

# Social Security Actuarial Status

The 2025 Annual Report of the Board of Trustees  
of the OASI and DI Trust Funds

Key Changes and Results Under Intermediate Assumptions

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PREPARED BY THE OFFICE OF THE CHIEF ACTUARY, SSA

AMERICAN ACADEMY OF ACTUARIES WEBINAR JULY 1, 2025

# What is the Legislative Mandate for the Social Security Annual Report?

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1. Trust Fund operations of the past year and the next five years
2. Actuarial status of the trust funds
  - The ability to meet the cost of scheduled benefits with scheduled revenue and trust fund reserves
  - And the extent to which scheduled revenue would fall short under current law, indicating the size of legislative changes that will be needed

**The report has been produced every year starting in 1941!**

# Changes in the 2025 Trustees Report

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# Three Primary Changes This Year

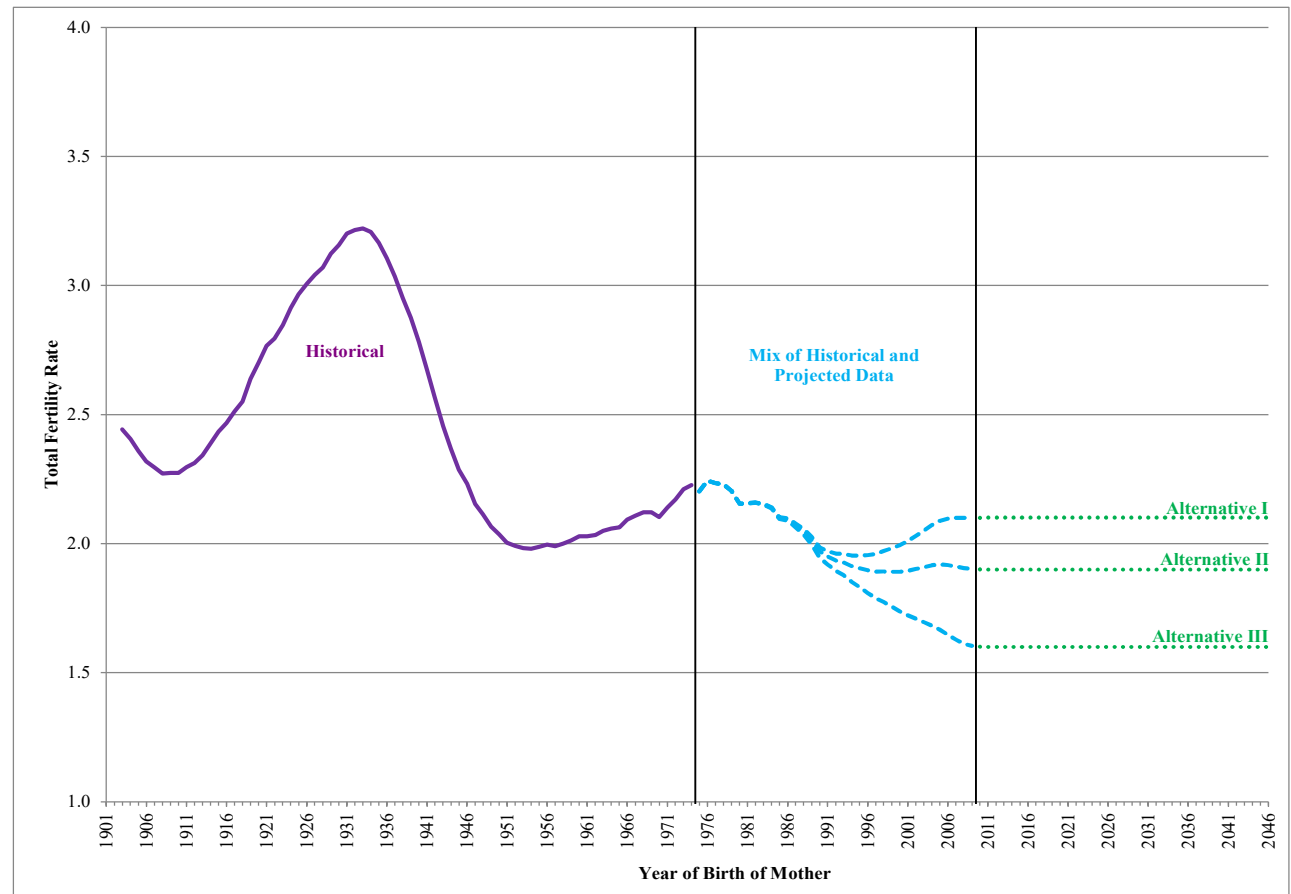
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1. **Law Change:** The Social Security Fairness Act was enacted on January 5, 2025. This law repeals the Windfall Elimination Provision and Government Pension Offset. The repeal of these provisions increases benefits for many people who worked in jobs that were not covered by Social Security.
2. **Fertility Assumption:** The ultimate total fertility rate is 1.9 children per woman over her lifetime, unchanged from last year's report. However, the ultimate rate is reached in 2050, 10 years later than in last year's report. This extension of the transition path reflects the Trustees' expectation that fertility rates will recover relatively slowly from current low levels.
3. **Labor Share Assumption:** The ratio of total labor compensation to GDP is assumed to reach a lower long-term level than in last year's report. This updated assumption better reflects historical trends and implies somewhat slower average earnings growth in the near term.

# Birth Rates by Cohort

Under intermediate assumptions, birth rates are projected to go below 2.0 for women born after 1990, reaching an assumed ultimate level of 1.9.

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

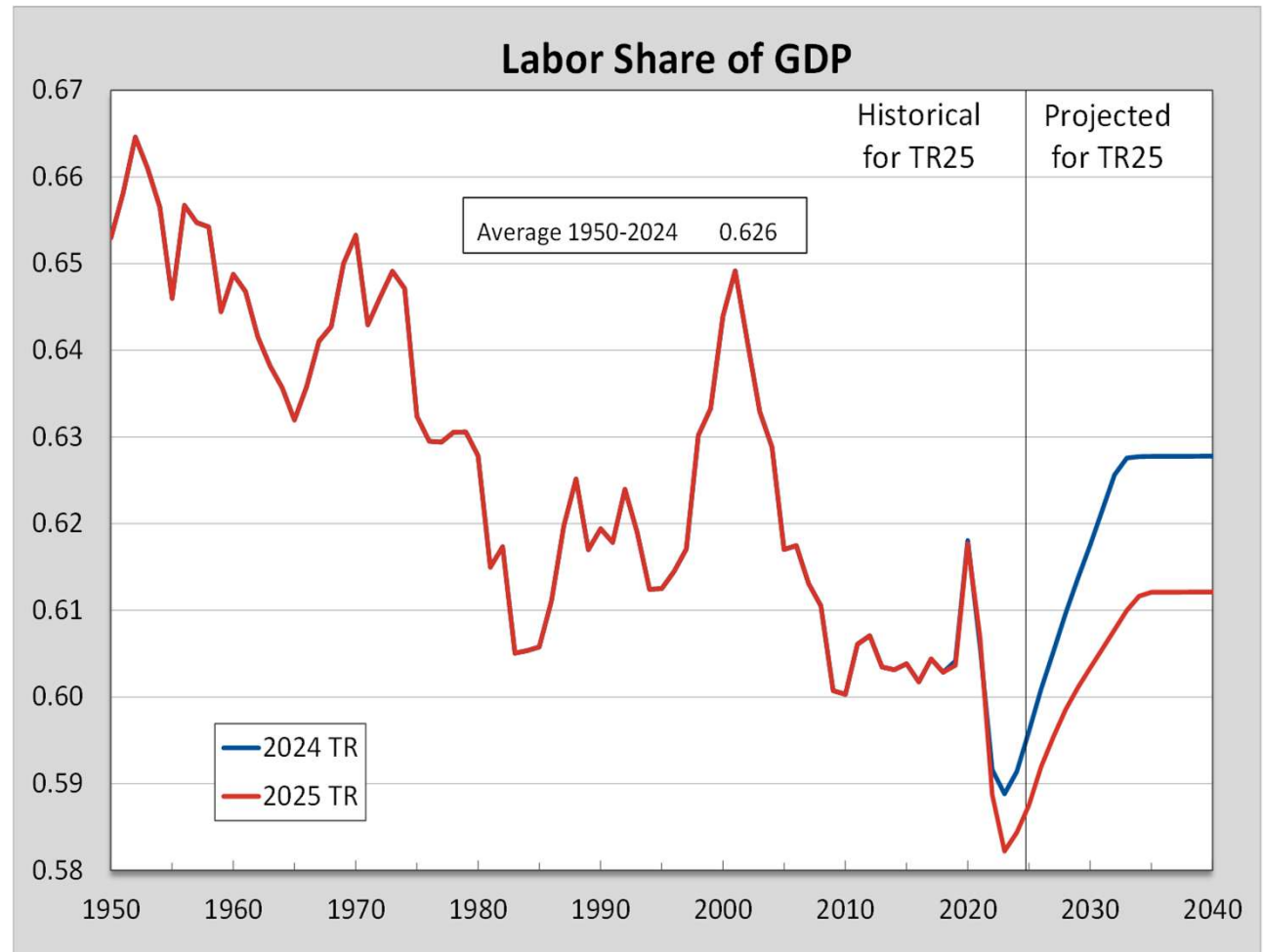


[https://www.ssa.gov/oact/TR/2025/2025\\_Long-Range\\_Demographic\\_Assumptions.pdf](https://www.ssa.gov/oact/TR/2025/2025_Long-Range_Demographic_Assumptions.pdf)

# Ratio of Labor Compensation to GDP (Labor Share)

For the 2025 TR, the Trustees lowered the assumed long-term level for the labor share to 61.2 percent from 62.8 percent assumed in the 2024 TR, reflecting the experience of recent decades.

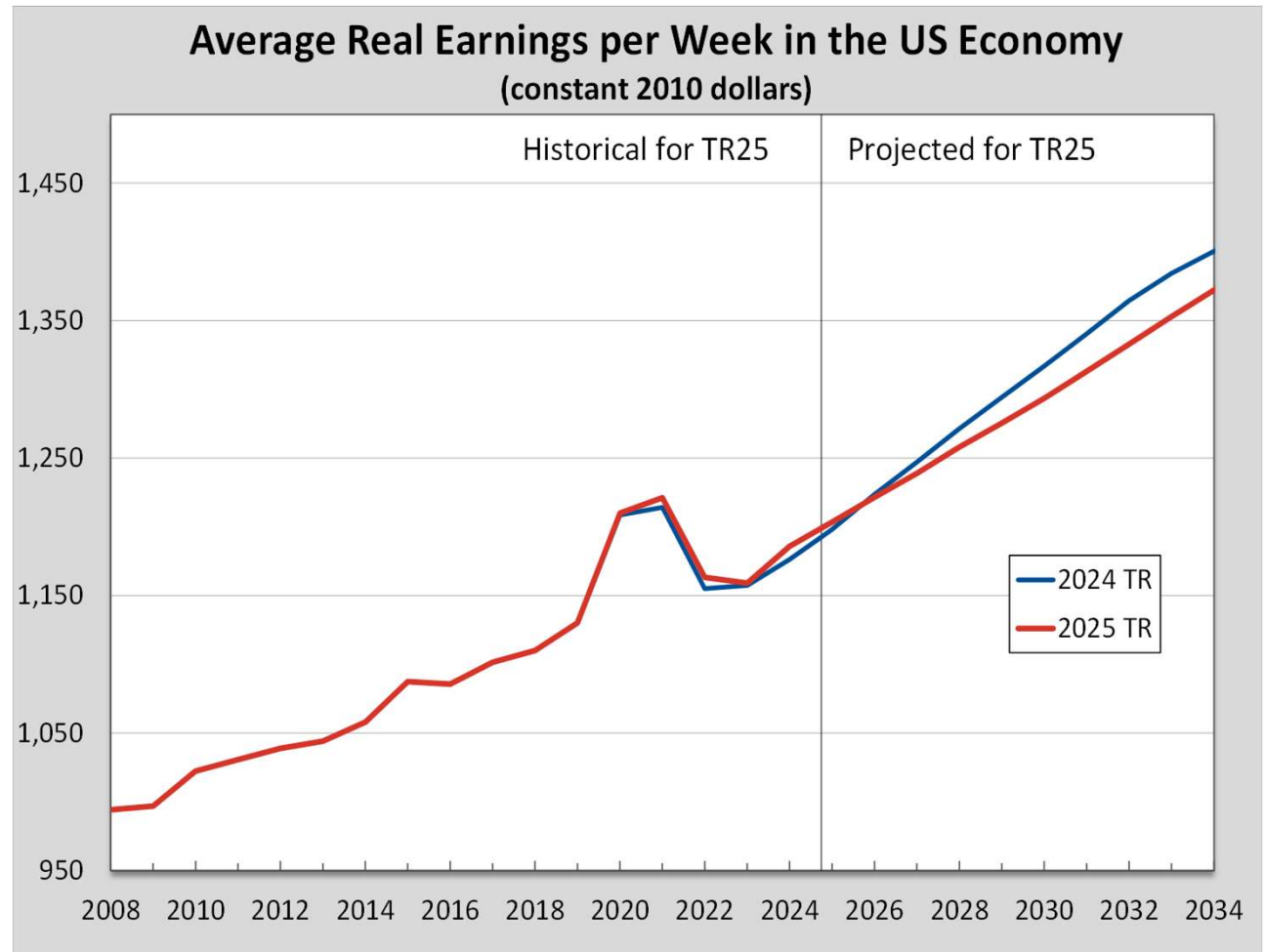
In the most recent data, the labor share of GDP in 2023 is lower than was estimated in the 2024 TR. Going forward, the labor share is projected to rise gradually to its assumed long-range value.



# Average Weekly Real U.S. Earnings

Increased above trend in 2020 and 2021 due to the unusual features of the pandemic-induced recession, where job losses were concentrated in the low-wage sectors. This effect is largely reversed by 2022.

Compared to the 2024 TR, average real earnings are projected to grow slower through 2032 and remain at a lower level thereafter, consistent with the lower ratio of labor compensation to GDP. The projected growth rate after 2034 is the same as in last year's report.



# 2025 Trustees Report Results

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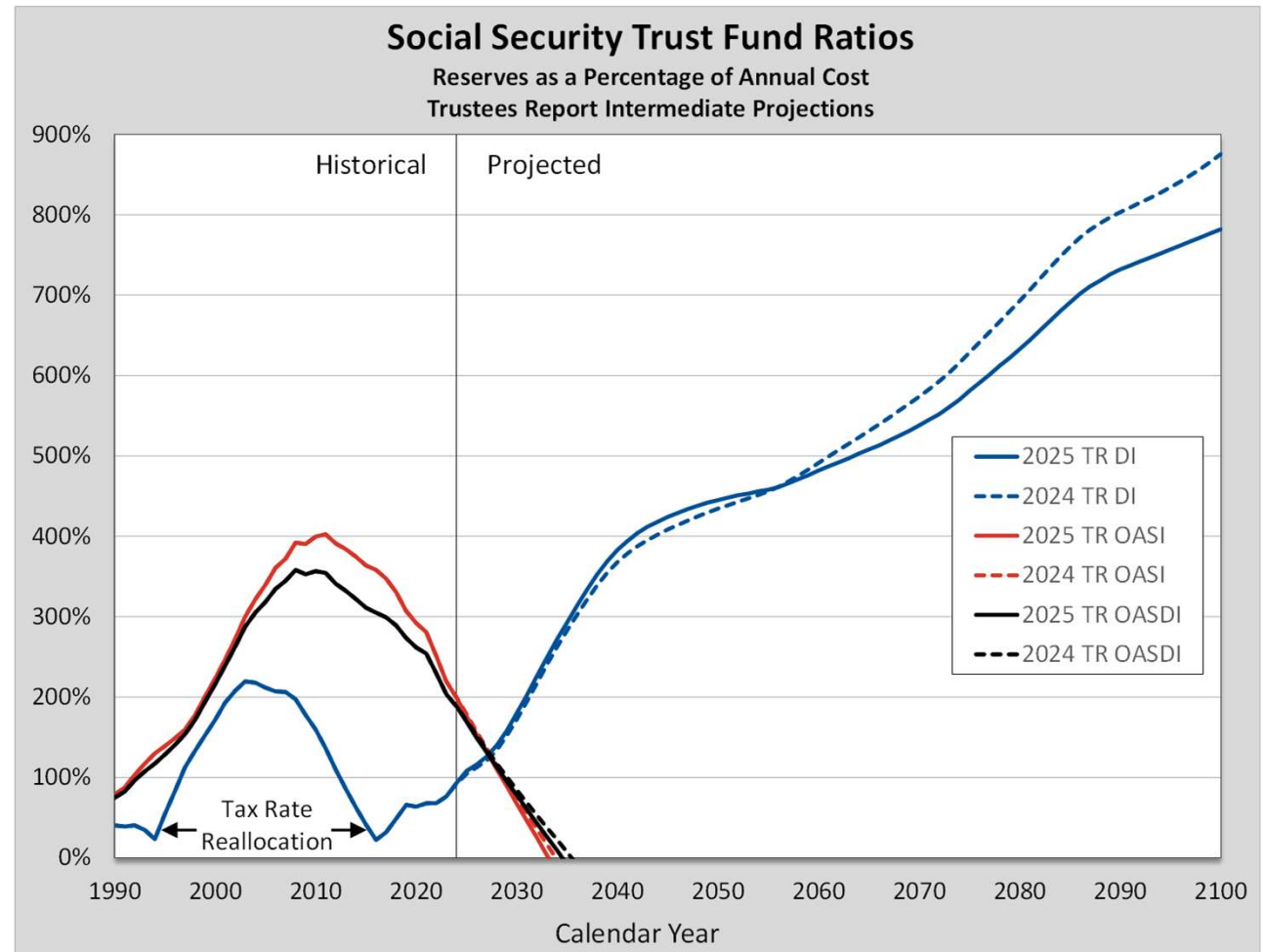


## Solvency: OASI+DI Trust Fund Reserve Depletion in 2034 (one year earlier than last year)

OASDI reserve depletion date has varied from 2033 to 2035 in reports over the last 14 years (2012-2025) and from 2029 to 2042 in reports over the last 35 years (1991-2025).

OASI reserve depletion date is now in the first quarter of 2033 versus the fourth quarter of 2033 in last year's report.

DI Trust Fund: reserves do not deplete, due largely to continued low applications and awards.

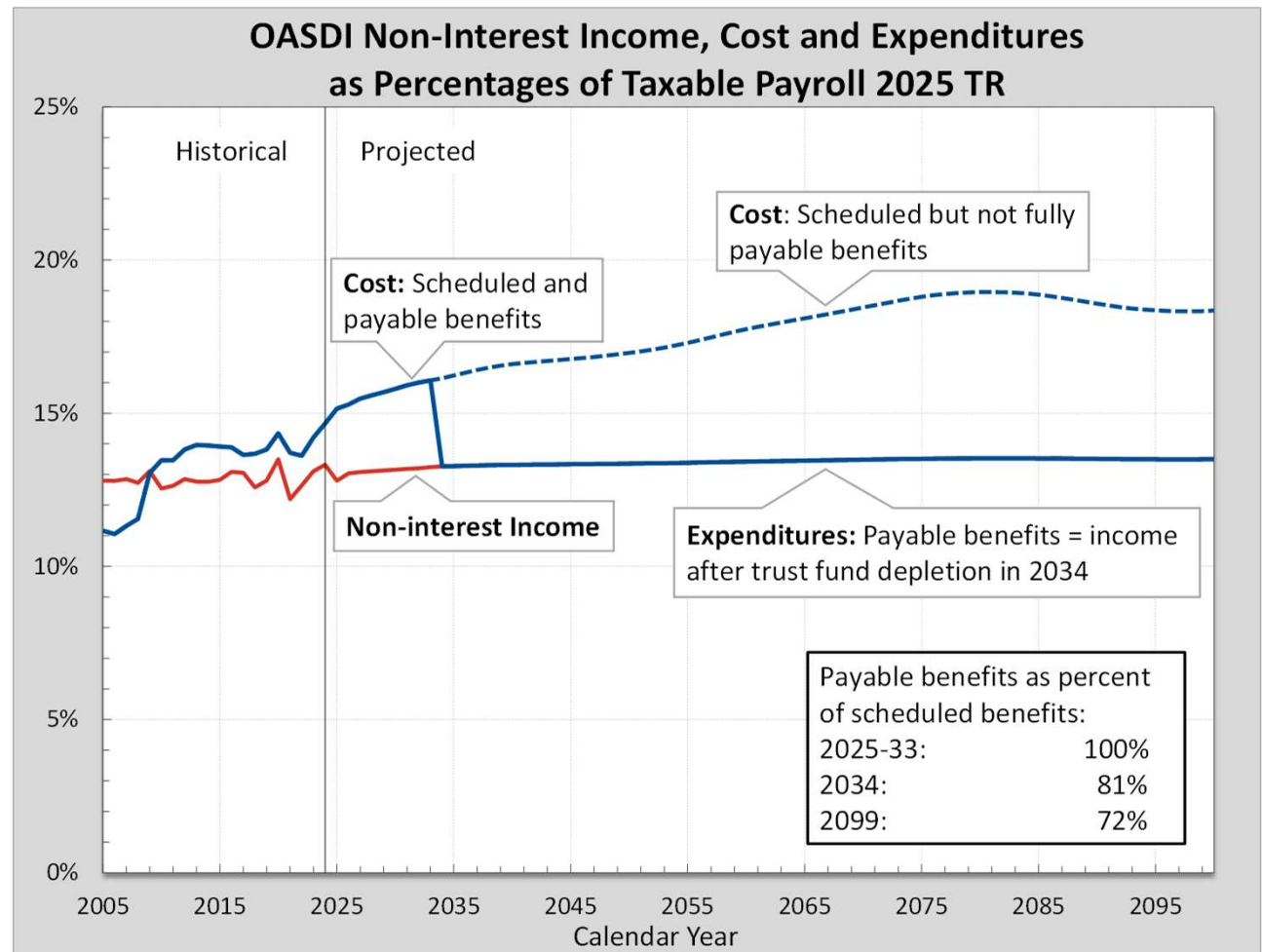


# OASDI Annual Cost and Non-Interest Income as Percent of Taxable Payroll

Persistent negative annual cash-flow balance starting in 2010.

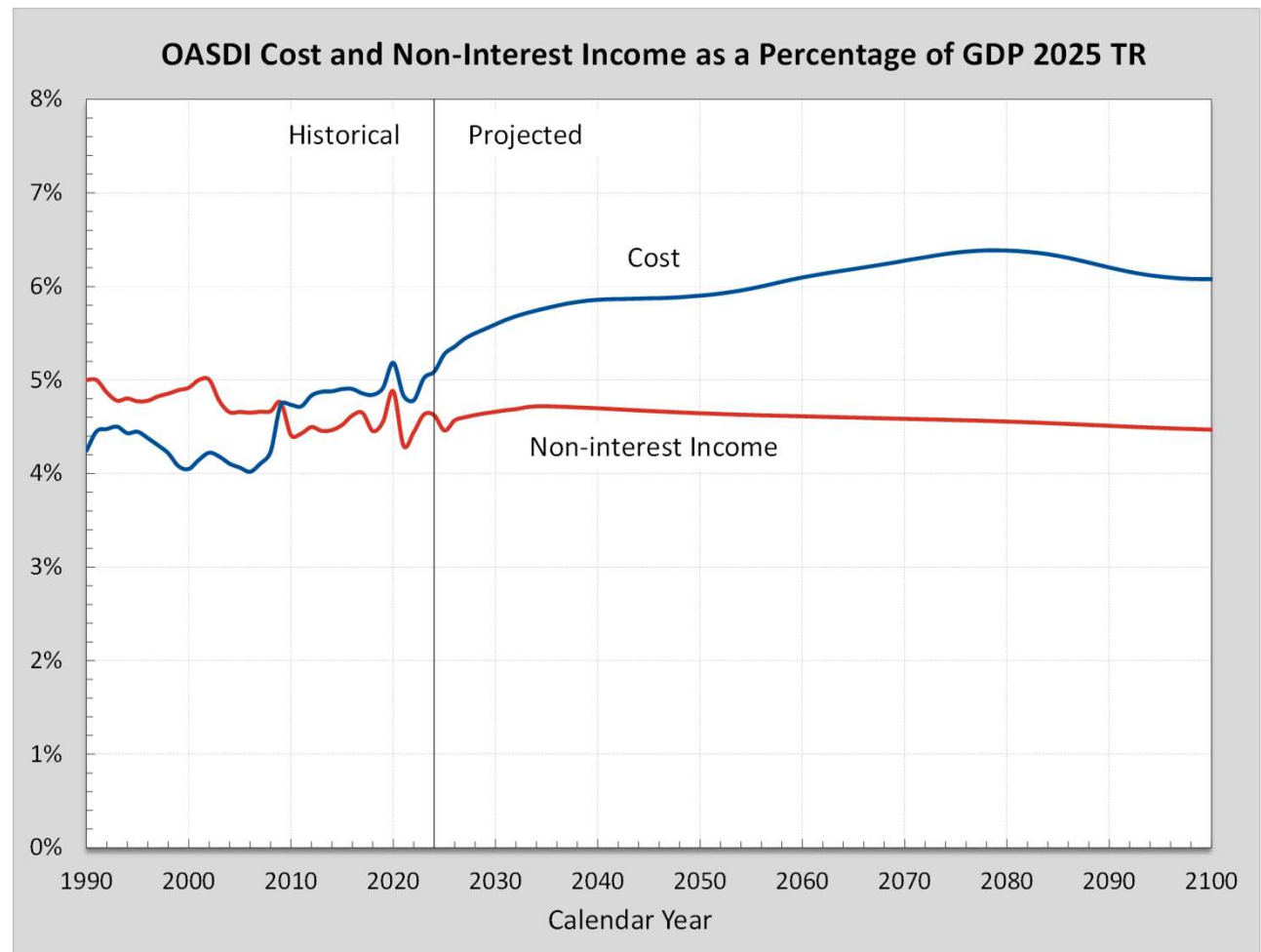
81 percent of scheduled benefits still payable at trust fund reserve depletion; was 83 percent in last year's report.

72 percent payable for 2099; was 73 percent for 2098 in last year's report.



## SUSTAINABILITY: Cost as percent of GDP

Rises from a 4.2 percent average in 1990-2008, to a peak of about 6.4 percent for 2079, and then declines to 6.1 percent by 2099.



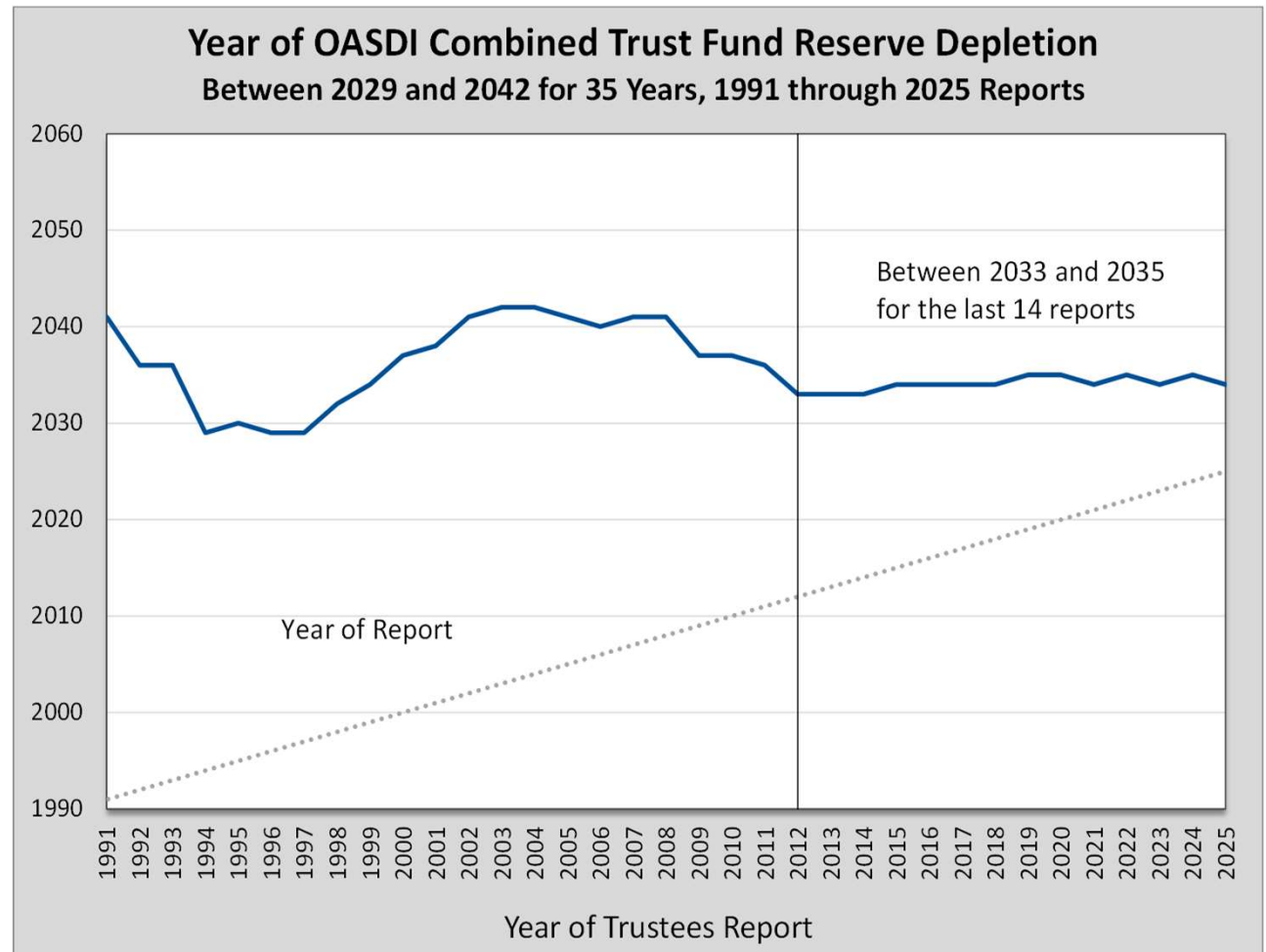
# Changes in Timing of Trust Fund Reserve Depletion in 2025 Report

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1. OASDI reserve depletion is in 2034 (versus 2035 in last year's report), mainly due to:
  - a) The implementation of the Social Security Fairness Act
  - b) The extension in the assumed year the ultimate total fertility rate is reached
  - c) The reduction in the long-term assumption for the ratio of total labor compensation to GDP
2. OASI reserve depletion is again in 2033 (although 3 quarters earlier than in last year's report)
3. DI reserves do not become depleted over the 75-year long-range projection period (same as in last year's report)
  - a) Applications and benefit awards continue to be quite low through 2024
  - b) Assumed gradual increase in initial applications to ultimate levels

# Year of OASDI Combined Trust Fund Reserve Depletion

OASDI reserve depletion date varied from 2033 to 2035 in reports over the last 14 years (2012-2025) and from 2029 to 2042 in reports over the last 35 years (1991-2025).



# Reasons for Change in Actuarial Balance in 2025 Trustees Report

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**Actuarial Balance: -3.82 percent of taxable payroll (from -3.50 percent in last year's report)**

**Valuation Period** - Changes the actuarial balance by

**- 0.06 percent of payroll**

**Legislation etc.** – Changes the actuarial balance by

**- 0.16 percent of payroll**

- Regulation on past relevant work
- Social Security Fairness Act

(- 0.02 percent)  
(- 0.14 percent)

**Demographic Data/Assumptions** – Changes the actuarial balance by

**- 0.02 percent of payroll**

- Extended the year the ultimate fertility rate is reached
- Recent birth data and slightly lower assumed near-term total fertility rates
- Higher near-term assumed levels of temporary or unlawfully present immigrant entrants
- New data for mortality, immigration, marriage/divorce, and historical population

(- 0.11 percent)  
(- 0.02 percent)  
(+ 0.05 percent)  
(+ 0.05 percent)

**Economic Data/Assumptions** – Changes the actuarial balance by

**- 0.06 percent of payroll**

- Lowered the assumed ratio of total labor compensation to GDP
- New historical OASDI covered employment data
- New data and other near-term economic assumptions

(- 0.12 percent)  
(+ 0.02 percent)  
(+ 0.03 percent)

**Disability Data/Assumptions** – Changes the actuarial balance by

**0.00 percent of payroll**

- New disability data and near-term assumptions have a negligible effect

**Methods and Programmatic Assumptions**

**- 0.03 percent of payroll**

- Methodological improvements, programmatic data and other improvements and updates

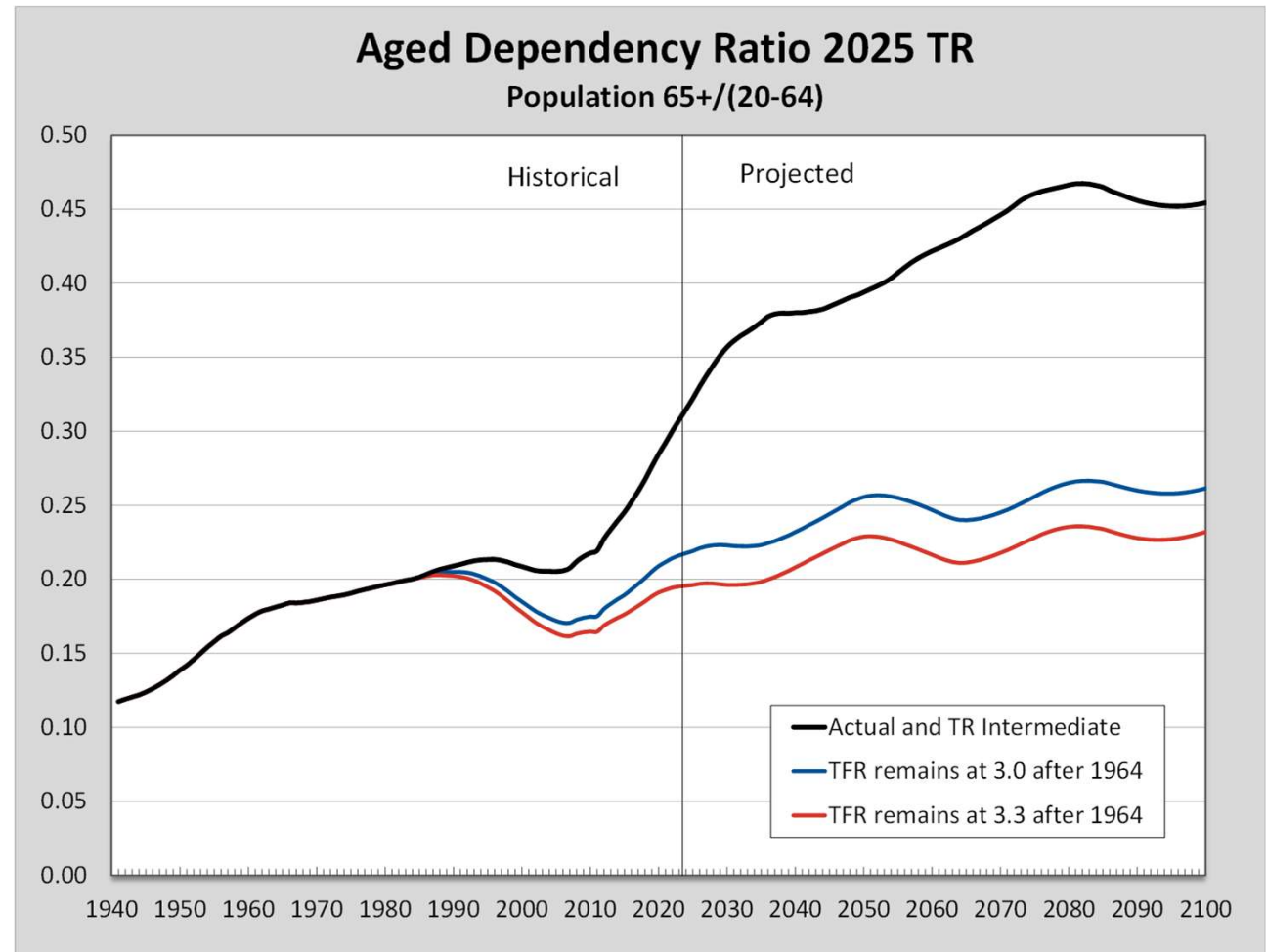
# Main Reasons for Worsening Financial Outlook

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# Aging – Change in Age Distribution

This is the primary reason for increasing cost relative to payroll and GDP - mainly due to drop in birth rates.

This change has been anticipated.



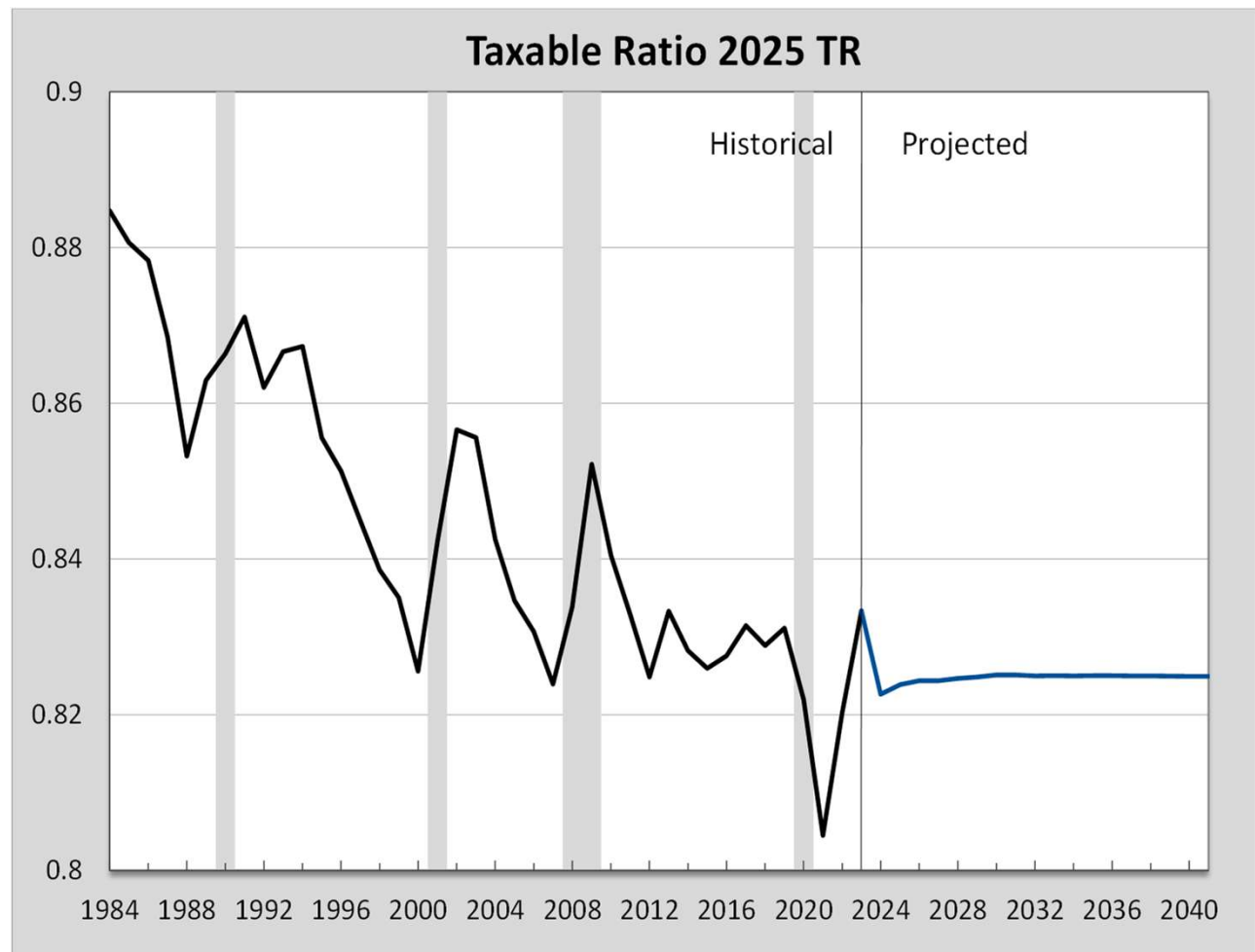


## Another Reason: Ratio of Taxable Earnings to All OASDI Covered Earnings

Declined since 1983 due to increasing concentration of earnings at the top of the distribution. This change was not anticipated.

The share of workers earning more than the OASDI taxable maximum has remained stable at about 6 percent, but between 1983 and 2000, the average inflation-adjusted earnings of those top 6 percent rose by 62 percent vs. only 17 percent for the bottom 94 percent of earners.

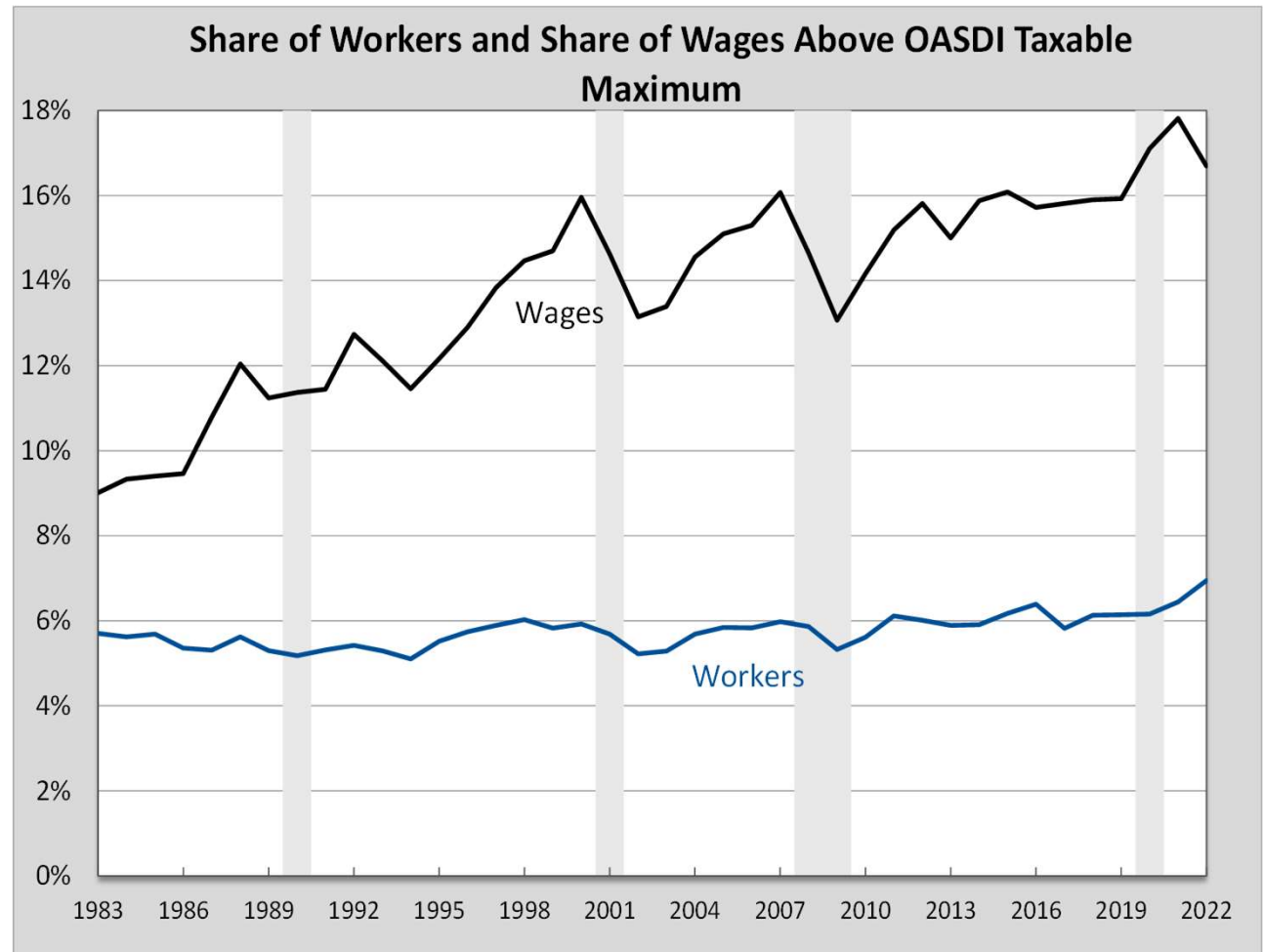
The decline in the ratio slowed down in the 2000s and ceased after 2012 except for cyclical effects.



## OASDI-Covered Wages in Excess of the Taxable Maximum

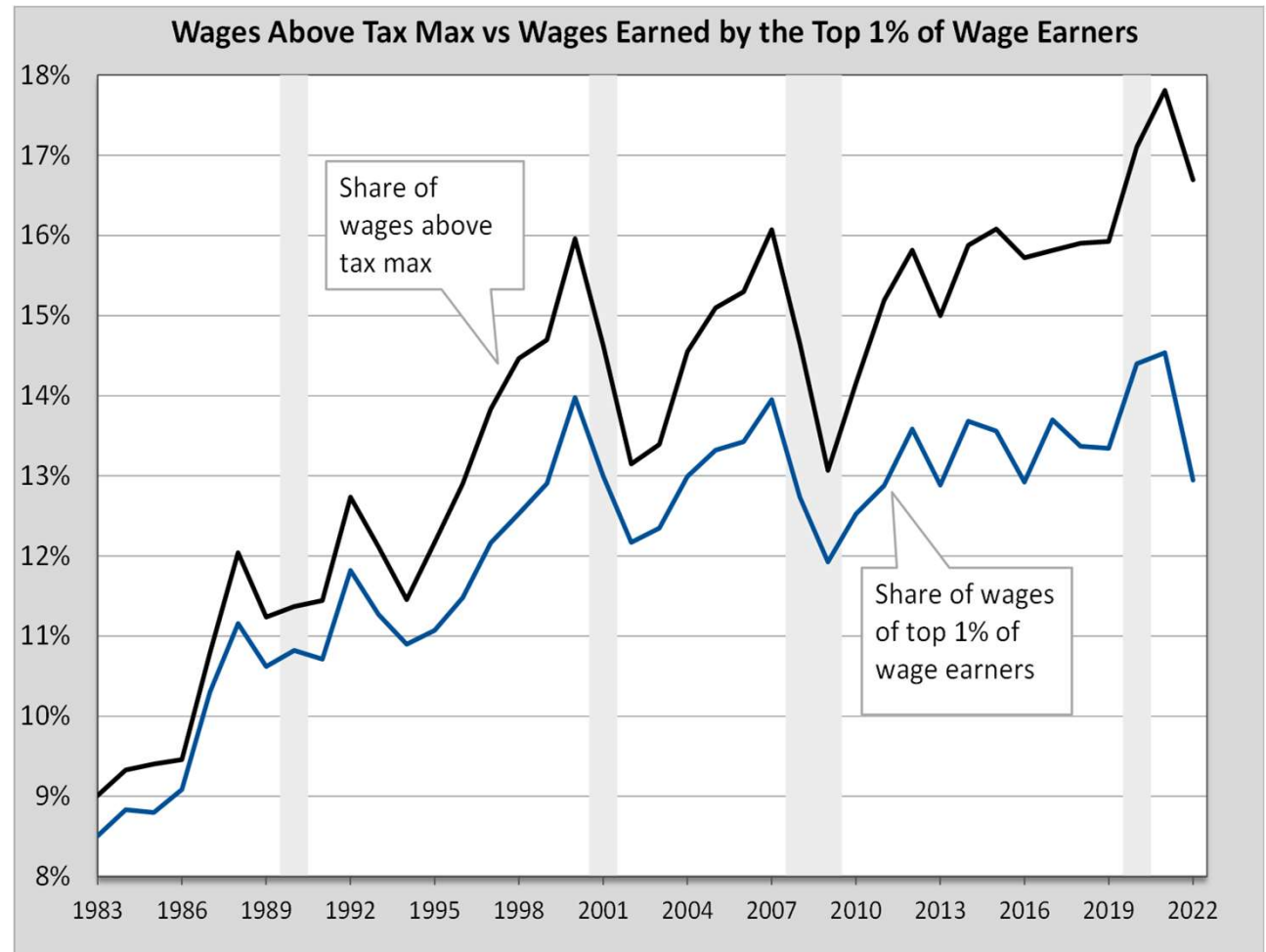
The share of *workers* with wages exceeding the OASDI taxable maximum remained fairly stable around 6 percent.

The share of *wages* in excess of the OASDI taxable maximum has generally risen since 1983 and it stood at 16.7 percent in 2022 (the latest historical data available).



# Share of Wages Earned by the Top 1% of Wage Earners

The trend and fluctuations in wages earned by the top 1% significantly influence the trend and fluctuations of all wages above the taxable maximum.



# Selected Other Measures and Assumptions of Interest to Actuaries...

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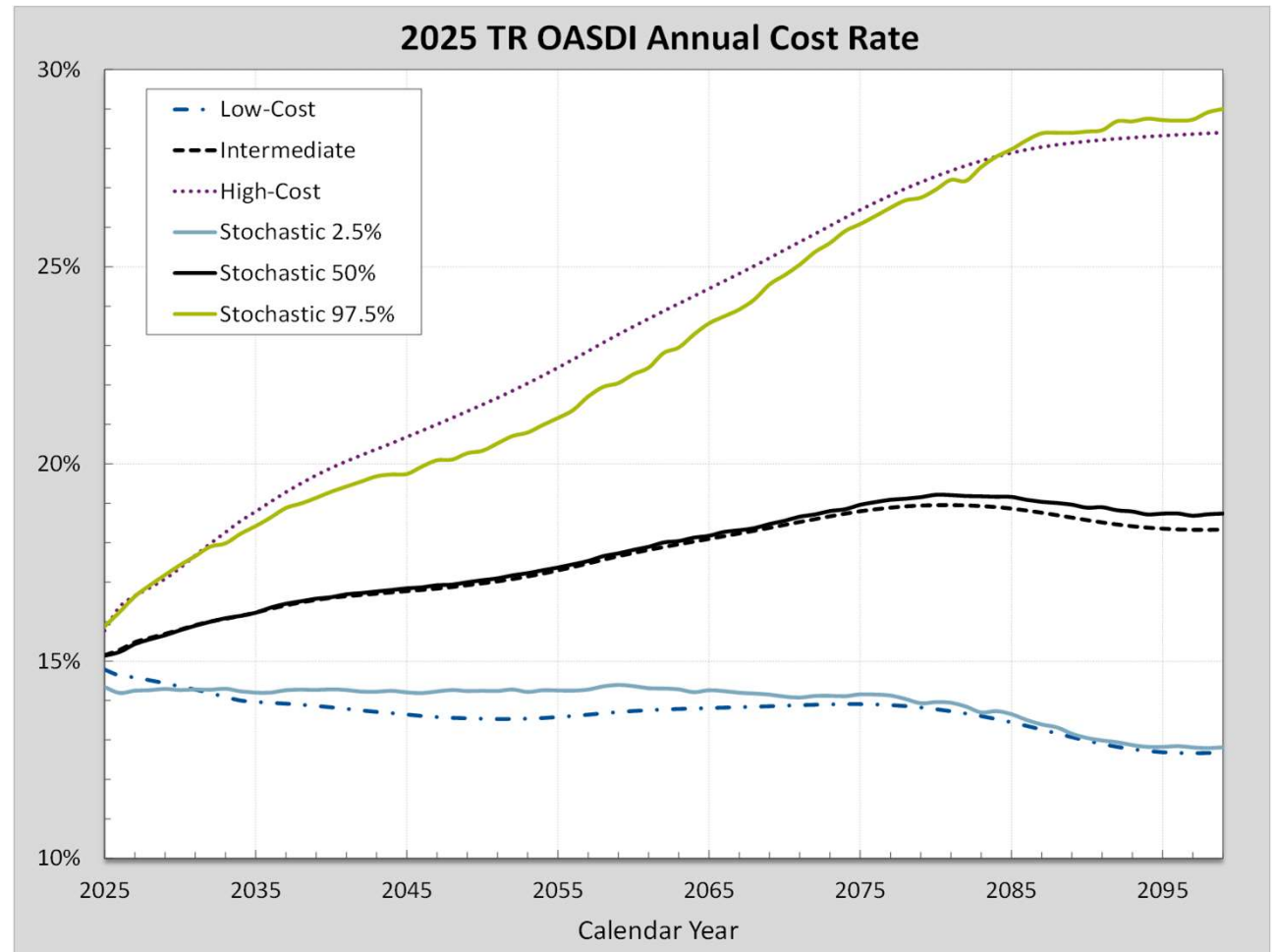
# Open Group Unfunded Obligation Through 75-Year Projection Period

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2024 Report	Change valuation date only	2025 Report
\$22.6 trillion PV	\$23.5 trillion PV	\$25.1 trillion PV
1.16% of GDP	1.18% of GDP	1.26% of GDP

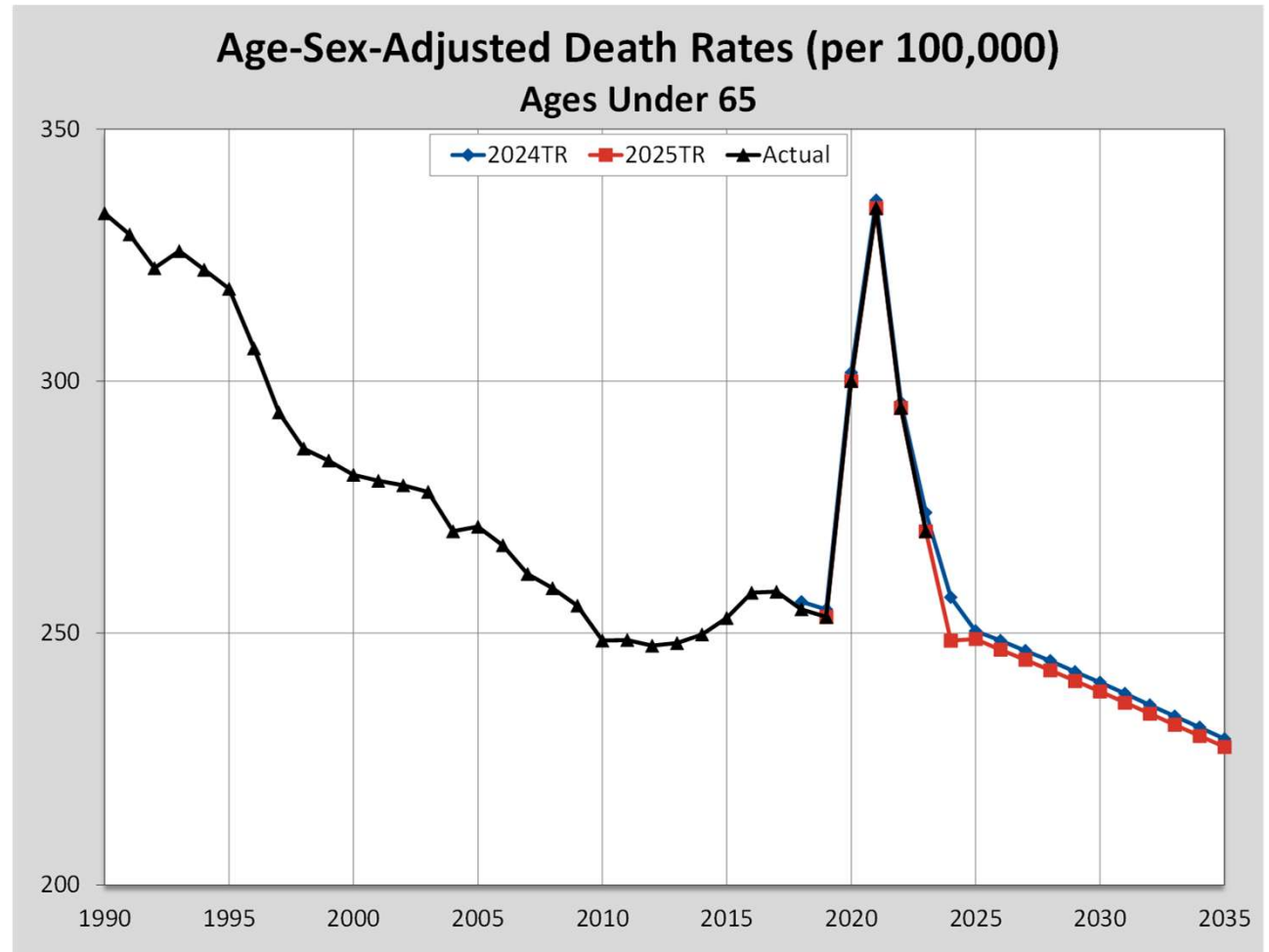
# Uncertainty Illustrations

Stochastic simulations suggest that the high- and low-cost alternatives, in the aggregate, roughly coincide with the 95% range of outcomes.



# Mortality Experience: Ages Under 65

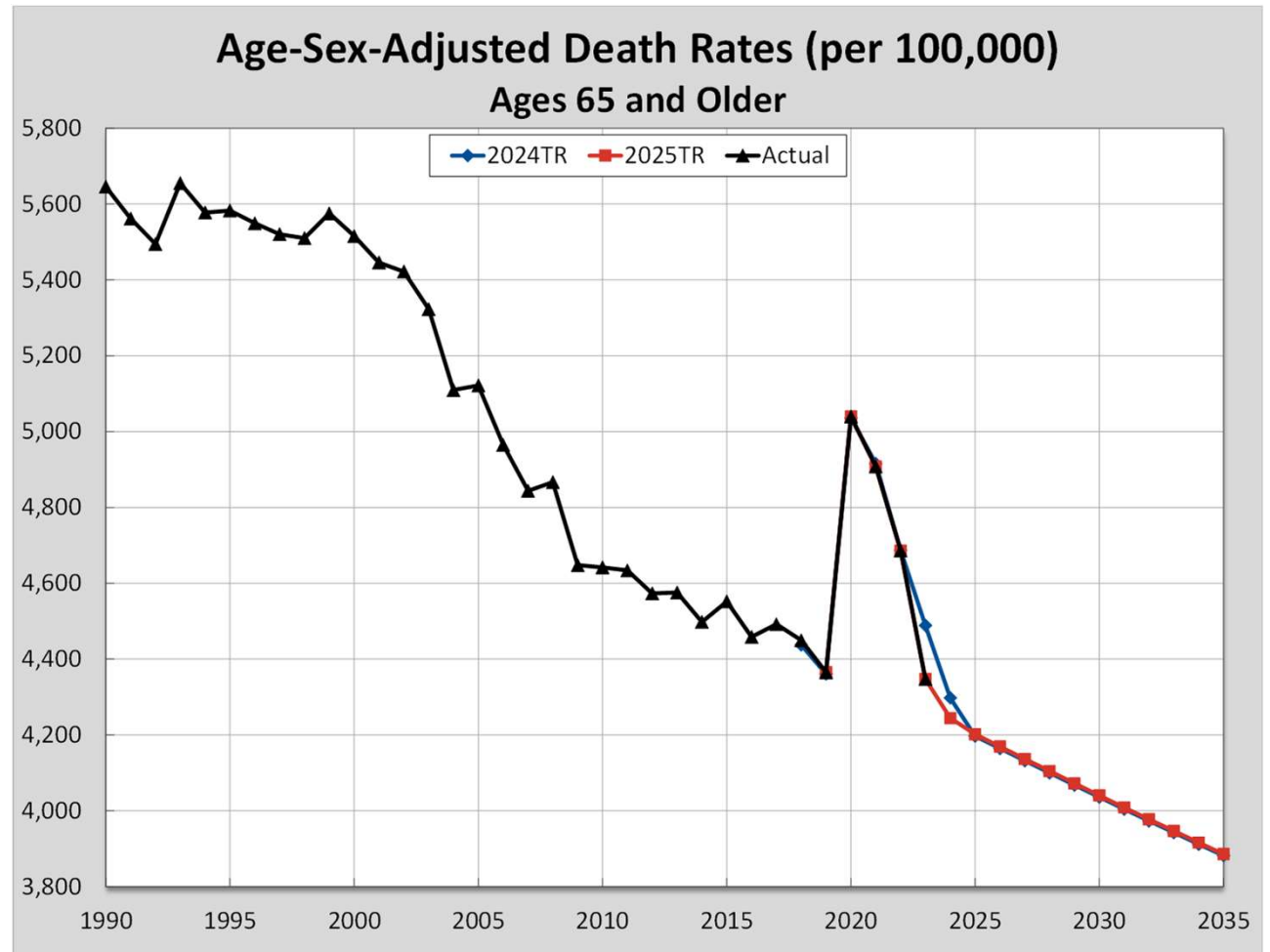
Significantly increased mortality in 2020-23 reflects the effects of the COVID-19 pandemic.



# Mortality Experience: Ages 65 and Older

Significantly increased mortality in 2020-23 reflects the effects of the COVID-19 pandemic.

What will the net effect of the pandemic be on mortality in the future? We assume offsetting effects for the residual population.

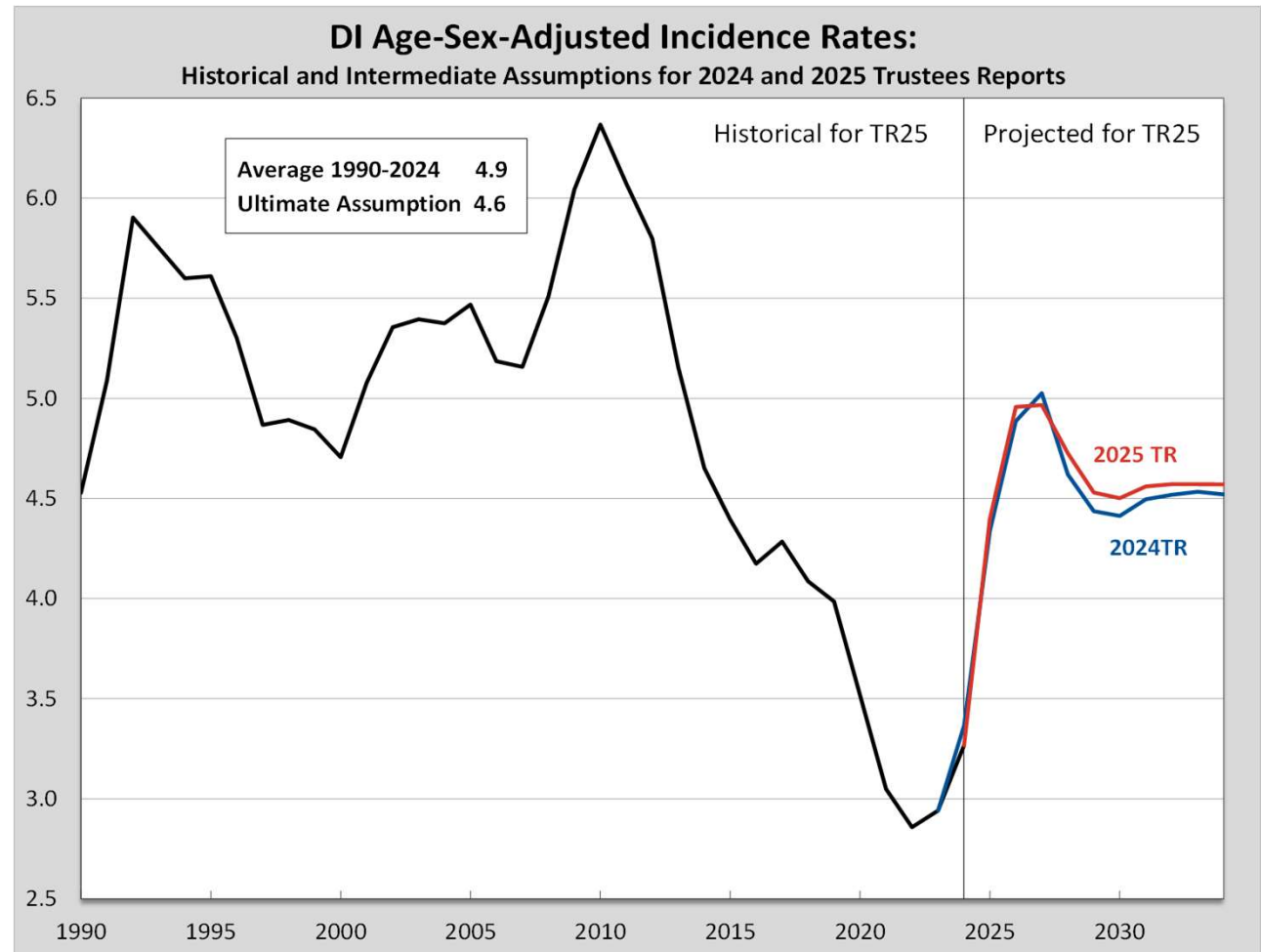




## Disability Incidence Rate Remains Near Historically Low Level

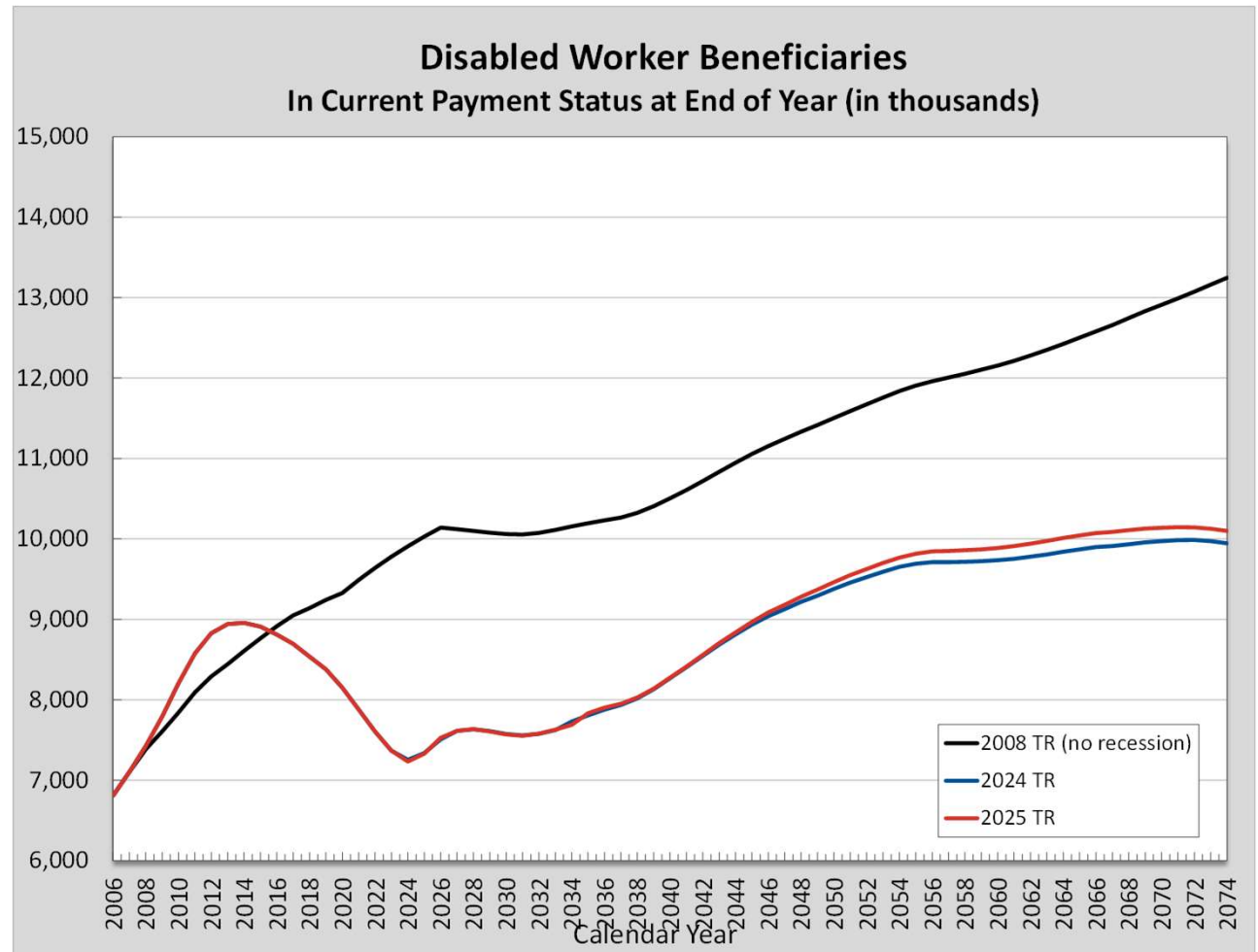
DI disabled worker incidence rate rose sharply in the 2007-2009 recession and has declined since the peak in 2010 to extraordinarily low levels in 2016 through 2022.

Incidence rates increased slightly in 2023 and 2024 and are projected to rise in order to reduce pending claims.

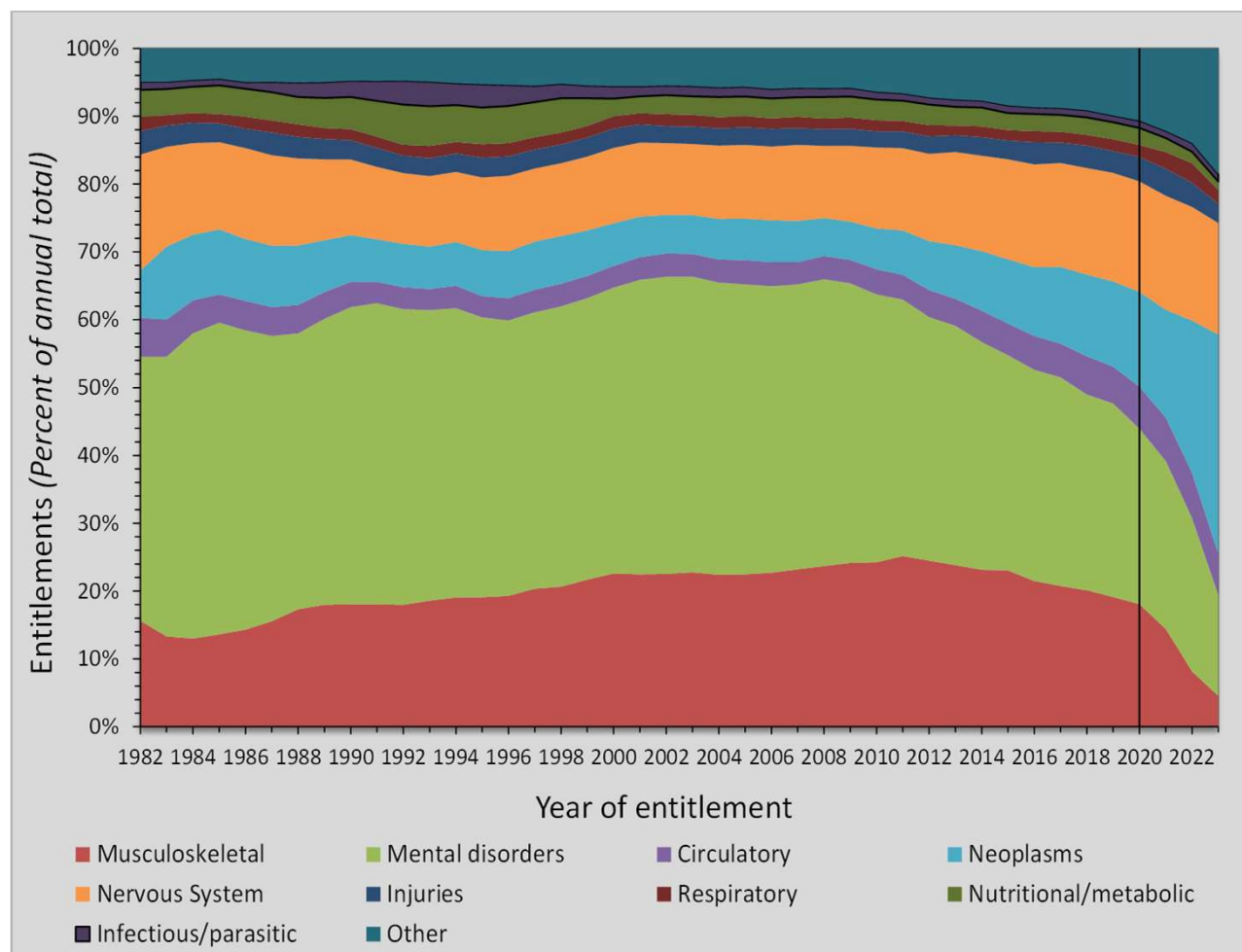


# Disabled Worker Beneficiaries

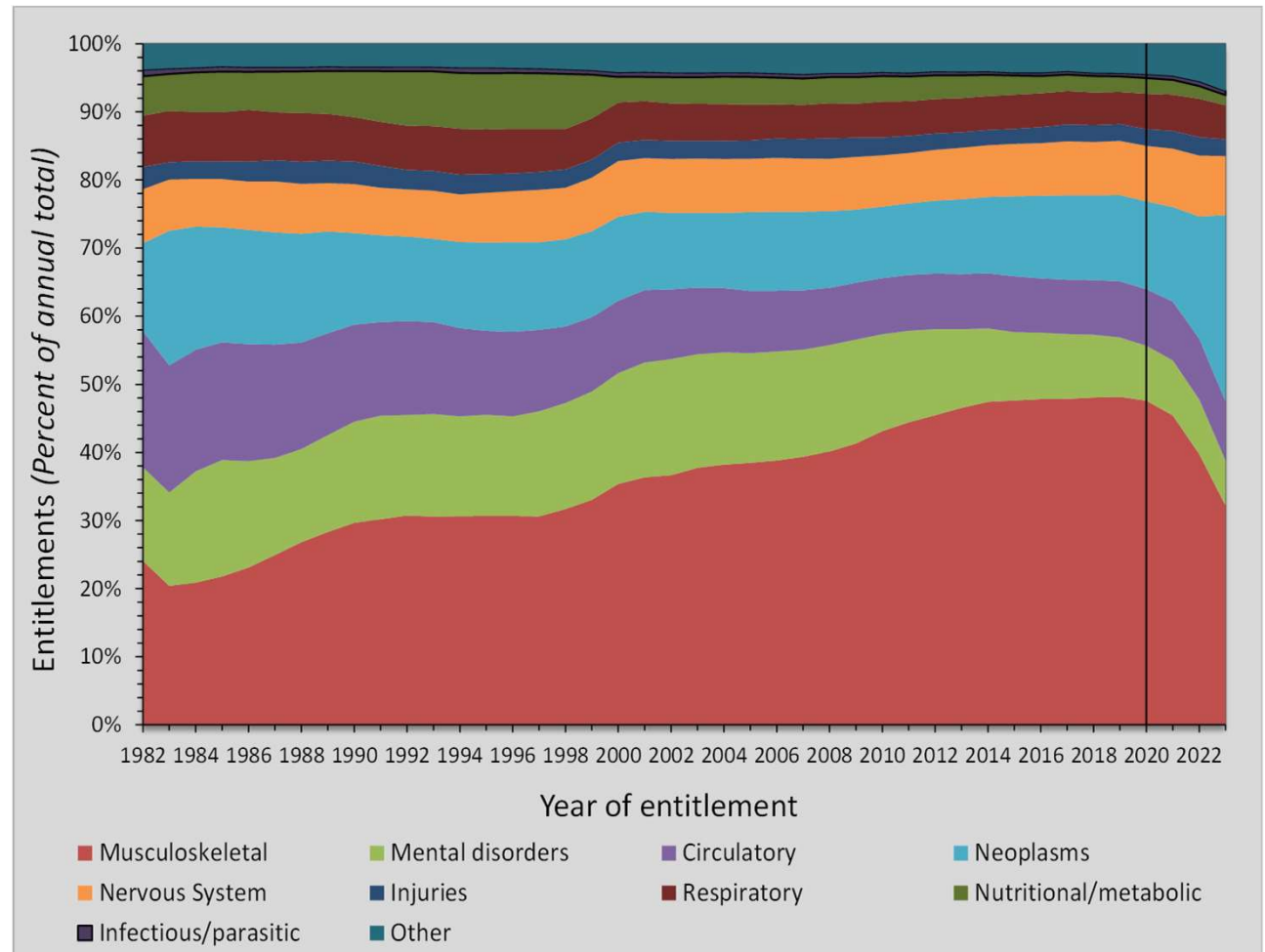
Slightly higher in the long-term based on implementation of the past relevant work regulation.



DIBs Awarded  
Through January  
2024 by Year of  
Entitlement and  
Primary  
Diagnosis Code:  
*Women Age 30-  
39 at Entitlement*



DIBs Awarded  
Through January  
2024 by Year of  
Entitlement and  
Primary  
Diagnosis Code:  
*Women Age 50-  
59 at Entitlement*



# Changing Nature of Work: Trends in Employment by Occupation

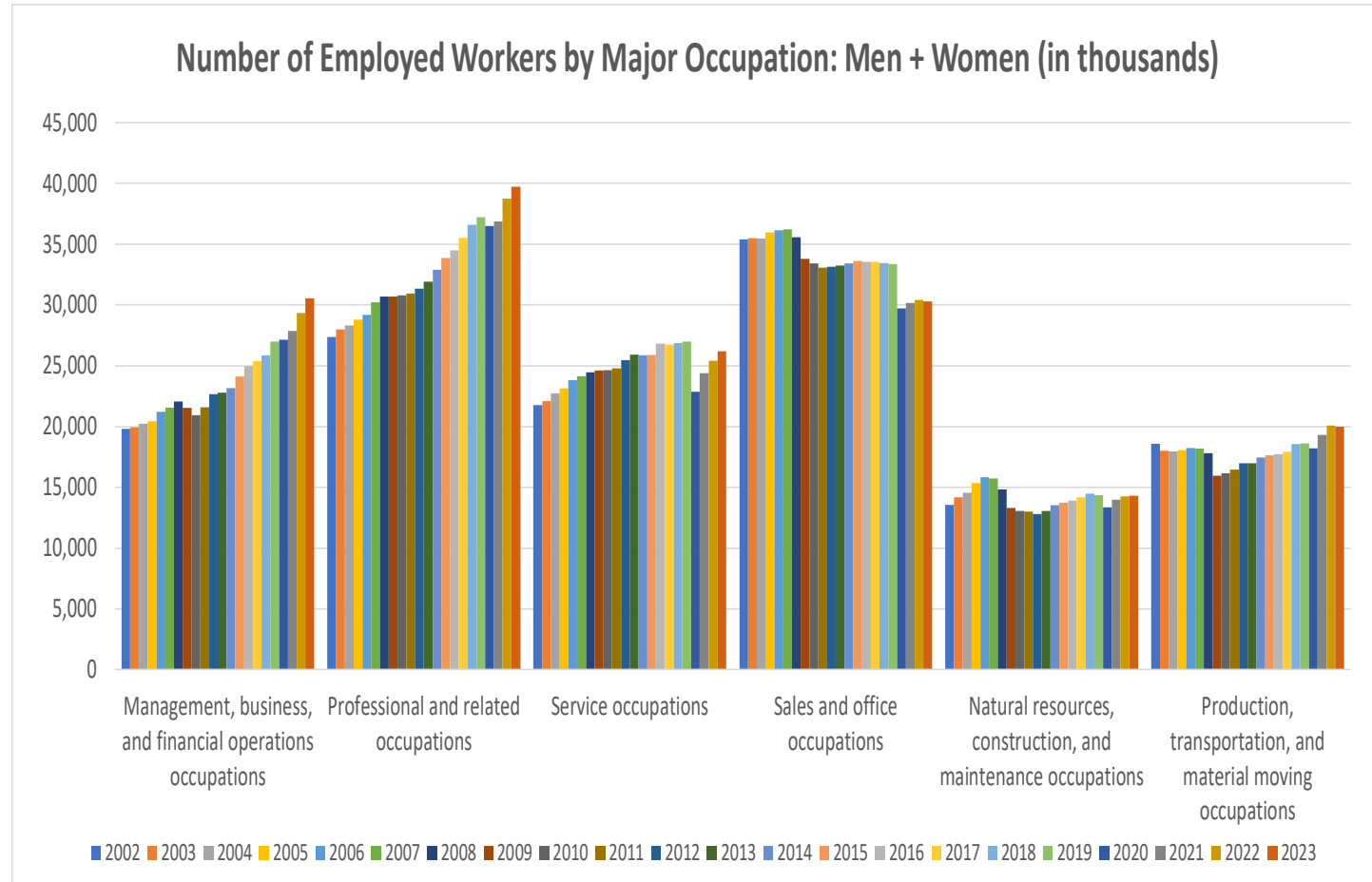
Employment effects in all areas in 2020; share for management and professional, highly paid, increased (BLS cpsaat09)

Will trends of 2002-23 return, and continue?

Will these shifts continue with technology, automation, and increasing education levels?

Might increases in infrastructure spending change these trends?

Also, changes in how job-specific tasks are performed

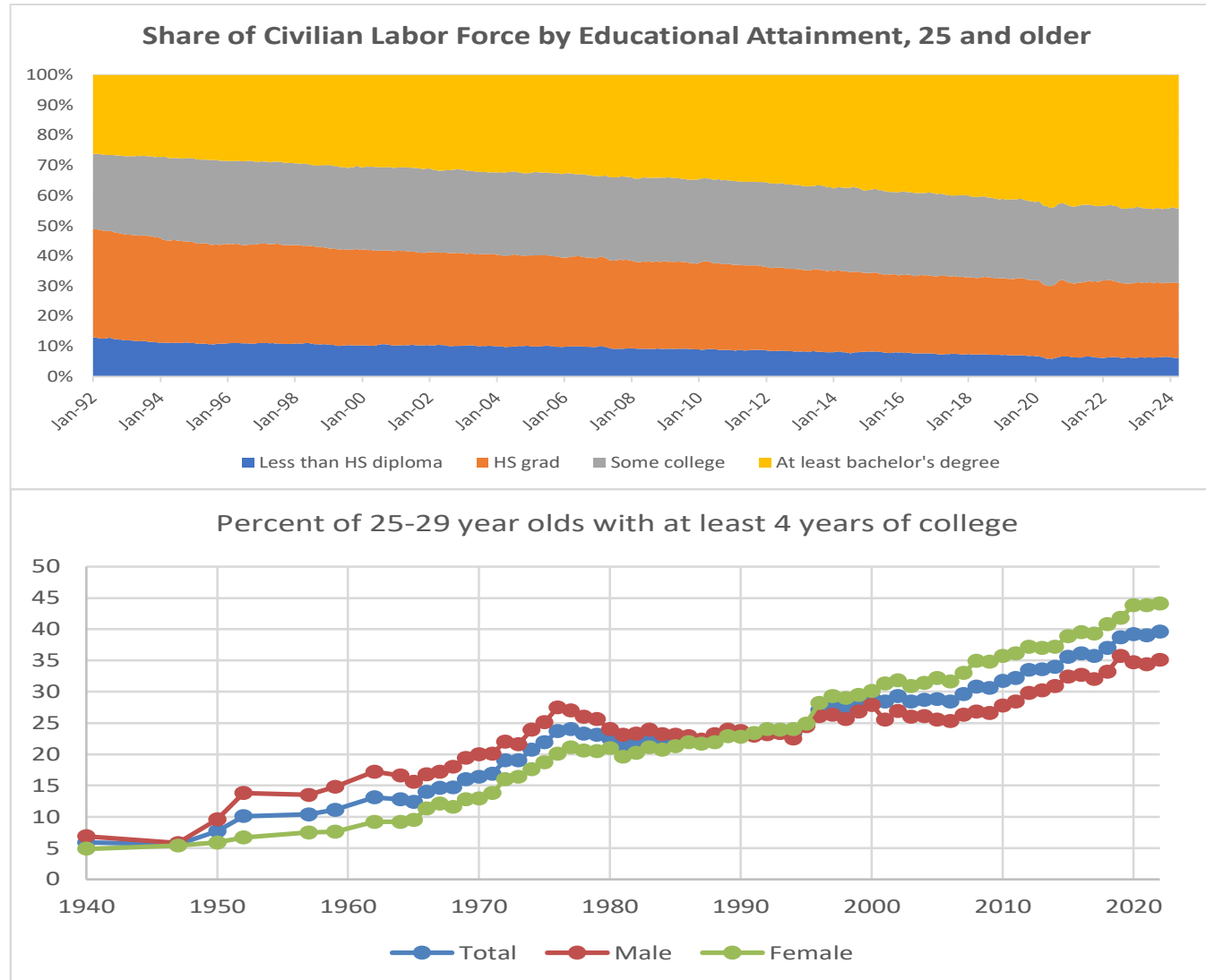


# Changing Educational Attainment

Increasing share of labor force has at least a bachelor's degree – around 25 percent in 1992 to about 45 percent in 2024

By birth cohort, for those born in the early 1900s, about 5 percent had at least 4 years of college, increasing to 40 percent for those born in the 1990s

Women have increased attainment more than men

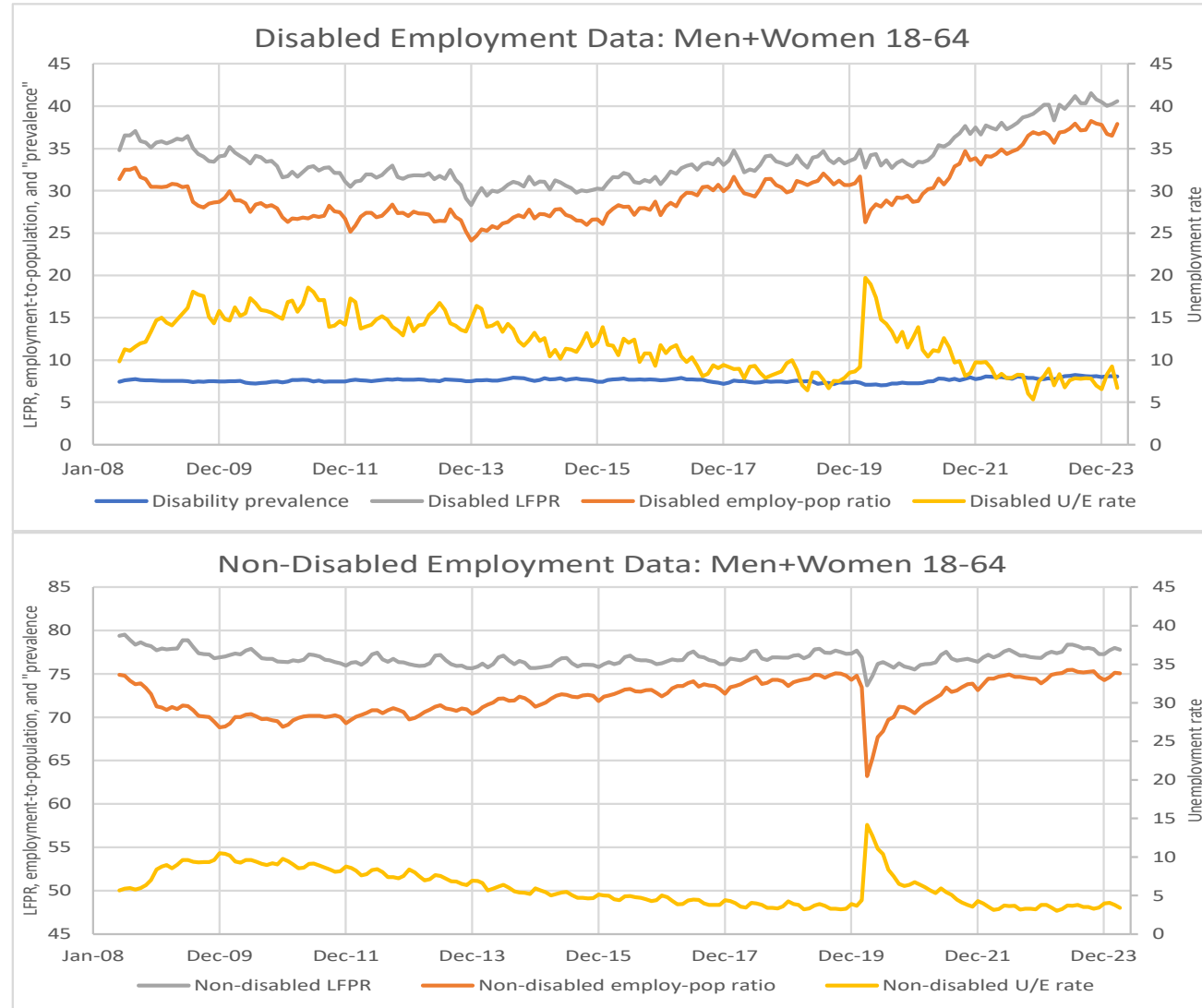


# Employment of the Disabled

Employment of individuals self-identifying as disabled appears to be gradually rising from low rates experienced in 2013-15.

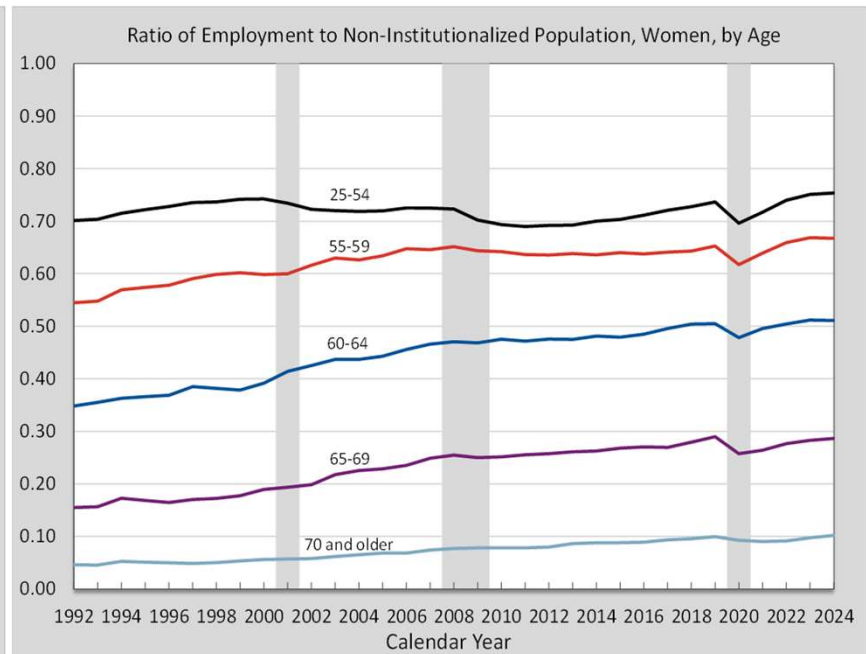
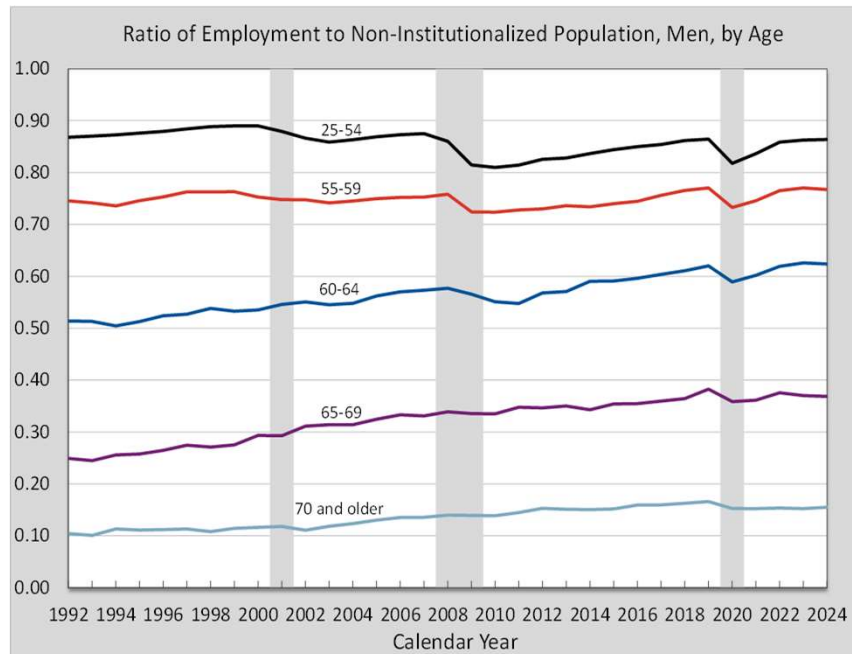
Current rates of employment are at the highest levels since the beginning of 2008. Will this continue to increase or level out?

Note that this is self-identification of disability by CPS survey respondents, so the definition of disability may greatly differ from what is used for the OASDI program.



# Employment Over Age 65...

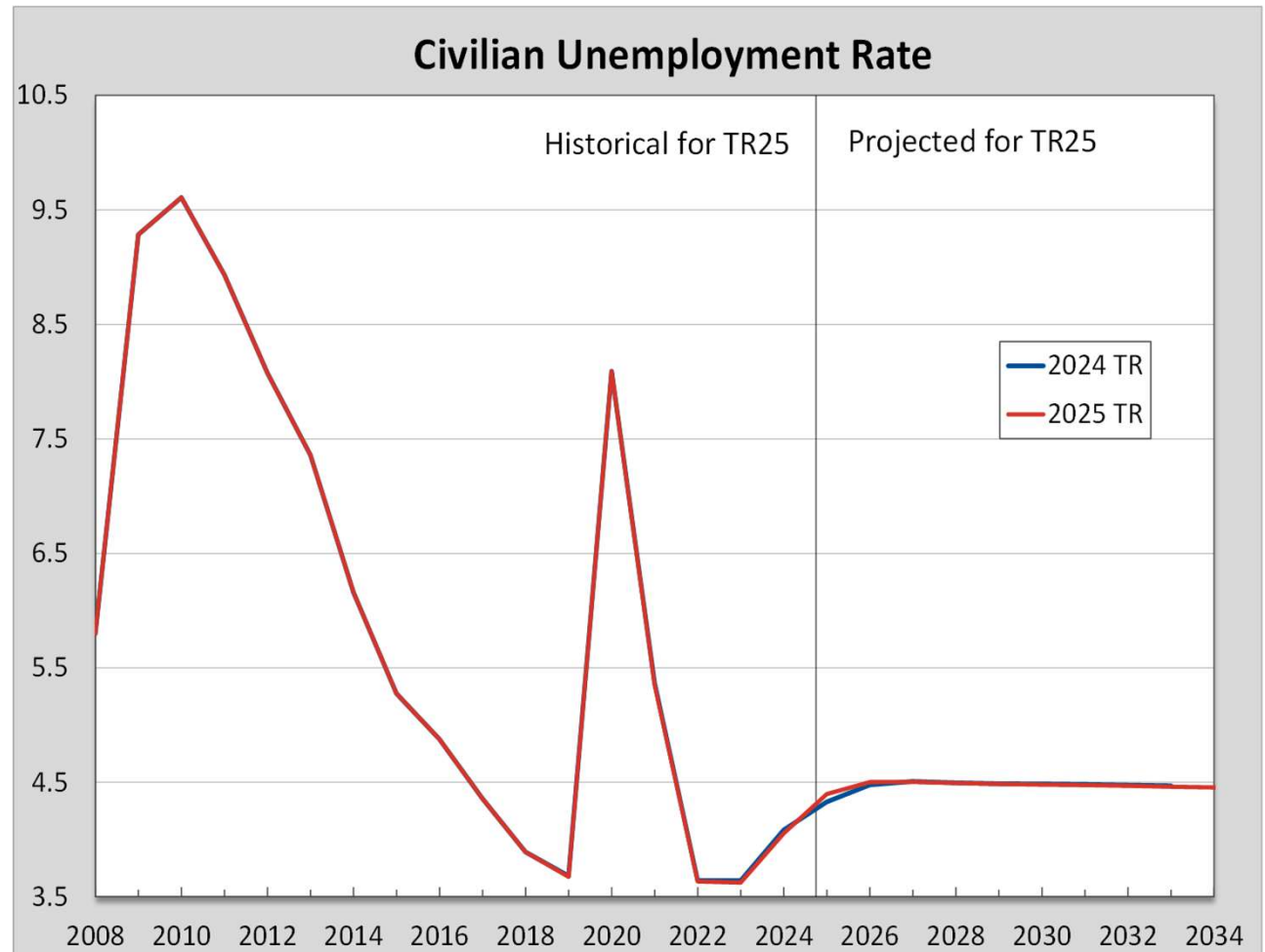
declined briefly with the 2020 recession, but is projected to continue rising. How much of this is from changing the NRA and earnings test? *Is the best retirement approach a job (Paul Samuelson)?*



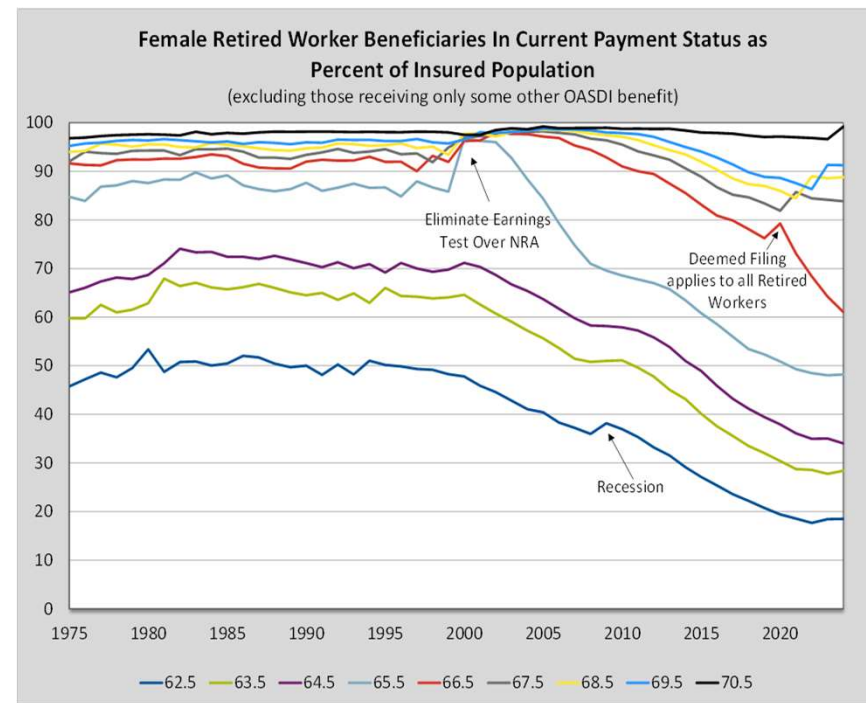
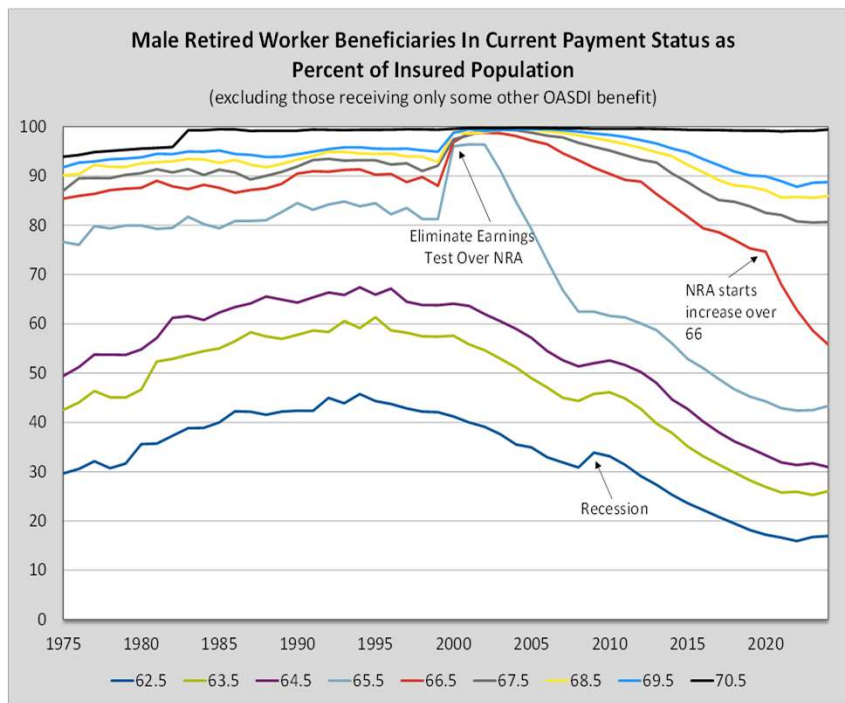


# Unemployment Rates Rising from 2022-23 Lows

The unemployment rate is projected to continue increasing gradually and reach the assumed ultimate level in 2026.



# Age of Starting Social Security Retirement Benefits



# How to Eliminate the Social Security Long-Term Actuarial Deficit

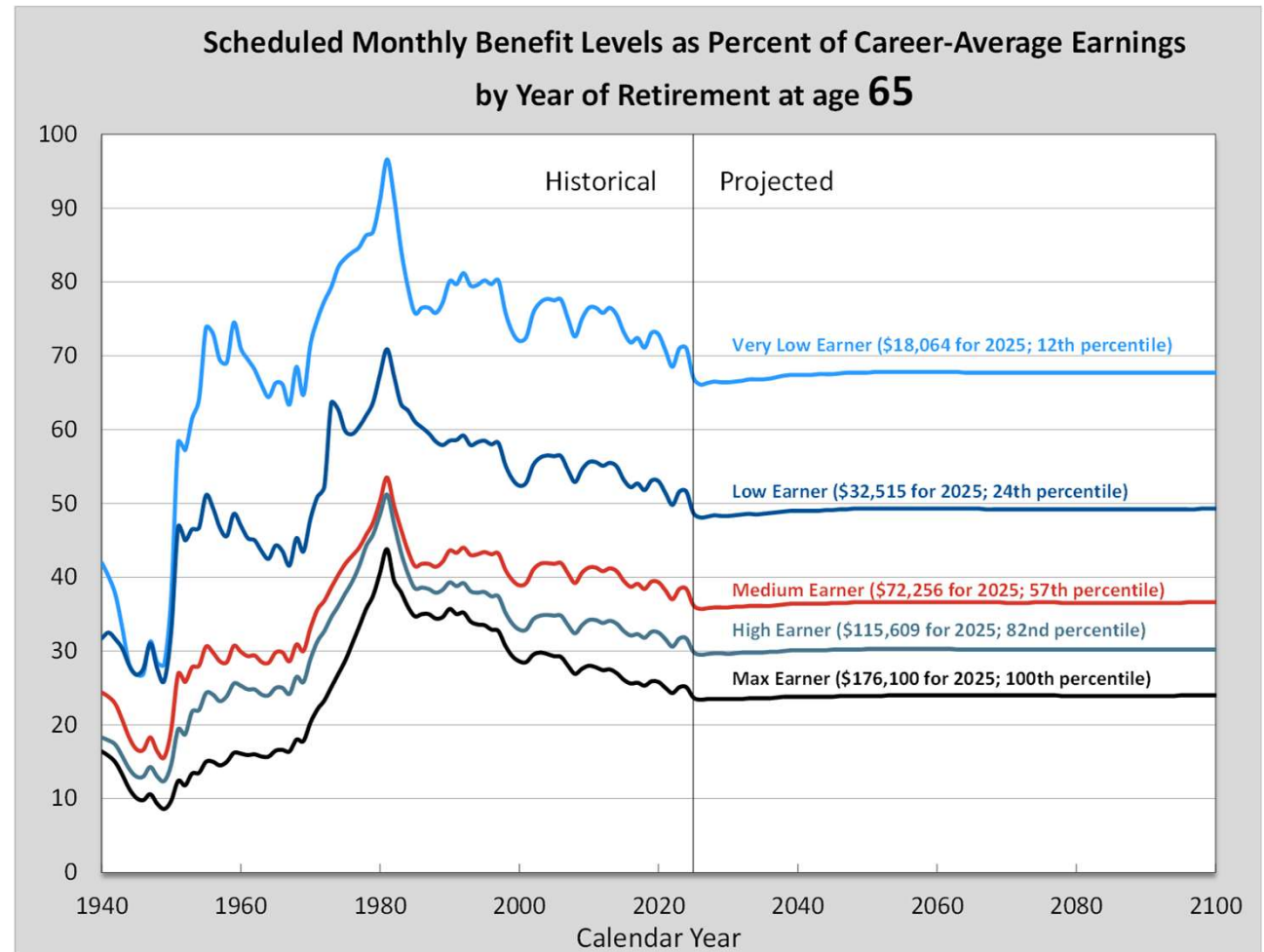
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# Long-Term Projections Inform Policymakers

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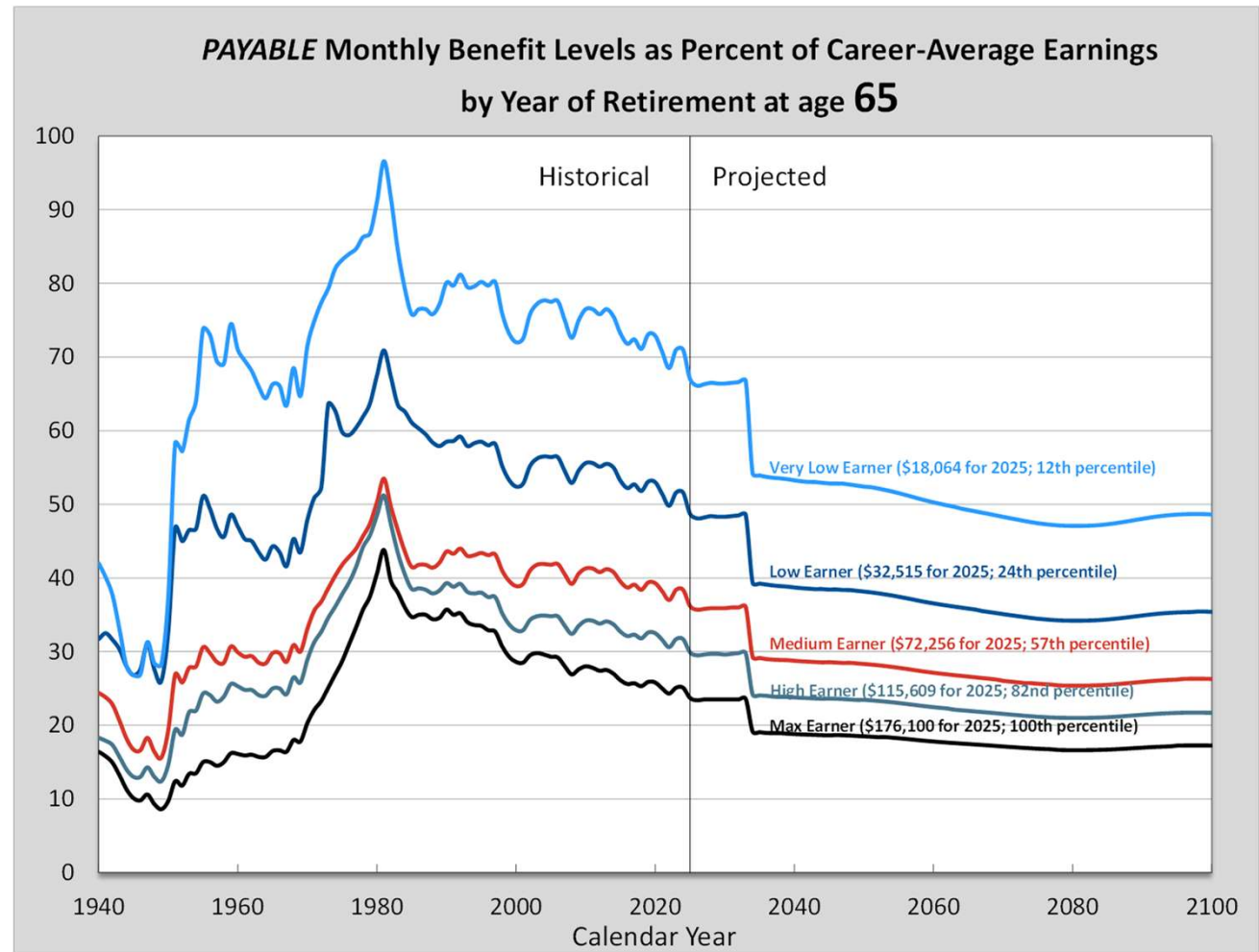
- Congress must act, as it always has
- Straightforward solutions:
  - Raise scheduled revenue by 2034 by about one-third
  - Reduce scheduled benefits by 2034 by about one-fourth
  - Or some combination of the two
  - Comprehensive changes *implemented* by 2034
- Consider adequacy of benefits?

# Replacement Rates Based on the 2025 TR



Source: Annual Recurring Actuarial Note #9 at [www.ssa.gov/oact/NOTES/ran9/index.html](http://www.ssa.gov/oact/NOTES/ran9/index.html)

Payable Benefits  
Under the Law,  
After Trust Fund  
Reserves Are  
Depleted, Are  
Even Lower



Source: Annual Recurring Actuarial Note #9 at [www.ssa.gov/oact/NOTES/ran9/index.html](http://www.ssa.gov/oact/NOTES/ran9/index.html)

# Ways to Lower Cost

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- Lower benefits for retirees – not disabled?
  - Increase normal retirement age (lowers OASI cost, but increases DI cost)
  - Can exempt long-career low earners
- Lower benefits mainly for high earners?
  - Reduce PIA above some level
  - Often combined with increasing PIA below some level, subject to work year requirements
- Lower benefits mainly for the oldest old?
  - Reduce the COLA by using the chain-weighted CPI-U
  - But, some say increase it with the CPI-E (based on purchase of consumers over age 62)

# Ways to Increase Revenue

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- Raise the 12.4 percent OASDI payroll tax rate?
- Raise tax on highest earners?
  - Increase taxable maximum amount
  - Some tax on all earnings above the maximum
- Tax employer group health insurance premiums?
  - Affects only middle class if taxable maximum remains
- Tax individuals' investment income?
  - Or potentially a wealth tax?
- Invest the trust funds in higher-yielding investments?
  - Potentially increasing risk



# Notable Proposals Scored—Hoyer/Primus

Rep. Steny Hoyer and Dr. Wendell Primus (Brookings)—January 3, 2025

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- Significant provisions:
  - Increase the taxable maximum level by 6 percent faster than current law, until it reaches 90 percent of covered earnings
  - Place all proceeds from taxation of Social Security benefits into the OASI and DI funds
  - Change immigration policies to increase lawful immigration
  - Increase the number of computation years from 35 to 40, gradually
  - Increase the NRA for those in the top 40 percent of the all-career average earnings distribution
  - Several other provisions with smaller effects (17 provisions in total)
- Making these changes would have lead to 75-year solvency
- See [https://www.ssa.gov/OACT/solvency/HoyerPrimus\\_20250103.pdf](https://www.ssa.gov/OACT/solvency/HoyerPrimus_20250103.pdf)

# Notable Proposals Scored—Larson

Representative John Larson—July 12, 2023 (*original version July 2014*)

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- Significant provisions:
  - Several benefit improvements similar to his prior bills, but for 10 years only
  - Apply payroll tax on earnings above \$400,000, with a small benefit credit
  - Add a 12.4-percent tax on net investment income above \$400,000
- Making these changes would have lead to an additional 32 years of full solvency (reserve depletion in 2066)
- See [www.ssa.gov/OACT/solvency/JLarson\\_20230712.pdf](http://www.ssa.gov/OACT/solvency/JLarson_20230712.pdf)

# Notable Proposals Scored—Johnson

Former Representative Sam Johnson—December 8, 2016

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- Significant provisions:
  - Make benefit formula less generous but more “progressive”; change to mini-PIA approach; add a new minimum benefit
  - Raise Normal Retirement Age to age 69 (8-year phase-in)
  - Lower the COLA by using chain-weighted CPI; no COLA if high income
  - Eliminate taxation of Social Security benefits
- Making these changes would have lead to 75-year solvency
- See [www.ssa.gov/OACT/solvency/SJohnson\\_20161208.pdf](http://www.ssa.gov/OACT/solvency/SJohnson_20161208.pdf)

# Notable Proposals Scored—Simpson/Bowles

Simpson/Bowles Fiscal Commission—December 1, 2010

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- Significant provisions:
  - Index NRA to maintain life expectancy at  $NRA/(NRA-20)$ ;  $EEA=NRA-5$  but allow  $\frac{1}{2}$  at age 62; exempt  $AIME < 250\%$  poverty from increase in NRA, phase out at 400%
  - Increase the taxable maximum by  $AWI + 2$  ppt until 90% of earnings taxed
  - Restore the special minimum benefit
  - Provide a uniform increase 20-24 years after eligibility: 5% of PIA at  $AIME=AWI$
  - Reduce PIA factors above 50th percentile of AIME to 30%, 10%, 5%
  - Lower the COLA by using chain-weighted CPI
- Making these changes would have lead to 75-year solvency
- See [www.ssa.gov/OACT/solvency/FiscalCommission\\_20101201.pdf](http://www.ssa.gov/OACT/solvency/FiscalCommission_20101201.pdf)

# For More Information Go to

<http://www.ssa.gov/oact/>

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- There you will find:
  - The 2025 and all prior OASDI Trustees Reports
  - Detailed single-year tables for recent reports
  - Our estimates for comprehensive proposals and individual provisions
  - Actuarial notes
  - Actuarial studies
  - Extensive databases
  - Congressional testimonies
  - Presentations by OCACT employees