



# Session 10D: Updates on the Financial Status of Social Security and Proposals October 28, 2021

#### Presenters:

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### Outline

- 2021 Social Security Trustees Report: Baseline Projections of Actuarial Status of the OASI and DI Trust Funds
- Implications of the COVID-19 Pandemic and Ensuing Recession on Social Security
- Possible Solutions to Social Security's Projected Shortfalls: Legislative Proposals







# 2021 Social Security Trustees Report: Baseline Projections



## 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





### Why Do These Actuarial Projections Matter?

- Long-term projections provide information to assess solvency and changes needed to eliminate shortfalls
- If trust fund reserves were to become depleted:
  - Full scheduled benefits could not be paid timely
  - NO pressure on the Budget or Federal Debt
  - So Congress must act, as it always has
- Straightforward solutions:
  - Add revenue and/or lower cost for OASDI
  - Comprehensive changes *implemented* by 2034



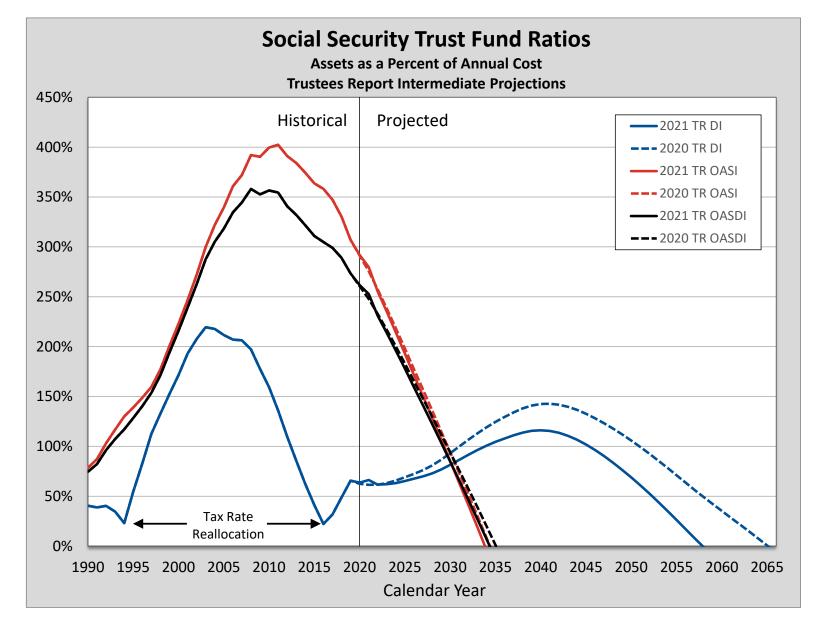


### Solvency: OASI+DI Trust Fund Reserve Depletion in 2034 (one year earlier than last year)

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.





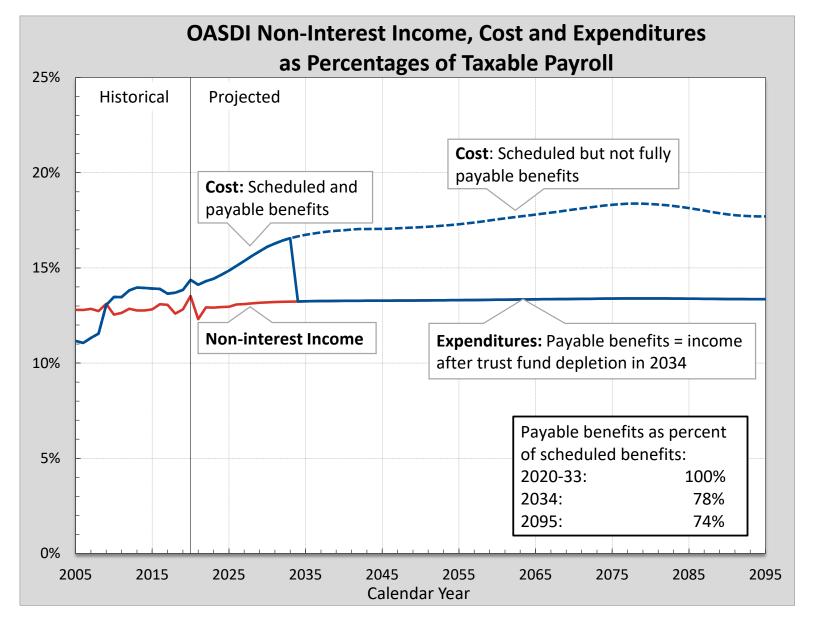


### OASDI Annual Cost and Non-Interest Income as Percent of Taxable Payroll

Persistent negative annual cashflow 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

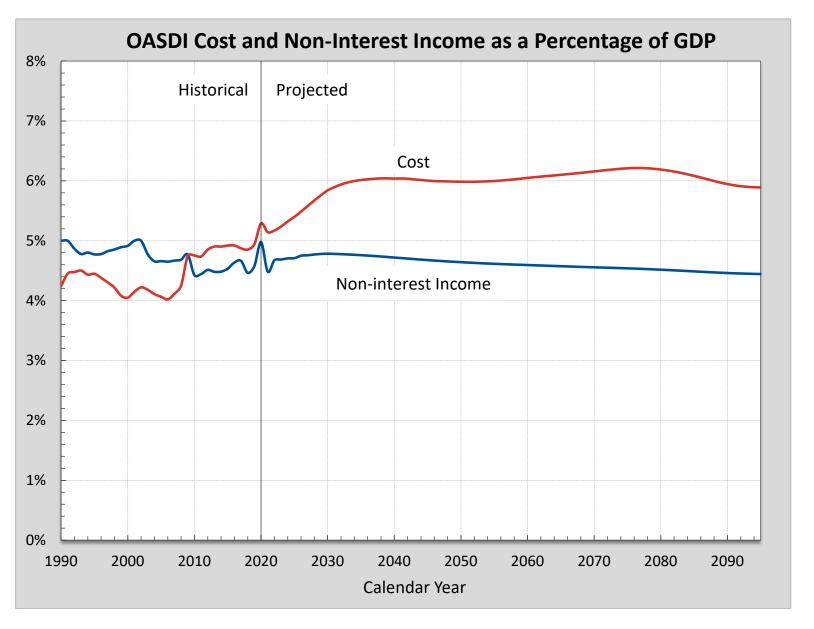






# Sustainability: Cost as Percent of GDP

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.

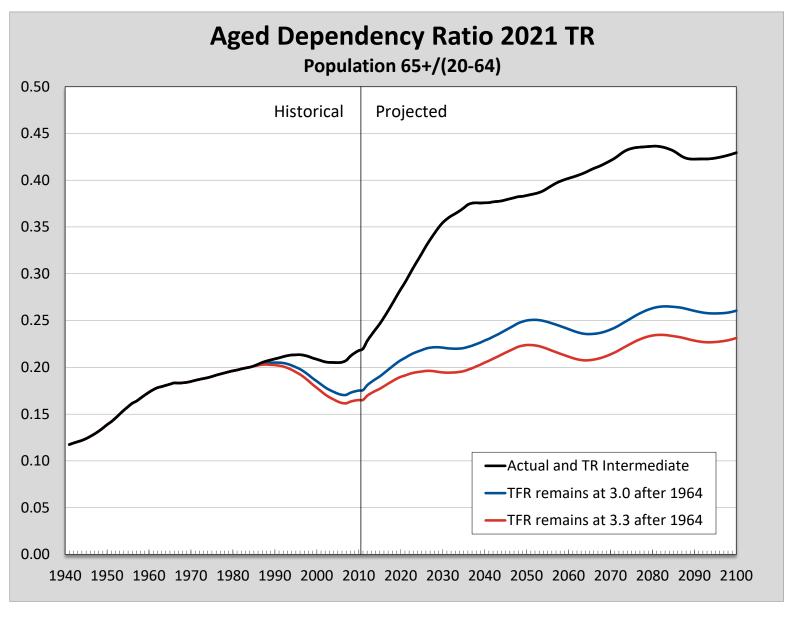






### Aging: Change in Age Distribution

Mainly due to drop in birth rates







### 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.

- 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 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.
- 2. OASI reserve depletion is 2033, one year earlier than last year's report.
- 3. DI reserve depletion is 2057, 8 years earlier than last year's report.
  - Change is larger for DI because difference between cost and income is smaller and more similar in years after 2030





### Primary Changes This Year: Longer Term

- 1. Birth rates: change to projecting by "cohort" rather than by year
  - Reflects the continuing trend for women having children at older ages
  - Lower annual birth rates through 2036, reaching ultimate 2.0 in 2056
- 2. Employment: Updated labor force model to include latest economic cycle
  - 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 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

• 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

-0.09 percent

Net Changes for All Reasons

-0.32 percent





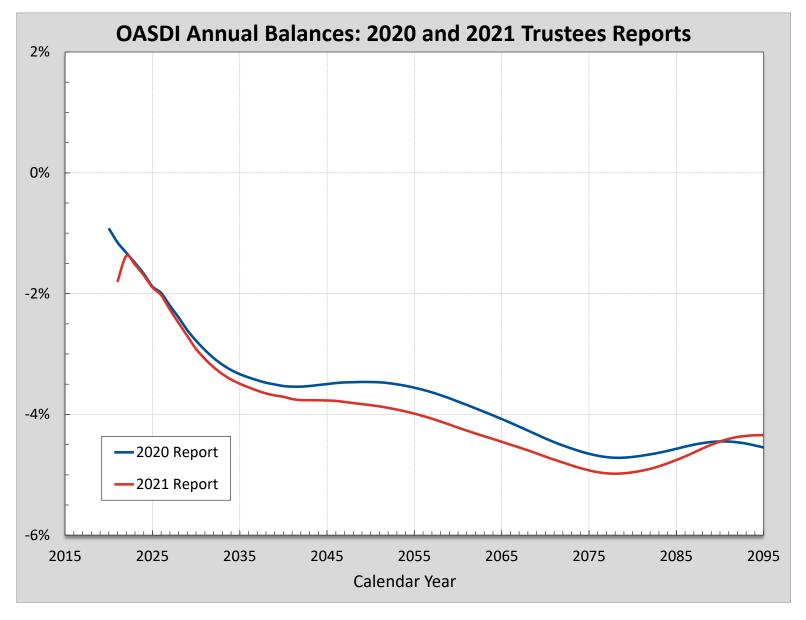
### Changes in OASDI Annual Balance

Annual income rate minus annual cost rate.

The trends in the very near term are due to the recession and recovery.

The increased annual deficits between 2025 and 2090 are mainly due to lower birth rates through 2036, reduced productivity, reduced revenue from taxation of benefits, and changes in benefit projection methods.

The reduction in annual deficits after 2080 is largely due attaining the ultimate fertility rate in 2056.





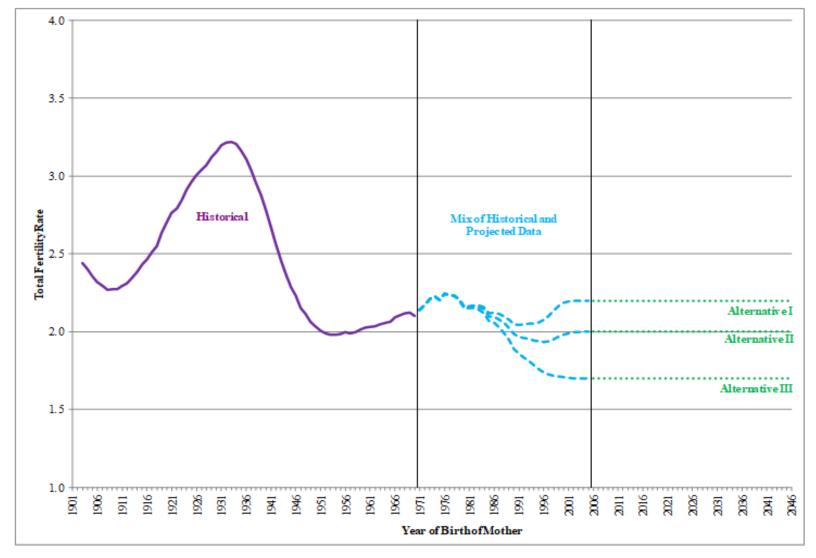


### Birth Rates by Cohort

Has been rising for women born since 1951.

Projected to dip below 2.0 for women born between 1990 and 2006, based on low rates since 2008.

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



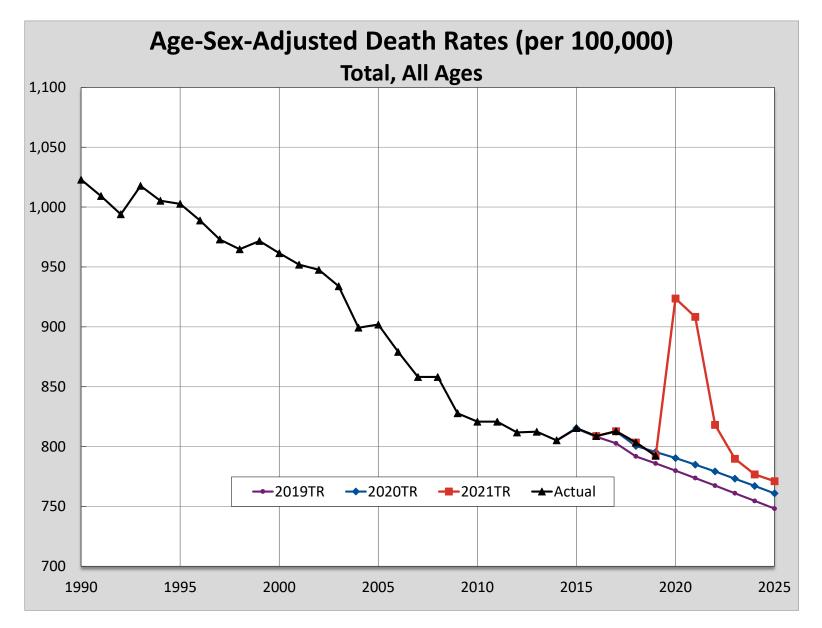
https://www.ssa.gov/oact/TR/2021/2021 Long-Range Demographic Assumptions.pdf





# Mortality Experience: All Ages

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



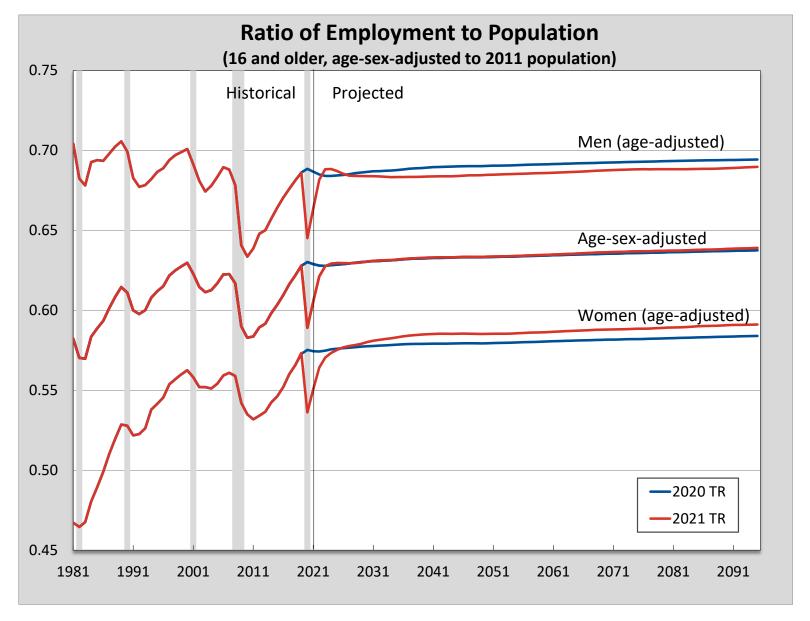




# Ratio of Employment to Population

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.



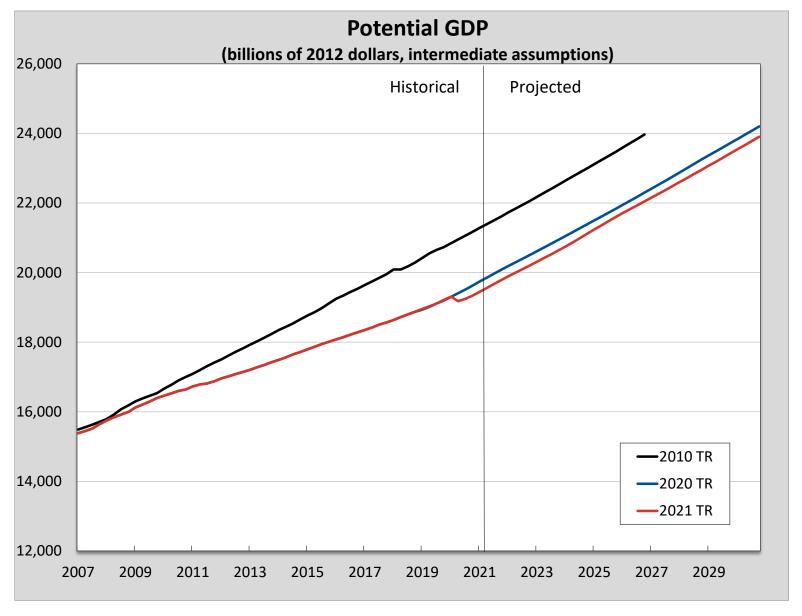




# Lower Potential GDP in 2021 TR Compared to 2020 TR

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+.

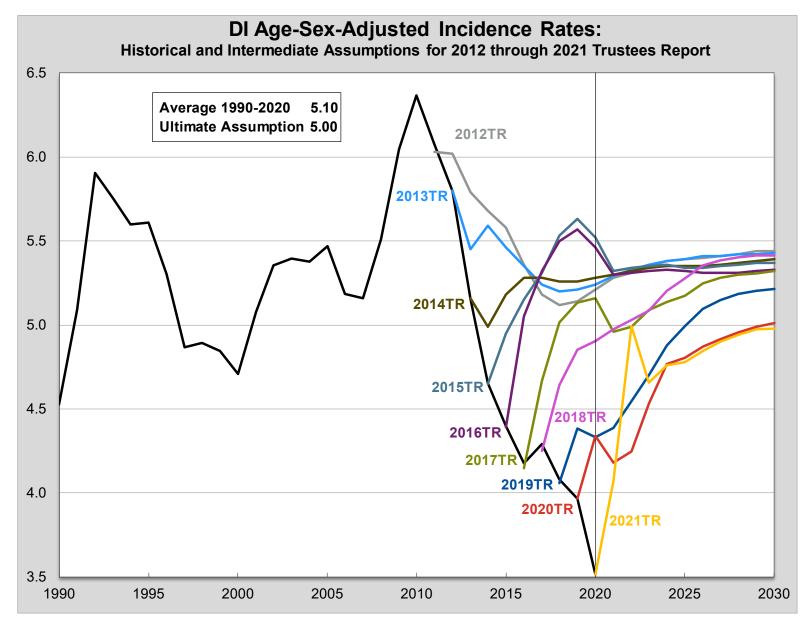






# Disability Incidence Rate Remains Historically Low

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.

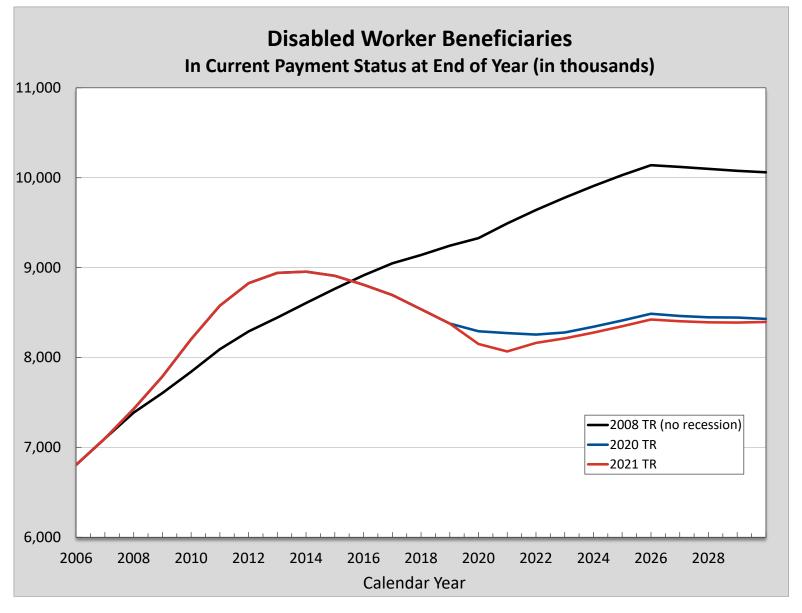






# Fewer Disabled Worker Beneficiaries

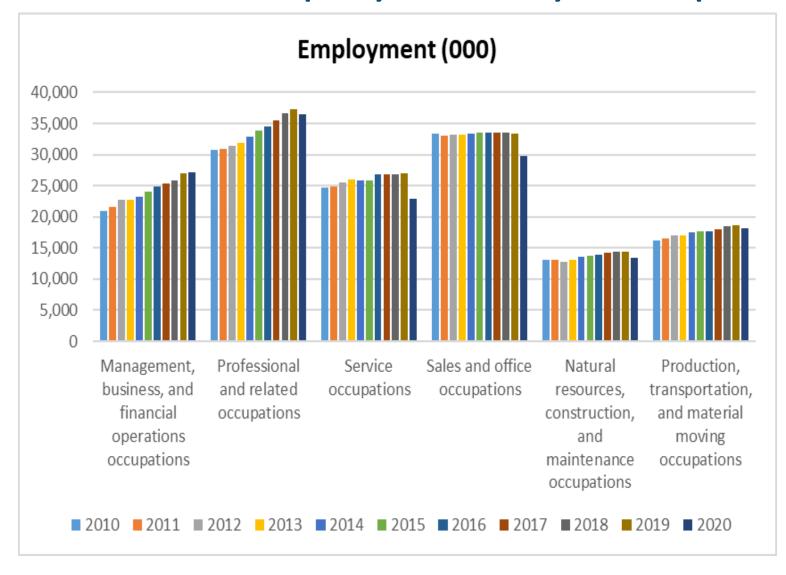
Fewer now and in near term based on recent applications and incidence rates.







### Trends in Employment by Occupation

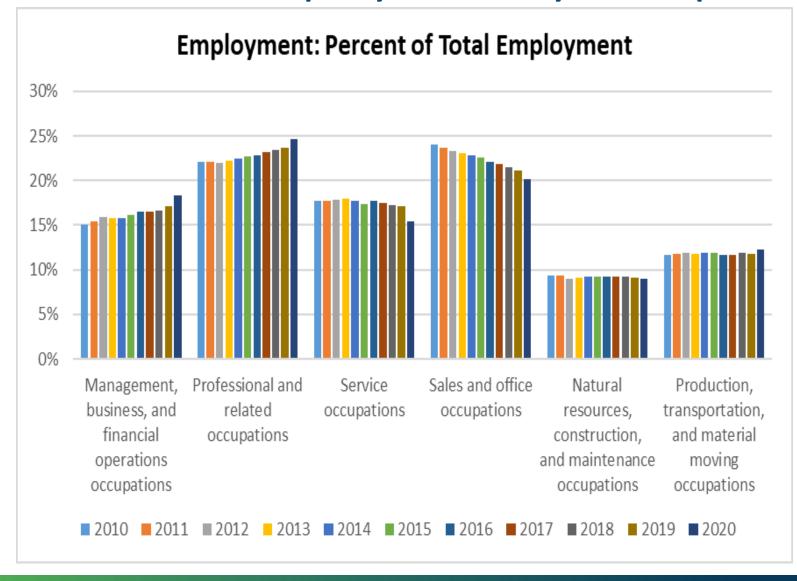


- Employment effects in all areas in 2020 (BLS cpsaat09)
- Will trends of 2010-19 return, and continue?





### Trends in Employment by Occupation

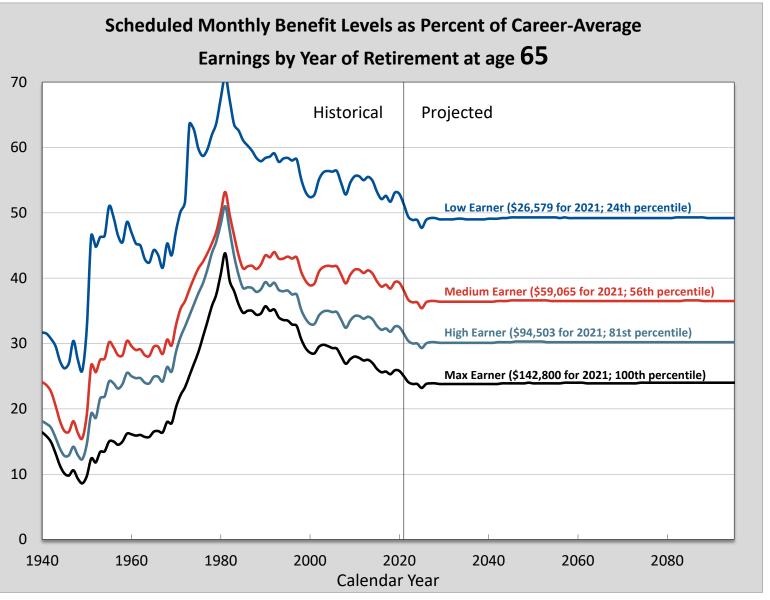


- Employment distribution more revealing
- Share for management and professional, highly paid, increased in 2020
- Will these shifts continue with technology, automation, and increasing education levels?
- Might increases in infrastructure spending change these trends?





# Adequacy: Replacement Rates Based on the 2021 TR

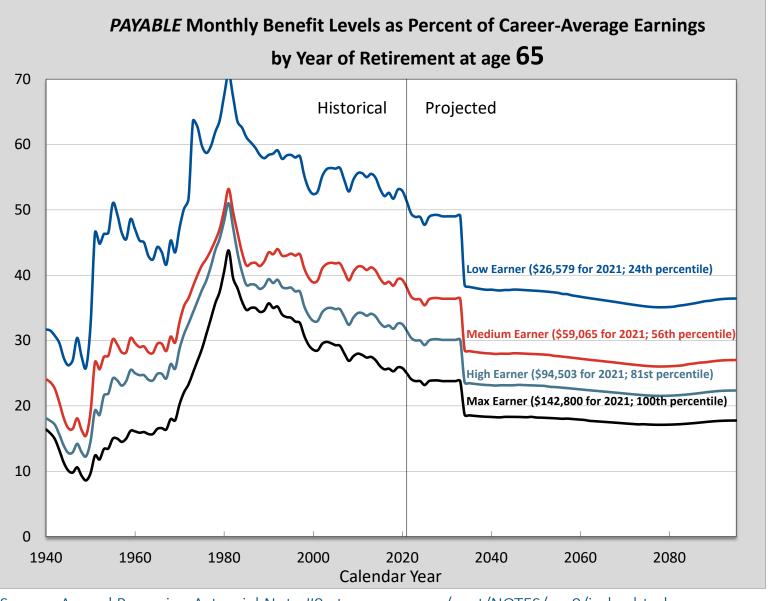


Source: Annual Recurring Actuarial Note #9 at www.ssa.gov/oact/NOTES/ran9/index.html





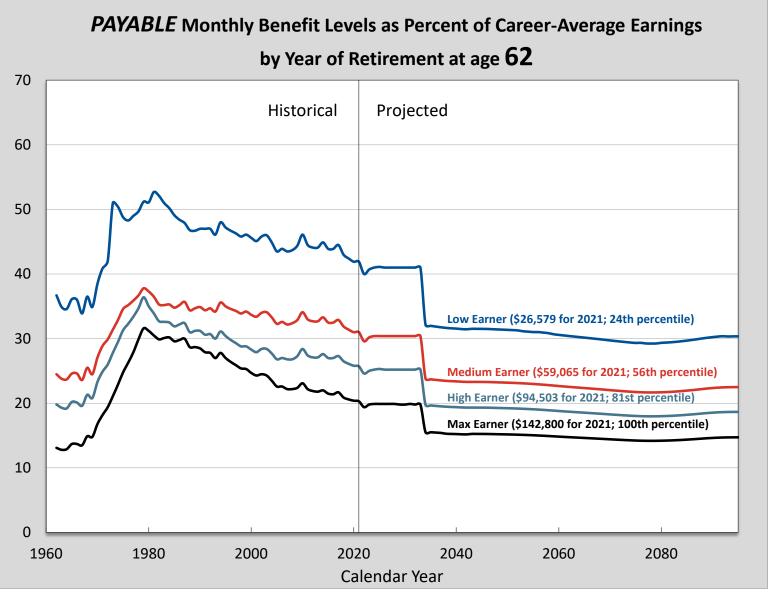
# Payable Benefits Under the Law, After Trust Fund Reserves Are Depleted, Are Even Lower



Source: Annual Recurring Actuarial Note #9 at www.ssa.gov/oact/NOTES/ran9/index.html



# How About at Age 62, Where Many Start Benefits?



Source: Annual Recurring Actuarial Note #9 at www.ssa.gov/oact/NOTES/ran9/index.html





# Implications of the COVID-19 Pandemic and Ensuing Recession on Social Security



### Changes Due to Pandemic/Recession: Any Changes Since 2021 TR 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

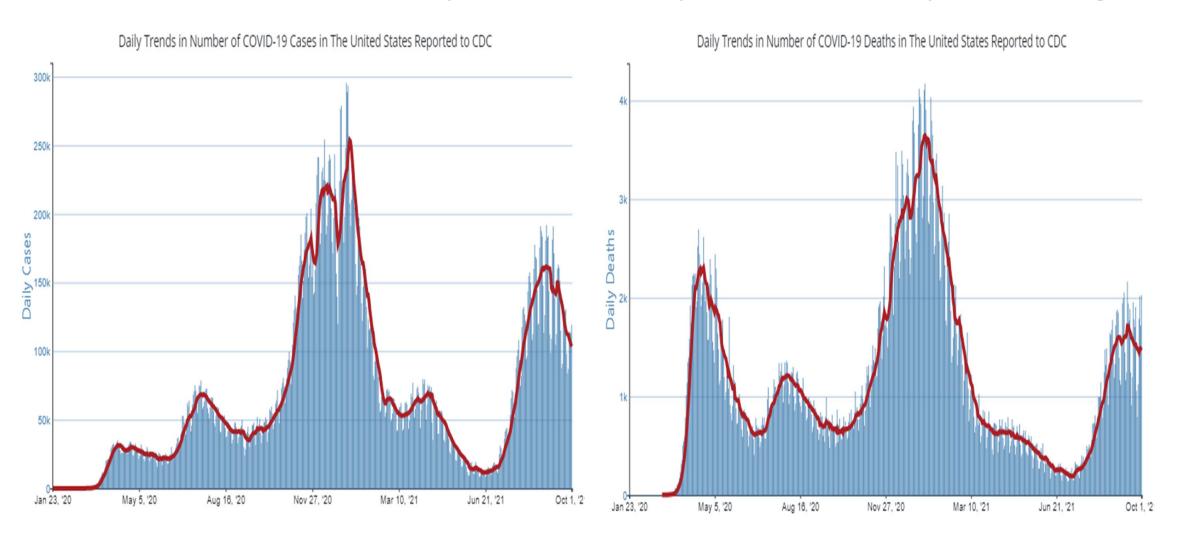
  Consistent for 2020 based on CDC. But actual deaths are higher than we projected for 2021.
- 3. Delays in births and immigration

  Actual births and immigration look to be higher than we assumed for 2021.
- 4. Lower applications for benefits, particularly disability Continuing low so far, but we expect them to rise after the pandemic.
- 5. A permanent loss in the level of worker productivity, as in other recessions Too soon to tell.





### Cases and Deaths Reported Daily to CDC: Reports Lag

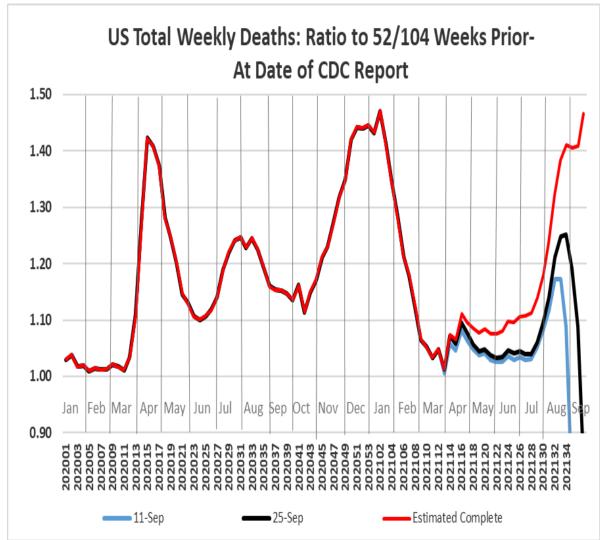


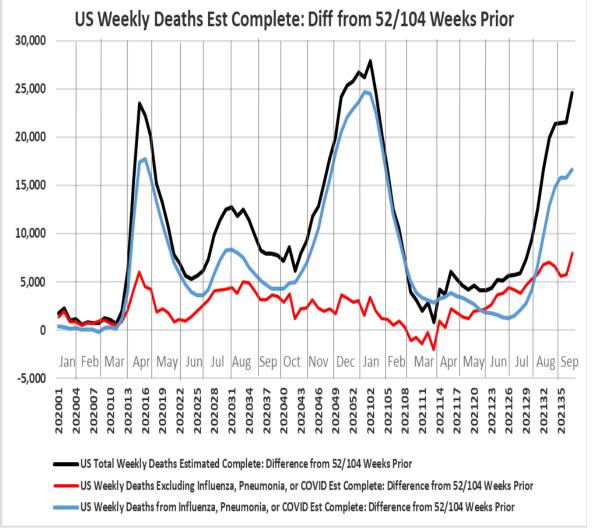
Source: https://covid.cdc.gov/covid-data-tracker



#### Death Reporting Lags Date of Death

#### Estimated Complete—PIC Still Rising





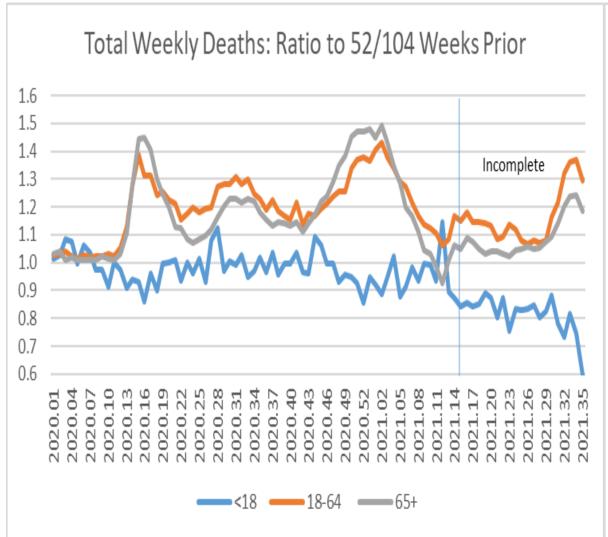


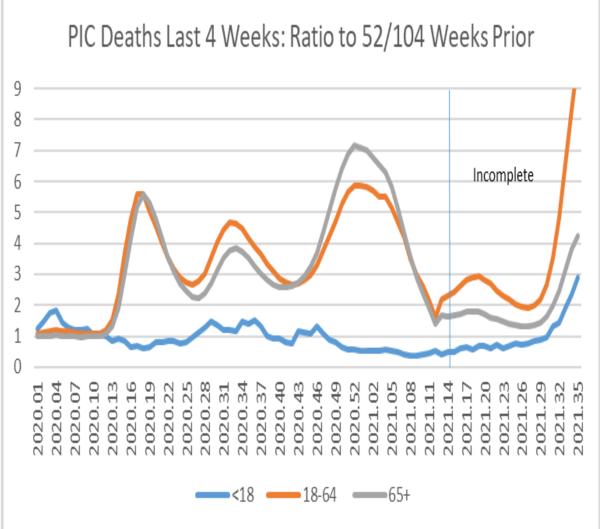


#### Reported Total Deaths by Age Group

### Reported PIC Deaths by Age Group

Earlier vaccinations for 65+ apparent by April 2021









### Timing of Benefit Applications

- There has been speculation that job losses in the COVID-induced recession would cause workers to apply for retirement and disability benefits earlier than they would have otherwise
- We are not seeing this in the data
- Employment rebounded significantly and quickly after the brief 2020 Q2 recession
- Note that earlier benefit start for those with age-reduced benefits actually tends to lower longer-term cost





### Effects from Employment and Other Factors: Questions

- To what extent will the nature and conditions of employment change in the future—and to what extent will COVID affect the pre-pandemic trends? How about "gig" employment?
- Will remote work for many occupations that have been less affected by the pandemic persist? Or will these changes diminish over time?
- Will the reductions in productivity and employment in some areas recover?
- The degree of longer-term persistent effects on the level of economic activity and on demographic factors is as yet unknowable







# Possible Solutions to Social Security's Projected Shortfalls: Legislative Proposals



### 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





### Ways to Lower Cost

- 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





### Ways to Lower Cost (continued)

- Lower benefits mainly for the oldest old
  - Reduce the COLA by using a chained version of the CPI
  - Some say instead raise the COLA by using the CPI-E (based on purchases of consumers over age 62)
- Increase the number of years used in calculation (currently 35)
  - Especially hurts those who haven't been in the workforce for more than 35 years





### Ways to Increase Revenue

- Raise tax rate on all earners
  - Increasing rate immediately from current 12.4 percent to about 15.6 percent is projected to eliminate the long-range shortfall
- Raise tax on highest earners
  - Increase taxable maximum amount (\$142,800 in 2021) or remove it completely
  - Some tax on all earnings above the maximum





### Ways to Increase Revenue (continued)

- Tax employer group health insurance premiums
  - Affects only middle class if taxable maximum remains the same
- Tax certain investment income
  - Consistent with ACA approach?
  - Or potentially a wealth tax?
- Maintain larger trust fund reserves
  - Could do this by investing some portion of reserves in equities
  - Added interest/yield can lower needed taxes





### Many Comprehensive Proposals Scored

Example 1: Representative John Larson (D-CT) and others, September 2019

- Make PIA formula slightly more generous, more "progressive" (shortfall ↑9%)
- Increase the COLA (↑15%)
  - Based on CPI-E for all beneficiaries; 0.2pp higher on average
  - Index designed to better reflect the purchases of the elderly
- Improve the minimum benefit (↑5%)
- Lower taxation of OASDI benefits slightly (个5%)
- Tax earnings above \$400K (not indexed) with small benefit credit (↓69%)
- Increase payroll tax rate gradually from 12.4 percent to 14.8 percent ( $\sqrt{67\%}$ )
- Would produce "sustainable solvency" (shortfall ↓114%)

Go to: <a href="https://www.ssa.gov/OACT/solvency/LarsonBlumenthalVanHollen 20190918.pdf">https://www.ssa.gov/OACT/solvency/LarsonBlumenthalVanHollen 20190918.pdf</a>





### Many Comprehensive Proposals Scored

Example 2: Former Representative Sam Johnson (R-TX), December 2016

- Make PIA formula less generous but more "progressive" (shortfall  $\sqrt{32\%}$ )
- Change to mini-PIA approach (↓13%)
- Raise the Normal Retirement Age to age 69 soon (8-year phase-in) ( $\sqrt{32\%}$ )
- Lower the COLA ( $\sqrt{47\%}$ )
  - Based on chain-weighted CPI for most beneficiaries; 0.3pp lower on average
  - No COLA if prior year's MAGI is above certain thresholds
- Add a new minimum benefit (↑9%)
- Eliminate taxation of OASDI benefits in 2054 and later (↑15%)
- Would produce "sustainable solvency" (shortfall ↓ 100%)

Go to: <a href="https://www.ssa.gov/OACT/solvency/SJohnson">https://www.ssa.gov/OACT/solvency/SJohnson</a> 20161208.pdf





### Timing for Changes

- Historically, Congress has waited until reserve depletion is imminent
  - Difficult to lower benefits or raise taxes until necessary
- Enacting sooner allows more options, more gradual phase in, and more advance notice
  - Best example: 17-year delay in implementing NRA increase in 1983 amendments
- OASDI reserve depletion now projected for 2034
  - One year sooner due to COVID-19
  - The date has varied between 2029 and 2042 over the past 30 years





## For More Information Go To <a href="http://www.ssa.gov/oact/">http://www.ssa.gov/oact/</a>

- There you will find:
  - The 2021 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





