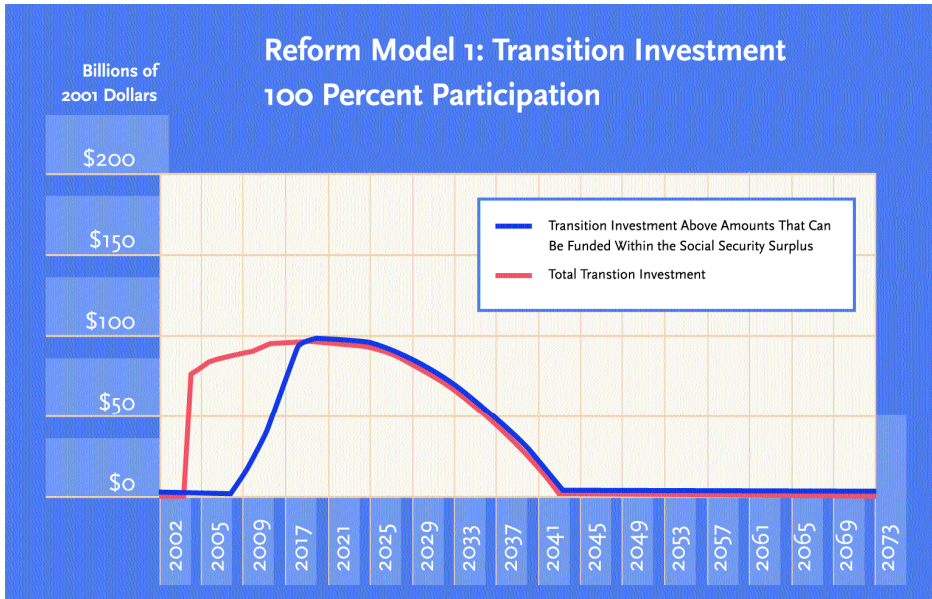








Charts: Transition Investment



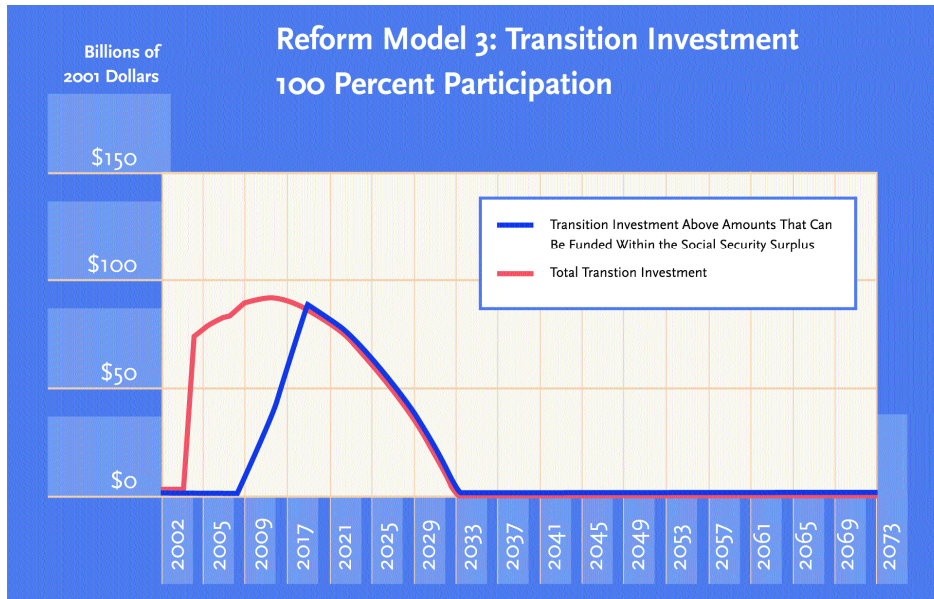


Table: Plan 1 Variable Annuity

Relative Earnings		Plan 1: Variable Annuity Two Percent Personal Account, No Changes to Underlying System			
		Today's Benefit Levels	Current Law Benefit	Reform Model Benefits	
2032			Expected Benefit With Account	Increase Relative to Today's Benefit	Additional Increase Due to Account
Low	\$7,644	\$9,756	\$10,140	\$2,496	\$384
Medium	\$12,624	\$16,116	\$16,944	\$4,320	\$828
High	\$16,392	\$21,288	\$22,620	\$6,228	\$1,332
2052					
Low	\$7,644	\$8,568*	\$9,624*	\$1,980	\$1,056
Medium	\$12,624	\$14,148*	\$16,476*	\$3,852	\$2,328
High	\$16,392	\$18,696*	\$22,428*	\$6,036	\$3,732
2075					
Low	\$7,644	\$9,900**	\$11,186**	\$3,542	\$1,286
Medium	\$12,624	\$16,343**	\$19,199**	\$6,575	\$2,856
High	\$16,392	\$21,594**	\$26,164**	\$9,772	\$4,570

* \$11,832, \$19,536, and \$25,812 are currently scheduled for low, medium, and high earners respectively, but the system is projected to be 27.6% underfunded in 2052. Under the assumption that currently scheduled benefits are met, then the total expected benefit with personal accounts would be \$12,888, \$21,864, and \$29,544 respectively.

** \$14,772, \$24,384, and \$32,220 are currently scheduled for low, medium, and high earners respectively but the system is projected to be 33.0% underfunded in 2075. Assuming that full scheduled benefits were paid, low, medium, and high-income workers with personal accounts would receive total benefits of \$16,055, \$27,237, and \$36,785 respectively.

*** Expected benefits with accounts assume individual invests in a 50/50 stock/bond portfolio earning an annual real rate of return, net of administrative expenses, of 4.6%. Upon retirement, the individual is assumed to have converted to a variable annuity invested in the same portfolio. Actual benefits may be higher or lower than those reported here depending on realized investment returns.

Table: Plan 1 Fixed Annuity

Plan 1: Fixed Annuity					
Two Percent Personal Account, No Changes to Underlying System					
Relative Earnings	Reform Model Benefits				
	2032	Today's Benefit Levels	Current Law Benefit	Expected Benefit With Account	Increase Relative to Today's Benefit
Low	\$7,644	\$9,756	\$9,912	\$2,268	\$156
Medium	\$12,624	\$16,116	\$16,452	\$3,828	\$336
High	\$16,392	\$21,288	\$21,840	\$5,448	\$552
2052					
Low	\$7,644	\$8,568*	\$9,118*	\$1,474	\$550
Medium	\$12,624	\$14,148*	\$15,365*	\$2,741	\$1,217
High	\$16,392	\$18,696*	\$20,644*	\$4,252	\$1,948
2075					
Low	\$7,644	\$9,900**	\$10,561**	\$2,917	\$661
Medium	\$12,624	\$16,343**	\$17,810**	\$5,186	\$1,467
High	\$16,392	\$21,594**	\$23,942**	\$7,550	\$2,348

* \$11,832, \$19,536, and \$25,812 are currently scheduled for low, medium, and high earners respectively, but the system is projected to be 27.6% underfunded in 2052. Under the assumption that currently scheduled benefits are met, then the total expected benefit with personal accounts would be \$12,888, \$21,864, and \$29,544 respectively.

** \$14,772, \$24,384, and \$32,220 are currently scheduled for low, medium, and high earners respectively but the system is projected to be 33.0% underfunded in 2075. Assuming that full scheduled benefits were paid, low, medium, and high-income workers with personal accounts would receive total benefits of \$16,055, \$27,237, and \$36,785 respectively.

*** Expected benefits with accounts assume individual invests in a 50/50 stock/bond portfolio earning an annual real rate of return, net of administrative expenses, of 4.6%. Upon retirement, the individual is assumed to have converted to a fixed, inflation-adjusted annuity invested at the government bond rate of 3.0% after inflation.

Table: Plan 2 Variable Annuity

Relative Earnings		Plan 2: Variable Annuity Price Indexed System			
		Reform Model Benefits			
2032	Today's Benefit Levels	Current Law Benefit	Expected Benefit With Account	Increase Relative to Today's Benefit	Additional Increase Due to Account
Low	\$7,644	\$9,756	\$11,160	\$3,516	\$1,488
Medium	\$12,624	\$16,116	\$15,444	\$2,820	\$2,256
High	\$16,392	\$21,288	\$19,680	\$3,266	\$2,268
2052					
Low	\$7,644	\$8,568*	\$13,608	\$5,964	\$3,936
Medium	\$12,624	\$14,148*	\$20,016	\$7,392	\$6,828
High	\$16,392	\$18,696*	\$24,684	\$8,292	\$7,272
2075					
Low	\$7,644	\$9,900**	\$14,484	\$6,840	\$4,808
Medium	\$12,624	\$16,343**	\$21,528	\$8,904	\$8,341
High	\$16,392	\$21,594**	\$26,292	\$9,900	\$8,868

* \$11,832, \$19,536, and \$25,812 are currently scheduled for low, medium, and high earners respectively, but the system is projected to be 27.6% underfunded in 2052.

** \$14,772, \$24,384, and \$32,220 are currently scheduled for low, medium, and high earners respectively but the system is projected to be 33.0% underfunded in 2075.

*** Expected benefits with accounts assume individual invests in a 50/50 stock/bond portfolio earning an annual real rate of return, net of administrative expenses, of 4.6%. Upon retirement, the individual is assumed to have converted to a variable annuity invested in the same portfolio. Actual benefits may be higher or lower than those reported here depending on realized investment returns.

Table: Plan 2 Fixed Annuity

Earnings			Reform Model Benefits		
Year	Benefit Level	Law Benefit	Benefit With Account	Relative to Today's Benefit	Increase Due to Accounts
2032	Low	\$7,644	\$10,728	\$3,084	\$1,056
	Medium	\$12,624	\$14,772	\$2,148	\$1,584
	High	\$16,392	\$19,008	\$2,616	\$1,596
2052	Low	\$7,644	\$12,600	\$4,956	\$2,928
	Medium	\$12,624	\$18,300	\$5,676	\$5,112
	High	\$16,392	\$22,884	\$6,492	\$5,472
2075	Low	\$7,644	\$13,224	\$5,580	\$3,548
	Medium	\$12,624	\$19,380	\$6,756	\$6,193
	High	\$16,392	\$24,036	\$7,644	\$6,612

* \$11,832, \$19,536, and \$25,812 are currently scheduled for low, medium, and high earners respectively, but the system is projected to be 27.6% underfunded in 2052.

** \$14,772, \$24,384, and \$32,220 are currently scheduled for low, medium, and high earners respectively but the system is projected to be 32.97% underfunded in 2075.

*** Expected benefits with accounts assume individual invests in a 50/50 stock/bond portfolio earning an annual real rate of return, net of administrative expenses, of 4.6%. Upon retirement, the individual is assumed to have converted to a variable annuity invested in the same portfolio. Actual benefits may be higher or lower than those reported here depending on realized investment returns

Table: Plan 3 Variable Annuity

Plan 3: Variable Annuity
One Percent 'Add-On' Contribution Allows For Benefit Growth
Exceeding Currently Scheduled Benefits

Relative Earnings	Reform Model Benefits					
	2032	Today's Benefit Levels	Current Law Benefit	Expected Benefit With Account	Increase Relative to Today's Benefit	Additional Increase Due to Account
2032						
Low		\$7,644	\$9,756	\$10,932	\$3,228	\$1,560
Medium		\$12,624	\$16,116	\$17,412	\$4,788	\$3,468
High		\$16,392	\$21,288	\$22,620	\$6,228	\$4,644
2052						
Low		\$7,644	\$8,568*	\$14,112	\$6,468	\$3,828
Medium		\$12,624	\$14,148*	\$23,796	\$11,172	\$8,496
High		\$16,392	\$18,696*	\$31,668	\$15,276	\$11,952
2075						
Low		\$7,644	\$9,900**	\$16,164	\$8,520	\$4,668
Medium		\$12,624	\$16,343**	\$27,456	\$14,832	\$10,356
High		\$16,392	\$21,594**	\$36,600	\$20,208	\$14,556

* \$11,832, \$19,536, and \$25,812 are currently scheduled for low, medium, and high earners respectively, but the system is projected to be 27.6% underfunded in 2052. Under the assumption that currently scheduled benefits are met, then the total expected benefit with personal accounts would be \$12,888, \$21,864, and \$29,544 respectively.

** \$14,772, \$24,384, and \$32,220 are currently scheduled for low, medium, and high earners respectively but the system is projected to be 33.0% underfunded in 2075. Assuming that full scheduled benefits were paid, low, medium, and high-income workers with personal accounts would receive total benefits of \$16,055, \$27,237, and \$36,785 respectively.

*** Expected benefits with accounts assume individual invests in a 50/50 stock/bond portfolio earning an annual real rate of return, net of administrative expenses, of 4.6%. Upon retirement, the individual is assumed to have converted to a variable annuity invested in the same portfolio. Actual benefits may be higher or lower than those reported here depending on realized investment returns.

Table: Plan 3 Fixed Annuity

Plan 3: Fixed Annuity					
One Percent 'Add-On' Contribution Allows For Benefit Growth Exceeding Currently Scheduled Benefits					
Relative Earnings			Reform Model Benefits		
	2032 Today's Benefit Levels	Current Law Benefit	Expected Benefit With Account	Increase Relative to Today's Benefit	Additional Increase Due to Account
2032					
Low	\$7,644	\$9,756	\$10,548	\$2,904	\$1,176
Medium	\$12,624	\$16,116	\$16,560	\$3,936	\$2,616
High	\$16,392	\$21,288	\$21,552	\$5,160	\$3,576
2052					
Low	\$7,644	\$8,568*	\$13,236	\$5,592	\$2,952
Medium	\$12,624	\$14,148*	\$21,852	\$9,228	\$6,564
High	\$16,392	\$18,696*	\$29,076	\$12,684	\$9,360
2075					
Low	\$7,644	\$9,900**	\$15,060	\$7,416	\$3,564
Medium	\$12,624	\$16,343**	\$25,032	\$12,408	\$7,932
High	\$16,392	\$21,594**	\$33,348	\$16,958	\$11,304

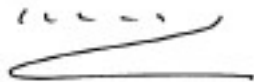
* \$11,832, \$19,536, and \$25,812 are currently scheduled for low, medium, and high earners respectively, but the system is projected to be 27.6% underfunded in 2052. Under the assumption that currently scheduled benefits are met, then the total expected benefit with personal accounts would be \$12,888, \$21,864, and \$29,544 respectively.

** \$14,772, \$24,384, and \$32,220 are currently scheduled for low, medium, and high earners respectively but the system is projected to be 33.0% underfunded in 2075. Assuming that full scheduled benefits were paid, low, medium, and high-income workers with personal accounts would receive total benefits of \$16,055, \$27,237, and \$36,785 respectively.

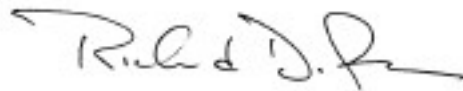
*** Expected benefits with accounts assume individual invests in a 50/50 stock/bond portfolio earning an annual real rate of return, net of administrative expenses, of 4.6%. Upon retirement, the individual is assumed to have converted to a fixed, inflation-adjusted annuity invested at the government bond rate of 3.0% after inflation.

Introduction to Actuaries Memo

The memorandum reproduced on the following pages is the work of the independent Office of the Actuary (OACT) of the Social Security Administration, and is not the work of the members or staff of the President's Commission to Strengthen Social Security. The President's Commission has relied throughout its deliberations on the nonpartisan, independent analyses of OACT, and the figures contained in the Commission report are taken from these analyses. Although the reports of the President's Commission and OACT are separate documents, we have chosen to include OACT's memorandum here in keeping with our expressed desire to foster independent examination of the Commission's recommendations. The President's Commission to Strengthen Social Security strongly believes in the educational role of such examinations, and expresses its hope and trust that others will likewise seek and circulate independent analyses of their proposals.



Daniel P. Moynihan



Richard D. Parsons



Social Security

Memorandum

Refer to: TCA

Date: January 31, 2002

To: Daniel Patrick Moynihan and Richard D. Parsons
Co-Chairs, President's Commission to Strengthen Social Security

From: Stephen C. Goss, Chief Actuary
Alice H. Wade, Deputy Chief Actuary

Subject: Estimates of Financial Effects for Three Models Developed by the
President's Commission to Strengthen Social Security

In the report, titled *Strengthening Social Security and Creating Personal Wealth for All Americans* and initially released on December 21, 2001, the President's Commission to Strengthen Social Security (PCSSS) presented three models for modifying the current Social Security program. Each of these models would include provisions for voluntary personal accounts and associated offsets to Social Security retirement benefits based on the earnings of workers who elect to have personal accounts.

This memorandum provides a description of the three models, as we understand them, and estimates of the expected effects of these models on selected aggregate and individual financial measures. The aggregate measures include the financial operations of the combined Trust Funds of the Old-Age and Survivors Insurance (OASI) and the Disability Insurance (DI) programs, aggregate flows and accumulations for personal accounts, effects on annual Federal unified budget balances, and cash flows from the General Fund of the Treasury to the OASDI Trust Funds. The individual measures include expected future total personal account accumulations and expected total benefit levels at retirement, under a range of assumptions. The terms, personal accounts and individual accounts, are used interchangeably in this memorandum.

All estimates are based on the intermediate assumptions of the 2001 OASDI Trustees Report, with additional assumptions related to returns on private securities, individual account and annuity administrative expenses, and individual account participation rates. These assumptions are described later in the memorandum. Estimates shown in this memorandum reflect the efforts of many individuals in the Office of the Chief Actuary, but particularly those of Jason Schultz, Michael Clingman, Michael Miller, Chris Chaplain, and Seung An.

I. Model 1 Specifications: 2-Percent Personal Account with Benefit Offset

a. Basic Provisions--Modification of OASDI Benefits

Under Model 1, OASDI benefit provisions would be unchanged from the specifications of current law. Thus, benefit levels specified in law for those who do not participate in the personal account option would be the same as under current law. However, based on the intermediate assumptions of the 2001 OASDI Trustees Report, OASDI Trust Funds and cash revenue would be insufficient to pay specified benefits through the next 75 years. Thus, under Model 1, as for current law, future modifications of revenue sources and/or benefit provisions would be needed to bring the program into long-range solvency.

b. Individual Accounts and Benefit Offset

Under this model, a voluntary option is provided starting in 2004 for workers covered under the OASDI program to have an amount equal to 2 percent of their OASDI taxable earnings deposited annually in a personal account. This option would be limited to workers who have not yet attained age 55 at the beginning of 2002.

Account contributions would be collected using the existing structure for collecting OASDI payroll tax contributions. In addition, account contributions would be managed by a central authority in a manner similar to that of the Federal Employee Thrift Savings Plan. Initially, available investment choices would be limited to a first tier of options that would include several broad index funds (equity, government bonds, and corporate and other bonds) plus several balanced funds. After several years, the board of the central authority would expand the options to include a second tier for individuals who had accumulated some threshold amount in their account. The second tier, still managed centrally, would offer a range of funds provided by approved private investment firms. The worker would select an investment firm and the funds offered by that firm. For both tiers, the central authority would maintain individual account records and would combine account transactions in aggregate amounts when dealing with the private investment firms.

For workers who participate in the individual account option, retirement and aged survivor benefits payable based on their earnings will be reduced according to a hypothetical account accumulation and annuity computation using a specified "offset yield rate". The offset yield rate for this plan is intended to be (or to average) 3.5 percent over price inflation. In practice, the offset yield rate could be computed as either (a) 3.5 percent above the realized or expected CPI inflation rate or (b) 0.5 percent above the realized or expected market yield on long-term Treasury bonds for each year.

The hypothetical account accumulation at retirement would be equal to the worker's personal account contributions accumulated using the specified offset yield rate for each past year. The retirement (and aged survivor) benefit offset would be equal to the computed amount of a CPI-indexed life annuity purchased with this hypothetical

accumulation, and based on the expected future mortality, inflation, and real interest rates used for the intermediate assumptions of the most recent OASDI Trustees Report. Offset annuities would be based on expected unisex mortality for workers who are not married at retirement. Joint and 2/3 survivor life annuities would be computed for workers who are married at retirement, reflecting the actual ages of each spouse.

c. Financing of Individual Account Contributions

Model 1 is described as a *flexible framework* in which the personal account contributions might be financed entirely as a “redirect” of OASI payroll tax revenue, entirely from the General Fund of the Treasury, or with some combination of the two. Any portion of the contributions based on wages that is financed as a redirect from payroll tax revenue is assumed to be divided equally between employee and employer payroll taxes. Three variations on Model 1 are provided in the financial estimates in this memorandum all of which have a 2-percent total personal account contribution. These are “Model 1 (2+0)” with financing of account contributions entirely from OASI payroll tax revenue, “Model 1 (1+1)” with half (1-percentage-point) of the financing from payroll taxes and the rest from general revenue, and “Model 1 (0+2)” with financing entirely from general revenue.

d. Account Distributions and Taxation

Estimates provided in this memorandum assume that individuals would not have access to personal account accumulations prior to retirement. Allowing such access would diminish the account balance at retirement and thus the available retirement income thereafter. For death before retirement, account balances would be transferred to the account of the surviving spouse, if any, and otherwise to the worker’s estate.

Upon entitlement to OASI benefits as a retired worker, aged spouse, or aged surviving spouse, the worker would have access to the account accumulation. Disabled workers would have access to their accounts when they convert to become retired worker beneficiaries. The benefit estimates in this memorandum assume that all account balances would be used to purchase life annuities at retirement. It is assumed that married workers would purchase joint and 2/3 survivor annuities. To the extent that lump-sum distributions are allowed under the model, monthly retirement annuity income would be diminished.

Personal account and annuity distributions would be treated like OASDI benefits for personal income tax purposes.

II. Model 2 Specifications: CPI Indexed OASDI Benefits and 4% (up to \$1,000) Personal Account with Benefit Offset

Model 2 includes three basic provisions, an optional personal account with benefit offset, and a provision for additional transfers from the General Fund of the Treasury to the Trust Funds as needed.

a. Basic Provisions--Modification of OASDI Benefits

1) *CPI-Indexed Benefits*: Modify the primary insurance amount (PIA) formula factors (90, 32, and 15) starting in 2009, reducing them successively by the measured real wage growth in the second prior year. Modified PIA factors would be applicable for OASDI beneficiaries becoming eligible for benefits in 2009 and later. This provision would result in increasing benefit levels for individuals with equivalent lifetime earnings across generations (relative to the average wage level) at the rate of price growth (increase in the CPI), rather than at the rate of growth in the average wage level as in current law. Calculation of the average indexed monthly earnings (AIME) used in computing the PIA would be unaffected by this provision. This provision alone would increase the size of the long-range OASDI actuarial balance (reduce the actuarial deficit) by an estimated 2.07 percent of taxable payroll.

2) *Enhanced Benefit Level for Low Earners*: This provision would gradually raise the PIA starting 2009 with an ultimate increase for 2018 and later of 40.4 percent (relative to the level provided under provision 1 above) for a 30-year minimum wage worker.¹ The combined effect of provisions 1 and 2 for such workers is expected to be a PIA equal to 120 percent of the aged poverty level for 2018. Thereafter the PIA would be indexed by the CPI as specified in provision 1, which is the same rate of growth specified for the poverty level.

The provision would provide the same 40.4 percent increase for 30-year workers with average earnings below that of the 30-year minimum wage worker. This 40.4 percent increase would be reduced for workers with higher career-average earnings levels (AIME), reaching 0 for those with AIMEs at twice the level of a 35-year minimum wage worker. For workers with more than 30 years of work, the percentage increase is maintained at the same level as specified for workers with the same AIME level and only 30 years of work. However, the percentage increase is reduced for workers with fewer than 30 years of work, reaching 0 for those with 20 or fewer years of work. Thus, no enhancement is provided by this provision for retirees with 20 or fewer years of employment. The year-of-work requirements would be “scaled” to the length of the elapsed period from age 22 to benefit eligibility for workers who become disabled or die

¹ The “minimum wage worker” is assumed to work 2000 hours each year at a minimum hourly wage rate of \$5.15 in 2000 and indexed thereafter by growth in the Social Security average wage index. The minimum wage worker is assumed not to work after the calendar year in which age 60 is attained.

before reaching age 62.² The incremental effect of this provision after provision 1 would be to reduce the size of the long-range OASDI actuarial balance by an estimated 0.13 percent of taxable payroll.

The table below illustrates the effect of the benefit enhancement for workers with low earnings.

Model 2: Effect of Provision 2: Ultimate Percentage Increase in PIA¹ for Retirees with No Period of Disability								
Increase is Relative to the <i>CPI-Indexed PIA</i>, Starting 2009								
		<u>Average Earnings Level in Years Worked (2002 wage levels)</u>						
Number of Years of Work	Quarters of Coverage (QCs)	Minimum Wage		Minimum Wage X 2		Medium	High	Maximum
		\$5,000	\$11,318	\$15,875	\$22,635	\$35,277	\$56,443	\$84,900
<u>Ultimate Percentage Increase in PIA Due to Provision 2</u>								
10	40	0	0	0	0	0	0	0
15	60	0	0	0	0	0	0	0
20	80	0	0	0	0	0	0	0
25	100	20	20	18	10	0	0	0
30	120	40	40	28	10	0	0	0
35	140	40	35	21	0	0	0	0
40	160	40	35	21	0	0	0	0

¹ Ultimate increase is phased in over 10 years, 2009-18. For workers with a given AIME, the increase is the same for 30 or more years of work. Increase reduced to 0 for 20 years of work or less. Based on intermediate assumptions of the 2001 Trustees Report.

The benefit enhancement under this provision would be computed according to the following formula:

For all workers whose AIME is less than twice the AIME for a 35-year minimum wage worker, the PIA is multiplied by

$$1 + \text{applicable percentage} \times \text{AIME factor} \times \text{coverage factor}.$$

In the above formula,

- "Applicable percentage" is equal to 4.04 percent for beneficiaries initially eligible in 2009, 8.08 percent for those initially eligible in 2010, ... , and 40.4 percent for those initially eligible in 2018 and later;

² For example, the PIA of a 15-year minimum wage worker, who becomes disabled at age 42 in 2018, would be increased 40.4 percent because this worker had OASDI covered earnings in three fourths of the 20 elapsed years.

- "AIME factor" is equal to

$$\begin{cases} 1 & \text{if AIME} \leq M \\ (A - \text{AIME}) / (A - M) & \text{if } M < \text{AIME} < A \\ 0 & \text{if AIME} \geq A. \end{cases}$$

Here,

A = Twice the AIME of a 35-year minimum wage worker and
 M = AIME for a 30-year minimum wage worker.

- "Coverage factor" is equal to

$$\begin{cases} 0 & \text{if QCs} \leq 2 \times \text{ elapsed years} \\ 1 + (\text{QCs} - 3 \times \text{ elapsed years}) / \text{ elapsed years} & \text{if } 2 \times \text{ elapsed years} < \text{QCs} < 3 \times \text{ elapsed years} \\ 1 & \text{if QCs} \geq 3 \times \text{ elapsed years.} \end{cases}$$

In the above formula for the coverage factor, "QCs" represents the number of quarters of coverage earned by the worker prior to benefit eligibility. "Elapsed years" represents the number of years starting with the year the worker attains age 22 through the year prior to benefit eligibility, excluding periods of disabled worker entitlement.

3) *Increased Benefits for Widow(er)s*: Starting 2009, pay all aged surviving spouses (aged 62 or older) 75 percent of the benefit that would be received by the couple if both were still alive (including all applicable actuarial reductions and delayed retirement credits), if this is higher than their current benefit. The benefit provided by this option would be limited to what the survivor would receive as a retired worker beneficiary with a PIA equal to the average PIA of all retired worker beneficiaries for December of the year prior to becoming eligible for this option. Actuarial reduction for this limitation would be computed as if the survivor had begun receiving a retired worker benefit on the earliest of the actual ages upon which benefits began as an aged spouse, an aged surviving spouse, or a retired worker beneficiary, but not before 62. The incremental effect of this provision after provisions 1 and 2 would be to reduce the size of the long-range OASDI actuarial balance by an estimated 0.08 percent of taxable payroll.

The total combined effect of the basic provisions 1-3 would be to increase the size of the long-range OASDI actuarial balance (reduce the actuarial deficit) by an estimated 1.87 percent of taxable payroll.

b. Individual Accounts and Benefit Offset

Under this model, a voluntary option is provided starting in 2004 for workers covered under the OASDI program to have an amount equal to 4 percent of their OASDI taxable earnings, up to \$1,000 (value for 2002, and wage indexed thereafter) deposited annually in a personal account. This option would be limited to workers who have not yet attained age 55 at the beginning of 2002.

Account contributions would be collected using the existing structure for collecting OASDI payroll tax contributions. In addition, account contributions would be managed by a central authority in a manner similar to that of the Federal Employee Thrift Savings Plan. Initially, available investment choices would be limited to a first tier of options that would include several broad index funds (equity, government bonds, and corporate and other bonds) plus several balanced funds. After several years, the board of the central authority would expand the options to include a second tier for individuals who had accumulated some threshold amount in their account. The second tier, still managed centrally, would offer a range of funds provided by approved private investment firms. The worker would select an investment firm and the funds offered by that firm. For both tiers, the central authority would maintain individual account records and would combine account transactions in aggregate amounts when dealing with the private investment firms.

For workers who participate in the individual account option, retirement and aged survivor benefits payable based on their earnings will be reduced according to a hypothetical account accumulation and annuity computation using a specified “offset yield rate”. The offset yield rate for this plan is intended to be (or to average) 2 percent over price inflation. In practice, the offset yield rate could be computed as either (a) 2 percent above the realized or expected CPI inflation rate or (b) 1 percent below the realized or expected market yield on long-term Treasury bonds for each year.

The hypothetical account accumulation at retirement would be equal to the worker’s personal account contributions accumulated using the specified offset yield rate for each year. The retirement (and aged survivor) benefit offset would be equal to the computed amount of a CPI-indexed life annuity purchased with this hypothetical accumulation, and based on the expected future mortality, inflation, and real interest rates used for the intermediate assumptions of the most recent OASDI Trustees Report. Offset annuities would be based on expected unisex mortality for workers who are not married at retirement. Joint and 2/3 survivor life annuities would be computed for workers who are married at retirement, reflecting the actual ages of each spouse.

c. Financing of Individual Account Contributions

Model 2 is a framework in which the personal account contributions would be financed entirely as a “redirect” of OASI payroll tax revenue. Contributions based on wages are assumed to be divided equally between employee and employer payroll taxes.

d. Account Distributions and Taxation

Estimates provided in this memorandum assume that individuals would not have access to personal account accumulations prior to retirement. Allowing such access would diminish the account balance at retirement and thus the available retirement income thereafter. For death before retirement, account balances would be transferred to the account of the surviving spouse, if any, and otherwise to the worker’s estate.

Upon entitlement to OASI benefits as a retired worker, aged spouse, or aged surviving spouse, the worker would have access to the account accumulation. Disabled workers would have access to their accounts when they convert to retired worker beneficiaries. The benefit estimates in this memorandum assume that all account balances would be used to purchase life annuities at retirement. It is assumed that married workers would purchase joint and 2/3 survivor annuities. To the extent that lump-sum distributions are allowed under the model, monthly retirement annuity income would be diminished.

Personal account and annuity distributions would be treated like OASDI benefits for personal income tax purposes.

e. Provision for Additional Transfers from the General Fund of the Treasury

For any year in which the combined OASDI Trust Funds would fall below 100 percent of annual program cost, transfers would be made from the General Fund of the Treasury to maintain the Trust Funds at a level equal to annual outgo. This provision is intended to assure adequate financing during the “transition” associated with the individual account provision described above. To the extent to which workers choose to participate in the personal account, payroll tax revenue will be redirected from the Trust Funds beginning 2009, but benefit offsets associated with this option will not rise to substantial levels for many years. This provision would maintain OASDI solvency during the period for which individual accounts would reduce the net cash flow to the Trust Funds. This provision would have the additional effect of assuring that the OASDI Trust Funds would never become exhausted and thus the program would always remain solvent in the future.

III. Model 3 Specifications: Longevity Indexed OASDI Benefits and 2.5% (up to \$1,000) Personal Account with Benefit Offset

Model 3 includes six basic provisions, an optional personal account with benefit offset, and a provision for additional transfers from the General Fund of the Treasury to the Trust Funds as needed.

a. Basic Provisions--Modification of OASDI Benefits and Dedicated Revenue

1) *Longevity-Indexed Benefits*: This provision would slow the growth across generations in the primary insurance amount (PIA) for all OASDI beneficiaries by an amount that would roughly offset the effects of increasing longevity on the average duration of benefit receipt for aged beneficiaries. Initially, PIA factors (90, 32, and 15) would be scheduled to be adjusted by a successive multiplier of 0.995 annually beginning 2009. This is about one-half the expected effect of “CPI-Indexing”. This adjustment reduces monthly benefit levels by an amount equivalent to increasing the normal retirement age (NRA) for retired workers by enough to maintain a constant life expectancy at NRA, for any fixed age of benefit entitlement. Calculations of this adjustment use the mortality assumptions for the intermediate estimates of the 2001 OASDI Trustees Report and the actuarial reduction factors in current law. Under this provision, the 0.995 multiplier

would be updated every 10 years (starting after 2010) to reflect actual historical increases in longevity as determined by the Social Security Administration for the most recent decade (as 2000 to 2010 for the first adjustment) and actuarial reduction factors in current law (without regard to provisions 2, 3, or 4 of this model). Note that this provision would apply in addition to the NRA increase already scheduled in current law. This provision alone would increase the size of the long-range OASDI actuarial balance (reduce the actuarial deficit) by an estimated 1.17 percent of taxable payroll.

2) *Reduce Benefits for High Earners*: Gradually reduce the third PIA factor, from 15 to 10, by 0.25 per year from 2009 through 2028. This reduction would be applied each year to the original 15 factor, prior to applying the cumulative effect of provision 1. This provision alone would increase the size of the long-range OASDI actuarial balance (reduce the actuarial deficit) by an estimated 0.16 percent of taxable payroll. The incremental effect of this provision after provision 1 would be to increase the size of the long-range OASDI actuarial balance by an estimated 0.14 percent of taxable payroll.

3) *Enhanced Benefit Level for Low Earners*: This provision would gradually raise the PIA starting 2009 with an ultimate increase for 2018 and later of 12 percent (relative to the level provided under provisions 1 and 2 above) for 30-year minimum wage worker.³ The combined effect of provisions 1, 2, and 3 for such workers is expected to be a PIA equal to 100 percent of the aged poverty level for 2018. Thereafter, the PIA would increase from one generation to the next at a rate that is expected to be about 0.5 percent per year faster than the growth in the CPI and the poverty level. Thus, PIA levels for such workers would be expected to rise to levels above 100 percent of the aged poverty level after 2018.

The provision would provide the same 12 percent increase for 30-year workers with average earnings below that of the 30-year minimum wage worker. This 12 percent increase would be reduced for workers with higher career-average earnings levels (AIME), reaching 0 for those with AIMEs equal to one-twelfth the average wage indexing series (AWI) for the second year prior to benefit eligibility. For workers with the same AIME levels, the percentage increase is raised for those with more than 30 years of work, reaching about 1.5 times as much (up to 18 percent) for those with 40 years of work or more. However, the percentage increase is reduced for workers with fewer than 30 years of work, reaching 0 for those with 20 or fewer years of work. Thus, no enhancement is provided by this provision for retirees with 20 or fewer years of employment. The year-of-work requirements would be “scaled” to the length of the elapsed period from age 22 to benefit eligibility for workers who become disabled or die before reaching age 62.⁴ The incremental effect of this provision after provisions 1 and

³ The “minimum wage worker” is assumed to work 2000 hours each year at a minimum hourly wage rate of \$5.15 in 2000 and indexed thereafter by growth in the Social Security average wage index. The minimum wage worker is assumed not to work after the calendar year in which age 60 is attained.

⁴ For example, the PIA of a 15-year minimum wage worker, who becomes disabled at age 42 in 2018, would be increased 12 percent because this worker had OASDI covered earnings in three fourths of the 20 elapsed years.

2 would be to reduce the size of the long-range OASDI actuarial balance by an estimated 0.13 percent of taxable payroll.

The following table illustrates the effect of the benefit enhancement for workers with low earnings.

Model 3: Effect of Provision 3: Ultimate Percentage Increase in PIA¹ for Retirees with No Period of Disability									
Increase is Relative to PIA multiplied by 0.995 annually, Starting 2009									
		<u>Average Earnings Level in Years Worked (2002 wage levels)</u>							
Number of Years of Work	Quarters of Coverage (QCs)	Minimum Wage		Minimum Wage X 2		Medium	High	Maximum	
		\$5,000	\$11,318	\$15,875	\$22,635	\$35,277	\$56,443	\$84,900	
<u>Ultimate Percentage Increase in PIA Due to Provision 3</u>									
10	40	0	0	0	0	0	0	0	0
15	60	0	0	0	0	0	0	0	0
20	80	0	0	0	0	0	0	0	0
25	100	6	6	6	4	2	0	0	0
30	120	12	12	10	7	2	0	0	0
35	140	15	14	11	7	0	0	0	0
40	160	18	17	14	9	0	0	0	0

¹ Ultimate increase is phased in over 10 years, 2009-18. For workers with a given AIME, the increase is greater for more that 30 years of work. Increase reduced to 0 for 20 years of work or less. Based on intermediate assumptions of the 2001 Trustees Report.

The benefit enhancement under this provision would be computed according to the following formula:

For all workers with AIME less than one-twelfth the AWI for 2 years prior to eligibility, the PIA is multiplied by

$$1 + \text{applicable percentage} \times \text{AIME factor} \times \text{coverage factor}.$$

In the above formula,

- "Applicable percentage" is equal to 1.2 percent for beneficiaries initially eligible in 2009, 2.4 percent for those initially eligible in 2010, ... , and 12 percent for those initially eligible in 2018 and later;
- "AIME factor" is equal to

$$\begin{cases} 1 & \text{if AIME} \leq M \\ (A - \text{AIME}) / (A - M) & \text{if } M < \text{AIME} < A \\ 0 & \text{if AIME} \geq A \end{cases}$$

Here,

A = AWI for second year before eligibility, divided by 12 and

M = AIME for a 30-year minimum wage worker.

Note that A as defined for Model 3 is different than A as defined for Model 2.

- "Coverage factor" is equal to the greater of zero and $1 + B \times (\text{QCs} - 3 \times \text{elapsed years}) / \text{elapsed years}$

with

$$B = \begin{cases} 1 & \text{if QCs} < 3 \times \text{elapsed years} \\ 1/2 & \text{otherwise.} \end{cases}$$

In the above formula for the coverage factor, "QCs" represents the number of quarters of coverage earned by the worker prior to benefit eligibility. "Elapsed years" represents the number of years starting with the year the worker attains age 22 through the year prior to benefit eligibility, excluding periods of disabled worker entitlement.

4) *Modify Actuarial Reduction and Increment Factors:* The early retirement reduction factors and delayed retirement credits would be changed in an attempt to reflect the fact that the marginal increase in the full benefit level (i.e., the PIA) for earnings after reaching retirement eligibility age is, generally, relatively small. (Reduction and increment factors provided under current law are intended to provide actuarially equivalent lifetime benefits for a fixed earnings history regardless of the age at which retirement benefits start.) This relatively small marginal increase results from both the AIME formula, which uses 35 years of earnings, and the weighted PIA benefit formula. Together, these provide a larger marginal amount of benefit per dollar of additional earnings for low earners and for earnings earned early in a worker's career.

This provision is intended to provide a greater marginal incentive to work past the retirement earliest eligibility age (EEA). Because the degree of this marginal effect depends upon the extent and level of earnings a worker has had in earlier years, no absolute adjustment can be provided that would be appropriate for all workers. Rough estimates of adjustments to the reduction and increment factors have thus been developed.

The chart below displays the proposed monthly early retirement reductions that would be applicable for retired worker beneficiaries for the first 36 months for which benefits are received prior to NRA under both current law and the provision. (Different factors apply to aged spouse beneficiaries and aged widow beneficiaries.)

Monthly Reduction in Benefits for Each of First 36 Months of Retirement Before NRA

Age 62 in:	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013+</u>
Present Law	20/36%	20/36%	20/36%	20/36%	20/36%	20/36%
Model 3	20/36%	21/36%	22/36%	23/36%	24/36%	25/36%

Similar increases for aged spouse beneficiaries would be applied, increasing the monthly reduction for the first 36 months of entitlement before NRA from 25/36 percent under present law to 30/36 percent under the provision.

The reductions that are proposed for the fourth and fifth year of benefit entitlement before NRA are 12/24% per month (current law reductions are 10/24% per month) for both retired worker and aged spouse beneficiaries. The reductions for the fourth and fifth year of entitlement before NRA are applicable to all new eligibles who reach age 62 after 2008.

The ultimate percentages of PIA payable for retired workers by age at initial benefit entitlement are shown in the table below.

Ultimate Percent of PIA Payable for Retired Worker Beneficiaries by Age at Initial Entitlement to Benefits

Age at Initial Entitlement:	<u>NRA-5</u>	<u>NRA-4</u>	<u>NRA-3</u>	<u>NRA-2</u>	<u>NRA-1</u>	<u>NRA</u>
Present Law	70	75	80	86.7	93.3	100
Model 3	63	69	75	83.3	91.7	100

The percentage of PIA payable for non-disabled aged widow beneficiaries newly eligible at age 60 would remain at 71.5 percent. The percentages payable for those newly eligible at ages between 60 and the NRA would scale linearly between 71.5 and 100 percent, as under present law.

The delayed retirement credit (DRC) under present law is scheduled to increase to 8% per year for workers attaining age 65 after 2007. Under this provision, the DRC would continue to increase at the rate of 0.5 percentage point every two years, with the first new increase applied to those attaining age 65 in 2010. An ultimate factor of 10 percentage points per year would be reached for workers reaching 65 after 2015. The delayed retirement credit applies for those months between NRA and age 70 in which no retired worker benefit is received.

Percentage Increase in PIA Per Year of Delayed Retirement after NRA

Age 65 in:	<u>2008-09</u>	<u>2010-11</u>	<u>2012-13</u>	<u>2014-15</u>	<u>2016 & later</u>
Present Law	8	8	8	8	8
Model 3	8	8.5	9	9.5	10

Provision 4 alone would increase the size of the long-range OASDI actuarial balance (reduce the actuarial deficit) by an estimated 0.28 percent of taxable payroll.

5) *Dedicated Transfers*: Provide for dedicated transfers from the General Fund of the Treasury to the Trust Funds that would be specified in the law as percentages of OASDI effective taxable payroll on a year-by-year basis for years 2005 and later. The specified transfers are equal in size to the estimated net revenue that would be expected under two provisions (neither of which is specifically included in the model) based on estimates under the intermediate assumptions of the 2001 Trustees Report. One of these provisions is an increase in the OASDI taxable maximum that would raise the percentage of covered earnings taxable gradually to 86 percent between 2005 and 2009, and increase the level to maintain 86 percent thereafter. The other provision redirects the portion of the revenue from the taxation of OASDI benefits that is currently scheduled for the Medicare HI Trust Fund to the OASDI Trust Funds, phased in 10 percent in 2010, 20 percent in 2011, ..., and 100 percent in 2019 and later. The Commission did not endorse these two provisions upon which the amount of the transfer is based. In fact, the Commission recommends that the Congress consider a number of possible proposals that might provide the revenue specified under this provision. This provision alone would increase the size of the long-range OASDI actuarial balance (reduce the actuarial deficit) by an estimated 0.63 percent of taxable payroll.

6) *Increased Benefits for Widow(er)s*: Starting 2009, pay all aged surviving spouses (aged 62 or older) 75 percent of the benefit that would be received by the couple if both were still alive (including all applicable actuarial reductions and delayed retirement credits), if this is higher than their current benefit. The benefit provided by this option would be limited to what the survivor would receive as a retired worker beneficiary with a PIA equal to the average PIA of all retired worker beneficiaries for December of the year prior to becoming eligible for this option. Actuarial reduction for this limitation would be computed as if the survivor had begun receiving a retired worker benefit on the earliest of the actual ages upon which benefits began as an aged spouse, an aged surviving spouse, or a retired worker beneficiary, but not before 62. This provision alone would reduce the size of the long-range OASDI actuarial balance by an estimated 0.08 percent of taxable payroll.

The total combined effect of the basic provisions 1-6 would be to increase the size of the long-range OASDI actuarial balance (reduce the actuarial deficit) by an estimated 1.94 percent of taxable payroll.

b. Individual Accounts and Benefit Offset

Under this model, a voluntary option is provided starting in 2004 for workers covered under the OASDI program to have an amount equal to 2.5 percent of their OASDI taxable earnings, up to \$1,000 (value for 2002, and wage indexed thereafter) deposited annually in a personal account. This option would be limited to workers who have not yet attained age 55 at the beginning of 2002. Participation in this option would require that the worker contribute an additional 1 percent of OASDI taxable earnings to the personal account each year. The 1-percent additional contribution would be subsidized in a progressive manner with a refundable tax credit that would be expected to have a cost (to the General Fund of the Treasury) of about 0.15 percent of OASDI taxable earnings if all workers participated.

Account contributions would be collected using the existing structure for collecting OASDI payroll tax contributions. In addition, account contributions would be managed by a central authority in a manner similar to that of the Federal Employee Thrift Savings Plan. Initially, available investment choices would be limited to a first tier of options that would include several broad index funds (equity, government bonds, and corporate and other bonds) plus several balanced funds. After several years, the board of the central authority would expand the options to include a second tier for individuals who had accumulated some threshold amount in their account. The second tier, still managed centrally, would offer a range of funds provided by approved private investment firms. The worker would select an investment firm and the funds offered by that firm. For both tiers, the central authority would maintain individual account records and would combine account transactions in aggregate amounts when dealing with the private investment firms.

For workers who participate in the individual account option, retirement and aged survivor benefits payable based on their earnings will be reduced according to a hypothetical account accumulation and annuity computation using a specified "offset yield rate". This hypothetical account and annuity computation would reflect only the personal account contributions provided as a redirect of payroll taxes (i.e., the 2.5 percent up to \$1,000). The offset yield rate for this plan is intended to be (or to average) 2.5 percent over price inflation. In practice, the offset yield rate could be computed as either (a) 2.5 percent above the realized or expected CPI inflation rate or (b) 0.5 percent below the realized or expected market yield on long-term Treasury bonds for each year.

The hypothetical account accumulation at retirement would be equal to the worker's personal account contributions (excluding the additional 1-percent) accumulated using the specified offset yield rate for each year. The retirement (and aged survivor) benefit offset would be equal to the computed amount of a CPI-indexed life annuity purchased with this hypothetical accumulation, and based on the expected future mortality, inflation, and real interest rates used for the intermediate assumptions of the most recent OASDI

Trustees Report. Offset annuities would be based on expected unisex mortality for workers who are not married at retirement. Joint and 2/3 survivor life annuities would be computed for workers who are married at retirement, reflecting the actual ages of each spouse.

c. Financing of Individual Account Contributions

Model 3 is a framework in which the voluntary 1-percent additional personal account contributions would be provided by the worker, with a progressive subsidy from the General Fund of the Treasury, as described above. For those who participate in the 1-percent additional contribution, the 2.5-percent (up to \$1,000) personal account contribution would be financed entirely as a “redirect” of OASI payroll tax revenue. Contributions redirected from payroll tax revenue based on wages are assumed to be divided equally between employee and employer payroll taxes.

d. Account Distributions and Taxation

Estimates provided in this memorandum assume that individuals would not have access to personal account accumulations prior to retirement. Allowing such access would diminish the account balance at retirement and thus the available retirement income thereafter. For death before retirement, account balances would be transferred to the account of the surviving spouse, if any, and otherwise to the worker’s estate.

Upon entitlement to OASI benefits as a retired worker, aged spouse, or aged surviving spouse, the worker would have access to the account accumulation. Disabled workers would have access to their accounts when they convert to retired worker beneficiaries. The benefit estimates in this memorandum assume that all account balances would be used to purchase life annuities at retirement. It is assumed that married workers would purchase joint and 2/3 survivor annuities. To the extent that lump-sum distributions are allowed under the model, monthly retirement annuity income would be diminished.

Personal account and annuity distributions would be treated like OASDI benefits for personal income tax purposes.

e. Provision for Additional Transfers from the General Fund of the Treasury

For any year in which the combined OASDI Trust Funds would fall below 100 percent of annual program cost, transfers would be made from the General Fund of the Treasury to maintain the Trust Funds at a level equal to annual outgo. This provision is provided to address the “transition costs” associated with the individual account provision described above. To the extent to which workers choose to participate in the personal account, payroll tax revenue will be redirected from the Trust Funds beginning 2009, but benefit offsets associated with this option will not rise to substantial levels for many years. This provision is intended to maintain OASDI solvency during the period for which individual accounts would reduce the net cash flow to the Trust Funds. This provision would have

the additional effect of assuring that the OASDI Trust Funds would never become exhausted and thus the program would always remain solvent in the future.

IV. Assumptions Used for Financial Estimates

All estimates provided to the Commission have been based on the intermediate assumptions of the 2001 OASDI Trustees Report. This includes the ultimate assumption of a 3-percent ultimate real annual yield on long-term U.S. Treasury bonds (based on the effective market yield of all marketable Treasury bonds with a remaining duration of more than 4 years). A number of additional assumptions have been made for these estimates, as indicated below.

a. Personal Account Participation

Participation in the personal accounts would be optional in each of the three models developed by the Commission. The proportion of workers who would voluntarily participate cannot be determined with any degree of certainty. For this reason, estimates of the aggregate financial status of the Trust Funds, the effect on the Federal Unified Budget balance, and the effect on individual benefit levels are presented in this memorandum for three different levels of participation, 0 percent, 67 percent, and 100 percent.

Estimates for the basic provisions of each model represent the aggregate financial effects assuming no voluntary participation in personal accounts. Estimates presented for 67-percent participation are based on the assumption that two thirds of all potential personal account contributions are made. This condition could exist if two thirds of workers at every level of earnings participated. This condition could also be met, for example, if more than two thirds of high earners participated and less than two thirds of the remaining earners participated. Due to the size of the personal account contributions and the nature of the benefit offset provisions, aggregate financial estimates for these models are not very sensitive to the precise distribution of participation rates by earnings level, assuming that two thirds of all potential personal account contributions are made.

However, due to the nature of the three models, their likely levels of participation would differ. For Model 1, participation would be expected to be well below 100 percent because the benefit offset for participants would be expected to exceed the annuity distribution from the accumulation in a conservatively invested personal account (for example an account invested solely in long-term U.S. Treasury bonds). However, individuals who are interested in investing a substantial portion of their account in equities could expect to gain from participating. Thus, the assumption for 67-percent participation is likely to be the most appropriate of the three assumptions for Model 1.

For Model 2, participation would be expected to be higher. If the benefit offset yield rate is computed as 2 percent above the realized or expected inflation rate, actual net yields on personal accounts would generally, but not always, exceed the benefit offset yield rate.

Due to this uncertainty, the 67-percent participation assumption is likely to be the most appropriate of the three assumptions in this case. However, if the benefit offset yield rate were computed as 1 percent below the realized or expected market yield on long-term Treasury bonds, 100 percent participation is the most appropriate assumption. Near universal participation is assumed in this case because Model 2 would provide for a benefit offset such that participants would gain by having an account as long as their individual account real yields (net of administrative expenses) are not 1 percent or more below what would have been achieved by investing solely in long-term Treasury bonds. Thus, even the most conservative investor could invest solely in Treasury bonds and be assured of coming out ahead as a result, as long as administrative expenses are less than 100 basis points (this is assumed to be true for the specified accounts).

For Model 3, less than 100 percent participation would be expected, and the 67-percent assumption is likely to be the most appropriate of the assumptions considered. Participation under Model 3 would be lower than under Model 2 for two reasons. First, in order to participate, workers would need to make an additional contribution “out of pocket” of 1 percent of OASDI taxable earnings. Even with a subsidy of up to one half from the General Fund of the Treasury, this additional contribution would result in many low earners not participating. Second, for the personal account contribution that is financed by redirecting a portion of the worker’s payroll taxes, the benefit offset that will later be applied is greater than under Model 2. This would reduce somewhat the likelihood of a net gain from opting for the personal account (assuming the benefit offset yield rate is computed as 2.5 percent over realized or expected inflation) or reduce the size of the assured net gain for the conservative investor (assuming the benefit offset yield rate is computed as 0.5 percent below the realized or expected market yield on Treasury bonds.).

b. Personal Account Accumulation

Workers are assumed to maintain personal-account portfolios that would have an average distribution of 50 percent in equity, 30 percent in corporate bonds, and 20 percent in U.S. Treasury long-term bonds. Equities are assumed to have an ultimate real annual yield of 6.5 percent, and corporate bonds are assumed to have an ultimate real annual yield of 3.5 percent, or one half of one percentage point higher than assumed for long-term U.S. Treasury bonds. An ultimate assumption of an annual administrative expense of 30 basis points is assumed for the accounts in all three models, consistent with the specifications of the account management.

These assumptions are critical for estimates of the expected effect of possible portfolio choices and yields on benefit levels. Thus, estimates of expected benefit levels for individuals under the models cover a range of possible yields, in order to provide a sensitivity analysis. On the other hand, aggregate financial estimates for the Trust Funds and the Federal Unified Budget are much less affected by variation in the yield achieved on personal accounts (because the benefit offsets are based on Treasury bond yield rates and thus are not affected by variations in the real yield on either equities or corporate bonds). A relatively small effect on aggregate financial status is realized from variation

in personal account yields, however, because variations in account accumulations and distributions would also affect the level of trust-fund revenue derived from the taxation of benefits and account distributions. Because this affect is small, no sensitivity analysis to account yield assumptions is provided for aggregate financial estimates.

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

The expected ultimate average real portfolio yield for personal accounts would thus be 4.6 percent, net of administrative expense and is calculated as follows:

$$0.5*6.5\% + 0.3*3.5\% + 0.2*3.0\% - 0.3\% = 4.6\%.$$

Due to the large degree of uncertainty associated with both the average portfolio distribution and future returns on equity (and corporate bonds), expected benefit levels are provided for two variations on the expected account yield. The first, referred to a **“Low Yield”** reflects an account yield equal to the assumed real return on long-term Treasury bonds, or 3 percent, less the administrative expense factor. This illustration is consistent with assuming that individuals will:

- Invest more conservatively (100 percent in Treasury bonds),
- Realize lower-than-expected returns on account assets (by 1.9 percentage points), or
- View accounts on a “risk-adjusted” basis where all assets are assumed to have an ultimate real risk-adjusted return of 3 percent.

The second variation of the yield assumption is referred to as **“High Yield”** and is consistent with assuming that individuals will:

- Invest more heavily in equity (60 percent rather than 50 percent) and less in bonds (24 percent in corporate bonds rather than 30 percent, and 16 percent in Treasury bonds rather than 20 percent), or
- Realize higher-than-expected returns on account assets (0.32 percentage point higher on all assets or 0.64 percentage point higher on equities for an ultimate real equity yield of over 7.1 percent).

It should be noted that the difference between the central and high yield assumptions is smaller than the difference between the central and low yield assumptions. This is not intended to suggest that achieving the low yield over a lifetime is as likely as the achieving the high yield for an individual who invests 50% in equity, as assumed for the central assumption. For this investment portfolio the high yield is assumed to be more likely to occur than the low yield.

A range of administrative expense factors was assumed for individual accounts proposed by the 1994-96 Advisory Council on Social Security. For the Individual Account (IA) plan, individual contributions were assumed to be collected and recorded by a central institution, invested in large blocks with financial institutions, and invested in a limited number of indexed funds. Based on experience of the Teachers Insurance and Annuity Association College Retirement Equities Fund (TIAA-CREF) and the Federal Employee Thrift Savings Plan (TSP), it was assumed that the IA plan could be administered with an expense of 10.5 basis points per year. For the Personal Security Accounts (PSAs), individual accounts were assumed to be invested on an individual basis, resulting in an annual administrative expense of 100 basis points. Because the Commission's specifications for personal accounts are closer to the individual accounts for the IA plan than to the individual accounts for the PSA plan, an average ultimate administrative expense charge of 30 basis points appears to be reasonable. Some additional expense over the accounts of the IA plan seems reasonable because investment alternatives are intended to be much broader, including, at a minimum, more than one balance fund and potentially some actively managed funds.

c. Personal Account Distributions

Under these models, workers would not have access to account balances before retirement, defined as entitlement to Social Security retired worker, aged spouse, or aged surviving spouse benefits. In the event of a worker's death *prior* to such entitlement, the account balance would be transferred to the account of the surviving spouse, if any. In the absence of a current spouse, the account assets would pass to the worker's estate.

Upon the divorce of a worker who has not become entitled to benefits (as described above), the worker's personal account assets that accumulated during the marriage (including contributions during the marriage and returns on all assets during the marriage) are divided equally between the worker's and former spouse's accounts. If the worker has already become entitled to benefits (as described above) before the divorce, the annuity purchased with account assets will remain in force.

Any additional assets that accrue to a worker's account after annuitization, whether due to additional work, divorce or inheritance, are assumed to be immediately annuitized based on the worker's then current age and marital status. While full annuitization is assumed for the purpose of estimates presented in this memorandum, some degree of lump-sum distributions would be allowed under the Commission models. To the extent that a lump-sum distribution is selected, the available annuity would be diminished. However, the value to the retiree of the partial lump sum distribution would presumably be at least as great as the amount of annuity income that is foregone.

Estimates of benefit payments to individuals are computed for two different forms of life annuities. These are a CPI-indexed life annuity, and a variable life annuity. For the CPI-indexed life annuity, a net real yield equal to the assumed real yield on long-term Treasury bonds is assumed. This would require that annuity assets actually be invested with an expectation of a higher yield than for Treasury bonds in order to offset the

administrative expense incurred by the annuity provider. For the purpose of these estimates, the administrative expense is assumed to be 30 basis points. This low expense factor for a CPI-indexed life annuity would likely only be provided by the Federal government, or by private financial institutions with special investment arrangements with the Federal government.

For the variable annuity, the “expected” level of monthly retirement income is greater because the Commission specified that the variable annuity would be invested in the same manner after retirement as before retirement, generally 50 percent in equities. Such investment in a variable annuity would lead to substantial variation in annual increases in annuity amounts. Increases in annual payments for an annuity at the rate of the increase in the CPI could not be assured. In fact, in years when the variable annuity portfolio substantially underperformed the expected return, benefit payments from the annuity could even be lower than in the prior year. Because of this uncertainty, we believe that variable life annuities would be selected by relatively few individuals. Thus, we put primary emphasis on estimates reflecting distributions with CPI-indexed life annuities.

V. Financial Estimates: Aggregate Measures of Effects on OASDI Financing, Individual Accounts, and the Federal Unified Budget

The attached tables reflect effects on the financial status of the OASDI program, including the benefit offsets based on contributions to personal accounts. For each model, the value of these benefit offsets is determined by accumulating the prior account contributions at the model-specific benefit offset yield rate (see descriptions of individual models above).

It is important to note that the two methods considered for computing the benefit offset yield rate would have the same “expected” effects on net benefit levels and on the financial status of the OASDI program. However, these two methods would have different effects on the sensitivity of benefit levels and OASDI financial status to variation in actual Treasury bond yields. If the benefit offset yield rate is computed as a fixed-percentage difference from realized or expected Treasury bond yields, then the net benefit level for the conservative investor (who invests solely in Treasury bonds) will be insensitive to (unaffected by) variation in actual bond yields. In addition, the sensitivity of OASDI financial status will ultimately be about the same as if no one opted for the personal accounts because variation in actual bond yields affects the present value of both payroll tax revenue redirected for PA contributions and benefit offsets to the same degree. But if the benefit offset yield rate is computed as a fixed percentage difference from the realized or expected inflation rate, then the sensitivity of net benefit levels to variation in actual Treasury bond yields will be much greater and the sensitivity of OASDI financial status will be considerably lower. This is true because, for example, a lower-than-expected Treasury bond yield will directly reduce the net benefit, dollar for dollar (because the offset is unaffected). While on the other hand, the OASDI Trust Funds will be partially insulated from the effects of the lower-than-expected bond yield because the benefit offset is unaffected.

a. Financial Operations of the Combined OASDI Trust Funds

Attached are eleven tables (on pages 32 - 42) that provide a standard analysis of the financial effects of the three models, or plans, on the financial status of the Social Security OASDI program. These tables provide annual and 75-year-summarized cost rates, income rates, and balances for the OASDI program under the plans with the different participation rates described above. The first of these tables provides the estimated financial status of the OASDI program under present law. This table also reflects the financial status of the OASDI program under Model 1 if 0-percent participation in the personal account option were assumed (Model 1 specifies no basic changes to the OASDI program).

For Plan (Model) 1, four tables are provided. The first two are based on Plan 1 assuming that the 2-percent personal account contribution is financed completely with a redirect of OASDI payroll tax revenue. These are *Plan 1—67p*, which reflects a 2/3 individual account participation rate and *Plan 1—100p*, which reflects a 100 percent individual account participation rate. The third table, *Plan 1(1+1) 67p*, assumes that the 2-percent personal account contribution is financed one half with a redirect of OASDI payroll tax revenue and one half with General Fund revenue, and that the individual account participation rate is 2/3. The fourth table, *Plan 1(0+2) 67p*, assumes that the 2-percent personal account contribution is financed entirely with General Fund revenue, and that the individual account participation rate is 2/3. As indicated earlier, the nature of Model 1 suggests that 2/3 participation is the most reasonable assumption of the three discussed. No table is included for zero participation, because in this case, Plan 1 would be the same as current law.

For Plan 2, three tables are provided. The first, *Basic Plan 2*, includes the basic provisions of the Plan that affect OASDI benefit levels, but excludes both the individual account option and the provision for additional transfers to the Trust Funds from the General Fund of the Treasury as needed for OASDI solvency. The second, *Plan 2T 67p*, includes all provisions of the Plan and assumes 2/3 participation in the individual account option. The third, *Plan 2T 100p*, includes all provisions of the Plan and assumes 100 percent participation in the individual account option.

For Plan 3, three tables are provided. The first, *Basic Plan 3*, includes (1) the basic provisions of the Plan that affect OASDI benefit levels and (2) the specified, or dedicated transfers, from the General Fund of the Treasury starting 2005. However, *Basic Plan 3* excludes (1) the individual account option and (2) the provision for additional transfers to the Trust Funds from the General Fund of the Treasury as needed for OASDI solvency. The second, *Plan 3T 67p*, includes all provisions of the Plan and assumes 2/3 participation in the individual account option. The third, *Plan 3T 100p*, includes all provisions of the Plan and assumes 100 percent participation in the individual account option. As indicated earlier, the nature of Model 3 suggests that 2/3 participation is the most reasonable assumption of the three discussed.

The table below summarizes the effects of the three models on the financial status of the OASDI Trust Funds under the 67 and 100 percent participation assumptions. More detailed analysis is provided in the attached tables.

Summary of Estimated Model Effects on OASDI Financial Status				
	OASDI Actuarial Balance (percent of payroll)	First Year Cash Flow Becomes Negative	Year Cash Flow Returns to Positive	Year of OASDI Trust Fund Exhaustion
Present Law	-1.86	2016	NA	2038
Model 1 (2+0)				
67% Participation *	-2.18	2012	NA	2030
100% Participation	-2.34	2009	NA	2026
Model 1 (1+1)				
67% Participation *	-1.57	2014	NA	2034
Model 1 (0+2)				
67% Participation *	-0.96	2016	NA	2042
Model 2				
67% Participation * <u>1/</u>	0.13	2010	2059	NA
100% Participation * <u>1/</u>	0.16	2006	2058	NA
Model 3				
67% Participation *	0.02	2014	2072	NA
100% Participation	0.07	2011	2062	NA

* Most likely individual account participation rate.

1/ For Model 2, 67-percent participation is considered more likely if the benefit offset yield rate is computed as 2 percent over the realized or expected inflation rate, but 100 percent participation is considered more likely if computed as 1 percent below the market yield on Treasury bonds.

Based on the intermediate assumptions of the 2001 Trustees Report and other assumptions described in the text.

For each year 2001 through 2076, the tables also provide:

- The trust fund ratio (TFR) which is defined as OASDI Trust Fund assets as of the beginning of the year, expressed as a percentage of the outgo from the OASDI Trust Fund during the year;
- The marginal change in the OASDI contribution rate (contribution rate *directed to the Trust Funds*), which reflects the change, from the prior year, in the OASDI contribution rate ¹;
- The net OASDI contribution rate; and
- The change in the net OASDI contribution rate from that specified in current law broken out by (1) the change from payroll taxes redirected from the Trust Funds to individual account and (2) the change due to transfers from the General Fund to the Trust Funds.

¹ Includes the amount of payroll taxes redirected from the Trust Funds to individual accounts and the transfers from the General Fund to the Trust Funds, expressed as a percent of taxable payroll.

b. Additional Aggregate Values for Trust Funds and Personal Accounts

A second set of ten tables for these models is attached (on pages 43 - 52) with a letter “a” following the table name. Each of these tables provides three additional sets of values. All values are expressed on a present value basis, i.e., current dollar values discounted to January 1, 2001 using the projected OASDI Trust Fund yield rates. These values are given for each year 2001 through 2076 and include:

- Trust Fund levels under present law (PL) and the Plan as of the end of the year,
- Net current accrual for future benefit offset under the Plan as of the end of the year,
- Annual cash flows of the personal accounts, and
- Personal account accumulations as of the end of the year.

The Trust Fund levels reflect the projected assets accumulated in the OASDI Trust Funds at the end of each year. Because the OASDI program does not have legal authority to borrow, these assets cannot become negative. Negative values in these tables are hypothetical, assuming the Trust Funds were able to borrow when necessary to fully pay scheduled benefits, with borrowing at the same interest rate specified for special issues to the Trust Funds. A negative value for a specific year represents the unfunded obligation for the period 2001 through the specific year.

Net current accrual for future benefit offset under each Plan is the *currently* accrued hypothetical amount of prior personal account contributions based on redirected payroll taxes that are expected to be applicable as a benefit offset in the future. This amount reflects deductions for accruals that have already been applied as benefit offsets and for accruals that were not applied (or are not expected to be applicable in the future) as offsets because of death by a worker before reaching retirement. It should be noted that these accruals are expressed in present value as of January 1, 2001, discounted at the OASDI Trust Fund yield rates, but that these amounts will actually “grow” through time at the benefit offset yield rate specified in each Plan. Thus, values of accruals at a particular date are not strictly comparable across Plans. It is also important to note that these accruals for future benefit offset are not equivalent to Trust Fund assets, as they are not available for payment of current benefits if needed.

Annual dollar flows and accumulations of the personal accounts are presented in the last three columns of these tables. These estimates are based on very specific assumptions that all personal account assets are converted to CPI-indexed life annuities at retirement (see description in the section on assumptions above). In practice, many individuals would likely annuitize only part of their personal account accumulation so estimated annuity assets are overstated to some degree. However this overstatement might be partially offset to the extent that some individuals would choose to purchase a variable life annuity, as described above, instead of the CPI-indexed life annuity. Total personal account and annuity assets (referred to as IA/Annuity assets in the tables) include both the assets of personal accounts held prior to retirement, and the assets held by the annuity provider after retirement. If the personal accounts are considered as a part of “Social

Security”, it is reasonable to combine the amounts of Trust Fund assets and personal accounts for a representation of total system assets.

The table below summarizes the effects of the three models on system assets and the net current accrual for future benefit offset under each Plan. More detailed analysis is provided in the attached tables.

Summary of Estimated Model Effects on System Assets and Future Obligations As of January 1, 2076			
(present value in billions of dollars, discounted to 1-1-2001)			
	OASDI Trust Fund Assets 1/	Net Current Accrual for Future Benefit Offset	Current Personal Account and Annuity Assets
Present Law	-3,230	NA	NA
Model 1 (2+0)			
67% Participation *	-3,826	861	1,080
100% Participation	-4,124	1,291	1,619
Model 1 (1+1)			
67% Participation *	-2,708	861	1,080
Model 1 (0+2)			
67% Participation *	-1,590	861	1,080
Model 2			
67% Participation * <u>2/</u>	380	735	1,290
100% Participation * <u>2/</u>	423	1,102	1,935
Model 3			
67% Participation *	185	673	1,602
100% Participation	270	1,010	2,401

* Most likely individual account participation rate.

1/ Negative values are the OASDI unfunded obligation for the period 2001 through 2075.

2/ For Model 2, 67-percent participation is considered more likely if the benefit offset yield rate is computed as 2 percent over the realized or expected inflation rate, but 100 percent participation is considered more likely if computed as 1 percent below the market yield on Treasury bonds.

Based on the intermediate assumptions of the 2001 Trustees Report and other assumptions described in the text.

c. Effects on Annual Federal Unified Budget Balances

A third set of ten tables for these models is attached (on pages 53 - 62) with a letter “b” following the table name. Each of these tables provides a rough estimate of the effects of the Plan on the annual Federal unified budget balance for *calendar years* 2004 through 2076. All values in these tables are presented in constant 2001 dollars (i.e., dollar amounts that are indexed back to 2001 based on the Consumer Price Index, CPI).

These estimates are based completely on the intermediate assumptions of the 2001 Trustees Report, including the trust-fund interest assumption (plus additional assumptions discussed above), and thus are not consistent with projections made by CBO and OMB (which use different assumptions). However, differences in payroll and benefit estimates are not large during the first 10 projection years so these values can be viewed as very rough approximations of the magnitude of effects on the unified budget balances through this period.

The first column in these tables provides the estimated contributions to personal accounts financed by redirecting payroll taxes plus, in the case of Plan 1 (1+1) and Plan 1 (0+2), the portion of the contributions financed from the General Fund of the Treasury. These contributions by the Federal government count as expenditures for the Federal unified budget.

A second column provides the amount of dedicated General Fund transfers to the Trust Funds (beginning 2005) specified for Plan 3, and is blank for other Plans. While these values are included in this table, it should be noted that such transfers do not affect the unified budget balance.

The third column provides the estimated amount of OASDI benefit offset based on earlier contributions to personal accounts. These benefit offsets reduce the amount paid to beneficiaries by the Trust Funds and thus reduce expenditures for the unified budget.

The fourth column provides the amount of other changes in OASDI cash flow under the Plan. These include specified modifications to OASDI benefit levels and changes in revenue to the Trust Funds based on taxation of benefits and disbursements from personal accounts. Additional transfers from the General Fund to the Trust Funds to achieve OASDI solvency are not included in this amount because they do not affect the unified budget balance.

A fifth column provides the estimated amount of income tax credit provided by the General Fund as a subsidy for the 1-percent out-of-pocket personal account contributions under Plan 3, and is blank for other Plans. This amount is an expenditure for the unified budget balance.

The sixth column provides the estimated “Change in Annual Unified Budget Cash Flow” for each Plan. This value reflects the amounts in the first 5 columns, and thus excludes the effects on interest obligations of the Federal government on publicly held debt.

The seventh column provides the estimated cumulative effect of the Plan through the end of the year on the amount of Federal debt held by the public, including interest in these changes. Note that these estimates assume that no other changes in Federal spending or income will occur other than those directly related to the Plan.

The eighth and final column provides the estimated “Change in Annual Unified Budget Balance”, which includes changes in interest obligations to the public.

d. Annual Cash Flows from the General Fund of the Treasury to the OASDI Trust Funds

A fourth set of ten tables for these models is attached (on pages 63 - 72) with a letter “c” following the table name. Each of these tables provides the estimated annual net cash flow from the General Fund of the Treasury to the OASDI Trust Funds. All values in these tables are presented in constant 2001 dollars (i.e., dollar amounts that are indexed back to 2001 based on the CPI).

For comparison purposes, cash flow estimates are provided in each table for three different cases:

- The Plan, assuming borrowing from the General Fund if needed to pay benefits (borrowing is expected to occur for Plan 1 only)
- Present Law OASDI modified to allow borrowing from the General Fund to pay scheduled benefits, and
- Present Law OASDI where only benefits payable with current financing provisions are being paid.

For each of these cases three columns are provided. The first column shows either estimates of the amount of borrowing needed from the General Fund to pay benefits or estimates of the amount of transfers from the General Fund as appropriate to the Plan. The second column is the estimated total net cash flow from the General Fund to the Trust Funds under the Plan, including transfers and borrowing. The third column is the total net cash flow for years starting with 2001 through the end of the given year, including accumulated interest cash flows for the period.

e. Aggregate Measures of OASDI Cash Flow for the 75-Year Period

Five aggregate measures of OASDI program cash flow are discussed in this section. The first two, actuarial balance and trust fund assets, are initially introduced earlier in this section. Aggregate gross cash-flow requirements from General Revenue (measure 4) and transition investment (measure 5) are presented in the Commission Report. The aggregate net cash-flow requirements from General Revenue, measure 5, is closely related to measure 4. All values presented below in the discussion of measures 3, 4, and 5 are based on 2/3 participation and, in the case of Model 1, assume all contributions are redirected from payroll taxes (Model 1 (2+0)).

1) Actuarial Balance: The traditional summary measure of cash flow for the OASDI Trust Funds over the 75-year long range valuation period is the actuarial balance. The actuarial balance expresses the net cash flow to and from the Trust Funds during the valuation period as a percentage of the effective taxable payroll (i.e., the tax base) for the period. Also included in the actuarial balance is the level of assets held in the Trust Funds at the beginning of the valuation period, and the cost of having a “contingency reserve” in the Trust Funds at the end of the period equal to the annual cost of the program. All values included in the actuarial balance are calculated on a present value basis. Thus, the actuarial balance provides a measure of whether the OASDI program

will have sufficient net cash flow during the period, combined with starting assets in the Trust Funds, to allow for payment of scheduled benefits while leaving a reasonable contingency reserve at the end of the period. The estimated OASDI actuarial balance for present law and for each of the Commission's Plans is presented in section V.a., above.

2) *Trust Fund Assets*: The dollar level of assets held in the OASDI Trust Funds (also referred to as Trust Fund balance) at the end of the 75-year valuation period provides an aggregate measure of the net cash flow of the program over the valuation that is closely related to the actuarial balance. The Trust Fund balance at the end of the period, in present value terms, is equal to the net cash flow during the period plus the Trust Fund balance at the start of the period. In practice, the Trust Fund balance is not permitted to become negative because the OASDI program has no statutory authority to borrow. However, a theoretical projection of the Trust Fund balance as if borrowing were permitted is useful because it allows for a negative value which represents the accumulated additional revenue needed to fully pay scheduled benefits throughout the valuation period. This negative value, \$3.2 trillion in present value dollars (discounted to 1-1-2001) under present law using the intermediate assumptions of the 2001 Trustees Report, is referred to as the "unfunded obligation" for the program. These values are presented for present law and each of the Commission's proposals in section V.b. above.

3) *Aggregate Net Cash-Flow Requirements from General Revenue*: Aggregate net cash-flow requirements from general revenue are more closely related to unified budget analysis than to the analysis of the specific financial needs of the Trust Funds. Aggregate net cash-flow requirements are computed consistent with the budget convention that assumes all scheduled benefits will be paid and that general revenue will finance any shortfall in OASDI financing. Moreover, this measure assesses the total cash flow from general revenues, including amounts that may be redeemed from Trust Fund assets. As a result, the total OASDI net cash-flow requirement from general revenue is \$4.2 trillion in present value dollars (discounted to 1-1-2001) under present law for the 75-year period. This is \$1 trillion higher than the unfunded obligation for the program, the difference being precisely the amount of Trust Fund assets held at the beginning of the period. Assuming 2/3 participation in the individual account option in each case, the aggregate net cash-flow requirement from general revenue would be \$4.8 trillion, \$2.3 trillion, and \$2.9 trillion for Models 1, 2, and 3, respectively, in present value dollars as of 1-1-2001. Thus, net OASDI cash flow requirements from general revenue are increased by \$0.6 trillion for Model 1 and reduced by \$1.9 trillion and \$1.3 trillion for Models 2 and 3, respectively.

4) *Aggregate Gross Cash-Flow Requirements from General Revenue*: Aggregate **gross** cash-flow requirements from general revenue are greater than net cash-flow requirements because they consider only years in which the OASDI program has a negative cash flow, and ignore years in which cash flow is positive. This approach is consistent with a view that years of negative OASDI cash-flow place a burden on general revenue sources that cannot be compensated for with positive OASDI cash flow in other years. Under current law and the intermediate assumptions of the 2001 Trustees Report, the gross OASDI cash-flow requirement from general revenue is \$5.1 trillion in present value dollars

(reflecting only years of negative cash flow starting in 2016). Assuming 2/3 participation in the individual account option in each case, the aggregate gross cash-flow requirement from general revenue would be \$5.3 trillion, \$2.8 trillion, and \$3.4 trillion for Models 1, 2, and 3, respectively, in present value dollars as of 1-1-2001. Thus, gross OASDI cash flow requirements from general revenue are increased by \$0.2 trillion for Model 1 and reduced by \$2.3 trillion and \$1.7 trillion for Models 2 and 3, respectively. These values are shown as item 3 in the summary table on page 18 of the Commission's Report.

5) "*Transition Investment*": There is no generally-accepted definition of what has been loosely referred to as the "transition cost" of changing the OASDI program. The concept of "transition investment", included as item 6 in the summary table on page 18 of the Commission's Report, provides one measure related to this concept. The designation as "transition investment" rather than transition cost is reasonable when additional costs are generated by a process designed to increase the extent of advance funding for the program.

The concept of "transition investment" adopted by the Commission is related to the estimated effects of the proposal on the net annual OASDI program cash-flow balance relative to all other entities, assuming borrowing by the Trust Funds were permitted when needed to pay benefits specified in the law. This cash flow is referred to as the OASDI annual balance (i.e., the difference between annual program cost with the payment of benefits specified in the law and annual income, excluding bond redemptions and borrowing from the General Fund of the Treasury).

Transition investment in any year is defined as the extent to which the OASDI net cash-flow balance (excluding any borrowing or bond purchase/redemptions from the General Fund of the Treasury) is lower under the proposal than under current law. Thus, a year for which the OASDI net cash-flow balance is higher under the proposal than under current law is deemed to be a year with no transition investment, even though a substantial contribution toward advance funding may be occurring.

This concept of "transition investment" may be evaluated in two different ways. The first counts any reduction in the annual net OASDI cash flow balance relative to current law (with borrowing authority). This would count a reduction from a present-law positive net cash-flow balance to a smaller positive net cash-flow balance under the proposal as transition investment. This way is consistent with the view that any positive current-law net annual OASDI cash-flow balance for a year would be spent on non-Social-Security Federal government obligations, and thus the transition investment amount for the year would be the full difference between the net OASDI cash flow balances for current law and the proposal.

The second way of interpreting "transition investment" counts only the extent to which the net OASDI cash-flow balance is made negative or more negative than under current law (with borrowing authority). This would NOT count a reduction in present-law positive net OASDI cash-flow balance, except to the extent that the balance is made

negative by the proposal. This way is consistent with the view that any positive current-law net annual OASDI cash-flow balance for a year would be “saved” in the Trust Funds, and thus the transition investment amount for the year can be viewed as being at least partially covered by the current-law surplus.

“Transition Investment” 1/	<u>Model 1 (2+0)</u>	<u>Model 2</u>	<u>Model 3</u>
1. Reduction in annual OASDI net cash-flow balance (including general revenue transfers) relative to current law. 2/			
In trillions of present value dollars	\$1.1	\$0.9	\$0.4
As % of GDP over years included in calculation	0.36	0.49	0.25
2. Extent to which annual OASDI net cash-flow balance (including general revenue transfers) is negative or more negative than under current law. 3/			
In trillions of present value dollars	\$0.7	\$0.4	\$0.1
As % of GDP over years included in calculation	0.29	0.33	0.10

1/ Difference between net annual OASDI cash-flow balance (income minus cost) of proposed model versus present law (with borrowing authority)

2/ Assumes current-law OASDI surplus would not be “saved” for Social Security financing.

3/ Assumes current-law OASDI surplus would be “saved” for Social Security financing.

Note: Above values assume 2/3 participation for all three models.

The table above provides estimated values for these two ways of considering the concept of “Transition Investment” for the three models developed by the Commission (Model 1 is with all individual account contributions financed by redirecting payroll tax revenues). These values are shown in the summary table in item 6 on page 18 of the Commission Report.

The years having a transition investment under the first way (i.e., where any reduction in OASDI net cash-flow balance is estimated) are 2004 through 2042, 2004 through 2025, and 2004 through 2020, for Models 1, 2, and 3, respectively. The years having a transition investment under the second way (i.e., where the estimated net OASDI cash-flow balance is made negative or more negative) are 2012 through 2042 for Model 1, 2010 through 2025 for Model 2, and 2014 through 2020 for Model 3. The dollar values given in the above table are present-value totals over these periods. Dividing these totals by the present-value total of GDP for the corresponding years yields the values expressed as a percent of GDP.

VI. Financial Estimates: Individual Measures of Effects on Retirement Benefits

For the purpose of this analysis, selected hypothetical individuals are assumed to participate fully in the available personal account option and to fully annuitize their account upon retirement (benefit entitlement) at age 65. Illustrations are provided for hypothetical workers retiring at 65 in 2012, 2022, 2032, 2042, 2052, and 2075.

For these hypothetical cases, earnings and personal account contributions are assumed to begin at age 21 (22 for steady maximum workers), or in the year 2004 if later. Annuities

for married couples are assumed to be joint, with the survivor receiving two thirds of the monthly payment that is provided while both spouses are alive and entitled for benefits.

Four illustrative earnings levels are included. The “scaled” low, medium, and high earners have earnings patterns that reflect the relative probability of work and relative level of earnings by age during the period 1988-97. The absolute level of earnings in each case was set so that the Average Indexed Monthly Earnings (AIME) would be equal to that for a “steady” earner with low, average, and high earnings, respectively. For the steady average earner, earnings are at the SSA average wage index (AWI) for each year. For the steady low earner, earnings are at 45 percent of the AWI. The steady high earner has earnings at 160 percent of the AWI. The steady maximum worker is assumed to earn at or above the SSA taxable maximum each year prior to retirement. While these cases are hypothetical, the PIA for the medium (or steady average) earner is close to the median PIA for newly retired worker beneficiaries. See Social Security Administration Actuarial Note Number 144 for a full description of these hypothetical cases.

a. Expected Future Total Personal Account Accumulations at Retirement

The table on page 73 titled “Wealth Estimated Accumulation of Personal Account Assets at Retirement at Age 65 for Plans 1, 2, and 3” provides estimated accumulated IA assets at age 65, just prior to annuitization, for the cases described above. As described in the section on assumptions, values are provided for the expected average personal account investment portfolio (50 percent in equity, 30 percent in corporate bonds, and 20 percent in Treasury bonds), as well as for a “Low Yield” and a “High Yield” sensitivity analysis. Estimates are provided in constant 2001 dollars.

b. Expected Total Benefit Levels at Retirement

Illustrations of benefit levels under these Plans are provided in 12 attached tables (pages 74 - 85). The first set of 6 tables is based on an assumption of full annuitization of personal account assets at retirement with a CPI-indexed life annuity on a joint and 2/3 survivor basis. This is believed to be the most likely choice for retirees as it would assure payments that would increase with the cost of living, and that would match the indexation of both OASDI benefit levels and benefit offsets under the Plan. The second set of 6 tables is based on the assumption of full annuitization of personal account assets with a variable annuity invested as before retirement. As discussed in the assumptions section, the variable annuity would provide a higher expected payment but could not assure increases from one year to the next that would keep up with the cost of living. In addition, the Models would permit a partial lump-sum distribution of an individuals account balance at retirement. Individuals who take partial lump-sum distributions would have lower monthly annuity payments based on the remaining personal account balance.

For each type of annuitization (CPI-indexed or variable), two tables are presented for each Plan 1, 2, and 3. One table illustrates the benefit levels of a married worker with a spouse who has earnings equal to those of the worker (2-earner couple). The other table illustrates the benefit levels of a worker with a non-earner spouse (1-earner couple).

Monthly benefit estimates are presented in constant 2001 dollars as scheduled under present law, and as estimated under the Plan. Benefits are the amount payable based on a worker's earnings, and thus reflect one half of the couple's benefit in the 2-earner case, and the total couple benefit in the 1-earner case. Both spouses are assumed to reach 65 in the same year. Plan (proposal) benefits reflect:

- % Basic Change for All—The percentage change in the benefit scheduled under present law based on the basic provisions of the Plan (note that this change applies to disability and survivor benefit cases, as well as to retirement cases),
- % for PRA annuity—The estimated monthly amount of the life annuity available based on full annuitization of the personal account accumulation assuming both spouses retire at age 65, expressed as a percentage of the present law scheduled benefit, and
- % for Benefit Offset—The estimated amount of the benefit offset based on personal account contributions under the Plan, expressed as a percentage of the present law scheduled benefit.


The proposal benefit, reflecting the three factors above is presented in the tables first in constant 2001 dollars, but also in relative terms as a :

- Percent of the present law scheduled benefit,
- Percent of the present law payable benefit (reflecting reductions that would be needed starting in 2038), and
- *Percent of 2001 Real Benefit*—This is the ratio of the benefit payable under the Plan in constant 2001 dollars, to the amount payable to a worker with a comparable relative earnings history who retired at 65 in 2001.

For 2-earner married couples with unequal earnings, results would be between those shown for the 2-earner couples with equal earnings and for 1-earner couples. Single-life-annuity payment for an individual who is not married at retirement would be somewhat larger than for a married person with the same personal account.

Finally, it should be noted that estimates of personal account annuities and benefit offset amounts may tend to be somewhat overstated. Mortality for the individual account annuities calculated here is assumed to be the average for the total U.S. population, for all income levels. In fact, the expected mortality experience of annuitants, weighted by amount of assets to be annuitized, would be better (lower death rates) than for the general population. Individuals with lower accumulated assets due to lower lifetime earnings, or disability prior to retirement, tend to have higher mortality, all else being equal. Thus, the use of general-population mortality in these illustrations tends to understate the weighted life expectancy of annuitants, and overstate the size of the monthly annuity from individual account accumulations.


Stephen C. Goss


Alice H. Wade

Present Law	Present Law Social Security With Ult Real TF Int Rate of		3.0	IA Cntrb	0 %	Ben Offset	0.0 %	Changes in OASDI Contrib Rt from--	
Year	Cost Rate	Income Rate	Annual Balance	TFR 1-1-yr	Marginal Change in OASDI Contrib Rate	Net OASDI Contrib Rate**	PRA Contribs	Addl Net GF Transfer	
2001	10.49	12.72	2.23	239					
2002	10.42	12.72	2.30	264					
2003	10.43	12.73	2.29	289					
2004	10.48	12.74	2.26	313	0.000				
2005	10.56	12.75	2.19	335	0.000				
2006	10.64	12.75	2.11	357	0.000				
2007	10.77	12.76	1.99	376	0.000				
2008	10.93	12.78	1.85	393	0.000				
2009	11.12	12.79	1.67	407	0.000				
2010	11.34	12.81	1.47	419	0.000				
2011	11.56	12.81	1.25	428	0.000				
2012	11.83	12.82	0.99	434	0.000				
2013	12.13	12.83	0.70	437	0.000				
2014	12.46	12.84	0.38	437	0.000				
2015	12.80	12.85	0.05	435	0.000				
2016	13.15	12.86	-0.29	430	0.000				
2017	13.52	12.87	-0.64	423	0.000				
2018	13.89	12.89	-1.00	414	0.000				
2019	14.26	12.90	-1.36	403	0.000				
2020	14.63	12.91	-1.72	390	0.000				
2021	14.97	12.93	-2.04	376	0.000				
2022	15.30	12.95	-2.36	362	0.000				
2023	15.62	12.97	-2.65	345	0.000				
2024	15.92	12.99	-2.93	328	0.000				
2025	16.20	13.00	-3.20	310	0.000				
2026	16.46	13.02	-3.44	291	0.000				
2027	16.71	13.04	-3.67	272	0.000				
2028	16.93	13.05	-3.87	251	0.000				
2029	17.11	13.07	-4.05	230	0.000				
2030	17.28	13.08	-4.19	209	0.000				
2031	17.42	13.09	-4.33	186	0.000				
2032	17.55	13.11	-4.44	164	0.000				
2033	17.65	13.12	-4.53	140	0.000				
2034	17.71	13.13	-4.58	117	0.000				
2035	17.74	13.13	-4.61	93	0.000				
2036	17.76	13.14	-4.62	69	0.000				
2037	17.76	13.15	-4.62	44	0.000				
2038	17.76	13.15	-4.60	19	0.000				
2039	17.73	13.15	-4.58	--	0.000				
2040	17.71	13.16	-4.55	--	0.000				
2041	17.69	13.16	-4.53	--	0.000				
2042	17.68	13.17	-4.51	--	0.000				
2043	17.67	13.17	-4.50	--	0.000				
2044	17.67	13.17	-4.50	--	0.000				
2045	17.67	13.18	-4.50	--	0.000				
2046	17.68	13.18	-4.50	--	0.000				
2047	17.70	13.18	-4.51	--	0.000				
2048	17.72	13.19	-4.53	--	0.000				
2049	17.75	13.19	-4.56	--	0.000				
2050	17.79	13.20	-4.59	--	0.000				
2051	17.83	13.20	-4.63	--	0.000				
2052	17.89	13.21	-4.68	--	0.000				
2053	17.96	13.22	-4.74	--	0.000				
2054	18.03	13.22	-4.80	--	0.000				
2055	18.10	13.23	-4.87	--	0.000				
2056	18.17	13.24	-4.94	--	0.000				
2057	18.25	13.24	-5.00	--	0.000				
2058	18.32	13.25	-5.07	--	0.000				
2059	18.39	13.25	-5.14	--	0.000				
2060	18.46	13.26	-5.20	--	0.000				
2061	18.53	13.27	-5.26	--	0.000				
2062	18.60	13.27	-5.32	--	0.000				
2063	18.66	13.28	-5.38	--	0.000				
2064	18.73	13.28	-5.44	--	0.000				
2065	18.79	13.29	-5.50	--	0.000				
2066	18.85	13.30	-5.56	--	0.000				
2067	18.91	13.30	-5.61	--	0.000				
2068	18.97	13.31	-5.67	--	0.000				
2069	19.03	13.31	-5.72	--	0.000				
2070	19.09	13.31	-5.78	--	0.000				
2071	19.15	13.32	-5.83	--	0.000				
2072	19.21	13.32	-5.89	--	0.000				
2073	19.27	13.33	-5.94	--	0.000				
2074	19.33	13.33	-5.99	--	0.000				
2075	19.39	13.34	-6.05	--	0.000				
2076	19.45	13.34	-6.11	--	0.000				
	Summarized								
	CostRt	IncRt	ActBal	Change in					
2001	OASDI	OASDI	OASDI	ActBal					
-2075	15.44	13.58	-1.86	0.00					

Based on Intermediate Assumptions of the 2001 Trustees Report

Office of the Actuary
Social Security Administration
January 29, 2002

Plan 1(2+0)--67p	2% PRA in 2004, BenOffst@Ryld=CPI+3.5% or Tbond+0.5%	IA Cntrb	2.00 %	Ben Offset	100.0 %
IA toEstate	With Ult Real TF Int Rate of 3.0	Assumed % Elect PA			
at Death <65	Ult Ave Real BenOffstYld Rate of 3.5	66.7%			
If No Survivor	Ave BenOffst Annuity Net Yld Rate of 3.5	Marginal Change in OASDI Contrib Rate	Net OASDI Contrib Rate**	Changes in OASDI Contrib Rt from--	
TaxIDisburse	Cost	Income	Annual Balance	TFR 1-1-yr	PRA Addl Net GF Transfers
Year	Rate*	Rate	Balance	1-1-yr	Contribs
2001	10.49	12.72	2.23	239	12.40
2002	10.42	12.72	2.30	264	12.40
2003	10.43	12.73	2.29	289	12.40
2004	10.48	11.58	1.10	313	11.24
2005	10.56	11.57	1.01	325	-0.020
2006	10.64	11.56	0.91	335	-0.020
2007	10.77	11.55	0.78	343	-0.012
2008	10.93	11.55	0.62	350	-0.012
2009	11.12	11.56	0.44	354	-0.012
2010	11.32	11.56	0.24	355	-0.012
2011	11.53	11.55	0.02	354	-0.012
2012	11.79	11.55	-0.24	351	-0.012
2013	12.08	11.55	-0.53	345	-0.012
2014	12.39	11.55	-0.84	338	-0.006
2015	12.71	11.56	-1.15	327	-0.004
2016	13.05	11.57	-1.48	315	-0.005
2017	13.39	11.57	-1.82	301	-0.004
2018	13.74	11.58	-2.16	285	-0.005
2019	14.09	11.59	-2.50	268	-0.004
2020	14.43	11.59	-2.83	248	-0.005
2021	14.74	11.61	-3.13	228	-0.004
2022	15.04	11.63	-3.42	207	-0.003
2023	15.32	11.64	-3.68	184	-0.003
2024	15.59	11.66	-3.93	161	-0.003
2025	15.83	11.67	-4.16	137	-0.003
2026	16.05	11.69	-4.37	111	-0.003
2027	16.26	11.70	-4.55	85	0.000
2028	16.43	11.72	-4.71	58	0.000
2029	16.57	11.74	-4.84	31	0.000
2030	16.69	11.75	-4.94	2	0.000
2031	16.78	11.76	-5.02	--	0.000
2032	16.86	11.78	-5.08	--	0.000
2033	16.90	11.79	-5.12	--	0.000
2034	16.91	11.80	-5.11	--	0.000
2035	16.89	11.80	-5.08	--	0.000
2036	16.85	11.81	-5.04	--	0.000
2037	16.79	11.82	-4.97	--	0.000
2038	16.72	11.82	-4.90	--	0.000
2039	16.63	11.83	-4.81	--	0.000
2040	16.54	11.83	-4.71	--	0.000
2041	16.46	11.84	-4.62	--	0.000
2042	16.38	11.84	-4.54	--	0.000
2043	16.30	11.84	-4.45	--	0.000
2044	16.22	11.85	-4.37	--	0.000
2045	16.15	11.85	-4.30	--	0.000
2046	16.09	11.86	-4.23	--	0.000
2047	16.02	11.87	-4.16	--	0.000
2048	15.97	11.87	-4.10	--	0.000
2049	15.92	11.88	-4.05	--	0.000
2050	15.89	11.88	-4.01	--	0.000
2051	15.88	11.89	-3.99	--	0.000
2052	15.88	11.90	-3.98	--	0.000
2053	15.88	11.91	-3.98	--	0.000
2054	15.90	11.91	-3.98	--	0.000
2055	15.91	11.92	-3.99	--	0.000
2056	15.93	11.93	-4.01	--	0.000
2057	15.96	11.94	-4.02	--	0.000
2058	15.99	11.95	-4.04	--	0.000
2059	16.01	11.95	-4.06	--	0.000
2060	16.04	11.96	-4.08	--	0.000
2061	16.07	11.97	-4.10	--	0.000
2062	16.10	11.98	-4.12	--	0.000
2063	16.13	11.98	-4.15	--	0.000
2064	16.16	11.99	-4.17	--	0.000
2065	16.20	12.00	-4.20	--	0.000
2066	16.23	12.00	-4.23	--	0.000
2067	16.27	12.01	-4.26	--	0.000
2068	16.31	12.01	-4.29	--	0.000
2069	16.35	12.02	-4.33	--	0.000
2070	16.39	12.03	-4.36	--	0.000
2071	16.43	12.03	-4.40	--	0.000
2072	16.47	12.04	-4.44	--	0.000
2073	16.52	12.04	-4.48	--	0.000
2074	16.57	12.05	-4.52	--	0.000
2075	16.62	12.05	-4.56	--	0.000
2076	16.67	12.06	-4.61	--	0.000
Summarized					
	CostRt	IncRt	ActBal	Change in	
2001	OASDI	OASDI	OASDI	ActBal	
-2075	14.55	12.37	-2.18	-0.32	

Based on Intermediate Assumptions of the 2001 Trustees Report
IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
* Net of Benefit Offset

Office of the Actuary
Social Security Administration
January 29, 2002

Plan1(2+0)--100p 2% PRA in 2004, BenOffst@Ryld=CPI+3.5% or Tbond+0.5%					IA Cntrb	2.00 %	Ben Offset	100.0 %
IA toEstate					Assumed % Elect PA			
With Ult Real TF Int Rate of 3.0								
at Death <65					100.0%			
Ult Ave Real BenOffstYld Rate of 3.5								
If No Survivor								
Ave BenOffst Annuity Net Yld Rate of 3.5								
TaxIADisburse	Cost	Income	Annual	TFR	Marginal	Net	Changes in OASDI	
Year	Rate*	Rate	Balance	1-1-yr	Change	OASDI	PRA	Addl Net GF
					in OASDI	Contrib	Contribs	Transfer
					Contrib Rate	Rate**		
2001	10.49	12.72	2.23	239		12.40		
2002	10.42	12.72	2.30	264		12.40		
2003	10.43	12.73	2.29	289		12.40		
2004	10.48	11.00	0.52	313	-1.736	10.66		1.74
2005	10.56	10.98	0.42	319	-0.030	10.63		1.77
2006	10.64	10.96	0.31	324	-0.030	10.60		1.80
2007	10.77	10.95	0.18	327	-0.019	10.59		1.81
2008	10.93	10.94	0.01	328	-0.018	10.57		1.83
2009	11.11	10.94	-0.17	327	-0.018	10.55		1.85
2010	11.31	10.94	-0.38	323	-0.018	10.53		1.87
2011	11.52	10.93	-0.59	318	-0.018	10.51		1.89
2012	11.77	10.92	-0.86	310	-0.018	10.50		1.90
2013	12.06	10.91	-1.15	299	-0.018	10.48		1.92
2014	12.35	10.91	-1.45	287	-0.009	10.47		1.93
2015	12.67	10.91	-1.76	273	-0.006	10.46		1.94
2016	12.99	10.92	-2.08	257	-0.008	10.45		1.95
2017	13.33	10.92	-2.41	239	-0.006	10.45		1.95
2018	13.66	10.93	-2.74	220	-0.008	10.44		1.96
2019	14.00	10.93	-3.07	198	-0.006	10.43		1.97
2020	14.33	10.94	-3.39	176	-0.008	10.43		1.97
2021	14.63	10.95	-3.68	152	-0.006	10.42		1.98
2022	14.91	10.96	-3.95	127	-0.004	10.42		1.98
2023	15.18	10.98	-4.20	102	-0.004	10.41		1.99
2024	15.42	10.99	-4.43	75	-0.004	10.41		1.99
2025	15.65	11.01	-4.64	47	-0.004	10.40		2.00
2026	15.85	11.02	-4.83	18	-0.004	10.40		2.00
2027	16.03	11.04	-4.99	--	0.000	10.40		2.00
2028	16.19	11.05	-5.13	--	0.000	10.40		2.00
2029	16.30	11.07	-5.24	--	0.000	10.40		2.00
2030	16.39	11.08	-5.31	--	0.000	10.40		2.00
2031	16.46	11.10	-5.37	--	0.000	10.40		2.00
2032	16.51	11.11	-5.40	--	0.000	10.40		2.00
2033	16.53	11.12	-5.41	--	0.000	10.40		2.00
2034	16.51	11.13	-5.38	--	0.000	10.40		2.00
2035	16.46	11.14	-5.32	--	0.000	10.40		2.00
2036	16.39	11.15	-5.24	--	0.000	10.40		2.00
2037	16.30	11.15	-5.15	--	0.000	10.40		2.00
2038	16.20	11.16	-5.04	--	0.000	10.40		2.00
2039	16.08	11.16	-4.92	--	0.000	10.40		2.00
2040	15.96	11.17	-4.79	--	0.000	10.40		2.00
2041	15.84	11.17	-4.67	--	0.000	10.40		2.00
2042	15.72	11.18	-4.55	--	0.000	10.40		2.00
2043	15.61	11.18	-4.43	--	0.000	10.40		2.00
2044	15.50	11.19	-4.31	--	0.000	10.40		2.00
2045	15.39	11.19	-4.20	--	0.000	10.40		2.00
2046	15.29	11.20	-4.09	--	0.000	10.40		2.00
2047	15.19	11.21	-3.98	--	0.000	10.40		2.00
2048	15.09	11.21	-3.88	--	0.000	10.40		2.00
2049	15.01	11.22	-3.79	--	0.000	10.40		2.00
2050	14.95	11.23	-3.72	--	0.000	10.40		2.00
2051	14.90	11.23	-3.67	--	0.000	10.40		2.00
2052	14.87	11.24	-3.63	--	0.000	10.40		2.00
2053	14.85	11.25	-3.60	--	0.000	10.40		2.00
2054	14.83	11.26	-3.57	--	0.000	10.40		2.00
2055	14.82	11.27	-3.55	--	0.000	10.40		2.00
2056	14.82	11.28	-3.54	--	0.000	10.40		2.00
2057	14.82	11.28	-3.53	--	0.000	10.40		2.00
2058	14.82	11.29	-3.52	--	0.000	10.40		2.00
2059	14.82	11.30	-3.52	--	0.000	10.40		2.00
2060	14.83	11.31	-3.52	--	0.000	10.40		2.00
2061	14.84	11.32	-3.52	--	0.000	10.40		2.00
2062	14.85	11.33	-3.52	--	0.000	10.40		2.00
2063	14.86	11.33	-3.53	--	0.000	10.40		2.00
2064	14.88	11.34	-3.54	--	0.000	10.40		2.00
2065	14.90	11.35	-3.55	--	0.000	10.40		2.00
2066	14.92	11.36	-3.57	--	0.000	10.40		2.00
2067	14.95	11.36	-3.58	--	0.000	10.40		2.00
2068	14.97	11.37	-3.60	--	0.000	10.40		2.00
2069	15.00	11.38	-3.63	--	0.000	10.40		2.00
2070	15.03	11.38	-3.65	--	0.000	10.40		2.00
2071	15.07	11.39	-3.68	--	0.000	10.40		2.00
2072	15.11	11.39	-3.71	--	0.000	10.40		2.00
2073	15.15	11.40	-3.75	--	0.000	10.40		2.00
2074	15.19	11.40	-3.78	--	0.000	10.40		2.00
2075	15.23	11.41	-3.82	--	0.000	10.40		2.00
2076	15.28	11.41	-3.87	--	0.000	10.40		2.00
	Summarized							
	CostRt	IncRt	ActBal	Change in				
2001	OASDI	OASDI	OASDI	ActBal				
-2075	14.10	11.76	-2.34	-0.48				

Based on Intermediate Assumptions of the 2001 Trustees Report
IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
* Net of Benefit Offset ** Includes additional net General Fund transfers.

Plan 1(1+1)--67p	2% PRA in 2004, BenOffst@Ryld=CPI+3.5% or Tbond+0.5%	IA Cntrb	2.00 %	Ben Offset	100.0 %		
IA toEstate	With Ult Real TF Int Rate of 3.0	Assumed % Elect PA					
at Death <65	Ult Ave Real BenOffstYld Rate of 3.5	66.7%					
If No Survivor	Ave BenOffst Annuity Net Yld Rate of 3.5	Marginal Change in OASDI Contrib Rate	Net OASDI Contrib Rate**	Changes in OASDI Contrib Rt from--			
TaxIDisburse	Cost Rate* Income Rate Annual Balance TFR 1-1-yr			PRA	Addl Net GF Transfer		
2001	10.49	12.72	2.23	239	12.40		
2002	10.42	12.72	2.30	264	12.40		
2003	10.43	12.73	2.29	289	12.40		
2004	10.48	12.16	1.68	313	-0.579	11.82	1.16
2005	10.56	12.16	1.60	330	-0.010	11.81	1.18
2006	10.64	12.16	1.51	346	-0.010	11.80	1.20
2007	10.77	12.16	1.39	360	-0.006	11.80	1.21
2008	10.93	12.16	1.24	372	-0.006	11.79	1.22
2009	11.12	12.17	1.06	381	-0.006	11.78	1.23
2010	11.32	12.18	0.86	388	-0.006	11.78	1.25
2011	11.53	12.18	0.65	392	-0.006	11.77	1.26
2012	11.79	12.19	0.39	393	-0.006	11.77	1.27
2013	12.08	12.19	0.11	393	-0.006	11.76	1.28
2014	12.39	12.20	-0.19	389	-0.003	11.76	1.29
2015	12.71	12.21	-0.51	384	-0.002	11.75	1.29
2016	13.05	12.21	-0.83	376	-0.003	11.75	1.30
2017	13.39	12.22	-1.17	366	-0.002	11.75	1.30
2018	13.74	12.23	-1.51	354	-0.003	11.75	1.31
2019	14.09	12.24	-1.84	340	-0.002	11.74	1.31
2020	14.43	12.25	-2.18	325	-0.003	11.74	1.32
2021	14.74	12.27	-2.47	309	-0.002	11.74	1.32
2022	15.04	12.29	-2.76	292	-0.001	11.74	1.32
2023	15.32	12.30	-3.02	274	-0.001	11.74	1.33
2024	15.59	12.32	-3.27	254	-0.001	11.74	1.33
2025	15.83	12.34	-3.49	234	-0.001	11.73	1.33
2026	16.05	12.35	-3.70	213	-0.001	11.73	1.33
2027	16.26	12.37	-3.89	192	0.000	11.73	1.33
2028	16.43	12.39	-4.05	170	0.000	11.73	1.33
2029	16.57	12.40	-4.17	147	0.000	11.73	1.33
2030	16.69	12.42	-4.27	123	0.000	11.73	1.33
2031	16.78	12.43	-4.35	100	0.000	11.73	1.33
2032	16.86	12.44	-4.42	75	0.000	11.73	1.33
2033	16.90	12.45	-4.45	50	0.000	11.73	1.33
2034	16.91	12.46	-4.45	25	0.000	11.73	1.33
2035	16.89	12.47	-4.42	--	0.000	11.73	1.33
2036	16.85	12.48	-4.37	--	0.000	11.73	1.33
2037	16.79	12.48	-4.31	--	0.000	11.73	1.33
2038	16.72	12.49	-4.23	--	0.000	11.73	1.33
2039	16.63	12.49	-4.14	--	0.000	11.73	1.33
2040	16.54	12.50	-4.05	--	0.000	11.73	1.33
2041	16.46	12.50	-3.96	--	0.000	11.73	1.33
2042	16.38	12.51	-3.87	--	0.000	11.73	1.33
2043	16.30	12.51	-3.78	--	0.000	11.73	1.33
2044	16.22	12.52	-3.70	--	0.000	11.73	1.33
2045	16.15	12.52	-3.63	--	0.000	11.73	1.33
2046	16.09	12.53	-3.56	--	0.000	11.73	1.33
2047	16.02	12.53	-3.49	--	0.000	11.73	1.33
2048	15.97	12.54	-3.43	--	0.000	11.73	1.33
2049	15.92	12.54	-3.38	--	0.000	11.73	1.33
2050	15.89	12.55	-3.34	--	0.000	11.73	1.33
2051	15.88	12.56	-3.32	--	0.000	11.73	1.33
2052	15.88	12.56	-3.31	--	0.000	11.73	1.33
2053	15.88	12.57	-3.31	--	0.000	11.73	1.33
2054	15.90	12.58	-3.32	--	0.000	11.73	1.33
2055	15.91	12.59	-3.32	--	0.000	11.73	1.33
2056	15.93	12.60	-3.34	--	0.000	11.73	1.33
2057	15.96	12.60	-3.36	--	0.000	11.73	1.33
2058	15.99	12.61	-3.37	--	0.000	11.73	1.33
2059	16.01	12.62	-3.39	--	0.000	11.73	1.33
2060	16.04	12.63	-3.41	--	0.000	11.73	1.33
2061	16.07	12.63	-3.43	--	0.000	11.73	1.33
2062	16.10	12.64	-3.46	--	0.000	11.73	1.33
2063	16.13	12.65	-3.48	--	0.000	11.73	1.33
2064	16.16	12.66	-3.51	--	0.000	11.73	1.33
2065	16.20	12.66	-3.54	--	0.000	11.73	1.33
2066	16.23	12.67	-3.56	--	0.000	11.73	1.33
2067	16.27	12.67	-3.59	--	0.000	11.73	1.33
2068	16.31	12.68	-3.63	--	0.000	11.73	1.33
2069	16.35	12.69	-3.66	--	0.000	11.73	1.33
2070	16.39	12.69	-3.69	--	0.000	11.73	1.33
2071	16.43	12.70	-3.73	--	0.000	11.73	1.33
2072	16.47	12.70	-3.77	--	0.000	11.73	1.33
2073	16.52	12.71	-3.81	--	0.000	11.73	1.33
2074	16.57	12.71	-3.85	--	0.000	11.73	1.33
2075	16.62	12.72	-3.90	--	0.000	11.73	1.33
2076	16.67	12.72	-3.95	--	0.000	11.73	1.33
	Summarized						
	CostRt	IncRt	ActBal	Change in			
2001	OASDI	OASDI	OASDI	ActBal			
-2075	14.55	12.98	-1.57	0.29			

Based on Intermediate Assumptions of the 2001 Trustees Report
IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
* Net of Benefit Offset

Office of the Actuary
Social Security Administration
January 29, 2002

Plan 1(0+2)--67p	2% PRA in 2004, BenOffst@Ryld=CPI+3.5% or Tbond+0.5%	IA Cntrb	2.00 %	Ben Offset	100.0 %	
IA toEstate	With Ult Real TF Int Rate of 3.0	Assumed % Elect PA				
at Death <65	Ult Ave Real BenOffstYld Rate of 3.5	66.7%				
If No Survivor	Ave BenOffst Annuity Net Yld Rate of 3.5	Marginal Change in OASDI Contrib Rate	Net OASDI Contrib Rate**	Changes in OASDI Contrib Rt from--		
TaxIDisburse	Cost Rate* Income Rate Annual Balance TFR 1-1-yr			PRA	Addl Net GF Transfer	
2001	10.49	12.72	2.23	239	12.40	
2002	10.42	12.72	2.30	264	12.40	
2003	10.43	12.73	2.29	289	12.40	
2004	10.48	12.74	2.26	313	12.40	
2005	10.56	12.75	2.19	335	0.000	12.40
2006	10.64	12.75	2.11	357	0.000	12.40
2007	10.77	12.76	1.99	376	0.000	12.40
2008	10.93	12.78	1.85	393	0.000	12.40
2009	11.12	12.79	1.67	408	0.000	12.40
2010	11.32	12.81	1.48	420	0.000	12.40
2011	11.53	12.81	1.28	429	0.000	12.40
2012	11.79	12.82	1.03	436	0.000	12.40
2013	12.08	12.83	0.75	440	0.000	12.40
2014	12.39	12.84	0.45	441	0.000	12.40
2015	12.71	12.85	0.14	440	0.000	12.40
2016	13.05	12.86	-0.18	436	0.000	12.40
2017	13.39	12.87	-0.52	430	0.000	12.40
2018	13.74	12.89	-0.85	423	0.000	12.40
2019	14.09	12.90	-1.19	413	0.000	12.40
2020	14.43	12.91	-1.52	402	0.000	12.40
2021	14.74	12.93	-1.81	390	0.000	12.40
2022	15.04	12.95	-2.09	377	0.000	12.40
2023	15.32	12.97	-2.36	363	0.000	12.40
2024	15.59	12.98	-2.60	348	0.000	12.40
2025	15.83	13.00	-2.83	332	0.000	12.40
2026	16.05	13.02	-3.03	316	0.000	12.40
2027	16.26	13.04	-3.22	299	0.000	12.40
2028	16.43	13.05	-3.38	281	0.000	12.40
2029	16.57	13.07	-3.51	263	0.000	12.40
2030	16.69	13.08	-3.61	245	0.000	12.40
2031	16.78	13.10	-3.69	226	0.000	12.40
2032	16.86	13.11	-3.75	207	0.000	12.40
2033	16.90	13.12	-3.78	188	0.000	12.40
2034	16.91	13.13	-3.78	169	0.000	12.40
2035	16.89	13.14	-3.75	149	0.000	12.40
2036	16.85	13.14	-3.70	130	0.000	12.40
2037	16.79	13.15	-3.64	111	0.000	12.40
2038	16.72	13.16	-3.56	92	0.000	12.40
2039	16.63	13.16	-3.47	72	0.000	12.40
2040	16.54	13.16	-3.38	53	0.000	12.40
2041	16.46	13.17	-3.29	34	0.000	12.40
2042	16.38	13.17	-3.20	15	0.000	12.40
2043	16.30	13.18	-3.12	--	0.000	12.40
2044	16.22	13.18	-3.04	--	0.000	12.40
2045	16.15	13.19	-2.97	--	0.000	12.40
2046	16.09	13.19	-2.90	--	0.000	12.40
2047	16.02	13.20	-2.83	--	0.000	12.40
2048	15.97	13.20	-2.77	--	0.000	12.40
2049	15.92	13.21	-2.71	--	0.000	12.40
2050	15.89	13.22	-2.68	--	0.000	12.40
2051	15.88	13.22	-2.66	--	0.000	12.40
2052	15.88	13.23	-2.65	--	0.000	12.40
2053	15.88	13.24	-2.64	--	0.000	12.40
2054	15.90	13.25	-2.65	--	0.000	12.40
2055	15.91	13.25	-2.66	--	0.000	12.40
2056	15.93	13.26	-2.67	--	0.000	12.40
2057	15.96	13.27	-2.69	--	0.000	12.40
2058	15.99	13.28	-2.71	--	0.000	12.40
2059	16.01	13.29	-2.73	--	0.000	12.40
2060	16.04	13.29	-2.75	--	0.000	12.40
2061	16.07	13.30	-2.77	--	0.000	12.40
2062	16.10	13.31	-2.79	--	0.000	12.40
2063	16.13	13.32	-2.81	--	0.000	12.40
2064	16.16	13.32	-2.84	--	0.000	12.40
2065	16.20	13.33	-2.87	--	0.000	12.40
2066	16.23	13.34	-2.90	--	0.000	12.40
2067	16.27	13.34	-2.93	--	0.000	12.40
2068	16.31	13.35	-2.96	--	0.000	12.40
2069	16.35	13.35	-2.99	--	0.000	12.40
2070	16.39	13.36	-3.03	--	0.000	12.40
2071	16.43	13.36	-3.06	--	0.000	12.40
2072	16.47	13.37	-3.10	--	0.000	12.40
2073	16.52	13.38	-3.14	--	0.000	12.40
2074	16.57	13.38	-3.19	--	0.000	12.40
2075	16.62	13.39	-3.23	--	0.000	12.40
2076	16.67	13.39	-3.28	--	0.000	12.40
	Summarized					
	CostRt	IncRt	ActBal	Change in		
2001	OASDI	OASDI	OASDI	ActBal		
-2075	14.55	13.59	-0.96	0.90		

Based on Intermediate Assumptions of the 2001 Trustees Report
IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
* Net of Benefit Offset

Office of the Actuary
Social Security Administration
January 29, 2002

Basic Plan 2
i.e., Without
PAs

Basic Provisions: CPLindx09+,with40.4%MinBy2018; Widow75% of Couple Benefit
With Ult Real TF Int Rate of 3.0

Year	Cost Rate*	Income Rate	Annual Balance	TFR 1-1-yr	Marginal Change in OASDI Contrib Rate	Net OASDI Contrib Rate**
2001	10.49	12.72	2.23	239		12.40
2002	10.42	12.72	2.30	264		12.40
2003	10.43	12.73	2.29	289		12.40
2004	10.48	12.74	2.26	313	0.000	12.40
2005	10.56	12.75	2.19	335	0.000	12.40
2006	10.64	12.75	2.11	357	0.000	12.40
2007	10.77	12.76	1.99	376	0.000	12.40
2008	10.93	12.78	1.85	393	0.000	12.40
2009	11.21	12.79	1.58	404	0.000	12.40
2010	11.42	12.81	1.39	415	0.000	12.40
2011	11.63	12.82	1.18	424	0.000	12.40
2012	11.89	12.82	0.93	430	0.000	12.40
2013	12.17	12.83	0.66	433	0.000	12.40
2014	12.46	12.84	0.38	434	0.000	12.40
2015	12.77	12.85	0.08	433	0.000	12.40
2016	13.08	12.86	-0.22	430	0.000	12.40
2017	13.39	12.87	-0.52	425	0.000	12.40
2018	13.70	12.88	-0.82	419	0.000	12.40
2019	14.01	12.89	-1.12	411	0.000	12.40
2020	14.30	12.90	-1.40	401	0.000	12.40
2021	14.57	12.92	-1.65	391	0.000	12.40
2022	14.81	12.93	-1.88	380	0.000	12.40
2023	15.04	12.95	-2.09	369	0.000	12.40
2024	15.24	12.96	-2.28	356	0.000	12.40
2025	15.42	12.97	-2.45	344	0.000	12.40
2026	15.58	12.99	-2.59	331	0.000	12.40
2027	15.71	13.00	-2.71	317	0.000	12.40
2028	15.82	13.01	-2.81	303	0.000	12.40
2029	15.89	13.02	-2.87	289	0.000	12.40
2030	15.94	13.03	-2.91	275	0.000	12.40
2031	15.96	13.04	-2.93	262	0.000	12.40
2032	15.97	13.04	-2.93	248	0.000	12.40
2033	15.95	13.05	-2.90	234	0.000	12.40
2034	15.89	13.05	-2.84	220	0.000	12.40
2035	15.81	13.06	-2.75	207	0.000	12.40
2036	15.71	13.06	-2.65	194	0.000	12.40
2037	15.59	13.06	-2.54	182	0.000	12.40
2038	15.47	13.06	-2.41	170	0.000	12.40
2039	15.33	13.05	-2.27	159	0.000	12.40
2040	15.18	13.05	-2.13	148	0.000	12.40
2041	15.04	13.05	-1.99	138	0.000	12.40
2042	14.90	13.05	-1.85	129	0.000	12.40
2043	14.76	13.04	-1.72	119	0.000	12.40
2044	14.63	13.04	-1.59	111	0.000	12.40
2045	14.50	13.04	-1.46	103	0.000	12.40
2046	14.38	13.04	-1.34	95	0.000	12.40
2047	14.26	13.03	-1.22	88	0.000	12.40
2048	14.14	13.03	-1.11	82	0.000	12.40
2049	14.03	13.03	-1.00	76	0.000	12.40
2050	13.92	13.03	-0.90	71	0.000	12.40
2051	13.83	13.03	-0.80	66	0.000	12.40
2052	13.74	13.02	-0.72	62	0.000	12.40
2053	13.66	13.02	-0.64	58	0.000	12.40
2054	13.58	13.02	-0.56	55	0.000	12.40
2055	13.51	13.02	-0.49	52	0.000	12.40
2056	13.44	13.02	-0.42	49	0.000	12.40
2057	13.36	13.02	-0.35	47	0.000	12.40
2058	13.29	13.02	-0.27	45	0.000	12.40
2059	13.22	13.02	-0.20	44	0.000	12.40
2060	13.15	13.01	-0.14	44	0.000	12.40
2061	13.08	13.01	-0.07	44	0.000	12.40
2062	13.01	13.01	0.00	44	0.000	12.40
2063	12.95	13.01	0.06	45	0.000	12.40
2064	12.88	13.01	0.13	46	0.000	12.40
2065	12.81	13.01	0.20	48	0.000	12.40
2066	12.74	13.01	0.26	51	0.000	12.40
2067	12.67	13.00	0.33	54	0.000	12.40
2068	12.60	13.00	0.40	58	0.000	12.40
2069	12.53	13.00	0.47	62	0.000	12.40
2070	12.46	13.00	0.54	67	0.000	12.40
2071	12.38	13.00	0.61	73	0.000	12.40
2072	12.31	12.99	0.68	80	0.000	12.40
2073	12.24	12.99	0.75	87	0.000	12.40
2074	12.16	12.99	0.83	95	0.000	12.40
2075	12.09	12.99	0.89	104	0.000	12.40
2076	12.02	12.98	0.96	114	0.000	12.40
Summarized	CostRt	IncRt	ActBal	Change in		
2001	OASDI	OASDI	OASDI	ActBal		
-2075	13.48	13.49	0.01	1.87		

Based on Intermediate Assumptions of the 2001 Trustees Report

Office of the Actuary
Social Security Administration
January 29, 2002

Plan 2T-67p IA toEstate at Death <65 If No Survivor TaxIDisburse	CPlindx09+,40.4%Min,Wid75%, 4%to\$1K in 2004, BenOffst@Ryld=2% With Ult Real TF Int Rate of 3.0 Ult Ave Real BenOffstYld Rate of 2 Ave BenOffst Annuity Net Yld Rate of 2	3.0 66.7%	IA Cntrb 2.39 %, Ben Offset 100.0 %	Marginal Change in OASDI Contrib Rate	Net OASDI Contrib Rate**	Changes in OASDI Contrib Rt from-- PRA Addl Net GF Contribs Transfer
Year	Cost Rate*	Income Rate	Annual Balance	TFR 1-1-yr		
2001	10.49	12.72	2.23	239		
2002	10.42	12.72	2.30	264		
2003	10.43	12.73	2.29	289		
2004	10.48	11.36	0.87	313	-1.383	11.02 1.38
2005	10.56	11.34	0.78	322	-0.024	10.99 1.41
2006	10.64	11.32	0.68	331	-0.024	10.97 1.43
2007	10.77	11.32	0.54	337	-0.015	10.95 1.45
2008	10.93	11.32	0.39	341	-0.014	10.94 1.46
2009	11.21	11.32	0.11	340	-0.014	10.93 1.47
2010	11.41	11.32	-0.08	340	-0.014	10.91 1.49
2011	11.60	11.31	-0.29	336	-0.014	10.90 1.50
2012	11.85	11.31	-0.54	331	-0.014	10.88 1.52
2013	12.11	11.30	-0.81	324	-0.014	10.87 1.53
2014	12.39	11.30	-1.09	315	-0.007	10.86 1.54
2015	12.68	11.31	-1.37	304	-0.005	10.86 1.54
2016	12.96	11.31	-1.65	291	-0.006	10.85 1.55
2017	13.26	11.32	-1.94	277	-0.005	10.85 1.55
2018	13.55	11.32	-2.23	261	-0.006	10.84 1.56
2019	13.83	11.32	-2.50	244	-0.005	10.83 1.57
2020	14.10	11.33	-2.77	226	-0.006	10.83 1.57
2021	14.33	11.34	-3.00	207	-0.005	10.82 1.58
2022	14.55	11.35	-3.20	187	-0.003	10.82 1.58
2023	14.74	11.36	-3.38	166	-0.003	10.82 1.58
2024	14.91	11.38	-3.54	145	-0.003	10.81 1.59
2025	15.06	11.49	-3.57	122	0.097	10.91 1.59 0.1
2026	15.18	15.00	-0.19	100	3.497	14.41 1.59 3.6
2027	15.28	15.11	-0.17	100	0.100	14.51 1.59 3.7
2028	15.35	15.12	-0.23	100	0.000	14.51 1.59 3.7
2029	15.39	15.13	-0.25	100	0.000	14.51 1.59 3.7
2030	15.39	15.14	-0.25	100	0.000	14.51 1.59 3.7
2031	15.38	15.15	-0.23	100	0.000	14.51 1.59 3.7
2032	15.34	14.96	-0.38	100	-0.200	14.31 1.59 3.5
2033	15.28	14.97	-0.31	100	0.000	14.31 1.59 3.5
2034	15.18	14.87	-0.30	100	-0.100	14.21 1.59 3.4
2035	15.05	14.68	-0.37	100	-0.200	14.01 1.59 3.2
2036	14.91	14.48	-0.43	100	-0.200	13.81 1.59 3.0
2037	14.75	14.38	-0.37	100	-0.100	13.71 1.59 2.9
2038	14.57	14.08	-0.49	100	-0.300	13.41 1.59 2.6
2039	14.39	13.98	-0.40	100	-0.100	13.31 1.59 2.5
2040	14.20	13.79	-0.41	100	-0.200	13.11 1.59 2.3
2041	14.01	13.59	-0.42	100	-0.200	12.91 1.59 2.1
2042	13.82	13.49	-0.33	100	-0.100	12.81 1.59 2.0
2043	13.63	13.19	-0.45	100	-0.300	12.51 1.59 1.7
2044	13.45	13.09	-0.36	100	-0.100	12.41 1.59 1.6
2045	13.27	12.89	-0.39	100	-0.200	12.21 1.59 1.4
2046	13.10	12.69	-0.41	100	-0.200	12.01 1.59 1.2
2047	12.93	12.49	-0.44	100	-0.200	11.81 1.59 1.0
2048	12.76	12.39	-0.37	100	-0.100	11.71 1.59 0.9
2049	12.60	12.29	-0.31	100	-0.100	11.61 1.59 0.8
2050	12.46	12.09	-0.36	100	-0.200	11.41 1.59 0.6
2051	12.32	12.00	-0.32	100	-0.100	11.31 1.59 0.5
2052	12.20	11.90	-0.30	100	-0.100	11.21 1.59 0.4
2053	12.08	11.70	-0.38	100	-0.200	11.01 1.59 0.2
2054	11.97	11.70	-0.26	100	0.000	11.01 1.59 0.2
2055	11.86	11.51	-0.36	100	-0.200	10.81 1.59
2056	11.76	11.51	-0.25	100	0.000	10.81 1.59
2057	11.66	11.51	-0.14	100	0.000	10.81 1.59
2058	11.56	11.51	-0.04	101	0.000	10.81 1.59
2059	11.46	11.52	0.06	104	0.000	10.81 1.59
2060	11.37	11.52	0.15	107	0.000	10.81 1.59
2061	11.27	11.52	0.25	111	0.000	10.81 1.59
2062	11.18	11.52	0.34	116	0.000	10.81 1.59
2063	11.10	11.52	0.42	122	0.000	10.81 1.59
2064	11.01	11.52	0.51	128	0.000	10.81 1.59
2065	10.93	11.52	0.60	136	0.000	10.81 1.59
2066	10.84	11.52	0.68	145	0.000	10.81 1.59
2067	10.76	11.53	0.77	155	0.000	10.81 1.59
2068	10.68	11.53	0.85	166	0.000	10.81 1.59
2069	10.59	11.53	0.93	178	0.000	10.81 1.59
2070	10.51	11.52	1.01	191	0.000	10.81 1.59
2071	10.43	11.52	1.10	206	0.000	10.81 1.59
2072	10.35	11.52	1.18	221	0.000	10.81 1.59
2073	10.26	11.52	1.26	238	0.000	10.81 1.59
2074	10.18	11.52	1.34	257	0.000	10.81 1.59
2075	10.11	11.52	1.41	276	0.000	10.81 1.59
2076	10.03	11.52	1.49	297	0.000	10.81 1.59
	Summarized					
	CostRt	IncRt	ActBal	Change in		
2001	OASDI	OASDI	OASDI	ActBal		
-2075	12.78	12.91	0.13	1.99		

Based on Intermediate Assumptions of the 2001 Trustees Report
IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
* Net of Benefit Offset ** Includes additional net General Fund transfers.

Plan 2T-100p IA toEstate at Death <65 If No Survivor TaxIDisburse	CPlindx09+,40.4%Min,Wid75%, 4%to\$1K in 2004, BenOffst@Ryld=2% With Ult Real TF Int Rate of 3.0 Ult Ave Real BenOffstYld Rate of 2 Ave BenOffst Annuity Net Yld Rate of 2	3.0 Assumed % Elect PA 100.0%	IA Cntrb 2.39 %, Ben Offset 100.0 %	Marginal Change in OASDI Contrib Rate	Net OASDI Contrib Rate**	Changes in OASDI Contrib Rt from-- PRA Addl Net GF Contribs Transfer
Year	Cost Rate*	Income Rate	Annual Balance	TFR 1-1-yr		
2001	10.49	12.72	2.23	239		
2002	10.42	12.72	2.30	264		
2003	10.43	12.73	2.29	289		
2004	10.48	10.66	0.18	313	-2.075	10.33 2.07
2005	10.56	10.64	0.08	316	-0.036	10.29 2.11
2006	10.64	10.61	-0.04	318	-0.036	10.25 2.15
2007	10.77	10.60	-0.18	317	-0.022	10.23 2.17
2008	10.93	10.58	-0.34	315	-0.022	10.21 2.19
2009	11.20	10.58	-0.62	308	-0.021	10.19 2.21
2010	11.40	10.58	-0.82	302	-0.021	10.17 2.23
2011	11.59	10.56	-1.03	292	-0.022	10.15 2.25
2012	11.83	10.55	-1.28	282	-0.022	10.12 2.28
2013	12.08	10.53	-1.55	269	-0.022	10.10 2.30
2014	12.35	10.53	-1.82	254	-0.010	10.09 2.31
2015	12.63	10.54	-2.10	238	-0.007	10.08 2.32
2016	12.91	10.54	-2.37	221	-0.009	10.08 2.32
2017	13.19	10.54	-2.65	202	-0.007	10.07 2.33
2018	13.47	10.54	-2.93	181	-0.009	10.06 2.34
2019	13.74	10.54	-3.20	159	-0.007	10.05 2.35
2020	13.99	10.54	-3.45	136	-0.009	10.04 2.36
2021	14.22	12.35	-1.87	112	1.793	11.83 2.37 1.80
2022	14.42	14.36	-0.06	100	1.995	13.83 2.37 3.80
2023	14.60	14.57	-0.02	100	0.195	14.02 2.38 4.00
2024	14.75	14.68	-0.07	100	0.095	14.12 2.38 4.10
2025	14.88	14.69	-0.19	101	-0.005	14.12 2.38 4.10
2026	14.99	14.70	-0.28	100	-0.005	14.11 2.39 4.10
2027	15.07	14.92	-0.15	100	0.200	14.31 2.39 4.30
2028	15.12	14.93	-0.19	100	0.000	14.31 2.39 4.30
2029	15.14	14.84	-0.29	100	-0.100	14.21 2.39 4.20
2030	15.12	14.85	-0.27	100	0.000	14.21 2.39 4.20
2031	15.09	14.86	-0.22	100	0.000	14.21 2.39 4.20
2032	15.03	14.67	-0.36	100	-0.200	14.01 2.39 4.00
2033	14.94	14.58	-0.37	100	-0.100	13.91 2.39 3.90
2034	14.82	14.48	-0.34	100	-0.100	13.81 2.39 3.80
2035	14.67	14.29	-0.39	100	-0.200	13.61 2.39 3.60
2036	14.51	14.09	-0.41	100	-0.200	13.41 2.39 3.40
2037	14.32	13.90	-0.43	100	-0.200	13.21 2.39 3.20
2038	14.13	13.70	-0.43	100	-0.200	13.01 2.39 3.00
2039	13.92	13.50	-0.42	100	-0.200	12.81 2.39 2.80
2040	13.70	13.20	-0.50	100	-0.300	12.51 2.39 2.50
2041	13.49	13.10	-0.39	100	-0.100	12.41 2.39 2.40
2042	13.28	12.81	-0.47	100	-0.300	12.11 2.39 2.10
2043	13.07	12.71	-0.36	100	-0.100	12.01 2.39 2.00
2044	12.86	12.41	-0.45	100	-0.300	11.71 2.39 1.70
2045	12.66	12.21	-0.45	100	-0.200	11.51 2.39 1.50
2046	12.46	12.11	-0.35	100	-0.100	11.41 2.39 1.40
2047	12.26	11.82	-0.44	100	-0.300	11.11 2.39 1.10
2048	12.07	11.72	-0.35	100	-0.100	11.01 2.39 1.00
2049	11.89	11.53	-0.36	100	-0.200	10.81 2.39 0.80
2050	11.72	11.33	-0.39	100	-0.200	10.61 2.39 0.60
2051	11.57	11.23	-0.33	100	-0.100	10.51 2.39 0.50
2052	11.42	11.14	-0.29	100	-0.100	10.41 2.39 0.40
2053	11.29	10.94	-0.35	100	-0.200	10.21 2.39 0.20
2054	11.16	10.84	-0.32	100	-0.100	10.11 2.39 0.10
2055	11.04	10.75	-0.29	100	-0.100	10.01 2.39 0.00
2056	10.92	10.75	-0.16	100	0.000	10.01 2.39
2057	10.80	10.76	-0.04	101	0.000	10.01 2.39
2058	10.69	10.76	0.07	104	0.000	10.01 2.39
2059	10.58	10.76	0.19	107	0.000	10.01 2.39
2060	10.47	10.77	0.30	112	0.000	10.01 2.39
2061	10.37	10.77	0.40	118	0.000	10.01 2.39
2062	10.27	10.77	0.51	125	0.000	10.01 2.39
2063	10.17	10.78	0.61	133	0.000	10.01 2.39
2064	10.08	10.78	0.70	142	0.000	10.01 2.39
2065	9.99	10.78	0.80	153	0.000	10.01 2.39
2066	9.89	10.78	0.89	165	0.000	10.01 2.39
2067	9.80	10.79	0.98	178	0.000	10.01 2.39
2068	9.71	10.79	1.07	193	0.000	10.01 2.39
2069	9.63	10.79	1.16	209	0.000	10.01 2.39
2070	9.54	10.79	1.25	227	0.000	10.01 2.39
2071	9.45	10.79	1.34	246	0.000	10.01 2.39
2072	9.36	10.79	1.42	267	0.000	10.01 2.39
2073	9.28	10.79	1.51	289	0.000	10.01 2.39
2074	9.19	10.79	1.59	313	0.000	10.01 2.39
2075	9.11	10.79	1.67	339	0.000	10.01 2.39
2076	9.04	10.78	1.75	366	0.000	10.01 2.39
	Summarized					
	CostRt	IncRt	ActBal	Change in		
2001	OASDI	OASDI	OASDI	ActBal		
-2075	12.43	12.59	0.16	2.02		

Based on Intermediate Assumptions of the 2001 Trustees Report
IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
* Net of Benefit Offset ** Includes additional net General Fund transfers.

Office of the Actuary
Social Security Administration
January 29, 2002

Year	Cost Rate*	Income Rate	Annual Balance	TFR 1-1-yr	Marginal Change in OASDI CntrbRate	Spec GF Trans fer	Net	OASDI Contrib Rate**
2001	10.49	12.72	2.23	239				12.40
2002	10.42	12.72	2.30	264				12.40
2003	10.43	12.73	2.29	289				12.40
2004	10.48	12.74	2.26	313	0.000			12.40
2005	10.56	13.09	2.53	335	0.341	0.34		12.74
2006	10.64	13.13	2.49	360	0.034	0.38		12.78
2007	10.77	13.15	2.38	383	0.011	0.39		12.79
2008	10.93	13.17	2.25	403	0.012	0.40		12.80
2009	11.20	13.20	2.00	418	0.007	0.41		12.81
2010	11.40	13.25	1.86	433	0.039	0.44		12.84
2011	11.59	13.28	1.69	446	0.023	0.47		12.87
2012	11.84	13.31	1.47	456	0.023	0.49		12.89
2013	12.11	13.34	1.24	464	0.024	0.51		12.91
2014	12.39	13.38	0.99	470	0.025	0.54		12.94
2015	12.68	13.41	0.73	474	0.025	0.56		12.96
2016	12.98	13.45	0.47	476	0.027	0.59		12.99
2017	13.29	13.48	0.20	476	0.028	0.62		13.02
2018	13.59	13.52	-0.07	474	0.029	0.65		13.05
2019	13.90	13.56	-0.34	471	0.030	0.68		13.08
2020	14.21	13.58	-0.63	466	0.006	0.68		13.08
2021	14.48	13.60	-0.88	461	0.006	0.69		13.09
2022	14.74	13.62	-1.12	455	0.005	0.70		13.10
2023	14.99	13.64	-1.34	447	0.005	0.70		13.10
2024	15.21	13.66	-1.55	440	0.005	0.70		13.10
2025	15.42	13.68	-1.74	431	0.004	0.71		13.11
2026	15.60	13.70	-1.90	423	0.004	0.71		13.11
2027	15.77	13.72	-2.05	413	0.003	0.72		13.12
2028	15.90	13.73	-2.17	404	0.003	0.72		13.12
2029	16.00	13.74	-2.26	395	0.002	0.72		13.12
2030	16.08	13.76	-2.32	386	0.001	0.72		13.12
2031	16.13	13.76	-2.37	377	0.001	0.72		13.12
2032	16.17	13.77	-2.39	367	0.001	0.72		13.12
2033	16.18	13.78	-2.40	358	0.000	0.72		13.12
2034	16.16	13.78	-2.38	350	-0.001	0.72		13.12
2035	16.12	13.79	-2.34	342	-0.002	0.72		13.12
2036	16.07	13.79	-2.28	334	-0.002	0.72		13.12
2037	16.00	13.79	-2.22	326	-0.003	0.72		13.12
2038	15.93	13.78	-2.14	320	-0.003	0.71		13.11
2039	15.84	13.78	-2.06	313	-0.003	0.71		13.11
2040	15.76	13.78	-1.98	307	-0.003	0.71		13.11
2041	15.67	13.78	-1.90	301	-0.004	0.70		13.10
2042	15.59	13.77	-1.82	296	-0.004	0.70		13.10
2043	15.51	13.77	-1.75	290	-0.004	0.69		13.09
2044	15.44	13.76	-1.68	286	-0.004	0.69		13.09
2045	15.37	13.76	-1.61	281	-0.004	0.69		13.09
2046	15.30	13.76	-1.54	277	-0.004	0.68		13.08
2047	15.24	13.75	-1.49	272	-0.003	0.68		13.08
2048	15.18	13.75	-1.43	268	-0.003	0.68		13.08
2049	15.12	13.75	-1.38	265	-0.003	0.67		13.07
2050	15.08	13.75	-1.33	261	-0.003	0.67		13.07
2051	15.04	13.74	-1.29	258	-0.002	0.67		13.07
2052	15.01	13.74	-1.27	254	-0.002	0.67		13.07
2053	14.99	13.74	-1.24	251	-0.002	0.67		13.07
2054	14.97	13.75	-1.23	247	-0.001	0.66		13.06
2055	14.96	13.75	-1.21	243	-0.001	0.66		13.06
2056	14.95	13.75	-1.20	240	-0.001	0.66		13.06
2057	14.93	13.75	-1.18	236	0.000	0.66		13.06
2058	14.92	13.75	-1.17	233	0.000	0.66		13.06
2059	14.91	13.75	-1.16	229	0.000	0.66		13.06
2060	14.90	13.76	-1.14	226	0.000	0.66		13.06
2061	14.89	13.76	-1.13	222	0.000	0.66		13.06
2062	14.87	13.76	-1.12	219	0.000	0.66		13.06
2063	14.87	13.76	-1.10	215	0.001	0.66		13.06
2064	14.85	13.76	-1.09	212	0.001	0.66		13.06
2065	14.84	13.77	-1.08	209	0.001	0.67		13.07
2066	14.83	13.77	-1.07	205	0.001	0.67		13.07
2067	14.82	13.77	-1.05	202	0.001	0.67		13.07
2068	14.80	13.77	-1.03	198	0.001	0.67		13.07
2069	14.79	13.77	-1.02	195	0.001	0.67		13.07
2070	14.77	13.77	-1.00	192	0.001	0.67		13.07
2071	14.75	13.77	-0.97	189	0.001	0.67		13.07
2072	14.73	13.78	-0.95	186	0.001	0.67		13.07
2073	14.71	13.78	-0.93	183	0.001	0.67		13.07
2074	14.68	13.78	-0.91	180	0.001	0.67		13.07
2075	14.67	13.78	-0.89	178	0.001	0.67		13.07
2076	14.65	13.78	-0.87	175	0.000	0.67		13.07
Summarized	CostRt	IncRt	ActBal	Change in				
2001	OASDI	OASDI	OASDI	ActBal				
-2075	14.01	14.09	0.07	1.94				

Plan 3T--67p	2.5%to\$1K in 2004, BenOffst@Ryld=2.5%; Requires 1% addOn				IA Cntrb	1.97 %	Ben Offset	100.0 %		
IA toEstate	With Ult Real TF Int Rate of 3.0				Assumed % Elect PA					
at Death <65	Ult Ave Real BenOffstYld Rate of 2.5				66.7%					
If No Survivor	Ave BenOffst Annuity Net Yld Rate of 2.5				Marginal	Spec	Net	Changes in OASDI		
TaxIDisburse	Cost	Income	Annual	TFR	Change	GF	OASDI	Contrib Rt from--		
Year	Rate*	Rate	Balance	1-1-yr	in OASDI	Trans	Contrib	PRA	Addl Net GF	
					CntrbRate	fer	Rate**	Contribs	Transfer	
2001	10.49	12.72	2.23	239			12.40			
2002	10.42	12.72	2.30	264			12.40			
2003	10.43	12.73	2.29	289			12.40			
2004	10.48	11.60	1.12	313	-1.137		11.26	1.14		
2005	10.56	11.93	1.37	325	0.322	0.34	11.58	1.16		
2006	10.64	11.95	1.31	338	0.015	0.38	11.60	1.18		
2007	10.77	11.96	1.19	351	-0.001	0.39	11.60	1.19		
2008	10.93	11.97	1.04	361	0.001	0.40	11.60	1.20		
2009	11.19	11.99	0.79	366	-0.005	0.41	11.59	1.21		
2010	11.38	12.03	0.65	371	0.027	0.44	11.62	1.22		
2011	11.57	12.05	0.48	374	0.011	0.47	11.63	1.24		
2012	11.80	12.06	0.26	375	0.011	0.49	11.64	1.25		
2013	12.06	12.09	0.03	374	0.012	0.51	11.65	1.26		
2014	12.32	12.11	-0.21	372	0.019	0.54	11.67	1.27		
2015	12.60	12.14	-0.46	368	0.022	0.57	11.70	1.27		
2016	12.88	12.18	-0.71	362	0.022	0.59	11.72	1.27		
2017	13.17	12.21	-0.96	354	0.025	0.62	11.74	1.28		
2018	13.46	12.25	-1.21	345	0.025	0.65	11.77	1.28		
2019	13.75	12.28	-1.46	335	0.028	0.68	11.80	1.29		
2020	14.03	12.30	-1.73	323	0.002	0.69	11.80	1.29		
2021	14.28	12.32	-1.96	311	0.003	0.70	11.80	1.30		
2022	14.51	12.34	-2.18	298	0.004	0.70	11.81	1.30		
2023	14.73	12.36	-2.37	284	0.004	0.71	11.81	1.30		
2024	14.92	12.38	-2.55	269	0.004	0.72	11.81	1.30		
2025	15.10	12.40	-2.70	254	0.003	0.72	11.82	1.31		
2026	15.25	12.42	-2.84	238	0.003	0.73	11.82	1.31		
2027	15.39	12.44	-2.95	222	0.005	0.73	11.82	1.31		
2028	15.49	12.46	-3.03	205	0.005	0.74	11.83	1.31		
2029	15.55	12.47	-3.08	188	0.004	0.74	11.83	1.31		
2030	15.59	12.49	-3.10	171	0.004	0.75	11.84	1.31		
2031	15.61	12.50	-3.10	154	0.003	0.75	11.84	1.31		
2032	15.60	12.52	-3.09	137	0.003	0.75	11.84	1.31		
2033	15.58	12.53	-3.05	120	0.003	0.76	11.85	1.31		
2034	15.52	14.84	-0.68	103	2.302	0.76	14.15	1.31		2.30
2035	15.44	15.05	-0.39	100	0.202	0.76	14.35	1.31		2.50
2036	15.34	15.05	-0.29	100	0.001	0.76	14.35	1.31		2.50
2037	15.23	14.86	-0.37	100	-0.199	0.76	14.15	1.31		2.30
2038	15.11	14.67	-0.45	100	-0.199	0.76	13.95	1.31		2.10
2039	14.98	14.67	-0.31	100	0.001	0.76	13.95	1.31		2.10
2040	14.85	14.48	-0.37	100	-0.199	0.76	13.75	1.31		1.90
2041	14.72	14.28	-0.44	100	-0.199	0.76	13.55	1.31		1.70
2042	14.59	14.29	-0.30	100	0.001	0.77	13.56	1.31		1.70
2043	14.46	14.09	-0.37	100	-0.199	0.77	13.36	1.31		1.50
2044	14.34	14.00	-0.34	100	-0.099	0.77	13.26	1.31		1.40
2045	14.22	13.90	-0.32	100	-0.099	0.77	13.16	1.31		1.30
2046	14.10	13.71	-0.39	100	-0.199	0.77	12.96	1.31		1.10
2047	13.99	13.62	-0.37	100	-0.098	0.77	12.86	1.31		1.00
2048	13.88	13.53	-0.35	100	-0.098	0.77	12.76	1.31		0.90
2049	13.77	13.53	-0.24	100	0.003	0.78	12.77	1.31		0.90
2050	13.68	13.34	-0.34	100	-0.198	0.78	12.57	1.31		0.70
2051	13.61	13.35	-0.26	100	0.003	0.78	12.57	1.31		0.70
2052	13.54	13.16	-0.38	100	-0.197	0.79	12.38	1.31		0.50
2053	13.48	13.17	-0.31	100	0.003	0.79	12.38	1.31		0.50
2054	13.43	13.18	-0.25	100	0.003	0.79	12.38	1.31		0.50
2055	13.38	13.19	-0.19	100	0.004	0.80	12.39	1.31		0.50
2056	13.34	13.00	-0.34	100	-0.196	0.80	12.19	1.31		0.30
2057	13.29	13.01	-0.28	100	0.004	0.80	12.19	1.31		0.30
2058	13.25	13.02	-0.23	100	0.004	0.81	12.20	1.31		0.30
2059	13.21	12.93	-0.28	100	-0.096	0.81	12.10	1.31		0.20
2060	13.18	12.94	-0.23	100	0.004	0.82	12.11	1.31		0.20
2061	13.14	12.85	-0.29	100	-0.096	0.82	12.01	1.31		0.10
2062	13.10	12.86	-0.24	100	0.004	0.82	12.01	1.31		0.10
2063	13.07	12.87	-0.20	100	0.004	0.83	12.02	1.31		0.10
2064	13.04	12.78	-0.26	100	-0.096	0.83	11.92	1.31		0.00
2065	13.01	12.79	-0.23	100	0.004	0.84	11.93	1.31		0.00
2066	12.99	12.80	-0.19	100	0.004	0.84	11.93	1.31		
2067	12.96	12.80	-0.15	101	0.003	0.84	11.93	1.31		
2068	12.93	12.81	-0.12	102	0.003	0.85	11.94	1.31		
2069	12.90	12.82	-0.09	103	0.003	0.85	11.94	1.31		
2070	12.87	12.82	-0.05	104	0.003	0.85	11.94	1.31		
2071	12.84	12.83	-0.01	106	0.003	0.85	11.94	1.31		
2072	12.81	12.83	0.02	108	0.002	0.86	11.95	1.31		
2073	12.78	12.84	0.06	110	0.003	0.86	11.95	1.31		
2074	12.75	12.84	0.09	112	0.002	0.86	11.95	1.31		
2075	12.73	12.85	0.12	115	0.002	0.86	11.95	1.31		
2076	12.70	12.85	0.14	118	0.001	0.86	11.95	1.31		
Summarized										
	CostRt	IncRt	ActBal	Change in						
2001	OASDI	OASDI	OASDI	ActBal						
-2075	13.35	13.37	0.02	1.88						

Based on Intermediate Assumptions of the 2001 Trustees Report
IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
* Net of Benefit Offset

** Includes additional net General Fund transfers.

Office of the Actuary
Social Security Administration
January 29, 2002

Plan 3T-100p	2.5%to\$1K in 2004, BenOffst@Ryld=2.5%; Requires 1% addOn				IA Cntrb	1.97 %	Ben Offset	100.0 %		
IA toEstate	With Ult Real TF Int Rate of 3.0				Assumed % Elect PA					
at Death <65	Ult Ave Real BenOffstYld Rate of 2.5				100.0%					
If No Survivor	Ave BenOffst Annuity Net Yld Rate of 2.5				Marginal Spec	Change GF	Net	Changes in OASDI		
TaxIDisburse	Cost	Income	Annual	TFR	in OASDI	Trans	OASDI	PRA	Conrib Rt from--	
Year	Rate*	Rate	Balance	1-1-yr	CntrbRate	fer	Conrib Rate**	Contribs	Addl Net GF	Transfer
2001	10.49	12.72	2.23	239			12.40			
2002	10.42	12.72	2.30	264			12.40			
2003	10.43	12.73	2.29	289			12.40			
2004	10.48	11.03	0.55	313	-1.706		10.69	1.71		
2005	10.56	11.35	0.80	319	0.312	0.34	11.01	1.74		
2006	10.64	11.37	0.72	328	0.005	0.38	11.01	1.76		
2007	10.77	11.37	0.59	334	-0.007	0.39	11.00	1.78		
2008	10.93	11.37	0.44	339	-0.005	0.40	11.00	1.80		
2009	11.19	11.38	0.19	339	-0.011	0.41	10.99	1.82		
2010	11.37	11.42	0.04	340	0.021	0.44	11.01	1.84		
2011	11.56	11.43	-0.13	338	0.005	0.47	11.01	1.85		
2012	11.78	11.44	-0.34	335	0.005	0.49	11.02	1.87		
2013	12.03	11.46	-0.58	329	0.006	0.51	11.03	1.89		
2014	12.29	11.48	-0.81	322	0.017	0.54	11.04	1.90		
2015	12.56	11.51	-1.05	314	0.020	0.57	11.06	1.90		
2016	12.83	11.54	-1.29	304	0.020	0.59	11.08	1.91		
2017	13.12	11.58	-1.54	292	0.023	0.62	11.11	1.92		
2018	13.39	11.61	-1.79	279	0.023	0.65	11.13	1.93		
2019	13.67	11.65	-2.03	265	0.026	0.69	11.16	1.93		
2020	13.94	11.66	-2.28	250	0.000	0.69	11.16	1.94		
2021	14.18	11.68	-2.50	234	0.001	0.70	11.16	1.95		
2022	14.40	11.70	-2.70	217	0.003	0.71	11.16	1.95		
2023	14.60	11.72	-2.88	199	0.003	0.72	11.16	1.95		
2024	14.78	11.74	-3.05	181	0.003	0.72	11.17	1.96		
2025	14.94	11.76	-3.19	162	0.003	0.73	11.17	1.96		
2026	15.08	11.77	-3.31	142	0.003	0.74	11.17	1.96		
2027	15.20	11.80	-3.40	122	0.006	0.74	11.18	1.97		
2028	15.28	14.92	-0.36	101	3.106	0.75	14.28	1.97	3.1	
2029	15.33	15.04	-0.29	100	0.106	0.75	14.39	1.96		3.2
2030	15.35	15.05	-0.29	100	0.005	0.76	14.39	1.97		3.2
2031	15.34	15.07	-0.27	100	0.005	0.76	14.40	1.96		3.2
2032	15.32	15.09	-0.24	100	0.005	0.77	14.40	1.96		3.2
2033	15.27	15.00	-0.27	100	-0.096	0.77	14.31	1.96		3.1
2034	15.20	14.91	-0.28	100	-0.097	0.78	14.21	1.96		3.0
2035	15.09	14.73	-0.37	100	-0.197	0.78	14.01	1.97		2.8
2036	14.98	14.54	-0.44	100	-0.197	0.78	13.82	1.97		2.6
2037	14.85	14.55	-0.30	100	0.003	0.79	13.82	1.97		2.6
2038	14.70	14.26	-0.45	100	-0.297	0.79	13.52	1.97		2.3
2039	14.55	14.16	-0.39	100	-0.097	0.79	13.43	1.96		2.2
2040	14.39	14.07	-0.32	100	-0.097	0.79	13.33	1.97		2.1
2041	14.24	13.78	-0.46	100	-0.297	0.80	13.03	1.96		1.8
2042	14.09	13.79	-0.30	100	0.003	0.80	13.03	1.97		1.8
2043	13.94	13.50	-0.44	100	-0.297	0.80	12.74	1.97		1.5
2044	13.79	13.41	-0.38	100	-0.096	0.81	12.64	1.96		1.4
2045	13.65	13.32	-0.32	100	-0.097	0.81	12.54	1.96		1.3
2046	13.50	13.13	-0.37	100	-0.196	0.81	12.35	1.96		1.1
2047	13.36	12.95	-0.41	100	-0.195	0.82	12.15	1.96		0.9
2048	13.23	12.86	-0.36	100	-0.095	0.82	12.06	1.97		0.8
2049	13.10	12.78	-0.32	100	-0.095	0.83	11.96	1.96		0.7
2050	12.99	12.69	-0.30	100	-0.095	0.83	11.87	1.96		0.6
2051	12.89	12.60	-0.29	100	-0.095	0.84	11.77	1.96		0.5
2052	12.80	12.52	-0.29	100	-0.094	0.84	11.68	1.97		0.4
2053	12.73	12.43	-0.29	100	-0.094	0.85	11.58	1.96		0.3
2054	12.66	12.35	-0.31	100	-0.094	0.86	11.49	1.97		0.2
2055	12.59	12.36	-0.23	100	0.006	0.86	11.50	1.96		0.2
2056	12.53	12.28	-0.25	100	-0.094	0.87	11.40	1.97		0.1
2057	12.47	12.19	-0.28	100	-0.094	0.87	11.31	1.96		0.0
2058	12.41	12.21	-0.21	100	0.006	0.88	11.31	1.96		
2059	12.36	12.22	-0.14	101	0.006	0.89	11.32	1.97		
2060	12.31	12.24	-0.08	102	0.006	0.89	11.33	1.97		
2061	12.26	12.25	-0.02	103	0.006	0.90	11.33	1.97		
2062	12.22	12.26	0.04	105	0.006	0.90	11.34	1.97		
2063	12.18	12.28	0.10	108	0.006	0.91	11.34	1.97		
2064	12.14	12.29	0.15	111	0.006	0.92	11.35	1.96		
2065	12.10	12.30	0.20	114	0.005	0.92	11.36	1.97		
2066	12.07	12.31	0.24	118	0.005	0.93	11.36	1.97		
2067	12.03	12.32	0.29	122	0.005	0.93	11.37	1.97		
2068	11.99	12.33	0.34	127	0.004	0.93	11.37	1.96		
2069	11.96	12.34	0.38	132	0.004	0.94	11.37	1.96		
2070	11.92	12.35	0.42	138	0.004	0.94	11.38	1.96		
2071	11.89	12.35	0.47	145	0.004	0.95	11.38	1.96		
2072	11.85	12.36	0.51	151	0.003	0.95	11.39	1.97		
2073	11.82	12.37	0.55	159	0.003	0.95	11.39	1.96		
2074	11.78	12.37	0.59	167	0.003	0.96	11.39	1.96		
2075	11.76	12.38	0.62	175	0.002	0.96	11.39	1.97		
2076	11.73	12.38	0.65	184	0.001	0.96	11.39	1.97		
Summarized										
	CostRt	IncRt	ActBal	Change in						
2001	OASDI	OASDI	OASDI	ActBal						
-2075	13.02	13.08	0.07	1.93						

Based on Intermediate Assumptions of the 2001 Trustees Report
IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
* Net of Benefit Offset ** Includes additional net General Fund transfers.

Plan 1(2+0)--67p a 2% PRA in 2004, BenOffst@Ryld=CPI+3.5% or Tbond+0.5%
 Assumed With Ult Real Int Rate of 3
 % Elect PRA Ult Ave Real BenOffstYld Rate of 3.5
 66.7% Ave BenOffst Annuity Net Yld Rate of 3.5

Ult Ave Real IA Rate of 4.6
 Ave IA Annuity Net Yld Rate of 3
 IA/Annuity IA Contribs IA Disburse
 Assets EOY in Year in Year
 (billions of PV\$ 1/1/2001)

Year	PL	TF	EOY	PROP	TF	Net Accrual for Future Benefit Offset 1/	IA/Annuity Assets EOY (billions of PV\$ 1/1/2001)	IA Contribs in Year	IA Disburse in Year
2001		1,139		1,139		0	0	0.0	0.0
2002		1,230		1,230		0	0	0.0	0.0
2003		1,320		1,320		45	46	45.2	0.0
2004		1,407		1,362		91	92	45.4	0.0
2005		1,491		1,400		137	139	45.7	0.0
2006		1,570		1,433		184	187	45.5	0.0
2007		1,644		1,462		230	235	45.4	0.0
2008		1,711		1,484		276	284	45.3	0.3
2009		1,771		1,499		322	332	45.1	0.5
2010		1,824		1,507		368	381	45.1	0.9
2011		1,867		1,507		413	430	44.9	1.3
2012		1,901		1,497		458	479	44.7	1.7
2013		1,925		1,478		502	528	44.2	2.2
2014		1,937		1,448		546	576	43.7	2.7
2015		1,938		1,408		588	624	43.2	3.3
2016		1,928		1,358		629	671	42.6	3.9
2017		1,906		1,298		670	717	42.1	4.6
2018		1,873		1,228		709	763	41.5	5.3
2019		1,829		1,148		747	808	41.0	6.1
2020		1,775		1,059		784	852	40.4	6.9
2021		1,712		963		819	895	39.8	7.7
2022		1,641		859		854	936	39.2	8.6
2023		1,562		750		887	977	38.6	9.5
2024		1,476		635		918	1,017	38.0	10.5
2025		1,384		516		948	1,055	37.4	11.6
2026		1,287		393		977	1,092	36.8	12.6
2027		1,186		267		1,004	1,128	36.2	13.7
2028		1,080		139		1,030	1,162	35.6	14.8
2029		972		9		1,054	1,195	35.0	16.0
2030		861		-121		1,077	1,226	34.4	17.2
2031		749		-251		1,098	1,255	33.8	18.4
2032		636		-380		1,117	1,283	33.3	19.7
2033		523		-508		1,135	1,310	32.8	21.0
2034		410		-634		1,152	1,334	32.2	22.3
2035		298		-758		1,167	1,357	31.7	23.6
2036		188		-878		1,180	1,379	31.2	24.9
2037		79		-994		1,192	1,398	30.7	26.3
2038		-27		-1,108		1,202	1,415	30.2	27.6
2039		-131		-1,217		1,210	1,431	29.7	29.0
2040		-233		-1,322		1,217	1,445	29.2	30.4
2041		-333		-1,424		1,223	1,457	28.8	31.9
2042		-430		-1,522		1,227	1,467	28.3	33.3
2043		-526		-1,617		1,229	1,474	27.8	34.7
2044		-620		-1,708		1,230	1,480	27.3	36.1
2045		-713		-1,797		1,229	1,484	26.9	37.4
2046		-804		-1,882		1,227	1,486	26.4	39.0
2047		-893		-1,965		1,223	1,486	26.0	40.4
2048		-982		-2,045		1,218	1,483	25.5	41.6
2049		-1,069		-2,123		1,212	1,479	25.1	42.6
2050		-1,156		-2,198		1,205	1,474	24.6	43.5
2051		-1,242		-2,272		1,197	1,467	24.2	44.3
2052		-1,327		-2,345		1,188	1,459	23.8	45.1
2053		-1,412		-2,416		1,178	1,449	23.3	45.7
2054		-1,496		-2,486		1,167	1,439	22.9	46.3
2055		-1,580		-2,555		1,156	1,427	22.5	46.9
2056		-1,664		-2,623		1,144	1,414	22.1	47.3
2057		-1,747		-2,690		1,131	1,400	21.7	47.7
2058		-1,830		-2,756		1,118	1,385	21.4	47.9
2059		-1,912		-2,821		1,104	1,370	21.0	48.2
2060		-1,994		-2,885		1,090	1,353	20.6	48.3
2061		-2,076		-2,949		1,075	1,336	20.3	48.4
2062		-2,157		-3,012		1,061	1,320	19.9	48.4
2063		-2,238		-3,074		1,046	1,303	19.6	48.3
2064		-2,318		-3,136		1,030	1,285	19.2	48.2
2065		-2,397		-3,196		1,015	1,267	18.9	48.0
2066		-2,476		-3,256		999	1,249	18.5	47.8
2067		-2,554		-3,316		984	1,231	18.2	47.5
2068		-2,632		-3,375		968	1,212	17.9	47.2
2069		-2,709		-3,433		953	1,193	17.6	46.8
2070		-2,785		-3,491		937	1,174	17.3	46.3
2071		-2,861		-3,548		922	1,155	17.0	45.9
2072		-2,936		-3,604		906	1,136	16.7	45.4
2073		-3,010		-3,660		891	1,117	16.4	44.8
2074		-3,084		-3,716		876	1,098	16.1	44.3
2075		-3,157		-3,771		861	1,080	15.8	43.7
2076		-3,230		-3,826					

IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
 1/ Present value of net current offset accrual; reduction of future obligations.

Office of the Actuary
 Social Security Administration
 January 29, 2002

Plan 1(0+2)--67p a 2% PRA in 2004, BenOffst@Ryld=CPI+3.5% or Tbond+0.5%
 Assumed With Ult Real Int Rate of 3
 % Elect PRA Ult Ave Real BenOffstYld Rate of 3.5
 66.7% Ave BenOffst Annuity Net Yld Rate of 3.5

Ult Ave Real IA Rate of 4.6
 Ave IA Annuity Net Yld Rate of 3
 IA/Annuity IA Contribs IA Disburse
 Assets EOY in Year in Year
 (billions of PV\$ 1/1/2001)

Year	PL	TF	EOY	PROP	TF	Net Accrual for Future Benefit Offset 1/	IA/Annuity Assets EOY (billions of PV\$ 1/1/2001)	IA Contribs in Year	IA Disburse in Year
2001		1,139		1,139		0	0	0.0	0.0
2002		1,230		1,230		0	0	0.0	0.0
2003		1,320		1,320		45	46	45.2	0.0
2004		1,407		1,407		91	92	45.4	0.0
2005		1,491		1,491		137	139	45.7	0.0
2006		1,570		1,570		184	187	45.5	0.0
2007		1,644		1,644		230	235	45.4	0.0
2008		1,711		1,711		276	284	45.3	0.3
2009		1,771		1,772		322	332	45.1	0.5
2010		1,824		1,824		368	381	45.1	0.9
2011		1,867		1,869		413	430	44.9	1.3
2012		1,901		1,905		458	479	44.7	1.7
2013		1,925		1,930		502	528	44.2	2.2
2014		1,937		1,945		546	576	43.7	2.7
2015		1,938		1,949		588	624	43.2	3.3
2016		1,928		1,942		629	671	42.6	3.9
2017		1,906		1,924		670	717	42.1	4.6
2018		1,873		1,896		709	763	41.5	5.3
2019		1,829		1,858		747	808	41.0	6.1
2020		1,775		1,810		784	852	40.4	6.9
2021		1,712		1,754		819	895	39.8	7.7
2022		1,641		1,690		854	936	39.2	8.6
2023		1,562		1,620		887	977	38.6	9.5
2024		1,476		1,544		918	1,017	38.0	10.5
2025		1,384		1,463		948	1,055	37.4	11.6
2026		1,287		1,377		977	1,092	36.8	12.6
2027		1,186		1,288		1,004	1,128	36.2	13.7
2028		1,080		1,196		1,030	1,162	35.6	14.8
2029		972		1,102		1,054	1,195	35.0	16.0
2030		861		1,007		1,077	1,226	34.4	17.2
2031		749		911		1,098	1,255	33.8	18.4
2032		636		816		1,117	1,283	33.3	19.7
2033		523		721		1,135	1,310	32.8	21.0
2034		410		628		1,152	1,334	32.2	22.3
2035		298		537		1,167	1,357	31.7	23.6
2036		188		448		1,180	1,379	31.2	24.9
2037		79		362		1,192	1,398	30.7	26.3
2038		-27		280		1,202	1,415	30.2	27.6
2039		-131		201		1,210	1,431	29.7	29.0
2040		-233		125		1,217	1,445	29.2	30.4
2041		-333		53		1,223	1,457	28.8	31.9
2042		-430		-17		1,227	1,467	28.3	33.3
2043		-526		-83		1,229	1,474	27.8	34.7
2044		-620		-147		1,230	1,480	27.3	36.1
2045		-713		-208		1,229	1,484	26.9	37.4
2046		-804		-266		1,227	1,486	26.4	39.0
2047		-893		-323		1,223	1,486	26.0	40.4
2048		-982		-377		1,218	1,483	25.5	41.6
2049		-1,069		-429		1,212	1,479	25.1	42.6
2050		-1,156		-479		1,205	1,474	24.6	43.5
2051		-1,242		-529		1,197	1,467	24.2	44.3
2052		-1,327		-577		1,188	1,459	23.8	45.1
2053		-1,412		-624		1,178	1,449	23.3	45.7
2054		-1,496		-671		1,167	1,439	22.9	46.3
2055		-1,580		-717		1,156	1,427	22.5	46.9
2056		-1,664		-762		1,144	1,414	22.1	47.3
2057		-1,747		-807		1,131	1,400	21.7	47.7
2058		-1,830		-852		1,118	1,385	21.4	47.9
2059		-1,912		-896		1,104	1,370	21.0	48.2
2060		-1,994		-939		1,090	1,353	20.6	48.3
2061		-2,076		-982		1,075	1,336	20.3	48.4
2062		-2,157		-1,025		1,061	1,320	19.9	48.4
2063		-2,238		-1,067		1,046	1,303	19.6	48.3
2064		-2,318		-1,109		1,030	1,285	19.2	48.2
2065		-2,397		-1,150		1,015	1,267	18.9	48.0
2066		-2,476		-1,192		999	1,249	18.5	47.8
2067		-2,554		-1,232		984	1,231	18.2	47.5
2068		-2,632		-1,273		968	1,212	17.9	47.2
2069		-2,709		-1,313		953	1,193	17.6	46.8
2070		-2,785		-1,354		937	1,174	17.3	46.3
2071		-2,861		-1,393		922	1,155	17.0	45.9
2072		-2,936		-1,433		906	1,136	16.7	45.4
2073		-3,010		-1,472		891	1,117	16.4	44.8
2074		-3,084		-1,512		876	1,098	16.1	44.3
2075		-3,157		-1,551		861	1,080	15.8	43.7
2076		-3,230		-1,590					

IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
 RiskAdi is equiv to all TreasBnd

Office of the Actuary
 Social Security Administration
 January 29, 2002

Year	PL TF EOY	PROP TF (billions of PV\$ 1/1/2001)
2001	1,139	1,139
2002	1,230	1,230
2003	1,320	1,320
2004	1,407	1,407
2005	1,491	1,491
2006	1,570	1,570
2007	1,644	1,644
2008	1,711	1,711
2009	1,771	1,768
2010	1,824	1,817
2011	1,867	1,859
2012	1,901	1,891
2013	1,925	1,913
2014	1,937	1,925
2015	1,938	1,927
2016	1,928	1,919
2017	1,906	1,901
2018	1,873	1,874
2019	1,829	1,838
2020	1,775	1,794
2021	1,712	1,743
2022	1,641	1,686
2023	1,562	1,623
2024	1,476	1,557
2025	1,384	1,486
2026	1,287	1,413
2027	1,186	1,338
2028	1,080	1,261
2029	972	1,184
2030	861	1,108
2031	749	1,032
2032	636	957
2033	523	884
2034	410	814
2035	298	747
2036	188	684
2037	79	624
2038	-27	568
2039	-131	516
2040	-233	469
2041	-333	425
2042	-430	384
2043	-526	347
2044	-620	314
2045	-713	284
2046	-804	256
2047	-893	232
2048	-982	210
2049	-1,069	191
2050	-1,156	173
2051	-1,242	158
2052	-1,327	145
2053	-1,412	133
2054	-1,496	123
2055	-1,580	115
2056	-1,664	107
2057	-1,747	101
2058	-1,830	97
2059	-1,912	93
2060	-1,994	91
2061	-2,076	89
2062	-2,157	89
2063	-2,238	90
2064	-2,318	92
2065	-2,397	94
2066	-2,476	98
2067	-2,554	102
2068	-2,632	108
2069	-2,709	114
2070	-2,785	121
2071	-2,861	128
2072	-2,936	137
2073	-3,010	146
2074	-3,084	156
2075	-3,157	167
2076	-3,230	178

Based on Intermediate Assumptions of the 2001 Trustees Report

Plan 2T-67p a CPlindx09+,40.4%Min,Wid75%, 4%to\$1K in 2004, BenOffst@Ryld=2%
Assumed With Ult Real Int Rate of 3
% Elect PRA Ult Ave Real BenOffstYld Rate of 2
66.7% Ave BenOffst Annuity Net Yld Rate of 2 Net Accrual

Ult Ave Real IA Rate of 4.6
 Ave IA Annuity Net Yld Rate of 3
 IA/Annuity IA Contribs IA Disburse
 Assets EOY in Year in Year
 (billions of PV\$ 1/1/2001)

Year	PL	TF	EOY	PROP	TF	Net Accrual for Future Benefit Offset 1/	IA/Annuity Assets EOY (billions of PV\$ 1/1/2001)	IA Contribs in Year	IA Disburse in Year
2001		1,139		1,139		0	0	0.0	0.0
2002		1,230		1,230		0	0	0.0	0.0
2003		1,320		1,320		54	54	54.1	0.0
2004		1,407		1,353		107	110	54.3	0.0
2005		1,491		1,382		161	166	54.6	0.0
2006		1,570		1,407		213	223	54.4	0.0
2007		1,644		1,426		265	281	54.3	0.0
2008		1,711		1,440		316	339	54.1	0.3
2009		1,771		1,443		366	397	53.9	0.7
2010		1,824		1,439		415	456	53.9	1.1
2011		1,867		1,427		463	514	53.7	1.5
2012		1,901		1,407		509	573	53.4	2.0
2013		1,925		1,378		554	631	52.8	2.6
2014		1,937		1,340		598	689	52.2	3.2
2015		1,938		1,293		640	746	51.6	3.9
2016		1,928		1,237		680	802	50.9	4.7
2017		1,906		1,173		718	857	50.3	5.5
2018		1,873		1,100		755	912	49.6	6.3
2019		1,829		1,020		789	965	49.0	7.2
2020		1,775		934		823	1,018	48.3	8.2
2021		1,712		841		854	1,069	47.6	9.2
2022		1,641		745		883	1,119	46.8	10.3
2023		1,562		644		911	1,168	46.1	11.4
2024		1,476		541		937	1,215	45.4	12.6
2025		1,384		438		961	1,261	44.7	13.8
2026		1,287		333		983	1,305	44.0	15.1
2027		1,186		428		1,004	1,348	43.2	16.4
2028		1,080		421		1,022	1,388	42.5	17.7
2029		972		414		1,039	1,428	41.8	19.1
2030		861		407		1,055	1,465	41.1	20.6
2031		749		401		1,068	1,500	40.4	22.0
2032		636		391		1,081	1,534	39.8	23.5
2033		523		382		1,091	1,565	39.1	25.0
2034		410		375		1,100	1,595	38.5	26.6
2035		298		365		1,107	1,622	37.9	28.2
2036		188		355		1,113	1,647	37.3	29.8
2037		79		346		1,118	1,671	36.7	31.4
2038		-27		334		1,121	1,691	36.1	33.0
2039		-131		325		1,123	1,710	35.5	34.7
2040		-233		315		1,123	1,727	34.9	36.4
2041		-333		305		1,122	1,741	34.4	38.1
2042		-430		298		1,120	1,753	33.8	39.8
2043		-526		288		1,117	1,762	33.2	41.5
2044		-620		280		1,113	1,769	32.7	43.1
2045		-713		272		1,107	1,774	32.1	44.7
2046		-804		263		1,101	1,776	31.6	46.6
2047		-893		255		1,093	1,775	31.0	48.2
2048		-982		247		1,084	1,773	30.5	49.7
2049		-1,069		241		1,075	1,768	29.9	50.9
2050		-1,156		234		1,065	1,762	29.4	52.0
2051		-1,242		228		1,055	1,753	28.9	53.0
2052		-1,327		222		1,043	1,744	28.4	53.9
2053		-1,412		215		1,032	1,732	27.9	54.7
2054		-1,496		210		1,020	1,719	27.4	55.4
2055		-1,580		204		1,007	1,705	26.9	56.0
2056		-1,664		199		994	1,690	26.5	56.5
2057		-1,747		197		981	1,673	26.0	56.9
2058		-1,830		196		968	1,655	25.5	57.3
2059		-1,912		196		954	1,637	25.1	57.6
2060		-1,994		198		940	1,617	24.6	57.7
2061		-2,076		202		926	1,597	24.2	57.8
2062		-2,157		207		912	1,577	23.8	57.8
2063		-2,238		213		898	1,557	23.4	57.8
2064		-2,318		220		884	1,536	23.0	57.6
2065		-2,397		229		870	1,514	22.6	57.4
2066		-2,476		238		856	1,493	22.2	57.1
2067		-2,554		249		842	1,470	21.8	56.8
2068		-2,632		260		828	1,448	21.4	56.4
2069		-2,709		272		815	1,426	21.0	55.9
2070		-2,785		286		801	1,403	20.6	55.4
2071		-2,861		300		787	1,380	20.3	54.8
2072		-2,936		314		774	1,358	19.9	54.2
2073		-3,010		330		761	1,335	19.5	53.6
2074		-3,084		346		748	1,312	19.2	52.9
2075		-3,157		363		735	1,290	18.9	52.2
2076		-3,230		380					

IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
 1/ Present value of net current offset accrual; reduction of future obligations.

Office of the Actuary
 Social Security Administration
 January 29, 2002

Plan 2T-100p a CPLindx09+,40.4%Min,Wid75%, 4%to\$1K in 2004, BenOffst@Ryld=2%
Assumed With Ult Real Int Rate of 3
% Elect PRA Ult Ave Real BenOffstYld Rate of 2
100.0% Ave BenOffst Annuity Net Yld Rate of 2 Net Accrual

Ult Ave Real IA Rate of 4.6
 Ave IA Annuity Net Yld Rate of 3
 IA/Annuity IA Contrbns IA Disburse
 Assets EOY in Year in Year
 (billions of PV\$ 1/1/2001)

Year	PL	TF	EOY	PROP	TF	Net Accrual for Future Benefit Offset 1/	IA/Annuity Assets EOY (billions of PV\$ 1/1/2001)	IA Contrbns in Year	IA Disburse in Year
2001		1,139		1,139		0	0	0.0	0.0
2002		1,230		1,230		0	0	0.0	0.0
2003		1,320		1,320		81	82	81.1	0.0
2004		1,407		1,326		161	165	81.5	0.0
2005		1,491		1,328		241	249	81.9	0.0
2006		1,570		1,325		320	335	81.6	0.0
2007		1,644		1,318		398	422	81.4	0.0
2008		1,711		1,304		474	509	81.2	0.5
2009		1,771		1,280		549	596	80.9	1.0
2010		1,824		1,249		622	684	80.8	1.6
2011		1,867		1,212		694	772	80.5	2.3
2012		1,901		1,165		764	859	80.1	3.0
2013		1,925		1,111		832	947	79.3	3.9
2014		1,937		1,047		897	1,033	78.3	4.8
2015		1,938		976		959	1,118	77.4	5.9
2016		1,928		896		1,019	1,203	76.4	7.0
2017		1,906		808		1,077	1,286	75.4	8.2
2018		1,873		713		1,132	1,368	74.4	9.5
2019		1,829		612		1,184	1,448	73.5	10.9
2020		1,775		503		1,234	1,527	72.4	12.3
2021		1,712		446		1,281	1,604	71.3	13.8
2022		1,641		444		1,325	1,679	70.2	15.4
2023		1,562		442		1,366	1,752	69.2	17.1
2024		1,476		440		1,405	1,823	68.1	18.9
2025		1,384		434		1,441	1,891	67.1	20.7
2026		1,287		426		1,475	1,958	65.9	22.6
2027		1,186		421		1,506	2,021	64.8	24.6
2028		1,080		416		1,534	2,083	63.7	26.6
2029		972		407		1,559	2,141	62.7	28.7
2030		861		400		1,582	2,197	61.7	30.8
2031		749		394		1,603	2,250	60.6	33.0
2032		636		384		1,621	2,300	59.7	35.3
2033		523		375		1,636	2,348	58.7	37.6
2034		410		366		1,650	2,392	57.8	39.9
2035		298		356		1,661	2,433	56.9	42.3
2036		188		346		1,670	2,471	55.9	44.7
2037		79		336		1,677	2,506	55.0	47.1
2038		-27		325		1,681	2,537	54.2	49.6
2039		-131		315		1,684	2,565	53.3	52.0
2040		-233		304		1,685	2,590	52.4	54.6
2041		-333		295		1,684	2,611	51.5	57.1
2042		-430		285		1,681	2,629	50.7	59.6
2043		-526		277		1,676	2,643	49.8	62.2
2044		-620		267		1,669	2,653	49.0	64.6
2045		-713		257		1,661	2,660	48.2	67.1
2046		-804		250		1,651	2,664	47.3	69.9
2047		-893		241		1,640	2,663	46.5	72.4
2048		-982		234		1,627	2,659	45.7	74.6
2049		-1,069		227		1,613	2,652	44.9	76.4
2050		-1,156		219		1,598	2,642	44.1	78.0
2051		-1,242		213		1,582	2,630	43.4	79.5
2052		-1,327		207		1,565	2,615	42.6	80.8
2053		-1,412		201		1,548	2,598	41.9	82.0
2054		-1,496		195		1,529	2,579	41.1	83.1
2055		-1,580		190		1,511	2,558	40.4	84.0
2056		-1,664		187		1,491	2,534	39.7	84.8
2057		-1,747		186		1,472	2,510	39.0	85.4
2058		-1,830		187		1,451	2,483	38.3	85.9
2059		-1,912		190		1,431	2,455	37.6	86.3
2060		-1,994		194		1,410	2,426	37.0	86.6
2061		-2,076		200		1,390	2,395	36.3	86.7
2062		-2,157		208		1,369	2,366	35.7	86.7
2063		-2,238		216		1,348	2,335	35.0	86.6
2064		-2,318		226		1,326	2,304	34.4	86.4
2065		-2,397		238		1,305	2,272	33.8	86.1
2066		-2,476		250		1,284	2,239	33.2	85.7
2067		-2,554		264		1,263	2,206	32.6	85.2
2068		-2,632		278		1,243	2,172	32.1	84.5
2069		-2,709		293		1,222	2,138	31.5	83.9
2070		-2,785		310		1,201	2,104	30.9	83.1
2071		-2,861		327		1,181	2,070	30.4	82.2
2072		-2,936		345		1,161	2,036	29.9	81.3
2073		-3,010		364		1,141	2,002	29.3	80.4
2074		-3,084		383		1,121	1,969	28.8	79.4
2075		-3,157		403		1,102	1,935	28.3	78.4
2076		-3,230		423					

IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
 1/ Present value of net current offset accrual; reduction of future obligations.

Office of the Actuary
 Social Security Administration
 January 29, 2002

Year	PL TF EOY	PROP TF (billions of PV\$ 1/1/2001)
2001	1,139	1,139
2002	1,230	1,230
2003	1,320	1,320
2004	1,407	1,407
2005	1,491	1,504
2006	1,570	1,597
2007	1,644	1,686
2008	1,711	1,768
2009	1,771	1,841
2010	1,824	1,907
2011	1,867	1,966
2012	1,901	2,017
2013	1,925	2,060
2014	1,937	2,093
2015	1,938	2,117
2016	1,928	2,132
2017	1,906	2,137
2018	1,873	2,134
2019	1,829	2,123
2020	1,775	2,103
2021	1,712	2,075
2022	1,641	2,041
2023	1,562	2,001
2024	1,476	1,955
2025	1,384	1,905
2026	1,287	1,851
2027	1,186	1,794
2028	1,080	1,735
2029	972	1,674
2030	861	1,613
2031	749	1,551
2032	636	1,490
2033	523	1,430
2034	410	1,371
2035	298	1,314
2036	188	1,259
2037	79	1,207
2038	-27	1,157
2039	-131	1,110
2040	-233	1,065
2041	-333	1,023
2042	-430	984
2043	-526	946
2044	-620	911
2045	-713	878
2046	-804	846
2047	-893	817
2048	-982	788
2049	-1,069	762
2050	-1,156	736
2051	-1,242	712
2052	-1,327	689
2053	-1,412	667
2054	-1,496	645
2055	-1,580	624
2056	-1,664	603
2057	-1,747	583
2058	-1,830	564
2059	-1,912	545
2060	-1,994	527
2061	-2,076	509
2062	-2,157	492
2063	-2,238	475
2064	-2,318	459
2065	-2,397	443
2066	-2,476	428
2067	-2,554	413
2068	-2,632	399
2069	-2,709	385
2070	-2,785	372
2071	-2,861	359
2072	-2,936	347
2073	-3,010	335
2074	-3,084	323
2075	-3,157	312
2076	-3,230	302

Based on Intermediate Assumptions of the 2001 Trustees Report

Plan 3T--67p a 2.5%to\$1K in 2004, BenOffst@Ryld=2.5%; Requires 1% addOn
Assumed With Ult Real Int Rate of 3
% Elect PRA Ult Ave Real BenOffstYld Rate of 2.5
66.7% Ave BenOffst Annuity Net Yld Rate of 2.5

IA/Annuity Operations Including 1% Add On IA
 Ult Ave Real IA Rate of 4.6
 Ave IA Annuity Net Yld Rate of 3
 IA/Annuity IA Contribs IA Disburse
 Assets EOY in Year in Year
 (billions of PV\$ 1/1/2001)

Year	PL	TF	EOY	PROP	TF	Net Accrual for Future Benefit Offset 1/	IA/Annuity Assets EOY (billions of PV\$ 1/1/2001)	IA Contribs in Year	IA Disburse in Year
2001		1,139		1,139					
2002		1,230		1,230		0	0	0.0	0.0
2003		1,320		1,320		0	0	0.0	0.0
2004		1,407		1,362		44	67	67.1	0.0
2005		1,491		1,415		89	136	67.4	0.0
2006		1,570		1,463		133	206	67.7	0.0
2007		1,644		1,507		177	277	67.5	0.0
2008		1,711		1,545		221	349	67.3	0.0
2009		1,771		1,573		264	421	67.1	0.4
2010		1,824		1,595		306	493	66.9	0.8
2011		1,867		1,612		348	566	66.8	1.3
2012		1,901		1,620		389	638	66.6	1.9
2013		1,925		1,620		429	711	66.3	2.5
2014		1,937		1,612		468	783	65.6	3.2
2015		1,938		1,596		506	854	64.8	4.0
2016		1,928		1,572		543	925	64.0	4.9
2017		1,906		1,539		578	995	63.2	5.8
2018		1,873		1,500		612	1,064	62.4	6.8
2019		1,829		1,453		645	1,131	61.6	7.8
2020		1,775		1,398		676	1,198	60.8	9.0
2021		1,712		1,337		706	1,263	59.9	10.2
2022		1,641		1,271		735	1,327	59.0	11.4
2023		1,562		1,201		762	1,389	58.1	12.8
2024		1,476		1,126		788	1,449	57.3	14.2
2025		1,384		1,048		812	1,508	56.4	15.6
2026		1,287		968		834	1,565	55.5	17.1
2027		1,186		886		856	1,620	54.6	18.7
2028		1,080		804		876	1,673	53.7	20.3
2029		972		721		894	1,723	52.8	22.0
2030		861		639		911	1,772	51.9	23.7
2031		749		559		926	1,818	51.0	25.5
2032		636		480		940	1,862	50.2	27.3
2033		523		403		953	1,904	49.4	29.2
2034		410		386		964	1,943	48.6	31.1
2035		298		376		974	1,979	47.8	33.0
2036		188		369		982	2,013	47.1	35.0
2037		79		360		989	2,045	46.3	37.0
2038		-27		349		995	2,074	45.6	39.0
2039		-131		342		1,000	2,100	44.8	41.0
2040		-233		333		1,003	2,123	44.1	43.1
2041		-333		323		1,005	2,144	43.4	45.1
2042		-430		316		1,006	2,161	42.7	47.2
2043		-526		308		1,006	2,176	42.0	49.4
2044		-620		301		1,004	2,187	41.3	51.5
2045		-713		294		1,002	2,196	40.6	53.5
2046		-804		285		998	2,202	39.9	55.5
2047		-893		278		994	2,205	39.2	57.8
2048		-982		271		988	2,204	38.5	59.9
2049		-1,069		266		981	2,201	37.8	61.7
2050		-1,156		259		974	2,195	37.2	63.2
2051		-1,242		254		966	2,187	36.5	64.5
2052		-1,327		247		957	2,177	35.9	65.7
2053		-1,412		241		948	2,165	35.3	66.9
2054		-1,496		237		938	2,151	34.7	67.9
2055		-1,580		233		928	2,135	34.0	68.7
2056		-1,664		227		917	2,117	33.4	69.5
2057		-1,747		222		906	2,098	32.9	70.2
2058		-1,830		218		895	2,077	32.3	70.7
2059		-1,912		213		883	2,055	31.7	71.1
2060		-1,994		210		871	2,032	31.2	71.5
2061		-2,076		205		859	2,008	30.6	71.7
2062		-2,157		201		847	1,983	30.1	71.8
2063		-2,238		198		834	1,958	29.5	71.8
2064		-2,318		194		822	1,933	29.0	71.7
2065		-2,397		190		809	1,907	28.5	71.5
2066		-2,476		187		797	1,881	28.0	71.3
2067		-2,554		185		784	1,854	27.5	70.9
2068		-2,632		183		771	1,826	27.0	70.5
2069		-2,709		182		759	1,798	26.6	70.0
2070		-2,785		181		746	1,770	26.1	69.4
2071		-2,861		181		734	1,742	25.6	68.8
2072		-2,936		181		721	1,714	25.2	68.1
2073		-3,010		181		709	1,686	24.7	67.3
2074		-3,084		182		697	1,658	24.3	66.5
2075		-3,157		183		685	1,630	23.8	65.7
2076		-3,230		185		673	1,602	23.4	64.9

IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
 1/ Present value of net current offset accrual; reduction of future obligations.

Office of the Actuary
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Year	PL TF EOY		PROP TF		Net Accrual for Future Benefit Offset 1/	IA/Annuity Operations Including 1% Add On IA			
	Ult Ave Real BenOffstYld Rate of Ave BenOffst Annuity Net Yld Rate of		Ult Ave Real BenOffstYld Rate of Ave BenOffst Annuity Net Yld Rate of			Ult Ave Real IA Rate of Ave IA Annuity Net Yld Rate of		IA Contribs in Year	IA Disburse in Year
	2.5		2.5			4.6		3	
	100.0%		(billions of PV\$ 1/1/2001)			(billions of PV\$ 1/1/2001)			
2001	1,139	1,139			0	0	0.0	0.0	
2002	1,230	1,230			0	0	0.0	0.0	
2003	1,320	1,320			67	101	100.6	0.0	
2004	1,407	1,340			133	204	101.1	0.0	
2005	1,491	1,370			200	309	101.6	0.0	
2006	1,570	1,396			265	416	101.3	0.0	
2007	1,644	1,418			331	523	101.0	0.0	
2008	1,711	1,433			395	631	100.7	0.6	
2009	1,771	1,439			459	739	100.3	1.2	
2010	1,824	1,440			522	848	100.2	2.0	
2011	1,867	1,434			583	957	99.9	2.8	
2012	1,901	1,421			644	1,066	99.4	3.8	
2013	1,925	1,400			702	1,174	98.3	4.8	
2014	1,937	1,372			759	1,282	97.1	6.0	
2015	1,938	1,335			814	1,388	96.0	7.3	
2016	1,928	1,292			867	1,492	94.7	8.7	
2017	1,906	1,240			918	1,595	93.6	10.2	
2018	1,873	1,182			967	1,697	92.3	11.8	
2019	1,829	1,117			1,014	1,796	91.1	13.5	
2020	1,775	1,046			1,059	1,894	89.9	15.3	
2021	1,712	968			1,102	1,989	88.5	17.2	
2022	1,641	887			1,143	2,082	87.1	19.1	
2023	1,562	801			1,181	2,173	85.8	21.2	
2024	1,476	712			1,218	2,261	84.5	23.4	
2025	1,384	620			1,252	2,346	83.2	25.7	
2026	1,287	527			1,284	2,429	81.8	28.0	
2027	1,186	432			1,313	2,508	80.4	30.5	
2028	1,080	422			1,341	2,584	79.1	33.0	
2029	972	414			1,366	2,657	77.8	35.6	
2030	861	406			1,389	2,726	76.5	38.2	
2031	749	398			1,410	2,792	75.2	41.0	
2032	636	392			1,429	2,854	74.0	43.8	
2033	523	385			1,446	2,913	72.8	46.6	
2034	410	378			1,460	2,967	71.7	49.5	
2035	298	368			1,473	3,018	70.5	52.4	
2036	188	357			1,484	3,066	69.4	55.4	
2037	79	350			1,493	3,109	68.3	58.4	
2038	-27	339			1,500	3,148	67.2	61.5	
2039	-131	330			1,505	3,183	66.1	64.6	
2040	-233	323			1,508	3,213	65.0	67.7	
2041	-333	312			1,509	3,239	63.9	70.8	
2042	-430	306			1,509	3,261	62.9	74.0	
2043	-526	296			1,507	3,279	61.8	77.2	
2044	-620	288			1,503	3,292	60.8	80.2	
2045	-713	281			1,498	3,301	59.7	83.2	
2046	-804	273			1,491	3,304	58.7	86.7	
2047	-893	265			1,482	3,304	57.7	89.8	
2048	-982	257			1,472	3,299	56.7	92.6	
2049	-1,069	251			1,461	3,290	55.7	94.7	
2050	-1,156	245			1,449	3,278	54.7	96.7	
2051	-1,242	239			1,436	3,263	53.8	98.6	
2052	-1,327	234			1,422	3,244	52.8	100.2	
2053	-1,412	228			1,407	3,223	51.9	101.7	
2054	-1,496	223			1,392	3,199	51.0	103.0	
2055	-1,580	218			1,376	3,173	50.1	104.2	
2056	-1,664	214			1,359	3,144	49.2	105.2	
2057	-1,747	209			1,342	3,113	48.4	106.0	
2058	-1,830	205			1,325	3,080	47.5	106.6	
2059	-1,912	203			1,307	3,046	46.7	107.1	
2060	-1,994	201			1,289	3,009	45.9	107.4	
2061	-2,076	201			1,270	2,971	45.0	107.6	
2062	-2,157	201			1,251	2,935	44.3	107.6	
2063	-2,238	203			1,233	2,897	43.5	107.5	
2064	-2,318	205			1,214	2,858	42.7	107.2	
2065	-2,397	207			1,195	2,818	42.0	106.8	
2066	-2,476	211			1,176	2,777	41.2	106.3	
2067	-2,554	214			1,157	2,736	40.5	105.7	
2068	-2,632	219			1,138	2,695	39.8	104.9	
2069	-2,709	224			1,119	2,653	39.1	104.0	
2070	-2,785	229			1,101	2,611	38.4	103.1	
2071	-2,861	235			1,082	2,569	37.7	102.0	
2072	-2,936	241			1,064	2,526	37.0	100.9	
2073	-3,010	248			1,046	2,484	36.4	99.7	
2074	-3,084	255			1,028	2,442	35.7	98.5	
2075	-3,157	262			1,010	2,401	35.1	97.2	
2076	-3,230	270							

IA invested 50%Equity, 30% CorpBnd, 20%TreasBnd; 0.3%Admin
1/ Present value of net current offset accrual; reduction of future obligations.

Office of the Actuary
Social Security Administration
January 29, 2002

Plan 1(2+0)--67p b Unified Budget Effects

**Assumed
% Elect PA
66.7%**

	Contributes to PRA by Fed Govt Based Year on Earnings	Offset to OASI Ben from PRA	IA Cntrb Other Changes in OASDI CashFlow	2 %, Change in Annual UnifBudg CashFlow	Benefit Offset Change in Debt Held by Public (EOY)	100.0 % Change in Ann UnifBudg Balance
(Billions of Constant 2001 \$)						
2002	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0
2004	51.6	0.0	0.0	-51.6	53.2	-53.2
2005	53.4	0.0	0.0	-53.4	109.8	-58.3
2006	55.2	0.0	0.0	-55.2	169.9	-63.6
2007	56.6	0.0	0.0	-56.6	233.2	-68.7
2008	58.1	0.0	0.0	-58.1	299.9	-74.1
2009	59.6	0.4	0.0	-59.2	369.6	-79.4
2010	61.1	0.8	0.0	-60.3	442.5	-84.7
2011	62.8	1.4	0.0	-61.5	518.9	-90.5
2012	64.4	2.0	0.0	-62.5	598.5	-96.2
2013	66.0	2.7	0.0	-63.3	681.5	-102.1
2014	67.3	3.6	0.0	-63.7	767.5	-107.8
2015	68.4	4.6	0.0	-63.9	856.4	-113.4
2016	69.7	5.6	0.0	-64.0	948.2	-119.1
2017	70.8	6.9	0.0	-64.0	1,042.6	-124.7
2018	72.0	8.2	0.0	-63.8	1,139.7	-130.4
2019	73.2	9.7	0.0	-63.5	1,239.3	-136.1
2020	74.4	11.4	0.0	-63.0	1,341.5	-141.8
2021	75.6	13.2	0.0	-62.4	1,446.2	-147.5
2022	76.7	15.2	0.0	-61.5	1,553.0	-153.0
2023	77.8	17.3	0.0	-60.5	1,661.9	-158.6
2024	78.9	19.6	0.0	-59.3	1,772.9	-164.1
2025	80.0	22.1	0.0	-57.9	1,885.8	-169.5
2026	81.2	24.8	0.0	-56.3	2,000.5	-174.9
2027	82.2	27.7	0.0	-54.5	2,116.7	-180.1
2028	83.2	30.8	0.0	-52.4	2,234.3	-185.2
2029	84.3	34.1	0.0	-50.2	2,353.0	-190.2
2030	85.4	37.6	0.0	-47.8	2,472.9	-195.0
2031	86.5	41.3	0.0	-45.2	2,593.7	-199.8
2032	87.6	45.3	0.0	-42.4	2,715.2	-204.4
2033	88.8	49.4	0.0	-39.4	2,837.2	-208.8
2034	90.0	53.8	0.0	-36.2	2,959.6	-213.1
2035	91.2	58.5	0.0	-32.8	3,082.2	-217.1
2036	92.5	63.3	0.0	-29.1	3,204.7	-221.0
2037	93.7	68.5	0.0	-25.2	3,326.9	-224.5
2038	95.0	73.8	0.0	-21.1	3,448.5	-227.9
2039	96.2	79.4	0.0	-16.8	3,569.2	-230.9
2040	97.5	85.3	0.0	-12.2	3,688.9	-233.7
2041	98.8	91.5	0.0	-7.3	3,807.1	-236.1
2042	100.1	97.9	0.0	-2.2	3,923.6	-238.1
2043	101.4	104.5	0.0	3.2	4,038.0	-239.8
2044	102.7	111.5	0.0	8.8	4,150.0	-241.0
2045	103.9	118.5	0.0	14.5	4,259.6	-242.1
2046	105.2	125.7	0.0	20.5	4,366.2	-242.7
2047	106.6	133.8	0.0	27.3	4,469.0	-242.3
2048	107.9	141.8	0.0	33.9	4,568.1	-241.8
2049	109.2	149.5	0.0	40.3	4,663.6	-241.4
2050	110.5	156.7	0.0	46.2	4,755.8	-241.2
2051	111.8	163.8	0.0	52.0	4,844.8	-240.9
2052	113.1	171.0	0.0	57.8	4,930.5	-240.4
2053	114.5	178.1	0.0	63.6	5,012.8	-239.9
2054	115.9	185.1	0.0	69.2	5,091.8	-239.1
2055	117.2	192.1	0.0	74.8	5,167.4	-238.2
2056	118.6	199.0	0.0	80.4	5,239.5	-237.2
2057	120.0	205.8	0.0	85.8	5,308.2	-236.1
2058	121.5	212.6	0.0	91.1	5,373.4	-234.8
2059	122.9	219.3	0.0	96.4	5,435.2	-233.5
2060	124.4	225.8	0.0	101.5	5,493.6	-232.0
2061	125.9	232.3	0.0	106.5	5,548.6	-230.5
2062	127.4	238.7	0.0	111.3	5,600.3	-228.9
2063	128.9	244.8	0.0	115.9	5,648.7	-227.3
2064	130.4	250.8	0.0	120.4	5,693.9	-225.7
2065	132.0	256.7	0.0	124.8	5,736.0	-224.0
2066	133.5	262.5	0.0	129.0	5,775.1	-222.3
2067	135.1	268.1	0.0	133.0	5,811.2	-220.6
2068	136.7	273.5	0.0	136.8	5,844.4	-218.8
2069	138.3	278.9	0.0	140.5	5,874.7	-217.1
2070	139.9	284.0	0.0	144.1	5,902.4	-215.3
2071	141.6	289.1	0.0	147.5	5,927.3	-213.5
2072	143.3	294.0	0.0	150.7	5,949.6	-211.7
2073	144.9	298.8	0.0	153.9	5,969.4	-209.8
2074	146.6	303.5	0.0	156.9	5,986.7	-208.0
2075	148.3	308.1	0.0	159.8	6,001.5	-206.1
2076	150.0	312.6	-0.2	162.3	6,014.0	-204.3

Based on Intermediate Assumptions of the 2001 Trustees Report

With Ult Real Int Rate of

3.0 TF,

Office of the Actuary

Social Security Administration

January 29, 2002

Ult Ave Real BenOffstYld Rate of

Ave BenOffst A Annuity Yield

3.5

3.5

Plan1(2+0)--100p	b Unified Budget Effects		IA Cntrb	2 %,	Benefit Offset	100.0 %		
Assumed	Contributes to	Offset to	Other	Change	Change	Change		
% Elect PA	PRA by Fed	OASI Ben	Changes	in Annual	in Debt	in Ann		
100.0%	Govt Based	from PRA	in OASDI	UnifBudg	Held by	UnifBudg		
	Year on Earnings		CashFlow	CashFlow	Public	Balance		
					(EOY)			
			(Billions of Constant 2001 \$)					
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2004	77.3	0.0	0.0	-77.3	79.8	-79.8	-79.8	
2005	80.1	0.0	0.0	-80.1	164.7	-87.4	-87.4	
2006	82.8	0.0	0.0	-82.8	254.8	-95.4	-95.4	
2007	85.0	0.0	0.0	-85.0	349.8	-103.1	-103.1	
2008	87.2	0.0	0.0	-87.1	449.8	-111.1	-111.1	
2009	89.4	0.6	0.0	-88.9	554.5	-119.0	-119.0	
2010	91.7	1.2	0.0	-90.5	663.8	-127.1	-127.1	
2011	94.3	2.0	0.0	-92.2	778.3	-135.7	-135.7	
2012	96.7	3.0	0.0	-93.7	897.8	-144.4	-144.4	
2013	99.0	4.1	0.0	-94.9	1,022.3	-153.2	-153.2	
2014	100.9	5.4	0.0	-95.5	1,151.3	-161.7	-161.7	
2015	102.7	6.8	0.0	-95.8	1,284.7	-170.2	-170.2	
2016	104.5	8.5	0.0	-96.0	1,422.3	-178.6	-178.6	
2017	106.2	10.3	0.0	-95.9	1,563.9	-187.0	-187.0	
2018	108.1	12.4	0.0	-95.7	1,709.5	-195.6	-195.6	
2019	109.8	14.6	0.0	-95.2	1,859.0	-204.1	-204.1	
2020	111.7	17.1	0.0	-94.6	2,012.3	-212.7	-212.7	
2021	113.4	19.8	0.0	-93.6	2,169.2	-221.2	-221.2	
2022	115.0	22.8	0.0	-92.3	2,329.5	-229.5	-229.5	
2023	116.7	26.0	0.0	-90.7	2,492.9	-237.9	-237.9	
2024	118.3	29.5	0.0	-88.9	2,659.4	-246.1	-246.1	
2025	120.0	33.2	0.0	-86.8	2,828.7	-254.3	-254.3	
2026	121.8	37.3	0.0	-84.5	3,000.8	-262.4	-262.4	
2027	123.3	41.6	0.0	-81.7	3,175.0	-270.2	-270.2	
2028	124.8	46.2	0.0	-78.6	3,351.4	-277.8	-277.8	
2029	126.4	51.2	0.0	-75.3	3,529.6	-285.2	-285.2	
2030	128.1	56.4	0.0	-71.6	3,709.3	-292.5	-292.5	
2031	129.7	62.0	0.0	-67.7	3,890.5	-299.6	-299.6	
2032	131.4	67.9	0.0	-63.5	4,072.7	-306.5	-306.5	
2033	133.2	74.2	0.0	-59.0	4,255.8	-313.2	-313.2	
2034	135.0	80.8	0.0	-54.2	4,439.4	-319.6	-319.6	
2035	136.8	87.7	0.0	-49.1	4,623.3	-325.7	-325.7	
2036	138.7	95.0	0.0	-43.7	4,807.0	-331.4	-331.4	
2037	140.5	102.7	0.0	-37.9	4,990.3	-336.8	-336.8	
2038	142.4	110.7	0.0	-31.7	5,172.7	-341.8	-341.8	
2039	144.3	119.2	0.0	-25.2	5,353.8	-346.4	-346.4	
2040	146.3	128.0	0.0	-18.3	5,533.3	-350.5	-350.5	
2041	148.2	137.2	0.0	-11.0	5,710.7	-354.1	-354.1	
2042	150.1	146.8	0.0	-3.3	5,885.4	-357.1	-357.1	
2043	152.0	156.8	0.0	4.8	6,057.0	-359.7	-359.7	
2044	154.0	167.2	0.0	13.3	6,225.0	-361.5	-361.5	
2045	155.9	177.7	0.0	21.8	6,389.3	-363.2	-363.2	
2046	157.9	188.6	0.0	30.7	6,549.3	-364.1	-364.1	
2047	159.8	200.8	0.0	40.9	6,703.6	-363.5	-363.5	
2048	161.8	212.7	0.0	50.9	6,852.2	-362.8	-362.8	
2049	163.8	224.3	0.0	60.5	6,995.3	-362.0	-362.0	
2050	165.7	235.0	0.0	69.3	7,133.7	-361.9	-361.9	
2051	167.7	245.8	0.0	78.0	7,267.2	-361.4	-361.4	
2052	169.7	256.5	0.0	86.8	7,395.7	-360.7	-360.7	
2053	171.7	267.1	0.0	95.4	7,519.3	-359.8	-359.8	
2054	173.8	277.6	0.0	103.8	7,637.7	-358.7	-358.7	
2055	175.9	288.1	0.0	112.2	7,751.1	-357.3	-357.3	
2056	177.9	298.5	0.0	120.5	7,859.3	-355.8	-355.8	
2057	180.1	308.8	0.0	128.7	7,962.3	-354.1	-354.1	
2058	182.2	318.9	0.0	136.7	8,060.1	-352.2	-352.2	
2059	184.4	328.9	0.0	144.5	8,152.9	-350.2	-350.2	
2060	186.6	338.8	0.0	152.2	8,240.4	-348.0	-348.0	
2061	188.8	348.5	0.0	159.7	8,322.9	-345.7	-345.7	
2062	191.0	358.0	0.0	166.9	8,400.4	-343.4	-343.4	
2063	193.3	367.2	0.0	173.9	8,473.0	-341.0	-341.0	
2064	195.6	376.3	0.0	180.7	8,540.9	-338.5	-338.5	
2065	197.9	385.1	0.0	187.2	8,604.0	-336.0	-336.0	
2066	200.3	393.7	0.0	193.4	8,662.6	-333.5	-333.5	
2067	202.7	402.1	0.0	199.5	8,716.8	-330.9	-330.9	
2068	205.1	410.3	0.0	205.2	8,766.6	-328.3	-328.3	
2069	207.5	418.3	0.0	210.8	8,812.1	-325.6	-325.6	
2070	209.9	426.0	0.0	216.1	8,853.5	-322.9	-322.9	
2071	212.4	433.6	0.0	221.2	8,890.9	-320.2	-320.2	
2072	214.9	441.0	0.0	226.1	8,924.4	-317.5	-317.5	
2073	217.4	448.2	0.0	230.8	8,954.1	-314.7	-314.7	
2074	219.9	455.2	0.0	235.3	8,980.0	-311.9	-311.9	
2075	222.5	462.1	0.0	239.6	9,002.2	-309.1	-309.1	
2076	225.1	468.9	-0.2	243.6	9,021.0	-306.4	-306.4	

Based on Intermediate Assumptions of the 2001 Trustees Report

With Ult Real Int Rate of

3.0 TF,

Office of the Actuary

Social Security Administration

January 29, 2002

Ult Ave Real BenOffstYld Rate of

Ave BenOffst A Annuity Yield

3.5

3.5

Plan 1(1+1)--67p b Unified Budget Effects

**Assumed
% Elect PA
66.7%**

	Contributes to PRA by Fed Govt Based Year on Earnings	Offset to OASI Ben from PRA	IA Cntrb Other Changes in OASDI CashFlow	2 %, Change in Annual UnifBudg CashFlow	Benefit Offset Change in Debt Held by Public (EOY)	100.0 % Change in Ann UnifBudg Balance
(Billions of Constant 2001 \$)						
2002	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0
2004	51.6	0.0	0.0	-51.6	53.2	-53.2
2005	53.4	0.0	0.0	-53.4	109.8	-58.3
2006	55.2	0.0	0.0	-55.2	169.9	-63.6
2007	56.6	0.0	0.0	-56.6	233.2	-68.7
2008	58.1	0.0	0.0	-58.1	299.9	-74.1
2009	59.6	0.4	0.0	-59.2	369.6	-79.4
2010	61.1	0.8	0.0	-60.3	442.5	-84.7
2011	62.8	1.4	0.0	-61.5	518.9	-90.5
2012	64.4	2.0	0.0	-62.5	598.5	-96.2
2013	66.0	2.7	0.0	-63.3	681.5	-102.1
2014	67.3	3.6	0.0	-63.7	767.5	-107.8
2015	68.4	4.6	0.0	-63.9	856.4	-113.4
2016	69.7	5.6	0.0	-64.0	948.2	-119.1
2017	70.8	6.9	0.0	-64.0	1,042.6	-124.7
2018	72.0	8.2	0.0	-63.8	1,139.7	-130.4
2019	73.2	9.7	0.0	-63.5	1,239.3	-136.1
2020	74.4	11.4	0.0	-63.0	1,341.5	-141.8
2021	75.6	13.2	0.0	-62.4	1,446.2	-147.5
2022	76.7	15.2	0.0	-61.5	1,553.0	-153.0
2023	77.8	17.3	0.0	-60.5	1,661.9	-158.6
2024	78.9	19.6	0.0	-59.3	1,772.9	-164.1
2025	80.0	22.1	0.0	-57.9	1,885.8	-169.5
2026	81.2	24.8	0.0	-56.3	2,000.5	-174.9
2027	82.2	27.7	0.0	-54.5	2,116.7	-180.1
2028	83.2	30.8	0.0	-52.4	2,234.3	-185.2
2029	84.3	34.1	0.0	-50.2	2,353.0	-190.2
2030	85.4	37.6	0.0	-47.8	2,472.9	-195.0
2031	86.5	41.3	0.0	-45.2	2,593.7	-199.8
2032	87.6	45.3	0.0	-42.4	2,715.2	-204.4
2033	88.8	49.4	0.0	-39.4	2,837.2	-208.8
2034	90.0	53.8	0.0	-36.2	2,959.6	-213.1
2035	91.2	58.5	0.0	-32.8	3,082.2	-217.1
2036	92.5	63.3	0.0	-29.1	3,204.7	-221.0
2037	93.7	68.5	0.0	-25.2	3,326.9	-224.5
2038	95.0	73.8	0.0	-21.1	3,448.5	-227.9
2039	96.2	79.4	0.0	-16.8	3,569.2	-230.9
2040	97.5	85.3	0.0	-12.2	3,688.9	-233.7
2041	98.8	91.5	0.0	-7.3	3,807.1	-236.1
2042	100.1	97.9	0.0	-2.2	3,923.6	-238.1
2043	101.4	104.5	0.0	3.2	4,038.0	-239.8
2044	102.7	111.5	0.0	8.8	4,150.0	-241.0
2045	103.9	118.5	0.0	14.5	4,259.6	-242.1
2046	105.2	125.7	0.0	20.5	4,366.2	-242.7
2047	106.6	133.8	0.0	27.3	4,469.0	-242.3
2048	107.9	141.8	0.0	33.9	4,568.1	-241.8
2049	109.2	149.5	0.0	40.3	4,663.6	-241.4
2050	110.5	156.7	0.0	46.2	4,755.8	-241.2
2051	111.8	163.8	0.0	52.0	4,844.8	-240.9
2052	113.1	171.0	0.0	57.8	4,930.5	-240.4
2053	114.5	178.1	0.0	63.6	5,012.8	-239.9
2054	115.9	185.1	0.0	69.2	5,091.8	-239.1
2055	117.2	192.1	0.0	74.8	5,167.4	-238.2
2056	118.6	199.0	0.0	80.4	5,239.5	-237.2
2057	120.0	205.8	0.0	85.8	5,308.2	-236.1
2058	121.5	212.6	0.0	91.1	5,373.4	-234.8
2059	122.9	219.3	0.0	96.4	5,435.2	-233.5
2060	124.4	225.8	0.0	101.5	5,493.6	-232.0
2061	125.9	232.3	0.0	106.5	5,548.6	-230.5
2062	127.4	238.7	0.0	111.3	5,600.3	-228.9
2063	128.9	244.8	0.0	115.9	5,648.7	-227.3
2064	130.4	250.8	0.0	120.4	5,693.9	-225.7
2065	132.0	256.7	0.0	124.8	5,736.0	-224.0
2066	133.5	262.5	0.0	129.0	5,775.1	-222.3
2067	135.1	268.1	0.0	133.0	5,811.2	-220.6
2068	136.7	273.5	0.0	136.8	5,844.4	-218.8
2069	138.3	278.9	0.0	140.5	5,874.7	-217.1
2070	139.9	284.0	0.0	144.1	5,902.4	-215.3
2071	141.6	289.1	0.0	147.5	5,927.3	-213.5
2072	143.3	294.0	0.0	150.7	5,949.6	-211.7
2073	144.9	298.8	0.0	153.9	5,969.4	-209.8
2074	146.6	303.5	0.0	156.9	5,986.7	-208.0
2075	148.3	308.1	0.0	159.8	6,001.5	-206.1
2076	150.0	312.6	-0.2	162.3	6,014.0	-204.3

Based on Intermediate Assumptions of the 2001 Trustees Report

With Ult Real Int Rate of

3.0 TF,

Office of the Actuary

Social Security Administration

January 29, 2002

Ult Ave Real BenOffstYld Rate of

Ave BenOffst A Annuity Yield

3.5

3.5

Plan 1(0+2)--67p b Unified Budget Effects

Assumed
% Elect PA
66.7%

	Contributes to PRA by Fed Govt Based Year on Earnings	Offset to OASI Ben from PRA	IA Cntrb Other Changes in OASDI CashFlow	2 %, Change in Annual UnifBudg CashFlow	Benefit Offset Change in Debt Held by Public (EOY)	100.0 % Change in Ann UnifBudg Balance
(Billions of Constant 2001 \$)						
2002	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0
2004	51.6	0.0	0.0	-51.6	53.2	-53.2
2005	53.4	0.0	0.0	-53.4	109.8	-58.3
2006	55.2	0.0	0.0	-55.2	169.9	-63.6
2007	56.6	0.0	0.0	-56.6	233.2	-68.7
2008	58.1	0.0	0.0	-58.1	299.9	-74.1
2009	59.6	0.4	0.0	-59.2	369.6	-79.4
2010	61.1	0.8	0.0	-60.3	442.5	-84.7
2011	62.8	1.4	0.0	-61.5	518.9	-90.5
2012	64.4	2.0	0.0	-62.5	598.5	-96.2
2013	66.0	2.7	0.0	-63.3	681.5	-102.1
2014	67.3	3.6	0.0	-63.7	767.5	-107.8
2015	68.4	4.6	0.0	-63.9	856.4	-113.4
2016	69.7	5.6	0.0	-64.0	948.2	-119.1
2017	70.8	6.9	0.0	-64.0	1,042.6	-124.7
2018	72.0	8.2	0.0	-63.8	1,139.7	-130.4
2019	73.2	9.7	0.0	-63.5	1,239.3	-136.1
2020	74.4	11.4	0.0	-63.0	1,341.5	-141.8
2021	75.6	13.2	0.0	-62.4	1,446.2	-147.5
2022	76.7	15.2	0.0	-61.5	1,553.0	-153.0
2023	77.8	17.3	0.0	-60.5	1,661.9	-158.6
2024	78.9	19.6	0.0	-59.3	1,772.9	-164.1
2025	80.0	22.1	0.0	-57.9	1,885.8	-169.5
2026	81.2	24.8	0.0	-56.3	2,000.5	-174.9
2027	82.2	27.7	0.0	-54.5	2,116.7	-180.1
2028	83.2	30.8	0.0	-52.4	2,234.3	-185.2
2029	84.3	34.1	0.0	-50.2	2,353.0	-190.2
2030	85.4	37.6	0.0	-47.8	2,472.9	-195.0
2031	86.5	41.3	0.0	-45.2	2,593.7	-199.8
2032	87.6	45.3	0.0	-42.4	2,715.2	-204.4
2033	88.8	49.4	0.0	-39.4	2,837.2	-208.8
2034	90.0	53.8	0.0	-36.2	2,959.6	-213.1
2035	91.2	58.5	0.0	-32.8	3,082.2	-217.1
2036	92.5	63.3	0.0	-29.1	3,204.7	-221.0
2037	93.7	68.5	0.0	-25.2	3,326.9	-224.5
2038	95.0	73.8	0.0	-21.1	3,448.5	-227.9
2039	96.2	79.4	0.0	-16.8	3,569.2	-230.9
2040	97.5	85.3	0.0	-12.2	3,688.9	-233.7
2041	98.8	91.5	0.0	-7.3	3,807.1	-236.1
2042	100.1	97.9	0.0	-2.2	3,923.6	-238.1
2043	101.4	104.5	0.0	3.2	4,038.0	-239.8
2044	102.7	111.5	0.0	8.8	4,150.0	-241.0
2045	103.9	118.5	0.0	14.5	4,259.6	-242.1
2046	105.2	125.7	0.0	20.5	4,366.2	-242.7
2047	106.6	133.8	0.0	27.3	4,469.0	-242.3
2048	107.9	141.8	0.0	33.9	4,568.1	-241.8
2049	109.2	149.5	0.0	40.3	4,663.6	-241.4
2050	110.5	156.7	0.0	46.2	4,755.8	-241.2
2051	111.8	163.8	0.0	52.0	4,844.8	-240.9
2052	113.1	171.0	0.0	57.8	4,930.5	-240.4
2053	114.5	178.1	0.0	63.6	5,012.8	-239.9
2054	115.9	185.1	0.0	69.2	5,091.8	-239.1
2055	117.2	192.1	0.0	74.8	5,167.4	-238.2
2056	118.6	199.0	0.0	80.4	5,239.5	-237.2
2057	120.0	205.8	0.0	85.8	5,308.2	-236.1
2058	121.5	212.6	0.0	91.1	5,373.4	-234.8
2059	122.9	219.3	0.0	96.4	5,435.2	-233.5
2060	124.4	225.8	0.0	101.5	5,493.6	-232.0
2061	125.9	232.3	0.0	106.5	5,548.6	-230.5
2062	127.4	238.7	0.0	111.3	5,600.3	-228.9
2063	128.9	244.8	0.0	115.9	5,648.7	-227.3
2064	130.4	250.8	0.0	120.4	5,693.9	-225.7
2065	132.0	256.7	0.0	124.8	5,736.0	-224.0
2066	133.5	262.5	0.0	129.0	5,775.1	-222.3
2067	135.1	268.1	0.0	133.0	5,811.2	-220.6
2068	136.7	273.5	0.0	136.8	5,844.4	-218.8
2069	138.3	278.9	0.0	140.5	5,874.7	-217.1
2070	139.9	284.0	0.0	144.1	5,902.4	-215.3
2071	141.6	289.1	0.0	147.5	5,927.3	-213.5
2072	143.3	294.0	0.0	150.7	5,949.6	-211.7
2073	144.9	298.8	0.0	153.9	5,969.4	-209.8
2074	146.6	303.5	0.0	156.9	5,986.7	-208.0
2075	148.3	308.1	0.0	159.8	6,001.5	-206.1
2076	150.0	312.6	-0.2	162.3	6,014.0	-204.3

Based on Intermediate Assumptions of the 2001 Trustees Report

With Ult Real Int Rate of

3.0 TF,

Office of the Actuary

Social Security Administration

January 29, 2002

Ult Ave Real BenOffstYld Rate of

Ave BenOffst A Annuity Yield

3.5

3.5

Basic Plan 2
i.e., Without
PAs

b IA Contributions, Clawback or OASDI Benefit Cut from IA, & Budget Effect

	Contributes to PRA by Fed Govt Based Year on Earnings	Offset to OASI Ben from PRA	IA Cntrb Other Changes in OASDI CashFlow	0 %, Change in Annual UnifBudg CashFlow	Benefit Offset Change in Debt Held by Public (EOY)	0.0 % Change in Ann UnifBudg Balance
(Billions of Constant 2001 \$)						
2002	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	-4.2	-4.2	4.3	-4.3
2010	0.0	0.0	-4.0	-4.0	8.6	-4.4
2011	0.0	0.0	-3.6	-3.6	12.6	-4.2
2012	0.0	0.0	-2.9	-2.9	15.9	-3.7
2013	0.0	0.0	-1.8	-1.8	18.2	-2.9
2014	0.0	0.0	-0.4	-0.4	19.2	-1.5
2015	0.0	0.0	1.5	1.5	18.1	0.4
2016	0.0	0.0	3.9	3.9	14.7	2.9
2017	0.0	0.0	6.7	6.7	8.2	6.0
2018	0.0	0.0	9.9	9.9	-1.8	9.7
2019	0.0	0.0	13.7	13.7	-16.0	14.2
2020	0.0	0.0	17.8	17.8	-34.8	19.4
2021	0.0	0.0	22.4	22.4	-59.0	25.3
2022	0.0	0.0	27.5	27.5	-89.2	32.0
2023	0.0	0.0	33.0	33.0	-125.8	39.5
2024	0.0	0.0	38.9	38.9	-169.7	47.9
2025	0.0	0.0	45.2	45.2	-221.5	57.2
2026	0.0	0.0	51.9	51.9	-281.7	67.3
2027	0.0	0.0	59.0	59.0	-351.0	78.3
2028	0.0	0.0	66.5	66.5	-430.2	90.3
2029	0.0	0.0	74.2	74.2	-519.7	103.2
2030	0.0	0.0	82.3	82.3	-620.1	117.1
2031	0.0	0.0	90.7	90.7	-732.4	132.0
2032	0.0	0.0	99.5	99.5	-857.0	148.0
2033	0.0	0.0	108.6	108.6	-994.7	165.1
2034	0.0	0.0	117.8	117.8	-1,146.0	183.1
2035	0.0	0.0	127.0	127.0	-1,311.4	202.0
2036	0.0	0.0	136.5	136.5	-1,491.6	222.1
2037	0.0	0.0	146.3	146.3	-1,687.2	243.3
2038	0.0	0.0	156.3	156.3	-1,899.1	265.7
2039	0.0	0.0	166.6	166.6	-2,127.8	289.5
2040	0.0	0.0	177.1	177.1	-2,374.4	314.5
2041	0.0	0.0	188.1	188.1	-2,639.7	341.1
2042	0.0	0.0	199.6	199.6	-2,924.8	369.4
2043	0.0	0.0	211.5	211.5	-3,230.7	399.3
2044	0.0	0.0	223.8	223.8	-3,558.4	431.0
2045	0.0	0.0	236.5	236.5	-3,909.1	464.4
2046	0.0	0.0	249.6	249.6	-4,283.8	499.6
2047	0.0	0.0	263.1	263.1	-4,683.7	536.7
2048	0.0	0.0	276.9	276.9	-5,109.8	575.8
2049	0.0	0.0	291.2	291.2	-5,563.5	616.9
2050	0.0	0.0	305.8	305.8	-6,045.8	660.0
2051	0.0	0.0	320.8	320.8	-6,558.1	705.4
2052	0.0	0.0	336.3	336.3	-7,101.7	753.2
2053	0.0	0.0	352.3	352.3	-7,678.2	803.3
2054	0.0	0.0	368.5	368.5	-8,288.6	855.7
2055	0.0	0.0	385.0	385.0	-8,934.4	910.5
2056	0.0	0.0	402.0	402.0	-9,617.1	968.1
2057	0.0	0.0	419.4	419.4	-10,338.2	1,028.3
2058	0.0	0.0	436.9	436.9	-11,099.1	1,091.1
2059	0.0	0.0	454.5	454.5	-11,900.9	1,156.4
2060	0.0	0.0	472.3	472.3	-12,745.0	1,224.3
2061	0.0	0.0	490.3	490.3	-13,633.2	1,295.3
2062	0.0	0.0	508.5	508.5	-14,566.6	1,369.0
2063	0.0	0.0	526.6	526.6	-15,546.8	1,445.6
2064	0.0	0.0	545.2	545.2	-16,575.6	1,525.4
2065	0.0	0.0	563.9	563.9	-17,654.6	1,608.5
2066	0.0	0.0	583.0	583.0	-18,785.6	1,695.0
2067	0.0	0.0	602.6	602.6	-19,970.7	1,785.3
2068	0.0	0.0	622.4	622.4	-21,211.8	1,879.1
2069	0.0	0.0	642.5	642.5	-22,511.0	1,976.8
2070	0.0	0.0	663.1	663.1	-23,870.3	2,078.4
2071	0.0	0.0	684.3	684.3	-25,292.2	2,184.5
2072	0.0	0.0	705.7	705.7	-26,778.9	2,294.7
2073	0.0	0.0	727.6	727.6	-28,332.8	2,409.4
2074	0.0	0.0	749.9	749.9	-29,956.3	2,528.6
2075	0.0	0.0	772.3	772.3	-31,651.6	2,652.3
2076	0.0	0.0	794.9	794.9	-33,421.1	2,780.7

Based on Intermediate Assumptions of the 2001 Trustees Report

With Ult Real Int Rate of

3.0 TF,

Office of the Actuary

Social Security Administration

January 29, 2002

Plan 2T-67p b IA Contributions, Clawback or OASDI Benefit Cut from IA, & Budget Effect

Assumed % Elect PA 66.7%	Contribs to PRA by Fed Govt Based Year on Earnings	Offset to OASI Ben from PRA	IA Cntrb Other Changes in OASDI CashFlow	2.39 %, Change in Annual UnifBudg CashFlow	Benefit Offset Change in Debt Held by Public (EOY)	100.0 % Change in Ann UnifBudg Balance
(Billions of Constant 2001 \$)						
2002	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0
2004	61.6	0.0	0.0	-61.6	63.5	-63.5
2005	63.8	0.0	0.0	-63.8	131.2	-69.6
2006	66.0	0.0	0.0	-66.0	203.0	-76.0
2007	67.7	0.0	0.0	-67.7	278.7	-82.2
2008	69.4	0.0	0.0	-69.4	358.3	-88.5
2009	71.2	0.4	-4.2	-75.0	446.1	-99.2
2010	73.0	0.9	-4.0	-76.1	537.5	-105.7
2011	75.1	1.5	-3.6	-77.2	632.8	-112.4
2012	77.0	2.2	-2.9	-77.7	731.5	-118.9
2013	78.9	3.0	-1.8	-77.7	833.3	-125.2
2014	80.4	3.9	-0.4	-76.9	937.4	-130.7
2015	81.8	4.9	1.5	-75.4	1,043.3	-135.8
2016	83.3	6.0	3.9	-73.4	1,150.2	-140.3
2017	84.6	7.2	6.7	-70.7	1,257.7	-144.2
2018	86.1	8.6	9.9	-67.6	1,365.1	-147.6
2019	87.5	10.0	13.7	-63.8	1,471.8	-150.3
2020	88.9	11.6	17.8	-59.5	1,577.3	-152.5
2021	90.3	13.4	22.4	-54.5	1,680.9	-154.0
2022	91.6	15.2	27.5	-48.9	1,781.8	-154.6
2023	93.0	17.2	33.0	-42.8	1,879.4	-154.5
2024	94.3	19.3	38.9	-36.1	1,973.1	-153.6
2025	95.6	21.5	45.2	-28.9	2,062.0	-152.0
2026	97.0	23.9	51.9	-21.1	2,145.7	-149.5
2027	98.2	26.5	59.0	-12.7	2,223.2	-146.0
2028	99.5	29.1	66.5	-3.8	2,293.8	-141.7
2029	100.7	31.9	74.2	5.4	2,357.0	-136.5
2030	102.0	34.9	82.3	15.2	2,412.1	-130.4
2031	103.4	38.0	90.7	25.4	2,458.3	-123.3
2032	104.7	41.2	99.5	36.0	2,494.9	-115.1
2033	106.1	44.6	108.6	47.0	2,521.2	-106.0
2034	107.6	48.1	117.8	58.3	2,536.7	-96.0
2035	109.0	51.7	127.0	69.7	2,540.9	-85.2
2036	110.5	55.5	136.5	81.6	2,533.0	-73.3
2037	112.0	59.4	146.3	93.7	2,512.3	-60.2
2038	113.5	63.5	156.3	106.3	2,478.0	-46.0
2039	115.0	67.7	166.6	119.3	2,429.3	-30.5
2040	116.5	72.1	177.1	132.7	2,365.3	-13.6
2041	118.1	76.6	188.1	146.6	2,285.0	4.7
2042	119.6	81.2	199.6	161.2	2,187.2	24.8
2043	121.1	86.0	211.5	176.3	2,070.9	46.4
2044	122.7	90.9	223.8	192.0	1,935.0	69.8
2045	124.2	95.8	236.5	208.0	1,778.5	94.7
2046	125.8	100.8	249.6	224.6	1,600.1	121.5
2047	127.3	106.4	263.1	242.1	1,398.4	150.6
2048	128.9	111.7	276.9	259.8	1,172.4	181.3
2049	130.5	116.9	291.2	277.6	921.2	213.7
2050	132.0	121.7	305.8	295.4	644.1	247.7
2051	133.6	126.4	320.8	313.6	339.9	283.6
2052	135.2	131.1	336.3	332.3	7.4	321.7
2053	136.8	135.8	352.3	351.3	-354.7	361.9
2054	138.5	140.4	368.5	370.4	-747.4	404.1
2055	140.1	144.9	385.0	389.8	-1,171.9	448.4
2056	141.8	149.4	402.0	409.7	-1,629.6	495.2
2057	143.4	153.8	419.4	429.8	-2,121.8	544.2
2058	145.2	158.1	436.9	449.9	-2,649.6	595.5
2059	146.9	162.4	454.5	470.0	-3,213.9	649.0
2060	148.6	166.6	472.3	490.2	-3,816.0	704.8
2061	150.4	170.7	490.3	510.7	-4,457.3	763.1
2062	152.2	174.8	508.5	531.1	-5,138.8	823.9
2063	154.0	178.7	526.6	551.4	-5,861.7	887.1
2064	155.8	182.6	545.2	572.0	-6,627.5	953.1
2065	157.7	186.4	563.9	592.7	-7,437.7	1,021.9
2066	159.6	190.2	583.0	613.6	-8,293.8	1,093.7
2067	161.5	193.8	602.6	635.0	-9,197.5	1,168.7
2068	163.4	197.4	622.4	656.4	-10,150.6	1,246.9
2069	165.3	200.9	642.5	678.2	-11,154.6	1,328.3
2070	167.2	204.4	663.1	700.2	-12,211.5	1,413.2
2071	169.2	207.8	684.3	722.8	-13,323.5	1,502.0
2072	171.2	211.1	705.7	745.6	-14,492.3	1,594.4
2073	173.2	214.4	727.6	768.8	-15,720.0	1,690.7
2074	175.2	217.6	749.9	792.3	-17,008.9	1,791.1
2075	177.2	220.8	772.3	815.8	-18,360.7	1,895.2
2076	179.3	224.0	794.9	839.6	-19,777.6	2,003.5

Based on Intermediate Assumptions of the 2001 Trustees Report
 With Ult Real Int Rate of 3.0 TF,
 Office of the Actuary
 Social Security Administration
 January 29, 2002

Ult Ave Real BenOfstYld Rate of 2
 Ave BenOfst Annuity Net Yld Rate of 2

Plan 2T-100p	b IA Contributions, Clawback or OASDI Benefit Cut from IA, & Budget Effect						
Assumed % Elect PA 100.0%	Contribs to PRA by Fed Govt Based Year on Earnings	Offset to OASI Ben from PRA	IA Cntrb Other Changes in OASDI CashFlow	2.39 %,	Change in Annual UnifBudg CashFlow	Benefit Offset Change in Debt Held by Public (EOY)	100.0 % Change in Ann UnifBudg Balance
(Billions of Constant 2001 \$)							
2002	0.0	0.0	0.0		0.0	0.0	0.0
2003	0.0	0.0	0.0		0.0	0.0	0.0
2004	92.4	0.0	0.0		-92.4	95.3	-95.3
2005	95.7	0.0	0.0		-95.7	196.8	-104.5
2006	98.9	0.0	0.0		-98.9	304.5	-114.0
2007	101.5	0.0	0.0		-101.5	418.0	-123.2
2008	104.1	0.0	0.0		-104.1	537.5	-132.8
2009	106.9	0.6	-4.2		-110.4	667.0	-146.6
2010	109.6	1.4	-4.0		-112.2	802.0	-156.3
2011	112.6	2.3	-3.6		-113.9	942.9	-166.5
2012	115.5	3.3	-2.9		-115.1	1,089.3	-176.5
2013	118.4	4.5	-1.8		-115.7	1,240.9	-186.4
2014	120.6	5.8	-0.4		-115.1	1,396.6	-195.4
2015	122.7	7.3	1.5		-113.8	1,555.9	-203.9
2016	124.9	9.0	3.9		-112.0	1,718.0	-211.9
2017	127.0	10.9	6.7		-109.4	1,882.4	-219.3
2018	129.1	12.9	9.9		-106.3	2,048.6	-226.3
2019	131.2	15.1	13.7		-102.5	2,215.7	-232.6
2020	133.4	17.5	17.8		-98.1	2,383.4	-238.5
2021	135.5	20.0	22.4		-93.0	2,550.9	-243.6
2022	137.5	22.8	27.5		-87.2	2,717.3	-247.9
2023	139.4	25.8	33.0		-80.7	2,882.1	-251.6
2024	141.4	28.9	38.9		-73.6	3,044.4	-254.4
2025	143.5	32.3	45.2		-65.9	3,203.8	-256.6
2026	145.5	35.9	51.9		-57.7	3,359.3	-257.9
2027	147.3	39.7	59.0		-48.6	3,510.3	-258.2
2028	149.2	43.7	66.5		-39.0	3,655.8	-257.7
2029	151.1	47.9	74.2		-29.0	3,795.3	-256.3
2030	153.0	52.3	82.3		-18.4	3,928.2	-254.1
2031	155.0	56.9	90.7		-7.3	4,053.6	-250.9
2032	157.1	61.8	99.5		4.2	4,170.8	-246.7
2033	159.2	66.8	108.6		16.3	4,279.2	-241.6
2034	161.3	72.1	117.8		28.6	4,378.1	-235.6
2035	163.5	77.6	127.0		41.1	4,467.0	-228.8
2036	165.7	83.3	136.5		54.1	4,545.3	-220.9
2037	167.9	89.2	146.3		67.5	4,612.0	-211.9
2038	170.2	95.3	156.3		81.3	4,666.5	-201.8
2039	172.5	101.6	166.6		95.7	4,707.8	-190.4
2040	174.8	108.1	177.1		110.5	4,735.1	-177.7
2041	177.1	114.8	188.1		125.9	4,747.3	-163.5
2042	179.4	121.8	199.6		142.0	4,743.2	-147.6
2043	181.7	129.0	211.5		158.7	4,721.8	-130.1
2044	184.0	136.3	223.8		176.1	4,681.7	-110.8
2045	186.3	143.7	236.5		193.8	4,622.3	-90.1
2046	188.7	151.2	249.6		212.2	4,542.1	-67.5
2047	191.0	159.5	263.1		231.6	4,439.5	-42.5
2048	193.3	167.6	276.9		251.2	4,313.5	-15.9
2049	195.7	175.4	291.2		270.9	4,163.6	12.2
2050	198.0	182.5	305.8		290.2	3,989.1	41.5
2051	200.4	189.6	320.8		310.1	3,788.9	72.7
2052	202.8	196.7	336.3		330.2	3,562.0	105.9
2053	205.2	203.7	352.3		350.8	3,307.0	141.2
2054	207.7	210.6	368.5		371.4	3,023.2	178.2
2055	210.2	217.4	385.0		392.2	2,709.3	217.3
2056	212.6	224.1	402.0		413.5	2,364.1	258.7
2057	215.2	230.7	419.4		434.9	1,986.4	302.2
2058	217.7	237.2	436.9		456.4	1,575.2	347.8
2059	220.3	243.6	454.5		477.8	1,129.6	395.3
2060	222.9	249.9	472.3		499.2	648.5	445.0
2061	225.6	256.1	490.3		520.8	130.7	497.1
2062	228.3	262.2	508.5		542.4	-424.8	551.4
2063	231.0	268.1	526.6		563.7	-1,019.1	607.8
2064	233.7	273.9	545.2		585.4	-1,653.5	666.9
2065	236.5	279.7	563.9		607.1	-2,329.3	728.6
2066	239.3	285.3	583.0		628.9	-3,047.9	793.0
2067	242.2	290.7	602.6		651.1	-3,810.9	860.5
2068	245.0	296.1	622.4		673.5	-4,620.0	930.7
2069	247.9	301.4	642.5		696.0	-5,476.4	1,004.1
2070	250.9	306.5	663.1		718.8	-6,382.1	1,080.6
2071	253.8	311.6	684.3		742.1	-7,339.1	1,160.8
2072	256.8	316.6	705.7		765.6	-8,348.9	1,244.3
2073	259.8	321.5	727.6		789.4	-9,413.6	1,331.4
2074	262.8	326.4	749.9		813.5	-10,535.2	1,422.3
2075	265.9	331.2	772.3		837.6	-11,715.3	1,516.6
2076	268.9	336.0	794.9		862.0	-12,955.9	1,614.8

Based on Intermediate Assumptions of the 2001 Trustees Report
 With Ult Real Int Rate of 3.0 TF, Office of the Actuary
 Social Security Administration
 January 29, 2002

Ult Ave Real BenOfstYld Rate of 2
 Ave BenOfst Annuity Net Yld Rate of 2

Basic Plan 3
i.e., Without
PAs

Year	Unified Budget Effects			IA Cntrb 0 %		Benefit Offset 0.0 %		Change in Ann UnifBudg Balance
	Contribs to PRA by Fed Govt Based Year on Earnings	Specified GenFnd Transfer to OASDI TrustFunds (NoEffectonUB)	Offset to OASI Ben from PRA	Other Changes in OASDI CashFlow lessGFTTrans	Tax Credit for Addon	Change in Annual UnifBudg CashFlow	Change in Debt Held by Public (EOY)	
(Billions of Constant 2001 \$)								
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	15.5	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	17.3	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	18.1	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	19.6	0.0	-3.5	0.0	-3.5	3.6	-3.6
2010	0.0	21.8	0.0	-2.7	0.0	-2.7	6.6	-3.0
2011	0.0	23.3	0.0	-1.6	0.0	-1.6	8.5	-2.1
2012	0.0	24.9	0.0	-0.3	0.0	-0.3	9.0	-0.8
2013	0.0	26.5	0.0	1.4	0.0	1.4	7.8	0.9
2014	0.0	28.1	0.0	3.5	0.0	3.5	4.4	3.2
2015	0.0	29.9	0.0	6.1	0.0	6.1	-1.7	6.0
2016	0.0	31.7	0.0	8.9	0.0	8.9	-11.0	9.3
2017	0.0	33.7	0.0	12.1	0.0	12.1	-23.8	13.2
2018	0.0	35.7	0.0	15.6	0.0	15.6	-40.6	17.5
2019	0.0	37.9	0.0	19.2	0.0	19.2	-61.6	22.3
2020	0.0	38.7	0.0	23.1	0.0	23.1	-87.2	27.6
2021	0.0	39.5	0.0	27.0	0.0	27.0	-117.8	33.3
2022	0.0	40.3	0.0	31.3	0.0	31.3	-153.5	39.5
2023	0.0	41.1	0.0	35.7	0.0	35.7	-194.9	46.3
2024	0.0	41.9	0.0	40.3	0.0	40.3	-242.4	53.7
2025	0.0	42.7	0.0	45.1	0.0	45.1	-296.2	61.6
2026	0.0	43.4	0.0	50.2	0.0	50.2	-356.9	70.2
2027	0.0	44.2	0.0	55.5	0.0	55.5	-424.9	79.4
2028	0.0	44.9	0.0	61.2	0.0	61.2	-500.8	89.4
2029	0.0	45.6	0.0	67.2	0.0	67.2	-585.1	100.4
2030	0.0	46.3	0.0	73.5	0.0	73.5	-678.6	112.1
2031	0.0	46.9	0.0	80.1	0.0	80.1	-781.5	124.6
2032	0.0	47.6	0.0	86.7	0.0	86.7	-894.3	137.8
2033	0.0	48.2	0.0	93.3	0.0	93.3	-1,017.4	151.7
2034	0.0	48.8	0.0	99.7	0.0	99.7	-1,150.8	165.9
2035	0.0	49.3	0.0	105.8	0.0	105.8	-1,294.5	180.4
2036	0.0	49.9	0.0	112.0	0.0	112.0	-1,448.8	195.7
2037	0.0	50.3	0.0	118.1	0.0	118.1	-1,614.1	211.6
2038	0.0	50.8	0.0	124.3	0.0	124.3	-1,790.7	228.2
2039	0.0	51.3	0.0	130.4	0.0	130.4	-1,978.9	245.4
2040	0.0	51.7	0.0	136.5	0.0	136.5	-2,179.1	263.4
2041	0.0	52.1	0.0	142.9	0.0	142.9	-2,391.8	282.4
2042	0.0	52.5	0.0	149.5	0.0	149.5	-2,617.8	302.4
2043	0.0	52.9	0.0	156.5	0.0	156.5	-2,857.8	323.5
2044	0.0	53.2	0.0	163.8	0.0	163.8	-3,112.4	346.0
2045	0.0	53.6	0.0	171.4	0.0	171.4	-3,382.6	369.6
2046	0.0	54.0	0.0	179.4	0.0	179.4	-3,669.1	394.5
2047	0.0	54.4	0.0	187.6	0.0	187.6	-3,972.7	420.8
2048	0.0	54.8	0.0	196.1	0.0	196.1	-4,294.2	448.4
2049	0.0	55.2	0.0	205.0	0.0	205.0	-4,634.5	477.5
2050	0.0	55.6	0.0	214.1	0.0	214.1	-4,994.4	507.9
2051	0.0	56.1	0.0	223.5	0.0	223.5	-5,374.8	539.9
2052	0.0	56.7	0.0	233.1	0.0	233.1	-5,776.5	573.4
2053	0.0	57.2	0.0	243.1	0.0	243.1	-6,200.5	608.5
2054	0.0	57.8	0.0	252.9	0.0	252.9	-6,647.4	645.0
2055	0.0	58.4	0.0	262.9	0.0	262.9	-7,118.0	683.0
2056	0.0	59.0	0.0	273.4	0.0	273.4	-7,613.5	722.9
2057	0.0	59.7	0.0	284.0	0.0	284.0	-8,134.9	764.6
2058	0.0	60.4	0.0	294.9	0.0	294.9	-8,683.1	808.1
2059	0.0	61.1	0.0	305.6	0.0	305.6	-9,258.9	853.1
2060	0.0	61.9	0.0	316.3	0.0	316.3	-9,862.9	899.8
2061	0.0	62.7	0.0	327.4	0.0	327.4	-10,496.5	948.7
2062	0.0	63.4	0.0	338.4	0.0	338.4	-11,160.5	999.3
2063	0.0	64.2	0.0	349.3	0.0	349.3	-11,855.6	1,051.6
2064	0.0	65.1	0.0	360.5	0.0	360.5	-12,583.2	1,106.3
2065	0.0	65.9	0.0	371.7	0.0	371.7	-13,344.2	1,162.9
2066	0.0	66.8	0.0	383.0	0.0	383.0	-14,139.5	1,221.6
2067	0.0	67.6	0.0	394.8	0.0	394.8	-14,970.9	1,283.1
2068	0.0	68.5	0.0	406.7	0.0	406.7	-15,839.6	1,346.9
2069	0.0	69.3	0.0	418.7	0.0	418.7	-16,746.7	1,413.1
2070	0.0	70.2	0.0	431.3	0.0	431.3	-17,693.9	1,482.3
2071	0.0	71.1	0.0	444.6	0.0	444.6	-18,683.3	1,554.6
2072	0.0	72.0	0.0	457.7	0.0	457.7	-19,716.0	1,629.5
2073	0.0	72.9	0.0	471.3	0.0	471.3	-20,793.6	1,707.5
2074	0.0	73.9	0.0	485.4	0.0	485.4	-21,918.1	1,788.8
2075	0.0	74.8	0.0	499.1	0.0	499.1	-23,090.4	1,872.5
2076	0.0	75.6	0.0	512.9	0.0	512.9	-24,312.2	1,959.4

Based on Intermediate Assumptions of the 2001 Trustees Report
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Office of the Actuary
Social Security Administration
January 29, 2002

Plan 3T--67p	b Unified Budget Effects			IA Cntrb	1.97 %	Benefit Offset	100.0 %	Change
Assumed	Contribs to	Specified	Offset to	Other	Tax	Change	Change	in Ann
% Elect PA	PRA by Fed	GenFnd	OASI Ben	Changes	Credit	in Annual	in Debt	UnifBudg
66.7%	Govt Based	Transfer to	from PRA	in OASDI	for	UnifBudg	Held by	Balance
Year on Earnings	OASDI	TrustFunds		CashFlow	Addon	CashFlow	Public	
	(NoEffectonUB)			lessGFTTrans			(EOY)	
				(Billions of Constant 2001 \$)				
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	50.7	0.0	0.0	0.0	3.9	-54.5	56.2	-56.2
2005	52.4	15.5	0.0	0.0	4.0	-56.4	116.1	-61.6
2006	54.2	17.3	0.0	0.0	4.1	-58.4	179.7	-67.3
2007	55.6	18.1	0.0	0.0	4.2	-59.9	246.6	-72.7
2008	57.1	19.0	0.0	0.0	4.4	-61.4	317.1	-78.4
2009	58.6	19.6	0.4	-3.5	4.5	-66.2	394.6	-87.6
2010	60.1	21.8	0.8	-2.7	4.6	-66.6	474.7	-92.7
2011	61.8	23.3	1.3	-1.6	4.7	-66.8	557.5	-97.9
2012	63.3	24.9	1.9	-0.3	4.8	-66.6	642.6	-102.9
2013	64.9	26.5	2.5	1.4	5.0	-65.9	729.5	-107.5
2014	66.1	28.1	3.3	3.5	5.0	-64.3	817.6	-111.4
2015	67.3	29.9	4.2	6.1	5.1	-62.2	906.3	-114.8
2016	68.5	31.7	5.1	8.9	5.2	-59.6	995.0	-117.7
2017	69.6	33.7	6.2	12.1	5.3	-56.6	1,083.3	-120.0
2018	70.8	35.7	7.4	15.6	5.4	-53.3	1,170.7	-122.0
2019	72.0	37.9	8.7	19.2	5.5	-49.6	1,257.0	-123.7
2020	73.2	38.7	10.1	23.1	5.6	-45.6	1,341.8	-124.9
2021	74.3	39.5	11.6	27.0	5.7	-41.4	1,424.7	-125.8
2022	75.4	40.3	13.3	31.3	5.8	-36.6	1,505.2	-126.0
2023	76.5	41.1	15.0	35.7	5.8	-31.6	1,583.0	-125.9
2024	77.6	41.9	16.9	40.3	5.9	-26.2	1,657.5	-125.1
2025	78.7	42.7	19.0	45.1	6.0	-20.6	1,728.5	-123.9
2026	79.8	43.4	21.1	50.2	6.1	-14.5	1,795.3	-122.1
2027	80.8	44.2	23.4	55.5	6.2	-8.0	1,857.4	-119.5
2028	81.8	44.9	25.9	61.2	6.2	-1.0	1,914.2	-116.1
2029	82.9	45.6	28.5	67.2	6.3	6.5	1,964.9	-111.9
2030	84.0	46.3	31.2	73.5	6.4	14.4	2,009.1	-106.9
2031	85.1	46.9	34.1	80.1	6.5	22.6	2,046.1	-101.2
2032	86.2	47.6	37.1	86.7	6.6	31.0	2,075.5	-94.8
2033	87.3	48.2	40.2	93.3	6.7	39.5	2,096.9	-87.8
2034	88.5	48.8	43.5	99.7	6.8	47.9	2,110.4	-80.5
2035	89.7	49.3	47.0	105.8	6.9	56.2	2,115.7	-72.7
2036	90.9	49.9	50.6	112.0	6.9	64.7	2,112.5	-64.4
2037	92.2	50.3	54.3	118.1	7.0	73.2	2,100.3	-55.3
2038	93.4	50.8	58.2	124.3	7.1	82.0	2,078.8	-45.6
2039	94.7	51.3	62.3	130.4	7.2	90.8	2,047.5	-35.2
2040	95.9	51.7	66.5	136.5	7.3	99.7	2,006.1	-23.9
2041	97.2	52.1	70.8	142.9	7.4	109.1	1,953.7	-11.7
2042	98.4	52.5	75.3	149.5	7.5	118.9	1,889.6	1.7
2043	99.7	52.9	80.0	156.5	7.6	129.1	1,813.1	16.2
2044	101.0	53.2	84.8	163.8	7.7	139.9	1,723.2	32.0
2045	102.2	53.6	89.6	171.4	7.8	151.0	1,619.1	49.0
2046	103.5	54.0	94.6	179.4	7.9	162.6	1,500.0	67.4
2047	104.8	54.4	100.1	187.6	8.0	174.9	1,364.5	87.5
2048	106.1	54.8	105.5	196.1	8.1	187.4	1,212.2	108.8
2049	107.4	55.2	110.7	205.0	8.2	200.1	1,042.1	131.3
2050	108.7	55.6	115.4	214.1	8.3	212.6	854.1	154.7
2051	110.0	56.1	120.2	223.5	8.4	225.3	647.3	179.5
2052	111.3	56.7	124.9	233.1	8.5	238.3	420.9	205.7
2053	112.6	57.2	129.6	243.1	8.6	251.5	174.1	233.3
2054	114.0	57.8	134.3	252.9	8.7	264.5	-93.5	262.1
2055	115.3	58.4	138.9	262.9	8.8	277.7	-382.7	292.2
2056	116.7	59.0	143.4	273.4	8.9	291.2	-694.5	324.1
2057	118.1	59.7	147.9	284.0	9.0	304.8	-1,029.8	357.4
2058	119.5	60.4	152.3	294.9	9.1	318.6	-1,389.3	392.5
2059	120.9	61.1	156.7	305.6	9.2	332.2	-1,773.7	428.7
2060	122.3	61.9	161.0	316.3	9.3	345.6	-2,183.3	466.4
2061	123.8	62.7	165.2	327.4	9.5	359.4	-2,619.5	505.9
2062	125.3	63.4	169.3	338.4	9.6	372.9	-3,082.8	546.9
2063	126.8	64.2	173.4	349.3	9.7	386.2	-3,573.6	589.3
2064	128.3	65.1	177.3	360.5	9.8	399.8	-4,093.2	633.8
2065	129.8	65.9	181.2	371.7	9.9	413.2	-4,642.2	679.8
2066	131.4	66.8	185.0	383.0	10.0	426.6	-5,221.5	727.6
2067	132.9	67.6	188.7	394.8	10.1	440.5	-5,832.6	777.8
2068	134.5	68.5	192.4	406.7	10.3	454.4	-6,476.2	830.0
2069	136.1	69.3	196.0	418.7	10.4	468.2	-7,153.5	884.1
2070	137.7	70.2	199.5	431.3	10.5	482.6	-7,865.8	940.9
2071	139.3	71.1	202.9	444.6	10.6	497.5	-8,615.0	1,000.5
2072	140.9	72.0	206.3	457.7	10.8	512.3	-9,401.9	1,062.1
2073	142.6	72.9	209.6	471.3	10.9	527.4	-10,228.1	1,126.5
2074	144.2	73.9	212.8	485.4	11.0	543.0	-11,095.0	1,193.7
2075	145.9	74.8	216.1	499.1	11.1	558.1	-12,003.6	1,263.0
2076	147.6	75.6	219.2	512.9	11.3	573.3	-12,955.0	1,334.9

Based on Intermediate Assumptions of the 2001 Trustees Report
With Ult Real Int Rate of

3.0 TF,
Office of the Actuary
Social Security Administration
January 29, 2002

Ult Ave Real BenOfstYld Rate of
Ave BenOfst # Annuity Yield

2.5
2.5

Plan 3T-100p	b Unified Budget Effects			IA Cntrb	1.97 %	Benefit Offset	100.0 %	Change
Assumed	Contribs to	Specified	Offset to	Other	Tax	Change	Change	in Ann
% Elect PA	PRA by Fed	GenFnd	OASI Ben	Changes	Credit	in Annual	in Debt	UnifBudg
100.0%	Govt Based	Transfer to	from PRA	in OASDI	for	UnifBudg	Held by	Balance
Year on Earnings	TrustFunds	OASDI		CashFlow	Addon	CashFlow	Public	
	(NoEffectonUB)			lessGFTTrans			(EOY)	
(Billions of Constant 2001 \$)								
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	76.0	0.0	0.0	0.0	5.8	-81.8	84.3	-84.3
2005	78.7	15.5	0.0	0.0	6.0	-84.7	174.2	-92.4
2006	81.4	17.3	0.0	0.0	6.2	-87.6	269.5	-100.9
2007	83.5	18.1	0.0	0.0	6.4	-89.8	369.9	-109.0
2008	85.6	19.0	0.0	0.0	6.5	-92.1	475.7	-117.5
2009	87.9	19.6	0.5	-3.5	6.7	-97.6	590.1	-129.6
2010	90.1	21.8	1.2	-2.7	6.9	-98.5	708.8	-137.6
2011	92.6	23.3	1.9	-1.6	7.1	-99.4	832.0	-145.9
2012	95.0	24.9	2.8	-0.3	7.3	-99.7	959.3	-153.9
2013	97.3	26.5	3.8	1.4	7.4	-99.6	1,090.4	-161.7
2014	99.2	28.1	5.0	3.5	7.6	-98.3	1,224.2	-168.7
2015	100.9	29.9	6.3	6.1	7.7	-96.3	1,360.3	-175.2
2016	102.7	31.7	7.7	8.9	7.8	-93.9	1,498.0	-181.2
2017	104.4	33.7	9.3	12.1	8.0	-91.0	1,636.8	-186.7
2018	106.2	35.7	11.1	15.6	8.1	-87.7	1,776.4	-191.8
2019	108.0	37.9	13.0	19.2	8.2	-84.0	1,916.3	-196.7
2020	109.8	38.7	15.1	23.1	8.4	-80.0	2,056.3	-201.2
2021	111.5	39.5	17.4	27.0	8.5	-75.6	2,195.9	-205.3
2022	113.1	40.3	19.9	31.3	8.6	-70.6	2,334.6	-208.8
2023	114.7	41.1	22.6	35.7	8.8	-65.3	2,471.9	-211.9
2024	116.4	41.9	25.4	40.3	8.9	-59.5	2,607.5	-214.5
2025	118.0	42.7	28.5	45.1	9.0	-53.4	2,740.8	-216.6
2026	119.7	43.4	31.7	50.2	9.1	-46.9	2,871.5	-218.2
2027	121.2	44.2	35.2	55.5	9.3	-39.8	2,998.6	-218.9
2028	122.8	44.9	38.8	61.2	9.4	-32.1	3,121.7	-218.9
2029	124.3	45.6	42.7	67.2	9.5	-23.9	3,240.0	-218.0
2030	125.9	46.3	46.8	73.5	9.6	-15.2	3,352.9	-216.4
2031	127.6	46.9	51.1	80.1	9.7	-6.2	3,459.8	-214.1
2032	129.3	47.6	55.6	86.7	9.9	3.1	3,560.4	-211.1
2033	131.0	48.2	60.4	93.3	10.0	12.7	3,654.1	-207.5
2034	132.8	48.8	65.3	99.7	10.1	22.1	3,741.0	-203.6
2035	134.6	49.3	70.5	105.8	10.3	31.4	3,820.8	-199.3
2036	136.4	49.9	75.9	112.0	10.4	41.0	3,893.1	-194.4
2037	138.3	50.3	81.5	118.1	10.6	50.8	3,957.5	-188.8
2038	140.1	50.8	87.3	124.3	10.7	60.8	4,013.5	-182.4
2039	142.0	51.3	93.4	130.4	10.8	71.0	4,060.7	-175.4
2040	143.9	51.7	99.7	136.5	11.0	81.4	4,098.6	-167.6
2041	145.8	52.1	106.2	142.9	11.1	92.2	4,126.5	-158.8
2042	147.7	52.5	113.0	149.5	11.3	103.6	4,143.4	-148.7
2043	149.6	52.9	120.0	156.5	11.4	115.5	4,148.6	-137.5
2044	151.5	53.2	127.2	163.8	11.6	128.0	4,141.0	-124.9
2045	153.4	53.6	134.5	171.4	11.7	140.8	4,120.0	-111.3
2046	155.3	54.0	141.9	179.4	11.9	154.2	4,084.5	-96.2
2047	157.2	54.4	150.2	187.6	12.0	168.6	4,033.2	-79.1
2048	159.1	54.8	158.2	196.1	12.1	183.1	3,965.3	-61.0
2049	161.1	55.2	166.0	205.0	12.3	197.7	3,880.4	-41.8
2050	163.0	55.6	173.2	214.1	12.4	211.8	3,778.3	-21.9
2051	165.0	56.1	180.3	223.5	12.6	226.3	3,658.3	-0.7
2052	166.9	56.7	187.4	233.1	12.7	240.9	3,519.6	21.8
2053	168.9	57.2	194.4	243.1	12.9	255.7	3,361.5	45.7
2054	171.0	57.8	201.4	252.9	13.0	270.3	3,183.5	70.6
2055	173.0	58.4	208.3	262.9	13.2	285.0	2,985.0	96.8
2056	175.0	59.0	215.1	273.4	13.4	300.1	2,765.0	124.6
2057	177.1	59.7	221.9	284.0	13.5	315.2	2,522.8	153.9
2058	179.2	60.4	228.5	294.9	13.7	330.5	2,257.5	184.6
2059	181.4	61.1	235.0	305.6	13.8	345.4	1,968.9	216.5
2060	183.5	61.9	241.4	316.3	14.0	360.2	1,656.4	249.6
2061	185.7	62.7	247.8	327.4	14.2	375.3	1,319.0	284.5
2062	187.9	63.4	254.0	338.4	14.3	390.1	956.1	320.7
2063	190.2	64.2	260.0	349.3	14.5	404.6	567.4	358.1
2064	192.4	65.1	266.0	360.5	14.7	419.4	151.8	397.5
2065	194.7	65.9	271.8	371.7	14.9	434.0	-291.3	438.2
2066	197.0	66.8	277.5	383.0	15.0	448.4	-762.5	480.6
2067	199.4	67.6	283.1	394.8	15.2	463.4	-1,263.4	525.2
2068	201.7	68.5	288.6	406.7	15.4	478.2	-1,794.5	571.5
2069	204.1	69.3	293.9	418.7	15.6	493.0	-2,356.9	619.7
2070	206.5	70.2	299.2	431.3	15.8	508.2	-2,951.8	670.2
2071	208.9	71.1	304.3	444.6	15.9	524.0	-3,580.9	723.4
2072	211.4	72.0	309.4	457.7	16.1	539.6	-4,244.9	778.4
2073	213.8	72.9	314.4	471.3	16.3	555.5	-4,945.3	836.0
2074	216.3	73.9	319.3	485.4	16.5	571.8	-5,683.5	896.2
2075	218.8	74.8	324.1	499.1	16.7	587.6	-6,460.1	958.2
2076	221.4	75.6	328.9	512.9	16.9	603.5	-7,276.4	1,022.7

Based on Intermediate Assumptions of the 2001 Trustees Report

With Ult Real Int Rate of

3.0 TF,

Office of the Actuary

Social Security Administration

January 29, 2002

Ult Ave Real BenOffstYld Rate of

Ave BenOffst A Annuity Yield

2.5

2.5

Plan 1(2+0)--67p c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/

Year	Estimate for this Plan			Estimate for Modified Present Law			Estimate for Present Law		
	with Borrowing to Pay Scheduled Benefits			with Borrowing to Pay Scheduled Benefits			with Only Payable Benefits		
	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	Full Plan Net Cash Flow from the GF	Total to EndOfYear withInterest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnn Cash Flow from GF	Total to EOYwith Interest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnnual Cash Flow from GF	Total to EOYwith Interest
2001	0	-93	-95	0	-93	-95	0	-93	-95
2002	0	-99	-199	0	-99	-199	0	-99	-199
2003	0	-100	-307	0	-100	-307	0	-100	-307
2004	0	-49	-366	0	-101	-418	0	-101	-418
2005	0	-46	-424	0	-99	-532	0	-99	-532
2006	0	-42	-479	0	-97	-646	0	-97	-646
2007	0	-37	-529	0	-93	-759	0	-93	-759
2008	0	-30	-575	0	-88	-870	0	-88	-870
2009	0	-21	-613	0	-81	-977	0	-81	-977
2010	0	-12	-643	0	-72	-1,078	0	-72	-1,078
2011	0	-1	-663	0	-63	-1,173	0	-63	-1,173
2012	0	12	-670	0	-50	-1,259	0	-50	-1,259
2013	0	27	-662	0	-36	-1,332	0	-36	-1,332
2014	0	44	-637	0	-20	-1,392	0	-20	-1,392
2015	0	61	-594	0	-3	-1,437	0	-3	-1,437
2016	0	80	-531	0	15	-1,464	0	15	-1,464
2017	0	99	-447	0	35	-1,473	0	35	-1,473
2018	0	119	-339	0	55	-1,461	0	55	-1,461
2019	0	140	-208	0	76	-1,427	0	76	-1,427
2020	0	160	-51	0	97	-1,371	0	97	-1,371
2021	0	180	129	0	117	-1,294	0	117	-1,294
2022	0	198	334	0	137	-1,194	0	137	-1,194
2023	0	216	564	0	156	-1,072	0	156	-1,072
2024	0	233	818	0	174	-927	0	174	-927
2025	0	250	1,096	0	192	-760	0	192	-760
2026	0	266	1,399	0	210	-570	0	210	-570
2027	0	281	1,726	0	226	-357	0	226	-357
2028	0	294	2,076	0	242	-123	0	242	-123
2029	0	306	2,449	0	256	133	0	256	133
2030	295	316	2,843	0	269	410	0	269	410
2031	326	326	3,259	0	281	707	0	281	707
2032	334	334	3,696	0	292	1,024	0	292	1,024
2033	341	341	4,152	0	302	1,361	0	302	1,361
2034	345	345	4,627	0	309	1,716	0	309	1,716
2035	348	348	5,119	0	315	2,087	0	315	2,087
2036	349	349	5,627	0	320	2,475	0	320	2,475
2037	350	350	6,151	0	325	2,879	0	325	2,879
2038	349	349	6,689	87	328	3,298	0	241	3,209
2039	347	347	7,242	331	331	3,732	0	0	3,305
2040	345	345	7,809	333	333	4,182	0	0	3,405
2041	343	343	8,391	336	336	4,648	0	0	3,507
2042	340	340	8,988	339	339	5,131	0	0	3,612
2043	338	338	9,601	342	342	5,633	0	0	3,720
2044	337	337	10,231	346	346	6,153	0	0	3,832
2045	335	335	10,878	351	351	6,693	0	0	3,947
2046	334	334	11,543	355	355	7,255	0	0	4,065
2047	332	332	12,227	361	361	7,839	0	0	4,187
2048	332	332	12,930	367	367	8,446	0	0	4,313
2049	331	331	13,654	373	373	9,078	0	0	4,442
2050	332	332	14,401	380	380	9,736	0	0	4,575
2051	334	334	15,172	388	388	10,422	0	0	4,713
2052	338	338	15,970	397	397	11,138	0	0	4,854
2053	342	342	16,796	407	407	11,886	0	0	5,000
2054	346	346	17,651	417	417	12,666	0	0	5,150
2055	351	351	18,537	428	428	13,480	0	0	5,304
2056	356	356	19,455	439	439	14,330	0	0	5,463
2057	362	362	20,406	450	450	15,217	0	0	5,627
2058	368	368	21,391	462	462	16,142	0	0	5,796
2059	374	374	22,413	473	473	17,107	0	0	5,970
2060	380	380	23,471	485	485	18,113	0	0	6,149
2061	387	387	24,568	497	497	19,160	0	0	6,334
2062	394	394	25,705	509	509	20,251	0	0	6,524
2063	401	401	26,883	520	520	21,387	0	0	6,719
2064	408	408	28,104	532	532	22,569	0	0	6,921
2065	416	416	29,369	544	544	23,798	0	0	7,128
2066	424	424	30,680	557	557	25,077	0	0	7,342
2067	432	432	32,039	569	569	26,407	0	0	7,563
2068	440	440	33,447	581	581	27,789	0	0	7,789
2069	449	449	34,906	594	594	29,225	0	0	8,023
2070	458	458	36,417	606	606	30,717	0	0	8,264
2071	467	467	37,984	619	619	32,267	0	0	8,512
2072	477	477	39,607	632	632	33,877	0	0	8,767
2073	487	487	41,289	646	646	35,549	0	0	9,030
2074	497	497	43,032	659	659	37,284	0	0	9,301
2075	508	508	44,839	673	673	39,086	0	0	9,580
2076	519	519	46,711	687	687	40,955	0	0	9,867

1/ Including redemption of TF assets as of 1-1-2001.
 2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Plan1(2+0)--100p c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/

Year	Estimate for this Plan			Estimate for Modified Present Law			Estimate for Present Law		
	with Borrowing to Pay Scheduled Benefits			with Borrowing to Pay Scheduled Benefits			with Only Payable Benefits		
	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	Full Plan Cash Flow from the GF	Net Total to EndOfYear withInterest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnn Cash Flow from GF	Total to EOYwith Interest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnnual Cash Flow from GF	Total to EOYwith Interest
2001	0	-93	-95	0	-93	-95	0	-93	-95
2002	0	-99	-199	0	-99	-199	0	-99	-199
2003	0	-100	-307	0	-100	-307	0	-100	-307
2004	0	-23	-340	0	-101	-418	0	-101	-418
2005	0	-19	-369	0	-99	-532	0	-99	-532
2006	0	-15	-395	0	-97	-646	0	-97	-646
2007	0	-8	-415	0	-93	-759	0	-93	-759
2008	0	-1	-427	0	-88	-870	0	-88	-870
2009	0	8	-431	0	-81	-977	0	-81	-977
2010	0	18	-425	0	-72	-1,078	0	-72	-1,078
2011	0	30	-407	0	-63	-1,173	0	-63	-1,173
2012	0	43	-375	0	-50	-1,259	0	-50	-1,259
2013	0	59	-326	0	-36	-1,332	0	-36	-1,332
2014	0	76	-260	0	-20	-1,392	0	-20	-1,392
2015	0	93	-173	0	-3	-1,437	0	-3	-1,437
2016	0	112	-65	0	15	-1,464	0	15	-1,464
2017	0	131	66	0	35	-1,473	0	35	-1,473
2018	0	151	221	0	55	-1,461	0	55	-1,461
2019	0	171	402	0	76	-1,427	0	76	-1,427
2020	0	192	609	0	97	-1,371	0	97	-1,371
2021	0	211	841	0	117	-1,294	0	117	-1,294
2022	0	229	1,098	0	137	-1,194	0	137	-1,194
2023	0	246	1,381	0	156	-1,072	0	156	-1,072
2024	0	263	1,690	0	174	-927	0	174	-927
2025	0	279	2,024	0	192	-760	0	192	-760
2026	117	294	2,383	0	210	-570	0	210	-570
2027	308	308	2,767	0	226	-357	0	226	-357
2028	320	320	3,175	0	242	-123	0	242	-123
2029	331	331	3,606	0	256	133	0	256	133
2030	340	340	4,060	0	269	410	0	269	410
2031	348	348	4,535	0	281	707	0	281	707
2032	355	355	5,031	0	292	1,024	0	292	1,024
2033	360	360	5,548	0	302	1,361	0	302	1,361
2034	363	363	6,083	0	309	1,716	0	309	1,716
2035	364	364	6,635	0	315	2,087	0	315	2,087
2036	364	364	7,203	0	320	2,475	0	320	2,475
2037	362	362	7,787	0	325	2,879	0	325	2,879
2038	359	359	8,385	87	328	3,298	0	241	3,209
2039	355	355	8,997	331	331	3,732	0	0	3,305
2040	351	351	9,622	333	333	4,182	0	0	3,405
2041	346	346	10,262	336	336	4,648	0	0	3,507
2042	341	341	10,916	339	339	5,131	0	0	3,612
2043	336	336	11,585	342	342	5,633	0	0	3,720
2044	332	332	12,269	346	346	6,153	0	0	3,832
2045	327	327	12,970	351	351	6,693	0	0	3,947
2046	323	323	13,687	355	355	7,255	0	0	4,065
2047	318	318	14,420	361	361	7,839	0	0	4,187
2048	314	314	15,172	367	367	8,446	0	0	4,313
2049	310	310	15,942	373	373	9,078	0	0	4,442
2050	309	309	16,733	380	380	9,736	0	0	4,575
2051	308	308	17,547	388	388	10,422	0	0	4,713
2052	308	308	18,386	397	397	11,138	0	0	4,854
2053	309	309	19,251	407	407	11,886	0	0	5,000
2054	310	310	20,144	417	417	12,666	0	0	5,150
2055	312	312	21,065	428	428	13,480	0	0	5,304
2056	315	315	22,017	439	439	14,330	0	0	5,463
2057	318	318	23,000	450	450	15,217	0	0	5,627
2058	321	321	24,016	462	462	16,142	0	0	5,796
2059	325	325	25,066	473	473	17,107	0	0	5,970
2060	328	328	26,151	485	485	18,113	0	0	6,149
2061	332	332	27,273	497	497	19,160	0	0	6,334
2062	337	337	28,432	509	509	20,251	0	0	6,524
2063	341	341	29,632	520	520	21,387	0	0	6,719
2064	346	346	30,872	532	532	22,569	0	0	6,921
2065	352	352	32,155	544	544	23,798	0	0	7,128
2066	357	357	33,482	557	557	25,077	0	0	7,342
2067	363	363	34,855	569	569	26,407	0	0	7,563
2068	370	370	36,276	581	581	27,789	0	0	7,789
2069	376	376	37,746	594	594	29,225	0	0	8,023
2070	383	383	39,267	606	606	30,717	0	0	8,264
2071	391	391	40,842	619	619	32,267	0	0	8,512
2072	399	399	42,472	632	632	33,877	0	0	8,767
2073	407	407	44,159	646	646	35,549	0	0	9,030
2074	416	416	45,906	659	659	37,284	0	0	9,301
2075	425	425	47,715	673	673	39,086	0	0	9,580
2076	435	435	49,588	687	687	40,955	0	0	9,867

1/ Including redemption of TF assets as of 1-1-2001.
 2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Plan 1(1+1)--67p c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/

Year	Estimate for this Plan			Estimate for Modified Present Law			Estimate for Present Law		
	with Borrowing to Pay Scheduled Benefits			with Borrowing to Pay Scheduled Benefits			with Only Payable Benefits		
	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	Full Plan Net Cash Flow from the GF	Total to EndOfYear withInterest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnn Cash Flow from GF	Total to EOYwith Interest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnnual Cash Flow from GF	Total to EOYwith Interest
2001	0	-93	-95	0	-93	-95	0	-93	-95
2002	0	-99	-199	0	-99	-199	0	-99	-199
2003	0	-100	-307	0	-100	-307	0	-100	-307
2004	0	-75	-392	0	-101	-418	0	-101	-418
2005	0	-73	-478	0	-99	-532	0	-99	-532
2006	0	-70	-562	0	-97	-646	0	-97	-646
2007	0	-65	-644	0	-93	-759	0	-93	-759
2008	0	-59	-722	0	-88	-870	0	-88	-870
2009	0	-51	-795	0	-81	-977	0	-81	-977
2010	0	-42	-861	0	-72	-1,078	0	-72	-1,078
2011	0	-33	-919	0	-63	-1,173	0	-63	-1,173
2012	0	-20	-967	0	-50	-1,259	0	-50	-1,259
2013	0	-6	-1,001	0	-36	-1,332	0	-36	-1,332
2014	0	10	-1,020	0	-20	-1,392	0	-20	-1,392
2015	0	27	-1,024	0	-3	-1,437	0	-3	-1,437
2016	0	45	-1,009	0	15	-1,464	0	15	-1,464
2017	0	64	-975	0	35	-1,473	0	35	-1,473
2018	0	83	-920	0	55	-1,461	0	55	-1,461
2019	0	103	-843	0	76	-1,427	0	76	-1,427
2020	0	123	-743	0	97	-1,371	0	97	-1,371
2021	0	142	-622	0	117	-1,294	0	117	-1,294
2022	0	160	-478	0	137	-1,194	0	137	-1,194
2023	0	177	-313	0	156	-1,072	0	156	-1,072
2024	0	194	-125	0	174	-927	0	174	-927
2025	0	210	84	0	192	-760	0	192	-760
2026	0	225	316	0	210	-570	0	210	-570
2027	0	240	568	0	226	-357	0	226	-357
2028	0	252	842	0	242	-123	0	242	-123
2029	0	264	1,135	0	256	133	0	256	133
2030	0	274	1,446	0	269	410	0	269	410
2031	0	282	1,776	0	281	707	0	281	707
2032	0	290	2,124	0	292	1,024	0	292	1,024
2033	0	296	2,489	0	302	1,361	0	302	1,361
2034	9	300	2,868	0	309	1,716	0	309	1,716
2035	302	302	3,261	0	315	2,087	0	315	2,087
2036	303	303	3,666	0	320	2,475	0	320	2,475
2037	303	303	4,083	0	325	2,879	0	325	2,879
2038	301	301	4,512	87	328	3,298	0	241	3,209
2039	299	299	4,950	331	331	3,732	0	0	3,305
2040	296	296	5,399	333	333	4,182	0	0	3,405
2041	293	293	5,858	336	336	4,648	0	0	3,507
2042	290	290	6,329	339	339	5,131	0	0	3,612
2043	288	288	6,811	342	342	5,633	0	0	3,720
2044	285	285	7,305	346	346	6,153	0	0	3,832
2045	283	283	7,811	351	351	6,693	0	0	3,947
2046	281	281	8,331	355	355	7,255	0	0	4,065
2047	279	279	8,864	361	361	7,839	0	0	4,187
2048	278	278	9,412	367	367	8,446	0	0	4,313
2049	277	277	9,975	373	373	9,078	0	0	4,442
2050	277	277	10,555	380	380	9,736	0	0	4,575
2051	279	279	11,155	388	388	10,422	0	0	4,713
2052	281	281	11,775	397	397	11,138	0	0	4,854
2053	284	284	12,417	407	407	11,886	0	0	5,000
2054	288	288	13,081	417	417	12,666	0	0	5,150
2055	292	292	13,771	428	428	13,480	0	0	5,304
2056	297	297	14,485	439	439	14,330	0	0	5,463
2057	302	302	15,226	450	450	15,217	0	0	5,627
2058	307	307	15,995	462	462	16,142	0	0	5,796
2059	313	313	16,792	473	473	17,107	0	0	5,970
2060	318	318	17,619	485	485	18,113	0	0	6,149
2061	324	324	18,476	497	497	19,160	0	0	6,334
2062	330	330	19,366	509	509	20,251	0	0	6,524
2063	336	336	20,288	520	520	21,387	0	0	6,719
2064	343	343	21,245	532	532	22,569	0	0	6,921
2065	350	350	22,238	544	544	23,798	0	0	7,128
2066	357	357	23,267	557	557	25,077	0	0	7,342
2067	364	364	24,335	569	569	26,407	0	0	7,563
2068	372	372	25,442	581	581	27,789	0	0	7,789
2069	380	380	26,590	594	594	29,225	0	0	8,023
2070	388	388	27,782	606	606	30,717	0	0	8,264
2071	396	396	29,017	619	619	32,267	0	0	8,512
2072	405	405	30,299	632	632	33,877	0	0	8,767
2073	414	414	31,628	646	646	35,549	0	0	9,030
2074	424	424	33,007	659	659	37,284	0	0	9,301
2075	434	434	34,437	673	673	39,086	0	0	9,580
2076	444	444	35,921	687	687	40,955	0	0	9,867

1/ Including redemption of TF assets as of 1-1-2001.
 2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Plan 1(0+2)--67p c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/

Year	Estimate for this Plan			Estimate for Modified Present Law			Estimate for Present Law		
	with Borrowing to Pay Scheduled Benefits			with Borrowing to Pay Scheduled Benefits			with Only Payable Benefits		
	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	Full Plan Net Cash Flow from the GF	Total to EndOfYear withInterest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnn Cash Flow from GF	Total to EOYwith Interest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnnual Cash Flow from GF	Total to EOYwith Interest
2001	0	-93	-95	0	-93	-95	0	-93	-95
2002	0	-99	-199	0	-99	-199	0	-99	-199
2003	0	-100	-307	0	-100	-307	0	-100	-307
2004	0	-101	-418	0	-101	-418	0	-101	-418
2005	0	-99	-532	0	-99	-532	0	-99	-532
2006	0	-97	-646	0	-97	-646	0	-97	-646
2007	0	-93	-759	0	-93	-759	0	-93	-759
2008	0	-88	-870	0	-88	-870	0	-88	-870
2009	0	-81	-977	0	-81	-977	0	-81	-977
2010	0	-73	-1,079	0	-72	-1,078	0	-72	-1,078
2011	0	-64	-1,176	0	-63	-1,173	0	-63	-1,173
2012	0	-52	-1,263	0	-50	-1,259	0	-50	-1,259
2013	0	-39	-1,340	0	-36	-1,332	0	-36	-1,332
2014	0	-24	-1,404	0	-20	-1,392	0	-20	-1,392
2015	0	-7	-1,453	0	-3	-1,437	0	-3	-1,437
2016	0	10	-1,487	0	15	-1,464	0	15	-1,464
2017	0	28	-1,503	0	35	-1,473	0	35	-1,473
2018	0	47	-1,500	0	55	-1,461	0	55	-1,461
2019	0	66	-1,478	0	76	-1,427	0	76	-1,427
2020	0	86	-1,435	0	97	-1,371	0	97	-1,371
2021	0	104	-1,373	0	117	-1,294	0	117	-1,294
2022	0	121	-1,291	0	137	-1,194	0	137	-1,194
2023	0	138	-1,189	0	156	-1,072	0	156	-1,072
2024	0	155	-1,068	0	174	-927	0	174	-927
2025	0	170	-927	0	192	-760	0	192	-760
2026	0	185	-767	0	210	-570	0	210	-570
2027	0	198	-589	0	226	-357	0	226	-357
2028	0	211	-393	0	242	-123	0	242	-123
2029	0	222	-179	0	256	133	0	256	133
2030	0	231	49	0	269	410	0	269	410
2031	0	239	294	0	281	707	0	281	707
2032	0	246	553	0	292	1,024	0	292	1,024
2033	0	252	825	0	302	1,361	0	302	1,361
2034	0	255	1,109	0	309	1,716	0	309	1,716
2035	0	257	1,402	0	315	2,087	0	315	2,087
2036	0	257	1,705	0	320	2,475	0	320	2,475
2037	0	256	2,016	0	325	2,879	0	325	2,879
2038	0	254	2,334	87	328	3,298	0	241	3,209
2039	0	251	2,658	331	331	3,732	0	0	3,305
2040	0	247	2,989	333	333	4,182	0	0	3,405
2041	0	244	3,326	336	336	4,648	0	0	3,507
2042	57	240	3,670	339	339	5,131	0	0	3,612
2043	237	237	4,020	342	342	5,633	0	0	3,720
2044	234	234	4,378	346	346	6,153	0	0	3,832
2045	231	231	4,744	351	351	6,693	0	0	3,947
2046	229	229	5,119	355	355	7,255	0	0	4,065
2047	226	226	5,501	361	361	7,839	0	0	4,187
2048	224	224	5,893	367	367	8,446	0	0	4,313
2049	222	222	6,296	373	373	9,078	0	0	4,442
2050	222	222	6,710	380	380	9,736	0	0	4,575
2051	223	223	7,137	388	388	10,422	0	0	4,713
2052	225	225	7,579	397	397	11,138	0	0	4,854
2053	227	227	8,037	407	407	11,886	0	0	5,000
2054	230	230	8,512	417	417	12,666	0	0	5,150
2055	234	234	9,004	428	428	13,480	0	0	5,304
2056	238	238	9,516	439	439	14,330	0	0	5,463
2057	242	242	10,047	450	450	15,217	0	0	5,627
2058	247	247	10,598	462	462	16,142	0	0	5,796
2059	251	251	11,171	473	473	17,107	0	0	5,970
2060	256	256	11,766	485	485	18,113	0	0	6,149
2061	261	261	12,385	497	497	19,160	0	0	6,334
2062	266	266	13,027	509	509	20,251	0	0	6,524
2063	272	272	13,693	520	520	21,387	0	0	6,719
2064	278	278	14,386	532	532	22,569	0	0	6,921
2065	284	284	15,106	544	544	23,798	0	0	7,128
2066	290	290	15,854	557	557	25,077	0	0	7,342
2067	297	297	16,630	569	569	26,407	0	0	7,563
2068	303	303	17,437	581	581	27,789	0	0	7,789
2069	310	310	18,275	594	594	29,225	0	0	8,023
2070	318	318	19,146	606	606	30,717	0	0	8,264
2071	325	325	20,051	619	619	32,267	0	0	8,512
2072	333	333	20,991	632	632	33,877	0	0	8,767
2073	342	342	21,967	646	646	35,549	0	0	9,030
2074	350	350	22,982	659	659	37,284	0	0	9,301
2075	359	359	24,036	673	673	39,086	0	0	9,580
2076	369	369	25,132	687	687	40,955	0	0	9,867

1/ Including redemption of TF assets as of 1-1-2001.

2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Basic Plan 2
i.e., Without
PAs

c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/
Estimate for this Plan

Year	with Borrowing to Pay Scheduled Benefits			with Borrowing to Pay Scheduled Benefits			Estimate for Present Law with Only Payable Benefits		
	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	Full Plan Net Cash Flow from the GF	Total to EndOfYear withInterest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnn Cash Flow from GF	Total to EOYwith Interest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnnual Cash Flow from GF	Total to EOYwith Interest
2001	0	-93	-95	0	-93	-95	0	-93	-95
2002	0	-99	-199	0	-99	-199	0	-99	-199
2003	0	-100	-307	0	-100	-307	0	-100	-307
2004	0	-101	-418	0	-101	-418	0	-101	-418
2005	0	-99	-532	0	-99	-532	0	-99	-532
2006	0	-97	-646	0	-97	-646	0	-97	-646
2007	0	-93	-759	0	-93	-759	0	-93	-759
2008	0	-88	-870	0	-88	-870	0	-88	-870
2009	0	-76	-973	0	-81	-977	0	-81	-977
2010	0	-68	-1,070	0	-72	-1,078	0	-72	-1,078
2011	0	-59	-1,161	0	-63	-1,173	0	-63	-1,173
2012	0	-47	-1,243	0	-50	-1,259	0	-50	-1,259
2013	0	-34	-1,314	0	-36	-1,332	0	-36	-1,332
2014	0	-20	-1,374	0	-20	-1,392	0	-20	-1,392
2015	0	-4	-1,419	0	-3	-1,437	0	-3	-1,437
2016	0	12	-1,450	0	15	-1,464	0	15	-1,464
2017	0	28	-1,465	0	35	-1,473	0	35	-1,473
2018	0	45	-1,463	0	55	-1,461	0	55	-1,461
2019	0	63	-1,443	0	76	-1,427	0	76	-1,427
2020	0	79	-1,406	0	97	-1,371	0	97	-1,371
2021	0	95	-1,352	0	117	-1,294	0	117	-1,294
2022	0	109	-1,282	0	137	-1,194	0	137	-1,194
2023	0	123	-1,196	0	156	-1,072	0	156	-1,072
2024	0	135	-1,094	0	174	-927	0	174	-927
2025	0	147	-978	0	192	-760	0	192	-760
2026	0	158	-847	0	210	-570	0	210	-570
2027	0	167	-703	0	226	-357	0	226	-357
2028	0	175	-546	0	242	-123	0	242	-123
2029	0	182	-378	0	256	133	0	256	133
2030	0	186	-200	0	269	410	0	269	410
2031	0	190	-14	0	281	707	0	281	707
2032	0	192	181	0	292	1,024	0	292	1,024
2033	0	193	382	0	302	1,361	0	302	1,361
2034	0	191	588	0	309	1,716	0	309	1,716
2035	0	188	797	0	315	2,087	0	315	2,087
2036	0	184	1,007	0	320	2,475	0	320	2,475
2037	0	178	1,219	0	325	2,879	0	325	2,879
2038	0	172	1,429	87	328	3,298	0	241	3,209
2039	0	164	1,639	331	331	3,732	0	0	3,305
2040	0	156	1,846	333	333	4,182	0	0	3,405
2041	0	148	2,051	336	336	4,648	0	0	3,507
2042	0	139	2,254	339	339	5,131	0	0	3,612
2043	0	131	2,454	342	342	5,633	0	0	3,720
2044	0	122	2,652	346	346	6,153	0	0	3,832
2045	0	114	2,848	351	351	6,693	0	0	3,947
2046	0	106	3,040	355	355	7,255	0	0	4,065
2047	0	98	3,231	361	361	7,839	0	0	4,187
2048	0	90	3,419	367	367	8,446	0	0	4,313
2049	0	82	3,605	373	373	9,078	0	0	4,442
2050	0	74	3,788	380	380	9,736	0	0	4,575
2051	0	67	3,970	388	388	10,422	0	0	4,713
2052	0	61	4,151	397	397	11,138	0	0	4,854
2053	0	55	4,331	407	407	11,886	0	0	5,000
2054	0	49	4,511	417	417	12,666	0	0	5,150
2055	0	43	4,690	428	428	13,480	0	0	5,304
2056	0	37	4,868	439	439	14,330	0	0	5,463
2057	0	31	5,046	450	450	15,217	0	0	5,627
2058	0	25	5,223	462	462	16,142	0	0	5,796
2059	0	19	5,399	473	473	17,107	0	0	5,970
2060	0	13	5,574	485	485	18,113	0	0	6,149
2061	0	6	5,747	497	497	19,160	0	0	6,334
2062	0	0	5,920	509	509	20,251	0	0	6,524
2063	0	-6	6,091	520	520	21,387	0	0	6,719
2064	0	-13	6,261	532	532	22,569	0	0	6,921
2065	0	-19	6,429	544	544	23,798	0	0	7,128
2066	0	-26	6,595	557	557	25,077	0	0	7,342
2067	0	-34	6,759	569	569	26,407	0	0	7,563
2068	0	-41	6,920	581	581	27,789	0	0	7,789
2069	0	-49	7,078	594	594	29,225	0	0	8,023
2070	0	-57	7,233	606	606	30,717	0	0	8,264
2071	0	-65	7,384	619	619	32,267	0	0	8,512
2072	0	-73	7,531	632	632	33,877	0	0	8,767
2073	0	-82	7,674	646	646	35,549	0	0	9,030
2074	0	-91	7,812	659	659	37,284	0	0	9,301
2075	0	-99	7,945	673	673	39,086	0	0	9,580
2076	0	-108	8,074	687	687	40,955	0	0	9,867

1/ Including redemption of TF assets as of 1-1-2001.
2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Plan 2T-67p c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/

Assumed
% Elect PA
66.7%

Year	Estimate for this Plan				Estimate for Modified Present Law			Estimate for Present Law		
	with GF Transfer to Pay Scheduled Benefits				with Borrowing to Pay Scheduled Benefits			with Only Payable Benefits		
	Addl GF Transfer for Balance (billions of Constant 2001\$)	Full Plan Cash Flow from the GF (billions of Constant 2001\$)	Net EndOfYear withInterest	Total to	Borrowing In Year 2/ (billions of Constant 2001\$)	NetAnn from GF (billions of Constant 2001\$)	Total to EOYwith Interest (billions of Constant 2001\$)	Borrowing In Year 2/ (billions of Constant 2001\$)	NetAnnual Cash Flow from GF (billions of Constant 2001\$)	Total to EOYwith Interest (billions of Constant 2001\$)
2001	0	-93	-95	0	-93	-95	0	-93	-95	
2002	0	-99	-199	0	-99	-199	0	-99	-199	
2003	0	-100	-307	0	-100	-307	0	-100	-307	
2004	0	-39	-356	0	-101	-418	0	-101	-418	
2005	0	-35	-402	0	-99	-532	0	-99	-532	
2006	0	-31	-446	0	-97	-646	0	-97	-646	
2007	0	-25	-485	0	-93	-759	0	-93	-759	
2008	0	-18	-517	0	-88	-870	0	-88	-870	
2009	0	-5	-538	0	-81	-977	0	-81	-977	
2010	0	4	-549	0	-72	-1,078	0	-72	-1,078	
2011	0	15	-551	0	-63	-1,173	0	-63	-1,173	
2012	0	27	-539	0	-50	-1,259	0	-50	-1,259	
2013	0	42	-512	0	-36	-1,332	0	-36	-1,332	
2014	0	57	-470	0	-20	-1,392	0	-20	-1,392	
2015	0	73	-410	0	-3	-1,437	0	-3	-1,437	
2016	0	89	-333	0	15	-1,464	0	15	-1,464	
2017	0	106	-235	0	35	-1,473	0	35	-1,473	
2018	0	123	-118	0	55	-1,461	0	55	-1,461	
2019	0	140	21	0	76	-1,427	0	76	-1,427	
2020	0	157	180	0	97	-1,371	0	97	-1,371	
2021	0	172	360	0	117	-1,294	0	117	-1,294	
2022	0	185	559	0	137	-1,194	0	137	-1,194	
2023	0	198	777	0	156	-1,072	0	156	-1,072	
2024	0	210	1,014	0	174	-927	0	174	-927	
2025	6	221	1,268	0	192	-760	0	192	-760	
2026	219	230	1,540	0	210	-570	0	210	-570	
2027	228	239	1,829	0	226	-357	0	226	-357	
2028	231	245	2,132	0	242	-123	0	242	-123	
2029	234	250	2,450	0	256	133	0	256	133	
2030	237	253	2,780	0	269	410	0	269	410	
2031	240	255	3,122	0	281	707	0	281	707	
2032	230	255	3,474	0	292	1,024	0	292	1,024	
2033	233	254	3,836	0	302	1,361	0	302	1,361	
2034	230	250	4,205	0	309	1,716	0	309	1,716	
2035	219	245	4,579	0	315	2,087	0	315	2,087	
2036	208	238	4,958	0	320	2,475	0	320	2,475	
2037	204	229	5,340	0	325	2,879	0	325	2,879	
2038	185	220	5,723	87	328	3,298	0	241	3,209	
2039	180	209	6,107	331	331	3,732	0	0	3,305	
2040	168	198	6,492	333	333	4,182	0	0	3,405	
2041	156	187	6,876	336	336	4,648	0	0	3,507	
2042	150	175	7,260	339	339	5,131	0	0	3,612	
2043	129	163	7,644	342	342	5,633	0	0	3,720	
2044	123	151	8,027	346	346	6,153	0	0	3,832	
2045	109	139	8,409	351	351	6,693	0	0	3,947	
2046	95	127	8,790	355	355	7,255	0	0	4,065	
2047	80	115	9,170	361	361	7,839	0	0	4,187	
2048	73	103	9,549	367	367	8,446	0	0	4,313	
2049	66	91	9,928	373	373	9,078	0	0	4,442	
2050	50	80	10,307	380	380	9,736	0	0	4,575	
2051	42	69	10,686	388	388	10,422	0	0	4,713	
2052	34	59	11,067	397	397	11,138	0	0	4,854	
2053	17	50	11,449	407	407	11,886	0	0	5,000	
2054	17	40	11,834	417	417	12,666	0	0	5,150	
2055	0	31	12,220	428	428	13,480	0	0	5,304	
2056	0	22	12,609	439	439	14,330	0	0	5,463	
2057	0	13	13,001	450	450	15,217	0	0	5,627	
2058	0	4	13,395	462	462	16,142	0	0	5,796	
2059	0	-5	13,791	473	473	17,107	0	0	5,970	
2060	0	-14	14,191	485	485	18,113	0	0	6,149	
2061	0	-23	14,593	497	497	19,160	0	0	6,334	
2062	0	-32	14,998	509	509	20,251	0	0	6,524	
2063	0	-41	15,406	520	520	21,387	0	0	6,719	
2064	0	-50	15,818	532	532	22,569	0	0	6,921	
2065	0	-59	16,232	544	544	23,798	0	0	7,128	
2066	0	-68	16,650	557	557	25,077	0	0	7,342	
2067	0	-78	17,071	569	569	26,407	0	0	7,563	
2068	0	-87	17,495	581	581	27,789	0	0	7,789	
2069	0	-97	17,921	594	594	29,225	0	0	8,023	
2070	0	-106	18,351	606	606	30,717	0	0	8,264	
2071	0	-116	18,783	619	619	32,267	0	0	8,512	
2072	0	-126	19,219	632	632	33,877	0	0	8,767	
2073	0	-137	19,656	646	646	35,549	0	0	9,030	
2074	0	-147	20,097	659	659	37,284	0	0	9,301	
2075	0	-157	20,540	673	673	39,086	0	0	9,580	
2076	0	-167	20,987	687	687	40,955	0	0	9,867	

1/ Including redemption of TF assets as of 1-1-2001.

2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Plan 2T-100p c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/

Year	Estimate for this Plan			Estimate for Modified Present Law			Estimate for Present Law		
	with GF Transfer to Pay Scheduled Benefits			with Borrowing to Pay Scheduled Benefits			with Only Payable Benefits		
	GF Transfer for Balance (billions of Constant 2001\$)	Addl Full Plan Cash Flow from the GF	Net EndOfYear withInterest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnn Cash Flow from GF	Total to EOYwith Interest	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnnual Cash Flow from GF	Total to EOYwith Interest
2001	0	-93	-95	0	-93	-95	0	-93	-95
2002	0	-99	-199	0	-99	-199	0	-99	-199
2003	0	-100	-307	0	-100	-307	0	-100	-307
2004	0	-8	-325	0	-101	-418	0	-101	-418
2005	0	-4	-338	0	-99	-532	0	-99	-532
2006	0	2	-346	0	-97	-646	0	-97	-646
2007	0	8	-348	0	-93	-759	0	-93	-759
2008	0	16	-341	0	-88	-870	0	-88	-870
2009	0	30	-321	0	-81	-977	0	-81	-977
2010	0	40	-289	0	-72	-1,078	0	-72	-1,078
2011	0	51	-246	0	-63	-1,173	0	-63	-1,173
2012	0	65	-187	0	-50	-1,259	0	-50	-1,259
2013	0	80	-111	0	-36	-1,332	0	-36	-1,332
2014	0	95	-18	0	-20	-1,392	0	-20	-1,392
2015	0	111	94	0	-3	-1,437	0	-3	-1,437
2016	0	127	226	0	15	-1,464	0	15	-1,464
2017	0	144	379	0	35	-1,473	0	35	-1,473
2018	0	162	555	0	55	-1,461	0	55	-1,461
2019	0	179	753	0	76	-1,427	0	76	-1,427
2020	0	195	973	0	97	-1,371	0	97	-1,371
2021	103	210	1,216	0	117	-1,294	0	117	-1,294
2022	220	224	1,479	0	137	-1,194	0	137	-1,194
2023	235	236	1,763	0	156	-1,072	0	156	-1,072
2024	244	248	2,067	0	174	-927	0	174	-927
2025	247	258	2,391	0	192	-760	0	192	-760
2026	250	267	2,734	0	210	-570	0	210	-570
2027	265	274	3,094	0	226	-357	0	226	-357
2028	268	280	3,471	0	242	-123	0	242	-123
2029	266	284	3,864	0	256	133	0	256	133
2030	269	286	4,270	0	269	410	0	269	410
2031	272	287	4,690	0	281	707	0	281	707
2032	263	287	5,121	0	292	1,024	0	292	1,024
2033	260	284	5,563	0	302	1,361	0	302	1,361
2034	257	279	6,013	0	309	1,716	0	309	1,716
2035	246	273	6,471	0	315	2,087	0	315	2,087
2036	236	264	6,933	0	320	2,475	0	320	2,475
2037	225	255	7,400	0	325	2,879	0	325	2,879
2038	214	244	7,870	87	328	3,298	0	241	3,209
2039	202	232	8,342	331	331	3,732	0	0	3,305
2040	183	220	8,815	333	333	4,182	0	0	3,405
2041	178	207	9,289	336	336	4,648	0	0	3,507
2042	158	193	9,764	339	339	5,131	0	0	3,612
2043	152	179	10,239	342	342	5,633	0	0	3,720
2044	131	166	10,714	346	346	6,153	0	0	3,832
2045	117	152	11,189	351	351	6,693	0	0	3,947
2046	111	138	11,665	355	355	7,255	0	0	4,065
2047	88	123	12,140	361	361	7,839	0	0	4,187
2048	81	109	12,615	367	367	8,446	0	0	4,313
2049	66	95	13,090	373	373	9,078	0	0	4,442
2050	50	82	13,566	380	380	9,736	0	0	4,575
2051	42	70	14,044	388	388	10,422	0	0	4,713
2052	34	58	14,524	397	397	11,138	0	0	4,854
2053	17	47	15,008	407	407	11,886	0	0	5,000
2054	9	36	15,495	417	417	12,666	0	0	5,150
2055	0	25	15,986	428	428	13,480	0	0	5,304
2056	0	15	16,480	439	439	14,330	0	0	5,463
2057	0	4	16,978	450	450	15,217	0	0	5,627
2058	0	-7	17,481	462	462	16,142	0	0	5,796
2059	0	-17	17,988	473	473	17,107	0	0	5,970
2060	0	-28	18,500	485	485	18,113	0	0	6,149
2061	0	-38	19,016	497	497	19,160	0	0	6,334
2062	0	-48	19,537	509	509	20,251	0	0	6,524
2063	0	-58	20,064	520	520	21,387	0	0	6,719
2064	0	-69	20,596	532	532	22,569	0	0	6,921
2065	0	-79	21,134	544	544	23,798	0	0	7,128
2066	0	-89	21,678	557	557	25,077	0	0	7,342
2067	0	-100	22,227	569	569	26,407	0	0	7,563
2068	0	-110	22,782	581	581	27,789	0	0	7,789
2069	0	-121	23,343	594	594	29,225	0	0	8,023
2070	0	-131	23,910	606	606	30,717	0	0	8,264
2071	0	-142	24,483	619	619	32,267	0	0	8,512
2072	0	-153	25,062	632	632	33,877	0	0	8,767
2073	0	-164	25,648	646	646	35,549	0	0	9,030
2074	0	-175	26,239	659	659	37,284	0	0	9,301
2075	0	-186	26,838	673	673	39,086	0	0	9,580
2076	0	-197	27,443	687	687	40,955	0	0	9,867

1/ Including redemption of TF assets as of 1-1-2001.

2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Basic Plan 3
i.e., Without
PAs

c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/
Estimate for this Plan

Year	with GF Transfer to Pay Scheduled Benefits			with Borrowing to Pay Scheduled Benefits			Estimate for Present Law with Only Payable Benefits		
	Specified GF Transfer	Full Plan Net Cash Flow from the GF	Total to EndOfYear withInterest	Borrowing In Year 2/	NetAnn from GF	Total to EOYwith Interest	Borrowing In Year 2/	NetAnnual Cash Flow from GF	Total to EOYwith Interest
	<i>(billions of Constant 2001\$)</i>			<i>(billions of Constant 2001\$)</i>			<i>(billions of Constant 2001\$)</i>		
2001	0	-93	-95	0	-93	-95	0	-93	-95
2002	0	-99	-199	0	-99	-199	0	-99	-199
2003	0	-100	-307	0	-100	-307	0	-100	-307
2004	0	-101	-418	0	-101	-418	0	-101	-418
2005	15	-99	-532	0	-99	-532	0	-99	-532
2006	17	-97	-646	0	-97	-646	0	-97	-646
2007	18	-93	-759	0	-93	-759	0	-93	-759
2008	19	-88	-870	0	-88	-870	0	-88	-870
2009	20	-77	-973	0	-81	-977	0	-81	-977
2010	22	-69	-1,072	0	-72	-1,078	0	-72	-1,078
2011	23	-61	-1,165	0	-63	-1,173	0	-63	-1,173
2012	25	-50	-1,250	0	-50	-1,259	0	-50	-1,259
2013	26	-37	-1,325	0	-36	-1,332	0	-36	-1,332
2014	28	-24	-1,388	0	-20	-1,392	0	-20	-1,392
2015	30	-9	-1,439	0	-3	-1,437	0	-3	-1,437
2016	32	7	-1,475	0	15	-1,464	0	15	-1,464
2017	34	23	-1,496	0	35	-1,473	0	35	-1,473
2018	36	40	-1,501	0	55	-1,461	0	55	-1,461
2019	38	57	-1,488	0	76	-1,427	0	76	-1,427
2020	39	74	-1,457	0	97	-1,371	0	97	-1,371
2021	40	90	-1,410	0	117	-1,294	0	117	-1,294
2022	40	105	-1,345	0	137	-1,194	0	137	-1,194
2023	41	120	-1,264	0	156	-1,072	0	156	-1,072
2024	42	134	-1,166	0	174	-927	0	174	-927
2025	43	147	-1,051	0	192	-760	0	192	-760
2026	43	159	-921	0	210	-570	0	210	-570
2027	44	171	-775	0	226	-357	0	226	-357
2028	45	181	-615	0	242	-123	0	242	-123
2029	46	189	-443	0	256	133	0	256	133
2030	46	195	-258	0	269	410	0	269	410
2031	47	201	-62	0	281	707	0	281	707
2032	48	205	144	0	292	1,024	0	292	1,024
2033	48	208	360	0	302	1,361	0	302	1,361
2034	49	210	583	0	309	1,716	0	309	1,716
2035	49	210	814	0	315	2,087	0	315	2,087
2036	50	208	1,050	0	320	2,475	0	320	2,475
2037	50	206	1,291	0	325	2,879	0	325	2,879
2038	51	204	1,536	87	328	3,298	0	241	3,209
2039	51	200	1,785	331	331	3,732	0	0	3,305
2040	52	196	2,038	333	333	4,182	0	0	3,405
2041	52	193	2,295	336	336	4,648	0	0	3,507
2042	52	189	2,556	339	339	5,131	0	0	3,612
2043	53	186	2,821	342	342	5,633	0	0	3,720
2044	53	182	3,091	346	346	6,153	0	0	3,832
2045	54	179	3,365	351	351	6,693	0	0	3,947
2046	54	176	3,645	355	355	7,255	0	0	4,065
2047	54	173	3,930	361	361	7,839	0	0	4,187
2048	55	171	4,221	367	367	8,446	0	0	4,313
2049	55	168	4,518	373	373	9,078	0	0	4,442
2050	56	166	4,822	380	380	9,736	0	0	4,575
2051	56	165	5,134	388	388	10,422	0	0	4,713
2052	57	164	5,455	397	397	11,138	0	0	4,854
2053	57	164	5,785	407	407	11,886	0	0	5,000
2054	58	164	6,126	417	417	12,666	0	0	5,150
2055	58	165	6,477	428	428	13,480	0	0	5,304
2056	59	166	6,840	439	439	14,330	0	0	5,463
2057	60	166	7,214	450	450	15,217	0	0	5,627
2058	60	167	7,600	462	462	16,142	0	0	5,796
2059	61	168	7,998	473	473	17,107	0	0	5,970
2060	62	169	8,409	485	485	18,113	0	0	6,149
2061	63	169	8,833	497	497	19,160	0	0	6,334
2062	63	170	9,271	509	509	20,251	0	0	6,524
2063	64	171	9,722	520	520	21,387	0	0	6,719
2064	65	172	10,189	532	532	22,569	0	0	6,921
2065	66	173	10,670	544	544	23,798	0	0	7,128
2066	67	174	11,166	557	557	25,077	0	0	7,342
2067	68	174	11,678	569	569	26,407	0	0	7,563
2068	68	175	12,205	581	581	27,789	0	0	7,789
2069	69	175	12,749	594	594	29,225	0	0	8,023
2070	70	175	13,309	606	606	30,717	0	0	8,264
2071	71	175	13,886	619	619	32,267	0	0	8,512
2072	72	175	14,480	632	632	33,877	0	0	8,767
2073	73	174	15,091	646	646	35,549	0	0	9,030
2074	74	174	15,720	659	659	37,284	0	0	9,301
2075	75	174	16,368	673	673	39,086	0	0	9,580
2076	76	174	17,036	687	687	40,955	0	0	9,867

1/ Including redemption of TF assets as of 1-1-2001.

2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Plan 3T--67p c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/

Year	Estimate for this Plan			Estimate for Modified Present Law			Estimate for Present Law		
	with GF Transfer to Pay Scheduled Benefits			with Borrowing to Pay Scheduled Benefits			with Only Payable Benefits		
	Spec +Addl GF Transfer for Balance <i>(billions of Constant 2001\$)</i>	Full Plan Net Cash Flow from the GF	Total to EndOfYear withInterest <i>(billions of Constant 2001\$)</i>	Borrowing Needed In Year 2/ <i>(billions of Constant 2001\$)</i>	NetAnn Cash Flow from GF	Total to EOYwith Interest <i>(billions of Constant 2001\$)</i>	Borrowing Needed In Year 2/ <i>(billions of Constant 2001\$)</i>	NetAnnual Cash Flow from GF	Total to EOYwith Interest
2001	0	-93	-95	0	-93	-95	0	-93	-95
2002	0	-99	-199	0	-99	-199	0	-99	-199
2003	0	-100	-307	0	-100	-307	0	-100	-307
2004	0	-50	-367	0	-101	-418	0	-101	-418
2005	15	-47	-425	0	-99	-532	0	-99	-532
2006	17	-43	-481	0	-97	-646	0	-97	-646
2007	18	-38	-533	0	-93	-759	0	-93	-759
2008	19	-31	-580	0	-88	-870	0	-88	-870
2009	20	-19	-616	0	-81	-977	0	-81	-977
2010	22	-10	-644	0	-72	-1,078	0	-72	-1,078
2011	23	-1	-663	0	-63	-1,173	0	-63	-1,173
2012	25	12	-671	0	-50	-1,259	0	-50	-1,259
2013	26	25	-666	0	-36	-1,332	0	-36	-1,332
2014	28	39	-646	0	-20	-1,392	0	-20	-1,392
2015	30	54	-610	0	-3	-1,437	0	-3	-1,437
2016	32	70	-557	0	15	-1,464	0	15	-1,464
2017	34	86	-487	0	35	-1,473	0	35	-1,473
2018	36	103	-397	0	55	-1,461	0	55	-1,461
2019	38	120	-287	0	76	-1,427	0	76	-1,427
2020	39	137	-156	0	97	-1,371	0	97	-1,371
2021	40	152	-6	0	117	-1,294	0	117	-1,294
2022	41	167	163	0	137	-1,194	0	137	-1,194
2023	42	181	352	0	156	-1,072	0	156	-1,072
2024	43	194	559	0	174	-927	0	174	-927
2025	44	206	786	0	192	-760	0	192	-760
2026	44	217	1,030	0	210	-570	0	210	-570
2027	45	227	1,291	0	226	-357	0	226	-357
2028	46	236	1,569	0	242	-123	0	242	-123
2029	47	242	1,862	0	256	133	0	256	133
2030	48	247	2,168	0	269	410	0	269	410
2031	49	250	2,487	0	281	707	0	281	707
2032	50	253	2,818	0	292	1,024	0	292	1,024
2033	50	254	3,160	0	302	1,361	0	302	1,361
2034	207	253	3,511	0	309	1,716	0	309	1,716
2035	223	250	3,870	0	315	2,087	0	315	2,087
2036	226	246	4,237	0	320	2,475	0	320	2,475
2037	215	242	4,609	0	325	2,879	0	325	2,879
2038	204	236	4,987	87	328	3,298	0	241	3,209
2039	207	229	5,369	331	331	3,732	0	0	3,305
2040	195	222	5,756	333	333	4,182	0	0	3,405
2041	183	215	6,147	336	336	4,648	0	0	3,507
2042	185	208	6,543	339	339	5,131	0	0	3,612
2043	172	201	6,943	342	342	5,633	0	0	3,720
2044	167	193	7,348	346	346	6,153	0	0	3,832
2045	161	186	7,757	351	351	6,693	0	0	3,947
2046	148	179	8,171	355	355	7,255	0	0	4,065
2047	142	171	8,590	361	361	7,839	0	0	4,187
2048	136	164	9,015	367	367	8,446	0	0	4,313
2049	137	157	9,445	373	373	9,078	0	0	4,442
2050	123	151	9,882	380	380	9,736	0	0	4,575
2051	124	146	10,326	388	388	10,422	0	0	4,713
2052	109	141	10,779	397	397	11,138	0	0	4,854
2053	111	137	11,242	407	407	11,886	0	0	5,000
2054	112	134	11,715	417	417	12,666	0	0	5,150
2055	114	131	12,200	428	428	13,480	0	0	5,304
2056	98	128	12,695	439	439	14,330	0	0	5,463
2057	99	125	13,203	450	450	15,217	0	0	5,627
2058	101	122	13,723	462	462	16,142	0	0	5,796
2059	93	119	14,255	473	473	17,107	0	0	5,970
2060	95	117	14,801	485	485	18,113	0	0	6,149
2061	87	114	15,361	497	497	19,160	0	0	6,334
2062	88	112	15,935	509	509	20,251	0	0	6,524
2063	90	109	16,524	520	520	21,387	0	0	6,719
2064	81	107	17,129	532	532	22,569	0	0	6,921
2065	83	105	17,750	544	544	23,798	0	0	7,128
2066	84	103	18,387	557	557	25,077	0	0	7,342
2067	85	101	19,041	569	569	26,407	0	0	7,563
2068	87	99	19,713	581	581	27,789	0	0	7,789
2069	88	97	20,403	594	594	29,225	0	0	8,023
2070	89	95	21,111	606	606	30,717	0	0	8,264
2071	91	92	21,838	619	619	32,267	0	0	8,512
2072	92	90	22,585	632	632	33,877	0	0	8,767
2073	94	87	23,351	646	646	35,549	0	0	9,030
2074	95	85	24,138	659	659	37,284	0	0	9,301
2075	96	83	24,946	673	673	39,086	0	0	9,580
2076	97	81	25,777	687	687	40,955	0	0	9,867

1/ Including redemption of TF assets as of 1-1-2001.
2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Plan 3T-100p c Cash Flow From the General Fund of the Treasury to the OASDI Trust Funds--- Constant 2001 Dollars 1/

Year	Estimate for this Plan			Estimate for Modified Present Law			Estimate for Present Law		
	with GF Transfer to Pay Scheduled Benefits			with Borrowing to Pay Scheduled Benefits			with Only Payable Benefits		
	Spec +Addl GF Transfer for Balance (billions of Constant 2001\$)	Full Plan Net Cash Flow from the GF	Total to EndOfYear withInterest (billions of Constant 2001\$)	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnn Cash Flow from GF	Total to EOYwith Interest (billions of Constant 2001\$)	Borrowing Needed In Year 2/ (billions of Constant 2001\$)	NetAnnual Cash Flow from GF	Total to EOYwith Interest
2001	0	-93	-95	0	-93	-95	0	-93	-95
2002	0	-99	-199	0	-99	-199	0	-99	-199
2003	0	-100	-307	0	-100	-307	0	-100	-307
2004	0	-25	-341	0	-101	-418	0	-101	-418
2005	15	-21	-372	0	-99	-532	0	-99	-532
2006	17	-16	-399	0	-97	-646	0	-97	-646
2007	18	-10	-421	0	-93	-759	0	-93	-759
2008	19	-2	-435	0	-88	-870	0	-88	-870
2009	20	10	-437	0	-81	-977	0	-81	-977
2010	22	20	-430	0	-72	-1,078	0	-72	-1,078
2011	23	30	-412	0	-63	-1,173	0	-63	-1,173
2012	25	42	-382	0	-50	-1,259	0	-50	-1,259
2013	27	56	-336	0	-36	-1,332	0	-36	-1,332
2014	28	71	-274	0	-20	-1,392	0	-20	-1,392
2015	30	86	-196	0	-3	-1,437	0	-3	-1,437
2016	32	101	-99	0	15	-1,464	0	15	-1,464
2017	34	118	18	0	35	-1,473	0	35	-1,473
2018	36	135	155	0	55	-1,461	0	55	-1,461
2019	38	152	314	0	76	-1,427	0	76	-1,427
2020	39	169	494	0	97	-1,371	0	97	-1,371
2021	40	184	695	0	117	-1,294	0	117	-1,294
2022	41	198	917	0	137	-1,194	0	137	-1,194
2023	42	212	1,160	0	156	-1,072	0	156	-1,072
2024	43	224	1,422	0	174	-927	0	174	-927
2025	44	236	1,704	0	192	-760	0	192	-760
2026	45	246	2,005	0	210	-570	0	210	-570
2027	46	256	2,325	0	226	-357	0	226	-357
2028	240	263	2,661	0	242	-123	0	242	-123
2029	250	269	3,014	0	256	133	0	256	133
2030	254	272	3,381	0	269	410	0	269	410
2031	257	275	3,761	0	281	707	0	281	707
2032	261	277	4,155	0	292	1,024	0	292	1,024
2033	258	276	4,560	0	302	1,361	0	302	1,361
2034	255	274	4,975	0	309	1,716	0	309	1,716
2035	245	270	5,399	0	315	2,087	0	315	2,087
2036	235	265	5,830	0	320	2,475	0	320	2,475
2037	238	259	6,268	0	325	2,879	0	325	2,879
2038	220	252	6,712	87	328	3,298	0	241	3,209
2039	216	244	7,161	331	331	3,732	0	0	3,305
2040	212	235	7,615	333	333	4,182	0	0	3,405
2041	193	227	8,073	336	336	4,648	0	0	3,507
2042	195	218	8,536	339	339	5,131	0	0	3,612
2043	175	208	9,004	342	342	5,633	0	0	3,720
2044	170	199	9,476	346	346	6,153	0	0	3,832
2045	165	190	9,953	351	351	6,693	0	0	3,947
2046	151	180	10,435	355	355	7,255	0	0	4,065
2047	137	170	10,921	361	361	7,839	0	0	4,187
2048	131	161	11,412	367	367	8,446	0	0	4,313
2049	125	152	11,908	373	373	9,078	0	0	4,442
2050	119	144	12,411	380	380	9,736	0	0	4,575
2051	112	136	12,922	388	388	10,422	0	0	4,713
2052	106	130	13,442	397	397	11,138	0	0	4,854
2053	99	124	13,971	407	407	11,886	0	0	5,000
2054	92	119	14,511	417	417	12,666	0	0	5,150
2055	93	114	15,061	428	428	13,480	0	0	5,304
2056	86	109	15,624	439	439	14,330	0	0	5,463
2057	79	104	16,198	450	450	15,217	0	0	5,627
2058	80	99	16,785	462	462	16,142	0	0	5,796
2059	82	95	17,384	473	473	17,107	0	0	5,970
2060	83	91	17,998	485	485	18,113	0	0	6,149
2061	85	86	18,625	497	497	19,160	0	0	6,334
2062	86	82	19,268	509	509	20,251	0	0	6,524
2063	88	79	19,926	520	520	21,387	0	0	6,719
2064	90	75	20,599	532	532	22,569	0	0	6,921
2065	91	72	21,290	544	544	23,798	0	0	7,128
2066	93	68	21,998	557	557	25,077	0	0	7,342
2067	94	65	22,724	569	569	26,407	0	0	7,563
2068	96	61	23,468	581	581	27,789	0	0	7,789
2069	98	58	24,231	594	594	29,225	0	0	8,023
2070	99	55	25,013	606	606	30,717	0	0	8,264
2071	101	51	25,815	619	619	32,267	0	0	8,512
2072	102	48	26,638	632	632	33,877	0	0	8,767
2073	104	44	27,482	646	646	35,549	0	0	9,030
2074	105	40	28,348	659	659	37,284	0	0	9,301
2075	107	38	29,236	673	673	39,086	0	0	9,580
2076	108	35	30,149	687	687	40,955	0	0	9,867

1/ Including redemption of TF assets as of 1-1-2001.

2/ Trust Funds are assumed to borrow from the General Fund of the Treasury.

Wealth Individual Worker Couple **Estimated Accumulation of Personal Account Assets at Retirement at Age 65 for Plans 1, 2, and 3**
 Personal Account Contributions Starting 2004

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)		
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield
Plan 1-- 2%												
Retire at 65 in--												
2012	\$2,336	\$2,532	\$2,567	\$5,192	\$5,627	\$5,704	\$8,307	\$9,003	\$9,126	\$15,473	\$16,692	\$16,907
2022	\$7,530	\$9,117	\$9,420	\$16,733	\$20,261	\$20,934	\$26,772	\$32,417	\$33,494	\$41,861	\$50,009	\$51,557
2032	\$14,767	\$19,935	\$20,995	\$32,815	\$44,299	\$46,657	\$52,504	\$70,879	\$74,650	\$78,497	\$104,658	\$110,022
2042	\$23,388	\$35,001	\$37,557	\$51,974	\$77,781	\$83,460	\$83,158	\$124,449	\$133,536	\$128,724	\$192,992	\$207,226
2052	\$29,006	\$45,395	\$49,117	\$64,457	\$100,879	\$109,149	\$103,132	\$161,406	\$174,638	\$168,165	\$268,088	\$291,096
2075	\$36,201	\$56,656	\$61,300	\$80,446	\$125,901	\$136,223	\$128,713	\$201,442	\$217,957	\$209,878	\$334,587	\$363,302
Plan 2-- 4% to \$1,000												
Retire at 65 in--												
2012	\$4,673	\$5,064	\$5,134	\$9,068	\$9,785	\$9,912	\$9,118	\$9,836	\$9,963	\$9,118	\$9,836	\$9,963
2022	\$15,059	\$18,235	\$18,840	\$24,615	\$29,416	\$30,329	\$24,669	\$29,470	\$30,383	\$24,669	\$29,470	\$30,383
2032	\$29,533	\$39,869	\$41,991	\$46,200	\$61,616	\$64,777	\$46,259	\$61,676	\$64,837	\$46,259	\$61,676	\$64,837
2042	\$46,776	\$70,003	\$75,114	\$75,796	\$113,669	\$122,057	\$75,862	\$113,735	\$122,123	\$75,862	\$113,735	\$122,123
2052	\$58,011	\$90,791	\$98,234	\$97,854	\$155,504	\$168,757	\$101,586	\$163,501	\$177,844	\$99,112	\$158,002	\$171,562
2075	\$72,401	\$113,311	\$122,601	\$122,127	\$194,076	\$210,617	\$126,785	\$204,058	\$221,958	\$123,697	\$197,195	\$214,118
Plan 3-- 2.5% to \$1,000, +1%												
Retire at 65 in--												
2012	\$4,089	\$4,431	\$4,492	\$9,086	\$9,847	\$9,982	\$13,221	\$14,287	\$14,475	\$16,854	\$18,182	\$18,416
2022	\$13,177	\$15,955	\$16,485	\$29,282	\$35,456	\$36,634	\$38,001	\$45,625	\$47,076	\$45,599	\$54,475	\$56,162
2032	\$25,842	\$34,886	\$36,742	\$57,426	\$77,524	\$81,649	\$72,451	\$97,055	\$102,102	\$85,507	\$114,005	\$119,848
2042	\$40,929	\$61,252	\$65,725	\$90,954	\$136,116	\$146,055	\$117,375	\$175,893	\$188,825	\$140,224	\$210,231	\$225,735
2052	\$50,760	\$79,442	\$85,955	\$112,800	\$176,538	\$191,010	\$149,420	\$236,206	\$256,076	\$183,195	\$292,047	\$317,110
2075	\$63,351	\$99,147	\$107,275	\$140,780	\$220,328	\$238,390	\$186,483	\$294,797	\$319,595	\$228,636	\$364,489	\$395,769

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.
 For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds. Office of the Chief Actuary January 29, 2002

Plan 1 Estimated Change in Monthly Benefit for Retiree at 65-- Personal Account Annuity is CPI-Indexed Life Annuity

2-Earner No Basic Benefit Changes

Couple 2% Redirect PA 2004 with Ben Offset (Offset Yield Rate at Inflation +3.5% Or TreasBndYld +0.5%)

Equal Earns

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)		
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield
2012 Retiree PL Sched Ben	\$723	\$723	\$723	\$1,194	\$1,194	\$1,194	\$1,578	\$1,578	\$1,578	\$1,873	\$1,873	\$1,873
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	1.8	2.0	2.0	2.4	2.7	2.7	2.9	3.3	3.3	4.6	5.1	5.1
% for Ben Offset	<u>-2.0</u>	<u>-2.0</u>	<u>-2.0</u>	<u>-2.7</u>	<u>-2.7</u>	<u>-2.7</u>	<u>-3.3</u>	<u>-3.3</u>	<u>-3.3</u>	<u>-5.1</u>	<u>-5.1</u>	<u>-5.1</u>
Prop Benefit	\$722	\$723	\$723	\$1,191	\$1,194	\$1,194	\$1,572	\$1,578	\$1,578	\$1,863	\$1,873	\$1,874
Percent of PL Scheduled	99.8	100.0	100.0	99.7	100.0	100.0	99.7	100.0	100.0	99.5	100.0	100.0
Percent of PL Payable	99.8	100.0	100.0	99.7	100.0	100.0	99.7	100.0	100.0	99.5	100.0	100.0
Percent of 2001 Real Benefit	113.3	113.5	113.6	113.2	113.5	113.6	115.1	115.5	115.6	121.1	121.8	121.9
2022 Retiree PL Sched Ben	\$767	\$767	\$767	\$1,266	\$1,266	\$1,266	\$1,673	\$1,673	\$1,673	\$2,024	\$2,024	\$2,024
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	5.3	6.6	6.8	7.1	8.9	9.2	8.6	10.8	11.2	11.2	13.8	14.2
% for Ben Offset	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-8.4</u>	<u>-8.4</u>	<u>-8.4</u>	<u>-10.1</u>	<u>-10.1</u>	<u>-10.1</u>	<u>-13.0</u>	<u>-13.0</u>	<u>-13.0</u>
Prop Benefit	\$760	\$770	\$772	\$1,250	\$1,273	\$1,277	\$1,648	\$1,684	\$1,690	\$1,986	\$2,039	\$2,048
Percent of PL Scheduled	99.1	100.4	100.6	98.8	100.5	100.8	98.5	100.7	101.0	98.1	100.7	101.2
Percent of PL Payable	99.1	100.4	100.6	98.8	100.5	100.8	98.5	100.7	101.0	98.1	100.7	101.2
Percent of 2001 Real Benefit	119.3	120.9	121.1	118.9	121.0	121.4	120.6	123.3	123.7	129.1	132.6	133.1
2032 Retiree PL Sched Ben	\$813	\$813	\$813	\$1,343	\$1,343	\$1,343	\$1,774	\$1,774	\$1,774	\$2,151	\$2,151	\$2,151
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	9.6	13.4	14.1	12.9	18.0	19.0	15.6	21.8	23.0	19.3	26.6	27.9
% for Ben Offset	<u>-11.8</u>	<u>-11.8</u>	<u>-11.8</u>	<u>-15.9</u>	<u>-15.9</u>	<u>-15.9</u>	<u>-19.2</u>	<u>-19.2</u>	<u>-19.2</u>	<u>-23.6</u>	<u>-23.6</u>	<u>-23.6</u>
Prop Benefit	\$795	\$826	\$832	\$1,303	\$1,371	\$1,384	\$1,710	\$1,820	\$1,841	\$2,059	\$2,216	\$2,245
Percent of PL Scheduled	97.8	101.6	102.3	97.0	102.1	103.1	96.4	102.6	103.8	95.7	103.0	104.4
Percent of PL Payable	97.8	101.6	102.3	97.0	102.1	103.1	96.4	102.6	103.8	95.7	103.0	104.4
Percent of 2001 Real Benefit	124.9	129.7	130.6	123.8	130.4	131.6	125.2	133.2	134.8	133.8	144.1	146.0
2042 Retiree PL Sched Ben	\$896	\$896	\$896	\$1,478	\$1,478	\$1,478	\$1,953	\$1,953	\$1,953	\$2,365	\$2,365	\$2,365
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	13.5	20.9	22.5	18.2	28.2	30.3	22.1	34.1	36.6	28.2	43.7	47.0
% for Ben Offset	<u>-17.4</u>	<u>-17.4</u>	<u>-17.4</u>	<u>-23.4</u>	<u>-23.4</u>	<u>-23.4</u>	<u>-28.3</u>	<u>-28.3</u>	<u>-28.3</u>	<u>-36.2</u>	<u>-36.2</u>	<u>-36.2</u>
Prop Benefit	\$861	\$928	\$941	\$1,402	\$1,549	\$1,580	\$1,831	\$2,067	\$2,116	\$2,175	\$2,543	\$2,619
Percent of PL Scheduled	96.2	103.6	105.1	94.8	104.8	106.9	93.7	105.8	108.3	92.0	107.5	110.7
Percent of PL Payable	131.5	141.7	143.8	129.7	143.4	146.2	128.2	144.7	148.2	125.8	147.1	151.5
Percent of 2001 Real Benefit	135.2	145.6	147.8	133.3	147.3	150.2	134.0	151.3	154.9	141.4	165.3	170.3
2052 Retiree PL Sched Ben	\$986	\$986	\$986	\$1,628	\$1,628	\$1,628	\$2,151	\$2,151	\$2,151	\$2,604	\$2,604	\$2,604
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	15.0	24.2	26.2	20.1	32.6	35.3	24.4	39.5	42.8	32.8	54.2	58.9
% for Ben Offset	<u>-19.6</u>	<u>-19.6</u>	<u>-19.6</u>	<u>-26.4</u>	<u>-26.4</u>	<u>-26.4</u>	<u>-31.9</u>	<u>-31.9</u>	<u>-31.9</u>	<u>-43.3</u>	<u>-43.3</u>	<u>-43.3</u>
Prop Benefit	\$940	\$1,032	\$1,052	\$1,526	\$1,730	\$1,773	\$1,989	\$2,314	\$2,384	\$2,332	\$2,888	\$3,009
Percent of PL Scheduled	95.4	104.7	106.6	93.8	106.3	108.9	92.5	110.8	110.8	89.5	110.9	115.6
Percent of PL Payable	131.7	144.6	147.3	129.5	146.8	150.5	127.7	148.6	153.1	123.7	153.2	159.6
Percent of 2001 Real Benefit	147.6	162.0	165.1	145.1	164.4	168.6	145.6	169.4	174.5	151.6	187.8	195.7
2075 Retiree PL Sched Ben	\$1,231	\$1,231	\$1,231	\$2,032	\$2,032	\$2,032	\$2,685	\$2,685	\$2,685	\$3,250	\$3,250	\$3,250
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	14.5	23.5	25.4	19.5	31.6	34.2	23.6	38.2	41.4	31.7	52.4	56.9
% for Ben Offset	<u>-19.0</u>	<u>-19.0</u>	<u>-19.0</u>	<u>-25.6</u>	<u>-25.6</u>	<u>-25.6</u>	<u>-30.9</u>	<u>-30.9</u>	<u>-30.9</u>	<u>-42.0</u>	<u>-42.0</u>	<u>-42.0</u>
Prop Benefit	\$1,175	\$1,286	\$1,310	\$1,908	\$2,154	\$2,207	\$2,486	\$2,880	\$2,964	\$2,917	\$3,590	\$3,737
Percent of PL Scheduled	95.5	104.5	106.4	93.9	106.0	108.6	92.6	107.3	110.4	89.8	110.5	115.0
Percent of PL Payable	142.4	155.9	158.7	140.1	158.2	162.0	138.2	160.1	164.7	133.9	164.8	171.5
Percent of 2001 Real Benefit	184.5	201.9	205.6	181.4	204.8	209.8	182.0	210.9	217.0	189.7	233.4	243.0

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have a net real yield equal to LT Treas Bonds, except for 100% Treas case, where gross annuity yield is equal to Treas.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 2 Estimated Change in Monthly Benefit for Retiree at 65-- Personal Account Annuity is CPI-Indexed Life Annuity
2-Earner CPI Index PIA Starting 2009, LowEarnerEnhancement
Couple 4% to \$1,000 Redirect 2004 PA with Ben Offset (Offset Yield Rate at Inflation +2% Or TreasBndYld -1%)
Equal Earns

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)		
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield
2012 Retiree PL Sched Ben	\$723	\$723	\$723	\$1,194	\$1,194	\$1,194	\$1,578	\$1,578	\$1,578	\$1,873	\$1,873	\$1,873
% Basic Change for All	1.2	1.2	1.2	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
% for PA Annuity**	3.6	4.0	4.0	4.2	4.7	4.7	3.2	3.6	3.6	2.7	3.0	3.0
% for Ben Offset	<u>-3.2</u>	<u>-3.2</u>	<u>-3.2</u>	<u>-3.8</u>	<u>-3.8</u>	<u>-3.8</u>	<u>-2.9</u>	<u>-2.9</u>	<u>-2.9</u>	<u>-2.4</u>	<u>-2.4</u>	<u>-2.4</u>
Prop Benefit	\$734	\$737	\$738	\$1,188	\$1,194	\$1,194	\$1,568	\$1,574	\$1,575	\$1,861	\$1,867	\$1,867
Percent of PL Scheduled	101.5	101.9	102.0	99.5	100.0	100.0	99.4	99.8	99.8	99.3	99.6	99.7
Percent of PL Payable	101.5	101.9	102.0	99.5	100.0	100.0	99.4	99.8	99.8	99.3	99.6	99.7
Percent of 2001 Real Benefit	115.3	115.7	115.8	112.9	113.5	113.5	114.8	115.2	115.3	121.0	121.4	121.4
2022 Retiree PL Sched Ben	\$767	\$767	\$767	\$1,266	\$1,266	\$1,266	\$1,673	\$1,673	\$1,673	\$2,024	\$2,024	\$2,024
% Basic Change for All	9.2	9.2	9.2	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
% for PA Annuity**	10.6	13.3	13.7	10.5	13.0	13.4	8.0	9.8	10.1	6.6	8.1	8.4
% for Ben Offset	<u>-9.2</u>	<u>-9.2</u>	<u>-9.2</u>	<u>-9.1</u>	<u>-9.1</u>	<u>-9.1</u>	<u>-6.9</u>	<u>-6.9</u>	<u>-6.9</u>	<u>-5.7</u>	<u>-5.7</u>	<u>-5.7</u>
Prop Benefit	\$848	\$868	\$872	\$1,158	\$1,189	\$1,194	\$1,525	\$1,556	\$1,561	\$1,841	\$1,872	\$1,877
Percent of PL Scheduled	110.6	113.2	113.7	91.5	93.9	94.3	91.1	93.0	93.3	91.0	92.5	92.8
Percent of PL Payable	110.6	113.2	113.7	91.5	93.9	94.3	91.1	93.0	93.3	91.0	92.5	92.8
Percent of 2001 Real Benefit	133.1	136.3	136.8	110.1	113.0	113.5	111.6	113.9	114.3	119.7	121.7	122.1
2032 Retiree PL Sched Ben	\$813	\$813	\$813	\$1,343	\$1,343	\$1,343	\$1,774	\$1,774	\$1,774	\$2,151	\$2,151	\$2,151
% Basic Change for All	-0.9	-0.9	-0.9	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2
% for PA Annuity**	19.2	26.8	28.2	18.2	25.1	26.3	13.8	19.0	20.0	11.4	15.7	16.5
% for Ben Offset	<u>-16.0</u>	<u>-16.0</u>	<u>-16.0</u>	<u>-15.2</u>	<u>-15.2</u>	<u>-15.2</u>	<u>-11.6</u>	<u>-11.6</u>	<u>-11.6</u>	<u>-9.5</u>	<u>-9.5</u>	<u>-9.5</u>
Prop Benefit	\$832	\$894	\$905	\$1,138	\$1,231	\$1,248	\$1,491	\$1,584	\$1,601	\$1,800	\$1,892	\$1,910
Percent of PL Scheduled	102.3	109.9	111.3	84.8	91.7	93.0	84.1	89.3	90.3	83.7	88.0	88.8
Percent of PL Payable	102.3	109.9	111.3	84.8	91.7	93.0	84.1	89.3	90.3	83.7	88.0	88.8
Percent of 2001 Real Benefit	130.6	140.3	142.1	108.2	117.0	118.6	109.2	116.0	117.2	117.0	123.0	124.2
2042 Retiree PL Sched Ben	\$896	\$896	\$896	\$1,478	\$1,478	\$1,478	\$1,953	\$1,953	\$1,953	\$2,365	\$2,365	\$2,365
% Basic Change for All	-10.0	-10.0	-10.0	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7
% for PA Annuity**	27.1	41.9	44.9	26.6	41.2	44.2	20.1	31.2	33.5	16.6	25.8	27.7
% for Ben Offset	<u>-21.8</u>	<u>-21.8</u>	<u>-21.8</u>	<u>-21.4</u>	<u>-21.4</u>	<u>-21.4</u>	<u>-16.2</u>	<u>-16.2</u>	<u>-16.2</u>	<u>-13.4</u>	<u>-13.4</u>	<u>-13.4</u>
Prop Benefit	\$853	\$986	\$1,014	\$1,175	\$1,392	\$1,437	\$1,528	\$1,745	\$1,790	\$1,834	\$2,051	\$2,096
Percent of PL Scheduled	95.3	110.1	113.2	79.5	94.1	97.2	78.2	89.3	91.6	77.6	86.7	88.6
Percent of PL Payable	130.3	150.6	154.8	108.7	128.8	132.9	107.0	122.2	125.3	106.1	118.6	121.2
Percent of 2001 Real Benefit	134.0	154.8	159.1	111.7	132.3	136.6	111.9	127.8	131.0	119.3	133.4	136.3
2052 Retiree PL Sched Ben	\$986	\$986	\$986	\$1,628	\$1,628	\$1,628	\$2,151	\$2,151	\$2,151	\$2,604	\$2,604	\$2,604
% Basic Change for All	-18.2	-18.2	-18.2	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5
% for PA Annuity**	29.9	48.5	52.5	30.6	50.3	54.6	24.0	40.0	43.6	19.4	32.0	34.7
% for Ben Offset	<u>-23.7</u>	<u>-23.7</u>	<u>-23.7</u>	<u>-24.1</u>	<u>-24.1</u>	<u>-24.1</u>	<u>-18.9</u>	<u>-18.9</u>	<u>-18.9</u>	<u>-15.3</u>	<u>-15.3</u>	<u>-15.3</u>
Prop Benefit	\$867	\$1,050	\$1,090	\$1,204	\$1,525	\$1,595	\$1,563	\$1,907	\$1,983	\$1,865	\$2,193	\$2,264
Percent of PL Scheduled	88.0	106.5	110.5	73.9	93.7	98.0	72.6	88.7	92.2	71.6	84.2	86.9
Percent of PL Payable	121.5	147.2	152.6	102.1	129.4	135.3	100.4	122.5	127.3	98.9	116.3	120.1
Percent of 2001 Real Benefit	136.2	164.9	171.1	114.4	145.0	151.6	114.4	139.6	145.1	121.2	142.6	147.2
2075 Retiree PL Sched Ben	\$1,231	\$1,231	\$1,231	\$2,032	\$2,032	\$2,032	\$2,685	\$2,685	\$2,685	\$3,250	\$3,250	\$3,250
% Basic Change for All	-34.5	-34.5	-34.5	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9
% for PA Annuity**	28.9	46.9	50.8	29.6	48.7	52.8	23.2	38.7	42.1	18.7	30.9	33.6
% for Ben Offset	<u>-22.9</u>	<u>-22.9</u>	<u>-23.3</u>	<u>-23.3</u>	<u>-23.3</u>	<u>-23.3</u>	<u>-18.2</u>	<u>-18.2</u>	<u>-18.2</u>	<u>-14.7</u>	<u>-14.7</u>	<u>-14.7</u>
Prop Benefit	\$881	\$1,102	\$1,150	\$1,227	\$1,615	\$1,700	\$1,587	\$2,003	\$2,095	\$1,888	\$2,284	\$2,371
Percent of PL Scheduled	71.6	89.6	93.4	60.4	79.5	83.7	59.1	74.6	78.0	58.1	70.3	72.9
Percent of PL Payable	106.8	133.6	139.3	90.1	118.6	124.8	88.2	111.3	116.4	86.7	104.9	108.8
Percent of 2001 Real Benefit	138.3	173.1	180.5	116.6	153.6	161.6	116.2	146.7	153.3	122.7	148.5	154.1

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have a net real yield equal to LT Treas Bonds, except for 100% Treas case, where gross annuity yield is equal to Treas.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 3 Estimated Change in Monthly Benefit for Retiree at 65-- Personal Account Annuity is CPI-Indexed Life Annuity												
2-Earner Index PIA by 0.995 Starting 2009, Change PIA 15 to 10, Incrs Act Red, LowEarnerEnhancement												
Couple 2.5% to \$1,000 Redirect PA 2004 with Ben Offset (Offst Yld Rt at Inflation +2.5% Or TreasBndYld -0.5%), IF Make 1% AddOn PA Contrib												
Equal Earns												
	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)		
	Low Yield	50% Equity	High Yield	Low Yield	50% Equity	High Yield	Low Yield	50% Equity	High Yield	Low Yield	50% Equity	High Yield
PA Portfolio/Yield*	constant 2001\$			constant 2001\$			constant 2001\$			constant 2001\$		
2012 Retiree	PL Sched Ben	\$723	\$723	\$723	\$1,194	\$1,194	\$1,194	\$1,578	\$1,578	\$1,578	\$1,873	\$1,873
	% Basic Change for All	0.2	0.2	0.2	-0.9	-0.9	-0.9	-1.0	-1.0	-1.0	-1.2	-1.2
	% for PA Annuity**	3.1	3.5	3.5	4.2	4.7	4.8	4.6	5.2	5.2	5.0	5.6
	% for Ben Offset	-2.2	-2.2	-2.2	-2.9	-2.9	-2.9	-3.1	-3.1	-3.1	-2.6	-2.6
	Prop Benefit	\$732	\$732	\$735	\$1,199	\$1,205	\$1,206	\$1,587	\$1,595	\$1,596	\$1,895	\$1,905
	Percent of PL Scheduled	101.2	101.6	101.6	100.4	100.9	101.0	100.6	101.1	101.2	101.1	101.7
	Percent of PL Payable	101.2	101.6	101.6	100.4	100.9	101.0	100.6	101.1	101.2	101.1	101.7
	Percent of 2001 Real Benefit	114.9	115.3	115.4	114.0	114.6	114.6	116.2	116.8	116.9	123.2	123.9
2022 Retiree	PL Sched Ben	\$767	\$767	\$767	\$1,266	\$1,266	\$1,266	\$1,673	\$1,673	\$1,673	\$2,024	\$2,024
	% Basic Change for All	2.1	2.1	2.1	-8.0	-8.0	-8.0	-9.2	-9.2	-9.2	-11.9	-11.9
	% for PA Annuity**	9.3	11.6	12.0	12.5	15.6	16.1	12.3	15.2	15.7	12.2	15.0
	% for Ben Offset	-6.4	-6.4	-6.4	-8.6	-8.6	-8.6	-7.6	-7.6	-7.6	-6.3	-6.3
	Prop Benefit	\$806	\$823	\$826	\$1,214	\$1,254	\$1,261	\$1,596	\$1,646	\$1,654	\$1,901	\$1,958
	Percent of PL Scheduled	105.0	107.4	107.8	95.9	99.1	99.6	95.4	98.4	98.8	93.9	96.8
	Percent of PL Payable	105.0	107.4	107.8	95.9	99.1	99.6	95.4	98.4	98.8	93.9	96.8
	Percent of 2001 Real Benefit	126.5	129.3	129.7	115.5	119.2	119.9	116.9	120.5	121.1	123.6	127.3
2032 Retiree	PL Sched Ben	\$813	\$813	\$813	\$1,343	\$1,343	\$1,343	\$1,774	\$1,774	\$1,774	\$2,151	\$2,151
	% Basic Change for All	-3.9	-3.9	-3.9	-13.5	-13.5	-13.5	-15.5	-15.5	-15.5	-20.2	-20.2
	% for PA Annuity**	16.8	23.4	24.7	22.6	31.5	33.2	21.6	29.9	31.4	21.0	28.9
	% for Ben Offset	-11.4	-11.4	-11.4	-15.3	-15.3	-15.3	-13.1	-13.1	-13.1	-10.8	-10.8
	Prop Benefit	\$825	\$879	\$889	\$1,260	\$1,380	\$1,402	\$1,649	\$1,796	\$1,824	\$1,935	\$2,106
	Percent of PL Scheduled	101.5	108.1	109.4	93.8	102.8	104.4	93.0	101.3	102.8	90.0	97.9
	Percent of PL Payable	101.5	108.1	109.4	93.8	102.8	104.4	93.0	101.3	102.8	90.0	97.9
	Percent of 2001 Real Benefit	129.6	138.0	139.6	119.8	131.2	133.3	120.7	131.5	133.5	125.8	136.9
2042 Retiree	PL Sched Ben	\$896	\$896	\$896	\$1,478	\$1,478	\$1,478	\$1,953	\$1,953	\$1,953	\$2,365	\$2,365
	% Basic Change for All	-8.6	-8.6	-8.6	-17.7	-17.7	-17.7	-19.7	-19.7	-19.7	-24.1	-24.1
	% for PA Annuity**	23.7	36.7	39.3	31.9	49.3	52.9	31.1	48.3	51.8	30.7	47.6
	% for Ben Offset	-15.9	-15.9	-15.9	-21.4	-21.4	-21.4	-18.9	-18.9	-18.9	-15.6	-15.6
	Prop Benefit	\$888	\$1,004	\$1,028	\$1,372	\$1,630	\$1,684	\$1,808	\$2,143	\$2,212	\$2,152	\$2,552
	Percent of PL Scheduled	99.2	112.1	114.8	92.8	110.3	113.9	92.6	109.7	113.3	91.0	107.9
	Percent of PL Payable	135.6	153.4	157.1	126.9	150.8	155.8	126.6	150.1	154.9	124.5	147.6
	Percent of 2001 Real Benefit	139.4	157.7	161.4	130.4	155.0	160.1	132.4	156.9	162.0	139.9	166.0
2052 Retiree	PL Sched Ben	\$986	\$986	\$986	\$1,628	\$1,628	\$1,628	\$2,151	\$2,151	\$2,151	\$2,604	\$2,604
	% Basic Change for All	-13.1	-13.1	-13.1	-21.7	-21.7	-21.7	-23.6	-23.6	-23.6	-27.8	-27.8
	% for PA Annuity**	26.2	42.4	45.9	35.3	57.1	61.8	35.3	57.8	62.7	35.8	59.1
	% for Ben Offset	-17.5	-17.5	-17.5	-23.5	-23.5	-23.5	-21.6	-21.6	-21.6	-18.1	-18.1
	Prop Benefit	\$943	\$1,103	\$1,137	\$1,465	\$1,821	\$1,897	\$1,939	\$2,423	\$2,527	\$2,341	\$2,947
	Percent of PL Scheduled	95.6	111.9	115.3	90.0	111.9	116.6	90.1	112.6	117.5	89.9	113.2
	Percent of PL Payable	132.1	154.5	159.3	124.3	154.5	161.0	124.5	155.6	162.3	124.2	156.3
	Percent of 2001 Real Benefit	148.0	173.2	178.5	139.3	173.1	180.4	141.9	177.4	185.0	152.2	191.6
2075 Retiree	PL Sched Ben	\$1,231	\$1,231	\$1,231	\$2,032	\$2,032	\$2,032	\$2,685	\$2,685	\$2,685	\$3,250	\$3,250
	% Basic Change for All	-22.2	-22.2	-22.2	-29.9	-29.9	-29.9	-31.6	-31.6	-31.6	-35.4	-35.4
	% for PA Annuity**	25.3	41.1	44.4	34.1	55.3	59.8	34.1	56.0	60.7	34.6	57.1
	% for Ben Offset	-16.9	-16.9	-16.9	-22.7	-22.7	-22.7	-20.9	-20.9	-20.9	-17.4	-17.4
	Prop Benefit	\$1,062	\$1,255	\$1,297	\$1,655	\$2,086	\$2,178	\$2,194	\$2,779	\$2,905	\$2,658	\$3,391
	Percent of PL Scheduled	86.3	102.0	105.4	81.5	102.7	107.2	81.7	103.5	108.2	81.8	104.3
	Percent of PL Payable	128.7	152.2	157.2	121.5	153.1	159.9	121.9	154.4	161.5	122.0	155.7
	Percent of 2001 Real Benefit	166.7	197.1	203.6	157.3	198.3	207.0	160.6	203.5	212.7	172.8	220.5

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have a net real yield equal to LT Treas Bonds, except for 100% Treas case, where gross annuity yield is equal to Treas.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 1 **Estimated Change in Monthly Benefit for Retiree and Spouse at 65-- Personal Account Annuity is CPI-Indexed Life Annuity**

1-Earner **No Basic Benefit Changes**

Couple **2% Redirect PA 2004 with Ben Offset (Offset Yield Rate at Inflation +3.5% Or TreasBndYld +0.5%)**

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)		
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield
2012 Retiree PL Sched Ben	\$1,078	\$1,078	\$1,078	\$1,780	\$1,780	\$1,780	\$2,353	\$2,353	\$2,353	\$2,793	\$2,793	\$2,793
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	1.2	1.3	1.4	1.6	1.8	1.8	1.9	2.2	2.2	3.1	3.4	3.4
% for Ben Offset	-1.3	-1.3	-1.3	-1.8	-1.8	-1.8	-2.2	-2.2	-2.2	-3.4	-3.4	-3.4
Prop Benefit	\$1,077	\$1,078	\$1,078	\$1,777	\$1,780	\$1,781	\$2,347	\$2,353	\$2,353	\$2,783	\$2,793	\$2,794
Percent of PL Scheduled	99.9	100.0	100.0	99.8	100.0	100.0	99.8	100.0	100.0	99.6	100.0	100.0
Percent of PL Payable	99.9	100.0	100.0	99.8	100.0	100.0	99.8	100.0	100.0	99.6	100.0	100.0
Percent of 2001 Real Benefit	112.7	112.9	112.9	112.6	112.8	112.9	114.6	114.8	114.9	120.6	121.1	121.1
2022 Retiree PL Sched Ben	\$1,140	\$1,140	\$1,140	\$1,881	\$1,881	\$1,881	\$2,486	\$2,486	\$2,486	\$3,008	\$3,008	\$3,008
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	3.6	4.5	4.6	4.8	6.0	6.2	5.8	7.3	7.5	7.5	9.3	9.6
% for Ben Offset	-4.2	-4.2	-4.2	-5.6	-5.6	-5.6	-6.8	-6.8	-6.8	-8.8	-8.8	-8.8
Prop Benefit	\$1,133	\$1,143	\$1,144	\$1,866	\$1,888	\$1,892	\$2,461	\$2,497	\$2,503	\$2,970	\$3,023	\$3,032
Percent of PL Scheduled	99.4	100.3	100.4	99.2	100.4	100.6	99.0	100.4	100.7	98.7	100.5	100.8
Percent of PL Payable	99.4	100.3	100.4	99.2	100.4	100.6	99.0	100.4	100.7	98.7	100.5	100.8
Percent of 2001 Real Benefit	118.5	119.6	119.8	118.2	119.7	119.9	120.1	121.9	122.2	128.7	131.0	131.4
2032 Retiree PL Sched Ben	\$1,204	\$1,204	\$1,204	\$1,988	\$1,988	\$1,988	\$2,627	\$2,627	\$2,627	\$3,185	\$3,185	\$3,185
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	6.5	9.0	9.5	8.7	12.2	12.8	10.6	14.7	15.5	13.0	17.9	18.9
% for Ben Offset	-8.0	-8.0	-8.0	-10.7	-10.7	-10.7	-13.0	-13.0	-13.0	-15.9	-15.9	-15.9
Prop Benefit	\$1,186	\$1,217	\$1,223	\$1,948	\$2,017	\$2,030	\$2,563	\$2,673	\$2,694	\$3,093	\$3,250	\$3,279
Percent of PL Scheduled	98.5	101.1	101.6	98.0	101.4	102.1	97.6	101.8	102.5	97.1	102.0	102.9
Percent of PL Payable	98.5	101.1	101.6	98.0	101.4	102.1	97.6	101.8	102.5	97.1	102.0	102.9
Percent of 2001 Real Benefit	124.2	127.4	128.0	123.5	127.8	128.6	125.1	130.5	131.5	134.1	140.9	142.1
2042 Retiree PL Sched Ben	\$1,326	\$1,326	\$1,326	\$2,189	\$2,189	\$2,189	\$2,893	\$2,893	\$2,893	\$3,502	\$3,502	\$3,502
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	9.1	14.1	15.2	12.3	19.0	20.4	14.9	23.1	24.7	19.0	29.5	31.7
% for Ben Offset	-11.7	-11.7	-11.7	-15.8	-15.8	-15.8	-19.1	-19.1	-19.1	-24.5	-24.5	-24.5
Prop Benefit	\$1,292	\$1,358	\$1,372	\$2,113	\$2,260	\$2,291	\$2,770	\$3,006	\$3,055	\$3,312	\$3,680	\$3,756
Percent of PL Scheduled	97.4	102.4	103.4	96.5	103.2	104.6	95.8	103.9	105.6	94.6	105.1	107.3
Percent of PL Payable	133.2	140.1	141.5	132.0	141.2	143.1	131.0	142.2	144.5	129.4	143.7	146.7
Percent of 2001 Real Benefit	135.2	142.1	143.6	133.9	143.2	145.2	135.2	146.7	149.1	143.6	159.5	162.8
2052 Retiree PL Sched Ben	\$1,460	\$1,460	\$1,460	\$2,410	\$2,410	\$2,410	\$3,185	\$3,185	\$3,185	\$3,856	\$3,856	\$3,856
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	10.1	16.4	17.7	13.6	22.0	23.9	16.5	26.7	28.9	22.2	36.6	39.8
% for Ben Offset	-13.2	-13.2	-13.2	-17.8	-17.8	-17.8	-21.6	-21.6	-21.6	-29.3	-29.3	-29.3
Prop Benefit	\$1,415	\$1,506	\$1,526	\$2,309	\$2,512	\$2,556	\$3,023	\$3,348	\$3,418	\$3,584	\$4,140	\$4,261
Percent of PL Scheduled	96.9	103.1	104.5	95.8	104.2	106.0	94.9	105.1	107.3	92.9	107.4	110.5
Percent of PL Payable	133.8	142.5	144.3	132.3	144.0	146.5	131.1	145.2	148.2	128.4	148.3	152.6
Percent of 2001 Real Benefit	148.0	157.6	159.7	146.3	159.2	162.0	147.5	163.4	166.8	155.3	179.5	184.7
2075 Retiree PL Sched Ben	\$1,823	\$1,823	\$1,823	\$3,009	\$3,009	\$3,009	\$3,975	\$3,975	\$3,975	\$4,812	\$4,812	\$4,812
% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% for PA Annuity**	9.8	15.8	17.1	13.1	21.3	23.1	15.9	25.8	27.9	21.4	35.4	38.5
% for Ben Offset	-12.8	-12.8	-12.8	-17.3	-17.3	-17.3	-20.9	-20.9	-20.9	-28.3	-28.3	-28.3
Prop Benefit	\$1,767	\$1,878	\$1,901	\$2,885	\$3,131	\$3,183	\$3,777	\$4,171	\$4,255	\$4,480	\$5,153	\$5,299
Percent of PL Scheduled	96.9	103.0	104.3	95.9	104.1	105.8	95.0	104.9	107.0	93.1	107.1	110.1
Percent of PL Payable	144.6	153.7	155.6	143.0	155.2	157.9	141.7	156.5	159.7	138.9	159.7	164.3
Percent of 2001 Real Benefit	184.9	196.5	199.0	182.8	198.4	201.8	184.4	203.6	207.7	194.2	223.4	229.7

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have a net real yield equal to LT Treas Bonds, except for 100% Treas case, where gross annuity yield is equal to Treas.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 2 1-Earner Couple **Estimated Change in Monthly Benefit for Retiree and Spouse at 65-- Personal Account Annuity is CPI-Indexed Life Annuity**
CPI Index PIA Starting 2009, LowEarnerEnhancement
4% to \$1,000 Redirect 2004 PA with Ben Offset (Offset Yield Rate at Inflation +2% Or TreasBndYld -1%)

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)		
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield
2012 Retiree PL Sched Ben	\$1,078	\$1,078	\$1,078	\$1,780	\$1,780	\$1,780	\$2,353	\$2,353	\$2,353	\$2,793	\$2,793	\$2,793
% Basic Change for All	1.2	1.2	1.2	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
% for PA Annuity**	2.4	2.7	2.7	2.8	3.1	3.2	2.1	2.4	2.4	1.8	2.0	2.0
% for Ben Offset	<u>-2.2</u>	<u>-2.2</u>	<u>-2.2</u>	<u>-2.5</u>	<u>-2.5</u>	<u>-2.5</u>	<u>-1.9</u>	<u>-1.9</u>	<u>-1.9</u>	<u>-1.6</u>	<u>-1.6</u>	<u>-1.6</u>
Prop Benefit	\$1,093	\$1,097	\$1,097	\$1,769	\$1,775	\$1,775	\$2,336	\$2,342	\$2,342	\$2,772	\$2,778	\$2,779
Percent of PL Scheduled	101.4	101.7	101.7	99.4	99.7	99.7	99.3	99.5	99.6	99.3	99.5	99.5
Percent of PL Payable	101.4	101.7	101.7	99.4	99.7	99.7	99.3	99.5	99.6	99.3	99.5	99.5
Percent of 2001 Real Benefit	114.4	114.8	114.8	112.1	112.5	112.5	114.0	114.3	114.3	120.2	120.4	120.4
2022 Retiree PL Sched Ben	\$1,140	\$1,140	\$1,140	\$1,881	\$1,881	\$1,881	\$2,486	\$2,486	\$2,486	\$3,008	\$3,008	\$3,008
% Basic Change for All	9.2	9.2	9.2	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
% for PA Annuity**	7.1	8.9	9.2	7.1	8.7	9.0	5.4	6.6	6.8	4.4	5.5	5.6
% for Ben Offset	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-4.7</u>	<u>-4.7</u>	<u>-4.7</u>	<u>-3.9</u>	<u>-3.9</u>	<u>-3.9</u>
Prop Benefit	\$1,255	\$1,275	\$1,279	\$1,713	\$1,744	\$1,749	\$2,258	\$2,289	\$2,294	\$2,728	\$2,759	\$2,764
Percent of PL Scheduled	110.1	111.9	112.2	91.0	92.7	93.0	90.8	92.1	92.3	90.7	91.7	91.9
Percent of PL Payable	110.1	111.9	112.2	91.0	92.7	93.0	90.8	92.1	92.3	90.7	91.7	91.9
Percent of 2001 Real Benefit	131.3	133.5	133.8	108.5	110.5	110.8	110.2	111.7	112.0	118.2	119.6	119.8
2032 Retiree PL Sched Ben	\$1,204	\$1,204	\$1,204	\$1,988	\$1,988	\$1,988	\$2,627	\$2,627	\$2,627	\$3,185	\$3,185	\$3,185
% Basic Change for All	-0.9	-0.9	-0.9	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2
% for PA Annuity**	13.0	18.1	19.0	12.3	16.9	17.8	9.3	12.8	13.5	7.7	10.6	11.1
% for Ben Offset	<u>-10.8</u>	<u>-10.8</u>	<u>-10.8</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-7.8</u>	<u>-7.8</u>	<u>-7.8</u>	<u>-6.4</u>	<u>-6.4</u>	<u>-6.4</u>
Prop Benefit	\$1,220	\$1,281	\$1,293	\$1,667	\$1,759	\$1,776	\$2,189	\$2,282	\$2,299	\$2,646	\$2,739	\$2,756
Percent of PL Scheduled	101.3	106.4	107.4	83.8	88.5	89.3	83.3	86.9	87.5	83.1	86.0	86.5
Percent of PL Payable	101.3	106.4	107.4	83.8	88.5	89.3	83.3	86.9	87.5	83.1	86.0	86.5
Percent of 2001 Real Benefit	127.6	134.1	135.3	105.6	111.5	112.6	106.9	111.4	112.2	114.7	118.7	119.5
2042 Retiree PL Sched Ben	\$1,326	\$1,326	\$1,326	\$2,189	\$2,189	\$2,189	\$2,893	\$2,893	\$2,893	\$3,502	\$3,502	\$3,502
% Basic Change for All	-10.0	-10.0	-10.0	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7
% for PA Annuity**	18.3	28.3	30.4	17.9	27.8	29.9	13.6	21.1	22.6	11.2	17.4	18.7
% for Ben Offset	<u>-14.7</u>	<u>-14.7</u>	<u>-14.7</u>	<u>-14.4</u>	<u>-14.4</u>	<u>-14.4</u>	<u>-10.9</u>	<u>-10.9</u>	<u>-10.9</u>	<u>-9.0</u>	<u>-9.0</u>	<u>-9.0</u>
Prop Benefit	\$1,241	\$1,374	\$1,401	\$1,704	\$1,920	\$1,965	\$2,226	\$2,443	\$2,488	\$2,680	\$2,896	\$2,941
Percent of PL Scheduled	93.6	103.6	105.7	77.8	87.7	89.8	77.0	84.5	86.0	76.5	82.7	84.0
Percent of PL Payable	128.0	141.7	144.5	106.4	120.0	122.8	105.3	115.5	117.7	104.7	113.1	114.9
Percent of 2001 Real Benefit	129.9	143.8	146.7	108.0	121.7	124.5	108.7	119.2	121.4	116.2	125.5	127.5
2052 Retiree PL Sched Ben	\$1,460	\$1,460	\$1,460	\$2,410	\$2,410	\$2,410	\$3,185	\$3,185	\$3,185	\$3,856	\$3,856	\$3,856
% Basic Change for All	-18.2	-18.2	-18.2	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5
% for PA Annuity**	20.2	32.7	35.4	20.7	34.0	36.9	16.2	27.0	29.4	13.1	21.6	23.4
% for Ben Offset	<u>-16.0</u>	<u>-16.0</u>	<u>-16.0</u>	<u>-16.3</u>	<u>-16.3</u>	<u>-16.3</u>	<u>-12.8</u>	<u>-12.8</u>	<u>-12.8</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-10.3</u>
Prop Benefit	\$1,255	\$1,438	\$1,477	\$1,732	\$2,053	\$2,123	\$2,261	\$2,605	\$2,681	\$2,710	\$3,038	\$3,109
Percent of PL Scheduled	85.9	98.5	101.2	71.9	85.2	88.1	71.0	81.8	84.2	70.3	78.8	80.6
Percent of PL Payable	118.7	136.0	139.8	99.3	117.7	121.7	98.0	113.0	116.3	97.1	108.8	111.4
Percent of 2001 Real Benefit	131.3	150.5	154.6	109.8	130.1	134.6	110.3	127.1	130.8	117.5	131.7	134.8
2075 Retiree PL Sched Ben	\$1,823	\$1,823	\$1,823	\$3,009	\$3,009	\$3,009	\$3,975	\$3,975	\$3,975	\$4,812	\$4,812	\$4,812
% Basic Change for All	-34.5	-34.5	-34.5	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9
% for PA Annuity**	19.5	31.7	34.3	20.0	32.9	35.7	15.7	26.2	28.5	12.6	20.9	22.7
% for Ben Offset	<u>-15.4</u>	<u>-15.4</u>	<u>-15.4</u>	<u>-15.7</u>	<u>-15.7</u>	<u>-15.7</u>	<u>-12.3</u>	<u>-12.3</u>	<u>-12.3</u>	<u>-9.9</u>	<u>-9.9</u>	<u>-9.9</u>
Prop Benefit	\$1,269	\$1,490	\$1,537	\$1,755	\$2,144	\$2,228	\$2,285	\$2,701	\$2,793	\$2,733	\$3,130	\$3,216
Percent of PL Scheduled	69.6	81.8	84.4	58.3	71.3	74.1	57.5	68.0	70.3	56.8	65.0	66.8
Percent of PL Payable	103.8	122.0	125.8	87.0	106.3	110.5	85.7	101.4	104.8	84.7	97.0	99.7
Percent of 2001 Real Benefit	132.8	155.9	160.9	111.2	135.9	141.2	111.5	131.9	136.3	118.5	135.7	139.4

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have a net real yield equal to LT Treas Bonds, except for 100% Treas case, where gross annuity yield is equal to Treas.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 3 1-Earner Couple **Estimated Change in Monthly Benefit for Retiree and Spouse at 65-- Personal Account Annuity is CPI-Indexed Life Annuity Index PIA by 0.995 Starting 2009, Change PIA 15 to 10, Incrs Act Red, LowEarnerEnhancement 2.5% to \$1,000 Redirect PA 2004 with Ben Offset (Offst Yld Rt at Inflation +2.5% Or TreasBndYld -0.5%), IF Make 1% AddOn PA Contrib**

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)		
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield
2012 Retiree PL Sched Ben	\$1,078	\$1,078	\$1,078	\$1,780	\$1,780	\$1,780	\$2,353	\$2,353	\$2,353	\$2,793	\$2,793	\$2,793
% Basic Change for All	0.2	0.2	0.2	-0.9	-0.9	-0.9	-1.0	-1.0	-1.0	-1.2	-1.2	-1.2
% for PA Annuity**	2.1	2.3	2.4	2.8	3.2	3.2	3.1	3.5	3.5	3.3	3.7	3.8
% for Ben Offset	-1.5	-1.5	-1.5	-2.0	-2.0	-2.0	-2.1	-2.1	-2.1	-1.7	-1.7	-1.7
Prop Benefit	\$1,088	\$1,090	\$1,091	\$1,781	\$1,786	\$1,787	\$2,354	\$2,362	\$2,363	\$2,804	\$2,814	\$2,815
Percent of PL Scheduled	100.9	101.1	101.2	100.0	100.3	100.4	100.1	100.4	100.5	100.4	100.8	100.8
Percent of PL Payable	100.9	101.1	101.2	100.0	100.3	100.4	100.1	100.4	100.5	100.4	100.8	100.8
Percent of 2001 Real Benefit	113.8	114.1	114.2	112.8	113.2	113.3	114.9	115.3	115.4	121.5	122.0	122.0
2022 Retiree PL Sched Ben	\$1,140	\$1,140	\$1,140	\$1,881	\$1,881	\$1,881	\$2,486	\$2,486	\$2,486	\$3,008	\$3,008	\$3,008
% Basic Change for All	2.1	2.1	2.1	-8.0	-8.0	-8.0	-9.2	-9.2	-9.2	-11.9	-11.9	-11.9
% for PA Annuity**	6.2	7.8	8.1	8.4	10.5	10.9	8.2	10.2	10.6	8.2	10.1	10.4
% for Ben Offset	-4.3	-4.3	-4.3	-5.8	-5.8	-5.8	-5.1	-5.1	-5.1	-4.3	-4.3	-4.3
Prop Benefit	\$1,186	\$1,204	\$1,207	\$1,781	\$1,820	\$1,827	\$2,335	\$2,384	\$2,392	\$2,767	\$2,825	\$2,834
Percent of PL Scheduled	104.1	105.7	105.9	94.6	96.8	97.1	93.9	95.9	96.2	92.0	93.9	94.2
Percent of PL Payable	104.1	105.7	105.9	94.6	96.8	97.1	93.9	95.9	96.2	92.0	93.9	94.2
Percent of 2001 Real Benefit	124.2	126.0	126.3	112.9	115.4	115.8	114.0	116.4	116.8	120.0	122.5	122.9
2032 Retiree PL Sched Ben	\$1,204	\$1,204	\$1,204	\$1,988	\$1,988	\$1,988	\$2,627	\$2,627	\$2,627	\$3,185	\$3,185	\$3,185
% Basic Change for All	-3.9	-3.9	-3.9	-13.5	-13.5	-13.5	-15.5	-15.5	-15.5	-20.2	-20.2	-20.2
% for PA Annuity**	11.3	15.8	16.7	15.3	21.3	22.4	14.6	20.2	21.2	14.2	19.5	20.5
% for Ben Offset	-7.7	-7.7	-7.7	-10.3	-10.3	-10.3	-8.8	-8.8	-8.8	-7.3	-7.3	-7.3
Prop Benefit	\$1,201	\$1,255	\$1,265	\$1,818	\$1,938	\$1,961	\$2,369	\$2,517	\$2,544	\$2,760	\$2,931	\$2,963
Percent of PL Scheduled	99.7	104.2	105.0	91.5	97.5	98.6	90.2	95.8	96.9	86.6	92.0	93.0
Percent of PL Payable	99.7	104.2	105.0	91.5	97.5	98.6	90.2	95.8	96.9	86.6	92.0	93.0
Percent of 2001 Real Benefit	125.7	131.3	132.4	115.2	122.8	124.3	115.6	122.8	124.2	119.6	127.0	128.4
2042 Retiree PL Sched Ben	\$1,326	\$1,326	\$1,326	\$2,189	\$2,189	\$2,189	\$2,893	\$2,893	\$2,893	\$3,502	\$3,502	\$3,502
% Basic Change for All	-8.6	-8.6	-8.6	-17.7	-17.7	-17.7	-19.7	-19.7	-19.7	-24.1	-24.1	-24.1
% for PA Annuity**	16.0	24.8	26.6	21.5	33.3	35.8	21.0	32.6	35.0	20.7	32.2	34.5
% for Ben Offset	-10.7	-10.7	-10.7	-14.4	-14.4	-14.4	-12.7	-12.7	-12.7	-10.5	-10.5	-10.5
Prop Benefit	\$1,282	\$1,398	\$1,422	\$1,957	\$2,215	\$2,269	\$2,563	\$2,897	\$2,967	\$3,015	\$3,415	\$3,499
Percent of PL Scheduled	96.6	105.4	107.2	89.4	101.2	103.6	88.6	100.2	102.6	86.1	97.5	99.9
Percent of PL Payable	132.2	144.2	146.6	122.3	138.4	141.8	121.2	137.0	140.3	117.8	133.4	136.6
Percent of 2001 Real Benefit	134.1	146.3	148.8	124.0	140.4	143.8	125.1	141.4	144.8	130.7	148.0	151.6
2052 Retiree PL Sched Ben	\$1,460	\$1,460	\$1,460	\$2,410	\$2,410	\$2,410	\$3,185	\$3,185	\$3,185	\$3,856	\$3,856	\$3,856
% Basic Change for All	-13.1	-13.1	-13.1	-21.7	-21.7	-21.7	-23.6	-23.6	-23.6	-27.8	-27.8	-27.8
% for PA Annuity**	17.7	28.7	31.0	23.8	38.6	41.7	23.9	39.1	42.3	24.2	39.9	43.3
% for Ben Offset	-11.8	-11.8	-11.8	-15.9	-15.9	-15.9	-14.6	-14.6	-14.6	-12.2	-12.2	-12.2
Prop Benefit	\$1,355	\$1,515	\$1,549	\$2,078	\$2,434	\$2,510	\$2,729	\$3,213	\$3,317	\$3,245	\$3,851	\$3,983
Percent of PL Scheduled	92.8	103.8	106.1	86.2	101.0	104.1	85.7	100.9	104.2	84.1	99.9	103.3
Percent of PL Payable	128.2	143.3	146.6	119.1	139.5	143.8	118.3	139.3	143.9	116.2	137.9	142.7
Percent of 2001 Real Benefit	141.8	158.6	162.1	131.7	154.3	159.1	133.2	156.8	161.9	140.7	166.9	172.7
2075 Retiree PL Sched Ben	\$1,823	\$1,823	\$1,823	\$3,009	\$3,009	\$3,009	\$3,975	\$3,975	\$3,975	\$4,812	\$4,812	\$4,812
% Basic Change for All	-22.2	-22.2	-22.2	-29.9	-29.9	-29.9	-31.6	-31.6	-31.6	-35.4	-35.4	-35.4
% for PA Annuity**	17.1	27.7	30.0	23.0	37.3	40.4	23.1	37.8	41.0	23.3	38.6	41.9
% for Ben Offset	-11.4	-11.4	-11.4	-15.3	-15.3	-15.3	-14.1	-14.1	-14.1	-11.8	-11.8	-11.8
Prop Benefit	\$1,522	\$1,716	\$1,757	\$2,340	\$2,771	\$2,863	\$3,077	\$3,662	\$3,789	\$3,668	\$4,401	\$4,561
Percent of PL Scheduled	83.5	94.2	96.4	77.8	92.1	95.1	77.4	92.1	95.3	76.2	91.5	94.8
Percent of PL Payable	124.6	140.5	143.8	116.0	137.4	141.9	115.5	137.4	142.2	113.7	136.4	141.4
Percent of 2001 Real Benefit	159.3	179.6	183.9	148.3	175.6	181.4	150.2	178.7	184.9	159.0	190.8	197.7

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have a net real yield equal to LT Treas Bonds, except for 100% Treas case, where gross annuity yield is equal to Treas.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 1-V Estimated Change in Monthly Benefit for a Retiree at 65-- PA VARIABLE Annuity Selected by Some, or Required for All, with 50% Equity for Life

2-Earner No Basic Benefit Changes

Couple 2% Redirect PA 2004 with Ben Offset (Offset Yield Rate at Inflation +3.5% Or TreasBndYld +0.5%)

Equal Earns

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)			
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	
	2012 Retiree	PL Sched Ben	\$723	\$723	\$723	\$1,194	\$1,194	\$1,194	\$1,578	\$1,578	\$1,578	\$1,873	\$1,873
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	1.8	2.3	2.4	2.4	3.1	3.3	2.9	3.8	3.9	4.6	5.9	6.1
	% for Ben Offset	<u>-2.0</u>	<u>-2.0</u>	<u>-2.0</u>	<u>-2.7</u>	<u>-2.7</u>	<u>-2.7</u>	<u>-3.3</u>	<u>-3.3</u>	<u>-3.3</u>	<u>-5.1</u>	<u>-5.1</u>	<u>-5.1</u>
	Prop Benefit	\$722	\$725	\$726	\$1,191	\$1,199	\$1,201	\$1,572	\$1,586	\$1,589	\$1,863	\$1,888	\$1,893
	Percent of PL Scheduled	99.8	100.3	100.4	99.7	100.4	100.6	99.7	100.5	100.7	99.5	100.8	101.1
	Percent of PL Payable	99.8	100.3	100.4	99.7	100.4	100.6	99.7	100.5	100.7	99.5	100.8	101.1
	Percent of 2001 Real Benefit	113.3	113.9	114.0	113.2	114.0	114.2	115.1	116.1	116.3	121.1	122.8	123.1
2022 Retiree	PL Sched Ben	\$767	\$767	\$767	\$1,266	\$1,266	\$1,266	\$1,673	\$1,673	\$1,673	\$2,024	\$2,024	\$2,024
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	5.3	7.7	8.2	7.1	10.4	11.1	8.6	12.6	13.4	11.2	16.0	17.0
	% for Ben Offset	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-8.4</u>	<u>-8.4</u>	<u>-8.4</u>	<u>-10.1</u>	<u>-10.1</u>	<u>-10.1</u>	<u>-13.0</u>	<u>-13.0</u>	<u>-13.0</u>
	Prop Benefit	\$760	\$778	\$782	\$1,250	\$1,292	\$1,300	\$1,648	\$1,714	\$1,728	\$1,986	\$2,085	\$2,105
	Percent of PL Scheduled	99.1	101.5	102.0	98.8	102.0	102.7	98.5	102.4	103.3	98.1	103.0	104.0
	Percent of PL Payable	99.1	101.5	102.0	98.8	102.0	102.7	98.5	102.4	103.3	98.1	103.0	104.0
	Percent of 2001 Real Benefit	119.3	122.2	122.8	118.9	122.8	123.6	120.6	125.5	126.5	129.1	135.6	136.9
2032 Retiree	PL Sched Ben	\$813	\$813	\$813	\$1,343	\$1,343	\$1,343	\$1,774	\$1,774	\$1,774	\$2,151	\$2,151	\$2,151
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	9.6	15.6	17.0	12.9	21.0	22.9	15.6	25.5	27.7	19.3	31.0	33.6
	% for Ben Offset	<u>-11.8</u>	<u>-11.8</u>	<u>-11.8</u>	<u>-15.9</u>	<u>-15.9</u>	<u>-15.9</u>	<u>-19.2</u>	<u>-19.2</u>	<u>-19.2</u>	<u>-23.6</u>	<u>-23.6</u>	<u>-23.6</u>
	Prop Benefit	\$795	\$845	\$855	\$1,303	\$1,412	\$1,436	\$1,710	\$1,885	\$1,924	\$2,059	\$2,312	\$2,368
	Percent of PL Scheduled	97.8	103.8	105.2	97.0	105.2	107.0	96.4	106.3	108.5	95.7	107.5	110.1
	Percent of PL Payable	97.8	103.8	105.2	97.0	105.2	107.0	96.4	106.3	108.5	95.7	107.5	110.1
	Percent of 2001 Real Benefit	124.9	132.6	134.3	123.8	134.2	136.5	125.2	138.0	140.9	133.8	150.3	153.9
2042 Retiree	PL Sched Ben	\$896	\$896	\$896	\$1,478	\$1,478	\$1,478	\$1,953	\$1,953	\$1,953	\$2,365	\$2,365	\$2,365
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	13.5	24.5	27.2	18.2	33.0	36.6	22.1	40.0	44.3	28.2	51.2	56.7
	% for Ben Offset	<u>-17.4</u>	<u>-17.4</u>	<u>-17.4</u>	<u>-23.4</u>	<u>-23.4</u>	<u>-23.4</u>	<u>-28.3</u>	<u>-28.3</u>	<u>-28.3</u>	<u>-36.2</u>	<u>-36.2</u>	<u>-36.2</u>
	Prop Benefit	\$861	\$960	\$983	\$1,402	\$1,621	\$1,673	\$1,831	\$2,181	\$2,265	\$2,175	\$2,720	\$2,851
	Percent of PL Scheduled	96.2	107.2	109.8	94.8	109.6	113.2	93.7	111.7	116.0	92.0	115.0	120.5
	Percent of PL Payable	131.5	146.6	150.2	129.7	150.0	154.8	128.2	152.7	158.6	125.8	157.3	164.9
	Percent of 2001 Real Benefit	135.2	150.7	154.4	133.3	154.1	159.1	134.0	159.7	165.8	141.4	176.9	185.3
2052 Retiree	PL Sched Ben	\$986	\$986	\$986	\$1,628	\$1,628	\$1,628	\$2,151	\$2,151	\$2,151	\$2,604	\$2,604	\$2,604
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	15.0	28.5	31.8	20.1	38.3	42.8	24.4	46.4	51.8	32.8	63.7	71.4
	% for Ben Offset	<u>-19.6</u>	<u>-19.6</u>	<u>-19.6</u>	<u>-26.4</u>	<u>-26.4</u>	<u>-26.4</u>	<u>-31.9</u>	<u>-31.9</u>	<u>-31.9</u>	<u>-43.3</u>	<u>-43.3</u>	<u>-43.3</u>
	Prop Benefit	\$940	\$1,074	\$1,106	\$1,526	\$1,822	\$1,895	\$1,989	\$2,462	\$2,579	\$2,332	\$3,134	\$3,335
	Percent of PL Scheduled	95.4	108.9	112.2	93.8	112.0	116.4	92.5	114.5	119.9	89.5	120.3	128.0
	Percent of PL Payable	131.7	150.4	155.0	129.5	154.6	160.8	127.7	158.1	165.6	123.7	166.2	176.9
	Percent of 2001 Real Benefit	147.6	168.6	173.7	145.1	173.2	180.2	145.6	180.3	188.8	151.6	203.8	216.8
2075 Retiree	PL Sched Ben	\$1,231	\$1,231	\$1,231	\$2,032	\$2,032	\$2,032	\$2,685	\$2,685	\$2,685	\$3,250	\$3,250	\$3,250
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	14.5	27.7	31.0	19.5	37.3	41.7	23.6	45.1	50.5	31.7	61.9	69.5
	% for Ben Offset	<u>-19.0</u>	<u>-19.0</u>	<u>-19.0</u>	<u>-25.6</u>	<u>-25.6</u>	<u>-25.6</u>	<u>-30.9</u>	<u>-30.9</u>	<u>-30.9</u>	<u>-42.0</u>	<u>-42.0</u>	<u>-42.0</u>
	Prop Benefit	\$1,175	\$1,338	\$1,378	\$1,908	\$2,270	\$2,359	\$2,486	\$3,065	\$3,208	\$2,917	\$3,898	\$4,143
	Percent of PL Scheduled	95.5	108.7	112.0	93.9	111.7	116.1	92.6	114.2	119.5	89.8	119.9	127.5
	Percent of PL Payable	142.4	162.2	167.0	140.1	166.7	173.2	138.2	170.3	178.3	133.9	178.9	190.2
	Percent of 2001 Real Benefit	184.5	210.0	216.4	181.4	215.8	224.3	182.0	224.4	234.9	189.7	253.4	269.4

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have same average yield as PRA accumulation, however, annuity would NOT be CPI indexed over lifetime.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 2-V Estimated Change in Monthly Benefit for a Retiree at 65-- PA VARIABLE Annuity Selected by Some, or Required for All, with 50% Equity for Life

2-Earner CPI Index PIA Starting 2009, LowEarnerEnhancement

Couple 4% to \$1,000 Redirect 2004 PA with Ben Offset (Offset Yield Rate at Inflation +2% Or TreasBndYld -1%)

Equal Earns

PRA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)			
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	
	2012 Retiree	PL Sched Ben	\$723	\$723	\$723	\$1,194	\$1,194	\$1,194	\$1,578	\$1,578	\$1,578	\$1,873	\$1,873
	% Basic Change for All	1.2	1.2	1.2	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
	% for PA Annuity**	3.6	4.6	4.8	4.2	5.4	5.7	3.2	4.1	4.3	2.7	3.5	3.6
	% for Ben Offset	<u>-3.2</u>	<u>-3.2</u>	<u>-3.2</u>	<u>-3.8</u>	<u>-3.8</u>	<u>-3.8</u>	<u>-2.9</u>	<u>-2.9</u>	<u>-2.9</u>	<u>-2.4</u>	<u>-2.4</u>	<u>-2.4</u>
	Prop Benefit	\$734	\$742	\$743	\$1,188	\$1,203	\$1,205	\$1,568	\$1,583	\$1,586	\$1,861	\$1,876	\$1,878
	Percent of PL Scheduled	101.5	102.6	102.8	99.5	100.7	100.9	99.4	100.3	100.5	99.3	100.1	100.3
	Percent of PL Payable	101.5	102.6	102.8	99.5	100.7	100.9	99.4	100.3	100.5	99.3	100.1	100.3
	Percent of 2001 Real Benefit	115.3	116.5	116.7	112.9	114.3	114.6	114.8	115.9	116.1	121.0	122.0	122.1
2022 Retiree	PL Sched Ben	\$767	\$767	\$767	\$1,266	\$1,266	\$1,266	\$1,673	\$1,673	\$1,673	\$2,024	\$2,024	\$2,024
	% Basic Change for All	9.2	9.2	9.2	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
	% for PA Annuity**	10.6	15.4	16.4	10.5	15.1	16.0	8.0	11.4	12.2	6.6	9.5	10.0
	% for Ben Offset	<u>-9.2</u>	<u>-9.2</u>	<u>-9.2</u>	<u>-9.1</u>	<u>-9.1</u>	<u>-9.1</u>	<u>-6.9</u>	<u>-6.9</u>	<u>-6.9</u>	<u>-5.7</u>	<u>-5.7</u>	<u>-5.7</u>
	Prop Benefit	\$848	\$885	\$893	\$1,158	\$1,216	\$1,228	\$1,525	\$1,583	\$1,595	\$1,841	\$1,899	\$1,911
	Percent of PL Scheduled	110.6	115.4	116.4	91.5	96.1	97.0	91.1	94.6	95.3	91.0	93.8	94.4
	Percent of PL Payable	110.6	115.4	116.4	91.5	96.1	97.0	91.1	94.6	95.3	91.0	93.8	94.4
	Percent of 2001 Real Benefit	133.1	138.9	140.1	110.1	115.6	116.8	111.6	115.9	116.8	119.7	123.5	124.3
2032 Retiree	PL Sched Ben	\$813	\$813	\$813	\$1,343	\$1,343	\$1,343	\$1,774	\$1,774	\$1,774	\$2,151	\$2,151	\$2,151
	% Basic Change for All	-0.9	-0.9	-0.9	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2
	% for PA Annuity**	19.2	31.3	34.0	18.2	29.3	31.7	13.8	22.2	24.0	11.4	18.3	19.8
	% for Ben Offset	<u>-16.0</u>	<u>-16.0</u>	<u>-16.0</u>	<u>-15.2</u>	<u>-15.2</u>	<u>-15.2</u>	<u>-11.6</u>	<u>-11.6</u>	<u>-11.6</u>	<u>-9.5</u>	<u>-9.5</u>	<u>-9.5</u>
	Prop Benefit	\$832	\$930	\$952	\$1,138	\$1,287	\$1,320	\$1,491	\$1,640	\$1,674	\$1,800	\$1,949	\$1,982
	Percent of PL Scheduled	102.3	114.4	117.1	84.8	95.9	98.3	84.1	92.5	94.3	83.7	90.6	92.1
	Percent of PL Payable	102.3	114.4	117.1	84.8	95.9	98.3	84.1	92.5	94.3	83.7	90.6	92.1
	Percent of 2001 Real Benefit	130.6	146.1	149.5	108.2	122.4	125.5	109.2	120.1	122.5	117.0	126.7	128.9
2042 Retiree	PL Sched Ben	\$896	\$896	\$896	\$1,478	\$1,478	\$1,478	\$1,953	\$1,953	\$1,953	\$2,365	\$2,365	\$2,365
	% Basic Change for All	-10.0	-10.0	-10.0	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7
	% for PA Annuity**	27.1	49.1	54.3	26.6	48.3	53.5	20.1	36.5	40.5	16.6	30.2	33.4
	% for Ben Offset	<u>-21.8</u>	<u>-21.8</u>	<u>-21.8</u>	<u>-21.4</u>	<u>-21.4</u>	<u>-21.4</u>	<u>-16.2</u>	<u>-16.2</u>	<u>-16.2</u>	<u>-13.4</u>	<u>-13.4</u>	<u>-13.4</u>
	Prop Benefit	\$853	\$1,051	\$1,098	\$1,175	\$1,496	\$1,573	\$1,528	\$1,849	\$1,926	\$1,834	\$2,155	\$2,232
	Percent of PL Scheduled	95.3	117.3	122.6	79.5	101.2	106.4	78.2	94.7	98.6	77.6	91.1	94.4
	Percent of PL Payable	130.3	160.5	167.6	108.7	138.4	145.6	107.0	129.5	134.9	106.1	124.7	129.1
	Percent of 2001 Real Benefit	134.0	164.9	172.3	111.7	142.2	149.6	111.9	135.4	141.0	119.3	140.1	145.1
2052 Retiree	PL Sched Ben	\$986	\$986	\$986	\$1,628	\$1,628	\$1,628	\$2,151	\$2,151	\$2,151	\$2,604	\$2,604	\$2,604
	% Basic Change for All	-18.2	-18.2	-18.2	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5
	% for PA Annuity**	29.9	56.9	63.6	30.6	59.1	66.2	24.0	47.0	52.8	19.4	37.5	42.1
	% for Ben Offset	<u>-23.7</u>	<u>-23.7</u>	<u>-23.7</u>	<u>-24.1</u>	<u>-24.1</u>	<u>-24.1</u>	<u>-18.9</u>	<u>-18.9</u>	<u>-18.9</u>	<u>-15.3</u>	<u>-15.3</u>	<u>-15.3</u>
	Prop Benefit	\$867	\$1,134	\$1,199	\$1,204	\$1,668	\$1,783	\$1,563	\$2,057	\$2,181	\$1,865	\$2,338	\$2,456
	Percent of PL Scheduled	88.0	115.0	121.6	73.9	102.4	109.6	72.6	95.6	101.4	71.6	89.8	94.3
	Percent of PL Payable	121.5	158.8	168.0	102.1	141.5	151.3	100.4	132.1	140.1	98.9	124.0	130.3
	Percent of 2001 Real Benefit	136.2	178.0	188.3	114.4	158.5	169.5	114.4	150.6	159.7	121.2	152.0	159.7
2075 Retiree	PL Sched Ben	\$1,231	\$1,231	\$1,231	\$2,032	\$2,032	\$2,032	\$2,685	\$2,685	\$2,685	\$3,250	\$3,250	\$3,250
	% Basic Change for All	-34.5	-34.5	-34.5	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9
	% for PA Annuity**	28.9	55.4	61.9	29.6	57.5	64.4	23.2	45.7	51.4	18.7	36.5	40.9
	% for Ben Offset	<u>-22.9</u>	<u>-22.9</u>	<u>-22.9</u>	<u>-23.3</u>	<u>-23.3</u>	<u>-23.3</u>	<u>-18.2</u>	<u>-18.2</u>	<u>-18.2</u>	<u>-14.7</u>	<u>-14.7</u>	<u>-14.7</u>
	Prop Benefit	\$881	\$1,207	\$1,287	\$1,227	\$1,794	\$1,935	\$1,587	\$2,191	\$2,343	\$1,888	\$2,466	\$2,610
	Percent of PL Scheduled	71.6	98.0	104.6	60.4	88.3	95.3	59.1	81.6	87.3	58.1	75.9	80.3
	Percent of PL Payable	106.8	146.2	156.0	90.1	131.7	142.1	88.2	121.7	130.2	86.7	113.2	119.8
	Percent of 2001 Real Benefit	138.3	189.4	202.0	116.6	170.5	184.0	116.2	160.4	171.5	122.7	160.3	169.7

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have same average yield as PRA accumulation, however, annuity would NOT be CPI indexed over lifetime.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 3-V Estimated Change in Monthly Benefit for a Retiree at 65-- PA VARIABLE Annuity Selected by Some, or Required for All, with 50% Equity for Life
2-Earner Index PIA by 0.995 Starting 2009, Change PIA 15 to 10, Incrs Act Red, LowEarnerEnhancement
Couple 2.5% to \$1,000 Redirect PA 2004 with Ben Offset (Offst Yld Rt at Inflation +2.5% Or TreasBndYld -0.5%), IF Make 1% AddOn PA Contrib
Equal Earns Scaled LOW Earner Scaled MEDIUM Earner Scaled HIGH Earner Steady MAXIMUM Earner
(\$15,875 in 2002) (\$35,277 in 2002) (\$56,443 in 2002) (\$84,900 in 2002)

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)		
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield
2012 Retiree PL Sched Ben	\$723	\$723	\$723	\$1,194	\$1,194	\$1,194	\$1,578	\$1,578	\$1,578	\$1,873	\$1,873	\$1,873
% Basic Change for All	0.2	0.2	0.2	-0.9	-0.9	-0.9	-1.0	-1.0	-1.0	-1.2	-1.2	-1.2
% for PA Annuity**	3.1	4.1	4.2	4.2	5.5	5.7	4.6	6.0	6.3	5.0	6.4	6.7
% for Ben Offset	-2.2	-2.2	-2.2	-2.9	-2.9	-2.9	-3.1	-3.1	-3.1	-2.6	-2.6	-2.6
Prop Benefit	\$732	\$739	\$740	\$1,199	\$1,214	\$1,217	\$1,587	\$1,608	\$1,612	\$1,895	\$1,922	\$1,927
Percent of PL Scheduled	101.2	102.1	102.3	100.4	101.7	101.9	100.6	101.9	102.2	101.1	102.6	102.9
Percent of PL Payable	101.2	102.1	102.3	100.4	101.7	101.9	100.6	101.9	102.2	101.1	102.6	102.9
Percent of 2001 Real Benefit	114.9	115.9	116.1	114.0	115.4	115.7	116.2	117.7	118.0	123.2	125.0	125.3
2022 Retiree PL Sched Ben	\$767	\$767	\$767	\$1,266	\$1,266	\$1,266	\$1,673	\$1,673	\$1,673	\$2,024	\$2,024	\$2,024
% Basic Change for All	2.1	2.1	2.1	-8.0	-8.0	-8.0	-9.2	-9.2	-9.2	-11.9	-11.9	-11.9
% for PA Annuity**	9.3	13.5	14.4	12.5	18.2	19.4	12.3	17.7	18.8	12.2	17.5	18.6
% for Ben Offset	-6.4	-6.4	-6.4	-8.6	-8.6	-8.6	-7.6	-7.6	-7.6	-6.3	-6.3	-6.3
Prop Benefit	\$806	\$838	\$845	\$1,214	\$1,287	\$1,302	\$1,596	\$1,688	\$1,706	\$1,901	\$2,009	\$2,031
Percent of PL Scheduled	105.0	109.3	110.2	95.9	101.6	102.8	95.4	100.9	102.0	93.9	99.2	100.3
Percent of PL Payable	105.0	109.3	110.2	95.9	101.6	102.8	95.4	100.9	102.0	93.9	99.2	100.3
Percent of 2001 Real Benefit	126.5	131.6	132.6	115.5	122.3	123.7	116.9	123.5	124.9	123.6	130.6	132.0
2032 Retiree PL Sched Ben	\$813	\$813	\$813	\$1,343	\$1,343	\$1,343	\$1,774	\$1,774	\$1,774	\$2,151	\$2,151	\$2,151
% Basic Change for All	-3.9	-3.9	-3.9	-13.5	-13.5	-13.5	-15.5	-15.5	-15.5	-20.2	-20.2	-20.2
% for PA Annuity**	16.8	27.4	29.7	22.6	36.8	40.0	21.6	34.9	37.9	21.0	33.8	36.6
% for Ben Offset	-11.4	-11.4	-11.4	-15.3	-15.3	-15.3	-13.1	-13.1	-13.1	-10.8	-10.8	-10.8
Prop Benefit	\$825	\$911	\$930	\$1,260	\$1,451	\$1,493	\$1,649	\$1,885	\$1,938	\$1,935	\$2,211	\$2,272
Percent of PL Scheduled	101.5	112.1	114.4	93.8	108.1	111.2	93.0	106.3	109.2	90.0	102.8	105.6
Percent of PL Payable	101.5	112.1	114.4	93.8	108.1	111.2	93.0	106.3	109.2	90.0	102.8	105.6
Percent of 2001 Real Benefit	129.6	143.1	146.1	119.8	137.9	142.0	120.7	138.0	141.9	125.8	143.7	147.7
2042 Retiree PL Sched Ben	\$896	\$896	\$896	\$1,478	\$1,478	\$1,478	\$1,953	\$1,953	\$1,953	\$2,365	\$2,365	\$2,365
% Basic Change for All	-8.6	-8.6	-8.6	-17.7	-17.7	-17.7	-19.7	-19.7	-19.7	-24.1	-24.1	-24.1
% for PA Annuity**	23.7	42.9	47.5	31.9	57.8	64.0	31.1	56.5	62.6	30.7	55.8	61.8
% for Ben Offset	-15.9	-15.9	-15.9	-21.4	-21.4	-21.4	-18.9	-18.9	-18.9	-15.6	-15.6	-15.6
Prop Benefit	\$888	\$1,061	\$1,102	\$1,372	\$1,755	\$1,847	\$1,808	\$2,304	\$2,423	\$2,152	\$2,745	\$2,888
Percent of PL Scheduled	99.2	118.4	123.0	92.8	118.7	124.9	92.6	118.0	124.1	91.0	116.1	122.1
Percent of PL Payable	135.6	162.0	168.3	126.9	162.4	170.9	126.6	161.4	169.7	124.5	158.8	167.0
Percent of 2001 Real Benefit	139.4	166.5	173.0	130.4	166.9	175.6	132.4	168.7	177.4	139.9	178.5	187.8
2052 Retiree PL Sched Ben	\$986	\$986	\$986	\$1,628	\$1,628	\$1,628	\$2,151	\$2,151	\$2,151	\$2,604	\$2,604	\$2,604
% Basic Change for All	-13.1	-13.1	-13.1	-21.7	-21.7	-21.7	-23.6	-23.6	-23.6	-27.8	-27.8	-27.8
% for PA Annuity**	26.2	49.8	55.7	35.3	67.1	74.9	35.3	67.9	76.0	35.8	69.4	77.7
% for Ben Offset	-17.5	-17.5	-17.5	-23.5	-23.5	-23.5	-21.6	-21.6	-21.6	-18.1	-18.1	-18.1
Prop Benefit	\$943	\$1,176	\$1,233	\$1,465	\$1,983	\$2,111	\$1,939	\$2,639	\$2,813	\$2,341	\$3,215	\$3,434
Percent of PL Scheduled	95.6	119.2	125.1	90.0	121.8	129.7	90.1	122.7	130.8	89.9	123.5	131.8
Percent of PL Payable	132.1	164.7	172.8	124.3	168.3	179.1	124.5	169.5	180.7	124.2	170.5	182.1
Percent of 2001 Real Benefit	148.0	184.6	193.6	139.3	188.5	200.7	141.9	193.2	206.0	152.2	209.1	223.3
2075 Retiree PL Sched Ben	\$1,231	\$1,231	\$1,231	\$2,032	\$2,032	\$2,032	\$2,685	\$2,685	\$2,685	\$3,250	\$3,250	\$3,250
% Basic Change for All	-22.2	-22.2	-22.2	-29.9	-29.9	-29.9	-31.6	-31.6	-31.6	-35.4	-35.4	-35.4
% for PA Annuity**	25.3	48.5	54.2	34.1	65.2	72.9	34.1	66.0	74.0	34.6	67.4	75.7
% for Ben Offset	-16.9	-16.9	-16.9	-22.7	-22.7	-22.7	-20.9	-20.9	-20.9	-17.4	-17.4	-17.4
Prop Benefit	\$1,062	\$1,347	\$1,417	\$1,655	\$2,288	\$2,445	\$2,194	\$3,050	\$3,263	\$2,658	\$3,726	\$3,993
Percent of PL Scheduled	86.3	109.4	115.1	81.5	112.6	120.3	81.7	113.6	121.6	81.8	114.6	122.9
Percent of PL Payable	128.7	163.2	171.7	121.5	168.0	179.5	121.9	169.5	181.3	122.0	171.0	183.3
Percent of 2001 Real Benefit	166.7	211.4	222.4	157.3	217.5	232.4	160.6	223.3	238.9	172.8	242.3	259.6

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have same average yield as PRA accumulation, however, annuity would NOT be CPI indexed over lifetime.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 1-V Estimated Change in Monthly Benefit for Retiree and Spouse at 65-- PA VARIABLE Annuity Selected by Some, or Required for All, with 50% Equity for Life

1-Earner No Basic Benefit Changes

Couple 2% Redirect PA 2004 with Ben Offset (Offset Yield Rate at Inflation +3.5% Or TreasBndYld +0.5%)

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)			
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	
	2012 Retiree	PL Sched Ben	\$1,078	\$1,078	\$1,078	\$1,780	\$1,780	\$1,780	\$2,353	\$2,353	\$2,353	\$2,793	\$2,793
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	1.2	1.6	1.6	1.6	2.1	2.2	1.9	2.5	2.6	3.1	4.0	4.1
	% for Ben Offset	-1.3	-1.3	-1.3	-1.8	-1.8	-1.8	-2.2	-2.2	-2.2	-3.4	-3.4	-3.4
	Prop Benefit	\$1,077	\$1,081	\$1,081	\$1,777	\$1,786	\$1,787	\$2,347	\$2,361	\$2,363	\$2,783	\$2,808	\$2,813
	Percent of PL Scheduled	99.9	100.2	100.3	99.8	100.3	100.4	99.8	100.4	100.5	99.6	100.5	100.7
	Percent of PL Payable	99.9	100.2	100.3	99.8	100.3	100.4	99.8	100.4	100.5	99.6	100.5	100.7
	Percent of 2001 Real Benefit	112.7	113.1	113.2	112.6	113.2	113.3	114.6	115.2	115.4	120.6	121.7	121.9
2022 Retiree	PL Sched Ben	\$1,140	\$1,140	\$1,140	\$1,881	\$1,881	\$1,881	\$2,486	\$2,486	\$2,486	\$3,008	\$3,008	\$3,008
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	3.6	5.2	5.5	4.8	7.0	7.4	5.8	8.5	9.0	7.5	10.8	11.5
	% for Ben Offset	-4.2	-4.2	-4.2	-5.6	-5.6	-5.6	-6.8	-6.8	-6.8	-8.8	-8.8	-8.8
	Prop Benefit	\$1,133	\$1,151	\$1,155	\$1,866	\$1,907	\$1,916	\$2,461	\$2,527	\$2,541	\$2,970	\$3,069	\$3,089
	Percent of PL Scheduled	99.4	101.0	101.3	99.2	101.4	101.8	99.0	101.6	102.2	98.7	102.0	102.7
	Percent of PL Payable	99.4	101.0	101.3	99.2	101.4	101.8	99.0	101.6	102.2	98.7	102.0	102.7
	Percent of 2001 Real Benefit	118.5	120.5	120.9	118.2	120.9	121.4	120.1	123.3	124.0	128.7	133.0	133.9
2032 Retiree	PL Sched Ben	\$1,204	\$1,204	\$1,204	\$1,988	\$1,988	\$1,988	\$2,627	\$2,627	\$2,627	\$3,185	\$3,185	\$3,185
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	6.5	10.6	11.5	8.7	14.2	15.4	10.6	17.2	18.7	13.0	21.0	22.7
	% for Ben Offset	-8.0	-8.0	-8.0	-10.7	-10.7	-10.7	-13.0	-13.0	-13.0	-15.9	-15.9	-15.9
	Prop Benefit	\$1,186	\$1,236	\$1,246	\$1,948	\$2,057	\$2,082	\$2,563	\$2,738	\$2,777	\$3,093	\$3,346	\$3,402
	Percent of PL Scheduled	98.5	102.6	103.5	98.0	103.5	104.7	97.6	104.2	105.7	97.1	105.0	106.8
	Percent of PL Payable	98.5	102.6	103.5	98.0	103.5	104.7	97.6	104.2	105.7	97.1	105.0	106.8
	Percent of 2001 Real Benefit	124.2	129.3	130.5	123.5	130.4	131.9	125.1	133.6	135.5	134.1	145.0	147.5
2042 Retiree	PL Sched Ben	\$1,326	\$1,326	\$1,326	\$2,189	\$2,189	\$2,189	\$2,893	\$2,893	\$2,893	\$3,502	\$3,502	\$3,502
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	9.1	16.6	18.3	12.3	22.3	24.7	14.9	27.0	29.9	19.0	34.6	38.3
	% for Ben Offset	-11.7	-11.7	-11.7	-15.8	-15.8	-15.8	-19.1	-19.1	-19.1	-24.5	-24.5	-24.5
	Prop Benefit	\$1,292	\$1,390	\$1,414	\$2,113	\$2,332	\$2,384	\$2,770	\$3,120	\$3,204	\$3,312	\$3,857	\$3,988
	Percent of PL Scheduled	97.4	104.8	106.6	96.5	106.5	108.9	95.8	107.9	110.8	94.6	110.1	113.9
	Percent of PL Payable	133.2	143.4	145.8	132.0	145.7	149.0	131.0	147.6	151.5	129.4	150.6	155.7
	Percent of 2001 Real Benefit	135.2	145.5	148.0	133.9	147.8	151.1	135.2	152.3	156.4	143.6	167.2	172.9
2052 Retiree	PL Sched Ben	\$1,460	\$1,460	\$1,460	\$2,410	\$2,410	\$2,410	\$3,185	\$3,185	\$3,185	\$3,856	\$3,856	\$3,856
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	10.1	19.2	21.5	13.6	25.9	28.9	16.5	31.3	35.0	22.2	43.0	48.2
	% for Ben Offset	-13.2	-13.2	-13.2	-17.8	-17.8	-17.8	-21.6	-21.6	-21.6	-29.3	-29.3	-29.3
	Prop Benefit	\$1,415	\$1,548	\$1,581	\$2,309	\$2,605	\$2,678	\$3,023	\$3,496	\$3,613	\$3,584	\$4,386	\$4,587
	Percent of PL Scheduled	96.9	106.0	108.2	95.8	108.1	111.1	94.9	109.8	113.4	92.9	113.7	118.9
	Percent of PL Payable	133.8	146.4	149.5	132.3	149.3	153.5	131.1	151.6	156.7	128.4	157.1	164.3
	Percent of 2001 Real Benefit	148.0	162.0	165.4	146.3	165.1	169.7	147.5	170.7	176.3	155.3	190.1	198.8
2075 Retiree	PL Sched Ben	\$1,823	\$1,823	\$1,823	\$3,009	\$3,009	\$3,009	\$3,975	\$3,975	\$3,975	\$4,812	\$4,812	\$4,812
	% Basic Change for All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% for PA Annuity**	9.8	18.7	20.9	13.1	25.2	28.1	15.9	30.5	34.1	21.4	41.8	46.9
	% for Ben Offset	-12.8	-12.8	-12.8	-17.3	-17.3	-17.3	-20.9	-20.9	-20.9	-28.3	-28.3	-28.3
	Prop Benefit	\$1,767	\$1,930	\$1,970	\$2,885	\$3,247	\$3,336	\$3,777	\$4,356	\$4,499	\$4,480	\$5,460	\$5,706
	Percent of PL Scheduled	96.9	105.9	108.1	95.9	107.9	110.9	95.0	109.6	113.2	93.1	113.5	118.6
	Percent of PL Payable	144.6	158.0	161.2	143.0	161.0	165.4	141.7	163.5	168.8	138.9	169.3	176.9
	Percent of 2001 Real Benefit	184.9	202.0	206.2	182.8	205.8	211.4	184.4	212.6	219.6	194.2	236.7	247.3

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have same average yield as PRA accumulation, however, annuity would NOT be CPI indexed over lifetime.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 2-V **Estimated Change in Monthly Benefit for Retiree and Spouse at 65-- PA VARIABLE Annuity Selected by Some, or Required for All, with 50% Equity for Life**

1-Earner **CPI Index PIA Starting 2009, LowEarnerEnhancement**
 Couple **4% to \$1,000 Redirect 2004 PA with Ben Offset (Offset Yield Rate at Inflation +2% Or TreasBndYld -1%)**

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)			
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	
2012 Retiree	PL Sched Ben	\$1,078	\$1,078	\$1,078	\$1,780	\$1,780	\$1,780	\$2,353	\$2,353	\$2,353	\$2,793	\$2,793	\$2,793
	% Basic Change for All	1.2	1.2	1.2	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
	% for PA Annuity**	2.4	3.1	3.2	2.8	3.6	3.8	2.1	2.8	2.9	1.8	2.3	2.4
	% for Ben Offset	<u>-2.2</u>	<u>-2.2</u>	<u>-2.2</u>	<u>-2.5</u>	<u>-2.5</u>	<u>-2.5</u>	<u>-1.9</u>	<u>-1.9</u>	<u>-1.9</u>	<u>-1.6</u>	<u>-1.6</u>	<u>-1.6</u>
	Prop Benefit	\$1,093	\$1,101	\$1,103	\$1,769	\$1,784	\$1,786	\$2,336	\$2,351	\$2,353	\$2,772	\$2,787	\$2,790
	Percent of PL Scheduled	101.4	102.1	102.3	99.4	100.2	100.3	99.3	99.9	100.0	99.3	99.8	99.9
	Percent of PL Payable	101.4	102.1	102.3	99.4	100.2	100.3	99.3	99.9	100.0	99.3	99.8	99.9
	Percent of 2001 Real Benefit	114.4	115.2	115.4	112.1	113.0	113.2	114.0	114.7	114.9	120.2	120.8	120.9
2022 Retiree	PL Sched Ben	\$1,140	\$1,140	\$1,140	\$1,881	\$1,881	\$1,881	\$2,486	\$2,486	\$2,486	\$3,008	\$3,008	\$3,008
	% Basic Change for All	9.2	9.2	9.2	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
	% for PA Annuity**	7.1	10.4	11.1	7.1	10.2	10.8	5.4	7.7	8.2	4.4	6.4	6.8
	% for Ben Offset	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-6.2</u>	<u>-4.7</u>	<u>-4.7</u>	<u>-4.7</u>	<u>-3.9</u>	<u>-3.9</u>	<u>-3.9</u>
	Prop Benefit	\$1,255	\$1,292	\$1,300	\$1,713	\$1,771	\$1,783	\$2,258	\$2,316	\$2,328	\$2,728	\$2,786	\$2,798
	Percent of PL Scheduled	110.1	113.4	114.0	91.0	94.1	94.8	90.8	93.2	93.6	90.7	92.6	93.0
	Percent of PL Payable	110.1	113.4	114.0	91.0	94.1	94.8	90.8	93.2	93.6	90.7	92.6	93.0
	Percent of 2001 Real Benefit	131.3	135.2	136.0	108.5	112.2	113.0	110.2	113.0	113.6	118.2	120.8	121.3
2032 Retiree	PL Sched Ben	\$1,204	\$1,204	\$1,204	\$1,988	\$1,988	\$1,988	\$2,627	\$2,627	\$2,627	\$3,185	\$3,185	\$3,185
	% Basic Change for All	-0.9	-0.9	-0.9	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2	-18.2
	% for PA Annuity**	13.0	21.1	22.9	12.3	19.8	21.4	9.3	15.0	16.2	7.7	12.4	13.4
	% for Ben Offset	<u>-10.8</u>	<u>-10.8</u>	<u>-10.8</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-7.8</u>	<u>-7.8</u>	<u>-7.8</u>	<u>-6.4</u>	<u>-6.4</u>	<u>-6.4</u>
	Prop Benefit	\$1,220	\$1,318	\$1,340	\$1,667	\$1,816	\$1,849	\$2,189	\$2,339	\$2,372	\$2,646	\$2,796	\$2,829
	Percent of PL Scheduled	101.3	109.4	111.3	83.8	91.3	93.0	83.3	89.0	90.3	83.1	87.8	88.8
	Percent of PL Payable	101.3	109.4	111.3	83.8	91.3	93.0	83.3	89.0	90.3	83.1	87.8	88.8
	Percent of 2001 Real Benefit	127.6	137.9	140.2	105.6	115.1	117.2	106.9	114.1	115.8	114.7	121.2	122.6
2042 Retiree	PL Sched Ben	\$1,326	\$1,326	\$1,326	\$2,189	\$2,189	\$2,189	\$2,893	\$2,893	\$2,893	\$3,502	\$3,502	\$3,502
	% Basic Change for All	-10.0	-10.0	-10.0	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7	-25.7
	% for PA Annuity**	18.3	33.1	36.7	17.9	32.6	36.1	13.6	24.7	27.3	11.2	20.4	22.6
	% for Ben Offset	<u>-14.7</u>	<u>-14.7</u>	<u>-14.7</u>	<u>-14.4</u>	<u>-14.4</u>	<u>-14.4</u>	<u>-10.9</u>	<u>-10.9</u>	<u>-10.9</u>	<u>-9.0</u>	<u>-9.0</u>	<u>-9.0</u>
	Prop Benefit	\$1,241	\$1,438	\$1,485	\$1,704	\$2,024	\$2,101	\$2,226	\$2,547	\$2,624	\$2,680	\$3,001	\$3,078
	Percent of PL Scheduled	93.6	108.4	112.0	77.8	92.5	96.0	77.0	88.1	90.7	76.5	85.7	87.9
	Percent of PL Payable	128.0	148.3	153.2	106.4	126.5	131.3	105.3	120.5	124.1	104.7	117.2	120.2
	Percent of 2001 Real Benefit	129.9	150.5	155.4	108.0	128.3	133.2	108.7	124.3	128.1	116.2	130.1	133.4
2052 Retiree	PL Sched Ben	\$1,460	\$1,460	\$1,460	\$2,410	\$2,410	\$2,410	\$3,185	\$3,185	\$3,185	\$3,856	\$3,856	\$3,856
	% Basic Change for All	-18.2	-18.2	-18.2	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5	-32.5
	% for PA Annuity**	20.2	38.5	43.0	20.7	39.9	44.7	16.2	31.8	35.6	13.1	25.3	28.4
	% for Ben Offset	<u>-16.0</u>	<u>-16.0</u>	<u>-16.0</u>	<u>-16.3</u>	<u>-16.3</u>	<u>-16.3</u>	<u>-12.8</u>	<u>-12.8</u>	<u>-12.8</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-10.3</u>
	Prop Benefit	\$1,255	\$1,521	\$1,587	\$1,732	\$2,196	\$2,312	\$2,261	\$2,755	\$2,879	\$2,710	\$3,183	\$3,301
	Percent of PL Scheduled	85.9	104.2	108.7	71.9	91.1	95.9	71.0	86.5	90.4	70.3	82.5	85.6
	Percent of PL Payable	118.7	143.9	150.1	99.3	125.8	132.5	98.0	119.5	124.9	97.1	114.0	118.2
	Percent of 2001 Real Benefit	131.3	159.2	166.1	109.8	139.2	146.5	110.3	134.5	140.5	117.5	138.0	143.1
2075 Retiree	PL Sched Ben	\$1,823	\$1,823	\$1,823	\$3,009	\$3,009	\$3,009	\$3,975	\$3,975	\$3,975	\$4,812	\$4,812	\$4,812
	% Basic Change for All	-34.5	-34.5	-34.5	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9	-45.9
	% for PA Annuity**	19.5	37.4	41.8	20.0	38.8	43.5	15.7	30.9	34.7	12.6	24.6	27.6
	% for Ben Offset	<u>-15.4</u>	<u>-15.4</u>	<u>-15.4</u>	<u>-15.7</u>	<u>-15.7</u>	<u>-15.7</u>	<u>-12.3</u>	<u>-12.3</u>	<u>-12.3</u>	<u>-9.9</u>	<u>-9.9</u>	<u>-9.9</u>
	Prop Benefit	\$1,269	\$1,594	\$1,675	\$1,755	\$2,322	\$2,464	\$2,285	\$2,889	\$3,041	\$2,733	\$3,311	\$3,455
	Percent of PL Scheduled	69.6	87.5	91.9	58.3	77.2	81.9	57.5	72.7	76.5	56.8	68.8	71.8
	Percent of PL Payable	103.8	130.5	137.1	87.0	115.1	122.2	85.7	108.4	114.1	84.7	102.6	107.1
	Percent of 2001 Real Benefit	132.8	166.8	175.3	111.2	147.2	156.1	111.5	141.0	148.4	118.5	143.5	149.8

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have same average yield as PRA accumulation, however, annuity would NOT be CPI indexed over lifetime.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.

Plan 3-V 1-Earner Couple **Estimated Change in Monthly Benefit for Retiree and Spouse at 65-- PA VARIABLE Annuity Selected by Some, or Required for All, with 50% Equity for Life**
Index PIA by 0.995 Starting 2009, Change PIA 15 to 10, Incrs Act Red, LowEarnerEnhancement
2.5% to \$1,000 Redirect PA 2004 with Ben Offset (Offst Yld Rt at Inflation +2.5% Or TreasBndYld -0.5%), IF Make 1% AddOn PA Contrib

PA Portfolio/Yield*	Scaled LOW Earner (\$15,875 in 2002)			Scaled MEDIUM Earner (\$35,277 in 2002)			Scaled HIGH Earner (\$56,443 in 2002)			Steady MAXIMUM Earner (\$84,900 in 2002)			
	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	Low Yield	50% Equity constant 2001\$	High Yield	
2012 Retiree	PL Sched Ben	\$1,078	\$1,078	\$1,078	\$1,780	\$1,780	\$1,780	\$2,353	\$2,353	\$2,353	\$2,793	\$2,793	\$2,793
	% Basic Change for All	0.2	0.2	0.2	-0.9	-0.9	-0.9	-1.0	-1.0	-1.0	-1.2	-1.2	-1.2
	% for PA Annuity**	2.1	2.7	2.8	2.8	3.7	3.8	3.1	4.0	4.2	3.3	4.3	4.5
	% for Ben Offset	-1.5	-1.5	-1.5	-2.0	-2.0	-2.0	-2.1	-2.1	-2.1	-1.7	-1.7	-1.7
	Prop Benefit	\$1,088	\$1,094	\$1,096	\$1,781	\$1,796	\$1,798	\$2,354	\$2,375	\$2,380	\$2,804	\$2,831	\$2,836
	Percent of PL Scheduled	100.9	101.5	101.6	100.0	100.9	101.0	100.1	101.0	101.1	100.4	101.4	101.5
	Percent of PL Payable	100.9	101.5	101.6	100.0	100.9	101.0	100.1	101.0	101.1	100.4	101.4	101.5
	Percent of 2001 Real Benefit	113.8	114.5	114.7	112.8	113.8	114.0	114.9	115.9	116.1	121.5	122.7	122.9
2022 Retiree	PL Sched Ben	\$1,140	\$1,140	\$1,140	\$1,881	\$1,881	\$1,881	\$2,486	\$2,486	\$2,486	\$3,008	\$3,008	\$3,008
	% Basic Change for All	2.1	2.1	2.1	-8.0	-8.0	-8.0	-9.2	-9.2	-9.2	-11.9	-11.9	-11.9
	% for PA Annuity**	6.2	9.1	9.7	8.4	12.2	13.0	8.2	11.9	12.7	8.2	11.8	12.5
	% for Ben Offset	-4.3	-4.3	-4.3	-5.8	-5.8	-5.8	-5.1	-5.1	-5.1	-4.3	-4.3	-4.3
	Prop Benefit	\$1,186	\$1,219	\$1,225	\$1,781	\$1,853	\$1,868	\$2,335	\$2,426	\$2,445	\$2,767	\$2,875	\$2,897
	Percent of PL Scheduled	104.1	106.9	107.5	94.6	98.5	99.3	93.9	97.6	98.3	92.0	95.6	96.3
	Percent of PL Payable	104.1	106.9	107.5	94.6	98.5	99.3	93.9	97.6	98.3	92.0	95.6	96.3
	Percent of 2001 Real Benefit	124.2	127.6	128.3	112.9	117.4	118.4	114.0	118.4	119.3	120.0	124.6	125.6
2032 Retiree	PL Sched Ben	\$1,204	\$1,204	\$1,204	\$1,988	\$1,988	\$1,988	\$2,627	\$2,627	\$2,627	\$3,185	\$3,185	\$3,185
	% Basic Change for All	-3.9	-3.9	-3.9	-13.5	-13.5	-13.5	-15.5	-15.5	-15.5	-20.2	-20.2	-20.2
	% for PA Annuity**	11.3	18.5	20.1	15.3	24.9	27.0	14.6	23.6	25.6	14.2	22.8	24.7
	% for Ben Offset	-7.7	-7.7	-7.7	-10.3	-10.3	-10.3	-8.8	-8.8	-8.8	-7.3	-7.3	-7.3
	Prop Benefit	\$1,201	\$1,287	\$1,306	\$1,818	\$2,010	\$2,052	\$2,369	\$2,606	\$2,658	\$2,760	\$3,036	\$3,097
	Percent of PL Scheduled	99.7	106.9	108.5	91.5	101.1	103.2	90.2	99.2	101.2	86.6	95.3	97.2
	Percent of PL Payable	99.7	106.9	108.5	91.5	101.1	103.2	90.2	99.2	101.2	86.6	95.3	97.2
	Percent of 2001 Real Benefit	125.7	134.7	136.7	115.2	127.4	130.1	115.6	127.2	129.7	119.6	131.6	134.2
2042 Retiree	PL Sched Ben	\$1,326	\$1,326	\$1,326	\$2,189	\$2,189	\$2,189	\$2,893	\$2,893	\$2,893	\$3,502	\$3,502	\$3,502
	% Basic Change for All	-8.6	-8.6	-8.6	-17.7	-17.7	-17.7	-19.7	-19.7	-19.7	-24.1	-24.1	-24.1
	% for PA Annuity**	16.0	29.0	32.1	21.5	39.0	43.2	21.0	38.2	42.3	20.7	37.7	41.7
	% for Ben Offset	-10.7	-10.7	-10.7	-14.4	-14.4	-14.4	-12.7	-12.7	-12.7	-10.5	-10.5	-10.5
	Prop Benefit	\$1,282	\$1,454	\$1,495	\$1,957	\$2,340	\$2,432	\$2,563	\$3,059	\$3,178	\$3,015	\$3,608	\$3,751
	Percent of PL Scheduled	96.6	109.6	112.7	89.4	106.9	111.1	88.6	105.8	109.9	86.1	103.0	107.1
	Percent of PL Payable	132.2	150.0	154.2	122.3	146.2	152.0	121.2	144.6	150.3	117.8	140.9	146.5
	Percent of 2001 Real Benefit	134.1	152.2	156.5	124.0	148.3	154.1	125.1	149.3	155.1	130.7	156.4	162.6
2052 Retiree	PL Sched Ben	\$1,460	\$1,460	\$1,460	\$2,410	\$2,410	\$2,410	\$3,185	\$3,185	\$3,185	\$3,856	\$3,856	\$3,856
	% Basic Change for All	-13.1	-13.1	-13.1	-21.7	-21.7	-21.7	-23.6	-23.6	-23.6	-27.8	-27.8	-27.8
	% for PA Annuity**	17.7	33.6	37.6	23.8	45.3	50.6	23.9	45.9	51.3	24.2	46.8	52.5
	% for Ben Offset	-11.8	-11.8	-11.8	-15.9	-15.9	-15.9	-14.6	-14.6	-14.6	-12.2	-12.2	-12.2
	Prop Benefit	\$1,355	\$1,588	\$1,645	\$2,078	\$2,596	\$2,724	\$2,729	\$3,430	\$3,604	\$3,245	\$4,119	\$4,337
	Percent of PL Scheduled	92.8	108.7	112.7	86.2	107.7	113.0	85.7	107.7	113.1	84.1	106.8	112.5
	Percent of PL Payable	128.2	150.2	155.6	119.1	148.8	156.1	118.3	148.7	156.3	116.2	147.5	155.4
	Percent of 2001 Real Benefit	141.8	166.2	172.2	131.7	164.5	172.6	133.2	167.4	175.9	140.7	178.5	188.0
2075 Retiree	PL Sched Ben	\$1,823	\$1,823	\$1,823	\$3,009	\$3,009	\$3,009	\$3,975	\$3,975	\$3,975	\$4,812	\$4,812	\$4,812
	% Basic Change for All	-22.2	-22.2	-22.2	-29.9	-29.9	-29.9	-31.6	-31.6	-31.6	-35.4	-35.4	-35.4
	% for PA Annuity**	17.1	32.7	36.6	23.0	44.0	49.2	23.1	44.6	50.0	23.3	45.5	51.1
	% for Ben Offset	-11.4	-11.4	-11.4	-15.3	-15.3	-15.3	-14.1	-14.1	-14.1	-11.8	-11.8	-11.8
	Prop Benefit	\$1,522	\$1,807	\$1,878	\$2,340	\$2,973	\$3,129	\$3,077	\$3,933	\$4,146	\$3,668	\$4,736	\$5,003
	Percent of PL Scheduled	83.5	99.2	103.0	77.8	98.8	104.0	77.4	98.9	104.3	76.2	98.4	104.0
	Percent of PL Payable	124.6	147.9	153.7	116.0	147.4	155.2	115.5	147.6	155.6	113.7	146.8	155.1
	Percent of 2001 Real Benefit	159.3	189.1	196.5	148.3	188.4	198.3	150.2	192.0	202.4	159.0	205.3	216.9

* Low Yield assumes the Treas Bond yield on all assets, or risk adjusted returns. High Yield reflects a higher 7.1% ult real yield on equities, OR investing 60 percent of PA in equities at the assumed 6.5% yield.

** Annuity is assumed to have same average yield as PRA accumulation, however, annuity would NOT be CPI indexed over lifetime.

Note: Based on 2001 Trustees Intermediate assms, including 3.0 Treas ultimate real yield; Plus 6.5 equity, 3.5 corp bond ultimate real yields, and 0.3% annual ult PA and annuity admin cost.

For portfolios with part equity, balance is assumed 60% corporate and 40% Treas bonds.