

## **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:

[http://www.socialsecurity.gov/OACT/NOTES/pdf\\_notes/note155.pdf](http://www.socialsecurity.gov/OACT/NOTES/pdf_notes/note155.pdf).

We base all calculations on the intermediate assumptions of the 2015 Old-Age and Survivors Insurance and Disability Insurance (OASDI) Trustees Report.

### **Social Security Benefits**

The Social Security benefit formula<sup>1</sup> 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 con-

verts 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 patterns<sup>2</sup> 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 1992-2011. 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 \$47,820 for 2015). 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 \$11,955, \$21,519, and \$76,512, respectively, for 2015). The steady maximum earner has earnings at or above the contribution and benefit base for

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

<sup>2</sup> Actuarial Note Number 2015.3 has more details on scaled-earnings patterns. See [www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf](http://www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf).

each year starting at age 22 through the year prior to retirement (or \$118,500 for 2015).

## 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 2015 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 retirement.<sup>3</sup> 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

<sup>3</sup> 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.

percent reduction in benefits, and those retiring at age 65 would have a  $13\frac{1}{3}$  percent reduction. Table D shows benefit amounts and replacement rates for retirement at 62,<sup>4</sup> 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 2034 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 2015 dollars.<sup>5</sup> 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.

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

<sup>5</sup> A CPI-indexed 2015 dollar adjustment uses the adjusted CPI indexing series in table VI.G6 of the 2015 Trustees Report. See: [www.socialsecurity.gov/OACT/TR/2015/index.html](http://www.socialsecurity.gov/OACT/TR/2015/index.html)

**Table A—Scheduled and Payable Benefits and Replacement Rates for Hypothetical Retired Workers<sup>a</sup> in their First Year of Benefit Receipt at Age 62**  
*(based on intermediate assumptions of the 2015 OASDI Trustees Report)*

Year of birth <sup>c</sup>	Year attain age 62	Present-Law Scheduled Benefits		Payable Benefits		Purchasing Power of Benefits in CPI-Indexed 2015 dollars <sup>b</sup>	
		Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Present-Law Scheduled Benefits	Payable Benefits
<b>Scaled very low earnings: (Career-average earnings for 2014 equal \$11,559<sup>f</sup>)</b>							
1949	2011	\$7,084	61.2	\$7,084	61.2	\$6,701	\$6,701
1950	2012	7,014	60.6	7,014	60.6	6,702	6,702
1951	2013	7,143	60.6	7,143	60.6	6,819	6,819
1952	2014	7,150	61.8	7,150	61.8	6,935	6,935
1953	2015	6,996	60.5	6,996	60.5	6,996	6,996
1955	2017	6,671	58.7	6,671	58.7	6,979	6,979
1960	2022	6,411	56.0	6,411	56.0	7,322	7,322
1965	2027	6,465	56.3	6,465	56.3	7,837	7,837
1970	2032	6,457	56.2	6,457	56.2	8,308	8,308
1975	2037	6,465	56.2	5,037	43.8	8,813	6,866
1980	2042	6,463	56.2	5,054	44.0	9,337	7,302
1985	2047	6,460	56.2	5,087	44.3	9,905	7,799
1990	2052	6,466	56.3	5,089	44.3	10,513	8,274
1995	2057	6,471	56.3	5,028	43.7	11,136	8,653
2000	2062	6,470	56.3	4,951	43.1	11,779	9,014
2005	2067	6,477	56.3	4,879	42.4	12,452	9,380
2010	2072	6,476	56.3	4,806	41.8	13,141	9,752
2015	2077	6,476	56.3	4,777	41.5	13,876	10,237
2020	2082	6,475	56.3	4,770	41.5	14,654	10,796
<b>Scaled low earnings: (Career-average earnings for 2014 equal \$20,806<sup>f</sup>)</b>							
1949	2011	9,254	44.4	9,254	44.4	8,754	8,754
1950	2012	9,180	44.0	9,180	44.0	8,770	8,770
1951	2013	9,344	44.0	9,344	44.0	8,920	8,920
1952	2014	9,348	44.9	9,348	44.9	9,067	9,067
1953	2015	9,144	44.0	9,144	44.0	9,144	9,144
1955	2017	8,734	42.7	8,734	42.7	9,138	9,138
1960	2022	8,388	40.7	8,388	40.7	9,580	9,580
1965	2027	8,455	40.9	8,455	40.9	10,249	10,249
1970	2032	8,447	40.8	8,447	40.8	10,868	10,868
1975	2037	8,452	40.9	6,585	31.9	11,521	8,976
1980	2042	8,451	40.9	6,609	32.0	12,209	9,548
1985	2047	8,450	40.9	6,654	32.2	12,956	10,202
1990	2052	8,453	40.9	6,652	32.2	13,743	10,816
1995	2057	8,459	40.9	6,573	31.8	14,558	11,312
2000	2062	8,460	40.9	6,474	31.3	15,402	11,786
2005	2067	8,468	40.9	6,379	30.8	16,280	12,264
2010	2072	8,468	40.9	6,284	30.4	17,182	12,751
2015	2077	8,467	40.9	6,246	30.2	18,144	13,385
2020	2082	8,466	40.9	6,237	30.1	19,160	14,116
<b>Scaled medium earnings: (Career-average earnings for 2014 equal \$46,235<sup>f</sup>)</b>							
1949	2011	15,253	32.9	15,253	32.9	14,429	14,429
1950	2012	15,118	32.6	15,118	32.6	14,444	14,444
1951	2013	15,398	32.7	15,398	32.7	14,699	14,699
1952	2014	15,394	33.2	15,394	33.2	14,931	14,931
1953	2015	15,072	32.6	15,072	32.6	15,072	15,072
1955	2017	14,385	31.6	14,385	31.6	15,049	15,049
1960	2022	13,806	30.1	13,806	30.1	15,769	15,769
1965	2027	13,923	30.3	13,923	30.3	16,876	16,876
1970	2032	13,909	30.3	13,909	30.3	17,896	17,896
1975	2037	13,923	30.3	10,847	23.6	18,980	14,787
1980	2042	13,916	30.3	10,883	23.7	20,104	15,722
1985	2047	13,913	30.3	10,956	23.9	21,333	16,798
1990	2052	13,922	30.3	10,957	23.8	22,636	17,815

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

*(based on intermediate assumptions of the 2015 OASDI Trustees Report)*

Year of birth <sup>c</sup>	Year attain age 62	Present-Law Scheduled Benefits		Payable Benefits		Purchasing Power of Benefits in CPI-Indexed 2015 dollars <sup>b</sup>	
		Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Present-Law Scheduled Benefits	Payable Benefits
1995	2057	\$13,931	30.3	\$10,825	23.5	\$23,975	\$18,630
2000	2062	13,933	30.3	10,662	23.2	25,365	19,411
2005	2067	13,944	30.3	10,505	22.8	26,809	20,196
2010	2072	13,945	30.3	10,349	22.5	28,297	21,000
2015	2077	13,943	30.3	10,286	22.4	29,879	22,042
2020	2082	13,941	30.3	10,271	22.3	31,553	23,246
<b>Scaled high earnings: (Career-average earnings for 2014 equal \$73,976<sup>f</sup>)</b>							
1949	2011	20,235	27.3	20,235	27.3	19,142	19,142
1950	2012	20,070	27.1	20,070	27.1	19,176	19,176
1951	2013	20,429	27.1	20,429	27.1	19,501	19,501
1952	2014	20,434	27.6	20,434	27.6	19,819	19,819
1953	2015	20,004	27.0	20,004	27.0	20,004	20,004
1955	2017	19,078	26.2	19,078	26.2	19,959	19,959
1960	2022	18,318	25.0	18,318	25.0	20,922	20,922
1965	2027	18,476	25.1	18,476	25.1	22,396	22,396
1970	2032	18,459	25.1	18,459	25.1	23,749	23,749
1975	2037	18,474	25.1	14,393	19.6	25,184	19,621
1980	2042	18,462	25.1	14,439	19.6	26,673	20,860
1985	2047	18,460	25.1	14,536	19.8	28,304	22,287
1990	2052	18,471	25.1	14,537	19.8	30,030	23,634
1995	2057	18,484	25.1	14,363	19.5	31,810	24,718
2000	2062	18,487	25.1	14,147	19.2	33,655	25,754
2005	2067	18,500	25.1	13,937	18.9	35,569	26,795
2010	2072	18,501	25.1	13,730	18.6	37,542	27,860
2015	2077	18,498	25.1	13,647	18.5	39,639	29,242
2020	2082	18,495	25.1	13,626	18.5	41,861	30,841
<b>Steady maximum earnings: (Career-average earnings for 2014 equal \$112,085<sup>f</sup>)</b>							
1949	2011	24,012	22.2	24,012	22.2	22,714	22,714
1950	2012	23,921	21.9	23,921	21.9	22,855	22,855
1951	2013	24,474	21.8	24,474	21.8	23,362	23,362
1952	2014	24,593	22.0	24,593	22.0	23,853	23,853
1953	2015	24,168	21.6	24,168	21.6	24,168	24,168
1955	2017	23,141	20.8	23,141	20.8	24,209	24,209
1960	2022	22,272	19.8	22,272	19.8	25,438	25,438
1965	2027	22,500	19.9	22,500	19.9	27,273	27,273
1970	2032	22,504	19.8	22,504	19.8	28,955	28,955
1975	2037	22,507	19.9	17,535	15.5	30,681	23,904
1980	2042	22,520	19.8	17,612	15.5	32,536	25,445
1985	2047	22,490	19.9	17,709	15.7	34,483	27,152
1990	2052	22,458	19.9	17,675	15.7	36,513	28,737
1995	2057	22,445	19.9	17,441	15.5	38,627	30,015
2000	2062	22,455	19.9	17,184	15.2	40,880	31,283
2005	2067	22,476	19.9	16,931	15.0	43,212	32,553
2010	2072	22,478	19.9	16,681	14.8	45,613	33,850
2015	2077	22,478	19.9	16,583	14.7	48,168	35,534
2020	2082	22,477	19.9	16,560	14.7	50,872	37,479

<sup>a</sup> The table uses 4 hypothetical “scaled” earnings levels and a hypothetical worker who earns the taxable maximum each year. See actuarial note 2015.3 at [www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf](http://www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf) for more information.

<sup>b</sup> CPI-indexed dollar adjustment uses the adjusted CPI indexing series shown in table VI.G6 of the 2015 OASDI Trustees Report.

<sup>c</sup> Born on January 2nd of year.

<sup>d</sup> Wage-indexed dollar adjustment uses the National Average Wage Indexing series shown in table VI.G6 of the 2015 OASDI Trustees Report.

<sup>e</sup> Computed using nominal dollars.

<sup>f</sup> Average of highest 35 years of wage-indexed earnings through the year prior to retirement. The value is for retirement in 2015. Thus, the annual earnings used for this average are wage-indexed to 2014.

**Table B—Scheduled and Payable Benefits and Replacement Rates for Hypothetical Retired Workers<sup>a</sup> in their First Year of Benefit Receipt at Age 65**  
*(based on intermediate assumptions of the 2015 OASDI Trustees Report)*

Year of birth <sup>c</sup>	Year attain age 65	Present-Law Scheduled Benefits		Payable Benefits		Purchasing Power of Benefits in CPI-Indexed 2015 dollars <sup>b</sup>	
		Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Present-Law Scheduled Benefits	Payable Benefits
<b>Scaled very low earnings: (Career-average earnings for 2014 equal \$11,572<sup>f</sup>)</b>							
1949	2014	\$8,740	75.4	\$8,740	75.4	\$8,477	\$8,477
1950	2015	8,496	73.4	8,496	73.4	8,496	8,496
1951	2016	8,198	72.3	8,198	72.3	8,389	8,389
1952	2017	8,170	71.8	8,170	71.8	8,547	8,547
1953	2018	7,976	70.0	7,976	70.0	8,521	8,521
1955	2020	7,866	68.7	7,866	68.7	8,709	8,709
1960	2025	7,667	66.6	7,667	66.6	9,084	9,084
1965	2030	7,736	67.3	7,736	67.3	9,719	9,719
1970	2035	7,737	67.2	6,061	52.6	10,308	8,076
1975	2040	7,747	67.3	6,040	52.5	10,932	8,524
1980	2045	7,733	67.2	6,074	52.8	11,579	9,095
1985	2050	7,735	67.2	6,098	53.0	12,287	9,688
1990	2055	7,749	67.3	6,058	52.6	13,038	10,193
1995	2060	7,759	67.4	5,973	51.9	13,812	10,634
2000	2065	7,766	67.4	5,889	51.1	14,611	11,079
2005	2070	7,778	67.5	5,803	50.4	15,445	11,523
2010	2075	7,775	67.5	5,742	49.8	16,301	12,038
2015	2080	7,774	67.5	5,733	49.8	17,213	12,695
2020	2085	7,769	67.5	5,698	49.5	18,177	13,331
<b>Scaled low earnings: (Career-average earnings for 2014 equal \$20,830<sup>f</sup>)</b>							
1949	2014	11,445	54.8	11,445	54.8	11,101	11,101
1950	2015	11,124	53.4	11,124	53.4	11,124	11,124
1951	2016	10,721	52.5	10,721	52.5	10,971	10,971
1952	2017	10,690	52.2	10,690	52.2	11,184	11,184
1953	2018	10,432	50.8	10,432	50.8	11,145	11,145
1955	2020	10,294	50.0	10,294	50.0	11,396	11,396
1960	2025	10,038	48.5	10,038	48.5	11,893	11,893
1965	2030	10,128	48.9	10,128	48.9	12,725	12,725
1970	2035	10,124	48.9	7,932	38.3	13,489	10,568
1975	2040	10,138	49.0	7,905	38.2	14,306	11,154
1980	2045	10,120	48.9	7,949	38.4	15,153	11,903
1985	2050	10,122	48.9	7,981	38.6	16,080	12,678
1990	2055	10,140	48.9	7,927	38.2	17,061	13,338
1995	2060	10,151	49.0	7,815	37.7	18,070	13,912
2000	2065	10,162	49.0	7,706	37.2	19,120	14,498
2005	2070	10,176	49.1	7,592	36.6	20,208	15,076
2010	2075	10,172	49.1	7,512	36.3	21,328	15,750
2015	2080	10,170	49.1	7,501	36.2	22,519	16,608
2020	2085	10,165	49.1	7,455	36.0	23,781	17,441
<b>Scaled medium earnings: (Career-average earnings for 2014 equal \$46,290<sup>f</sup>)</b>							
1949	2014	18,858	40.7	18,858	40.7	18,290	18,290
1950	2015	18,324	39.6	18,324	39.6	18,324	18,324
1951	2016	17,675	38.9	17,675	38.9	18,087	18,087
1952	2017	17,621	38.7	17,621	38.7	18,435	18,435
1953	2018	17,207	37.7	17,207	37.7	18,383	18,383
1955	2020	16,985	37.1	16,985	37.1	18,804	18,804
1960	2025	16,550	35.9	16,550	35.9	19,608	19,608
1965	2030	16,693	36.3	16,693	36.3	20,973	20,973
1970	2035	16,689	36.3	13,075	28.4	22,235	17,420
1975	2040	16,711	36.3	13,030	28.3	23,582	18,387
1980	2045	16,683	36.3	13,104	28.5	24,980	19,622
1985	2050	16,687	36.3	13,157	28.6	26,508	20,900
1990	2055	16,715	36.3	13,068	28.4	28,124	21,988

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

(based on intermediate assumptions of the 2015 OASDI Trustees Report)

Year of birth <sup>c</sup>	Year attain age 65	Present-Law Scheduled Benefits		Payable Benefits		Purchasing Power of Benefits in CPI-Indexed 2015 dollars <sup>b</sup>	
		Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Present-Law Scheduled Benefits	Payable Benefits
1995	2060	\$16,732	36.3	\$12,882	27.9	\$29,786	\$22,932
2000	2065	16,749	36.4	12,700	27.6	31,513	23,895
2005	2070	16,773	36.4	12,514	27.2	33,307	24,849
2010	2075	16,766	36.4	12,381	26.9	35,152	25,959
2015	2080	16,764	36.4	12,363	26.8	37,118	27,375
2020	2085	16,754	36.4	12,288	26.7	39,199	28,748
<b>Scaled high earnings: (Career-average earnings for 2014 equal \$74,063<sup>f</sup>)</b>							
1949	2014	25,002	33.7	25,002	33.7	24,250	24,250
1950	2015	24,288	32.8	24,288	32.8	24,288	24,288
1951	2016	23,430	32.3	23,430	32.3	23,976	23,976
1952	2017	23,358	32.1	23,358	32.1	24,437	24,437
1953	2018	22,801	31.3	22,801	31.3	24,359	24,359
1955	2020	22,491	30.7	22,491	30.7	24,900	24,900
1960	2025	21,915	29.8	21,915	29.8	25,965	25,965
1965	2030	22,113	30.0	22,113	30.0	27,782	27,782
1970	2035	22,113	30.0	17,324	23.5	29,461	23,081
1975	2040	22,141	30.1	17,263	23.5	31,243	24,360
1980	2045	22,100	30.0	17,360	23.6	33,093	25,995
1985	2050	22,104	30.0	17,428	23.7	35,114	27,686
1990	2055	22,142	30.1	17,311	23.5	37,255	29,126
1995	2060	22,166	30.1	17,065	23.2	39,459	30,379
2000	2065	22,189	30.1	16,825	22.8	41,748	31,656
2005	2070	22,219	30.1	16,577	22.5	44,122	32,918
2010	2075	22,211	30.1	16,403	22.2	46,569	34,391
2015	2080	22,207	30.1	16,378	22.2	49,171	36,264
2020	2085	22,195	30.1	16,277	22.1	51,927	38,083
<b>Steady maximum earnings: (Career-average earnings for 2014 equal \$112,085<sup>f</sup>)</b>							
1949	2014	30,180	27.0	30,180	27.0	29,272	29,272
1950	2015	29,424	26.3	29,424	26.3	29,424	29,424
1951	2016	28,443	25.8	28,443	25.8	29,105	29,105
1952	2017	28,388	25.6	28,388	25.6	29,699	29,699
1953	2018	27,753	24.9	27,753	24.9	29,650	29,650
1955	2020	27,420	24.5	27,420	24.5	30,356	30,356
1960	2025	26,775	23.7	26,775	23.7	31,723	31,723
1965	2030	27,052	23.8	27,052	23.8	33,988	33,988
1970	2035	27,077	23.8	21,213	18.6	36,075	28,262
1975	2040	27,086	23.9	21,119	18.6	38,221	29,801
1980	2045	27,058	23.8	21,254	18.7	40,516	31,826
1985	2050	27,032	23.8	21,313	18.8	42,941	33,857
1990	2055	27,019	23.9	21,124	18.7	45,461	35,542
1995	2060	27,013	24.0	20,797	18.5	48,088	37,022
2000	2065	27,044	24.0	20,506	18.2	50,883	38,583
2005	2070	27,085	24.0	20,207	17.9	53,784	40,126
2010	2075	27,078	24.0	19,997	17.7	56,774	41,927
2015	2080	27,076	24.0	19,969	17.7	59,952	44,215
2020	2085	27,064	24.0	19,848	17.6	63,318	46,437

<sup>a</sup> The table uses 4 hypothetical “scaled” earnings levels and a hypothetical worker who earns the taxable maximum each year. See actuarial note 2015.3 at [www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf](http://www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf) for more information.

<sup>b</sup> CPI-indexed dollar adjustment uses the adjusted CPI indexing series shown in table VI.G6 of the 2015 OASDI Trustees Report.

<sup>c</sup> Born on January 2nd of year.

<sup>d</sup> Wage-indexed dollar adjustment uses the National Average Wage Indexing series shown in table VI.G6 of the 2015 OASDI Trustees Report.

<sup>e</sup> Computed using nominal dollars.

<sup>f</sup> Average of highest 35 years of wage-indexed earnings through the year prior to retirement. The value is for retirement in 2015. Thus, the annual earnings used for this average are wage-indexed to 2014.

**Table C—Scheduled and Payable Benefits and Replacement Rates for Hypothetical Retired Workers<sup>a</sup> in their First Year of Benefit Receipt at Normal Retirement Age (NRA)**  
*(based on intermediate assumptions of the 2015 OASDI Trustees Report)*

Year of birth <sup>c</sup>	Year attain NRA	Age at retirement	Present-Law Scheduled Benefits		Payable Benefits		Purchasing Power of Benefits in CPI-Indexed 2014 dollars <sup>b</sup>	
			Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Present-Law Scheduled Benefits	Payable Benefits
<b>Scaled very low earnings: (Career-average earnings for 2014 equal \$11,572<sup>f</sup>)</b>								
1949	2015	66:0	\$9,216	79.6	\$9,216	79.6	\$9,216	\$9,216
1950	2016	66:0	8,666	76.4	8,666	76.4	8,868	8,868
1951	2017	66:0	8,615	75.7	8,615	75.7	9,013	9,013
1952	2018	66:0	8,577	75.2	8,577	75.2	9,163	9,163
1953	2019	66:0	8,384	73.4	8,384	73.4	9,128	9,128
1955	2021	66:2	8,427	73.1	8,427	73.1	9,441	9,441
1960	2027	67:0	8,650	75.2	8,650	75.2	10,485	10,485
1965	2032	67:0	8,720	75.8	8,720	75.8	11,219	11,219
1970	2037	67:0	8,726	75.8	6,798	59.1	11,895	9,267
1975	2042	67:0	8,730	75.9	6,828	59.4	12,613	9,864
1980	2047	67:0	8,713	75.7	6,861	59.6	13,360	10,520
1985	2052	67:0	8,722	75.8	6,865	59.7	14,181	11,161
1990	2057	67:0	8,741	75.9	6,793	59.0	15,044	11,690
1995	2062	67:0	8,754	76.0	6,699	58.2	15,936	12,195
2000	2067	67:0	8,769	76.1	6,606	57.3	16,859	12,700
2005	2072	67:0	8,782	76.3	6,517	56.6	17,820	13,224
2010	2077	67:0	8,777	76.2	6,475	56.2	18,808	13,875
2015	2082	67:0	8,775	76.2	6,465	56.1	19,860	14,632
2020	2087	67:0	8,766	76.2	6,402	55.6	20,973	15,316
<b>Scaled low earnings: (Career-average earnings for 2014 equal \$20,830<sup>f</sup>)</b>								
1949	2015	66:0	12,048	57.8	12,048	57.8	12,048	12,048
1950	2016	66:0	11,338	55.5	11,338	55.5	11,602	11,602
1951	2017	66:0	11,277	55.1	11,277	55.1	11,798	11,798
1952	2018	66:0	11,219	54.7	11,219	54.7	11,986	11,986
1953	2019	66:0	10,977	53.4	10,977	53.4	11,951	11,951
1955	2021	66:2	11,043	53.2	11,043	53.2	12,372	12,372
1960	2027	67:0	11,321	54.7	11,321	54.7	13,723	13,723
1965	2032	67:0	11,409	55.1	11,409	55.1	14,680	14,680
1970	2037	67:0	11,417	55.1	8,895	42.9	15,564	12,126
1975	2042	67:0	11,426	55.2	8,936	43.2	16,507	12,909
1980	2047	67:0	11,404	55.1	8,979	43.4	17,485	13,768
1985	2052	67:0	11,413	55.1	8,982	43.4	18,556	14,604
1990	2057	67:0	11,440	55.2	8,889	42.9	19,687	15,298
1995	2062	67:0	11,453	55.3	8,765	42.3	20,851	15,956
2000	2067	67:0	11,474	55.4	8,644	41.7	22,061	16,619
2005	2072	67:0	11,490	55.4	8,527	41.1	23,316	17,303
2010	2077	67:0	11,484	55.4	8,472	40.9	24,609	18,155
2015	2082	67:0	11,481	55.4	8,459	40.8	25,985	19,144
2020	2087	67:0	11,470	55.4	8,376	40.5	27,440	20,038
<b>Scaled medium earnings: (Career-average earnings for 2014 equal \$46,290<sup>f</sup>)</b>								
1949	2015	66:0	19,860	42.9	19,860	42.9	19,860	19,860
1950	2016	66:0	18,680	41.2	18,680	41.2	19,115	19,115
1951	2017	66:0	18,578	40.8	18,578	40.8	19,436	19,436
1952	2018	66:0	18,491	40.6	18,491	40.6	19,755	19,755
1953	2019	66:0	18,103	39.6	18,103	39.6	19,710	19,710
1955	2021	66:2	18,213	39.5	18,213	39.5	20,405	20,405
1960	2027	67:0	18,664	40.6	18,664	40.6	22,623	22,623
1965	2032	67:0	18,808	40.9	18,808	40.9	24,199	24,199
1970	2037	67:0	18,826	40.9	14,667	31.9	25,664	19,995
1975	2042	67:0	18,834	40.9	14,730	32.0	27,211	21,280
1980	2047	67:0	18,800	40.9	14,803	32.2	28,825	22,697
1985	2052	67:0	18,815	40.9	14,808	32.2	30,590	24,075
1990	2057	67:0	18,855	41.0	14,651	31.9	32,448	25,214

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

(based on intermediate assumptions of the 2015 OASDI Trustees Report)

Year of birth <sup>c</sup>	Year attain NRA	Age at retirement	Present-Law Scheduled Benefits		Payable Benefits		Purchasing Power of Benefits in CPI-Indexed 2014 dollars <sup>b</sup>	
			Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Wage-indexed 2015 dollars <sup>d</sup>	Percent of career-average earnings <sup>e</sup>	Present-Law Scheduled Benefits	Payable Benefits
1995	2062	67:0	\$18,878	41.0	\$14,447	31.4	\$34,368	\$26,300
2000	2067	67:0	18,914	41.1	14,248	31.0	36,363	27,393
2005	2072	67:0	18,939	41.1	14,055	30.5	38,432	28,521
2010	2077	67:0	18,928	41.1	13,964	30.3	40,561	29,923
2015	2082	67:0	18,923	41.1	13,941	30.3	42,828	31,553
2020	2087	67:0	18,905	41.1	13,805	30.0	45,229	33,028
<b>Scaled high earnings: (Career-average earnings for 2014 equal \$74,063<sup>f</sup>)</b>								
1949	2015	66:0	26,340	35.6	26,340	35.6	26,340	26,340
1950	2016	66:0	24,765	34.1	24,765	34.1	25,342	25,342
1951	2017	66:0	24,629	33.8	24,629	33.8	25,767	25,767
1952	2018	66:0	24,511	33.6	24,511	33.6	26,185	26,185
1953	2019	66:0	23,973	32.8	23,973	32.8	26,101	26,101
1955	2021	66:2	24,103	32.6	24,103	32.6	27,004	27,004
1960	2027	67:0	24,720	33.6	24,720	33.6	29,964	29,964
1965	2032	67:0	24,916	33.8	24,916	33.8	32,057	32,057
1970	2037	67:0	24,939	33.9	19,430	26.4	33,996	26,486
1975	2042	67:0	24,953	33.9	19,515	26.5	36,051	28,194
1980	2047	67:0	24,903	33.8	19,609	26.6	38,184	30,067
1985	2052	67:0	24,923	33.8	19,615	26.6	40,521	31,891
1990	2057	67:0	24,977	33.9	19,409	26.3	42,985	33,402
1995	2062	67:0	25,010	33.9	19,139	25.9	45,530	34,842
2000	2067	67:0	25,055	34.0	18,874	25.6	48,171	36,288
2005	2072	67:0	25,089	34.0	18,619	25.2	50,911	37,782
2010	2077	67:0	25,076	34.0	18,499	25.1	53,734	39,641
2015	2082	67:0	25,068	34.0	18,468	25.0	56,736	41,800
2020	2087	67:0	25,044	34.0	18,288	24.8	59,916	43,754
<b>Steady maximum earnings: (Career-average earnings for 2014 equal \$112,085<sup>f</sup>)</b>								
1949	2015	66:0	31,956	28.5	31,956	28.5	31,956	31,956
1950	2016	66:0	30,132	27.3	30,132	27.3	30,834	30,834
1951	2017	66:0	30,007	27.0	30,007	27.0	31,393	31,393
1952	2018	66:0	29,897	26.8	29,897	26.8	31,940	31,940
1953	2019	66:0	29,288	26.2	29,288	26.2	31,887	31,887
1955	2021	66:2	29,512	26.1	29,512	26.1	33,063	33,063
1960	2027	67:0	30,431	26.9	30,431	26.9	36,887	36,887
1965	2032	67:0	30,703	27.0	30,703	27.0	39,504	39,504
1970	2037	67:0	30,752	27.0	23,959	21.0	41,921	32,661
1975	2042	67:0	30,745	27.1	24,044	21.2	44,418	34,737
1980	2047	67:0	30,700	27.0	24,173	21.3	47,071	37,064
1985	2052	67:0	30,682	27.1	24,147	21.3	49,884	39,260
1990	2057	67:0	30,688	27.2	23,846	21.1	52,813	41,039
1995	2062	67:0	30,686	27.2	23,482	20.8	55,864	42,750
2000	2067	67:0	30,744	27.3	23,160	20.6	59,108	44,528
2005	2072	67:0	30,787	27.3	22,847	20.3	62,472	46,361
2010	2077	67:0	30,775	27.3	22,703	20.1	65,946	48,650
2015	2082	67:0	30,768	27.3	22,668	20.1	69,638	51,305
2020	2087	67:0	30,742	27.2	22,450	19.9	73,549	53,709

<sup>a</sup> The table uses 4 hypothetical “scaled” earnings levels and a hypothetical worker who earns the taxable maximum each year. See actuarial note 2015.3 at [www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf](http://www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf) for more information.

<sup>b</sup> CPI-indexed dollar adjustment uses the adjusted CPI indexing series shown in table VI.G6 of the 2015 OASDI Trustees Report.

<sup>c</sup> Born on January 2nd of year.

<sup>d</sup> Wage-indexed dollar adjustment uses the National Average Wage Indexing series shown in table VI.G6 of the 2015 OASDI Trustees Report.

<sup>e</sup> Computed using nominal dollars.

<sup>f</sup> Average of highest 35 years of wage-indexed earnings through the year prior to retirement. The value is for retirement in 2015. Thus, the annual earnings used for this average are wage-indexed to 2014.

**Table D—Historical Benefits and Replacement Rates for Hypothetical Retired Workers<sup>a</sup>  
in their First Year of Benefit Receipt**  
*(based on intermediate assumptions of the 2015 OASDI Trustees Report)*

Year of birth <sup>b</sup>	Year attain age 65	Benefit Amounts for Workers Retiring at 62		Benefit Amounts for Workers Retiring at 65		Benefit Amounts for Workers Retiring at NRA			
		Wage-indexed 2015 dollars <sup>c</sup>	Percent of career-average earnings <sup>d</sup>	Wage-indexed 2015 dollars <sup>c</sup>	Percent of career-average earnings <sup>d</sup>	NRA	Wage-indexed 2015 dollars <sup>c</sup>	Percent of career-average earnings <sup>d</sup>	
<b>Scaled very low earnings:</b>									
1875	1940	e	e	\$4,802	42.1	65:0	\$4,802	42.1	
1880	1945	e	e	2,839	24.8	65:0	2,839	24.8	
1885	1950	e	e	4,211	36.2	65:0	4,211	36.2	
1890	1955	e	e	8,198	71.9	65:0	8,198	71.9	
1895	1960	e	e	8,163	71.0	65:0	8,163	71.0	
1900	1965	\$6,095	53.6	7,781	66.3	65:0	7,781	66.3	
1905	1970	5,659	50.0	8,148	71.5	65:0	8,148	71.5	
1910	1975	6,529	60.1	9,253	83.2	65:0	9,253	83.2	
1915	1980	7,648	67.9	9,997	91.2	65:0	9,997	91.2	
1920	1985	7,286	64.4	8,687	75.8	65:0	8,687	75.8	
1925	1990	7,344	65.4	9,156	80.1	65:0	9,156	80.1	
1930	1995	7,300	64.3	9,217	80.2	65:0	9,217	80.2	
1935	2000	7,168	63.5	8,144	71.9	65:0	8,144	71.9	
1940	2005	7,448	63.0	8,928	77.4	65:6	9,426	80.3	
1945	2010	6,830	59.8	8,923	76.4	66:0	9,294	80.2	
<b>Scaled low earnings:</b>									
1875	1940	e	e	6,123	29.8	65:0	6,123	29.8	
1880	1945	e	e	5,157	25.0	65:0	5,157	25.0	
1885	1950	e	e	6,730	32.0	65:0	6,730	32.0	
1890	1955	e	e	10,357	50.4	65:0	10,357	50.4	
1895	1960	e	e	9,595	46.3	65:0	9,595	46.3	
1900	1965	7,377	36.1	9,228	43.7	65:0	9,228	43.7	
1905	1970	6,889	33.9	9,694	47.3	65:0	9,694	47.3	
1910	1975	8,205	41.9	11,968	59.8	65:0	11,968	59.8	
1915	1980	9,809	48.4	13,165	66.7	65:0	13,165	66.7	
1920	1985	10,590	52.0	12,618	61.1	65:0	12,618	61.1	
1925	1990	9,657	47.8	12,007	58.4	65:0	12,007	58.4	
1930	1995	9,583	46.9	12,080	58.4	65:0	12,080	58.4	
1935	2000	9,389	46.2	10,666	52.3	65:0	10,666	52.3	
1940	2005	9,745	45.8	11,671	56.2	65:6	12,325	58.3	
1945	2010	8,935	43.5	11,677	55.5	66:0	12,160	58.3	
<b>Scaled medium earnings:</b>									
1875	1940	e	e	10,845	23.7	65:0	10,845	23.7	
1880	1945	e	e	7,476	16.3	65:0	7,476	16.3	
1885	1950	e	e	8,816	18.9	65:0	8,816	18.9	
1890	1955	e	e	13,471	29.5	65:0	13,471	29.5	
1895	1960	e	e	13,318	28.9	65:0	13,318	28.9	
1900	1965	11,021	24.2	13,590	28.9	65:0	13,590	28.9	
1905	1970	10,567	23.4	14,710	32.3	65:0	14,710	32.3	
1910	1975	12,830	29.5	18,190	40.9	65:0	18,190	40.9	
1915	1980	15,858	35.3	21,588	49.4	65:0	21,588	49.4	
1920	1985	15,914	35.3	18,980	41.5	65:0	18,980	41.5	
1925	1990	15,971	35.6	19,874	43.5	65:0	19,874	43.5	
1930	1995	15,727	34.6	19,902	43.3	65:0	19,902	43.3	
1935	2000	15,448	34.2	17,593	38.8	65:0	17,593	38.8	
1940	2005	16,068	34.0	19,244	41.7	65:6	20,317	43.3	
1945	2010	14,713	32.2	19,250	41.2	66:0	20,060	43.3	
<b>Scaled high earnings:</b>									
1875	1940	e	e	12,925	17.7	65:0	12,925	17.7	
1880	1945	e	e	9,203	12.6	65:0	9,203	12.6	
1885	1950	e	e	10,733	14.4	65:0	10,733	14.4	
1890	1955	e	e	17,121	24.0	65:0	17,121	24.0	
1895	1960	e	e	16,755	24.6	65:0	16,755	24.6	
1900	1965	12,514	19.7	16,218	24.7	65:0	16,218	24.7	
1905	1970	11,603	19.5	17,122	28.4	65:0	17,122	28.4	
1910	1975	14,338	25.9	21,359	37.4	65:0	21,359	37.4	
1915	1980	18,626	33.0	26,548	48.0	65:0	26,548	48.0	
1920	1985	19,064	32.7	22,980	38.7	65:0	22,980	38.7	

**Table D—Historical Benefits and Replacement Rates for Hypothetical Retired Workers<sup>a</sup>  
in their First Year of Benefit Receipt**

*(based on intermediate assumptions of the 2015 OASDI Trustees Report)*

Year of birth <sup>b</sup>	Year attain age 65	Benefit Amounts for Workers Retiring at 62		Benefit Amounts for Workers Retiring at 65		NRA	Benefit Amounts for Workers Retiring at NRA	
		Wage-indexed 2015 dollars <sup>c</sup>	Percent of career-average earnings <sup>d</sup>	Wage-indexed 2015 dollars <sup>c</sup>	Percent of career-average earnings <sup>d</sup>		Wage-indexed 2015 dollars <sup>c</sup>	Percent of career-average earnings <sup>d</sup>
1925	1990	\$19,687	32.5	\$24,642	39.6	65:0	\$24,642	39.6
1930	1995	20,014	30.8	25,349	38.2	65:0	25,349	38.2
1935	2000	20,079	29.4	22,874	33.1	65:0	22,874	33.1
1940	2005	21,216	28.4	25,413	34.8	65:6	26,822	36.1
1945	2010	19,523	26.7	25,502	34.1	66:0	26,568	35.8
<b>Steady maximum earnings:</b>								
1875	1940	e	e	19,768	16.4	65:0	19,768	16.4
1880	1945	e	e	12,254	10.1	65:0	12,254	10.1
1885	1950	e	e	11,955	9.7	65:0	11,955	9.7
1890	1955	e	e	17,121	15.0	65:0	17,121	15.0
1895	1960	e	e	17,041	16.1	65:0	17,041	16.1
1900	1965	12,514	13.1	16,218	16.5	65:0	16,218	16.5
1905	1970	11,603	13.6	17,609	20.3	65:0	17,609	20.3
1910	1975	14,338	19.4	22,013	28.7	65:0	22,013	28.7
1915	1980	19,388	27.9	28,421	40.6	65:0	28,421	40.6
1920	1985	19,557	29.9	24,521	34.7	65:0	24,521	34.7
1925	1990	20,686	30.0	26,725	35.7	65:0	26,725	35.7
1930	1995	21,419	27.8	27,909	33.5	65:0	27,909	33.5
1935	2000	21,987	25.9	25,684	28.6	65:0	25,684	28.6
1940	2005	23,756	24.5	29,201	29.3	65:6	30,826	30.2
1945	2010	22,610	22.2	30,170	28.0	66:0	31,684	29.3

<sup>a</sup> The table uses 4 hypothetical “scaled” earnings levels and a hypothetical worker who earns the taxable maximum each year. See actuarial note 2015.3 at [www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf](http://www.socialsecurity.gov/OACT/NOTES/ran3/an2015-3.pdf) for more information.

<sup>b</sup> Born on January 2nd of year.

<sup>c</sup> Wage-indexed dollar adjustment uses the National Average Wage Indexing series shown in table VI.G6 of the 2015 OASDI Trustees Report.

<sup>d</sup> Computed using nominal dollars.

<sup>e</sup> Benefit at age 62 not available for these years of birth.