

## **A MESSAGE TO THE PUBLIC:**

*Each year the Trustees of the Social Security and Medicare trust funds report on the current status and projected condition of the funds over the next 75 years. This message summarizes the 2005 Annual Reports.*

*The fundamentals of the financial status of Social Security and Medicare remain problematic under the intermediate economic and demographic assumptions. Social Security's current annual cash surpluses will soon begin to decline and will be followed by deficits that begin to grow rapidly toward the end of the next decade as the baby boom generation retires. The Medicare Hospital Insurance (HI) Trust Fund that pays hospital benefits had negative cash flows in 2004 and annual cash flow deficits are expected to continue and to grow rapidly after 2010 as baby boomers begin to retire. The growing deficits in both programs will lead to exhaustion in trust fund reserves for HI in 2020 and for Social Security in 2041. In addition, the Medicare Supplementary Medical Insurance (SMI) Trust Fund that pays for physician services and the new prescription drug benefit will require substantial increases over time in both general revenue financing and premium charges. As the reserves in Social Security and HI are drawn down and SMI general revenue financing requirements continue to grow, the pressure on the Federal budget will intensify. We do not believe the currently projected long run growth rates of Social Security and Medicare are sustainable under current financing arrangements.*

### **Social Security**

*The annual cost of Social Security benefits represents 4.3 percent of Gross Domestic Product (GDP) today and is projected to rise to 6.4 percent of GDP in 2079. The projected 75-year actuarial deficit in the combined Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) Trust Funds is 1.92 percent of taxable payroll, up slightly from 1.89 percent in last year's report. The program continues to fail our long-range test of close actuarial balance by a wide margin. Projected OASDI tax income will begin to fall short of outlays in 2017 and will be sufficient to finance only 74 percent of scheduled annual benefits by 2041, when the combined OASDI trust fund is projected to be exhausted.*

*Social Security could be brought into actuarial balance over the next 75 years in various ways, including an immediate increase of 15 percent in the amount of payroll taxes or an immediate reduction in benefits of 13 percent (or some combination of the two). To the extent that changes are*

*delayed or phased in gradually, greater adjustments in scheduled benefits and revenues would be required. Ensuring that the system is solvent on a sustainable basis over the next 75 years and beyond would also require larger changes.*

### **Medicare**

*As we reported last year, Medicare's financial difficulties come sooner—and are much more severe—than those confronting Social Security. While both programs face essentially the same demographic challenge, underlying health care costs per enrollee are projected to rise faster than the wages per worker on which the payroll tax is paid and on which Social Security benefits are based. As a result, while Medicare's annual costs are currently 2.6 percent of GDP, or about 60 percent of Social Security's, they are now projected to surpass Social Security expenditures in 2024 and reach almost 14 percent of GDP in 2079.*

*The projected 75-year actuarial deficit in the Hospital Insurance (HI) Trust Fund is now 3.09 percent of taxable payroll, down slightly from 3.12 percent in last year's report due primarily to slightly greater income in 2004, and slightly lower costs, than estimated in last year's report. The fund again fails our test of short-range financial adequacy, as assets drop below the level of the next year's projected expenditures within 10 years—in 2014. The fund also continues to fail our long-range test of close actuarial balance by a wide margin. Though the projected date of HI Trust Fund exhaustion moved back slightly to 2020, from 2019 in last year's report, projected HI tax income falls short of outlays in this and all future years. HI could be brought into actuarial balance over the next 75 years by an immediate 107 percent increase in program income or an immediate 48 percent reduction in program outlays (or some combination of the two). However, as with Social Security, adjustments of far greater magnitude would be necessary to the extent changes are delayed or phased in gradually, or to make the program solvent on a sustainable basis over the next 75 years and beyond.*

*Part B of the Supplementary Medical Insurance (SMI) Trust Fund, which pays doctors' bills and other outpatient expenses, and the new Part D, which pays for access to prescription drug coverage, are both projected to remain financed into the indefinite future because current law automatically sets financing each year to meet next year's expected costs. However, expected rapid cost increases will result in a rapidly growing amount of general revenue financing—projected to rise from just under*

*1 percent of GDP today to 6.2 percent in 2079—as well as substantial increases over time in beneficiary premium charges.*

### **Conclusion**

*Though highly challenging, the financial difficulties facing Social Security and Medicare are not insurmountable. But we must take action to address them in a timely manner. The sooner they are addressed the more varied and less disruptive can be their solutions. With informed public discussion and creative thinking that relates the principles underlying these programs to the economic and demographic realities, as well as to the changing needs and preferences of working and retired households, Social Security and Medicare can continue to play a critical role in the lives of all Americans.*

*By the Trustees:*

*John W. Snow,  
Secretary of the Treasury,  
and Managing Trustee*

*Elaine L. Chao,  
Secretary of Labor,  
and Trustee*

*Michael O. Leavitt,  
Secretary of Health  
and Human Services,  
and Trustee*

*Jo Anne B. Barnhart,  
Commissioner of  
Social Security,  
and Trustee*

*John L. Palmer,  
Trustee*

*Thomas R. Saving,  
Trustee*



# A SUMMARY OF THE 2005 ANNUAL SOCIAL SECURITY AND MEDICARE TRUST FUND REPORTS

**Who Are the Trustees?** There are six Trustees: the Secretary of the Treasury, the Secretary of Labor, the Secretary of Health and Human Services, the Commissioner of Social Security and two members appointed by the President and confirmed by the Senate to represent the public. The Public Trustees are John L. Palmer, University Professor and Dean Emeritus of the Maxwell School of Citizenship and Public Affairs at Syracuse University, and Thomas R. Saving, Director of the Private Enterprise Research Center and Professor of Economics at Texas A & M University.

**What Are the Trust Funds?** The trust funds were created in the U.S. Treasury to account for all program income and disbursements. Social Security and Medicare taxes, premiums and other income are credited to the funds. Benefit payments and program administrative costs are the only purposes for which disbursements from the funds can be made. Program revenues not needed in the current year to pay benefits and administrative costs are invested in special non-negotiable securities of the U.S. Government on which a market rate of interest is credited. Thus, the trust funds represent the accumulated value, including interest, of all prior program annual surpluses, and provide automatic authority to pay benefits.

There are four separate trust funds. For Social Security, the Old-Age and Survivors Insurance (OASI) Trust Fund pays retirement and survivors benefits, and the Disability Insurance (DI) Trust Fund pays disability benefits. (The combined trust funds are described as OASDI.) For Medicare, the Hospital Insurance (HI) Trust Fund pays for inpatient hospital and related care. The Supplementary Medical Insurance (SMI) Trust Fund is composed of Part B, which pays for physician and outpatient services, and effective in 2004, Part D, which provides a prescription drug benefit that begins in 2006. Medicare benefits are provided to most people age 65 and over and to most workers who are receiving Social Security disability benefits.

**What Were the Trust Fund Results in 2004?** In December 2004, 39.7 million people were receiving OASI benefits, 7.9 million were receiving DI benefits, and 41.7 million were covered under Medicare. Trust fund operations, in billions of dollars, are shown below (totals may not add due to rounding).

	OASI	DI	HI	SMI
Assets (end of 2003) . . . . .	\$1,355.3	\$175.4	\$256.0	\$24.0
Income during 2004 . . . . .	566.3	91.4	183.9	133.8
Outgo during 2004 . . . . .	421.0	80.6	170.6	138.3
Net increase in assets . . . . .	145.3	10.8	13.3	-4.5
Assets (end of 2004) . . . . .	1,500.6	186.2	269.3	19.4

## How Has the Outlook for the Trust Funds Changed Since Last Year?

During the past year there has been no important change in the financial outlook for either Social Security or Medicare. Under the intermediate assumptions, the combined OASDI Trust Funds show a 75-year actuarial deficit equal to 1.92 percent of taxable payroll, slightly larger than last year's estimate of 1.89 percent. That change is largely attributable to moving the valuation period forward a year from 2004-78 to 2005-79, which adds a year (2079) with a large projected deficit into the estimate of long-range funding adequacy. The OASDI Trust Funds, separately and combined, are adequately financed over the next 10 years under the intermediate assumptions.

Medicare's HI Trust Fund now has a projected 75-year actuarial deficit equal to 3.09 percent of payroll compared with last year's estimate of 3.12 percent under the intermediate assumptions. That change results primarily from slightly lower expenditures and slightly higher income in 2004 than previously estimated. The HI Trust Fund is inadequately funded over the next 10 years, with trust fund assets falling short of 100 percent of expenditures in 2014. That represents a small improvement from last year's estimate of 2012. The SMI Trust Fund is adequately financed in both the short and long term because of the automatic financing established for Medicare Parts B and D.

**How Are Social Security and Medicare Financed?** For OASDI and HI, the major source of financing is payroll taxes on earnings that are paid by employees and their employers and by the self-employed (157 million for OASDI and 160 million for HI in 2004). The self-employed are charged the equivalent of the combined employer and employee tax rates. The payroll tax rates are set by law and for OASDI apply to earnings up to an annual maximum that rises as average wages increase (\$90,000 in 2005). HI taxes are paid on total earnings. The tax rates (in percent) for 2005 and later are:

	OASI	DI	OASDI	HI	Total
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

Within SMI both Part B and Part D are financed largely (about 75 percent) by payments from Federal general fund revenues supplemented by monthly premiums charged beneficiaries (\$78.20 in 2005 for Part B; Part D premiums begin in 2006). Part D also will receive payments from States beginning in 2006 for Federal assumption of Medicaid responsibilities for premium and cost-sharing subsidies for individuals eligible for both Medicare and Medicaid. Part B and Part D premium amounts are based on methods defined in law and increase as the estimated costs of

those programs rise. Income to each trust fund by source in 2004 is shown in the table below (totals may not add due to rounding).

Source ( <i>in billions</i> )	OASI	DI	HI	SMI
Payroll taxes . . . . .	\$472.8	\$80.3	\$156.7	—
General fund revenue . . . .	—	—	.6	\$100.9
Interest earnings. . . . .	79.0	10.0	15.0	1.5
Beneficiary premiums . . . .	—	—	1.9	31.4
Taxes on benefits . . . . .	14.6	1.1	8.6	—
Other . . . . .	*	—	1.2	*
Total . . . . .	566.3	91.4	183.9	133.8

\* Less than \$50 million.

**What Were the Administrative Expenses in 2004?** Administrative expenses, as a percentage of total expenditures, were:

	OASI	DI	HI	SMI
Administrative expenses 2004. . .	0.6	2.7	1.8	2.1

**How Are Estimates of the Trust Funds’ Future Status Made?**

Short-range (10-year) and long-range (75-year) estimates are reported for all funds. The estimates are based on current law and assumptions about all of the factors that affect the income and outgo of each trust fund. Assumptions include economic growth, wage growth, inflation, unemployment, fertility, immigration, and mortality, as well as factors relating to disability incidence and the cost of hospital, medical, and prescription drug services.

Because the future is inherently uncertain, three alternative sets of economic and demographic assumptions are used to show a range of possibilities. The intermediate assumptions (alternative II) reflect the Trustees’ best estimate of future experience. The low-cost alternative I is more optimistic for trust fund financing, and the high-cost alternative III is more pessimistic; they show trust fund projections for more and less favorable economic and demographic conditions for trust fund financing than the best estimate. The assumptions are reexamined each year in light of recent experience and new information about future trends, and are revised as warranted. In general, greater confidence can be placed in the assumptions and estimates for earlier projection years than for later years.

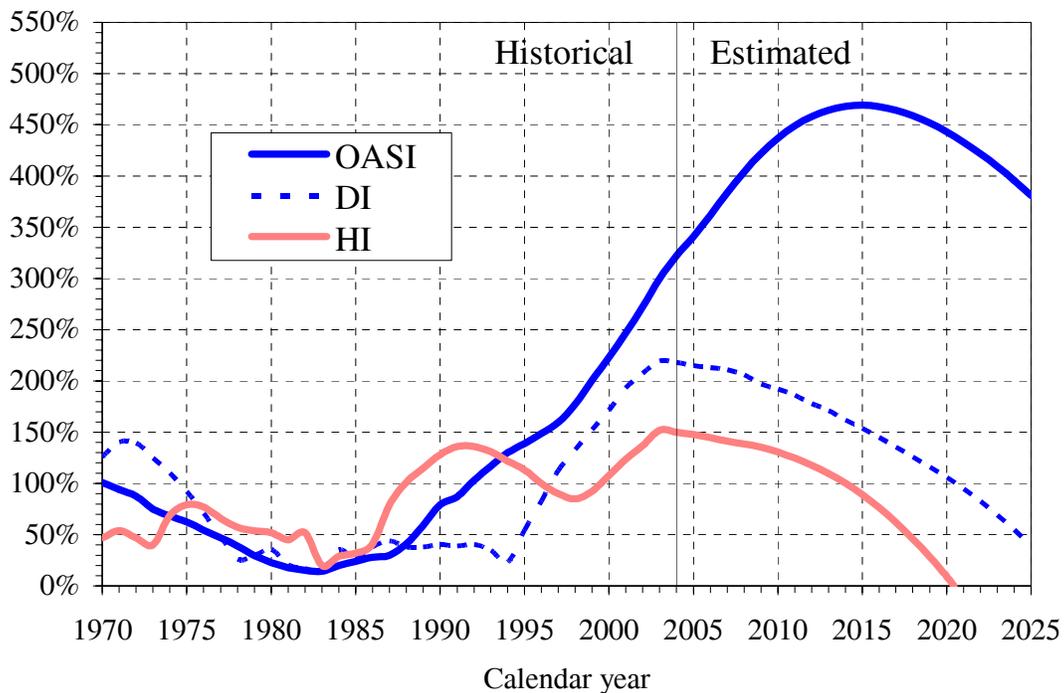
**What is the Short-Range Outlook (2005-2014) for the Trust Funds?**

For the short range, we measure the adequacy of the OASI, DI, and HI Trust Funds by comparing their assets at the beginning of a year to projected costs for that year (the “trust fund ratio”). A trust fund ratio of 100 percent or more—that is, assets at least equal to projected benefit payments for a year—is considered a good indicator of a fund’s short-term

adequacy. This level of projected assets for any year means that even if expenditures exceed income, the trust fund reserves, combined with annual tax revenues, would be sufficient to pay full benefits for several years, allowing time for legislative action to restore financial adequacy.

By this measure, the OASI and DI funds are considered financially adequate throughout the short range because the assets of each fund exceed the 100 percent level through the year 2014. The HI fund does not meet the short-range test of financial adequacy because its assets fall below the 100 percent level of one year's outgo during 2014. Chart A shows these trust fund ratios under the intermediate assumptions through 2025.

**Chart A—OASI, DI, and HI Trust Fund Ratios**  
*[Assets as a percentage of annual expenditures]*



For SMI, a less stringent annual “contingency reserve” asset test applies to both Part B and Part D because the financing of each of those accounts is provided by beneficiary premiums and Federal general fund revenue payments automatically adjusted each year to meet expected costs. Thus, under current law both SMI accounts are fully financed throughout the 75-year projection period no matter what the costs may be.

The following table shows the projected income and outgo, and the change in the balance of each trust fund except SMI, over the next 10 years. Note the separation of SMI income and expenditures into columns for Parts B and D. The change in SMI is not shown because of its automatic annual adjustments in income to meet the next year's projected expenditures.

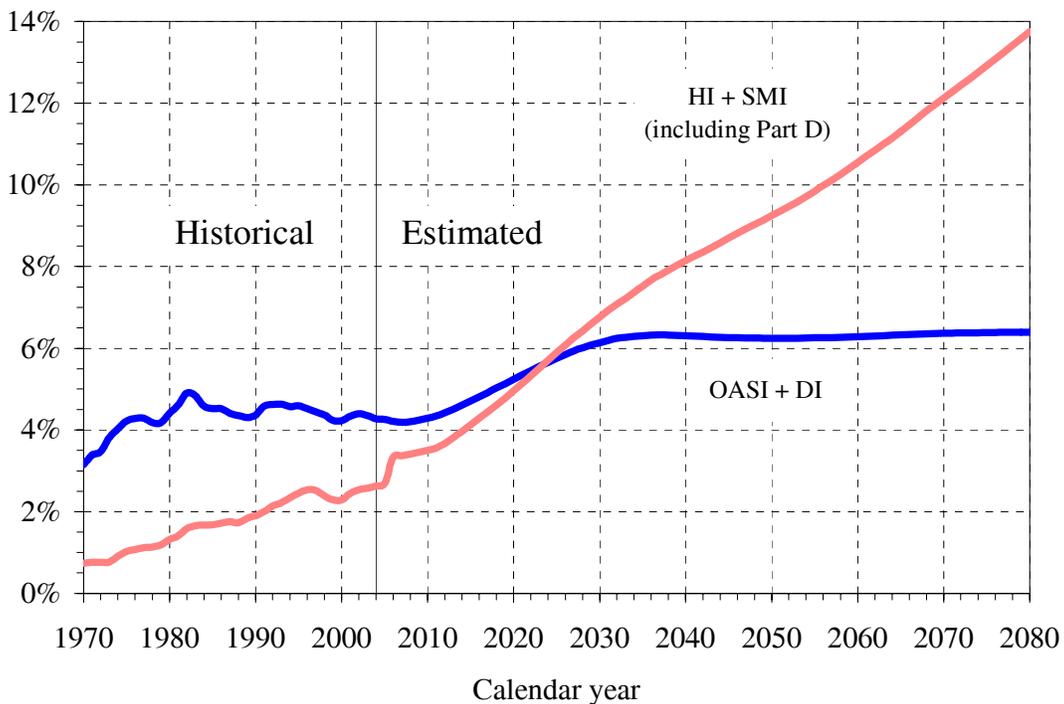
## ESTIMATED OPERATIONS OF TRUST FUNDS

*(In billions—totals may not add due to rounding)*

Year	Income					Expenditures					Change in fund		
	OASI	DI	HI	SMI		OASI	DI	HI	SMI		OASI	DI	HI
				B	D				B	D			
2005	\$594	\$96	\$195	\$155	\$7	\$440	\$86	\$183	\$153	\$7	\$154	\$9	\$12
2006	634	102	207	174	82	457	92	195	161	82	178	10	12
2007	671	107	218	177	90	477	98	208	170	90	195	9	10
2008	714	112	231	182	99	501	104	219	179	99	212	8	11
2009	755	117	243	205	109	531	113	233	187	109	224	5	9
2010	800	123	254	182	116	564	118	248	197	116	236	5	6
2011	849	129	268	209	128	602	124	265	207	128	247	5	3
2012	897	135	282	226	142	643	132	283	223	142	254	2	-1
2013	947	140	295	249	158	689	140	303	245	158	258	1	-8
2014	998	146	308	273	175	739	147	324	268	175	259	-1	-15

**What is the Long-Range (2005-2079) Outlook for Social Security and Medicare Costs?** Costs for both programs increase steeply between 2010 and 2030 because the number of people receiving benefits will increase rapidly as the large baby boom generation retires. Thereafter, Social Security costs grow slowly due primarily to projected increasing life expectancy. Medicare costs continue to grow rapidly due to expected increases in the use and cost of health care. In particular, the continued development of new technology is expected to cause per capita health care expenditures to continue to grow faster in the long term, as they have in the past, than the economy as a whole.

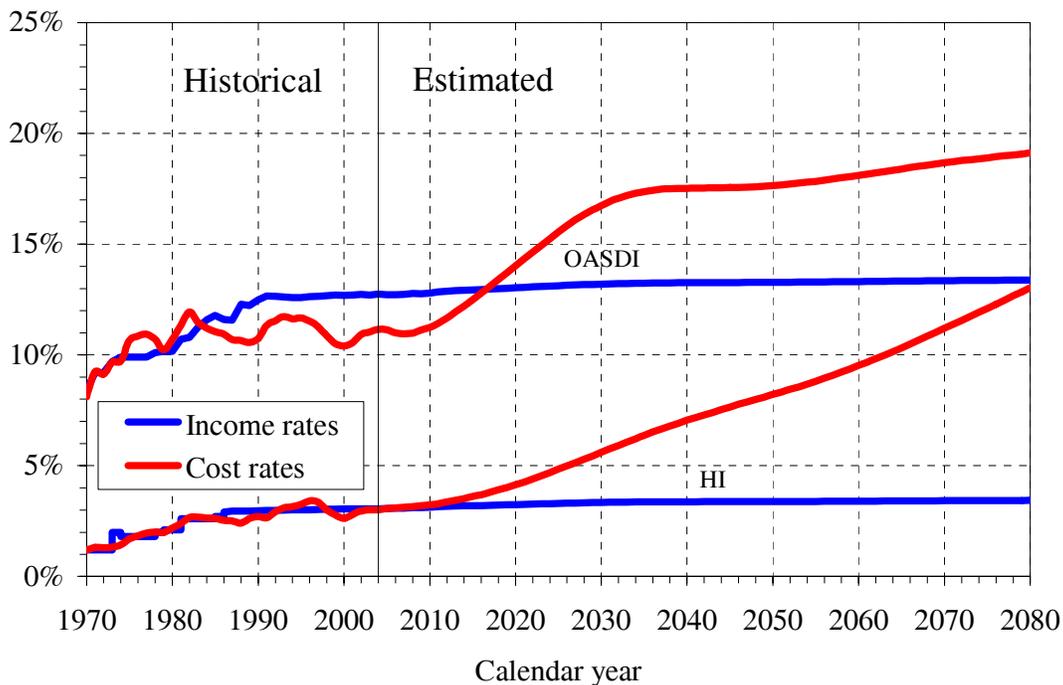
**Chart B—Social Security and Medicare Cost as a Percentage of GDP**



Thus, a good way to view the projected cost of Social Security and Medicare is in relation to gross domestic product (GDP), the most frequently used measure of the total U.S. economy (Chart B). Medicare's cost will first exceed Social Security's in 2024. Social Security outgo amounted to 4.3 percent of GDP in 2004 and is projected to increase to 6.4 percent of GDP in 2079. Medicare's cost was smaller in 2004, 2.6 percent of GDP, but is projected to grow more than fivefold to 13.6 percent of GDP in 2079, when it will be more than twice that of Social Security.

**What is the Outlook for OASDI and HI Costs Relative to Tax Income?** Although Medicare's and Social Security's costs are projected to grow substantially faster than the economy over the next several decades, tax income to the HI and OASDI Trust Funds is not. Because their primary source of income is the payroll tax, it is customary to compare HI and Social Security income and cost rates as a percentage of taxable payroll, as in Chart C. Note that the income rate lines do not rise substantially over the long run. This is because payroll tax rates are not scheduled to change and income from the other tax source to these programs, taxation of OASDI benefits, will rise only gradually from a greater proportion of beneficiaries being subject to taxation in future years.

**Chart C—Income and Cost Rates**  
*[Percentage of taxable payroll]*



**What is the Long-Range Actuarial Balance of the OASI, DI, and HI Trust Funds?** The traditional way to view the outlook of the payroll tax-financed trust funds is in terms of their actuarial balances for the 75-year valuation period. The actuarial balance of a fund is essentially the difference between annual income and costs, expressed as a percentage of taxable payroll, summarized over the 75-year projection period. Because

SMI is brought into balance annually through premium increases and general revenue transfers, actuarial balance is not a useful concept for that program.

The OASI, DI, and HI Trust Funds each have an actuarial deficit under the intermediate assumptions, as shown below. Each actuarial deficit can be interpreted as the percentage that could be either added to the current law income rate or subtracted from the cost rate for each of the next 75 years to bring the funds into actuarial balance. However, such uniform changes, while adequate for this period as a whole, would close less than one-third of the gap for 2079 between the annual income and cost rates for OASDI and HI shown in Chart C.

**LONG-RANGE ACTUARIAL DEFICIT OF THE  
OASI, DI, AND HI TRUST FUNDS**

*(As a percentage of taxable payroll)*

	<u>OASI</u>	<u>DI</u>	<u>OASDI</u>	<u>HI</u>
Actuarial Deficit . . . . .	1.60	0.32	1.92	3.09

**What Are Key Dates in Long-Range OASI, DI, and HI Financing?**

When costs exceed tax income (shown in Chart C), use of trust fund assets occurs in stages. For HI the process began in 2004, when interest earnings had to be used to help pay benefits. Beginning in 2012 assets will have to be redeemed each year until the trust fund is exhausted in 2020. At that time, tax income is estimated to be sufficient to pay 79 percent of HI costs—and by 2079 only 27 percent. OASDI first needs to utilize interest in 2017 and to begin redeeming assets in 2027. OASDI assets are projected to be exhausted in 2041, when tax income would cover 74 percent of costs—and by 2079 only 68 percent. The key dates regarding cash flows are shown below.

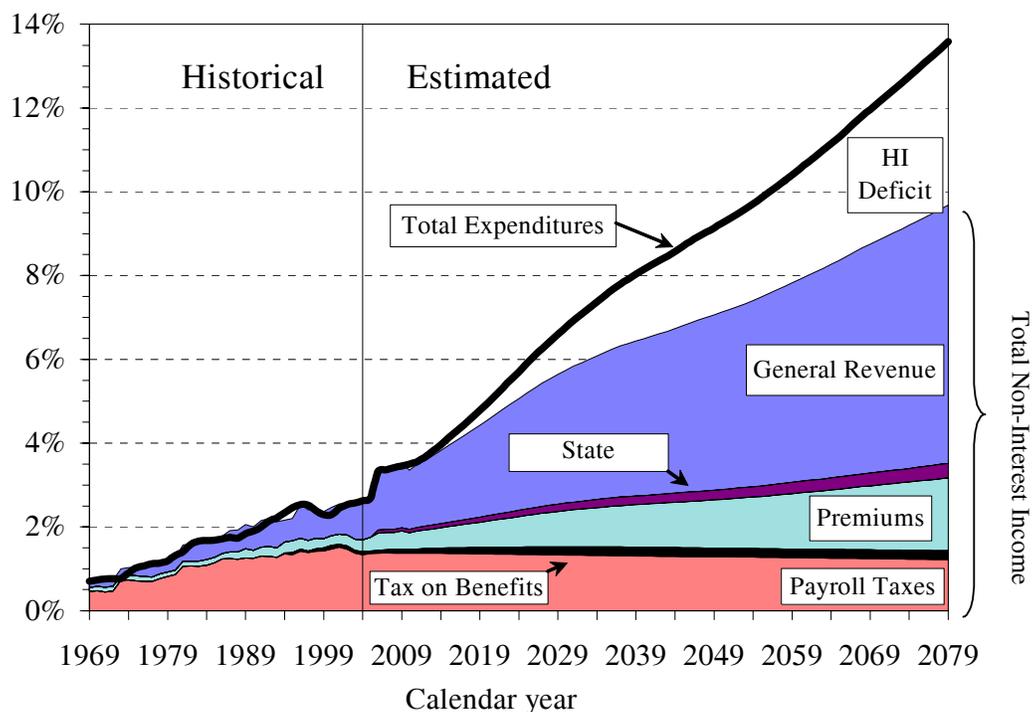
**KEY DATES FOR THE TRUST FUNDS**

	<u>OASI</u>	<u>DI</u>	<u>OASDI</u>	<u>HI</u>
First year outgo exceeds income excluding interest . . . . .	2018	2005	2017	2004
First year outgo exceeds income including interest . . . . .	2028	2014	2027	2012
Year trust fund assets are exhausted . . . . .	2043	2027	2041	2020

**How Do the Sources of Medicare Financing Change?** As Medicare costs grow over time, general revenues and beneficiary premiums will play a larger role in financing the program. Chart D shows expenditures and current law non-interest revenue sources for HI and SMI combined as a percentage of GDP. The total expenditure line is the same as shown in Chart B and shows Medicare costs rising to 13.6 percent of GDP by 2079. Revenues from taxes are expected to remain just over 1.4 percent of GDP,

while general fund revenue contributions are projected to rise from 1.0 percent in 2005 to 6.2 percent in 2079, and beneficiary premiums from 0.3 to 1.7 percent of GDP. Thus, revenues from taxes will fall substantially as a share of total non-interest Medicare income (from 53 percent to 15 percent) while general fund revenues will rise (from 35 to 64 percent), as will premiums (from 12 percent to 18 percent). The gap between total non-interest income and expenditures steadily widens due to growing annual HI deficits, which reach 4 percent of GDP by 2079. Medicare law now requires a determination in future reports of whether the difference between total outlays and earmarked revenues (the first four layers in Chart D) exceeds 45 percent of total Medicare outlays within the first 7 years of the 75-year projection period. That threshold is now expected to be reached in 2012.

**Chart D—Medicare Expenditures and Non-Interest Income by Source as a Percent of GDP**

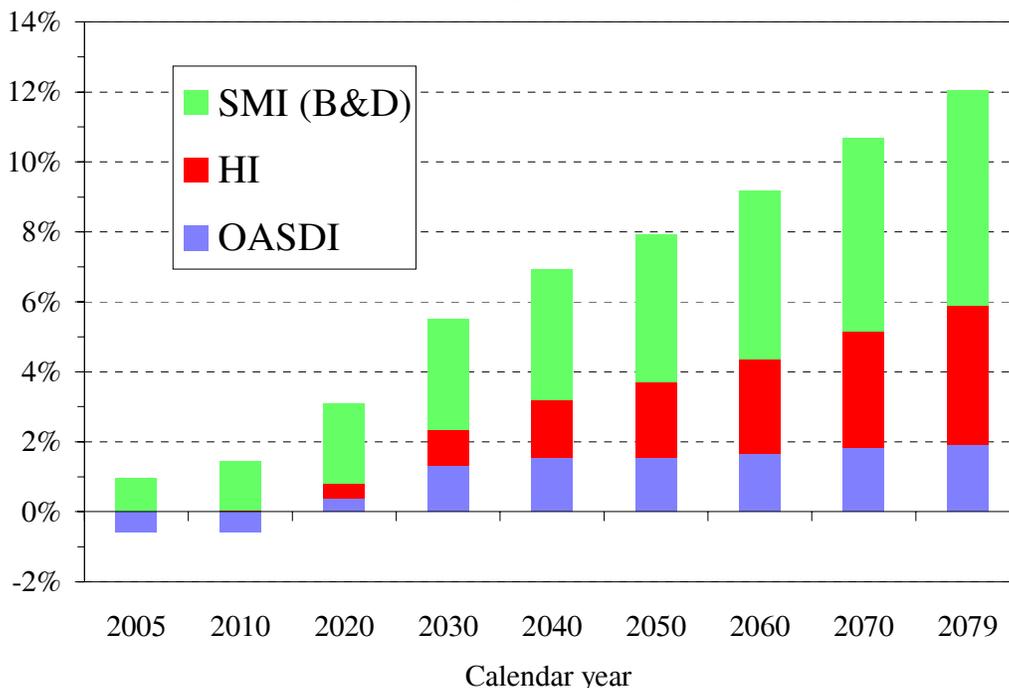


**Why is Reform to Improve the Medicare and Social Security Financial Imbalance Needed?** Public concern about the financial status of Medicare and Social Security tends to focus on the HI and OASDI Trust Fund exhaustion dates when benefits scheduled under current law can no longer be paid in full. But there are more immediate and fundamental reasons why Medicare and Social Security financing reform is needed. The two programs together will place greater demands on Federal general fund revenues long before trust fund exhaustion, and their financing in the long term is more problematic than suggested by the 75-year actuarial deficits for HI and OASDI.

The mounting financial shortfall in these programs is illustrated in Chart E. It shows, as a percentage of GDP, the gap between annual HI and OASDI tax income and the cost of scheduled benefits, plus the 75 percent general fund revenue contributions to SMI's Part B and Part D. The initial negative amounts for OASDI in 2005 and for more than a decade thereafter represent net revenues to the Treasury that result in the issuance of Treasury bonds to the trust funds in years of annual cash flow surpluses. Conversely, the positive amounts for OASDI and HI initially represent payments the Treasury must make to the funds when assets are redeemed to help pay benefits in the years leading up to exhaustion of the funds. After the exhaustion date, the positive amounts depict growing shortfalls in program finances.

In 2005 the Social Security tax income surplus is estimated to be more than offset by the shortfall in tax and premium income for Medicare, resulting in a small overall cash shortfall that must be covered by transfers from general fund revenues. The combined shortfall is projected to grow each year such that by 2017 net revenue flows from the general fund to the trust funds will total \$515 billion, or 2.3 percent of GDP. Since neither the interest paid on the Treasury bonds held in the HI and OASDI Trust Funds, nor their redemption, provides any net new income to the Treasury, the full amount of the required Treasury payments to these trust funds must be financed by some combination of increased taxation, increased Federal borrowing and debt, or a reduction in other government expenditures. Thus, these payments along with the 75 percent general fund revenue contributions to SMI will add greatly to pressures on Federal general fund revenues much sooner than is generally appreciated.

**Chart E—OASDI and HI Income Shortfall to Pay Scheduled Benefits, and the 75 Percent General Fund Revenue Contribution to SMI**  
*(Percentage of GDP)*



It is also evident from Chart E that currently projected benefit costs for Medicare and Social Security pose a far more serious long-term financing problem than is often recognized. There is a big increase in the shortfall of dedicated payroll tax and premium income in the 2010 to 2030 period as the baby boom generation reaches retirement age, but this shortfall continues to grow rapidly after that point due to health care costs that are expected to grow faster than GDP and to the increasing life expectancy of beneficiaries. In 2004 the combined annual cost of HI, SMI, and OASDI was about 7 percent of GDP, or two-fifths of total Federal revenues. It is projected to double to 14 percent of GDP by 2040 and then to rise further to 20 percent of GDP in 2079, at which time it would exceed total Federal revenues at their historic share of 19 percent of GDP. We do not believe such a long-term rate of growth for the two programs can be sustained.

In summary, the projections for Medicare and Social Security under current law manifest mounting draws on Federal general fund revenues, exhaustion of trust funds beginning in 15 years (for HI) that would not permit full payment of currently scheduled benefits, and unsustainable long-term growth in costs. The sooner these problems are addressed, the more varied and less disruptive will be their solutions.

## **A MESSAGE FROM THE PUBLIC TRUSTEES**

*These are the fifth annual Trustees Reports in which we have participated, and our extended terms end upon the issuance of these reports. Our goal as Public Trustees has been to ensure the integrity of the process by which these reports are prepared and the credibility of the information they contain. We believe that the Public Trustees' role is important and urge the President to nominate, and the Senate to confirm, Public Trustees for new terms as soon as possible, so that they can be full participants in the process leading up to next year's reports.*

### **Changes in Outlook Over the Past Five Years**

*The long-term financial outlooks for Medicare and for Social Security have changed little from last year's reports. Therefore, we focus here on how those outlooks have altered during our watch over the last five years, and on some lessons we have learned during that time in helping determine the annual Trustees' projections.*

*The financial outlook for Social Security has improved marginally since 2000 due to a myriad of factors, including updated information on immigration, a better economic outlook and improvements in projection methodology. Annual cash-flow deficits for the combined OASDI Trust Funds are now projected to begin two years later (2017 rather than the 2015 date projected five years ago), the exhaustion of trust fund assets is projected to occur four years later (2041 rather than 2037), and Social Security's cost as a percentage of gross domestic product (GDP) at the end of the 75-year period has decreased from 6.8 to 6.4. However, once they begin, the program's annual cash-flow deficits are still projected to grow rapidly through mid-century—and then more slowly thereafter—with trust fund income sufficient to pay only 74 percent of scheduled benefits at the time of asset exhaustion and 68 percent at the end of the 75-year projection period.*

*In sharp contrast, Medicare's financial outlook has deteriorated dramatically over the past five years and is now much worse than Social Security's. This is due primarily to a major change in the projected long-term growth rate of Medicare costs relative to that of the economy and, secondarily, to more rapid expenditure growth so far this decade than previously anticipated. In 2000 annual cash-flow deficits were projected to first appear for HI in 2010. But these deficits actually began last year, resulting in the projected exhaustion date for HI Trust Fund reserves moving forward from 2025 to 2020—at which time trust fund income would be*

sufficient to pay only 79 percent of HI costs. HI costs are expected to rise so rapidly thereafter that trust fund income will be adequate to cover only 27 percent of program costs by the end of the 75-year period.

The change in the outlook is equally stark for SMI, where Part B is now joined by the new Part D Prescription Drug Benefit. Annual income to the SMI Trust Fund is always projected to be sufficient to cover costs, since general revenue transfers and beneficiary premiums are automatically adjusted each year to achieve this outcome. But the required rate of growth of such revenues is far more than previously anticipated. With the retirement of the baby boom generation, SMI costs (as a percent of GDP) are now projected to nearly quadruple from 1.2 to 4.6 over the next 30 years and to continue to increase rapidly thereafter. As a result, total Medicare expenditures are now projected to increase from 2.6 to 5.7 percent of GDP by 2024, when Medicare expenses will first exceed those of Social Security. By the end of the 75-year period, the cost of Medicare is now expected to approach 14 percent of GDP. In contrast, in 2000 the cost was projected to be less than 4 percent of GDP in 2024 and to reach only 5.3 percent of GDP by the end of the 75-year period.

A notable addition to the Trustees Reports during our tenure has been the inclusion of new measures that summarize program finances for a period extending beyond the traditional 75 years and indicate whether those finances can be expected to improve in this extended time frame. These measures indicate that both Social Security and Medicare will be subject to increasing deficits into the indefinite future under current policies.

Two important observations follow from an examination of the 2000-2005 Trustees Reports projections. First, Medicare's costs are expected to grow at a much faster rate than those of Social Security. The impending retirement of the baby boom generation, continued lower birth rates, and further increases in life expectancy thereafter will cause the costs of both programs to grow faster than the economy. But Medicare's costs are also fueled by ever increasing scientific knowledge, medical technology incorporating that knowledge, and per capita utilization of the resulting health care capabilities. The second observation follows from the first: there is considerable inherent uncertainty in the future path of costs under current law for both programs, with projections for Medicare being a less reliable guide than those for Social Security the further out in time they go. In the balance of this message we briefly examine the reasons for the uncertainty inherent in these projections and the relevance to policy discussions.

## **What are the Major Sources of Uncertainty in the Projections?**

*There are two major sources of uncertainty inherent in the long-term projections for Medicare and Social Security.*

*First, the projections for both programs depend on many common factors, including the size and characteristics of the population receiving program benefits, the size of the American workforce, and the level of workers' earnings. The projections therefore require assumptions about future birth rates, death rates by age, immigration, marriage and divorce rates, retirement-age patterns, productivity gains, wage increases, inflation, and many other demographic and economic factors. Although historical experience is generally a good guide for the likely future courses of these factors, these courses cannot be known with certainty. When substantial change occurs in a factor in a concentrated period of time, it is particularly difficult to sort out how much of it is simply a movement to a new level of related activity and how much represents a change in a long-term trend. For example, expert economic opinion remains divided on whether the revolution in information technology, which has contributed to the recent productivity surge, will provide continuing year-to-year productivity increases for only another decade or so, or for many more decades into the future (as did the spread of the steam engine and then electric power in the past).*

*Minor variations in assumptions about the future paths of important factors can lead to significant differences in expected program costs and revenues over many decades. This is illustrated in the differences between the long-term projections for Social Security done by the Trustees and those done by the Congressional Budget Office (CBO) for the first time last year. CBO utilizes the same demographic assumptions as the Trustees but somewhat more optimistic economic assumptions. While the fundamental character of the financial future portrayed for the program under the two sets of projections is quite similar, there are substantial differences in the details of the projections—most notably in the expected date of trust fund exhaustion.*

*There are also sources of uncertainty specific to the long-term Medicare projections beyond those inherent in the economic and demographic assumptions common to both programs: for example, the rate of scientific breakthroughs, the frequency of release of “blockbuster” drugs, new diseases or widespread recurrence of older ones, and new medical treatment techniques that improve the quality of or prolong life. Such factors have*

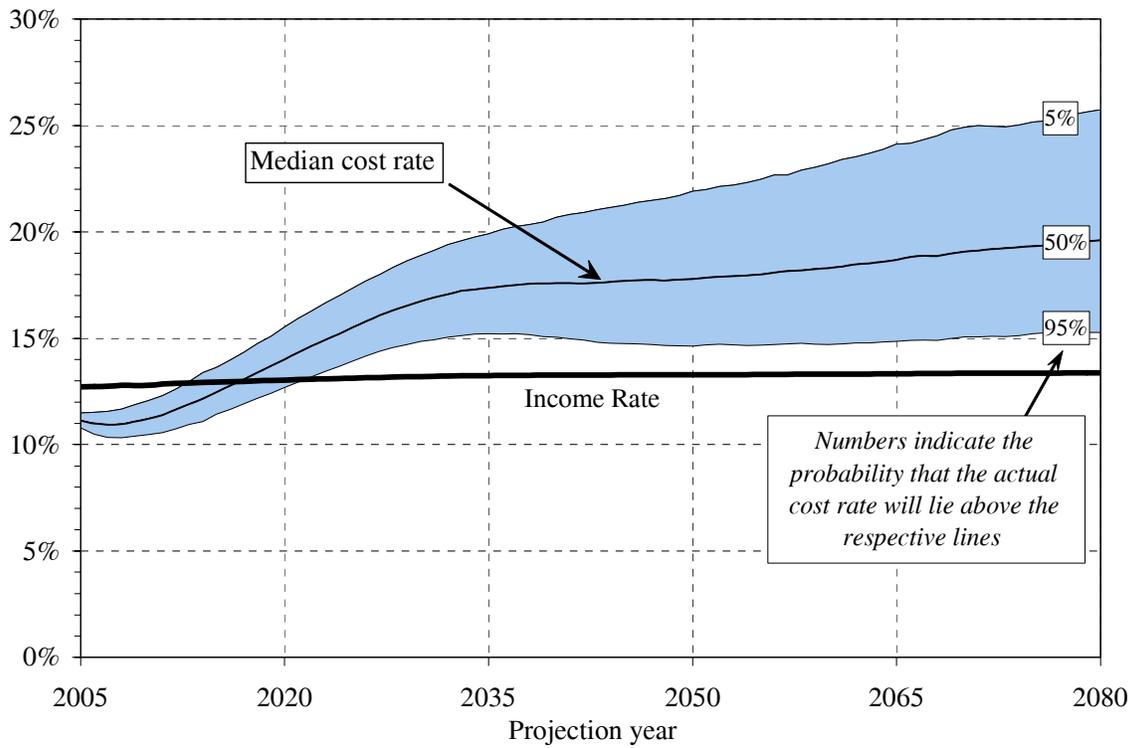
*been a principal reason that per capita health care costs have grown well over two percent more rapidly than has per capita GDP over the past half-century. The intermediate projections of the Medicare Trustees prior to 2001 assumed the difference in the two growth rates would gradually decline to zero over the subsequent 25 years. But this seemed an increasingly unrealistic expectation during the 1990s as evidence mounted for a persistent one to two percent differential due to the increasing use of new technologies. Pursuant to the recommendation of the 2000 Medicare Technical Panel, Trustees Reports since then have assumed this differential would decline to one percent after 25 years and remain at that level thereafter. While clearly an improvement, the current assumption is still subject to considerable uncertainty and reflects our relative ignorance about the forces at work in determining the long-term growth rate of health care costs. We strongly encourage further work on this important issue.*

*The Trustees have traditionally reported projections based on intermediate, low cost, and high cost assumptions for the important factors determining the future financial status of Medicare and Social Security. The low and high cost alternatives assume that these factors vary individually, as well as collectively, in a direction resulting in an outcome that is either less or more costly, than the intermediate assumptions. While it may be reasonable for all these factors to vary together in a cost-increasing or cost-decreasing direction for several years in a row, as the length of the projection period expands, the likelihood that they will continue to do so declines dramatically. Thus, the low and high cost alternatives reflect very low probability outcomes.*

*Since 2003 the Trustees Reports have included a presentation based on stochastic modeling techniques in order to communicate the uncertainty involved in the projections more effectively. An important advantage of such techniques is that they assign probabilities to possible outcomes that can be displayed in graphic form to illustrate the uncertainty surrounding the intermediate assumptions more clearly. The chart shows the probability distribution of year-by-year Social Security costs as a percentage of taxable payroll. (The income rate also is shown for comparison but as a single line as it is set largely by law.) The blue area surrounding the median cost rate denotes a 90% confidence interval (i.e., the probability of the actual cost rate lying within this area is projected to be 90%). The widening of the confidence interval as the projection extends further into the future provides a strong visual impression of the increasing uncertainty over time. But it is important to recognize that the stochastic results*

are sensitive to many technical choices made by forecasters and, at this juncture, are more useful as illustrative devices than precise depictions.

### Annual OASDI Cost Rates Under Intermediate Assumptions (Percentage of Taxable Payroll)



### Conclusion

*The economy has strong equilibrating mechanisms over long periods of time. Despite the uncertainties discussed above, we believe that the central tendencies of the long-run projections for Medicare and Social Security are robust: demographics are driving both and nearly unimaginable changes in expected rates of fertility, mortality, and immigration would be required to dramatically alter the long-term financial outlooks for the two programs for the better or worse. Furthermore, the costs of Medicare under current policies will continue to be strongly influenced by the fact that, as incomes increase, so does the value of health care. Thus, expenditure on health care can be expected to rise faster than non-health care consumption for the foreseeable future. Prudence dictates action sooner rather than later to address the challenges posed by the financial outlook for both Medicare and Social Security.*

*John L. Palmer,  
Trustee*

*Thomas R. Saving,  
Trustee*

