



# SOCIAL SECURITY

## MEMORANDUM

Date: October 10, 2003

Refer To: TCA

To: Robert M. Ball

From: Stephen C. Goss  
Chief Actuary

Subject: Estimated OASDI Financial Effects for Two Provisions that Would Improve Social Security Financing Plus a Balancing Tax-Rate Increase--INFORMATION

This memorandum provides estimates for a proposal that you have outlined. The attached tables 1.0 and 1.1 provide estimates of the effects of two basic provisions (tables 1.0) plus the effects of an additional possible increase in the combined OASDI payroll tax rate that would achieve solvency for the 75-year projection period (tables 1.1). All estimates reflect the intermediate assumptions of the 2003 Trustees Report. These estimates reflect contributions from many individuals in the Office of the Chief Actuary, particularly Alice Wade, Jason Schultz, Bill Piet, and Chris Chaplain.

### Two Basic Provisions Alone

Tables 1.0 provide estimates of the financial effects on the OASDI program of two basic provisions that you have described. The total effect of these provisions, including interaction, would be to reduce the size of the 75-year actuarial deficit by 0.94 percent of payroll, from 1.92 to 0.97 percent of payroll.

Briefly described, the two provisions are:

1. Increase the OASDI contribution and benefit base by an additional 2 percent (beyond wage indexing) for years 2004 through 2036. This change is projected to result in 90 percent of OASDI covered earnings being taxable for 2036 and later. About 6 percent of covered workers have earnings above the current-law taxable maximum each year, and would thus be affected by this provision. This provision alone would reduce the OASDI actuarial deficit by an estimated 0.61 percent of payroll.
2. Effective December 2004, base the OASDI COLA on a new CPI-W series that would reflect a superlative formula, of the type currently used for the new "chained" CCPI-U. This provision is assumed to reduce the OASDI annual COLA by an average of 0.22 percentage point. This provision alone would reduce the OASDI actuarial deficit by an estimated 0.35 percent of payroll.

Table 1.0, attached, provides certain projected measures of the actuarial status of the OASDI program assuming that these two provisions would be enacted. With enactment of these two

provisions alone, the year in which the annual cost of the program begins to exceed the annual income would be advanced 2 years, from 2018 under current law, to 2020. The estimated year of combined OASDI Trust Fund exhaustion would be advanced by 13 years, from 2042 under current law, to 2055.

Table 1.0a provides estimated annual income (non-interest, interest, and total), outgo, and assets at the end of the year in current dollars, under the provisions of the proposal. This table also provides estimated OASDI effective taxable payroll under the proposal. Table 1.0b provides the estimated effect of enacting these two provisions only on the Federal Unified Budget. It should be noted that all estimates in this table are based on the intermediate assumptions of the 2003 OASDI Trustees Report, and thus do not match estimates presented by the Office of Management and Budget. Table 1.0c provides the estimates effect of enacting these 2 provisions on the net cash flow from the OASDI combined Trust Funds to the General Fund of the Treasury. For the purpose of the illustration in Table 1.0c, the OASDI program is assumed to receive transfers or to have the authority to borrow from the General Fund of the Treasury in order to maintain full payment of scheduled benefits after Trust Fund exhaustion. This is true for both the proposal, and for the comparative illustration to a “Theoretical Social Security with PAYGO transfers.”

#### Two Provisions Plus a Balancing Tax-Rate Increase

Tables 1.1 provide estimates for a more complete proposal, which includes, in addition to the two provisions described above, a payroll tax-rate increase of 1.22 percent for employers and employees, each (for a total combined increase of 2.44 percent) in 2038. This is the year in which the nominal dollar level of Trust Fund assets would begin to decline with the two provisions alone (see table 1.0a). The tax-rate increase in table 1.1 is computed to achieve exact actuarial balance for the 75-year period 2003 through 2077. However, estimates for this proposal show a declining trust fund ratio (TFR) at the end of the period 75-year period. Thus, with this single “balancing tax-rate increase” added to the two basic provisions, the proposal would not achieve sustainable solvency. However, if the proposal is amended to include additional periodic balancing tax-rate increases based on achieving OASDI actuarial balance under the projections of subsequent Trustees Reports, then sustainable solvency would be achieved.

Tables 1.1a, 1.1b, and 1.1c provide estimated effects on annual trust fund operations, the Federal Unified Budget, and on the net cash flow from the OASDI combined Trust Funds to the General Fund of the Treasury.



Stephen C. Goss

Attachments

Table 1.0 Robert Ball Proposal--Two Provisions Only  
With Ult Real TF Int Rate of 3.0

Year	Cost Rate	Income Rate	Annual Balance	TFR 1-1-yr	Change in OASDI Contrib Rate	OASDI Contrib Rate
2003	10.89	12.73	1.83	288		12.40
2004	10.78	12.70	1.91	309		12.40
2005	10.65	12.71	2.06	331		12.40
2006	10.51	12.70	2.20	355		12.40
2007	10.47	12.72	2.25	378		12.40
2008	10.48	12.73	2.25	400		12.40
2009	10.53	12.74	2.20	422		12.40
2010	10.63	12.76	2.13	442		12.40
2011	10.75	12.82	2.07	460		12.40
2012	10.91	12.81	1.90	477		12.40
2013	11.11	12.83	1.72	490		12.40
2014	11.32	12.84	1.52	501		12.40
2015	11.56	12.86	1.30	510		12.40
2016	11.83	12.88	1.05	515		12.40
2017	12.12	12.90	0.78	518		12.40
2018	12.42	12.91	0.50	518		12.40
2019	12.71	12.93	0.22	516		12.40
2020	13.03	12.95	-0.08	512		12.40
2021	13.35	12.97	-0.38	506		12.40
2022	13.65	12.99	-0.66	498		12.40
2023	13.93	13.01	-0.92	491		12.40
2024	14.19	13.03	-1.17	482		12.40
2025	14.45	13.04	-1.41	472		12.40
2026	14.69	13.06	-1.63	461		12.40
2027	14.91	13.07	-1.84	450		12.40
2028	15.13	13.09	-2.03	438		12.40
2029	15.32	13.11	-2.21	425		12.40
2030	15.48	13.12	-2.36	412		12.40
2031	15.62	13.13	-2.49	399		12.40
2032	15.74	13.14	-2.59	386		12.40
2033	15.83	13.15	-2.68	373		12.40
2034	15.91	13.16	-2.75	360		12.40
2035	15.97	13.17	-2.80	346		12.40
2036	16.01	13.17	-2.84	333		12.40
2037	16.07	13.18	-2.89	319		12.40
2038	16.11	13.18	-2.92	306		12.40
2039	16.14	13.19	-2.95	292		12.40
2040	16.17	13.19	-2.98	278		12.40
2041	16.20	13.20	-3.00	264		12.40
2042	16.23	13.20	-3.03	249		12.40
2043	16.27	13.21	-3.06	234		12.40
2044	16.31	13.21	-3.10	219		12.40
2045	16.36	13.22	-3.14	203		12.40
2046	16.42	13.22	-3.20	187		12.40
2047	16.48	13.23	-3.25	170		12.40
2048	16.54	13.24	-3.31	153		12.40
2049	16.61	13.24	-3.37	135		12.40
2050	16.68	13.25	-3.43	117		12.40
2051	16.76	13.26	-3.51	98		12.40
2052	16.85	13.26	-3.59	78		12.40
2053	16.93	13.27	-3.66	58		12.40
2054	17.02	13.28	-3.74	38		12.40
2055	17.10	13.28	-3.81	17		12.40
2056	17.18	13.29	-3.89	--		12.40
2057	17.25	13.30	-3.96	--		12.40
2058	17.32	13.30	-4.02	--		12.40
2059	17.38	13.31	-4.07	--		12.40
2060	17.44	13.31	-4.13	--		12.40
2061	17.49	13.32	-4.18	--		12.40
2062	17.55	13.32	-4.23	--		12.40
2063	17.61	13.33	-4.28	--		12.40
2064	17.67	13.33	-4.34	--		12.40
2065	17.73	13.34	-4.39	--		12.40
2066	17.79	13.34	-4.45	--		12.40
2067	17.85	13.35	-4.51	--		12.40
2068	17.92	13.35	-4.57	--		12.40
2069	17.98	13.36	-4.62	--		12.40
2070	18.04	13.36	-4.68	--		12.40
2071	18.11	13.36	-4.75	--		12.40
2072	18.18	13.37	-4.81	--		12.40
2073	18.24	13.37	-4.87	--		12.40
2074	18.30	13.38	-4.92	--		12.40
2075	18.37	13.38	-4.98	--		12.40
2076	18.43	13.39	-5.04	--		12.40
2077	18.49	13.39	-5.10	--		12.40
2078	18.55	13.39	-5.15	--		12.40

Summarized

	CostRt	IncRt	ActBal	Change in ActBal
	OASDI	OASDI	OASDI	
2003-27	12.49	14.28	1.79	0.53
2003-52	13.92	13.82	-0.10	0.85
2003-77	14.69	13.71	-0.97	0.94

Based on Intermediate Assumptions of the 2003 Trustees Report  
With Ult Real Int Rate of 3.00

Office of the Actuary  
Social Security Administration  
September 29, 2003

Table 1.0 a OASDI Tax Income, Outgo, and Net Cash Flow Balance-- for Proposal

Year	Income Excluding Interest	Interest Income	Total Income	Outgo	Assets at End of Year	OASDI Effective Taxable Payroll
Billions of nominal (current) dollars						
2003	555.9	87.5	643.4	477.9	1,543.5	4,389
2004	584.2	97.5	681.6	499.1	1,726.0	4,630
2005	621.2	109.6	730.8	521.6	1,935.3	4,901
2006	657.5	123.7	781.2	545.6	2,170.8	5,196
2007	696.8	139.4	836.2	574.6	2,432.4	5,493
2008	735.9	156.2	892.1	607.3	2,717.2	5,800
2009	776.6	173.7	950.4	644.1	3,023.5	6,117
2010	818.8	192.4	1,011.1	684.1	3,350.5	6,440
2011	865.9	212.1	1,078.0	728.0	3,700.5	6,773
2012	909.0	233.1	1,142.2	775.8	4,066.9	7,112
2013	955.9	255.0	1,210.9	829.4	4,448.4	7,469
2014	1,004.4	277.6	1,282.0	887.2	4,843.2	7,838
2015	1,054.6	300.8	1,355.4	949.7	5,249.0	8,219
2016	1,106.5	324.5	1,431.0	1,018.3	5,661.7	8,612
2017	1,161.0	348.3	1,509.3	1,092.7	6,078.3	9,023
2018	1,217.8	373.1	1,590.9	1,172.8	6,496.4	9,451
2019	1,277.4	397.9	1,675.3	1,257.8	6,913.9	9,899
2020	1,339.4	422.6	1,762.0	1,349.6	7,326.3	10,364
2021	1,404.7	446.8	1,851.5	1,448.0	7,729.9	10,854
2022	1,472.3	470.4	1,942.7	1,550.3	8,122.2	11,359
2023	1,543.0	493.4	2,036.4	1,654.9	8,503.7	11,888
2024	1,616.6	515.7	2,132.2	1,764.7	8,871.2	12,438
2025	1,693.5	537.0	2,230.6	1,879.3	9,222.5	13,013
2026	1,774.0	557.5	2,331.5	1,998.7	9,555.3	13,615
2027	1,858.5	576.6	2,435.2	2,123.7	9,866.8	14,246
2028	1,947.2	594.4	2,541.6	2,253.8	10,154.6	14,907
2029	2,039.7	610.9	2,650.6	2,387.8	10,417.3	15,598
2030	2,136.6	625.8	2,762.3	2,525.5	10,654.2	16,323
2031	2,238.1	639.1	2,877.3	2,666.8	10,864.6	17,083
2032	2,344.2	650.9	2,995.1	2,812.0	11,047.7	17,878
2033	2,455.2	661.1	3,116.3	2,960.8	11,203.2	18,712
2034	2,570.8	669.6	3,240.4	3,113.4	11,330.2	19,580
2035	2,691.5	676.4	3,367.9	3,270.1	11,428.0	20,488
2036	2,817.6	681.5	3,499.1	3,431.3	11,495.8	21,439
2037	2,945.1	684.6	3,629.7	3,597.0	11,528.6	22,396
2038	3,078.4	685.7	3,764.2	3,767.6	11,525.2	23,400
2039	3,216.9	684.6	3,901.5	3,943.9	11,482.8	24,443
2040	3,361.0	681.0	4,042.0	4,126.8	11,398.0	25,528
2041	3,511.2	674.8	4,186.0	4,317.8	11,266.3	26,660
2042	3,668.0	665.7	4,333.7	4,517.8	11,082.2	27,840
2043	3,831.4	653.4	4,484.8	4,727.9	10,839.1	29,070
2044	4,001.9	637.3	4,639.2	4,948.9	10,529.4	30,353
2045	4,178.9	617.0	4,795.9	5,181.8	10,143.5	31,683
2046	4,363.8	591.9	4,955.7	5,427.2	9,671.9	33,070
2047	4,556.6	561.5	5,118.1	5,685.3	9,104.7	34,515
2048	4,757.9	525.1	5,283.0	5,956.1	8,431.6	36,024
2049	4,967.7	482.2	5,449.8	6,241.0	7,640.4	37,594
2050	5,186.3	431.8	5,618.1	6,541.3	6,717.2	39,229
2051	5,414.2	373.2	5,787.5	6,858.4	5,646.2	40,931
2052	5,652.7	305.5	5,958.2	7,193.0	4,411.4	42,712
2053	5,901.7	227.5	6,129.2	7,543.2	2,997.4	44,569
2054	6,161.3	138.5	6,299.8	7,910.1	1,387.2	46,506
2055						48,532
2056						50,645
2057						52,850
2058						55,157
2059						57,562
2060						60,073
2061						62,692
2062						65,420
2063						68,271
2064						71,245
2065						74,341
2066						77,572
2067						80,936
2068						84,447
2069						88,107
2070						91,922
2071						95,895
2072						100,038
2073						104,357
2074						108,863
2075						113,560
2076						118,455
2077						123,560
2078						128,884

Table 1.0 b Unified Budget Effects of Proposal

Year	Changes in OASDI CashFlow	Change in Annual UnifBudg CashFlow	Change in Debt Held by Public (EOY)	Change in Ann UnifBudg Balance
	(Billions of Constant 2003\$)			
2004	1.8	1.8	-1.9	1.9
2005	4.8	4.8	-6.8	5.1
2006	8.0	8.0	-15.2	8.7
2007	11.0	11.0	-26.8	12.2
2008	14.2	14.2	-42.1	16.3
2009	17.5	17.5	-61.2	20.6
2010	20.6	20.6	-84.0	25.0
2011	25.1	25.1	-112.1	31.0
2012	26.9	26.9	-142.9	34.5
2013	30.0	30.0	-177.7	39.5
2014	33.2	33.2	-216.7	44.9
2015	36.3	36.3	-260.1	50.5
2016	39.3	39.3	-307.9	56.2
2017	42.4	42.4	-360.1	62.1
2018	45.4	45.4	-417.1	68.4
2019	48.5	48.5	-478.8	75.0
2020	51.5	51.5	-545.4	81.8
2021	54.7	54.7	-617.3	89.1
2022	57.7	57.7	-694.4	96.5
2023	60.8	60.8	-776.9	104.3
2024	63.7	63.7	-864.9	112.3
2025	66.8	66.8	-958.6	120.7
2026	69.7	69.7	-1,058.1	129.3
2027	72.7	72.7	-1,163.6	138.4
2028	75.8	75.8	-1,275.4	147.9
2029	78.7	78.7	-1,393.6	157.6
2030	81.6	81.6	-1,518.2	167.7
2031	84.5	84.5	-1,649.5	178.2
2032	87.4	87.4	-1,787.7	189.0
2033	90.3	90.3	-1,933.0	200.3
2034	93.1	93.1	-2,085.5	211.9
2035	95.9	95.9	-2,245.3	223.9
2036	98.6	98.6	-2,412.7	236.3
2037	99.6	99.6	-2,586.2	247.4
2038	100.8	100.8	-2,766.1	259.0
2039	101.8	101.8	-2,952.4	270.8
2040	102.6	102.6	-3,145.1	282.9
2041	103.4	103.4	-3,344.4	295.2
2042	104.1	104.1	-3,550.4	308.0
2043	104.8	104.8	-3,763.3	321.0
2044	105.4	105.4	-3,983.2	334.4
2045	105.8	105.8	-4,210.1	348.0
2046	106.3	106.3	-4,444.2	362.1
2047	106.6	106.6	-4,685.8	376.5
2048	107.1	107.1	-4,935.0	391.4
2049	107.4	107.4	-5,192.0	406.7
2050	107.6	107.6	-5,457.0	422.4
2051	107.9	107.9	-5,730.2	438.6
2052	108.2	108.2	-6,011.9	455.3
2053	108.5	108.5	-6,302.4	472.5
2054	108.8	108.8	-6,601.9	490.3
2055	109.3	109.3	-6,910.9	508.7
2056	109.7	109.7	-7,229.5	527.7
2057	110.1	110.1	-7,558.1	547.2
2058	110.6	110.6	-7,897.1	567.5
2059	111.2	111.2	-8,246.9	588.5
2060	111.9	111.9	-8,607.9	610.2
2061	112.7	112.7	-8,980.5	632.6
2062	113.4	113.4	-9,365.0	655.7
2063	114.2	114.2	-9,761.8	679.6
2064	115.1	115.1	-10,171.5	704.3
2065	115.9	115.9	-10,594.3	729.8
2066	116.9	116.9	-11,030.8	756.1
2067	117.7	117.7	-11,481.2	783.2
2068	118.7	118.7	-11,946.0	811.2
2069	119.6	119.6	-12,425.8	840.1
2070	120.7	120.7	-12,921.1	870.0
2071	121.7	121.7	-13,432.3	900.7
2072	122.8	122.8	-13,959.8	932.5
2073	123.9	123.9	-14,504.3	965.3
2074	125.0	125.0	-15,066.3	999.1
2075	126.2	126.2	-15,646.4	1,034.1
2076	127.4	127.4	-16,245.2	1,070.2
2077	128.7	128.7	-16,863.1	1,107.4
2078	130.0	130.0	-17,500.9	1,145.8

Based on Intermediate Assumptions of the 2003 Trustees Report  
With Ult Real Int Rate of

3.0 TF,

Office of the Actuary  
Social Security Administration  
September 29, 2003

Table 1.0 c. OASDI Cash Flow to General Fund of the Treasury---Proposal vs. Theoretical OASDI

	<u>Proposal</u>				<u>Theoretical Social Security with PAYGO Transfers</u>			
	Net Amount of Cash-Flow from the OASDI Trust Funds to the General Fund of the Treasury During the Year 1/				Net Amount of Cash-Flow from the OASDI Trust Funds to the General Fund of the Treasury During the Year 1/			
	% of Pysl	Current \$	PV Jan 1, 03	Const 2003\$	% of Pysl	Current \$	PV Jan 1, 03	Const 2003\$
2003	1.8	80	78	80	1.8	78	76	78
2004	1.9	89	81	86	1.8	84	77	82
2005	2.1	101	87	96	2.0	95	82	91
2006	2.2	114	93	106	2.0	104	84	96
2007	2.2	124	94	111	2.0	111	85	100
2008	2.3	131	94	114	2.0	113	82	99
2009	2.2	135	91	114	1.9	113	77	96
2010	2.1	137	87	112	1.8	111	71	91
2011	2.1	140	84	112	1.6	108	65	86
2012	1.9	135	76	105	1.4	100	56	77
2013	1.7	128	68	96	1.2	88	47	66
2014	1.5	119	60	87	1.0	73	37	53
2015	1.3	107	51	76	0.7	55	26	39
2016	1.0	90	40	62	0.4	33	15	23
2017	0.8	70	30	47	0.1	7	3	4
2018	0.5	47	19	31	-0.3	-23	-9	-15
2019	0.2	22	8	14	-0.6	-56	-21	-35
2020	-0.1	-8	-3	-5	-0.9	-92	-33	-56
2021	-0.4	-41	-14	-24	-1.3	-133	-44	-79
2022	-0.7	-75	-24	-43	-1.6	-176	-55	-101
2023	-0.9	-109	-32	-61	-1.9	-218	-64	-122
2024	-1.2	-145	-40	-79	-2.2	-263	-73	-143
2025	-1.4	-183	-48	-96	-2.5	-310	-81	-163
2026	-1.6	-222	-55	-113	-2.8	-358	-88	-183
2027	-1.8	-262	-61	-130	-3.1	-409	-95	-203
2028	-2.0	-303	-66	-146	-3.3	-461	-101	-222
2029	-2.2	-345	-71	-161	-3.5	-513	-106	-240
2030	-2.4	-385	-75	-175	-3.7	-565	-110	-257
2031	-2.5	-425	-78	-188	-3.9	-617	-113	-272
2032	-2.6	-464	-80	-199	-4.0	-669	-116	-286
2033	-2.7	-501	-82	-209	-4.1	-719	-117	-299
2034	-2.7	-538	-83	-217	-4.2	-770	-118	-311
2035	-2.8	-574	-83	-225	-4.3	-819	-119	-321
2036	-2.8	-609	-83	-232	-4.4	-869	-119	-331
2037	-2.9	-647	-83	-239	-4.4	-917	-118	-339
2038	-2.9	-684	-83	-246	-4.5	-966	-117	-347
2039	-3.0	-722	-83	-251	-4.5	-1,015	-116	-353
2040	-3.0	-760	-82	-257	-4.5	-1,065	-115	-360
2041	-3.0	-801	-81	-263	-4.5	-1,117	-113	-367
2042	-3.0	-844	-81	-269	-4.5	-1,171	-112	-373
2043	-3.1	-890	-80	-276	-4.6	-1,230	-111	-381
2044	-3.1	-941	-80	-283	-4.6	-1,292	-110	-388
2045	-3.1	-996	-80	-291	-4.6	-1,360	-109	-397
2046	-3.2	-1,057	-80	-299	-4.7	-1,433	-108	-406
2047	-3.2	-1,122	-80	-308	-4.7	-1,510	-108	-415
2048	-3.3	-1,191	-80	-318	-4.8	-1,593	-107	-425
2049	-3.4	-1,266	-80	-328	-4.8	-1,681	-106	-436
2050	-3.4	-1,347	-80	-339	-4.9	-1,776	-106	-447
2051	-3.5	-1,436	-81	-351	-5.0	-1,878	-106	-459
2052	-3.6	-1,532	-81	-363	-5.0	-1,989	-105	-472
2053	-3.7	-1,633	-82	-376	-5.1	-2,105	-105	-485
2054	-3.7	-1,739	-82	-389	-5.2	-2,227	-105	-498
2055	-3.8	-1,851	-82	-402	-5.2	-2,356	-105	-511
2056	-3.9	-1,969	-82	-415	-5.3	-2,490	-104	-525
2057	-4.0	-2,091	-83	-428	-5.4	-2,630	-104	-538
2058	-4.0	-2,216	-82	-440	-5.4	-2,775	-103	-551
2059	-4.1	-2,346	-82	-452	-5.5	-2,924	-103	-564
2060	-4.1	-2,480	-82	-464	-5.5	-3,079	-102	-577
2061	-4.2	-2,619	-82	-476	-5.6	-3,240	-101	-589
2062	-4.2	-2,767	-81	-488	-5.6	-3,411	-100	-602
2063	-4.3	-2,924	-81	-501	-5.7	-3,592	-99	-616
2064	-4.3	-3,089	-81	-514	-5.7	-3,782	-99	-629
2065	-4.4	-3,264	-80	-527	-5.8	-3,984	-98	-644
2066	-4.4	-3,449	-80	-541	-5.8	-4,196	-97	-658
2067	-4.5	-3,647	-80	-555	-5.9	-4,422	-97	-673
2068	-4.6	-3,855	-79	-570	-6.0	-4,660	-96	-689
2069	-4.6	-4,075	-79	-585	-6.0	-4,910	-95	-705
2070	-4.7	-4,306	-79	-600	-6.1	-5,175	-95	-721
2071	-4.7	-4,551	-78	-616	-6.1	-5,453	-94	-738
2072	-4.8	-4,808	-78	-631	-6.2	-5,745	-93	-755
2073	-4.9	-5,078	-78	-648	-6.3	-6,051	-93	-772
2074	-4.9	-5,361	-77	-664	-6.3	-6,373	-92	-789
2075	-5.0	-5,659	-77	-680	-6.4	-6,711	-91	-807
2076	-5.0	-5,970	-77	-697	-6.4	-7,065	-91	-825
2077	-5.1	-6,297	-76	-713	-6.5	-7,435	-90	-842
2078	-5.2	-6,641	-76	-731	-6.6	-7,825	-89	-861
			-3,133				-4,922	

1/ Equals net investment in special Treasury Bonds by the Trust Funds less the Amount of General Fund transfers or, in the case of the proposal, the theoretical amount of Transfers or borrowing from the General fund that would be needed to maintain solvency, if any.

Office of the Actuary  
Social Security Administration  
September 29, 2003

Table 1.1 Robert Ball Proposal--Two Provisions Plus Balancing Tax Rate in 2038  
With Ult Real TF Int Rate of 3.0

Year	Cost Rate	Income Rate	Annual Balance	TFR 1-1-yr	Change in OASDI Contrib Rate	OASDI Contrib Rate
2003	10.89	12.73	1.83	288		12.40
2004	10.78	12.70	1.91	309		12.40
2005	10.65	12.71	2.06	331		12.40
2006	10.51	12.70	2.20	355		12.40
2007	10.47	12.72	2.25	378		12.40
2008	10.48	12.73	2.25	400		12.40
2009	10.53	12.74	2.20	422		12.40
2010	10.63	12.76	2.13	442		12.40
2011	10.75	12.82	2.07	460		12.40
2012	10.91	12.81	1.90	477		12.40
2013	11.11	12.83	1.72	490		12.40
2014	11.32	12.84	1.52	501		12.40
2015	11.56	12.86	1.30	510		12.40
2016	11.83	12.88	1.05	515		12.40
2017	12.12	12.90	0.78	518		12.40
2018	12.42	12.91	0.50	518		12.40
2019	12.71	12.93	0.22	516		12.40
2020	13.03	12.95	-0.08	512		12.40
2021	13.35	12.97	-0.38	506		12.40
2022	13.65	12.99	-0.66	498		12.40
2023	13.93	13.01	-0.92	491		12.40
2024	14.19	13.03	-1.17	482		12.40
2025	14.45	13.04	-1.41	472		12.40
2026	14.69	13.06	-1.63	461		12.40
2027	14.91	13.07	-1.84	450		12.40
2028	15.13	13.09	-2.03	438		12.40
2029	15.32	13.11	-2.21	425		12.40
2030	15.48	13.12	-2.36	412		12.40
2031	15.62	13.13	-2.49	399		12.40
2032	15.74	13.14	-2.59	386		12.40
2033	15.83	13.15	-2.68	373		12.40
2034	15.91	13.16	-2.75	360		12.40
2035	15.97	13.17	-2.80	346		12.40
2036	16.01	13.17	-2.84	333		12.40
2037	16.07	13.18	-2.89	319		12.40
2038	16.11	15.62	-0.48	306	2.44	14.84
2039	16.14	15.63	-0.51	307		14.84
2040	16.17	15.63	-0.54	308		14.84
2041	16.20	15.64	-0.56	309		14.84
2042	16.23	15.64	-0.59	310		14.84
2043	16.27	15.65	-0.62	311		14.84
2044	16.31	15.65	-0.66	311		14.84
2045	16.36	15.66	-0.70	311		14.84
2046	16.42	15.66	-0.76	311		14.84
2047	16.48	15.67	-0.81	310		14.84
2048	16.54	15.68	-0.87	309		14.84
2049	16.61	15.68	-0.93	308		14.84
2050	16.68	15.69	-0.99	306		14.84
2051	16.76	15.70	-1.07	304		14.84
2052	16.85	15.70	-1.15	301		14.84
2053	16.93	15.71	-1.22	298		14.84
2054	17.02	15.72	-1.30	295		14.84
2055	17.10	15.72	-1.37	291		14.84
2056	17.18	15.73	-1.45	286		14.84
2057	17.25	15.74	-1.52	281		14.84
2058	17.32	15.74	-1.58	276		14.84
2059	17.38	15.75	-1.63	271		14.84
2060	17.44	15.75	-1.69	265		14.84
2061	17.49	15.76	-1.74	259		14.84
2062	17.55	15.76	-1.79	253		14.84
2063	17.61	15.77	-1.84	246		14.84
2064	17.67	15.77	-1.90	239		14.84
2065	17.73	15.78	-1.95	232		14.84
2066	17.79	15.78	-2.01	224		14.84
2067	17.85	15.79	-2.07	216		14.84
2068	17.92	15.79	-2.13	207		14.84
2069	17.98	15.80	-2.18	198		14.84
2070	18.04	15.80	-2.24	189		14.84
2071	18.11	15.80	-2.31	179		14.84
2072	18.18	15.81	-2.37	169		14.84
2073	18.24	15.81	-2.43	158		14.84
2074	18.30	15.82	-2.48	147		14.84
2075	18.37	15.82	-2.54	136		14.84
2076	18.43	15.83	-2.60	124		14.84
2077	18.49	15.83	-2.66	112		14.84
2078	18.55	15.83	-2.71	100		14.84
Summarized						
	CostRt	IncRt	ActBal	Change in		
	OASDI	OASDI	OASDI	ActBal		
2003-27	12.49	14.28	1.79	0.53		
2003-52	13.92	14.38	0.47	1.41		
2003-77	14.69	14.69	0.00	1.92		

Based on Intermediate Assumptions of the 2003 Trustees Report  
With Ult Real Int Rate of 3.00

Office of the Actuary  
Social Security Administration  
September 29, 2003

Table 1.1 a OASDI Tax Income, Outgo, and Net Cash Flow Balance-- for Proposal

Year	Income Excluding Interest	Interest Income	Total Income	Outgo	Assets at End of Year	OASDI Effective Taxable Payroll
Billions of nominal (current) dollars						
2003	555.9	87.5	643.4	477.9	1,543.5	4,389
2004	584.2	97.5	681.6	499.1	1,726.0	4,630
2005	621.2	109.6	730.8	521.6	1,935.3	4,901
2006	657.5	123.7	781.2	545.6	2,170.8	5,196
2007	696.8	139.4	836.2	574.6	2,432.4	5,493
2008	735.9	156.2	892.1	607.3	2,717.2	5,800
2009	776.6	173.7	950.4	644.1	3,023.5	6,117
2010	818.8	192.4	1,011.1	684.1	3,350.5	6,440
2011	865.9	212.1	1,078.0	728.0	3,700.5	6,773
2012	909.0	233.1	1,142.2	775.8	4,066.9	7,112
2013	955.9	255.0	1,210.9	829.4	4,448.4	7,469
2014	1,004.4	277.6	1,282.0	887.2	4,843.2	7,838
2015	1,054.6	300.8	1,355.4	949.7	5,249.0	8,219
2016	1,106.5	324.5	1,431.0	1,018.3	5,661.7	8,612
2017	1,161.0	348.3	1,509.3	1,092.7	6,078.3	9,023
2018	1,217.8	373.1	1,590.9	1,172.8	6,496.4	9,451
2019	1,277.4	397.9	1,675.3	1,257.8	6,913.9	9,899
2020	1,339.4	422.6	1,762.0	1,349.6	7,326.3	10,364
2021	1,404.7	446.8	1,851.5	1,448.0	7,729.9	10,854
2022	1,472.3	470.4	1,942.7	1,550.3	8,122.2	11,359
2023	1,543.0	493.4	2,036.4	1,654.9	8,503.7	11,888
2024	1,616.6	515.7	2,132.2	1,764.7	8,871.2	12,438
2025	1,693.5	537.0	2,230.6	1,879.3	9,222.5	13,013
2026	1,774.0	557.5	2,331.5	1,998.7	9,555.3	13,615
2027	1,858.5	576.6	2,435.2	2,123.7	9,866.8	14,246
2028	1,947.2	594.4	2,541.6	2,253.8	10,154.6	14,907
2029	2,039.7	610.9	2,650.6	2,387.8	10,417.3	15,598
2030	2,136.6	625.8	2,762.3	2,525.5	10,654.2	16,323
2031	2,238.1	639.1	2,877.3	2,666.8	10,864.6	17,083
2032	2,344.2	650.9	2,995.1	2,812.0	11,047.7	17,878
2033	2,455.2	661.1	3,116.3	2,960.8	11,203.2	18,712
2034	2,570.8	669.6	3,240.4	3,113.4	11,330.2	19,580
2035	2,691.5	676.4	3,367.9	3,270.1	11,428.0	20,488
2036	2,817.6	681.5	3,499.1	3,431.3	11,495.8	21,439
2037	2,945.1	684.6	3,629.7	3,597.0	11,528.6	22,396
2038	3,083.3	703.9	3,787.2	3,767.6	11,533.3	23,400
2039	3,232.2	739.4	3,971.6	3,943.9	11,521.0	24,443
2040	3,392.7	776.3	4,169.0	4,126.8	11,493.2	25,528
2041	3,564.0	814.7	4,378.7	4,317.8	11,450.5	26,660
2042	3,746.0	854.5	4,600.5	4,517.8	11,393.3	27,840
2043	3,939.4	895.9	4,835.3	4,727.9	11,320.7	29,070
2044	4,144.1	938.7	5,082.8	4,948.9	11,233.6	30,353
2045	4,360.5	982.8	5,343.3	5,181.8	11,131.1	31,683
2046	4,588.1	1,028.1	5,616.2	5,427.2	11,014.3	33,070
2047	4,826.6	1,074.4	5,901.0	5,685.3	10,883.4	34,515
2048	5,076.5	1,121.6	6,198.1	5,956.1	10,738.1	36,024
2049	5,338.2	1,169.7	6,507.9	6,241.0	10,578.9	37,594
2050	5,611.7	1,218.2	6,830.0	6,541.3	10,405.5	39,229
2051	5,997.4	1,267.0	7,264.4	6,858.4	10,219.0	40,931
2052	6,495.7	1,315.8	7,811.5	7,193.0	10,020.9	42,712
2053	7,007.0	1,364.2	8,371.2	7,543.2	9,811.9	44,569
2054	7,532.6	1,412.0	8,944.6	7,910.1	9,593.7	46,506
2055	8,073.7	1,459.1	9,532.8	8,294.1	9,367.6	48,532
2056	8,630.6	1,505.0	10,135.6	8,695.2	9,134.3	50,645
2057	9,203.6	1,549.7	10,753.3	9,114.0	8,894.4	52,850
2058	9,792.9	1,592.9	11,385.8	9,549.2	8,649.1	55,157
2059	10,397.8	1,634.5	12,032.3	10,001.2	8,399.2	57,562
2060	11,017.6	1,674.2	12,691.8	10,472.2	8,144.7	60,073
2061	11,652.6	1,711.9	13,364.5	10,962.7	7,886.2	62,692
2062	12,302.9	1,747.0	14,049.9	11,477.2	7,623.7	65,420
2063	12,968.6	1,779.2	14,747.8	12,017.2	7,357.2	68,271
2064	13,649.8	1,807.6	15,457.4	12,581.2	7,091.7	71,245
2065	14,346.6	1,832.2	16,178.8	13,172.3	6,827.2	74,341
2066	15,058.9	1,851.8	16,910.7	13,791.6	6,563.7	77,572
2067	15,786.6	1,865.9	17,652.5	14,441.4	6,301.2	80,936
2068	16,529.6	1,873.6	18,403.2	15,122.6	6,039.7	84,447
2069	17,287.7	1,874.1	19,161.8	15,834.5	5,779.2	88,107
2070	18,060.6	1,866.3	19,926.9	16,579.5	5,519.7	91,922
2071	18,848.1	1,849.4	20,697.5	17,359.0	5,261.2	95,985
2072	19,650.0	1,822.2	21,472.2	18,173.9	5,003.7	100,038
2073	20,466.9	1,783.5	22,250.4	19,025.8	4,747.2	104,357
2074	21,298.6	1,732.2	23,030.8	19,916.1	4,491.7	108,863
2075	22,144.9	1,667.0	23,811.9	20,846.4	4,237.2	113,560
2076	23,005.6	1,586.2	24,591.8	21,818.1	3,983.7	118,455
2077	23,880.5	1,488.5	25,369.0	22,832.6	3,731.2	123,560
2078	24,769.4	1,372.1	26,141.5	23,894.2	3,479.7	128,884



Table 1.1 b Unified Budget Effects of Proposal

Year	Changes in OASDI CashFlow	Change in Annual UnifBudg CashFlow	Change in Debt Held by Public (EOY)	Change in Ann UnifBudg Balance
	(Billions of Constant 2003\$)			
2004	1.8	1.8	-1.9	1.9
2005	4.8	4.8	-6.8	5.1
2006	8.0	8.0	-15.2	8.7
2007	11.0	11.0	-26.8	12.2
2008	14.2	14.2	-42.1	16.3
2009	17.5	17.5	-61.2	20.6
2010	20.6	20.6	-84.0	25.0
2011	25.1	25.1	-112.1	31.0
2012	26.9	26.9	-142.9	34.5
2013	30.0	30.0	-177.7	39.5
2014	33.2	33.2	-216.7	44.9
2015	36.3	36.3	-260.1	50.5
2016	39.3	39.3	-307.9	56.2
2017	42.4	42.4	-360.1	62.1
2018	45.4	45.4	-417.1	68.4
2019	48.5	48.5	-478.8	75.0
2020	51.5	51.5	-545.4	81.8
2021	54.7	54.7	-617.3	89.1
2022	57.7	57.7	-694.4	96.5
2023	60.8	60.8	-776.9	104.3
2024	63.7	63.7	-864.9	112.3
2025	66.8	66.8	-958.6	120.7
2026	69.7	69.7	-1,058.1	129.3
2027	72.7	72.7	-1,163.6	138.4
2028	75.8	75.8	-1,275.4	147.9
2029	78.7	78.7	-1,393.6	157.6
2030	81.6	81.6	-1,518.2	167.7
2031	84.5	84.5	-1,649.5	178.2
2032	87.4	87.4	-1,787.7	189.0
2033	90.3	90.3	-1,933.0	200.3
2034	93.1	93.1	-2,085.5	211.9
2035	95.9	95.9	-2,245.3	223.9
2036	98.6	98.6	-2,412.7	236.3
2037	99.6	99.6	-2,586.2	247.4
2038	305.7	305.7	-2,974.0	470.1
2039	309.5	309.5	-3,377.4	497.3
2040	313.3	313.3	-3,796.7	525.4
2041	317.0	317.0	-4,232.3	554.4
2042	320.7	320.7	-4,684.8	584.3
2043	324.4	324.4	-5,154.6	615.2
2044	328.0	328.0	-5,642.1	647.2
2045	331.4	331.4	-6,147.6	679.9
2046	334.8	334.8	-6,671.9	713.8
2047	338.2	338.2	-7,215.3	748.8
2048	341.8	341.8	-7,778.6	785.0
2049	345.2	345.2	-8,362.3	822.3
2050	348.5	348.5	-8,966.9	860.8
2051	351.9	351.9	-9,593.0	900.5
2052	355.4	355.4	-10,241.5	941.7
2053	359.0	359.0	-10,913.1	984.3
2054	362.6	362.6	-11,608.5	1,028.3
2055	366.4	366.4	-12,328.6	1,073.9
2056	370.1	370.1	-13,074.1	1,121.0
2057	374.0	374.0	-13,845.8	1,169.7
2058	378.0	378.0	-14,644.9	1,220.2
2059	382.2	382.2	-15,472.1	1,272.4
2060	386.4	386.4	-16,328.4	1,326.5
2061	390.8	390.8	-17,214.9	1,382.3
2062	395.2	395.2	-18,132.4	1,440.0
2063	399.7	399.7	-19,082.0	1,499.7
2064	404.3	404.3	-20,064.8	1,561.5
2065	409.0	409.0	-21,081.8	1,625.3
2066	413.7	413.7	-22,134.1	1,691.2
2067	418.4	418.4	-23,222.8	1,759.2
2068	423.3	423.3	-24,349.1	1,829.5
2069	428.2	428.2	-25,514.2	1,902.2
2070	433.3	433.3	-26,719.3	1,977.3
2071	438.3	438.3	-27,965.6	2,054.7
2072	443.4	443.4	-29,254.6	2,134.8
2073	448.6	448.6	-30,587.5	2,217.5
2074	453.9	453.9	-31,965.8	2,303.0
2075	459.3	459.3	-33,390.9	2,391.2
2076	464.8	464.8	-34,864.3	2,482.4
2077	470.3	470.3	-36,387.5	2,576.5
2078	475.9	475.9	-37,962.1	2,673.7

Based on Intermediate Assumptions of the 2003 Trustees Report

With Ult Real Int Rate of

3.0 TF,

Office of the Actuary

Social Security Administration

September 29, 2003

Table 1.1 c. OASDI Cash Flow to General Fund of the Treasury---Proposal vs. Theoretical OASDI

	<u>Proposal</u>				<u>Theoretical Social Security with PAYGO Transfers</u>			
	Net Amount of Cash-Flow from the OASDI Trust Funds to the General Fund of the Treasury During the Year 1/				Net Amount of Cash-Flow from the OASDI Trust Funds to the General Fund of the Treasury During the Year 1/			
	% of Pysl	Current \$	PV Jan 1, 03	Const 2003\$	% of Pysl	Current \$	PV Jan 1, 03	Const 2003\$
2003	1.8	80	78	80	1.8	78	76	78
2004	1.9	89	81	86	1.8	84	77	82
2005	2.1	101	87	96	2.0	95	82	91
2006	2.2	114	93	106	2.0	104	84	96
2007	2.2	124	94	111	2.0	111	85	100
2008	2.3	131	94	114	2.0	113	82	99
2009	2.2	135	91	114	1.9	113	77	96
2010	2.1	137	87	112	1.8	111	71	91
2011	2.1	140	84	112	1.6	108	65	86
2012	1.9	135	76	105	1.4	100	56	77
2013	1.7	128	68	96	1.2	88	47	66
2014	1.5	119	60	87	1.0	73	37	53
2015	1.3	107	51	76	0.7	55	26	39
2016	1.0	90	40	62	0.4	33	15	23
2017	0.8	70	30	47	0.1	7	3	4
2018	0.5	47	19	31	-0.3	-23	-9	-15
2019	0.2	22	8	14	-0.6	-56	-21	-35
2020	-0.1	-8	-3	-5	-0.9	-92	-33	-56
2021	-0.4	-41	-14	-24	-1.3	-133	-44	-79
2022	-0.7	-75	-24	-43	-1.6	-176	-55	-101
2023	-0.9	-109	-32	-61	-1.9	-218	-64	-122
2024	-1.2	-145	-40	-79	-2.2	-263	-73	-143
2025	-1.4	-183	-48	-96	-2.5	-310	-81	-163
2026	-1.6	-222	-55	-113	-2.8	-358	-88	-183
2027	-1.8	-262	-61	-130	-3.1	-409	-95	-203
2028	-2.0	-303	-66	-146	-3.3	-461	-101	-222
2029	-2.2	-345	-71	-161	-3.5	-513	-106	-240
2030	-2.4	-385	-75	-175	-3.7	-565	-110	-257
2031	-2.5	-425	-78	-188	-3.9	-617	-113	-272
2032	-2.6	-464	-80	-199	-4.0	-669	-116	-286
2033	-2.7	-501	-82	-209	-4.1	-719	-117	-299
2034	-2.7	-538	-83	-217	-4.2	-770	-118	-311
2035	-2.8	-574	-83	-225	-4.3	-819	-119	-321
2036	-2.8	-609	-83	-232	-4.4	-869	-119	-331
2037	-2.9	-647	-83	-239	-4.4	-917	-118	-339
2038	-0.5	-113	-14	-41	-4.5	-966	-117	-347
2039	-0.5	-125	-14	-44	-4.5	-1,015	-116	-353
2040	-0.5	-138	-15	-47	-4.5	-1,065	-115	-360
2041	-0.6	-151	-15	-49	-4.5	-1,117	-113	-367
2042	-0.6	-165	-16	-53	-4.5	-1,171	-112	-373
2043	-0.6	-181	-16	-56	-4.6	-1,230	-111	-381
2044	-0.7	-200	-17	-60	-4.6	-1,292	-110	-388
2045	-0.7	-223	-18	-65	-4.6	-1,360	-109	-397
2046	-0.8	-250	-19	-71	-4.7	-1,433	-108	-406
2047	-0.8	-280	-20	-77	-4.7	-1,510	-108	-415
2048	-0.9	-312	-21	-83	-4.8	-1,593	-107	-425
2049	-0.9	-348	-22	-90	-4.8	-1,681	-106	-436
2050	-1.0	-390	-23	-98	-4.9	-1,776	-106	-447
2051	-1.1	-437	-25	-107	-5.0	-1,878	-106	-459
2052	-1.1	-489	-26	-116	-5.0	-1,989	-105	-472
2053	-1.2	-545	-27	-126	-5.1	-2,105	-105	-485
2054	-1.3	-605	-28	-135	-5.2	-2,227	-105	-498
2055	-1.4	-667	-30	-145	-5.2	-2,356	-105	-511
2056	-1.4	-733	-31	-154	-5.3	-2,490	-104	-525
2057	-1.5	-801	-32	-164	-5.4	-2,630	-104	-538
2058	-1.6	-871	-32	-173	-5.4	-2,775	-103	-551
2059	-1.6	-941	-33	-182	-5.5	-2,924	-103	-564
2060	-1.7	-1,014	-34	-190	-5.5	-3,079	-102	-577
2061	-1.7	-1,089	-34	-198	-5.6	-3,240	-101	-589
2062	-1.8	-1,171	-34	-207	-5.6	-3,411	-100	-602
2063	-1.8	-1,258	-35	-216	-5.7	-3,592	-99	-616
2064	-1.9	-1,350	-35	-225	-5.7	-3,782	-99	-629
2065	-2.0	-1,450	-36	-234	-5.8	-3,984	-98	-644
2066	-2.0	-1,556	-36	-244	-5.8	-4,196	-97	-658
2067	-2.1	-1,672	-37	-255	-5.9	-4,422	-97	-673
2068	-2.1	-1,795	-37	-265	-6.0	-4,660	-96	-689
2069	-2.2	-1,925	-37	-276	-6.0	-4,910	-95	-705
2070	-2.2	-2,063	-38	-288	-6.1	-5,175	-95	-721
2071	-2.3	-2,211	-38	-299	-6.1	-5,453	-94	-738
2072	-2.4	-2,367	-38	-311	-6.2	-5,745	-93	-755
2073	-2.4	-2,531	-39	-323	-6.3	-6,051	-93	-772
2074	-2.5	-2,705	-39	-335	-6.3	-6,373	-92	-789
2075	-2.5	-2,888	-39	-347	-6.4	-6,711	-91	-807
2076	-2.6	-3,080	-40	-359	-6.4	-7,065	-91	-825
2077	-2.7	-3,282	-40	-372	-6.5	-7,435	-90	-842
2078	-2.7	-3,497	-40	-385	-6.6	-7,825	-89	-861
			-1,079				-4,922	

1/ Equals net investment in special Treasury Bonds by the Trust Funds less the Amount of General Fund transfers or, in the case of the proposal, the theoretical amount of Transfers or borrowing from the General fund that would be needed to maintain solvency, if any.  
Office of the Actuary  
Social Security Administration  
September 29, 2003