



AMERICAN ACADEMY *of* ACTUARIES

AND ANNUAL MEETING  
PUBLIC POLICY FORUM

NOVEMBER 5-6 2020

**Social Security**—Reinforcing the Foundation  
of U.S. Retirement in a Time of Uncertainty

# Social Security Actuarial Status

The 2020 Annual Report of the Board of Trustees  
of the OASI and DI Trust Funds  
...and Developments Since Then

---

Karen Glenn, Deputy Chief Actuary  
Social Security Administration  
November 6, 2020



# Social Security Basics



# Social Security Trust Funds

- Two legally distinct trust funds:
  - **OASI** = Old-Age and Survivors Insurance
  - **DI** = Disability Insurance
- Financial operations are overseen by the Social Security Board of Trustees
- The two funds are often looked at on a theoretical combined basis, and referred to as **OASDI**
  - As of September 30, 2020, the trust funds hold about **\$2.91 trillion** in reserves



# Social Security Trust Funds

- Why do we have trust funds?
  - The trust funds provide an essential reserve so benefits can be paid even when current income alone is not enough
  - Social Security (OASI and DI) cannot borrow; can only spend what has been collected



# Social Security Trust Funds

- The combined funds have run surpluses since the early 1980s and through calendar year 2019 (and likely 2020)
- Beginning in 2021, we project that combined asset reserves will start to decline until they are depleted in **2035**
- The OASI fund alone is projected to be depleted in **2034**; the DI fund alone in **2065**
- **Note that these latter two bullets are based on our pre-COVID projections!**

# How Is Social Security Financed (Income)?

- Payroll taxes
  - Employees and employers each pay **6.2%** of covered earnings
  - The self-employed pay **12.4%** of covered earnings
  - On earnings up to **\$137,700** in 2020 (**\$142,800** in 2021)
- Taxes on Social Security benefits
  - Higher-income beneficiaries pay federal income tax on their benefits
- Interest on trust fund reserves
  - Invested in interest-bearing securities of the US government

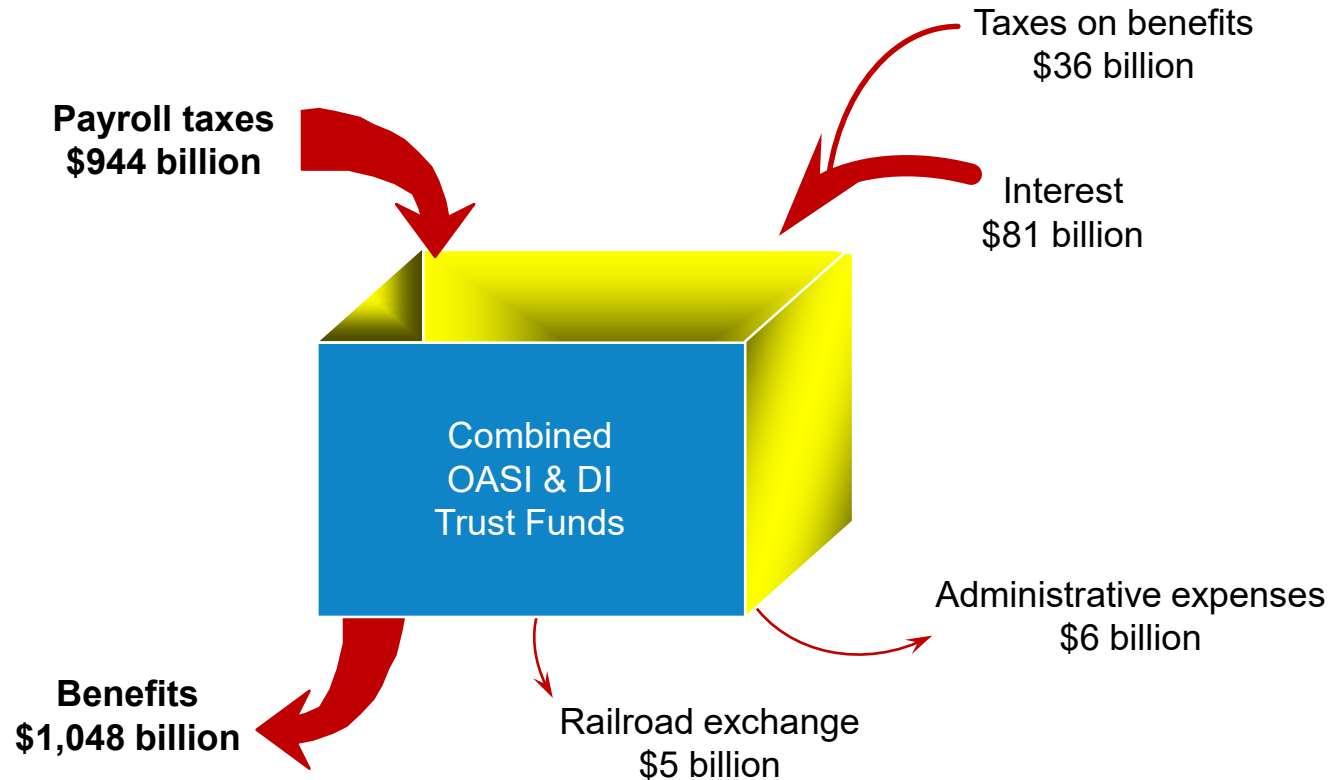
# Where Does the Money Go (Cost)?

- Benefit payments
  - About **64 million** people getting benefits as of December 2019:
    - **48 million** retired workers and dependents of retired workers
    - **6 million** survivors of deceased workers
    - **10 million** disabled workers and dependents of disabled workers
- Administrative expenses
  - Only about **0.6 percent** of total program cost in 2019





# Income and Cost for Calendar Year 2019



# 2020 Trustees Report



# What is the Legislative Mandate for the Annual Trustees 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

# Primary Changes for the 2020 Trustees Report

First, an important caveat! The projections in the 2020 Trustees Report (released April 22, 2020) do NOT reflect the potential implications of the COVID-19 pandemic, due to (1) the timing of the development of assumptions for the report and (2) the timing of the recognition of the pandemic.

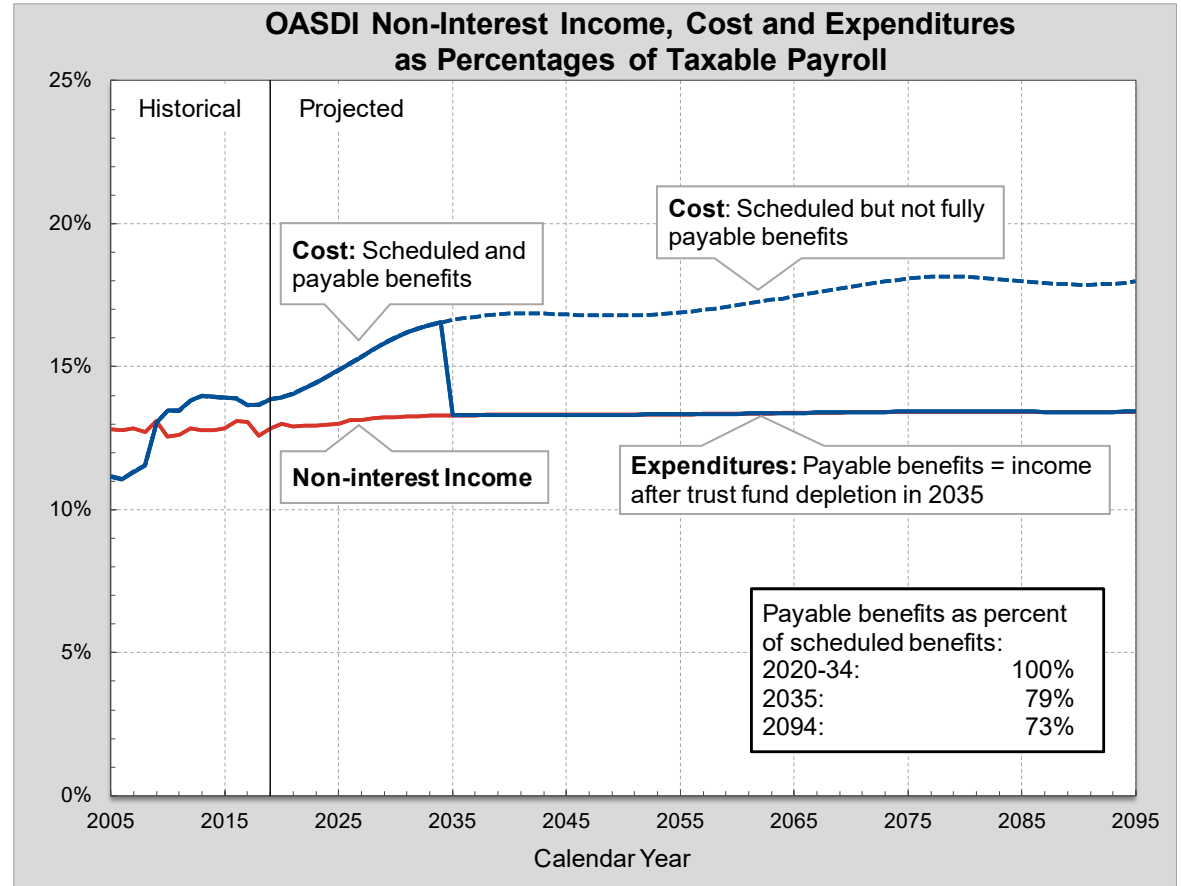
1. DI reserve depletion extended another 13 years, from 2052 to 2065
  - a) Applications and benefit awards remained at historically low levels in 2019
  - b) Lower ultimate assumed disability incidence rate
  - c) Gradual increase to ultimate incidence rate
2. OASI reserve depletion is 2034, the same as in the 2019 report
3. OASDI reserve depletion is 2035, the same as in the 2019 report
4. 75-year actuarial deficit increased by 0.43 percent of payroll (versus expected increase of 0.05 percent from change in valuation period alone)

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

Persistent negative annual cash-flow balance starting in 2010.

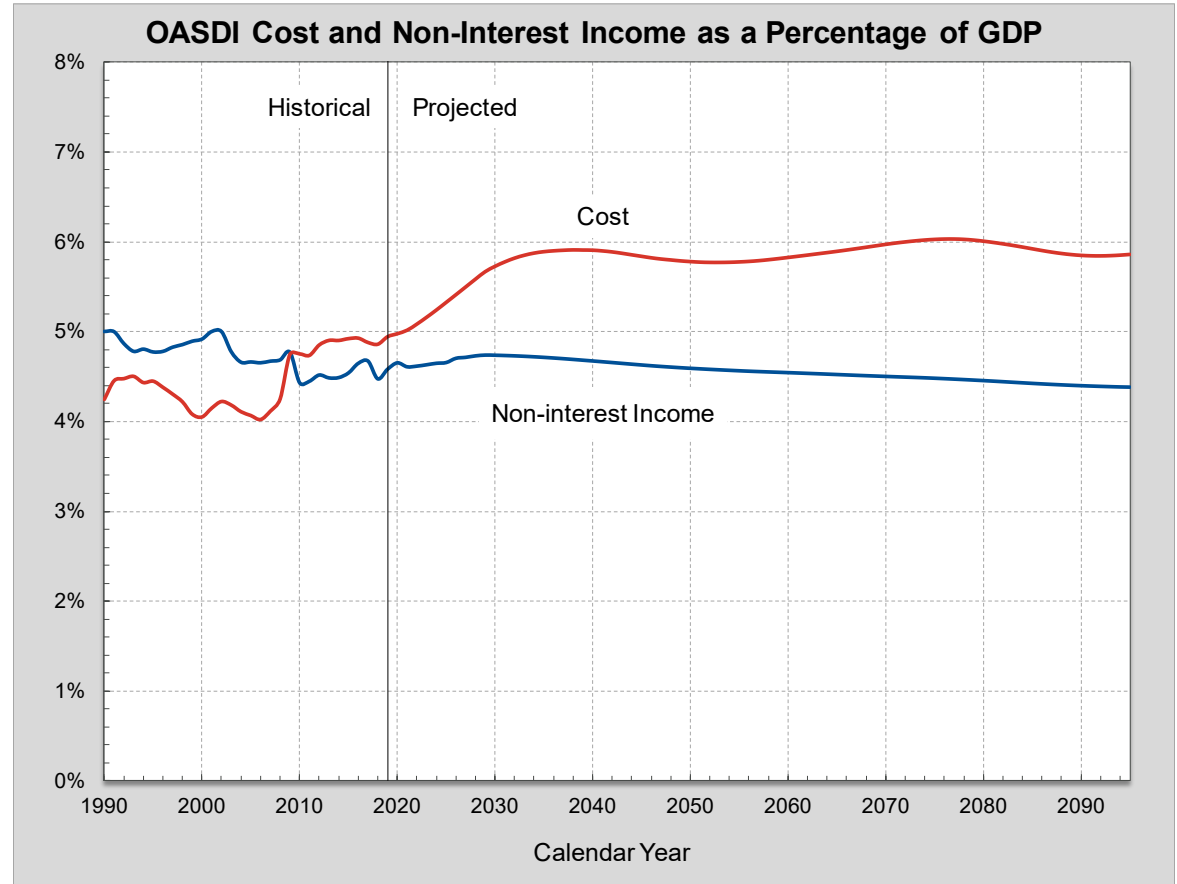
79 percent of scheduled benefits still payable at trust fund reserve depletion.

Annual Deficit in 2094: 4.51 percent of payroll – 0.36 percent larger than last year



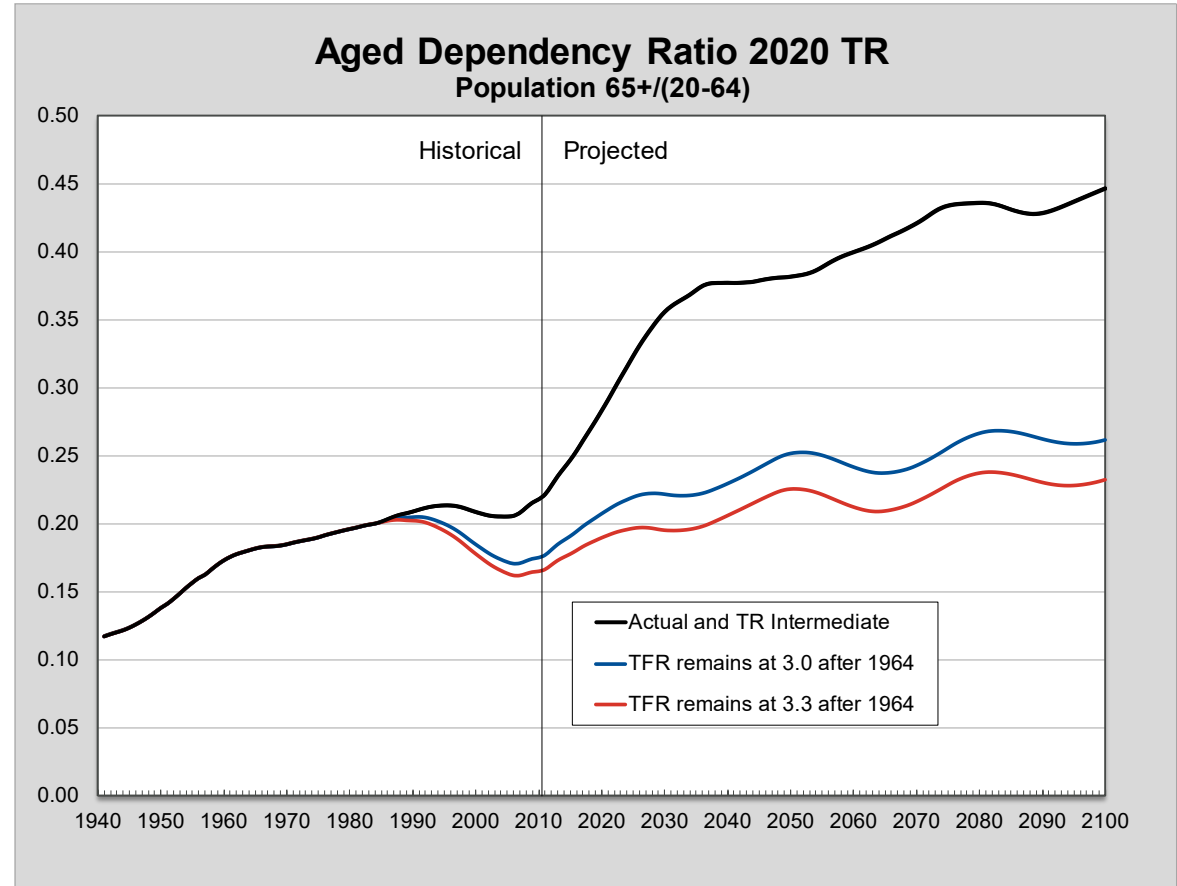
# SUSTAINABILITY: Cost as percent of GDP

Rises from a 4.2 percent average in 1990-2008, to about 5.9 percent by 2038, then declines to 5.8 percent by 2053, and generally increases to 5.9 percent by 2094.

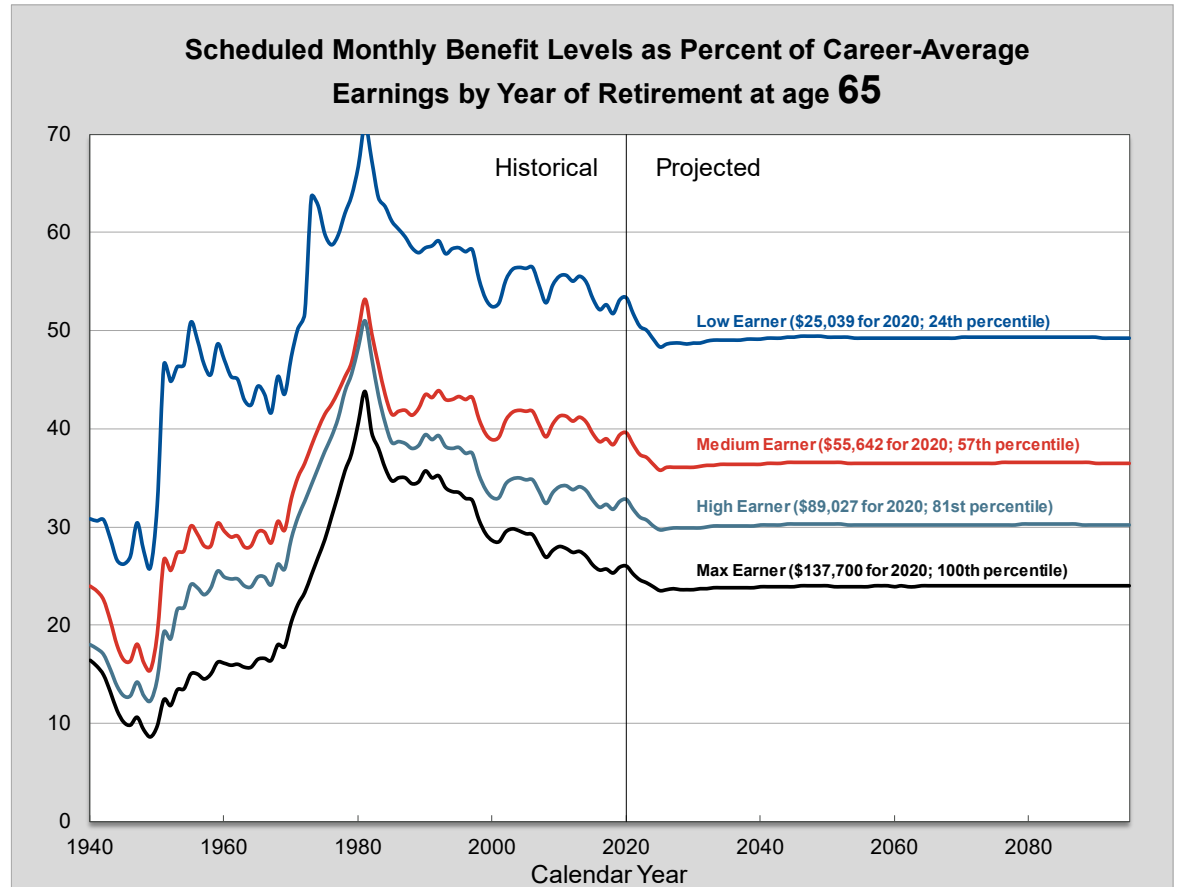


# Aging: Change in Age Distribution

Mainly due to drop in birth rates



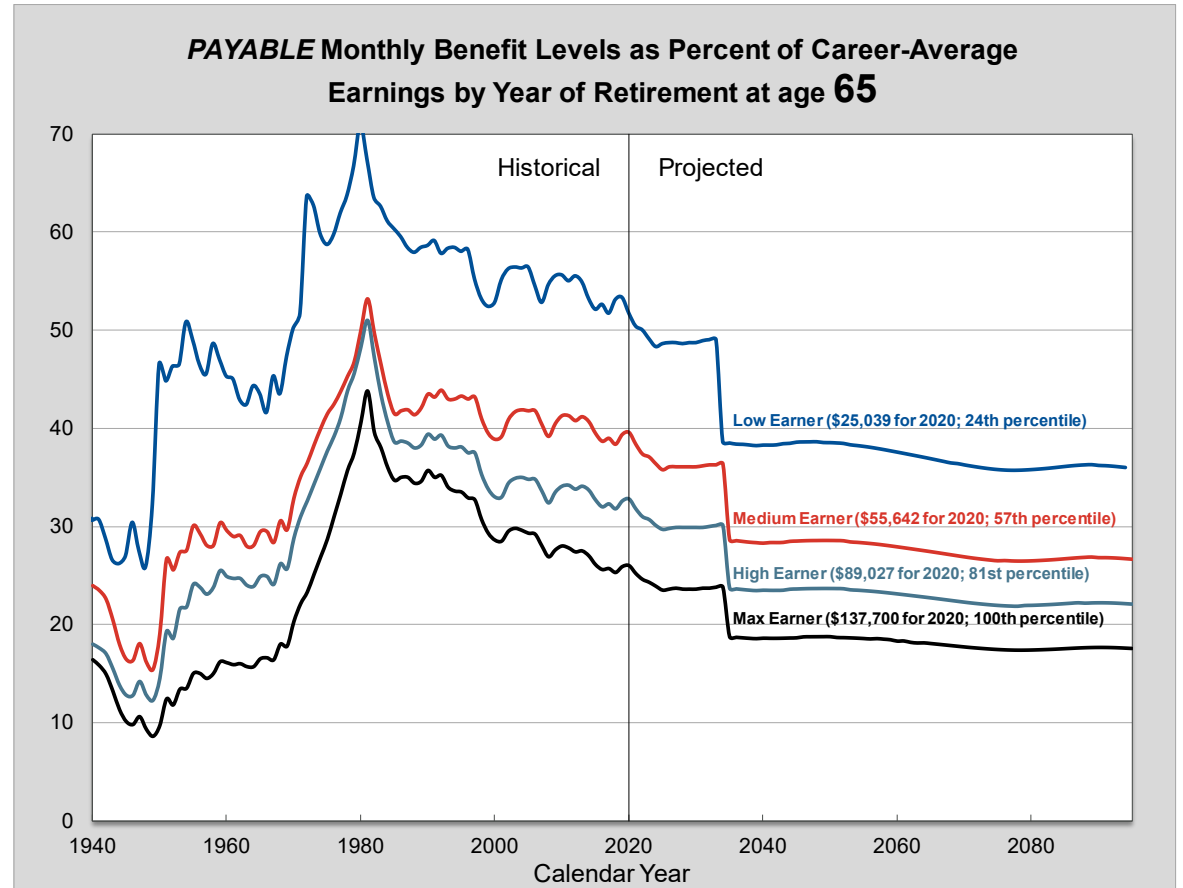
# ADEQUACY: Replacement Rates Based on the 2020 TR



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)

# Effects of COVID-19



# After the 2020 Trustees Report: COVID Effects

- Employment and labor force participation rates have declined along with the COVID-induced recession—will they remain low, or rebound soon?
- Will there be persistent and even cumulative effects on mortality (and morbidity) in the longer term?
  - Direct virus-related immediate deaths, whether diagnosed or not
  - Indirect deaths due to avoidance of medical treatment
  - Increased deaths of despair/violence—suicide, homicide, overdose?
  - Decreased life expectancy from compromise for COVID survivors; how much?
- Other economic and demographic effects? Fertility, immigration?
- So much depends on government and individual responses, along with the timing and efficacy of a vaccine

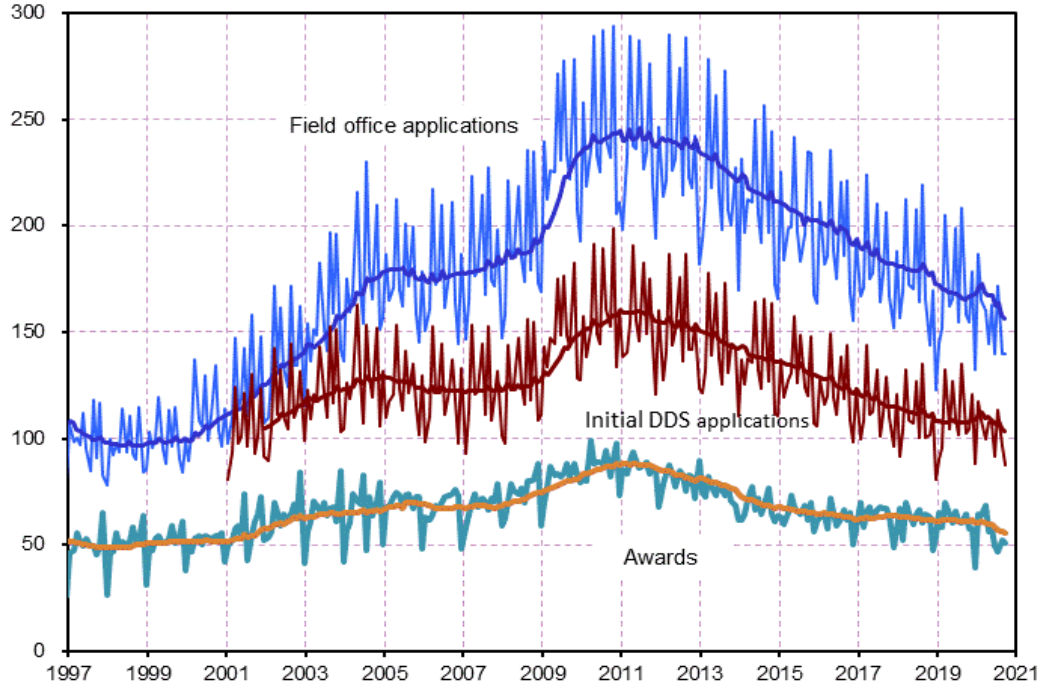
# COVID Effects: GDP, Earnings, and Payroll Tax Revenue

- Social Security payroll tax revenue will certainly be lower than we projected for 2020 due to lower earnings—by between 5 and 10 percent
  - Technicality: due to the way tax revenues are transferred from Treasury to the Social Security trust funds, the trust funds won't be affected until 2021
- Neither the employer payroll tax deferral in COVID legislation nor the employee payroll tax deferral in the presidential memorandum affect revenue to the trust funds
- What will effects be beyond 2020? There has been a substantial economic recovery since the second quarter of 2020

# COVID Effects: Timing of Benefit Applications

Disabled worker data through September 2020 (numbers in thousands)

Number in month and 12-month moving average



Source: <https://www.ssa.gov/oact/STATS/dibGraphs.html>

- There has been speculation in the press and elsewhere that the COVID-induced recession will cause workers to apply for retirement benefits earlier than they would have otherwise
- We aren't seeing this in the data—yet
- Similarly, we aren't yet seeing evidence of increased DI or SSI applications
- Speculation is that folks have been relying on extended unemployment benefits, but might start applying earlier if the recession persists

# Bottom Line: Effects of COVID on Trust Funds

- In April, we speculated a potential 15 percent reduction in earnings and payroll tax for one or two years, and then full recovery: Trust Fund reserve depletion advanced from early 2035 to mid- or early 2034
  - We now think this speculation was probably too pessimistic
- Now, consider an alternative scenario: assume total earnings in 2020 are reduced 5 to 10 percent below the 2020 TR intermediate projection, with recovery in 2021 and 2022
  - This could happen if there is no substantial wave in the fall with resulting closure of the economy
  - The trust fund reserve depletion date for the combined OASI and DI Trust Funds would likely be sometime in 2034, all else equal
  - In September, CBO estimated that COVID would hasten trust fund depletion by one year

# Bottom Line: Effects of COVID on Trust Funds

- If, instead, a fall/winter return to closure due to the pandemic extends through 2021, and possibly beyond, then negative effects on the actuarial status could be substantially larger
- Trust Fund reserve depletion could be earlier than 2034, and the percent of scheduled benefits payable after depletion could be reduced
- The Bipartisan Policy Center recently released several possible scenarios, with the most pessimistic leading to OASDI combined trust fund reserve depletion 7 years earlier (2028)

# Bottom Line: Effects of COVID on Trust Funds

- The 2021 Trustees Report, scheduled to be released in April 2021, will reflect our best estimates of the impacts of COVID-19
- We have had, and will continue to have, many discussions about assumptions with the trustees and their staffs...
- And we will continue to monitor emerging experience and knowledge about the virus and vaccines/therapies



# Legislative Changes



# 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 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 2035



# How to Eliminate the Long-Term Actuarial Deficit

- Make choices addressing OASDI deficits 2035–2094:
  - Raise scheduled revenue after 2034 by about one-third
  - Reduce scheduled benefits after 2034 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
- Lower benefits mainly for the oldest old?
  - Reduce the COLA
  - But, some say increase it with the CPI-E (based on purchase of consumers over age 62)



# Ways to Increase Revenue

- Raise the 12.4 percent OASDI payroll tax rate?
- Raise tax on highest earners?
  - Increase taxable maximum amount (\$142,800 in 2021)
  - Some tax on all earnings above the maximum
- Tax employer group health insurance premiums?
  - Affects only middle class if taxable maximum remains
- Tax investment income?
  - Or potentially a wealth tax?

For More Information, Go To <https://www.ssa.gov/OACT/>

- There you will find:
  - The 2020 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
  - Extensive databases about the trust funds and program beneficiaries
  - Congressional testimonies
  - Presentations by OACT employees

