



SOCIAL SECURITY

MEMORANDUM

Date: November 9, 2010

Refer To: TCA

To: Bruce Reed, Marc Goldwein, Meaghan Mann
Fiscal Commission Staff

From: Stephen C. Goss, Chief Actuary
Social Security Administration

Subject: Co-Chairs' Proposals for Consideration by the Fiscal Commission:
Preliminary Long-Range Estimates of Effect on Social Security

The attached tables provide preliminary estimates for the two proposals, 1a and 1b, that you have identified as being of interest for consideration by the Fiscal Commission. All estimates are based on the intermediate assumptions of the 2010 Trustees Report. These estimates provide the estimated effects for the 75-year long-range period as a whole, referred to as the change in the actuarial balance, and the effect on the annual balance for the 75th year, 2084, which is the difference between scheduled tax income and scheduled cost for the program for that year. Both estimates are expressed as percentages of taxable payroll for the OASDI program. In addition, we are providing estimates of the effect of the proposals on benefits for selected hypothetical workers by career-average earnings level and age, relative to both current law scheduled and payable benefit levels.

Proposal 1a includes increase in the earliest eligibility age (EEA) to maintain a 5-year difference with the NRA, and proposal 1b holds the EEA 62. For each proposal, a variation is provided where the coverage of State and local government employees hires after 2020 is included. In each case, long-range sustainable solvency and ultimate positive annual cash flow is projected under the intermediate assumption. The margin of solvency is sufficient to allow consideration of extending the phase-in period for the PIA formula proposal to be completed after 2050 in each case. Likely the extension may be possible for completion in 2060 or even 2070.

Chris Chaplain, Dan Nickerson, Tiffany Bosley and Alice Wade as well as others contributed immensely to producing these estimates in a very short time. We anticipate refinements in the provisions and will be ready to develop further estimates. We look forward to working with you on these proposals for restoring long-term sustainable solvency for the OASDI program. Please let us know if you have any questions on these estimates.

A handwritten signature in cursive script that reads "Stephen C. Goss".

Stephen C. Goss

Attachments

a) Maintain the EEA at 5 years less than NRA in the future. Index the NRA to Life Expectancy Once the NRA Reaches 67 by the "ratio" approach (note: 1 month every 2 years)	0.41	1.48
b) Create New Bend Point at 50 th Percentile career-average earnings level, Reduce PIA Factors to 90/30/10/5 by 2050. Beginning 2017	0.86	2.12
d) Use Chained-CPI to Calculate all COLAs starting December 2011	0.50	0.70
e) Beginning in 2017, increase the special minimum benefit by making the following changes: (a) A year of coverage is defined as a year in which 4 quarters of coverage are earned. (b) At implementation, set the PIA for 30 years of coverage equal to 125 percent of the monthly poverty level (about \$1,128 in 2009). The PIA per year of coverage (after the first 10 years) would be $\$1,128/20 = \56.40 . (c) Chain-CPI index the poverty level from 2009 to 2017, then index the initial PIA per year of coverage by wage growth for successive cohorts, so that the special minimum keeps up with the wage-indexed benefit formula. Scale work requirements for DIB based on yrs potential work.	-0.15	-0.26
f) Provide 5% Benefit Increase Beginning 20 Years After Eligibility and Phased over Five Years Phase 82-86 for OAB. Start 2011 for all. <i>(For retired workers, age of eligibility would be the EEA – so effectively the "bump up" age would be indexed to life expectancy. For disabled workers, the eligibility age would be the first year of collection). Increase is equal to 1% of PIA of AWI worker per year for five years.</i>	-0.15	-0.23
g) Index Taxable Maximum to Have 90% of OASDI Covered Earnings below the Maximum Level. Phase in slowly over time (over 35+ years). Starting 2012. Subject all earnings above the current-law taxable maximum to a new 5% bend point.	0.67	0.90
h) Allow Retirees to Collect up to Half their Benefits at Age 62, with the other half available independently starting at EEA. Actuarial reduction or delayed retirement increment applies to each half separately based on starting age. The retirement earnings test would apply for benefits payable before EEA. Also, the PIA for the portion of the benefit starting at age 62 would be computed with the PIA formula appropriate for the year of attaining 62 (with indexing of earnings for AIME to 2 years earlier).	Negligible	Negligible
Total preliminary estimates for above provisions with interaction	2.03	4.43
i) Cover all newly hired state and local workers after 2020. (Please model with interactions if added into the package above).	0.16	-0.12
Grand total preliminary estimates for all above provisions with interaction	2.22	4.43

a) Index the NRA to Life Expectancy Once the NRA Reaches 67 by the "ratio" approach (note: 1 month every 2 years)	0.41	1.52
b) Create New Bend Point at 50 th Percentile career-average earnings level, Reduce PIA Factors to 90/30/10/5 by 2050. Beginning 2017	0.86	2.12
d) Use Chained-CPI to Calculate all COLAs starting December 2011	0.50	0.70
e) Beginning in 2017, increase the special minimum benefit by making the following changes: (a) A year of coverage is defined as a year in which 4 quarters of coverage are earned. (b) At implementation, set the PIA for 30 years of coverage equal to 125 percent of the monthly poverty level (about \$1,128 in 2009). The PIA per year of coverage (after the first 10 years) would be \$1,128/20 = \$56.40. (c) Chain-CPI index the poverty level from 2009 to 2017, then index the initial PIA per year of coverage by wage growth for successive cohorts, so that the special minimum keeps up with the wage-indexed benefit formula. Scale work requirements for DIB based on yrs potential work.	-0.15	-0.26
f) Provide 5% Benefit Increase Beginning 20 Years After Eligibility and Phased over Five Years Phase 82-86 for OAB. Start 2011 for all. <i>(For retired workers, age of eligibility would be the EEA – so effectively the "bump up" age would be indexed to life expectancy. For disabled workers, the eligibility age would be the first year of collection). Increase is equal to 1% of PIA of AWI worker per year for five years.</i>	-0.15	-0.23
g) Index Taxable Maximum to Have 90% of OASDI Covered Earnings below the Maximum Level. Phase in slowly over time (over 35+ years). Starting 2012. Subject all earnings above the current-law taxable maximum to a new 5% bend point.	0.67	0.90
h) Allow Retirees to Collect up to Half their Benefits at Age 62, with the other half available independently starting at EEA. Actuarial reduction or delayed retirement increment applies to each half separately based on starting age. The retirement earnings test would apply for benefits payable before EEA. Also, the PIA for the portion of the benefit starting at age 62 would be computed with the PIA formula appropriate for the year of attaining 62 (with indexing of earnings for AIME to 2 years earlier).	Negligible	Negligible
Total preliminary estimates for above provisions with interaction	2.02	4.43
i) Cover all newly hired state and local workers after 2020. (Please model with interactions if added into the package above).	0.16	-0.12
Grand total preliminary estimates for all above provisions with interaction	2.21	4.43

**Fiscal Commission Co-Chairs' Proposal 1a
For Worker Retiring (Stops Working) at age 65 with Indicated Career Earnings Level**

Year Attain Age 65	<u>Present Law Scheduled</u>		<u>Scheduled Benefit Level Percent Change at age 65</u>					<u>Proposal Scheduled Benefit</u>	
	<u>Monthly Benefits²</u>		Longevity	Reduced	Benefit	Minimum	Total	<u>Percent of Present Law:</u>	
	<u>(Wage Indexed</u>	<u>(Constant</u>	Index NRA	COLA ⁴	Formula ⁵	Benefit ⁶		Scheduled	Payable
	<u>2010 Dollars)</u>	<u>2010 Dollars)</u>	1 Mth/ 2 Yrs ³		(Percent change)			(Percents)	
Scaled Very Low Earner (\$10,771 for 2010¹)									
2010	648	648							
2020	611	717	0.0	-0.9	0.0	35.9	34.7	135	135
2030	579	758	-1.3	-0.9	-0.1	36.0	33.0	133	133
2040	578	852	-4.5	-0.9	-0.2	36.1	28.7	129	164
2050	580	959	-7.7	-0.9	-0.3	36.3	24.4	124	156
2060	580	1,074	-10.1	-0.9	-0.3	36.3	21.1	121	153
2070	580	1,200	-12.5	-0.9	-0.3	36.3	17.9	118	152
2080	580	1,341	-14.9	-0.9	-0.3	36.3	14.6	115	151
Scaled Low Earner (\$19,388 for 2010¹)									
2010	848	848							
2020	800	938	0.0	-0.9	0.0	3.9	3.0	103	103
2030	758	992	-1.3	-0.9	-0.5	4.4	1.7	102	102
2040	756	1,115	-4.5	-0.9	-1.0	5.0	-1.6	98	125
2050	758	1,255	-7.7	-0.9	-1.5	5.5	-4.9	95	119
2060	759	1,404	-10.1	-0.9	-1.7	5.7	-7.4	93	117
2070	759	1,569	-12.5	-0.9	-1.7	5.7	-9.9	90	116
2080	758	1,754	-14.9	-0.9	-1.7	5.7	-12.4	88	116
Scaled Medium Earner (\$43,084 for 2010¹)									
2010	1,397	1,397							
2020	1,318	1,546	0.0	-0.9	-0.2	0.0	-1.1	99	99
2030	1,248	1,634	-1.3	-0.9	-2.6	0.0	-4.6	95	95
2040	1,245	1,838	-4.5	-0.9	-4.9	0.0	-9.9	90	115
2050	1,249	2,068	-7.7	-0.9	-7.2	0.0	-15.1	85	106
2060	1,251	2,314	-10.1	-0.9	-7.9	0.0	-17.9	82	104
2070	1,251	2,586	-12.5	-0.9	-7.9	0.0	-20.1	80	103
2080	1,249	2,889	-14.9	-0.9	-7.9	0.0	-22.3	78	102
Scaled High Earner (\$68,934 for 2010¹)									
2010	1,851	1,851							
2020	1,747	2,048	0.0	-0.9	-0.7	0.0	-1.5	98	98
2030	1,654	2,166	-1.3	-0.9	-7.3	0.0	-9.3	91	91
2040	1,651	2,435	-4.5	-0.9	-14.0	0.0	-18.6	81	104
2050	1,656	2,740	-7.7	-0.9	-20.7	0.0	-27.4	73	91
2060	1,658	3,067	-10.1	-0.9	-22.7	0.0	-31.1	69	87
2070	1,658	3,427	-12.5	-0.9	-22.7	0.0	-32.9	67	86
2080	1,656	3,829	-14.9	-0.9	-22.7	0.0	-34.8	65	86
Steady Maximum Earner (\$106,800 for 2010¹)									
2010	2,192	2,192							
2020	2,126	2,493	0.0	-0.9	-0.9	0.0	-1.8	98	98
2030	2,021	2,646	-1.3	-0.9	-9.9	0.0	-11.9	88	88
2040	2,016	2,974	-4.5	-0.9	-18.9	0.0	-23.3	77	98
2050	2,020	3,343	-7.7	-0.9	-27.9	0.0	-34.0	66	83
2060	2,021	3,738	-10.1	-0.9	-30.6	0.0	-38.1	62	78
2070	2,021	4,177	-12.5	-0.9	-30.6	0.0	-39.8	60	77
2080	2,019	4,668	-14.9	-0.9	-30.6	0.0	-41.5	59	77

¹ Average of highest 35 years of earnings wage indexed to 2010.

² After trust fund exhaustion under present law continuing taxes are expected to be enough to pay about three fourths of scheduled benefits.

³ Index NRA and EEA to Longevity increasing 1 month every 2 years

⁴ Starting Dec 2011, compute the COLA using a chained CPI-W, producing 0.3% lower annual COLAs on average.

⁵ New Bend Point at 50th Percentile career-average earnings level, Reduced PIA Factors 90/30/10/5 by 2050.

⁶ Increase the PIA to a level such that a worker with 30 years of earnings at the minimum wage level would receive an adjusted PIA equal to 125% of monthly poverty level in 2009, CPI-index from 2009-2017 then wage-indexed. This provision would take full effect for all newly eligible workers in 2017. The EEA increases under this proposal. For these illustrations, we assume the indexing year and the computation period remain as in current law - the indexing year is the year the worker reaches age 60 and the computation period is 35 years.

All estimates based on the intermediate assumptions of the 2010 Trustees Report.

Fiscal Commission Co-Chairs' Proposal 1a
For Worker Retiring (Stops Working) at age 65 with Indicated Career Earnings Level

Proposal Benefit as Percent of Present Law Scheduled

Year Attain	<u>Age 65</u>	<u>Age 75</u>	<u>Age 85²</u>	<u>Age 95</u>
	(Percents)			
Scaled Very Low Earner (\$10,771 for 2010¹)				
2010				
2020	134.7	130.8	132.1	129.6
2030	133.0	129.1	130.4	127.9
2040	128.7	125.0	126.2	123.8
2050	124.4	120.8	120.8	119.6
2060	121.1	117.6	117.7	116.5
2070	117.9	114.5	114.5	113.4
2080	114.6	111.3	110.3	110.3
Scaled Low Earner (\$19,388 for 2010¹)				
2010				
2020	103.0	100.0	101.0	99.0
2030	101.7	98.7	99.7	97.8
2040	98.4	95.5	96.5	94.6
2050	95.1	92.3	92.4	91.4
2060	92.6	89.9	90.0	89.1
2070	90.1	87.5	87.5	86.7
2080	87.6	85.1	84.3	84.3
Scaled Medium Earner (\$43,084 for 2010¹)				
2010				
2020	98.9	96.1	97.0	95.1
2030	95.4	92.6	93.5	91.7
2040	90.1	87.5	88.3	86.6
2050	84.9	82.5	82.5	81.7
2060	82.1	79.7	79.7	78.9
2070	79.9	77.6	77.6	76.8
2080	77.7	75.5	74.7	74.7
Scaled High Earner (\$68,934 for 2010¹)				
2010				
2020	98.5	95.6	96.6	94.7
2030	90.7	88.1	88.9	87.2
2040	81.4	79.1	79.9	78.3
2050	72.6	70.5	70.5	69.8
2060	68.9	66.9	66.9	66.3
2070	67.1	65.1	65.1	64.5
2080	65.2	63.3	62.7	62.7
Steady Maximum Earner (\$106,800 for 2010¹)				
2010				
2020	98.2	95.4	96.4	94.5
2030	88.1	85.6	86.5	84.8
2040	76.7	74.5	75.3	73.8
2050	66.0	64.1	64.1	63.4
2060	61.9	60.1	60.1	59.5
2070	60.2	58.5	58.5	57.9
2080	58.5	56.9	56.3	56.3

¹ Average of highest 35 years of earnings wage indexed to 2010.

² Increase the benefit by 5% beginning 20 years after eligibility and phased in over five years starting in 2011

Note: Starting Dec 2011, compute the COLA using a chained CPI-W, producing 0.3% lower annual COLAs on average.

Other Changes: Index NRA and EEA to Longevity increasing 1 month every 2 years.

New Bend Point at 50th Percentile career-average earnings level, Reduced PIA Factors 90/30/10/5 by 2050.

Increase the PIA to a level such that a worker with 30 years of earnings at the minimum wage level would receive an adjusted PIA equal to 125% of monthly poverty level in 2009, CPI-index from 2009-2017 then wage-indexed. This provision would take full effect for all newly eligible workers in 2017.

The EEA increases under this proposal. For these illustrations, we assume the indexing year and the computation period remain as in current law - the indexing year is the year the worker reaches age 60 and the computation period is 35 years.

All estimates based on the intermediate assumptions of the 2010 Trustees Report.

**Fiscal Commission Co-Chairs' Proposal 1b
For Worker Retiring (Stops Working) at age 65 with Indicated Career Earnings Level**

Year Attain Age 65	<u>Present Law Scheduled</u>		<u>Scheduled Benefit Level Percent Change at age 65</u>					<u>Proposal Scheduled Benefit</u>	
	<u>Monthly Benefits²</u>		Longevity	Index NRA	Reduced	Benefit	Minimum	<u>Percent of Present Law:</u>	
	<u>(Wage Indexed</u>	<u>(Constant</u>	1 Mth/ 2 Yrs ³	COLA ⁴	Formula ⁵	Benefit ⁶	Total	<u>Scheduled</u>	<u>Payable</u>
	<u>2010 Dollars)</u>	<u>2010 Dollars)</u>						<u>(Percents)</u>	
Scaled Very Low Earner (\$10,771 for 2010¹)									
2010	648	648	0.0	-0.9	0.0	35.9	34.7	135	135
2020	611	717	-1.3	-0.9	-0.1	36.0	33.0	133	133
2030	579	758	-4.5	-0.9	-0.2	36.1	28.7	129	164
2040	578	852	-7.7	-0.9	-0.3	36.3	24.4	124	156
2050	580	959	-10.1	-0.9	-0.3	36.3	21.1	121	153
2060	580	1,074	-12.5	-0.9	-0.3	36.3	17.9	118	152
2070	580	1,200	-14.9	-0.9	-0.3	36.3	14.6	115	151
2080	580	1,341							
Scaled Low Earner (\$19,388 for 2010¹)									
2010	848	848	0.0	-0.9	0.0	3.9	3.0	103	103
2020	800	938	-1.3	-0.9	-0.5	4.4	1.7	102	102
2030	758	992	-4.5	-0.9	-1.0	5.0	-1.6	98	125
2040	756	1,115	-7.7	-0.9	-1.5	5.5	-4.9	95	119
2050	758	1,255	-10.1	-0.9	-1.7	5.7	-7.4	93	117
2060	759	1,404	-12.5	-0.9	-1.7	5.7	-9.9	90	116
2070	759	1,569	-14.9	-0.9	-1.7	5.7	-12.4	88	116
2080	758	1,754							
Scaled Medium Earner (\$43,084 for 2010¹)									
2010	1,397	1,397	0.0	-0.9	-0.2	0.0	-1.1	99	99
2020	1,318	1,546	-1.3	-0.9	-2.6	0.0	-4.6	95	95
2030	1,248	1,634	-4.5	-0.9	-4.9	0.0	-9.9	90	115
2040	1,245	1,838	-7.7	-0.9	-7.2	0.0	-15.1	85	106
2050	1,249	2,068	-10.1	-0.9	-7.9	0.0	-17.9	82	104
2060	1,251	2,314	-12.5	-0.9	-7.9	0.0	-20.1	80	103
2070	1,251	2,586	-14.9	-0.9	-7.9	0.0	-22.3	78	102
2080	1,249	2,889							
Scaled High Earner (\$68,934 for 2010¹)									
2010	1,851	1,851	0.0	-0.9	-0.7	0.0	-1.5	98	98
2020	1,747	2,048	-1.3	-0.9	-7.3	0.0	-9.3	91	91
2030	1,654	2,166	-4.5	-0.9	-14.0	0.0	-18.6	81	104
2040	1,651	2,435	-7.7	-0.9	-20.7	0.0	-27.4	73	91
2050	1,656	2,740	-10.1	-0.9	-22.7	0.0	-31.1	69	87
2060	1,658	3,067	-12.5	-0.9	-22.7	0.0	-32.9	67	86
2070	1,658	3,427	-14.9	-0.9	-22.7	0.0	-34.8	65	86
2080	1,656	3,829							
Steady Maximum Earner (\$106,800 for 2010¹)									
2010	2,192	2,192	0.0	-0.9	-0.9	0.0	-1.8	98	98
2020	2,126	2,493	-1.3	-0.9	-9.9	0.0	-11.9	88	88
2030	2,021	2,646	-4.5	-0.9	-18.9	0.0	-23.3	77	98
2040	2,016	2,974	-7.7	-0.9	-27.9	0.0	-34.0	66	83
2050	2,020	3,343	-10.1	-0.9	-30.6	0.0	-38.1	62	78
2060	2,021	3,738	-12.5	-0.9	-30.6	0.0	-39.8	60	77
2070	2,021	4,177	-14.9	-0.9	-30.6	0.0	-41.5	59	77
2080	2,019	4,668							

¹ Average of highest 35 years of earnings wage indexed to 2010.

² After trust fund exhaustion under present law continuing taxes are expected to be enough to pay about three fourths of scheduled benefits.

³ Index NRA to Longevity increasing 1 month every 2 years

⁴ Starting Dec 2011, compute the COLA using a chained CPI-W, producing 0.3% lower annual COLAs on average.

⁵ New Bend Point at 50th Percentile career-average earnings level, Reduced PIA Factors 90/30/10/5 by 2050.

⁶ Increase the PIA to a level such that a worker with 30 years of earnings at the minimum wage level would receive an adjusted PIA equal to 125% of monthly poverty level in 2009, CPI-index from 2009-2017 then wage-indexed. This provision would take full effect for all newly eligible workers in 2017

All estimates based on the intermediate assumptions of the 2010 Trustees Report.

**Fiscal Commission Co-Chairs' Proposal 1b
For Worker Retiring (Stops Working) at age 65 with Indicated Career Earnings Level**

Proposal Benefit as Percent of Present Law Scheduled

Year Attain	Age 65	Age 75	Age 85 ²	Age 95
	(Percents)			
Scaled Very Low Earner (\$10,771 for 2010¹)				
2010				
2020	134.7	130.8	132.1	129.6
2030	133.0	129.1	130.4	127.9
2040	128.7	125.0	126.2	123.8
2050	124.4	120.8	122.0	119.6
2060	121.1	117.6	118.8	116.5
2070	117.9	114.5	115.6	113.4
2080	114.6	111.3	112.4	110.3
Scaled Low Earner (\$19,388 for 2010¹)				
2010				
2020	103.0	100.0	101.0	99.0
2030	101.7	98.7	99.7	97.8
2040	98.4	95.5	96.5	94.6
2050	95.1	92.3	93.3	91.4
2060	92.6	89.9	90.8	89.1
2070	90.1	87.5	88.4	86.7
2080	87.6	85.1	86.0	84.3
Scaled Medium Earner (\$43,084 for 2010¹)				
2010				
2020	98.9	96.1	97.0	95.1
2030	95.4	92.6	93.5	91.7
2040	90.1	87.5	88.3	86.6
2050	84.9	82.5	83.3	81.7
2060	82.1	79.7	80.5	78.9
2070	79.9	77.6	78.4	76.8
2080	77.7	75.5	76.2	74.7
Scaled High Earner (\$68,934 for 2010¹)				
2010				
2020	98.5	95.6	96.6	94.7
2030	90.7	88.1	88.9	87.2
2040	81.4	79.1	79.9	78.3
2050	72.6	70.5	71.2	69.8
2060	68.9	66.9	67.6	66.3
2070	67.1	65.1	65.8	64.5
2080	65.2	63.3	64.0	62.7
Steady Maximum Earner (\$106,800 for 2010¹)				
2010				
2020	98.2	95.4	96.4	94.5
2030	88.1	85.6	86.5	84.8
2040	76.7	74.5	75.3	73.8
2050	66.0	64.1	64.7	63.4
2060	61.9	60.1	60.7	59.5
2070	60.2	58.5	59.1	57.9
2080	58.5	56.9	57.4	56.3

¹ Average of highest 35 years of earnings wage indexed to 2010.

² Increase the benefit by 5% beginning 20 years after eligibility and phased in over five years starting in 2011

Note: Starting Dec 2011, compute the COLA using a chained CPI-W, producing 0.3% lower annual COLAs on average.

Other Changes: Index NRA to Longevity increasing 1 month every 2 years.

New Bend Point at 50th Percentile career-average earnings level, Reduced PIA Factors 90/30/10/5 by 2050.

Increase the PIA to a level such that a worker with 30 years of earnings at the minimum wage level would receive an adjusted PIA equal to 125% of monthly poverty level in 2009, CPI-index from 2009-2017 then wage-indexed. This provision would take full effect for all newly eligible workers in 2017.

All estimates based on the intermediate assumptions of the 2010 Trustees Report.