



## SOCIAL SECURITY

### MEMORANDUM

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Refer To: TCC

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From: Chris Chaplain, Actuary  
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Subject: Estimated Long-Range OASDI Financial Effects of a Proposal to Increase the Taxable Maximum Earnings Level -- **INFORMATION**

This memorandum provides estimates of the financial effect on the Social Security (OASDI) program for a proposal that would:

- 1) Increase the *contribution base* (taxable maximum) such that 90 percent of earnings covered under Social Security would be subject to OASDI payroll taxes, and
- 2) Maintain the current-law *benefit base* for the purpose of computing benefits.

This analysis has been produced at the request of Bryan George from Representative Joseph Hoeffel's staff. The overall effect of this proposal would be to lower the long-range OASDI actuarial deficit by 1.04 percent of payroll. All estimates are based on the intermediate assumptions of the 2004 Trustees Report.

#### **Background: Current Law**

The *contribution and benefit base* for Social Security (OASDI) is \$87,900 for earnings in 2004. Under current law, this base will be indexed in future years to increases in the level of the economy-wide average annual wage as measured by the SSA average wage index. The contribution and benefit base serves the following two purposes:

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

The contribution and benefit base, which is often referred to as the taxable maximum, has generally been increased automatically each year since 1982 by the rate of growth in the average wage level in the U.S. economy. The percentage of covered earnings that is taxable has decreased from about 90 percent in 1982 to about 86 percent in 2002. This is mainly due to relatively larger increases in earnings levels for those above the taxable maximum. Under the intermediate assumptions of the 2004 Trustees Report, the percentage of covered earnings that is taxable is projected to decline to about 83 percent for 2013 and later.

## Description of Proposal

Beginning in calendar year 2005, the proposal would establish separate bases for determining contributions and benefits. The “*benefit base*” would be unchanged, equaling the present-law contribution and benefit base. The “*contribution base*”, however, would increase so that 90 percent of all earnings covered under Social Security would be subject to OASDI payroll taxes. The actual levels of the “*contribution base*” for a given year would be calculated by:

- Determining a base amount which yields 90 percent of covered earnings being taxable using actual earnings distribution data for the *second prior year* (the most recent data that would be available) and
- Increasing this base amount by the two years of change in the Social Security average wage index between the *fourth prior year* and the *second prior year*.

For example, in 2005, the current-law contribution and benefit base is projected to be \$89,700. Under the proposal, this amount would continue to serve as a “*benefit base*”, but the “*contribution base*” would be increased to an estimated \$147,000. Thus, a worker with \$200,000 of covered earnings in 2005 would pay employee payroll taxes of \$9,114, 6.2% of earnings up to the proposal “*contribution base*” (\$147,000), but would only be credited with \$89,700 in computing benefits.

Increasing the “*contribution base*” would result in higher payroll tax revenues for workers with earnings above the present-law base. The estimates reflect the behavioral assumption that the total amount of covered earnings would diminish slightly as a result of increasing the base. This would occur because many workers who have earnings above the base would be able to modify the form of their compensation in reaction to a change in the marginal payroll tax rates to which the earnings are subjected.

## Long-Range Financial Effect of Proposal

This proposal would increase (improve) the long-range OASDI actuarial balance by an estimated 1.04 percent of payroll. Thus, under the proposal, the present-law long-range actuarial deficit of 1.89 percent of taxable payroll would be reduced to a deficit of 0.85 percent of taxable payroll. All estimates are based on the intermediate assumptions of the 2004 Trustees Report.

Under present law, the OASDI Trust Funds are projected to be exhausted in 2042. Under the proposal, the year of exhaustion would be extended to 2057, 15 years beyond the projected exhaustion year under current law. In addition, the first year that income excluding interest is projected to be less than outgo would change from 2018 under current law to 2021 under the proposal. Furthermore, the annual balance in 2078 projected under the proposal (-4.48) is about three-fourths the level (-5.91) projected under current law.

Table 1 for the proposal is attached. The table includes individual-year estimates of:

- The annual income rates, annual cost rates, and annual balance of the combined Trust Funds of the Old-Age and Survivors Insurance (OASI) and the Disability Insurance (DI) programs;
- The combined OASI and DI Trust Fund ratio (TFR); and
- The taxable payroll in current dollars, both under the proposal and under current law.

The table also includes 75-year-summarized cost rates, income rates, and balances for the OASDI program under the proposal. The table provides the trust fund ratio (TFR) for each year until the OASDI Trust Funds are projected to be exhausted. The TFR is defined as the amount of assets in the OASDI Trust Funds as of the beginning of the year, expressed as a percentage of the outgo from the OASDI Trust Funds during the year.

/S/  
Chris Chaplain

/S/  
Alice H. Wade

**Table 1 Financial Estimates for the OASDI Trust Fund Program**

**Increase contribution and benefits base such that 90 percent of all earnings is taxable in 2005 and later, but retain current law contribution and benefit base for benefit calculation purposes**

Year	Expressed as a percentage of taxable payroll			Trust Fund Ratio 1-1-year	OASDI Taxable Payroll (in billions of dollars)		Increase in Taxable Payroll over Present Law
	Cost Rate	Income Rate	Annual Balance		Proposed Plan	Present Law	
2004	11.07	12.71	1.64	306	4,522	4,522	0.0%
2005	10.23	12.71	2.48	325	5,060	4,762	6.3%
2006	10.11	12.71	2.61	354	5,326	4,999	6.6%
2007	10.07	12.73	2.66	381	5,597	5,244	6.7%
2008	10.09	12.76	2.68	407	5,889	5,502	7.0%
2009	10.16	12.75	2.59	429	6,218	5,770	7.8%
2010	10.31	12.77	2.46	451	6,498	6,047	7.5%
2011	10.45	12.82	2.37	471	6,815	6,331	7.6%
2012	10.66	12.85	2.19	487	7,134	6,614	7.8%
2013	10.88	12.87	1.99	502	7,456	6,901	8.0%
2014	11.12	12.89	1.77	514	7,794	7,213	8.1%
2015	11.38	12.90	1.52	524	8,141	7,534	8.1%
2016	11.67	12.92	1.25	530	8,502	7,868	8.1%
2017	11.96	12.94	0.98	534	8,877	8,214	8.1%
2018	12.26	12.96	0.70	536	9,267	8,575	8.1%
2019	12.57	12.97	0.41	536	9,667	8,944	8.1%
2020	12.89	12.99	0.11	534	10,083	9,329	8.1%
2021	13.20	13.01	-0.19	530	10,511	9,724	8.1%
2022	13.51	13.03	-0.48	525	10,955	10,135	8.1%
2023	13.81	13.05	-0.77	518	11,412	10,557	8.1%
2024	14.11	13.06	-1.04	510	11,888	10,997	8.1%
2025	14.39	13.08	-1.31	501	12,383	11,453	8.1%
2026	14.66	13.09	-1.57	491	12,898	11,930	8.1%
2027	14.92	13.11	-1.81	480	13,438	12,428	8.1%
2028	15.16	13.12	-2.03	468	13,998	12,945	8.1%
2029	15.37	13.14	-2.23	456	14,583	13,486	8.1%
2030	15.56	13.15	-2.41	444	15,193	14,050	8.1%
2031	15.74	13.16	-2.58	431	15,832	14,639	8.1%
2032	15.90	13.17	-2.73	417	16,500	15,256	8.2%
2033	16.03	13.18	-2.85	403	17,197	15,899	8.2%
2034	16.14	13.19	-2.95	390	17,924	16,571	8.2%
2035	16.23	13.19	-3.04	376	18,683	17,272	8.2%
2036	16.30	13.20	-3.10	361	19,478	18,006	8.2%
2037	16.35	13.20	-3.15	347	20,307	18,771	8.2%
2038	16.38	13.21	-3.17	333	21,172	19,570	8.2%
2039	16.40	13.21	-3.19	318	22,072	20,401	8.2%
2040	16.42	13.21	-3.21	304	23,011	21,267	8.2%
2041	16.43	13.21	-3.22	289	23,990	22,172	8.2%
2042	16.44	13.21	-3.23	274	25,009	23,112	8.2%
2043	16.45	13.22	-3.23	259	26,070	24,091	8.2%
2044	16.46	13.22	-3.24	243	27,175	25,111	8.2%
2045	16.46	13.22	-3.24	227	28,322	26,170	8.2%
2046	16.47	13.22	-3.25	211	29,516	27,271	8.2%
2047	16.48	13.22	-3.26	195	30,756	28,415	8.2%
2048	16.50	13.22	-3.27	179	32,043	29,603	8.2%
2049	16.51	13.22	-3.29	162	33,378	30,835	8.2%
2050	16.54	13.23	-3.31	144	34,767	32,116	8.3%
2051	16.57	13.23	-3.34	127	36,213	33,450	8.3%
2052	16.61	13.23	-3.37	109	37,717	34,837	8.3%
2053	16.65	13.23	-3.41	90	39,287	36,285	8.3%
2054	16.69	13.24	-3.45	71	40,922	37,793	8.3%
2055	16.74	13.24	-3.50	52	42,620	39,359	8.3%
2056	16.79	13.24	-3.54	32	44,388	40,990	8.3%
2057	16.84	13.25	-3.59	11	46,224	42,682	8.3%
2058	16.89	13.25	-3.64	---	48,138	44,447	8.3%
2059	16.93	13.25	-3.68	---	50,134	46,287	8.3%
2060	16.98	13.26	-3.72	---	52,210	48,202	8.3%
2061	17.03	13.26	-3.77	---	54,370	50,193	8.3%
2062	17.08	13.26	-3.82	---	56,621	52,268	8.3%
2063	17.14	13.27	-3.88	---	58,963	54,426	8.3%
2064	17.20	13.27	-3.93	---	61,402	56,674	8.3%
2065	17.24	13.27	-3.97	---	63,945	59,018	8.3%
2066	17.29	13.28	-4.02	---	66,588	61,454	8.4%
2067	17.34	13.28	-4.06	---	69,346	63,996	8.4%
2068	17.39	13.28	-4.10	---	72,236	66,659	8.4%
2069	17.43	13.29	-4.14	---	75,236	69,423	8.4%
2070	17.47	13.29	-4.18	---	78,357	72,299	8.4%
2071	17.51	13.29	-4.22	---	81,611	75,296	8.4%
2072	17.55	13.29	-4.26	---	84,995	78,414	8.4%
2073	17.59	13.30	-4.29	---	88,513	81,654	8.4%
2074	17.63	13.30	-4.33	---	92,174	85,026	8.4%
2075	17.67	13.30	-4.37	---	95,987	88,538	8.4%
2076	17.71	13.30	-4.41	---	99,956	92,194	8.4%
2077	17.75	13.31	-4.44	---	104,087	95,998	8.4%
2078	17.79	13.31	-4.48	---	108,387	99,958	8.4%
2079	17.83	13.31	-4.52	---	112,852	104,070	8.4%

Summarized Rates: OASDI				Change in Actuarial Balance
Year	Cost Rate	Income Rate	Actuarial Balance	
2004				
-2078	14.58%	13.73%	-0.85%	1.04%

Based on Intermediate Assumptions of the 2004 Trustees Report

Office of the Chief Actuary  
Social Security Administration  
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