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ILLUSTRATIVE BENEFITS FOR RETIRED WORKERS, DISABLED WORKERS, AND SURVIVORS SCHEDULED UNDER CURRENT LAW

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The Social Security program provides monthly benefits to retired workers and their families, disabled workers and their families, and survivors of workers. The *progressivity* of the Social Security benefit formula provides individuals who have lower career-average earnings with monthly benefits that are a higher percentage of their career-average earnings than the percentage for those who have higher career-average earnings. For a group of *example workers* with a range of full-lifetime average earnings levels¹ at various ages in 2018, this note displays their current earnings at various ages in 2017, their full-lifetime average earnings, and the amounts they would expect to receive at benefit entitlement.

The assumptions underlying the attached tables are similar to those used in the annual Social Security Statement available online to workers and former workers aged 18 and older. The benefit amounts are calculated as specified in current law. The amounts reflect no increase in price levels or in average wage levels after 2017. Thus, the benefit estimates for workers at various ages in 2018 who would be retiring in future years are roughly comparable to their potential benefits as disabled workers and for their survivors, which both assume benefit entitlement in 2018.

All example workers, except the steady maximum worker, have scaled earnings patterns beginning at age 21. These patterns reflect the actual average work experience of fully insured workers during 1995-2014. These patterns show relatively low wages and probability of work at young and old ages and higher relative wages and probability of work at mid-career.³ A worker is considered fully insured if he or she has a total number of quarters of coverage (QCs)⁴ at least equal to the number of years after attainment of age 21 through the last year considered in the analysis (in this case 2014). A further requirement is that the worker must have a minimum of 6 QCs. Since a worker achieves permanently insured status with 40 QCs, any worker with 40 QCs is fully insured no matter how many years have elapsed since age 21. Any fully insured worker is likely to become eligible for a Social Security retirement benefit if he or she survives to eligibility age. After 2017, earnings levels for workers illustrated in this note increase or decrease due solely to the scaled earnings pattern, and not due to changes in the average wage level.

The following four tables show estimated future benefits consistent with earnings in 2017 and age in 2018. Each table lists *earnings in 2017* at various ages and *annual benefit amounts* at entitlement for example workers with full-lifetime average

¹ The full-lifetime average earnings level reflects the average of the highest 35 years of wage-indexed earnings (wage-indexed to 2017) expected for the illustration assuming that the worker survives to age 65 without becoming disabled.

² For the steady maximum worker, earnings start at age 22 and are assumed to equal the taxable maximum (the OASDI benefit and contribution base) for each year through 2017. Earnings after 2017 are assumed to equal the taxable maximum of \$127,200 for 2017.

³ For more details on development of the scaled earnings patterns, see Actuarial Note Number 2018.3 at: http://www.ssa.gov/OACT/NOTES/ran3/an2018-3.pdf.

⁴The QC is the basic unit for determining whether a worker is insured for Social Security benefits. In 2018, for example, a worker needed to have \$1,320 in covered earnings to obtain a QC. Workers can earn up to 4 QCs per calendar year. Since 1978, the amount of covered earnings required to obtain a QC has been automatically indexed each year with the growth in average wage levels. See: http://www.ssa.gov/OACT/COLA/QC.html for more information, including a list of historical QC amounts.

earnings levels¹ of \$10,000, \$20,000, \$30,000, \$40,000, \$50,000, \$60,000, and the taxable maximum. As mentioned above, the benefit amounts assume no increase in price levels or in average wage levels after 2017. Additional information about each table is provided below.

- Table 1A: Retired Workers Who Become Entitled at Normal Retirement Age (NRA). This table also shows the percentage of fully insured workers with full-lifetime average earnings at or below each of the seven fulllifetime average earnings levels. We base these percentages on the earnings of a onepercent sample of individuals, aged 25 through 65, who were fully insured in 2015. For this purpose, comparisons are made to hypothetical scaled worker career average earnings at each of the applicable ages corresponding to the \$10,000, \$20,000, ..., maximum full lifetime average earnings levels. The illustrative benefits are for workers only. Additional benefits may be available for auxiliary beneficiaries such as spouses and dependent children. The NRA increased to 66 for those attaining age 62 in 2005, and it is currently increasing further beginning with those attaining age 62 in 2017, reaching 67 for those attaining age 62 in 2022 and later.
- Table 1B: Retired Workers Who Become Entitled at Age 65. The only difference between table 1B and table 1A is that the example workers retire at age 65 rather than at NRA, resulting in lower benefit amounts due to reduction for early retirement. The illustrative benefits are for workers only. Additional benefits may be available for auxiliary beneficiaries such as spouses and dependent children.

• Table 2: Disabled Worker Annual Benefit **Amounts.** For the seven full-lifetime average earnings levels, table 2 provides benefit amounts assuming benefit entitlement in 2018 for disabled example workers aged 25, 35, 45, and 55. In addition, the table provides the percentage of disability insured⁵ workers with full-lifetime average earnings at or below each full-lifetime average earnings level. We base these percentages on the earnings of a onepercent sample of individuals, aged 25 through 65, who were disability insured in 2015. The illustrated benefits are for workers only. Additional benefits may be available for auxiliary beneficiaries such as spouses and dependent children.

• Table 3: Survivor Annual Benefit Amounts.

For the seven full-lifetime average earnings levels, table 3 provides benefit amounts assuming that the deceased example workers would have attained ages 25, 35, 45, or 60 just before dying in 2018. In each case, we assume the surviving spouse is the same age as the deceased worker and that he or she becomes entitled to benefits in 2018. The table provides benefit estimates for three scenarios of survivor beneficiaries: (1) spouse and one child (spouse only for the age 60 case), (2) one child only, and (3) spouse and two children. Because of the family maximum benefit provision, annual benefit amounts for a spouse and two children are the same as, or only moderately higher than, benefit amounts for a spouse and one child. In addition, the table provides the percentage of fully or currently insured⁶ workers with full-lifetime average earnings at or below each full-lifetime average

earnings level. We base these percentages on

the earnings of a one-percent sample of individuals, aged 25 through 65, who were

fully or currently insured in 2015.

⁵A worker is *disability insured* if he or she is: (1) a fully insured worker who has accumulated 20 quarters of coverage during the 40-quarter period ending with the current quarter, (2) a fully insured worker aged 24-30 who has accumulated quarters of coverage during one-half of the quarters elapsed after the quarter of attainment of age 21 and up to and including the current quarter, or (3) a fully insured worker under age 24 who has accumulated six quarters of coverage during the 12-quarter period ending with the current quarter.

⁶A worker is *currently insured* if he or she has accumulated six quarters of coverage during the 13-quarter period ending with the current quarter.

Table 1A. Retired Worker Annual Benefit Amounts¹ Scheduled in Current Law

For Fully Insured² Workers at Various Ages Who Become Entitled at Normal Retirement Age (NRA) With Various Full-Lifetime Earnings Patterns³

| Age in 2018 | Age at benefit entitlement (NRA) | Earnings in 2017 and benefit at entitlement (NRA) | | | | | | | | |
|---|---|---|---------|----------|----------|----------|----------|----------|-----------|--|
| | | | | | | | | | | |
| 25 | 67 | Earnings in 2017 | \$5,423 | \$10,847 | \$16,270 | \$21,694 | \$27,117 | \$32,541 | \$127,200 | |
| | | Benefit at entitlement | 8,988 | 12,804 | 16,008 | 19,200 | 22,404 | 25,596 | 36,804 | |
| | | | | | | | | | | |
| 35 | 67 | Earnings in 2017 | 9,623 | 19,246 | 28,869 | 38,492 | 48,115 | 57,739 | 127,200 | |
| | | Benefit at entitlement | 8,988 | 12,804 | 16,008 | 19,200 | 22,404 | 25,596 | 36,828 | |
| | | | | | | | | | | |
| 45 | 67 | Earnings in 2017 | 10,865 | 21,730 | 32,595 | 43,459 | 54,324 | 65,189 | 127,200 | |
| | | Benefit at entitlement | 8,988 | 12,804 | 16,008 | 19,200 | 22,404 | 25,596 | 36,732 | |
| | | - | | | | | | | | |
| 55 | 67 | Earnings in 2017 | 10,721 | 21,443 | 32,164 | 42,885 | 53,606 | 64,328 | 127,200 | |
| | | Benefit at entitlement | 8,988 | 12,804 | 16,008 | 19,200 | 22,404 | 25,596 | 36,540 | |
| | | | , | , | , | | , | | , | |
| 65 | | Earnings in 2017 | 7,410 | 14,820 | 22,230 | 29,639 | 37,049 | 44,459 | 127,200 | |
| 65 | 66 | <u> </u> | | | | , | 20,628 | , | | |
| | | Benefit at entitlement | 8,292 | 11,772 | 14,724 | 17,676 | 20,028 | 23,580 | 33,384 | |
| Full-lifetime average earnings level ⁴ | | | 10,000 | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | Maximum | |
| | | | , | , | , | , | | , | | |
| | Percent of fully insured workers with career average earnings at this level or below ⁵ | | | 21 | 36 | 50 | 62 | 72 | 100 | |

¹ The assumptions underlying the above benefit estimates are similar to those used for the Social Security Statement. These estimates reflect no increase in the cost of living or average wage and earnings levels after December 2017. However, earnings after 2017 follow scaled earnings patterns as age increases. (These assumptions are not consistent with those used for table V.C7 of the 2018 Trustees Report.)

² A worker is *fully insured* if he or she has a total number of quarters of coverage (QCs) at least equal to the number of years after attainment of age 21 through the last year considered in the analysis (in this case 2014), or through age 62 if earlier, and has a minimum of 6 QCs.

³ Scaled earnings patterns starting at age 21 are assumed for all but the maximum worker. These scaled patterns reflect the actual average work experience of fully insured workers during 1995-2014. For the maximum worker, earnings start at age 22 and are assumed to equal the taxable maximum (the OASDI contribution and benefit base) for each year through 2017. (For 2017, this amount was \$127,200.) For more details on the scaled-earnings patterns see Actuarial Note Number 2018.3 at: http://www.ssa.gov/OACT/NOTES/ran3/an2018-3.pdf.

⁴The full-lifetime average earnings level reflects the average of the highest 35 years of wage-indexed earnings (wage-indexed to 2017) expected for the illustration assuming the worker survives to age 65 without becoming disabled.

⁵Based on a 1% sample of actual earnings histories for individuals aged 25 through 65 who were fully insured in 2015. Comparisons are made to hypothetical scaled worker career average earnings at each of the applicable ages corresponding to the \$10,000, \$20,000, ..., maximum full lifetime average earnings levels.

| Table 1B. Retired Worker Annual Benefit Amounts ¹ Scheduled in Current Law For Fully Insured ² Workers at Various Ages Who Become Entitled at Age 65 With Various Full-Lifetime Earnings Patterns ³ | | | | | | | | | | |
|--|---|---|--|----------|----------|----------|----------|----------|-----------|--|
| Age in 2018 | Age at benefit entitlement | | Earnings in 2017 and benefit at entitlement (Age 65) | | | | | | | |
| 25 | 65 | Earnings in 2017 | \$5,423 | \$10,847 | \$16,270 | \$21,694 | \$27,117 | \$32,541 | \$127,200 | |
| | | Benefit at entitlement | 7,788 | 11,088 | 13,872 | 16,644 | 19,416 | 22,188 | 31,896 | |
| 35 | 65 | Earnings in 2017 | 9,623 | 19,246 | 28,869 | 38,492 | 48,115 | 57,739 | 127,200 | |
| | | Benefit at entitlement | 7,788 | 11,088 | 13,872 | 16,644 | 19,416 | 22,188 | 31,908 | |
| 45 | 65 | Earnings in 2017 | 10,865 | 21,730 | 32,595 | 43,459 | 54,324 | 65,189 | 127,200 | |
| | | Benefit at entitlement | 7,788 | 11,088 | 13,872 | 16,644 | 19,416 | 22,188 | 31,800 | |
| 55 | 65 | Earnings in 2017 | 10,721 | 21,443 | 32,164 | 42,885 | 53,606 | 64,328 | 127,200 | |
| | | Benefit at entitlement | 7,788 | 11,088 | 13,872 | 16,644 | 19,416 | 22,188 | 31,620 | |
| 65 | 65 | Earnings in 2017 | 7,410 | 14,820 | 22,230 | 29,639 | 37,049 | 44,459 | 127,200 | |
| | | Benefit at entitlement | 7,740 | 10,992 | 13,740 | 16,500 | 19,248 | 22,008 | 31,068 | |
| Full-life | Full-lifetime average earnings level ⁴ | | | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | Maximum | |
| | | red workers with career nis level or below ⁵ | 8 | 21 | 36 | 50 | 62 | 72 | 100 | |

¹The assumptions underlying the above benefit estimates are similar to those used for the Social Security Statement. These estimates reflect no increase in the cost of living or average wage and earnings levels after December 2017. However, earnings after 2017 follow scaled earnings patterns as age increases. (These assumptions are not consistent with those used for table V.C7 of the 2018 Trustees Report.)

² A worker is fully insured if he or she has a total number of quarters of coverage (QCs) at least equal to the number of years after attainment of age 21 through the last year considered in the analysis (in this case 2014), or through age 62 if earlier, and has a minimum of 6 QCs.

³ Scaled earnings patterns starting at age 21 are assumed for all but the maximum worker. These scaled patterns reflect the actual average work experience of fully insured workers during 1995-2014. For the maximum worker, earnings start at age 22 and are assumed to equal the taxable maximum (the OASDI contribution and benefit base) for each year through 2017. (For 2017, this amount was \$127,200.) For more details on the scaled-earnings patterns see Actuarial Note Number 2018.3 at: http://www.ssa.gov/OACT/NOTES/ran3/an2018-3.pdf.

⁴The full-lifetime average earnings level reflects the average of the highest 35 years of wage-indexed earnings (wage-indexed to 2017) expected for the illustration assuming the worker survives to age 65 without becoming disabled.

⁵ Based on a 1% sample of actual earnings histories for individuals aged 25 through 65 who were fully insured in 2015. Comparisons are made to hypothetical scaled worker career average earnings at each of the applicable ages corresponding to the \$10,000, \$20,000, ..., maximum full lifetime average earnings levels.

Table 2. Disabled Worker Annual Benefit Amounts

For Disability Insured¹ Workers Entitled in 2018 at Selected Ages and With Various Full-Lifetime Earnings Patterns²

| Age at benefit entitlement in | | | | | | | | | |
|-------------------------------|---|---------|----------|----------|----------|----------|----------|-----------|--|
| 2018 | Earnings in 2017 and benefit at entitlement in 2018 | | | | | | | | |
| 25 | Earnings in 2017 | \$5,423 | \$10,847 | \$16,270 | \$21,694 | \$27,117 | \$32,541 | \$127,200 | |
| | Benefit at entitlement | 4,020 | 8,052 | 10,524 | 11,952 | 13,392 | 14,820 | 35,508 | |
| 35 | Earnings in 2017 | 9,623 | 19,246 | 28,869 | 38,492 | 48,115 | 57,739 | 127,200 | |
| | Benefit at entitlement | 6,936 | 11,160 | 13,632 | 16,104 | 18,564 | 21,036 | 35,556 | |
| 45 | Earnings in 2017 | 10,865 | 21,730 | 32,595 | 43,459 | 54,324 | 65,189 | 127,200 | |
| | Benefit at entitlement | 8,280 | 12,108 | 15,060 | 18,012 | 20,952 | 23,904 | 35,424 | |
| 55 | Earnings in 2017 | 10,721 | 21,443 | 32,164 | 42,885 | 53,606 | 64,328 | 127,200 | |
| | Benefit at entitlement | 8,820 | 12,504 | 15,648 | 18,780 | 21,924 | 25,068 | 35,292 | |
| Full-lifetime av | Full-lifetime average earnings level ³ | | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | Maximum | |
| | ility insured workers with career s at this level or below ⁴ | 4 | 15 | 29 | 44 | 58 | 69 | 100 | |

¹ A worker is *disability insured* if he or she is: (1) a fully insured worker who has accumulated 20 quarters of coverage during the 40-quarter period ending with the current quarter, (2) a fully insured worker aged 24-30 who has accumulated quarters of coverage during one-half of the quarters elapsed after the quarter of attainment of age 21 and up to and including the current quarter, or (3) a fully insured worker under age 24 who has accumulated six quarters of coverage during the 12-quarter period ending with the current quarter.

Note: These estimates reflect no increase in the cost of living after December 2017.

² Scaled earnings patterns starting at age 21 are assumed for all but the maximum worker. These scaled patterns reflect the actual average work experience of fully insured workers during 1995-2014. For the maximum worker, earnings start at age 22 and are assumed to equal the taxable maximum (the OASDI contribution and benefit base) for each year through 2017. (For 2017, this amount was \$127,200.) For more details on the scaled-earnings patterns see Actuarial Note Number 2018.3 at: http://www.ssa.gov/OACT/NOTES/ran3/an2018-3.pdf.

³ The full-lifetime average earnings level reflects the average of the highest 35 years of wage-indexed earnings (wage-indexed to 2017) expected for the illustration assuming the worker survives to age 65 without having become disabled.

⁴ Based on a 1% sample of actual earnings histories for individuals aged 25 to 65 who were disability insured in 2015. Comparisons are made to hypothetical scaled worker career average earnings at each of the applicable ages corresponding to the \$10,000, \$20,000, ..., maximum full lifetime average earnings levels.

Table 3. Survivor Annual Benefit Amounts

For Survivors Entitled in 2018 at Selected Ages and With Various Full-Lifetime Earnings Patterns of the Deceased Spouse¹

| Age of deceased spouse in 2018 | Age of surviving spouse in 2018 | | Benefit | at entitlem | ent in 2018 | 3 and decea | ased spouse | e's earning | s in 2017 |
|---|---|---------------------------|---------|-------------|-------------|-------------|-------------|-------------|-----------|
| | | Spouse and one child | \$6,648 | \$13,296 | \$16,440 | \$18,816 | \$21,168 | \$23,544 | \$53,640 |
| | 25 | Child only | 3,324 | 6,648 | 8,220 | 9,408 | 10,584 | 11,772 | 26,820 |
| 25 | | Spouse and two children | 6,648 | 13,308 | 16,440 | 18,816 | 21,672 | 25,968 | 62,580 |
| | Earnings of deceased spouse in 2017 | | 5,423 | 10,847 | 16,270 | 21,694 | 27,117 | 32,541 | 127,200 |
| | | Spouse and one child | 11,304 | 17,376 | 21,408 | 25,440 | 29,472 | 33,504 | 53,592 |
| | 35 | Child only | 5,652 | 8,688 | 10,704 | 12,720 | 14,736 | 16,752 | 26,796 |
| 35 | , | Spouse and two children | 11,316 | 17,388 | 22,104 | 29,400 | 36,708 | 40,524 | 62,532 |
| | Earnings of deceased spouse in 2017 | | 9,623 | 19,246 | 28,869 | 38,492 | 48,115 | 57,739 | 127,200 |
| | , | Spouse and one child | 12,600 | 18,312 | 22,800 | 27,288 | 31,800 | 36,288 | 53,184 |
| 45 | 45 | Child only | 6,300 | 9,156 | 11,400 | 13,644 | 15,900 | 18,144 | 26,592 |
| 45 | | Spouse and two children | 12,612 | 18,312 | 24,612 | 32,760 | 39,000 | 43,008 | 62,052 |
| | Earnings o | f deceased spouse in 2017 | 10,865 | 21,730 | 32,595 | 43,459 | 54,324 | 65,189 | 127,200 |
| | , | Spouse and one child | 6,300 | 8,928 | 11,172 | 13,404 | 15,648 | 17,892 | 25,140 |
| | 60 | Child only | 6,600 | 9,360 | 11,712 | 14,064 | 16,416 | 18,768 | 26,376 |
| 60 | , | Spouse and two children | 13,212 | 18,732 | 25,752 | 34,284 | 39,936 | 44,136 | 61,548 |
| | Earnings of deceased spouse in 2017 | | 9,312 | 18,624 | 27,935 | 37,247 | 46,559 | 55,871 | 127,200 |
| Full-lifetin | Full-lifetime average earnings level ² | | | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | Maximum |
| Percent of f | 9 | 22 | 37 | 50 | 62 | 72 | 100 | | |

¹ Scaled earnings patterns starting at age 21 are assumed for all but the maximum worker. These scaled patterns reflect the actual average work experience of fully insured workers during 1995-2014. For the maximum worker, earnings start at age 22 and are assumed to equal the taxable maximum (the OASDI contribution and benefit base) for each year through 2017. (For 2017, this amount was \$127,200.) For more details on the scaled-earnings patterns see Actuarial Note Number 2018.3 at: http://www.ssa.gov/OACT/NOTES/ran3/an2018-3.pdf.

Note: These estimates reflect no increase in the cost of living after December 2017.

² The full-lifetime average earnings level reflects the average of the highest 35 years of wage-indexed earnings (wage-indexed to 2017) expected for the illustration assuming the worker were to survive to age 65 without becoming disabled.

³ A worker is *fully insured* if he or she has a total number of quarters of coverage (QCs) at least equal to the number of years after attainment of age 21 through the last year considered in the analysis (in this case 2014), or through age 62 if earlier, and has a minimum of 6 QCs.

⁴ A worker is *currently insured* if he or she has accumulated six quarters of coverage during the 13-quarter period ending with the current quarter.

⁵ Based on a 1% sample of actual earnings histories for individuals aged 25 through 65 who were fully or currently insured in 2015. Comparisons are made to hypothetical scaled worker career average earnings at each of the applicable ages corresponding to the \$10,000, \$20,000, ..., maximum full lifetime average earnings levels.