



# Social Security

## Memorandum

Refer to : TCC

**Date:** March 3, 2000

**To:** Harry C. Ballantyne, Chief Actuary

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

**Subject:** Estimated Long-Range OASDI Financial Effects of Two Proposals  
Developed by Senator Moynihan --INFORMATION

This memorandum provides the estimated effects on the long-range OASDI financial status of two proposals designed to restore long-range solvency for the OASDI program. The proposals are closely related to the *Social Security Solvency Act of 1999 (S.21)*, proposed by Senators Moynihan and (Bob) Kerrey. However, the two proposals for which estimates are provided in this memorandum reflect several differences from the legislative language of *S.21*, which have been specified by David Podoff of Senator Moynihan's staff. All estimates are based on the intermediate assumptions of the 1999 Trustees Report.

Both proposals include specified payroll tax rates for future years designed to eliminate the long-range OASDI actuarial deficit (currently 2.07 percent of taxable payroll) and to eventually maintain a steady contingency reserve level of assets in the trust funds (between 125 and 150 percent of annual program cost). The proposals differ from one another in the size of the specified reduction in future automatic cost-of-living adjustments (COLAs) for OASDI monthly benefits.. Under **Proposal A**, the COLA is reduced by 0.8 percentage point from the percentage otherwise computed beginning with the COLA scheduled for December 2000. Under **Proposal B**, the COLA is reduced by 1.0 percentage point beginning with the COLA scheduled for December 2000.

### Long-Range OASDI Financial Effects

As designed, each of the proposals would each eliminate the estimated present-law OASDI actuarial deficit of 2.07 percent of taxable payroll. These proposals consist of several provisions that would modify the level of OASDI benefits, increase the amount of earnings subject to the payroll tax, and change the rules for taxing of OASDI benefits. In addition, specified annual payroll tax rates for the future would

be varied so that, on a year-by-year basis, estimated income to the OASDI trust funds would be expected to more closely match estimated outgo from the OASDI trust funds. The annual payroll tax rates are specified so that the combined OASDI trust fund ratio (ratio of trust fund assets to annual outgo) is projected, based on the intermediate assumptions of the 1999 Trustees Report, to be between 125 and 150 percent during about the last half of the long-range, 75-year period. **Table A** and **Table B** provide a brief listing of the individual provisions of **Proposal A** and **Proposal B**, respectively. A more detailed description of the provisions is given below. For each individual provision and for the total proposed packages, **Tables A** and **B** provide the following estimates:

- The change, from present law, in the long-range OASDI actuarial balance.
- The change, from present law, in the OASDI annual income rate in 2070.
- The change, from present law, in the OASDI annual cost rate in 2070.
- The change, from present law, in the OASDI annual balance in 2070.

Enactment of **Proposal A** would result in an improvement in the long-range actuarial balance for the 75-year period (1999-2073) that is estimated to produce a positive actuarial balance of +0.03 percent of taxable payroll. The OASDI trust fund ratio would increase from 194 percent of annual outgo for the beginning of 1999, to a projected level of 316 percent for the beginning of 2015. The projected trust fund ratio would then decrease to 132 percent for the beginning of 2042. As designed, the projected OASDI trust fund ratio would stay relatively stable (between 127 and 132 percent of annual outgo) for the remainder of the long-range projection period (2043-2073).

Enactment of the **Proposal B** would also result in an estimated long-range actuarial balance for the 75-year period (1999-2073) of +0.03 percent of taxable payroll. The projected OASDI trust fund ratio would increase to 336 percent for the beginning of 2016, then decline steadily until around 2035, and thereafter stay relatively stable (between 125 and 140 percent).

For years through 2029, the specified payroll tax rates are the same for both proposals and are lower than the rate of 12.4 percent of taxable payroll specified under current law. After 2029, payroll tax rates under **Proposal A** are higher than under **Proposal B**. Specified payroll tax rates exceed the 12.4 percent rate in current law starting in 2030 under **Proposal A** and starting in 2034 under **Proposal B**.

## **Description of Provisions**

### ***Provision 1: Reduce the COLA***

Under present law, monthly OASDI benefits are increased automatically each year, effective for December payments. The automatic increase is referred to as the cost-of-living adjustment (COLA) and is based on the percentage increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). Under both proposals, COLAs scheduled for December 2000 and later would be reduced. The specified reduction in COLA is 0.8 percentage point under **Proposal A** and 1.0 percentage point under **Proposal B**. The legislative language in *S-21* for modification of COLAs differs from the specifications for these proposals.

### ***Provision 2: Subject OASDI benefits to income tax in essentially the same manner as for the taxation of private pensions***

This provision, when fully implemented, would subject OASDI benefits to income tax in essentially the same manner prescribed for private and government employee defined benefit pension plans. When fully implemented, the amount of OASDI benefits that is included in gross income for income tax purposes would be the total monthly benefits paid, less the exclusion amount. The income thresholds applicable under current law would not apply to the new provision. The monthly exclusion amount would be computed, as in current tax code, as the total amount of employee, after tax, contribution to OASDI divided by the estimates of single-life or joint-and-survivor life expectancy, in months, provided in the tax code for private and government-employee, contributory, defined-benefit pensions.

This provision would be phased in during the period 2000-2004, becoming fully effective for 2004 and later. During the phase-in period, an individual's gross income for income tax purposes would include the greater of (1) the amount of OASDI benefits included in gross income under present law (reflecting income thresholds) and (2) the amount of OASDI benefits that would be included in gross income with this provision fully implemented, times a phase-in factor. The phase-in factor would be 20 percent for 2000, 40 percent for 2001, 60 percent for 2002, 80 percent for 2003, and 100 percent for 2004 and later.

### ***Provision 3: Extend OASDI coverage to virtually all State and local government employees hired after 2001***

Employees of most State and local governments are covered under the OASDI program through voluntary, but irrevocable, agreements with the Federal government. In 1990, legislation extended, on a mandatory basis, OASDI coverage to all employees of State and local government not covered by a public employee retirement system, with the exception of full-time students and election workers.

However, currently about 5 million State and local government employees, excluding students and election workers, are still not covered by OASDI. This provision would extend OASDI coverage, on a mandatory basis, to all employees newly hired by State and local governments after 2001, except for full-time students and election workers.

***Provision 4: Change in calculation of AIME***

This provision would increase the maximum number of computation years used in determining an individual's average indexed monthly earnings (AIME) from 35 years to 38 years. The number of computation years would increase to 36 years for retired worker beneficiaries attaining age 62 in 2002, 37 years for retired worker beneficiaries attaining age 62 in 2003, and 38 years for retired worker beneficiaries attaining age 62 after 2003. The number of computation years would increase to 36 years for workers who die or become disabled at age 63 after 2002, 37 years for workers who die or become disabled at age 64 after 2004, and 38 years workers who die or become disabled at age 65 after 2006.

In calculating the AIME for a *retired worker* under present law, a computation period of 35 years is used. Thus, the worker's highest 35 years of indexed earnings are used in determining the numerator of the AIME and 35 X 12 (the number of months in 35 years) is used as the denominator. Under this provision, the number of benefit computation years used in determining the AIME for a *retired worker* turning age 62 after 2003 would be 38.

Under current law, the number of benefit computation years is determined by subtracting up to *five dropout* years from the number of *elapsed* years. *Elapsed* years are determined as the number of years from age 22 through the year prior to the earlier of (1) year of death or (2) year of attaining age 62, excluding any calendar years in a period of disability. Under this proposed provision, the calculation of *elapsed years* would change by increasing the age 62, ultimately to age 65.

***Provision 5: Retain the NRA at age 65 and modify the PIA formula***

This provision would restore and retain the normal retirement age (NRA) at age 65, thereby negating the increase in the NRA specified in current law. This part of the provision alone would increase benefits by about 15 percent for retired worker beneficiaries newly eligible after 2021.

In addition, this provision would reduce the primary insurance amount (PIA) of beneficiaries who become eligible for benefits after 1999. These reductions are designed to roughly approximate the effect of increasing the NRA, beginning with individuals turning age 62 in 2000, by 2 months per year until reaching age 68 for

individuals turning age 62 in 2017, and then indexing the NRA thereafter (at an estimated increase of 1 month every 2 years) until reaching an NRA of 70 for those first eligible for benefits in 2065 or later. Specifically, this provision would reduce each of the PIA-formula factors (90, 32, and 15 under current law) by 1.2 percent (multiply by 0.988) each year 2000-17, and by 0.3 percent (multiply by 0.997) each year 2018 through 2065. The ultimate reduction in the PIA level for beneficiaries newly eligible in 2065 and later would be about 30 percent. The combination of this reduction in PIA level and the retention of the NRA at age 65 would result in a reduction in benefits of about 19 percent for retired worker beneficiaries newly eligible in 2065 and later.

This modified PIA formula would apply to benefits payable to retired worker beneficiaries newly eligible after 1999, and to their auxiliary beneficiaries. The modified formula would *not* apply to benefits payable under the Disability Insurance program (for disabled worker beneficiaries and their dependents), or to benefits payable to child survivors or to a surviving spouse eligible due to having a child in care. For disabled worker beneficiaries who convert directly to retired worker beneficiary status upon attaining the “disability conversion age”, the modified benefit formula would continue to not apply to the worker and dependents benefits, for life. Benefits for aged surviving spouses would be equivalent to the benefits they would receive under the “equivalent” provision of increasing NRA (language for this needs to be developed).

Under current law, the disability conversion age is equal to the NRA. The disability conversion age is the age up to which new disabled worker benefits may be awarded and at which all disabled worker beneficiaries are automatically converted to retired worker beneficiary status. Under the proposal the disability conversion age would be increased by 2 months per year, beginning with individuals who attain age 62 in the year 2000, until reaching age 68 for individuals turning age 62 in 2017, and then increased by 1 month every 2 years, until reaching an age of 70 for those who attain age 62 in 2065 and later.

As currently formulated, this provision provides some significant differences in benefit levels as compared with the roughly “equivalent” change in the NRA. These differences affect primarily (1) disabled workers and (2) aged surviving spouses. Our estimates assume that the intent of the legislation is to achieve the same effect as gradually increasing the NRA to age 70.

***Provision 6: Eliminate the earnings test for beneficiaries 62+***

Effective 1/1/2003, this provision would eliminate the earnings test for beneficiaries who are age 62 or older. The estimated long-range cost of this provision is small because months for which retirement benefits are withheld under current law result

in later recomputation (increase) of the percent of PIA payable. Thus, the earnings test has very little effect on the expected amount of lifetime retirement benefits; it defers benefits from when individuals still have substantial earnings from work until substantial earnings have ceased.

***Provision 7: Raise the OASDI contribution and benefit base***

The *contribution and benefit base* for Social Security (OASDI) was \$72,600 for earnings in 1999 (\$76,200 for 2000). Under current law, this *base* will be indexed in future years to increases in the level of the average annual wage as measured by the *SSA average wage index (AWI)*. The *contribution and benefit base* serves the following two purposes:

- As a contribution base, it establishes the maximum annual amount of covered earnings per worker that are subject to OASDI payroll taxes.
- As a benefit base, it establishes the maximum annual amount of earnings creditable for each worker for the purposes of benefit computation.

*Provision 7* would raise the *contribution and benefit base* to \$87,000 in 2002, \$94,000 in 2003 and \$99,900 in 2004. After 2004, the *contribution and benefit base* would be indexed as specified in current law (using increases in the *AWI*). Increasing the *base* would result in an increase in the amount of payroll taxes for workers with earnings above the present-law *base*. Because the additional earnings subject to payroll tax would also be credited for the purpose of computing OASDI monthly benefit amounts, the income from additional taxes payable over the long-range (75-year) period would be partially offset by the cost of additional benefits.

Under present law, the percent of total covered earnings that is taxable is expected to decline from 85.3 percent in 1999, to a stable level of 84.3 percent for 2008 and later. This change results from expected increases in earnings levels that are greater than average for the most highly compensated workers over the next 10 years. Under the proposal with the specified higher dollar amounts for the *contribution and benefit base* during the period 2002-2004, the percent of total covered earnings that is taxable is expected to reach a stable level of 86.3 for 2008 and later.

***Provision 8: Change the OASI and DI payroll tax***

This provision changes the OASDI payroll tax beginning in 2000. These payroll tax rates are different for **Proposal A** and **Proposal B**. There rates are determined so that the combined OASDI trust fund ratio (ratio of trust fund assets to annual outgo) is maintained between 125 and 150 percent during the last half of the long-range 75-year period.

Payroll tax rates for **Proposal A**, which are listed in **Table A** (*specified 0.8-percentage-point reduction in COLA*) are as follows:

Calendar Years	Payroll Tax		Calendar Years	Payroll Tax
2000-2001	11.4%		2051-2057	13.5%
2002-2029	10.4%		2058-2064	13.8%
2030-2043	12.8%		2065+	14.0%
2044-2050	13.2%			

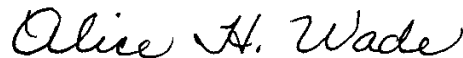
Payroll tax rates for **Proposal B**, which are listed in **Table B** (*specified 1.0-percentage-point reduction in COLA*) are as follows:

Calendar Years	Payroll Tax		Calendar Years	Payroll Tax
2000-2001	11.4%		2039-2052	12.9%
2002-2033	10.4%		2053-2062	13.3%
2034-2038	12.5%		2063+	13.7%

The payroll tax rates above are different from the payroll tax rates currently specified in **S-21**.



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Attachments

**Table A Proposal A: Estimated Long-Range OASDI Financial Effect of a Proposal by Senator Moynihan**

**Estimated Change (As a percent of taxable payroll) in**

Provision	Actuarial Balance (75-year)	Annual Measures: 2070			
		Income Rate	Cost Rate	Annual Balance	
1 For December 2000 and later, reduce the OASDI automatic cost of living adjustment (COLA) by 0.8 percentage point.	1.16	-0.10	-1.99	1.89	
2 Subject OASDI benefits to income tax in the same manner as prescribed for benefits received from private and government employee defined benefit pension plans, with all current threshold levels for taxing OASDI benefits eliminated. This provision is phased in over the period 2000-2004.	0.43	0.28	-0.00	0.28	
3 Extend OASDI coverage to all State and local government employees hired after 2001.	0.21	-0.00	-0.02	0.02	
4 Increase maximum computation period from 35 years to 38 years for retirement, survivor, and disability. The maximum computation period would increase to 36 years for those attaining age 62 in 2002, 37 years for those attaining age 62 in 2003, and 38 years for those attaining age 62 after 2003.	0.25	-0.02	-0.44	0.41	
5 Retain the normal retirement age (NRA) at age 65. Multiply all benefit formula factors (90, 32, and 15) successively by 0.988 for 2000-2017 and by 0.997 for 2018-2065. The resulting factors for beneficiaries age 62 in 2065 are 62.70, 22.29, and 10.45. Disability beneficiaries, retired worker beneficiaries who convert from disability, and young survivor beneficiaries maintain the current formula PIA factors. <sup>1</sup>	0.79	-0.13	-2.08	1.95	
6 Effective 1/1/2003, eliminate the retirement earnings test for beneficiaries age 62 and older.	-0.01	-0.00	-0.08	0.08	
7 Raise the OASDI contribution and benefit base to \$87,000 in 2002, \$94,000 in 2003, and \$99,900 in 2004. After 2004, resume indexing the contribution and benefit base using the SSA average wage index.	0.22	-0.01	-0.21	0.20	
Total for Provisions 1 through 7 (including interactions among provisions)	2.79	-0.04	-4.38	4.34	
8 Change the combined OASI and DI payroll tax rate beginning in 2000 as follows (including interactions among provisions) :					
		<b>Payroll Tax</b>			
		<u>OASDI</u>	<u>Years</u>	<u>OASDI</u>	<u>Years</u>
		11.4%	2000-2001	12.8%	2030-2043
		10.4%	2002-2029	13.2%	2044-2050
				13.5%	2051-2057
				13.8%	2058-2064
				14.0%	2060+
<b>Total for Provisions 1 through 8 (including interactions among provisions)</b>	<b>2.10</b>	<b>1.60</b>	<b>0.00</b>	<b>1.60</b>	
		<b>1.56</b>	<b>-4.38</b>	<b>5.94</b>	

Based on the intermediate assumptions of the 1999 Trustees Report under present law, the long-range actuarial balance for the 75-year period (1999-2073) is estimated to be -2.07 percent of taxable payroll. For 2070, the annual income rate, annual cost rate, and annual balance are 13.34, 19.63, and -6.29 respectively.

<sup>1</sup>This provision is assumed to achieve the same cost effect of gradually increasing the normal retirement age (NRA) to age 70.



**Table B Proposal B: Estimated Long-Range OASDI Financial Effect of a Proposal by Senator Moynihan**

**Estimated Change (As a percent of taxable payroll) in**

Provision	Actuarial Balance (75-year)	Annual Measures: 2070		
		Income Rate	Cost Rate	Annual Balance
1 For December 2000 and later, reduce the OASDI automatic cost of living adjustment (COLA) by 1.0 percentage point.	1.43	-0.12	-2.44	2.32
2 Subject OASDI benefits to income tax in the same manner as prescribed for benefits received from private and government employee defined benefit pension plans, with all current threshold levels for taxing OASDI benefits eliminated. This provision is phased in over the period 2000-2004.	0.43	0.28	-0.00	0.28
3 Extend OASDI coverage to all State and local government employees hired after 2001.	0.21	-0.00	-0.02	0.02
4 Increase maximum computation period from 35 years to 38 years for retirement, survivor, and disability. The maximum computation period would increase to 36 years for those attaining age 62 in 2002, 37 years for those attaining age 62 in 2003, and 38 years for those attaining age 62 after 2003.	0.25	-0.02	-0.44	0.41
5 Retain the normal retirement age (NRA) at age 65. Multiply all benefit formula factors (90, 32, and 15) successively by 0.988 for 2000-2017 and by 0.997 for 2018-2065. The resulting factors for beneficiaries age 62 in 2065 are 62.70, 22.29, and 10.45. Disability beneficiaries, retired worker beneficiaries who convert from disability, and young survivor beneficiaries maintain the current formula PIA factors. <sup>1</sup>	0.79	-0.13	-2.08	1.95
6 Effective 1/1/2003, eliminate the retirement earnings test for beneficiaries age 62 and older.	-0.01	-0.00	-0.08	0.08
7 Raise the OASDI contribution and benefit base to \$87,000 in 2002, \$94,000 in 2003, and \$99,900 in 2004. After 2004, resume indexing the contribution and benefit base using the SSA average wage index.	0.22	-0.01	-0.21	0.20
<b>Total for Provisions 1 through 7 (including interactions among provisions)</b>	<b>3.02</b>	<b>-0.06</b>	<b>-4.76</b>	<b>4.70</b>
8 Change the combined OASI and DI payroll tax rate beginning in 2000 as follows (including interactions among provisions) :				
	<b><u>Payroll Tax</u></b>			
	<u>OASDI</u>	<u>Years</u>	<u>OASDI</u>	<u>Years</u>
	11.4%	2000-2001	12.5%	2034-2038
	10.4%	2002-2033	12.9%	2039-2062
	13.3%	2053-2062	13.7%	2063+
	-0.92	1.30	0.00	1.30
<b>Total for Provisions 1 through 8 (including interactions among provisions)</b>	<b>2.10</b>	<b>1.24</b>	<b>-4.76</b>	<b>6.00</b>

Based on the intermediate assumptions of the 1999 Trustees Report under present law, the long-range actuarial balance for the 75-year period (1999-2073) is estimated to be -2.07 percent of taxable payroll. For 2070, the annual income rate, annual cost rate, and annual balance are 13.34, 19.63, and -6.29 respectively.

<sup>1</sup>This provision is assumed to achieve the same cost effect of gradually increasing the normal retirement age (NRA) to age 70.