Figure 1. TFR: Actual and Middle Series Projections 1940-2005

(Source: U.S. Census Bureau, Current Population Reports, Series P-25)

Note: Middle Series is calculated as the simple average of moderate high and moderate low series, when no middle series is forecast.
Figure 2. TFR: Actual and High/Low Series Projections 1940-2005

(Source: U.S. Census Bureau, Current Population Reports, Series P-25)
Figure 3
Actual and Middle Series Projections of Life Expectancies for the United States
[Source: Social Security Administration, Actuarial Studies]
Fig. 4 – Lee–Carter mortality index $k(t)$, fitted (1900–96) and forecasted (1997–2096)

<table>
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<tr>
<th>Year</th>
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<th>50%tile</th>
<th>97.5%tile</th>
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<tbody>
<tr>
<td>2035</td>
<td>−34.27</td>
<td>−24.24</td>
<td>−15.01</td>
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<tr>
<td>2065</td>
<td>−49.14</td>
<td>−34.67</td>
<td>−20.19</td>
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<tr>
<td>2095</td>
<td>−63.75</td>
<td>−45.07</td>
<td>−28.11</td>
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Fig. 5 – Life expectancy at birth, fitted (1900–96) and forecasted (1997–2096)

<table>
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<tr>
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<td>81.823</td>
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<td>2095</td>
<td>83.229</td>
<td>88.606</td>
<td>93.275</td>
</tr>
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</table>
Figure 6. Projections of Life Expectancy at Birth, 1990-2000

- Solid line = Actual Life Expectancy
Figure 7. Total Fertility Rate, historical (1917–1996) and forecasted (1997–2096), with 95% Probability Intervals for Annual Values and for the Cumulative Average Up To Each Horizon.
Fig. 8 – TFR by life expectancy in 2050, 1,000 simulated points

- SSA forecasts
- Census forecasts
- Simulated points
- Mean of simulated points
Figure 9. TFR in 2050 by TFR in 2020, 1,000 simulated points

- SSA forecasts
- Census forecasts
- Simulated points
- Mean of simulated points
Fig. 10 – Old age dependency ratio (65+ pop)/(20–64 pop)

- SSA forecasts
- Census forecasts
- Lee–Tuljapurkar forecasts
Fig. 11 – Total dependency ratio \((>64\ \text{pop} + <20\ \text{pop})/(20–64\ \text{pop})\)

Note: Census uses \((>64\ \text{pop} + <18\ \text{pop})/(18–64\ \text{pop})\).
12A. Spending on Programs for Old
12B. Spending on Programs for Young
12C. Spending on Age-Neutral Programs
12D. Spending on All Government Programs
Figure 13. Tax Rate for Year-Ahead Balance
(Distribution by Selected Probability Percentiles)
Fig. 14 – Histograms of 1,000 dates of exhaustion for three scenarios

Panel A – No investment in S&P 500

Panel B – 20% invested in S&P in 2000; 50% by 2010

Panel C – 90% invested in S&P in 2000
Fig. 15 – Histograms of 1,000 actuarial balances in 2072 for three scenarios

Panel A – Legislated NRA of 67 by 2022

Panel B – Accelerated NRA of 70 by 2033

Panel C – Accelerated NRA of 71 by 2022

Note: Balances expressed as percentages.