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Options to Address Social Security Solvency and Their Impact on Beneficiaries: Results from the Dynasim Microsimulation Model-Detailed Distributional Tables

Laura Haltzel, Dawn Nuschler, Kathleen Romig, Gary Sidor, Scott Szymendera, Mikki Waid, and Debra Whitman, Domestic Social Policy Division

January 29, 2007

Abstract. This report presents detailed tables showing the distributional effects of 12 Social Security solvency options on Social Security beneficiaries in 2035 compared with current law. The 12 options presented fall into 6 categories of reform proposals. For some reform options, two or more variations on how they could be approached are presented. They include the most commonly discussed or introduced proposals to improve cash flow and achieve Social Security solvency:





Options to Address Social Security Solvency and Their Impact on Beneficiaries: Results from the Dynasim Microsimulation Model— Detailed Distributional Tables

Laura Haltzel

Specialist in Income Security

Dawn Nuschler

Specialist in Income Security

Kathleen Romig

Analyst in Income Security

Gary Sidor

Information Research Specialist

Scott Szymendera

Analyst in Disability Policy

Mikki Devine Waid

Applications Developer, Client-Server and WEB

Debra B. Whitman

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Summary

This report presents detailed tables showing the distributional effects of 12 Social Security solvency options on Social Security beneficiaries in 2035 compared with current law.

The 12 options presented fall into 6 categories of reform proposals. For some reform options, we present two or more variations on how they could be approached. They include the most commonly discussed or introduced proposals to improve cash flow and achieve Social Security solvency:

- reducing the annual cost of living adjustment (COLA)
- increasing the number of computation years in the benefit formula
- increasing the full retirement age (FRA)
- longevity indexing initial Social Security benefits
- progressive price indexing initial Social Security benefits
- increasing earnings subject to Social Security payroll taxes by raising or eliminating the taxable earnings base.

These tables provide the modeling results used to produce the full analysis of these options contained in a companion report, CRS Report RL33840, *Options to Address Social Security Solvency and Their Impact on Beneficiaries: Results from the Dynasim Microsimulation Model.* That report presents the distributional effects of these reform options in terms of Social Security beneficiaries' median payroll tax increase or benefit reduction and shows the varied effect of these reforms on beneficiaries along certain socio-economic lines (i.e., age, type of benefit received, and income quintile). Those readers interested in a complete explanation of these results are encouraged to read that report.

The tables contained in this report provide some additional detail not included in the previously mentioned report. The first table for each option summarizes the effect of the policy change on beneficiaries in 2035 *across* socio-economic groups (i.e., by gender, ethnicity, educational attainment, age, marital status, benefit type, and income quintile). These tables show the number in the population, the mean percent change in benefits or taxes between current law and the policy option, and the median percent change in benefits or taxes between current law and the policy option. Subsequent tables show the varied effects of these reforms on beneficiaries in 2035 overall and then *within* each socio-economic group (i.e., gender, ethnicity, educational attainment, age, marital status, benefit type, and income quintile).

CRS analysts used the Dynasim microsimulation model to project the effects of these reforms on Social Security beneficiaries in 2035, assuming the reforms first take effect in 2013.

This report will not be updated.

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Introduction

This report presents detailed tables showing the distributional effects of 12 Social Security solvency options on Social Security beneficiaries in 2035 compared with current law. The options presented are

- 1. Reducing the annual cost of living adjustment (COLA) by half a percentage point
- 2. Reducing the annual COLA by one percentage point
- 3. Increasing the number of computation years in the benefit formula from 35 to 38 for all beneficiaries
- 4. Increasing the number of computation years in the benefit formula from 35 to 38 for all but disability beneficiaries
- 5. Increasing the number of computation years in the benefit formula from 35 to 40 for all beneficiaries
- 6. Increasing the number of computation years in the benefit formula from 35 to 40 for all but disability beneficiaries
- 7. Increasing the full retirement age (FRA) by accelerating the increase from age 66 to age 67 scheduled under current law and further increasing the FRA from age 67 to age 70
- 8. Longevity indexing initial Social Security benefits by reducing the Primary Insurance Amount (PIA) formula factors
- 9. Longevity indexing initial Social Security benefits by reducing the PIA value and holding disability beneficiaries harmless until they reach the FRA
- 10. Progressive price indexing initial Social Security benefits
- 11. Increasing earnings subject to Social Security payroll taxes by raising the dollar amount of the taxable earnings base to 100% of aggregate covered earnings in the U.S. (eliminating the taxable earnings base)
- 12. Increasing earnings subject to Social Security payroll taxes by raising the dollar amount of the taxable earnings base to 90% of aggregate covered earnings in the U.S.

These tables provide the modeling results used to produce the full analysis of these options contained in a companion report, CRS Report RL33840, Options to Address Social Security Solvency and Their Impact on Beneficiaries: Results from the Dynasim Microsimulation Model.

¹ Those unfamiliar with the Social Security reform debate or the Social Security program may wish to first read the following reports: CRS Report RL33544, Social Security Reform: Current Issues and Legislation, by Dawn Nuschler; CRS Report 94-27, Social Security: Brief Facts and Statistics, by Gary Sidor; and, CRS Report RL32279, Primer on Disability Benefits: Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI), by Scott Szymendera.

That report presents the distributional effects of these reform options in terms of Social Security beneficiaries' median payroll tax increase or benefit reduction and shows the varied effect of these reforms on beneficiaries along certain socio-economic lines (i.e., age, type of benefit received, and income quintile). Those readers interested in a complete explanation of these results are encouraged to read that report.

The tables contained in this report provide some additional detail not included in the previously mentioned report. The first table for each option summarizes the effect of the policy change on beneficiaries in 2035 *across* socio-economic groups (i.e., by gender, ethnicity, educational attainment, age, marital status, benefit type, and income quintile). These tables show the number of people in the population, the mean percent change in benefits or taxes between current law and the policy option, and the median percent change in benefits or taxes between current law and the policy option. Subsequent tables show the varied effects of these reforms on beneficiaries in 2035 overall and then *within* each socio-economic group (i.e., gender, ethnicity, educational attainment, age, marital status, benefit type, and income quintile).

The options presented below include the most commonly discussed or introduced proposals to improve cash flow and achieve Social Security solvency. CRS takes no position for or against any of the options presented in this report.² The presentation of options in the report moves from least complex to most complex. The ordering of the 12 options, and the assumptions used in their analysis, reflect no policy recommendations or preferences on the part of CRS. For some reform options, we present two or more variations on how they could be approached. Each option would affect beneficiaries differently. This report assumes that all of the options take effect in 2013 and shows the distributional impact of each option in 2035 using results from the Dynasim microsimulation model.³ The Dynasim model is not an actuarial model and so cannot produce solvency estimates for these options.

Interpreting the Results

Why These Options?

The primary rationale for all of the options in this report is to improve the solvency of the Social Security system. All of the options would enhance long-range solvency by either cutting benefits or increasing payroll taxes. There are also secondary rationales behind most of the options—for example, some would reward longer working careers or account for increases in longevity.

The options in this report include the most commonly discussed or introduced proposals to improve cash flow and achieve Social Security solvency. Each option in this report is analyzed in isolation, but it is important to note that the options are typically proposed in combination with one another and/or with other Social Security reform features (such as individual accounts or

² Some solvency options, such as increasing the Social Security coverage of state and local government workers, altering the taxation of Social Security benefits, or investing a portion of the Social Security surplus in equities, cannot currently be modeled in this version of Dynasim. Therefore, these options are not included among the options analyzed in this report.

³ For additional information on the Dynasim microsimulation model, please see **Appendix E**.

benefit enhancements for low earners). The options analyzed in this report can be viewed as a set of building blocks for comprehensive Social Security reform.

When Would the Options Begin?

All of the options in this report are assumed to be implemented starting in 2013. The year 2013 was chosen since many policymakers have indicated a desire to leave the benefits of individuals who are currently age 55 or older unchanged, since they would have little time to alter their savings, work, or retirement plans. With the exception of the option to increase the full retirement age, none of the options presented in this report are phased in gradually over time. Any of the options could be implemented before or after 2013, or could be phased in gradually.

This analysis aims to compare all of the reform options using consistent assumptions and under identical circumstances. However, for some options, all beneficiaries would be affected starting in 2013, including those who became eligible for benefits before 2013 (e.g., reducing the COLA). For other options, only new beneficiaries—those who become eligible for benefits in 2013 or later—would be affected (e.g., progressive price indexing initial Social Security benefits). These differences are dictated by the nature of the reform options themselves and the particular Social Security program rules affected by these reform options.

How Far Into the Future Does This Analysis Look?

This report focuses on the effects of policy changes on beneficiaries in 2035. The tables presented are essentially a snapshot of the projected beneficiary population in this single year. Focusing on a different year would lead to different results.

The year 2035 was selected for this analysis because it balances two competing goals. The first goal is to allow a sufficient amount of time to pass for the differing effects of the policy options to become clear once the new policies are implemented. Since all of the options are assumed to begin in 2013, by 2035 most beneficiaries would be affected. An earlier date may not capture the disparate effects of the options, particularly for those options with relatively small annual changes. The second goal is to provide the most reliable information possible. Since it is impossible to accurately predict the future, all projection models contain some level of uncertainty. The further into the future one projects, the greater the estimates may ultimately deviate from reality. The most accurate data are the actual observations that exist when the projection period began. The youngest individuals eligible to receive retirement benefits in 2035 would have been born in the early 1970s, and so actual data would be included in the model's projection of their retirement benefits. Extending the analysis to periods much later than 2035 would rely more heavily on the model's assumptions about future trends.

Under some of the options, not all beneficiaries in 2035 would be affected. This is because some of the options apply only to beneficiaries who become eligible for benefits in 2013 or later (e.g., progressive price indexing). For these options, the analysis in 2035 will show a sizable group of beneficiaries who are not subject to the change since they became eligible for benefits before 2013. Because the proportion of beneficiaries who become eligible for benefits before 2013

⁴ Combining any of the options with one another or with other features could significantly alter their distributional impacts. Thus, it is not possible to sum the results of any combination of options shown in this report since the options could interact in unexpected ways.

varies significantly by socio-economic characteristics, the date of implementation drives many of the results in 2035, particularly the results by age.

Results shown for 2035 also do not reflect the full impact of the options over time. The effect of some options increases over time (e.g., longevity indexing). Under these options, each successive cohort of beneficiaries would be affected more than the last, so that a beneficiary who becomes eligible 50 years after implementation would be affected much more than a beneficiary who becomes eligible in the first year, all other things being equal. For other options, the magnitude of the benefit change does not increase over time (e.g., increasing the number of computation years). Under these options, each successive cohort of beneficiaries would be subject to the same rules, so that a beneficiary who becomes eligible 50 years after implementation would experience the same magnitude of change as a beneficiary who becomes eligible in the first year, all other things being equal. Since the tables in this report focus on a single year, these distinctions are not shown.

What Do the Tables Show?

The first table for each option breaks down the effect of the policy change on beneficiaries in 2035 by gender, ethnicity, educational attainment, age, marital status, benefit type, and income quintile. (For more information on income quintiles, please see the subsection below called "Breakdowns by Income Quintile."). These tables show the number of people in the population,⁵ the mean percent change, and the median percent change in benefits between current law and the policy option. Since Dynasim projects a representative sub-sample of the population, the number of observations in the model must be weighted (in this case multiplied by a constant) so that the numbers total the entire population. Population numbers in the tables are presented in thousands. The *mean*, or average, is determined by adding all the values in a data set and dividing the sum by the number of values in the data set. The *median* is the midpoint in a group of values, such that half the values are above the median and half are below. Unlike a mean, a median will not be skewed by a small number of extremely large or extremely small values. For example, consider five beneficiaries affected by a policy option. One loses her entire benefit under the option (meaning she has a change of -100%). The other four beneficiaries have benefit changes of -3%, -2%, -2%, and -1%, compared with current law. The median percentage change for this group would be -2% because -2% is the third value of the five values arranged from least to greatest. The mean percentage change would be -22% because it is the sum of all five values divided by five. Since policy changes sometimes result in very large benefit changes (such as beneficiaries gaining or losing a benefit) for a few beneficiaries, the median is a good measure of how a policy would affect a typical beneficiary. For both the mean and median percent change in benefits, numbers have been rounded to the nearest full percentage point.

The results for each option include tables that show the overall distribution of the estimated benefit change for all beneficiaries as well as for beneficiaries broken down by gender, ethnicity, educational attainment, age, marital status, benefit type, and income quintile. For example, the

⁵ In this version of Dynasim, each observation had a weight of 2,517.3811. Thus, 10 raw observations would be shown as about 25,000 individuals in the tables presented. All projected population numbers are rounded to the nearest

⁶ The report compares benefits under each option to scheduled benefits under current law. Some other analyses compare benefits under policy options to payable benefits, or the level of benefits that could be funded with current funding levels. However, the 2005 Trustees Report (on which this analysis is based) projects that the trust funds will remain solvent until 2041. Since the analysis in this report focuses on 2035, scheduled benefits and payable benefits would be the same amount.

tables show what proportion of beneficiaries in each of the five income quintiles have benefit reductions of up to -10%, reductions from -10% to -19%, etc.

Every attempt has been made to be consistent in the presentation of the results of the analysis. The same benefit reduction categories have been used in all tables across the various reform options so as not to skew the results. Furthermore, the tables for all of the options include the entire Dynasim population, with one exception. For the options to raise or eliminate the taxable earnings base, the report contains additional separate tables describing the mean and median impact for only those beneficiaries who would be affected by the option and for only those beneficiaries who would pay no additional taxes. These additional breakdowns are presented since a relatively small share of beneficiaries would be affected by the options to raise or eliminate the taxable earnings base. Tables that include the entire Dynasim population for these options show that the median beneficiary in each subgroup is not affected.

Breakdowns by Benefit Type

All of the options include tables in the report that break down the beneficiary population by the type of Social Security benefits they receive. Four types of Social Security beneficiaries are presented in this report: retired worker beneficiaries who receive a Social Security benefit based on their own earnings; disabled worker beneficiaries who receive a Social Security disability benefit based on their own earnings; spouse beneficiaries who receive a Social Security retirement benefit based on their working spouse's earnings; and, survivor beneficiaries who receive Social Security survivor benefits based on their deceased spouse's earnings. Some individuals may qualify for more than one type of benefit.

In the tables that follow, the *retired worker only* category and the *disability only* category are made up of beneficiaries who receive solely a retired or disabled worker benefit, not a spouse or survivor benefit. The *survivor* category and the *spouse* category include both beneficiaries who receive solely spouse or survivor benefits as well as those who receive both a spouse or survivor benefit and a retired or disabled worker benefit (i.e., dually entitled beneficiaries). The disability benefit only category includes both beneficiaries receiving disability benefits in 2035 and those who originally received disability benefits but automatically converted to retirement benefits at the full retirement age (as required by law).

Breakdowns by Age

All of the policy options include tables in the report that break down the beneficiary population by age group. These categories reflect beneficiaries' ages as of 2035. It is important to note that beneficiaries in the age 61 and younger category are primarily disability beneficiaries but also include some aged survivor beneficiaries who began to receive benefits at age 60 or 61. (Other Social Security beneficiaries who are eligible to receive benefits before age 60—such as children of retired, disabled, or deceased workers—are not included in the analysis in this report.) For retirement beneficiaries, the earliest age of eligibility is age 62. Thus, no retirement beneficiaries are included in the age 61 and younger category.

Breakdowns by Income Quintile

All of the policy options include tables in the report that break down the beneficiary population by income quintile. In other words, they separate the Dynasim population into five equal parts—

the one-fifth with the highest incomes, the one-fifth with the second-highest incomes, etc., down to the one-fifth with the lowest income. For the purposes of this analysis, income includes Social Security benefits, Supplemental Security Income (SSI) benefits, pension payments, earnings, and the annuitized value of financial assets. Income is calculated on a per capita basis, which means that for married couples the income of both spouses is averaged together.

It is important to note the distinction between income levels and Social Security benefit amounts. Some beneficiaries with relatively low Social Security benefit amounts may be included in one of the higher income quintiles and vice versa. For example, a beneficiary married to a person with a high income may be in one of the higher income quintiles despite receiving a small Social Security benefit. Similarly, a beneficiary with a relatively large Social Security benefit but with no other income may be in one of the lower income quintiles.

How to Read the Tables

There are three types of tables presented in this report: The first shows the mean and median changes under the policy option across socio-economic groups; the second shows the overall distribution of benefit or tax changes in the population; and the third shows the distribution of benefit or tax changes within each socio-economic group.

Mean and Median Changes Across Groups

The first table for each option summarizes the effect of the policy change on beneficiaries in 2035 *across* socio-economic groups (i.e., by gender, ethnicity, educational attainment, age, marital status, benefit type, and income quintile). These tables show the number in the population, the mean percent change in benefits or taxes between current law and the policy option, and the median percent change in benefits or taxes between current law and the policy option.

For example, if a reader is interested in the average benefit reduction caused by reducing the COLA by half a percentage point, he or she should turn to **Table 1**. The first row (labeled "All") shows the total number in the population in thousands (e.g., the total population for **Table 1** is 80,362,000). The first row also shows the mean change in benefits overall (-6%) and median change in benefits overall (-6%). In other words, it shows that among the 80 million beneficiaries in the Dynasim population, reducing the COLA by half a percentage point would result in a mean benefit reduction of 6% and also a median benefit reduction of 6%. (The mean and the median may vary for other options.)

Table 1 also shows the mean and median change in benefits for each socio-economic group (i.e., by gender, ethnicity, educational attainment, age, marital status, benefit type, and income quintile). For example, the second and third rows of **Table 1** show a breakdown by gender. Females make up the majority of the population (i.e., there are 43,566,000 females wompared with 36,766,000 males). Females and males have the same mean benefit reduction (6%). Males have a smaller median benefit reduction (5%) than do females (6%).

Distribution of Changes Overall

The second table for each option show how the effects of each reform vary among the overall population. This table shows the number and percent of the population, broken down by the magnitude of the change in benefits. For example, the table shows the number and percent of

beneficiaries whose benefits would be reduced by 20% or more, then the number and percent of beneficiaries whose benefits would be reduced by 10% to 19%, and so forth.

For example, if a reader is interested in knowing whether the cuts caused by reducing the COLA by half a percentage point are spread equally across the entire sample, he or she should turn to **Table 2**. **Table 2** shows that a small number of beneficiaries (103,000 people, or less than 0.5%) would have benefit reductions of 20% or more. A larger number (14,973,000 people, or about 19%) have benefit reductions of 10% to 19%. Most beneficiaries (63,232,000 people, or about 79%) would have benefit reductions of up to 10%. The last two columns in **Table 2** show the cumulative number and percent of beneficiaries.

Distribution of Changes Within Groups

The subsequent tables for each option show the varied effects of these reforms on beneficiaries in 2035 *within* each socio-economic group (i.e., gender, ethnicity, educational attainment, age, marital status, benefit type, and income quintile).

For example, if a reader is interested in knowing how the cuts caused by reducing the COLA by half a percentage point are distributed by gender, he or she should turn to **Table 3**. There, the reader could see that the majority of both females and males would have a benefit cut of up to 10% (i.e., 75% of females and 83% of males). The reader could also see that females are more likely than males to receive a cut that is greater than 10% (i.e., 23% of females and 14% of males). The percentages in each horizontal row add up to 100%.

Why Do Some of the Results Seem Counterintuitive?

Sometimes the results shown in this report may be unexpected. For example, an option to cut Social Security benefits could result in a small number of beneficiaries receiving an increase in their benefits. Such counterintuitive results are not errors, but interactions between the option and the current law Social Security rules. For example, the interaction between the current law retirement earnings test (RET) and certain options to reduce benefits leads to benefit increases for some beneficiaries who were subject to the RET before reaching the full retirement age, but are currently older than the full retirement age. (For a full explanation of how this interaction works, please see **Appendix C**.)

One of the advantages of a microsimulation model such as Dynasim is that it brings unexpected interactions between policy options and program rules to light. Social Security is a complex program, and changes to its structure could result in unintended consequences.

Who Is Included in the Analysis?

The results presented in this report focus on individuals who are projected to receive Social Security retired worker, spouse, aged survivor and/or disability benefits in 2035. However, the Dynasim population does *not* include individuals who are projected to receive other types of Social Security benefits, including the children of retired, disabled, or deceased workers, surviving spouses under age 60 with a child in care, and the aged parents of deceased workers.

How Does Dynasim Estimate Future Benefits?

The Dynasim model estimates future Social Security benefits by using a mix of historical data and projections. The historical data—which include actual beneficiaries' earnings, marital histories, Social Security benefits, and more—come from the Survey of Income and Program Participation (SIPP), the Current Population Survey (CPS), the Panel Study of Income Dynamics (PSID), and other sources. Using the historical data as a base, Dynasim projects future economic and demographic patterns by using the 2005 Social Security Trustees' official assumptions about future trends as well as statistical methods that take into account individual beneficiaries' characteristics. When interpreting the results of Dynasim or any other model, it is important to note that projections are inherently imprecise; the further into the future one looks, the wider the range of possible outcomes. (For a full explanation, please see **Appendix E**.)

Where Can Readers Find Out More?

A full written analysis of all 12 policy options is available in CRS Report RL33840, *Options to Address Social Security Solvency and Their Impact on Beneficiaries: Results from the Dynasim Microsimulation Model*. For each reform option, that report explains current Social Security policy, reasons why some policymakers propose this particular type of reform, how the reform proposal works, the distributional effects of the reform proposal on various types of Social Security beneficiaries, and legislation related to the reform being analyzed. That report presents the distributional effects of these reform options in terms of Social Security beneficiaries' median payroll tax increase or benefit reduction and shows the varied effect of these reforms on beneficiaries along certain socio-economic lines (i.e., age, type of benefit received, and income quintile). That report, however, does not contain detailed analysis of the effects of these reforms on Social Security beneficiaries by gender, ethnicity, educational attainment, or marital status.

When interpreting the distributional results of these reform options, it is important for the reader to have a solid understanding of Social Security program rules, technical details, and terminology. Detailed explanations of certain Social Security program rules and their potential interactions with policy options, along with an explanation of how the Dynasim model works and a glossary of Social Security and technical terms may be found in the following appendices of the report:

- Appendix A, "Computation of the Primary Insurance Amount (PIA) Under Current Law"
- Appendix B, "Interaction of Spouse and Aged Survivor Benefit Rules with Policy Options"
- Appendix C, "Interaction of the Retirement Earnings Test with Policy Options"
 Appendix D, "Technical Description of the Progressive Price Indexing Option"
- Appendix E, "Background on the Urban Institute's Dynasim Model"
- Appendix F, "Glossary."

Option 1: Reducing the Annual Cost of Living Adjustment (COLA) by Half a Percentage Point

Table 1. Reduce the COLA by Half a Percentage Point: Summary of Mean and Median Percentage Change in Benefits in 2035

	Number (000s)	Mean	Median
All	80,362	-6	-6
Gender			
Female	43,596	-6	-6
Male	36,766	-6	-5
Ethnicity			
White non-Hispanic	54,217	-6	-6
Black non-Hispanic	8,494	-6	-5
Native American	413	-6	-5
Asian	5,354	-6	-5
Hispanic	11,885	-5	-5
Education Level (highest level completed)			
Did not graduate high school	9,531	-6	-6
High school graduate	27,253	-6	-6
Some college	18,525	-6	-6
College graduate	25,053	-6	-6
Age			
61 or younger	5,639	-4	-3
62—66	13,888	-3	-1
67—70	14,558	-4	-3
71—75	16,844	-6	-5
76—80	13,979	-8	-8
81—85	9,171	-10	-10
86 or older	6,283	-10	-11
Marital Status			
Married	41,023	-5	-5
Widowed	17,808	-8	-9
Divorced	11,789	-6	-6
Never married	9,742	-5	-5
Benefit Type - Current Law			
Retired worker only	46,274	-5	-5
Spouse	6,842	-6	-6

	Number (000s)	Mean	Median
Survivor	12,139	-9	-10
Disability only	15,107	-6	-6
Income Quintile			
Lowest quintile	16,071	-6	-6
Second quintile	16,073	-6	-6
Third quintile	16,071	-6	-6
Fourth quintile	16,073	-6	-5
Highest quintile	16,073	-6	-5

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 2. Reduce the COLA by Half a Percentage Point: Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	103	0	103	0
-10% to -19%	I 4,973	19	15,077	19
Up to -10%	63,232	79	78,308	97
No change	1,911	2	80,219	100
Up to 10%	143	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 3. Reduce the COLA by Half a Percentage Point: Distribution by Gender in 2035

	Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total Percent
Female	0	23	75	2	0	100
Male	0	14	83	3	0	100
Total number (000s)	103	14,973	63,232	1,911	143	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 4. Reduce the COLA by Half a Percentage Point: Distribution by Ethnicity in 2035

		Total				
<u>-</u>	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent
White non- Hispanic	0	20	78	2	0	100
Black non-Hispanic	0	19	77	4	0	100
Native American	0	15	82	2	0	100
Asian	0	16	81	3	0	100
Hispanic	0	14	83	3	0	100
Total number (000s)	103	14,973	63,232	1,911	143	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 5. Reduce the COLA by Half a Percentage Point: Distribution by Education Level in 2035

	Percentage Change Category					Total
-	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Percent
Did not graduate high school	0	20	77	3	0	100
High school graduate	0	20	77	3	0	100
Some college	0	19	79	2	0	100
College graduate or higher	0	17	81	2	0	100
Total number (000s)	103	14,973	63,232	1,911	143	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 6. Reduce the COLA by Half a Percentage Point: Distribution by Age in 2035

		Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -1 0 %	No change	Up to	Total percent	
61 or younger	0	12	78	9	0	100	
62—66	1	4	85	10	0	100	
67—70	0	4	96	0	0	100	
71—75	0	7	93	0	0	100	
76—80	0	13	87	0	0	100	
81—85	0	45	55	0	0	100	
86 or older	0	96	4	0	0	100	
Total number (000s)	103	14,973	63,232	1,911	143	80,362	

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 7. Reduce the COLA by Half a Percentage Point: Distribution by Marital Status in 2035

		Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent	
Married	0	10	86	3	0	100	
Widowed	0	40	59	1	0	100	
Divorced	0	17	80	2	0	100	
Never married	0	15	81	3	0	100	
Total number (000s)	103	14,973	63,232	1,911	143	80,362	

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 8. Reduce the COLA by Half a Percentage Point: Distribution by Benefit Type in 2035

		Total				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
Retired worker only	0	9	88	3	0	100
Spouse	0	11	86	ĺ	ĺ	100
Survivor	0	50	50	0	0	100
Disability only	0	25	71	4	0	100
Total number (000s)	103	14,973	63,232	1,911	143	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 9. Reduce the COLA by Half a Percentage Point: Distribution by Income Ouintile in 2035

		Total				
	-20% or more	-1 9 % to -10%	Up to -1 0 %	No change	Up to	Total percent
Lowest quintile	0	24	74	2	0	100
Second quintile	0	20	78	2	0	100
Third quintile	0	18	80	2	0	100
Fourth quintile	0	16	81	3	0	100
Highest quintile	0	16	82	2	0	100
Total number (000s)	103	14,973	63,232	1,911	143	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Option 2: Reducing the Annual COLA by One Percentage Point

Table 10. Reduce the COLA by One Percentage Point: Summary of Mean and Median Percentage Change in Benefits in 2035

	Number (000s)	Mean	Median
All	80,362	-11	-11
Gender			
Female	43,596	-12	-12
Male	36,766	-11	-10
Ethnicity			
White non-Hispanic	54,217	-12	-12
Black non-Hispanic	8,494	-11	-10
Native American	413	-11	-10
Asian	5,354	-11	-10
Hispanic	11,885	-10	-9
Education Level (highest level completed)			
Did not graduate high school	9,531	-11	-11
High school graduate	27,253	-12	-11
Some college	18,525	-12	-12
College graduate or higher	25,053	-11	-11
Age			
61 or younger	5,639	-8	-6
62—66	13,888	- 5	-3
67—70	14,558	- 7	- 7
71—75	16,844	-11	-10
76—80	13,979	-15	-14
81—85	9,171	-18	-19
86 or older	6,283	-20	-20
Marital Status			
Married	41,023	-10	-9
Widowed	17,808	-15	-17
Divorced	11,789	-11	-11
Never married	9,742	-10	-9
Benefit Type - Current Law			
Retired worker only	46,274	-10	-9
Spouse	6,842	-11	-11

	Number (000s)	Mean	Median
Survivor	12,139	-16	-19
Disability only	15,107	-11	-11
Income Quintile			
Lowest quintile	16,071	-12	-12
Second quintile	16,073	-11	-11
Third quintile	16,071	-11	-11
Fourth quintile	16,073	-11	-10
Highest quintile	16,073	-12	-11

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 11. Reduce the COLA by One Percentage Point: Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	l 2,967	16	12,967	16
-10% to -1 9 %	32,527	40	45,494	57
Up to -10%	32,822	41	78,316	97
No change	1,906	2	80,221	100
Up to 10%	141	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 12. Reduce the COLA by One Percentage Point: Distribution by Gender in 2035

		-				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent
Female	20	41	37	2	0	100
Male	12	40	45	3	0	100
Total number (000s)	12,967	32,527	32,822	1,906	141	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 13. Reduce the COLA by One Percentage Point: Distribution by Ethnicity in 2035

		Total				
-	-20% or more	-1 9 % to -10%	Up to -10%	No change	Up to	Total percent
White non- Hispanic	17	42	39	2	0	100
Black non-Hispanic	17	36	43	4	0	100
Native American	14	39	45	2	0	100
Asian	14	39	43	3	0	100
Hispanic	12	37	48	3	0	100
Total number (000s)	12,967	32,527	32,822	1,906	141	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 14. Reduce the COLA by One Percentage Point: Distribution by Education Level in 2035

		Total				
	-20% or more	-1 9 % to -10%	Up to -10%	No change	Up to	percent
Did not graduate high school	18	37	42	3	0	100
High school graduate	18	40	39	3	0	100
Some college	16	43	39	2	0	100
College graduate or higher	14	40	43	2	0	100
Total number (000s)	I 2,967	32,527	32,822	1,906	141	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 15. Reduce the COLA by One Percentage Point: Distribution by Age in 2035

		T-4-1				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent
61 or younger	11	24	55	9	0	100
62—66	4	10	76	10	0	100
67—70	3	11	85	0	0	100
71—75	6	56	37	0	0	100
76—80	10	87	2	0	0	100
81—85	31	67	1	0	0	100
86 or older	94	5	1	0	0	100
Total number (000s)	l 2,967	32,527	32,822	1,906	141	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 16. Reduce the COLA by One Percentage Point: Distribution by Marital Status in 2035

	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent
Married	9	40	49	3	0	100
Widowed	35	45	19	1	0	100
Divorced	15	42	40	2	0	100
Never married	14	34	48	3	0	100
Total number (000s)	12,967	32,527	32,822	1,906	141	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 17. Reduce the COLA by One Percentage Point: Distribution by Benefit Type in 2035

			-			
<u>-</u>	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent
Retired worker only	8	42	48	3	0	100
Spouse	8	47	44	1	1	100
Survivor	44	43	12	0	0	100
Disability only	23	33	40	4	0	100
Total number (000s)	l 2,967	32,527	32,822	1,906	141	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 18. Reduce the COLA by One Percentage Point: Distribution by Income Quintile in 2035

		T-4-1				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent
Lowest quintile	21	40	36	2	0	100
Second quintile	17	41	39	2	0	100
Third quintile	15	42	41	2	0	100
Fourth quintile	14	40	44	3	0	100
Highest quintile	14	40	44	2	0	100
Total number (000s)	12,967	32,527	32,822	1,906	141	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Option 3: Increasing the Number of Computation Years in the Benefit Formula From 35 to 38 for All Beneficiaries

Table 19. Increase the Number of Computation Years to 38 for All Beneficiaries: Summary of Mean and Median Percentage Change in Benefits in 2035

	Number (000s)	Mean	Median
All	80,362	-3	-2
Gender			
Female	43,596	-3	-2
Male	36,766	-3	-3
Ethnicity			
White non-Hispanic	54,217	-3	-2
Black non-Hispanic	8,494	-3	-3
Native American	413	-2	-2
Asian	5,354	-4	-3
Hispanic	11,885	-4	-3
Education Level (highest level completed)			
Did not graduate high school	9,531	-3	-3
High school graduate	27,253	-3	-3
Some college	18,525	-3	-2
College graduate or higher	25,053	-3	-2
Age			
61 or younger	5,639	-3	-3
62—66	13,888	-5	-3
67—70	14,558	-3	-3
71—75	16,844	-3	-3
76—80	13,979	-3	-2
81—85	9,171	- 2	-2
86 or older	6,283	0	0
Marital Status			
Married	41,023	-3	-3
Widowed	17,808	-2	-2
Divorced	11,789	-3	-3
Never married	9,742	-3	-3

	Number (000s)	Mean	Median	
Benefit Type - Current Law				
Retired worker only	46,274	-3	-3	
Spouse	6,842	-3	-2	
Survivor	12,139	-2	-	
Disability only	15,107	-3	-3	
Income Quintile				
Lowest quintile	16,071	-3	-3	
Second quintile	16,073	-3	-3	
Third quintile	16,071	-3	-3	
Fourth quintile	16,073	-3	-2	
Highest quintile	16,073	-2	-2	

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 20. Increase the Number of Computation Years to 38 for All Beneficiaries:

Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	272	0	272	0
-10% to -19%	254	0	526	ĺ
Up to -10%	65,830	82	66,356	83
No change	13,964	17	80,320	100
Up to 10%	43	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 21. Increase the Number of Computation Years to 38 for All Beneficiaries:

Distribution by Gender in 2035

	Percentage Change Category						
	-20% or more	-1 9 % to -10%	Up to -10%	No change	Up to	Total percent	
Female	0	0	78	21	0	100	
Male	0	0	86	13	0	100	
Total number (000s)	272	254	65,830	13,964	43	80,362	

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 22. Increase the Number of Computation Years to 38 for All Beneficiaries:

Distribution by Ethnicity in 2035

	Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to 10%	percent
White non-Hispanic	0	0	81	19	0	100
Black non-Hispanic	0	0	81	18	0	100
Native American	0	1	84	15	0	100
Asian	I	0	84	15	0	100
Hispanic	0	0	86	13	0	100
Total number (000s)	272	254	65,830	13,964	43	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 23. Increase the Number of Computation Years to 38 for All Beneficiaries:

Distribution by Education Level in 2035

		Total percent				
	-20% or more	-1 9 % to -1 0 %	Up to -1 0 %	No change	Up to 10%	percent
Did not graduate high school	0	0	81	19	0	100
High school graduate	0	0	81	19	0	100
Some college	0	0	82	18	0	100

		Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent	
College graduate	0	0	84	15	0	100	
Total number (000s)	272	254	65,830	13,964	43	80,362	

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 24. Increase the Number of Computation Years to 38 for All Beneficiaries:

Distribution by Age in 2035

		Total				
-	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
61 or younger	0	0	88	12	0	100
62—66	2	2	93	3	0	100
67—70	0	0	95	5	0	100
71—75	0	0	92	8	0	100
76—80	0	0	88	12	0	100
81—85	0	0	66	33	0	100
86 or older	0	0	5	95	0	100
Total number (000s)	272	254	65,830	13,964	43	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 25. Increase the Number of Computation Years to 38 for All Beneficiaries:

Distribution by Marital Status in 2035

	Percentage Change Category					Tatal
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent
Married	0	0	89	10	0	100
Widowed	0	0	62	37	0	100
Divorced	0	0	83	16	0	100
Never married	0	0	85	14	0	100
Total number (000s)	272	254	65,830	13,964	43	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 26. Increase the Number of Computation Years to 38 for All Beneficiaries:

Distribution by Benefit Type in 2035

	Percentage Change Category					-
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	Total percent
Retired worker only	1	I	91	8	0	100
Spouse	0	0	89	11	0	100
Survivor	0	0	53	47	0	100
Disability only	0	0	76	24	0	100
Total number (000s)	272	254	65,830	13,964	43	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 27. Increase the Number of Computation Years to 38 for All Beneficiaries:

Distribution by Income Quintile in 2035

	Percentage Change Category					T -4-1
	-20% or more	-1 9 % to -10%	Up to -1 0 %	No change	Up to	Total percent
Lowest quintile	0	0	78	22	0	100
Second quintile	0	0	82	18	0	100
Third quintile	0	0	84	16	0	100
Fourth quintile	1	1	84	15	0	100
Highest quintile	1	1	83	16	0	100
Total number (000s)	272	254	65,830	13,964	43	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Option 4: Increasing the Number of Computation Years in the Benefit Formula From 35 to 38 For All But Disability Beneficiaries

Table 28. Increase the Number of Computation Years to 38 for All But Disability Beneficiaries: Summary of Mean and Median Percentage Change in Benefits in 2035

<u> </u>				
	Number (000s)	Mean	Median	
All	80,362	-2	-2	
Gender				
Female	43,596	-2	-2	
Male	36,766	-2	-2	
Ethnicity				
White non-Hispanic	54,217	-2	-2	
Black non-Hispanic	8,494	-2	-2	
Native American	413	-2	- [
Asian	5,354	-3	-3	
Hispanic	11,885	-3	-2	
Education Level (highest level completed)				
Did not graduate high school	9,531	-2	-2	
High school graduate	27,253	-2	-2	
Some college	18,525	-2	-2	
College graduate or higher	25,053	-2	-2	
Age				
61 or younger	5,639	0	0	
62—66	13,888	-4	-3	
67—70	14,558	-2	-2	
71—75	16,844	-2	-2	
76—80	13,979	-2	-2	
81—85	9,171	-2	-1	
86 or older	6,283	0	0	
Marital Status				
Married	41,023	-3	-2	
Widowed	17,808	-2	-1	
Divorced	11,789	-2	-2	
Never married	9,742	-2	-1	

	Number (000s)	Mean	Median
Benefit Type - Current Law			
Retired worker only	46,274	-3	-3
Spouse	6,842	-2	-2
Survivor	12,139	-1	0
Disability only	15,107	0	0
Income quintile - CL			
Lowest quintile	16,071	-2	-2
Second quintile	16,073	-2	-2
Third quintile	16,071	-2	-2
Fourth quintile	16,073	-2	-2
Highest quintile	16,073	-2	-1

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 29. Increase the Number of Computation Years to 38 for All But Disability Beneficiaries: Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	274	0	274	0
-10% to -19%	274	0	549	1
Up to -10%	53,527	67	54,076	67
No change	26,128	33	80,204	100
Up to 10%	159	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 30. Increase the Number of Computation Years to 38 for All But Disability Beneficiaries: Distribution by Gender in 2035

		Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent	
Female	0	0	65	34	0	100	
Male	0	0	69	30	0	100	
Total number (000s)	274	274	53,527	26,128	159	80,362	

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 31. Increase the Number of Computation Years to 38 for All But Disability Beneficiaries: Distribution by Ethnicity in 2035

	Percentage Change Category					
_	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
White non-Hispanic	0	0	68	31	0	100
Black non-Hispanic	0	0	59	40	0	100
Native American	0	1	67	32	1	100
Asian	1	0	69	29	0	100
Hispanic	0	I	65	34	0	100
Total number (000s)	274	274	53,527	26,128	159	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 32. Increase the Number of Computation Years to 38 for All But Disability Beneficiaries: Distribution by Education Level in 2035

		Total				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Did not graduate high school	0	0	55	44	0	100
High school graduate	0	0	63	36	0	100
Some college	0	0	70	29	0	100
College graduate or higher	0	0	72	27	0	100
Total number (000s)	274	274	53,527	26,128	159	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 33. Increase the Number of Computation Years to 38 for All But Disability Beneficiaries: Distribution by Age in 2035

	Percentage Change Category					Total
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
61 or younger	0	0	3	97	0	100
62—66	2	2	73	23	0	100
67—70	0	0	83	17	0	100
71—75	0	0	81	18	0	100
76—80	0	0	82	18	0	100
81—85	0	0	64	36	0	100
86 or older	0	0	4	96	0	100
Total number (000s)	274	274	53,527	26,128	159	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 34. Increase the Number of Computation Years to 38 for All But Disability Beneficiaries: Distribution by Marital Status in 2035

		Total				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
Married	0	0	75	24	0	100
Widowed	0	0	54	46	0	100
Divorced	0	0	66	33	0	100
Never married	0	0	55	44	0	100
Total number (000s)	274	274	53,527	26,128	159	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 35. Increase the Number of Computation Years to 38 for All But Disability Beneficiaries: Distribution by Benefit Type in 2035

		Total				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent
Retired worker only	1	I	91	8	0	100
Spouse	0	0	86	13	Ì	100
Survivor	0	0	45	55	0	100
Disability only	0	0	0	100	0	100
Total number (000s)	274	274	53,527	26,128	159	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 36. Increase the Number of Computation Years to 38 for All But Disability Beneficiaries: Distribution by Income Quintile in 2035

		Total				
	-20% or more	-1 9 % to -10%	Up to -10%	No change	Up to	percent
Lowest quintile	0	0	59	41	0	100
Second quintile	0	0	61	38	0	100
Third quintile	0	0	67	33	0	100
Fourth quintile	I	1	71	28	0	100
Highest quintile	I	1	75	23	0	100
Total number (000s)	274	274	53,527	26,128	159	80,362

Option 5: Increasing the Number of Computation Years in the Benefit Formula From 35 to 40 for All Beneficiaries

Table 37. Increase the Number of Computation Years to 40 for All Beneficiaries: Summary of Mean and Median Percentage Change in Benefits in 2035

	Number (000s)	Mean	Median
All	80,362	-5	-4
Gender			
Female	43,596	-5	-4
Male	36,766	-5	-4
Ethnicity			
White non-Hispanic	54,217	-4	-4
Black non-Hispanic	8,494	-5	-5
Native American	413	-4	-4
Asian	5,354	-6	-6
Hispanic	11,885	-6	-5
Education Levels (highest level completed)			
Did not graduate high school	9,531	-6	-5
High school graduate	27,253	-5	-4
Some college	18,525	-5	-4
College graduate or higher	25,053	-4	-4
Age			
61 or younger	5,639	-5	-5
62—66	13,888	-8	-6
67—70	14,558	-5	-5
71—75	16,844	-5	-4
76—80	13,979	-4	-4
81—85	9, 17 1	-3	-3
86 or older	6,283	0	0
Marital Status			
Married	41,023	-5	-5
Widowed	17,808	-3	-3
Divorced	11,789	-5	-4
Never married	9,742	-5	-5

	Number (000s)	Mean	Median
Benefit Type - Current Law			
Retired worker only	46,274	-5	-5
Spouse	6,842	-4	-4
Survivor	12,139	-3	-2
Disability only	15,107	-4	-5
Income Quintile - CL			
Lowest quintile	I 6, 07 I	-5	-5
Second quintile	16,073	-5	-5
Third quintile	I 6, 07 I	-5	-4
Fourth quintile	16,073	-5	-4
Highest quintile	16,073	-4	-3

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 38. Increase the Number of Computation Years to 40 for All Beneficiaries:

Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	430	ĺ	430	1
-10% to -1 9 %	2,882	4	3,313	4
Up to -10%	63,843	79	67,156	84
No change	13,171	16	80,327	100
Up to 10%	35	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 39. Increase the Number of Computation Years to 40 for All Beneficiaries:

Distribution by Gender in 2035

		Percentage Change Category					
	-20% or more	-1 9 % to -10%	Up to -10%	No change	Up to 10%	percent	
Female	I	4	75	20	0	100	
Male	1	3	85	12	0	100	
Total number (000s)	430	2,882	63,843	13,171	35	80,362	

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 40. Increase the Number of Computation Years to 40 for All Beneficiaries:

Distribution by Ethnicity in 2035

	Percentage Change Category					
_	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
White non-Hispanic	0	2	80	17	0	100
Black non-Hispanic	I	5	77	17	0	100
Native American	0	4	83	13	0	100
Asian	I	6	79	14	0	100
Hispanic	1	8	79	12	0	100
Total number (000s)	430	2,882	63,843	13,171	35	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 41. Increase the Number of Computation Years to 40 for All Beneficiaries:

Distribution by Education Level in 2035

		Total percent				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to 10%	percent
Did not graduate high school	0	П	71	18	0	100
High school graduate	I	4	78	18	0	100
Some college	0	3	80	17	0	100

		Total percent				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
College graduate or higher	l	2	84	14	0	100
Total number (000s)	430	2,882	63,843	13,171	35	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 42. Increase the Number of Computation Years to 40 for All Beneficiaries:

Distribution by Age in 2035

		Percentage Change Category				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
61 or younger	0	5	84	11	0	100
62—66	3	8	86	3	0	100
67—70	0	3	93	4	0	100
71—75	0	3	90	7	0	100
76—80	0	3	86	11	0	100
81—85	0	2	66	32	0	100
86 or older	0	0	5	95	0	100
Total number (000s)	430	2,882	63,843	13,171	35	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 43. Increase the Number of Computation Years to 40 for All Beneficiaries:

Distribution by Marital Status in 2035

		Total percent				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
Married	I	4	87	8	0	100
Widowed	0	2	61	37	0	100
Divorced	1	4	80	15	0	100

Never married	0	5	80	14	0	100
Total number (000s)	430	2,882	63,843	13,171	35	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 44. Increase the Number of Computation Years to 40 for All Beneficiaries:

Distribution by Benefit Type in 2035

		Total percent				
	-20% or more	-1 9 % to -1 0 %	Up to -1 0 %	No change	Up to 10%	percent
Retired worker only	1	4	87	8	0	100
Spouse	0	3	90	7	0	100
Survivor	0	1	52	47	0	100
Disability only	0	4	73	24	0	100
Total number (000s)	430	2,882	63,843	13,171	35	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 45. Increase the Number of Computation Years to 40 for All Beneficiaries:

Distribution by Income Quintile in 2035

		Total				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
Lowest quintile	0	[]	67	22	0	100
Second quintile	0	2	80	18	0	100
Third quintile	0	I	83	15	0	100
Fourth quintile	I	2	83	14	0	100
Highest quintile	I	2	84	14	0	100
Total number (000s)	430	2,882	63,843	13,171	35	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Option 6: Increasing the Number of Computation Years in the Benefit Formula From 35 to 40 for All But Disability Beneficiaries

Table 46. Increase the Number of Computation Years to 40 for All But Disability Beneficiaries: Summary of Mean and Median Percentage Change in Benefits in 2035

<u> </u>				
	Number (000s)	Mean	Median	
All	80,362	-4	-3	
Gender				
Female	43,596	-4	-3	
Male	36,766	-4	-3	
Ethnicity				
White non-Hispanic	54,217	-3	-3	
Black non-Hispanic	8,494	-4	-3	
Native American	413	-3	-2	
Asian	5,354	-5	-5	
Hispanic	11,885	-4	-4	
Education Level (highest level completed)				
Did not graduate high school	9,531	-4	-3	
High school graduate	27,253	-4	-3	
Some college	18,525	-4	-3	
College graduate or higher	25,053	-4	-3	
Age				
61 or younger	5,639	0	0	
62—66	13,888	-6	-5	
67—70	14,558	-4	-4	
71—75	16,844	-4	-4	
76—80	13,979	-4	-4	
81—85	9,171	-3	-2	
86 or older	6,283	0	0	
Marital Status				
Married	41,023	-4	-4	
Widowed	17,808	-3	-2	
Divorced	11,789	-4	-3	
Never married	9,742	-3	-3	

	Number (000s)	Mean	Median
Benefit Type - Current Law			
Retired worker only	46,274	-5	-5
Spouse	6,842	-4	-3
Survivor	12,139	-2	0
Disability only	15,107	0	0
Income Quintile			
Lowest quintile	I 6,07 I	-4	-4
Second quintile	16,073	-4	-4
Third quintile	I 6, 07 I	-4	-3
Fourth quintile	16,073	-4	-3
Highest quintile	16,073	-4	-3

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 47. Increase the Number of Computation Years to 40 for All But Disability Beneficiaries: Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	428	J	428	ĺ
-10% to -19%	2,278	3	2,706	3
Up to -10%	51, 4 78	64	54,184	67
No change	26,045	32	80,229	100
Up to 10%	133	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 48. Increase the Number of Computation Years to 40 for All But Disability Beneficiaries: Distribution by Gender in 2035

		Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -1 0 %	No change	Up to 10%	percent	
Female	0	3	62	34	0	100	
Male	1	3	67	30	0	100	
Total number (000s)	428	2,278	51,478	26,045	133	80,362	

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 49. Increase the Number of Computation Years to 40 for All But Disability Beneficiaries: Distribution by Ethnicity in 2035

		Total				
-	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
White non-Hispanic	0	2	67	31	0	100
Black non-Hispanic	Į	4	55	40	0	100
Native American	0	2	66	32	1	100
Asian	1	6	64	29	0	100
Hispanic	1	6	59	34	0	100
Total number (000s)	428	2,278	51,478	26,045	133	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 50. Increase the Number of Computation Years to 40 for All But Disability Beneficiaries: Distribution by Education Level in 2035

		Total percent				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Did not graduate high school	0	8	48	44	0	100
High school graduate	1	3	60	36	0	100
Some college	0	2	68	29	0	100
College graduate	1	1	71	27	0	100
Total number (000s)	428	2,278	51,478	26,045	133	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 51. Increase the Number of Computation Years to 40 for All But Disability Beneficiaries: Distribution by Age in 2035

	Percentage Change Category					T-4-1
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	Total percent
61 or younger	0	0	3	97	0	100
62—66	3	7	67	23	0	100
67—70	0	3	80	17	0	100
71—75	0	3	79	18	0	100
76—80	0	2	80	18	0	100
81—85	0	2	62	36	0	100
86 or older	0	0	4	96	0	100
Total number (000s)	428	2,278	51,478	26,045	133	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 52. Increase the Number of Computation Years to 40 for All But Disability Beneficiaries: Distribution by Marital Status in 2035

		Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent	
Married	I	3	72	24	0	100	
Widowed	0	2	52	45	0	100	
Divorced	I	3	64	32	0	100	
Never married	0	3	52	44	0	100	
Total number (000s)	428	2,278	51,478	26,045	133	80,362	

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 53. Increase the Number of Computation Years to 40 for All But Disability Beneficiaries: Distribution by Benefit Type in 2035

		Total				
	-20% or more	-1 9 % to -10%	Up to -10%	No change	Up to	percent
Retired worker only	1	4	87	8	0	100
Spouse	0	2	84	12	ĺ	100
Survivor	0	1	44	55	0	100
Disability only	0	0	0	100	0	100
Total number (000s)	428	2,278	51,478	26,045	I 33	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 54. Increase the Number of Computation Years to 40 for All But Disability Beneficiaries: Distribution by Income Quintile in 2035

		Total percent				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Lowest Quintile	0	8	50	41	0	100
Second Quintile	0	I	60	38	0	100
Third Quintile	0	1	66	33	0	100
Fourth Quintile	1	2	69	28	0	100
Highest Quintile	1	1	74	23	0	100
Total number (000s)	428	2,278	51,478	26,045	133	80,362

Option 7: Increasing the Full Retirement Age (FRA) by Accelerating the Increase From Age 66 to Age 67 Scheduled Under Current Law and Further Increasing the FRA From Age 67 to Age 70

Table 55. Increase the Full Retirement Age: Summary of Mean Percentage Change in Benefits in 2035

	Number (000s)	Mean	Median
All	80,362	-2	-2
Gender			
Female	43,596	-2	-1
Male	36,766	-2	-2
Ethnicity			
White non-Hispanic	54,217	-2	-2
Black non-Hispanic	8,494	-2	-1
Native American	413	-2	- I
Asian	5,354	-2	-2
Hispanic	11,885	-2	-2
Education Status (highest level completed)			
Did not graduate high school	9,531	-2	- I
High school graduate	27,253	-2	- I
Some college	18,525	-2	-2
College graduate or higher	25,053	-2	-2
Age			
61 or younger	5,639	0	0
62—66	13,888	-5	-4
67—70	14,558	-2	-3
71—75	16,844	-1	-2
76—80	13,979	-2	-2
81—85	9, 17 1	-2	- I
86 or older	6,283	0	0
Marital Status			
Married	41,023	-3	-2
Widowed	17,808	-1	0
Divorced	11,789	-2	-2
Never married	9,742	-2	-1

	Number (000s)	Mean	Median
Benefit Type - Current Law			
Retired worker only	46,274	-3	-3
Spouse	6,842	-2	-2
Survivor	12,139	0	0
Disability only	15,107	0	0
Income Quintile			
Lowest quintile	I 6,07 I	-2	-1
Second quintile	16,073	-2	-1
Third quintile	I 6, 07 I	-2	-2
Fourth quintile	16,073	-2	-2
Highest quintile	16,073	-3	-2

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 56. Increase the Full Retirement Age: Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	360	0	360	0
-10% to -1 9 %	461	I	82 I	1
Up to -10%	48,744	61	49,565	62
No change	28,784	36	78,348	97
Up to 10%	2,014	3	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 57. Increase the Full Retirement Age: Distribution by Gender in 2035

		Total				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Female	0	0	59	38	2	100
Male	I	I	63	33	3	100
Total number (000s)	360	461	48,744	28,784	2,014	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 58. Increase the Full Retirement Age: Distribution by Ethnicity in 2035

		Total				
_	-20% or more	-1 9 % to -1 0 %	Up to -1 0 %	No change	Up to	percent
White non-Hispanic	0	I	61	35	3	100
Black non-Hispanic	1	1	55	42	2	100
Native American	0	1	57	40	2	100
Asian	I	1	64	32	3	100
Hispanic	0	1	60	37	2	100
Total number (000s)	360	461	48,744	28,784	2,014	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 59. Increase the Full Retirement Age: Distribution by Education Level in 2035

		Total percent				
	-20% or more	-19% to -10%	Up to -1 0 %	No change	Up to	percent
Did not graduate high school	0	0	51	46	I	100
High school graduate	0	ĺ	58	40	2	100
Some college	0	1	64	32	3	100
College graduate or higher	I	1	65	30	4	100
Total number (000s)	360	461	48,744	28,784	2,014	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 60. Increase the Full Retirement Age: Distribution by Age in 2035

		Total				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
61 or younger	0	0		99	0	100
62—66	3	3	71	23	0	100
67—70	0	0	82	18	0	100
71—75	0	0	76	23	0	100
76—80	0	0	62	24	14	100
81—85	0	0	58	42	0	100
86 or older	0	0	ĺ	99	0	100
Total number (000s)	360	461	48,744	28,784	2,014	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 61. Increase the Full Retirement Age: Distribution by Marital Status in 2035

		Percentage Change Category					
	-20% or more	-1 9 % to -10%	Up to -10%	No change	Up to	percent	
Married	I	I	70	26	3	100	
Widowed	0	0	43	54	2	100	
Divorced	I	İ	61	35	2	100	
Never married	0	İ	52	45	2	100	
Total number (000s)	360	461	48,744	28,784	2,014	80,362	

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 62. Increase the Full Retirement Age: Distribution by Benefit Type in 2035

		Total percent				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to 10%	percent
Retired worker only	1	ı	85	9	4	100
Spouse	0	0	81	17	2	100

		Total				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
Survivor	0	0	30	68	ĺ	100
Disability only	0	0	0	100	0	100
Total number (000s)	360	461	48,744	28,784	2,014	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 63. Increase the Full Retirement Age: Distribution by Income Quintile in 2035

		Total				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
Lowest quintile	0	0	56	43	I	100
Second quintile	0	0	57	41	2	100
Third quintile	0	0	60	37	2	100
Fourth quintile	I	1	63	31	3	100
Highest quintile	I	1	66	27	4	100
Total number (000s)	360	461	48,744	28,784	2,014	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model

Option 8: Longevity Indexing Initial Social Security Benefits by Reducing the Primary Insurance Amount (PIA) Formula Factors

Table 64. Index the PIA Formula Factors for Longevity: Summary of Mean and Median Percentage Change in Benefits in 2035

	Number (000s)	Mean	Median
All	80,362	-6	-5
Gender			
Female	43,596	-5	-5
Male	36,766	-6	-6
Ethnicity			
White non-Hispanic	54,217	-5	-5
Black non-Hispanic	8,494	-6	-5
Native American	413	-5	-6
Asian	5,354	-6	-6
Hispanic	11,885	-6	-6
Education Level (highest level completed)			
Did not graduate high school	9,531	-5	-5
High school graduate	27,253	-5	-5
Some college	18,525	-5	-5
College graduate or higher	25,053	-6	-5
Age			
61 or younger	5,639	-7	-8
62—66	13,888	-12	-10
67—70	14,558	-7	-8
71—75	16,844	-5	-5
76—80	13,979	-3	-3
81—85	9, 17 1	-1	- [
86 or older	6,283	0	0
Marital Status			
Married	41,023	-6	-6
Widowed	17,808	-3	-2
Divorced	11,789	-6	-5
Never married	9,742	-6	-6

	Number (000s)	Mean	Median
Benefit Type - Current Law			
Retired worker only	46,274	-7	-6
Spouse	6,842	-5	-5
Survivor	12,139	-2	-1
Disability only	15,107	-5	-5
Income Quintile			
Lowest quintile	I 6, 07 I	-5	-4
Second quintile	16,073	-5	-5
Third quintile	I 6, 07 I	-5	-5
Fourth quintile	16,073	-6	-5
Highest quintile	16,073	-7	-6

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 65. Index the PIA Formula Factors for Longevity: Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	982	j	982	1
-10% to -1 9 %	5,211	7	6,193	8
Up to -10%	60,963	76	67,156	84
No change	13,176	16	80,332	100
Up to 10%	30	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 66. Index the PIA Formula Factors for Longevity: Distribution by Gender in 2035

		Total percent				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to 10%	percent
Female	I	6	73	20	0	100
Male	2	8	79	12	0	100
Total number (000s)	982	5,211	60,963	13,176	30	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 67. Index the PIA Formula Factors for Longevity: Distribution by Ethnicity in 2035

		Total				
-	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
White non-Hispanic	I	6	76	17	0	100
Black non-Hispanic	2	9	73	17	0	100
Native American	1	5	81	13	0	100
Asian	2	6	78	14	0	100
Hispanic	1	9	78	12	0	100
Total number (000s)	982	5,211	60,963	13,176	30	80,367

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 68. Index the PIA Formula Factors for Longevity: Distribution by Education Level in 2035

		Total percent				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Did not graduate high school	I	8	74	18	0	100
High school graduate	1	7	75	18	0	100
Some college	1	6	77	17	0	100
College graduate or higher	2	7	78	14	0	100
Total number (000s)	982	5,211	60,963	13,176	30	80,367

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 69. Index the PIA Formula Factors for Longevity: Distribution by Age in 2035

	Percentage Change Category					Total
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
61 or younger	0	19	70	П	0	100
62—66	7	28	62	3	0	100
67—70	0	I	96	4	0	100
71—75	0	0	93	7	0	100
76—80	0	0	89	11	0	100
81—85	0	0	67	33	0	100
86 or older	0	0	5	95	0	100
Total number (000s)	982	5,211	60,963	13,176	30	80,367

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 70. Index the PIA Formula Factors for Longevity: Distribution by Marital Status in 2035

		Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent	
Married	2	8	82	9	0	100	
Widowed	0	2	61	36	0	100	
Divorced	1	6	77	15	0	100	
Never married	I	9	76	14	0	100	
Total number (000s)	982	5,211	60,963	13,176	30	80,367	

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 71. Index the PIA Formula Factors for Longevity: Distribution by Benefit Type in 2035

		Total				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
Retired worker only	2	7	83	8	0	100
Spouse	0	6	86	8	0	100
Survivor	0	1	52	46	0	100
Disability only	0	9	68	24	0	100
Total number (000s)	982	5,211	60,963	13,176	30	80,367

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 72. Index the PIA Formula Factors for Longevity: Distribution by Income Quintile in 2035

		Total				
	-20% or more	-1 9 % to -10%	Up to -10%	No change	Up to	percent
Lowest quintile	0	5	73	22	0	100
Second quintile	0	6	76	18	0	100
Third quintile	I	7	77	15	0	100
Fourth quintile	2	8	76	14	0	100
Highest quintile	3	6	78	13	0	100
Total number (000s)	982	5,211	60,963	13,176	30	80,367

Option 9: Longevity Indexing Initial Social Security Benefits by Reducing the PIA Value and Holding Disability Beneficiaries Harmless Until They Reach the FRA

Table 73. Index the PIA Value for Longevity: Summary of Mean and Median Percentage Change in Benefits in 2035

	Number (000s)	Mean	Median
All	80,362	-3	-2
Gender			
Female	43,596	-3	-2
Male	36,766	-3	-3
Ethnicity			
White non-Hispanic	54,217	-3	-2
Black non-Hispanic	8,494	-3	-2
Native American	413	-3	-3
Asian	5,354	-3	-3
Hispanic	11,885	-3	-3
Education Level (highest level completed)			
Did not graduate high school	9,531	-3	-2
High school graduate	27,253	-3	-2
Some college	18,525	-3	-2
College graduate or higher	25,053	-3	-3
Age			
61 or younger	5,639	0	0
62—66	13,888	-7	-6
67—70	14,558	-4	-5
71—75	16,844	-3	-3
76—80	13,979	-2	-2
81—85	9,171	-1	- I
86 or older	6,283	0	0
Marital Status			
Married	41,023	-4	-3
Widowed	17,808	-2	-1
Divorced	11,789	-3	-2
Never married	9,742	-3	-2

	Number (000s)	Mean	Median
Benefit Type - Current Law			
Retired worker only	46,274	-4	-4
Spouse	6,842	-3	-3
Survivor	12,139	-1	0
Disability only	15,107	-1	0
Income Quintile			
Lowest quintile	I 6, 07 I	-2	-2
Second quintile	16,073	-2	-2
Third quintile	I 6, 07 I	-3	-2
Fourth quintile	16,073	-3	-3
Highest quintile	16,073	-4	-3

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 74. Index the PIA Value for Longevity: Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	549	ļ	549	1
-10% to -1 9 %	717	I	1,266	2
Up to -10%	55,929	70	57,195	71
No change	23,067	29	80,262	100
Up to 10%	101	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 75. Index the PIA Value for Longevity: Distribution by Gender in 2035

		Total				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Female	I	l	68	31	0	100
Male	1	1	72	26	0	100
Total number (000s)	549	717	55,929	23,067	101	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 76. Index the PIA Value for Longevity: Distribution by Ethnicity in 2035

_		Total percent				
_	-20% or more	-1 9 % to -1 0 %	Up to -1 0 %	No change	Up to	percent
White non-Hispanic	I	I	71	28	0	100
Black non-Hispanic	Í	1	63	35	0	100
Native American	0	1	72	27	0	100
Asian	1	1	72	26	0	100
Hispanic	1	1	69	30	0	100
Total number (000s)	549	717	55929	23067	101	80367

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 77. Index the PIA Value for Longevity: Distribution by Education Level in 2035

		Total percent				
	-20% or more	-1 9 % to -10%	Up to -10%	No change	Up to 10%	percent
Did not graduate high school	0	I	61	38	0	100
High school graduate	I	I	67	32	0	100
Some college	I	Ī	73	26	0	100
College graduate or higher	I	I	74	24	0	100
Total number (000s)	549	717	55,929	23,067	101	80,367

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 78. Index the PIA Value for Longevity: Distribution by Age in 2035

	Percentage Change Category					Total
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
61 or younger	0	0	3	97	0	100
62—66	4	5	68	23	0	100
67—70	0	0	89	11	0	100
71—75	0	0	88	12	0	100
76—80	0	0	86	13	0	100
81—85	0	0	67	33	0	100
86 or older	0	0	5	95	0	100
Total number (000s)	549	717	55,929	23,067	101	80,367

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 79. Index the PIA Value for Longevity: Distribution by Marital Status in 2035

		Total				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Married	1	l	77	21	0	100
Widowed	0	0	58	41	0	100
Divorced	1	I	70	28	0	100
Never married	1	1	58	40	0	100
Total number (000s)	549	717	55,929	23,067	101	80,367

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 80. Index the PIA Value for Longevity: Distribution by Benefit Type in 2035

		Total percent				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Retired worker only	I	ſ	90	8	0	100
Spouse	0	0	88	11	0	100
Survivor	0	0	50	49	I	100
Disability only	0	0	15	85	0	100
Total number (000s)	549	717	55,929	23,067	101	80,367

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 81. Index the PIA Value for Longevity: Distribution by Income Quintile in 2035

		Total				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Lowest quintile	0	0	63	37	0	100
Second quintile	0	0	66	33	0	100
Third quintile	0	1	71	28	0	100
Fourth quintile	1	2	73	24	0	100
Highest quintile	2	2	76	20	0	100
Total number (000s)	549	717	55,929	23,067	101	80,367

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Option 10: Progressive Price Indexing Initial Social Security Benefits

Table 82. Index Initial Benefits to a Combination of Wage Growth and Price Growth:

Summary of Mean and Median Percentage Change in Benefits in 2035

	Number (000s)	Mean	Median	
All	80,362	-6	-4	
Gender				
Female	43,596	-5	-3	
Male	36,766	-7	-5	
Ethnicity				
White non-Hispanic	54,217	-6	-5	
Black non-Hispanic	8,494	-5	-3	
Native American	413	-6	-5	
Asian	5,354	-6	-4	
Hispanic	11,885	-5	-2	
Education Level (highest level completed)				
Did not graduate high school	9,531	-3	0	
High school graduate	27,253	-5	-3	
Some college	18,525	-6	-4	
College graduate or higher	25,053	-8	-7	
Age				
61 or younger	5,639	-5	-2	
62—66	13,888	-12	-8	
67—70	14,558	-8	-9	
71—75	16,844	-6	-7	
76—80	13,979	-4	-4	
81—85	9,171	-2	-1	
86 or older	6,283	0	0	
Marital Status				
Married	41,023	-7	-6	
Widowed	17,808	-4	-1	
Divorced	11,789	-6	-4	
Never married	9,742	-5	-3	
Benefit Type - Current Law				
Retired worker only	46,274	-7	-6	
Spouse	6,842	-7	-6	

	Number (000s)	Mean	Median	
Survivor	12,139	-3	0	
Disability only	15,107	-4	- [
Income Quintile - CL				
Lowest quintile	16,071	-1	0	
Second quintile	16,073	-4	-3	
Third quintile	16,071	-6	-5	
Fourth quintile	16,073	-8	-7	
Highest quintile	16,073	-10	-9	

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 83. Index Initial Benefits to a Combination of Wage Growth and Price Growth:

Distribution by Impact in 2035

Percentage Change Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
-20% or more	1,624	2	1,624	2
-10% to -1 9 %	16,552	21	18,175	23
Up to -10%	37,179	46	55,355	69
No change	24,982	3	80,337	100
Up to 10%	25	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 84. Index Initial Benefits to a Combination of Wage Growth and Price Growth:

Distribution by Gender in 2035

		Total percent				
	-20% or more	-1 9 % to -1 0 %	Up to -1 0 %	No change	Up to	percent
Female	I	17	46	36	0	100
Male	3	25	47	26	0	100
Total number (000s)	1,624	16,552	37,179	24,983	25	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 85. Index Initial Benefits to a Combination of Wage Growth and Price Growth:

Distribution by Ethnicity in 2035

_		Total percent				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
White non-Hispanic	2	22	48	28	0	100
Black non-Hispanic	2	16	45	37	0	100
Native American	1	26	47	27	0	100
Asian	2	23	43	33	0	100
Hispanic	2	16	42	39	0	100
Total number (000s)	1,624	16,552	37,179	24,983	25	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 86. Index Initial Benefits to a Combination of Wage Growth and Price Growth:

Distribution by Education Level in 2035

		Total percent				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Did not graduate high school	I	10	36	53	0	100
High school graduate	I	15	48	36	0	100
Some college	2	19	51	28	0	100
College graduate or higher	3	31	45	20	0	100
Total number (000s)	1,624	16,552	37,179	24,983	25	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 87. Index Initial Benefits to a Combination of Wage Growth and Price Growth:

Distribution by Age in 2035

		Total				
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
61 or younger	I	23	38	38	0	100
62—66	10	34	31	25	0	100
67—70	0	43	37	19	0	100
71—75	0	23	56	20	0	100
76—80	0	2	74	24	0	100
81—85	0	1	57	42	0	100
86 or older	0	0	3	96	0	100
Total number (000s)	1,624	16,552	37,179	24,983	25	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 88. Index Initial Benefits to a Combination of Wage Growth and Price Growth:

Distribution by Marital Status in 2035

		Total percent				
	-20% or more	-1 9 % to -1 0 %	Up to -1 0 %	No change	Up to	percent
Married	3	25	48	24	0	100
Widowed	1	12	43	44	0	100
Divorced	2	20	47	31	0	100
Never married	2	18	43	37	0	100
Total number (000s)	1,624	16,552	37,179	24,983	25	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 89. Index Initial Benefits to a Combination of Wage Growth and Price Growth:

Distribution by Benefit Type in 2035

		Total percent				
	-20% or more	-19% to -10%	Up to -10%	No change	Up to	percent
Retired worker only	3	24	50	23	0	100
Spouse	2	27	51	19	0	100
Survivor	1	9	39	51	0	100
Disability only	0	16	39	45	0	100
Total number (000s)	1,624	16,552	37,179	24,983	25	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 90. Index Initial Benefits to a Combination of Wage Growth and Price Growth:

Distribution by Income Quintile in 2035

	Percentage Change Category					
	-20% or more	-1 9 % to -1 0 %	Up to -10%	No change	Up to	percent
Lowest quintile	0	3	31	66	0	100
Second quintile	0	13	56	31	0	100
Third quintile	I	21	54	23	0	100
Fourth quintile	4	28	50	19	0	100
Highest quintile	5	38	41	16	0	100
Total number (000s)	1,624	16,552	37,179	24,983	25	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Option 11: Increasing Earnings Subject to Social Security Payroll Taxes by Raising the Dollar Amount of the Taxable Earnings Base to 100% of Aggregate Covered Earnings in the U.S. (Eliminating the Taxable Earnings Base)

Table 91. Increase the Taxable Earnings Base to Tax All Covered Earnings: Summary of Mean and Median Percentage Change in Benefits for Individuals Who Pay No Additional Taxes Over Their Lifetime in 2035

Individuals who pay no additional taxes	Number (000s)	Median percent change in benefits	Mean percent change in benefits
All	62,406	0	0
Gender			
Female	36,283	0	0
Male	26,123	0	0
Ethnicity			
White non-Hispanic	40,711	0	0
Black non-Hispanic	7,499	0	0
Native American	345	0	0
Asian	3,796	0	0
Hispanic	10,054	0	0
Education Level (highest level completed)			
Did not graduate high school	8,990	0	0
High school graduate	24,570	0	0
Some college	15,029	0	0
College graduate or higher	13,818	0	1
Age			
61 or Younger	4,743	0	0
62-66	10,087	0	1
67-70	10,102	0	0
71-75	12,476	0	0
76-80	11,009	0	0
81-85	7,900	0	0
86+	6,090	0	0

Individuals who pay no additional taxes	Number (000s)	Median percent change in benefits	Mean percent change in benefits	
Marital Status				
Married	30,382	0	0	
Widowed	15,004	0	0	
Divorced	9,211	0	I	
Never married	7,809	0	0	
Benefit Type - Current Law				
Retired worker only	31,193	0	0	
Spouse	6,779	0	2	
Survivor	11,464	0	0	
Disability only	12,970	0	0	
Income Quintile				
Lowest quintile	15,610	0	0	
Second quintile	14,394	0	0	
Third quintile	13,058	0	0	
Fourth quintile	11,263	0	I	
Highest quintile	8,081	0	I	

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 92. Increase the Taxable Earnings Base to Tax All Covered Earnings: Summary of Mean and Median Percentage Change in Benefits for Individuals Who Pay Additional Taxes Over Their Lifetime in 2035

Individuals who pay additional taxes	Number (000s)	Median percent change in benefits	Mean percent change in benefits	
All	17,956	2	5	
Gender				
Female	7,313	1	5	
Male	10,643	2	6	
Ethnicity				
White non-Hispanic	13,506	2	5	
Black non-Hispanic	994	I	6	
Native American	a	a	a	
Asian	1,558	2	4	
Hispanic	1,830	1	8	

Individuals who pay additional taxes	Number (000s)	Median percent change in benefits	Mean percent change in benefits
Education Level (highest level completed	d)		
Did not graduate high school	541	2	5
High school graduate	2,684	I	4
Some college	3,497	I	3
College graduate or higher	11,235	2	6
Age			
61 or Younger	896	2	5
62-66	3,801	2	12
67-70	4,456	2	4
71-75	4,368	I	3
76-80	2,971	I	3
81-85	1,271	I	2
86+	194	I	2
Marital Status			
Married	10,641	2	5
Widowed	2,804	I	6
Divorced	2,578	2	5
Never married	1,933	2	4
Benefit Type - Current Law			
Retired worker only	15,082	2	6
Spouse	a	a	a
Survivor	675	0	2
Disability only	2, I 37	I	5
Income Quintile			
Lowest quintile	46	I	2
Second quintile	1,679	1	2
Third quintile	3,013	I	2
Fourth quintile	4,811	1	5
Highest quintile	7,993	2	8

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

a. Number not presented due to insufficient sample size.

Table 93. Increase the Taxable Earnings Base to Tax All Covered Earnings: Summary of Mean and Median Percentage Change in Benefits for the Total Population in 2035

Total population	Number (000s)	Median percent change in benefits	Mean percent change in benefits	
All	80,362	0	I	
Gender				
Female	43,596	0	I	
Male	36,766	0	2	
Ethnicity				
White non-Hispanic	54,217	0	2	
Black non-Hispanic	164	0	I	
Native American	413	0	I	
Asian	5,354	0	1	
Hispanic	11,885	0	I	
Education Level (highest level complete	d)			
Did not graduate high school	9,531	0	0	
High school graduate	27,253	0	I	
Some college	18,525	0	I	
College graduate	25,053	0	3	
Age				
61 or Younger	5,639	0	I	
62-66	13,888	0	4	
67-70	14,558	0	2	
71-75	16,844	0	I	
76-80	13,979	0	I	
81-85	9,171	0	0	
86+	6,283	0	0	
Marital Status				
Married	41,023	0	2	
Widowed	17,808	0	I	
Divorced	11,789	0	2	
Never married	9,742	0	I	
Simple Benefit Type - Current Law				
Retired worker only	46,274	0	2	
Spouse	6,842	0	2	
Survivor	12,139	0	0	
Disability only	15,107	0	1	

Total population	Number (000s)	Median percent change in benefits	Mean percent change in benefits
Income Quintile - Current Law			
Lowest quintile	16,071	0	0
Second quintile	16,073	0	0
Third quintile	16,071	0	1
Fourth quintile	16,073	0	2
Highest quintile	16,073	0	4

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 94. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Benefits for the Total Population by Impact in

2035

Percentage Change in Benefits Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
Up to -10%	8	0	8	0
No change	62,303	78	62,310	78
Up to 10%	16,046	20	78,356	98
10% to 19%	1,234	2	79,590	99
20% to 100%	697	1	80,287	100
More than 100%	76	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 95. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Benefits for the Total Population by Gender in 2035

	Percentage Change in Benefits Category						
	Up to -10%	No change	Up to 10%	l 0 % to l 9 %	20% to 100%	More than 100%	percent
Female	0	80	18	I	I	0	100
Male	0	75	22	2	ĺ	0	100
Total number (000s)	8	62,303	16,046	1,234	697	76	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 96. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Benefits for the Total Population by Ethnicity in 2035

	Percentage Change in Benefits Category						Total
	Up to -10%	No change	Up to	10% to 1 9 %	20% to 100%	More than	percent
White non- Hispanic	0	75	22	2	I	0	100
Black non- Hispanic	0	89	10	0	0	0	100
Native American	0	82	14	2	2	0	100
Asian	0	72	25	3	1	0	100
Hispanic	0	84	14	1	I	0	100
Total number (000s)	8	62,303	16,046	1,234	697	76	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the "What Do the Tables Show?" in the report Introduction.

Table 97. Increase the Taxable Earnings Base to Tax All Covered Earnings of the Total Population: Distribution of Percentage Change in Benefits for the Total Population by Education Level in 2035

	Percentage Change in Benefits Category						Total
•	Up to -10%	No change	Up to	10% to 19%	20% to	More than	percent
Did not graduate high school	0	92	7	0	I	0	100
High school graduate	0	89	10	1	0	0	100
Some college	0	82	16	1	1	0	100
College graduate or higher	0	57	38	3	2	0	100
Total number (000s)	8	62,303	16,046	I,23 4	697	76	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 98. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Benefits for the Total Population by Age in
2035

		Percentage Change in Benefits Category					
	Up to -10%	No change	Up to 10%	10% to 1 9 %	20% to	More than 100%	percent
61 or Younger	0	86	12	ĺ	I	0	100
62-66	0	72	23	3	2	0	100
67-70	0	70	27	2	1	0	100
71-75	0	73	24	2	1	0	100
76-80	0	78	20	1	1	0	100
81-85	0	86	13	0	0	0	100
86+	0	97	3	0	0	0	100
Total number (000s)	8	62,303	I 6,046	1,234	697	76	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 99. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Benefits for the Total Population by Marital

Status in 2035

	Percentage Change in Benefits Category							
	Up to -10%	No change	Up to	10% to 1 9 %	20% to	More than	Total percent	
Married	0	74	23	2	I	0	100	
Widowed	0	82	16	1	I	0	100	
Divorced	0	79	19	1	1	0	100	
Never married	0	84	15	1	1	0	100	
Total number (000s)	8	62,303	16,046	1,234	697	76	80,362	

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 100. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Benefits for the Total Population by Benefit

Type in 2035

		Percentage Change in Benefits Category							
•	Up to -10%	No change	Up to	10% to 19%	20% to	More than	Total percent		
Retired worker only	0	73	24	2	I	0	100		
Spouse	0	65	30	3	1	0	100		
Survivor	0	88	11	1	0	0	100		
Disability only	0	89	10	1	0	0	100		
Total number (000s)	8	62,303	16,046	1,234	697	76	80,362		

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 101. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Benefits for the Total Population by Income

Quintile in 2035

	Percentage Change in Benefits Category							
	Up to -10%	No change	Up to 1 0 %	10% to 1 9 %	20% to 100%	More than 100%	percent	
Lowest Quintile	0	97	3	0	0	0	100	
Second Quintile	0	90	10	I	0	0	100	
Third Quintile	0	81	18	j	0	0	100	
Fourth Quintile	0	70	27	2	1	0	100	
Highest Quintile	0	50	42	5	3	0	100	
Total number (000s)	8	62,303	16,046	1,234	697	76	80,362	

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 102. Increase the Taxable Earnings Base to Tax All Covered Earnings: Summary of Mean and Median Percentage Change in Taxes Paid for Individuals Who Pay No Additional Taxes Over their Lifetime in 2035

Individuals who pay no additional taxes	Number (000s)	Median percent change in taxes	Mean percent change in taxes	
All	60,903	0	0	
Gender				
Female	35,344	0	0	
Male	25,559	0	0	
Ethnicity				
White non-Hispanic	39,62 l	0	0	
Black non-Hispanic	7,343	0	0	
Native American	340	0	0	
Asian	3,726	0	0	
Hispanic	9,873	0	0	
Education Level (highest level completed)				
Did not graduate high school	8,909	0	0	
High school graduate	24,290	0	0	
Some college	14,707	0	0	
College graduate or higher	12,997	0	0	
Birth Year				
<= 1930	a	a	a	
1931-1941	755	0	0	
1942-1945	1,528	0	0	
1946-1955	12,831	0	0	
1956-1964	21,000	0	0	
1965-1970	14,596	0	0	
1971+	10,160	0	0	
Marital Status				
Married	29,602	0	0	
Widowed	14,462	0	0	
Divorced	9,030	0	0	
Never married	7,809	0	0	
Benefit Type - Current Law				
Retired worker only	31,193	0	0	
Spouse	5,916	0	0	
Survivor	10,825	0	0	
Disability only	12,970	0	0	

Individuals who pay no additional taxes	Number (000s)	Median percent change in taxes	Mean percent change in taxes	
Income Quintile				
Lowest quintile	15,432	0	0	
Second quintile	14,135	0	0	
Third quintile	12,776	0	0	
Fourth quintile	10,923	0	0	
Highest quintile	7,638	0	0	

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

a. Number not presented due to insufficient sample size.

Table 103. Increase the Taxable Earnings Base to Tax All Covered Earnings: Summary of Mean and Median Percentage Change in Taxes Paid for Individuals Who Pay Additional Taxes Over their Lifetime in 2035

Individuals who pay additional taxes	Number (000s)	Median percent change in taxes	Mean percent change in taxes
All	17,956	3	8
Gender			
Female	7,313	3	8
Male	10,643	3	8
Ethnicity			
White non-Hispanic	l 3,506	3	8
Black non-Hispanic	994	2	7
Native American	a	a	a
Asian	1,558	4	7
Hispanic	1,830	3	7
Education Level (highest level completed)			
Did not graduate high school	541	3	12
High school graduate	2,684	2	7
Some college	3,497	2	5
College graduate or higher	11,235	4	9
Birth Year			
1931-1941	a	a	a
1942-1945	a	a	a
1946-1955	1,921	2	5
1956-1964	6,862	3	7

Individuals who pay additional taxes	Number (000s)	Median percent change in taxes	Mean percent change in taxes
1965-1970	6,346	4	9
1971+	2,807	4	11
Marital Status			
Married	I 0,64 I	3	8
Widowed	2,804	3	7
Divorced	2,578	3	9
Never married	1,933	3	9
Simple Benefit Type - Current Law			
Retired worker only	15,082	3	8
Spouse	a	a	a
Survivor	675	2	5
Disability only	2,137	3	10
Income Quintile - Current Law			
Lowest quintile	461	2	5
Second quintile	1,679	2	5
Third quintile	3,013	2	5
Fourth quintile	4,811	3	7
Highest quintile	7,993	4	П

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

a. Number not presented due to insufficient sample size.

Table 104. Increase the Taxable Earnings Base to Tax All Covered Earnings:
Distribution of Percentage Change in Taxes Paid for the Total Population in 2035

Percentage Change in Taxes Category	Number (000s)	Percent	Cumulative Number (000s)	Cumulative Percent
No change	62,645	79	62,645	79
Up to 10%	12,824	16	75,469	96
10% to 19%	1,991	3	77,460	98
20% to 100%	1,246	2	78,706	100
More than 100%	154	0	78,859	100
Number	Missing (000s) =	= 1503		

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 105. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Taxes Paid for the Total Population by Gender in 2035

		Percentage Change in Taxes Category							
	Up to -10%	No change	Up to 10%	10% to 19%	20% to 100%	Total percent			
Female	85	13	I	I	0	100			
Male	73	20	4	2	0	100			
Total number (000s)	62,645	12,824	1,991	1,246	154	78,860			
		Number	Missing (000s)	= 1503					

Note: Categories may not add to 100% due to rounding. Individuals without earnings are not included (missing) from table. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 106. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Taxes Paid for the Total Population by Ethnicity
in 2035

		Percentage Change in Taxes Category							
	Up to -10%	No change	Up to 10%	10% to 19%	20% to 100%	Total percent			
White non-Hispanic	77	18	3	2	0	100			
Black non-Hispanic	90	9	1	1	0	100			
Native American	85	10	2	3	0	100			
Asian	73	20	4	3	0	100			
Hispanic	86	12	1	1	0	100			
Total number (000s)	62,645	12,824	1,991	1,246	154	78,860			
		Number	Missing (000s)	= 1503					

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 107. Increase the Taxable Earnings Base to Tax All Covered Earnings: Distribution of Percentage Change in Taxes Paid for the Total Population by Education Level in 2035

	İ	Total				
	Up to -10%	No change	Up to 10%	10% to 19%	20% to	percent
Did not graduate high school	95	4	0	I	0	100
High school graduate	92	7	0	I	0	100
Some college	84	15	1	1	0	100
College graduate or higher	57	32	7	4	0	100
Total number (000s)	62,645	12,824	1,991	1,246	154	78,860
		Number Missi	ng (000s) = 15	03		

Note: Categories may not add to 100% due to rounding. Individuals without earnings are not included (missing) from table. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 108. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Taxes Paid for the Total Population by Age in

2035

		Total percent				
	Up to -10%	No change	Up to 10%	10% to 19%	20% to 100%	•
61 or Younger	85	[1	2	ĺ	0	100
62-66	75	19	3	2	0	100
67-70	72	21	4	3	0	100
71-75	76	19	3	2	0	100
76-80	80	17	2	1	0	100
81-85	88	11	I	1	0	100
86+	97	3	0	0	0	100
Total number (000s)	62,645	12,824	1,991	1,246	154	78,860
		Number	Missing (000s)	= 1503		

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 109. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Taxes Paid for the Total Population Marital

Status in 2035

		Total percent					
	Up to -10%	No change	Up to 10%	10% to 1 9 %	20% to 100%		
Married	76	19	3	2	0	100	
Widowed	85	12	1	1	0	100	
Divorced	80	16	3	1	0	100	
Never married	82	15	2		0	100	
Total number (000s)	62,645	12,824	1,991	1,246	154	78,860	
Number Missing (000s) = 1,503							

Note: Categories may not add to 100% due to rounding. Individuals without earnings are not included (missing) from table. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 110. Increase the Taxable Earnings Base to Tax All Covered Earning:

Distribution of Percentage Change in Taxes Paid for the Total Population by Benefit

Type in 2035

		Total percent				
	Up to -10%	No change	Up to 10%	10% to 19%	20% to 100%	
Retired worker only	71	23	4	2	0	100
Spouse	99	0	0	0	0	100
Survivor	95	4	0	0	0	100
Disability only	87	10	2	I	0	100
Total number (000s)	62,645	12,824	1,991	1,246	154	78,860
		Number I	Missing (000s) :	= 1,503		

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model

Table 111. Increase the Taxable Earnings Base to Tax All Covered Earnings:

Distribution of Percentage Change in Taxes Paid for the Total Population by Income

Quintile in 2035

		-				
	Up to -10%	No change	Up to 10%	10% to 19%	20% to 100%	Total percent
Lowest quintile	98	2	0	0	0	100
Second quintile	91	8	1	0	0	100
Third quintile	83	15	2	1	0	100
Fourth quintile	73	23	3	2	0	100
Highest quintile	53	35	7	5	1	100
Total number (000s)	62,645	12,824	1,991	1,246	154	78,860
		Number I	Missing (000s) :	= 1,503		

Option 12: Increasing Earnings Subject to Social Security Payroll Taxes by Raising the Dollar Amount of the Taxable Earnings Base to 90% of Aggregate Covered Earnings in the U.S.

Table 112. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Summary of Mean and Median Percentage Change in Benefits for Individuals Who

Pay No Additional Taxes Over their Lifetime in 2035

Individuals who pay no additional taxes	Number (000s)	Median percent change in benefits	Mean percent change in benefits	
All	62,406	0	(
Gender				
Female	36,283	0	(
Male	26,123	0	(
Ethnicity				
White non-Hispanic	40,711	0	(
Black non-Hispanic	7,499	0	(
Native American	345	0	(
Asian	3,796	0	(
Hispanic	10,054	0	(
Education Level (highest level completed)				
Did not graduate high school	8,990	0		
High school graduate	24,570	0		
Some college	15,029	0	(
College graduate or higher	13,818	0		
Age				
61 or Younger	4,743	0	(
62-66	10,087	0	(
67-70	10,102	0		
71-75	12,476	0	(
76-80	11,009	0		
81-85	7,900	0		
86+	6,090	0	(
Marital Status				
Married	30,382	0		
Widowed	15,004	0	(

Individuals who pay no additional taxes	Number (000s)	Median percent change in benefits	Mean percent change in benefits	
Divorced	9,211	0	0	
Never married	7,809	0	0	
Benefit Type - Current Law				
Retired worker only	31,193	0	0	
Spouse	6,779	0	I	
Survivor	11,464	0	0	
Disability only	12,970	0	0	
Income Quintile				
Lowest quintile	15,610	0	0	
Second quintile	14,394	0	0	
Third quintile	13,058	0	0	
Fourth quintile	11,263	0	0	
Highest quintile	8,081	0	I	

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 113. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Summary of Mean and Median Percentage Change in Benefits for Individuals Who

Pay Additional Taxes Over Their Lifetime in 2035

Individuals who pay additional taxes	Number (000s)	Median percent change in benefits	Mean percent change in benefits	
All	17,956	2	4	
Gender				
Female	7,313	ĺ	3	
Male	10,643	2	5	
Ethnicity				
White non-Hispanic	13,506	2	4	
Black non-Hispanic	994	1	4	
Native American	a	a	a	
Asian	1,558	2	3	
Hispanic	1,830	ĺ	6	
Education Level (highest level completed)				
Did not graduate high school	541	2	4	
High school graduate	2,684	I	2	
Some college	3,497	ĺ	2	
College graduate or higher	11,235	2	5	

Individuals who pay additional taxes	Number (000s)	Median percent change in benefits	Mean percent change in benefits	
Age				
61 or younger	896	2	4	
62-66	3,801	2	9	
67-70	4,456	2	3	
71-75	4,368	1	3	
76-80	2,971	1	2	
81-85	1,271	I	2	
86+	194	I	1	
Marital Status				
Married	10,641	2	4	
Widowed	2,804	1	4	
Divorced	2,578	1	4	
Never married	1,933	2	3	
Benefit Type - Current Law				
Retired worker only	15,082	2	4	
Spouse	a	a	a	
Survivor	675	0	2	
Disability only	2,137	1	3	
Income Quintile				
Lowest quintile	461	1	2	
Second quintile	1,679	I	2	
Third quintile	3,013	1	2	
Fourth quintile	4,811	I	4	
Highest quintile	7,993	2	6	

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

a. Number not presented due to insufficient sample size.

Table 114. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Summary of Mean and Median Percentage Change in Benefits for Total Population in 2035

Total population	Number (000s)	Median percent change in benefits	Mean percent change in benefits	
All	80,362	0		
Gender				
Female	43,596	0	I	
Male	36,766	0	I	
Ethnicity				
White non-Hispanic	54,217	0	ı	
Black non-Hispanic	8,494	0	1	
Native American	413	0	ı	
Asian	5,354	0	I	
Hispanic	11,885	0		
Education Level (highest level completed	d)			
Did not graduate high school	9,531	0	(
High school graduate	27,253	0	(
Some college	18,525	0		
College graduate or higher	25,053	0		
Age				
61 or younger	5,639	0		
62-66	13,888	0	;	
67-70	14,558	0		
71-75	16,844	0		
76-80	13,979	0		
81-85	9,171	0	(
86+	6,283	0	(
Marital Status				
Married	41,023	0		
Widowed	17,808	0		
Divorced	11,789	0		
Never married	9,742	0		
Simple Benefit Type - Current Law				
Retired worker only	46,274	0		
Spouse	6,842	0		
Survivor	12,139	0	(
Disability only	15,107	0	(

Total population	Number (000s)	Median percent change in benefits	Mean percent change in benefits	
Income Quintile - Current Law				
Lowest quintile	16,071	0	0	
Second quintile	16,073	0	0	
Third quintile	16,071	0	l	
Fourth quintile	16,073	0	l	
Highest quintile	16,073	0	3	

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 115. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Benefits for the Total Population by Impact in
2035

Percentage Change in Benefits Category	Number (000s)	Percent	Cumulative number (000s)	Cumulative percent
Up to -10%	8	0	8	0
No change	62,323	78	62,330	78
Up to 10%	16,592	21	78,922	98
10% to 19%	1,057	I	79,980	100
20% to 100%	350	0	80,330	100
More than 100%	33	0	80,362	100

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 116. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Benefits for the Total Population by Gender in

2035

	Percentage Change in Benefits Category						Total
	Up to -10%	No change	Up to	10% to 1 9 %	20% to	More than	percent
Female	0	80	19	1	0	0	100
Male	0	75	23	2	1	0	100
Total number (000s)	8	62,323	16,592	1,057	350	33	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 117. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Benefits for the Total Population by Ethnicity in 2035

	Percentage Change in Benefits Category						
	Up to -10%	No change	Up to	10% to 1 9 %	20% to	More than	percent
White non- Hispanic	0	75	23	I	0	0	100
Black non- Hispanic	0	89	10	0	0	0	100
Native American	0	82	15	3	0	0	100
Asian	0	72	26	2	0	0	100
Hispanic	0	84	15	1	0	0	100
Total number (000s)	8	62,323	16,592	1,057	350	33	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 118. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Benefits for the Total Population by Education

Level in 2035

		Total						
•	Up to -10%	No change	Up to	10% to 1 9 %	20% to	More than 100%	percent	
Did not graduate high school	0	92	7	I	0	0	100	
High school graduate	0	89	Н	I	0	0	100	
Some college	0	82	17	1	0	0	100	
College graduate or higher	0	57	39	3	I	0	100	
Total number (000s)	8	62,323	16,592	1,057	350	33	80,362	

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 119. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings: Distribution of Percentage Change Benefits for the Total Population by Age in 2035

	Percentage Change in Benefits Category						Total
	Up to -10%	No change	Up to 10%	10% to 1 9 %	20% to	More than	percent
61 or younger	0	86	12	ĺ	0	0	100
62-66	0	72	24	3	1	0	100
67-70	0	70	28	2	1	0	100
71-75	0	73	25	1	0	0	100
76-80	0	78	21	1	0	0	100
81-85	0	86	13	0	0	0	100
86+	0	97	3	0	0	0	100
Total number (000s)	8	62,323	16,592	1,057	350	33	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 120. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings: Distribution of Percentage Change Benefits for the Total Population by Marital Status in 2035

		Total percent					
	Up to -10%	No change	Up to	10% to 1 9 %	20% to 100%	More than 100%	percent
Married	0	74	24	2	0	0	100
Widowed	0	82	17	1	0	0	100
Divorced	0	79	19	1	1	0	100
Never married	0	84	15	ĺ	0	0	100
Total number (000s)	8	62,323	16,592	1,057	350	33	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 121. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Benefits for the Total Population by Benefit Type in 2035

		Total					
	Up to -10%	No change	Up to	1 0 % to	20% to	More than	percent
Retired worker only	0	73	25	2	I	0	100
Spouse	0	65	32	2	1	0	100
Survivor	0	88	12	0	0	0	100
Disability only	0	89	10	1	0	0	100
Total number (000s)	8	62,323	16,592	1,057	350	33	80,362

Note: Categories may not add to 100% due to rounding. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 122. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings: Distribution of Percentage Change Benefits for the Total Population by Income Quintile in 2035

	Percentage Change in Benefits Category						Total percent
-	Up to -10%	No change	Up to 1 0 %	10% to 19%	20% to	More than 100%	percent
Lowest quintile	0	97	3	0	0	0	100
Second quintile	0	90	10	0	0	0	100
Third quintile	0	81	18	0	0	0	100
Fourth quintile	0	70	28	1	0	0	100
Highest quintile	0	50	44	4	2	0	100
Total number (000s)	8	62,323	16,592	1,057	350	33	80,362

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 123. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Summary of Mean and Median Percentage Change in Taxes Paid for Individuals Who
Pay No Additional Taxes Over Their Lifetime in 2035

Individuals who pay no additional taxes	Number (000s)	Median percent change in taxes	Mean percent change in taxes
All	60,903	0	(
Gender			
Female	35,344	0	C
Male	25,559	0	C
Ethnicity			
White non-Hispanic	39,62 l	0	C
Black non-Hispanic	7,343	0	(
Native American	340	0	(
Asian	3,726	0	(
Hispanic	9,873	0	(
Education Level (highest level completed)			
Did not graduate high school	8,909	0	(
High school graduate	24,290	0	(
Some college	14,707	0	1
College graduate or higher	12,997	0	1
Birth Year			
<= 930	a	a	
1931-1941	755	0	
1942-1945	1,528	0	
1946-1955	12,831	0	1
1956-1964	21,000	0	
1965-1970	14,596	0	
97 +	10,160	0	
Marital Status			
Married	29,602	0	
Widowed	14,462	0	
Divorced	9,030	0	1
Never married	7,809	0	1
Benefit Type - Current Law			
Retired worker only	31,193	0	1
Spouse	5,916	0	1
Survivor	10,825	0	1
Disability only	12,970	0	(

Individuals who pay no additional taxes	Number (000s)	Median percent change in taxes	Mean percent change in taxes
Income Quintile			
Lowest quintile	15,432	0	0
Second quintile	14,135	0	0
Third quintile	12,776	0	0
Fourth quintile	10,923	0	0
Highest quintile	7,638	0	0

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

a. Number not presented due to insufficient sample size.

Table 124. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Summary of Mean and Median Percentage Change in Taxes Paid for Individuals Who

Pay Additional Taxes Over Their Lifetime in 2035

Individuals who pay additional taxes	Number (000s)	Median percent change in taxes	Mean percent change in taxes
All	17,956	3	6
Gender			
Female	7,313	3	6
Male	10,643	3	6
Ethnicity			
White non-Hispanic	I 3,506	3	6
Black non-Hispanic	994	2	5
Native American	a	a	a
Asian	1,558	4	6
Hispanic	1,830	3	6
Education Level (highest level completed)			
Did not graduate high school	541	3	8
High school graduate	2,684	2	5
Some college	3,497	2	4
College graduate or higher	11,235	4	7
Birth Year			
1931-1941	a	a	a
1942-1945	a	a	a
1946-1955	1,921	2	4
1956-1964	6,862	3	5

Individuals who pay additional taxes	Number (000s)	Median percent change in taxes	Mean percent change in taxes
1965-1970	6,346	4	7
1971+	2,807	4	7
Marital Status			
Married	4,227	3	6
Widowed	1,114	3	5
Divorced	1,024	3	6
Never married	768	3	6
Simple Benefit Type - Current Law			
Retired worker only	15,082	3	6
Spouse	a	a	a
Survivor	675	2	4
Disability only	2,137	3	7
Income Quintile - Current Law			
Lowest quintile	461	2	5
Second quintile	1,679	2	4
Third quintile	3,013	2	4
Fourth quintile	4,811	3	5
Highest quintile	7,993	4	7

Note: Please see the section on "What Do the Tables Show?" in the report Introduction.

a. Number not presented due to insufficient sample size.

Table 125. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Taxes Paid for the Total Population by Impact in 2035

	Number (000s)	Percent	Cumulative number (000s)	Cumulative percent
No change	62,645	79	62,645	79
Up to 10%	13,168	17	75,813	96
10% to 20%	2,042	3	77,855	99
20% or more	1,004	1	78,859	100
	Nun	nber Missing (000s) :	= 1,503	

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 126. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Taxes Paid for the Total Population by Gender in 2035

	Per	Total percent					
	No change	Up to 10%	10% to 20%	20% or more			
Female	85	13	2	I I	100		
Male	73	21	4	2	100		
Total number (000s)	62,645	13,168	2,042	1,004	78,860		
Number Missing $(000s) = 1,503$							

Note: Categories may not add to 100% due to rounding. Individuals without earnings are not included (missing) from table. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 127. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Taxes Paid for the Total Population by Ethnicity in

2035

	Per	Total percent			
	No change	Up to 10%	10% to 20%	20% or more	
White non-Hispanic	77	19	3	1	100
Black non-Hispanic	90	9	1	1	100
Native American	85	10	2	2	100
Asian	73	21	4	2	100
Hispanic	86	12	1	1	100
Total number (000s)	62,645	13,168	2,042	1,004	78,860
		Number Missing	(000s) = 1,503		

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 128. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Taxes Paid for the Total Population by Education

Level in 2035

	Perc	Total percent			
	No change	Up to 10%	10% to 20%	20% or more	
Did not graduate high school	95	4	0	l	100
High school graduate	92	7	0	I	100
Some college	84	15	1	1	100

	Perc	Total percent			
	No change	Up to 10%	10% to 20%	20% or more	
College graduate or higher	57	34	7	3	100
Total number (000s)	62,645	13,168	2,042	1,004	78,860
	Num	ber Missing (000	os) = 1,503		

Note: Categories may not add to 100% due to rounding. Individuals without earnings are not included (missing) from table. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 129. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings: Distribution of Percentage Change Taxes Paid for the Total Population by Age in 2035

	Per				
	No change	Up to 10%	10% to 20%	20% or more	Total percent
61 or younger	85	П	2	1	100
62-66	75	19	4	2	100
67-70	72	22	4	2	100
71-75	76	20	3	1	100
76-80	80	17	2	1	100
81-85	88	П	1	0	100
86+	97	3	0	0	100
Total number (000s)	62,645	13,168	2,042	1,004	78,860
		Number Missing	(000s) = 1,503		

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model.

Table 130. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Taxes Paid for the Total Population by Marital

Status in 2035

	Per	T-4-1				
	No change	Up to 10%	10% to 20%	20% or more	Total percent	
Married	76	19	3	2	100	
Widowed	85	12	1	1	100	
Divorced	80	16	3	1	100	
Never married	82	15	1	1	100	
Total number (000s)	62,645	13,168	2,042	I,00 4	78,860	
Number Missing $(000s) = 1,503$						

Note: Categories may not add to 100% due to rounding. Individuals without earnings are not included (missing) from table. Please see the section on "What Do the Tables Show?" in the report Introduction.

Table 131. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Taxes Paid for the Total Population by Benefit

Type in 2035

	Pei	_ , ,			
	No change	Up to 10%	10% to 20%	20% or more	Total percent
Retired worker only	71	24	4	2	100
Spouse	99	Ī	0	0	100
Survivor	95	5	0	0	100
Disability only	87	10	2	1	100
Total number (000s)	62,645	13,168	2,042	1,004	78,860
		Number Missing	(000s) = 1,503		

Source: Congressional Research Service (CRS) calculations using the Urban Institute's Dynasim microsimulation model

Table 132. Increase the Taxable Earnings Base to Tax 90% of Covered Earnings:

Distribution of Percentage Change Taxes Paid for the Total Population by Income

Quintile in 2035

	Per	Total percent			
	No change	Up to 10%	10% to 20%	20% or more	i otai percent
Lowest quintile	98	2	0	0	100
Second quintile	91	8	1	0	100
Third quintile	83	15	2	1	100

	Per	T-4-1			
	No change	Up to 10%	10% to 20%	20% or more	Total percent
Fourth quintile	73	23	3	1	100
Highest quintile	53	36	7	4	100
Total number (000s)	62,645	13,168	2,042	1,004	78,860
		Number Missing	(000s) = 1,503		

Appendix A. Computation of the Primary Insurance Amount (PIA) Under Current Law

The Primary Insurance Amount (PIA) is the basic Social Security monthly benefit amount payable to an individual upon entitlement to retirement benefits at the normal retirement age (i.e., the PIA does not reflect any adjustments for early or delayed retirement) or disability benefits. In addition, the PIA is the base amount used to determine monthly benefits payable to family members on the worker's record (such as a spouse or surviving spouse).

Under current law, the PIA is determined by applying a benefit formula to the worker's average lifetime covered earnings. In the first step of the benefit computation, the worker's nominal earnings (up to 2 calendar years prior to the year of eligibility—for example, earnings prior to age 60 in the case of a retirement benefit) are indexed to wage growth to reflect the change in average wages over time. (Earnings in subsequent years are counted at nominal value.) For purposes of computing a basic retirement benefit, the 35 highest years of indexed earnings are then averaged and a monthly amount is computed to determine the worker's Average Indexed Monthly Earnings (AIME). (If a worker has fewer than 35 years of covered earnings, years of "zero" earnings are counted in the computation of the AIME.)⁷ The benefit formula is then applied to the worker's AIME. The benefit formula that applies to individuals who first become eligible for retirement or disability benefits in 2006, or who die in 2006 before becoming eligible for benefits, is as follows:

- 90% of the first \$656 of AIME, plus
- 32% of AIME over \$656 through \$3,955, *plus*
- 15% of AIME over \$3,955

For example, the PIA for a worker who reaches age 62 in 2006, based on an AIME of \$4,500, would be \$1,727.80. The PIA would be computed as follows:

- 90% x \$656 = \$590.40, plus
- 32%x\$3,299 = \$1,055.68, plus
- 15% x \$545 = \$81.75

PIA = \$1,727.80 (rounded to the next lower 10 cents)

The worker's PIA is based on the benefit formula that applies in the year the worker first becomes *eligible* for benefits (age 62 for retired-worker benefits, the year of disability for disabled-worker benefits, or the year of the worker's death for survivor benefits), rather than the first year of

⁷ The number of computation years used to determine the AIME varies, depending on the type of benefit (retirement, survivor or disability). The number of computation years is based on the number of "elapsed years" (i.e., the number of calendar years after 1950 or, if later, attainment of age 21) up to the year the worker attains age 62 (for retirement benefits); the year of death or, if earlier, attainment of age 62 (for survivor benefits); or the year of disability (for disability benefits) minus any "dropout years." The number of dropout years also varies, depending on the type of benefit. For purposes of retirement and survivor benefits, up to 5 dropout years apply. For purposes of disability benefits for workers disabled before age 47, 1 to 4 dropout years apply, depending on the worker's age and the number of dropout years. However, no fewer than 2 computation years may be used for disability benefit calculations.

benefit receipt. Beginning with the first year of eligibility, the PIA is increased by the annual Social Security cost-of-living adjustment (COLA) for any intervening years between eligibility and benefit receipt. For example, if an individual who first becomes eligible for retired-worker benefits at age 62 in 2006 elects to receive benefits at the normal retirement age (age 66 in 2010), the PIA effective at the normal retirement age would be the PIA calculated using the benefit formula for 2006 (shown above) adjusted annually according to the COLA effective in December 2006, December 2007, December 2008 and December 2009.

The dollar amounts that separate the three brackets of AIME in the benefit formula (\$656 and \$3,955) are referred to as bend points. Under current law, the bend points are indexed to wage growth on an annual basis to provide stable replacement rates over time for workers with similar earnings patterns. (The replacement rate is based on Social Security benefits in the first year of retirement divided by final earnings.) For example, under current law, the benefit formula is designed to provide a replacement rate of approximately 40% for average-wage earners regardless of the year of retirement.

The percentages that apply to each of the three brackets of AIME in the benefit formula (90%, 32% and 15%) are referred to as formula factors (or replacement factors). The formula factors, which are fixed under current law, are structured such that Social Security benefits replace a greater share of pre-retirement earnings for lower-wage workers wompared with higher-wage workers.

Appendix B. Interaction of Spouse and Aged **Survivor Benefit Rules with Policy Options**

The current-law Social Security rules regarding spouses and survivors can increase the benefits of some married, widowed, and divorced beneficiaries. When these spouse and survivor rules interact with policy options that reduce Social Security benefits, they can mitigate the effect of benefit reductions, causing smaller reductions than would have been expected under the policy option.

Current Law Spouse and Survivor Rules Can Increase Social Security Benefits

The Social Security rules regarding spouses and aged survivors allow some individuals to receive a benefit when they otherwise would have received none, and allow other individuals to receive a higher benefit than they otherwise would have received.

Individuals who do not qualify for a Social Security benefit based on their own work records may qualify for a benefit based on their current or former spouses' work records. Social Security spouse benefits are payable to the spouse or divorced spouse of a retired or disabled worker, based on the worker's earnings record. 8 The primary insurance amount (PIA) for a spouse beneficiary is generally 50% of his or her spouse's PIA. Social Security survivor benefits are payable to the survivors of a deceased worker, based on the worker's earnings record. The PIA for an aged widow or widower is 100% of his or her deceased spouse's final benefit amount.⁹

Individuals who do qualify for Social Security benefits based on their own work records may receive a partial spouse or survivor benefit in addition to their own worker benefit, if the amount of their spouse or survivor benefit would be greater than their worker benefit. These so-called dually entitled beneficiaries receive a total Social Security benefit that is the higher of the worker benefit and the spouse or survivor benefit to which they are entitled, not the sum of the two benefits.

Some individuals marry more than once throughout the course of their lives, either because they were divorced or widowed. Some of these individuals may qualify for spouse and/or survivor benefits based on the work records of more than one spouse. ¹⁰ In such a case, an individual would receive the highest benefit to which he or she is entitled.

Spouse and Survivor Benefit Rules Can Mitigate Benefit Reductions Under **Policy Options**

When Social Security's spouse and survivor rules interact with policy options that would reduce benefits, they can mitigate the effect of benefit reductions, causing smaller reductions than would have been expected under the policy option. There are two mechanisms that could mitigate the

⁸ Divorced spouses must have been married to the worker for at least 10 years to qualify for spouse or survivor benefits.

⁹ Other types of survivor benefits—those for children, mothers or fathers with a child in care, and dependent parents of Social Security beneficiaries—are not analyzed in this report.

¹⁰ In some cases, beneficiaries do not qualify for benefits based on a former spouse's work record if they remarry.

effect of the policy option for a beneficiary: (1) if his or her benefit type changes under the option, or (2) if the spouse on whose work record his or her the benefit is based changes under the option.

Some individuals could change benefit types under a policy option because of the spouse and survivor rules, thus mitigating the effect of the option's benefit reduction. For example, consider a couple in which the wife receives a \$600 retired worker benefit and the husband receives a \$1,100 retired worker benefit under current law. The woman would not qualify for a spouse benefit under current law, since her worker benefit (\$600) is greater than 50% of her husband's primary insurance amount (assuming he is not subject to any reductions or credits, this amount would be \$550). If the wife is younger than the husband, she would be subject to a greater benefit reduction in 2035 under most of the policy options analyzed in this report. Continuing the example above, let's assume under a policy option that the wife's benefit were reduced by \$100 (making her retired worker benefit \$500) and the husband's benefit is reduced by \$50 (making his retired worker benefit \$1,050). As a result, the wife would become dually entitled to receive a partial spouse benefit in addition to her full worker benefit. Her total benefit amount under the option would be equal to 50% of her husband's PIA, or \$525 in this case (i.e., \$500 in worker benefits and \$25 in spouse benefits). Thus, the dual entitlement rule leads the wife to receive a \$75 benefit reduction rather than a \$100 reduction.

Some individuals could receive a spouse or survivor benefit based on a different marriage than under current law as a result of a policy change, thus mitigating the effect of a benefit reduction that would otherwise result from the policy option. For example, consider a woman who divorced after 15 years of marriage, then remarried. Under current law, she receives a spouse benefit of \$600. Her spouse benefit is based on her current husband's PIA of \$1,200; her former husband's PIA is \$1,180. Under the policy option, her current husband's PIA is reduced by \$100 (to \$1,100), and her former husband's PIA remains at \$1,180 since he retired before the policy option was implemented. Under the policy option, she would receive a divorced spouse benefit based on her *former* husband's work record—rather than her current husband's work record—since the benefit she would receive based on her former husband's record (\$590) would be greater than the benefit she would receive based on her current husband's record (\$550). Thus, the rule that allows beneficiaries to receive the highest spouse or survivor benefit to which they are entitled means that the wife in this example receives a \$10 benefit reduction rather than a \$50 benefit reduction.

It is important to note that in either scenario—changing benefit type or changing the spouse on which the benefit is based—the affected beneficiary would receive a higher-than-expected benefit under the option due to Social Security's spouse and survivor rules. The reason for this effect is that the Social Security rules always allow beneficiaries to receive a total benefit that is equal to the highest of the various benefits to which they may be entitled.

Appendix C. Interaction of the Retirement Earnings Test with Policy Options

The current-law Retirement Earnings Test (RET) can affect benefits received before and after the full retirement age (FRA). When the RET provision interacts with policy options that reduce Social Security benefits, it can magnify the size of the benefit reduction received before the FRA and reduce the size of the benefit reduction received after the FRA relative to what is expected under the policy option, or even lead to apparent benefit increases relative to current law.

Current-Law RET Reduces Benefits Received Prior to the Full Retirement Age

The RET is a current-law provision that reduces the Social Security benefits paid to some individuals who work before their full retirement age (FRA). Specifically, the RET applies to non-DI beneficiaries below the FRA who have earnings from employment in excess of certain thresholds. Generally, for workers who fall under the full retirement age for the entire year, the threshold is \$12,480 in 2006. For every two dollars in earnings over this threshold, the worker's Social Security benefit is reduced by one dollar. In the year that the worker attains the full retirement age, a higher threshold of \$33,240 applies in 2006 for those months worked prior to the full retirement age. For every three dollars in earnings over this threshold, the worker's Social Security benefit is reduced by one dollar. These thresholds rise annually with increases in the national average wage. Monthly benefits are eliminated or reduced until all excess earnings have been offset. The RET does not apply to workers after they attain the full retirement age.

Table C-I. Retirement Earnings Test Application Rules

Age of Social Security Beneficiary	Threshold in 2006	Benefit Reduction
Under FRA Entire Year	\$12,480	\$1 for every \$2 of excess earnings
In Year of Attaining FRA, for Months Prior to the FRA	\$33,240	\$1 for every \$3 of excess earnings
Over the FRA	No threshold	No reduction

For example, Joe is 62 and will not reach the full retirement age this year. Thus, Joe could earn up to \$12,480 in 2006 without penalty. Joe earns \$30,000 this year, so his Social Security benefit would be reduced under the RET. For every two dollars of earnings over the \$12,480 threshold, his benefit would be reduced by one dollar. Joe has 'excess' earnings of \$17,520 in 2006 (\$30,000 - \$12,480). Thus, the reduction to his Social Security benefit is \$8,760 (\$17,520 x 0.5) in 2006. Joe's current-law Social Security benefit is \$1,500 per month (\$18,000 per year) before the RET is applied. Therefore, Joe would lose his Social Security benefit payments for 5 full months and would lose a portion of his benefit for a 6th month (\$8,760/\$1,500) because of his excess earnings under the RET. After application of the RET, Joe's annual Social Security benefit would be \$9,240 (\$18,000 - \$8,760).

¹¹ The RET does not apply to disabled workers receiving Disability Insurance (DI) benefits because these individuals are subject to their own earnings test, the Substantial Gainful Activity (SGA) test. See CRS Report 98-789, *Social Security: Proposed Changes to the Earnings Test*, by Debra B. Whitman for additional information on the RET.

Current-Law RET Increases Benefits Received After the Full Retirement Age

Those individuals who face benefit reductions due to the RET have their benefits increased at the full retirement age. Under current law, workers are only subject to the RET if they have excess earnings, receive non-DI benefits and have not yet reached the full retirement age. When individuals receive non-DI benefits prior to the full retirement age, they are subject to an actuarial benefit reduction, the size of which is dependent on the number of months of benefits the individual is projected to receive benefits before the full retirement age. The greater the number of months of benefit receipt prior to the full retirement age, the greater the actuarial reduction. Those retiring at the earliest eligibility age (60 for survivors benefits, 62 for retirement benefits) face the largest reduction. For every month that an individual's early retirement or early survivor benefit is eliminated as a result of the RET, the actuarial reduction that he or she is subject to goes down as compensation for these lost benefits. When the individual reaches the full retirement age, the actuarial reduction is lowered and the retirement or survivor benefit is adjusted upward to account for the lost months of benefits under the RET.

Following on the previous example, if Joe takes Social Security benefits at the earliest eligibility age, 62, his benefits will be 25% lower than if he retired at his FRA of 66. If Joe's full retirement benefit (PIA) was \$2,000 per month, his monthly benefit after the early retirement reduction would be \$1,500 (\$2,000 x 0.75). However, if Joe continues working, as described in the previous example, he would lose benefits for over five months out of the year due to the RET. If Joe worked intermittently between age 62 and 66 and the RET ultimately eliminated Joe's benefit for a total of 12 months over this period, essentially, Joe delayed taking up Social Security benefits for an additional year. Therefore, his actuarial reduction for early retirement should be adjusted to reflect his receipt of Social Security benefits for only 36 months prior to his full retirement age instead of 48. Joe's actuarial reduction would be reduced from -25% to -20% at the full retirement age of 66. Thus, at age 66 the RET would increase Joe's monthly benefit from \$1,500 to \$1,600 (\$2,000 x .80) under current-law, about a 7% increase. On an annual basis, the RET would increase Joe's benefit from \$18,000 per year to \$19,200 per year.

The RET Can Magnify Percent Benefit Reductions Experienced Under a Policy Option *Prior to* the Full Retirement Age

The RET can magnify the effect of policy options that reduce benefits relative to current law. Those affected by the RET appear to receive larger benefit reductions than what could be attributed to the policy change alone. The RET calculation is based on a worker's excess earnings. Since earnings are not affected by the policy option, the RET reduction is the same dollar amount under both current law and the policy option. If a policy option reduces Social Security benefits, this smaller Social Security benefit is being reduced by the same dollar amount under the RET as under current law. Therefore, the RET creates a larger percent reduction in benefits than is expected under the policy change.

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¹² The benefit reduction of 25% is calculated based on the number of months Joe retires before his full retirement age. By retiring at age 62, Joe will collect Social Security benefits for 48 months before his full retirement age of 66. For information on how the actuarial reduction is determined, see Table 2.A17.1 in the Social Security Administration's Annual Statistical Supplement to the Social Security Bulletin, 2005 available at http://www.ssa.gov/policy/docs/statcomps/supplement/2005/2a8-2a19.html#table2.a17.1.

Continuing the current-law example, assume that a policy option reduces Joe's initial benefit by 10% (prior to the application of the RET). Thus, his annual benefit prior to the RET is \$18,000 and the policy option reduces his benefit by 10% (\$1,800) to \$16,200. Since Joe's earnings don't change, and he still has excess earnings of \$17,520 in 2006, the RET still reduces his annual Social Security benefit by \$8,760. So, Joe's final annual benefit (after the policy option and the RET) is \$7,440 (\$16,200 - \$8,760), which is approximately a 20% decrease (\$7,440/\$9,240) from the current law annual benefit of \$9,240 (after the RET). Thus, the interaction of the policy option with the RET program rules is responsible for the larger than expected reduction in Joe's benefit.

The RET Can Mitigate or Eliminate the Benefit Reduction Under a Policy Option *After* the Full Retirement Age

Some policy options might reduce the Social Security benefit to a size where the fixed dollar amount of the RET fully eliminates the Social Security benefit for a greater number of months than under current law. Because of the interaction of the policy option with the RET and the actuarial benefit reduction, the ultimate consequence of this benefit elimination is a later increase in benefits relative to current law. When a policy option reduces the size of the Social Security benefit, the unchanging dollar amount of the RET requires more months of benefits to be eliminated than under current law. Thus, at the full retirement age, when the benefits are adjusted upward for this loss, they are increased relative to current law, making some individuals receive benefit *increases* that would seem to be counterintuitive under a policy change that reduces benefits.

For example, if Joe's benefit were reduced relative to current law, let's say that the RET would eliminate his now smaller Social Security benefit for 16 months instead of 12 months during the period he worked between age 62 and 66. Joe's actuarial reduction would be adjusted to reflect his receipt of Social Security benefits for only 32 months prior to his full retirement age instead of 36 months under current law (after the RET). Joe's actuarial reduction would be reduced from -20% to approximately -16.7%. Thus, under the policy option, at age 66 Joe's benefit increases from \$1,600 (PIA of \$2,000 x 0.80) under current law to \$1,666 (PIA of \$2,000 x .83) under the policy option, a benefit increase of 4%.

In summary, the RET can either magnify the size of a benefit reduction under a policy change or appear to create a benefit increase relative to current law, depending on whether an individual is below or above the full retirement age.

Appendix D. Technical Description of the Progressive Price Indexing Option

Progressive Price Indexing

The progressive price indexing policy option would constrain the growth of initial benefits for future retirees by using a combination of wage indexing and price indexing in the benefit formula to apply differing degrees of benefit reduction based on the worker's career-average level of earnings. The following section explains the mechanics of the progressive price indexing option examined in this report. ¹³ The basic steps used to calculate initial benefits for future retirees under the progressive price indexing option include:

Step 1. Create a new bend point in the benefit formula

The benefits of low-wage workers would be preserved by establishing a new bend point in the PIA formula, below which initial benefits would continue to be fully wage-indexed. For the option analyzed in this report, the new bend point would be established at the 30th percentile of earnings. This means that workers with career-average earnings in the lowest 30% of the earnings distribution would experience no change in benefits relative to current law.

The new bend point would fall between the first and second bend points under current law. The replacement factors for the now four brackets of Average Indexed Monthly Earnings in the benefit formula would be set initially at 90%, 32%, 32% and 15%. The new bend point would increase each year after 2013 by the rate of growth of the national average wage, just as the two current bend points are wage-indexed. All workers with career-average earnings below this new bend point would continue to have their initial benefits fully wage-indexed. Workers with career-average earnings above the new bend point would have their initial benefits reduced because the third and fourth replacement factors (32% and 15%) would be adjusted downward each year (described in Step 3 below).

Step 2. Calculate a hypothetical, fully price-indexed PIA

For those who become eligible for retired-worker benefits in 2013 and each year thereafter, calculate a hypothetical fully price-indexed PIA for a worker who had maximum earnings over his/her career and the percentage reduction in benefits between this hypothetical PIA and the current law PIA. SSA would compute the percentage benefit reduction that would apply for a career high-wage earner¹⁴ if all three of the current-law PIA factors (90%, 32%, and 15%) were fully price-indexed.

For example, if the benefit for a career high-wage earner retiring at the full retirement age in a future year were determined to be, say, \$2,800 per month and the percentage changes in prices

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¹³ These steps follow those described in a memorandum from Stephen Goss, Chief Actuary of the Social Security Administration to Robert Pozen dated Feb. 10, 2005. See http://www.ssa.gov/OACT/solvency/RPozen_20050210.pdf.

¹⁴ A career high-wage earner is someone who earned at or above the taxable wage base for at least 35 years in their entire career.

and wages since 2011 were 2.8% and 3.9%, respectively, the benefit for a high-wage earner would be recalculated with each of the three PIA factors multiplied by the ratio 1.028/1.039 or .989. Thus, in this example, the benefit of a high-wage earner under full price indexing would be reduced by 1.1% in 2013, the first year that price indexing would be in effect. After ten years—assuming that prices and wages continued to grow annually by 2.8% and 3.9%—the PIA factors would be multiplied by $1.028^{10}/1.039^{10} = .899$, representing a benefit reduction of 10.1%.

Step 3. Make downward adjustments to the third and fourth replacement factors in the benefit formula

The third step of the process would be to calculate the percentage reduction only to the PIA factors *above* the new bend point (32% and 15%) that would result in the same benefit reduction for career-long maximum-wage earners (those always at or above the annual maximum taxable wage) as would have applied to these earners if price indexing had been applied to all workers. This would reduce benefits for career-long maximum-wage earners by the same percentage as they would have been reduced if the benefit formula were fully price-indexed for workers at all earnings levels. Benefits would be reduced by a smaller percentage for workers with career-long average wages and not at all for workers with average wages that fall in the lowest 30% of the earnings distribution.

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¹⁵ Earnings are indexed to the average wage level two years prior to the worker's first year of eligibility because there is a two-year lag time associated with the release of official wage data for a given year. Thus, if the first year the policy applies is 2013, it would be necessary to obtain the official wage data from 2011.

Appendix E. Background on the Urban Institute's Dynasim Microsimulation Model

What is Dynasim?

The Urban Institute's Dynamic Simulation of Income Model (Dynasim) is a computer model that uses survey data to project demographic changes, retirement income, and Social Security benefits. It was created by the Urban Institute and was purchased by the Congressional Research Service. Dynasim can be used to analyze the consequences of retirement and aging policy issues on individual and family income and benefits. One of the major advantages of using the Dynasim model is the ability to analyze the distributional effects of Social Security proposals. For example, Dynasim can be used: 1) to analyze the difference in benefit levels between a particular Social Security reform proposal and current law; 2) to model the combined effects of multiple and complex policy changes on individual and family benefits and total income; 3) to model the effect of a change in Social Security policy on an individual's eligibility for other means-tested federal programs (e.g. SSI). The effect on individuals and families can be broken down along multiple demographic and economic lines, such as gender, educational attainment, marital status, race, and wealth.

How Does Dynasim Work?

Through statistical adjustments of the data sources listed below, Dynasim projects the major pillars of retirement income. Starting with a representative sample of individuals and nuclear families, the model "ages" the data year by year from 1993 to 2050. Characteristics such as an individual's year of birth, educational attainment, marital status, and race are used to predict future values of variables such as earnings, marital changes, and wealth. For each year, Dynasim simulates such demographic events as births, deaths, marriages and divorces, and such economic events as labor force participation, earnings, hours of work, disability onset, and retirement.

The large amount of demographic and income information makes Dynasim particularly suitable to analyze the distributional effects of various Social Security reform proposals and other issues relating to the aged population. For example, retired worker Social Security benefits are based on 35 years of a worker's earning history. Having a tool, such as Dynasim, that contains an individual's earning history as well as the individual's traits over his/her entire career is essential to modeling Social Security reforms. One such policy option that requires 40 years of a worker's earning history is to increase the number of computation years from 35 to 40. In addition to modeling provisions that require long work histories, we can analyze how benefits change due to changes in life events (such as a marital status change or the death of a spouse) over the span of the individual's lifetime. At the end of the simulation process, we have detailed information on the lifetimes of multiple individuals, with all of the information needed to calculate Social Security benefits and total incomes. In addition to workers' earning histories, the Dynasim model includes additional retirement income projections useful for analyzing policy options. These projections include but are not limited to: Social Security coverage, eligibility and benefit levels, pension coverage and participation, income from assets, and Supplemental Security Income (SSI).

What Are the Underlying Data?

The Dynasim model was created using a complex combination of various data resources. The base population is comprised of households from the 1990 through 1993 panels of the Survey of Income and Program Participation (SIPP). This sample consists of over 100,000 people and 44,000 families and is limited to individuals who answered questions regarding assets and pensions, ¹⁶ Annual earnings are created from a mixture of historical and projected data, Earnings histories are calculated for SIPP respondents by matching individuals from the SIPP to individuals interviewed in the Panel Study of Income Dynamics (PSID) and to individuals interviewed in the 1972 Current Population Survey (CPS). The 1972 Current Population Survey is a unique dataset because it is matched to Social Security Administrative records. The 1972 CPS is matched to the Social Security Administration's Summary of Earnings Records and is used to provide SIPP respondents with earnings between the years 1951 and 1967. The PSID also collects annual earnings information and provides SIPP respondents with earnings between the years 1968 and 1992.

Once earnings are imputed for the years 1968 through 1992, earnings are then projected for the years 1993 through 2050. Dynasim uses information from the Panel Study of Income Dynamics and the National Longitudinal Survey of Youth to project individual earnings from 1993 through 2050 using a series of statistical regression equations. The earnings are projected in 5 steps. First, hourly wages are estimated using a random-effects model. Second, results from the hourly wage model are used to calculate predicted wages for all individuals in the PSID. Third, the number of annual hours worked is predicted using a tobit model that includes the predicted wage results from the previous regression. In the fourth step, labor force participation is estimated using a random-effect probit model. Finally, the labor force participation rates are adjusted to reflect projected employment rates from the OASDI Trustees' Report by age and gender.

The model utilizes survey data to estimate population growth, family formation, education and health, earnings, employee benefits, asset accumulation, pension and Social Security benefits, and payroll taxes. Some of the survey data used to estimate these processes include the Survey of Income and Program Participation, the Panel Study of Income Dynamics, the Current Population Survey, the Health and Retirement Survey, the National Longitudinal Mortality Study, the National Longitudinal Survey of Youth, estimates from the Social Security Administration's Office of the Chief Actuary, Vital Statistics, the Pension Simulation Model from the Policy Simulation Group, and the Pension Insurance Modeling System from the Pension Benefit Guaranty Corporation. All of these data sources are used to validate and readjust the underlying data for the Dynasim model as necessary.

What Do I Need to Know When Interpreting Dynasim Results?

Despite the many advantages of using a microsimulation model, such as Dynasim, one must keep in mind the caveats that are common to the use of microsimulation models, in general. Such caveats include, but are not limited to:

1. Microsimulation models require the use of a large number of assumptions. For example, Dynasim utilizes assumptions from the Social Security Administration's Office of the Chief Actuary (OCACT) to determine future fertility and mortality patterns and to project

¹⁶ The questions regarding assets and pensions can be found in the SIPP long asset/pension topical module wave.

employment rates and wage growth. Individuals who believe that OCACT's fertility and mortality assumptions are too optimistic or pessimistic will also have the same views of Dynasim's fertility and mortality assumptions. In addition, Dynasim models mortality using an individual's age, race/ethnicity, marital status, education, disability status and work history. There may be other variables that affect mortality that are not used in this model.

- 2. Like all projections, historical information is used to calculate future information for individuals such as future earnings, future marital status changes, future pensions, etc. There may be historical information, however, that will not provide good estimates of future values. For example, 40 years ago, it could not have been foreseen how technological advancements would have altered mortality and earnings. Similarly, future technology and medical advancements will have an effect on the population that can not currently be predicted. A model, such as Dynasim, would not be able to factor in these kinds of advancements unless they are already, somehow, accounted for in historical information. Put another way, the model assumes that the future will resemble the past. The model often uses a variety of techniques (e.g., cohort effects) to place heavier weight on more recent experience than on less recent experience. The model projects social and economic change mainly through change in the composition of the population.
- 3. Microsimulation models require many assumptions and utilize many specific mathematical equations. Therefore, care should be taken when interpreting results. For example, because of their detailed assumptions, microsimulation models better represent relative changes in benefits rather than exact benefit levels. All microsimulation models are estimates of what a given population will look like in the future. Because they are estimates, all microsimulation models contain some level of error. By analyzing relative differences, rather than point estimates such as average benefits, some of the error is controlled for because the underlying error will be the same under both options. Thus, microsimulation models will be more accurate in stating that "Plan A is estimated to result in a 23% increase in benefits over current law" than stating that "Individuals, under Plan A, receive a monthly benefit of \$900" because the error found in microsimulation models is difficult to quantify, but can be mitigated by comparing plans across the same population and, in essence, holding the error constant.

In addition to the caveats associated with microsimulation models, there are caveats that are specific to the Dynasim model. For example:

- 1. Dynasim does not model the "old law" Social Security benefit rules in place prior to 1979. Therefore, the benefits for the oldest individuals may not precisely reflect the level of benefits that they actually received.
- 2. Dynasim does not include behavioral changes resulting from the modification of the Social Security benefit and tax structures. Thus, changes to Social Security's tax or benefit structure will not automatically alter an individual's work patterns or retirement decision.
- 3. Dynasim does not include macroeconomic feedbacks. A change in the Social Security program can affect other segments of the economy. For example, a benefit cut could have effects on the labor force participation and the savings rate. These kinds of macroeconomic effects cannot automatically be modeled using the Dynasim model. Thus, second order microeconomic effects such as the effect of the savings rate on the interest rate earned by individual accounts cannot be modeled.

- 4. This version of Dynasim does not currently include an income tax module. Because Social Security benefits may be subject to income taxation, reform options that alter the level of Social Security benefits can also alter the amount of income tax paid by individuals. Although *income* taxes cannot be modeled, the amount of Social security *payroll* taxes paid can easily be calculated from an individual's earnings.
- 5. Dynasim is not a Social Security actuarial model and thus cannot estimate the solvency effect of a proposed policy change. The Dynasim model does not contain all of the information required to produce solvency estimates. For example, Dynasim does not calculate children's benefits and so a complete account of benefit payments cannot be calculated. In addition, Dynasim simulates the population between the years 1993 and 2050. The benefits received by individuals outside of this yearly range would not be included in the calculations. For these same reasons, long-term cost estimates cannot be calculated.
- 6. Dynasim incorporates differences in processes on the basis of race/ethnicity where the data suggest that such differences are significant. The literature is not always definitive on the magnitude of differences by race, and measurement issues can complicate estimation of such effects. We thus suggest conservative interpretation of differences by race and Hispanicity.

Despite the caveats related to microeconomic models and specifically to Dynasim, the Urban Institute's Dynamic Simulation Model is an extremely useful tool for analyzing the effects of Social Security reform proposals and other topics related to the aged. The wealth of demographic and economic information found in the Dynasim model enables CRS to provide members of Congress with in-depth analysis regarding the distributional effects of reform proposals that would not be possible without the use of a microsimulation model.

Appendix F. Glossary

Actuarially Fair

In the context of Social Security, holding constant the value of lifetime Social Security benefits for a person of average *life expectancy*, regardless of when he or she takes up benefits. For example, the *early retirement reduction* and *delayed retirement credit* were intended to make lifetime Social Security benefits equal in actuarial terms regardless of when beneficiaries began to collect benefits.

Adequacy

In the context of Social Security, the goal of providing some basic level of income to beneficiaries. Measures of benefit adequacy include poverty rates and replacement rates.

Average Indexed Monthly Earnings (AIME)

The average monthly amount of a worker's taxable earnings, which is wage indexed (or adjusted to reflect increasing wages) and used to determine the primary insurance amount (PIA) when a worker applies for Social Security benefits. In the average indexed monthly earnings (AIME) calculation for a retired worker, the highest 35 years of taxable earnings are wage indexed, averaged, and divided by 12. Fewer years of earnings may be used to calculate the AIMEs of workers who die or become disabled.

Average Wage Index (AWI)

The average amount of total national wages for each year after 1950, as measured by annual wage data tabulated by the Social Security Administration (SSA). The Average Wage Index (AWI) includes earnings that are not covered and/or taxable by Social Security. The AWI is used for wage indexing values in the Social Security program.

Baseline

In the context of this report, current law Social Security benefits and payroll taxes, against which Social Security benefits and payroll taxes under various alternative policies are compared. Also see *payable baseline* and *scheduled baseline*.

Basic Benefit Amount

See primary insurance amount (PIA).

Basic Benefit Formula

See primary insurance amount (PIA) formula.

Bend Points

The dollar amounts that define the brackets in the *primary insurance amount (PIA)* formula used to calculate basic Social Security benefits. The bend points are *wage indexed*, or adjusted annually to reflect increasing wages. In 2006, the bend points were \$656 and \$3,955. The use of bend points in the Social Security benefit formula creates a *progressive* benefit structure, where lower earners receive proportionately higher benefits, relative to *covered earnings*, than do higher earners.

Cohort

A group of individuals sharing a particular characteristic and studied over time. For example, a birth cohort is a group of individuals born in the same year or period of time.

Computation Years

The years of earnings used to calculate a worker's average indexed monthly earnings (AIME) in the Social Security benefit formula. For retirement benefits, the highest 35 years of earnings are used. For disability and survivor benefits, the number of computation years depends on the age when the wage earner became disabled or died; the number of computation years varies from 2 to 35.

Consumer Price Index (CPI)

An official measure of inflation (i.e., the change over time in prices) calculated by the U.S. Department of Labor. The Social Security program uses the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) to calculate annual cost-of-living adjustments (COLA) to benefits.

Cost-of-Living Adjustment (COLA)

The annual increase in Social Security benefits reflecting the increase in the cost of living (i.e., inflation), as measured by the Consumer Price Index (CPI-W). The cost-of-living adjustment (COLA) is effective in December of each year and is calculated as the change in the CPI-W from the third calendar quarter of the prior year to the third calendar quarter of the current year. If the CPI-W increases during this period, Social Security benefits for the next year increase proportionately. If the CPI-W decreases, Social Security benefits stay the same.

Contribution and Benefit Base

See taxable earnings base.

Covered Earnings

Earnings from a job which requires contributions to the Social Security program. (See covered worker for more information.) All covered earnings below the taxable wage base—that is, taxable earnings—are subject to Social Security payroll taxes. Covered earnings above the taxable wage base are exempt from the Social Security payroll tax.

Covered Worker

A worker who is employed in a job at which he or she contributes a portion of earnings to Social Security, or a worker who is self-employed. Workers not covered by Social Security are either covered by a similar eligible contributory system offered by their employers outside of Social Security, do not have high enough earnings for mandatory participation, or have another special exemption. (About 96% of all workers are covered by Social Security.)

Credits

To be insured for retired worker benefits, an individual must accumulate at least 40 credits in the Social Security system, which is equivalent to at least 10 years of covered employment. In 2006, a worker received one credit (up to a total of four per year) for each \$970 in covered earnings. Fewer credits may be required in some survivor and disability cases; in these cases, benefits may be granted with as few as six credits. The amount of earnings required for a credit is wage indexed.

Delayed Retirement Credit (DRC)

An increase to the *primary insurance amount (PIA)* if a beneficiary delays claiming Social Security benefits beyond his or her *full retirement age (FRA)*. The amount of the increase varies depending on the beneficiary's date of birth and how long a beneficiary delays benefit take-up beyond his or her FRA. However, the increase stops when a person reaches age 70, even if he or she continues to delay taking up benefits.

Disabled

For Social Security purposes, a person who is unable to work because of a physical or mental impairment that can be expected to result in death or to last for a continuous period of at least one year. Disabled individuals under the age of 62 may qualify for Social Security disability benefits (after which they qualify for retirement benefits). No benefits are payable for short-term disability or partial disability.

Distributional Analysis

A method of analyzing how the costs and benefits of a program or a policy option are distributed among different subgroups (e.g., birth cohort or income level).

Dually Entitled Beneficiaries

Workers who qualify for Social Security benefits based on their own work records (i.e., worker benefits) as well as benefits based on their spouses' work records (i.e., spouse benefits or survivor benefits). Dually entitled beneficiaries receive a total Social Security benefit that is the higher of the worker benefit and the spouse/survivor benefit to which they are entitled, not the sum of the two benefits.

Early Retirement Age

The age at which individuals qualify for reduced Social Security retired worker benefits if they choose to collect benefits before the *full retirement age* (*FRA*). The early retirement age is 62. Individuals who begin to receive retired worker benefits early will be subject to the *early retirement reduction*. (Also called the early eligibility age.)

Early Retirement Reduction

The amount which a person's monthly Social Security benefit is permanently reduced for taking up retirement benefits before the *full retirement age (FRA)*. The amount of the reduction varies depending on the beneficiary's date of birth and how long before his or her FRA that he or she takes up benefits. The maximum amount of the reduction ranges from 20% to 30%, depending on the year in which the worker was born (because of the increase in the FRA). The early retirement reduction is intended to be *actuarially fair*.

Earnings

Wages or self-employment income. Also see covered earnings and taxable earnings.

Eligibility

To be eligible for Social Security benefits, a worker (or his or her family members) must be *insured* and must meet age, disability status, family relationship, and/or other criteria established by law.

Entitlement

Any federal program—including Social Security—that legally requires payments to any individual who meets the *eligibility* criteria established by law. (To be entitled to Social Security benefits, an individual must meet eligibility criteria and file an application for benefits.) Generally, entitlement programs are not subject to the annual appropriations process.

FICA (Federal Insurance Contributions Act) See payroll taxes.

Taxes

Full Retirement Age (FRA)

The age at which an individual may first become entitled to unreduced Social Security retirement benefits. The full retirement age (FRA) was age 65 for most of Social Security's history, and is now gradually increasing to age 67. In 2006, the FRA was 65 years and 6 months. (Also called the normal retirement age.)

Hold Harmless

In the context of Social Security, a group of beneficiaries is held harmless if benefit cuts and/or tax increases are not applied to that group.

Income

In the context of this report, Dynasim projections of total income in the year 2035, including Social Security benefits, defined-benefit pension benefits, income from retirement accounts, earnings, SSI, and the annuitized value of financial assets. Individuals are the unit of observation, but income estimates include income of the spouse, if the individual is married.

Inflation (Prices)

A rate of increase in the general price level of all goods and services. The official measure of inflation in the United States is the Consumer Price Index.

Insolvency

In the context of Social Security, the inability of the trust funds to pay all current expenses out of current tax income and accumulated trust fund assets. Insolvency would mean that Social Security's trust funds were unable to pay full benefits on time. (Insolvency would not mean that Social Security would be completely broke and unable to pay any benefits.)

Insured

In the context of Social Security, having enough *credits* to meet eligibility requirements for retired or *disabled* worker benefits, or to permit the worker's spouse and children or survivors to establish eligibility for benefits in the event of the worker's retirement, disability, or death.

Intermediate Assumptions The Social Security Administration actuaries' "best estimate" of future demographic and economic trends. The actuaries also produce high cost (pessimistic) assumptions and low cost (optimistic) assumptions. These assumptions are published annually in the Social Security Trustees Report. This report uses the Trustees' intermediate assumptions.

Life Expectancy

An estimate of the average remaining number of years expected prior to death for a given cohort. In the context of Social Security, life expectancy at age 65 is most commonly used.

Long Range

In the context of Social Security, the next 75 years. Long-range actuarial estimates are made for this period because it is approximately the maximum remaining lifetime of workers currently covered by Social Security. The annual Social Security Trustees Report includes long-range projections of Social Security's financial status. (See also short range.)

Mean

The mean is the average value in a data set. It is determined by adding all the values and dividing the sum by the number of values in the data set. In this report, the *median* is generally used instead of the mean.

Median

The middle number in a series of numbers arranged from least to greatest. Half the data values are above the median, and half are below. The value of a median is not affected by a few extremely high or extremely low values, as a mean would be.

Microsimulation Model In the context of policy analysis, a computer model that simulates how a government program would operate under policy changes and how participants would be affected. For more information on the Dynasim microsimulation model used in this report, please see **Appendix E**.

Nominal Dollars

The face value of an amount of money during a given year, using the prices prevailing during that year. Nominal dollars are not adjusted for *inflation*.

Normal Retirement Age (NRA) See full retirement age (FRA).

Payable Baseline

In the context of Social Security, a baseline that includes benefits payable with current tax income and accumulated trust fund assets, even if those benefits are less than those which would be paid according to the formula set forth in the law. Payable benefits would be less than scheduled benefits in the case of Social Security insolvency. (See also scheduled benefits.)

Payroll Tax

In the context of Social Security, a tax levied on all covered earnings, up to the contribution wage base in a given year. The Social Security payroll tax is paid in equal parts by employers and employees. Currently the Social Security payroll tax rate is 12.4% (of which 6.2% is paid by each employee and employer). Payroll taxes are also known as FICA (Federal Insurance Contributions Act) or SECA (Self-Employment Contributions Act) taxes. FICA and SECA taxes include both the Social Security tax and a Medicare Hospital Insurance tax of 2.9% of all covered earnings (of which 1.45% is paid by each employee and employer).

Price Indexing

In the context of Social Security, a proposed alternative method of calculating benefits. The most commonly discussed form of price indexing would increase individuals' benefit levels at the rate of price growth (i.e., inflation) rather than at the rate of wage growth (as under current law). Under this form of price indexing, the primary insurance amount (PIA) factors would be multiplied each year by the ratio of the Consumer Price Index (CPI) to the Average Wage Index (AWI) for the second prior year. Under a system of price indexing, beneficiaries' Social Security benefits would be lower than under current law. (Other parts of the Social Security benefit formula which are wage indexed under current law, such as bend points, could also be price indexed, but the term "price indexing" is typically used in reference to reducing the PIA factors.)

Primary Insurance Amount (PIA)

The monthly Social Security benefit amount payable to a retired worker who begins to receive benefits at the full retirement age (FRA) or, generally, to a disabled worker. This amount, which is based on the worker's average indexed monthly earnings (AIME), is also used to calculate benefits payable on the worker's earnings record—for example, benefits paid to his or her spouse or survivors. Also referred to as a basic benefit amount. For more information on the PIA calculation, please refer to **Appendix A**.

Primary Insurance Amount (PIA) Factors

The factors by which the dollar amounts in the *primary insurance amount (PIA) formula* are multiplied. The PIA factors are 90%, 32% and 15%; each is applied to a worker's average indexed monthly earnings (AIME) amounts between the bend points in the PIA formula.

Primary Insurance Amount (PIA) Formula

The formula to calculate the *primary insurance amount (PIA)* for workers who attain age 62, become *disabled*, or die after 1978. The PIA is equal to 90% of a worker's *average indexed monthly earnings (AIME)* up to the first *bend point*, plus 32% of AIME between the first and second bend points, plus 15% of AIME above the second bend point.

Progressive

A system in which lower earners receive proportionately higher benefits (or pay proportionately lower taxes) than do higher earners. The Social Security benefit formula is progressive.

Purchasing Power

The amount of goods and services that a given amount of money can buy. In the context of Social Security, beneficiaries receive an annual cost-of-living adjustment (COLA) in which benefits are adjusted according to the growth in prices (i.e., inflation) as a way to maintain the purchasing power of benefits over the course of a beneficiaries lifetime.

Quarters of Coverage

See credits.

Quintile

One of five segments of a distribution that has been divided into fifths. For example, an individual in the second-from-the-bottom quintile of an income distribution is one whose income falls between the 20th and 40th percentile of the income of the population. In this report, *income* quintiles are used to illustrate the effects of policy changes on individuals of different income levels.

Real Dollars

The value of an amount of money measured in terms of purchasing power in a given year. Real dollars are adjusted for *inflation*. In this report, real values are in 2005 dollars.

Regressive

A system in which lower earners pay proportionately higher taxes (or receive proportionately lower benefits) than do higher earners. The Social Security payroll tax is regressive, since the tax rate is flat and the amount of taxable earnings is capped.

Replacement Rate

In the context of Social Security, the proportion of taxable earnings before retirement that are replaced by benefits. A Social Security replacement rate is calculated by dividing a worker's initial Social Security benefit by his or her average indexed monthly earnings (AIME). Replacement rates are one way of measuring the adequacy of a person's benefits.

Retirement Earnings Test (RET)

A provision of the law which reduces Social Security benefits on account of earnings from work before the full retirement age (FRA). In 2006, the RET applied to beneficiaries earning more than \$12,480 before the year in which they reach the FRA, and to beneficiaries earning more than \$33,240 during the year in which they reach the FRA (i.e., during the months before their birthdays). For more information on the RET, please see **Appendix** C

Scheduled Baseline

In the context of Social Security, a baseline that includes benefits according to the formula set forth in the law, regardless of whether those benefits would be payable with current tax income and accumulated trust fund assets. Scheduled benefits would be greater than payable benefits in the case of Social Security insolvency. (See also payable baseline.)

Short Range

In the context of Social Security, the next 10 years. The annual Social Security Trustees Report includes short-range projections of Social Security's financial status. (See also *long range*.)

Social Insurance

A system that insures workers and their families against economic insecurity caused by the loss of earnings or health care due to some event (e.g., retirement, unemployment, disability, or death). Benefit amounts are based on workers' and employers' contributions to the social insurance system. Social Security is a system of social insurance.

Solvency

In the context of Social Security, the ability to pay scheduled benefits when due out of current tax income and accumulated trust fund assets. Social Security is considered solvent as long as the Social Security trust funds maintain a positive balance.

Spouse Benefits

Social Security benefits payable to the spouse or divorced spouse of a retired or disabled worker, based on the worker's earnings record. The primary insurance amount (PIA) for a spouse beneficiary is generally 50% of his or her spouse's PIA. For more information on how spouse benefits are calculated, please see **Appendix B**.

Survivor Benefits

Social Security benefits payable to the survivors of a deceased worker, based on the worker's earnings record. Potential survivor beneficiaries include widow(er)s, former spouses, children, and parents of the deceased worker. The primary insurance amount (PIA) for an aged widow or widower is 100% of his or her deceased spouse's actual benefit amount (i.e., the deceased spouse's PIA after applying the early retirement reduction or delayed retirement credit (DRC), if applicable). Other types of survivor benefits—child's, mother's, father's, and parent's benefits—are not analyzed in this report. For more information on how survivor benefits are calculated, please see **Appendix B**.

Taxable Earnings

In the context of Social Security, wages and/or self-employment income earned in *covered employment* that is less than the *taxable earnings base*. (About 85% of covered earnings were taxable in 2005.)

Taxable Earnings Base

The maximum annual amount of covered earnings that are subject to Social Security payroll taxes and credited toward Social Security benefits. Covered earnings above this amount are neither taxable nor creditable for benefit computation purposes. The amount of the taxable earnings base is wage indexed (i.e., rises each year with overall wage growth). In 2006, the amount of the taxable earnings base was \$94,200. (Also called the contribution and benefit base, taxable wage base, or the taxable maximum.)

Taxable Maximum

See taxable earnings base.

Wage Indexation

In the context of Social Security, a method by which dollar values are adjusted to account for the annual growth in national wages. The Average Wage Index (AWI) is used to increase values in the Social Security program, including the average indexed monthly earnings (AIME) formula, the taxable wage base, the bend points in the primary insurance amount (PIA) formula, and the retirement earnings test (RET) exempt amounts.

Worker Benefits

Social Security benefits payable to a retired or disabled worker, based on his or her own earnings record.

Author Contact Information

Laura Haltzel Specialist in Income Security lhaltzel@crs.loc.gov, 7-4895

Kathleen Romig Analyst in Income Security kromig@crs.loc.gov, 7-3742

Scott Szymendera Analyst in Disability Policy sszymendera@crs.loc.gov, 7-0014

Debra B. Whitman

Dawn Nuschler Specialist in Income Security dnuschler@crs.loc.gov, 7-6283

Gary Sidor Information Research Specialist gsidor@crs.loc.gov, 7-2588

Mikki Devine Waid Applications Developer, Client-Server and WEB mwaid@crs.loc.gov, 7-3908