



**Congressional  
Research Service**

Informing the legislative debate since 1914

---

# Social Security: What Would Happen If the Trust Funds Ran Out?

Updated October 15, 2021

**Congressional Research Service**

<https://crsreports.congress.gov>

RL33514

## Summary

Social Security's receipts and expenditures are accounted for through two federal trust funds: the Federal Old-Age and Survivors Insurance (OASI) Trust Fund and the Federal Disability Insurance (DI) Trust Fund. Under their intermediate assumptions and under current law, the Social Security trustees project that the OASI trust fund will become depleted in 2033 and the DI trust fund will become depleted in 2057. Although the two funds are legally separate, they are often considered in combination. The trustees project that the combined Social Security trust funds will become depleted in 2034 (under different assumptions and projection methods, the Congressional Budget Office projected in 2021 that the combined trust funds will become insolvent in 2032). At that point, the combined trust funds would become *insolvent*, because incoming tax revenue would be sufficient to pay only about 78% of scheduled benefits. Insolvency does not mean that Social Security will be completely broke and unable to pay any benefits.

The 2021 intermediate assumptions reflect the trustees' understanding of the status of the Social Security trust funds at the start of 2021. Unlike the previous year's report, the 2021 estimates do include potential effects of Coronavirus Disease 2019 (COVID-19). Although the report includes impacts from COVID-19, the impacts are confined to the near term. The trustees acknowledge that effects from the pandemic, especially in the long term, are subject to a high level of uncertainty.

If a trust fund became depleted and current receipts were insufficient to cover current expenditures, there would be a conflict between two federal laws. Under the Social Security Act, beneficiaries would still be legally entitled to their full scheduled benefits. However, the Antideficiency Act prohibits government spending in excess of available funds, so the Social Security Administration (SSA) would not have legal authority to pay full Social Security benefits on time.

It is unclear what specific actions SSA would take if a trust fund were insolvent. After depletion, the trust funds would continue to receive tax revenues, from which a majority of scheduled benefits could be paid. One option would be to pay full benefits on a delayed schedule; another would be to make timely but reduced payments. Social Security beneficiaries would remain legally entitled to full, timely benefits and could take legal action to claim the balance of their benefits.

Maintaining financial balance after trust fund insolvency would require substantial reductions in Social Security benefits, substantial increases in tax revenues, or some combination of the two. The trustees project that following depletion of the combined funds in 2034, Congress could restore balance by reducing scheduled benefits by about 22%; the required reduction would grow gradually to 26% by 2095. An alternative could be for Congress to raise the Social Security payroll tax rate from 12.4% to 15.8% following depletion in 2034, then gradually increase it to 16.7% by 2095.

Trust-fund insolvency could be avoided if expenditures were reduced or receipts increased sufficiently. The sooner adjustment to Social Security policy is undertaken, the less abrupt the changes would need to be, because they could be spread over a longer period and would therefore affect a larger number of workers and beneficiaries. As well, enacting adjustment to Social Security policy sooner, rather than later, would give workers and beneficiaries more time to plan and adjust their work and savings behavior.

# Contents

Introduction .....	1
Background on Social Security .....	2
The Social Security Trust Funds.....	2
How the Trust Funds Work .....	2
Trust Fund Receipts .....	3
Trust Fund Expenditures .....	4
Annual Surpluses and Deficits .....	4
Cash-Flow Surpluses and Deficits .....	4
Trust Fund Balances.....	4
Trust Fund Solvency .....	5
Historical Trust Fund Operations .....	5
Surpluses and Deficits.....	5
Near-Insolvency of the OASI Trust Fund in the Early 1980s .....	6
Recent Near-Insolvency of the DI Trust Fund .....	7
Social Security Financial Projections.....	7
Trust Fund Ratio .....	8
Legal Background on Trust Fund Insolvency .....	9
The Antideficiency Act .....	9
Legal Entitlement to Social Security Benefits .....	9
What Happens to Benefits in the Case of Insolvency? .....	9
What If Congress Waits to Act?.....	10
Benefit Cut Scenario .....	11
Size of Benefit Cuts .....	11
Payroll Tax Increase Scenario .....	15
Size of Payroll Tax Rate Increases.....	15
Impact of Payroll Tax Increases .....	16
Conclusion.....	16

# Figures

Figure 1. Annual Net Change in the Balance of the Combined Social Security Trust Funds, With and Without Interest Income, 1987-2020.....	6
Figure 2. Actual and Projected Trust Fund Ratios, by Trust Fund, 2000-2060 .....	8
Figure 3. Benefits as a Share of Scheduled Benefits, 2021-2095.....	11
Figure 4. Replacement Rates for Retired Workers Who Claim at Their Full Retirement Age Under the Benefit Cut Scenario, 2021-2095.....	13
Figure 5. Initial Real Annual Payable Benefits for Retired Workers Claiming at Their Full Retirement Age Under the Benefit Cut Scenario, 2021-2095 .....	14
Figure 6. Combined Social Security Payroll Tax Rate Under Current Law and Under the Tax Rate Increase Scenario, 2021-2095 .....	15

## **Tables**

Table 1. Current Social Security Benefit Payment Schedule .....	10
Table A-1. Operations of the Social Security Trust Funds, 2020 .....	17
Table B-1. Key Dates Projected for the Social Security Trust Funds as Shown Under the Intermediate Assumptions in Trustees Reports from 1983 to 2021.....	18

## **Appendixes**

Appendix A. 2020 Trust Fund Operations.....	17
Appendix B. Key Dates Projected for the Social Security Trust Funds .....	18

## **Contacts**

Author Information.....	19
Acknowledgments .....	19

## Introduction

Each year when the Social Security trustees release their annual report, attention is focused on the projection of the year that the Social Security trust funds will become *depleted*, that is, the year in which the trust funds' investment holdings in U.S. Treasury securities fall to zero.<sup>1</sup> In their 2021 report, the trustees project that, under their intermediate assumptions and under current law, the Federal Old-Age and Survivors Insurance (OASI) Trust Fund will become depleted in 2033 and the Federal Disability Insurance (DI) Trust Fund will do so in 2057.<sup>2</sup> Although the two funds are legally separate, they are often described in combination. The trustees project that the combined Old-Age, Survivors, Disability Insurance (OASDI) trust funds will become depleted in 2034. The 2021 intermediate assumptions reflect the Board of Trustees' understanding of the status of the Social Security trust funds at the start of 2021.<sup>3</sup>

Some Americans may believe that if the trust funds were depleted, Social Security would be unable to pay benefits at all. However, in 2034, the first year of projected depletion of the combined Social Security trust funds, the program is projected to have enough tax revenues to pay about 78% of scheduled benefits; that percentage would decline to 74% by the end of the 75-year projection period in 2095.<sup>4</sup> Thus, although the trust funds would be *insolvent* upon depletion, because they would be unable to cover 100% of expenditures with incoming tax revenues, they would not be completely broke and unable to pay *any* benefits.

Although benefits are projected to be paid in some form, it is unclear how the necessary reductions would be implemented, because the Social Security Act does not specify what would happen to benefits if a trust fund became insolvent. One option would be to pay full benefits on a delayed schedule; another would be to make timely but reduced payments.

This report explains what the Social Security trust funds are and how they work. It describes the historical operations of the trust funds and the Social Security trustees' projections of future operations. It explains what could happen if Congress allowed the trust funds to run out. It also

---

<sup>1</sup> The Social Security Board of Trustees presents an annual report to Congress on the current and projected financial status of the Social Security trust funds (see 42 U.S.C. §401[c]). The board is composed of six members: the Secretary of the Treasury, who is the Managing Trustee; the Secretary of Labor; the Secretary of Health and Human Services; the Commissioner of Social Security; and two public representatives, who are nominated by the President for a term of four years and subject to confirmation by the Senate. The trustees specify the assumptions about future demographic and economic trends used in the projections; however, the Social Security Administration's (SSA) Office of the Chief Actuary (OCACT) advises the trustees on the assumptions as well as develops and runs the computer models that produce the forecasts. For more information on the Board of Trustees' annual report to Congress, see U.S. Government Accountability Office (GAO), *SOCIAL SECURITY AND MEDICARE: Improved Schedule Management Needed for More Timely Trust Fund Reports*, GAO-19-596, August 14, 2019, <https://www.gao.gov/products/GAO-19-596>.

<sup>2</sup> The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, The 2021 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, August 31, 2021, Table IV.B4, <https://www.ssa.gov/OACT/TR/2021/tr2021.pdf> (hereinafter "2021 Social Security Trustees Report").

<sup>3</sup> The 2020 Social Security Trustees Report reflected the trustees' understanding at the start of 2020. As such, it did not include any potential impacts from COVID-19. The 2021 Social Security Trustees Report reflects the trustees' understanding at the beginning of 2021. As such, it incorporates COVID-19 impacts from 2020 and projections of COVID-19 in future years into the actuarial status. In the 2021 report, the trustees note the lack of consensus on the long-term effects from COVID-19. Given this, the trustees have confined impacts from COVID-19 into the near-term estimates. They state, "The pandemic and precipitous recession have clearly had significant effects on the actuarial status of the OASI and DI Trust Funds, and the future course of the pandemic is still uncertain. The Trustees will continue to monitor developments and modify projections in later reports" (2021 Social Security Trustees Report, p. 2).

<sup>4</sup> 2021 Social Security Trustees Report, Table IV.B4.

analyzes two scenarios that assume Congress waits until the moment of insolvency to act, showing the magnitude of benefit cuts or tax increases needed and how such changes would affect beneficiaries.

## Background on Social Security

Old-Age, Survivors, and Disability Insurance (OASDI), commonly known as Social Security, is a work-based social insurance program authorized under Title II of the Social Security Act that provides monthly cash benefits to retired or disabled workers and their eligible dependents and to eligible survivors of deceased insured workers.<sup>5</sup> Workers obtain insurance protection by working for a sufficient number of years in jobs covered by Social Security. A worker's job is considered *covered* if the earnings derived from that job are subject to Social Security taxes and thus are creditable for program purposes. In 2021, an estimated 176 million people (or about 94% of all workers) will work in paid employment or self-employment covered by Social Security.<sup>6</sup>

Social Security benefits are based on a worker's career-average earnings in jobs covered by Social Security and are designed to replace a portion of the income lost to a family due to the worker's retirement, disability, or death. In July 2021, Social Security paid \$93.4 billion in benefits to 65.0 million beneficiaries, including 46.9 million retired workers, 8.1 million disabled workers, 4.3 million dependents of retired or disabled workers, and 5.8 million survivors of deceased insured workers.<sup>7</sup> The average benefit that month was \$1,557 for retired workers, \$1,281 for disabled workers, \$658 for dependents of retired or disabled workers, and \$1,249 for survivors of deceased insured workers.<sup>8</sup> The Social Security Administration (SSA) administers the program, and the Department of the Treasury issues the benefits.

## The Social Security Trust Funds

### How the Trust Funds Work<sup>9</sup>

Social Security's receipts and expenditures are accounted for through two legally distinct federal trust funds: the OASI trust fund and the DI trust fund. In the federal accounting structure, a *trust fund* is an accounting mechanism used by the Department of the Treasury to track and report receipts dedicated for spending on specific purposes, as well as expenditures made to its beneficiaries that are financed by those receipts, in accordance with the terms of a statute that designates the fund as a trust fund.<sup>10</sup> The OASI trust fund records receipts and expenditures associated with retired workers, their dependents, and survivors of deceased insured workers, while the DI trust fund records receipts and expenditures associated with disabled workers and

---

<sup>5</sup> 42 U.S.C. §§401 et seq.

<sup>6</sup> SSA, OACT, *Fact Sheet on the Old-Age, Survivors, and Disability Insurance Program*, June 30, 2021, <https://www.ssa.gov/oact/FACTS/index.html>.

<sup>7</sup> SSA, OACT, "Benefits Paid By Type Of Beneficiary," <https://www.ssa.gov/oact/ProgData/icp.html>.

<sup>8</sup> SSA, OACT, "Benefits Paid By Type Of Beneficiary," <https://www.ssa.gov/oact/ProgData/icp.html>.

<sup>9</sup> CRS Report RL33028, *Social Security: The Trust Funds*.

<sup>10</sup> An account of the U.S. Treasury is designated as a trust fund by the Office of Management and Budget (OMB), in consultation with the Department of the Treasury, if the fund's authorizing legislation makes such a designation and if the fund's receipts are earmarked for spending on specific purposes or programs. Section 201 of the Social Security Act (42 U.S.C. §401) authorizes the Federal Old-Age and Survivors Insurance (OASI) Trust Fund and the Federal Disability Insurance (DI) Trust Fund and designates them as trust funds.

their dependents. The OASI and DI trust funds operate separately but are closely linked.<sup>11</sup> Several times in the past, lawmakers have authorized the reallocation of the Social Security payroll tax rate to equalize the financial conditions of the two trust funds. In part because of those experiences, analysts often treat the two funds collectively on a hypothetical basis as the combined OASDI trust funds.

The Social Security trust funds, like most federal trust funds, have different attributes than trust funds in the private sector. The Government Accountability Office (GAO) notes the following:

In the federal budget the meaning of the term “trust” differs significantly from its private sector usage. In the private sector, a person creates a private trust fund using his or her own assets to benefit a stated individual(s). The creator of the trust names a trustee who has a fiduciary responsibility to manage the designated assets in accordance with the stipulations of the trust. In the federal sector, the Congress creates a federal trust fund in law and designates a funding source to benefit stated groups or individuals. However, in contrast to a private trust fund, the federal government does not have a fiduciary responsibility to the trust beneficiaries, and it can raise or lower future trust fund collections and payments or change the purposes for which the collections are used by changing existing laws. Moreover, the federal government has custody and control of the funds as well as the earnings of most federal trust funds.<sup>12</sup>

## Trust Fund Receipts

The trust funds’ primary source of revenue is the Social Security payroll tax, but they also receive income from federal income taxes on benefits and from interest on the funds’ investment holdings. The payroll tax consists of a 12.4% total tax on wages and self-employment income up to the taxable maximum, which in 2021 is \$142,800 and generally increases annually with average wage growth in the economy.<sup>13</sup> Of the 12.4% total, 10.6% is credited to the OASI trust fund and 1.8% to the DI trust fund.<sup>14</sup> Some Social Security benefits paid to people with incomes above a certain threshold are subject to federal income tax.<sup>15</sup> Most of the resulting revenue is credited to the Social Security trust funds, and some goes to Medicare’s Hospital Insurance (HI) trust fund.<sup>16</sup> In 2020, the combined trust funds’ total receipts were \$1,118.1 billion, with 89.6% from payroll taxes, 6.8% from interest income, and 3.6% from income taxes on benefits (see **Appendix A**).<sup>17</sup>

---

<sup>11</sup> Under current law, the OASI and DI trust funds may not borrow from one another.

<sup>12</sup> GAO, *Federal Trust and Other Earmarked Funds: Answers to Frequently Asked Questions*, GAO-01-199SP, January 1, 2001, p. 7, <https://www.gao.gov/products/GAO-01-199SP>.

<sup>13</sup> 42 U.S.C. §430 and 26 U.S.C. §§1401, 3101, and 3111. See SSA, OCACT, “Contribution and Benefit Base,” <https://www.ssa.gov/oact/cola/cbb.html>.

<sup>14</sup> 42 U.S.C. §401(a) and 401(b). Both the total tax rate and the allocation of it between the OASI and DI trust funds have changed many times; for historical rates, see SSA, OCACT, “Social Security Taxes Rates,” <https://www.ssa.gov/oact/progdata/oasdiRates.html>.

<sup>15</sup> CRS Report RL32552, *Social Security: Taxation of Benefits*.

<sup>16</sup> CRS Report R43122, *Medicare Financial Status: In Brief*.

<sup>17</sup> SSA, OCACT, “Trust Fund Data,” <https://www.ssa.gov/oact/ProgData/funds.html>. A very small amount of the combined trust funds total receipts (less than 0.001%) were transfers from the General Fund of the U.S. Treasury, which occurred for several different reasons.

## Trust Fund Expenditures

In 2020, the combined trust funds' total expenditures were \$1,107.2 billion, with 99.0% for benefit payments and 0.6% for administrative expenses (see **Appendix A**). The remaining 0.5% was transferred to the Railroad Retirement Board (RRB) as part of a financial interchange with the RRB. (The totals do not necessarily equal the sums of the rounded components.) This annual exchange of funds places the Social Security trust funds in the same financial position in which they would have been if railroad service had been covered by Social Security.

## Annual Surpluses and Deficits

In years when Social Security's total receipts, including interest, exceed expenditures, then the trust funds have an *annual surplus*. By law, that surplus is invested in special-issue U.S. Treasury securities (i.e., nonmarketable government bonds), which are backed by the full faith and credit of the federal government.<sup>18</sup> In other words, Social Security's cash surpluses are borrowed by the General Fund of the U.S. Treasury. The Treasury, in turn, incurs an obligation to repay the bonds with interest. These bonds are assets to the Social Security program but liabilities to the rest of the government. In 2020, the combined trust funds generated an annual surplus of \$10.9 billion (\$1,118.1 billion in total receipts *minus* \$1,107.2 billion in total expenditures; see **Appendix A**).

When the trust funds spend more than they receive in taxes and interest, they have an *annual deficit*, which requires Social Security to redeem bonds accumulated in previous years. The Department of the Treasury pays benefits with cash from general revenues and writes down an equivalent amount of the trust fund's bond holdings.<sup>19</sup> In their latest report, the Social Security trustees project that total expenditures for the combined trust funds will exceed total receipts in 2021, resulting in an annual deficit for the first time since 1982.<sup>20</sup>

## Cash-Flow Surpluses and Deficits

An alternative measure of the trust funds' finances is given by the *cash-flow* balance. That measure does not consider interest income, so the trust funds run a *cash-flow surplus* when tax revenues exceed expenditures, and they run a *cash-flow deficit* when they spend more than they receive in taxes.

Total receipts for the combined trust funds in 2020 were \$1,118.1 billion, with \$1,042.0 billion in noninterest income (i.e., payroll taxes and income taxes on benefits) and \$76.1 billion in interest income (see **Appendix A**). Because total expenditures for the combined trust funds in 2020 were \$1,107.2 billion, there was a combined cash-flow deficit in 2020 of \$65.2 billion (\$1,107.2 billion in total expenditures *minus* \$1,042.0 billion in noninterest income).

## Trust Fund Balances

The *balance* of a trust fund is the accumulation of excess receipts over expenditures (i.e., the sum of annual surpluses *less* annual deficits). A positive balance denotes the total amount of the trust fund's investment holdings in U.S. government bonds (also known as *asset reserves*). Annual

---

<sup>18</sup> All trust fund receipts are invested in special-issue U.S. securities, and all trust fund expenditures are paid through the redemption of special-issue U.S. securities. However, for simplicity, this report limits the discussion of trust fund investment practices to annual surpluses and deficits. For more information, see CRS In Focus IF10564, *Social Security Trust Fund Investment Practices*.

<sup>19</sup> See David Pattison, "Social Security Trust Fund Cash Flows and Reserves," *Social Security Bulletin*, vol. 75, no. 1 (February 2015), <https://www.ssa.gov/policy/docs/ssb/v75n1/index.html>.

<sup>20</sup> 2021 Social Security Trustees Report, p. 3 and Table VI.G8 (Supplemental Single-Year Table).



surpluses add to a trust fund's balance while annual deficits reduce it. The annual surplus of \$10.9 billion in 2020 increased the trust funds' combined balance from \$2,897.4 billion at the end of 2019 to \$2,908.3 billion at the end of 2020 (see **Appendix A**).

## **Trust Fund Solvency**

If the trust funds are not able to pay all of current expenditures out of current tax revenues and accumulated trust fund assets, they are *insolvent*. Insolvency means that Social Security's trust funds are unable to pay benefits in full and on time. It does *not* mean that Social Security will be completely broke and unable to pay any benefits.

## **Historical Trust Fund Operations**

The OASI trust fund was created by the Social Security Act Amendments of 1939 (P.L. 76-379) and superseded the Old-Age Reserve Account established by the original Social Security Act in 1935 (P.L. 74-271).<sup>21</sup> The DI trust fund was established as part of the Social Security Amendments of 1956 (P.L. 84-880).<sup>22</sup> Neither of the Social Security trust funds has ever become insolvent. The trust funds have existed on a hypothetical combined basis since the DI fund was first credited with receipts and debited for expenditures in 1957.

## **Surpluses and Deficits**

The trust funds have run *annual surpluses* in most years. Except for the first decades of the program and a few years beginning in the late 1960s, these annual surpluses were typically small relative to the size of the trust funds' expenditures. Beginning in 1975, the combined trust funds ran annual deficits. The trust funds made up the difference between receipts and expenditures during these years by redeeming some of the bonds accumulated in earlier years. In other words, in those years, the Social Security trust funds received net transfers from the Treasury's General Fund.

The aging of the baby-boom population and the Great Recession (December 2007 to June 2009) and the resulting weak economic growth contributed to higher expenditures and lower tax revenues for Social Security. Since 2010, the combined trust funds have run cash-flow deficits (**Figure 1**), which are projected to continue indefinitely under current law.

However, because interest income has exceeded the *cash-flow deficit*, the combined trust funds have continued to run annual surpluses, which averaged about 4% of total expenditures from 2010 through 2020.<sup>23</sup> Cash-flow deficits do not affect Social Security directly. However, if the non-Social Security portion of the federal budget is in deficit, redemption of trust fund bonds puts additional pressure on the overall federal budget.

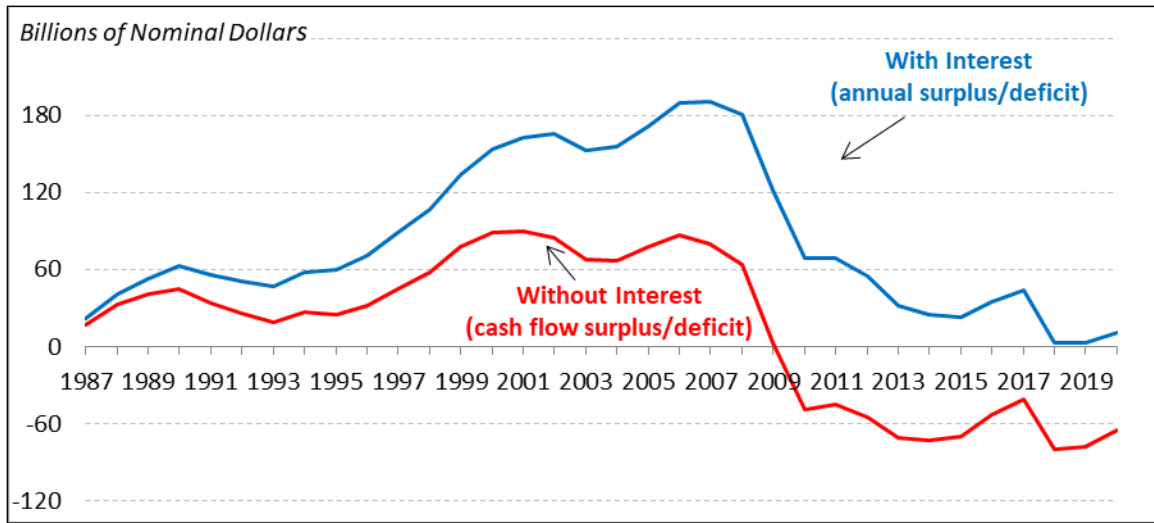
---

<sup>21</sup> The OASI trust fund became effective on January 1, 1940. For more information on the origins of the OASI trust fund and the Old-Age Reserve Account, see Board of Trustees of the Federal Old-Age and Survivors Insurance Trust Fund, *First Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance Trust Fund*, January 3, 1941, <https://www.ssa.gov/oact/tr/historical/1941TR.html>.

<sup>22</sup> The DI trust fund was established on August 1, 1956. For more information on the origins of the DI Trust Fund, see CRS Report R43318, *The Social Security Disability Insurance (DI) Trust Fund: Background and Current Status*.

<sup>23</sup> SSA, OACT, "Social Security Trust Fund Data," <https://www.ssa.gov/oact/ProgData/funds.html>.

**Figure I. Annual Net Change in the Balance of the Combined Social Security Trust Funds, With and Without Interest Income, 1987-2020**



**Source:** Congressional Research Service (CRS), based on data from the Social Security Administration (SSA), Office of the Chief Actuary (OCACT), “Social Security Trust Fund Data,” <https://www.ssa.gov/oact/STATS/table4a3.html>.

### Near-Insolvency of the OASI Trust Fund in the Early 1980s

In the early 1980s, a solvency crisis loomed for the OASI trust fund. The 1982 Social Security Trustees Report projected that in the absence of legislative changes, the OASI trust fund would become insolvent by July 1983.<sup>24</sup> To relieve the pressure on the OASI trust fund temporarily, Congress permitted the fund to borrow from the DI and HI trust funds through the end of 1982.<sup>25</sup> On November 5, 1982, the balance of the OASI trust fund had fallen to zero, and continuing tax revenues were insufficient to pay in full the OASI benefit checks that had been delivered on November 3.<sup>26</sup> To cover the shortfall, the Secretary of the Treasury authorized a \$581 million loan from the DI trust fund to the OASI trust fund. Additional loans from the DI and HI trust funds to the OASI trust fund were made before the temporary interfund borrowing authority expired.

This measure gave policymakers time to develop a more sustainable solution to Social Security’s solvency problem. The Social Security Amendments of 1983 (P.L. 98-21) increased Social Security income and reduced spending. As a result, the combined trust funds ran significant surpluses, which on average exceeded a quarter of expenditures from 1987 to 2009. The 1982 loans from the DI and HI trust funds to the OASI trust fund were repaid, with interest, by the end of April 1986.<sup>27</sup>

<sup>24</sup> U.S. Congress, House Committee on Ways and Means, *The 1982 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, 97<sup>th</sup> Cong., 2<sup>nd</sup> sess., April 1, 1982, H.Doc. 97-163 (Washington: GPO, 1982), p. 2, <https://www.ssa.gov/oact/tr/historical/1982TR.pdf> (hereinafter “1982 Social Security Trustees Report”).

<sup>25</sup> P.L. 97-123.

<sup>26</sup> Bruce D. Schobel, “Interfund Borrowing Under the Social Security Act,” *Social Security Bulletin*, vol. 46, no. 9 (September 1983), <https://www.ssa.gov/policy/docs/ssb/v46n9/>. See also Edward Cowan, “Leaders of Both Parties Facing Tough Choices on Social Security Problems,” *The New York Times*, November 7, 1982, <http://www.nytimes.com/1982/11/07/us/leaders-of-both-parties-facing-tough-choices-on-social-security-problems.html>.

<sup>27</sup> SSA, “Research Note #4: Inter-Fund Borrowing Among the Trust Funds,” <http://www.ssa.gov/history/>

## Recent Near-Insolvency of the DI Trust Fund<sup>28</sup>

In their annual reports for 2012 through 2015, the trustees projected that the DI trust fund would be depleted in late 2016 (see **Appendix B**). At the end of 2015, the balance of the DI trust fund was \$32.3 billion, down from \$60.2 billion at the start of the year.<sup>29</sup> The declining solvency of the DI trust fund was the result of an imbalance between the fund's receipts and expenditures. Between 1995 and 2015, tax revenues to the DI trust fund were relatively flat as a percentage of taxable payroll, whereas expenditures as a share of taxable payroll grew markedly.<sup>30</sup> The increase in expenditures stemmed largely from the growth in the number of beneficiaries in the program. During that period, the number of disabled-worker beneficiaries increased by 113%, from nearly 4.2 million to more than 8.9 million.<sup>31</sup>

On November 2, 2015, President Barack Obama signed into law the Bipartisan Budget Act of 2015 (BBA 2015; P.L. 114-74). Among other provisions, the BBA 2015 authorized a temporary reallocation of the payroll tax rate between the OASI and DI trust funds to provide DI with a larger share for 2016 through 2018. Specifically, the DI trust fund's share of the combined tax rate increased by 0.57 percentage points at the beginning of 2016, from 1.80% to 2.37%. Because the BBA 2015 did not change the combined payroll tax rate of 12.40%, the portion of the tax rate allocated to OASI decreased by a corresponding amount. This means that OASI's share of the combined tax rate declined by 0.57 percentage points at the start of 2016, from 10.60% to 10.03%. At the beginning of 2019, the shares allocated to the DI and OASI trust funds returned to their 2015 levels: 1.80% to the DI trust fund and 10.60% to the OASI trust fund.

## Social Security Financial Projections

This report focuses on the trustees' "intermediate" Social Security projections, which reflect their "best estimates" of future demographic and economic trends.<sup>32</sup> Under that set of assumptions, the OASI Trust Fund is depleted in 2033 and the DI trust fund is depleted in 2057.<sup>33</sup> Considered on a hypothetical combined basis, the trust funds would become insolvent in 2034. However, the trustees' projections—like all long-term projections—are uncertain. They estimate that there is a 10% chance that the combined trust funds would become insolvent in 2032 or earlier and a 10% chance that insolvency would occur in 2038 or later.<sup>34</sup> Using somewhat different assumptions and

---

interfundnote.html.

<sup>28</sup> CRS Report R43318, *The Social Security Disability Insurance (DI) Trust Fund: Background and Current Status*.

<sup>29</sup> SSA, OACT, "Time Series for Selected Financial Items," <https://www.ssa.gov/oact/ProgData/tsOps.html>.

<sup>30</sup> *Taxable payroll* is the total amount of earnings in the economy that is subject to Social Security payroll taxes (with some adjustments).

<sup>31</sup> SSA, OACT, "Benefits Paid by Type of Beneficiary," <https://www.ssa.gov/oact/ProgData/icp.html>.

<sup>32</sup> To estimate the future financial status of the trust funds, the Social Security trustees produce short-range and long-range actuarial projections under three sets of economic and demographic assumptions: intermediate, low-cost, and high-cost. Intermediate assumptions represent the trustees' best estimate of the financial condition of the trust funds in the future. The low-cost and high-cost sets of assumptions, on the other hand, depict extraordinarily favorable (low-cost) or unfavorable (high-cost) possibilities for the trust funds' future solvency. According to the trustees, "actual future costs are unlikely to be as extreme as those portrayed by the low-cost and high-cost projections" (2021 Social Security Trustees Report, p. 9). Unless otherwise specified, projections cited in this report are based on the trustees' intermediate assumptions.

<sup>33</sup> 2021 Social Security Trustees Report, Table IV.B4.

<sup>34</sup> 2021 Social Security Trustees Report, Table VI.E1.

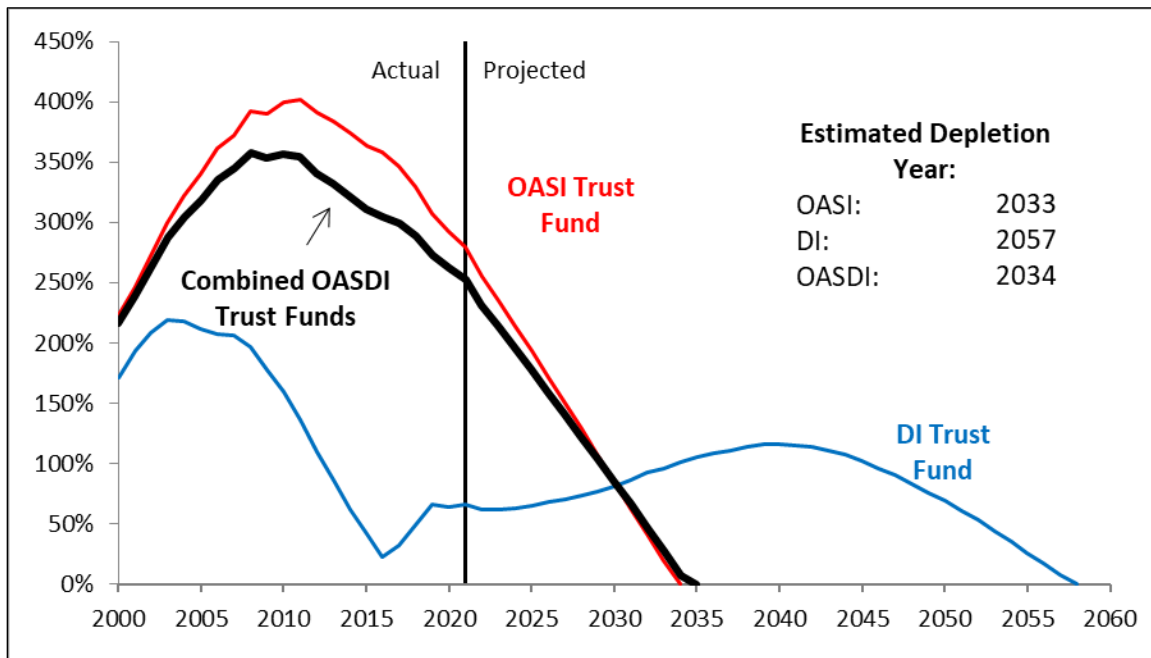
projection methods, the Congressional Budget Office (CBO) projected in March 2021 that the combined trust funds will become insolvent in 2032.<sup>35</sup>

Even after insolvency, the trust funds are to continue to receive income from payroll taxes and income taxes on benefits that would allow some benefits to be paid. The trustees project that, under their intermediate assumptions, tax income would be sufficient to cover about 78% of scheduled benefits following insolvency of the combined trust funds in 2034, declining to 74% in 2095.<sup>36</sup>

### Trust Fund Ratio

To put the trust fund balance in context, analysts commonly consider the *trust fund ratio*: the balance in the trust funds at the beginning of a year divided by projected expenditures for that year. The trust fund ratio thus represents the proportion of a year’s cost that could be paid solely with the reserves at the beginning of the year. The ratio for the combined trust funds peaked at 358% in 2008 (Figure 2). The combined trust fund ratio declined to 262% in 2020 and is continuing to fall. By definition, the ratio will reach zero when the trust funds become depleted.

**Figure 2. Actual and Projected Trust Fund Ratios, by Trust Fund, 2000-2060**  
(trust fund assets at the beginning of the year as a share of annual expenditures)



**Source:** CRS, based on the Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, *The 2021 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds.*, August 31, 2021, Table IV.B4 (Supplemental Single-Year Table), <https://www.ssa.gov/OACT/TR/2021/tr2021.pdf> (hereinafter “2021 Social Security Trustees Report”).

**Notes:** OASI = Old-Age and Survivors Insurance. DI = Disability Insurance. OASDI = Old-Age, Survivors, and Disability Insurance. Projections are based on the trustees’ 2021 intermediate assumptions.

<sup>35</sup> U.S. Congressional Budget Office (CBO), *The 2021 Long-Term Budget Outlook*, March 4, 2021, p. 18, <https://www.cbo.gov/system/files/2021-03/56977-LTBO-2021.pdf>.

<sup>36</sup> 2021 Social Security Trustees Report, Table IV.B4.

## Legal Background on Trust Fund Insolvency

### The Antideficiency Act

The Social Security Act specifies that benefit payments shall be made *only* from the trust funds (i.e., only from their accumulated bond holdings).<sup>37</sup> Another law, the Antideficiency Act, prohibits government spending in excess of available funds.<sup>38</sup> Consequently, if the Social Security trust funds become insolvent—that is, if current tax receipts and accumulated assets are not sufficient to pay the benefits to which people are entitled—the law effectively prohibits full Social Security benefits from being paid on time.

### Legal Entitlement to Social Security Benefits

The Social Security Act states that every individual who meets program eligibility requirements is entitled to benefits.<sup>39</sup> Social Security is an *entitlement program*, which means that the federal government is legally obligated to pay Social Security benefits to all those who are eligible for them as set forth in the statute.<sup>40</sup> If the federal government fails to pay the benefits stipulated by law, beneficiaries could take legal action. Insolvency would not relieve the government of its obligation to provide benefits.

### What Happens to Benefits in the Case of Insolvency?

The Antideficiency Act prohibits government agencies from paying for benefits, goods, or services beyond the limit authorized in law for such payments. The authorized limit in law for Social Security benefits is the balance of the trust fund. The Social Security Act does not stipulate what would happen to benefit payments if the trust funds ran out. As a result, either full benefit checks may be paid on a delayed schedule or reduced benefits would be paid on time.<sup>41</sup> In either case, total payable benefits would be lower than scheduled benefits.

To see how a delay could affect beneficiaries, consider the current Social Security benefit payment schedule, shown in **Table 1**. (This schedule may be changed at the discretion of the Commissioner of Social Security.)<sup>42</sup>

---

<sup>37</sup> 42 U.S.C. §401(h).

<sup>38</sup> 31 U.S.C. §1341.

<sup>39</sup> 42 U.S.C. §§402 and 423.

<sup>40</sup> See 2 U.S.C. §622 for the definition of *entitlement authority*. Congress retains the right to modify provisions of the Social Security Act at any time, which could affect the benefits current and future beneficiaries may receive (see 42 U.S.C. §1304).

<sup>41</sup> The 1982 Trustees Report, which projected impending trust fund insolvency, stated that unless legislative changes were made, “inability to pay some benefits *on time* would result” (1982 Social Security Trustees Report, p. 2 [emphasis added]). That language suggests that after insolvency, full benefit payments would have been made on a delayed schedule. The 2021 report uses more neutral language, stating that after insolvency, the trust funds would be “unable to pay scheduled benefits in full on a timely basis” (2021 Social Security Trustees Report, p. 42).

<sup>42</sup> 20 C.F.R. §404.1807. For the payment schedule rationale, see SSA, “Cycling Payment of Social Security,” 62 *Federal Register* 6114, February 11, 1997, <https://www.gpo.gov/fdsys/pkg/FR-1997-02-11/pdf/97-3205.pdf>.

**Table I. Current Social Security Benefit Payment Schedule**

Benefits Paid On	Birth Date of Worker on Whose Record Benefits Are Paid
Third of every month	Any birth date for: (1) Social Security beneficiaries who also receive Supplemental Security Income benefits or who reside in a foreign country, and (2) Most beneficiaries who began to receive benefits prior to June 1997.
Second Wednesday	1 <sup>st</sup> to 10 <sup>th</sup> day of the month
Third Wednesday	11 <sup>th</sup> to 20 <sup>th</sup> day of the month
Fourth Wednesday	21 <sup>st</sup> to 31 <sup>st</sup> day of the month

**Source:** Congressional Research Service (CRS), based on 20 C.F.R. §404.1807 and Social Security Administration (SSA), Office of the Chief Actuary (OACT), “Cyclical Payment of Social Security Benefits,” <http://ssa.gov/OACT/ProgData/cyclicalpay.html>.

**Note:** For beneficiaries scheduled to receive payments on the third of the month, benefits may be paid earlier if the third is on a weekend or holiday.

New beneficiaries’ payment dates are generally based on their day of birth—for example, if the worker covered by Social Security was born on the first of the month (e.g., June 1), his or her benefit payment is made on the second Wednesday in the month.<sup>43</sup>

If trust fund insolvency caused delays in the payment schedule, benefit payments could be made in the usual order—first to those who receive benefits on the third of the month, then to those on the second Wednesday of the month, and so on, until the remainder of the trust funds’ balance reached zero. At that point, no benefits could be paid until more tax receipts were credited to the trust funds. Then benefit payments could be picked up where they left off when the trust funds ran out. This cycle could continue indefinitely. The timing of these payments would be unpredictable.

## What If Congress Waits to Act?

There are many options to restore Social Security solvency, which could be combined or targeted in a variety of ways. For example, Congress could decrease Social Security benefits. Benefit cuts could be applied proportionately to all beneficiaries or structured to protect certain people, such as disabled or low-income beneficiaries. Congress could also increase Social Security’s income by raising payroll or other taxes or by transferring funds from the Treasury’s general fund. Payroll tax increases could be applied proportionately to all workers or targeted to certain workers, such as those who earn more than the taxable maximum (\$142,800 in 2021).

The next section presents two policy options that could be implemented after the trust funds’ combined balance fell to zero to ensure a balanced system in later years:

- the *benefit cut scenario*, under which benefits would be cut across the board; and
- the *tax increase scenario*, under which the payroll tax rate would increase.

Both scenarios assume that current law would remain in place until the combined trust funds became insolvent. If changes were made sooner, they could be smaller, since the burden of lower

<sup>43</sup> For beneficiaries who receive Social Security benefits based on another person’s work record (e.g., spousal benefits), their payment date depends on the birth date of the worker on whose record they receive benefits. The current benefit payment schedule was first implemented for new beneficiaries in May 1997.

benefits or higher taxes would be shared by more beneficiaries or workers over a longer period.<sup>44</sup> Both scenarios would essentially convert Social Security to a pure pay-as-you-go system, in which income and outgo are equal on an annual basis and there are no trust fund assets. These scenarios are only two of a wide range of possibilities. When Congress last addressed Social Security’s solvency in 1983, lawmakers employed a combination of tax increases and benefit reductions to improve the financial condition of the combined trust funds.

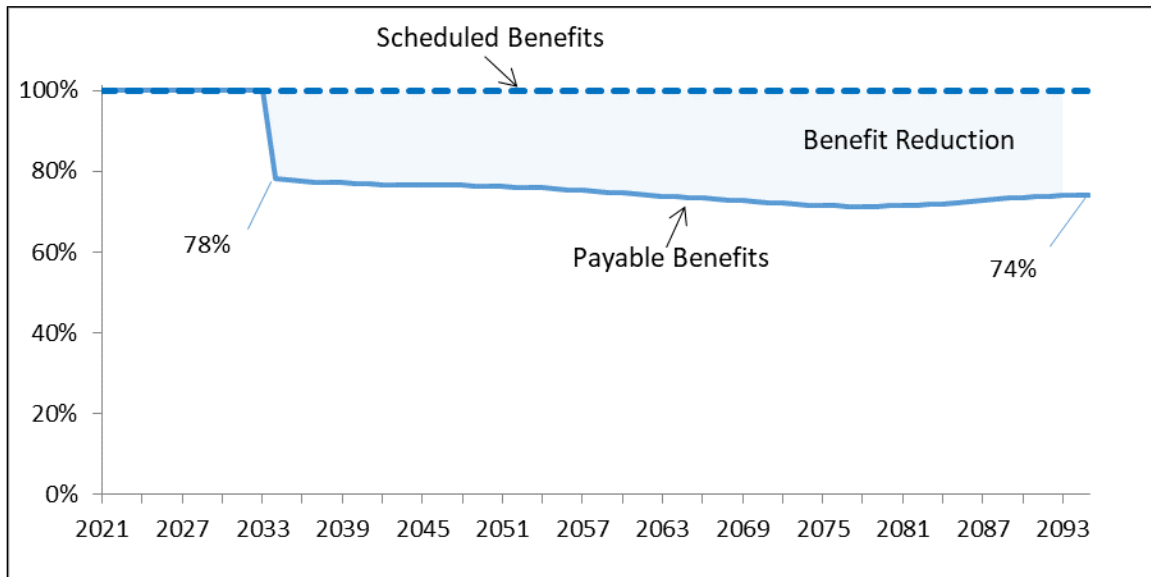
## Benefit Cut Scenario

### Size of Benefit Cuts

If the trust funds were allowed to run out, Congress could eliminate annual cash-flow deficits by cutting benefits so that spending equals tax income on an annual basis. According to the trustees, achieving annual balance would require benefit cuts of 22% in 2034, the first year of insolvency, rising to 26% by 2095.<sup>45</sup> To maintain balance after 2094, the Social Security trustees project that larger benefit reductions would be needed, because people would continue to live longer and therefore collect benefits for longer periods.

**Figure 3** shows the percentage of scheduled benefits that are payable each year with scheduled revenues. One way to understand how such a reduction would affect beneficiaries is to examine the effect on projected replacement rates and real benefit amounts for hypothetical workers.

**Figure 3. Benefits as a Share of Scheduled Benefits, 2021-2095**



**Source:** CRS, based on an OCACT memorandum from Daniel Nickerson, actuary, and Kyle Burkhalter, actuary, to Chris Chaplain, supervisory actuary, and Karen Glenn, deputy chief actuary, “Current-Law OASDI

<sup>44</sup> The trustees estimate that 75-year solvency could be restored through (1) an immediate payroll tax increase of 3.36 percentage points (from the current 12.40% to 15.76%), (2) a benefit reduction of 21% for all current and future beneficiaries, (3) a benefit reduction of 25% for only those who become initially eligible for benefits in 2021 or later, or (4) some combination of those approaches. If Congress waited until 2034 to act, the trustees estimate that maintaining solvency over the 75-year projection period would require (1) a payroll tax increase of 4.20 percentage points (from the current 12.40% to 16.60%) starting in 2034, (2) a reduction in scheduled benefits of 26% starting in 2034, or (3) some combination of those approaches. See 2021 Social Security Trustees Report, pp. 5-6.

<sup>45</sup> 2021 Social Security Trustees Report, Table IV.B4.

Payable Percentages: Current-Law Revenue as a Percent of the Cost of Providing Scheduled Benefits Through Year 2095—Information,” September 10, 2021 (hereinafter “2021 OCACT Payable Benefits Memo”).

**Notes:** Projections are based on the trustees’ 2021 intermediate assumptions. In calculating the share of payable benefits, OCACT limits revenue from the taxation of benefits to the amount that would be obtained from the payable benefits.

## Replacement Rates

One way of measuring the adequacy of Social Security benefits is the *replacement rate*, the ratio of an individual’s program benefit to past covered earnings. Replacement rates can be calculated in different ways. This report uses the following methodology employed by SSA’s actuaries.<sup>46</sup>

$$\text{Replacement Rate} = \frac{\text{Initial Social Security Benefit}}{\text{Career-Average Indexed Earnings from Covered Work}}$$

Social Security was established to replace income lost to a family as a result of the retirement, death, or disability of a worker. To ensure that average benefit levels grow along with average wages—thus keeping replacement rates generally steady—initial Social Security benefits are indexed to wage growth. Historically, wages have generally risen faster than prices, allowing the standard of living to rise from one generation to the next.

**Figure 4** shows projected replacement rates under the benefit cut scenario for hypothetical low, medium, and high earners who claim retirement benefits at their full retirement age from 2021 through 2095.<sup>47</sup>

---

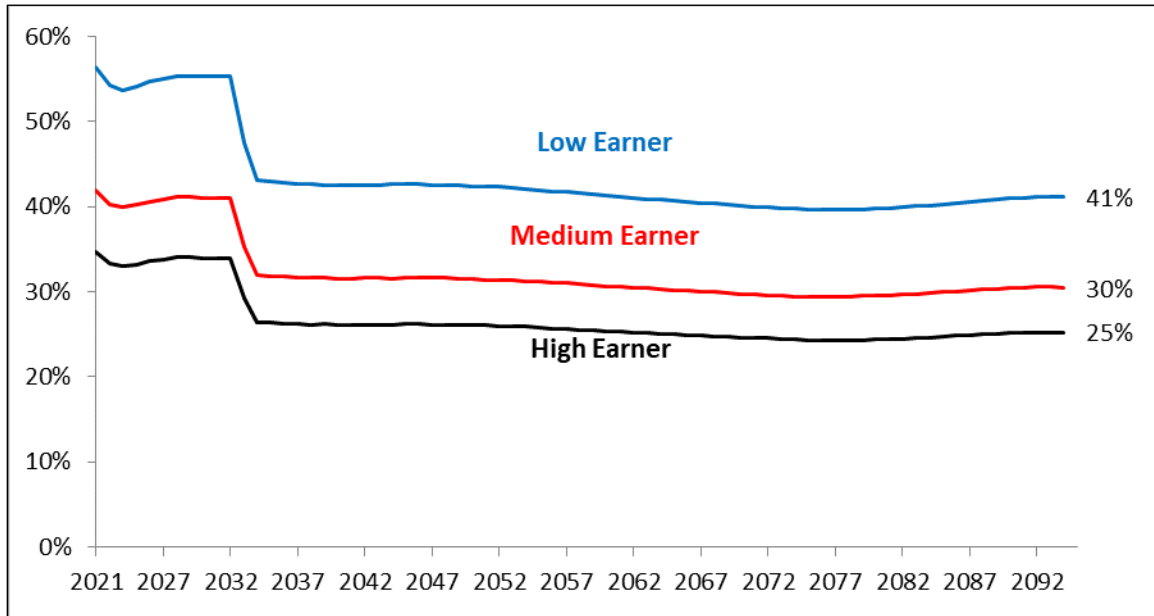
<sup>46</sup> Under the Social Security program, the replacement rate for retired workers is the ratio of the Social Security benefit to the average of the highest 35 years of covered earnings, indexed to wage growth using the SSA’s Average Wage Index (AWI). Other ways to measure replacement rates are discussed in Andrew G. Biggs and Glenn R. Springstead, “Alternate Measures of Replacement Rates for Social Security Benefits and Retirement Income,” *Social Security Bulletin*, vol. 68, no. 2, October 2008, <http://www.ssa.gov/policy/docs/ssb/v68n2/v68n2p1.html>, and in SSA, OCACT, *Replacement Rates For Retirees: What Makes Sense For Planning And Evaluation?*, Actuarial Note 155, July 2014, at [http://www.ssa.gov/oact/NOTES/pdf\\_notes/note155.pdf](http://www.ssa.gov/oact/NOTES/pdf_notes/note155.pdf).

<sup>47</sup> The low earner is assumed to have earned 45% of the national average wage (or \$26,579 in 2021) when working and to receive an annual Social Security benefit of \$14,181 in 2021. The medium earner is assumed to have earned the average wage (or \$59,065 in 2021) and to receive a benefit of \$23,393 in 2021. The high earner is assumed to have earned 160% of the average wage (or \$94,503 in 2021) and to receive a benefit of about \$30,958 in 2021. For more information, see 2021 Social Security Trustees Report, Table V.C7 (Supplemental Single-Year Tables) and SSA, OCACT, *Replacement Rates for Hypothetical Retired Workers*, Actuarial Note 2021.9, August 2021, Table C, <https://www.ssa.gov/OACT/NOTES/ran9/an2021-9.pdf> (hereinafter “OCACT Actuarial Note 2021.9”). For information on the development of the hypothetical workers, see SSA, OCACT, *Internal Rates of Return Under the OASDI Program for Hypothetical Workers*, Actuarial Note 144, June 2001, <http://www.ssa.gov/oact/NOTES/note2000s/note144.html>.



**Figure 4. Replacement Rates for Retired Workers Who Claim at Their Full Retirement Age Under the Benefit Cut Scenario, 2021-2095**

(initial benefits as a share of career-average indexed earnings from covered work)



**Source:** CRS analysis of data from 2021 OCACT Payable Benefits Memo and SSA, OCACT, *Replacement Rates for Hypothetical Retired Workers*, Actuarial Note 2021.9, August 2021, Table C, <https://www.ssa.gov/OACT/NOTES/ran9/an2021-9.pdf>.

**Notes:** Projections are based on the trustees’ 2021 intermediate assumptions. Replacement rates are for hypothetical earners who claim retirement benefits at their full retirement age.

The Social Security benefit formula is progressive, so the replacement rate is higher for people with lower lifetime earnings in covered employment or self-employment than for people with higher lifetime earnings. In 2021, the estimated rates are 56% for low earners, 42% for medium earners, and 35% for high earners.<sup>48</sup>

Because lower earners have higher replacement rates, the 22% reduction would result in a larger *percentage point* reduction in replacement rates for low earners than for high earners. The replacement rate for low earners would fall from 55% in 2032 to 43% in 2034, a decline of 12 percentage points. In contrast, the replacement rate for high earners would fall from 34% in 2032 to 26% in 2034, an 8 percentage point drop.<sup>49</sup>

### Real Benefit Levels

Another measure of benefit adequacy is initial annual benefit amounts. Since benefits are based on workers’ lifetime earnings, higher earners tend to receive higher benefit amounts than lower earners. In 2021, a hypothetical low earner is estimated to receive an annual Social Security

<sup>48</sup> OCACT Actuarial Note 2021.9, Table C.

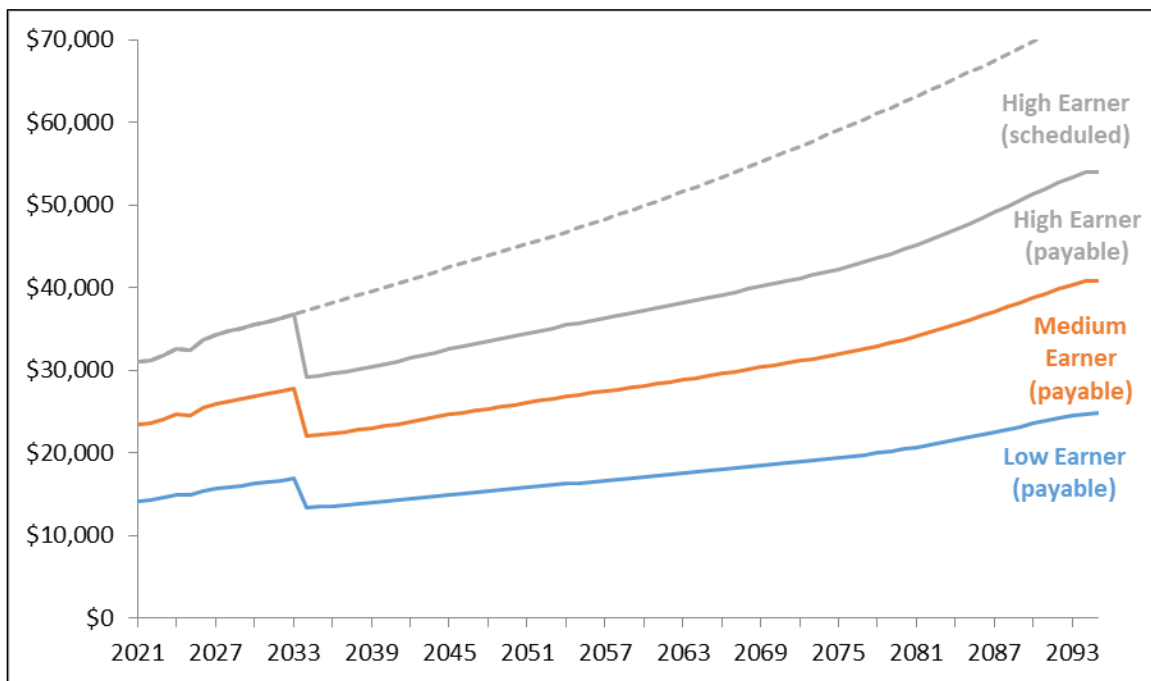
<sup>49</sup> CRS analysis of data from OCACT Actuarial Note 2021.9, Table C, and OCACT memorandum from Daniel Nickerson, actuary, and Kyle Burkhalter, actuary, to Chris Chaplain, supervisory actuary, and Karen Glenn, deputy chief actuary, “Current-Law OASDI Payable Percentages: Current-Law Revenue as a Percent of the Cost of Providing Scheduled Benefits Through Year 2095—Information,” September 10, 2021 (hereinafter “2021 OCACT Payable Benefits Memo”).

benefit of \$14,181, a medium earner a benefit of \$23,393, and a high earner a benefit of \$30,958.<sup>50</sup> **Figure 5** shows future initial real benefit amounts in 2021 dollars (i.e., after adjusting for inflation), which illustrates how the purchasing power of benefits will change over time.

Because average real earnings generally grow over time, scheduled real benefits also grow. The trustees project that scheduled initial real benefit amounts for hypothetical individuals claiming retirement benefits at their full retirement age will increase by 20% between 2021 and 2034.<sup>51</sup> Under the benefit cut scenario, real payable benefit levels are projected to drop by 22% after the trust funds become insolvent in 2034, then to once again rise gradually.<sup>52</sup> Under the trustees' projections, payable benefits in 2034 would be about the same as payable benefits were in 2017.<sup>53</sup>

**Figure 5. Initial Real Annual Payable Benefits for Retired Workers Claiming at Their Full Retirement Age Under the Benefit Cut Scenario, 2021-2095**

(in 2021 dollars)



**Source:** CRS analysis of data from 2021 OCACT Payable Benefits Memo and 2021 Social Security Trustees Report, Table V.C7 (Supplemental Single-Year Table).

**Notes:** Projections are based on the trustees' 2021 intermediate assumptions. Benefits are for hypothetical earners who claim retirement benefits at their full retirement age. After insolvency, scheduled benefits would continue to increase because average real earnings are projected to continue to grow. Payable benefits would therefore also grow over time following the drop upon insolvency, though they would be permanently lower than scheduled benefits. For clarity, scheduled benefits are shown only for high earners.

<sup>50</sup> 2021 Social Security Trustees Report, Table V.C7 (Supplemental Single-Year Table). Benefits in 2021 dollars with retirement at full retirement age.

<sup>51</sup> 2021 Social Security Trustees Report, Table V.C7 (Supplemental Single-Year Table).

<sup>52</sup> Immediately before the trust funds become insolvent, in 2033, annual scheduled real benefits for individuals retiring at their full retirement age are projected to be \$16,840 for the low earner, \$27,788 for the medium earner, and \$36,768 for the high earner. The annual payable real benefits would be 78% of these amounts. See 2021 Social Security Trustees Report, Table V.C7, (Supplemental Single-Year Table).

<sup>53</sup> CRS analysis of data from 2021 OCACT Payable Benefits Memo and 2021 Social Security Trustees Report, Table V.C7 (Supplemental Single-Year Table).

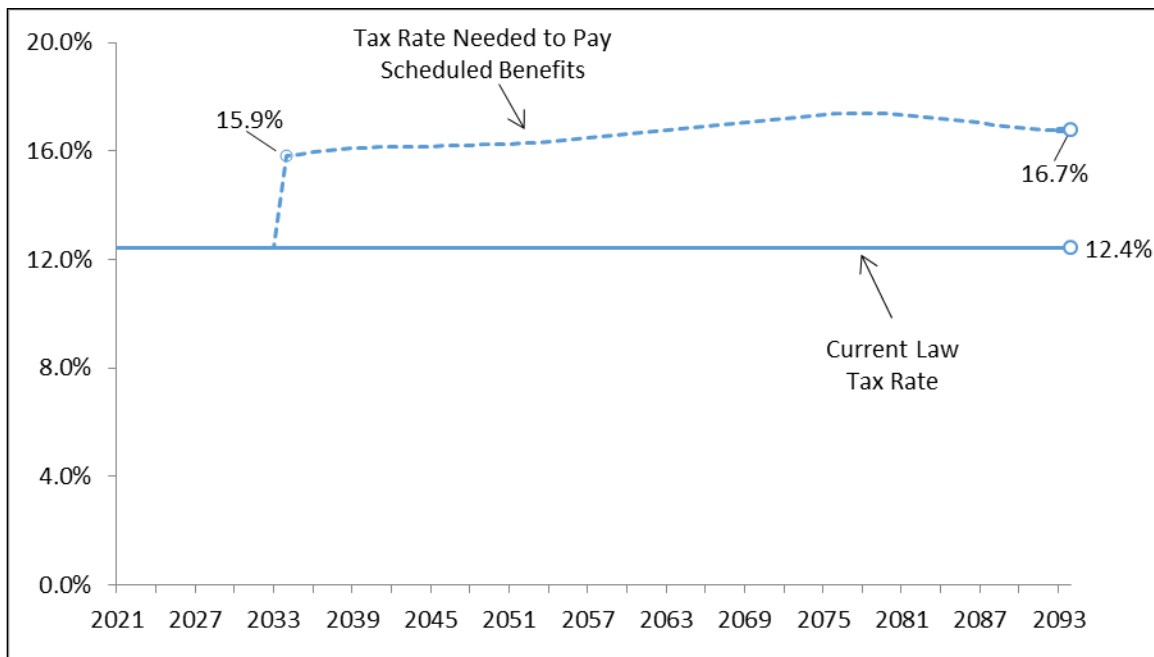
## Payroll Tax Increase Scenario

Upon trust fund depletion, the system could also be balanced by raising the payroll tax rate so that the tax income would be sufficient to pay scheduled benefits each year.

### Size of Payroll Tax Rate Increases

The trustees project that paying scheduled benefits after depletion in 2034 would require an increase in the combined employee and employer payroll tax rate of 3.4 percentage points, from the current 12.4% to 15.8%, after insolvency in 2034.<sup>54</sup> To sustain balance, the payroll tax rate would have to reach 16.7% by 2095, the last year of the 75-year projection period.<sup>55</sup> **Figure 6** shows the combined payroll tax rate under current law and the combined payroll tax rate needed to pay scheduled benefits from 2021 to 2095.

**Figure 6. Combined Social Security Payroll Tax Rate Under Current Law and Under the Tax Rate Increase Scenario, 2021-2095**



**Source:** CRS analysis of data from 2021 Social Security Trustees Report, Table IV.B1 (Supplemental Single-Year Table).

**Notes:** Projections are based on the trustees' 2021 intermediate assumptions. Under the trustees' projections, the current 12.4% combined payroll tax rate is sufficient to pay scheduled benefits prior to 2034 on a combined basis.

<sup>54</sup> CRS analysis of data from 2021 Social Security Trustees Report, Table IV.B1 (Supplemental Single-Year Table).

<sup>55</sup> CRS analysis of data from 2021 Social Security Trustees Report, Table IV.B1 (Supplemental Single-Year Table). Under the tax rate increase scenario discussed in this report, the payroll tax rate would have to change each year, increasing in some years and decreasing in others. Alternatively, the payroll tax rate could be permanently increased by 4.20 percentage points starting in 2034 (from 12.40% to 16.60%) to maintain solvency over the 75-year projection period. See footnote 44.

## **Impact of Payroll Tax Increases**

Raising the payroll tax rate would increase most workers' taxes by the same proportion. However, because covered earnings are taxable only up to a specified maximum (\$142,800 in 2021), the effective increase in the payroll tax would be smaller in percentage terms for people who earn more than the taxable maximum than for other workers. Unlike the federal income tax, the Social Security payroll tax is levied at a flat rate starting at the first dollar of earnings.

## **Conclusion**

On a combined basis, the Social Security trust funds are expected to run cash-flow deficits starting indefinitely in 2021. Until 2034—the projected exhaustion date of assets held in the trust funds—revenues can be augmented by the trust funds. That is, under current law, the Social Security trust funds will almost certainly become insolvent. Insolvency does not mean that Social Security will be completely broke and unable to pay any benefits. Rather, absent changes to current law, at the point of insolvency continuing benefit payments can only be supported by continuing tax revenues. Under the intermediate assumptions, the trustees project continuing revenues to support 78% of scheduled payments.

For illustration purposes, the trustees estimate changes that the Social Security trust funds would need to remain solvent throughout the 75-year projection period. For example, for the trust funds to remain solvent, revenues would need to be increased by an amount equivalent to an immediate and permanent payroll tax rate increase of 3.36 percentage points (from 12.40% to 15.76%, a relative increase of 27.1%).<sup>56</sup> Similarly, for example, benefits scheduled under current law would need to be reduced by an amount equivalent to an immediate and permanent reduction of (1) about 21% if applied to all current and future beneficiaries or (2) about 25% if applied only to those who become eligible for benefits in 2021 or later. These illustrative scenarios offer one way to increase revenues and one way to reduce costs. In reality, there is a wide range of revenue-increasing and cost-reducing policy options available to lawmakers. As with many policies, a combination of these approaches could be adopted. The sooner changes are made to the program, the smaller and less abrupt the changes would need to be to maintain solvency. Prompt action would also allow Congress to gradually phase in changes, rather than abruptly cutting benefits or raising taxes, thus allowing workers to plan in advance for their retirements.<sup>57</sup>

---

<sup>56</sup> The Social Security trustees explain that the projected increase in the payroll tax rate needed for the trust funds to remain solvent throughout the 75-year projection period (3.36 percentage points) differs from the projected 75-year actuarial deficit (3.54% of taxable payroll) for two reasons. The trustees state on page five of the 2021 Annual Report: "First, the necessary tax rate increase is the increase required to maintain solvency throughout the period with a zero trust fund reserve at the end of the period, whereas the actuarial deficit also incorporates an ending trust fund reserve equal to one year's cost at the end of the projection period. Second, the necessary tax rate increase reflects a behavioral response to tax rate changes, whereas the actuarial deficit does not. In particular, the calculation of the necessary tax rate increase assumes that an increase in payroll taxes results in a small shift of wages and salaries to forms of employee compensation that are not subject to the payroll tax."

<sup>57</sup> The illustrative scenarios highlight estimated policy options that are calculated to provide a permanent, or long-term, fix. In addressing the projected financial shortfall, Congress could opt to enact provisions that are shorter-term measures. For instance, a payroll tax rate increase of less than 3.36 percentage points or a benefit reduction of less than 21% would improve the program's actuarial status while not providing a permanent fix.

## Appendix A. 2020 Trust Fund Operations

**Table A-1. Operations of the Social Security Trust Funds, 2020**  
(in millions of dollars)

Category	OASI Trust Fund	DI Trust Fund	Combined OASDI Trust Funds
<b>Receipts</b>			
Payroll and Self-Employment Taxes	\$855,979	\$145,293	\$1,001,272
Income from the Taxation of Benefits	39,032	1,704	40,736
General Fund Reimbursements	3	0	3
<b>Non-Interest Income</b>	<b>\$895,014</b>	<b>\$146,997</b>	<b>\$1,042,011</b>
Interest	73,334	2,750	76,085
<b>Total</b>	<b>\$968,348</b>	<b>\$149,748</b>	<b>\$1,118,096</b>
<b>Expenditures</b>			
Benefit Payments	952,362	143,561	1,095,924
Administrative Expenses	3,748	2,555	6,303
Railroad Retirement Transfers	4,844	144	4,988
<b>Total</b>	<b>\$960,954</b>	<b>\$146,260</b>	<b>\$1,107,214</b>
<b>Balance (Asset Reserves)</b>			
Balance at the Start of the Year	2,804,322	93,083	2,897,405
Net Increase	7,394	3,488	10,881
<b>Balance at the End of the Year</b>	<b>\$2,811,706</b>	<b>\$96,570</b>	<b>\$2,908,286</b>
<b>Cash Flow Surplus/Deficit (Net Increase in Balance Less Interest Income)</b>	<b>-\$65,940</b>	<b>737</b>	<b>-\$65,203</b>

**Source:** CRS, based on SSA, OCACT, "Financial Data for a Selected Time Period," <https://www.ssa.gov/oact/ProgData/allOps.html>.

**Notes:** OASI = Old-Age and Survivors Insurance. DI = Disability Insurance. OASDI = Old-Age, Survivors, and Disability Insurance. The Combined OASDI Trust Fund values may not necessarily equal the sum of its rounded components.

## Appendix B. Key Dates Projected for the Social Security Trust Funds

**Table B-1. Key Dates Projected for the Social Security Trust Funds as Shown Under the Intermediate Assumptions in Trustees Reports from 1983 to 2021**

Year of Report	Year of Projected Depletion			Year That Total Cost First Exceeds Non-Interest Income <sup>a</sup>			Year That Total Cost First Exceeds Total Income <sup>a</sup>		
	OASI	DI	OASDI	OASI	DI	OASDI	OASI	DI	OASDI
Intermediate II-B Projections <sup>b</sup>									
1983	c	c	c	d	d	2021	d	d	2047
1984	c	2050	c	2021	2012	2021	2045	2038	2044
1985	2050	2034	2049	2019	2010	2019	2032	2020	2032
1986	2054	2026	2051	2020	2009	2019	2035	2017	2033
1987	2055	2023	2051	2020	2008	2019	2036	2013	2033
1988	2050	2027	2048	2019	2009	2019	2033	2016	2032
1989	2049	2025	2046	2019	2009	2018	2032	2014	2030
1990	2046	2020	2043	2019	2008	2017	2030	2011	2028
Intermediate Projections									
1991	2045	2015	2041	2018	1998	2017	2030	2011	2028
1992	2042	1997	2036	2018	1992	2016	2028	1992	2024
1993	2044	1995	2036	2019	1993	2017	2030	1993	2025
1994	2036	1995	2029	2016	1994	2013	2024	1994	2019
1995	2031	2016 <sup>e</sup>	2030	2014	2003 <sup>e</sup>	2013	2021	2007 <sup>e</sup>	2020
1996	2031	2015	2029	2014	2003	2012	2021	2007	2019
1997	2031	2015	2029	2014	2004	2012	2021	2007	2019
1998	2034	2019	2032	2015	2006	2013	2023	2009	2021
1999	2036	2020	2034	2015	2006	2014	2024	2009	2022
2000	2039	2023	2037	2016	2007	2015	2026	2012	2025
2001	2040	2026	2038	2016	2008	2016	2027	2015	2027
2002	2043	2028	2041	2018	2009	2017	2028	2018	2027
2003	2044	2028	2042	2018	2008	2018	2030	2018	2028
2004	2044	2029	2042	2018	2008	2018	2029	2017	2028
2005	2043	2027	2041	2018	2005	2017	2028	2014	2027
2006	2042	2025	2040	2018	2005	2017	2028	2013	2027
2007	2042	2026	2041	2018	2005	2017	2028	2013	2027
2008	2042	2025	2041	2018	2005	2017	2028	2012	2027
2009	2039	2020	2037	2017	2005	2016	2025	2009	2024

Year of Report	Year of Projected Depletion			Year That Total Cost First Exceeds Non-Interest Income <sup>a</sup>			Year That Total Cost First Exceeds Total Income <sup>a</sup>		
	OASI	DI	OASDI	OASI	DI	OASDI	OASI	DI	OASDI
2010	2040	2018	2037	2018	2005	2015	2026	2009	2025
2011	2038	2018	2036	2017	2005	2010	2025	2009	2023
2012	2035	2016	2033	2010	2005	2010	2023	2009	2021
2013	2035	2016	2033	2010	2005	2010	2022	2009	2021
2014	2034	2016	2033	2010	2005	2010	2022	2009	2020
2015	2035	2016	2034	2010	2005	2010	2022	2009	2020
2016	2035	2023 <sup>f</sup>	2034	2010	2019 <sup>f</sup>	2010	2022	2019 <sup>f</sup>	2020
2017	2035	2028	2034	2010	2019	2010	2022	2019	2022
2018	2034	2032	2034	2010	2019	2010	2020	2019	2018
2019	2034	2052	2035	2010	2036	2010	2020	2041	2020
2020	2034	2065	2035	2010	2041	2010	2021	2047	2021
2021	2033	2057	2034	2010	2040	2010	2021	2045	2021

**Source:** CRS, based on data from 1983-2021 Social Security Trustees Reports and information provided by SSA.

**Notes:** OASI = Old-Age and Survivors Insurance. DI = Disability Insurance. OASDI = Old-Age, Survivors, and Disability Insurance.

- a. Dates indicate the first year a condition is projected to occur and to persist annually thereafter through the end of the 75-year projection period.
- b. From 1983 to 1990, two intermediate forecasts were prepared (II-A and II-B). The intermediate II-B forecast corresponds more closely to the intermediate forecast in subsequent years.
- c. Trust fund expected to remain solvent throughout the long-range projection period.
- d. Not available.
- e. The Social Security Domestic Employment Reform Act of 1994 (P.L. 103-387) authorized a reallocation of the payroll tax rate between the OASI and DI trust funds to ultimately provide DI with more revenue.
- f. The Bipartisan Budget Act of 2015 (P.L. 114-74) authorized a temporary reallocation of the payroll tax rate between the OASI and DI trust funds to provide DI with more revenue for 2016 through 2018.

## Author Information

Barry F. Huston  
Analyst in Social Policy

## Acknowledgments

Earlier versions of this report were written by CRS Analyst Will Morton and former CRS Analysts Kathleen Romig, Christine Scott, and Noah Meyerson. All questions from congressional clients should be directed to the current author.

---

## **Disclaimer**

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.