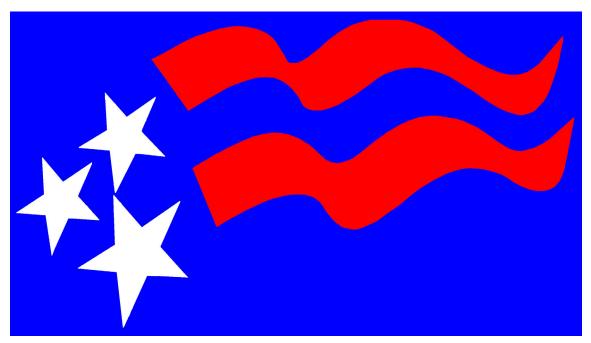
2027



Status of the Social Security and Medicare Programs

A SUMMARY OF THE 2021 ANNUAL REPORTS

Social Security and Medicare Boards of Trustees

The Social Security and Medicare Trustees Reports, as well as this document, are available at the following addresses:

Social Security (OASDI): www.ssa.gov/OACT/TR/2021/

www.ssa.gov/OACT/TR/2021/ www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/ www.ssa.gov/OACT/TRSUM/ Medicare (HI and SMI):

Summary:

Other information about Social Security benefits and services is available at www.ssa.gov or by calling toll-free 1-800-772-1213.

Other information about Medicare benefits and services is available at www.cms.gov or by calling toll-free 1-800-633-4227.

A MESSAGE TO THE PUBLIC:

Each year the Trustees of the Social Security and Medicare trust funds report on the current and projected financial status of the two programs. The reports include extensive information about the current operations of these important social insurance programs and careful analysis of their outlook. We believe the reports fully and fairly present the current and projected financial condition of the programs.

Social Security and Medicare both face long-term financing shortfalls under currently scheduled benefits and financing. Both programs will experience cost growth substantially in excess of GDP growth through the mid-2030s due to rapid population aging. Medicare also sees its share of GDP grow through the late 2070s due to projected increases in the volume and intensity of services provided.

The data and projections presented include the Trustees' best estimates of the effects of the COVID-19 pandemic and the 2020 recession, which were not reflected in last year's reports. The finances of both programs have been significantly affected by the pandemic and the recession of 2020. Employment, earnings, interest rates, and GDP dropped substantially in the second calendar quarter of 2020 and are assumed to rise gradually thereafter toward full recovery by 2023, with the level of worker productivity and thus GDP assumed to be permanently lowered by 1 percent even as they are projected to resume their pre-pandemic trajectories. In addition, the Trustees also project elevated mortality rates related to the pandemic through 2023 (15 percent for those over age 15 in 2021, declining to 1 percent by 2023) as well as reductions in immigration and childbearing in 2021-22 from the levels projected in the 2020 reports, with compensating increases a few years later. These alterations to near-term data and assumptions all significantly impact the outlook of the programs.

Given the unprecedented level of uncertainty, the Trustees currently assume that the pandemic will have no net effect on the individual long-range ultimate assumptions. At this time, there is no consensus on what the lasting effects of the COVID-19 pandemic on the long-term experience might be, if any. The Trustees will continue to monitor developments and modify the projections in later reports.

Based on our best estimates, the 2021 reports show:

• The Old-Age and Survivors Insurance (OASI) Trust Fund, which pays retirement and survivors benefits, will be able to pay scheduled

benefits on a timely basis until 2033, one year earlier than reported last year. At that time, the fund's reserves will become depleted and continuing tax income will be sufficient to pay 76 percent of scheduled benefits.

- The Disability Insurance (DI) Trust Fund, which pays disability benefits, will be able to pay scheduled benefits until 2057, 8 years earlier than in last year's report. At that time, the fund's reserves will become depleted and continuing tax income will be sufficient to pay 91 percent of scheduled benefits.
- The OASI and DI funds are separate entities under law. The report also presents information that combines the reserves of these two funds in order to illustrate the actuarial status of the Social Security program as a whole. The hypothetical combined OASI and DI funds would be able to pay scheduled benefits on a timely basis until 2034, one year earlier than reported last year. At that time, the combined funds' reserves will become depleted and continuing tax income will be sufficient to pay 78 percent of scheduled benefits.
- The Hospital Insurance (HI) Trust Fund, or Medicare Part A, which helps pay for services such as inpatient hospital care, will be able to pay scheduled benefits until 2026, the same year as reported last year. At that time, the fund's reserves will become depleted and continuing total program income will be sufficient to pay 91 percent of total scheduled benefits.
- The Supplemental Medical Insurance (SMI) Trust Fund has two accounts: Part B, which helps pay for services such as physician and outpatient hospital care, and Part D, which covers prescription drug benefits. SMI is adequately financed into the indefinite future because current law provides financing from general revenues and beneficiary premiums each year to meet the next year's expected costs. Due to these funding provisions and the rapid growth of its costs, SMI will place steadily increasing demands on both taxpayers and beneficiaries.
- The Trustees are including in the report for the fifth consecutive year a determination of projected excess general revenue Medicare funding, as is required by law whenever annual tax and premium revenues of the combined Medicare funds will be below 55 percent of projected combined annual outlays within the next seven fiscal years. Under the law, two consecutive such determinations, as is the

case again this year, constitute a "Medicare funding warning." Under current law and the Trustees' projections, such determinations and warnings will recur every year through the long-range projection period.

Key Changes Since Last Year

The long-range 75-year actuarial deficit of the combined OASI and DI trust funds increased from 3.21 to 3.54 percent of taxable payroll since the 2020 reports. As shown in Table 1, this result was due to the combined effects of changes in methodology, legislation, regulation, economic, demographic, and programmatic assumptions, and recent observed experience. The following changes had significant effects.

- The following long-range ultimate assumptions were changed:
 - The total fertility rate was raised from 1.95 to 2.0 births per woman. This change was combined with a change to the methodology for projecting fertility described below that offset the assumption change.
 - The unemployment rate was reduced from 5.0 percent to 4.5 percent. This change was combined with a change to the methodology for projecting the size of the labor force described below that offset the assumption change.
- Changes were made to near-term economic and demographic assumptions reflecting the pandemic and the 2020 recession, resulting in lower payroll tax income and lower revenue from income taxation of benefits.
- Three significant methodological changes were made:
 - Future birth rates are now projected using a cohort-based (number of births in a woman's lifetime) approach which better captures a gradual shift towards childbearing at older ages.
 - The model for projecting the size of the civilian labor force was updated to include data from the most recent completed

¹ The 75-year actuarial balance is a summary measure that calculates the difference between the projected summarized income rate and the summarized cost rate of the trust funds as a percentage of taxable payroll. When that balance is negative, or in "deficit," projected income over the long-range valuation period (2021-95 for the 2021 reports) plus any trust fund reserves at the start of the period are insufficient to pay all program costs over the period and leave an adequate "contingency reserve" at the end of the period.

economic cycle, thereby putting more weight on the recent relationships among the various factors affecting labor force participation.

- A methodological change was made to allow for improved projection of the initial benefit levels of retired workers by age.
- The 75-year valuation period was changed from 2020-94 to 2021-95.

Table 1.—Change in the OASDI 75-Year Actuarial Balance Since the 2020 Report, Based on Intermediate Assumptions

[As a percentage of taxable payroll]

Item	OASI	DI	OASDI
Shown in the 2020 report:			
Actuarial balance	-3.14	07	-3.21
Changes in actuarial balance due to changes in:			
Legislation / Regulation	01	.00	01
Valuation period	05	01	06
Demographic data and assumptions	.06	.01	.07
Economic data and assumptions	.00	.00	.00
Disability data and assumptions	.00	.00	.00
Methods and programmatic data	32	01	33
Total change in actuarial balance	32	01	32
Shown in the 2021 report:			
Actuarial balance	-3.46	08	-3.54

Note: Totals do not necessarily equal the sums of components due to rounding.

The long-range 75-year actuarial deficit of the HI Trust Fund increased from 0.76 to 0.77 percent of taxable payroll. As shown in Table 2, this result was due to the combined effects of changes in methodology, and economic, demographic, and programmatic assumptions, including the changes discussed above for OASDI:

- Three significant methodological changes exclusively affecting Medicare were made:
 - Two improvements were made to the methodology developed last year to incorporate time-to-death in the calculation of the demographic factors.²

² The 2020 report was the first in which the demographic factors incorporated information on time-to-death in addition to age and sex. For more information on the demographic factors, see https://www.cms.gov/files/document/incorporation-time-death-medicare-demographic-assumptions.pdf.

- The population for each hospice time-to-death category was adjusted to reflect private health plan beneficiaries as well as those enrolled in fee-for-service Medicare.
- The method for weighting the demographic factors was adjusted to reflect reduced exposures for part-year enrollees.
- Improvements were also made to better reflect the increasing number of end-stage renal disease (ESRD) beneficiaries joining private health plans beginning in 2020.

Table 2.—Change in the HI 75-Year Actuarial Balance Since the 2020 Report, Based on Intermediate Assumptions

[As a percentage of taxable payroll]

Shown in the 2020 report:	
Actuarial balance	76
Changes in actuarial balance due to changes in:	
Valuation period	01
Base estimate	04
Private health plan assumptions	.03
Hospital assumptions	01
Other provider assumptions	.00
Methodological changes	.24
COVID-19 spending assumptions	.00
Other economic and demographic assumptions	22
Total change in actuarial balance	01
Shown in the 2021 report:	
Actuarial balance	77

Conclusion

Lawmakers have many policy options that would reduce or eliminate the long-term financing shortfalls in Social Security and Medicare. Taking action sooner rather than later will permit consideration of a broader range of solutions and provide more time to phase in changes so that the public has adequate time to prepare.

By the Trustees:

JANET YELLEN,
Secretary of the Treasury,
and Managing Trustee
of the Trust Funds.

MARTIN J. WALSH, Secretary of Labor, and Trustee.

XAVIER BECERRA

Secretary of Health and Human Services, and Trustee.

KILOLO KIJAKAZI, Acting Commissioner of Social Security, and Trustee.

A SUMMARY OF THE 2021 ANNUAL SOCIAL SECURITY AND MEDICARE TRUST FUND REPORTS

This year's reports reflect the Trustees' estimates of the effects of the COVID-19 pandemic and the ensuing recession. These events have had significant effects on the finances of both the Social Security and Medicare programs. With the future course of the pandemic still uncertain, the Trustees will continue to monitor developments and modify the projections accordingly in future reports. Given this uncertainty, both reports assume that the pandemic will have no net effect on the individual longrange ultimate assumptions used in the projections. Pandemic effects occur mainly in the short range.

Employment, earnings, interest rates, and GDP fell substantially in the second quarter of 2020 and are assumed to rise gradually toward full recovery by 2023, with the level of worker productivity and thus GDP assumed to be permanently lowered by 1 percent even as they are projected to resume their pre-pandemic trajectories. The Trustees also project higher mortality related to COVID-19 and the pandemic through 2023 (15 percent higher for those aged 15 and older in 2021, declining to 1 percent higher in 2023) and delays in births and immigration in the near term.

In 2020, Social Security's trust fund reserves were \$2.9 trillion at the year's end, having increased by \$11 billion. The Trustees project that under the intermediate assumptions, the Old-Age and Survivors Insurance (OASI) Trust Fund will be able to pay full benefits on a timely basis until 2033, a year earlier than in last year's Social Security report. The Disability Insurance (DI) Trust Fund is now projected to be able to pay full benefits until 2057, 8 years earlier than indicated last year. The DI Trust Fund's reserve depletion date is very sensitive to changes in program cash flows and there is now less revenue anticipated in the near term than in last year's report. The number of disabled-worker beneficiaries in current payment status continued to fall in 2020, as it has since 2014.

The projected reserve depletion date for the combined OASI and DI funds is 2034, also a year earlier than in last year's report. Over the 75-year projection period, Social Security faces an actuarial deficit of 3.54 percent of taxable payroll, increased from the 3.21 percent figure projected last year. The main reasons for the larger deficit are a mix of new program data and methodological improvements that worsen the projected deficit by increasing expected benefit costs and lowering anticipated revenue

1

¹ The OASI and DI Trust Funds are distinct legal entities which operate independently. The two trust funds are often considered on a hypothetical combined basis—designated OASDI—to illustrate the actuarial status of the program as whole.

from the taxation of benefits. The change in the valuation period—the inclusion of 2095, a high-deficit year—and lower short-range interest rates are additional contributing factors. The actuarial deficit equals 1.2 percent of gross domestic product (GDP) through 2095.

Reserves in Medicare's Hospital Insurance (HI) Trust Fund decreased by \$60 billion to a total of \$134 billion at the end of 2020. This substantial decrease was due to an expansion of the Medicare Accelerated and Advance Payments (AAP) Program during the COVID-19 public health emergency period, and was only partially offset by spending reductions during the pandemic. These payments will be repaid in 2021 and 2022; thus, the increased accelerated and advance payments affect the timing of expenditures during 2020 through 2022, but not the total cost. The financial status of the HI Trust Fund has not appreciably changed and the Trustees project that it will be able to pay full benefits until 2026, unchanged from last year's Medicare report. HI income is projected to be lower than last year's estimates due to lower payroll tax revenues while HI expenditures are also expected to be lower because of smaller projected provider payment updates and improvements in the projection methodology. For the 75-year projection period, the HI actuarial deficit has increased to 0.77 percent of payroll from 0.76 percent in last year's report, and is equivalent to 0.3 percent of GDP through 2095.

The Supplementary Medical Insurance (SMI) Trust Fund held \$143 billion in assets at the end of 2020. Parts B and D are expected to be adequately financed over the next 10 years and beyond because income from premiums and general revenue are reset each year to cover expected costs and ensure an adequate reserve for Part B contingencies.

What Are the Trust Funds? Congress established trust funds managed by the Secretary of the Treasury to account for Social Security and Medicare income and disbursements. The Treasury credits Social Security and Medicare taxes, premiums, and other income to the funds. There are four separate trust funds. For Social Security, the OASI Trust Fund pays retirement and survivors benefits and the DI Trust Fund pays disability benefits. For Medicare, the HI Trust Fund pays for Part A inpatient hospital and related care. The SMI Trust Fund comprises two separate accounts: Part B, which pays for physician and outpatient services, and Part D, which covers prescription drug benefits.

The only disbursements permitted from the funds are benefit payments and administrative expenses. Federal law requires that all excess funds be invested in interest-bearing securities backed by the full faith and credit of the United States. The Department of the Treasury currently invests all program revenues in special non-marketable securities of the U.S. Government which earn interest equal to rates on marketable securities with durations defined in law. The balances in the trust funds, which represent the accumulated value, including interest, of all prior program annual surpluses and deficits, provide automatic authority to pay benefits.

Who Are the Trustees? There are six Trustees, four of whom serve by virtue of their positions in the Federal Government: the Secretary of the Treasury, the Secretary of Labor, the Secretary of Health and Human Services, and the Commissioner of Social Security. The other two Trustees are public representatives appointed by the President, subject to confirmation by the Senate. The two Public Trustee positions have been vacant since July 2015.

How Are Social Security and Medicare Financed? For OASDI and HI, the major source of financing is payroll taxes on earnings paid by employees and their employers. Self-employed workers pay the equivalent of the combined employer and employee tax rates. During 2020, an estimated 174.8 million people had earnings covered by Social Security and paid payroll taxes; for Medicare the corresponding figure was 178.9 million. Current law establishes payroll tax rates for OASDI, which apply to earnings up to an annual maximum (\$142,800 in 2021) that ordinarily increases with the growth in the nationwide average wage. In contrast to OASDI, covered workers pay HI taxes on total earnings. The scheduled payroll tax rates (in percent) for 2021 are shown in Table 1.

Table 1: 2021 PAYROLL TAX RATES

[In percent]							
OASI DI OASDI HI To							
Employees	5.30	0.90	6.20	1.45	7.65		
Employers	5.30	0.90	6.20	1.45	7.65		
Combined total	10.60	1.80	12.40	2.90	15.30		

There is an additional HI tax equal to 0.9 percent of earnings over \$200,000 for individual tax return filers, and on earnings over \$250,000 for joint return filers.

Taxation of Social Security benefits is another source of income for the Social Security and Medicare trust funds. Beneficiaries with incomes above \$25,000 for individuals (or \$32,000 for married couples filing jointly) pay income taxes on up to 50 percent of their benefits, with the revenues going to the OASDI trust funds. This income from taxation of benefits made up about 4 percent of Social Security's income in 2020. Those with incomes above \$34,000 (or \$44,000 for married couples filing jointly) pay income taxes on up to 85 percent of benefits, with the additional revenues going to the HI Trust Fund. This income from taxation of benefits represented about 8 percent of HI Trust Fund income in 2020.

The trust funds also receive income from interest on their accumulated reserves, which are invested in U.S. Government securities. In 2020, interest income made up 7 percent of total income to the OASDI trust funds, 1 percent for HI, and less than 1 percent for SMI.

Payments from the General Fund financed about 79 percent of SMI Part B and Part D costs in 2020. These payments were higher than usual due to a provision of the Continuing Appropriations Act, 2021 and Other Extensions Act, which required a transfer to Part B for the outstanding balance of the Accelerated and Advance Payments Program and will be repaid in 2021 and 2022. Most of the remaining SMI costs were covered by monthly premiums charged to enrollees, or in the case of low-income beneficiaries, paid on their behalf by Medicaid for Part B and Medicare for Part D. Part B and Part D premium amounts are determined by methods defined in law and increase as the estimated costs of those programs rise.

In 2021, the Part B standard monthly premium is \$148.50. There are also income-related premium surcharges for Part B beneficiaries whose modified adjusted gross income exceeds a specified threshold. In 2021, the threshold is \$88,000 for individual tax return filers and \$176,000 for joint return filers. Income-related premiums range from \$59.40 to \$356.40 per month in 2021.

In 2021, the Part D "base monthly premium" is \$33.06. Actual premium amounts charged to Part D beneficiaries depend on the specific plan they have selected and are projected to average around \$32 for standard coverage in 2021. Part D enrollees with incomes exceeding the thresholds established for Part B must pay income-related monthly adjustment amounts in addition to their normal plan premium. For 2021, the adjustments range from \$12.30 to \$77.10 per month. Part D also receives payments from States that partially compensate for the Federal assumption of Medicaid responsibilities for prescription drug costs for individuals eligible for both Medicare and Medicaid. In 2020, State payments covered about 11 percent of Part D costs.

What Were the Trust Fund Operations in 2020? At the end of 2020, 55.2 million people received OASI benefits, 9.6 million received DI benefits, and 62.6 million were covered under Medicare. A summary of the trust fund operations is shown below (Table 2). The OASI, DI, and SMI Trust Fund reserves increased in 2020; HI Trust Fund reserves declined.

Table 2: TRUST FUND OPERATIONS, 2020

[In billions] **OASI** DI HI **SMI** Reserves (end of 2019) \$2,804.3 \$93.1 \$194.6 \$108.8 341.7 Income during 2020 968.3 149.7 558.1 146.3 402.2 Cost during 2020..... 961.0 523.6 3.5 -60.4 34.5 Net change in reserves 7.4 96.6 134.1 143.3 Reserves (end of 2020) 2,811.7

Note: Totals do not necessarily equal the sums of rounded components.

Table 3 shows payments, by category, from each trust fund in 2020.

Table 3: PROGRAM COST, 2020

[In billions]

L				
Category	OASI	DI	HI	SMI
Benefit payments	\$952.4	\$143.6	\$397.7	\$518.7
Railroad Retirement financial				
interchange	4.8	0.1		
Administrative expenses	3.7	2.6	4.5	5.0
Total	961.0	146.3	402.2	523.6

Note: Totals do not necessarily equal the sums of rounded components.

Trust fund income, by source, in 2020 is shown in Table 4.

Table 4: PROGRAM INCOME, 2020

[In billions]

OASI	DI	HI	SMI
\$856.0	\$145.3	\$303.3	
39.0	1.7	26.9	
73.3	2.8	3.5	\$1.8
a	a	1.4	29.6
			384.1
		4.0	127.0
			11.6
a		2.6	4.0
968.3	149.7	341.7	558.1
	\$856.0 39.0 73.3 a	\$856.0 \$145.3 39.0 1.7 73.3 2.8 a a — — — — — —	\$856.0 \$145.3 \$303.3 39.0 1.7 26.9 73.3 2.8 3.5 a a 1.4 — — 4.0 — 4.0 a — 2.6

^a Less than \$50 million.

Note: Totals do not necessarily equal the sums of rounded components.

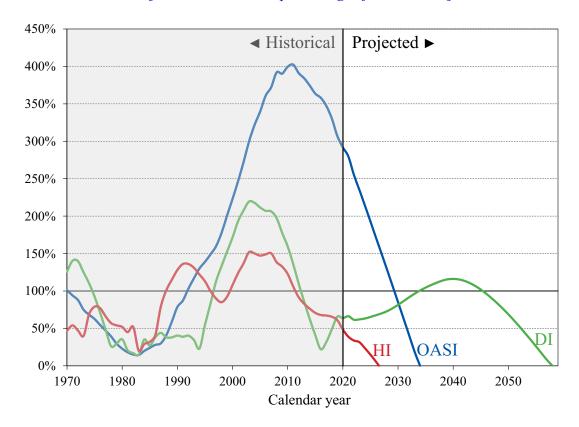
In 2020, Social Security's total income exceeded total cost by \$11 billion, but when interest received on trust fund asset reserves is excluded from program income, there was a deficit of \$65 billion. The Trustees project that total cost will exceed total income (including interest) beginning in 2021 and in all years thereafter.

In 2020, the HI Trust Fund's total income (\$342 billion), including \$3 billion of interest income (Table 4), fell considerably short of program expenditures (\$402 billion). With the expected repayment of recent increases in accelerated and advance payments during the COVID-19 pandemic, the Trustees anticipate a smaller HI deficit in 2021 followed by a small surplus in 2022. HI deficits are projected in all years after 2022, with reserves depleting in 2026. For SMI, general revenues, which are set prospectively based on projected costs, are the largest source of income.

What Is the Outlook for Short-Term Trust Fund Adequacy? The Trustees Reports measure the short-range adequacy of the OASI, DI, and HI Trust Funds by comparing fund asset reserves at the start of a year to projected costs for the ensuing year (the "trust fund ratio"). A trust fund ratio of 100 percent or more—that is, asset reserves at least equal to projected cost for the year—or reaching 100 percent within 5 years is a good

indicator of a fund's short-range adequacy. That level of projected reserves for any year suggests that even if cost exceeds income, the trust fund reserves, combined with annual tax revenues, would be sufficient to pay full benefits for several years. Chart A shows the trust fund ratios through 2060 under the intermediate assumptions.

Chart A-OASI, DI, and HI Trust Fund Ratios
[Asset reserves as a percentage of annual cost]



By this measure, neither the OASI Trust Fund nor the DI Trust Fund is financially adequate throughout the short-range period (2021-30). The OASI Trust Fund fails the short-range test because its trust fund ratio is projected to decline from 280 percent at the beginning of 2021 to 85 percent at the beginning of 2030. The DI Trust Fund ratio was 66 percent at the beginning of 2021 and is not projected to attain 100 percent within 5 years.

The HI Trust Fund also does not meet the short-range test of financial adequacy; its trust fund ratio was 39 percent at the beginning of 2021 based on the year's anticipated expenditures, and the projected ratio does not rise to 100 percent within 5 years. Projected HI Trust Fund asset reserves become fully depleted in 2026.

The Trustees apply a less stringent annual "contingency reserve" test to SMI Part B asset reserves because (1) the financing for that account is set each year to meet expected costs, and (2) the overwhelming portion of the

financing for that account consists of general revenue transfers and beneficiary premiums, which were 74 percent and 25 percent of total Part B income in calendar year 2020. Part D premiums paid by enrollees and the required amount of general revenue financing are determined each year. Moreover, flexible appropriation authority established by lawmakers for Part D allows additional general revenue transfers if costs are higher than anticipated, limiting the need for a contingency reserve in that account.

What Are Key Dates in OASI, DI, and HI Financing? The 2021 reports project that the HI Trust Fund will be depleted in 5 years and the OASI Trust Fund in 12 years; the anticipated depletion year for the DI Trust Fund is now 2057. Table 5 shows key dates for the three trust funds as well as for the combined OASDI trust funds.²

Table 5: KEY DATES FOR THE TRUST FUNDS

	OASI	DI	OASDI	HI
First year cost exceeds income				
excluding interest ^a	2010	2040	2010	2008
First year cost exceeds total income ^a	2021	2045	2021	2023
Year trust fund reserves are depleted	2033	2057	2034	2026

^a Dates indicate the first year a condition is projected to occur and to persist annually thereafter through 2095.

The Trustees project that DI Trust Fund reserves will increase through 2044 before declining annually until they are fully depleted in 2057. At that time, program income would be sufficient to pay 91 percent of scheduled benefits, and 92 percent by 2095.

The OASI Trust Fund, when considered separately, has a projected reserve depletion date of 2033, a year earlier than in last year's report. At that time, 76 percent of scheduled OASI benefits would be payable, declining to 72 percent in 2095.

The combined OASI and DI Trust Fund reserves have a projected depletion date of 2034, a year earlier than in last year's report. After the depletion of reserves, continuing tax income would be sufficient to pay 78 percent of scheduled benefits in 2034, and 74 percent by 2095.

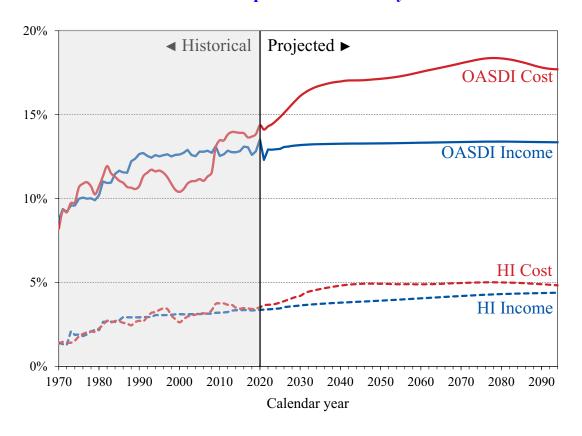
The combined OASI and DI Trust Fund reserves are projected to decrease in 2021 because total cost (\$1,151 billion) is expected to exceed total income (\$1,074 billion). The Trustees project that OASDI total cost will exceed total income each year throughout the remainder of the 75-year projection period. Consequently, starting this year, net redemptions of trust fund asset reserves with General Fund payments will be required to pay scheduled benefits until projected depletion of these reserves in 2034, a year earlier than in last year's report.

² HI results in this section of the Summary are on a cash rather than the incurred expenditures basis.

The projected HI Trust Fund depletion date is 2026, the same year as reported last year. Under current law, scheduled HI tax and premium income would be sufficient to pay 91 percent of estimated HI cost after trust fund depletion in 2026, declining to 78 percent by 2045, and then gradually increasing to 91 percent by 2095. The Medicare report projects a decrease in HI Trust Fund asset reserves in 2021 as total cost (\$345 billion) is expected to exceed total income (\$334 billion). With the anticipated repayment of recent increases in accelerated and advance payments during the COVID-19 pandemic, the Trustees expect a small surplus in 2022, after which annual HI cost exceeds program income throughout the long-range projection period.

What Is the Outlook for Future Social Security and Medicare HI Costs and Income in Relation to Taxable Earnings? Because the primary source of income for OASDI and HI is the payroll tax, it is informative to express the programs' incomes and costs as percentages of taxable payroll—that is, of the base of worker earnings taxed to support each program (Chart B).

Chart B-OASDI and HI Income and Cost as Percentages of Their Respective Taxable Payrolls



It is important to understand that the two programs have different taxable payrolls. HI taxable payroll is about 25 percent larger than that of OASDI because the HI payroll tax is imposed on all covered earnings while OASDI taxes apply only to earnings up to a maximum (\$142,800 in

2021), which ordinarily is adjusted each year. Thus, the percentages in Chart B are comparable within each program, but not across programs.

Both the OASDI and HI annual cost rates rise over the long run from their 2020 levels (14.37 and 3.52 percent). Projected Social Security cost grows to 18.38 percent of taxable payroll for 2078, and then decreases to 17.70 percent in 2095. The projected Medicare HI cost rate rises to 4.92 percent of taxable payroll in 2045, and thereafter remains at about that level, eventually declining slightly to 4.81 percent in 2095.

The OASDI and HI income rates in Chart B include payroll taxes and taxes on OASDI benefits, but not interest payments. The projected OASDI income rate is stable at about 13 percent throughout the long-range period. The HI income rate rises gradually from 3.37 percent in 2020 to 4.40 percent in 2095 primarily due to the higher payroll tax rates for high earners that began in 2013. Individual tax return filers with earnings above \$200,000, and joint return filers with earnings above \$250,000, pay an additional 0.9 percent tax on earnings above these earnings thresholds. An increasing fraction of all earnings will be subject to the higher tax rate over time because the thresholds are not indexed. By 2095, an estimated 80 percent of workers would pay the higher rate.

What Is the Long-Range Actuarial Balance of the OASI, DI, and HI Trust Funds? Another way to view the outlook for payroll tax-financed trust funds (OASI, DI, and HI) is to consider their actuarial balances for the 75-year valuation period. The actuarial balance measure includes the trust fund asset reserves at the beginning of the period, an ending fund balance equal to the 76th year's costs, and projected costs and income during the valuation period, all expressed as a percentage of taxable payroll for the 75-year projection period. The actuarial balance is the difference between the summarized income rate and the summarized cost rate as a percentage of taxable payroll over the valuation period. A negative actuarial balance is an actuarial deficit. Note that actuarial balance is not an informative concept for the SMI program because Federal law sets premium increases and general revenue transfers at the levels necessary to bring SMI into annual balance.

The actuarial deficit represents the average amount of change in income or cost that is needed throughout the valuation period in order to achieve actuarial balance. The actuarial balance equals zero if cost for the period can be met for the period as a whole and trust fund asset reserves at the end of the period are equal to the following year's cost. The OASI, DI, and HI Trust Funds all have long-range actuarial deficits under the intermediate assumptions, as shown in Table 6.

For the combined OASI and DI Trust Funds, the annual deficit, expressed as the difference between the cost rate and income rate for a particular year, was 0.85 percent of taxable payroll in 2020. Compared with last

Table 6: LONG-RANGE ACTUARIAL DEFICIT OF THE OASI, DI, AND HI TRUST FUNDS

[Percent of taxable payroll]

	OASI	DI	OASDI	HI
Actuarial	·			
Deficit	3.46	0.08	3.54	0.77

Note: Totals do not necessarily equal the sums of rounded components.

year's report, the Trustees project larger annual deficits for Social Security from 2021 through 2090, and then smaller for 2091 through 2095. For the full 75-year projection period, the annual deficits average 0.23 percentage point greater in this year's report. Relatively small changes in near-term projections reflect the assumed recovery path from the COVID-19 pandemic and 2020 recession. The comparatively larger deficits projected in later years in this year's report are mainly due to changes in the methodology and assumptions used to project fertility rates. For 2095, the projected annual deficit is 4.34 percent of payroll, compared to 4.55 percent in last year's report.

Projected annual deficits for the combined OASI and DI programs gradually increase from 1.81 percent of taxable payroll in 2021 to 4.98 percent in 2078, then decline to 4.34 percent of taxable payroll in 2095 (Chart B). The relatively large variation in annual deficits indicates that a single tax rate increase for all years starting in 2021 sufficient to achieve actuarial balance would result in large annual surpluses early in the period followed by increasing deficits in later years. Sustainable solvency would require payroll tax rate increases or benefit reductions, or a combination thereof, by the end of the period that are substantially larger than those needed on average for this report's long-range period (2021-95).

In 2020, the HI annual deficit was 0.15 percent of taxable payroll, and is expected to rise to 0.26 percent in 2021. Projected annual deficits subsequently increase gradually to 1.06 percent of taxable payroll in 2045, before declining to 0.42 percent in 2095. The projected HI cost rates in this year's Medicare report are very similar to those from the 2020 report. The Trustees expect annual HI deficits to increase as cost rates grow faster than income rates. The cost rate increases primarily due to rising per beneficiary spending and the aging of the baby boom population. Throughout the long-range period, cost rate growth is constrained by the productivity reductions in provider payments, and income rates continue to increase as a larger share of earnings becomes subject to the additional 0.9 percent payroll tax and a larger share of Social Security benefits becomes subject to income tax that is credited to the HI Trust Fund.

The financial outlooks for both OASDI and HI depend on a number of demographic and economic assumptions. Nevertheless, the actuarial deficit in each of these programs is large enough that averting trust fund

depletion under current-law financing is extremely unlikely. An analysis that allows plausible random variations around the intermediate assumptions employed in the report indicates that OASDI trust fund depletion is highly probable (denoted by a 95-percent confidence interval) by 2041.

How Has the Financial Outlook for Social Security and Medicare Changed Since Last Year? The COVID-19 pandemic and 2020 recession have had significant effects on the short-range finances of both programs. Employment, earnings, interest rates, and GDP dropped substantially in the second quarter of 2020 and are assumed to rise gradually toward full recovery by 2023, with the level of worker productivity and thus GDP permanently lowered by 1 percent. In addition, the pandemic and recession are assumed to lead to elevated mortality rates during the 2020-2023 period and delays in births and immigration in the near term. Taken together, these data and assumptions cause the projected reserve depletion date for the combined OASI and DI Trust Funds to move from 2035 to 2034. These changes also result in a small but significant reduction in the actuarial balance for OASDI. For Medicare, there have been notable impacts on short-term financing and spending patterns, but these are expected to play out by 2024 and the Trustees project little effect on the actuarial balance of the Medicare trust funds. There is, however, an unusually large degree of uncertainty associated with the eventual effects of COVID-19 and future projections could change significantly as more information becomes available.

Under the intermediate assumptions, the combined OASDI trust funds have a projected 75-year actuarial deficit equal to 3.54 percent of taxable payroll, compared with the 3.21 percent figure reported last year. The projected depletion date for the combined asset reserves is 2034, a year earlier than in last year's report. Advancing the valuation period by one year to include 2095, a year with a large negative balance, alone increases the actuarial deficit by 0.06 percent of taxable payroll. The change in the valuation period, new program data, changes in law, improvements in the projection methodology, and revised assumptions combine to increase the actuarial deficit by 0.32 percent of taxable in this year's report. Nearly all the change in the actuarial balance for the combined OASDI trust funds is attributable to the OASI Trust Fund.

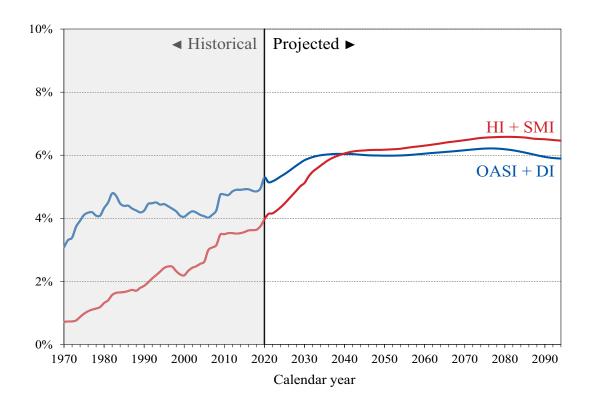
Medicare's HI Trust Fund has a long-range actuarial deficit equal to 0.77 percent of taxable payroll under the intermediate assumptions, 0.01 percentage point higher than reported last year. The anticipated date of depletion of the HI Trust Fund remains 2026. Several factors contributed to the change in the actuarial deficit, most notably less income from payroll taxes and taxation of Social Security benefits due to the pandemic, offset by methodological improvements to the projection model.

Due to the nature of the financing for both parts of SMI, each account is separately in financial balance under current law, as they were last year.

The projected Part B costs (expressed as a share of GDP) in this year's Medicare report are similar to those in last year's report. The Part D projections are lower than in last year's report primarily because of higher direct and indirect remuneration and the greater enrollment shift from Prescription Drug Plans to Medicare Advantage Prescription Drug Plans, which more than offset the higher gross drug prices in this year's report. SMI spending was 2.3 percent of GDP in 2020, and is expected to increase to 4.4 percent of GDP in 2094, as projected in last year's report.

What Is the Outlook for Future Social Security and Medicare Costs in Relation to GDP? One instructive way to view the projected costs of Social Security and Medicare is to compare the costs of scheduled benefits and administrative expenses for the programs with GDP, the most frequently used measure of the total output of the U.S. economy (Chart C).

Chart C-Social Security and Medicare Cost as a Percentage of GDP



Under the intermediate assumptions employed in the reports, the costs of these programs as a percentage of GDP increase substantially through about 2035 because: (1) the number of beneficiaries rises rapidly as the baby-boom generation retires; and (2) the lower birth rates that have persisted since the baby boom cause slower growth of employment and GDP.

Social Security's annual cost as a percentage of GDP is projected to increase from 5.1 percent in 2021 to a peak of 6.2 percent for 2077, and then decline to 5.9 percent by 2095. Under the intermediate assumptions, Medicare cost rises from 4.1 percent of GDP in 2021 to 6.2 percent by

2045 due mainly to the rapid growth in the number of beneficiaries, and then increases further to 6.5 percent by 2095. The growth in health care cost per beneficiary becomes the larger factor later in the valuation period, particularly in Part D.

In 2021, the combined cost of the Social Security and Medicare programs is estimated to equal 9.3 percent of GDP. The Trustees project an increase to 11.8 percent of GDP by 2035 and to 12.5 percent by 2095, with most of the increase attributable to Medicare. Medicare's annual relative cost is expected to rise gradually from 80 percent of the cost of Social Security in 2021 to become the more costly program by 2040. During the last 25 years of the long-range period, Medicare is, on average, about 7 percent more costly than Social Security.

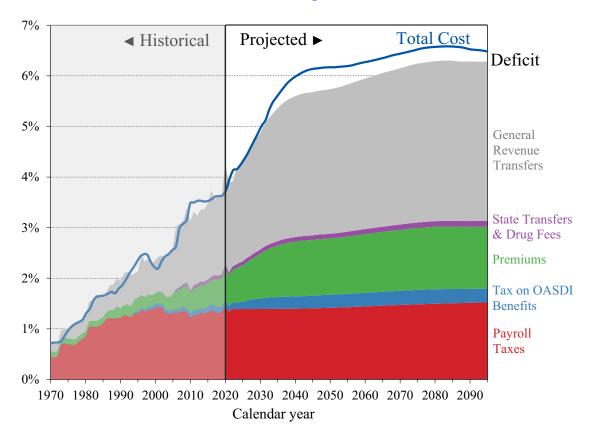
The projected costs for OASDI and HI depicted in Chart C and elsewhere in this summary reflect the full cost of scheduled current-law benefits without regard to whether the trust funds will have sufficient resources to meet these obligations. Current law precludes payment of any benefits beyond the amount that can be financed by each of the trust funds, that is, from annual income and trust fund reserves. In years after trust fund reserve depletion, the amount of benefits that would be payable is lower than shown because OASI, DI, and HI, by law, cannot borrow money or pay benefits that exceed the asset reserves in their trust funds. The projected Medicare costs assume realization of the full estimated savings specified by current law. As described in the Medicare Trustees Report, the projections for HI and SMI Part B depend significantly on the sustained effectiveness of various current-law cost-saving measures, in particular, the lower increases in Medicare payment rates to most categories of health care providers.

How Will Cost Growth in the Different Parts of Medicare Change the Sources of Program Financing? As Medicare cost grows over time, general revenues and beneficiary premiums will play an increasing role in financing the program. Chart D shows scheduled cost and non-interest revenue sources under current law for HI and SMI combined as a percentage of GDP. The total cost line is the same as displayed in Chart C and shows Medicare cost rising to 6.5 percent of GDP by 2095.

Projected revenue from payroll taxes and taxes on OASDI benefits credited to the HI Trust Fund increases from 1.4 percent of GDP in 2021 to 1.8 percent in 2095 under current law, while projected general revenue transfers to the SMI Trust Fund increase from 1.8 percent of GDP in 2021 to 3.1 percent in 2095, and beneficiary premiums increase from 0.6 to 1.2 percent of GDP during the same period. Thus, the share of total non-interest Medicare income from taxes declines (from 37 percent to 29 percent) while the general revenue share rises (from 46 percent to 50 percent), as does the share of premiums (from 15 percent to 19 percent). The distribution of financing changes in large part because

costs for Part B and especially Part D—the Medicare components that are financed mainly from general revenues—increase at a faster rate than Part A cost under the Trustees' projections. The projected annual HI financial deficits beyond 2035 are 0.4 to 0.5 percent of GDP during 2036-60 and then gradually decline to 0.2 percent of GDP by 2095. There is no provision under current law to finance that shortfall through general revenue transfers or any other revenue source.

Chart D-Medicare Cost and Non-Interest Income by Source as a Percentage of GDP



The law requires that the Board of Trustees determine each year whether the annual difference between program cost and dedicated financing sources (the bottom four layers of Chart D) under current law exceeds 45 percent of total Medicare cost in any of the first seven fiscal years of the 75-year projection period. The Trustees Reports for 2006 through 2013, and in 2017 through 2020, contained a determination of "excess general revenue Medicare funding." Because the current projected difference is expected to exceed the 45 percent threshold in fiscal year 2021, the Trustees are issuing a determination of projected excess general revenue Medicare funding in this year's report, which is the fifth consecutive year with that determination. Because this determination has been made for at least two consecutive years, a "Medicare funding warning" is triggered, which requires that the President submit to Congress proposed legislation to respond to the warning within 15 days after the submission of the Fiscal Year 2023 Budget. Congress is then required to consider the legislation on an expedited basis.

Because the two Public Trustee positions are currently vacant, there is no Message from the Public Trustees for inclusion in the Summary of the 2021 Annual Reports.

