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REPLACEMENT RATES FOR HYPOTHETICAL RETIRED WORKERS

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Introduction

Adequacy of Social Security benefits is a major policy consideration for the program. One measure of adequacy is the percentage of pre-retirement income that Social Security benefits replace, or the "replacement rate". The numerator of this replacement rate is well established as the Social Security benefit. However, policy analysts do not always agree on the appropriate denominator for the replacement rate.

In this note, we use the average of the highest 35 years of earnings, wage-indexed to the year before retirement, as the "standard" replacement rate denominator. Because Social Security serves a large population of workers with career earnings patterns that vary greatly, we believe the denominator used for the standard replacement rate in this note is the most appropriate choice for measuring the adequacy of Social Security retirement benefits. For a full analysis of this and other possible concepts of replacement rates, see Actuarial Note 155 at:

www.socialsecurity.gov/OACT/NOTES/n2010s.html.

We base all calculations on the intermediate assumptions of the 2014 Old-Age and Survivors Insurance and Disability Insurance (OASDI) Trustees Report.

Social Security Benefits

The Social Security benefit formula¹ uses wage-indexed earnings in computing the Social Security primary insurance amount (PIA). For a retired worker starting benefits at any age, the Social Security PIA formula:

- Indexes annual earnings for those years when the worker is younger than age 60 using changes in the SSA national average wage index (AWI) between each year of younger age and age 60;
- Averages the highest 35 years of these "indexed earnings" and earnings at age 60 and over, and converts this average to a monthly amount, called average indexed monthly earnings (AIME);

- Applies factors of 90 percent, 32 percent, and 15 percent to specified portions of the AIME in a progressive manner, resulting in higher portions of earnings replaced for those with lower AIMEs; and
- Applies cost-of-living increases for each year after age 62.

The retired worker benefit payable at any age is the PIA adjusted for early or delayed retirement.

The AIME calculation reflects the standard of living over a person's work career, which is consistent with a wage-indexed denominator for the replacement rate measure.

Earnings Patterns for Hypothetical Workers

Our analysis includes five hypothetical workers with different pre-retirement career-average earnings levels. Four of the hypothetical workers in the tables assume the earnings history of workers following scaled-earnings patterns² and reflect very low, low, medium, and high career-average levels of pre-retirement earnings starting at age 21. The fifth hypothetical worker assumes the earnings history of a steady maximum earner starting at age 22. The scaled-earnings patterns are derived from earnings experienced by insured workers during 1991-2010. The earnings levels differ by age, reflecting both the likelihood of having earnings at each age, and the average earnings levels for those who have earnings. The career-average level of earnings for each scaled case targets a percent of the national average wage index (AWI). For the scaled medium earner, the career-average earnings level is about equal to the AWI (or \$46,787 for 2014). For the scaled very low, low, and high earners, the career-average earnings level is about 25 percent, 45 percent, and 160 percent of the AWI, respectively (or \$11,697, \$21,054, and \$74,859, respectively, for 2014). The steady maximum earner has earnings at or above the contribution and benefit base for each year starting at age 22 through the year prior to retirement (or \$117,000 for 2014).

¹ Prior to the 1977 Amendments to the Social Security Act, the benefit formula differed. Historical benefit levels reflect the benefit formula in effect at

² Actuarial Note Number 2013.3 has more details on scaled-earnings patterns. See www.socialsecurity.gov/OACT/NOTES/ran3/an2013-3.html.

Description of Tables

Tables A through D show benefit and replacement rate information for the five different pre-retirement earnings levels. Each table shows the Social Security benefit in wage-indexed 2014 dollars and as a percent of career average earnings (the standard replacement rate measure in this note). The denominator of this replacement rate is the average of the highest 35 years of earnings for these hypothetical workers, wage-indexed to the year before retirement³. This calculation is very similar to the present-law AIME calculation, except that the AIME calculation wage-indexes earnings to age 60 rather than to the year before retirement. The calculations in these tables are wage-indexed to just before retirement to provide a closer comparison of pre-retirement earnings and post-retirement benefit levels.

Tables A through C show benefit amounts and replacement rates for retirement at 62, at 65, and at normal retirement age (NRA) for the hypothetical workers born in 1948 and selected subsequent years. In comparing across tables, benefit levels and replacement rates are lowest at age 62, and highest at NRA. This occurs because an actuarial reduction applies to the monthly benefit for those retiring before NRA. For an NRA of 67, individuals retiring at exact age 62 would have a 30 percent reduction in benefits, and those retiring at age 65 would have a $13^{1}/_{3}$ percent reduction. Table D shows

benefit amounts and replacement rates for retirement at 62⁴, at 65, and at normal retirement age (NRA) for selected hypothetical workers born between 1875 and 1945.

Tables A through C show present-law scheduled benefits and payable benefits in separate panels. Present-law scheduled benefits are those specified in the law. However, when the trust fund reserves deplete, present law prescribes that expenditures cannot exceed current income. Because the projected date that the combined OASI and DI Trust Funds deplete is 2033 and projected income will not fully finance scheduled benefits after that date, the tables include "payable benefits", where scheduled benefits are reduced such that present-law income is sufficient to pay benefits for that year.

Tables A through C also include present-law scheduled and payable benefits in CPI-indexed 2014 dollars.⁵ The present-law scheduled column shows a general increase over time in the purchasing power of Social Security benefits, which would be necessary for retirees across generations to maintain a similar standard of living.

³ In table D, in order to calculate the career-average earnings for birth cohorts where individuals attain age 21 before 1951, we use national average earnings from 1937 to 1950 in SSA's employee operations manual, available at http://policy.ssa.gov/poms.nsf/lnx/0201701200. For years prior to 1937, we use the 1937 national average earnings level.

⁴ The Social Security Act extended retirement benefits beginning at age 62 to female workers effective November 1956 and to male workers effective August 1961.

⁵ A CPI-indexed 2014 dollar adjustment uses the adjusted CPI indexing series in table VI.G6 of the 2014 Trustees Report. See: www.socialsecurity.gov/OACT/TR/2014/index.html

Table A—Scheduled and Payable Benefits and Replacement Rates for Hypothetical Retired Workers^a in their First Year of Benefit Receipt at Age 62

(based on intermediate assumptions of the 2014 OASDI Trustees Report)

		Present-Law Sch	eduled Benefits	Payable l	Benefits	Purchasing Power of CPI-Indexed 2014	dollars ^b
Year of	Year attain	Wage-indexed	Percent of career-	Wage-indexed	Percent of career-	Present-Law	Payable
birth ^c	age 62	2014 dollars ^d	average earningse	2014 dollars ^d	average earningse	Scheduled Benefits	Benefits
Scaled v	verv low earnin	ngs: (Career-averag	ge earnings for 2013 e	gual \$11.271 ^f)			
1948	2010	\$7,235	63.4	\$7,235	63.4	\$7,022	\$7,022
1949	2011	6,931	61.2	6,931	61.2	6,700	6,700
1950	2012	6,864	60.6	6,864	60.6	6,701	6,701
1951	2013	6,951	60.6	6,951	60.6	6,813	6,813
1952	2014	6,920	61.4	6,920	61.4	6,920	6,920
1955	2017	6,558	58.9	6,558	58.9	7,104	7,104
1960	2022	6,299	56.1	6,299	56.1	7,363	7,363
1965	2027	6,324	56.3	6,324	56.3	7,820	7,820
1970	2032	6,319	56.2	6,319	56.2	8,300	8,300
1975	2037	6,328	56.2	4,797	42.6	8,802	6,672
1980	2042	6,330	56.3	4,838	43.0	9,311	7,117
1985	2047	6,336	56.3	4,873	43.3	9,841	7,568
1990	2052	6,337	56.3	4,876	43.3	10,387	7,992
1995	2057	6,339	56.3	4,822	42.8	10,959	8,337
2000	2062	6,339	56.3	4,756	42.2	11,560	8,674
2005	2067	6,342	56.3	4,694	41.7	12,189	9,022
2010	2072	6,340	56.3	4,635	41.2	12,847	9,393
2015	2077	6,337	56.3	4,614	41.0	13,551	9,866
2020	2082	6,336	56.3	4,602	40.9	14,307	10,392
Scaled l	ow earnings: (Career-average ear	nings for 2013 equal	\$20,289 ^f)			
1948	2010	9,458	46.0	9,458	46.0	9,180	9,180
1949	2011	9,066	44.5	9,066	44.5	8,763	8,763
1950	2012	8,981	44.0	8,981	44.0	8,769	8,769
1951	2013	9,093	44.0	9,093	44.0	8,912	8,912
1952	2014	9,047	44.6	9,047	44.6	9,047	9,047
1955	2017	8,586	42.8	8,586	42.8	9,301	9,301
1960	2022	8,243	40.8	8,243	40.8	9,637	9,637
1965	2027	8,270	40.9	8,270	40.9	10,226	10,226
1970	2032	8,262	40.8	8,262	40.8	10,851	10,851
1975	2037	8,276	40.9	6,274	31.0	11,513	8,728
1980	2042	8,278	40.9	6,327	31.3	12,177	9,307
1985	2042	8,285	40.9	6,371	31.5	12,867	9,895
1990	2052	8,286	40.9	6,376	31.5	13,582	10,451
1995	2057	8,289	40.9	6,306	31.1	14,331	10,431
2000	2062	8,288	40.9	6,219	30.7	15,115	11,341
2005	2067	8,293	40.9	6,138	30.7	15,939	11,797
2010	2072	8,289	40.9	6,060	29.9	16,797	12,280
2015	2072	8,286	40.9	6,033	29.8	17,718	12,280
2020	2082	8,284	40.9	6,018	29.7	18,708	13,589
					2).1	10,700	13,307
			e earnings for 2013 ed		24.1	15 117	15 117
1948	2010	15,574	34.1	15,574	34.1	15,116	15,116 14,426
1949	2011	14,923	32.9	14,923	32.9	14,426	
1950	2012	14,791	32.6	14,791	32.6	14,441	14,441
1951	2013	14,985	32.6	14,985	32.6	14,686	14,686
1952	2014	14,899	33.0	14,899	33.0	14,899	14,899
1955	2017	14,134	31.7	14,134	31.7	15,312	15,312
1960	2022	13,578	30.2	13,578	30.2	15,873	15,873
1965	2027	13,622	30.3	13,622	30.3	16,844	16,844
1970	2032	13,613	30.3	13,613	30.3	17,878	17,878
1975	2037	13,632	30.3	10,334	23.0	18,962	14,374
1980	2042	13,637	30.3	10,423	23.2	20,061	15,333
1985	2047	13,647	30.3	10,494	23.3	21,195	16,299
1990	2052	13,647	30.3	10,501	23.3	22,369	17,212
1995	2057	13,651	30.3	10,385	23.1	23,602	17,955
2000	2062	13,650	30.3	10,242	22.7	24,894	18,679
2005	2067	13,655	30.3	10,106	22.4	26,245	19,425

Table A—Scheduled and Payable Benefits and Replacement Rates for Hypothetical Retired Workers^a in their First Year of Benefit Receipt at Age 62

		Present-Law Sch	eduled Benefits	Payable l	Benefits	Purchasing Power of 1 CPI-Indexed 2014	
Year of	Year attain		Percent of career-	Wage-indexed	Percent of career-	Present-Law	Payable
birth ^c	age 62	2014 dollars ^d	average earnings ^e	2014 dollars ^d	average earnings ^e	Scheduled Benefits	Benefits
2010	2072	\$13,650	30.3	\$9,980	22.2	\$27,662	\$20,224
2015	2077	13,646	30.3	9,936	22.1	29,180	21,245
2020	2082	13,643	30.3	9,910	22.0	30,809	22,379
Scaled h	igh earnings:	(Career-average ea	rnings for 2013 equal	\$72,138 ^f)			
1948	2010	20,666	28.3	20,666	28.3	20,059	20,059
1949	2011	19,810	27.3	19,810	27.3	19,149	19,149
1950	2012	19,637	27.1	19,637	27.1	19,172	19,172
1951	2013	19,881	27.1	19,881	27.1	19,484	19,484
1952	2014	19,776	27.4	19,776	27.4	19,776	19,776
1955	2017	18,755	26.3	18,755	26.3	20,318	20,318
1960	2022	18,008	25.0	18,008	25.0	21,053	21,053
1965	2027	18,071	25.1	18,071	25.1	22,346	22,346
1970	2032	18,058	25.1	18,058	25.1	23,717	23,717
1975	2037	18,087	25.1	13,711	19.0	25,159	19,072
1980	2042	18,089	25.1	13,826	19.2	26,611	20,339
1985	2047	18,103	25.1	13,921	19.3	28,116	21,621
1990	2052	18,102	25.1	13,929	19.3	29,672	22,832
1990	2052	18,111	25.1 25.1	13,778	19.3	31,312	22,832
					19.1		23,821
2000	2062	18,107	25.1	13,586	18.8	33,022	
2005	2067	18,116	25.1	13,408	18.6	34,819	25,771
2010	2072	18,109	25.1	13,240	18.4	36,698	26,830
2015	2077	18,103	25.1	13,181	18.3	38,711	28,184
2020	2082	18,098	25.1	13,146	18.2	40,870	29,687
			age earnings for 2013				
1948	2010	24,371	23.1	24,371	23.1	23,655	23,655
1949	2011	23,493	22.2	23,493	22.2	22,709	22,709
1950	2012	23,404	21.9	23,404	21.9	22,850	22,850
1951	2013	23,817	21.8	23,817	21.8	23,342	23,342
1952	2014	23,802	21.9	23,802	21.9	23,802	23,802
1955	2017	22,731	20.9	22,731	20.9	24,626	24,626
1960	2022	21,897	19.9	21,897	19.9	25,600	25,600
1965	2027	22,003	19.9	22,003	19.9	27,208	27,208
1970	2032	22,019	19.8	22,019	19.8	28,919	28,919
1975	2037	22,032	19.9	16,702	15.1	30,648	23,233
1980	2042	22,056	19.8	16,858	15.1	32,447	24,800
1985	2042	22,052	19.9	16,958	15.3	34,249	26,337
1983	2052	22,009	19.9	16,935	15.3	34,249	20,337
1995	2052	22,004	19.9	16,739	15.1	38,042	28,941
2000	2062	22,004	19.9	16,739	14.9	40,131	30,112
				16,296			21,221
2005	2067	22,017	19.9 19.9	10,290	14.7	42,317	31,321
2010	2072	22,013		16,094	14.5	44,610	32,615
2015	2077	22,008	19.9	16,024	14.5	47,061	34,264
2020	2082	22,003	19.9	15,982	14.5	49,687	36,091

^a The table uses 4 hypothetical "scaled" earnings levels and a hypothetical worker who earns the taxable maximum each year. See actuarial note 2013.3 at www.socialsecurity.gov/OACT/NOTES/ran3/an2013-3.html for more information.

b CPI-indexed dollar adjustment uses the adjusted CPI indexing series shown in table VI.G6 of the 2014 OASDI Trustees Report.

^c Born on January 2nd of year.

^d Wage-indexed dollar adjustment uses the National Average Wage Indexing series shown in table VI.G6 of the 2014 OASDI Trustees Report.

^e Computed using nominal dollars.

f Average of highest 35 years of wage-indexed earnings through the year prior to retirement. The value is for retirement in 2014. Thus, the annual earnings used for this average are wage-indexed to 2013.

Table B—Scheduled and Payable Benefits and Replacement Rates for Hypothetical Retired Workers^a in their First Year of Benefit Receipt at Age 65

(based on intermediate assumptions of the 2014 OASDI Trustees Report)

		Present-Law Sch	neduled Benefits	Payable	Benefits	Purchasing Power of Benefits in CPI-Indexed 2014 dollars ^b	
Year of	Year attain	Wage-indexed	Percent of career-	Wage-indexed	Percent of career-	Present-Law	Payable
birth ^c	age 65	2014 dollars ^d	average earningse	2014 dollars ^d	average earningse	Scheduled Benefits	Benefits
Scaled very	v low earnings:	(Career-average 6	earnings for 2013 equ	al \$11 282 ^f)			
1948	2013	\$8,770	76.3	\$8,770	76.3	\$8,595	\$8,595
1949	2014	8,459	75.0	8,459	75.0	8,459	8,459
1950	2015	8,104	72.7	8,104	72.7	8,336	8,336
1951	2016	7,983	71.7	7,983	71.7	8,436	8,436
1952	2017	7,900	70.9	7,900	70.9	8,559	8,559
1955	2020	7,765	69.1	7,765	69.1	8,840	8,840
1960	2025	7,560	67.1	7,560	67.1	9,134	9,134
1965	2030	7,561	67.2	7,561	67.2	9,696	9,696
1970	2035	7,571	67.2	5,755	51.1	10,297	7,828
1975	2040	7,588	67.4	5,773	51.3	10,916	8,305
1980	2045	7,596	67.4	5,832	51.7	11,547	8,865
1985	2050	7,607	67.5	5,860	52.0	12,202	9,400
1990	2055	7,609	67.5	5,821	51.6	12,879	9,853
1995	2060	7,612	67.6	5,743	51.0	13,590	10,252
2000	2065	7,616	67.6	5,668	50.3	14,334	10,669
2005	2070	7,618	67.6	5,594	49.6	15,113	11,097
2010	2075	7,613	67.6	5,546	49.2	15,930	11,605
2015	2080	7,606	67.5	5,535	49.1	16,804	12,229
2020	2085	7,602	67.5	5,489	48.7	17,742	12,812
Scaled low	earnings: (Car	eer-average earnii	ngs for 2013 equal \$2	0,308 ^f)			
1948	2013	11,473	55.5	11,473	55.5	11,244	11,244
1949	2014	11,077	54.5	11,077	54.5	11,077	11,077
1950	2015	10,593	52.8	10,593	52.8	10,895	10,895
1951	2016	10,451	52.1	10,451	52.1	11,045	11,045
1952	2017	10,345	51.6	10,345	51.6	11,207	11,207
1955	2020	10,164	50.3	10,164	50.3	11,572	11,572
1960	2025	9,895	48.8	9,895	48.8	11,954	11,954
1965	2030	9,896	48.9	9,896	48.9	12,690	12,690
1970	2035	9,905	48.9	7,529	37.2	13,471	10,240
1975	2040	9,931	49.0	7,556	37.3	14,287	10,870
1980	2045	9,943	49.0	7,633	37.6	15,114	11,603
1985	2050	9,953	49.1	7,667	37.8	15,966	12,299
1990	2055	9,956	49.1	7,616	37.6	16,851	12,891
1995	2060	9,960	49.1	7,514	37.0	17,781	13,414
2000	2065	9,964	49.1	7,416	36.5	18,754	13,959
2005	2070	9,968	49.1	7,319	36.1	19,774	14,519
2010	2075	9,959	49.1	7,256	35.8	20,841	15,183
2015 2020	2080 2085	9,951 9,946	49.1 49.1	7,242 7,182	35.7 35.5	21,985 23,212	15,999 16,761
		,			33.3	23,212	10,701
Scaled med 1948	lium earnings: 2013	(Career-average e 18,897	arnings for 2013 equa	al \$45,128 ¹) 18,897	41.1	18,520	18,520
1946	2013	18,251	40.4	18,251	40.4	18,251	18,251
1950	2015	17,470	39.2	17,470	39.2	17,968	17,968
1951	2016	17,211	38.6	17,211	38.6	18,189	18,189
1952	2017	17,038	38.2	17,038	38.2	18,458	18,458
1955	2020	16,757	37.3	16,757	37.3	19,078	19,078
1960	2025	16,315	36.2	16,315	36.2	19,710	19,710
1965	2030	16,311	36.2	16,313	36.2	20,917	20,917
1970	2035	16,324	36.2	12,410	27.5	22,202	16,878
1975	2040	16,366	36.3	12,452	27.6	23,545	17,914
1980	2045	16,387	36.4	12,580	27.9	24,909	19,123
1985	2050	16,405	36.4	12,638	28.0	26,317	20,273
1990	2055	16,409	36.4	12,553	27.8	27,774	21,247
1995	2060	16,415	36.4	12,384	27.5	29,305	22,108
2000	2065	16,420	36.4	12,222	27.1	30,906	23,004
2005	2070	16,427	36.4	12,061	26.7	32,587	23,927
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Table B—Scheduled and Payable Benefits and Replacement Rates for Hypothetical Retired Workers^a in their First Year of Benefit Receipt at Age 65

		Present-Law Scl	heduled Benefits	Payable	Benefits	Purchasing Power of CPI-Indexed 2014	
Year of	Year attain	Wage-indexed	Percent of career-	Wage-indexed	Percent of career-	Present-Law	Payable
birth ^c	age 65	2014 dollars ^d	average earnings ^e	2014 dollars ^d	average earnings ^e	Scheduled Benefits	Benefits
2010	2075	\$16,413	36.4	\$11,958	26.5	\$34,346	\$25,022
2015	2080	16,400	36.4	11,935	26.5	36,232	26,367
2020	2085	16,392	36.4	11,836	26.3	38,256	27,625
Scaled hig	h earnings: (Ca	reer-average earn	ings for 2013 equal \$7	72.206 ^f)			
1948	2013	25,075	34.1	25,075	34.1	24,574	24,574
1949	2014	24,198	33.5	24,198	33.5	24,198	24,198
1950	2015	23,157	32.4	23,157	32.4	23,817	23,817
1951	2016	22,824	32.0	22,824	32.0	24,121	24,121
1952	2017	22,585	31.7	22,585	31.7	24,467	24,467
1955	2020	22,195	30.9	22,195	30.9	25,270	25,270
1960	2025	21,616	30.0	21,616	30.0	26,115	26,115
1965	2030	21,611	30.0	21,611	30.0	27,714	27,714
1970	2035	21,629	30.0	16,442	22.8	29,417	22,362
1975	2040	21,686	30.1	16,500	22.9	31,199	23,738
1980	2045	21,710	30.1	16,668	23.1	33,001	25,336
1985	2050	21,735	30.1	16,744	23.2	34,867	26,860
1990	2055	21,742	30.1	16,632	23.0	36,800	28,152
1995	2060	21,750	30.2	16,409	22.8	38,829	29,293
2000	2065	21,758	30.2	16,195	22.5	40,953	30,482
2005	2070	21,765	30.2	15,981	22.2	43,178	31,704
2010	2075	21,748	30.2	15,844	22.0	45,508	33,154
2015	2080	21,728	30.1	15,812	21.9	48,005	34,935
2020	2085	21,717	30.1	15,682	21.7	50,684	36,599
Scaled ma	vimum garnings	s. (Caroor-avorage	e earnings for 2013 eq	mal \$108 570 ^f)			
1948	2013	30,070	27.5	30,070	27.5	29,470	29,470
1946							29,470
1949	2014	29,209	26.9	29,209	26.9	29,209	29,209
1950	2015	28,051	26.0	28,051	26.0	28,851	28,851
1951	2016	27,695	25.6	27,695	25.6	29,268	29,268
1952	2017	27,466	25.3	27,466	25.3	29,755	29,755
1955	2020	27,058	24.6	27,058	24.6	30,806	30,806
1960	2025	26,405	23.8	26,405	23.8	31,901	31,901
1965	2030	26,439	23.8	26,439	23.8	33,904	33,904
1970	2035	26,481	23.8	20,130	18.1	36,016	27,379
1975	2040	26,531	23.9	20,186	18.2	38,169	29,041
1980	2045	26,576	23.9	20,403	18.3	40,398	31,015
1985	2050	26,580	23.9	20,476	18.4	42,639	32,847
1990	2055	26,534	24.0	20,470	18.4	44,912	34,358
1990		,	24.0		18.1	47,352	
1773	2060	26,524	24.0	20,010	18.1	47,332	35,723
2000	2065	26,539	24.0	19,754	17.9	49,952	37,180
2005	2070	26,550	24.0	19,494	17.6	52,670	38,673
2010	2075	26,533	24.0	19,330	17.5	55,522	40,449
2015	2080	26,510	24.0	19,292	17.5	58,570	42,624
2020	2085	26,496	24.0	19,133	17.3	61,839	44,654

^a The table uses 4 hypothetical "scaled" earnings levels and a hypothetical worker who earns the taxable maximum each year. See actuarial note 2013.3 at www.socialsecurity.gov/OACT/NOTES/ran3/an2013-3.html for more information.

b CPI-indexed dollar adjustment uses the adjusted CPI indexing series shown in table VI.G6 of the 2014 OASDI Trustees Report.

^c Born on January 2nd of year.

^d Wage-indexed dollar adjustment uses the National Average Wage Indexing series shown in table VI.G6 of the 2014 OASDI Trustees Report.

^e Computed using nominal dollars.

f Average of highest 35 years of wage-indexed earnings through the year prior to retirement. The value is for retirement in 2014. Thus, the annual earnings used for this average are wage-indexed to 2013.

Table C—Scheduled and Payable Benefits and Replacement Rates for Hypothetical Retired Workers^a in their First Year of Benefit Receipt at Normal Retirement Age (NRA)

(based on intermediate assumptions of the 2014 OASDI Trustees Report)

Year of Year attain birth ^c Age at NRA retirement Wage-indexed 2014 dollars ^d Percent of career-average earnings ^e Wage-indexed 2014 dollars ^d Percent of career-2014 dollars ^d Scaled very low earnings: (Career-average earnings for 2013 equal \$11,282 ^f) \$1,282 ^f) 1948 2014 66:0 \$9,204 \$1.6 \$9,204 \$1.6 1949 2015 66:0 \$7,81 78.7 \$7.8 78.7 1950 2016 66:0 \$4,31 75.7 \$4,431 75.7 1951 2017 66:0 \$3,336 74.8 \$3,336 74.8 1952 2018 66:0 \$2,282 74.1 \$2,282 74.1 1955 2021 66:2 \$3,48 73.8 \$3,348 73.8 1960 2027 67:0 \$5,29 75.8 \$5,29 75.8	Scheduled Benefits 5 \$9,204 7 9,031 7 8,910 8 9,031 9,158 8 9,592	Payable Benefits \$9,204 9,031 8,910 9,031 9,158
birthc NRA retirement 2014 dollars ^d average earnings ^e 2014 dollars ^d average earnings ^e Scaled very low earnings: (Career-average earnings for 2013 equal \$11,282 ^f) 1948 2014 66:0 \$9,204 81.6 \$9,204 81.6 1949 2015 66:0 8,781 78.7 8,781 78.7 1950 2016 66:0 8,431 75.7 8,431 75.7 1951 2017 66:0 8,336 74.8 8,336 74.8 1952 2018 66:0 8,282 74.1 8,282 74.1 1955 2021 66:2 8,348 73.8 8,348 73.8 1960 2027 67:0 8,529 75.8 8,529 75.8	5 \$9,204 7 9,031 7 8,910 8 9,031 9,158 8 9,592	\$9,204 9,031 8,910 9,031
1948 2014 66:0 \$9,204 81.6 \$9,204 81.6 1949 2015 66:0 8,781 78.7 8,781 78.7 1950 2016 66:0 8,431 75.7 8,431 75.7 1951 2017 66:0 8,336 74.8 8,336 74.8 1952 2018 66:0 8,282 74.1 8,282 74.1 1955 2021 66:2 8,348 73.8 8,348 73.8 1960 2027 67:0 8,529 75.8 8,529 75.8	7 9,031 7 8,910 8 9,031 9,158 8 9,592	9,031 8,910 9,031
1948 2014 66:0 \$9,204 81.6 \$9,204 81.6 1949 2015 66:0 8,781 78.7 8,781 78.7 1950 2016 66:0 8,431 75.7 8,431 75.7 1951 2017 66:0 8,336 74.8 8,336 74.8 1952 2018 66:0 8,282 74.1 8,282 74.1 1955 2021 66:2 8,348 73.8 8,348 73.8 1960 2027 67:0 8,529 75.8 8,529 75.8	7 9,031 7 8,910 8 9,031 9,158 8 9,592	9,031 8,910 9,031
1949 2015 66:0 8,781 78.7 8,781 78.7 1950 2016 66:0 8,431 75.7 8,431 75.7 1951 2017 66:0 8,336 74.8 8,336 74.8 1952 2018 66:0 8,282 74.1 8,282 74.1 1955 2021 66:2 8,348 73.8 8,348 73.8 1960 2027 67:0 8,529 75.8 8,529 75.8	7 9,031 7 8,910 8 9,031 9,158 8 9,592	9,031 8,910 9,031
1950 2016 66:0 8,431 75.7 8,431 75.7 1951 2017 66:0 8,336 74.8 8,336 74.8 1952 2018 66:0 8,282 74.1 8,282 74.1 1955 2021 66:2 8,348 73.8 8,348 73.8 1960 2027 67:0 8,529 75.8 8,529 75.8	7 8,910 8 9,031 9,158 8 9,592	8,910 9,031
1951 2017 66:0 8,336 74.8 8,336 74.8 1952 2018 66:0 8,282 74.1 8,282 74.1 1955 2021 66:2 8,348 73.8 8,348 73.8 1960 2027 67:0 8,529 75.8 8,529 75.8	3 9,031 9,158 3 9,592	9,031
1952 2018 66:0 8,282 74.1 8,282 74.1 1955 2021 66:2 8,348 73.8 8,348 73.8 1960 2027 67:0 8,529 75.8 8,529 75.8	9,158 9,592	
1960 2027 67:0 8,529 75.8 8,529 75.8		,,,,,,,
1960 2027 67:0 8,529 75.8 8,529 75.8		9,592
1700 2027 07.0 0,327 73.0 0,327 73.0	3 10,546	10,546
1965 2032 67:0 8,522 75.7 8,522 75.7	7 11,192	11,192
1970 2037 67:0 8,539 75.8 6,473 57.5		9,004
1975 2042 67:0 8,565 76.0 6,546 58.1	12,600	9,630
1980 2047 67:0 8,579 76.1 6,597 58.5	5 13,324	10,246
1985 2052 67:0 8,592 76.3 6,612 58.7		10,837
1990 2057 67:0 8,595 76.3 6,539 58.0	14,860	11,305
1995 2062 67:0 8,600 76.3 6,453 57.3	15,683	11,768
2000 2067 67:0 8,604 76.3 6,368 56.5 2005 2072 67:0 8,605 76.4 6,291 55.9	16,538	12,241 12,750
		12,750
2010 2077 67:0 8,596 76.3 6,258 55.6 2015 2082 67:0 8,586 76.2 6,237 55.3		14,084
2020 2087 67:0 8,581 76.2 6,164 54.7		14,705
Scaled low earnings: (Career-average earnings for 2013 equal \$20,308 ^f)		
1948 2014 66:0 12,039 59.3 12,039 59.3	3 12,039	12,039
1949 2015 66:0 11,486 57.2 11,486 57.2	2 11,814	11,814
1950 2016 66:0 11,040 55.1 11,040 55.1	11,668	11,668
1951 2017 66:0 10,898 54.3 10,898 54.3		11,806
1952 2018 66:0 10,838 53.9 10,838 53.9		11,984
1955 2021 66:2 10,921 53.6 10,921 53.6	5 12,549	12,549
1960 2027 67:0 11,159 55.1 11,159 55.1	13,799	13,799
1965 2032 67:0 11,151 55.0 11,151 55.0		14,645
1970 2037 67:0 11,173 55.1 8,470 41.8		11,782
1975 2042 67:0 11,204 55.3 8,563 42.3		12,597
1980 2047 67:0 11,227 55.4 8,634 42.6		13,409
1985 2052 67:0 11,242 55.4 8,650 42.6		14,179
1990 2057 67:0 11,246 55.4 8,555 42.1 1995 2062 67:0 11,251 55.5 8,442 41.6		14,791 15,396
2000 2067 67:0 11,257 55.5 8,332 41.1		16,015
2005 2072 67:0 11,258 55.5 8,231 40.6		16,680
2010 2077 67:0 11,246 55.5 8,188 40.4		17,508
2015 2082 67:0 11,233 55.4 8,160 40.2	25,367	18,426
2020 2087 67:0 11,226 55.4 8,064 39.8	3 26,783	19,238
Scaled medium earnings: (Career-average earnings for 2013 equal \$45,128 ^f)		
1948 2014 66:0 19,825 43.9 19,825 43.9	19,825	19,825
1949 2015 66:0 18,937 42.4 18,937 42.4	19,477	19,477
1950 2016 66:0 18,193 40.8 18,193 40.8		19,227
1951 2017 66:0 17,964 40.3 17,964 40.3		19,462
1952 2018 66:0 17,867 40.0 17,867 40.0) 19,756	19,756
1955 2021 66:2 18,014 39.8 18,014 39.8		20,698
1960 2027 67:0 18,393 40.9 18,393 40.9		22,744
1965 2032 67:0 18,381 40.8 18,381 40.8		24,140
1970 2037 67:0 18,420 40.9 13,964 31.0		19,424
1975 2042 67:0 18,471 41.0 14,118 31.3 1980 2047 67:0 18,505 41.1 14,230 31.6	3 27,173 5 28,740	20,769 22,101
1985 2052 67:0 18,527 41.1 14,256 31.6	5 28,740	23,368
1990 2057 67:0 18,536 41.1 14,102 31.3	32,047	24,380
1995 2062 67:0 18,542 41.1 13,913 30.8	33,815	25,373
2000 2067 67:0 18,555 41.2 13,733 30.5	35,663	26,396
2005 2072 67:0 18,554 41.2 13,565 30.1	37,601	27,490

Table C—Scheduled and Payable Benefits and Replacement Rates for Hypothetical Retired Workers^a in their First Year of Benefit Receipt at Normal Retirement Age (NRA)

			Present-Law Sc	heduled Benefits	Payable 1	Benefits	Purchasing Power of CPI-Indexed 2014	
Year of Y	ear attain	Age at		Percent of career-		Percent of career-		Payable
birth ^c		retirement		average earnings ^e	2014 dollars ^d	average earnings ^e	Scheduled Benefits	Benefits
2010	2077	67:0	\$18,534	41.1	\$13,494	29.9	\$39,631	\$28,854
2015	2082	67:0	18,513	41.1	13,448	29.9	41,807	30,367
2020	2087	67:0	18,502	41.1	13,290	29.5	44,141	31,707
Scaled hi	gh earnin	gs: (Career-	average earnings	s for 2013 equal \$72,2	206 ^f)			
1948	2014	66:0	26,301	36.4	26,301	36.4	26,301	26,301
1949	2015	66:0	25,105	35.2	25,105	35.2	25,821	25,821
1950	2016	66:0	24,113	33.8	24,113	33.8	25,483	25,483
1951	2017	66:0	23,813	33.4	23,813	33.4		25,798
1952	2018	66:0	23,683	33.1	23,683	33.1	26,188	26,188
1955	2021	66:2	23,853	32.9	23,853	32.9	27,409	27,409
1960	2027	67:0	24,368	33.8	24,368	33.8		30,132
1965	2032	67:0	24,348	33.8	24,348	33.8		31,978
1970	2037	67:0	24,405	33.9	18,500	25.7	33,948	25,735
1975	2042	67:0	24,470	33.9	18,703	25.9	35,997	27,513
1980	2047	67:0	24,517	34.0	18,853	26.1	38,078	29,281
1985	2052	67:0	24,547	34.0	18,888	26.2	40,236	30,960
1990	2057	67:0	24,560	34.1	18,684	25.9	42,461	32,302
1995	2062	67:0	24,567	34.1	18,434	25.6	44,803	33,618
2000	2067	67:0	24,585	34.1	18,196	25.2		34,974
2005	2072	67:0	24,584	34.1	17,974	24.9	49,820	36,424
2010	2077	67:0	24,557	34.1	17,879	24.8	52,511	38,232
2015	2082	67:0	24,529	34.0	17,817	24.7		40,234
2020	2087	67:0	24,513	34.0	17,608	24.4	58,483	42,009
Scaled m	aximum e	earnings: (C:	areer-average ea	rnings for 2013 equa	1 \$108.570 ^f)			
1948	2014	66:0	31,744	29.2	31,744	29.2	31,744	31,744
1949	2015	66:0	30,470	28.2	30,470	28.2	31,338	31,338
1950	2016	66:0	29,333	27.1	29,333	27.1	31,000	31,000
1951	2017	66:0	29,027	26.7	29,027	26.7		31,447
1952	2018	66:0	28,902	26.5	28,902	26.5		31,959
1955	2021	66:2	29,198	26.3	29,198	26.3	33,549	33,549
1960	2027	67:0	30,000	27.1	30,000	27.1	37,096	37,096
1965	2032	67:0	30,004	27.0	30,004	27.0		39,407
1970	2037	67:0	30,089	27.0	22,809	20.5		31,729
1975	2042	67:0	30,148	27.1	23,043	20.7	44,351	33,898
1980	2047	67:0	30,219	27.2	23,238	20.9	46,933	36,091
1985	2052	67:0	30,216	27.2	23,251	20.9	49,529	38,111
1990	2057	67:0	30,210	27.2	22,957	20.8		39,689
1995	2062	67:0	30,170	27.3	22,630	20.5		41,270
2000	2062	67:0	30,139	27.3	22,342	20.3		42,942
2005	2072	67:0	30,180	27.3	22,070	20.2		44,726
2003	2072	67:0	30,187	27.3 27.3	21,958	20.0 19.9	64,489	46,952
2010	2077	67:0 67:0	30,139	27.3 27.3	21,938	19.9		40,932 49,414
2015	2082	67:0 67:0	30,126	27.3 27.2	21,882 21,625	19.8 19.5	68,029 71,826	51,593
2020	2087	07:0	30,100	21.2	21,023	19.5	/1,820	31,393

^a The table uses 4 hypothetical "scaled" earnings levels and a hypothetical worker who earns the taxable maximum each year. See actuarial note 2013.3 at www.socialsecurity.gov/OACT/NOTES/ran3/an2013-3.html for more information.

b CPI-indexed dollar adjustment uses the adjusted CPI indexing series shown in table VI.G6 of the 2014 OASDI Trustees Report.

^c Born on January 2nd of year.

^d Wage-indexed dollar adjustment uses the National Average Wage Indexing series shown in table VI.G6 of the 2014 OASDI Trustees Report.

^e Computed using nominal dollars.

f Average of highest 35 years of wage-indexed earnings through the year prior to retirement. The value is for retirement in 2014. Thus, the annual earnings used for this average are wage-indexed to 2013.

Table D—Historical Benefits and Replacement Rates for Hypothetical Retired Workers^a in their First Year of Benefit Receipt (based on intermediate assumptions of the 2014 OASDI Trustees Report)

		Benefit Amoun			nts for Workers	Benefit Amounts for Workers		
	_	Retiring			g at 65		Retiring at 1	
	Year attain		Percent of career-		Percent of career-			Percent of career-
birth ^b	age 65	2014 dollars ^c	average earnings ^d	2014 dollars ^c	average earnings ^d	NRA	2014 dollars ^c	average earnings ^d
Scaled v	very low earnii	ngs:						
1875	1940	е	e	\$4,698	42.1	65:0	\$4,698	42.1
1880	1945	e	e	2,777	24.8	65:0	2,777	24.8
1885	1950	e	e	4,120	36.2	65:0	4,120	36.2
1890	1955	e	e	8,021	71.9	65:0	8,021	71.9
1895	1960	e	e	7,986	71.0	65:0	7,986	71.0
1900	1965	\$5,964	53.6	7,612	66.3	65:0	7,612	66.3
1905	1970	5,537	50.0	7,971	71.5	65:0	7,971	71.5
1910	1975	6,388	60.1	9,053	83.2	65:0	9,053	83.2
1915	1980	7,482	67.9	9,781	91.2	65:0	9,781	91.2
1920	1985	7,128	64.4	8,499	75.8	65:0	8,499	75.8
1925	1990	7,186	65.4	8,958	80.1	65:0	8,958	80.1
1930	1995	7,142	64.3	9,018	80.2	65:0	9,018	80.2
1935	2000	7,013	63.5	7,968	71.9	65:0	7,968	71.9
1940	2005	7,287	63.0	8,735	77.4	65:6	9,222	81.7
1945	2010	6,682	59.8	8,730	76.4	66:0	9,093	80.2
	ow earnings:							
1875	1940	e	e	5,990	29.8	65:0	5,990	29.8
1880	1945	e e	e e	5,046	25.0	65:0	5,046	25.0
1885	1950	e	e	6,584	32.0	65:0	6,584	32.0
1890	1955	e	e	10,133	50.4	65:0	10,133	50.4
1895	1960			9,387	46.3	65:0	9,387	46.3
1900	1965	7,217	36.1	9,029	43.7	65:0	9,029	43.7
1905	1970	6,740	33.8	9,484	47.3	65:0	9,484	47.3
1910	1975	8,028	41.9	11,709	59.8	65:0	11,709	59.8
1915	1980	9,597	48.4	12,881	66.7	65:0	12,881	66.7
1920 1925	1985 1990	10,361 9,448	52.0 47.8	12,346 11,748	61.1 58.4	65:0 65:0	12,346 11,748	61.1 58.4
1923	1995	9,376	46.9	11,748	58.4	65:0	11,748	58.4
1935	2000	9,186	46.2	10,436	52.3	65:0	10,436	52.3
1940	2005	9,534	45.8	11,419	56.2	65:6	12,065	59.4
1945	2010	8,742	43.5	11,424	55.5	66:0	11,897	58.3
Caalada								
1875	nedium earni r 1940	i gs:	e	10,610	23.7	65:0	10,610	23.7
1880	1945	e	e	7,291	16.3	65:0	7,291	16.3
1885	1950	e	e	8,607	18.9	65:0	8,607	18.9
1890	1955	e	e	13,151	29.4	65:0	13,151	29.4
1895	1960	e	e	13,030	28.9	65:0	13,030	28.9
1900	1965	10,783	24.2	13,297	28.9	65:0	13,297	28.9
1905	1970	10,338	23.4	14,392	32.3	65:0	14,392	32.3
1910	1975	12,553	29.5	17,797	40.9	65:0	17,797	40.9
1915	1980	15,515	35.3	21,121	49.4	65:0	21,121	49.4
1920	1985	15,571	35.3	18,570	41.5	65:0	18,570	41.5
1925	1990	15,626	35.6	19,444	43.5	65:0	19,444	43.5
1930	1995	15,410	34.7	19,451	43.2	65:0	19,451	43.2
1935	2000	15,133	34.3	17,213	38.8	65:0	17,213	38.8
1940 1945	2005 2010	15,721 14,395	34.0 32.2	18,827 18,821	41.7 41.2	65:6 66:0	19,876 19,614	44.0
1943	2010	14,393	32.2	10,021	41.2	00:0	19,014	43.2
	nigh earnings:	e	e	,		, <u>.</u> .		
1875	1940	e	e	12,568	17.6	65:0	12,568	17.6
1880	1945	e	e	9,004	12.6	65:0	9,004	12.6
1885	1950	e	e	10,465	14.3	65:0	10,465	14.3
1890 1895	1955 1960	e	e	16,751	24.0 24.6	65:0 65:0	16,751	24.0 24.6
1900	1965	12,243	19.7	16,393 15,868	24.0	65:0	16,393 15,868	24.0 24.7
1900	1903	11,352	19.7	16,752	28.3	65:0	16,752	28.3
1910	1975	14,029	25.9	20,897	37.4	65:0	20,897	37.4
1915	1980	18,223	33.0	25,974	48.0	65:0	25,974	48.0
1920	1985	18,642	32.7	22,453	38.7	65:0	22,453	38.7
	1700	10,042	32.7	22, 133	20.7	00.0	22, 133	36.7

Table D—Historical Benefits and Replacement Rates for Hypothetical Retired Workers^a in their First Year of Benefit Receipt

	Benefit Amounts for Worker			Benefit Amour	its for Workers	Benefit Amounts for Workers		
		Retiring	g at 62	Retirin	g at 65		Retiring at 1	NRA
Year of	Year attain	Wage-indexed	Percent of career-	Wage-indexed	Percent of career-		Wage-indexed	Percent of career-
birth ^b	age 65	2014 dollars ^c	average earnings ^d	2014 dollars ^c	average earnings ^d	NRA	2014 dollars ^c	average earnings ^d
1925	1990	\$19,262	32.5	\$24,085	39.7	65:0	\$24,085	39.7
1930	1995	19,559	30.7	24,801	38.3	65:0	24,801	38.3
1935	2000	19,645	29.4	22,380	33.2	65:0	22,380	33.2
1940	2005	20,758	28.4	24,850	34.8	65:6	26,244	36.8
1945	2010	19,101	26.7	24,951	34.1	66:0	25,994	35.8
Scaled r	naximum ear	nings:						
1875	1940	e e	e	19,341	16.4	65:0	19,341	16.4
1880	1945	e	e	11,989	10.1	65:0	11,989	10.1
1885	1950	e	e	11,697	9.7	65:0	11,697	9.7
1890	1955	e	e	16,751	15.0	65:0	16,751	15.0
1895	1960	e	e	16,673	16.1	65:0	16,673	16.1
1900	1965	12,243	13.1	15,868	16.5	65:0	15,868	16.5
1905	1970	11,352	13.6	17,229	20.3	65:0	17,229	20.3
1910	1975	14,029	19.4	21,537	28.7	65:0	21,537	28.7
1915	1980	18,969	27.9	27,806	40.6	65:0	27,806	40.6
1920	1985	19,135	29.9	23,991	34.7	65:0	23,991	34.7
1925	1990	20,239	30.0	26,148	35.7	65:0	26,148	35.7
1930	1995	20,956	27.8	27,306	33.5	65:0	27,306	33.5
1935	2000	21,512	25.9	25,129	28.6	65:0	25,129	28.6
1940	2005	23,243	24.5	28,570	29.3	65:6	30,164	31.0
1945	2010	22,121	22.2	29,518	28.0	66:0	31,000	29.3

^a The table uses 4 hypothetical "scaled" earnings levels and a hypothetical worker who earns the taxable maximum each year. See actuarial note 2013.3 at www.socialsecurity.gov/OACT/NOTES/ran3/an2013-3.html for more information.

^b Born on January 2nd of year.

^c Wage-indexed dollar adjustment uses the National Average Wage Indexing series shown in table VI.G6 of the 2014 OASDI Trustees Report.

^d Computed using nominal dollars.

^e Benefit at age 62 not available for these years of birth.