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# Calculations of Maximum Earner's PIA (Age 65 in 1998)

by Richard G. Schreitmueller

**Editor's Note:** Following is a detailed calculation of the PIA for maximum earners who retire in January 1998. It goes through six steps, including each year's COLA and rounding. Mr. Schreitmueller says he has had favorable comments on this presentation from nonactuaries, who tell him they finally understand how indexing works.

STEP ONE— EMPLOYEE EARNINGS HISTORY		STEP TWO—INDEXED EARNINGS WORKERS ELIGIBLE IN 1995		
Year	Earnings	Wage Series	Wage Index	Indexed Earnings
1954	\$ 3,600	\$3,155.64	7.33	\$26,390.09
1955	4,200	3,301.44	7.01	29,428.74*
1956	4,200	3,532.36	6.55	27,504.90
1957	4,200	3,641.72	6.35	26,678.94
1958	4,200	3,673.80	6.30	26,445.97
1959	4,800	3,855.80	6.00	28,797.35*
1960	4,800	4,007.12	5.77	27,709.88*
1961	4,800	4,086.76	5.66	27,169.89
1962	4,800	4,291.40	5.39	25,874.26
1963	4,800	4,396.64	5.26	25,254.93
1964	4,800	4,576.32	5.05	24,263.34
1965	4,800	4,658.72	4.97	23,834.19
1966	6,600	4,938.36	4.68	30,916.26*
1967	6,600	5,213.44	4.44	29,285.01*
1968	7,800	5,571.76	4.15	32,383.81*
1969	7,800	5,893.76	3.92	30,614.55*
1970	7,800	6,186.24	3.74	29,167.12*
1971	7,800	6,497.08	3.56	27,771.68*
1972	9,000	7,133.80	3.24	29,184.17*
1973	10,800	7,580.16	3.05	32,958.78*
1974	13,200	8,030.76	2.88	38,022.71*
1975	14,100	8,630.92	2.68	37,790.95*
1976	15,300	9,226.48	2.51	38,360.23*
1977	16,500	9,779.44	2.37	39,029.75*
1978	17,700	10,556.03	2.19	38,788.09*
1979	22,900	11,479.46	2.02	46,146.61*
1980	25,900	12,513.46	1.85	47,879.34*
1981	29,700	13,773.10	1.68	49,882.76*
1982	32,400	14,531.34	1.59	51,578.07*
1983	35,700	15,239.24	1.52	54,191.44*
1984	37,800	16,135.07	1.43	54,193.44*
1985	39,600	16,822.51	1.38	54,454.05*
1986	42,000	17,321.82	1.34	56,089.50*
1987	43,800	18,426.51	1.26	54,986.59*
1988	45,000	19,334.04	1.20	53,841.32*
1989	48,000	20,099.55	1.15	55,243.43*
1990	51,300	21,027.98	1.10	56,434.62*
1991	53,400	21,811.60	1.06	56,634.29*
1992	55,500	22,935.42	1.01	55,977.31*
1993	57,600	23,132.67	1.00	57,600.00*
1994	60,600	N/A	1.00	60,600.00*
1995	61,200	N/A	1.00	61,200.00*
1996	62,700	N/A	1.00	62,700.00*
1997	65,400	N/A	1.00	65,400.00*

**STEP 3—AVERAGE INDEXED MONTHLY EARNINGS (AIME)**

(a) Identify 35 years with highest indexed earnings. These are marked by \* in Step 2.

(b) Calculate average indexed monthly earnings:

- (1) Total of highest 35 earnings is \$1,575,241.83.
- (2) Divide by (35 × 12). Result is \$3,750.58.
- (3) Drop cents. Result is AIME of \$3,750.

Note: This example omits earnings before age 21.

**STEP FOUR—PRIMARY INSURANCE AMOUNT (PIA) AT AGE 62**

(a) Enter AIME into PIA formula. Use bend points for 1995, the year of attained age 62:

90% of first \$426:	\$383.40
32% of next \$2,141:	685.12
15% of remaining \$1,183:	177.45
<b>Total</b>	<b>\$1,245.97</b>

(b) Round down to \$0.10 multiple. PIA is \$1,245.90.

**STEP FIVE—COLAS TO AGE 65**

	Age 62 PIA:	\$1,245.90
(a) Dec. 1995 COLA is 2.6%	× 1.026	
Round down to \$0.10	Age 63 PIA:	\$1,278.20
(b) Dec. 1996 COLA is 2.9%	× 1.029	
Round down to \$0.10	Age 64 PIA:	\$1,315.20
(c) Dec. 1997 COLA is 2.1%	× 1.021	
Round down to \$0.10	Age 65 PIA:	\$1,342.80

**STEP SIX—MONTHLY BENEFIT PAYABLE AT 65**

(a) Percentage of PIA paid to worker	100.00%
(b) Monthly benefit before adjustment	\$1,342.80
(c) Drop cents to get benefit payable	\$1,342.00

Note: Before dropping cents, the benefit often is reduced for Medicare premiums and excess earnings.

*Richard G. Schreitmueller, FSA, prepared the original report from which this article is derived when he was Principal and Director, Regulatory and Legislative Services, Aon Consulting in Baltimore, Maryland. He is now a consulting actuary in Kensington, Maryland.*