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## MAXIMUM PRIMARY INSURANCE AMOUNTS IN 1988

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### INTRODUCTION

Prior to the passage of the Social Security Amendments of 1972, each possible Primary Insurance Amount (PIA) was published in a PIA table. The highest PIA that could ever be awarded at any time, under the existing provisions of the law, was the one on the last line in the table.

The 1972 Amendments created a more complicated situation by providing for automatic adjustment of PIA's, based on changes in the Consumer Price Index (CPI) and average wages. The maximum possible PIA would increase each year, assuming that the CPI and/or average wages continued increasing. Further complication was added by subsequent amendments, particularly in 1977 with the transition to wage-indexed benefit computations.

Even though it is no longer possible to specify the maximum PIA that will ever be paid, it is possible to calculate the maximum PIA for a given set of circumstances at a particular time. For instance, the maximum PIA for someone retiring at age 65 in 1988 (assuming no period of disability) is \$838.60. This particular figure is commonly used as an example of a "maximum PIA" because it applies to someone retiring at 65, currently the age at which benefits can first be drawn without reduction for early retirement. When other sets of circumstances are considered, other maximum PIA's result. In this note we consider how the following factors affect the maximum PIA: (1) type of benefit (old-age, disability, or survivors); (2) last year of earnings; (3) year of disability onset, or year of death, if applicable; and (4) age.

### OLD-AGE BENEFITS

Table 1 presents the maximum PIA in 1988 for old-age beneficiaries by age, starting at 62 and ending with ages 92 and over (for males) or 89 and over (for females). Thirteen years, 1976 through 1988, are considered as the last year of earnings. Note, however, that earnings in 1988 may not be used in the computation of an old-age benefit until January 1989. The figures in this table do not consider the possible effects of the disability freeze provision. That provision would increase the theoretical maximum PIA, but it would only apply to workers with periods of disability.

The most striking feature of table 1 is that the largest possible PIA's occur for very old retirees with recent earnings. This results from the interaction of the following factors:<sup>1</sup>

1. The number of years of earnings which must be averaged in the benefit calculation decreases with increasing age at these ages, so that an aged retiree with a few recent years of maximum earnings does not have to use earnings from prior years, when the maximum earnings amount was lower.
2. Although the PIA table method of determining PIA's was generally replaced with a wage-indexing method, retirees born before 1917 are allowed to continue using the PIA table method. While the PIA table method generally produces higher benefits than the wage-indexing method, this is especially true for workers with steady maximum earnings up to advanced ages for the following reasons:
  - a. In the PIA table method, average monthly wage (AMW) replacement percentages are higher than the average indexed monthly earnings (AIME) replacement percentages used in the wage-indexing method, since the AIME percentages were designed to apply to a base of indexed earnings, which are generally higher than the unindexed earnings. The PIA table method applies these high percentages to all earnings, including any recent earnings at very high levels.
  - b. In the PIA table method, a year of recent earnings replaces a year of old earnings at its nominal dollar level, rather than an old year of indexed earnings.
  - c. Earnings after the year of attainment of age 60 do not get the benefit of indexing in the wage-indexing method.

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<sup>1</sup>For more information on benefit computations, see Actuarial Note No. 111: Computing a Social Security Benefit After the 1980 and 1981 Amendments by Steven F. McKay

**Table 1.—Maximum PIA in 1988 for old-age beneficiaries<sup>1</sup>, by age, sex, and last year of earnings, prior to application of December 1988 benefit increase**

Age attained in 1988		Last year of earnings												
Men	Women	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 <sup>2</sup>
62	62	\$659.20	\$683.50	\$707.50	\$736.30	\$766.40	\$797.50	\$814.00	\$822.80	\$831.50	\$840.10	\$848.90	\$858.40	\$868.10
63	63	682.50	708.10	733.40	763.40	794.50	817.70	826.20	835.40	844.20	852.90	862.40	872.70	883.70
64	64	678.90	704.60	729.90	760.00	788.70	796.80	805.20	814.10	822.60	831.90	842.30	853.50	865.00
65	65	677.30	703.10	728.80	759.20	770.00	777.80	785.90	794.80	804.40	814.80	826.20	838.60	851.30
66	66	686.30	712.70	738.50	753.70	762.00	769.80	777.80	787.40	798.20	809.60	822.30	835.70	849.70
67	67	692.30	718.90	729.00	742.80	750.10	757.70	766.90	777.40	789.40	802.20	816.10	830.90	846.50
68	68	694.30	705.10	715.20	726.10	733.20	742.70	753.50	766.40	780.40	795.30	811.70	829.10	847.10
69	69	712.40	723.60	733.30	742.80	751.50	763.40	776.70	792.30	809.30	827.20	846.90	867.70	889.40
70	70	753.40	763.90	774.80	800.80	800.80	810.10	826.90	846.20	867.10	889.40	913.90	939.50	966.00
71	71	770.70	810.30	850.20	850.20	850.20	850.20	854.70	877.70	902.60	928.90	957.50	987.90	1,018.70
72	72	772.40	825.60	858.90	900.00	942.40	987.90	1,038.20	1,092.90	1,145.30	1,195.40	1,245.90	1,298.10	1,349.10
73	73	787.30	835.60	868.00	910.10	952.90	1,002.70	1,051.80	1,107.80	1,161.20	1,214.10	1,264.90	1,317.60	1,369.90
74	74	798.90	847.10	880.30	920.00	962.70	1,015.50	1,067.80	1,124.50	1,178.80	1,238.10	1,284.40	1,338.30	1,390.50
75-78	75	814.20	856.50	889.30	930.00	978.20	1,029.30	1,086.10	1,143.10	1,199.10	1,251.10	1,305.20	1,359.40	1,412.90
79	76	833.10	865.00	900.00	942.40	990.30	1,044.90	1,103.70	1,163.00	1,216.00	1,270.40	1,326.30	1,382.30	1,436.70
80	77	840.90	877.20	910.10	955.20	1,007.90	1,063.40	1,122.50	1,181.00	1,235.20	1,291.40	1,349.10	1,406.40	1,463.10
81	78	853.10	889.30	922.50	970.40	1,024.80	1,083.80	1,141.40	1,199.10	1,254.50	1,313.90	1,374.60	1,434.90	1,488.10
82	79	861.80	900.00	937.50	987.90	1,042.80	1,101.40	1,161.20	1,219.80	1,277.40	1,338.30	1,401.50	1,461.90	1,514.60
83	80	877.20	914.70	952.90	1,005.30	1,058.60	1,120.70	1,178.80	1,238.90	1,301.60	1,368.10	1,430.30	1,488.10	1,539.30
84	81	891.90	930.00	970.40	1,022.20	1,079.00	1,139.30	1,199.10	1,263.30	1,331.40	1,396.90	1,459.00	1,513.40	1,565.70
85	82	904.90	947.50	985.20	1,040.90	1,097.50	1,159.20	1,223.30	1,291.40	1,361.20	1,425.60	1,484.10	1,540.40	1,593.20
86	83	922.50	960.30	1,002.70	1,056.70	1,116.10	1,182.50	1,251.10	1,320.90	1,390.50	1,453.50	1,511.80	1,569.40	1,621.00
87	84	935.00	978.20	1,018.20	1,074.80	1,141.40	1,210.40	1,279.20	1,352.60	1,419.20	1,481.20	1,543.20	1,598.90	1,652.60
88	85	952.90	992.80	1,036.10	1,099.60	1,169.00	1,238.90	1,308.80	1,381.10	1,449.30	1,511.80	1,574.30	1,631.50	1,678.60
89	86	964.90	1,010.70	1,058.60	1,126.90	1,195.40	1,266.80	1,336.70	1,411.20	1,481.20	1,546.80	1,608.30	1,659.40	1,704.10
90	87	982.70	1,033.90	1,086.10	1,155.10	1,223.30	1,293.20	1,368.10	1,446.10	1,516.10	1,584.40	1,637.30	1,686.50	1,725.90
91	88	1,005.30	1,061.00	1,116.10	1,182.50	1,247.50	1,322.70	1,401.50	1,482.60	1,558.10	1,614.00	1,666.20	1,709.70	1,747.20
92	89	1,036.10	1,092.90	1,141.40	1,204.90	1,273.70	1,357.70	1,442.90	1,527.20	1,590.70	1,643.30	1,690.00	1,731.30	1,764.10

<sup>1</sup> Assumes no prior period of disability.

<sup>2</sup> Although earnings in 1988 may not be used in the computation of an old age benefit until January 1989, this column shows maximum PIA's with 1988 earnings included.

The figures in table 1 overstate somewhat the difference in benefits between the PIA table method and the wage-indexing method because part of the credit for post-retirement earnings is reflected in a "delayed retirement credit" (DRC), rather than in the PIA. When the wage-indexing method of computing benefits was introduced, the DRC for workers affected by it was increased from its former level of 1 percent per year to 3 percent per year. For a worker retiring at age 70, the DRC is a maximum of 5 percent for a worker born in 1916 or earlier, while it is 15 percent for a worker born after 1916. A more subtle feature of table 1 is that, although for any given last year of earnings the maximum PIA generally increases with increasing age, it generally drops as the age increases from age 63 to age 67. Rather than being an anomaly, this is a result of using the wage-indexed method of computing PIA's and occurs because of the interaction of average wage and CPI changes for workers born after 1916. If average wage increases exceed CPI increases over a number of

years in the future (which is generally considered to be the normal situation), the maximum PIA would eventually decline or increase only slowly with increasing age.<sup>1</sup>

### DISABLED WORKER BENEFITS

Table 2 presents the maximum PIA in 1988 for disability beneficiaries for each fifth year of age from 20 to 55, and for ages 59 and over. Each of the 13 years from 1976 to 1988 is considered as a possible year of disability onset, with earnings assumed to cease in that year. As is true for old-age benefits, however, earnings in 1988 may not be used in the computation of a disability benefit until January 1989.

<sup>1</sup> For more information on the effects of the benefit computations see Actuarial Study No. 86: Effects of the Various Social Security Benefit Computation Procedures by Steven F. McKay and Bruce D. Schobel.

**Table 2.—Maximum PIA in 1988 for disability beneficiaries<sup>1</sup>, by age and year of disability onset, prior to application of December 1988 benefit increase**

Age at-tained in 1988	Year of disability onset and last year of earnings												
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 <sup>2</sup>
20	\$1,118.30	\$1,159.20	\$1,197.40	\$948.60	\$981.00	\$955.30	\$948.10	\$970.40	\$1,000.20	\$1,015.90	\$1,041.20	\$1,076.50	\$1,066.70
25	1,118.30	1,159.20	1,197.40	948.60	981.00	955.30	948.10	970.40	1,000.20	1,015.90	1,041.20	1,076.50	1,056.70
30	1,118.30	1,159.20	1,197.40	948.60	981.00	955.30	948.10	949.20	965.90	989.40	1,012.60	1,042.50	1,031.90
35	1,118.30	1,159.20	1,197.40	948.60	914.80	879.30	866.60	890.70	914.20	944.40	973.10	1,005.90	998.50
40	1,118.30	1,159.20	1,178.80	905.40	872.10	839.40	829.50	855.20	879.00	906.90	936.70	969.80	964.00
45	1,005.30	1,033.90	1,058.60	859.70	839.90	808.00	799.00	824.90	847.90	873.50	903.40	936.20	931.30
50	922.50	947.50	970.40	829.50	818.30	786.80	777.50	802.90	825.30	848.30	877.50	909.80	905.30
55	853.10	877.20	900.00	812.70	805.00	773.30	763.70	788.50	809.70	826.90	855.30	886.50	882.10
59--	798.90	835.60	858.90	803.60	795.40	763.40	753.50	777.40	798.20	814.80	842.30	872.70	868.10

<sup>1</sup> Assumes no prior period of disability.

<sup>2</sup> Although earnings in 1988 may not be used in the computation of a disability benefit before January 1989, this column shows maximum PIA's with 1988 earnings included.

The general pattern of figures in table 2 is that the largest PIA's occur for very young disabled workers with disability onset prior to 1979. Benefits for young disabled workers dropped very sharply in 1979, and have gradually increased since then along with increases in real earnings, but still have not reached the levels of young workers disabled before 1979. This pattern results from the interaction of two factors which parallel those for old-age beneficiaries:

1. The number of years of earnings which must be used in the benefit calculation decreases with decreasing age for disability beneficiaries, so that a young disabled worker with a few years of maximum earnings prior to disability onset does not have to use earnings from prior years, if any.
2. Workers with disability onset prior to 1979 use the PIA table method of computing a PIA, which leads to a higher maximum PIA, especially for workers with a short, recent earnings history.

### SURVIVOR BENEFITS

Table 3 presents the maximum PIA in 1988 for survivors of deceased workers for each fifth year of the worker's age (as if he were still alive) from 20 to 90. Each of the 13 years from 1976 through 1988 is considered as the year of death, with earnings assumed to cease in that year. In contrast to the examples for retirement and disability benefits, earnings prior to a worker's death in 1988 can be used in determining benefits prior to 1989.

The general pattern of figures in table 3 follows that for disabled workers at the younger ages and follows that for old-age beneficiaries at the older ages. The explanations for these results also parallel those for disabled worker and old-age beneficiaries.

**Table 3.—Maximum PIA in 1988 for survivor beneficiaries<sup>1</sup>, by age of worker and year of death, prior to application of December 1988 benefit increase**

Age at-tained in 1988	Year of disability onset and last year of earnings												
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 <sup>2</sup>
20	\$1,118.30	\$1,159.20	\$1,197.40	\$948.60	\$981.00	\$955.30	\$948.10	\$970.40	\$1,000.20	\$1,015.90	\$1,041.20	\$1,076.50	\$1,066.70
25	1,118.30	1,159.20	1,197.40	948.60	981.00	955.30	948.10	970.40	1,000.20	1,015.90	1,041.20	1,076.50	1,066.70
30	1,118.30	1,159.20	1,197.40	948.60	981.00	955.30	948.10	970.40	1,000.20	1,015.90	1,041.20	1,076.50	1,056.70
35	1,118.30	1,159.20	1,197.40	948.60	981.00	955.30	948.10	949.20	965.90	978.70	1,004.10	1,035.00	1,025.30
40	1,118.30	1,159.20	1,178.80	905.40	900.40	866.70	855.00	880.20	904.00	922.40	952.10	985.50	979.10
45	1,005.30	1,033.90	1,058.60	859.70	854.30	822.20	812.90	838.80	862.40	880.80	910.80	943.70	946.90
50	922.50	947.50	970.40	828.50	823.10	791.30	782.40	808.10	830.40	848.30	877.50	909.80	905.30
55	853.10	877.20	900.00	812.70	805.00	773.30	763.70	788.50	809.70	826.90	855.30	886.50	882.10
60	798.90	835.60	858.90	803.60	795.40	763.40	753.50	777.40	798.20	814.80	842.30	872.70	868.10
65	798.90	835.60	858.90	803.60	795.40	763.40	753.50	777.40	798.20	814.80	826.20	838.60	851.30
70	798.90	835.60	858.90	803.60	795.40	810.10	826.90	846.20	867.10	889.40	913.90	939.50	966.00
75	814.20	856.50	889.30	930.00	978.20	1,029.30	1,086.10	1,143.10	1,199.10	1,251.10	1,305.20	1,359.40	1,412.90
80	877.20	914.70	952.90	1,005.30	1,058.60	1,120.70	1,178.80	1,238.90	1,301.60	1,368.10	1,430.30	1,488.10	1,539.30
85	952.90	992.80	1,036.10	1,099.60	1,169.00	1,238.90	1,308.80	1,381.10	1,449.30	1,511.80	1,574.30	1,631.50	1,678.60
90	1,036.10	1,092.90	1,141.40	1,204.90	1,273.70	1,357.70	1,442.90	1,527.20	1,590.70	1,643.30	1,690.00	1,731.30	1,764.10

<sup>1</sup> Assumes no prior period of disability.

<sup>2</sup> Theoretical age that would be attained in year if death had not occurred; tabulated in this way to facilitate comparisons with tables 1 and 2.

## ACTUAL MAXIMUM PIA'S

Table 4 presents the number of actual workers with a PIA of \$1,000 or more as of December 1987, by category of beneficiary. The figures in this table represent actual data based on benefits paid to current beneficiaries, in contrast to the theoretical maximum amounts shown in tables 1 through 3. An undetermined number of PIA's for retired and deceased workers in table 4 are based on computations involving a disability exclusion computation, producing PIA's greater than those shown in tables 1 and 3. Some disabled workers became eligible for recomputations using earnings for years after the year of onset of disability, producing PIA's greater than those shown in table 2.

As indicated in table 4, the number of retired workers trails off quickly as the PIA level increases; only 334 workers have a PIA over \$1,600. The table shows 187 disabled workers with a PIA greater than \$1,200, while the highest possible PIA shown in table 2 is \$1,197.40. The number of survivors of deceased workers by PIA generally follows the same pattern as for retired workers. In all, only about 2,000 retired workers, or about .009 percent of all retired workers receiving benefits, have a PIA over \$1,500.

**Table 4.—Number of workers with PIA's of \$1,000 or more, by size of PIA, December 1987<sup>1</sup>**

PIA interval	Retired	Disabled	Deceased <sup>2</sup>	Total
\$1000.00-\$1024.90 .....	51,646	2,003	6,770	60,419
1025.00-1049.90 .....	42,515	1,292	5,389	49,196
1050.00-1074.90 .....	33,016	949	3,909	37,874
1075.00-1099.90 .....	27,949	813	3,523	32,285
1100.00-1124.90 .....	25,230	640	2,931	28,801
1125.00-1149.90 .....	23,285	293	2,401	25,979
1150.00-1174.90 .....	19,709	290	1,849	21,848
1175.00-1199.90 .....	30,396	150	1,943	32,489
1200.00-1224.90 .....	21,167	37	1,364	22,568
1225.00-1249.90 .....	17,577	31	990	18,598
1250.00-1274.90 .....	16,728	33	1,009	17,770
1275.00-1299.90 .....	4,731	19	430	5,180
1300.00-1324.90 .....	4,030	17	442	4,489
1325.00-1349.90 .....	2,638	11	273	2,922
1350.00-1374.90 .....	2,200	10	349	2,559
1375.00-1399.90 .....	1,693	4	211	1,908
1400.00-1424.90 .....	850	4	119	973
1425.00-1449.90 .....	1,137	2	152	1,291
1450.00-1474.90 .....	766	5	82	853
1475.00-1499.90 .....	693	3	72	768
1500.00-1524.90 .....	522	1	60	583
1525.00-1549.90 .....	409	2	76	487
1550.00-1574.90 .....	184	3	33	220
1575.00-1599.90 .....	534	2	68	604
1600.00-1624.90 .....	170	1	13	184
1625.00-1649.90 .....	158	1	18	177
1650.00 and over .....	6	1	1	8
Total.....	329,939	6,617	34,477	371,033

<sup>1</sup> Based on unedited data; some figures may be overstated slightly. In particular, amounts greater than the maximum PIA's shown in table 2 have not been verified.

<sup>2</sup> Represents number of deceased workers with beneficiaries receiving benefits in December 1987.