Appendix D: Computing a Retired-Worker Benefit

Overview

This section provides instructions and a worksheet for computing a retired-worker benefit. The worksheet can be used for persons born in 1932 through 1945—that is, those who attained the age of 62 in 2007 or earlier and were under the age of 75 at the end of 2007. The worksheet assumes that the worker had no prior period of entitlement to disability benefits and also did not work after becoming entitled to retired-worker benefits.

The worksheet describes the various steps used in computing a benefit. The steps are based on the following Social Security program goals.

- *To provide a benefit based on lifetime earnings*. Benefits are related to earnings over a period of time that the worker could be expected to have worked in covered employment—from age 22 through age 61. The years of earnings considered are termed *computation years*. The worker's 5 lowest earnings years, including years of no earnings at all, are not considered in the computation. They are termed the *drop-out years*.
- *To index lifetime earnings*. Earnings used in the computation are not the actual covered earnings but an amount for each year that reflects earnings increases in average wage levels after the year the earnings were paid. This procedure is termed *wage indexing*. Currently, earnings are generally indexed to wage levels in the year the worker turns age 60. For example, for a person attaining the age of 62 in 2007, actual earnings in 1985 of $20,000 are indexed to $45,804.50, on the basis of 2005 wage levels. Earnings after age 60 are included at their actual (nominal) value.
- *To replace a portion of the indexed earnings*. Indexed earnings are averaged over the number of computation years to calculate the average indexed monthly earnings (AIME). A benefit formula is applied to the AIME to produce the *primary insurance amount* (PIA), the amount payable to a worker who retires at the full retirement age (FRA). The benefit formula is weighted to provide a higher replacement of earnings for lower-wage workers. The formula for persons aged 62 in 2007 is 90 percent of the first $680 of AIME; plus 32 percent of the next $3,420; plus 15 percent of the AIME over $4,100.
- *To permit early retirement*. Persons can retire as early as age 62, but the monthly benefit is reduced. The reduction is 5/9 of 1 percent for each of the first 36 months of entitlement immediately preceding the age at which 100 percent of PIA is payable (66 in 2007 but scheduled to increase to age 67 by 2022), plus 5/12 of 1 percent for each of up to 24 earlier months. For a person aged 62 in 2007, the maximum reduction is 25 percent if the individual is entitled to benefits for all 48 months between ages 62 and 66.
- *To provide for price indexing after the age of 62*. Benefits are adjusted annually in December to reflect increases in the consumer price index (CPI-W). The benefit increase in 2006 was 3.3 percent. These cost-of-living adjustments are applied to the benefit for each year after the person attained the age of 62—even if the person was not actually receiving benefits.
- *To give credit for earnings after age 61*. Earnings after the age of 61 (which are not indexed) can be substituted for earnings in earlier years if they result in a higher benefit. In addition, persons who do not receive benefits between the FRA and age 69 may receive increased benefits as a result of the delayed retirement credit (DRC) provision. The benefit is increased by a specified percentage for each month a benefit was not received. (See Table 2.A20 for percentage increases.)

Clarifying the Worksheet Procedure

Step 1 - Determining the Number of Computation Years

For persons who attain age 62 before 1991, the number of years used in the benefit computation equals the number of years after 1950 up to the year of attainment of age 62, minus 5 years. For workers who attain age 62 in 1991 or later, the number of computation years is 35.

Step 2 - Wage Indexing of Earnings

The following description and examples are provided for persons who wish to compute the index factors and indexed earnings. The indexing year is the second year before attainment of the age of 62. However, beneficiaries born on January 1 are deemed to have attained age 62 in the prior year, and consequently, the applicable indexing year, factors, and bend points are those for that year.

The average wage for the indexing year is divided by the average wage in each prior year to obtain the factor for each prior year. For example, a person attains age 62 in 2007. The indexing year is 2005. The average annual wage for 2005 was $36,952.94. The average annual wage for 1990 was $21,027.98. The amount, $36,952.94 divided by $21,027.98, yields a factor of 1.7573224.

The worker's actual earnings covered under Social Security in that year, up to the maximum earnings creditable, are multiplied by the indexing factor to obtain the indexed earnings (see Worksheet 1). For example, actual covered earnings of $10,000 in 1990, multiplied by 1.7573224, result in indexed earnings of $17,573.22; actual earnings of $51,300 (the maximum creditable) result in indexed earnings of $90,150.64.

Step 3 - Computing the Average Indexed Monthly Earnings (AIME)

After the earnings in each year have been indexed, they are used in computing average indexed monthly earnings. The years of highest indexed earnings corresponding to the number of computation years are selected and totaled. This total is then divided by the number of months in the computation years. The result, rounded to the nearest lower dollar, is the average indexed monthly earnings.

For example, for a person attaining age 62 in 2007, the highest 35 years of indexed earnings are used. If the sum of these earnings equals $400,000, the AIME is $952 ($400,000 divided by 420 = $952.38, rounded to $952).

Step 4 - Computing the Primary Insurance Amount (PIA)

The PIA, the amount from which all Social Security benefits payable on a worker's earnings record are based, is computed by applying a formula to the AIME. The formula consists of brackets in which three percentages are applied to amounts of AIME. The dollar amounts defining the brackets are called *bend points*, and the bend points are different for each calendar year of attainment of age 62. The PIA is rounded to the nearest lower 10 cents.

For retired workers who attained age 62 in 2007, the bend points are $680 and $4,100. Thus the formula is 90 percent of the first $680 of AIME; plus 32 percent of the next $3,420 of AIME; plus 15 percent of AIME above $4,100. The following are examples of PIA computations for such workers with different AIME amounts.

Example 1 - AIME of $300
PIA is $270
Based on: 90 percent of $300

Example 2 - AIME of $952
PIA is $699.04 rounded to $699.00
Based on: 90 percent of $680 ($612.00); plus
32 percent of $272 ($87.04)

Example 3 - AIME of $4,500
PIA is $1,766.40
Based on: 90 percent of $680 ($612.00); plus
32 percent of $3,420 ($1,094.40); plus
15 percent of $400 ($60)

The above calculations are applicable to workers who attain the age of 62 in 2007. For workers who attained age 62 in prior years, the bend points will be different, and the PIA must be increased to reflect cost-of-living adjustments between the year of attainment of age 62 and 2007. Worksheet 2 shows cost-of-living increase factors for 1979 through 2006. After the PIA is calculated for the year of attainment of age 62, cost-of-living increases are applied for each year through 2006. The result is the current 2007 PIA.

For example, a worker who attained age 62 in 2004 would receive cost-of-living adjustments for the years 2004–2006. The adjustments are cumulative, with each step rounded to the next lower dime. If the PIA at age 62 was $500, the cost-of-living adjustments would be:

2004: $500 multiplied by 1.027 = $513.50

2005: $513.50 multiplied by 1.041 = $534.50

2006: $534.50 multiplied by 1.033 = $552.10

$552.10 would be the PIA effective December 2006.

Step 5 - Computation of the Monthly Benefit

The full PIA is payable to a worker who retires at the full retirement age (FRA). Beginning in the year 2000, the FRA, scheduled to be gradually raised to age 67 for workers attaining age 62 in 2022, began to be phased in. Workers can still retire as early as age 62, but the monthly benefit is reduced by 5/9 of 1 percent for each of the first 36 months of entitlement immediately preceding the full retirement age plus 5/12 of 1 percent for each of up to 24 earlier months. Workers attaining the age of 62 in 2007 have their benefits computed based on the full retirement age of 66. See Table 2.A17.1 to determine the FRA based on the year of birth as well as the reduction factors. For individuals electing benefits at exactly age 62 in 2005, the maximum reduction is 25 percent.

For example, in 2007 a worker with a PIA of $500 would receive $375 at the age of 62. The PIA is reduced by $124.99, reflecting a reduction rate of 5/9 of 1 percent for each of 36 months and a rate of 5/12 of 1 percent for each of 12 months for a total reduction of 25 percent. After reduction of the PIA by $124.99, the benefit amount is rounded down to the nearest lower dollar.

Instructions for computing a retired-worker benefit (only for workers attaining age 62 in years 1994–2007)

STEP 1.—Determining the Number of Computation Years		
1	Year of birth. (If your birthday is January 1, enter prior year.)	
2	Age "62" has been entered.	62
3	Add lines 1 and 2 to obtain year of attainment of age 62 (year of eligibility).	
4	Year of attainment of age 22. If 1951 or earlier, enter 1951 (If your birthday is January 1, enter prior year.)	
5	Subtract line 4 from line 3 (elapsed years).	
6	"5" (drop-out years) has been entered.	5
7	Subtract line 6 from line 5 (computation years—maximum 35).	
STEP 2.—Indexing of Earnings (Use Worksheet 1 for Steps 2 and 3.)		
8	Enter in column 2 your earnings in each year 1951 through 2006. If none, enter "0."	
9	Column 3 contains the maximum earnings creditable under Social Security for each year.	
10	Enter in column 4 the lower amount from columns 2 or 3 for each year.	
11	Enter in column 5 the indexing factors applicable to the year you attained age 62 (line 3) from Table 2.A8. (This table contains the indexing factors for persons attaining age 62 during the period 1994–2007.)	
12	Multiply column 4 by column 5 and enter results in column 6 in dollars and cents. These are your indexed earnings.	
STEP 3.—Computing the Average Indexed Monthly Earnings (AIME)		
13	Enter the number of computation years from line 7.	
14	Place an "X" in column 7 next to the highest indexed earnings corresponding with the number of computation years from line 13.	
15	Add all individual indexed earnings marked with an "X."	
16	Multiply line 13 (computation years) by 12 to obtain the number of months in the computation period.	
17	Divide line 15 by line 16.	
18	Round the result in line 17 to the next lower dollar. This is your average indexed monthly earnings (AIME).	
STEP 4.—Computing the Primary Insurance Amount (PIA) (Use Worksheet 2 for Step 4.)		
19	Enter first bend point from Worksheet 2 based on year of attainment of age 62, or prior year if birthday is January 1.	
20	Enter second bend point from Worksheet 2.	
21	If your AIME (obtained in line 18) is equal to or less than line 19, complete lines 22–24; if greater than line 19 but less than or equal to line 20, complete lines 25–30; if greater than line 20, complete lines 31–37.	
22	Enter your AIME from line 18.	
23	"0.9" has been entered. If you receive a pension on the basis of noncovered employment, see Table 2.A11.1.	0.9
24	Multiply line 22 by line 23, and round to next lower dime to obtain your PIA at age 62. Continue with line 38.	
25	Enter your AIME from line 18.	
26	Multiply line 19 by 0.9. If you receive a pension on the basis of noncovered employment, see Table 2.A11.1.	
27	Subtract line 19 from line 25.	
28	"0.32" has been entered.	0.32
29	Multiply line 27 by line 28.	
30	Add lines 26 and 29, and round to next lower dime to obtain your PIA at age 62. Continue with line 38.	
31	Enter your AIME from line 18.	
32	Multiply line 19 by 0.9. If you receive a pension on the basis of noncovered employment, see Table 2.A11.1.	
33	Subtract line 19 from line 20 and multiply by 0.32.	
34	Subtract line 20 from line 31.	
35	"0.15" has been entered.	0.15
36	Multiply line 34 by line 35.	
37	Add lines 32, 33, and 36, and round to the next lower dime to obtain your PIA at age 62. Continue with line 38.	

(Continued)

Instructions for computing a retired-worker benefit (only for workers attaining age 62 in years 1994–2007)—Continued

38	If you attained age 62 in 2007, skip to line 44. Otherwise you will need to adjust your PIA to reflect cost-of-living adjustments (COLAs) from the year you attained age 62 through 2006 by using lines 39–43 and Worksheet 2.	
39	Enter year of attainment of age 62 from line 3.	
40	Place an "X" corresponding to the year you attained age 62 in column 5, Worksheet 2.	
41	Place an "X" in column 5 (Worksheet 2) next to each subsequent year through 2006.	
42	Enter your PIA at age 62 from either line 24, 30, or 37—here and in the first row of column 6, Worksheet 2.	
43	Beginning with first year marked, multiply your PIA at age 62 by the corresponding factor (column 4), round to the next lower dime, and enter in column 6. The resulting PIA is then multiplied by the next factor and is again rounded to the next lower dime. Continue this process through 2006. Enter this last figure, which is your current PIA.	
STEP 5.—Computing the Monthly Benefit		
44	Enter your current PIA from either line 24, 30, 37, or 43.	
45	Using Table 2.A17.1, determine your full retirement age and enter here.	
46	If you retired at your full retirement age, round PIA from line 44 to the next lower dollar to obtain your monthly benefit.	
47	If you retired before the full retirement age, enter your age at retirement including year and months.	
48	Subtract line 47 from line 45, and convert the result to months to determine the total number of reduction months.	
49	If line 48 is greater than 36, subtract 36 and enter the number here.	
50	"0.0055556" (the decimal equivalent of 5/9 of 1 percent—the monthly reduction factor for the first 36 months) has been entered.	0.0055556
51	"0.0041667" (the decimal equivalent of 5/12 of 1 percent—the monthly reduction factor for months above 36) has been entered.	0.0041667
52	Multiply line 48 (but not more than 36) by line 50 to obtain the percent reduction for the first 36 months.	
53	Multiply line 49 by line 51 to obtain the percent reduction for months in excess of 36.	
54	Add lines 52 and 53 to obtain the total percent reduction.	
55	Multiply line 44 by line 54 to obtain the amount of benefit reduction.	
56	Subtract line 55 from line 44, and round to the next lower dollar to obtain your monthly benefit.	

Worksheet 1: Indexing of earnings

Year	Your earnings	Maximum taxable earnings (dollars)	Lower of columns 2 or 3	Indexing factor	Column 4 times column 5	Highest indexed earnings
1	2	3	4	5	6	7
1951		3,600				
1952		3,600				
1953		3,600				
1954		3,600				
1955		4,200				
1956		4,200				
1957		4,200				
1958		4,200				
1959		4,800				
1960		4,800				
1961		4,800				
1962		4,800				
1963		4,800				
1964		4,800				
1965		4,800				
1966		6,600				
1967		6,600				
1968		7,800				
1969		7,800				
1970		7,800				
1971		7,800				
1972		9,000				
1973		10,800				
1974		13,200				
1975		14,100				
1976		15,300				
1977		16,500				
1978		17,700				
1979		22,900				
1980		25,900				
1981		29,700				
1982		32,400				
1983		35,700				
1984		37,800				
1985		39,600				
1986		42,000				
1987		43,800				
1988		45,000				
1989		48,000				
1990		51,300				
1991		53,400				
1992		55,500				
1993		57,600				
1994		60,600				
1995		61,200				
1996		62,700				
1997		65,400				
1998		68,400				
1999		72,600				
2000		76,200				
2001		80,400				
2002		84,900				
2003		87,000				
2004		87,900				
2005		90,000				
2006		94,200				

Worksheet 2: Computing the primary insurance amount (PIA) for workers retiring after age 62

Year	1st bend point (dollars)	2nd bend point (dollars)	Cost-of-living increase (percent)	Cost-of-living factor	Years aged 62 or older	PIA (dollars)
	1	2	3	4	5	6
				Age 62 PIA		
1979	180	1,085	9.9	1.099		
1980	194	1,171	14.3	1.143		
1981	211	1,274	11.2	1.112		
1982	230	1,388	7.4	1.074		
1983	254	1,528	3.5	1.035		
1984	267	1,612	3.5	1.035		
1985	280	1,691	3.1	1.031		
1986	297	1,790	1.3	1.013		
1987	310	1,866	4.2	1.042		
1988	319	1,922	4.0	1.040		
1989	339	2,044	4.7	1.047		
1990	356	2,145	5.4	1.054		
1991	370	2,230	3.7	1.037		
1992	387	2,333	3.0	1.030		
1993	401	2,420	2.6	1.026		
1994	422	2,545	2.8	1.028		
1995	426	2,567	2.6	1.026		
1996	437	2,635	2.9	1.029		
1997	455	2,741	2.1	1.021		
1998	477	2,875	1.3	1.013		
1999	505	3,043	[a] 2.5	1.025		
2000	531	3,202	3.5	1.035		
2001	561	3,381	2.6	1.026		
2002	592	3,567	1.4	1.014		
2003	606	3,653	2.1	1.021		
2004	612	3,689	2.7	1.027		
2005	627	3,779	4.1	1.041		
2006	656	3,955	3.3	1.033		
2007	680	4,100	. . .	. . .		

NOTE: . . . = not applicable.

a. The December 1999 cost-of-living adjustment (COLA) was originally determined to be 2.4 percent, based on the consumer price index (CPI). The underlying CPI was later recomputed by the Bureau of Labor Statistics; a 2.5 percent COLA would have been consistent with the recomputed CPI. Pursuant to Public Law 106-554, benefits were calculated and paid in August 2001 and later as if the December 1999 COLA had been 2.5 percent. Affected beneficiaries received a one-time payment to cover the shortfall that occurred before August 2001.

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