Testimony to the Senate Finance Committee Stephen C. Goss, Chief Actuary Office of the Chief Actuary Social Security Administration April 9, 2003

Mr. Chairman, ranking member, and members of the committee, thank you for the opportunity to talk with you about the financial status of the Social Security program, and the results presented in the 2003 Annual Report of the Board of Trustees.

# Current Financial Status of the Social Security Program

The Social Security program currently provides monthly benefits to about 46 million individuals. The primary source of financing is a payroll tax on the over 150 million workers in covered employment.

Overall, the financial status of the Old-Age, Survivors, and Disability Insurance (OASDI) program is little changed from last year. Under the intermediate assumptions of the 2003 Report, the long-range actuarial deficit of the OASDI program is estimated to be 1.92 percent of taxable payroll. This long-range deficit is 0.04 percent of payroll larger than it was in the 2002 Report. Changing the valuation period alone, by adding the high deficit year 2077 to the long-range period, increased the actuarial deficit by 0.07 percent of payroll. The fact that the actuarial deficit is only 0.04 percent of payroll larger for this report therefore indicates that, on balance, changes in assumptions, methods, and experience have slightly improved the financial outlook through 2076, offsetting about one third of the effect of adding the year 2077.

Assets of the OASI and DI Trust Funds are invested in special obligations of the United States Treasury. Their combined assets increased by \$165 billion during 2002, reaching \$1.378 trillion at the beginning of 2003 and representing 288 percent of estimated annual expenditures for the year. These values are virtually identical to the estimates for 2002 in last year's report. Both the OASI and DI programs meet the "short-range test of financial adequacy", because the trust funds are projected to maintain assets at levels in excess of one year's cost throughout the short-range (10-year) period.

Tax revenue exceeded the cost of the program by \$85 billion in 2002. However, based on the intermediate assumptions of the 2003 Trustees Report, OASDI program cost is projected to begin growing faster than the program's tax income in 2009, and to exceed tax income beginning in 2018, one year later than projected in last year's report. The combined OASI and DI trust funds are projected to grow to nearly five times the annual cost of the program in 2016, and to decline thereafter, becoming exhausted in 2042, also one year later than in last year's report. At the point of trust fund exhaustion in 2042, continuing tax income

is expected to be equal to 73 percent of the cost of the program. By the end of the 75-year period, tax income is projected to equal only 65 percent of the cost of the program.

As in last year's report, the OASI and DI programs, both separately and combined, do not meet the test of "long-range close actuarial balance". This means basically that the projected income and assets of the programs are less than 95 percent of the level needed to fully pay scheduled costs throughout the 75-year period.

Projected annual balances between tax income and the scheduled cost of the program for the next few years deteriorated somewhat from last year's projections as a result of downward revisions by the Bureau of Economic Analysis (Department of Commerce) in estimates of wages for 2001 and 2002. The negative effects of lower wage levels are offset after a few years by corresponding reductions in average benefit levels and by an increase in the delayed-retirement assumption associated with the increasing Normal Retirement Age. These factors, combined with higher immigration between 1990 and 2022, based on the 2000 Census and new assumptions, result in higher annual balances in this report than in the 2002 report from 2010 through 2040. The higher levels of immigration for 1990 through 2022 result in additional beneficiaries which cause a reduction in the annual balances from about 2040 to 2075.

OASDI program cost is projected to rise from 10.9 percent of taxable payroll in 2003 to 19.9 percent of payroll in 2077. In 2077 the cost of the program is projected to exceed income by 6.5 percent of taxable payroll. This means that if payroll taxes were to be raised in 2077 to permit full payment of benefits scheduled for the year, an increase of more than 50 percent would be needed. Expressed as a percent of GDP, the cost of the OASDI program is projected to rise from 4.4 percent in 2003 to 7 percent for 2077, the same level as in last year's report for 2076.

# New Measures in the 2003 Report

Several additional measures of OASDI unfunded obligations have been added to this year's Social Security Trustees Report. The open-group unfunded obligation of the program under the intermediate assumptions is estimated at \$3.5 trillion, in discounted present value, for the 75-year period 2003 through 2077. This unfunded obligation is conceptually similar to the actuarial deficit for the 75-year period. It is important to remember that both of these measures indicate the magnitude of the financial shortfall for the next 75 years as a whole. The actuarial deficit of 1.92 percent of payroll expresses this 75-year shortfall relative to the tax base, or taxable payroll, for the program over the same 75-year period. The \$3.5-trillion unfunded obligation expresses the 75-year shortfall as an aggregate value which must be addressed over the course of the next 75 years. The 2003 Trustees Report also includes an estimate of \$10.5 trillion, in present

value, for the open-group unfunded obligation of the OASDI program for the infinite future period. The equivalent actuarial deficit for the infinite future is estimated at about 3.8 percent of taxable payroll. As with these measures for the 75-year period, the values reflect the projected shortfalls for the period as a whole, or the infinite future in this case. Thus, these values indicate that the shortfall for the infinite future represents about 3.8 percent of the taxable payroll for the infinite future, and that the \$10.5 trillion present value unfunded obligation will need to be met over this infinite period.

It should be noted that like the actuarial deficit measure, these present-value measures of unfunded obligations will tend to increase from one Trustees Report to the next even if no changes in the data or assumptions are made. The increase is simply due to the changing valuation date. For example, the 75-year open-group unfunded obligation is increased from \$3.3 trillion to \$3.5 trillion based on this year's valuation, even though the updated assumptions and experience were, on balance, positive. However, to the extent that these measures of unfunded obligations grow faster than the Social Security taxable payroll, they represent a real increase in the cost of meeting shortfalls for future years, as these years get closer.

The 2003 Trustees Report also provides two "components" of the \$10.5 trillion infinite future unfunded obligation. The first is the unfunded obligation the program would have if participation in the program were closed off to individuals under age 15 in 2003. The value for this "closed-group" unfunded obligation is estimated at \$10.5 trillion. The second component is the net present value of scheduled taxes and cost for new entrants to the program for the infinite future. This value is zero, indicating that taxes for future generations could finance their benefits on a fully-advance-funded basis. These two values are important, for evaluating a program that is designed to be "fully advance funded".

However, it is important to recognize that the Social Security program is financed on a basically pay-as-you-go basis. Under a pay-as-you-go program the taxes of each generation are used to pay the benefits of prior generations and are not saved to pay for their own benefits. Thus, the fact that taxes for future generations are about equal to the present value of the cost of their own scheduled benefits is not relevant to the actuarial status of the program. Similarly, the closed-group unfunded obligation of the program is not relevant to the actuarial status of the program, because benefits of current program participants will be paid largely by the taxes of future generations, which are not reflected in this value.

### Sustainable Solvency

The actuarial deficit and the unfunded obligation for a period indicate the financial status of the program for the period as a whole, and whether the program will be financially solvent at the end of the period. It is also important to consider whether solvency is achieved for the program at all times within the valuation

period, and beyond. For this purpose we consider the level of the trust fund at each point in time, which if positive indicates that the program is solvent. If the program is solvent throughout the 75-year period, and the trust fund, expressed as a percent of annual program cost, is stable or rising at the end of the period, then solvency can be expected to be sustained well beyond the end of the period. This year's report again shows that under current law, scheduled benefits are not sustainable in the long run with current tax rates.

## Stochastic Projections and Uncertainty

Appendix E of the 2003 Trustees Report presents the results of a new, first generation model using stochastic modeling techniques. These results are an important addition to the sensitivity analysis and presentation of alternative scenarios in the report. We are pleased with the prospects of expanding our understanding of uncertainty through this model and look forward to further development. Availability of this model for inclusion in the 2003 report was only possible through extraordinary effort by Alice Wade, Deputy Chief Actuary for Long-Range Actuarial Estimates, the highly talented team she led in the effort, and consultation with other pioneers in this field, like the staff at CBO. However, we note that the results of this model should be viewed with care. More work is needed on this and similar models to bring them to the point where they will fully represent the range of uncertainty associated with the future cost of Social Security. However, even at this stage of development, these models confirm that outcomes as good or better than the Trustees' low-cost projection, or as bad or worse than the high-cost projections, are relatively unlikely in the long run.

### Effects of Deferring Reform

Finally, Mr. Chairman, your staff requested that I present an analysis of the effect of deferring action for reforming Social Security on the size of benefit reductions and tax rate increases that would be needed. The table I have submitted titled "Immediate Benefit Reductions and Tax-Rate Increases that Would Eliminate Long-Range Social Security Actuarial Deficits" provides the effects of delaying the start of changes for the next several years.

The 2003 Trustees Report indicates that eliminating the 75-year actuarial deficit (for 2003 through 2077) could be achieved with an immediate 13-percent reduction in benefit levels for all recipients in 2003 and later. The report also indicates that an immediate reduction of about 23 percent (more precisely about 22.7 percent) could put the program in balance for the infinite future. If the start of such benefit reductions were delayed 7 years to the year 2010, the reductions needed to eliminate these deficits would increase to 14.5 percent and 24.3 percent, respectively.

We may also consider such hypothetical benefit reductions if they were only to be applied to individuals who become newly eligible in 2003, or some later year. On this basis, a 15.1-percent reduction for all individuals newly eligible in 2003 and

later could eliminate the 75-year actuarial deficit. A 25.1-percent reduction for those newly eligible in 2003 and later could eliminate the infinite-future deficit. However, if such reductions were delayed 7 years, to affect those newly eligible for benefits in 2010 and later, then the benefit reductions would need to be 17.6 percent and 27.6 percent, respectively.

Similarly, the payroll-tax-rate increases that could eliminate long-range deficits would increase if action were deferred. As indicated in the 2003 Trustees Report, an increase in the combined payroll tax rate of 1.92 percent of taxable earnings starting 2003 could eliminate the 75-year deficit, and an increase of about 3.8 percent (more precisely about 3.77 percent) could eliminate the infinite-future deficit. If the starting date were delayed 7 years to 2010, then the tax-rate increases needed would rise to 2.25 percent and 4.21 percent, respectively.

It is important to note that the total savings, or additional revenue, for the OASDI program is exactly the same in present value for each illustration that could eliminate the deficit for the 75-year period 2003 through 2077. The same is true for all illustrations that could eliminate the infinite-future deficit. Thus, the effect of delaying action so that there would be no change for the next few years is to require a larger change after the next few years. Whether the delayed change is larger or smaller for any individual depends on when he/she will stop working and become eligible for benefits.

I would be happy to answer any questions that you may have about the OASDI projections for this year.