

Social Security Actuarial Status

The 2021 Annual Report of the Board of Trustees
of the OASI and DI Trust Funds

Key Changes and Results Under Intermediate Assumptions

STEVE GOSS, CHIEF ACTUARY, SOCIAL SECURITY ADMINISTRATION

NATIONAL ACADEMY OF SOCIAL INSURANCE
BRIEFING ON SOCIAL SECURITY FINANCING, BENEFITS, AND EQUITY

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What is the Legislative Mandate for the Annual Report?

1. Trust Fund operations of the past year and the next five years
2. Actuarial status of the trust funds
 - This means 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

Changes This Year Due to Pandemic/ Recession

The projections in the 2021 Trustees Report include the Trustees' best estimates of the effects of the COVID-19 pandemic and ensuing recession, which were not reflected in the 2020 report. Earlier updates were provided by OCACT on November 24, 2020 at https://www.ssa.gov/OACT/solvency/UpdatedBaseline_20201124.pdf

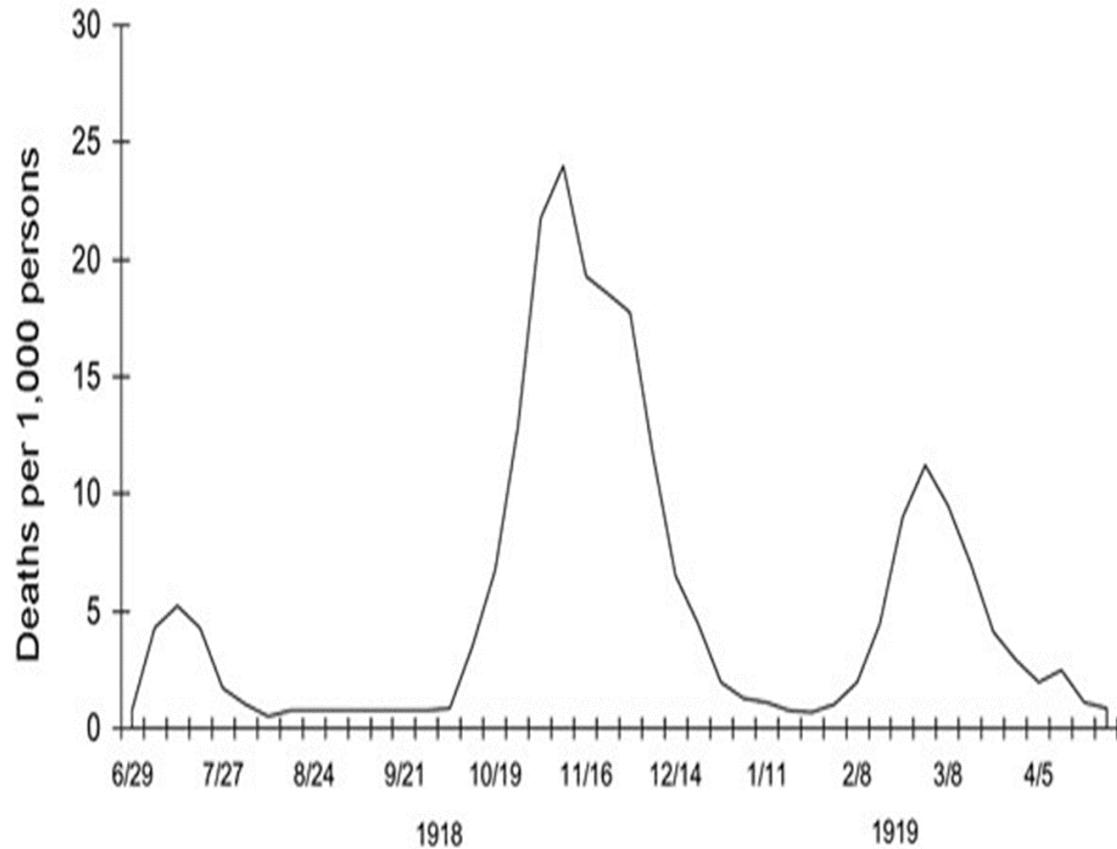
1. Lower employment and earnings in the near term, through 2023
However, the average wage index increases by about 2.7% for 2020
2. Increased deaths in 2020 through 2023
3. Delays in births and immigration
4. Lower applications for benefits, particularly disability
5. A permanent loss in the level of worker productivity, as in other recessions

Changes This Year Due to Pandemic/Recession— *Any Changes Since TR21 Assumptions Were Set?*

1. Lower employment and earnings in the near term, through 2023
Consistent—so far. Except December 2021 COLA is expected to be closer to 6% than 3.1%.
2. Increased deaths in 2020 through 2023
Consistent so far into 2021 but uncertain thereafter.
3. Delays in births and immigration
Preliminary indication of higher births than assumed in 2021.
4. Lower applications for benefits, particularly disability
Continuing so far, and may start back up with end of extended payments.
5. A permanent loss in the level of worker productivity, as in other recessions
Too soon to tell.

1918: Three Waves

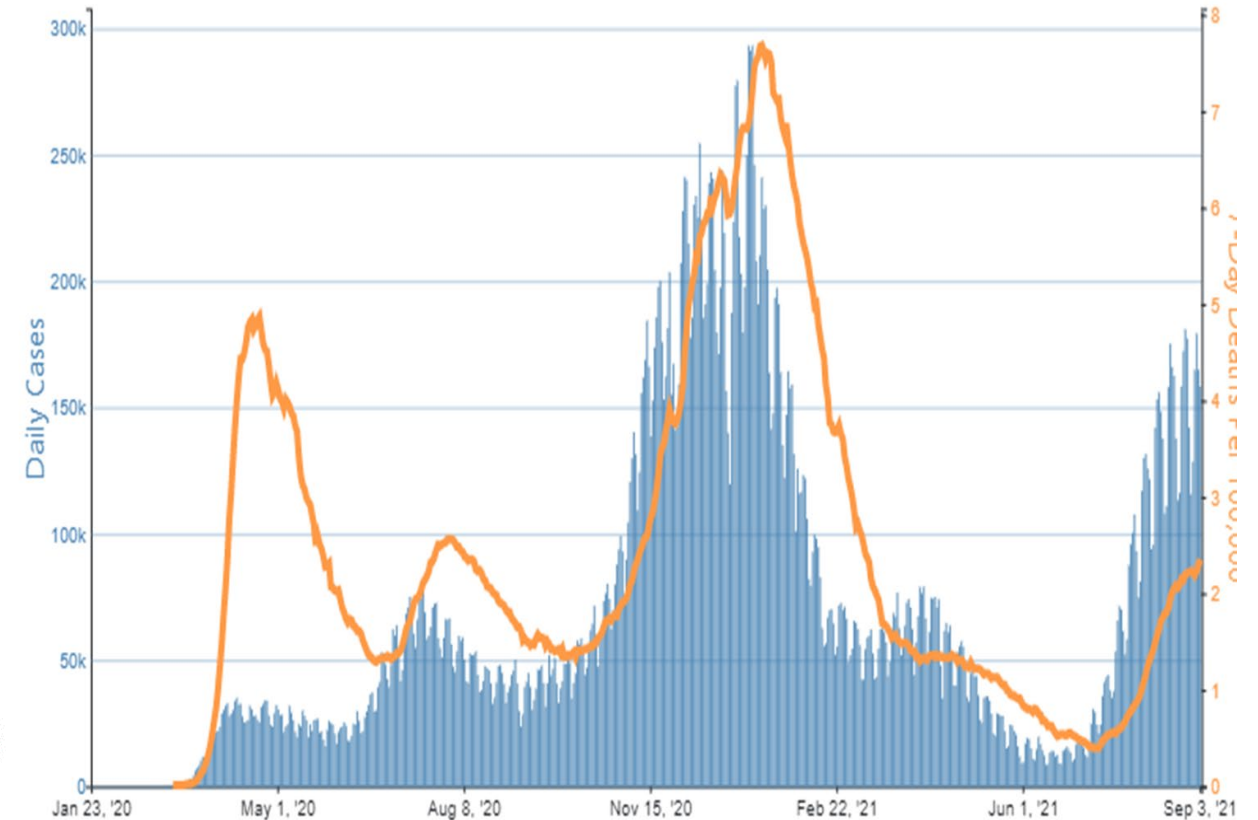
Figure 1. Death Rates of the Spanish Flu, June 1918 to May 1919



Source: The Spanish Flu and the Stock Market: The Pandemic of 1919 by Bryan Taylor | Feb 27, 2020 | Economics, Historical, Insights

COVID-19: So Far

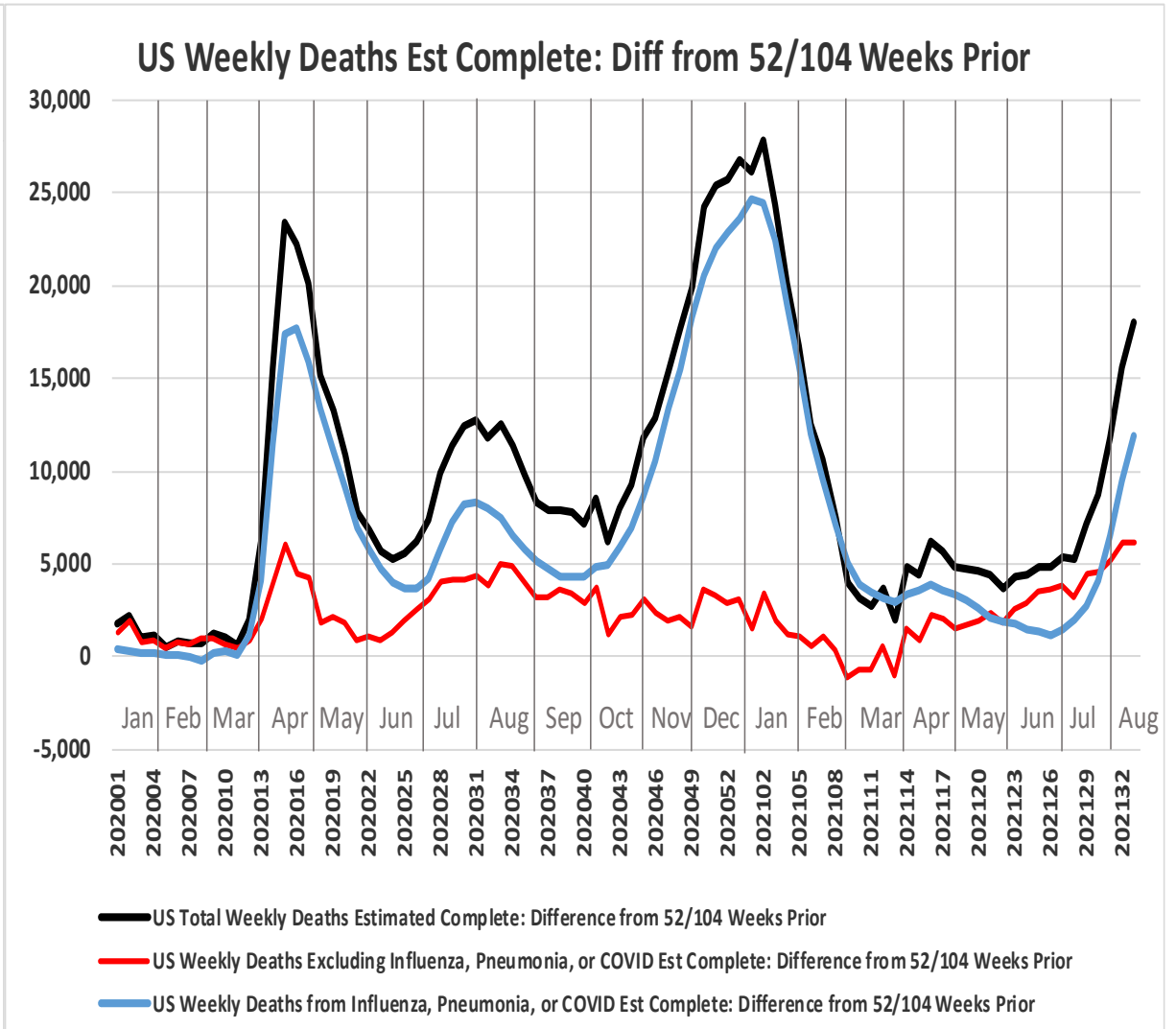
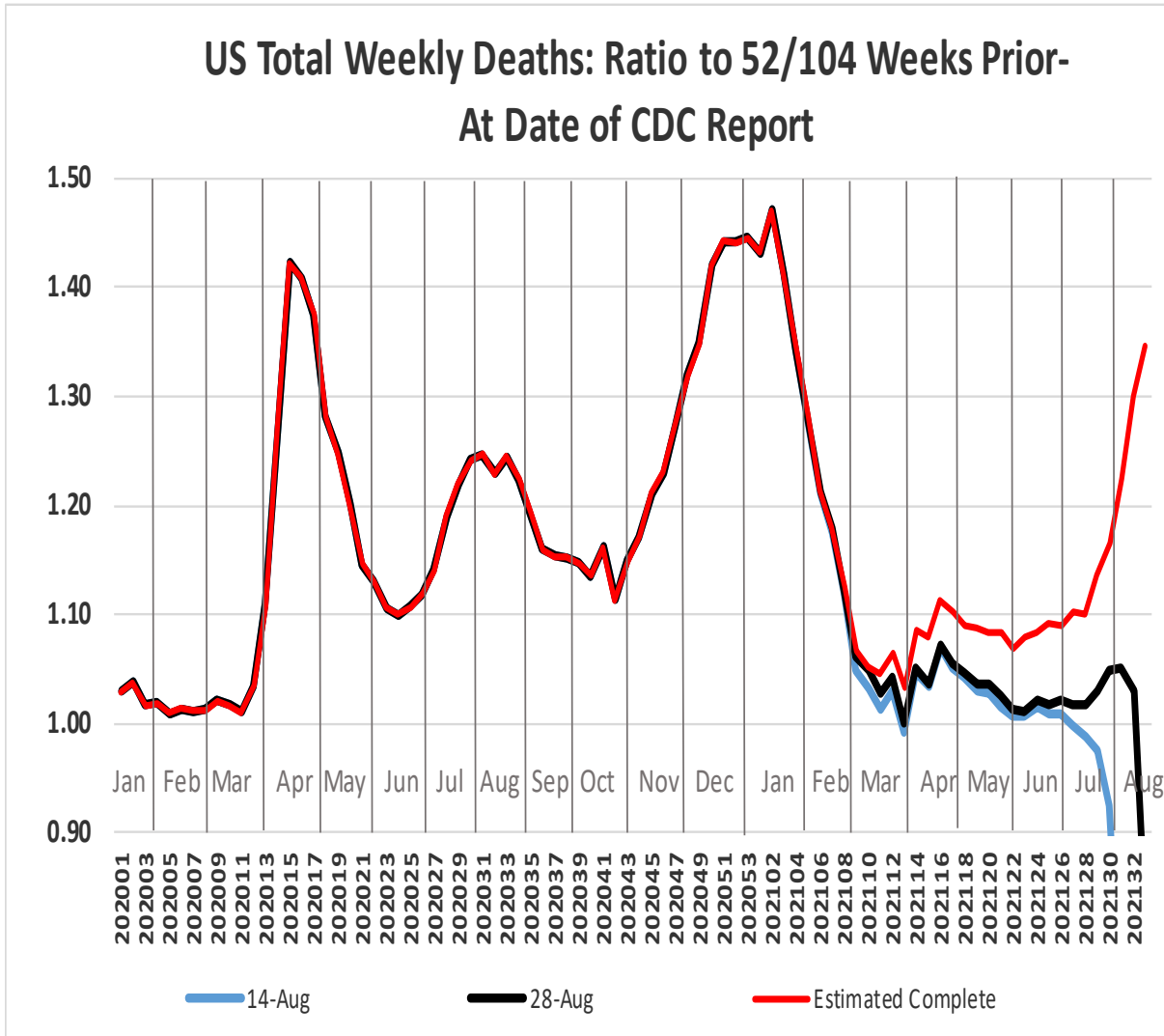
Daily Trends in Number of Cases and 7-Day Cumulative Incidence Rate of COVID-19 Deaths in The United States Reported to CDC, per 100,000 population.



Source: <https://covid.cdc.gov/covid-data-tracker>

Death Reporting Lags Date of Death

Estimated Complete—Rising



Primary Changes This Year: Longer Term

1. Birth rates: change to projecting by “cohort” rather than by year
 - a) Reflects the continuing trend for women having children at older ages
 - b) Lower annual birth rates through 2036, reaching ultimate 2.0 in 2056
2. Employment: Updated labor force model to include latest economic cycle
 - a) Lower labor force and unemployment rate with little net effect
3. Death rates: added dementia as a category and reduced rates of improvement for cardiovascular disease
4. Lower revenue from taxation of benefits per recent experience (Treasury OTA)
5. Methods changes, primarily for average benefit levels

Changes in Timing of Trust Fund *Reserve* Depletion

Mainly from the pandemic/recession in the first 10 to 20 years

1. OASDI reserve depletion is 2034, one year earlier than last year's report (*but 78 percent of scheduled benefits still payable*)
2. OASI reserve depletion is 2033, one year earlier than last year's report (*but 76 percent of scheduled benefits still payable*)
3. DI reserve depletion is 2057, 8 years earlier than last year's report (*but 91 percent of scheduled benefits still payable*)

Changes in OASDI Actuarial Balance in 2021 Report

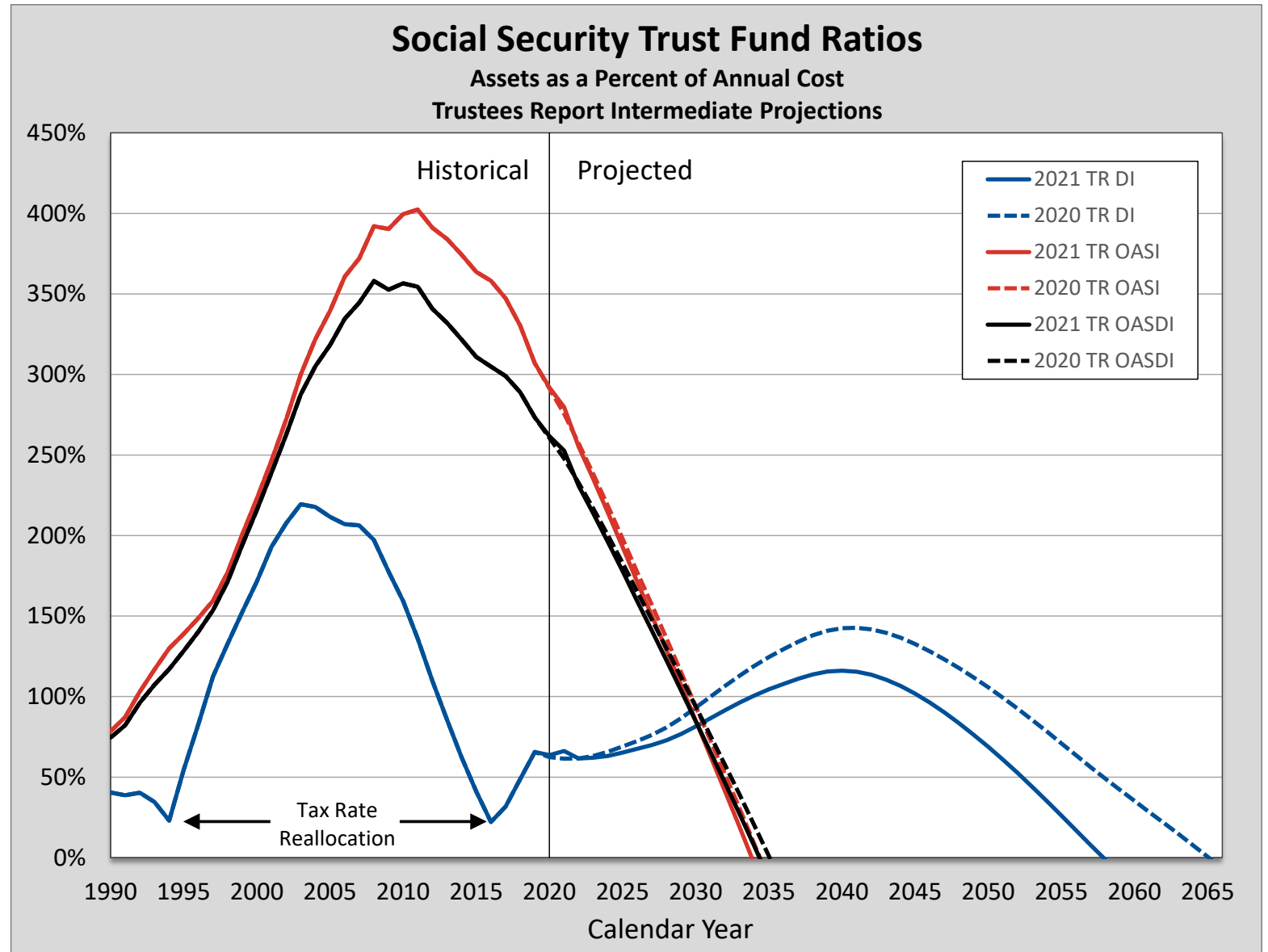
•Valuation Period	- 0.06 percent
•Legislation (restore and maintain the DACA program)	- 0.01 percent
•Demographic data, assumptions and methods	- 0.01 percent
• New cohort fertility method and higher ultimate fertility rate (roughly offsetting cost effects)	
• New dementia cause of death category	
• Higher recent and projected near-term mortality due to COVID-19 pandemic	
•Economic data, assumptions and methods	- 0.09 percent
• Updated labor force projection model and lower ultimate unemployment rate	
• Slightly faster real growth in average wage levels	
• Lower near-term real interest rates	
• Level of productivity and GDP permanently lowered by 1 percent due to recession	
• Reduced level of revenue from taxation of benefits	
•Other new data and methods improvements	- 0.16 percent
Net Changes for All Reasons	-0.32 percent

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

Reserve depletion date varied from 2029 to 2042 in reports over the past 30 years (1992-2021).

DI Trust Fund: reserve depletion in 2057, eight years earlier than last year.

Due largely to less revenue being projected for the DI program in the near-term. DI program continues to have low recent and near-term disability applications and awards.

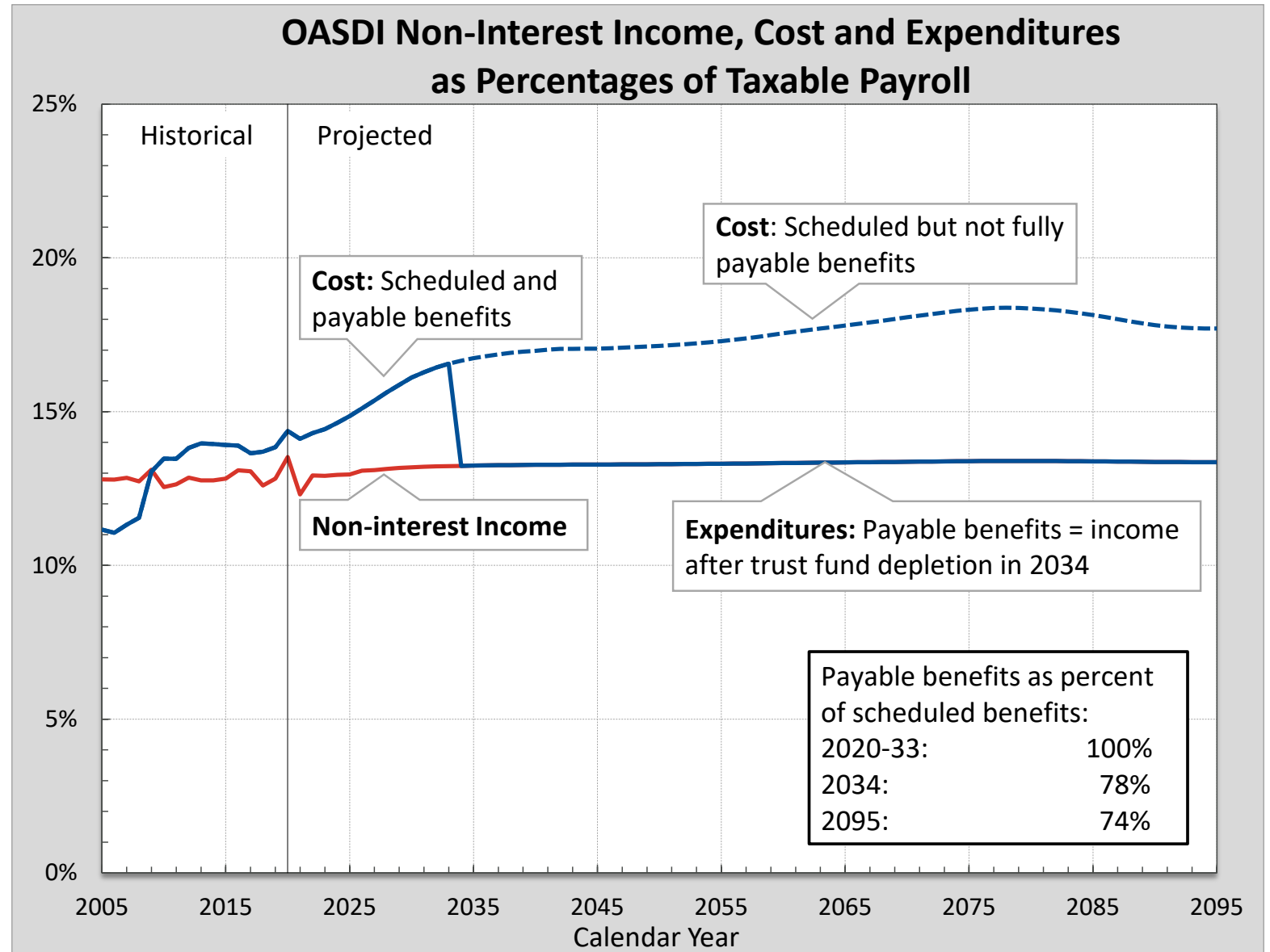


OASDI Annual Cost and Non-Interest Income as Percent of Taxable Payroll

Persistent negative annual cash-flow balance starting in 2010.

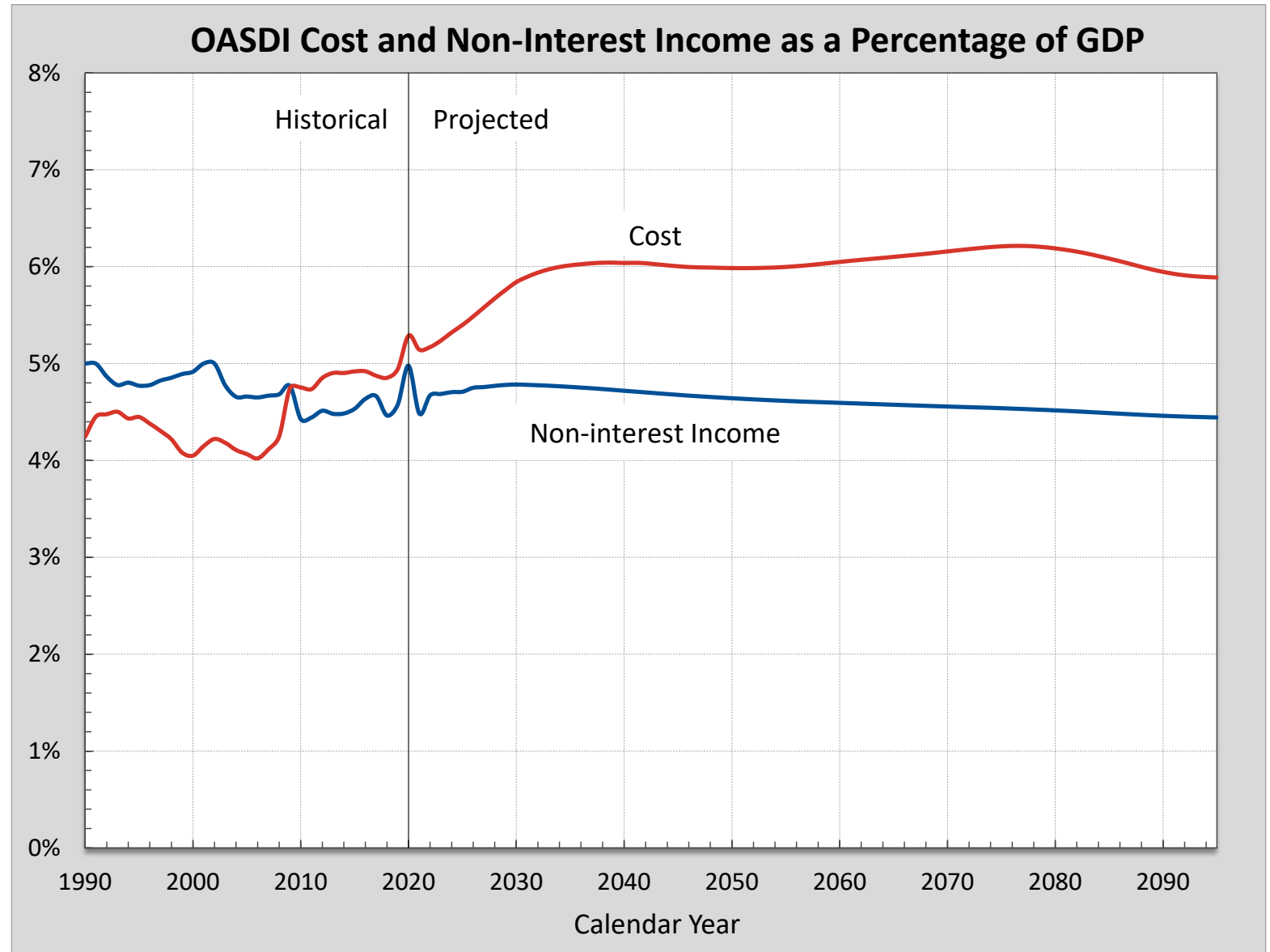
78 percent of scheduled benefits still payable at trust fund reserve depletion.

Annual deficit in 2095: 4.34 percent of payroll: 0.21 percent smaller than last year



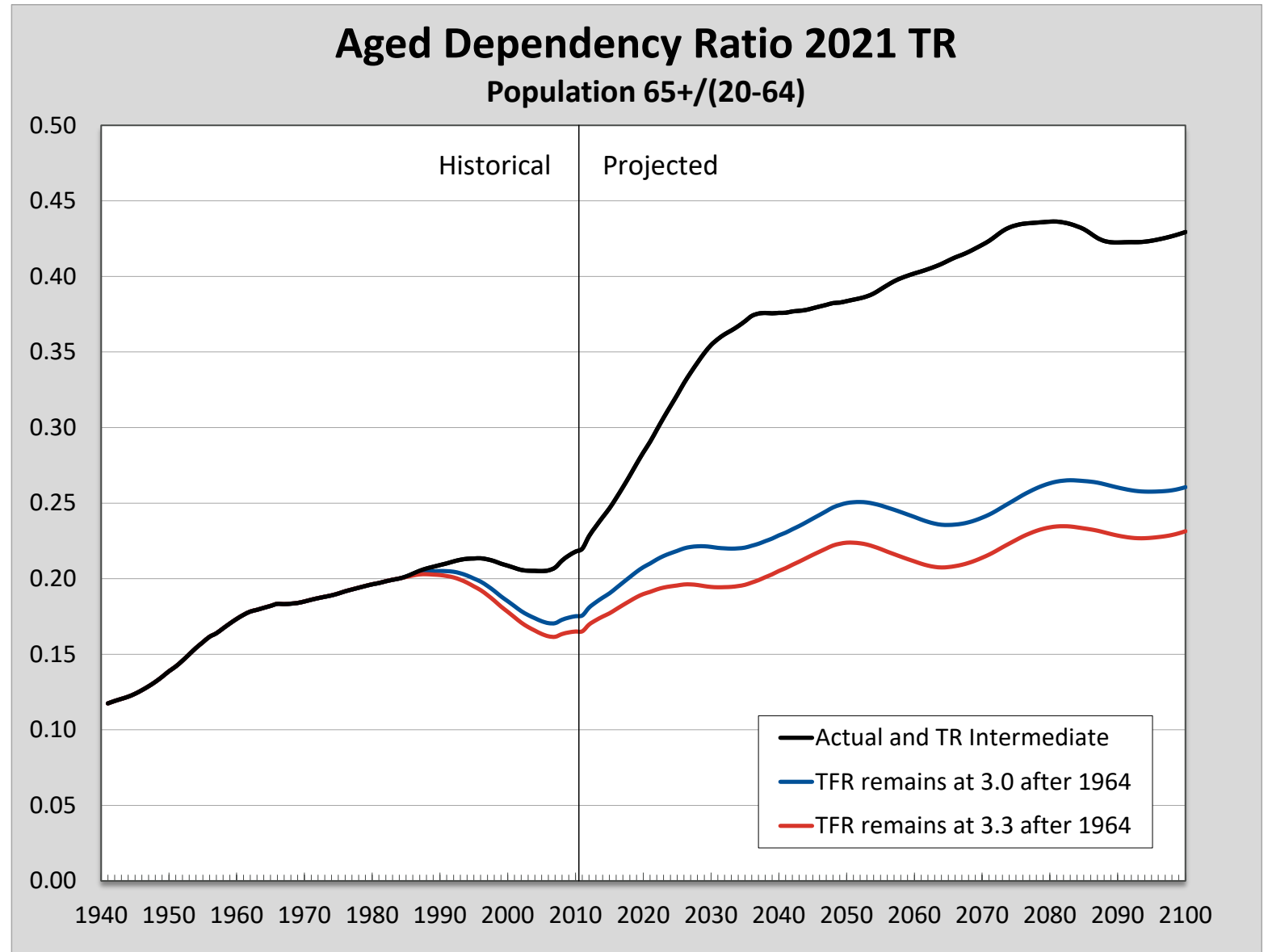
SUSTAINABILITY: Cost as percent of GDP

Rises from a 4.2 percent average in 1990-2008, to a peak of about 6.2 percent for 2077, and then decline to 5.9 percent by 2095.



Aging - Change in Age Distribution

Mainly due to drop in birth rates

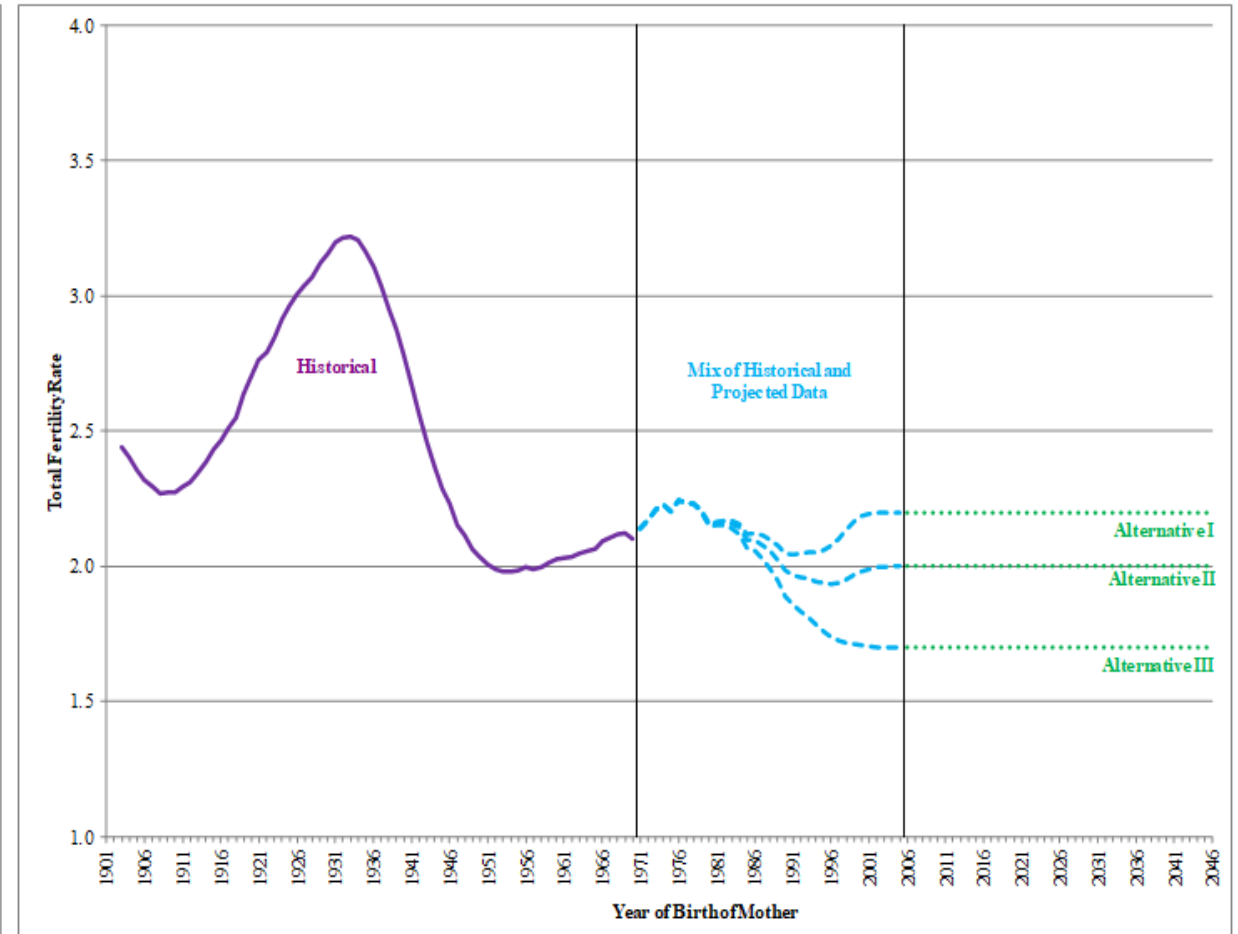


Birth Rates Projected **Lower** Through 2036 for 2021 TR: Ultimate TFR 2.0: Below Current Expectations—Higher 75-Year Deficit

Chart 1.3: Historical and Projected Period Total Fertility Rates



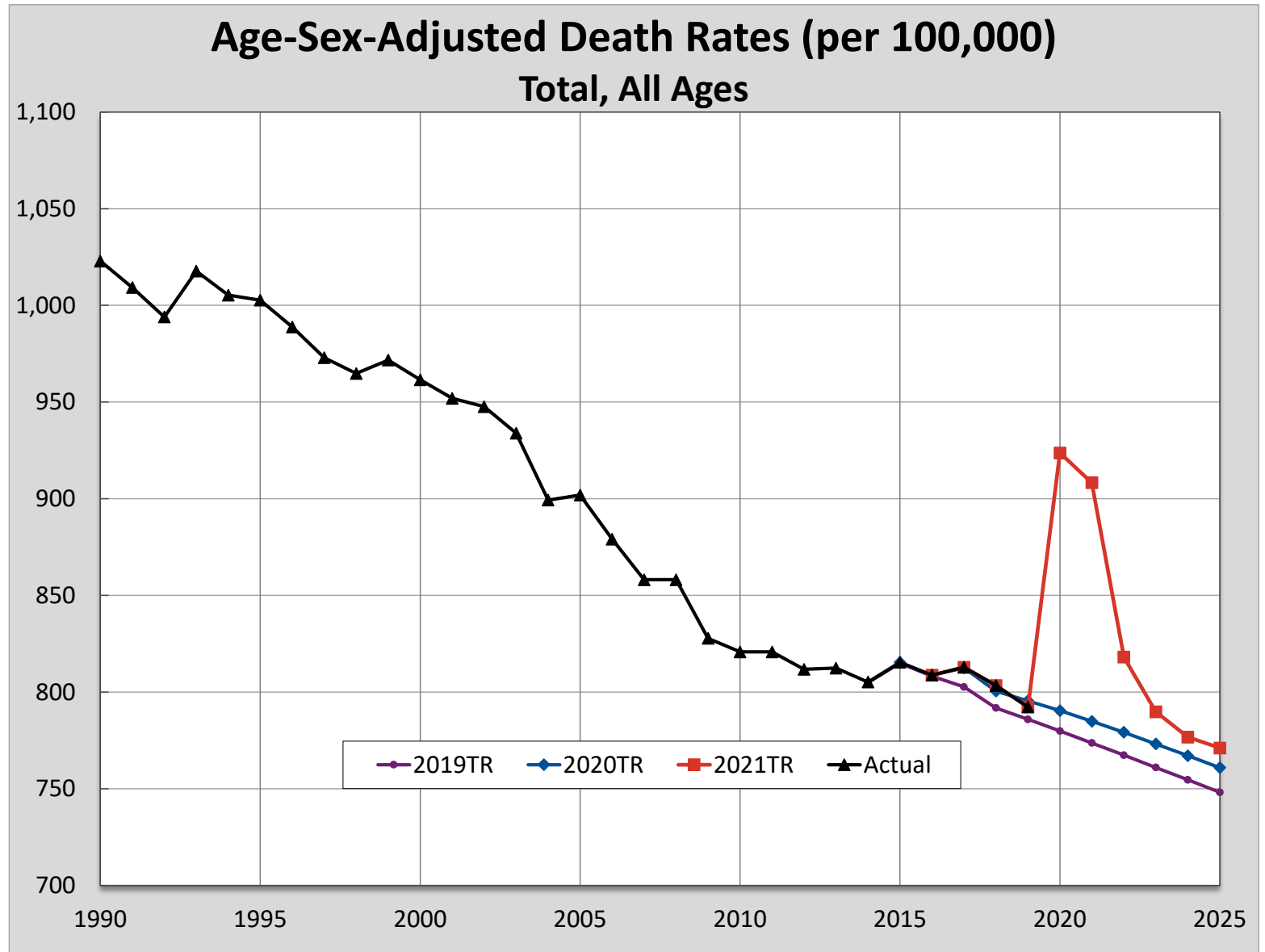
Chart 1.4: Historical and Projected Total Fertility Rates by Birth Cohort



[https://www.ssa.gov/oact/TR/2021/2021 Long-Range Demographic Assumptions.pdf](https://www.ssa.gov/oact/TR/2021/2021%20Long-Range%20Demographic%20Assumptions.pdf)

Mortality Experience: All Ages

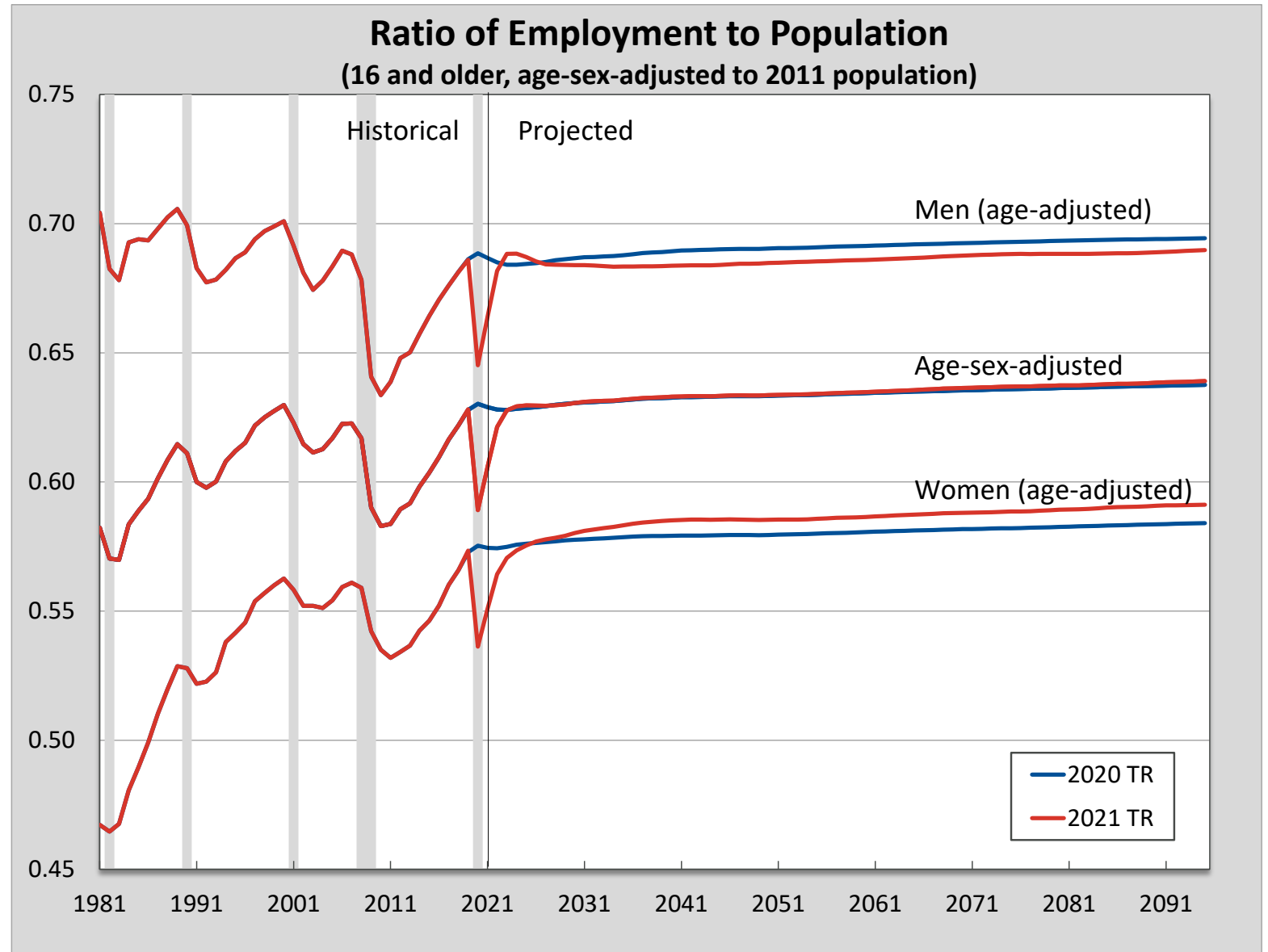
Increased mortality in the near-term to reflect the effects of the COVID-19 pandemic.



Ratio of Employment to Population

Expected to recover fully from the brief but steep recession.

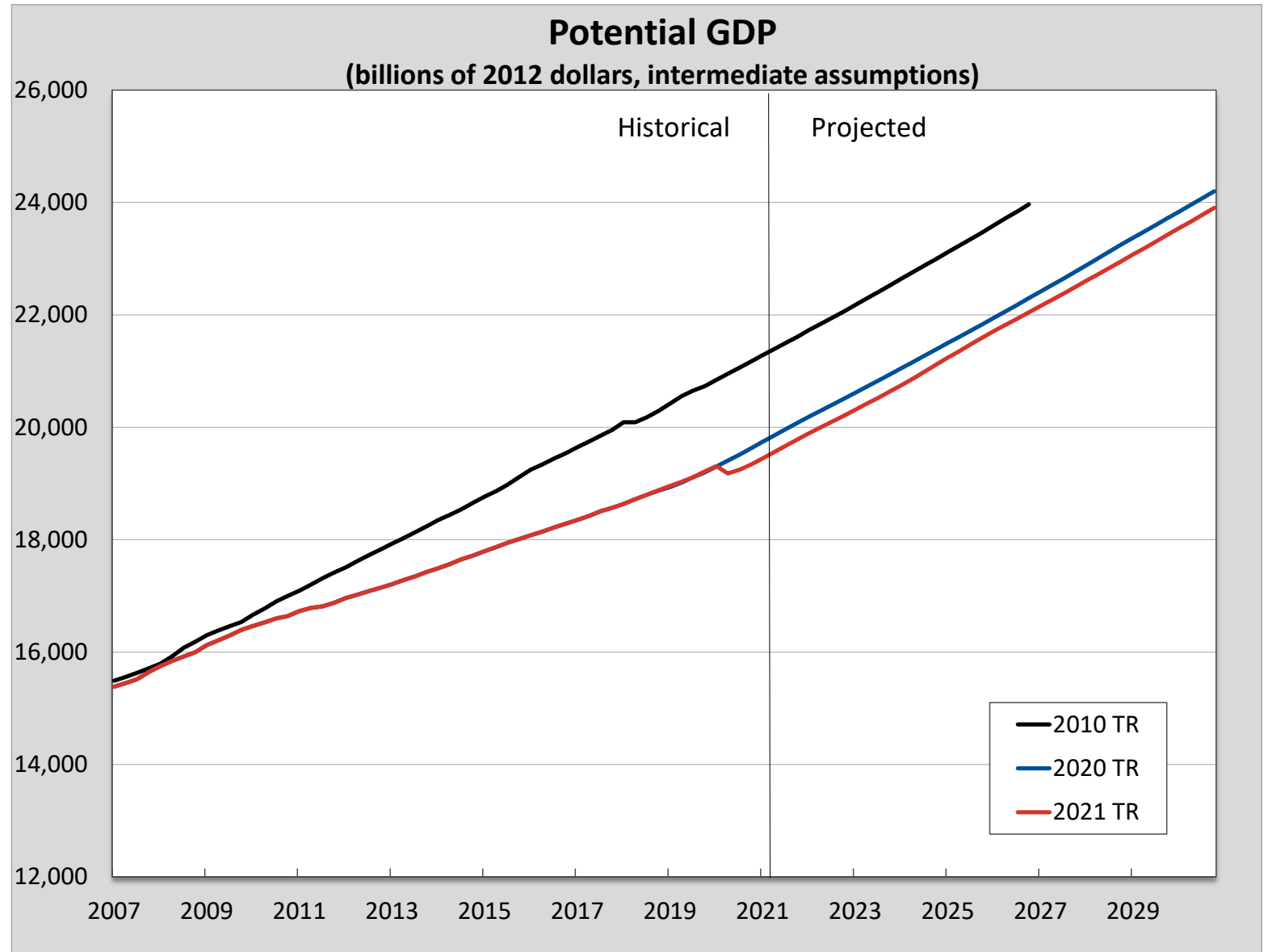
Expected to rise to same overall level as in the 2020TR. Under the new labor force model, difference between men and women narrowed somewhat. Slightly lower LFPR is offset by lower expected average unemployment rate, consistent with recent experience.



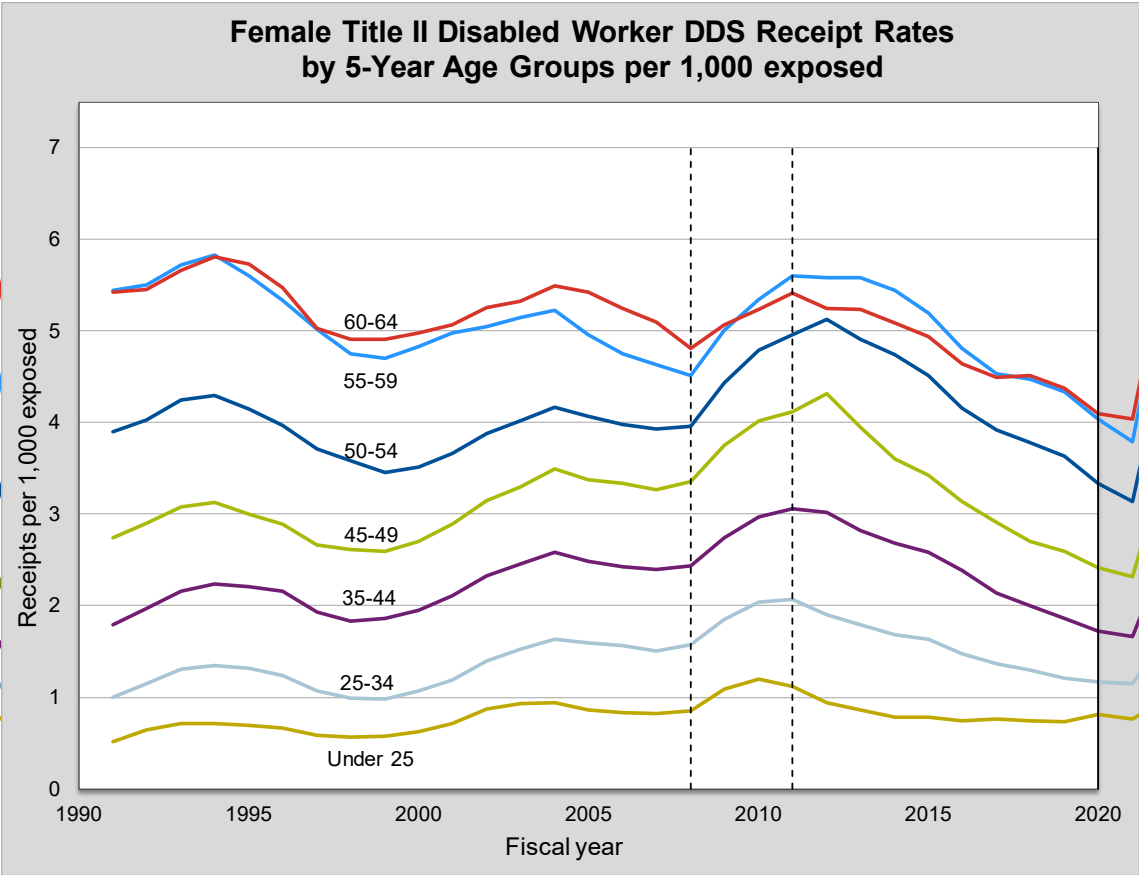
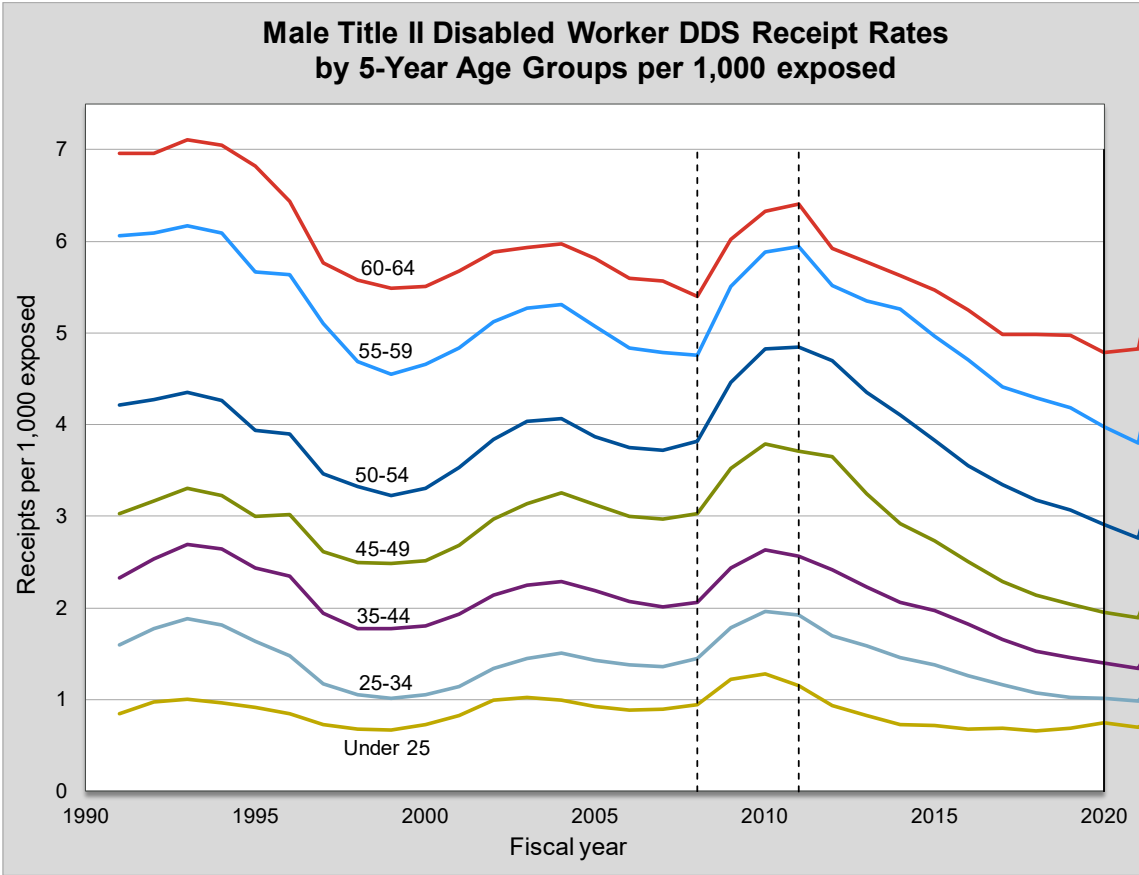
Lower Potential GDP in 2021 TR Compared to 2020 TR

Potential GDP is roughly 1 percent lower than the level in the 2020 TR.

Reflects expectation of a permanent level shift due to effects of the recession on total economy labor productivity and size of the population ages 16+.



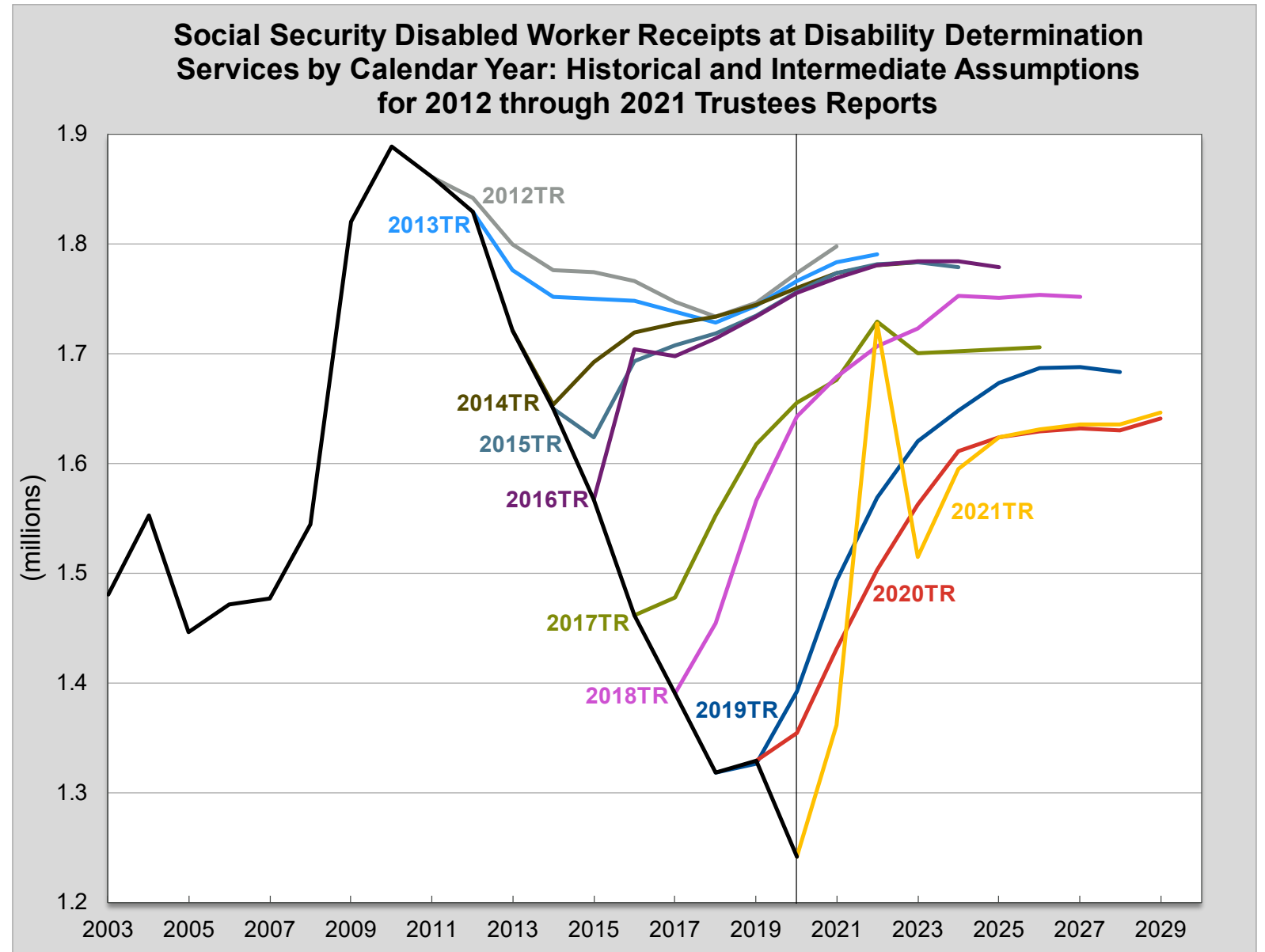
Disabled Worker Receipt Rates (at DDS) have Been Dropping Since 1990 at Older Ages, and at All Ages Lately



Applications for Disability Benefits Remain Historically Low

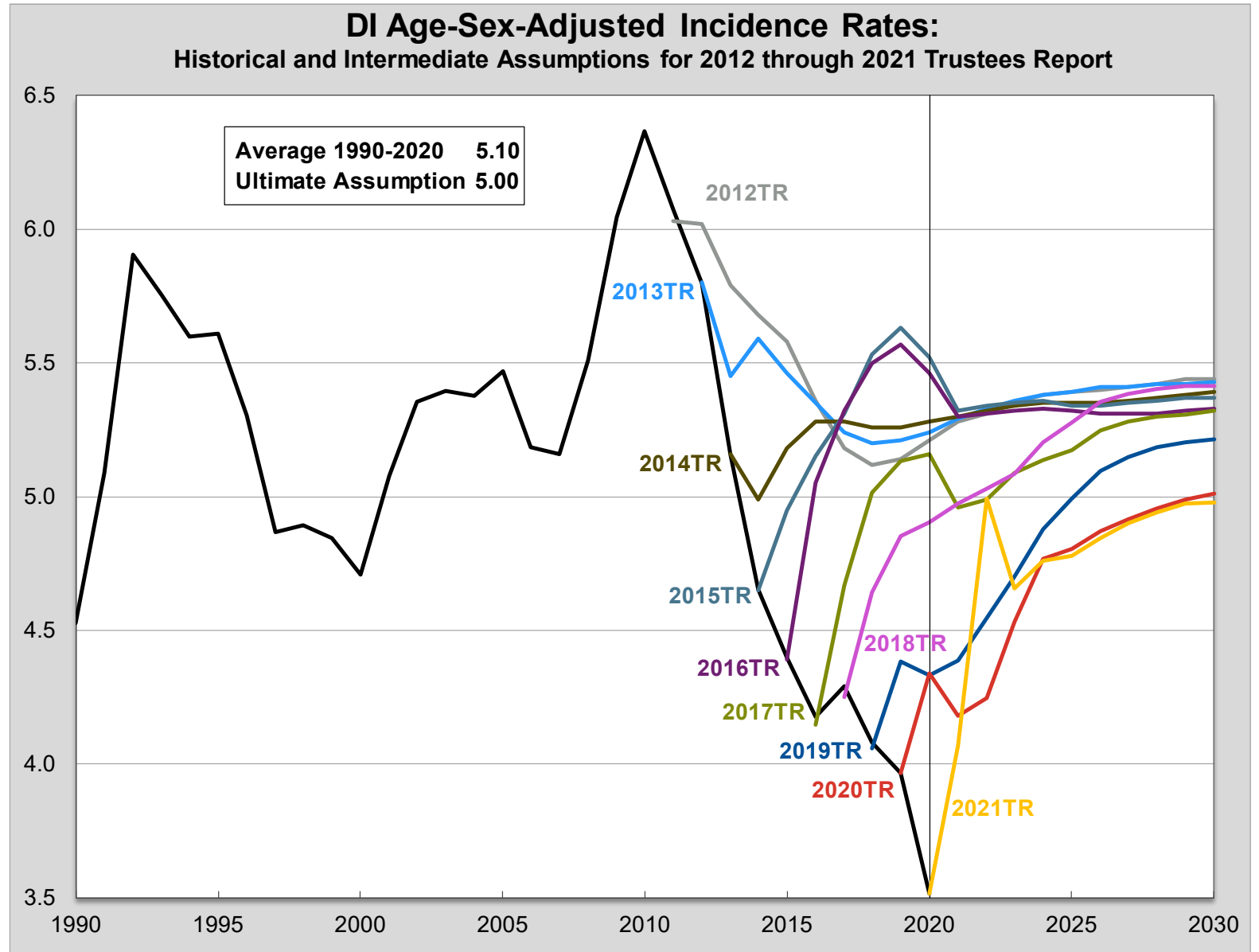
At the peak of the last economic cycle in 2007, applications were low, but increased rapidly in the 2008 recession from 1.5 million in 2007 to 1.9 million in 2010.

In 2016 through 2020, applications have dropped below the 2007 level.



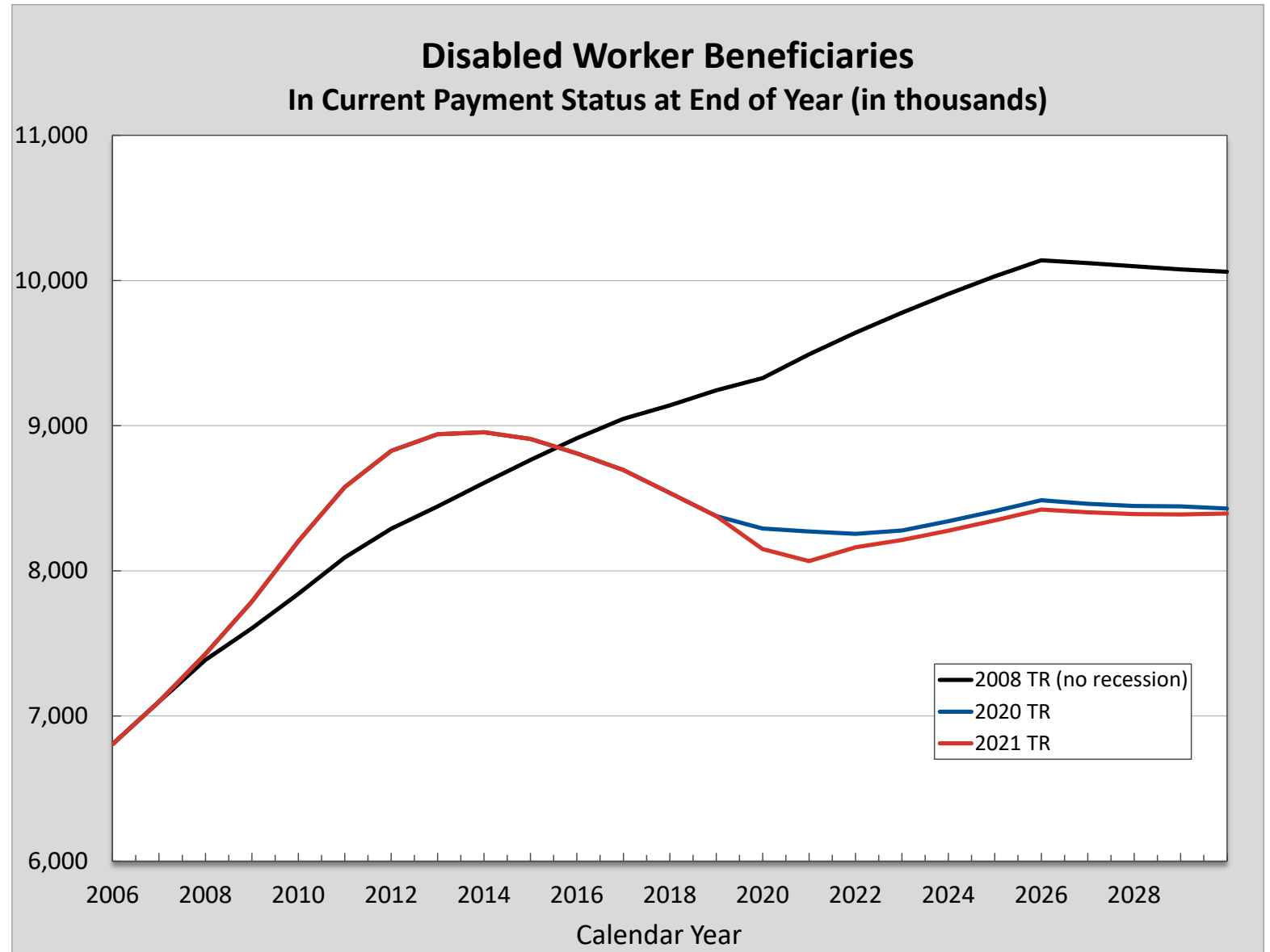
Disability Incidence Rate Also Remains Historically Low

DI disabled worker incidence rate rose sharply in the 2008 recession, and has declined since the peak in 2010 to extraordinarily low levels in 2016 through 2020.



Fewer Disabled Worker Beneficiaries

Fewer now and in near term based on recent applications and incidence rates.



How to Eliminate the Social Security Long-Term Actuarial Deficit

Make choices addressing OASDI shortfall 2034-2095:

- Raise scheduled revenue after 2033 by about one-third
- Reduce scheduled benefits after 2033 by about one-fourth
- Or some combination of the two

As always, we note that enacting changes sooner allows more possibilities, more gradual phase-in, and more advance notice

For More Information Go to

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

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