



SOCIETY OF ACTUARIES

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# Pension Section News

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## “Volunteers Needed, Please”

### Chairperson’s Corner

by Amy S. Timmons

**N**ineteen percent of the members of the Pension Section Council voted in its recent election—higher than the general population turnout for elections, lower than I would like for an organization that has a significant impact on our profession and its “new recruits.”

The new exam syllabus needs volunteer writers, reviewers, and instructors. Pension expertise is particularly important since our specialty is so unlike the insurance industry. We need involvement in overseeing the pension candidate’s educational requirements to become a Fellow of the Society of Actuaries.

Knowledgeable, articulate speakers are needed for meetings of the Society of Actuaries, the American Academy of Actuaries, the Enrolled Actuaries, and other continuing education opportunities required to keep our certifications.

Committees on professional

*(continued on page 3, column 1)*

## OASDI Trust Fund: Principal Economic and Demographic Assumptions

*Editor’s Note: The following excerpt is taken from Section II.D, “Actuarial Analysis,” in the 1999 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Copies of the OASDI 1999 Annual Report are available from Cece Enders (410-965-3015).*

**T**he future income and outgo of the OASDI program depend on many economic and demographic factors, including gross domestic product, labor force, unemployment, average earnings, productivity, inflation, fertility, mortality, net immigration, marriage, divorce, retirement patterns, and disability incidence and termination. The income will depend on how these factors affect the size and composition of the working population and the level and distribution of earnings. Similarly, the outgo will depend on how these factors affect the size and composition of the beneficiary population and the general level of benefits.

Because projections of these variables are inherently uncertain, estimates are shown in this report on the basis of three sets of assumptions, designated as intermediate (alternative II), low cost (alternative I), and high cost (alternative III). The intermediate set, alternative II, represents the Boards’ best estimate of the future course of the population and the economy. In terms of the new effect on the status of the OASDI program, the low cost alternative I is the most optimistic, and the high cost alternative III is the most pessimistic of the plausible economic and demographic conditions.

The economic and demographic assumptions used in this report are reexamined each year in light of recent experience and new information about future trends and are revised if warranted. This year, there was a particular need for such a review because of changes in the calculation of the CPI by the Bureau of Labor Statistics (BLS). These changes were announced last April, too late to incorporate into the 1998 report.

*(continued on page 4, column 1)*

## In This Issue

	page		page		page
<b>Special Report</b>					
OASDI Trust Fund:		Chairperson’s Corner		IRC Section 415 (e).....	13
Principal Economic and		by Amy S. Timmons .....	1	SOA Services to Pension Actuaries ....	14
Demographic Assumptions .....	1	Articles Needed for the News .....	2	Letter to the Editor .....	17
HI Trust Fund:		New Council Members .....	6	Help a Future Actuary .....	22
Actuarial Methodology and Principal		PBGC Valuation Report Excerpts		GAR-94: Tracking The 50 States	
Assumptions .....	15	Correction.....	7	by Zenaida M. Samaniego.....	23
SMI Trust Fund:		Pension Section Council Meeting—		Retirement 2000 Conference in	
Estimates under Alternative II		Sunday, March 14, 1999, at Marriott		Washington, DC .....	<i>see insert</i>
Assumption for Aged and Disabled		Wardham Park Hotel .....	8	Papers to be presented: .....	<i>see insert</i>
(Excluding End-Stage Renal		Web Discussions .....	10		
Disease) Enrollees .....	18				

\* \* \*

## OASDI Trust Fund

*continued from page 1*

Although the three sets of economic and demographic assumptions have been developed using the best available information, the resulting estimates should be interpreted with care. The estimates are not intended to be predictions of the future status of the OASDI program, but

### ***Economic Assumptions***

The principal economic assumptions for the three alternatives are summarized in Table II.D1 (See page 5).

Alternatives I, II, and III represent a range of economic assumptions designed to produce variation in Social Security's

effect on the long-range estimates of financial status.

### ***Demographic Assumptions***

The principal demographic assumptions for the three alternatives are shown in Table II.D2 (see page 6).

***“The estimates are not intended to be predictions of the future status of the OASDI program, but rather, they are intended to be indicators of the trend and potential range of future income and outgo....”***

rather, they are intended to be indicators of the trend and potential range of future income and outgo, under a variety of plausible economic and demographic conditions.

The values for each of the economic and demographic factors are assumed to move from recently experienced levels or trends, toward long-range ultimate values over the next 5 to 30 years. The ultimate values assumed after the first 5 to 30 years for both the economic and demographic variables are intended to represent average experience or growth rates. Actual future values will exhibit fluctuations or cyclical patterns, as in the past.

financial status that should encompass most of the possibilities that might be encountered. The intermediate assumptions (alternative II) represent the Trustees' consensus expectation of moderate economic growth through the projection period. The low cost assumptions (alternative I) represent a more optimistic outlook, with relatively stronger economic growth. The high cost assumptions (alternative III) represent a relatively pessimistic forecast, with weaker economic growth and two recessions in the short-range period. Economic cycles are not included in assumptions beyond the first five to ten years of the projection period because they have little

### **Increases in CPI reduced by 20**

**Basis Points:** "...in mid-April 1998, after careful analysis, the Bureau of Labor Statistics (BLS) announced an improvement in the method of calculating the CPI... This change is expected to lower the future annual growth rate of the CPI by 0.2 percentage point.... The effect of this change has been incorporated into the intermediate, low cost and high cost assumptions for the 1999 Trustees Report."

**Editor's Note:** *The 1998 Annual Report used 2.5%, 3.5% and 4.5% for the CPI increases in Low-Cost, Intermediate, and High-Cost Alternatives, respectively. The OASDI 1999 Annual Report used 2.3%, 3.3% and 4.3% for the CPI increases in Low-Cost, Intermediate, and High-Cost Alternatives, respectively.*

## **NEWLY-ELECTED PENSION SECTION COUNCIL MEMBERS**

- ***Paul Angelo, The Segal Company, San Francisco, CA***
- ***Thomas B. Lowman, Bolton Offutt Donovan, Inc., Baltimore, MD***
- ***John F. Wade, National Rural Electric Cooperatives Association, Arlington, VA***
- ***All have been elected to three-year terms.***

**TABLE II.D1  
Selected Economic Assumptions by Alternative  
Calendar Years 1960-2075**

Calendar Year	Average Annual Percentage (Change In-)		Real Wage Differential t (Percent)	Calendar Year	Average Annual Percentage (Change In-)		Real Wage Differential t (Percent)
	Average Annual Wage in Covered Employment	Consumer Price Index *			Average Annual Wage in Covered Employment	Consumer Price Index *	
Historical Data:				Low Cost:			
1960-64	3.4	1.2	2.2	1999	3.4	1.8	1.6
1965-69	6.1	3.9	2.2	2000	3.3	1.9	1.4
1970-74	6.6	6.2	0.4	2001	3.5	2.1	1.5
1975	6.7	9.1	-2.4	2002	3.4	2.2	1.3
1976	8.5	5.7	2.8	2003	3.6	2.3	1.4
1977	6.8	6.5	0.3	2004	3.7	2.3	1.4
1978	11.6	7.7	3.9	2005	3.6	2.3	1.3
1979	9.8	11.4	-1.6	2006	3.6	2.3	1.3
1980	6.7	13.4	-6.7	2007	3.8	2.3	1.5
1981	10.8	10.3	0.6	2008	3.8	2.3	1.5
1982	6.3	6.0	0.3	2010	3.8	2.3	1.5
1983	4.2	3.0	1.2	2020	3.7	2.3	1.4
1984	6.0	3.5	2.5	2030	3.7	2.3	1.4
1985	6.0	3.5	2.6	2040	3.7	2.3	1.4
1986	4.6	1.6	3.0	2050	3.7	2.3	1.4
1987	4.6	3.6	1.0	2060	3.7	2.3	1.4
1988	5.3	4.0	1.3	2070	3.7	2.3	1.4
1989	3.9	4.8	-0.9	2075	3.7	2.3	1.4
1990	5.1	5.2	-0.1				
1991	3.0	4.1	-1.1				
1992	4.9	2.9	2.0				
1993	1.9	2.8	-0.9				
1994	3.4 +	2.5	1.0				
1995	4.0 +	2.9	1.1				
1996	4.5 +	2.9	1.6				
1997	5.7 +	2.3	3.4				
1998	5.7 +	1.3	4.4				
Intermediate:				High Cost:			
1999	2.9	1.9	1.0	1999	3.2	2.5	0.7
2000	3.0	2.1	0.9	2000	2.8	3.7	-0.9
2001	3.4	2.5	0.9	2001	6.5	5.4	1.1
2002	3.5	2.6	0.9	2002	6.3	6.0	0.3
2003	3.7	2.7	1.0	2003	2.4	4.1	-1.7
2004	3.9	3.0	0.9	2004	5.5	4.2	1.4
2005	4.1	3.1	1.0	2005	5.4	4.3	1.1
2006	4.1	3.2	0.9	2006	4.8	4.3	0.6
2007	4.2	3.3	1.0	2007	4.7	4.3	0.4
2008	4.3	3.3	1.0	2008	4.7	4.3	0.4
2010	4.3	3.3	1.0	2010	4.8	4.3	0.5
2020	4.2	3.3	0.9	2020	4.8	4.3	0.5
2030	4.2	3.3	0.9	2030	4.7	4.3	0.4
2040	4.2	3.3	0.9	2040	4.7	4.3	0.4
2050	4.2	3.3	0.9	2050	4.7	4.3	0.4
2060	4.2	3.3	0.9	2060	4.7	4.3	0.4
2070	4.2	3.3	0.9	2070	4.7	4.3	0.4
2075	4.2	3.3	0.9	2075	4.7	4.3	0.4

\* The Consumer Price Index is the annual average value of the calendar year of the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

t The real-wage differential is the difference between the percentage increases, before rounding, in (1) the average wage in covered employment, and (2) the average annual Consumer Price Index.

+ Preliminary. Wages in covered employment are considered preliminary for several years primarily due to uncertainty associated with estimates of amounts above the benefit and contribution base.

*(continued on page 6, column 1)*

**OASDI Trust Fund**  
*continued from page 5*

**TABLE II.D2**  
**Selected Demographic Assumptions by Alternative**  
**Calendar Years 1940-2075**

Calendar Year	Life Expectancy * (At Age 65)		Calendar Year	Life Expectancy * (At Age 65)	
	Male	Female		Male	Female
Historical Data:			Low Cost:		
1940	11.9	13.4	1999	15.7	19.1
1945	12.6	14.4	2000	15.7	19.1
1950	12.8	15.1	2005	15.7	18.9
1955	13.1	15.6	2010	15.8	18.8
1960	12.9	15.9	2015	15.8	18.8
1965	12.9	16.3	2020	15.9	18.8
1970	13.1	17.1	2025	16.0	18.9
1975	13.7	18.0	2030	16.0	19.0
1976	13.8	18.1	2035	16.1	19.1
1977	13.9	18.3	2040	16.2	19.1
1978	14.0	18.3	2045	16.3	19.2
1979	14.2	18.6	2050	16.3	19.3
1980	14.0	18.4	2055	16.4	19.4
1981	14.2	18.6	2060	16.5	19.4
1982	14.5	18.8	2065	16.5	19.5
1983	14.3	18.6	2070	16.6	19.6
1984	14.4	18.7	2075	16.7	19.7
1985	14.4	18.6			
1986	14.5	18.7	High Cost:		
1987	14.6	18.7	1999	15.8	19.3
1988	14.6	18.7	2000	15.9	19.4
1989	14.8	18.9	2005	16.4	19.8
1990	15.0	19.0	2010	16.8	20.1
1991	15.1	19.1	2015	17.2	20.5
1992	15.2	19.2	2020	17.6	20.9
1993	15.1	19.0	2025	18.0	21.3
1994	15.3	19.0	2030	18.4	21.7
1995	15.3	19.0	2035	18.8	22.1
1996	15.4	19.0	2040	19.1	22.5
1997 t	15.9	19.1	2045	19.5	22.9
1998 t	15.7	19.2	2050	19.9	23.3
Intermediate:			2055	20.3	23.7
1999	15.8	19.2	2060	20.7	24.0
2000	15.8	19.2	2065	21.1	24.4
2005	16.1	19.4	2070	21.5	24.8
2010	16.3	19.5	2075	21.9	25.2
2015	16.5	19.6			
2020	16.7	19.8			
2025	16.9	20.0			
2030	17.1	20.2			
2035	17.3	20.5			
2040	17.5	20.7			
2045	17.7	20.9			
2050	17.9	21.1			
2055	18.1	21.3			
2060	18.3	21.5			
2065	18.5	21.7			
2070	18.7	21.9			
2075	18.9	22.1			

\* The life expectancy for any year is the average of years of life remaining for a person if that person were to experience the death rates by age observed in, or assumed for, the selected year.

t Preliminary or estimated.