Social Security Actuarial Status
The 2017 Annual Trustees Report and Proposals to Change the Law

Presented by Steve Goss, Chief Actuary, SSA
Middle Atlantic Actuarial Club Annual Meeting
November 8, 2017
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 will fall short, forcing cuts or delays in benefits in the absence of legislative change
   – 75-year projections under intermediate assumptions
Also—Full Scope Audit of the 75-year projections

1) Statement of Social Insurance in the Agency Financial Statement, and in the Federal Govt Consolidated Financial Statement

2) Mandated by the FASAB
   – This year KPMG, actuaries, economists and accountants
   – We are anticipating a clean opinion---again!!
SOLVENCY: OASDI Trust Fund Reserve Depletion 2034 (same as last year)

- Reserve depletion date varied from 2029 to 2042 in reports over the past 25 years (1992-2017)
- **DI Trust Fund — reserve depletion in 2028, five years later than last year**
  - Due largely to lower recent and near-term disability applications and incidence rate
Applications for Disability Benefits Continue to Fall

At the peak of the last economic cycle in 2007, applications were low, but increased rapidly in the recession to over 2 million in 2010. In 2016, with the economy still below the sustainable full-employment level, applications have dropped below the 2007 level.
Employment Remains below Full Employment

Despite the low unemployment rate (4.8 percent in 2016), employment is estimated to be about 2 percent below full employment level.
Disability Incidence Rate Falls to Historic Lows

DI disabled worker incidence rate rose sharply in the recession, and has declined since the peak in 2010 to an extraordinarily low level for 2016.
Fewer Disabled Worker Beneficiaries

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

[Graph showing the number of disabled worker beneficiaries in current payment status at the end of the year from 2006 to 2026.]

- **2008 TR (no recession)**
- **2016 TR**
- **2017 TR**
**DI Annual Cost and Non-Interest Income as Percent of Taxable Payroll**

93% of scheduled benefits still payable at trust fund reserve depletion

Annual deficit in 2091: 0.38 percent of payroll — 0.01 percent smaller than last year

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Cost: Scheduled and payable benefits</th>
<th>Cost: Scheduled but not fully payable benefits</th>
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<td>2005-2015</td>
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<td>2016-2027</td>
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<td>2028</td>
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<td>2091</td>
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Payable benefits as percent of scheduled benefits:
- 2016-2027: 100%
- 2028: 93%
- 2091: 82%

**Expenditures:** Payable benefits = income after trust fund depletion in 2028
OASDI Annual Cost and Non-Interest Income as Percent of Taxable Payroll

Persistent Negative Annual Cash-Flow Balance Starting in 2010

77% of scheduled benefits still payable at trust fund reserve depletion

Annual deficit in 2091: 4.48 percent of payroll — 0.13 percent larger than last year

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<td>2095</td>
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Payable benefits as percent of scheduled benefits:
- 2016-33: 100%
- 2034: 77%
- 2091: 73%

Expenditures: Payable benefits = income after trust fund depletion in 2034
SUSTAINABILITY: OASDI Cost as Percent of GDP

Rises from a 4.2-percent average in 1990-2008, to about 6.1% by 2037, then declines to under 5.9% by 2050, and generally increases to 6.1% by 2091.
OASDI Beneficiaries per 100 Workers

Historical

Estimated

Calendar year

Aging (change in age distribution) mainly due to drop in birth rates

Aged Dependency Ratio 2017 TR
Population 65+/20-64

- Actual and TR Intermediate
- TFR remains at 3.0 after 1964
- TFR remains at 3.3 after 1964
U.S. Total Fertility Rate: With and Without Adjustment for Survival to Age 10

<table>
<thead>
<tr>
<th>Period</th>
<th>Average TFR</th>
<th>Average Adjusted TFR</th>
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<tbody>
<tr>
<td>1865-1895</td>
<td>4.44</td>
<td>3.09</td>
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<tr>
<td>1896-1925</td>
<td>3.36</td>
<td>2.80</td>
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<tr>
<td>1926-1965</td>
<td>2.86</td>
<td>2.71</td>
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<tr>
<td>1966-1990</td>
<td>1.99</td>
<td>1.95</td>
</tr>
<tr>
<td>1991-2015</td>
<td>2.00</td>
<td>1.98</td>
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Notes: TFRs prior to 1917 are for whites only and survival rates prior to 1900 use Massachusetts data only.
Changing Adult Age Distribution: Boomers increase of prime disability age (45-64) is over ---- Next is increasing share at retirement age (65+) as boomers replaced at working ages.

![Age Distribution of the Population Age 25+, 1940 to 2100 (2017TR)](image-url)
Mortality Experience: All Ages
Reductions continue to fall short of expectations
Mortality Experience: Ages 65 and Older
Reductions since 2009 continue to fall short of expectations
Mortality Experience: Ages under 65
Actual Increase since 2010

Age-Sex-Adjusted Death Rates
(Ages Under 65)
Principal Reasons for Change in 2017 Report

*Actuarial Balance—Net Change of -0.17 percent of payroll*

- Valuation Period: -0.05 percent
- Higher recent mortality: +0.04 percent
- Lower recent fertility, immigration and other data updates: -0.07 percent
- Lower level of productivity & GDP (down by about 1 percent): -0.02 percent
- Lower avg real wage differential in near- and long-term: -0.03 percent
- Starting values and other near-term economic assumptions: -0.03 percent
- Lower recent and near-term disability applications and incidence rate: +0.03 percent
- Other new data and methods improvements: -0.04 percent
Uncertainty Illustrations

Unrealistically narrow stochastic results due to lack of central tendency variation

2017 TR OASDI Annual Cost Rate

- Low-Cost
- Intermediate
- High-Cost
- Stochastic 2.5%
- Stochastic 50%
- Stochastic 97.5%
Replacement Rates Based on the 2017TR

Scheduled Monthly Benefit Levels as Percent of Career-Average Earnings by Year of Retirement at age 65

Low Earner ($23,091 for 2017; 25th percentile)
Medium Earner ($51,314 for 2017; 57th percentile)
High Earner ($82,103 for 2017; 82nd percentile)
Max Earner ($127,200 for 2017; 100th percentile)

Source: Annual Recurring Actuarial Note #9 at www.ssa.gov/oact/NOTES/ran9/index.html
How About at Age 62, Where Most Start Benefits?

Scheduled Monthly Benefit Levels as Percent of Career-Average Earnings
by Year of Retirement at age 62

- Low Earner ($23,091 in 2017; 25th percentile)
- Medium Earner ($51,314 in 2017; 57th percentile)
- High Earner ($82,103 in 2017; 82nd percentile)
- Max Earner ($127,200 in 2017; 100th percentile)

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

PAYABLE Monthly Benefit Levels as Percent of Career-Average Earnings by Year of Retirement at age 62

- Low Earner ($23,091 in 2017; 25th percentile)
- Medium Earner ($51,314 in 2017; 57th percentile)
- High Earner ($82,103 in 2017; 82nd percentile)
- Max Earner ($127,200 in 2017; 100th percentile)

Source: Annual Recurring Actuarial Note #9 at www.ssa.gov/oact/NOTES/ran9/index.html
But, Wait—How About Budget Scoring?

Don’t entitlements just keep borrowing?

Source: Congressional Budget Office, June 2016
Actually, NO. Budget Scoring Is Inconsistent With the Law, and All Past Experience.

- See Actuarial Opinion in the 2017 TR (also 2014, 2015, and 2016 TR)

1) After reserves deplete, $12.5 trillion unfunded obligation through 2091 cannot be paid under the law.
   - Budget deems these “expenditures” creating publicly held debt

2) Reserve redemptions spend excess “earmarked” revenues invested in an earlier year.
   - Budget deems these “a draw on other Federal resources”

3) Trust Fund operations have NO direct effect on total Federal debt subject to ceiling in any year—and no net effect on publicly held debt.
   - Budget says redemptions increase Federal debt held by the public and often gives no credit for reserve accumulation
So—What If We Project Federal Debt Consistent With the Law?

Projected Federal Debt Held by the Public: CBO Baseline (Assuming OASDI & HI Unfunded Obligations Are Paid by Borrowing From the Public) vs. Assuming Current Law

- CBO Baseline July 2016
- Less OASDI Unfunded Obligations (2016 Trustees Projections)
- Less OASDI&HI Unfunded Obligations (2016 Trustees Projections)
So—What If We Project Federal Debt Consistent With the Law? Projection to 2090 back in 2015

Projected Federal Debt Held by the Public: CBO Baseline (Assuming OASDI & HI Unfunded Obligations Are Paid by Borrowing From the Public) vs. Assuming Current Law

- CBO Baseline July 2015
- Less OASDI Unfunded Obligations (CBO Dec 2015)
- Less OASDI (CBO Dec 2015) and HI (Trustees 2015) Unfunded Obligations
The Bottom Line

• Long-term projections provide information to assess solvency and changes needed to eliminate shortfalls

• If trust fund reserves were to deplete:
  – Full benefits cannot be paid timely
  – NO pressure on the Budget or Federal Debt
  – So Congress must and WILL act, as always

• Straightforward solutions:
  – Add revenue and/or lower cost for OASDI
    • Comprehensive changes implemented by 2034
How to Fix Social Security Long-Term

Make choices addressing OASDI deficits 2034-2091:

• Raise scheduled revenue after 2033 by about 33%: increase revenue from 4.6 to 6.1% of GDP

• Reduce scheduled benefits after 2033 by about 25%: lower benefits from 6.1 to 4.6% of GDP

• Or some combination of the two

• Invest trust funds for higher return?
  – Limited help—it is a PAYGO world
  – So invest in coming generations of workers
Ways to Lower Cost

• Lower benefits for retirees—not disabled?
  – Increase normal retirement age (lowers OASDI 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
  – Some say increase it with the CPI-E (based on purchases of consumers over age 62)
Ways to Increase Revenue

• 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

• Maintain larger trust fund reserves?
  – Added interest can lower needed taxes
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
  – Our estimates for the individual provisions
  – Actuarial notes; including replacement rates
  – Actuarial studies; including stochastic
  – Extensive databases
  – Congressional testimonies