

## THE SOCIAL SECURITY BENEFIT FORMULA

### The Benefit Calculation

A worker's Social Security benefits—either retirement or disability—are based upon his/her time and earnings in Social Security-covered employment and the age at which s/he leaves the labor force.

The number on which most initial Social Security disability, survivors, and retirement benefits are based is called the Primary Insurance Amount (PIA). It is reached through a two-step calculation: 1) the Average Indexed Monthly Earnings calculation, and 2) application of the PIA formula rates.

#### Average Indexed Monthly Earnings<sup>1</sup>

First, a worker's 35 highest-earning years<sup>2</sup> are indexed to wage growth<sup>3</sup>, up to the year the worker turns age 60. These wage-indexed annual earnings are then averaged (divided by 35 years), and divided by 12 months, to get a monthly amount. The result is called the Average Indexed Monthly Earnings (AIME). The AIME expresses a worker's lifetime earnings in terms of today's wage levels.

#### Primary Insurance Amount

Second, the worker's Primary Insurance Amount (PIA) is calculated by applying three separate rates to portions of the AIME.

For those who became eligible in 2003, benefits were based on the following formula:

- 90 percent of the first \$606 of AIME, plus
- 32 percent of AIME over \$606 through \$3,653, plus
- 15 percent of AIME above \$3,653.

Thus, if a worker had an AIME of \$3,750, the PIA in 2003 would be:

90% of first \$606	\$545
32% of next \$607 through \$3,653	975
15% over \$3,653	<u>15</u>

The PIA for this worker is: \$1,535

### The Weighted Formula

By applying the 90 percent, 32 percent, and 15 percent rates or "weights" to the AIME, the benefit formula ensures that low-wage workers will receive proportionately more from their Social Security contributions than average- or high-wage earners.

The weighting reflects the assumption that workers with higher earnings have a greater ability to protect themselves from financial risk—there is a higher probability they have private pension income and accumulated savings—than do low- and moderate-income workers who have less opportunity to save and invest.

### How the Benefit Calculation Maintains Comparable Benefits Across Generations

The benefit calculation rates—90 percent, 32 percent, and 15 percent—do not change from year to year. However, the dollar amounts to which the rates are applied, called "bend points," are adjusted annually based on changes in average wages.<sup>4</sup> This adjustment ensures that workers with comparable real earnings histories receive initial benefits replacing approximately the same percentage of their earnings, regardless of their nominal value or what year they retired.

According to estimates by the actuaries at the Social Security Administration, a worker with lifetime average earnings who retired in 2003 at the normal retirement age receives benefits that replace approximately 42 percent of prior earnings. Benefits are estimated to replace about 35 percent of prior earnings for high-wage earners, and about 56 percent for those with low

wages.<sup>5</sup> Successive generations of average earners will receive about that same replacement rate, even though their lifetime wages and benefits may be higher in dollar terms.<sup>6</sup>

### Illustrative PIA Calculations

The following are illustrations of the benefit formula applied to lifetime low-, average-, and high-income earners who retired at age 65 in 2003.<sup>7</sup>

- Low earnings are defined as earnings equal to 45 percent of the national average wage index.
- Average earnings are defined as equal to the national average wage index.
- High earnings are defined as equal to 160 percent of the national average wage index.<sup>8</sup>

<b>High-Income Earner Eligible for Benefits in 2003</b>	
<b>AIME (at age 65): \$3,792</b>	
<b>90% of first \$606</b>	<b>= \$545.40</b>
<b>32% of the next \$607 through \$3,653</b>	<b>= \$975.04</b>
(\$3,653 - \$606 = \$3,047)	
(0.32 x \$3,047 = \$975.04)	
<b>15% of AIME over \$3,653</b>	<b>= \$20.85</b>
(\$3,792 - \$3,653 = \$139.00)	
(0.15 x \$139.00 = \$20.85)	
<b>Primary Insurance Amount</b>	<b>\$1,541.00</b>
(\$1,541.29 rounded to the next lowest dollar = \$1,541.00.)	

<b>Average-Income Earner Eligible for Benefits in 2003</b>	
<b>AIME (at age 65): \$2,438</b>	
<b>90% of first \$606</b>	<b>= \$545.40</b>
<b>32% of the next \$607 through \$2,438</b>	<b>= \$586.24</b>
(\$2,438 - \$606 = \$1,832)	
(0.32 x \$1,832 = \$586.24)	
<b>Primary Insurance Amount</b>	<b>\$1,131.00</b>
(\$1,131.64 rounded to the next lowest dollar = \$1,131.00.)	

<b>Low-Income Earner Eligible for Benefits in 2003</b>	
<b>AIME (at age 65): \$1,097</b>	
<b>90% of first \$606</b>	<b>= \$545.40</b>
<b>32% of the next \$607 through \$1,097</b>	<b>= \$157.12</b>
(\$1,097 - \$606 = \$491.00)	
(0.32 x \$491.00 = \$157.12)	
<b>Primary Insurance Amount</b>	<b>\$702.00</b>
(\$702.52 rounded to the next lowest dollar = \$702.00.)	

<sup>1</sup> In most cases, for those eligible for benefits after 1979, the Average Indexed Monthly Earnings (AIME) formula is used. For those eligible for benefits before 1979, the Average Monthly Earnings (AME) method of calculation is used. For a small and declining number of workers, the Simplified Old Start Formula is used. See [www.ssa.gov/OACT/ProgData/retirebenefit2.html](http://www.ssa.gov/OACT/ProgData/retirebenefit2.html) for additional information on old-law benefits.

<sup>2</sup> Social Security considers 40 years a lifetime of work. The benefit formula drops a worker's five lowest earnings years, so 35 years are used in the final calculation. If a worker does not have 35 years of contributions, the years without earnings are included in the calculation as zeros.

<sup>3</sup> Wage indexing of the average monthly earnings calculation was legislated in 1977 and took effect in 1979.

<sup>4</sup> Bend points for the year 2003 were determined by multiplying the 1979 bend point amounts by the ratio of the national average wage index for 2001, \$32,921.92, to the wage index for 1977, \$9,779.44. See [www.ssa.gov/OACT/COLA/piaformula.html](http://www.ssa.gov/OACT/COLA/piaformula.html).

<sup>5</sup> Available at: [www.ssa.gov/OACT/TR/TR03/VI\\_OASDHI\\_dollars.html#wp119381](http://www.ssa.gov/OACT/TR/TR03/VI_OASDHI_dollars.html#wp119381).

<sup>6</sup> The replacement rates are expected to decline slightly over time as the normal retirement age is increased gradually from age 65 to 67.

<sup>7</sup> These calculations are illustrative. Since the age at which a full benefit is received is gradually increasing from age 65 to age 67 for persons born after 1938, workers born after 1938 who retire at exactly age 65 and 0 months would have their benefit reduced for early retirement. See [www.ssa.gov](http://www.ssa.gov) for benefit calculators that include all technical considerations.

<sup>8</sup> This amount is not necessarily equal to the AIME of a lifetime taxable maximum worker.

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