

**THE LONG-RANGE DEMOGRAPHIC ASSUMPTIONS
FOR THE 2026 TRUSTEES REPORT**

SOCIAL SECURITY ADMINISTRATION
ACTUARIAL SERVICES

June 9, 2026

PRINCIPAL DEMOGRAPHIC ASSUMPTIONS

OVERVIEW

SECTIONS

- 1 FERTILITY**
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Overview

Each year the Board of Trustees of the Federal Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) Trust Funds provides an annual report to the Congress on the financial and actuarial status of the Old-Age, Survivors, and Disability Insurance (OASDI) program. For this report, the Social Security Administration’s Actuarial Services organization, on behalf of the Board of Trustees, projects future cost and income based on three separate sets of long-range (75-year) assumptions for key demographic variables. The intermediate (alternative II) set of assumptions represents the Trustees’ best estimate for future experience, while the low cost (alternative I) and high cost (alternative III) sets of assumptions represent more and less favorable scenarios, respectively, from the perspective of program financial status. The intermediate assumptions are also used as the point of comparison for sensitivity analysis and the central tendency for the stochastic projections presented in the OASDI annual report to the Board of Trustees (the “Trustees Report”). This memorandum presents the demographic assumptions used in the 2026 Trustees Report.

The key demographic assumptions are:

- The total fertility rate, along with the single-year-of-age birth rates,
- The annual rates of reduction in central death rates by broad age group (0 – 14, 15 – 49, 50 – 64, 65 – 84, and 85+) and cause of death (cardiovascular, cancer, violence and accidents, respiratory, dementia, and all other), and
- Immigration levels, by age and sex, of lawful permanent resident (LPR) new arrivals, adjustments to LPR status, LPR and citizen exits, and temporary or unlawfully present entrants; and rates of exit from the temporary or unlawfully present immigrant population.

For the 2026 Trustees Report, the ultimate values for two of these key assumptions were changed from those used in the 2025 Trustees Report. First, the ultimate total fertility rate was decreased from 1.90 to 1.75 children per woman for the intermediate alternative and from 1.60 to 1.40 children per woman for the high-cost alternative. The low-cost value (2.10 children per woman) is unchanged from the 2025 Trustees Report. Second, the Trustees lowered the ultimate unlawfully present inflows by 150,000 for each alternative (from 990,000 to 840,000 for the low-cost alternative, from 720,000 to 570,000 for the intermediate alternative, and from 450,000 to 300,000 for the high-cost alternative). In addition, the Trustees increased assumed near-term unlawfully present emigration rates and decreased assumed near-term levels of unlawfully present inflows.

The following table shows values for key summary measures for the fertility, mortality, and immigration assumptions. Note that some of the values of the summary measures were affected by the incorporation of new data and their effects on the transition period.

Key Demographic Summary Measures for the Long-Range (75-Year) Projection Period									
2025 Trustees Report and 2026 Trustees Report									
Measure (for the last 65 years of the 75-year projection period unless otherwise stated)	2025 Trustees Report Alternative			2026 Trustees Report Alternative			2026 Trustees Report Less 2025 Trustees Report		
	I	II	III	I	II	III	I	II	III
Ultimate annual total fertility rate for years 2050 and later	2.10	1.90	1.60	2.10	1.75	1.40	0.00	-0.15	-0.20
Average annual percentage reduction in total age-sex-adjusted death rates	0.28	0.73	1.21	0.27	0.73	1.24	-0.01	0.00	0.03
Ultimate annual net LPR immigration (in thousands)	1,000	788	595	1,000	788	595	0	0	0
Average annual net temporary or unlawfully present immigration (in thousands)	696	465	238	624	389	154	-72	-76	-84

In total, the demographic changes resulted in a net decrease (worsening) in the OASDI actuarial balance of about 0.44 percent of taxable payroll under the intermediate assumptions. More specifically:

- Law or policy changes related to the demographic assumptions (i.e., assuming that no new applications will ever be accepted or processed for the Deferred Action for Childhood Arrivals, or DACA, program) have a negligible effect on the actuarial balance.
- The combined effect of all fertility changes, including incorporating new data and lowering the ultimate TFR by 0.15 children per woman, is a net decrease in the long-range actuarial balance of about 0.35 percent of taxable payroll.
- The combined effect of all mortality changes, including incorporating new data and having the regressions use 2024 data, is a net increase in the actuarial balance of about 0.09 percent of taxable payroll.
- The combined effect of all immigration changes, including incorporating new data, decreasing the near-term and ultimate unlawfully present entrant assumptions, and increasing the near-term unlawfully present emigration rates, is a net decrease in the actuarial balance of about 0.21 percent of taxable payroll.
- Updated historical data result in a net increase in actuarial balance of about 0.03 percent of taxable payroll.

The remainder of this memorandum provides details regarding the historical values and future values for each of the demographic assumptions, and the basis for the assumptions.

1. FERTILITY

ASSUMPTIONS FOR THE 2026 TRUSTEES REPORT
SOCIAL SECURITY ADMINISTRATION, ACTUARIAL SERVICES

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1.1 Summary

The ultimate total fertility rates (TFRs) assumed for the 2026 Trustees Report are 2.10, 1.75, and 1.40 children per woman for the low-cost, intermediate, and high-cost alternatives, respectively. The ultimate low-cost TFR is the same as assumed in the 2025 Trustees Report, the ultimate intermediate TFR is 0.15 children per woman lower than assumed in the 2025 Trustees Report, and the ultimate high-cost TFR is 0.20 children per woman lower than assumed in the 2025 Trustees Report. The decrease in the ultimate intermediate TFR of 0.15 children per woman decreases the long-range actuarial balance by about 0.33 percent of taxable payroll.

There has been a sharp drop in the TFR since the mid-2000's, from a level of 2.12 in 2007 to a level of 1.60 in 2023. Final data from the National Center for Health Statistics (NCHS) for 2024 also produce a TFR of 1.60. The 2025 TFR is estimated to be 1.59, based on partial-year provisional data through August 2025 from NCHS. Incorporating the 2024 and 2025 data and the resulting change in the transition path decrease the long-range actuarial balance by about 0.02 percent of taxable payroll.

For the intermediate alternative of the 2026 Trustees Report, the Trustees assume that the TFR will rise from the current low levels to an ultimate level of 1.75 by 2050, consistent with an ultimate completed cohort fertility rate of 1.75. This assumed ultimate level is reduced from the level of 1.90 that was assumed for the 2025 Trustees Report. Several factors led the Trustees to decrease this assumption, including the continued lower TFRs in recent years, lower immigration from countries with historically higher fertility rates (e.g., Mexico), increased utilization of more effective birth control, and societal changes related to family formation and the desire for children. These factors are also consistent with recent surveys indicating lower expectations of lifetime births.

The combined effect of all fertility changes, including incorporating new data and lowering the ultimate TFR by 0.15 children per woman, is a decrease in the long-range actuarial balance of about 0.35 percent of taxable payroll.

1.2 Historical Experience

Past period TFRs in the United States are shown in table 1.1 and chart 1.1. The period TFR for a given year is defined as the average number of children that would be born to a woman if she were to survive the entire childbearing period and were to experience, at each age of her life, the birth rate¹ observed in that year. During the period 1917 through 1924, the period TFR was more than 3.0 children per woman. From 1924 through 1933, the TFR declined from 3.1 to 2.2 children per woman, and then remained level at 2.1 to 2.2 children per woman through 1940. After 1940, the TFR began to rise, reaching a peak of 3.7 in 1957 and staying above 2.8 for the “baby boom” years of 1946 through 1965. This period of high fertility was followed by a period of declining fertility. The TFR fell to 1.7 in 1976. Beginning in 1977, the TFR remained fairly stable at 1.8 children per woman until 1987, when it started to increase, reaching 2.1 in 1990.

¹ The ratio of: (1) the number of live births to mothers of a specified age to (2) the midyear population of girls/women of that age.

Between 1990 and the start of the 2007-09 recession, the TFR remained fairly stable, fluctuating between about 2.0 and 2.1. Following a TFR of 2.12 in 2007, the TFR has decreased in most years since then, reaching 1.60 in 2024, an historic low. The TFR is estimated to decrease further in 2025, to 1.59.

The increase in the TFR after 1976 was primarily due to increases in birth rates among women in their 30s. After dropping dramatically between 1960 and 1976, birth rates for women in their 20s remained quite stable between 1976 and 2007 (see chart 1.2). Much of the decline in birth rates for women in their 20s was understood to be due to “tempo” effects,² with women desiring to defer births until they were in their 30s. Thus, the gradual increases in birth rates for women in their 30s for 10 to 15 years after 1976 were expected. However, birth rates for women in their 30s continued to rise through 2007, partially due to advancements in infertility treatments.

Since then, birth rates for age groups younger than 30 have decreased dramatically. Birth rates for women in their early 30s have remained relatively level, while birth rates for women in their late 30s have continued to increase gradually since 2007, but at a slower pace than in earlier years. Birth rates for women in their 40s have also continued to increase, but births to women at these older ages represent only a small portion of the total births.

1.3 Assumed Future Birth Rates

The Trustees do not expect cohort or period TFRs to return to the high levels experienced during the baby boom. Several changes in our society have occurred since the baby boom that have contributed to reducing birth rates. Some of these changes are:

- increased availability and use of birth control methods, including long-acting reversible contraceptives (LARCs),
- increased participation in the labor force among women,
- postponement of family formation and childbearing among young women,
- increased prevalence of divorce,
- decreased death rates among children (requiring fewer births for a desired family size),
- increased percentage of women choosing to remain childless (although this percentage has trended down, and then roughly leveled off, since the cohorts born in the mid-1950s),
- and other societal changes including lower marriage rates.

In addition, a sustained TFR at the low levels experienced by certain other industrialized countries is unlikely due to economic, demographic, and cultural differences between the U.S. and those countries. An additional contributing factor to future levels of birth rates is changes in abortion laws in certain states following the Supreme Court’s 2022 ruling in *Dobbs v. Jackson Women’s Health Organization*.

As shown in chart 1.2, the Trustees assume a continuation of the historical trend, which shows generally increasing birth rates for women at ages 30 and older, and generally decreasing rates for women below age 30. With the cohort-based model, birth rates for women at older ages reach

² Demographers refer to a temporary drop in the TFR due to a delay in childbearing to older ages as a tempo effect. For more information, see the discussion on “Tempo-adjusted total fertility rate” at: <https://www.humanfertility.org/File/GetDocumentFree/Docs/methods.pdf>.

ultimate values in later calendar years than those for women at younger ages, reflecting the deferral of births to older ages over time. The changing distribution of birth rates by age of woman has significant effects on population size, but the age distribution stabilizes after 2050.

Since the start of the 2007-09 recession, the age group that has had the steepest drop in fertility rates is 20-24. (See chart 1.2.) This drastic drop in birth rates for women aged 20-24 could be a sign of future tempo effects, leading to an increase in birth rates at older ages for these cohorts. One cause of this drop could be the increased debt taken on by the millennial and succeeding generations.

The Trustees also monitor assumptions and recommendations from other sources.

- The 2015 Technical Panel on Assumptions and Methods, appointed by the Social Security Advisory Board, recommended an ultimate alternative II TFR assumption of 1.90.
- The 2019 Technical Panel recommended continued increases in births to older women throughout the 75-year projection period, resulting in lower period TFRs reaching 1.95 and completed cohort TFRs potentially closer to 2.00. They also recommended adopting a new projection framework using cohort TFRs and continued tempo effects as the drivers, and period TFRs as an outcome. The Trustees adopted this general framework for the 2021 Trustees Report.
- The Congressional Budget Office, in their January 2026 projections, assume the TFR will drop to 1.53 in 2035 and will remain fairly stable thereafter.³
- In the Census Bureau's 2023 National Population Projections, the projected TFR decreases steadily from 1.64 in 2023 to 1.55 in 2100.⁴

Examining data from other countries is useful in selecting a range of ultimate assumptions for the low-cost and high-cost alternatives. Historical TFRs during the period 1980-2023 that were reported by 18 foreign countries to the Organisation for Economic Co-operation and Development (OECD), and the historical TFRs for the United States (as calculated by Actuarial Services), are shown in table 1.2. The TFRs for the most recent year shown in the table range from 0.7 for Korea to 2.0 for India. After India, the highest TFR is 1.9 for Mexico and then 1.7 for France. Although the TFR in industrialized countries has been observed at levels below 1.0, the cultural and economic climate in the U.S. makes it highly unlikely that our TFR will remain below a level of 1.40 for any sustained period. Thus, the Trustees assume an ultimate TFR for the high-cost scenario of 1.40 children per woman. Using the range of experience for the United States and other countries as a guide, the Trustees assume an ultimate TFR for the low-cost scenario of 2.10 children per woman. The ultimate period TFR is reached in 2050 for all alternatives.

For the intermediate alternative, the Trustees assume the TFR gradually increases from the estimated 2025 value until the ultimate value is attained in 2050. For the low-cost and high-cost alternatives, the Trustees assume that the paths of the TFRs gradually grade away from the

³ See <https://www.cbo.gov/system/files/2026-01/61879-Demographic-Outlook.pdf>.

⁴ See the group "0" values in https://www2.census.gov/programs-surveys/popproj/datasets/2023/2023-popproj/np2023_a1.csv.

intermediate alternative path. Chart 1.3 shows the historical path of the TFR starting in 1917 and the projected paths of the TFRs for all three alternatives.

Examining the TFR by birth cohort, shown in chart 1.4, is a useful tool in evaluating an ultimate assumption. A comparison of charts 1.3 and 1.4 shows that the cohort TFRs vary much less over time than the period TFRs. Chart 1.4 shows that the recent cohorts that have completed their childbearing years (those born in the 1950s and later) have a generally upward trend in their TFRs (as seen in the dark purple line), apart from the most recent completed cohort. The transition path for alternative II generally declines to the ultimate assumption of 1.75.

As mentioned above, reported birth expectations for girls and women of childbearing age provide another measure to help assess trends in birth rates. NCHS conducts the National Survey of Family Growth (NSFG) to gather information about boys and men⁵ and girls and women aged 15-49.⁶ Results from these surveys are shown in chart 1.5. Prior to the 1982 survey, NCHS only asked married women about past and future expected births. However, beginning with the 1982 survey, NCHS asked all girls and women about past and future expected births. In addition, the 2015-2017 survey was the first to survey respondents aged 45-49, which is why prior surveys are missing from that age group in the chart.

As shown in chart 1.5, past and future expected births dropped in the 2022-2023 survey, with the most dramatic decreases occurring for girls and women aged 15-19 and women aged 20-24. However, the results of the most recent survey are not entirely comparable to the results from previous surveys, as the most recent survey was the first to allow respondents to answer the survey questions either digitally or via face-to-face interviews. All prior surveys only allowed respondents to answer questions via face-to-face interviews. Analyzing the results of the most recent survey shows that digital respondents tended to have lower birth expectations than those who responded via face-to-face interviews. Nonetheless, the chart shows a significant decline in birth expectations for respondents across all age groups.

⁵ Boys and men were not surveyed until the 2002 survey.

⁶ For surveys prior to the 2015-17 survey, the people surveyed were aged 15-44 at the time of the sampling but may have had their 45th birthday by the interview date. Starting with the 2015-17 survey, the people surveyed were aged 15-49, with some attaining age 50 by the interview date.

Table 1.1: Past and Projected Total Fertility Rates for the United States

Calendar Year	2025 TR		2026 TR			
1920			3.263	3.263		
1930			2.533	2.533		
1940			2.229	2.229		
1950			3.028	3.028		
1960			3.606	3.606		
1965			2.882	2.882		
1970			2.432	2.432		
1975			1.770	1.770		
1980			1.820	1.820		
1985			1.835	1.835		
1990			2.069	2.069		
1995			1.981	1.981		
2000			2.054	2.054		
2001			2.032	2.032		
2002			2.025	2.025		
2003			2.055	2.055		
2004			2.059	2.059		
2005			2.062	2.062		
2006			2.112	2.112		
2007			2.123	2.123		
2008			2.074	2.074		
2009			2.002	2.002		
2010			1.925	1.925		
2011			1.888	1.888		
2012			1.873	1.873		
2013			1.849	1.849		
2014			1.861	1.861		
2015			1.843	1.843		
2016			1.815	1.815		
2017			1.763	1.763		
2018			1.727	1.726		
2019			1.702	1.701		
2020			1.638	1.638		
2021			1.661	1.660		
2022			1.657	1.651		
2023			1.619	1.603		
2024			1.620 ¹	1.598		
2025			1.637 ²	1.590 ¹		
	Alternative I		Alternative II		Alternative III	
	2025 TR	2026 TR	2025 TR	2026 TR	2025 TR	2026 TR
2026	1.704	1.646	1.654	1.594	1.578	1.542
2027	1.739	1.688	1.670	1.598	1.566	1.508
2028	1.773	1.726	1.686	1.602	1.556	1.478
2029	1.805	1.762	1.702	1.607	1.548	1.451
2030	1.836	1.797	1.719	1.613	1.543	1.429
2031	1.866	1.830	1.735	1.620	1.539	1.410
2032	1.895	1.862	1.753	1.629	1.539	1.395
2033	1.923	1.892	1.770	1.638	1.540	1.384
2034	1.950	1.922	1.787	1.649	1.543	1.375
2035	1.975	1.951	1.804	1.661	1.548	1.371
2036	1.998	1.978	1.820	1.674	1.553	1.369
2040	2.067	2.062	1.872	1.722	1.579	1.382
2045	2.095	2.095	1.896	1.746	1.596	1.397
2050	2.100	2.100	1.900	1.750	1.600	1.400
2055	2.100	2.100	1.900	1.750	1.600	1.400
2060	2.100	2.100	1.900	1.750	1.600	1.400
2065+	2.100	2.100	1.900	1.750	1.600	1.400

¹ Estimated.

² Estimated, intermediate alternative.

**Table 1.2: Historical Total Fertility Rates, by Country
1980 – 2023**

Country	1980	1985	1990	1995	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Latest 10-Year Change	
Australia	1.9	1.9	1.9	1.8	1.8	1.9	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.7	1.6	1.5	-0.4	
Brazil	4.0	3.5	2.9	2.6	2.3	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.8	1.7	1.7	1.6	—	1.6	-0.1	
Canada	1.7	1.6	1.7	1.7	1.5	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.4	1.4	—	1.3	-0.4	
China	2.7	2.6	2.5	1.6	1.6	1.6	1.7	1.7	1.8	1.7	1.8	1.7	1.8	1.8	1.6	1.5	1.3	1.2	—	1.0	-0.7	
France	2.0	1.8	1.8	1.7	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.7	-0.3	
Germany	1.6	1.4	1.5	1.3	1.4	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.6	1.5	1.4	-0.1	
Greece	2.2	1.7	1.4	1.3	1.3	1.3	1.5	1.4	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.3	1.4	1.4	1.4	1.3	1.3	0.0
India	4.8	4.5	4.1	3.7	3.4	3.0	2.6	2.5	2.5	2.4	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.0	—	2.0	-0.4	
Ireland	3.2	2.5	2.1	1.9	1.9	1.9	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.6	1.7	1.5	1.5	-0.4	
Italy	1.7	1.5	1.4	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.2	1.3	1.2	1.2	-0.2	
Japan	1.8	1.8	1.5	1.4	1.4	1.3	1.4	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.3	1.3	—	1.2	-0.2	
Korea	2.8	1.7	1.6	1.6	1.5	1.1	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8	0.8	—	0.7	-0.5	
Mexico	4.8	4.0	3.5	3.0	2.7	2.5	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.8	—	1.9	-0.4	
Netherlands	1.6	1.5	1.6	1.5	1.7	1.7	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.5	1.6	1.5	1.4	-0.3	
New Zealand	2.0	1.9	2.2	2.0	2.0	2.0	2.2	2.1	2.1	2.0	1.9	2.0	1.9	1.8	1.7	1.7	1.6	1.6	1.6	1.6	-0.5	
Spain	2.2	1.6	1.4	1.2	1.2	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.1	-0.2	
Sweden	1.7	1.7	2.1	1.7	1.6	1.8	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.7	1.5	1.5	-0.4	
United Kingdom	1.9	1.8	1.8	1.7	1.6	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.6	1.6	1.5	—	1.5	-0.3	
United States	1.8	1.8	2.1	2.0	2.1	2.1	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.7	1.7	1.6	-0.2	

Source: United States: Social Security Administration Actuarial Services calculations based on data from the National Center for Health Statistics and the Census Bureau

Other countries: Organisation for Economic Co-operation and Development (OECD) website at:

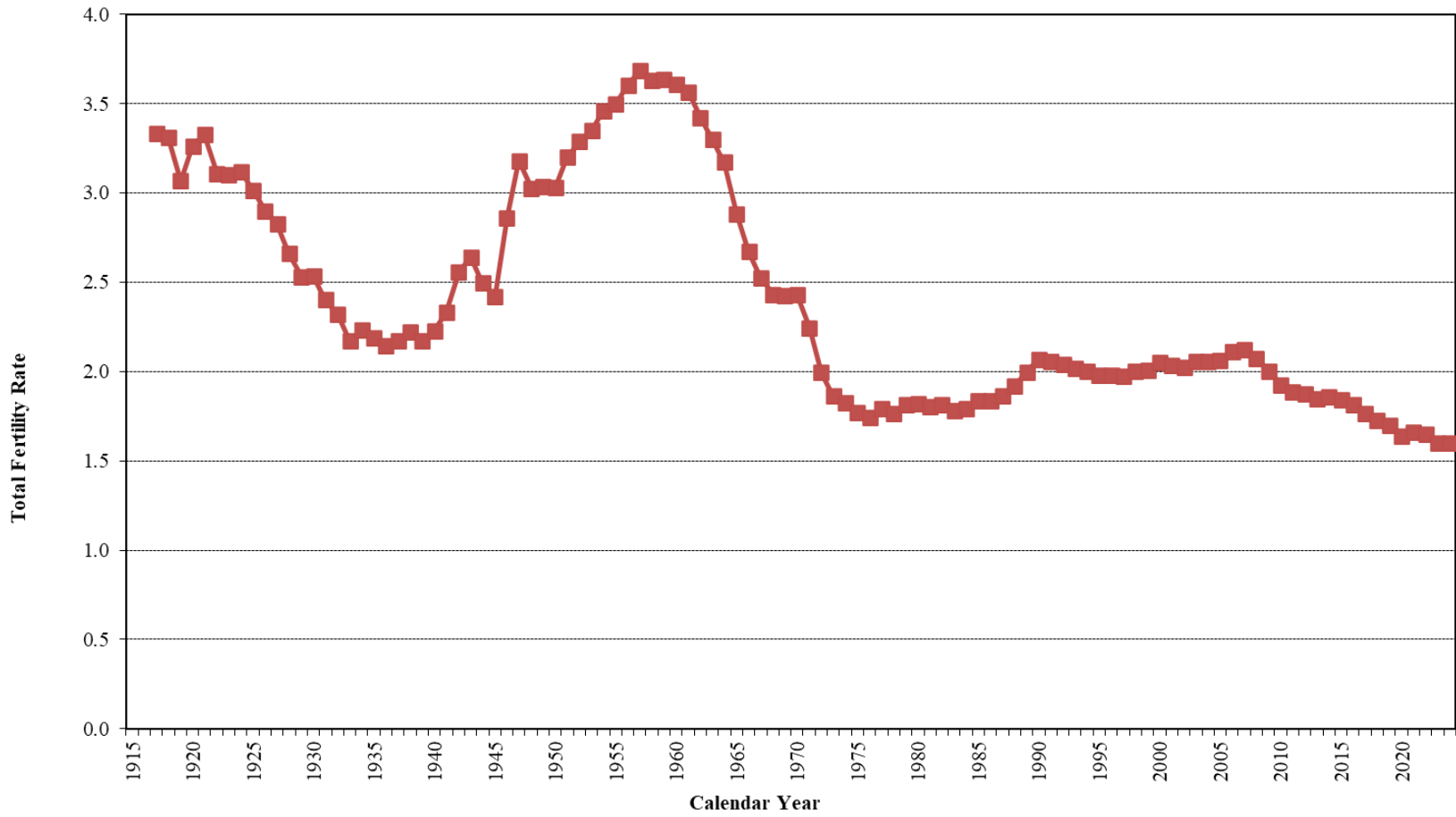
<https://data.oecd.org/pop/fertility-rates.htm>.

Note that for 2022, the OECD Data Explorer was used, as the 2022 total fertility rates were unavailable at the above website.

Note: France's rate for 2022 is provisional.

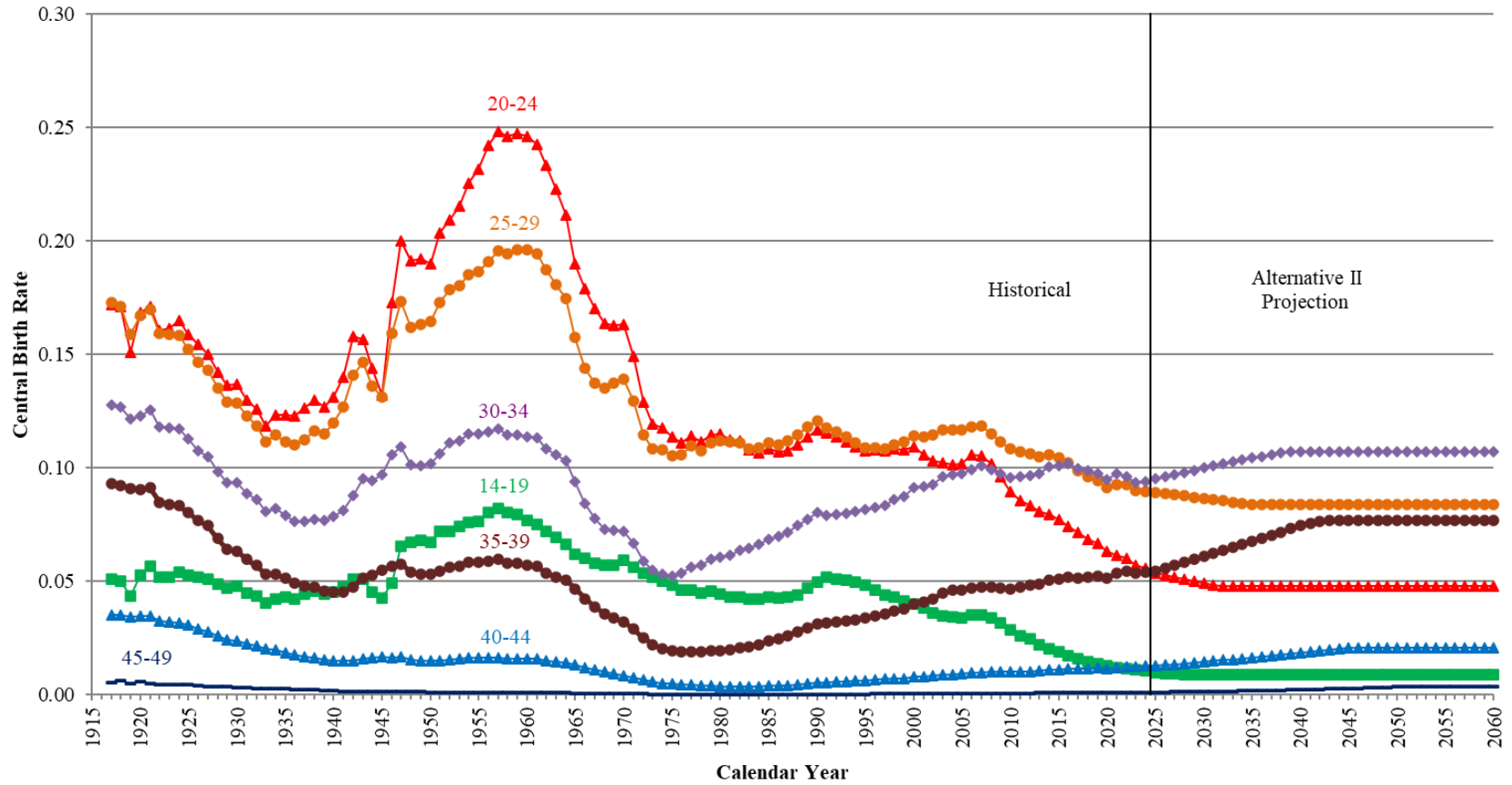
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Chart 1.1: Historical Total Fertility Rates for the United States



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Chart 1.2: Central Birth Rates for Five-Year Age Groups: Historical and Alternative II Projection



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Chart 1.3: Historical and Projected Total Fertility Rates

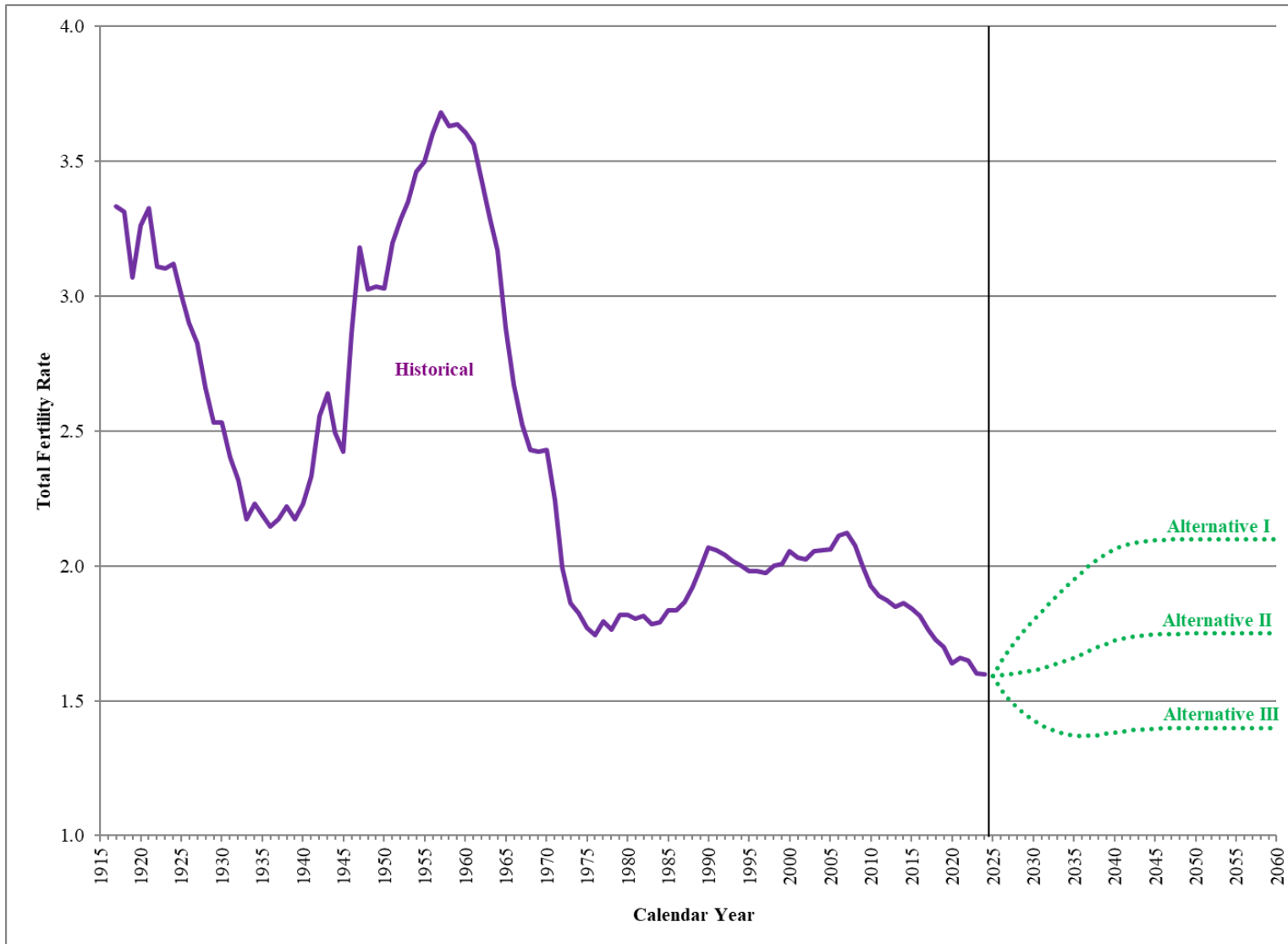


Chart 1.4: Historical and Projected Total Fertility Rates by Birth Cohort

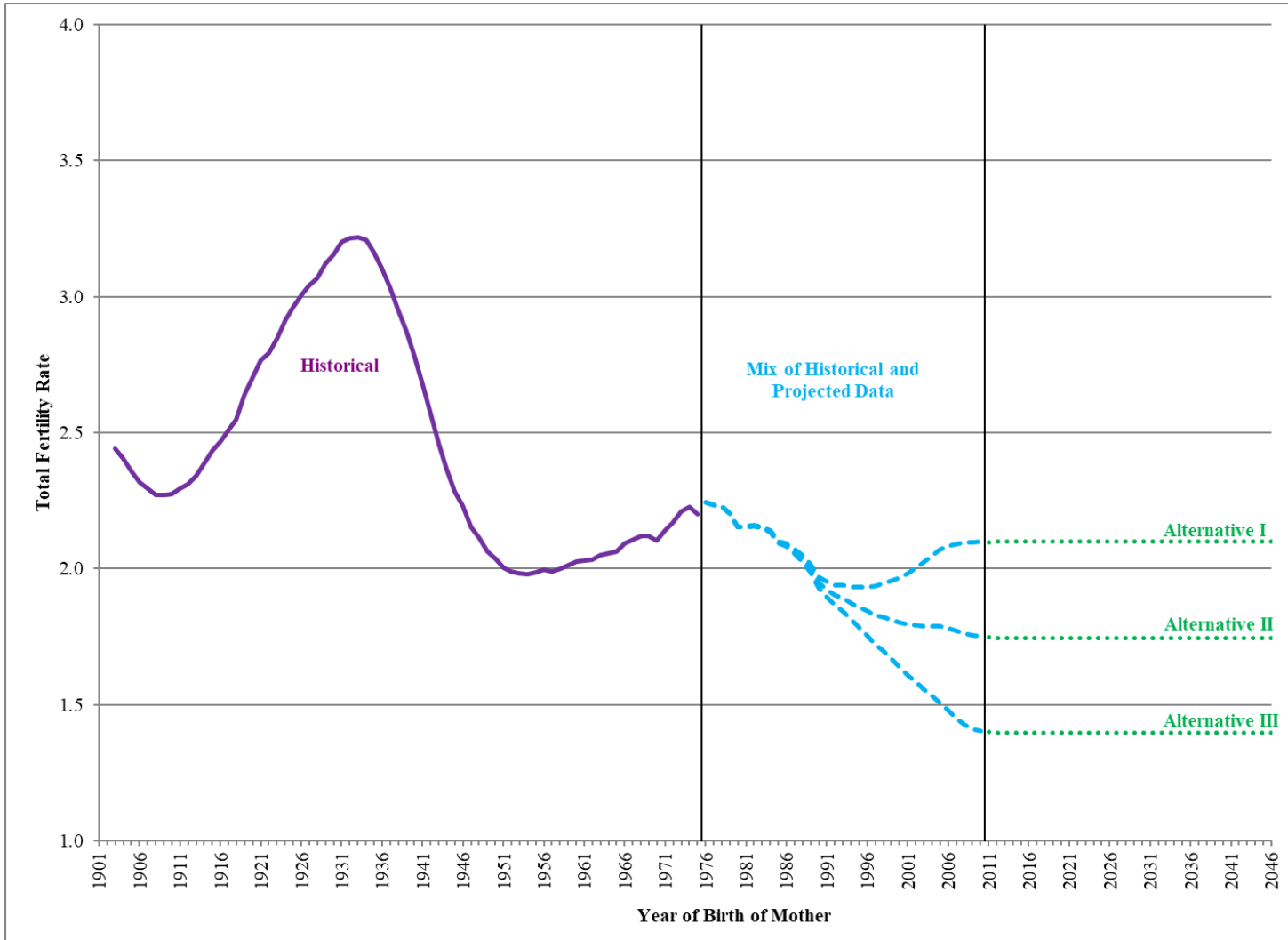
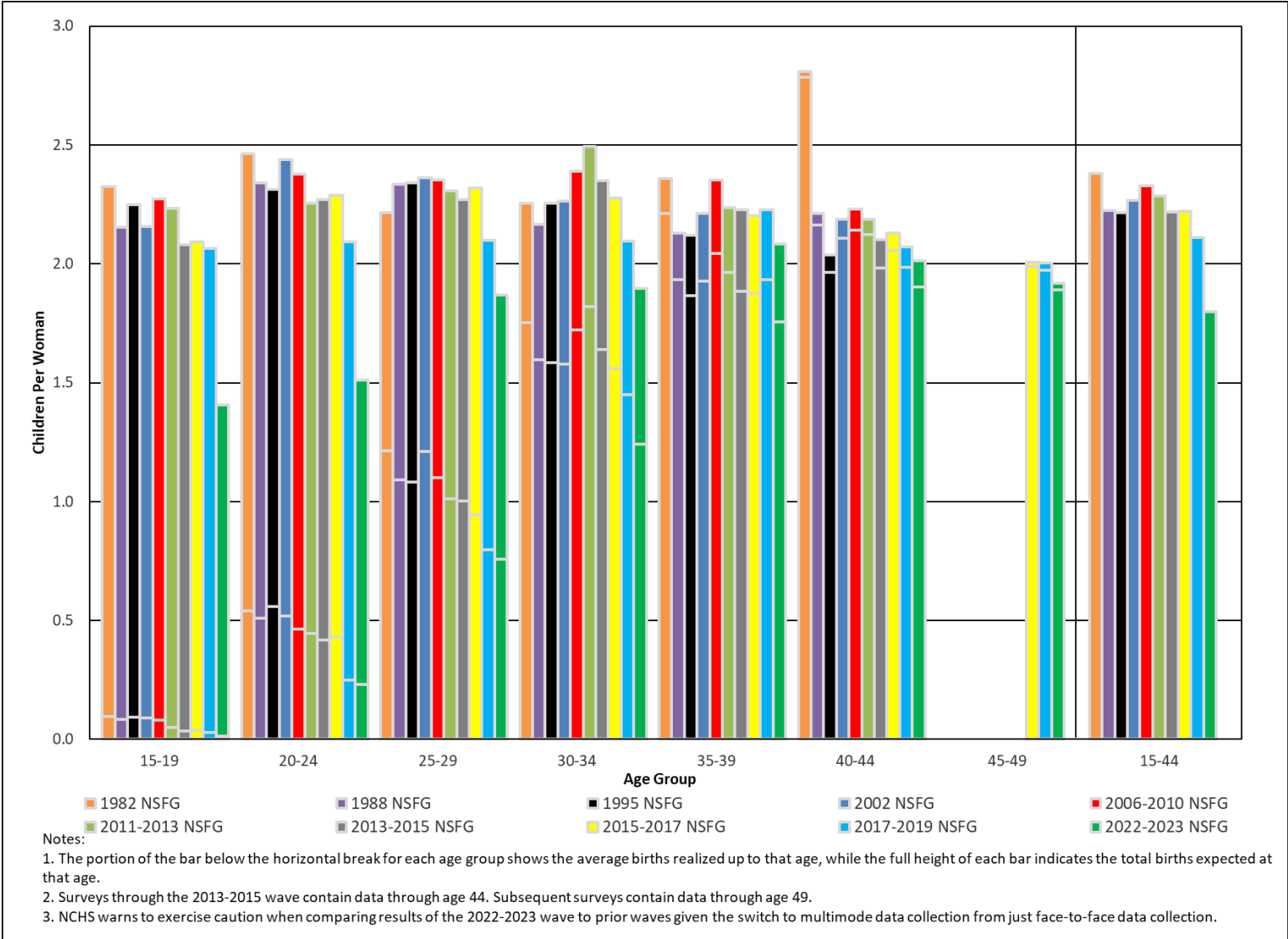


Chart 1.5: Past and Future Expected Births per Woman Based on the National Survey of Family Growth (NSFG)



2. MORTALITY

ASSUMPTIONS FOR THE 2026 TRUSTEES REPORT
SOCIAL SECURITY ADMINISTRATION, ACTUARIAL SERVICES

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2.1 Summary

For the 2026 Trustees Report, the ultimate annual rates of mortality reduction by age and cause of death are unchanged from those used for the 2025 Trustees Report. The assumed ultimate rates of reduction apply fully for years 2050 and later. For years between the most recent observed data and the full implementation of the ultimate rates of reduction, there is a transition from recently observed trends to the ultimate assumed rates of reduction by age, sex, and cause.

Projections for the 2026 Trustees Report reflect updated residential populations from the Census Bureau, final National Center for Health Statistics (NCHS) data for 2023, provisional NCHS data for 2024 and 2025,¹ final Medicare data for 2022, preliminary Medicare data for 2023 and 2024, and 2021-2023 marital status data. Incorporating these new data results in an increase (improvement) in the long-range actuarial balance of about 0.03 percent of taxable payroll.

In addition, the 2026 Trustees Report now includes 2024 data in the regressions used for the projections, to better capture recent trends in mortality. Beginning with the 2021 Trustees Report, regressions used in the projections were based on data years 2008-2019, so as to not include data from the pandemic years that might bias the projections inappropriately. Now, the regressions use years 2009-2019 and 2024; 2020-2023 data are not used. This data update results in an increase (improvement) in the long-range actuarial balance of about 0.06 percent of taxable payroll.

The low-cost and high-cost alternative ultimate rates of improvement by age and cause are set as percentages of the intermediate alternative assumed rates and, as such, are not displayed separately in the tables at the end of this section. Sex-specific ultimate rates of improvement by age and cause are set equal to each other, but are displayed separately because historical rates of change, projected rates of change through the transition years, and rates of change for all causes combined throughout the projection period vary by sex.

The combined effect of all mortality changes, including incorporating new data and having the regressions use the 2024 data, is a net increase (improvement) in the long-range actuarial balance of about 0.09 percent of taxable payroll.

2.2 Considerations in Selecting a Mortality Projection Method

Projections of mortality improvement are subject to significant uncertainty. Some demographers argue that life expectancy is potentially limitless and that rates of mortality reduction will match or exceed historical trends indefinitely into the future. Others believe that biological limitations make mortality improvement more difficult to achieve in the future and, combined with behavioral factors and economic considerations, future rates of reduction will be more modest than in the past.

Because the method for projecting future mortality is critical in determining the results, this

¹ For 2025, provisional data through May, adjusted for completeness, is used to estimate deaths for the full year.

section compares four approaches that are currently in use by demographers.² These approaches can provide very different results and make very different use of the available data. Some relatively simple approaches have been popular for illustrating trends in longevity but do not address the full complexities of changing conditions over time. Any projection of mortality used to model the size and age structure of the population, which is the foundation for analyzing the actuarial status of programs like Social Security and Medicare, should explicitly consider the past and expected future conditions that affect rates of improvement.

Perhaps the simplest approach to projecting future mortality is to extrapolate past trends in life expectancy. Some have presumed that the rate of increase in life expectancy at birth will be linear for the indefinite future. In 2002, Oeppen and Vaupel contended that a trend for the “best nation” would continue to rise linearly and that the U.S. would catch up to that trend. Further analyses by Lee, and by Villan and Meslé, have shown that this historical trend has not been linear but has been decelerating in recent years. In addition, experience for the U.S. and for other countries has demonstrated that there are clear differences in the populations among developed nations that have made differences in mortality persist. Even if mortality reduction trends by age were to continue unchanged into the future, increase in life expectancy at any age would slow. For assessing the actuarial status of Social Security and Medicare, extrapolation of life expectancy is not useful, because it does not address the age structure of mortality rates or of the population. Table 2.5 displays unisex life expectancy at birth for selected countries. Note that life expectancy at birth is most highly affected by changes in death rates at young ages, particularly at infancy.

A second approach extrapolates death rates on a cohort basis. Shifts in death rates from one cohort to the next have been observed particularly in the U.K., and to a lesser extent in the U.S. However, extrapolating such shifts across ages within a cohort requires careful analysis. If a cohort shows lower death rates up to a given age due to better health, then the improvement may be expected to persist to older ages. However, if the shift is primarily due to interventions that have lowered death rates for individuals with compromised physiology, then death rates for the cohort at older ages might actually be worse than the prior cohort. In addition, advances for one cohort may reflect a level shift in mortality and not a trend of improvement that will continue for succeeding cohorts.

A third, more commonly used approach extrapolates past rates of reduction in mortality, by age and sex, indefinitely into the future. Lee and Carter are the most notable proponents of this approach. They developed a model for fitting a trend to a selected historical period that is then applied for projected improvement, effectively assuming that future conditions for overall reduction by age and sex will match the conditions over the past. Key to this approach is the selection of the “appropriate” historical period. For many years, Lee and Carter suggested using the period starting with 1900. In 2015, they suggested a period starting with 1950, which results in somewhat faster projected rates of mortality improvement for ages 65 and older. The specific historical time period chosen can have significant impacts on the projections. The Lee and Carter extrapolation method presumes no deceleration in the future rate of mortality reduction and presumes no change in the relative rate of decline across ages in the historical period. In

² For further discussion of these approaches, including references to the papers mentioned, please see Actuarial Note 158 at https://www.ssa.gov/oact/NOTES/pdf_notes/note158.pdf.

2016, Lee produced projections of death rates through 2090 using national data by age and sex for the period 1950 through 2011. These death rates resulted in approximately the same overall 75-year actuarial balance for the Social Security program as the death rates used in the 2015 Trustees Report.

The fourth approach for projecting mortality involves more comprehensive use of available data and flexibility for considering how future conditions are expected to differ from the past. This approach takes advantage of historical mortality data by cause of death, age, and sex, which is available on a relatively complete basis for the U.S. starting in 1979. Biologists and many demographers have long recognized the value of modeling mortality by cause. Manton was a pioneer in evaluating effects of eliminating death by a given cause. Others, like Olshansky, have emphasized the strides made in mortality for some causes and the failure to improve for other causes. The actuarial model used for the Trustees Report has, for decades, reflected past trends in mortality by cause, taking into account future expected changes based on input from researchers at the National Institutes of Health, the Centers for Disease Control and Prevention, and others. In a 2016 study, medical researchers and clinicians at Johns Hopkins University (JHU) independently assessed prospects for mortality improvement by cause and age. The JHU study has been extremely useful in evaluating and benchmarking the Trustees' assumptions. Of course, developing assumptions for future rates of mortality reduction by cause and age requires judgment about the expectation of future conditions relative to the past. Consideration of past changes in the rates of mortality reduction for individual causes, along with expert opinion, provides a rich basis for such judgment. Perhaps most importantly, this approach provides a clear disclosure of specific assumptions used for improvement by age and cause of death. This can then be explicitly compared to the historical experience in considerable detail.

Note that the 2015 Technical Panel on Assumptions and Methods, appointed by the independent Social Security Advisory Board, endorsed the use of mortality assumptions by cause group. The 2019 Technical Panel also endorsed using cause of death, but only for the intermediate term (approximately 20 years).

2.3 Considerations in Selecting Mortality Assumptions by Age and Cause of Death

Simple extrapolation of the average trends experienced for any past period to project long-term future trends should only be considered when there is a basis for assuming that future conditions will, on average, replicate past conditions. This approach may have merit for processes where there is no reason to believe there are natural limits, such as for labor productivity of workers, where technology has no apparent limit. Human mortality, on the other hand, is limited by biology. The maximum verified age of survival for a human is age 122 and shows no signs of extending significantly. Biological researchers suggest that extension of the maximum lifespan would require fundamental alteration of the aging process. This may be possible, but there is no clear evidence that it will be achieved within the Trustees' 75-year projection period.

In addition, reductions in mortality have occurred in a very irregular pattern over time, closely reflecting changes in the economy, access to medical care, and behavior of the population. Therefore, in developing assumptions for future mortality improvement by age and cause, it is crucial to study the differing historical rates of decline for various periods and the conditions that

contributed to these variations. Only after considering how future conditions will differ from the past should one speculate about future mortality improvement.

The remainder of this section describes many of the overarching factors that have influenced mortality improvement since 1900 and that will affect it in the future. Section 2.5 provides greater detail regarding the Trustees' assumptions for rates of improvement for each cause of death.

A number of extremely important developments have contributed to the generally rapid overall rate of mortality improvement since 1900. These developments include:

- Discovery of and general availability of antibiotics and immunizations,
- Clean water supply and waste removal,
- Access to primary medical care for the general population (in particular, the access due to Medicare and Medicaid health coverage for the elderly, disabled, and poor),
- Medical advancements (such as prenatal and postnatal care, blood pressure and cholesterol medications, bypass surgery, angioplasty, etc.), and
- The rapid rate of growth in the general standard of living.

Each of these developments is expected to make a substantially smaller contribution to annual rates of mortality improvement over the next 75 years.

Future reductions in mortality will depend upon many factors, including (in no particular order):

- The development and application of new diagnostic, surgical, and life-sustaining techniques,
- The cost and availability of health care,
- The development of new prescription drugs,
- The usage and cost of new and existing prescription drugs,
- The rate of increase in health spending and the efficiency of that spending relative to mortality improvement,
- The presence of environmental pollutants,
- Environmental factors related to climate change,
- Changes in amount and type of physical activity,
- Improvements in nutrition,
- The incidence of violence and suicide,
- The isolation and treatment of causes of disease,
- The emergence of new forms of disease,
- The evolution of existing forms of disease,
- Improvements in prenatal care,
- The prevalence of obesity,
- The prevalence of cigarette smoking,
- The misuse of drugs (including alcohol),
- The extent to which people assume responsibility for their own health,
- Education regarding health, and
- Changes in perception of the value of life.

In reviewing the above list, future progress for some factors seems questionable when recent statistics are considered. NCHS releases have reported a substantial increase in the prevalence of obesity and diabetes, decreased environmental air quality, and an increase in negative side effects from invasive surgical procedures. On the other hand, there is good basis for speculation that there will continue to be substantial breakthroughs in advancing medical technology and treatment in the future. The extent to which such new technologies will have purely positive effects (like improved sanitation) versus mixed effects (as in the case of chemotherapy) will determine their potential for improving mortality. A fundamental consideration, however, is the ability and willingness of society to pay for the development of new treatments and technologies, and to provide these to the population as a whole.

The expansion of national expenditures for health services, research, and development over the last 60 years has been remarkable. Total national health expenditures rose from 5 percent of GDP in 1960 to 18 percent by 2024.³ This expansion has both enhanced health care for those who already had access and extended access to tens of millions through Medicare, Medicaid, and the Affordable Care Act. However, national health expenditures cannot continue to expand at this pace in the future. The Medicare Trustees Report projects a dramatic slowdown in the rate of increase in per-enrollee Medicare spending in the future, as the average number of enrollees will be increasing. The slowdown results from a combination of cost constraints from the Affordable Care Act and the fact that individuals will be living longer after attaining age 65, thus pushing end-of-life costs to older ages. Even with improved efficiency and targeting of medical care in the future, a deceleration in spending per enrollee of this magnitude will tend to slow the rate of reduction in mortality.

Smoking rates have decreased in the U.S. since the 1960s, particularly for men. However, there is a looming concern over other behavioral factors. Reduced physical activity and consumption of excess calories has led to the rising epidemic of obesity. In the future, assuming the prevalence of obesity stabilizes, an increasing portion of the adult and aged population will have been obese for long durations. The effects of prolonged obesity will clearly have negative cumulative effects for diabetes, cardiovascular disease, and cancer in the future.

Education and income are correlated with mortality differences in the population. Higher education and income are associated with lower mortality. It is not entirely clear whether this correlation is largely due to the benefits of higher income and education, or to the “selection” of more advantaged (and thus healthier) individuals in gaining access to the best education and job opportunities. To the extent that the former factor is important, then increasing education and income for the population as a whole may provide some further benefits, but substantially less than in the past, given that further increases in education are likely to slow.

Future progress in treatment of currently predominant diseases is contingent on the availability of funding, research outcomes, and education about lifestyle choices that affect one’s health. Quality of life and average years of healthy living have improved on a continual basis. Much progress has been made in the predominant causes of death (in particular, cardiovascular disease) over the past several decades. These medical advances have caused the predominant causes of death to become less dominant, so that other causes, which have had slower rates of

³ See <https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/historical>.

improvement or have only recently emerged, are becoming more predominant. For the still-predominant causes of death where significant progress has been made, further progress may be more difficult. In contrast, causes that have been less addressed may receive more research attention in the future. Therefore, many causes of death that have recently had rapid rates of reduction may have slower rates in the future. Causes that have had slower rates of improvement in the past may have more rapid rates of improvement in the future.

Finally, note that improvements in mortality and extension of longevity through the last century were relatively unconstrained by limitations of senescence and gradual deterioration of body systems, as we had not yet reached the apparent practical limit to life span. While there is likely no fixed limit for human longevity, it is true that the average human lifespan has improved much more than the maximum observed lifespan. This suggests that even with continued technological advances, the inherent limitations of the physical body and the mind to endure successfully past about 110 years will continue to provide a decelerating force of mortality improvement.

2.4 Past Experience by Cause of Death

In the past, reductions in mortality rates have varied greatly by cause of death. In assessing experience and future possible improvement in mortality, it is important to understand the varying trends in mortality by cause of death. For the period 1979-2024, average annual reductions in central death rates⁴ by age group and sex were analyzed for six basic categories of cause of death: five major groups of cause of death, and a residual group (Other) that contains all other causes. The analysis focuses on the period 1979-2024 because NCHS has provided death rates by cause on a consistent basis since 1979, allowing for consistent groupings of death rates by selected cause groups.

The average annual percentage reductions by age group and cause of death experienced during the periods 1979-2024 and 2014-2024 are presented in table 2.3, along with the ultimate rates that are assumed for the intermediate alternatives of the 2025 and 2026 Trustees Reports.

For all ages combined, the largest average annual rate of reduction over the period 1979-2024 was in the category of **Cardiovascular Disease**, which has been about 2.1 percent for both men and women. The rate of reduction for **Cancer** has been about 1.1 percent for men and about 0.7 percent for women. For the category of **Violence and Accidents**, which includes domestic violence, opioid and alcohol abuse, and suicides, there has been a rate of reduction of less than 0.1 percent for men, but a rate of *increase* of about 0.3 percent for women. For the **Respiratory Disease** category, there has been a rate of reduction of about 0.5 percent for men and a rate of *increase* of about 1.0 percent for women. For the **Dementia** category, there has been a rate of *increase* of 6.8 percent for men and 7.7 percent for women. For the **Other** category, there has been a rate of *increase* of 0.3 percent for men and 0.4 percent for women.

⁴ The average annual reduction over an “n” year period is calculated as the complement of the nth root of the ratio of the death rate in the last year over that of the first year.

2.5 Assumed Future Rates of Reduction in Mortality by Cause of Death

As noted in the previous section, the ultimate average annual percentage reductions by age group and cause of death that are assumed for the intermediate alternative of the 2026 Trustees Report are presented in table 2.3, along with the intermediate assumptions from the 2025 Trustees Report, and the average rates experienced during the historical periods 1979-2024 and 2014-2024. The ultimate rates of improvement by age, sex, and cause for the low-cost and high-cost alternatives are developed as a ratio to the intermediate alternative, with low-cost being one-third of the intermediate rates of improvement and the high-cost being two times the intermediate rates.

As seen in table 2.3, the rate of reduction in mortality due to cardiovascular disease has generally slowed in the last 10 years for all ages. The Trustees believe that ultimate rates of decline for this cause will generally be higher than for these 10 years, but somewhat lower than the rapid pace since 1979. For ages 65 and over, reductions in death rates from respiratory disease have generally increased over the 10-year period, 2014-2024, consistent with a partial continuation of the gains at younger ages in the previous 10 years. For the ultimate rates of reduction, the Trustees expect more modest improvement at ages 65 and over for both the cardiovascular and respiratory causes as the gains from reduced smoking and interventions for heart disease will slow, while effects of obesity will increase.

Reductions in death rates due to cancer for those aged 65 and older have improved significantly in the last 10 years. As indicated by researchers at NCHS, cancer is actually many different diseases, and each will be addressed by the medical community over time. Progress has been made for lung cancer in large part due to reduced smoking. Progress has been made in other areas such as breast cancer and prostate cancer due to increased awareness and medical treatments. However, progress for other cancers has been slower. In addition, there are indications that treatment for a first cancer may result in greater susceptibility to a second cancer at a later time. On balance, however, the Trustees expect that the ultimate average rate of reduction in death due to cancer for ages 65 and older will match or exceed the rate of reduction experienced from 1979 to 2024.

Death rates from violence and accidents (including assault, opioid poisoning, and suicides) have increased substantially in the last 10 years for all ages. The Trustees believe that this trend will not continue indefinitely.

Death rates from dementia have increased significantly at ages 65 and over, although those increases have slowed in the last 10 years. Public health and other government researchers that Actuarial Services has consulted have expressed pessimism about the prospects for significant breakthroughs in treating dementia in the near future, and even beyond. However, the Trustees do assume some modest progress over the next 75 years.

Analyzing death rates from all other causes is always a challenge because this category incorporates new causes that are identified over time. Death rates for this category (all other causes) have risen substantially since 1979. Progress in reducing death rates in this category will be extremely challenging in the future, even as the proportion of all deaths from this group

increases. Even with decelerating spending on health research and services relative to GDP for the future, it is reasonable to assume that spending will be redirected from the largest causes of death in the past (in particular, cardiovascular disease) to other causes (emerging diseases). Thus, the Trustees expect that some progress, even if modest, will be achieved for the all-other category.

Advice from the medical research community (including NCHS and others) has been received on a largely informal basis and has been an essential component in guiding the Trustees' assumptions for reductions in mortality by cause. Insights were gained from a Johns Hopkins University (JHU) study that was published in 2016,⁵ which enlisted medical researchers and clinicians to develop expectations for reductions in death rates over the period 2009-40. This input has been highly instructive in corroborating the Trustees' assumptions for the medium-term and long-term reductions in death rates by cause. Note that the JHU expectations included an assumption that declines for causes not specifically considered by their experts would occur at about one-half of the rate for all other causes combined, somewhat similar to the Trustees' assumptions for the "Other" category.

There are three directly comparable categories of cause of death between the JHU experts and the Trustees. As an example, consider these three categories at ages 85 and older. For cardiovascular disease, the JHU experts projected an average annual rate of decline from 2009-40 of 0.5 percent for women and 0.6 percent for men. The Trustees' ultimate assumption for cardiovascular disease is 1.5 percent. For cancer, the JHU experts projected an average annual rate of decline from 2009-40 of 0.4 percent for women and 0.6 percent for men. The Trustees' ultimate assumption for cancer is 0.5 percent. For respiratory disease, the JHU experts projected an average annual rate of decline from 2009-40 of 0.1 percent for women and 0.4 percent for men. The Trustees' ultimate assumption for respiratory disease is 0.2 percent. In particular, note the similarity of expectations for the respiratory disease and cancer categories between the JHU experts and those assumed for the 2026 Trustees Report.

2.6 Projected Rates of Reduction Based on Assumptions by Age, Sex, and Cause of Death

The period for determining the starting levels of annual mortality reduction is the most recent 12 years of historical data, excluding 2020-2023 (that is, 2009-2019 and 2024), with variable weighting on these 12 years. We do not include 2020-2023 data, in order to avoid biasing the projections inappropriately by including data from the years most affected by the pandemic. Starting levels were calculated by age group, sex, and cause as the percent reductions in log linear regressions of the central death rates.⁶ The rates of improvement rapidly grade to the ultimate rates (attained in 2050) beginning immediately after the last year of data. Under the low-cost and high-cost scenarios, the starting levels of annual reduction are assumed to be 50 percent and 150 percent,⁷ respectively, of the starting levels for the intermediate assumptions.

⁵ North American Actuarial Journal, Volume 20, Issue 3: <https://doi.org/10.1080/10920277.2016.1179123>.

⁶ If the starting level of annual reductions for a particular cause age-sex group is negative, then 75 percent of that starting level is assumed for the intermediate alternative.

⁷ If the starting level of annual reductions for a particular cause age-sex group is negative, then 100 percent of that starting level is assumed for the low-cost alternative and 50 percent is assumed for the high-cost alternative.

Instead of using the measured mortality rates for the last single year of data (2024) as the starting point of the mortality projections, mortality rates were calculated to be consistent with the trend inherent in the 12 years of data included in the analysis, 2009-2019 and 2024. This approach reduces the impact of wide fluctuations that tend to occur in annual data on the starting levels used for the mortality projection.

It is also useful to compare the resulting reductions in death rates for all causes combined to past trends. These are the “Resulting Total” entries displayed in table 2.3. This analysis allows for a further look at the reasonableness of the projections that result from the cause-specific assumptions. In addition, results using the Trustees’ assumptions are compared with those of demographers who prefer to extrapolate past trends without specific consideration of the underlying causes of death.

Table 2.4 provides age-sex-adjusted death rates⁸ for historical years and projected years, based on the assumed future rates of reduction by cause group. The age-sex-adjusted death rates presented in table 2.4 use the April 1, 2010, Census resident population as the standard population for the age-sex adjustment.

Because reductions in mortality have differed widely by age in the past, the ultimate reductions in death rates vary by age group. Historically, reductions have been very rapid at the youngest ages. However, reductions at the oldest ages, ages 85 and over, have been very slow. For many years, the Trustees’ assumptions have reflected the belief that neither of these extremes will persist indefinitely into the future. The Trustees’ assumptions have reflected slower improvement at the youngest ages than evidenced since 1900, and faster improvement at the oldest ages than experienced historically.

Table 2.2 shows historical rates of improvement and the projected rates of improvement based on assumed rates of reduction by cause, by alternative for the 2026 Trustees Report, summarized by age group and sex. For the intermediate alternative, projected rates of improvement for ages under 50 are generally lower than those experienced over the period 1900-2024, consistent with the Trustees’ expectation of continued generally slower improvement in the future for these age groups. For men at age 50 and older, the average projected rates of improvement for years after 2024 are slightly higher than those experienced since 1900. The projected rates of improvement for women at age 50 and older are slightly lower than those assumed for men and generally lower than the rates experienced by this group of women over the period 1900-2024. This is consistent with the Trustees’ long-held belief that average rates of mortality improvement for women, which had been faster than those for men until around 1980, would ultimately converge with average rates of mortality improvement for men. Evidence that improvement for women will not always be faster than for men is apparent in data for years since about 1980. As shown in table 2.3, the rate of improvement in mortality for women ages 65-84 averaged only 0.75 percent per year during the period 1979-2024. This amount was about three-fifths of the average

⁸ The age-sex-adjusted death rate is the crude rate that would occur in the enumerated total population as of a specific date, if that population were to experience the death rates by age and sex observed in, or projected for, the selected year.

rate of improvement for men ages 65-84 during this period (1.27 percent). Similarly, the rate of improvement in mortality for women at age 85 and older averaged only 0.32 percent per year during the period 1979-2024. This amount was about three-fourths of the average rate of improvement for men at age 85 and older during this period (0.43 percent).

For the age group 65 and over (where mortality is concentrated), the average annual rate of improvement experienced during 1900-2024 was 0.77 percent. As can be seen in table 2.2, the various sub-periods during that time frame have experienced slower than average rates of improvement, with the exception of three notable periods. The first was the World War II period and subsequent years, 1936-54. During this period, dramatic advances in the standard of living were achieved due to expanded medical practice including the introduction of antibiotics. The second period was from 1968-82, during which additional dramatic advancements in medicine were made and access to medical services was greatly expanded through Medicare and Medicaid for the old, frail, and disadvantaged, who account for the vast majority of deaths in the population. During the third period, 1999-2009, advances in medicines and surgical treatments led to rapid improvements. Cancer and cardiovascular patients especially benefitted from these advancements.

Chart 2.1 displays the annual age-sex-adjusted central death rates experienced since 1900. An examination of these rates reveals a sequence of distinct periods of mortality reduction. Table 2.2 provides average annual rates of reduction for these periods. During the period 1900-36, annual mortality reduction averaged about 0.5 percent for men and 0.8 percent for women. During the following period, 1936-54, there was more rapid reduction (partially due to antibiotics and other medical advances), averaging 1.8 percent per year for men and 2.5 percent per year for women. The period 1954-68 saw an *increase* of 0.5 percent per year for men and a much slower reduction of 0.5 percent per year for women. From 1968 through 1982, the rate of reduction in mortality surged (partially due to Medicare and Medicaid), averaging 1.8 percent for men and 2.1 percent for women, annually. From 1982 to 1999, moderately slow reduction in mortality returned, averaging 0.8 percent per year for men and 0.2 percent per year for women. From 1999 to 2009, another more rapid period occurred, averaging 1.8 percent per year for men and 1.4 percent per year for women, annually. The latest period, 2009-24, has mortality reduction slowing with average mortality improvement of 0.5 percent per year for men and 0.4 percent per year for women.

For the first four periods mentioned above, spanning 1900 through 1982, the average annual rate of improvement for men was less than that for women. For the last three periods, spanning 1982 through 2024, the opposite was true, i.e., the average annual rate of improvement for women was less than that for men. Chart 2.2 shows differences between sex-specific annual rates of mortality improvement (rates for men minus rates for women) for the age group 65 and older for each year of the period 1969 through 2024. Differences are shown for rates based on Medicare data. Even with normal year-to-year variation, improvement was generally greater for women until about 1980, as had been the case since the beginning of the past century. However, improvement for women was generally less than or equal to that for men beginning in about 1980. The differences in the improvement rates for years 2020-23 are affected by the unusual experience during the pandemic period.

Table 2.2 also shows that, for all ages combined, the projected rate of improvement under the intermediate alternative for the period 2050-2100 is 0.73 percent per year for men and 0.69 percent per year for women. The ultimate rates of improvement for the 2025 Trustees Report (for years 2049-2099) were 0.73 and 0.68 percent per year for men and women, respectively.

A comparison of the basis for past improvement in mortality with the expected basis for future improvement suggests that future improvement is likely to continue, but at a generally slower rate than experienced during the 1900-2024 period for ages under 65. Based on analysis of experience by cause of death, and expected future conditions affecting mortality improvement, it seems reasonable to expect the rate of mortality improvement for the age group 65 and older for the next 75 years to be slightly slower compared to that experienced during 1900-2024 (0.77 percent as shown in table 2.2). The Trustees believe that the average annual rate of decline of 0.67 percent for ages 65 and older (as shown in table 2.2) over the period 2024-2100 for the intermediate assumption is reasonable in this context.

2.7 Trustees' Assumptions versus Historical Trends and Other Assumptions

Table 2.1 shows average rates of reduction in mortality for three broad age groups over two historical periods. In addition, the table includes the following ultimate rates of reduction (the rate of reduction in mortality averaged over the last 50 years of the 75-year long-range period):

- Those assumed for the intermediate ultimate assumptions for various Trustees Reports (choosing those reports that included changes in the ultimate assumptions or in the methodology and the most recent report),
- Those recommended by various Technical Panels, and
- Those resulting from a survey taken at a Society of Actuaries (SOA) seminar.

Rates of improvement shown on the first page of table 2.1 reflect age-sex adjustment to the distribution of the 1990 U.S. population; those on the second page use the distribution of the 2000 U.S. population; and those on the third page use the distribution of the 2010 U.S. population. As seen by comparing the rates on the first and second pages in table 2.1 under the intermediate assumptions of the 2002 and the 2004 Trustees Reports (for which ultimate rates of improvement were the same), the difference in using the different populations for age-sex adjusting makes little difference in the *ultimate average rates* by the broad age groups. This conclusion is further supported by comparing the rates from the 2013 Trustees Report using two different populations for age-sex adjusting, as shown on the second and third pages in table 2.1. For presentations other than table 2.1 of this memorandum, rates of improvement are presented with age-sex adjustment to the distribution of the 2010 U.S. population.

Table 2.1 provides the assumed ultimate average annual percent reductions in mortality for the intermediate assumptions of several prior Trustees Reports, in addition to the 2026 report:

- The 1999 and 2000 Trustees Reports are included because ultimate annual percent reductions were increased substantially in the 2000 Trustees Report.
- The 2002 Trustees Report is included because changes in methodology were made that resulted in increased ultimate annual percent reductions.
- The 2004 Trustees Report values are shown on both the first and second pages of the table to compare results using different populations for age-sex adjustment.

- The 2008 and 2009 Trustees Reports are included because ultimate annual percent reductions were revised.
- The 2011 Trustees Report is included because changes in methodology were made that put more emphasis on the recent historical data.
- The 2013 Trustees Report values are shown on both the second and third pages of the table to compare results using different populations for age-sex adjustment.
- The 2021 Trustees Report is included because the dementia category was added as a cause of death and changes were made to the ultimate rates of improvement for the cardiovascular disease category.

Also included in table 2.1 are the assumed ultimate annual percent reductions in mortality recommended by past Technical Panels and the median response from actuaries, demographers, biologists, and economists who participated in an October 1997 Society of Actuaries seminar. Focusing on mortality for ages 65 and over, it should be noted that since 2000, the Trustees' ultimate rate of reduction under the intermediate assumptions has been somewhat less than the average experienced since 1900. A description of the recommendations of recent Technical Panels is presented in section 2.8.

2.8 Recommendations of the Previous Technical Panels and Other Projections

The Trustees also monitor assumptions and recommendations from other sources.

- The 2015 Technical Panel on Assumptions and Methods, appointed by the Social Security Advisory Board, recommended an assumption of an overall average 1 percent annual reduction in the age-sex-adjusted death rate for the ultimate period (2040 to 2089), compared to the 0.71 percent overall average rate of decline used for the 2015 Trustees Report. However, they supported the Trustees' approach of having an age gradient (i.e., having the rates of improvement at younger ages be greater than rates of improvement at the older ages) and using cause-specific assumptions.
- The 2019 Technical Panel recommended a 1 percent ultimate average annual reduction for all ages combined but noted that the Trustees' assumed age gradient was reasonable. They also recommended considering cause of death in the intermediate term (approximately 20 years), while eliminating cause of death projections for the long term. Finally, they recommended reflecting little or no improvement in aggregate mortality in the near-term and a slower transition to the ultimate rates of improvement.
- For their 2026 projections, the Congressional Budget Office uses an age gradient in projecting mortality rate decline, assuming that after 2028, each five-year age group will continue to decline at the average rate that it has declined from 1950-2019. These assumed mortality rate declines result in a life expectancy at birth of 82.3 years in 2056.⁹ For comparison, the assumptions for the 2026 Trustees Report result in a life expectancy at birth of 81.7 years in 2056.

⁹ See page 5 at <https://www.cbo.gov/system/files/2026-01/61879-Demographic-Outlook.pdf>.

- In the Census Bureau’s 2023 National Population Projections, the assumed mortality rates result in a life expectancy at birth of 83.8 years in 2056.¹⁰ As noted, the Trustees’ assumptions result in a life expectancy at birth of 81.7 years in 2056.

¹⁰ See the nativity, sex, and group “0” values at https://www2.census.gov/programs-surveys/popproj/datasets/2023/2023-popproj/np2023_a3.csv.

Table 2.1: Historical and Assumed Rates of Reduction in Mortality¹

(Using the 1990 Census Resident population as the standard population for age-sex adjusting)

	Historical average annual percent reductions in age-sex-adjusted death rates		Ultimate annual percent reductions in age-sex-adjusted death rates						
			(Based on data from the 2003 Trustees Report)		1994-96	October-97	1999	1999	2000
	1900-2000	1982-2000	Technical Panel ²	SOA Seminar ³	Trustees Alternative 2 ⁴	Technical Panel ⁵	Trustees Alternative 2 ⁶	Trustees Alternative 2 ⁷	Technical Panel ⁸
0 - 14	3.22	2.51	3.30	0.95	1.20	2.23	1.34	1.54	2.29
15 - 64	1.40	1.19	1.40	0.75	0.58	1.13	0.75	0.79	1.11
65 & Over	0.73	0.36	0.75	0.60	0.50	0.99	0.66	0.70	0.90

¹For the 1999 Trustees Report (ages 65 and over), the 1999 Technical Panel (all 3 age groups), and the 2000 Trustees Report (ages 65 and over), the rates of reduction shown are the average of the sex-specific annual rates of reduction in age-adjusted central death rates.

²The 1994-96 Technical Panel (appointed by the Advisory Council) recommended assuming reduction at the average rate experienced during the century.

³The Society of Actuaries Seminar included 60 actuaries, demographers, economists, and other experts on Social Security financing.

Values shown are the median responses of the participants.

⁴The 1999 Trustees ultimate intermediate assumptions are for the period 2023-2073.

⁵The 1999 Technical Panel (appointed by the Advisory Board) recommended that ultimate rate of reduction in mortality be increased at all ages (over the 1999 Trustees Report assumptions) by enough to increase the projected life expectancy at birth for 2070 by 3.7 years (to the level assumed for the high-cost alternative).

⁶The 2000 Trustees ultimate intermediate assumptions are for the period 2024-2074. Ultimate rates of mortality reduction increased.

⁷The 2002 Trustees ultimate intermediate assumptions are for the period 2026-2076. Changes to projection methodology increased rates of mortality reduction.

⁸The 2003 Technical Panel ultimate assumptions are for the period 2027-2077.

Table 2.1 (Continued): Historical and Assumed Rates of Reduction in Mortality
 (Using the 2000 Census Resident population as the standard population for age-sex adjusting)

	Historical average annual percent reductions in age-sex-adjusted death rates		Ultimate annual percent reductions in age-sex-adjusted death rates						
	(Based on data from the 2013 Trustees Report)		2004 Trustees	2007 Technical	2008 Trustees	2009 Trustees	2011 Trustees	2011 Technical	2013 Trustees
	1900-2009	1982-2009	Alternative 2¹	Panel²	Alternative 2³	Alternative 2⁴	Alternative 2⁵	Panel⁶	Alternative 2⁷
0 - 14	3.10	2.26	1.54	1.00	1.56	1.55	1.56	1.26	1.57
15 - 64	1.35	1.17	0.79	1.00	1.00	0.99	0.96	1.26	0.98
65 & Over	0.81	0.84	0.68	1.00	0.65	0.71	0.66	1.26	0.64

¹The 2004 Trustees ultimate intermediate assumptions are for the period 2028-2078.
²The 2007 Technical Panel ultimate assumptions are for the period 2031-2081.
³The 2008 Trustees ultimate intermediate assumptions are for the period 2032-2082.
⁴The 2009 Trustees ultimate intermediate assumptions are for the period 2033-2083.
⁵The 2011 Trustees ultimate intermediate assumptions are for the period 2035-2085.
⁶The 2011 Technical Panel ultimate assumptions are for the period 2035-2085.
⁷The 2013 Trustees ultimate intermediate assumptions are for the period 2037-2087.

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Table 2.1 (Continued): Historical and Assumed Rates of Reduction in Mortality
 (Using the 2010 Census Resident population as the standard population for age-sex adjusting)

	Historical average annual percent reductions in age-sex-adjusted death rates		Ultimate annual percent reductions in age-sex-adjusted death rates				
	(Based on data from the 2026 Trustees Report)		2013	2015	2019	2021	2026
	1900-2024	1982-2024	Trustees Alternative 2¹	Technical Panel²	Technical Panel³	Trustees Alternative 2⁴	Trustees Alternative 2⁵
0 - 14	2.83	1.74	1.57	2.44	2.10	1.52	1.51
15 - 64	1.15	0.81	1.00	1.48	1.35	0.92	0.90
65 & Over	0.77	0.75	0.63	0.86	0.87	0.64	0.63

¹The 2013 Trustees ultimate intermediate assumptions are for the period 2037-2087.

²The 2015 Technical Panel ultimate assumptions are for the period 2039-2089.

³The 2019 Technical Panel ultimate assumptions are for the period 2043-2093.

⁴The 2021 Trustees ultimate intermediate assumptions are for the period 2045-2095.

⁵The 2026 Trustees ultimate intermediate assumptions are for the period 2050-2100.

Table 2.2: Average Annual Percent Reductions in Age-Adjusted Central Death Rates for the 2026 Trustees Report ¹

		Historical Period								Intermediate Alternative		
Sex	Age	1900-1936	1936-1954	1954-1968	1968-1982	1982-1999	1999-2009	2009-2024	1900-2024	2024-2050	2024-2100	2050-2100
Boys and Men	0-14	2.85	4.76	1.68	4.28	2.75	1.60	0.94	2.82	1.43	1.48	1.50
	15-49	1.18	3.32	-0.42	2.12	1.10	0.86	-0.65	1.16	0.51	0.71	0.82
	50-64	0.13	1.30	-0.21	2.22	1.83	1.17	0.41	0.85	0.85	0.90	0.92
	65-84	0.07	1.32	-0.37	1.51	1.05	2.45	0.77	0.78	0.85	0.77	0.73
	85+	0.19	1.68	-1.18	1.71	-0.45	1.52	0.53	0.49	0.67	0.61	0.59
	65+	0.11	1.44	-0.64	1.58	0.51	2.08	0.67	0.67	0.77	0.70	0.66
	Total	0.53	1.77	-0.46	1.81	0.83	1.81	0.49	0.88	0.76	0.74	0.73
Girls and Women	0-14	3.10	4.99	1.76	4.07	2.55	1.51	0.65	2.84	1.45	1.50	1.53
	15-49	1.70	4.89	0.28	2.74	0.73	0.16	-0.14	1.65	0.67	0.82	0.89
	50-64	0.72	2.79	0.71	1.64	0.97	1.36	0.27	1.16	0.86	0.93	0.96
	65-84	0.29	2.23	0.83	2.03	0.25	1.70	0.69	0.99	0.80	0.71	0.66
	85+	0.22	1.59	-0.12	2.28	-0.39	1.25	0.25	0.62	0.61	0.56	0.54
	65+	0.27	2.00	0.46	2.13	-0.02	1.50	0.49	0.84	0.71	0.64	0.61
	Total	0.80	2.54	0.53	2.15	0.24	1.39	0.41	1.10	0.74	0.71	0.69
Total	0-14	2.96	4.86	1.72	4.19	2.66	1.56	0.81	2.83	1.44	1.49	1.51
	15-49	1.42	3.95	-0.17	2.33	0.98	0.62	-0.47	1.36	0.56	0.75	0.84
	50-64	0.40	1.91	0.12	2.01	1.51	1.24	0.35	0.99	0.86	0.91	0.94
	65-84	0.19	1.77	0.18	1.75	0.71	2.10	0.72	0.89	0.82	0.74	0.70
	85+	0.21	1.62	-0.49	2.06	-0.41	1.38	0.36	0.58	0.63	0.58	0.56
	65+	0.20	1.72	-0.06	1.86	0.29	1.80	0.57	0.77	0.74	0.67	0.63
	Total	0.66	2.13	0.02	1.99	0.60	1.61	0.44	1.00	0.75	0.72	0.71

¹Using the 2010 Census Resident population as the standard population for age adjusting.

Table 2.2 (Continued): Average Annual Percent Reductions in Age-Adjusted Central Death Rates for the 2026 Trustees Report ¹

		Low-Cost Alternative			High-Cost Alternative		
Sex	Age	2024-2050	2024-2100	2050-2100	2024-2050	2024-2100	2050-2100
Boys and Men	0-14	0.50	0.51	0.51	2.78	2.84	2.88
	15-49	-0.04	0.17	0.28	1.29	1.49	1.59
	50-64	0.21	0.29	0.33	1.74	1.68	1.65
	65-84	0.27	0.28	0.29	1.60	1.31	1.16
	85+	0.22	0.22	0.23	1.26	1.04	0.93
	65+	0.25	0.26	0.26	1.45	1.19	1.05
	Total	0.21	0.26	0.28	1.50	1.31	1.21
Girls and Women	0-14	0.52	0.52	0.52	2.81	2.89	2.94
	15-49	0.09	0.23	0.31	1.50	1.63	1.70
	50-64	0.22	0.30	0.34	1.76	1.73	1.72
	65-84	0.27	0.27	0.26	1.49	1.20	1.05
	85+	0.20	0.21	0.22	1.15	0.95	0.84
	65+	0.24	0.24	0.24	1.33	1.08	0.94
	Total	0.23	0.25	0.27	1.43	1.21	1.10
Total	0-14	0.51	0.51	0.52	2.79	2.87	2.90
	15-49	0.00	0.19	0.29	1.36	1.53	1.63
	50-64	0.22	0.29	0.34	1.75	1.70	1.68
	65-84	0.27	0.27	0.28	1.54	1.26	1.11
	85+	0.20	0.21	0.22	1.19	0.98	0.87
	65+	0.24	0.25	0.25	1.39	1.13	0.99
	Total	0.22	0.25	0.27	1.46	1.26	1.16

¹Using the 2010 Census Resident population as the standard population for age adjusting.

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**Table 2.3: Average Annual Rates of Reduction in Central
Death Rates by Age Group, Sex, and Cause**

	Historical		Alternative II*		Historical		Alternative II*	
	1979 to 2024	2014 to 2024	2025 TR	2026 TR	1979 to 2024	2014 to 2024	2025 TR	2026 TR
	Boys and Men				Girls and Women			
Under Age 15								
Cardiovascular Disease	1.62	0.14	1.9	1.9	1.48	-0.13	1.9	1.9
Cancer	1.88	0.30	1.5	1.5	1.62	-0.54	1.5	1.5
Violence and Accidents	2.05	-1.02	1.0	1.0	1.65	-1.75	1.0	1.0
Respiratory Disease	2.37	1.68	2.0	2.0	2.40	1.86	2.0	2.0
Dementia	3.17	5.80	0.1	0.1	2.62	4.02	0.1	0.1
Other	1.98	0.47	1.7	1.7	1.80	0.10	1.7	1.7
Resulting Total **	2.00	0.22	1.50	1.50	1.78	-0.16	1.53	1.53
Ages 15 - 49								
Cardiovascular Disease	1.61	0.04	1.3	1.3	1.08	0.01	1.3	1.3
Cancer	1.74	1.24	1.5	1.5	1.51	1.17	1.5	1.5
Violence and Accidents	0.23	-2.40	0.7	0.7	-0.14	-1.59	0.7	0.7
Respiratory Disease	0.44	0.87	0.5	0.5	-0.19	1.54	0.5	0.5
Dementia	1.46	0.00	0.1	0.1	0.49	-1.02	0.1	0.1
Other	-0.10	-1.92	0.8	0.8	-0.21	-1.08	0.8	0.8
Resulting Total **	0.60	-1.48	0.82	0.82	0.45	-0.51	0.89	0.89
Ages 50 - 64								
Cardiovascular Disease	2.21	0.34	1.5	1.5	1.80	0.22	1.5	1.5
Cancer	1.73	2.91	1.5	1.5	1.27	1.74	1.5	1.5
Violence and Accidents	-0.51	-2.92	0.5	0.5	-0.64	-1.06	0.5	0.5
Respiratory Disease	0.79	1.85	0.7	0.7	-0.74	1.07	0.7	0.7
Dementia	-2.35	-1.93	0.1	0.1	-3.00	-2.20	0.1	0.1
Other	-0.29	-0.18	0.6	0.6	-0.37	-0.64	0.6	0.6
Resulting Total **	1.21	0.50	0.94	0.92	0.80	0.47	0.96	0.96
Ages 65 - 84								
Cardiovascular Disease	2.52	0.77	1.9	1.9	2.41	0.87	1.9	1.9
Cancer	1.13	2.04	0.9	0.9	0.45	1.83	0.9	0.9
Violence and Accidents	0.04	-2.11	0.5	0.5	-0.21	-1.32	0.5	0.5
Respiratory Disease	0.71	2.18	0.3	0.3	-1.36	1.93	0.3	0.3
Dementia	-6.01	-0.58	0.1	0.1	-7.01	-1.09	0.1	0.1
Other	-0.42	-1.15	0.3	0.3	-0.56	-0.74	0.3	0.3
Resulting Total **	1.27	0.66	0.73	0.73	0.75	0.66	0.66	0.66
Ages 85 and older								
Cardiovascular Disease	1.67	0.82	1.5	1.5	1.86	0.75	1.5	1.5
Cancer	0.12	0.86	0.5	0.5	-0.17	0.32	0.5	0.5
Violence and Accidents	-0.71	-1.06	0.3	0.3	-1.15	-1.68	0.3	0.3
Respiratory Disease	0.06	2.91	0.2	0.2	-0.98	1.87	0.2	0.2
Dementia	-8.19	0.23	0.1	0.1	-8.99	-0.25	0.1	0.1
Other	-0.92	-1.08	0.3	0.3	-0.86	-0.91	0.3	0.3
Resulting Total **	0.43	0.55	0.58	0.59	0.32	0.23	0.53	0.54
Total								
Cardiovascular Disease	2.14	0.68	1.63	1.63	2.06	0.71	1.63	1.63
Cancer	1.12	1.93	0.90	0.90	0.69	1.49	0.96	0.96
Violence and Accidents	0.03	-2.30	0.58	0.58	-0.27	-1.45	0.56	0.56
Respiratory Disease	0.52	2.36	0.31	0.32	-1.05	1.78	0.32	0.33
Dementia	-6.77	-0.09	0.10	0.10	-7.74	-0.55	0.10	0.10
Other	-0.32	-0.94	0.43	0.43	-0.37	-0.76	0.43	0.43
Resulting Total **	0.98	0.38	0.73	0.73	0.61	0.38	0.68	0.69

* Alternative 1 is 1/3 times Alternative 2; Alternative 3 is 2 times Alternative 2.

** For the "Alternative II" columns, resulting total represents average annual percent reduction in age-adjusted death rates for the last 50 years of the 75-year projection period.

Table 2.4: Age-Sex-Adjusted Central Death Rates

(per 100,000 population)

Year	2025 TR		2026 TR			
1900			2,684.3		2,684.3	
1910			2,495.9		2,495.9	
1920			2,304.5		2,304.5	
1930			2,094.9		2,094.9	
1940			1,919.8		1,919.8	
1950			1,561.9		1,561.9	
1960			1,454.3		1,454.3	
1970			1,719.1		1,350.2	
1980			1,145.2		1,145.2	
1990			1,026.2		1,026.2	
2000			964.1		964.1	
2001			954.0		954.0	
2002			950.0		950.0	
2003			936.0		936.0	
2004			901.4		901.4	
2005			903.7		903.7	
2006			880.1		880.1	
2007			859.3		859.3	
2008			859.8		859.8	
2009			828.3		828.3	
2010			821.5		821.5	
2011			820.5		820.5	
2012			811.7		811.7	
2013			812.4		812.4	
2014			803.8		803.8	
2015			813.7		813.7	
2016			805.9		805.9	
2017			810.4		810.3	
2018			801.8		801.8	
2019			789.5		789.5	
2020			918.2		918.2	
2021			930.8		930.8	
2022			867.4		867.3	
2023			802.0		801.5	
2024			769.7 ¹		775.6	
2025			764.4 ¹		774.2 ²	
	Alternative I		Alternative II		Alternative III	
	2025 TR	2026 TR	2025 TR	2026 TR	2025 TR	2026 TR
2030	781.2	773.1	734.3	749.0	676.5	719.3
2040	760.0	754.0	676.1	691.4	578.0	615.1
2050	738.6	733.2	623.8	637.7	499.5	529.3
2060	718.1	712.9	577.6	590.0	437.2	461.1
2070	698.4	693.5	536.6	547.7	387.1	406.6
2080	679.5	674.8	500.1	510.1	346.2	362.3
2090	661.4	657.0	467.6	476.6	312.5	325.9
2100	644.1	639.8	438.5	446.7	284.2	295.6

¹ Estimated, intermediate alternative.

² Estimated.

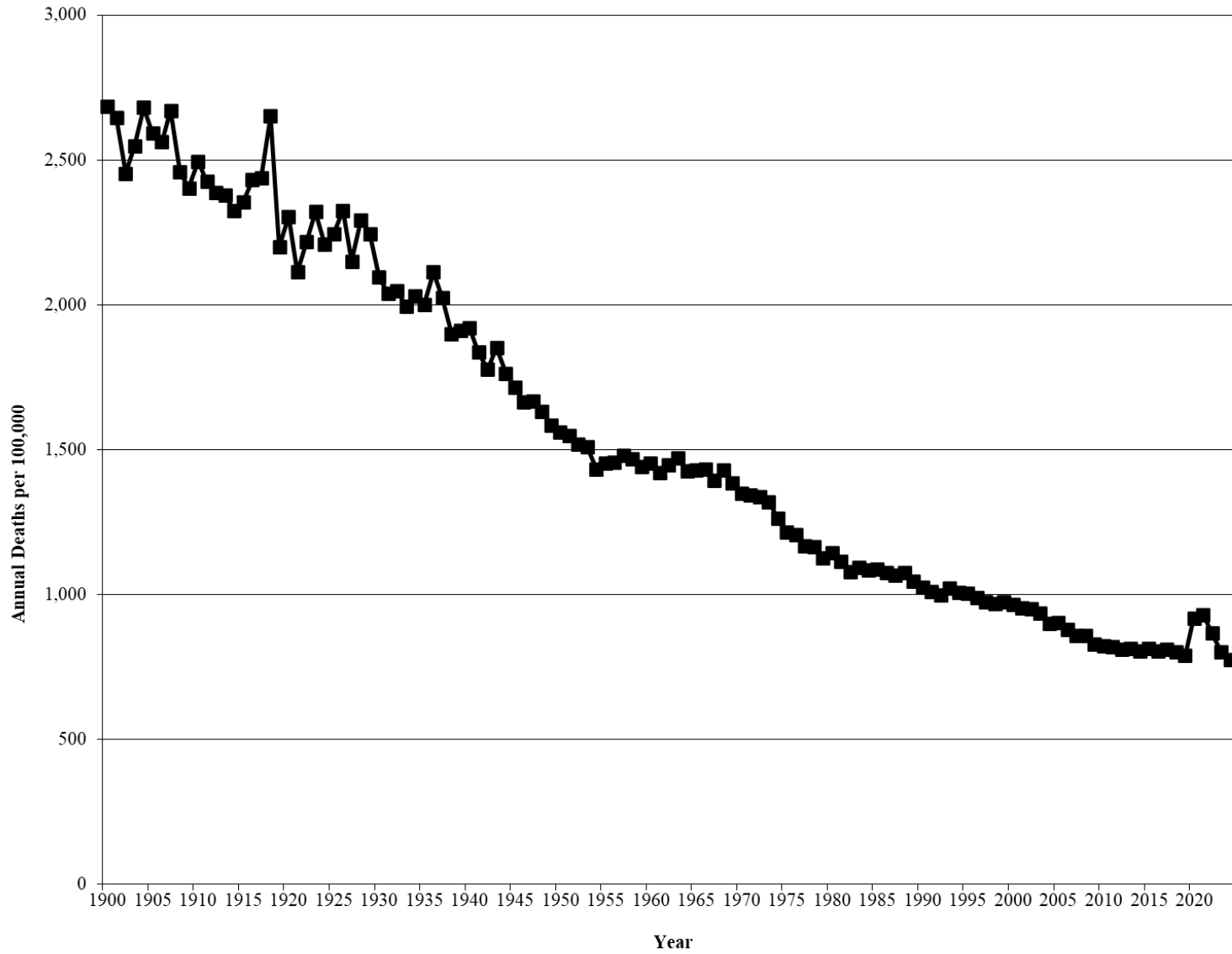
**Table 2.5: Historical Unisex Life Expectancy at Birth, by Country
1980-2023**

Country	1980	1985	1990	1995	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Latest 10-Year Change
Australia	—	75.5	76.9	77.8	79.2	80.8	81.7	81.9	82.0	82.1	82.3	82.4	82.4	82.5	82.8	82.9	83.2	83.3	83.2	83.0	0.9
Brazil	61.8	64.0	65.9	67.7	69.6	71.8	73.8	74.0	74.3	74.6	74.8	75.1	75.1	75.4	75.6	75.8	74.5	73.0	74.9	75.8	1.2
Canada	75.1	76.4	77.5	78.1	79.3	80.2	81.4	81.6	81.8	81.8	81.9	81.9	82.0	81.9	81.9	82.2	81.6	81.6	81.3	81.7	-0.1
China	64.2	66.5	68.2	70.4	72.3	74.1	75.7	75.9	76.2	76.5	76.7	77.0	77.2	77.2	77.7	77.9	78.0	78.1	78.2	78.0	1.5
France	74.3	75.4	77.0	78.1	79.2	80.3	81.8	82.3	82.1	82.4	82.9	82.4	82.7	82.7	82.8	83.0	82.3	82.4	82.3	83.0	0.6
Germany	73.1	74.6	75.4	76.7	78.3	79.4	80.5	80.6	80.7	80.6	81.2	80.7	81.0	81.1	81.0	81.3	81.1	80.8	80.7	81.1	0.5
Greece	75.3	76.0	77.1	77.8	78.6	79.6	80.6	80.8	80.7	81.4	81.5	81.1	81.5	81.4	81.9	81.7	81.4	80.2	80.8	81.8	0.4
India	53.6	56.3	58.6	60.6	62.7	64.9	67.2	67.6	68.1	68.5	68.9	69.3	69.7	70.1	70.4	70.7	70.2	67.3	71.7	72.0	3.5
Ireland	72.9	73.4	74.8	75.5	76.6	79.0	80.8	80.9	80.9	81.0	81.4	81.5	81.7	82.2	82.2	82.8	82.5	82.3	82.6	82.9	1.9
Italy	74.0	75.6	77.1	78.3	79.9	80.9	82.2	82.4	82.4	82.9	83.2	82.7	83.4	83.1	83.4	83.6	82.3	82.7	82.8	83.5	0.6
Japan	76.1	77.6	78.9	79.6	81.2	82.0	82.9	82.7	83.2	83.4	83.7	83.9	84.1	84.2	84.3	84.4	84.6	84.5	84.1	84.1	0.7
Korea	66.1	68.9	71.7	73.8	76.0	78.2	80.2	80.6	80.9	81.4	81.8	82.1	82.4	82.7	82.7	83.3	83.5	83.6	82.7	83.5	2.1
Mexico	66.2	69.0	70.9	72.2	74.7	75.2	74.3	74.8	74.9	75.2	75.1	75.1	74.8	74.8	74.9	74.8	68.9	68.8	75.2	75.3	0.1
Netherlands	75.9	76.5	77.1	77.6	78.2	79.6	81.0	81.3	81.2	81.4	81.8	81.6	81.7	81.8	81.9	82.2	81.4	81.4	81.7	81.9	0.5
New Zealand	73.2	74.0	75.5	76.8	78.4	79.8	80.8	81.0	81.2	81.4	81.4	81.5	81.6	81.7	81.7	82.1	82.3	82.3	82.0	82.0	0.6
Spain	75.5	76.4	76.9	78.1	79.3	80.3	82.4	82.6	82.5	83.2	83.3	83.0	83.5	83.4	83.5	84.0	82.3	83.3	83.2	84.0	0.8
Sweden	75.8	76.8	77.7	79.0	79.8	80.7	81.6	81.9	81.8	82.0	82.3	82.2	82.4	82.5	82.6	83.2	82.4	83.1	83.1	83.4	1.4
United Kingdom	73.6	74.5	75.7	76.6	77.8	79.0	80.4	80.7	80.8	80.9	81.1	80.9	81.0	81.1	81.0	81.4	80.3	80.5	80.9	81.0	0.1
United States	73.6	74.5	75.2	75.7	76.6	77.3	78.4	78.5	78.6	78.6	78.7	78.5	78.5	78.4	78.6	78.7	76.9	76.3	77.4	78.4	-0.2

Source: United States: Social Security Administration Actuarial Services calculations based on data from the National Center for Health Statistics, Census Bureau, and the Centers for Medicare and Medicaid Services
Other countries: Organisation for Economic Co-operation and Development website at: <https://data.oecd.org/healthstat/life-expectancy-at-birth.htm>.

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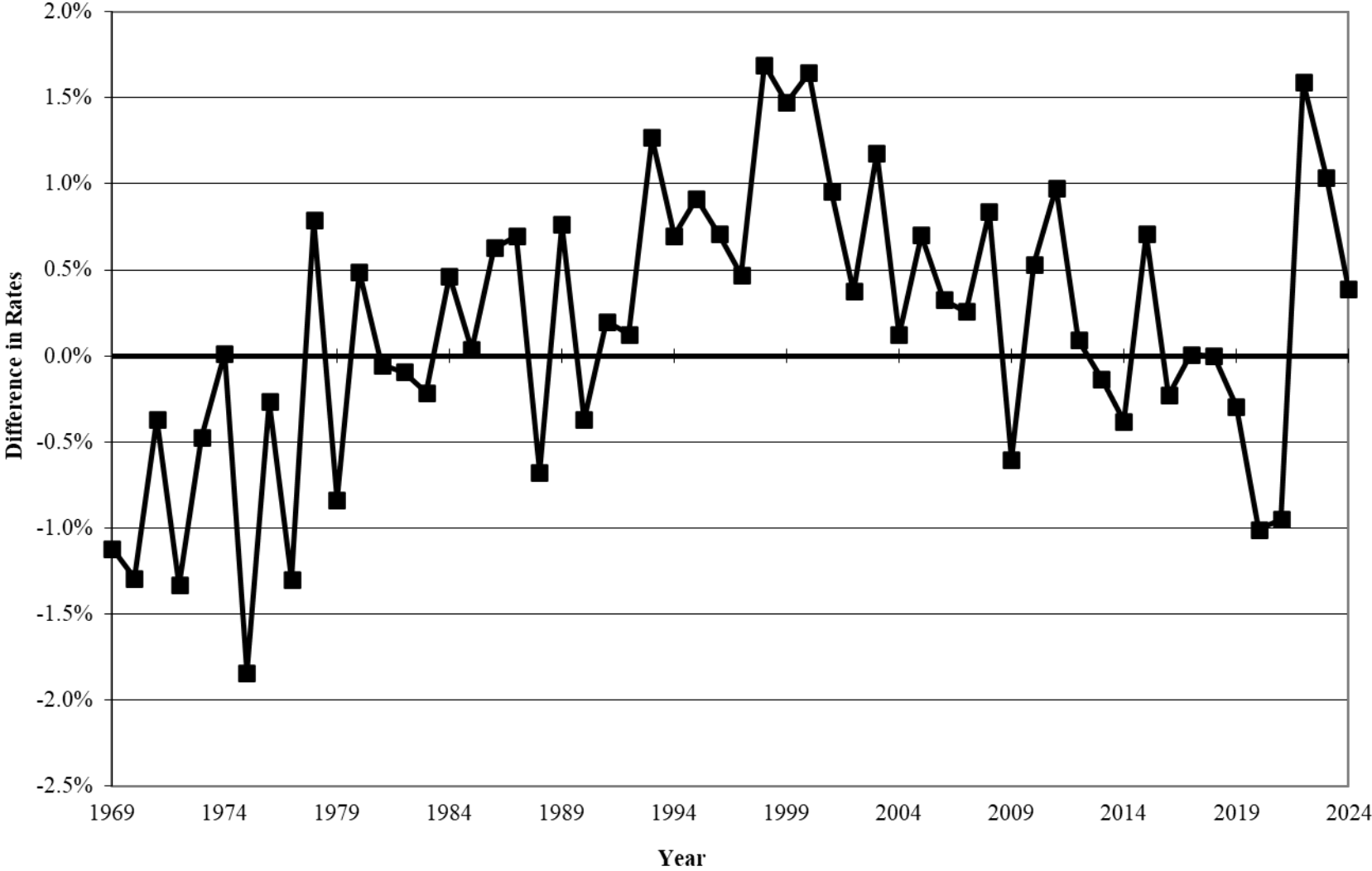
Chart 2.1: Historical United States Age-Sex-Adjusted Central Death Rates from 1900-2024



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Chart 2.2: Difference Between Sex-Specific Annual Percent Reductions in Age-Adjusted Death Rates (Rates for Men Minus Rates for Women) for Population 65 and Older

(based on Medicare data)



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3. IMMIGRATION

ASSUMPTIONS FOR THE 2026 TRUSTEES REPORT
SOCIAL SECURITY ADMINISTRATION, ACTUARIAL SERVICES

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3.1 Summary

For the 2026 Trustees Report, the ultimate lawful permanent resident (LPR) immigration assumptions remain the same as those used in the 2025 Trustees Report. However, the ultimate assumptions for the levels of temporary or unlawfully present immigration have been decreased from the levels assumed in the 2025 Trustees Report. In addition, the assumptions for near-term temporary or unlawfully present immigration and emigration have been updated to reflect expected lower net immigration over the next few years. Table 3.1 displays the annual immigration levels assumed for the 2026 Trustees Report as well as those assumed for the 2025 Trustees Report.

The annual number of immigrants attaining LPR status averaged 1.06 million persons per year for fiscal years 2010 through 2019, the last decade prior to the COVID-19 pandemic. Based on this average and the Trustees' belief that the number of future immigrants attaining LPR status in the category of immediate relatives of U.S. citizens will remain close to recent levels (prior to the pandemic), the intermediate ultimate assumption is retained at 1.05 million new LPRs per year for the 2026 Trustees Report. The Trustees also retained the intermediate assumption that legal emigration out of the Social Security area will be 25 percent of the number of immigrants attaining LPR status, so that the ultimate level of legal emigrants is 262,500 per year.

The COVID-19 pandemic started affecting immigration levels in 2020, and the Trustees assume that its aftereffects will continue to affect LPR immigration in 2025. The assumptions for the 2026 Trustees Report include elevated levels of LPR immigration in 2025, compared to the levels that would have been assumed in the absence of the pandemic. These higher levels for 2025 reflect the assumption that those people who had planned to immigrate in 2020-2022, but were unable to enter due to reasons related to the pandemic, have delayed their immigration to later years instead. Recent data show elevated levels of LPR immigration for 2023-2024. For all years after 2025, the Trustees assume that LPR immigration levels will be at ultimate levels.

The immigration model projects the annual temporary or unlawfully present immigration flows in three main components: (1) the temporary or unlawfully present immigrants entering the Social Security area each year, (2) those who leave the stock of temporary or unlawfully present immigrants by emigrating outside the Social Security area, and (3) the temporary or unlawfully present immigrants who adjust status to become LPRs, thereby leaving temporary or unlawfully present status. The net level of temporary or unlawfully present immigration is equal to the gross level of temporary or unlawfully present immigration, less those temporary or unlawfully present immigrants who leave the Social Security area, and less those who adjust status to become LPRs.

The immigration model projects the stock of temporary or unlawfully present immigrants, in three specific categories: (1) those who have temporary legal status ("nonimmigrants"), (2) those who never had legal status ("never-authorized"), and (3) those who originally entered legally as nonimmigrants but overstayed their visas ("visa-overstayers").

The temporary or unlawfully present immigration levels for the 2026 Trustees Report are estimated to be lower for recent historical years, compared to the levels estimated for the 2025

Trustees Report. This is due to: (1) downward revisions in the Department of Homeland Security's (DHS) estimated number of "got aways" (i.e., people who were observed entering the United States unlawfully but were not apprehended or turned back) in 2022-2023, (2) new border crossing data from DHS showing a significant decrease in border crossings in 2024, and an even sharper decrease in the first seven months of 2025, and (3) an assumed decrease of 150,000 in the ultimate temporary or unlawfully present immigration levels in 2035 and later. For years after 2026, the Trustees assume a transition path in which the temporary or unlawfully present immigration levels increase each year from the low levels assumed for 2026 to the ultimate levels by 2035.

Additionally, for the 2026 Trustees Report, the Trustees assume that emigration rates from the unlawfully present population will be higher than those assumed in the 2025 Trustees Report, for years 2025-2030. This assumption change is based on the recent adoption of more restrictive policies regarding the unlawfully present population, and the expectation that these policies will continue into the near future.

After updating the recent immigration experience and assumptions for the future, the level of net temporary or unlawfully present immigration, under the intermediate alternative, is projected to be about 191,000 persons for 2030, 391,000 persons for 2060, and 361,000 persons for 2100. The average level of net temporary or unlawfully present immigration during the last 65 years of the Trustees' projection period is approximately 389,000 persons per year.

The lower estimated temporary or unlawfully present immigration levels for years 2022-2025 result in a decrease (worsening) in the long-range actuarial balance of about 0.04 percent of taxable payroll. The assumed increase in emigration rates from the unlawfully present population, for years 2025-2030, results in a decrease (worsening) in the long-range actuarial balance of about 0.05 percent of taxable payroll. Finally, the lower assumed temporary or unlawfully present immigration levels for years 2026 and later result in a decrease (worsening) in the long-range actuarial balance of about 0.12 percent of taxable payroll. The combined effect of all immigration changes, including minor data and methodology updates not mentioned above, is a net decrease (worsening) in the long-range actuarial balance of about 0.21 percent of taxable payroll.

3.2 Lawful Permanent Resident (LPR) Immigration

The term LPR immigration refers to the number of persons granted authorization to live and work in the United States on a permanent basis. Hereafter, these individuals are referred to as *lawful permanent residents* (LPRs). Many individuals are admitted to the country legally but on a temporary basis. These individuals are included as a portion of the temporary or unlawfully present immigrants and are discussed in the following sections of this memorandum.

There are two ways immigrants attain LPR status:

- 1) New-arrival LPRs are persons who file applications to become LPRs with the Department of State while living outside of the United States and become LPRs upon entry.

- 2) Adjustments of Status¹ are persons who are already living in the United States as lawfully present temporary workers or students, or as unlawfully present immigrants, and who apply for and receive adjustments of status to be LPRs.

LPR immigration has been a very important element in the growth of the United States population. For the period 1870 through 1930, the population averaged about 13 percent foreign born. The Census Bureau estimates that the percentage of the civilian non-institutionalized population that is foreign born declined to a low of about 5 percent in the 1970 Census but rose to about 8 percent in the 1990 Census. The percentage has increased dramatically in recent decades. While not exactly comparable to the earlier Census estimates, the foreign-born population percentage for the entire United States was estimated to be approximately 14.8 percent in the 2024 American Community Survey.

Data on the number of LPR immigrants admitted to the U.S., including U.S. possessions and territories and Armed Service posts abroad, are obtained from the Office of Homeland Security Statistics (OHSS), a component of DHS. LPR immigration averaged nearly one million persons per year for the period 1904 through 1914. LPR immigration decreased greatly during World War I and following the adoption of quotas based on national origin in 1921. The economic depression in the 1930s caused an additional, but temporary, decrease that resulted in more emigration than immigration. Annual LPR immigration increased after World War II to around 200,000 to 300,000 persons and stayed at that level through the 1950s and into the 1960s. With the Immigration Act of 1965 and other related changes, annual LPR immigration increased to about 400,000 and remained fairly stable until 1977. Between 1977 and 1990, LPR immigration (excluding aliens admitted under the Immigration Reform and Control Act of 1986 [IRCA]) averaged approximately 560,000 per year. This increase was due to the increase in the numbers of relatives admitted and to the large numbers of refugees and political asylees admitted during this period. Table 3.2 lists LPR immigration for fiscal years 1966 through 1991, reflecting the immigration categories established in the 1965 Act.

The Immigration Act of 1990, which took effect in fiscal year 1992, restructured the immigration categories and substantially increased the number of immigrants that may legally enter the United States each year. For fiscal years 1995 and later, the 1990 law specified an annual limit that could range between 421,000 and 675,000 for certain categories of immigrants. These categories and their limits include those admitted based on family-sponsored preference (226,000 to 480,000), employment-based preference (140,000), and diversity (55,000). Other categories of immigrants, such as refugees, are subject to separate limits. The Real ID Act of 2005 eliminated the numerical limit on asylees, and no numerical limitation exists for immediate relatives of U.S. citizens. For each of the numerically limited categories, the limits may be adjusted annually based on unused amounts from prior years or other categories. Table 3.3 displays these unadjusted limits and the adjusted limits for each fiscal year from 1995 through 2024.

¹ DHS also considers refugees and asylees to be adjustments of status, but for the purposes of the immigration model, these categories are treated as new arrivals.

The annual level of total LPR immigration and the levels by category can vary considerably from year to year, as shown in table 3.4. For fiscal years 1998 and 1999, total LPR immigration was about 650,000 per year, the lowest level since the 1990 Act went into effect. This drop is attributed to a backlog in the process caused mainly by the longer time required to process the affidavit of support and the shifting of responsibilities from the Department of State to DHS. For years 2000 through 2002, total LPR immigration increased to an average of about 1,000,000 per year, mainly due to the efforts to reduce the backlog of pending immigration applications. In 2003, total LPR immigration declined to a level of 704,000 before increasing again and peaking at a level of 1,266,000 in 2006. From 2007 through 2019, total LPR immigration averaged about 1,100,000 per year. Total LPR immigration then decreased to 707,000 in 2020, largely due to pandemic-related restrictions on immigration in that year. Total LPR immigration then increased to 1,173,000 by 2023.

Historically, the adjustment of status category has been a substantial portion of all new LPRs. For years 2000 through 2005, approximately 50 percent of all new LPRs were people who had already been in the country as lawfully present temporary workers or foreign students, or as unlawfully present immigrants and who filed an application for adjustment to LPR status. However, the percentage decreased to an average of approximately 40 percent for years 2006 through 2019. The percentage increased to approximately 60 percent in years 2020-21, largely due to the pandemic-related decrease in new-arrival LPRs in those years. The percentage then decreased to between 40 and 45 percent in years 2022-2024. Thus, the Trustees assume slightly over 40 percent of future individuals becoming LPRs will be adjustments of status from the temporary or unlawfully present immigrant population.

As noted above, LPR immigration levels in 2025 are assumed to be higher than the levels that would have been assumed in the absence of the COVID-19 pandemic, making up for the lower immigration levels that were experienced in 2020-22. Table 3.1 shows a comparison of the levels assumed in the 2025 Trustees Report with those assumed in the 2026 Trustees Report.

For the intermediate alternative, the Trustees assume that ultimate LPR immigration levels will be 1,050,000 persons per year, consistent with recent historical levels. It is possible that future global economic conditions assumed under the high-cost alternative and/or less favorable attitudes toward immigration could result in generally lower immigration. Therefore, the Trustees assume an ultimate level of 850,000 LPR immigrants per year for the high-cost alternative. On the other hand, the possibility of a significant increase in the number of immediate relatives admitted and the uncertainty of the number of asylees permits the possibility of annual LPR immigration substantially higher than 1,050,000 persons per year. Therefore, the ultimate level for the low-cost alternative is 1,250,000 persons per year. The ultimate assumptions are reached in 2026 for all three alternatives.

3.3 Legal Emigration

Statistics on emigration are sparse and most analysis is based largely on estimates. Research done by the Census Bureau, the OHSS, and other experts suggests that annual emigration may generally be in the range of 20 to 40 percent of annual LPR immigration. Expected emigration from the Social Security area should be less than emigration from the United States, especially at

the older ages. This is primarily because most individuals who leave the United States having achieved fully insured status are still eligible to receive Social Security benefits and thus are still considered to be in the Social Security area population. For the 2026 Trustees Report, the assumed ratios of emigration to immigration are 20, 25, and 30 percent for the low-cost, intermediate, and high-cost alternatives, respectively. The same ratios of emigration to immigration were assumed for the 2025 Trustees Report.

3.4 Net LPR Immigration

Combining the levels of LPR immigration with the ratios for legal emigration yields ultimate levels of net LPR immigration of 1,000,000, 787,500, and 595,000 per year for the low-cost, intermediate, and high-cost alternatives, respectively.

3.5 Temporary or Unlawfully Present Immigration and Emigration

The term “temporary or unlawfully present immigration” refers to persons entering the United States in a manner other than lawfully admitted for permanent residence. The temporary or unlawfully present immigrant population consists of three components:

- 1) Nonimmigrants: those who entered the United States with authorization to stay for a temporary period of time and for a specific purpose, such as students and exchange visitors, temporary workers, and diplomats and other representatives. Nonimmigrants are lawfully present in the country, but temporarily, while their visas remain valid.
- 2) Never-authorized: those who entered the United States illegally and are unlawfully present in the country.
- 3) Visa-overstayers: those who entered the United States with temporary legal authorization but have overstayed their visas. Visa-overstayers are unlawfully present in the country.

The stock of the temporary or unlawfully present immigrant population is included in the starting year population level for the Trustees’ projections, in accordance with the official policy of the Census Bureau to enumerate all persons residing in the U.S., as well as to provide a basis for estimating the total labor force in the United States and total births in the Social Security area.

During the 1990s, there was rapid growth in the size of the temporary or unlawfully present immigrant population. In a joint project, the Office of Immigration Statistics (which has since been replaced by OHSS) and the Census Bureau examined the size of the unlawfully present immigrant population between October 1988 and October 1992. In October 1988, there were over 4 million unlawfully present immigrants residing in the United States. Excluding those who would be subsequently legalized under the Immigration Reform and Control Act of 1986 (IRCA), this estimate goes down to 2.2 million unlawfully present immigrants. At the time of the 1990 Census, 2.6 million persons were estimated to be unlawfully present, again excluding those who would subsequently be legalized under the IRCA. (The total unlawfully present population in 1990 was roughly 5.3 million.) Subsequent estimates suggest that this population increased to 3.4 million by October 1992 and to approximately 5.0 million by October 1996.

The rapid rise in the temporary or unlawfully present immigrant population between 1990 and 1996 reflected the continued inflow of temporary or unlawfully present immigrants combined with a decreased number leaving this status, due to the reduced stock of temporary or unlawfully present immigrants that resulted from the IRCA.

The 2000 Census provided evidence that temporary or unlawfully present immigration since 1990 had been consistently underestimated. In producing intercensal estimates of the U.S. population between the 1990 and 2000 Census, the Census Bureau estimated the average level of annual net temporary or unlawfully present immigration to be approximately 550,000. DHS estimated a total temporary or unlawfully present stock of 9.9 million for the beginning of the year 2000. Based on DHS estimates, the total temporary or unlawfully present stock was 11.7 million in 2005, then increased to 13.5 million in 2008, and then decreased to 12.5 million by 2013. Using DHS methods, we estimate that the total temporary or unlawfully present stock increased to 13.4 million in 2020 and to 16.9 million in 2024.

The immigration model makes explicit estimates of the following categories:

- The annual numbers of new-arrival immigrants who enter illegally and who enter legally as nonimmigrants;
- The annual number of nonimmigrants who become visa-overstayers;
- The annual numbers of emigrants (those leaving the Social Security area) who were never-authorized, nonimmigrants, or visa-overstayers; and
- The annual numbers of adjustments of status who were never-authorized, nonimmigrants, or visa-overstayers.

Table 3.5 shows the estimated number of temporary or unlawfully present immigrants since 1999. This table shows that the estimated number of temporary or unlawfully present immigrants increased from 696,000 in 2020 to 2,550,000 in 2023, and then decreased to 2,100,000 in 2024. As noted above, new border crossing data from DHS shows a significant decrease in border crossings in 2024, and an even sharper decrease in the first seven months of 2025. After 2026, the Trustees assume that temporary or unlawfully present immigration will increase each year until the ultimate levels are reached by 2035.

The Trustees assume an ultimate level of 1,200,000 new-arrival temporary or unlawfully present immigrants per year, for years 2035 and later, under the intermediate alternative of the 2026 Trustees Report. This value is 150,000 less than the ultimate value in the 2025 Trustees Report. This assumption change is based on a review of the levels of temporary or unlawfully present immigration since 1999, which average to just under 1,200,000 per year when excluding the unusually low immigration years experienced during the 2007-2009 recession and slow recovery that followed. As shown in table 3.1, the assumed temporary or unlawfully present immigration levels for 2025 and all future years are lower in the 2026 Trustees Report than those assumed in the 2025 Trustees Report.

The table below summarizes some of the information included in tables 3.1 and 3.5, to more easily facilitate a comparison of the levels of temporary or unlawfully present immigration assumed for the 2025 and 2026 Trustees Reports.

Temporary or Unlawfully Present Immigration, Historical Values and Assumed Future Values Under Intermediate Assumptions		
Year	2025 Trustees Report	2026 Trustees Report
2020	690,000	696,000
2021	1,205,000	1,187,000
2022	2,200,000	2,150,000
2023	2,700,000	2,550,000
2024	2,600,000	2,100,000
2025	2,000,000	800,000
2026	1,350,000	740,000
2027	1,350,000	750,000
2028	1,350,000	790,000
2029	1,350,000	860,000
2030	1,350,000	970,000
2031	1,350,000	1,070,000
2032	1,350,000	1,140,000
2033	1,350,000	1,180,000
2034	1,350,000	1,190,000
2035+	1,350,000	1,200,000

Note: Levels rounded to the nearest 1,000.

It is possible that the ultimate level will be higher than 1,200,000 in the future, as temporary or unlawfully present immigrants already in the U.S. may help additional temporary or unlawfully present immigrants enter the country. Another possibility is that the demand for temporary or unlawfully present immigrant labor in the economy will increase. Thus, the Trustees assume an ultimate level of 1,700,000 per year under the low-cost (high-immigration) scenario. Due to the possibility that the government will be increasingly willing to pursue deportation of unlawfully present immigrants, to withhold services from them, and to penalize those who employ them, the Trustees assume an ultimate level of 700,000 under the high-cost (low-immigration) scenario. Similar to the change in the intermediate assumption, the low-cost and high-cost assumptions for the 2026 Trustees Report are 150,000 lower than the assumptions used for the 2025 Trustees Report.

Additionally, for the 2026 Trustees Report, the Trustees assume that emigration rates from the unlawfully present population will be higher than those assumed in the 2025 Trustees Report, for years 2025-2030. This assumption change is based on the recent adoption of more restrictive policies regarding the unlawfully present population, and the expectation that these policies will continue into the near future.

The level of annual temporary or unlawfully present emigration is projected to decrease from 1,016,000 in 2025 to 248,000 in 2031. After 2031, the level of annual temporary or unlawfully present emigration is projected to rise throughout the remainder of the 75-year projection period. As the stock of the temporary or unlawfully present immigrant population rises, more emigration is likely to occur. Thus, temporary or unlawfully present emigration is estimated as a function of the population size. Rates of emigration by age and sex have been developed for the never-

authorized, the nonimmigrant, and the overstayer populations, based on the number of exits from each of these categories estimated to have occurred during the period 2008 through 2010. Ideally, these rates would be developed by age, sex, and duration of stay in the country. Unfortunately, at this time, data are too sparse to develop accurate estimates of the current stock by duration of stay. However, as in the 2025 Trustees Report, the Trustees assume continuing higher rates of emigration for recent entrants for the 2026 Trustees Report.

Applying the method described above results in increasing levels of emigration² from the temporary or unlawfully present immigrant population for years after 2031. Under the intermediate alternative, the gross emigration rate (number of emigrants from the temporary or unlawfully present population divided by the midyear temporary or unlawfully present population) starts at a maximum of 5.8 percent in 2025. It then generally declines to about 1.4 percent at the end of the 75-year projection period.

3.6 Recommendations of Previous Technical Panels and Other Projections

The Trustees also monitor assumptions and recommendations from other sources.

- The 2015 Technical Panel on Assumptions and Methods, appointed by the Social Security Advisory Board, recommended setting total net immigration to equal the average between that assumed in the 2015 Trustees Report and that projected by the Census Bureau, while maintaining the proportion of net LPR immigration and net temporary or unlawfully present immigration the same as assumed in the 2015 Trustees Report.
- The 2019 Technical Panel did not recommend changing immigration assumptions for years through 2029. However, for years after 2029, the panel recommended setting immigration assumptions so that the following two ratios would stay constant throughout the remaining years of the 75-year projection period: (1) the ratio of total net immigration to the total midyear population and (2) the ratio of net LPR immigration to net temporary or unlawfully present immigration. These recommendations resulted in total net immigration starting at 1.4 million in 2019 and growing to 1.9 million in 2100. Total net immigration for the intermediate alternative of the 2026 Trustees Report is about 1.1 million in 2100.

The increases in the levels of total net immigration recommended by the 2019 and some prior panels reflect a number of factors. One factor is that each panel included the assumption of continuing changes in immigration law to allow more immigration as the

² As the population matures, higher numbers of temporary or unlawfully present immigrants are in the population and, thus, higher levels of emigration are expected, particularly at ages 35 and older. The current temporary or unlawfully present immigrant population is centered very heavily at the younger ages. This concentration at the younger ages is likely due to (1) the relatively high levels of unlawfully present immigration that began in the late 1990s (individuals entering at relatively young ages) and (2) the effects of the IRCA legislation in the late 1980s (which legalized largely older individuals due to required substantial durations of residence in the country). Therefore, the population of temporary or unlawfully present immigrants is relatively young, with short durations of stay in the country.

population increases. Historically, the Trustees, as well as other Federal Government entities, have assumed that future immigration will be consistent with current law and that changes based on potential future legislation should not be reflected until enactment. Reflecting the possibility of future changes in immigration law is reasonable if there is a conviction that such changes are truly expected to occur and this change in the basis for projecting is fully disclosed. However, presuming such changes could result in the peculiar situation where the Trustees would need to change assumptions in the future because immigration law had not been modified. On balance, the Trustees have retained the practice of reflecting changes in the immigration law only upon enactment.

- In their January 2026 projections, the Congressional Budget Office (CBO) projects total net immigration of 1.1 million people per year, on average, for the period 2026-56.³ In comparison, the Trustees' assumptions for the intermediate alternative of the 2026 Trustees Report also result in an average annual level of total net immigration of 1.1 million for the period 2026-56.
- In the Census Bureau's 2023 National Population Projections, total net immigration increases from 853,000 in 2023 to 944,000 in 2100, averaging 911,000 per year for the period 2026-56.⁴ As noted, the Trustees' assumptions result in an average annual level of 1.1 million.

³ See <https://www.cbo.gov/system/files/2026-01/61879-Data.xlsx>, Figure 7.

⁴ See <https://www2.census.gov/programs-surveys/popproj/tables/2023/2023-summary-tables/np2023-b.xlsx>.

Table 3.1: Annual Immigration Assumptions¹ for the Social Security Area Population

(All values rounded to the nearest 1,000)

Values Used for 2025 Trustees Report						
Alternative	Year	LPR		Temporary or Unlawfully Present		
		Gross	Net	Gross	Net	
Low Cost:	2025	1,413,000	1,130,000	2,700,000	1,758,000	
	2026	1,413,000	1,130,000	1,850,000	869,000	
	2027	1,250,000	1,000,000	1,850,000	857,000	
	2028	1,250,000	1,000,000	1,850,000	856,000	
	2029	1,250,000	1,000,000	1,850,000	863,000	
	2030	1,250,000	1,000,000	1,850,000	867,000	
	2031	1,250,000	1,000,000	1,850,000	865,000	
	2032	1,250,000	1,000,000	1,850,000	855,000	
	2033	1,250,000	1,000,000	1,850,000	846,000	
	2034	1,250,000	1,000,000	1,850,000	837,000	
	2035	1,250,000	1,000,000	1,850,000	828,000	
	2040	1,250,000	1,000,000	1,850,000	786,000	
	2060	1,250,000	1,000,000	1,850,000	688,000	
	2080	1,250,000	1,000,000	1,850,000	661,000	
	2100	1,250,000	1,000,000	1,850,000	655,000	
	Intermediate:	2025	1,213,000	910,000	2,000,000	1,192,000
		2026	1,213,000	910,000	1,350,000	517,000
2027		1,050,000	788,000	1,350,000	513,000	
2028		1,050,000	788,000	1,350,000	519,000	
2029		1,050,000	788,000	1,350,000	529,000	
2030		1,050,000	788,000	1,350,000	536,000	
2031		1,050,000	788,000	1,350,000	537,000	
2032		1,050,000	788,000	1,350,000	533,000	
2033		1,050,000	788,000	1,350,000	528,000	
2034		1,050,000	788,000	1,350,000	524,000	
2035		1,050,000	788,000	1,350,000	520,000	
2040		1,050,000	788,000	1,350,000	502,000	
2060		1,050,000	788,000	1,350,000	463,000	
2080		1,050,000	788,000	1,350,000	452,000	
2100		1,050,000	788,000	1,350,000	448,000	
High Cost:		2025	1,013,000	709,000	1,300,000	626,000
		2026	1,013,000	709,000	850,000	165,000
	2027	850,000	595,000	850,000	169,000	
	2028	850,000	595,000	850,000	182,000	
	2029	850,000	595,000	850,000	194,000	
	2030	850,000	595,000	850,000	204,000	
	2031	850,000	595,000	850,000	209,000	
	2032	850,000	595,000	850,000	210,000	
	2033	850,000	595,000	850,000	211,000	
	2034	850,000	595,000	850,000	212,000	
	2035	850,000	595,000	850,000	213,000	
	2040	850,000	595,000	850,000	218,000	
	2060	850,000	595,000	850,000	239,000	
	2080	850,000	595,000	850,000	247,000	
	2100	850,000	595,000	850,000	247,000	

Values Used for 2026 Trustees Report						
Alternative	Year	LPR		Temporary or Unlawfully Present		
		Gross	Net	Gross	Net	
Low Cost:	2025	1,356,000	1,085,000	1,100,000	-517,000	
	2026	1,250,000	1,000,000	1,070,000	-486,000	
	2027	1,250,000	1,000,000	1,090,000	-278,000	
	2028	1,250,000	1,000,000	1,140,000	-51,000	
	2029	1,250,000	1,000,000	1,230,000	190,000	
	2030	1,250,000	1,000,000	1,380,000	457,000	
	2031	1,250,000	1,000,000	1,530,000	692,000	
	2032	1,250,000	1,000,000	1,620,000	766,000	
	2033	1,250,000	1,000,000	1,670,000	799,000	
	2034	1,250,000	1,000,000	1,690,000	802,000	
	2035	1,250,000	1,000,000	1,700,000	796,000	
	2040	1,250,000	1,000,000	1,700,000	742,000	
	2060	1,250,000	1,000,000	1,700,000	623,000	
	2080	1,250,000	1,000,000	1,700,000	579,000	
	2100	1,250,000	1,000,000	1,700,000	567,000	
	Intermediate:	2025	1,206,000	905,000	800,000	-716,000
		2026	1,050,000	788,000	740,000	-657,000
2027		1,050,000	788,000	750,000	-459,000	
2028		1,050,000	788,000	790,000	-244,000	
2029		1,050,000	788,000	860,000	-27,000	
2030		1,050,000	788,000	970,000	191,000	
2031		1,050,000	788,000	1,070,000	372,000	
2032		1,050,000	788,000	1,140,000	434,000	
2033		1,050,000	788,000	1,180,000	465,000	
2034		1,050,000	788,000	1,190,000	465,000	
2035		1,050,000	788,000	1,200,000	466,000	
2040		1,050,000	788,000	1,200,000	439,000	
2060		1,050,000	788,000	1,200,000	391,000	
2080		1,050,000	788,000	1,200,000	369,000	
2100		1,050,000	788,000	1,200,000	361,000	
High Cost:		2025	1,056,000	739,000	600,000	-814,000
		2026	850,000	595,000	500,000	-746,000
	2027	850,000	595,000	510,000	-553,000	
	2028	850,000	595,000	520,000	-372,000	
	2029	850,000	595,000	550,000	-200,000	
	2030	850,000	595,000	600,000	-49,000	
	2031	850,000	595,000	650,000	83,000	
	2032	850,000	595,000	680,000	112,000	
	2033	850,000	595,000	690,000	120,000	
	2034	850,000	595,000	700,000	129,000	
	2035	850,000	595,000	700,000	128,000	
	2040	850,000	595,000	700,000	131,000	
	2060	850,000	595,000	700,000	157,000	
	2080	850,000	595,000	700,000	162,000	
	2100	850,000	595,000	700,000	160,000	

¹ This table contains basic assumptions along with key summary values that are derived from basic assumptions.

Table 3.2: LPR Immigrants Admitted to the United States: Fiscal Years 1966-91
(in thousands)
Reflecting Categories Established in the 1965 Immigration Act

Fiscal Year	IRCA ¹	Total non IRCA ²	Numerically Limited ³	Western Hemisphere ⁴	Immediate Relatives of Citizens	Refugees & Asylees	Other Specially Legislated Immigrants ⁵
1966	—	323	126	148	39	3	6
1967	—	362	153	125	47	29	7
1968	—	454	156	154	44	94	6
1969	—	359	291	—	60	1	6
1970	—	373	287	—	79	—	7
1971	—	370	281	—	81	—	9
1972	—	385	284	—	86	—	15
1973	—	399	283	—	101	—	16
1974	—	394	274	—	105	—	16
1975	—	385	282	—	92	—	13
1976 ⁶	—	499	357	—	130	—	15
1977	—	459	277	—	106	68	12
1978	—	590	341	—	126	122	12
1979	—	394	279	—	138	32	11
1980	—	524	289	—	158	76	8
1981	—	595	330	—	152	107	7
1982	—	534	260	—	168	157	9
1983	—	550	269	—	178	103	10
1984	—	542	262	—	183	92	7
1985	—	568	264	—	204	95	6
1986	—	600	267	—	223	104	7
1987	—	600	271	—	219	92	20
1988	—	641	264	—	219	82	78
1989	479	611	280	—	218	84	30
1990	884	652	298	—	232	97	29
1991	1,133	693	294	—	237	139	34

¹ This category includes those aliens admitted under the Immigration Reform and Control Act of 1986.

² Components may not sum to totals because of rounding. Additionally, for years 1973 through 1991, DHS published revised totals that are considered more accurate than the sums of the components.

³ Legal limits on immigration visas were 170,000 per fiscal year before 1969, 290,000 per fiscal year for 1969 through 1979, 280,000 for fiscal year 1980, and 270,000 for fiscal years 1981 and later. Includes additional visas starting 1989.

⁴ Natives of Western Hemisphere countries, their children and spouses, Act of October 3, 1965. This category became numerically limited to 120,000 starting in fiscal year 1969.

⁵ This category consists mainly of children born abroad to alien residents, ministers and their families, alien residents eligible under Section 249 of the Immigration and Nationality Act, fiancés of U.S. citizens and their children (beginning in 1970), special Cuban / Haitian entrants (beginning in 1987), and Amerasians (beginning in 1988).

⁶ Includes the 15 months from July 1, 1975, to September 30, 1976, because the end date of fiscal years was changed from June 30 to September 30.

Source: Annual Reports of the Immigration and Naturalization Service, Department of Justice.

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Table 3.3: LPR Immigration Limits for Fiscal Years Beginning in 1995

	Family Sponsored Preference	Immediate Relatives of U.S. Citizens	Employment Based	Diversity	Refugees	Asylees	
Unadjusted Limit	226,000 to 480,000 ¹	Not Limited	140,000 ²	55,000 ³	Set Annually	Not Limited ⁴	
Limit For Fiscal Year	1995	253,721	Not Limited	146,503	55,000	111,000	10,000
	1996	311,819	Not Limited	140,000	55,000	90,000	10,000
	1997	226,000	Not Limited	140,000	55,000	78,000	10,000
	1998	226,000	Not Limited	140,000	55,000	83,000	10,000
	1999	226,000	Not Limited	160,906	55,000	91,000	10,000
	2000	294,601	Not Limited	142,299	55,000	90,000	10,000
	2001	226,000	Not Limited	192,074	55,000	80,000	10,000
	2002	226,000	Not Limited	142,632	55,000	70,000	10,000
	2003	226,000	Not Limited	171,532	55,000	70,000	10,000
	2004	226,000	Not Limited	204,422	55,000	70,000	10,000
	2005	226,000	Not Limited	148,449	55,000	70,000	Not Limited
	2006	226,000	Not Limited	143,949	55,000	70,000	Not Limited
	2007	226,000	Not Limited	147,148	55,000	70,000	Not Limited
	2008	226,000	Not Limited	162,704	55,000	80,000	Not Limited
	2009	226,000	Not Limited	140,000	55,000	80,000	Not Limited
	2010	226,000	Not Limited	150,657	55,000	80,000	Not Limited
	2011	226,000	Not Limited	140,000	55,000	80,000	Not Limited
	2012	226,000	Not Limited	144,951	55,000	76,000	Not Limited
	2013	226,000	Not Limited	158,466	55,000	70,000	Not Limited
	2014	226,000	Not Limited	150,241	55,000	70,000	Not Limited
	2015	226,000	Not Limited	144,796	55,000	70,000	Not Limited
	2016	226,000	Not Limited	140,338	55,000	85,000	Not Limited
	2017	226,000	Not Limited	140,000	55,000	50,000	Not Limited
	2018	226,000	Not Limited	140,292	55,000	45,000	Not Limited
2019	226,000	Not Limited	141,918	55,000	30,000	Not Limited	
2020	226,000	Not Limited	156,253	55,000	18,000	Not Limited	
2021	226,000	Not Limited	262,288	55,000	62,500	Not Limited	
2022	226,000	Not Limited	281,507	55,000	125,000	Not Limited	
2023	226,000	Not Limited	197,091	55,000	125,000	Not Limited	
2024	226,000	Not Limited	160,791	55,000	125,000	Not Limited	

¹ The family preference limit is given as a range because it is equal to the larger of: 226,000 or 480,000 minus the previous year's immediate relatives of U.S. citizens minus certain other small categories of children minus certain categories of aliens paroled into the U.S. in the second preceding fiscal year plus unused employment preferences from the previous year.

² The employment-based preference can be higher than 140,000 if certain other preferences go unused in the previous year.

³ The Diversity category includes those immigrating through the Nicaraguan Adjustment and Central American Relief Act (NACARA).

⁴ The REAL ID Act of 2005 eliminated the numerical limit for Asylees.

Sources:

1. Family sponsored, Employment based, and Diversity:

<https://travel.state.gov/content/travel/en/legal/visa-law0/visa-bulletin/2024/visa-bulletin-for-september-2024.html>.

2. Immediate Relatives: all "not limited" unless legislation changes

3. Refugees: Table 1 of

<https://ohss.dhs.gov/topics/immigration/refugees/annual-flow-report/fy-24-refugees-flow-report>.

4. Asylees: Historical years: text on page 6 of

[https://ohss.dhs.gov/sites/default/files/2023-12/Yearbook Immigration Statistics 2003.pdf](https://ohss.dhs.gov/sites/default/files/2023-12/Yearbook%20Immigration%20Statistics%202003.pdf).

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Table 3.4: LPR Immigrants Admitted to the United States: Fiscal Years Beginning in 1985
(in thousands)

Reflecting revised categories in the 1990 Immigration Act, Subject to limitation under the overall flexible cap

Fiscal Year	IRCA ¹	Total non IRCA ^{2,3}	Family Sponsored	Employment Based	Immediate Relatives	Refugees & Asylees	Diversity	Other Specially Legislated Immigrants
1985	—	568	213	53	204	95	—	4
1986	—	600	213	57	223	104	—	4
1987	—	600	212	58	219	92	3	19
1988	—	641	201	59	219	82	6	76
1989	479	611	217	58	218	84	7	28
1990	884	652	215	58	232	97	29	25
1991	1,133	693	216	60	237	139	22	30
1992	163	810	213	116	235	117	89	40
1993	17	887	227	147	255	127	89	35
1994	4	800	212	123	250	121	75	17
1995	3	717	238	85	220	115	48	10
1996	3	913	294	117	300	128	58	14
1997	1	797	213	90	321	112	49	11
1998	1	652	191	77	283	52	45	3
1999	—	645	217	57	258	43	48	24
2000	—	841	235	107	346	63	51	39
2001	—	1,059	232	179	440	108	42	58
2002	—	1,059	187	174	484	126	43	46
2003	—	704	159	82	331	45	46	41
2004	—	958	214	155	418	71	50	49
2005	—	1,122	213	247	436	143	46	37
2006	—	1,266	222	159	580	216	44	43
2007	—	1,052	195	162	495	136	42	23
2008	—	1,107	228	165	488	166	42	18
2009	—	1,131	212	141	536	177	48	17
2010	—	1,043	215	148	476	136	50	17
2011	—	1,062	235	139	453	168	50	16
2012	—	1,032	202	144	479	151	40	16
2013	—	991	210	161	439	120	46	14
2014	—	1,016	229	152	416	134	53	32
2015	—	1,051	214	144	465	152	48	28
2016	—	1,183	238	138	567	157	50	34
2017	—	1,127	232	138	517	146	52	43
2018	—	1,097	217	138	479	186	45	32
2019	—	1,032	204	139	506	107	43	32
2020	—	707	122	149	321	64	25	27
2021	—	740	66	193	385	56	15	24
2022	—	1,018	166	270	428	83	43	27
2023	—	1,173	204	197	552	99	67	54

¹ This category includes those aliens admitted under the Immigration Reform and Control Act of 1986.

² Comprehensive immigration legislation increased total immigration under an overall flexible cap of 675,000 immigrants beginning in fiscal year 1995, preceded by a 700,000 level during fiscal years 1992 through 1994.

³ Components may not sum to totals because of rounding. Additionally, for years 1985 through 1995, DHS published revised totals that are considered more accurate than the sums of the components.

Source: Table 6 of the 2023 Yearbook of Immigration Statistics from the Office of Homeland Security Statistics, Department of Homeland Security: <https://ohss.dhs.gov/topics/immigration/yearbook-immigration-statistics/yearbook-2023>.

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Table 3.5: Historical Annual Temporary or Unlawfully Present Immigration for the Social Security Area Population

(All values rounded to the nearest 1,000)

Year	Gross	Net
1999	1,234,000	612,000
2000	1,358,000	577,000
2001	1,255,000	577,000
2002	1,179,000	578,000
2003	1,052,000	578,000
2004	1,224,000	578,000
2005	1,645,000	1,015,000
2006	1,447,000	778,000
2007	996,000	89,000
2008	708,000	-660,000
2009	795,000	67,000
2010	663,000	17,000
2011	659,000	-62,000
2012	694,000	-112,000
2013	814,000	68,000
2014	1,335,000	868,000
2015	1,246,000	662,000
2016	1,080,000	6,000
2017	903,000	247,000
2018	744,000	-203,000
2019	882,000	-493,000
2020	696,000	276,000
2021	1,187,000	274,000
2022 ¹	2,150,000	1,440,000
2023 ¹	2,550,000	1,780,000
2024 ²	2,100,000	1,213,000

¹ Estimated.

² Estimated, intermediate alternative.

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