

# Florida Retirement System Actuarial Assumption Estimating Conference

## Executive Summary for September 27, 2011

The Florida Retirement System Actuarial Assumption Conference met on September 27, 2011 and adopted assumptions to be used in the actuarial valuation of Florida's Retirement System. The preliminary results show that the state continues to have an unfunded actuarial liability (UAL). As updated, the projected UAL has moderately increased from last year's \$16.7 billion (originally reported in October 2010) to \$18.7 billion.

This is the third consecutive year that the system was not in a surplus position. While asset performance was favorable in both the 2009-10 and 2010-11 fiscal years, the system is only 87.1% funded on an actuarial basis. While this projection has worsened slightly from this time last year, it is better than originally expected due to the passage of Senate Bill 2100 (Chapter No. 2011-68) during the 2011 Session, as well as other legislative changes.

The preliminary report addressed information received through July 1, 2011. The Conference retained the assumptions adopted last year.

---

### KEY ECONOMIC ASSUMPTIONS

Used in 2009, 2010 and 2011 Actuarial Valuations

	<u>2009</u>	<u>2010</u>	<u>2011</u>
• Investment Earnings	7.75%*	Same	Same
• General Wage Increase	4.00%**	Same	Same
• Post-Retirement Benefit Increase	3.00%	Same	Same
• Growth in Membership	0.00%	Same	Same

\*Includes a 3.0% inflation assumption.

\*\*Inflation and additional salary increases due to promotions and longevity.

---

The final report will be released in December 2011.

# Florida Retirement System

The Actuarial Assumption Estimating Conference  
Including Preliminary July 1, 2011 Actuarial Valuation Results

Presented by:

Robert Dezube  
Consulting Actuary

September 27, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Disclaimer

At your request, we have provided this DRAFT presentation prior to completion of the July 1, 2011 Actuarial Valuation Report. Because this is a draft presentation, Milliman, Inc. does not make any representation or warranty regarding the contents of the presentation. Milliman, Inc. advises any reader not to take any action in reliance on anything contained in this draft presentation. All results from this presentation are subject to revision or correction prior to the release of the final July 1, 2011 Actuarial Valuation Report, and such changes or corrections may be material. No distribution of this draft presentation may be made without our express prior written consent.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Overview

- Key Assumptions
- Historical Analysis
- 2011 Valuation
- Discussion Points
- Projections
- Appendix

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Key Economic Assumptions

## Used in 2010 & 2011 Actuarial Valuations

▪ Investment Earnings	7.75%*
▪ General Wage Increase	4.00%**
▪ Post-Retirement Benefit Increase	3.00%***
▪ Growth in Membership	0.00%

\* Includes a 3.0% inflation assumption

\*\* There are additional salary increases due to promotion and longevity

\*\*\* Applicable only to service earned before July 1, 2011; there are no post-retirement benefit increases for service earned on or after July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Key Demographic Assumption Change

## Change in Retirement Rates

- The 2011 Legislature enacted into law Senate Bill #2100, 3<sup>rd</sup>, Engrossed, Enrolled, which changed many of the FRS provisions effective July 1, 2011 (See Slide 18 for more details on the legislation). Following completion of the 2010 Actuarial Valuation, Milliman prepared a study showing the impact of SB #2100, 3<sup>rd</sup>, Engrossed, Enrolled.

One of the changes was a change in the Normal Retirement Age (NRA) for members initially enrolled on or after July 1, 2011. We assumed that the increase in the NRA would impact a post-June 30, 2011 enrollee's decision as to when to retire or participate in DROP and hence changed the retirement/DROP assumptions.

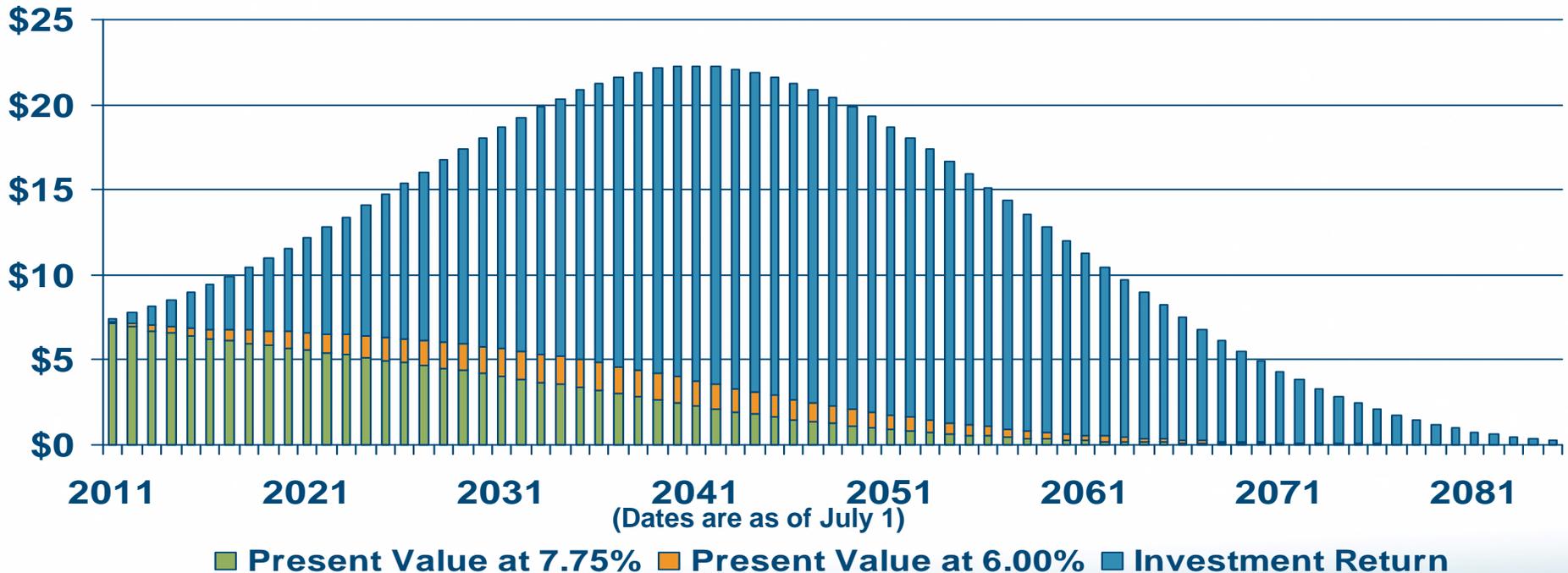
The July 1, 2011 Actuarial Valuation uses the revised retirement assumptions. This presentation compares the 2011 Valuation results to the results of the 2010 SB #2100, 3<sup>rd</sup>, Engrossed, Enrolled study. Where appropriate, the 2010 Valuation results are also shown.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Time-Value of Money: Benefit Payments

The chart represents the effect of the time-value of money on promised benefit payments. In each year, the total bar is equal to expected benefit payments (exclusive of transfers to PEORP). The green portion represents each year's benefit payments, discounted at 7.75% to July 1, 2011 (ie., the value of benefit payments in "today's dollars.") The orange portion is similar to the green, discounted at 6.0%. The blue portion of each bar represents the difference in dollars between the total value to be paid that year less the value in today's dollars.

(\$ In Billions)



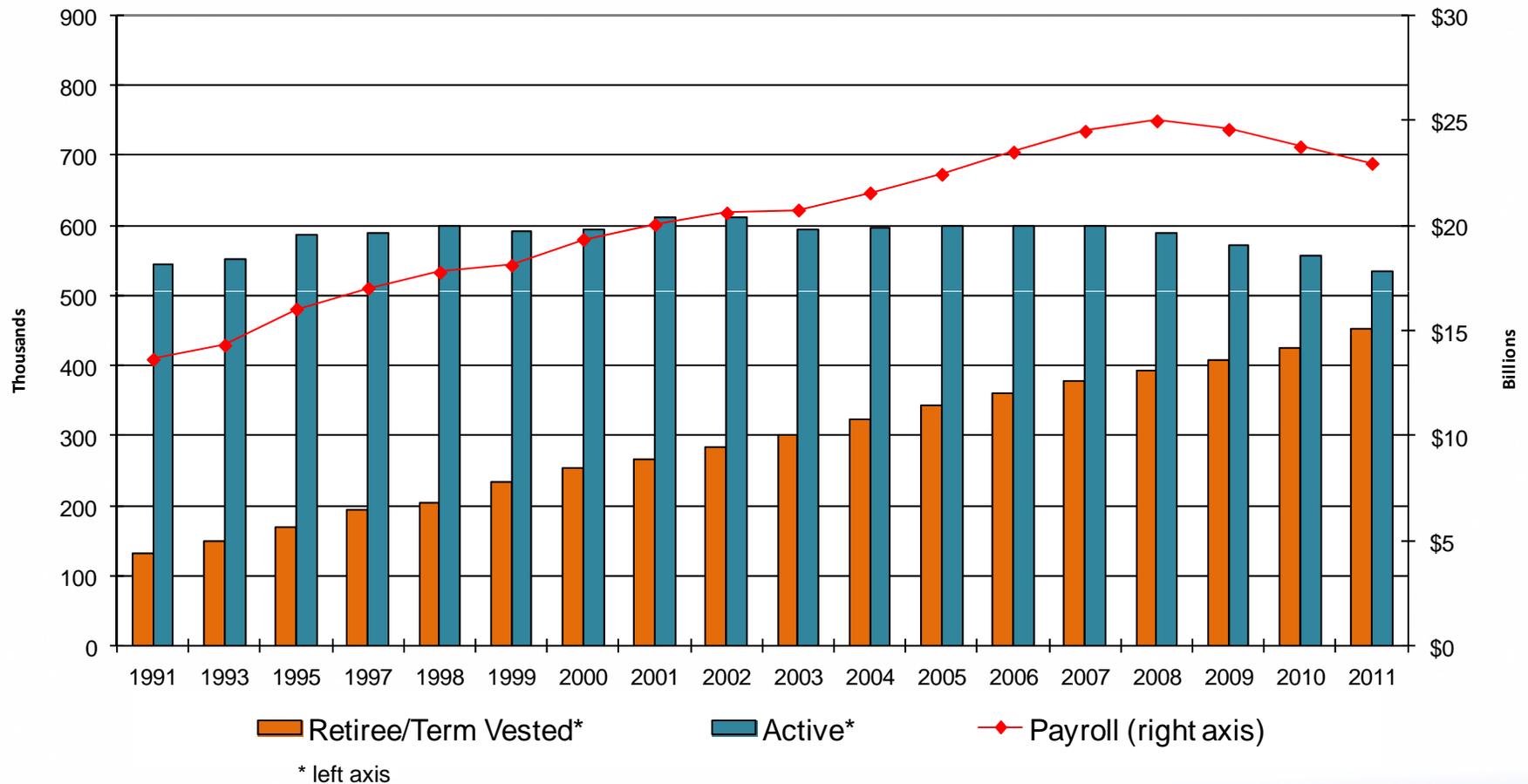
*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Historical Analysis

- Membership & Employer Payroll
- Market & Actuarial Value of Assets
- Liabilities
- Funding Target
- Contributions
- Plan Cash Flows
- Historic Asset Returns

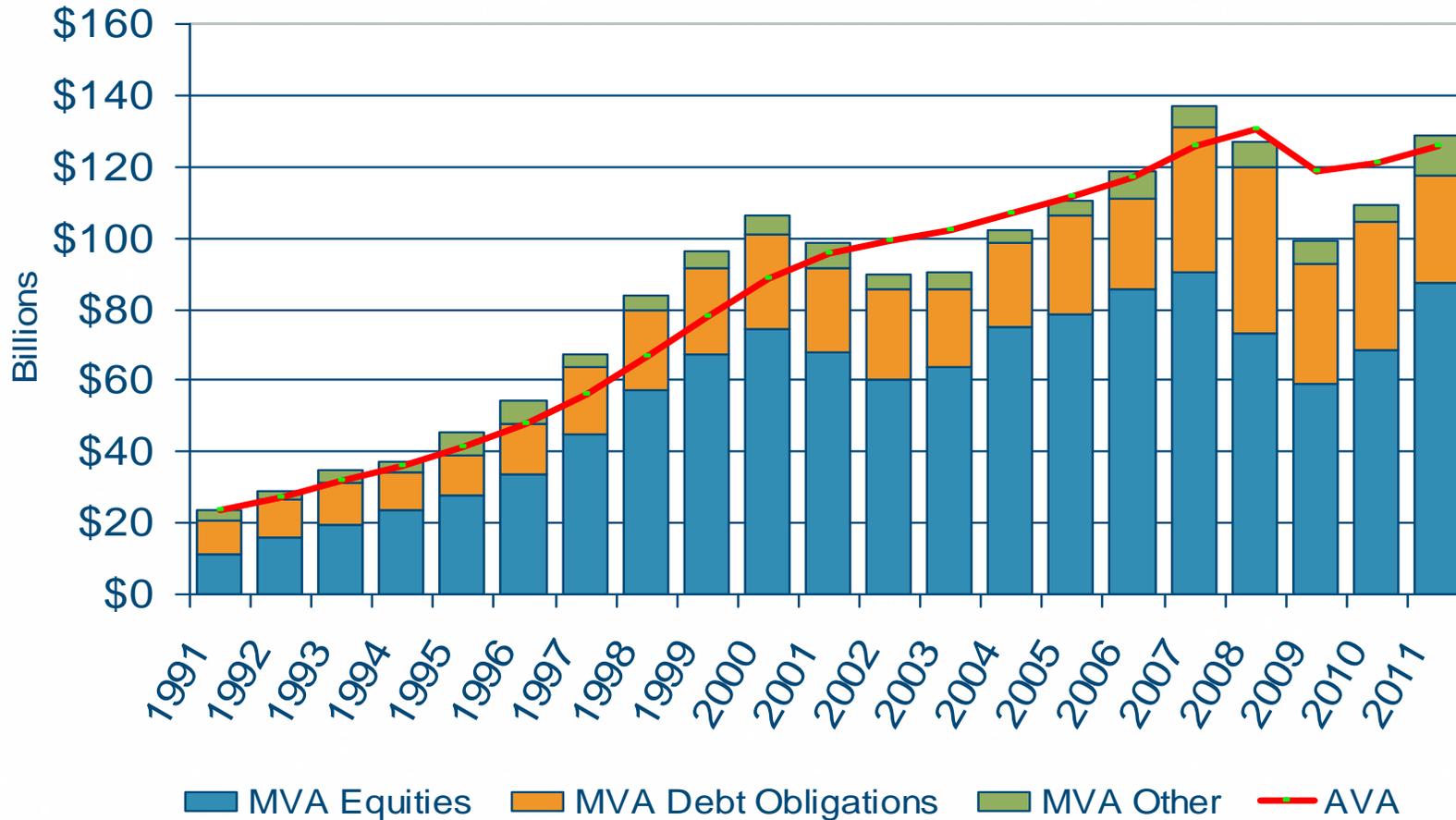
*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Membership & Employer Payroll



*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Market & Actuarial Value of Assets



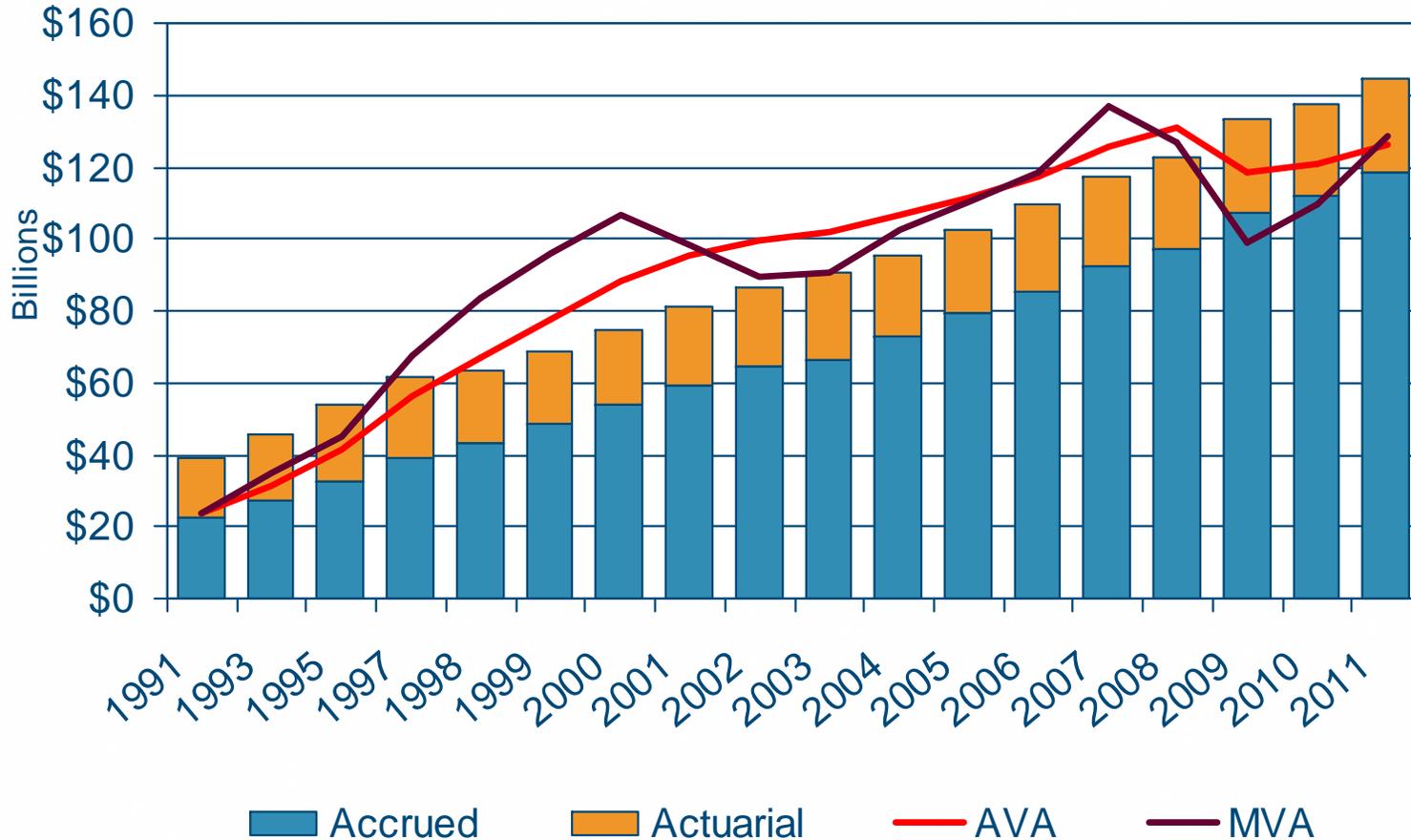
*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Actuarial Liability

	<u>Actuarial Accrued Liability</u>	<u>AVA</u>	<u>UAL</u>
2010 Valuation	\$137.6	\$120.9	\$16.7
2010 SB 2100 Study	\$136.5	\$120.9	\$15.6
2011 Valuation	\$144.7	\$126.0	\$18.7

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

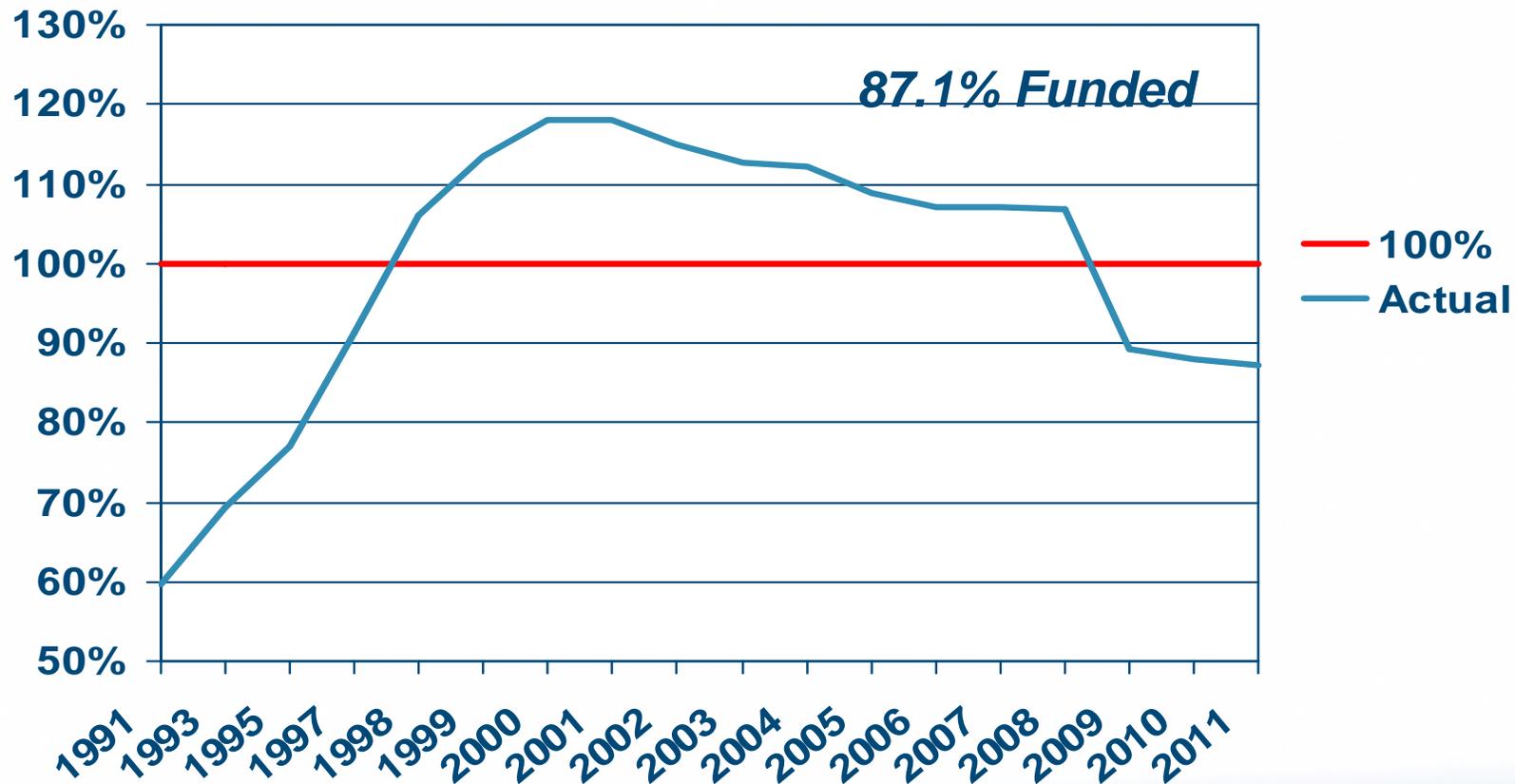
# Assets and Liabilities



*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Funding Target:

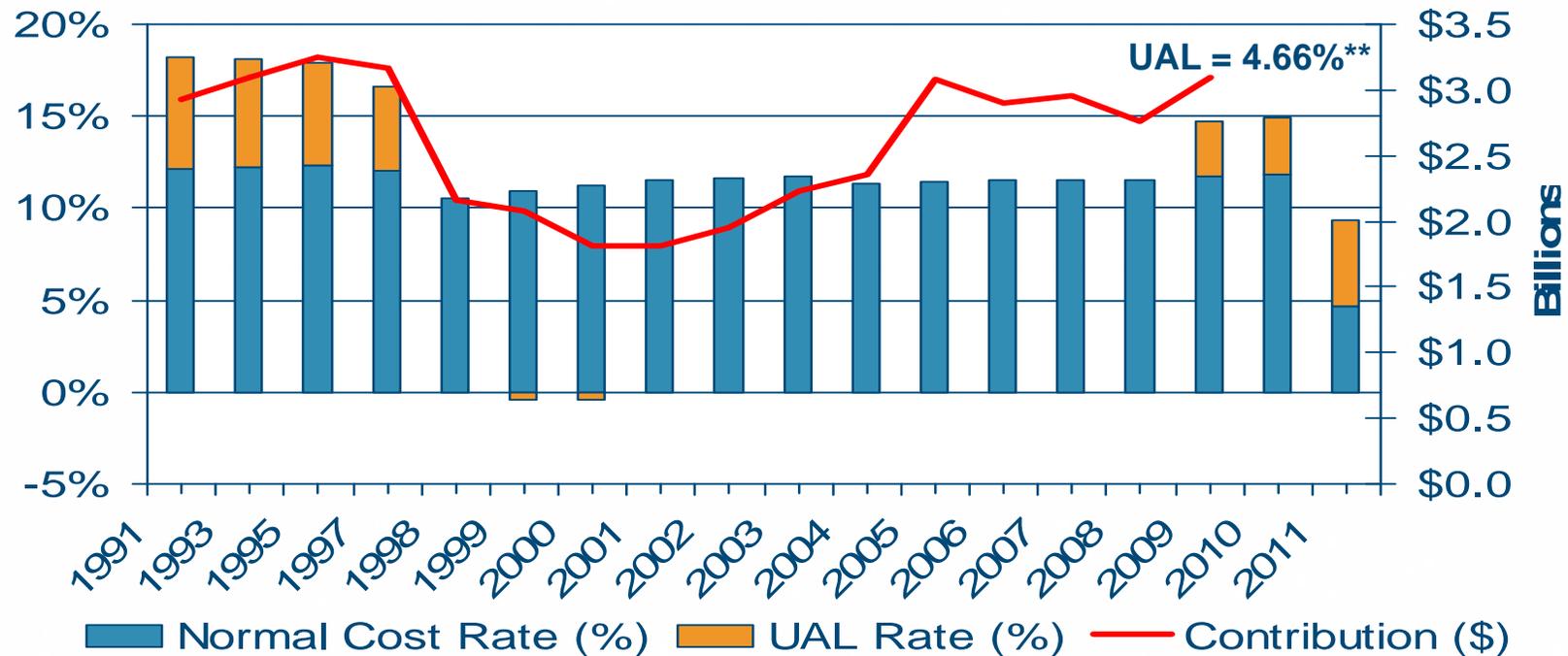
## Actuarial Value of Assets / Actuarial Liabilities



*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Contributions

(Composite contribution rate shown in year developed;  
contribution amount adjusted for budget lag\*)

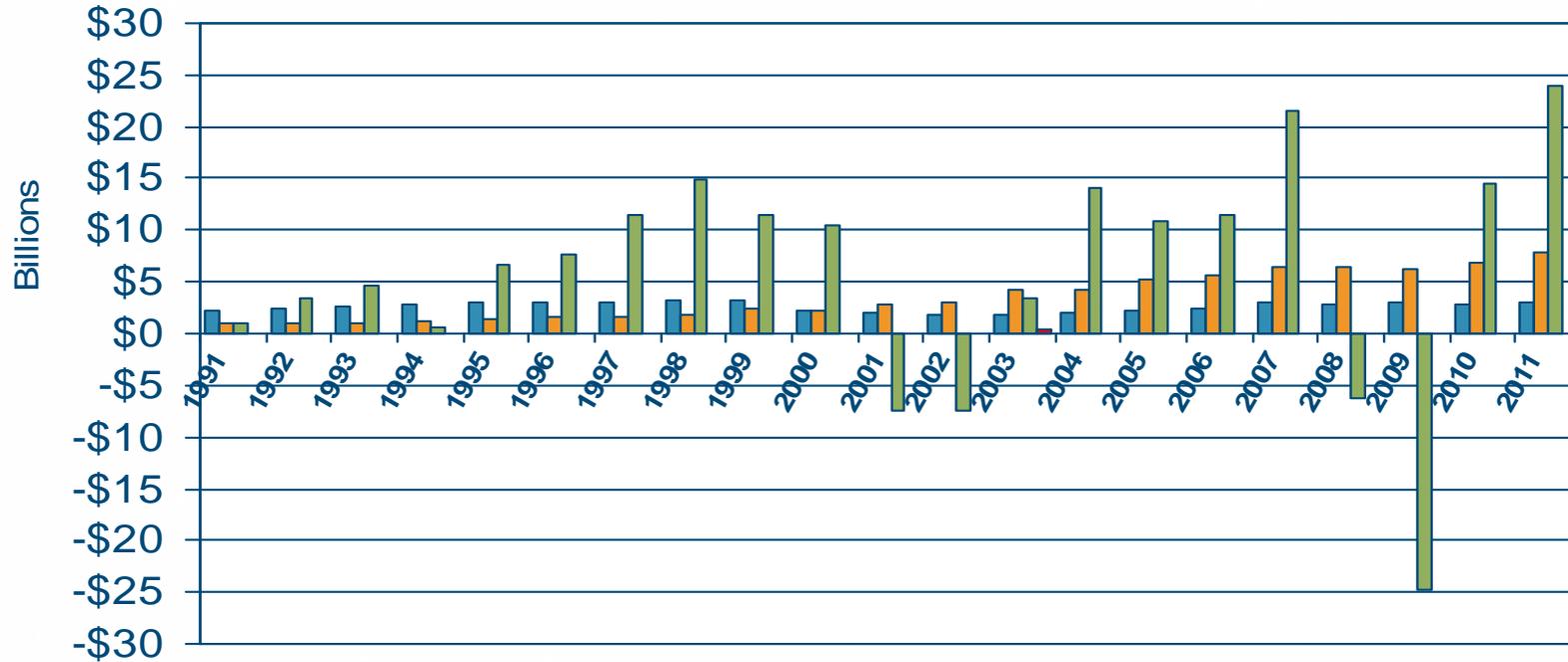


\*For example, contributions for FY 2011 are shown in 2009 because the 2009 actuarial valuation developed contribution rates for FY 2011.

\*\*For purposes of this presentation, the 2011 UAL rate was approximated as the rate needed to amortize the entire UAL over 30 years.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Plan Cash Flows



■ Contributions

■ Benefit Payments\*

■ Investment Income

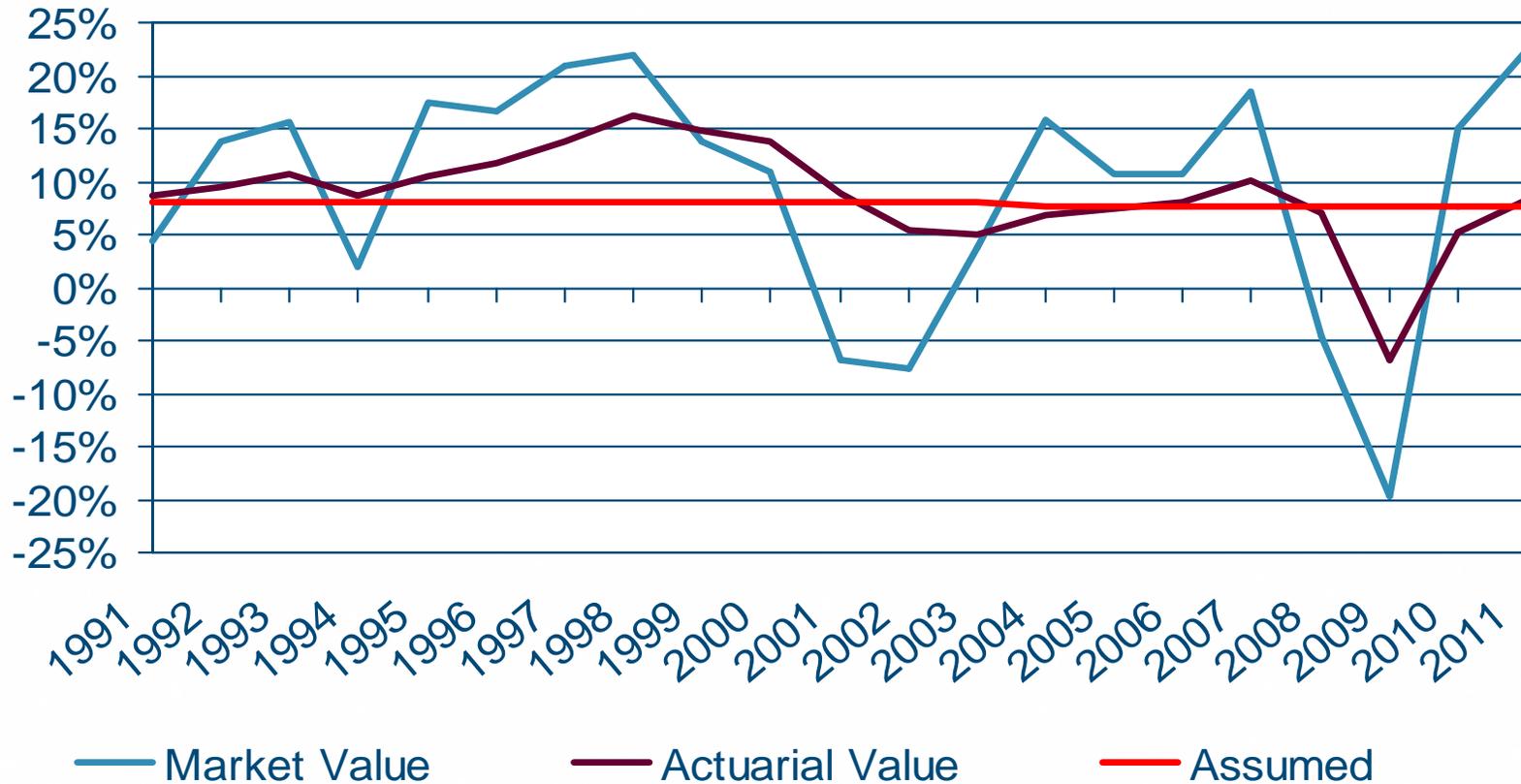
■ Initial Transfers to IP\*\*

\* Includes Transfers to IP

\*\* See Slide 24 for more detail

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Historic Asset Returns



*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# 2011 Valuation

- Valuation Highlights
- Composite Funding Levels
- Normal Cost Rates
- Summary of IP Elections

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# 2011 Valuation Highlights

- Results are based on the 2011 actuarial assumptions and methods as established by the July 1, 2003 – June 30, 2008 experience study, as modified by the February 16, 2010 study on HB 479 and the July 1, 2011 study on SB 2100, which were both enacted into law.
- Third year that FRS is not in a surplus position
- Second consecutive year of favorable asset performance; deferred asset gains
- MVA exceeds AVA by 2% or \$2.7 billion

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# 2011 Valuation Highlights(continued)

- Senate Bill #2100, 3<sup>rd</sup>, Engrossed, Enrolled made many plan provision changes. A summary of some of the changes is as follows:
  - Require employee contributions equal to 3% of pay, effective July 1, 2011 (for both Defined Benefit (DB) and Investment Plan (IP) members).
  - Reduce DROP Interest Rate from 6.5% to 1.3% for all members with a DROP effective begin date on or after July 1, 2011.
  - Eliminate Cost of Living Adjustment on service earned on and after July 1, 2011.
  - Change Vesting, Normal Retirement Date and Average Final Compensation for active members initially enrolled on or after July 1, 2011.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Asset Smoothing

Five-year smoothing method helps alleviate heavy losses (on an actuarial basis) at times of unfavorable asset performance. However, large gains are also not “felt” at once, but serve as a cushion against future unfavorable asset performance. This makes contribution rate changes less volatile.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Assets: MVA vs. AVA

(\$ in Billions)

<u>Year</u>	<u>MVA</u>	<u>MVA Return</u>	<u>AVA</u>	<u>AVA Return</u>
2002	89.7	-7.62	99.4	5.44
2003	90.5	3.76	101.9	5.10
2004	102.4	15.73	106.7	6.93
2005	110.2	10.71	111.5	7.43
2006	118.5	10.65	117.2	8.06
2007	136.7	18.38	125.6	10.16
2008	126.9	-4.65	130.7	6.98
2009	99.0	-19.71	118.8	-6.74
2010	109.5	15.03	120.9	5.30
2011	128.7	22.42	126.0	8.33

In 2006 & 2007 the MVA exceeded the AVA, as a result of four years of MVA returns greater than the 7.75% assumed return. In 2008 thru 2010 the AVA once again exceeded the MVA, representing the smoothed impact of two years of extremely unfavorable MVA returns. The MVA return in 2010-11 was a very favorable 22.42%, but deferred losses in prior years dampened the impact on the AVA.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Composite Funding Levels

	<u>2010 Val</u>	<u>2011 Val</u>	<u>Change</u>
<b>Actuarial Liability</b>	<b>\$137.6</b>	<b>\$144.7</b>	<b>5.2%</b>
<b>Actuarial Value of Assets</b>	<b>\$120.9</b>	<b>\$126.0</b>	<b>4.2%</b>
<b>Unfunded Actuarial Liability</b>	<b>\$16.7</b>	<b>\$18.7</b>	<b>12.0%</b>
<b>% Funded</b>	<b>87.9%</b>	<b>87.1%</b>	

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Normal Cost Rates

<u>Employer</u>	<u>2010 VAL (A)</u>	<u>2010 SB 2100 Study (B)</u>	<u>2011 VAL (C)</u>	<u>Change (C) – (B)</u>
FRS Regular	9.84%	3.55%	3.52%	-0.03%
Special Risk				
Regular	22.34%	10.76%	10.74%	-0.02%
Administration	11.26%	3.94%	3.43%	-0.51%
Elected Officers' Class				
Judicial	19.42%	10.00%	9.86%	-0.14%
Leg-Atty-Cab	14.74%	6.58%	6.40%	-0.18%
Local	16.79%	8.23%	7.84%	-0.39%
Senior Management Service	11.84%	4.80%	4.78%	-0.02%
Composite Rate (without DROP)	11.81%	4.69%	4.66%	-0.03%
Composite Rate with DROP equal 11.14% in 2010, 5.92% after SB 2100 and 3.31% in 2011	11.76%	4.79%	4.52%	-0.27%

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Allocation of Assets

(\$ Shown in Billions)

	Regular	Special Risk		Elected Officers			Senior	DROP	Grand
		Reg	Admin	Judicial	Leg-Atty-Cab	Local	Mgmt Service		Total
1. Actuarial Liability	\$95.2	\$24.4	\$0.1	\$1.0	\$0.1	\$0.6	\$3.2	\$20.1	\$144.7
2. Unadjusted AVA	89.1	20.3	0.1	0.7	0.1	0.3	2.1	13.3	126.0
3. UAL: (1) – (2)	6.1	4.1	0.0	0.3	0.0	0.3	1.1	6.8	18.7
4. Aggregate Funded Percentage: (2) / (1)									87.1%
5. DROP Assets required to meet Aggregate Funded Percentage								\$17.5	
6. Proportion of DROP Liability	0.7374	0.2084	0.0002	0.0150	0.0010	0.0047	0.0332	0.0000	1.0000
7. DROP Assets to be reallocated	(\$3.1)	(\$0.9)	\$0.0	(\$0.1)	\$0.0	\$0.0	(\$0.1)	\$4.2	-
8. Allocated AVA: (2) + (7)	86.0	19.4	0.1	0.7	0.1	0.3	2.0	17.5	126.0
9. Final UAL: (1) – (8)	\$9.2	\$5.0	\$0.0	\$0.3	\$0.0	\$0.3	\$1.2	\$2.6	\$18.7

**DROP Assets were allocated from all classes, the allocation is less than \$50 Million in classes where line 7 equals \$0.0.**

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# IP – July 1, 2011

<u>Employer</u>	<u>Remaining “Original” Participants</u>	<u>Contingent Liability (000 omitted)</u>
FRS Regular	8,321	\$216,026
Special Risk		
Regular	277	10,824
Administration	1	(22)
Elected Officer’s Class		
Judicial	5	(607)
Leg-Atty-Cab	6	224
Local	10	94
Senior Management Service	<u>202</u>	<u>9,736</u>
<b>2011 TOTAL</b>	<b>8,822</b>	<b>\$236,275</b>
<u>For Comparison:</u>		
2010 TOTAL	9,378	\$233,117
2003 TOTAL	21,043	\$312,915
Net Assets transferred to IP in 2003:		\$353,193

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Discussion Points

- We continue to recommend changes to the method of funding DROP that would explicitly recognize the impact of DROP on each class.
- In conjunction with the 2006, 2009 and 2010 actuarial valuations, we studied two alternative (more traditional) ways to fund DROP. In each, the contribution rates for each class of membership would include the cost of its members electing DROP:
  - DROP members treated as retirees (i.e., DROP payroll not used in developing the amount of contributions.)
  - DROP members treated as actives. Valuation would use more elaborate coding to model DROP as a decrement separate from retirement.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

## Discussion Points (continued)

- The contribution rates for FY 2011-12 were enacted into law based on several studies of unique proposed benefit changes that were prepared by Milliman. After passage of the legislation, Milliman completed the SB 2100 Special Study, which analyzed all the changes in total. As a result, the FY 2011-12 contribution rates are slightly different than those produced by our Special Study. Nevertheless, the actual contribution rate includes a contribution toward the UAL. For the first time since 1998, employers of employees subject to only the UAL contribution rates (SUSORP, SMSOAP, SCCORP, and Re-employed Retirees who are not eligible for Renewed Membership) are making contributions for FY2011-12.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

## Discussion Points (continued)

- When the Investment Plan (IP) was initially enacted, the employer contribution rate was set to be approximately equal to the Defined Benefit (DB) Plan normal cost rate. Thus the level of potential benefits from the two plans were designed to be approximately the same. SB 2100 mandated 3% employee contributions from all current and future members of the IP and DB Plan. However, SB 2100 also reduced the potential level and value of benefits for both current and future enrollees in the DB Plan. Without a corresponding reduction in the IP contribution rate, it is possible that these changes will induce a greater percentage of future enrollees to select the IP rather than the DB Plan. These elections may have an impact on future results.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Actuarial Liability & Asset Projections

- Assuming 7.75% constant investment returns
- Assuming 0.00% investment returns for one year followed by constant 7.75% returns
- Assuming 15.00% investment return for one year, followed by constant 7.75% returns

\*\*\* All returns are on a Market Value basis

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Comparison of Actuarial Liabilities & Assets

(Assuming Constant 7.75% Investment Returns)



*Employer contributions assumed to be 5.02% of payroll. Rate set to equal FY11-12 composite rate.*

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Comparison of Actuarial Liabilities & Assets

(Assuming 0.00% Return Followed by Constant 7.75% Returns)

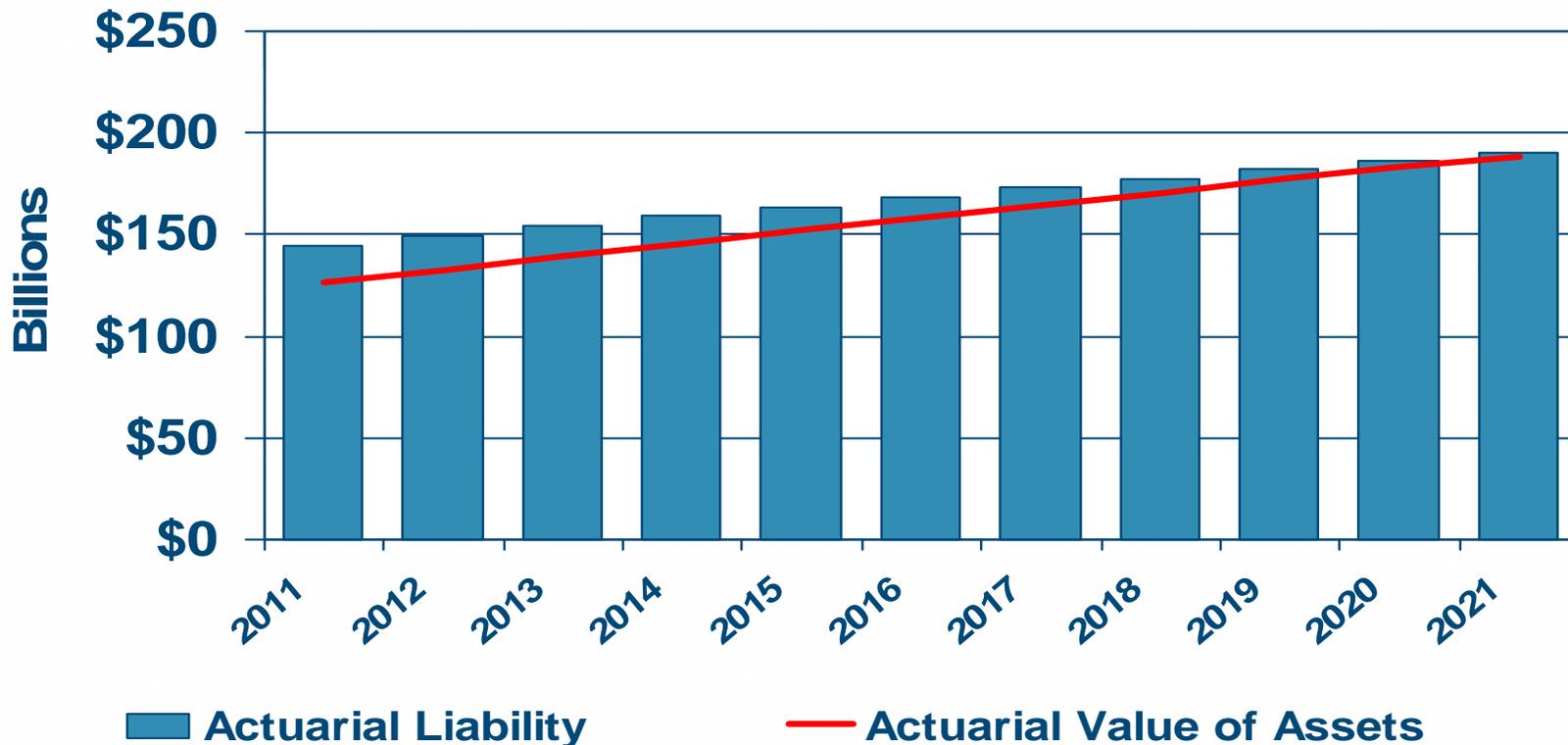


*Employer contributions assumed to be 5.02% of payroll. Rate set to equal FY11-12 composite reduced rate.*

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Comparison of Actuarial Liabilities & Assets

(Assuming one year with a 15.00% Return, Followed by Constant 7.75% Investment Returns)



*Employer contributions assumed to be 5.02% of payroll. Rate set to equal FY11-12 composite reduced rate.*

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

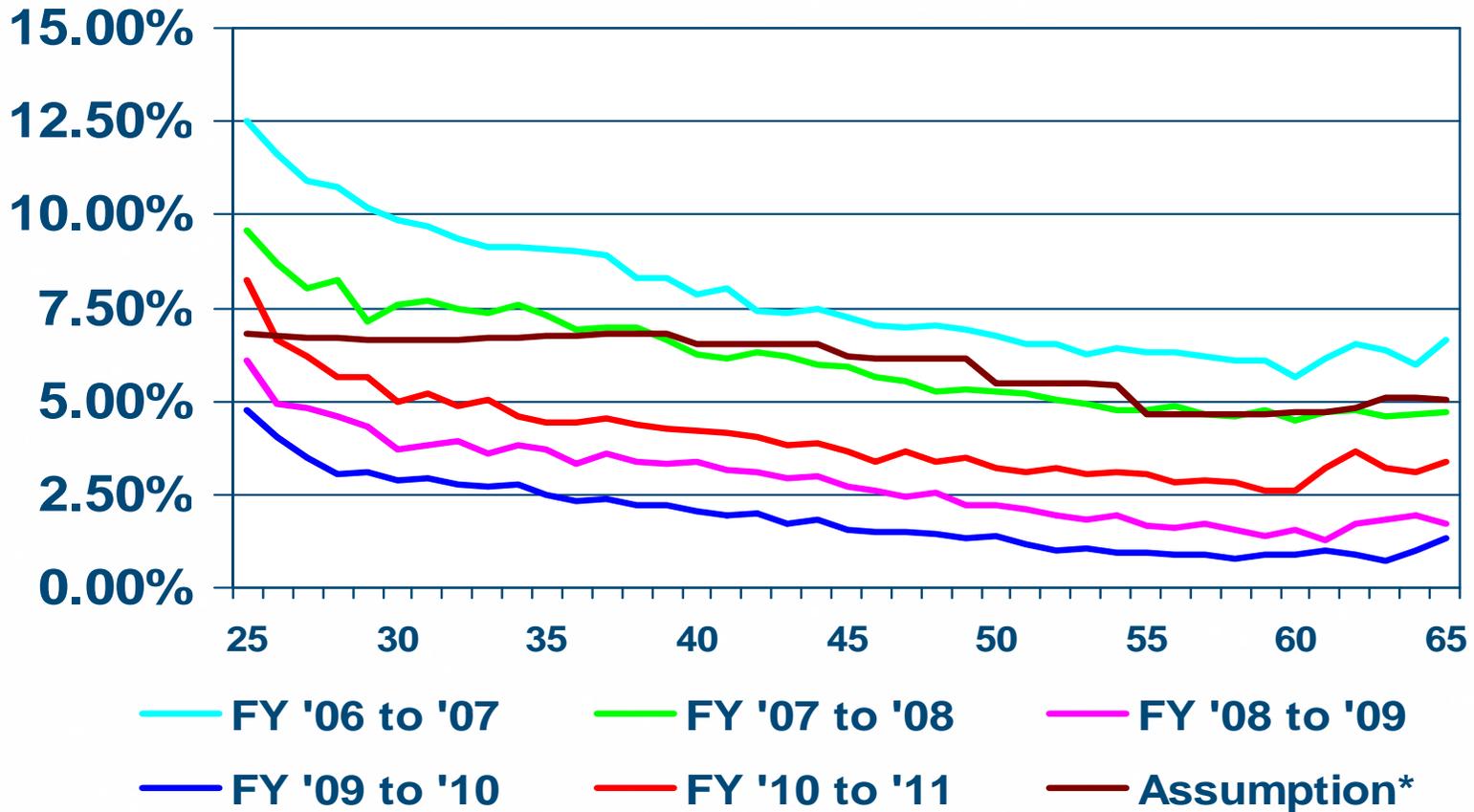
# Appendix

- Salary Experience
  - Compare last five years

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Salary Experience

(All Actives – Last five fiscal years)



\*Plotted against salary scale assumption first effective with the July 1, 2009 valuation.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# Conclusion

The purpose of this presentation is to provide preliminary results of the July 1, 2011 actuarial valuation of the Florida Retirement System Pension Plan and compare them to results from prior valuations. The results are not yet final and are subject to review and possible revision.

We relied, without audit, on information (some oral and some written) supplied by the Division of Retirement. This information includes, but is not limited to, plan provisions, employee data, and financial information. Census data provided to us by the Division has been reviewed for reasonableness and for consistency with data used in prior valuations. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

The actuarial assumptions used in performing this valuation have been recommended by the actuary and adopted by the Actuarial Assumption Conference based on Milliman's most recent review of the System's experience completed during Fiscal Year 2009, and modified by the studies reflecting the impact of HB 479 and SB 2100 which were both enacted into law. We believe the assumptions used reflect our best estimate of anticipated future experience of the plan. The results of this report are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from these assumptions, the true cost of the plan could vary from our results.

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# **FRS Pension Plan Asset Allocation Policy**

---

**Actuarial Assumptions  
Estimating Conference**

**September 27, 2011**

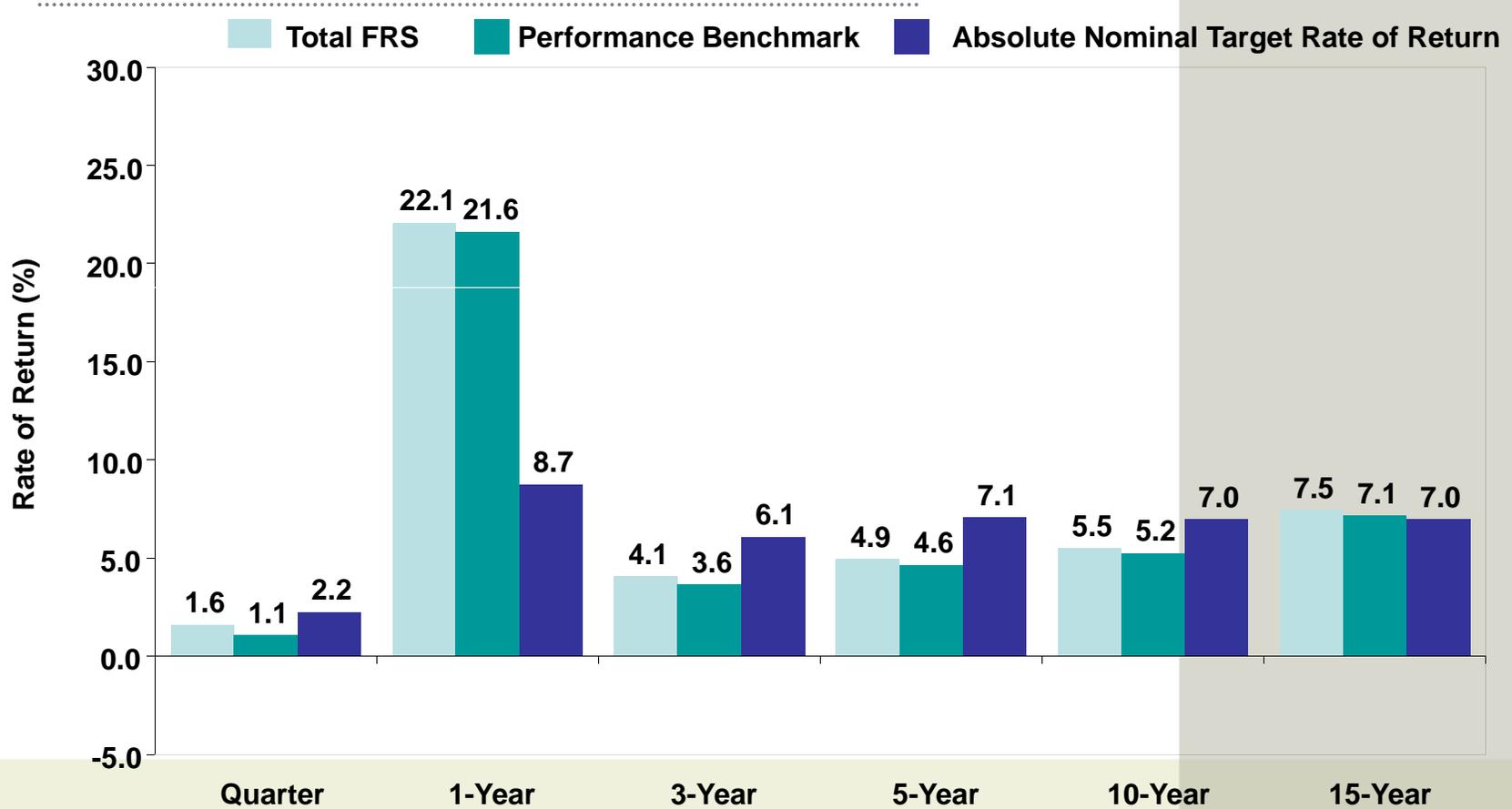


INVESTING FOR FLORIDA'S FUTURE

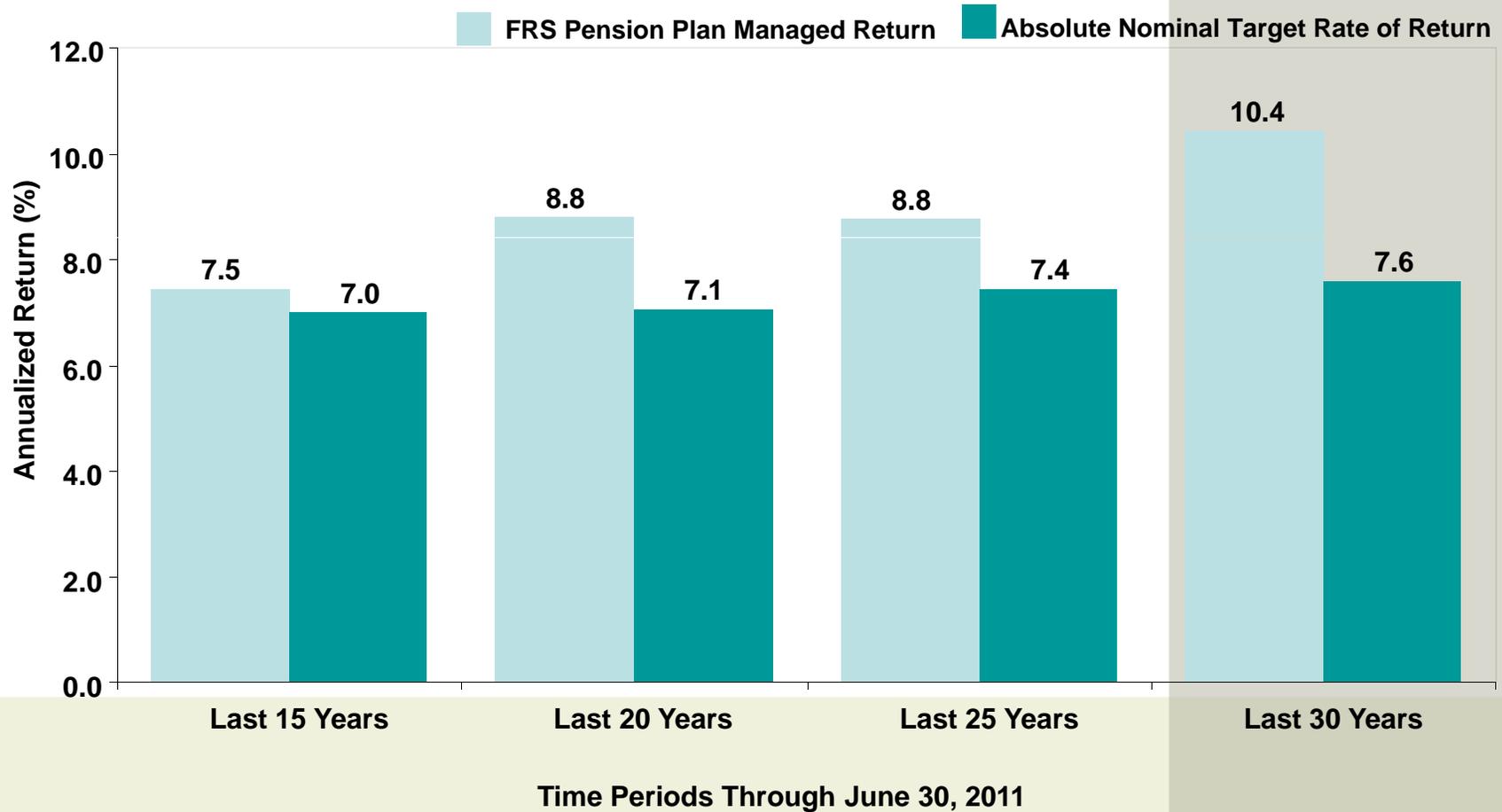
## → FRS Pension Plan Investment Policy Objective

- ... provide investment returns sufficient for the plan to be maintained in a manner that ensures the timely payment of promised benefits to current and future participants and keeps the plan cost at a reasonable level.
- To achieve this, a long-term real return approximating 5% per annum (compounded and net of investment expenses) should be attained, consistent with the actuarial investment return assumption of 7.75%.
- As additional considerations, the Board seeks to avoid excessive risk in long-term cost trends.
- To manage these risks, the volatility of annual returns should be reasonably controlled.

## → FRS Pension Plan Investment Results Periods Ending 6/30/2011



➔ **FRS Pension Plan Performance vs. Long-Term Objective**  
**Periods Ending 6/30/2011**



## → Changes Reflected In The 2011 HEKA Update

- Strong investment performance has increased assets since the 2010 study :
  - The 2010 study reflected assets as of 12/31/2009
  - The 2011 update reflects assets as of 3/31/2011
  - The portfolio return during the 15 months from 1/1/2010 through 3/31/2011 has been close to 18%
- Capital market assumptions have been updated:
  - Equity return expectations are about the same, but fixed income return expectations are lower
  - As a result, the “equity risk premium” assumption has increased from 3.36% to 3.79%
  - The “equity risk premium” is a measure of the expected amount of extra return from taking more risk, so it is a critical assumption in risk-reward analysis
- Significant plan changes were adopted in recent legislative sessions:
  - The 3% cost of living adjustment (COLA) is being phased out for current active members.
  - Members will contribute 3% of pay
  - Members hired after 7/1/2011 will have different benefit provisions (no COLA, higher normal retirement age, increased vesting service required, 8 years used for Average Final Compensation base)
  - Deferred Retirement Option Program (DROP) interest rate provisions are reduced
  - Funding for FY2011-2012 will be mostly for the Normal Cost, with only a small funding of the Unfunded Actuarial Liability (from 2010 session)

## → Non-Economic Assumptions for 2011 AL Update

- Demographic
  - Total FRS population (DB+DC) grows 0% for 2 years, then 1% per year
  - Percent of new hires electing into PEORP is 50%
- Funding
  - Contributions are based on current methods, with 30-year amortization of each “layer” of unfunded actuarial liability
  - No future changes in actuarial assumptions are assumed

	<i>Actuarial</i>	<i>AL Model Averages</i>	
	<u>Assumption</u>	<u>15 yrs.</u>	<u>30 yrs.</u>
Price inflation	3.00%	2.4%	
Real wage growth	1.00%	1.0%	
Total wage growth*	<b>4.00%</b>	<b>3.4%</b>	
Price inflation	3.00%	2.4%	2.6%
Real investment return	4.75%	5.1%	5.5%
Total investment return**	<b>7.75%</b>	<b>7.5%</b>	8.1%

On average, model will reflect “gains” from wage growth.

On average, model will reflect “losses” from investment return over the 15 year projection period.

\* Before merit/promotional increases.

\*\* Compounded multi-year average, net of expenses.

## → US Equity Return

- For the 2011 update HEKA used an equity risk premium assumption for the next 15 years equal to 3.8%, the average of the assumptions currently used by the four SBA investment consultants. The resulting expected average compounded return for US equities is equal to 8.0% (the US bond expected return of 4.2% plus the ERP of 3.8%):

	<u>Hewitt</u> <u>EnnisKnupp</u>	<u>Mercer</u>	<u>Wilshire</u>	<u>Callan</u>	<u>Average</u>
<b>2011 assumptions (15-yr. geometric average expected returns)</b>					
Domestic equity*	7.80%	7.90%	7.25%	8.00%	
Core US bonds**	4.20%	4.10%	3.75%	3.75%	
Equity risk premium	<b>3.60%</b>	<b>3.80%</b>	<b>3.50%</b>	<b>4.25%</b>	<b>3.79%</b>
<b>2010 equity risk premium</b>	2.40%	3.80%	3.25%	4.00%	<b>3.36%</b>
<b>Change 2011 vs 2010</b>	1.20%	0.00%	0.25%	0.25%	<b>0.43%</b>

\* Broad market (e.g. Wilshire 5000, Russell 3000, etc.)

\*\* E.g. Barclay Capital Aggregate Index

\*\*\* Average of 10-yr. and 20-yr. geometric average

\*\*\*\* 10-yr. geometric average

## → Equity Risk Premium

- The equity risk premium (“ERP”) is the difference between the expected return on US equities and the expected return on US bonds, using compounded returns.
- This is the single most important assumption for an asset-liability study, as it establishes the price of risk.
- Historical ERP’s over 15-year time periods are not very stable:



## → FRS Pension Plan Asset Allocation Policies

Asset Class	Pre-July 2010 Policy	Current Policy	Expanded Authority Policy
Global Equity	58%	56%	52%
Fixed Income	28	26	24
High Yield Fixed Income	2	–	–
Real Estate	7	7	7
Private Equity	4	4	5
Strategic Investments	–	6	11
Cash	1	1	1
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

\*Prior to July 2010, Global Equity was composed of two asset classes, Domestic Equities and Foreign Equities, with target allocations of 38% and 20%, respectively.

\*\* Global Equity asset class includes existing Domestic Equity, Foreign Equity and Global Equity mandates; Strategic Investments includes existing High Yield allocation.

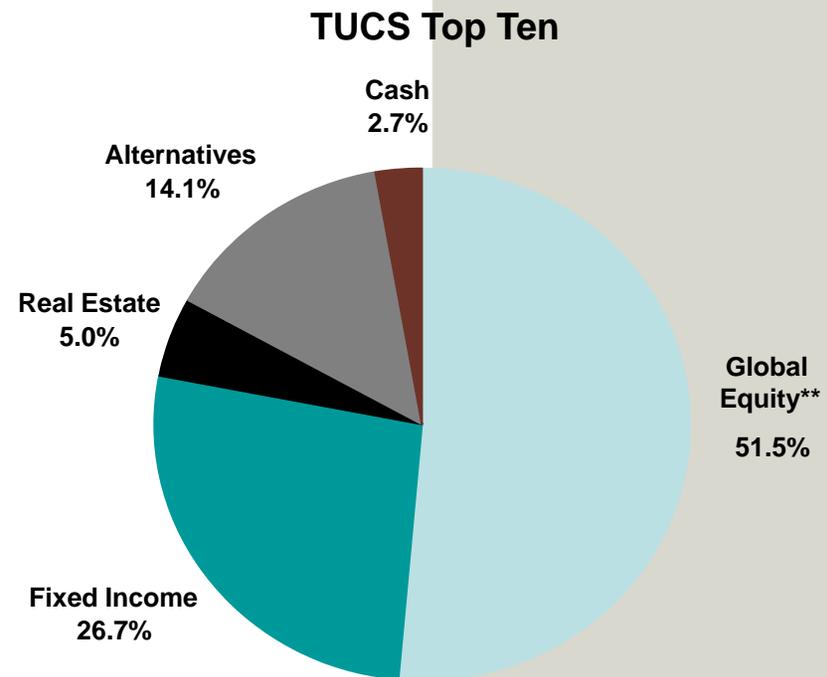
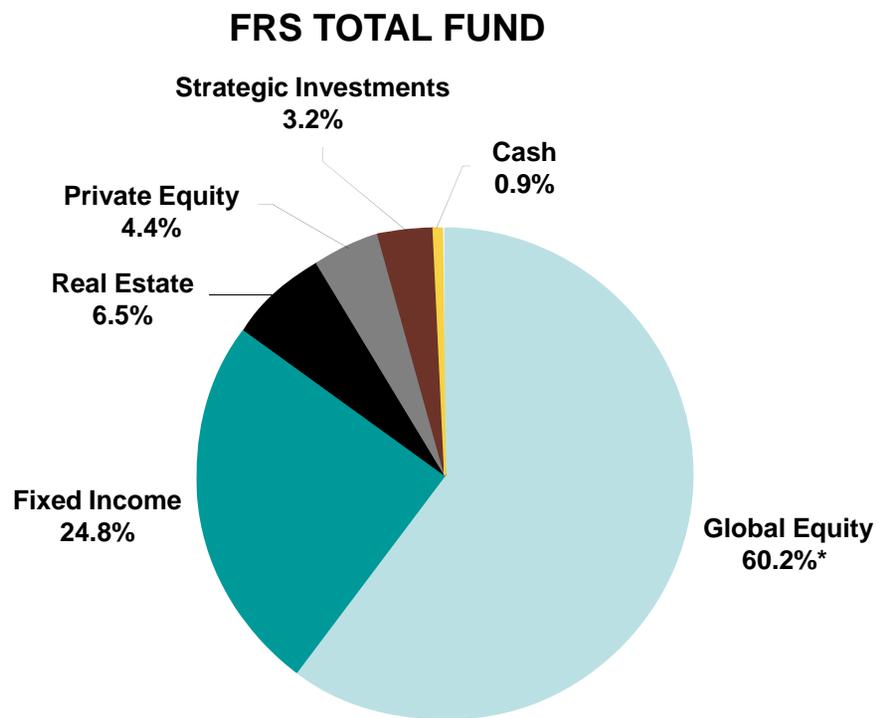
\*\*\* In recognition of the dynamic nature of this asset class, there is no specific expected weight. Its actual allocation will vary within the policy range depending on the mix of included strategies at any given time. When the actual allocation of Strategic Investments is greater than zero, all other asset class target allocations shall be reduced pro-rata.

## → Strategic Investments Detail

Asset Category	Recommended (% of Total Fund)
Debt-Oriented Funds	3.0%
Infrastructure	2.0
Absolute Return Hedge Funds	2.0
Long/Short Equity Hedge Funds	2.0
Open Mandate Hedge Funds	2.0
Commodities	--
Timberland	--
Total Strategic Investments	11.0%

- Allocations reflect current expectations for future allocations in Strategic Investments for modeling purposes. Actual allocations, including possible investments in commodities and timberland, will vary dependent on identification of attractive opportunities.

## → FRS Pension Plan and TUCS Top 10 Funds Asset Allocation As of 6/30/2011

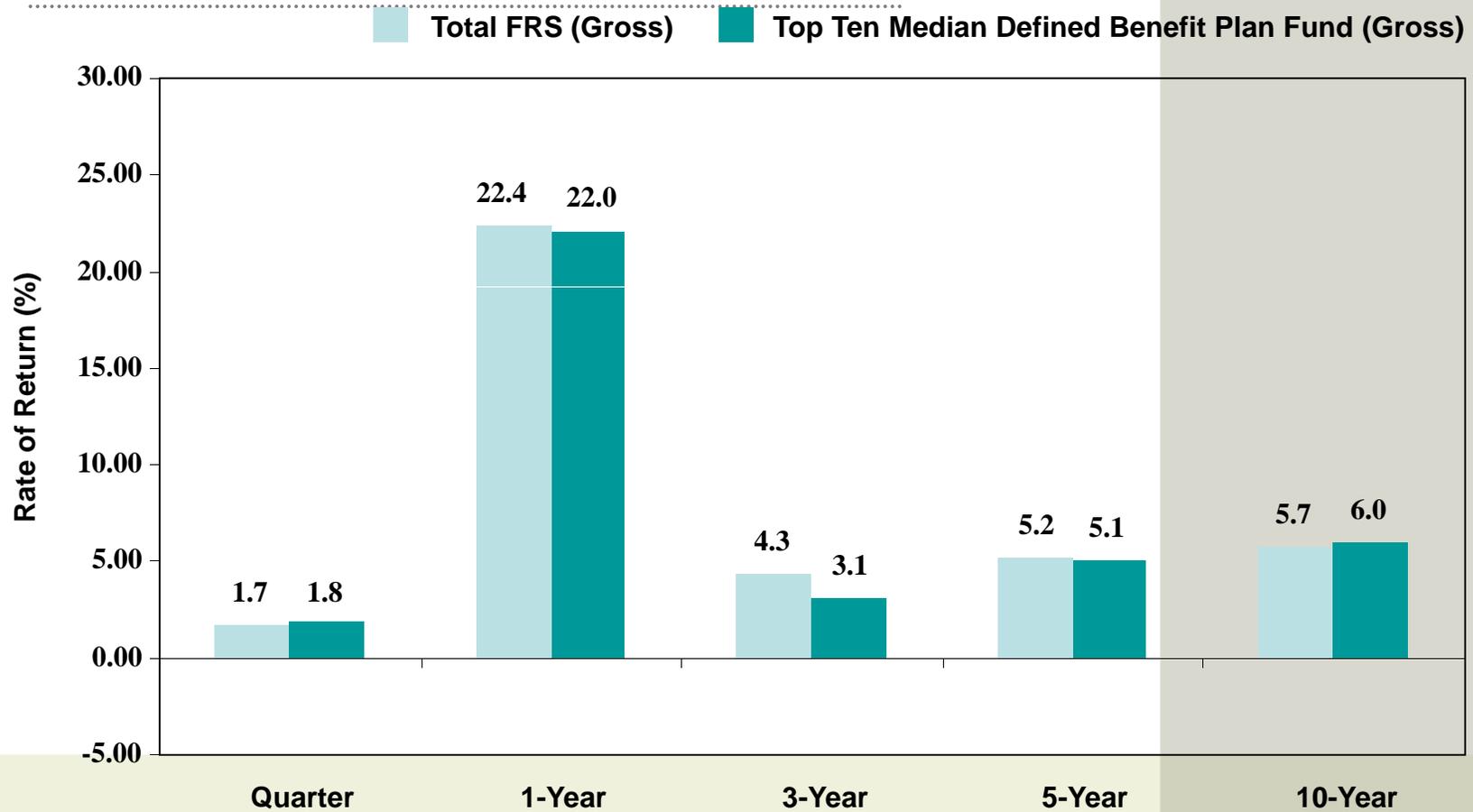


\*Global Equity Allocation: 25.6% Domestic Equities; 31.8% Foreign Equities; 2.9% Global Equities. Percentages are of the Total FRS Fund.

\*\*Global Equity Allocation: 28.2% Domestic Equities; 23.3% Foreign Equities.

Note: The TUCS Top Ten Universe includes \$1.1 trillion in total assets. The median fund size was \$109.9 billion and the average fund size was \$109.6 billion.

➔ **FRS Results Relative to TUCS Top Ten Defined Benefit Plans  
Periods Ending 6/30/2011**



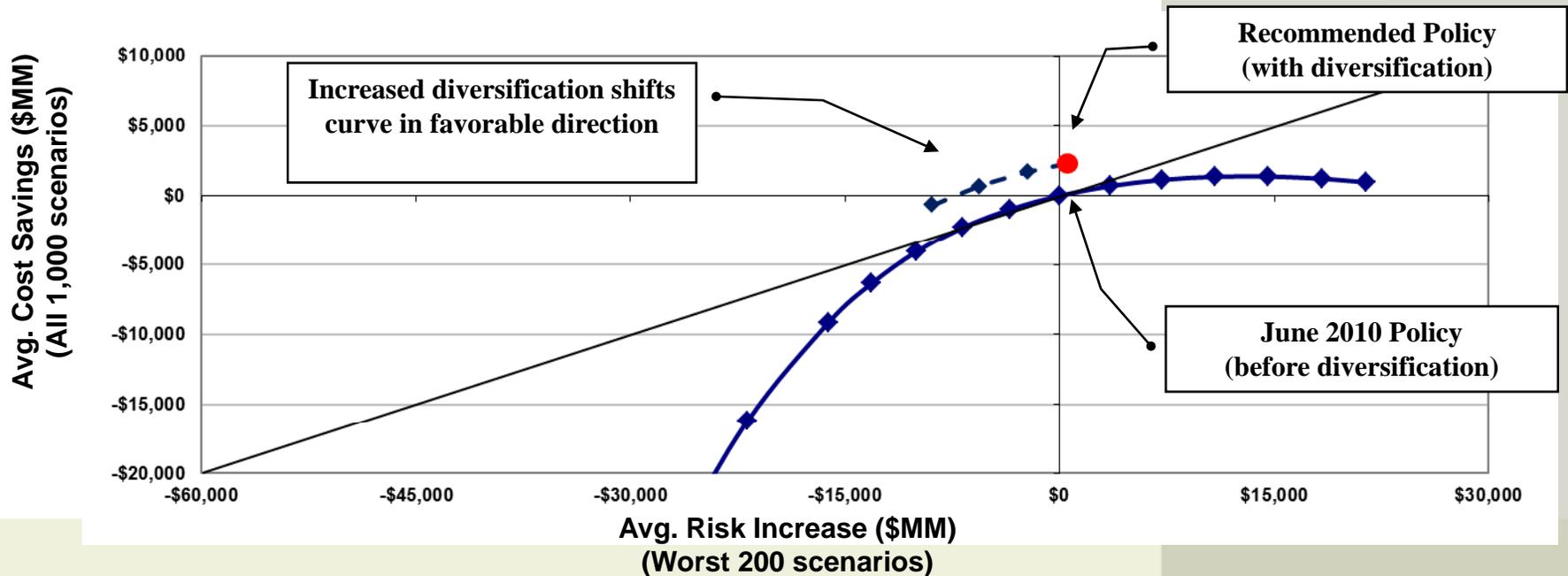
Note: The TUCS Top Ten Universe includes \$1.1 trillion in total assets. The median fund size was \$109.9 billion and the average fund size was \$109.6 billion.



## 2011 Asset Liability Update: Diversification Impact

Diversification changes can improve the results.

The Recommended policy offers long-term cost savings of \$2.3 billion, with no material change in risk profile



## → Implication of FRS Pension Plan Asset Allocation Policy

- Hewitt EnnisKnupp ran return simulations (using the assumptions and data in hand for the June 2011 Trustees meeting) for a 30-year period
- The probability that the FRS Pension Plan's annualized net return (geometric average) is equal to or greater than:
  - 7.50% is 61%
  - 7.75% is 57%
- For shorter time periods, the potential range of returns would be considerably greater
  - The returns for the past 5 fiscal years were 18%, -4%, -19%, 14% and 22%.

**FLORIDA RETIREMENT SYSTEM**  
**Actuarial Valuation**  
**as of**  
**July 1, 2011**



**December 2011**

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# TABLE OF CONTENTS

---

Section	Page
Letter of Transmittal	
I. Executive Summary .....	I - 1
II. Assets.....	II - 1
III. Liabilities.....	III - 1
IV. Contributions.....	IV - 1
V. Accounting Statements .....	V - 1
Appendix A – Actuarial Methods, Procedures and Assumptions ..	A - 1
Appendix B – Summary of Plan Provisions .....	B - 1
Appendix C – Membership Data .....	C - 1
Appendix D – Projections.....	D - 1
Appendix E – Comparisons/Reconciliation.....	E - 1
Appendix F – Glossary .....	F - 1





1921 Gallows Road  
Suite 900  
Vienna, VA 22182  
USA

Tel + 703 917 0143  
Fax + 703 827 9266

milliman.com

December 1, 2011

Ms. Sarabeth Snuggs  
State Retirement Director  
Division of Retirement  
PO Box 9000  
Tallahassee, FL 32315-9000

Dear Ms. Snuggs:

At your request, we have conducted our annual actuarial valuation of the Florida Retirement System (FRS) as of July 1, 2011, for determining contribution payments for Fiscal Year 2012-2013. The major findings of the valuation are contained in the following report.

Section I contains an Executive Summary of the results of our valuation followed by four sections containing detailed information on FRS Assets (Section II), Liabilities (Section III), Contributions (Section IV), and Accounting Statements (Section V). In the Appendices, we provide information regarding actuarial methods and assumptions, a summary of plan provisions, membership statistics, cost projections, and a glossary of terms.

All costs and liabilities shown in this report have been determined on the basis of actuarial assumptions and methods set forth in Appendix A. The actuarial assumptions used in performing this valuation have been recommended by the actuary and adopted by the Actuarial Assumption Conference based on Milliman's most recent review of the System's experience for the period July 1, 2003 through June 30, 2008, as modified by the February 16, 2010 study on House Bill 479 and the July 1, 2011 study on Senate Bill 2100, both of which were enacted into law. The assumptions were incorporated into the July 1, 2011 actuarial valuation which develops contribution rates for the Plan Year 2012-2013. We believe these assumptions are reasonable and have used them for purposes of GASB Statements No. 25 and No. 27. For funding purposes, we believe that the assumptions are reasonable except for the retirement assumptions which have been modified to reflect the Assumption Conference decision on funding DROP. The current funding method treats the impact of DROP on a system basis meaning the retirement rates of each class do not explicitly recognize the probability of a member electing DROP participation, and the related impact on each class' liabilities and funding. The difference between the liability and normal cost on this basis and that used for GASB reporting is funded through the DROP contribution rate. The results of this report are dependent upon future experience conforming to these assumptions. Future actuarial measurements may differ significantly



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

from the current measurements presented in this report due to many factors, including: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period) and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the System. Actuarial computations under GASB Statements No. 25 and No. 27 are for purposes of fulfilling financial accounting requirements. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals, and of GASB Statements No. 25 and No. 27. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the Division of Retirement. This information includes, but is not limited to, statutory provisions, employee census, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit provision or related expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. There were no known events that were not taken into account in the valuation. Other than the aforementioned experience study, we have not assumed any changes in the trend of actuarial experience.

Milliman's work product was prepared exclusively for the internal business use of Florida Department of Management Services, Division of Retirement, for a specific and limited purpose. It is a complex technical analysis that assumes a high level of knowledge concerning the Florida Retirement System's operations, and uses Division data, which Milliman has not audited. To the extent that Milliman's work is not subject to disclosure under applicable public record laws, Milliman's work may not be provided to third parties

without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

- (a) The Division of Retirement may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.
- (b) The Division of Retirement may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, I hereby certify that, to the best of my knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with Actuarial Standards of Practice, the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries. I am a member of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Respectfully submitted,

Milliman, Inc.

A handwritten signature in blue ink that reads 'Robert S. Dezube'.

Robert S. Dezube, F.S.A.  
Consulting Actuary, Enrollment #11-3397

# SECTION I

## EXECUTIVE SUMMARY



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

## EXECUTIVE SUMMARY

---

This report presents the results of our July 1, 2011 actuarial valuation of the Florida Retirement System (FRS) Defined Benefit Program. In this section, we compare the 2010 and 2011 principal valuation results for the total System. This comparison includes an analysis of the primary factors contributing to the change in the FRS's assets, liabilities, and contributions since July 1, 2010. We conclude this section with summary comments regarding the System's overall financial condition.

We would like to point out several key changes reflected in this valuation:

- The employer-paid composite normal cost rate, excluding DROP, decreased from 11.81% of payroll on July 1, 2010 to 4.68% of payroll on July 1, 2011. The decrease was primarily attributable to the plan changes legislated by 2011 Senate Bill 2100, that (among other changes) requires 3.00% employee contributions on behalf of all active members, except those participating in the Deferred Retirement Option Program (DROP). Please refer to subsection H of this Executive Summary for description of all provision changes enacted by Senate Bill 2100. The employer-paid composite normal cost rate, excluding DROP, as of July 1, 2010 after reflecting Senate Bill 2100 was 4.69% of payroll. The normal cost is determined assuming the plan provisions of Senate Bill 2100 for members hired on or after July 1, 2011 apply to all members from entry into the FRS.
- The unfunded actuarial liability (including DROP liability) also changed due to an additional year of experience, the passage of Senate Bill 2100, and the non-investment assumption changes resulting from the enactment of Senate Bill 2100. In the July 1, 2010 actuarial valuation report, the actuarial liability exceeded the actuarial value of assets by \$16.7 billion. After the impact of Senate Bill 2100, the Unfunded Actuarial Liability (UAL) as of July 1, 2010 was \$15.6 billion. On July 1, 2011 the actuarial liability exceeds the actuarial value of assets, yielding a UAL of \$18.0 billion, excluding additional liability funded through the DROP contribution rate. This marks the third consecutive actuarial valuation where the FRS has a UAL. To fully recognize Senate Bill 2100, we utilized a variation of the Entry Age Normal Funding Method (see Appendix A, Page A-2 for details).
- Active members by specified employer groups were provided a 90-day election period during the 2002-2003 year to elect between the Defined Benefit Program and the Investment Plan (IP). Members newly hired or initially enrolled after the election period for their employer groups are provided five months after their month of hire to file an election between the two primary programs. Members who do not make an election default into the Defined Benefit Program. After the period during which a member had the choice to elect the Defined Benefit Program or the IP, an employee will have one opportunity before retirement, at the employee's discretion, to choose to move from the Defined Benefit Program



to the IP or from the IP to the Defined Benefit Program. During the initial election period, approximately 21,000 members (less than 4% of the active population) elected to transfer from the FRS Defined Benefit Program to the IP during the enrollment periods for existing defined benefit plan members. Due to the relatively small percentage making the election, the initial impact on the Defined Benefit Program was *de minimis*. Approximately \$363 million was transferred from the Defined Benefit Program to the IP in 2003 as a result of these elections creating an estimated actuarial gain of \$293 million. Whether the long-term impact will be more significant will be determined by the actions (i.e., elections) of future hires. While to date these elections have also been primarily to the FRS Defined Benefit Program, it is unknown whether this trend will continue. As of July 1, 2011, approximately 16% of the active FRS population is currently participating in the IP.

Members of the FRS Defined Benefit Program who elected to join the IP and elected to transfer the present value of their service credits during the initial election period in 2002 and then choose to make a second election back to the Defined Benefit Program will not have to pay to the Defined Benefit Program the full cost of their actuarial liability. The cost of this potential subsidy is considered a contingent liability. This contingent liability is considered pre-funded because legislation enacted in 2001 “walls off” for 25 years the actuarial gain arising from these transfers to the IP. The remaining contingent liability as of July 1, 2011 is \$236 million.

In general, throughout this report, any reference to FRS refers to the FRS Defined Benefit Program, unless noted to the contrary.

The tables immediately following compare July 1, 2010 actuarial valuation results with July 1, 2011 actuarial results. The difference column shows the change between the July 1, 2011 valuation results and the July 1, 2010 results.

### **A. Assets and Liabilities**

A comparison of the actuarial liabilities and actuarial value of assets follows. These figures are based upon the actuarial assumptions used to determine the actuarial costs of the FRS (see Appendix A). Under current methodology, and as required by Florida law, the actuarial value of assets cannot be less than 80% or greater than 120% of the market value of assets. This corridor restriction does not come into play unless there are dramatic asset gains or losses in the prior plan year. The purpose of the corridor is to ensure that the “smoothed” value of assets does not vary from the market value by more than 20%. As of July 1, 2011, the actuarial value of assets is 97.6% of the market value of assets.

## EXECUTIVE SUMMARY

	Valuation Results (numbers in \$ billions)		
	July 1, 2010	July 1, 2011	Difference
1. Actuarial Liability	\$137.6	\$144.1	\$ 6.5
2. Actuarial Value of Assets	\$120.9	\$126.1	\$ 5.2
3. Unfunded Actuarial Liability (1 – 2)	\$ 16.7	\$ 18.0	\$ 1.3
4. Funded Percentage (2 / 1)	87.9%	87.5%	(0.40%)

In Section V of this report we present an additional measure of funded status, the "accumulated benefit obligation" (ABO), based on both the actuarial value of assets and the market value of assets.

### B. Contributions

Contribution rates for each class are set by statute and consist of a normal cost contribution and an unfunded liability contribution. The unfunded liability amortization payment will consist primarily of costs or savings associated with plan changes, assumption changes, differences in actual and expected experience, or changes in actuarial methodology (if applicable). As of July 1, 2011 the FRS has an unfunded actuarial liability of \$18.0 billion.

The comparative FRS Regular and Special Risk contribution rates resulting from the 2010 valuation and this valuation are as follows:

	July 1, 2010		July 1, 2011		Difference	
	Valuation Results		Valuation Results			
	FRS Reg	Special Risk	FRS Reg	Special Risk		
Normal Cost	9.84%	22.34%	3.54%	10.74%	-6.30%	-11.60%
UAL Cost	<u>2.23%</u>	<u>6.72%</u>	<u>2.36%</u>	<u>8.32%</u>	<u>0.13%</u>	<u>1.60%</u>
Preliminary FRS Contribution Rate	12.07%	29.06%	5.90%	19.06%	-6.17%	-10.00%
Normal Cost Impact of SB 2100	-6.29%	-11.58%	<b>NA</b>	<b>NA</b>		
UAL Cost Impact of SB 2100	<u>-0.38%</u>	<u>0.64%</u>	<b>NA</b>	<b>NA</b>		
FRS Contribution Rate after SB 2100	5.40%	18.12%	5.90%	19.06%	0.50%	0.94%
Additional UAL Contribution/(Rate Reduction) less than Actuarially Determined	-2.05%	-5.99%				
Administrative Charge	0.00%	0.00%	<b>Not determined</b>			
Enacted DB FRS Contribution Rate (Prior to blending for the uniform rate structure)	3.35%	12.13%	<b>Not determined</b>			



## EXECUTIVE SUMMARY

The July 1, 2010 valuation provided proposed contribution rates for plan year 2011-2012. Hence, there is a two-year lag between when the rates are set and when the contribution dollars are coming into the System. The contribution rates legislated for plan year 2011-2012 are significantly less than the sum of the Normal Cost only rates and UAL Cost rates determined by the July 1, 2010 valuation, after reflecting the impact of Senate Bill 2100. Thus, the contribution being made to fund the UAL in plan year 2011-2012 is lower than the actuarially determined contribution. Therefore, the contribution lag will result in an increase in the unfunded actuarial liability as of July 1, 2012 assuming no further gains or losses.

The current valuation calculates contribution rates for plan year 2012-2013. See Section IV.

The prior existence of a surplus and/or the rate stabilization mechanism may lead to an accounting disclosure under GASB Statement Number 27 (see Section V).

### C. Membership

The total membership (active, terminated vested, retired, and DROP) of the FRS Defined Benefit Program increased by 5,218 members from 981,459 as of July 1, 2010, to 986,677 as of July 1, 2011, an increase of 0.5%. The total annualized payroll of active members (exclusive of DROP members) decreased by 3.32%, from \$23.76 billion as of July 1, 2010 to \$22.97 billion as of July 1, 2011, a \$0.79 billion decrease in payroll.

A summary of membership change by status follows:

Valuation Results: Counts			
	July 1, 2010	July 1, 2011	% Change
Active Members	556,296	533,486	-4.1%
Terminated Vested Members	90,459	91,433	1.1%
Retired Members	301,129	316,699	5.2%
DROP Members	<u>33,575</u>	<u>45,059</u>	34.2%
Total Members	981,459	986,677	0.5%



## D. Experience

Several factors contributed to the changes in the FRS's assets, liabilities and contribution rates between July 1, 2010 and July 1, 2011. These factors included:

### 1. Assets:

The assets of the FRS, measured on an actuarial basis (i.e., smoothed), increased by \$5.148 billion. This change was attributable to the following:

Change Due to:

• Contributions Received	\$3.089
• Payment of Benefits, and Expenses	(7.888)
• Investment Experience	9.947
<b>Total</b>	<b>\$5.148 billion</b>

Of this total change, an increase of \$4.387 billion was expected, based on our assumption that the assets of the FRS would earn 7.75% during plan year 2010-2011. However, the actual annualized investment return on the actuarial value of assets was 8.39% resulting in an investment gain of \$0.761 billion. On a market value basis, the assets of the FRS earned 22.79%.

On a year-by-year basis, the assets earned the following:

Asset Bases	Rates of Return*		
	2008/2009	2009/2010	2010/2011
Market Value	-19.71%	15.03%	22.79%
Actuarial Value	-6.74%	5.30%	8.39%

\* Assumes net cash-flow occurs mid-year

## 2. *Liabilities:*

The actuarial liabilities of the FRS increased by \$6.488 billion. This increase is attributable to the following:

Change due to:

- Expected increase based on prior assumptions \$3.255
- Plan Change (Senate Bill 2100) (\$1.101)

### **Actual (Gains) / Losses**

• Healthy Retiree, Beneficiary & Terminated Vested Death	(1.939)	<sup>1</sup>
• Disabled Retiree Death	(0.009)	
• Inactive Data Clean-Up	1.723	
• Active Withdrawal	(2.072)	<sup>2 &amp; 3</sup>
• Active Retirement and DROP from Active	9.262	
• Active Death	0.018	
• Active Disability	(0.009)	
• Salary Increases less than expected	(1.352)	
• New Actives	0.496	<sup>3</sup>
• New Renewed Members (includes rehires)	0.065	
• Demographics/Other	(1.849)	
<b>Total Increase</b>	<b>\$6.488</b>	<b>Billion</b>

<sup>1</sup> The retiree mortality experience was an \$1,188.5 million gain.

<sup>2</sup> Includes IP and transfers between membership classes.

<sup>3</sup> Transfers between membership classes are valued as withdrawals from the prior membership class and new entrants into the new membership class.

The current financing method (see page I-12) for the DROP class makes it inconsistent with traditional gain/loss analysis. First, it makes any new DROP participant a source of actuarial loss since the retirement decrement reflects only expected retirements. Second, individual DROP liabilities are moved back to their original classes when the DROP membership ends. For purposes of this analysis, we have reallocated the DROP class gain/loss (see Table IV-3) to the seven traditional classes and subclasses of membership.

### 3. **Unfunded Liability:**

The net change in the FRS's unfunded actuarial liability was an increase of \$1.339 billion. The increase is attributable to the following:

Change due to:

• Expected Increase based on Prior Assumptions and Funding Policy	(\$1.132)
• Favorable Investment Experience	(0.761)
• Unfavorable Liability Experience	4.333
• Plan Change (Senate Bill 2100)	(1.101)
Total	\$1.339 Billion

See table on the following page for total gains/losses by class.

## UAL (Gain)/Loss by Source (All Amounts in Thousands)

	FRS	---- Special Risk ----		--Elected Officers' Class --		County	Senior	Grand Total
	Regular	Regular	Administration	Judges	Leg-Atty-Cab		Management	
Investment (Gain)/Loss (excluding DROP)	(\$538,857)	(\$121,013)	(\$458)	(\$4,469)	(\$377)	(\$2,068)	(\$12,667)	(\$679,909)
Allocation of DROP Investment (Gain)/Loss	<u>(64,526)</u>	<u>(14,491)</u>	<u>(55)</u>	<u>(535)</u>	<u>(45)</u>	<u>(248)</u>	<u>(1,517)</u>	<u>(81,416)</u>
<b>Total Investment (Gain)/Loss</b>	<b>(\$603,383)</b>	<b>(\$135,503)</b>	<b>(\$513)</b>	<b>(\$5,004)</b>	<b>(\$422)</b>	<b>(\$2,316)</b>	<b>(\$14,184)</b>	<b>(\$761,325)</b>
Liability (Gain)/Loss (excluding DROP) <sup>1</sup>	(\$1,393,581)	(\$542,920)	\$2,077	\$13,724	\$3,505	(\$5,622)	(\$14,272)	(\$1,937,090)
Additional (Gain)/Loss due to DROP <sup>1</sup>	<u>3,959,817</u>	<u>997,978</u>	<u>871</u>	<u>51,784</u>	<u>0</u>	<u>12,772</u>	<u>146,753</u>	<u>5,169,975</u>
<b>Total Liability (Gain)/Loss<sup>1</sup></b>	<b>\$2,566,236</b>	<b>\$455,058</b>	<b>\$2,948</b>	<b>\$65,508</b>	<b>\$3,505</b>	<b>\$7,150</b>	<b>\$132,481</b>	<b>\$3,232,885</b>
<u>Liability (Gain)/Loss by Source<sup>1</sup></u>								
Healthy Inactive Experience	(\$1,275,633)	(\$533,393)	(\$5,034)	(\$28,645)	(\$5,847)	(\$25,795)	(\$64,327)	(\$1,938,674)
Disabled Inactive Experience	(7,681)	810	9	(975)	0	45	(726)	(8,518)
Inactive New Entrants	1,451,843	166,107	476	15,633	1,991	1,907	84,803	1,722,760
Active Withdrawal <sup>2</sup>	(2,063,407)	73,193	2,697	3,623	175	(3,947)	(83,909)	(2,071,575)
Active Retirement and DROP from Active	7,075,351	1,805,338	1,478	91,895	886	23,237	261,994	9,260,179
Active Death	15,172	1,071	2	653	2	78	763	17,741
Active Disability	(1,942)	(6,631)	(4)	(209)	(6)	32	167	(8,593)
Salary Increases less than Expected	(1,073,502)	(237,226)	281	(9,834)	(823)	(4,273)	(27,094)	(1,352,471)
New Actives <sup>2</sup>	369,474	108,502	807	2,429	448	1,841	12,353	495,854
Rehires	66,337	1,369	0	341	(307)	1,261	(3,628)	65,373
Demographics/ Other	<u>(567,887)</u>	<u>(1,321,724)</u>	<u>2,703</u>	<u>(12,150)</u>	<u>6,873</u>	<u>12,504</u>	<u>31,075</u>	<u>(1,848,607)</u>
<b>Total Liability (Gain)/Loss</b>	<b>\$2,566,236</b>	<b>\$455,058</b>	<b>\$2,948</b>	<b>\$65,508</b>	<b>\$3,505</b>	<b>\$7,150</b>	<b>\$132,481</b>	<b>\$3,232,885</b>
<b>Total UAL (Gain)/Loss</b>	<b>\$1,962,853</b>	<b>\$319,555</b>	<b>\$2,434</b>	<b>\$60,503</b>	<b>\$3,082</b>	<b>\$4,835</b>	<b>\$118,297</b>	<b>\$2,471,560</b>

<sup>1</sup> Based on prior assumptions

<sup>2</sup> Transfers between membership classes are valued as withdrawals from the prior membership class and new entrants into the new membership class.



**4. Contributions:**

On a level-rate-of-pay basis, the FRS contribution rates for each membership class changed as follows:

	FRS	----- Special Risk -----		-- Elected Officers' Class --			Senior
	<u>Regular</u>	<u>Regular</u>	<u>Administration</u>	<u>Judicial</u>	<u>Leg-Atty-Cab</u>	<u>County</u>	<u>Management</u>
A • July 1, 2010 Normal Cost (Post-SB 2100)	3.55%	10.76%	3.94%	10.00%	6.58%	8.23%	4.80%
• UAL Cost (Certain Post-1998 Benefit Changes, 1998 and 2003 and 2008 Experience Studies, and certain Gains/Losses)	1.85%	7.36%	24.76%	12.05%	26.81%	26.93%	11.69%
• Rate Reduction less than Actuarially Recommended	<u>-2.05%</u>	<u>-5.99%</u>	<u>-25.10%</u>	<u>-11.96%</u>	<u>-26.63%</u>	<u>-26.89%</u>	<u>-12.27%</u>
• Total July 1, 2010 Contribution Rate <sup>1</sup>	3.35%	12.13%	3.60%	10.09%	6.76%	8.27%	4.22%
B • July 1, 2010 Normal Cost (Post-SB 2100)	3.55%	10.76%	3.94%	10.00%	6.58%	8.23%	4.80%
• Impact of ....							
- Retirements, Disabilities, Terminations, and Transfers within membership classes	-0.05%	-0.05%	-0.50%	-0.16%	-0.34%	-0.15%	-0.05%
- Actual Salary Increases	0.01%	0.00%	-0.01%	-0.01%	-0.01%	0.00%	0.01%
- New Entrants (excludes transfers)	0.02%	0.03%	0.00%	0.03%	0.15%	-0.14%	0.02%
- New Assumptions / Plan Changes	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
- Other Experience	0.01%	0.00%	0.00%	0.07%	0.00%	0.26%	0.02%
• July 1, 2011 Normal Cost (July 1, 2010 Normal Cost plus "Impact of . . .")	3.54%	10.74%	3.43%	9.93%	6.38%	8.20%	4.80%
• UAL Cost (See Table IV-2)	<u>2.36%</u>	<u>8.32%</u>	<u>37.14%</u>	<u>17.71%</u>	<u>37.41%</u>	<u>32.50%</u>	<u>14.73%</u>
• Total July 1, 2011 Contribution Rate	5.90%	19.06%	40.57%	27.64%	43.79%	40.70%	19.53%

<sup>1</sup> See Page B-4, Defined Benefit Column.



E. Graphs

Chart A: ASSET / LIABILITIES

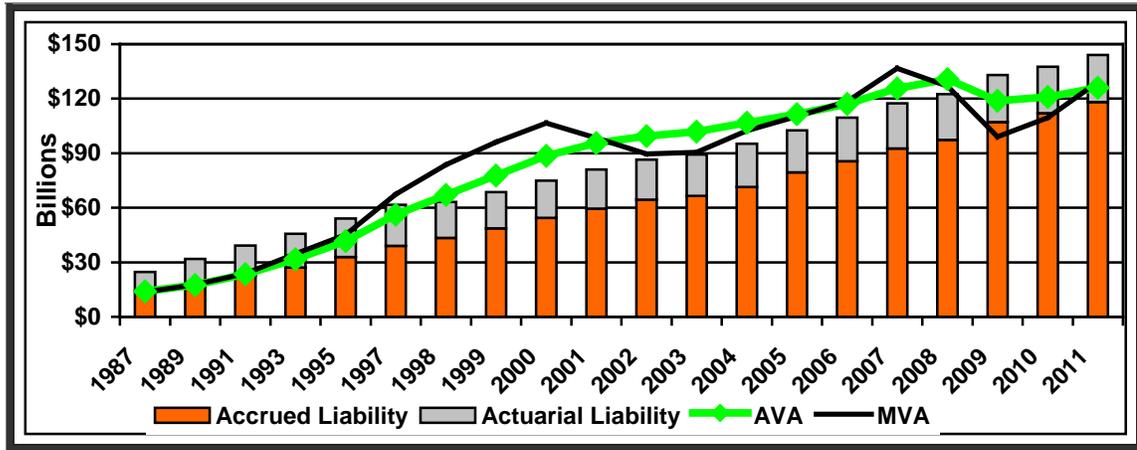


Chart B: CASH FLOWS

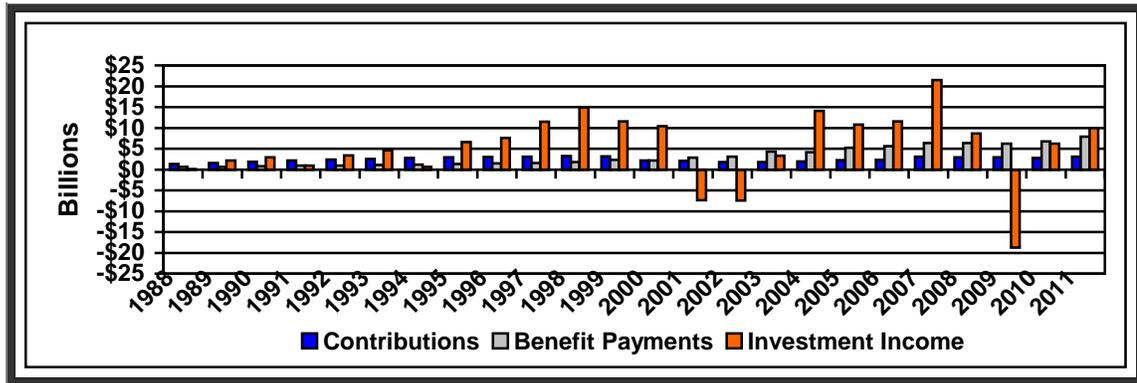
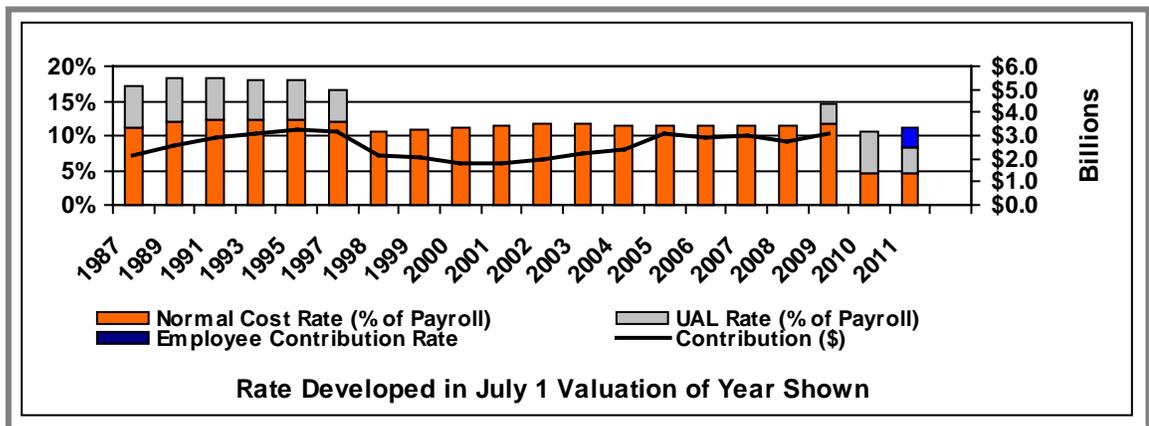


Chart C: CONTRIBUTION RATE (as % of Payroll) and CONTRIBUTIONS\*



\* As discussed earlier, the contribution rate developed in this report is for plan year 2012 – 2013. Therefore, our graph above accounts for the two-year lag between the development of the contribution rate and the actual contribution to the System. For example the year 2009 represents the July 1, 2009 valuation results and the actual contributions for the 2010-2011 plan year. In 1999 through 2009, surplus assets were used to reduce rates below normal cost. Starting with the 2010 valuation results, the term contribute includes employer and employee contribution.

## F. Summary Comments

We caution that the results herein are applicable only for the next plan year. More than anything, future investment results will impact future contribution rates.

- Benefit and payroll increases always have a direct impact on costs and liabilities.
- The contribution rates for plan year 2011-2012 are based on the July 1, 2010 actuarial valuation and legislation enacted in 2011, including the passage of Senate Bill 2100. These rates are significantly less than the Normal Cost plus UAL Cost rates determined in the original July 1, 2010, actuarial valuation.
- The extremely favorable investment returns prior to 2000 helped to mitigate the unfavorable investment returns in 2001-2003. The FRS experienced favorable investment returns in 2004-2007. However, unfavorable investment returns in 2007-2009 and utilization of surplus assets for rate reduction and benefit funding eroded the actuarial surplus and created an unfunded actuarial liability once again. The favorable investment returns over the prior two years have more than offset the deferred investment losses from the unfavorable investment returns in 2007-2009. As of July 1, 2011 there are deferred investment gains; should market value investment returns come close to or exceed the assumed rate of return during the 2011-2012 plan year, the deferred investment gain should produce an investment gain on an actuarial value basis. Continued favorable investment returns in the future would decrease the unfunded actuarial liability more rapidly. For example, returns as shown in the following table would produce the corresponding estimated UAL amounts assuming no liability gains or losses.

Market Return		UAL / (Surplus) <sup>1)</sup> measured as of		
PY 2011–2012	PY 2012–2013	July 1, 2011	July 1, 2012	July 1, 2013
7.75%	7.75%	\$18,045	\$18,739	\$18,445
0.00%	7.75%	18,045	20,700	22,249
0.00%	0.00%	18,045	20,700	24,134
-2.15% <sup>2)</sup>	-2.15% <sup>2)</sup>	18,045	21,244	25,658

<sup>1)</sup> Numbers in Millions

<sup>2)</sup> The estimated market value as of October 31, 2011 was \$121.22 billion as supplied by the State Board of Administration. Based on expected cash flows, if the market return was -2.15% for the 2011-12 plan year, the July 1, 2012 market value would be \$121.22 billion.

- Amortization of the unfunded actuarial liability over the statutory period assumes that payroll by class and in aggregate will increase by 4% per year. From July 1, 2010 to July 1, 2011, the payroll, in aggregate, used for amortization contributions decreased by 1.4%. This will result in lower UAL contributions resulting in an increase in the UAL and in future employer contributions.
- The state of the economy affects membership turnover (i.e., if job mobility or security is uncertain, people tend to stay, hence increasing benefits earned).
- The reader should note that while the effect of the implementation of the Investment Plan is included in this report, the initial election percentage to participate in the IP was less than 4%. Current IP membership is around 16% of total active membership. Elections by future hires may have a more material impact if a much larger percentage elect the IP, particularly following the enactment of Senate Bill 2100 which reduces the benefits earned by future Defined Benefit Plan members, while maintaining the total contribution percentages provided to future Investment Plan members.
- The most recent experience study covered the period from July 1, 2003 to June 30, 2008. Experience studies are performed every five years and compare actual plan experience to the assumptions set forth in this report. This valuation reflects the assumption changes proposed by the June 30, 2008 experience study and adopted in plan year 2009–2010, as modified by the February 16, 2010 study on House Bill 479 and the July 1, 2011 study on Senate Bill 2100, both of which were enacted into law. See subsection H of this Executive Summary for additional detail.

We mention these caveats because the actuarial process merely measures the impact of these factors on FRS costs and liabilities after they have occurred. Unanticipated benefit or salary changes, changes in member behavior (e.g. withdrawal rates, rates of retirement, etc.), or changes in investment return could necessitate a change in the contribution rates.

Finally, we caution the readers of this report not to overemphasize the results of any single valuation as long-term trends are more important.

### G. DROP Contribution Rate

Since the FRS funds the DROP through a separate contribution rate, we have developed a contribution rate associated with the actual cost of the DROP. Due to the emergence of the UAL, it was necessary to reallocate the assets so that the DROP funding mechanism does not reflect the impact of DROP on each individual membership class. The asset reallocation developed in Table II-5 is based on the presumption that assets assigned to the current DROP members equal the same percentage of DROP liabilities as the funded percentage of the FRS.

This asset re-allocation results in a UAL contribution rate of 6.21% of current DROP payroll increasing at the 4% payroll growth assumption. The other portion of the DROP contribution rate is based on the difference in the results of two scenario valuations:

- Funding Scenario – one in which DROP did not exist. In this scenario we estimated that half of those electing to go into DROP would have retired in the absence of the DROP.
- GASB Scenario – one in which the DROP exists as it does today.

The difference in these two scenarios represents the additional cost of assuming current active members will elect the DROP in the future. The difference in the dollar amount of the normal cost and the amortization cost of the two scenarios (using a 30-year level dollar amortization) represents the DROP contribution associated with future participation in DROP. This dollar amount is divided by current DROP payroll to determine the DROP contribution rate of 4.33%, compared with 13.79% determined by the July 1, 2010 valuation, and 5.92% as determined by Senate Bill 2100. The total DROP contribution rate for the July 1, 2011 valuation is 10.54% of DROP payroll (the sum of the 4.33% DROP contribution rate plus the 6.21% UAL contribution).

### H. Plan Change Legislated by Senate Bill 2100

As a result of (2011) Senate Bill 2100, which was enacted into law, the plan provisions and retirement assumptions for members initially enrolled on and after July 1, 2011 have been modified to reflect the later Normal Retirement Eligibility criteria, longer Average Monthly Compensation averaging period, and longer vesting period. The legislation also requires employee contributions on behalf of all active members, except those participating in DROP, changed the interest rate at which future DROP members' benefits will accumulate during DROP participation and eliminated the Cost of Living Adjustment on service earned on or after July 1, 2011. See Appendix B for detail of plan provisions affecting members enrolled on and after July 1, 2011.

# SECTION II

# ASSETS



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

In many respects, an actuarial valuation can be considered similar to an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is July 1, 2011. On that date the assets available for the payment of benefits are appraised. The 2010 asset values do not reflect any changes made to the financial statements after preparation of the 2010 actuarial valuation report. These assets are compared with the actuarial liabilities. The actuarial process thus leads to a method of determining what contributions by members and/or their employers are needed to systematically eliminate the shortfall, if any.

This section of the report deals with the asset determination. In the next section, the actuarial liabilities will be discussed. Section IV will deal with the process for determining required contributions, based upon the relationship between the assets and actuarial liabilities.

Two measures of FRS assets are presented in the valuation:

The market value of assets tends to be the more erratic of the two asset measures and therefore is not used for determining the required payroll contribution rates.

The actuarial value of assets is a second measure of FRS asset holdings. It is based on the market value of all assets but with a smoothing technique applied to mitigate market fluctuations. It is developed and used to stabilize the required FRS contributions.

The actuarial valuation measure, implemented in 1989, reflects a five-year averaging methodology, as required by Florida Law (S.121.031(3)(a), Florida Statutes). Under this method, the expected actuarial value of assets is determined by crediting the rate of investment return assumed in our valuation (7.75% beginning July 1, 2004) to the prior year's actuarial value of assets. Then, 20% of the difference between the actual market value and the expected actuarial value of assets is recognized. The actuarial value of assets is also restricted by a 20% corridor around the market value of assets, so that it cannot be greater than 120% or less than 80% of the market value. Table II-3 presents the details of this calculation. As of July 1, 2011 the actuarial value of assets is 97.64% of the market value of assets.

Six tables are presented in this section, summarizing the financial resources of the System on July 1, 2011. The assets are analyzed by category in Table II-1. Table II-2 shows the reconciliation of assets from July 1, 2010 to July 1, 2011. Table II-3 provides a detailed development of the July 1, 2011 actuarial value of assets. In Table II-4, the actuarial value of assets is allocated to each employee group, based on estimated cash flows, and the reallocation of assets from the various classes to the DROP class (see Table II-5). Table II-5 shows the derivation of reallocation of assets to the DROP class in order that DROP as a class is funded to the same

extent as the System as a whole. (This reallocation ensures that the accumulation of assets in the DROP class does not impact the contribution rates of the other classes). Finally in Table II-6, rates of return are presented along with a comparison of asset allocation figures between 2010 and 2011.

The data for Table II-1 (Market Value as of July 1, 2011) was furnished to us by the Division of Retirement. The values have been accepted for use in this report without audit, but have been reviewed for consistency and reasonableness, when compared to prior reports.

**Table II-1**  
**Florida Retirement System**  
**Summary of Assets (Market)**  
**(by Asset Category)**  
**(\$ in Thousands)**

<u>Asset Category</u>	<b>Market Value as of July 1,</b>	
	<u>2010</u>	<u>2011</u>
1. Common Stock	\$68,761,616	\$87,693,841
2. Bonds	\$35,711,086	\$37,362,710
3. Real Estate	\$6,160,289	\$7,285,791
4. Temporary Investments	\$5,149,867	\$4,459,882
5. Cash – Including Certificates of Deposit	\$738,541	\$664,018
6. Receivables	\$3,843,461	\$3,605,150
7. Miscellaneous	\$662	\$378
8. Reverse Purchase Agreements	<u>\$1,565,763</u>	<u>\$1,000,000</u>
Gross Assets	\$121,931,285	\$142,071,770
9. Current Liabilities and Reserves	<u>(\$12,420,127)</u>	<u>(\$12,948,415)</u>
<b>Total Net Assets</b>	<b>\$109,511,158</b>	<b>\$129,123,355</b>

**Table II-2  
Florida Retirement System  
Reconciliation of Market Value of Assets**

<b>Total Net Assets as of June 30, 2010</b>	<b>\$109,511,157,826</b>
+ Contributions by Source:	
Pension Contributions – State <sup>1 &amp; 3</sup>	765,984,321
Pension Contributions - Non-State <sup>1 &amp; 3</sup>	2,720,845,237
Pension Contributions - IP	33,595,022
Pension Contributions - Employees	32,931,529
Transfer from ORP	629
Transfer from OAP	0
Other	0
+ Interest and Dividends:	
Interest Income	1,202,670,123
Dividend Income	1,779,619,800
Real Estate Income	387,446,022
Other <sup>2</sup>	(250,814,927)
+Net Realized and Unrealized Appreciation:	
- Pension Payments: <sup>3</sup>	6,685,078,219
- Contribution Refunds:	2,210,500
- Disbursements – IP	1,639,554,265
- Expenses: <sup>2</sup>	16,429,891
- Transfers to Other Funds and Departments <sup>1</sup> :	9,109,084
<b>Total Net Assets as of June 30, 2011</b>	<b>\$129,123,355,436</b>

<sup>1</sup> Includes IP Administrative fees.

<sup>2</sup> Effective with the implementation of GASB #25, certain investment expenses (contractual services and fees) are used to offset investment income rather than being classified as expenses.

<sup>3</sup> Includes IP contributions and disbursements of \$463,864,960 which are excluded in the development of the AVA.

**Table II-3  
Florida Retirement System  
Development of 2011  
Actuarial Value of Assets**

1. FRS Market Value of Assets on July 1, 2010	\$109,511,157,826
2. Actuarial Value of Assets on July 1, 2010	\$120,929,665,999
3. 2010/2011 Net Cash Flow (Contributions less Benefits and Expenses)	(\$4,799,025,221)
4. Value of Assets, July 1, 2011, if Items 2 and 3 earned an assumed rate of 7.75%	\$125,316,727,665
5. Market Value of Assets, July 1, 2011	\$129,123,355,436
6. Net Assets (Actuarial Value Basis) Available for Benefits Prior to Application of Corridor 4 + ((5 - 4) x 20%)	\$126,078,053,225
7. 120% of Market Value [120% (5)]	\$154,948,026,523
8. 80% of Market Value [80% (5)]	\$103,298,684,349
9. Actuarial Value of Assets on July 1, 2011 Lesser of (6) and (7), but not less than (8)	<b>\$126,078,053,225</b>
10. Ratio of July 1, 2011 Actuarial Value of Assets to July 1, 2011 Market Value	<b>97.64%</b>

**Table II-4  
Florida Retirement System  
Development of Actuarial Value of Assets  
By Membership Class  
(\$ in Thousands)**

	FRS	----- Special Risk -----		-- Elected Officers' Class --			Senior	Total	
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management	DROP	System
1. Allocated Actuarial Value of Assets by Class, July 1, 2010	\$85,652,072	\$18,956,858	\$74,651	\$716,623	\$61,658	\$338,730	\$2,005,363	\$13,123,711	\$120,929,666
2. Total Contribution for the Plan Year	1,950,072	801,834	278	21,786	956	7,683	66,546	240,337	3,089,492
3. Benefit Payments and other Disbursements	5,466,026	1,034,764	6,744	63,330	6,687	41,204	133,139	1,136,622	7,888,516
4. Estimated Investment Earnings during the Year	7,040,647	1,581,143	5,993	58,398	4,934	27,021	165,502	1,063,773	9,947,411
5. Unadjusted Actuarial Value of Assets: (1) + (2) – (3) + (4)	89,176,765	20,305,071	74,178	733,477	60,861	332,230	2,104,272	13,291,199	126,078,053
6. Net Transfers (see Table II-5)	(3,155,028)	(891,777)	(872)	(64,388)	(4,296)	(19,955)	(142,123)	4,278,439	0
7. Allocated Actuarial Value of Assets by Class, July 1, 2011: (5) + (6)	\$86,021,737	\$19,413,294	\$73,306	\$669,089	\$56,565	\$312,275	\$1,962,149	\$17,569,638	\$126,078,053



**Table II-5  
Florida Retirement System  
Reallocation of Actuarial Value of Assets  
By Membership Class  
(\$ in Thousands)**

	FRS	----- Special Risk -----		-- Elected Officers' Class --			Senior	Total	
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management	DROP	System
1. Actuarial Accrued Liability								\$20,084,177	\$144,122,816
2. Actuarial Value of Assets								13,291,199	126,078,053
3. Unfunded Actuarial Liability (UAL): (1) – (2)								\$6,792,979	\$18,044,763
4. Aggregate Funded Percentage: (2) / (1)								66.18%	87.48%
5. DROP Assets Required to Meet Aggregate Funded Percentage: (1) x (4) [Total System] – (2)								\$4,278,439	
6. Proportion of DROP Liability by Class	0.7374	0.2084	0.0002	0.0150	0.0010	0.0047	0.0332	N/A	1.0000
7. DROP Assets to be Re-Allocated <sup>1</sup>	(\$3,155,028)	(\$891,777)	(\$872)	(\$64,388)	(\$4,296)	(\$19,955)	(\$142,123)	\$4,278,439	0

<sup>1</sup> These adjustments bring DROP from 66.18% funded to 87.48% funded.

**Table II-6  
Florida Retirement System**

**A. Rates of Return on Investments <sup>1</sup>**

<u>Asset Bases</u>	Rates of Return		
	<u>2008/2009</u>	<u>2009/2010</u>	<u>2010/2011</u>
Market Value	-19.71%	15.03%	22.79%
Actuarial Value	-6.74%	5.30%	8.39%

<sup>1</sup> Assumes net cash flow occurs mid-year.

**B. Allocation of Assets at Market Value**

<u>Asset Category</u>	<u>July 1, 2010</u>	<u>July 1, 2011</u>
Stocks	62.79%	67.91%
Bonds	32.61%	28.94%
Real Estate	5.63%	5.64%
Temporary Investments	4.70%	3.45%
Cash	0.67%	0.51%
Other (includes receivables & payables)	-6.40%	-6.45%
	100%	100%

# SECTION III

# LIABILITIES



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

In the previous section, an actuarial valuation was compared to an inventory process, and an analysis was given of the inventory of assets of the FRS as of the valuation date, July 1, 2011. In this section, the discussion will focus upon the commitments of the FRS, which will be referred to as its actuarial liabilities. In later sections, other liabilities are presented (Section V) based on accounting principles of the Financial Account Standards Board (FASB) and Governmental Accounting Standards Board (GASB). It is important to note that the accountant's liabilities are presented for disclosure and comparison purposes and that the actuarial liabilities in this section are used for determining the FRS contribution requirements.

The liabilities presented in this report differ by whether future anticipated salary increases or service credits are included in the calculation. Actuarial liabilities include future salary increases and service credits. The GASB No. 25 accounting liabilities include future salary increases and service credits (actuarial liabilities). The GASB No. 25 liabilities are also based on DROP retirees being included in the class of membership from which they retired, and active liabilities are based on the full retirement rates (per page I-12.). FASB accounting liabilities do not include either future salary increases or future service credits. See Section V of this report for further information on GASB No. 25 and other accounting liabilities.

A fundamental principle in financing a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. There are several methods that could be used in making such a determination.

The method used for this valuation is referred to as the "entry age actuarial cost method." Under this method, a level percent of pay is determined which will pay for projected benefits at retirement for a new entrant into the plan if future experience actually matches the actuarial assumptions. The level percent required is called the normal cost rate and the product of that rate and payroll is the normal cost.

The actuarial liability is that portion of the actuarial present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and funds accumulated as of the same date is referred to as the unfunded actuarial liability (UAL). (If the difference is negative, the excess of the funds accumulated over the liabilities may be referred to as the surplus.) If the sum of the contributions by the employer and the employees exceeds the normal cost for the year, after allowing for interest earned on the previous balance of the UAL, this UAL will be reduced. Benefit improvements, actuarial gains and losses, and changes in actuarial procedures will also have an effect on the total actuarial liability and on the UAL. See Appendix A (page A-2) for more details of the entry age normal method application.

After the amount of the UAL has been determined, a schedule of contributions is established to amortize it. Section IV of the report discusses the contribution schedules in detail.

Table III-1 contains a breakdown of the actuarial liabilities and unfunded actuarial liabilities/(surplus) in the FRS for the 2010 valuation, the 2010 valuation results after adoption of Senate Bill 2100, and the 2011 valuation. In Table III-2, the 2011 liabilities are shown for each employee group.

Legislation enacted in 2001 “walls off,” for 25 years, the actuarial gains arising from former Pension Plan participants electing the Investment Plan option. The “walled off” amount is called the contingent liability. The actuarial liabilities generally do not include the contingent liability. However, surplus, if any, used for contribution rate reductions is net of the contingent liability. Table III-3 shows contingent liability and the number of participants, by class, who elected to transfer from the Defined Benefit Plan to the Investment Plan during the original 2002-2003 election periods for members who were active when the IP became effective.

**Table III-1  
Florida Retirement System  
Actuarial Liabilities  
(\$ in Thousands)**

	July 1, 2010 Valuation	July 1, 2010 After Plan Change (SB 2100)	July 1, 2011 Valuation
1. Actuarial Liabilities for:			
(a) Active Members	\$58,230,539	\$57,129,955	\$54,497,795
(b) Retired, Disabled and Beneficiary Members	59,953,975	59,953,975	64,903,070
(c) Terminated Vested Members	4,513,427	4,513,427	4,637,774
(d) DROP	14,937,071	14,937,071	20,084,177 <sup>2)</sup>
2. Total Actuarial Liability	\$137,635,012	\$136,534,428	\$144,122,816
3. Actuarial Value of Assets	\$120,929,666	\$120,929,666	\$126,078,053
4. Unfunded Actuarial Liability / (Surplus)	\$16,705,346	\$15,604,762	\$18,044,763
5. Investment Plan Contingent Liability <sup>1)</sup>	\$233,117	\$233,117	\$236,275
6. Surplus Available for Rate Reduction	\$0	\$0	\$0

<sup>1)</sup> See Table III-3.

<sup>2)</sup> DROP liabilities include estimated liabilities for the 8,170 members electing to DROP between July 1, 2010 and June 30, 2011 and whose DROP elections were timely filed with the Division of Retirement but whose data was not included in the valuation database.

**Table III-2  
Florida Retirement System  
Actuarial Liabilities  
July 1, 2011  
(\$ in Thousands)**

	FRS	---- Special Risk ----		-- Elected Officers' Class --			Senior	Total	
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management	DROP	System
1. Present Value of Benefits for:									
a. Active Members	\$52,703,381	\$18,417,582	\$10,777	\$481,175	\$23,700	\$175,690	\$1,841,831	\$0	\$73,654,136
b. Retired, Disabled and Beneficiary Members	50,485,823	11,745,392	75,488	608,386	65,053	382,447	1,540,481	20,084,177	84,987,247
c. Terminated Vested Members	3,809,817	619,963	1,596	16,948	11,488	24,865	153,097	0	4,637,774
d. Total Present Value of Benefits (a)+(b)+(c)	106,999,021	30,782,937	87,861	1,106,509	100,241	583,002	3,535,409	20,084,177	163,279,157
2. Present Value of Future Normal Cost (Actives):	\$12,317,203	\$6,346,472	\$1,077	\$129,848	\$3,927	\$35,050	\$322,764	\$0	\$19,156,341
3. Actuarial Liabilities for:									
a. Active Members (1a – 2)	\$40,386,178	\$12,071,110	\$9,700	\$351,327	\$19,773	\$140,640	\$1,519,067	\$0	\$54,497,795
b. Retired, Disabled and Beneficiary Members (1b)	50,485,823	11,745,392	75,488	608,386	65,053	382,447	1,540,481	20,084,177	84,987,247
c. Terminated Vested Members (1c)	3,809,817	619,963	1,596	16,948	11,488	24,865	153,097	0	4,637,774
d. Total Actuarial Liability (a)+(b)+(c)	\$94,681,818	\$24,436,465	\$86,784	\$976,661	\$96,314	\$547,952	\$3,212,645	\$20,084,177	\$144,122,816
4. Actuarial Value of Assets	\$86,021,737	\$19,413,294	\$73,306	\$669,089	\$56,565	\$312,275	\$1,962,149	\$17,569,638	\$126,078,053
5. Unfunded Actuarial Liability / (Surplus)	\$8,660,081	\$5,023,171	\$13,478	\$307,572	\$39,749	\$235,677	\$1,250,496	\$2,514,539 <sup>1</sup>	\$18,044,763
6. Present Value of Future Pay	\$181,320,115	\$44,409,477	\$16,230	\$980,804	\$43,651	\$323,056	\$3,832,492	\$0	\$230,925,825

<sup>1</sup> This is a bookkeeping item. DROP liabilities include the total present value of benefits to all members currently in DROP. When a member leaves DROP, their liability is transferred to the class of membership from which they retired.

**Table III-3  
Investment Plan  
Contingent Actuarial Liabilities  
July 1, 2011  
(\$ in Thousands)**

	<u>FRS Regular</u>	<u>-----Special Risk----- Regular Administration</u>	<u>-----Elected Officers' Class----- Judicial Leg-Atty-Cab County</u>	<u>Senior Management</u>	<u>DROP</u>	<u>Total System</u>			
<u>As of July 1, 2010</u>									
Contingent Liability	\$213,114	\$10,771	(\$20)	(\$563)	\$139	\$105	\$9,572	N/A	\$233,117
Participant Counts	8,845	297	1	5	4	12	214	N/A	9,378
<u>As of July 1, 2011</u>									
Contingent Liability <sup>1 &amp; 2</sup>	\$216,026	\$10,824	(\$22)	(\$607)	\$224	\$94	\$9,736	N/A	\$236,275
Participant Counts	8,321	277	1	5	6	10	202	N/A	8,822

<sup>1</sup> The contingent liability is not included in the actuarial liabilities of FRS.

<sup>2</sup> The contingent liability as of July 1, 2011 is calculated as the July 1, 2003 contingent liability increased by eight years of interest, adjusted for the proportion of original transfers remaining in the Investment Plan.

# SECTION IV

# CONTRIBUTIONS



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

Any difference between the actuarial liabilities and the assets would have to be made up through (1) the excess of future contributions over normal costs and (2) the excess of actual investment returns over assumed returns. An actuarial valuation sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion. In the past when the FRS had an actuarial surplus, contributions were allowed to fall below the Normal Cost. In this section we develop and present the FRS contribution rates based on the July 1, 2011 membership data to be effective for the Plan Year beginning July 1, 2012.

First, we present a description of the actuarial method used to determine the FRS contribution. This is followed by a series of tables presenting the details of our calculations.

## A. Funding Methods

The actuarial cost method used to determine the pattern of future contributions is called the "entry age actuarial cost method". Under this method (as is the case for most actuarial cost methods), the contributions required are based on two elements:

- The normal cost
- The amortization payment to liquidate the unfunded actuarial liability (UAL) or surplus.

These elements are described in more detail below.

### 1. Normal Cost

Under the entry age actuarial cost method, the normal cost rate is that level percentage of pay, which would fully fund a member's benefit at retirement, if paid from the year of entry (i.e., "entry age") to the year of retirement if future experience were to exactly match the actuarial assumptions.

We have determined the normal cost rates for the FRS separately by type of employee and benefit. These are summarized in Table IV-1.

### 2. Unfunded Actuarial Liability (UAL)

The term "fully funded" is often applied to a system where contributions at the normal cost rate are completely adequate to pay for the benefits of all existing employees. Currently, most systems are not fully funded, either because benefit improvements in the past have not been completely paid for, or because actuarial deficiencies have

## CONTRIBUTIONS

---

occurred due to experience that has not been as favorable as anticipated. Under these circumstances, an unfunded actuarial liability (UAL) exists. For the FRS, this is the third consecutive year since 1997 that a UAL exists, or that the Plan does not have a surplus.

Table IV-2 shows the UAL Contribution rates. Table IV-3 shows how the UAL/surplus was derived for the FRS. A key consideration in appraising the adequacy of the funding of the FRS is how the UAL, if any, is being funded.

Starting in the 1998 actuarial valuation, the Legislature required all UAL bases in existence at that time to be considered fully amortized, since the Plan was in surplus position. Now that the UAL has reemerged, all gains and losses are subject to amortization. In this valuation we show the amortization of each plan/assumption change since 1998 and experience gains/losses starting in 2009. The plan changes include those attributable to House Bill 479 in 2010 and Senate Bill 2100 in 2011.

The benefit changes legislated by Senate Bill 2100 reduced the Normal Cost, Present Value of Future Normal Cost (PVFNC) and the Present Value of Benefits (PVB) for current and future active members. The actuarial accrued liability is defined as PVB less PVFNC. For some membership classes the percentage decrease in the PVFNC was larger than the percentage decrease in the PVB, resulting in an increase in an actuarial liability. For the remaining membership classes, the percentage decrease in the PVFNC was smaller than the percentage decrease in the PVB, resulting in a decrease in the actuarial liability. The variation is due to the different demographics, benefit multipliers and unique interrelation of the modified benefit provisions of each membership class. The PVB will decrease in future valuations as current active members are replaced by new members impacted by the change in benefits.

All current members will continue to earn benefits at levels greater than those annually earned by members initially enrolled on or after July 1, 2011. When this impact is combined with amortizing the change in the unfunded liability due to Senate Bill 2100 over 30 years, the funding of current member's actual normal costs will extend beyond working lifetime into retirement. Under the percent of pay amortization method used in the valuation, payment of the actual excess normal costs will effectively not occur until the last 10 years of the 30 year amortization period. Under a level percent of pay amortization, initial payments are less than interest on the unfunded liability, resulting in the unfunded liability increase over time. After approximately 20 years, the unfunded liability will be approximately at the same level as the initial amount. By deferring to the later years of the 30-year amortization period, the funded ratio of the plan is expected to gradually decline for the next 20 years, which could compound the impact of any future adverse experience. This result is somewhat mitigated by the



decrease in the accrued liability due to the elimination of the COLA for future service for all members.

### **B. EMPLOYER CONTRIBUTION RATES**

Table IV-4 presents the calculated employer contribution rates. For the third consecutive year there is no surplus available with which to reduce contribution rates.

The reader should note that the payroll base for UAL contributions is approximately \$2 billion larger than the payroll base for normal cost contributions. This is because Florida law requires the employer of certain defined contribution program participants to make UAL contributions based on their payroll. Thus the total contribution shown is an arithmetic sum but the actual contribution percentage will vary by employer based on their workforce percentage of defined contribution program employees.

Shown on the next page is an excerpt from Table D-3, which provides a projection of the UAL costs that were previously paid from the surplus.

# CONTRIBUTIONS

	<b>2012 – 2013 Plan Year (in millions)</b>
1 Estimated Current Year Surplus Available RSM	\$0
2 Increase/(Decrease) in Available Surplus from prior year	\$0
<b><u>Amortization of UAL Bases</u></b>	
3 12% Increase in Special Risk benefits (in pay status before 07/01/2000)	(\$25.1)
4 Special Risk Minimum In-Line-of-Duty Disability Increased to 65%	\$0.4
5 1993-1998 Experience Study Assumption Changes	\$31.3
6 1998-2003 Experience Study Assumption Changes	\$232.6
7 2003-2008 Experience Study Assumption Changes	(\$389.4)
8 2009 Experience Gain/(Loss)	(\$864.4)
9 2009 Plan Change (House Bill 479)	\$73.4
10 2010 Experience Gain/(Loss)	(\$65.1)
11 2010 Plan Change (Senate Bill 2100)	\$71.4
12 2011 Experience Gain/(Loss)	<u>(\$151.7)</u>
<b>Subtotal [(3) + (4) + (5) + (6) + (7) + (8) + (9) + (10) + (11) + (12)]</b>	<b>(\$1,086.6)</b>
13 Across the Board Rate Reduction of 0%	<u>\$0</u>
<b>Total [Subtotal + (13)]</b>	<b>(\$1,086.6)</b>
14 Surplus Available / (UAL Amortization) [(1) + Total] =	(\$1,086.6)

Please refer to table D-3 for important footnotes that should be understood when reading this table.

## C. CHANGES SINCE PRIOR VALUATION

As a result of (2011) Senate Bill 2100, which was enacted into law, the plan provisions and retirement assumptions for members initially enrolled on and after July 1, 2011 have been modified to reflect the later Normal Retirement Eligibility criteria, longer Average Monthly Compensation averaging period, and longer vesting period. The legislation also requires employee contributions on behalf of all active members, except those participating in DROP, and changed the interest rate at which DROP members' benefits accumulate during DROP participation and eliminated the Cost of Living Adjustment on service earned on or after July 1, 2011. For complete details see the Executive Summary and Appendices A and B of this valuation report.



**Table IV-1  
Florida Retirement System  
Normal Cost Rates by Decrement  
July 1, 2011**

	FRS	----- Special Risk -----		-- Elected Officers' Class --			Senior	DROP	Composite
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management		Rate
1. Vested Benefits and Early Retirement	1.50%	2.05%	1.90%	1.72%	4.01%	3.25%	1.54%	NA	1.59%
2. Regular Retirement	4.04%	10.02%	3.14%	10.03%	4.18%	6.90%	5.12%	NA	4.99%
3. Non-Duty Death	0.13%	0.26%	0.05%	0.48%	0.21%	0.28%	0.15%	NA	0.15%
4. Line of Duty Death	0.10%	0.25%	0.18%	0.18%	0.15%	0.16%	0.11%	NA	0.12%
5. Non-Duty Disability	0.22%	0.47%	0.14%	0.39%	0.18%	0.21%	0.17%	NA	0.26%
6. Line of Duty Disability	<u>0.04%</u>	<u>0.47%</u>	<u>0.27%</u>	<u>0.09%</u>	<u>0.07%</u>	<u>0.06%</u>	<u>0.04%</u>	<u>NA</u>	<u>0.10%</u>
7. Total Normal Cost	6.03%	13.52%	5.68%	12.89%	8.80%	10.86%	7.13%	NA	7.21%
8. Refund of Employee Contributions	0.49%	0.25%	0.67%	0.06%	0.50%	0.31%	0.63%	NA	0.46%
9. Expected Employee Contributions <sup>1</sup>	<u>-2.98%</u>	<u>-3.03%</u>	<u>-2.92%</u>	<u>-3.02%</u>	<u>-2.92%</u>	<u>-2.97%</u>	<u>-2.96%</u>	<u>NA</u>	<u>-2.99%</u>
10. Net Normal Cost	3.54%	10.74%	3.43%	9.93%	6.38%	8.20%	4.80%	NA	4.68%

<sup>1</sup> The actual rate of employee contribution is 3.00%. The rates shown are based on pay rates as of the date of the valuation and reflect actuarial methodology which includes the timing of salary increases, expected turnover and other decrements.



**Table IV-2  
Florida Retirement System  
UAL Contribution Rates  
July 1, 2011**

	FRS	----- Special Risk -----		-- Elected Officers' Class --			Senior		Total
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management	DROP	
1. Previous UAL Bases*									
a. Special Risk-Regular 12% Pre-2000 Retired Benefit Increase (2000)	0.00%	0.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.09%
b. Special Risk 65% In-Line-of-Duty Disability (2000)	0.00%	-0.01%	0.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
c. 1998 Experience Study (1999)**	-0.11%	-0.21%	-1.20%	0.00%	0.00%	0.00%	-0.04%	0.00%	-0.11%
d. 2003 Experience Study (2004)	-0.96%	-1.18%	31.81%	1.80%	2.24%	5.55%	2.87%	-0.16%	-0.82%
e. 2008 Experience Study (2009)	1.48%	0.87%	3.38%	1.11%	1.84%	1.57%	0.73%	1.28%	1.37%
f. 2008-2009 (Gains) / Losses	1.96%	7.99%	-5.58%	12.82%	24.07%	24.27%	10.98%	2.80%	3.04%
g. 2009-2010 (Gains) / Losses	0.34%	-0.64%	2.96%	-1.18%	2.55%	0.27%	0.38%	0.51%	0.23%
h. 2009-2010 Plan Changes (HB 479)	<u>-0.27%</u>	<u>-0.30%</u>	<u>0.00%</u>	<u>-1.40%</u>	<u>-0.73%</u>	<u>-0.98%</u>	<u>-0.60%</u>	<u>0.00%</u>	<u>-0.26%</u>
i. Total UAL Bases	2.44%	7.22%	31.55%	13.15%	29.97%	30.68%	14.32%	4.43%	3.54%
2. 2010-2011 (Gains) / Losses	0.35%	0.39%	6.94%	4.39%	7.32%	1.78%	1.41%	1.78%	0.53%
3. 2010-2011 Assumption Changes	NA	NA	NA	NA	NA	NA	NA	NA	NA
4. 2010-2011 Plan Changes (SB 2100)	<u>-0.43%</u>	<u>0.71%</u>	<u>-1.35%</u>	<u>0.17%</u>	<u>0.12%</u>	<u>0.04%</u>	<u>-1.00 %</u>	<u>0.00%</u>	<u>-0.25%</u>
5. Total UAL Contribution Rates	2.36%	8.32%	37.14%	17.71%	37.41%	32.50%	14.73%	6.21%	3.82%

\* Year in parentheses refers to year when bases were calculated.

\*\* For classes with 0.00%, amortization payments are being made; however as a percentage of payroll they round to less than 0.005%.



**Table IV-3  
Florida Retirement System  
Unfunded Actuarial Liability (UAL) Bases  
July 1, 2011  
(\$ in Thousands)**

	FRS	----- Special Risk -----		-- Elected Officers' Class --			Senior	DROP	Total
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management		
1. July 1, 2010 Valuation UAL	\$8,926,794	\$4,335,016	\$10,763	\$221,705	\$30,210	\$209,516	\$1,157,982	\$1,813,360	\$16,705,346
2. Effect of SB 2100 on July 1, 2010 UAL	(1,421,889)	397,642	(467)	2,747	113	260	(78,990)	0	(1,100,584)
3. Expected UAL / (Surplus) after Plan Change <sup>1</sup>	7,437,490	4,795,327	10,987	233,930	32,326	223,412	1,135,312	1,704,419	15,573,203
4. Actuarial Accrued Liability (Table III-2)	94,681,818	24,436,465	86,784	976,661	96,314	547,952	3,212,645	20,084,177	144,122,816
5. Actuarial Value of Assets (Table II-4)	86,021,737	19,413,294	73,306	669,089	56,565	312,275	1,962,149	17,569,638	126,078,053
6. Total UAL / (Surplus) (2 - 3)	\$8,660,081	\$5,023,171	\$13,478	\$307,572	\$39,749	\$235,677	\$1,250,496	\$2,514,539	\$18,044,763
7. Net Transfers	0	0	0	0	0	0	0	0	0
8. UAL Bases as of July 1, 2011									
a. Special Risk-Regular 12% Pre-2000 Retired Benefit Increase	\$0	\$324,789	\$0	\$0	\$0	\$0	\$0	\$0	\$324,789
b. Special Risk 65% In Line of Disability	0	(2,860)	51	0	0	0	0	0	(2,809)
c. 1998 Experience Study	(302,601)	(91,614)	(329)	43	3	5	(2,727)	0	(397,221)
d. 2003 Experience Study	(3,015,364)	(616,012)	10,284	27,174	2,046	34,395	211,273	(66,972)	(3,413,175)
e. 2008 Experience Study	5,223,859	513,094	1,234	18,859	1,892	11,004	60,666	591,303	6,421,911
f. 2009 Experience Gain/Loss	32,090,972	7,070,311	18,554	477,074	57,969	225,864	1,181,552	(20,969,464)	20,152,831
g. Unrecognized Gain/Loss while in Surplus	(25,276,095)	(2,268,463)	(19,407)	(247,754)	(31,634)	(43,271)	(212,589)	21,907,992	(6,191,221)
h. 2009 Plan Change (HB 479)	(958,070)	(178,943)	0	(23,834)	(753)	(6,827)	(50,238)	0	(1,218,665)
i. 2010 Experience Gain/Loss	1,206,874	(383,435)	1,103	(20,591)	2,681	1,962	32,487	241,559	1,082,641
j. 2010 Plan Change (SB 2100)	(1,532,085)	428,459	(503)	2,960	122	280	(85,112)	0	(1,185,879)
k. 2011 Experience Gain/Loss	1,222,591	227,844	2,491	73,642	7,423	12,265	115,184	810,120	2,471,560
l. Total Bases	\$8,660,081	\$5,023,171	\$13,478	\$307,572	\$39,749	\$235,677	\$1,250,496	\$2,514,539	\$18,044,763
9. New UAL Base	\$1,222,591	\$227,844	\$2,491	\$73,642	\$7,423	\$12,265	\$115,184	\$810,120	\$2,471,560

<sup>1</sup> Reflects Senate Bill 2100



**Table IV-4  
Florida Retirement System  
Employer Contribution Rates  
July 1, 2011 Valuation for Plan Year Beginning July 1, 2012**

**No surplus available for rate reductions.**

	FRS	----- Special Risk -----		-- Elected Officers' Class --			Senior	Composite	Composite	
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management	(excluding DROP)	DROP <sup>1</sup>	(including DROP)
1. Normal Cost <sup>3</sup>	3.54%	10.74%	3.43%	9.93%	6.38%	8.20%	4.80%	4.68% <sup>2</sup>	4.33%	4.64%
2. UAL Cost <sup>3</sup>	2.36%	8.32%	37.14%	17.71%	37.41%	32.50%	14.73%	3.56%	6.21%	3.82%
3. Total Cost [(1) + (2)] <sup>3</sup>	5.90%	19.06%	40.57%	27.64%	43.79%	40.70%	19.53%	8.24%	10.54%	8.46%
4. UAL Cost Paid from Surplus	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5. Rate Reduction Paid from Surplus	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6. Total Adjusted Contribution [(3) + (4) + (5)]	5.90%	19.06%	40.57%	27.64%	43.79%	40.70%	19.53%	8.24%	10.54%	8.46%

<sup>1</sup> DROP rates are special charges to cover the assumed cost of DROP participants; they are not Normal Cost or UAL Cost in the traditional sense.

<sup>2</sup> Due to the relatively different payrolls by membership class excluding DROP, and the plan changes resulting from enactment of Senate Bill 2100 (particularly the adoption of employee contributions), this year the composite normal cost contribution rate is 7.13% less than last year's rate of 11.81%. The plan change is responsible for reducing the composite normal cost rate by 7.12%, and the demographic changes are responsible for reducing the rate by 0.01%.

<sup>3</sup> Item (1) is expressed as a percentage of the salaries of participating members, whereas item (2) is expressed as a percentage of a larger payroll base that includes those employees for whom only UAL contributions are due. Item (3) is an arithmetic sum of (1) and (2). The total cost will vary by employer and their workforce percentage of employees who are not participants in the Defined Benefit Plan.



# SECTION V

## ACCOUNTING STATEMENTS



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# ACCOUNTING STATEMENT

---

Statement No. 35 of the Financial Accounting Standards Board (FASB) previously required the Florida Retirement System to disclose certain information regarding the Plan's funded status. Statement No. 25 of the Governmental Standards Board (GASB) establishes standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in notes to financial statements and supplementary information.

The FASB-35 disclosures are intended to provide a "snap shot" view of how the Plan's assets compare to its liabilities if contributions stopped and accrued benefit claims had to be satisfied. The accrued benefits obligation (ABO) are determined assuming that the plan is ongoing and participants continue to terminate employment, retire, and otherwise act in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.75% per annum.

Table V-1 presents the ABO for the Florida Retirement System determined as of July 1, 2011. All of the calculations presented in that table are based on the actuarial assumptions used in the valuation, as described in Appendix A, except no salary projection. Values of the ABO are shown by type of member and by class. The active members' values are also divided between the employee-financed (accumulated member contributions) and employer-financed portions, with the employer-financed portions shown separately for vested benefits and non-vested benefits. For purposes of calculating the ABO, post-Senate Bill 2100, we based the calculation on an ongoing plan, which produces COLA percentages of less than 3% for benefits earned as of July 1, 2011 for active members.

Table V-2 presents the total ABO for the FRS for current and prior valuations. The 2010 results are displayed before and after the Plan Change due to (2011) Senate Bill 2100.

Table V-3 reconciles the ABO determined as of the prior valuation, July 1, 2010, to the ABO as of July 1, 2011. This reconciliation indicates the impact of the assumption changes and plan changes, if any.

GASB Statement No. 25 requires the actuarial accrued liability (AAL) to be compared with the actuarial value of assets used for funding purposes. The report includes two tables for GASB No. 25 disclosures and a third table used in the Comprehensive Annual Financial Report (CAFR). Table V-4 shows the GASB No. 25 Accounting Statement Information by membership class. Table V-5 shows similar information for the total FRS comparing several years' results in addition to the July 1, 2010 results. Table V-6 shows the Solvency Test for the FRS for the 2009, 2010, and 2011 valuations. The Solvency Test compares the actuarial accrued liabilities to the market value of assets. The Statement No. 25 liabilities are



# ACCOUNTING STATEMENT

---

based on DROP retirees being included in the class of membership from which they retired, and active liabilities are based on the full retirement rates (per page I-12.)

The trend of the FRS's funding status, as measured by the unfunded AAL or ABO over a period of time, is one indication of the progress being made in accumulating sufficient assets to pay benefits when due. Some of the basic trend data for this valuation and the prior two valuations (i.e., as of July 1, 2009 and July 1, 2010) for the FRS are shown in Table V-2 (ABO) and Table V-5 (AAL). Past and future results are affected by changes in actuarial assumptions, benefit provisions, accounting policies, etc.

For fiscal 1999-00 the FRS employers contributed the normal cost. Because the System was in a surplus position, the actuarially determined contribution level was less than the normal cost. Hence, an accounting disclosure under GASB Statement Number 27 first became necessary. For fiscal 2000-01, the System continued in a surplus position and FRS employers again contributed more than the GASB actuarially determined contribution. For fiscal 2001-02 through fiscal 2003-04, because of the rate stabilization mechanism, the FRS employers contributed less than the actuarially determined contribution, whereas in fiscal 2004-2005 the employers contributed more than the actuarially determined contribution. In fiscal 2005-2006 employers again contributed less than the actuarial determined contribution. For fiscal 2006-2007 through fiscal 2009-2010, actual contributions were more than expected. For fiscal 2010-2011, actual contributions were less than expected meaning the FRS employers contributed less than the actuarially determined contributions, assuming 30 year amortization of the surplus or unfunded actuarial liability. To date, the accumulation impact remains a negative number (i.e., cumulative contributions exceed actuarially determined contributions, both adjusted with interest). The Annual Required Contribution (ARC) developed in the 2009 annual valuation which applies to FY 2010-2011, \$3,680,042,000, included the sum of the composite contribution rate (including DROP) of 12.16% plus the minimum UAL amortization payment required by GASB. As shown on Table V-7, the Annual Pension Cost (APC) is \$3,653,019,000 and the total employer contribution was actually \$3,050,684,000. Therefore, if GASB 27 applies, the State's CAFR must reflect a Net Pension Obligation (NPO) of (\$553,830,000), as compared to an NPO of (\$1,156,165,000) as of the prior year.



# ACCOUNTING STATEMENT

**Table V-1**  
**Florida Retirement System**  
**Accumulated Benefit Obligation - FASB Statement #35**  
**July 1, 2011**  
**(All Amounts in Thousands)**

	FRS	---- Special Risk ----		-- Elected Officers' Class --			Senior	DROP	Total
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management		
<b>A. Accumulated Benefit Obligation</b>									
1. Active Members									
a. Accumulated Member Contributions	\$24,193	\$4,585	\$0	\$249	\$85	\$688	\$1,539	\$0	\$31,339
Employer - Financed									
b. Vested Benefits	20,199,741	5,321,683	5,322	189,684	11,154	78,682	849,036	0	26,655,302
c. Non - Vested Benefits	1,394,928	361,526	501	11,435	1,098	6,256	35,423	0	1,811,167
d. Total	\$21,618,862	\$5,687,794	\$5,823	\$201,368	\$12,337	\$85,626	\$885,998	\$0	\$28,497,808
2. Annuitants	\$50,485,823	\$11,745,392	\$75,488	\$608,386	\$65,053	\$382,447	\$1,540,481	\$20,084,177	\$84,987,247
3. Other Inactive Members	\$3,809,817	\$619,963	\$1,596	\$16,948	\$11,488	\$24,865	\$153,097	\$0	\$4,637,774
4. Total Accumulated Benefit Obligation	\$75,914,502	\$18,053,149	\$82,907	\$826,702	\$88,878	\$492,938	\$2,579,576	\$20,084,177	\$118,122,829
<b>B. Assets Available for Benefits</b>									
1. Market	\$88,099,515	\$19,882,205	\$75,077	\$685,250	\$57,931	\$319,818	\$2,009,543	\$17,994,017	\$129,123,356
2. Actuarial Basis	\$86,021,737	\$19,413,294	\$73,306	\$669,089	\$56,565	\$312,275	\$1,962,149	\$17,569,638	\$126,078,053
<b>C. Unfunded / (Surplus) Total Accumulated Benefit Obligation,</b>									
Assets at:									
1. Market	(\$12,185,013)	(\$1,829,056)	\$7,830	\$141,452	\$30,947	\$173,120	\$570,033	\$2,090,160	(\$11,000,527)
2. Actuarial Basis	(\$10,107,235)	(\$1,360,145)	\$9,601	\$157,613	\$32,313	\$180,663	\$617,427	\$2,514,539	(\$7,955,224)
<b>D. Percent of Accumulated Obligation Funded,</b>									
Assets at:									
1. Market	116.05%	110.13%	90.56%	82.89%	65.18%	64.88%	77.90%	89.59%	109.31%
2. Actuarial Basis	113.31%	107.53%	88.42%	80.93%	63.64%	63.35%	76.06%	87.48%	106.73%



# ACCOUNTING STATEMENT

**Table V-2**  
**Florida Retirement System**  
**Analysis of Funding Progress - FASB Statement #35**  
**(All Amounts in Thousands)**

	July 1, 2009 Reflecting HB479	July 1, 2010 Valuation Basis	July 1, 2010 Reflecting SB2100	July 1, 2011 Valuation Basis
<b>A. Accumulated Benefit Obligation</b>				
<b>1. Active Members</b>				
a. Accumulated Member Contributions Employer - Financed	\$38,689	\$33,659	\$33,659	\$31,339
b. Vested Benefits	32,278,069	31,691,706	28,394,646	26,655,302
c. Non - Vested Benefits	<u>1,050,094</u>	<u>1,007,888</u>	<u>1,881,302</u>	<u>1,811,167</u>
d. Total	\$33,366,852	\$32,733,253	\$30,309,607	\$28,497,808
<b>2. Annuitants</b>	\$55,054,800	\$59,953,975	\$59,953,975	\$64,903,070
<b>3. Other Inactive Members</b>	\$4,381,108	\$4,513,427	\$4,513,427	\$4,637,774
<b>4. DROP</b>	<u>\$14,344,324</u>	<u>\$14,937,071</u>	<u>\$14,937,071</u>	<u>\$20,084,177</u>
<b>5. Total Accumulated Benefit Obligation</b>	\$107,147,084	\$112,137,726	\$109,714,080	\$118,122,829
<b>B. Assets Available for Benefits</b>				
1. Market	\$98,970,575	\$109,511,158	\$109,511,158	\$129,123,355
2. Actuarial Basis	\$118,764,692	\$120,929,666	\$120,929,666	\$126,078,053
<b>C. Unfunded/(Surplus) Total Accumulated Benefit Obligation, Assets at:</b>				
1. Market	\$8,176,509	\$2,626,568	\$202,922	(\$11,000,526)
2. Actuarial Basis	(\$11,617,608)	(\$8,791,940)	(\$11,215,586)	(\$7,955,224)
<b>D. Percent of Accumulated Benefit Obligation Funded, Assets at:</b>				
1. Market	92.37%	97.66%	99.82%	109.31%
2. Actuarial Basis	110.84%	107.84%	110.22%	106.73%
<b>E. Annual Salaries<sup>1</sup></b>	\$26,573,196	\$25,765,362	\$25,765,362	\$25,686,138
<b>F. Unfunded/(Surplus) Accumulated Benefit Obligation as a Percent of Salary, Assets at:</b>				
1. Market	30.77%	10.19%	0.79%	-42.83%
2. Actuarial Basis	-43.72%	-34.12%	-43.53%	-30.97%

<sup>1</sup> Includes Drop Salaries



# ACCOUNTING STATEMENT

---

**Table V-3**  
**Florida Retirement System**  
**Statement of Changes in Total Actuarial**  
**Present Value of All Accrued Benefits**  
**(All Amounts in Thousands)**

	<u>Accumulated Benefit Obligation</u>
Actuarial Present Value of Accrued Benefits at July 1, 2010	\$112,137,726
Increase (Decrease) During Year Attributable to:	
Increase for Interest Due to Decrease in Discount Period	\$8,202,865
Benefits Paid – PY 2011	(\$7,888,517)
Benefits Accrued & Other Gains / Losses	\$8,094,401
Plan Provision / Assumption Changes	(\$2,423,646)
Net Increase (Decrease)	\$5,985,103
Actuarial Present Value of Accrued Benefits at July 1, 2011	\$118,122,829



# ACCOUNTING STATEMENT

**Table V-4**  
**Florida Retirement System**  
**Accounting Statement Information - GASB Statement #25**  
**July 1, 2011**  
**(All Amounts in Thousands)**

	FRS	---- Special Risk ----		---- Elected Officers' Class ----			Senior	Total
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management	
1. Actuarial Accrued Liability:								
a. Active Member Contributions	\$24,193	\$4,585	\$0	\$249	\$85	\$688	\$1,539	\$31,339
b. Annuitants	65,296,402	15,931,640	79,580	910,641	85,218	476,121	2,207,644	84,987,246
c. Other Inactive Members	3,809,817	619,963	1,596	16,948	11,488	24,865	153,097	4,637,774
d. Active Members	<u>41,036,978</u>	<u>12,283,687</u>	<u>9,763</u>	<u>356,263</u>	<u>19,692</u>	<u>142,004</u>	<u>1,529,729</u>	<u>55,378,116</u>
2. Total Actuarial Accrued Liability [1(a) + 1(b) + 1(c) + 1(d)]	\$110,167,390	\$28,839,875	\$90,939	\$1,284,101	\$116,483	\$643,678	\$3,892,009	\$145,034,475
3. Actuarial Value of Assets	99,520,635	22,706,884	89,758	857,348	74,182	410,705	2,418,541	126,078,053
4. Unfunded Actuarial Accrued Liability / (Surplus) (UAAL), [2 - 3]	\$10,646,755	\$6,132,991	\$1,181	\$426,753	\$42,301	\$232,973	\$1,473,468	\$18,956,422
5. Funded Ratio	90.34%	78.73%	98.70%	66.77%	63.68%	63.81%	62.14%	86.93%
6. Covered Payroll	\$21,157,918	\$3,788,335	\$2,592	\$127,474	\$7,512	\$49,399	\$552,908	\$25,686,138
7. UAAL / (Surplus) as a % of Payroll	50.32%	161.89%	45.56%	334.78%	563.11%	471.61%	266.49%	73.80%



# ACCOUNTING STATEMENT

**Table V-5**  
**Florida Retirement System**  
**Accounting Statement Information - GASB Statement #25**  
**(All Amounts in Thousands)**

	July 1, 2009 Reflecting HB479	July 1, 2010 Valuation Basis	July 1, 2010 Reflecting SB2100	July 1, 2011 Valuation Basis
1. Actuarial Accrued Liability:				
a. Active Member Contributions	\$38,689	\$33,659	\$33,659	\$31,339
b. Annuitants	69,399,125	74,891,047	74,891,047	84,987,246
c. Other Inactive Members	4,381,108	4,513,427	4,513,427	4,637,774
d. Active Members	<u>61,321,647</u>	<u>60,214,244</u>	<u>58,004,298</u>	<u>55,378,116</u>
2. Total Actuarial Accrued Liability [1(a) + 1(b) + 1(c) + 1(d)]	\$135,140,569	\$139,652,377	\$137,442,431	\$145,034,475
3. Actuarial Value of Assets	\$118,764,692	\$120,929,666	\$120,929,666	\$126,078,053
4. Unfunded Actuarial Accrued Liability / (Surplus) (UAAL), [2 - 3]	\$16,375,877	\$18,722,711	\$16,512,765	\$18,956,422
5. Funded Ratio	87.88%	86.59%	87.99%	86.93%
6. Covered Payroll <sup>1</sup>	\$26,573,196	\$25,765,362	\$25,765,362	\$25,686,138
7. UAAL / (Surplus) as a % of Payroll	61.63%	72.67%	64.09%	73.80%

<sup>1</sup> Includes Drop Salaries



*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# ACCOUNTING STATEMENT

**Table V-6**  
**Florida Retirement System**  
**Solvency Test**  
**(All Amounts in Thousands)**

	<u>July 1, 2009</u> <u>Valuation Basis</u>	<u>July 1, 2010</u> <u>Valuation Basis</u>	<u>July 1, 2011</u> <u>Valuation Basis</u>
1. Actuarial Accrued Liability for:			
a. Retired and Disabled Members, and Survivors	\$69,399,125	\$74,891,047	\$84,987,246
b. Vested Deferred and Inactive Status Members	4,381,108	4,513,427	4,637,774
c. Active Members			
i) Accumulated employee contributions with interest	38,689	33,659	31,339
ii) Employer-financed liabilities	<u>62,556,675</u>	<u>60,214,244</u>	<u>55,378,116</u>
d. Total	\$136,375,597	\$139,652,377	\$145,034,475
2. Net Assets Available for Benefits at Market Value	\$98,970,576	\$109,511,158	\$129,123,355
3. Ratio of Market Value of Assets to Actuarial Accrued Liabilities: [2 / 1]	72.57%	78.42%	89.03%



# ACCOUNTING STATEMENT

**Table V-7**  
**Florida Retirement System**  
**Net Pension Obligation - GASB Statement #27**  
**(All Amounts in Thousands)**

	ACTUAL		PROJECTED
	<u>7/1/2009 - 6/30/2010</u>	<u>7/1/2010 - 6/30/2011</u>	<u>7/1/2011 - 6/30/2012</u>
1. Unfunded Actuarial Liability (UAL) / (Surplus)	(\$6,633,333)	\$16,375,877	\$16,512,765
2. Amortization of UAL	(359,043)	886,377	893,787
3. Normal Cost	<u>2,806,416</u>	<u>2,793,665</u>	<u>1,161,647</u>
4. Annual Required Contribution: [2 + 3]	\$2,447,374	\$3,680,042	\$2,055,434
5. Interest on Net Pension Obligation:	(66,788)	(89,603)	(42,922)
6. Adjustment to Annual Required Contribution:	<u>46,646</u>	<u>62,580</u>	<u>29,977</u>
7. Annual Pension Cost: [4 + 5 + 6]	\$2,427,232	\$3,653,019	\$2,042,489
8. Contributions Made:	<u>\$2,721,618</u>	<u>\$3,050,684</u>	NA
9. Percent Contributed: [8 / 4]	111%	83%	NA
10. Increase in Net Pension Obligation: [7 - 8]	(294,386)	602,335	NA
11. Net Pension Obligation at Beginning of Year:	<u>(861,779)</u>	<u>(1,156,165)</u>	<u>(553,830)</u>
12. Net Pension Obligation at End of Year:	(1,156,165)	(553,830)	NA



*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# APPENDIX A

## ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

---

The actuarial procedures and assumptions used in this valuation are described herein.

Table A-I summarizes the assumptions. The pre-and post-retirement mortality rates are taken from the sources listed. The other rates were developed from the experience of the FRS and are illustrated in Tables A-2 through A-9, as noted.

The actuarial assumptions are intended to estimate the future experience of the members of the FRS and of the FRS in other areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in the estimated costs of the FRS' benefits. These assumptions are based on Milliman's most recent review of the System's experience for the period July 1, 2003 through June 30, 2008, as adopted by the FRS Assumptions Conference and as modified by the February 16, 2010 study on House Bill 479 (2009) and the July 1, 2011 study on Senate Bill 2100 (2011) which were enacted into law.

All tables in this section give independent rates of decrement expressed as percentages. The independent rates of decrement are referred to by the general symbol "q" in actuarial notation. The underlying theory is described more fully in Life Contingencies, by C. Wallace Jordan, Society of Actuaries (Second Edition, 1967), page 278.

## ACTUARIAL COST METHOD

The actuarial valuation is prepared using the entry age actuarial cost method. Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit. The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs, is called the unfunded actuarial liability (UAL). The UAL is amortized as level percentages of the projected payroll (salaries of present and future members of the FRS) during various amortization periods. When the UAL remained negative (i.e., surplus position), it was not amortized.

The normal cost for the valuation year was calculated separately for each individual, based on his or her age at entry into the FRS. The individual normal costs for all members are based on the provisions for newly enrolled members, assuming the

---



# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

---

member has always been in the current class and these provisions had been in effect since entry. The normal costs were then aggregated and divided by the total current compensation of the individuals included in the valuation to determine the normal cost rate as a percentage of compensation.

The benefit changes legislated by Senate Bill 2100 reduced the Normal Cost, Present Value of Future Normal Cost (PVFNC) and the Present Value of Benefits (PVB) for current and future active members. The actuarial accrued liability is defined as PVB less PVFNC. For some membership classes the percentage decrease in the PVFNC was larger than the percentage decrease in the PVB, resulting in an increase in an actuarial liability. For the remaining membership classes, the percentage decrease in the PVFNC was smaller than the percentage decrease in the PVB, resulting in a decrease in the actuarial liability. The variation is due to the different demographics, benefit multipliers and unique interrelation of the modified benefit provisions of each membership class. The PVB will decrease in future valuations as current active members are replaced by new members impacted by the change in benefits.

All current members will continue to earn benefits at levels greater than those annually earned by members initially enrolled on or after July 1, 2011. When this impact is combined with amortizing the change in the unfunded liability due to this proposal over 30 years, the funding of current member's actual normal costs will extend beyond working lifetime into retirement. Under the percent of pay amortization method used in the valuation, payment of the actual excess normal costs will effectively not occur until the last 10 years of the 30 year amortization period. Under a level percent of pay amortization, initial payments are less than interest on the unfunded liability, resulting in the unfunded liability increase over time. After approximately 20 years, the unfunded liability will be approximately at the same level as the initial amount. By deferring to the later years of the 30-year amortization period, the funded ratio of the plan is expected to gradually decline for the next 20 years, which could compound the impact of any future adverse experience. This result is somewhat mitigated by the decrease in the accrued liability due to the elimination of the COLA for future service for all members.

## RECORDS AND DATA

The data used in this valuation consist of financial information and records of age, service and income of active members, annuitants and other inactive members. All of the data was supplied by the FRS, and was accepted for valuation purposes without audit.



# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

---

## REPLACEMENT OF TERMINATED MEMBERS

The ages and relative salaries at entry of future members are assumed to follow a new entrant distribution based on the current active population. Under this assumption, the normal cost rates for active members will remain valid in future years, unless the governing law or actuarial assumptions are changed.

## GROWTH IN MEMBERSHIP

The membership of the FRS is assumed to grow at the rate of 0.0% per year. This assumption was changed in the July 1, 1997 valuation from 1.50% in the July 1, 1995 valuation, as required by GASB No. 25.

## ADMINISTRATIVE EXPENSE

Administrative expenses are paid from investment earnings. It is assumed that investments will yield 7.75% as the valuation assumption and 0.25% to cover the administrative expenses.

## VALUATION OF ASSETS

The asset valuation method determines the actuarial value as follows:

- Step 1.** Determine the total yield on the investments of the FRS using the full investment return (including capital gains) measured by the difference in the actuarial value of the assets at the beginning of the plan year just ended and the market value of assets at the end of the year. For the first year this method is employed, the market value of assets is used for the beginning of the plan year.
- Step 2.** Calculate the excess of the yield determined in Step 1 over the expected yield for the same year according to the actuarial assumptions.
- Step 3.** Calculate an adjusted yield equal to the expected yield plus one-fifth of the yield determined in Step 2.
- Step 4.** The actuarial value of assets used in this valuation equals the amount that would have existed if the actual yield on the assets had been at the yield determined in Step 3.

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

---

The resulting actuarial value of the assets shall be not less than 80% nor more than 120% of the market value.

This method conforms to Section 121.031(3)(a), Florida Statutes, calling for an averaging method acceptable under U.S. Treasury Regulations in effect on August 16, 2008.

## INVESTMENT EARNINGS

The future investment earnings of the assets of the FRS are assumed to accrue at an annual rate of 7.75%, compounded annually, net of investment expenses.

## POST-RETIREMENT BENEFIT INCREASES

Senate Bill 2100 (2011) eliminated post-retirement benefit increases on benefits earned on and after July 1, 2011. Benefits earned before July 1, 2011 will receive post-retirement benefit increases of 3% per year. Tier II members (those initially enrolled on and after July 1, 2011) will receive no post-retirement benefit increases. Tier I members (those initially enrolled before July 1, 2011) will receive post-retirement benefit increases equal to 3% per year multiplied by a fraction, the numerator of which is service through June 30, 2011 and the denominator of which is total service at retirement.

## INTEREST ON EMPLOYEE CONTRIBUTIONS

Interest is only credited on accounts held by members of TRS. A 6.5% annual rate of interest is assumed to be credited on these accounts.

## FUTURE SALARIES

Salaries are assumed to increase between 4.00% and 10.00% per year depending on the member's age and service. In addition to increases in salary due to promotions and longevity, this scale includes an assumed 4.00% per annum rate of increase in the average wage level of the membership. Table A-2 shows merit (i.e., promotion and longevity) scale rates at representative ages, by class.

## SERVICE RETIREMENT

Members are assumed to take unreduced retirement at the rates shown in Table A-3. Rates of reduced early retirement are included in rates of other terminations of employment.

---



# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

---

All members who have attained age 80 (age 70 for TRS, SCOERS and IFAS) in active service are assumed to retire immediately.

## DISABLEMENT

Note that the frequency of disablement reflects not only the impairments but also the policies underlying the approval of claims and the administration of disability benefits. The more liberal the administration or conditions under which an employee may qualify for disability, the greater the expected incidence of disability.

### *Line-of-Duty Disability Incidence Rates*

The rates used to estimate the likelihood of line-of-duty disability were initially based on Social Security disability experience reported in the Social Security Administration's disability study published as Actuarial Study Number 74, adjusted to recognize the FRS line-of-duty disability incidence experience. The most recent study looked at the line-of-duty disability incidence experience for the five fiscal years ending June 30, 2008, and adjusted the current tables slightly.

### *Not-in-Line-of-Duty Disability Incidence Rates*

The rates used to estimate the likelihood of not-in-line-of-duty disability were initially based on Social Security disability experience reported in the Social Security Administration's disability study published as Actuarial Study Number 74, adjusted to recognize the FRS not-in-line-of-duty disability incidence experience. These rates were modified to be more in line with FRS experience during the five plan years ending June 30, 2008.

The rates of disablement used in the valuation are illustrated in Tables A-4 and A-5.

## PRE-RETIREMENT MORTALITY

Mortality rates for members who die in service are based on the RP-2000 Employee Mortality tables for males and females. Table A-6 shows these rates at representative ages.

To allocate active member deaths between duty and non-duty death, the following percentages of total active member deaths were assumed to be duty deaths.

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

Age	FRS-Special Risk		FRS-All Other Groups	
	Men	Women	Men	Women
37	60%	60%	25%	15%
42	40	40	25	15
47	30	30	15	10
52	25	25	15	10

## POST-RETIREMENT MORTALITY

Mortality rates for all members once in retirement status are based on the RP-2000 Healthy White Collar tables for males and females, as projected from the year 2000 to the valuation year using Projection Scale AA, adjusted by the following percentages:

	Males	Females
Regular and Special Risk Class	90.9%	95.8%
ECO, ESO, Judges, Senior Management and Special Risk Administrative	82.4%	56.7%

Table A-7 shows these rates for representative ages.

## DISABILITY MORTALITY RATES

Disability mortality rates are based on the RP-2000 Disabled Retiree Table for males, and the PBGC Disabled with Social Security Table for females, adjusted by the following percentages:

	Adjustment Factor
<b>Males</b>	
Under age 45	92.4%
Age 51 and over	73.9%
Ages 46 – 50 are interpolated between the two factors	
<b>Females</b>	
Under age 65	82.9%
Age 65 and over	88.1%

Representative rates of disability mortality are illustrated in Table A-8.



# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

---

## OTHER TERMINATIONS OF EMPLOYMENT

Table A-9 shows, for representative ages, the rates assumed in this valuation for future withdrawal from active service for reasons other than death, disability or retirement with an unreduced benefit. These rates contain the probability of retiring with a reduced immediate pension.

## ELIGIBLE SURVIVORS

It is assumed that 80% of deceased active members will have survivors eligible for lifetime benefits upon their death. Males are assumed to be three years older than their female spouses.

## MILITARY SERVICE AND OUT-OF-STATE SERVICE CREDITS

Each member is assumed to have the following additional years of service credit purchased:

Type of Service Credit	FRS-Special Risk		FRS-All Other Groups	
	Men	Women	Men	Women
Military Service Credit <sup>1)</sup>	0.2818	0	0.1853	0
Out-of-State Service Credit	0	0	0.0910	0.0910

<sup>1)</sup> Pre-1987 hires only.

No extra service credit was assumed for TRS, SCOERS and IFAS participants.

## ANNUAL LEAVE CREDIT

Unused annual leave in the amount of 139 hours is assumed to be credited to each retiring member to increase the salary used for calculating the retirement benefits. An increase in the retirement benefit of 1.66% is assumed to result from this factor.

## DROP MEMBERS

The demographics and benefits attributable to the 8,170 members who timely filed to participate in DROP before July 1, 2011 but were not processed by the data collection date, were assumed to mirror the demographics and benefits of the 9,189 members who elected DROP between July 1, 2010 and June 30, 2011 and whose applications were processed before the data collection date.

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

**TABLE A-1**  
Summary of Valuation Assumptions  
July 1, 2011

I. Economic Assumptions	
A. General Wage Increases	4.00%*
B. Investment Earnings	7.75%*
C. Growth in Membership	0.00%
D. Post-Retirement Benefit Increases	Varies based on date of enrollment
* Including a 3.0% inflation assumption.	
II. Non-Economic Assumptions	
A. Salary Increases Due to Promotion and Longevity	Table A-2
B. Service Retirement	Table A-3; rates reflect the enactment of 2009 House Bill 479 and 2011 Senate Bill 2100
C. Disablement	Tables A-4 and A-5
D. Pre-Retirement Mortality	RP-2000 Mortality Tables for males and females. Table A-6
E. Post-Retirement Mortality	RP-2000 Healthy White Collar Tables for males and females, projected from 2000 using Projection Scale AA. Table A-7
F. Disabled Termination (Mortality and Recovery)	Table A-8
G. Other Terminations of Employment	Table A-9

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

<b>Table A-2 Salary</b>										
<b>REGULAR – Male</b>										
Combined Years of Service	Attained Age									
	20	25	30	35	40	45	50	55	60	65
0	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%
1	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%
2	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%
3	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%
4	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%
5	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%
6	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%
7	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
8	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
9	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
10 or more	3.00%	3.00%	3.00%	3.00%	2.50%	2.00%	1.50%	0.50%	0.50%	0.50%
<b>REGULAR - Female</b>										
Combined Years of Service	Attained Age									
	20	25	30	35	40	45	50	55	60	65
0	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
1	4.23%	4.23%	4.23%	4.23%	4.23%	4.23%	4.23%	4.23%	4.23%	4.23%
2	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%
3	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%	2.62%
4	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%
5	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%
6	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%
7	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%
8	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
9	1.97%	1.97%	1.97%	1.97%	1.97%	1.97%	1.97%	1.97%	1.97%	1.97%
10 or more	3.00%	3.00%	3.00%	3.00%	2.50%	2.00%	1.00%	0.00%	0.00%	0.00%
<b>ECO, ESO – Male and Female</b>										
Combined Years of Service	Attained Age									
	20	25	30	35	40	45	50	55	60	65
0	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
1	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
2	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
3	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
4	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
5	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
6	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
7	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
8	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
9	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
10 or more	0.43%	0.43%	0.43%	0.43%	0.43%	0.23%	0.03%	0.00%	0.00%	0.00%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

## Table A2 (cont.) Salary

<b>JUDGES – Male and Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
1	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
2	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
3	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
4	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
5	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
6	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
7	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
8	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
9	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
10 or more	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>SENIOR MANAGEMENT – Male</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%
1	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%
2	3.94%	3.94%	3.94%	3.94%	3.94%	3.94%	3.94%	3.94%	3.94%	3.94%	3.94%
3	3.72%	3.72%	3.72%	3.72%	3.72%	3.72%	3.72%	3.72%	3.72%	3.72%	3.72%
4	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
5	3.06%	3.06%	3.06%	3.06%	3.06%	3.06%	3.06%	3.06%	3.06%	3.06%	3.06%
6	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
7	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
8	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
9	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
10 or more	2.18%	2.18%	2.18%	2.18%	1.74%	1.30%	0.86%	0.86%	0.86%	0.86%	0.86%
<b>SENIOR MANAGEMENT - Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%
1	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%
2	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%
3	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%
4	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%	4.02%
5	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%
6	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%
7	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
8	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
9	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
10 or more	2.18%	2.18%	2.18%	2.18%	1.36%	1.15%	0.54%	0.00%	0.00%	0.00%	0.00%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

**Table A-2 (cont.)  
Salary**

<b>SPECIAL RISK – Male</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
1	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
2	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%
3	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%
4	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%
5	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%
6	2.95%	2.95%	2.95%	2.95%	2.95%	2.95%	2.95%	2.95%	2.95%	2.95%	2.95%
7	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%
8	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%
9	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%
10 or more	2.50%	2.50%	2.50%	2.50%	2.50%	2.00%	1.00%	0.50%	0.50%	0.50%	0.50%
<b>SPECIAL RISK – Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%
1	4.57%	4.57%	4.57%	4.57%	4.57%	4.57%	4.57%	4.57%	4.57%	4.57%	4.57%
2	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%	3.22%
3	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%
4	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%
5	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%
6	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%
7	2.54%	2.54%	2.54%	2.54%	2.54%	2.54%	2.54%	2.54%	2.54%	2.54%	2.54%
8	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%
9	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%	2.52%
10 or more	2.50%	2.50%	2.50%	2.50%	2.00%	1.50%	1.25%	0.75%	0.75%	0.75%	0.75%
<b>SPECIAL RISK ADMIN – Male and Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%
1	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%
2	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%
3	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%
4	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%
5	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%
6	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%	3.46%
7	2.61%	2.61%	2.61%	2.61%	2.61%	2.61%	2.61%	2.61%	2.61%	2.61%	2.61%
8	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%
9	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%
10 or more	1.97%	1.97%	1.97%	1.97%	1.55%	1.12%	0.91%	0.91%	0.91%	0.91%	0.91%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

**Table A-3  
Unreduced Retirement Annual Rates – Tier I Members**

<b>REGULAR</b>				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	11.4%	3.0%	13.1%	1.7%
50	25.1%	9.5%	21.9%	6.2%
55	31.3%	9.1%	26.7%	7.6%
60	39.4%	10.4%	35.5%	14.6%
65	23.5%	11.0%	29.2%	19.0%

<b>ELECTED OFFICERS' GROUPS: ECO, ESO *</b>				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	8.0%	0.0%	7.8%	1.2%
50	9.6%	0.7%	12.8%	1.2%
55	14.3%	1.5%	17.0%	4.0%
60	19.3%	4.9%	13.8%	7.2%
65	21.8%	9.6%	17.4%	10.7%

\* Rates for the ECO and ESO groups differ only at age 64, retirement at first eligibility for males. Otherwise, the tables are identical.

<b>JUDICIAL</b>				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	8.0%	0.0%	7.8%	1.2%
50	9.6%	0.7%	12.8%	1.2%
55	12.0%	1.5%	17.0%	4.0%
60	12.1%	4.9%	18.4%	7.2%
65	20.0%	9.6%	18.2%	10.7%



# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

**Table A-3 (cont.)  
Unreduced Retirement Annual Rates – Tier I Members**

SENIOR MANAGEMENT SERVICE				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	10.3%	2.1%	12.1%	0.4%
50	24.2%	11.1%	20.9%	5.9%
55	29.1%	10.3%	25.3%	6.6%
60	37.2%	14.9%	40.0%	12.8%
65	31.7%	21.5%	35.2%	21.4%
TRS and SCOERS				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	16.3%	2.5%	15.0%	1.5%
50	32.7%	2.5%	26.3%	1.5%
55	34.0%	13.5%	32.5%	9.0%
60	100.0%	56.5%	100.0%	55.5%
65	37.5%	56.5%	88.8%	57.5%
SPECIAL RISK				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	2.4%	0.9%	2.4%	0.9%
45	7.6%	0.9%	4.1%	4.7%
50	20.9%	4.5%	14.6%	4.4%
55	16.5%	4.7%	13.5%	4.8%
60	12.1%	4.9%	17.0%	7.9%
65	39.8%	14.5%	31.7%	10.6%

**IFAS:** It is assumed that IFAS participants will retire upon the later of attainment of age 62 and 10 years of covered service or immediately, if beyond that time.

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

**Table A-3 (cont.)  
Unreduced Retirement Annual Rates – Tier I Members**

<b>SPECIAL RISK ADMINISTRATIVE SUPPORT</b>				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	11.3%	0.0%	11.3%	0.0%
50	18.0%	4.5%	18.0%	4.5%
55	33.0%	5.8%	56.5%	5.8%
60	24.8%	11.6%	42.6%	11.6%
65	69.2%	56.0%	69.5%	56.0%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

<b>Table A-3</b>				
<b>Unreduced Retirement Annual Rates – Tier II Members</b>				
<b>REGULAR</b>				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	11.4%	3.0%	13.1%	1.7%
50	25.1%	9.5%	21.9%	6.2%
55	31.3%	9.1%	26.7%	7.6%
60	39.4%	10.4%	35.5%	14.6%
65	32.6%	11.0%	38.3%	19.0%
<b>ELECTED OFFICERS' GROUPS: ECO, ESO</b>				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	8.0%	0.0%	7.8%	1.2%
50	9.6%	0.7%	12.8%	1.2%
55	14.3%	1.5%	17.0%	4.0%
60	19.3%	4.9%	13.8%	7.2%
65	29.8%	9.6%	25.4%	10.7%
<b>JUDICIAL</b>				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	8.0%	0.0%	7.8%	1.2%
50	9.6%	0.7%	12.8%	1.2%
55	12.0%	1.5%	17.0%	4.0%
60	12.1%	4.9%	18.4%	7.2%
65	28.0%	9.6%	26.2%	10.7%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

<b>Table A-3 (cont.)</b>				
<b>Unreduced Retirement Annual Rates – Tier II Members</b>				
<b>SENIOR MANAGEMENT SERVICE</b>				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	10.3%	2.1%	12.1%	0.4%
50	24.2%	11.1%	20.9%	5.9%
55	29.1%	10.2%	25.3%	6.6%
60	37.2%	14.9%	40.0%	12.8%
65	40.3%	21.5%	43.8%	21.4%
<b>SPECIAL RISK</b>				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	2.4%	0.9%	2.4%	0.9%
45	7.6%	0.9%	4.1%	4.7%
50	20.9%	4.5%	14.6%	4.4%
55	24.8%	4.7%	19.7%	4.8%
60	12.1%	4.9%	17.0%	7.9%
65	39.8%	14.5%	31.7%	10.6%
<b>SPECIAL RISK ADMINISTRATIVE SUPPORT</b> (Same rates as applied to Tier I members)				
Age	Male		Female	
	Retirement at First Eligibility	Retirement Beyond First Eligibility	Retirement at First Eligibility	Retirement Beyond First Eligibility
20	0.0%	0.0%	0.0%	0.0%
25	0.0%	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%	0.0%
40	0.0%	0.0%	0.0%	0.0%
45	11.3%	0.0%	11.3%	0.0%
50	18.0%	4.5%	18.0%	4.5%
55	33.0%	5.8%	56.5%	5.8%
60	24.8%	11.6%	42.6%	11.6%
65	69.2%	56.0%	69.5%	56.0%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

<b>Table A-4 Line-of-Duty Disability Annual Rates</b>		
<b>REGULAR</b>		
Age	Male	Female
20	0.002%	0.000%
25	0.002%	0.001%
30	0.003%	0.001%
35	0.005%	0.003%
40	0.009%	0.005%
45	0.014%	0.008%
50	0.022%	0.010%
55	0.034%	0.016%
60	0.048%	0.022%
65	0.050%	0.020%
<b>ECO, ESO, JUDGES, SENIOR MANAGEMENT</b>		
Age	Male	Female
20	0.004%	0.001%
25	0.004%	0.001%
30	0.005%	0.001%
35	0.007%	0.002%
40	0.011%	0.003%
45	0.017%	0.005%
50	0.029%	0.007%
55	0.044%	0.011%
60	0.044%	0.014%
65	0.044%	0.013%
<b>SPECIAL RISK, SPECIAL RISK ADMINISTRATIVE</b>		
Age	Male	Female
20	0.012%	0.008%
25	0.012%	0.008%
30	0.017%	0.016%
35	0.029%	0.037%
40	0.051%	0.068%
45	0.087%	0.106%
50	0.138%	0.153%
55	0.215%	0.152%
60	0.301%	0.151%
65	0.231%	0.143%
<b>TRS and SCOERS</b>		
Same as Non-Duty Disability		

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

<b>Table A-5 Non-Duty Disability Annual Rates</b>		
<b>REGULAR</b>		
Age	Male	Female
20	0.000%	0.000%
25	0.027%	0.010%
30	0.053%	0.026%
35	0.066%	0.049%
40	0.092%	0.070%
45	0.122%	0.114%
50	0.203%	0.184%
55	0.339%	0.294%
60	0.445%	0.419%
65	0.215%	0.105%
<b>ECO, ESO, JUDGES, SENIOR MANAGEMENT</b>		
Age	Male	Female
20	0.000%	0.002%
25	0.000%	0.002%
30	0.016%	0.017%
35	0.022%	0.030%
40	0.033%	0.047%
45	0.072%	0.096%
50	0.121%	0.151%
55	0.210%	0.162%
60	0.313%	0.162%
65	0.156%	0.106%
<b>SPECIAL RISK, SPECIAL RISK ADMINISTRATIVE</b>		
Age	Male	Female
20	0.037%	0.036%
25	0.037%	0.036%
30	0.043%	0.046%
35	0.055%	0.075%
40	0.087%	0.118%
45	0.140%	0.209%
50	0.292%	0.254%
55	0.244%	0.328%
60	0.206%	0.328%
65	0.206%	0.328%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

---

**Table A-5 (cont.)  
Non-Duty Disability Annual Rates**

TRS and SCOERS		
Age	Male	Female
20	0.149%	0.089%
25	0.149%	0.089%
30	0.190%	0.154%
35	0.264%	0.262%
40	0.396%	0.382%
45	0.616%	0.580%
50	1.044%	0.914%
55	1.918%	1.532%
60	2.724%	1.876%
65	3.436%	1.924%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

<b>Table A-6</b>				
<b>Pre-Retirement Mortality Annual Rates</b>				
<b>REGULAR, ECO, ESO, JUDGES, SENIOR MANAGEMENT</b>				
	Male		Female	
Age	Duty Death	Non-Duty Death	Duty Death	Non-Duty Death
20	0.01%	0.03%	0.00%	0.02%
25	0.01%	0.03%	0.00%	0.02%
30	0.01%	0.03%	0.00%	0.02%
35	0.02%	0.06%	0.01%	0.04%
40	0.03%	0.08%	0.01%	0.06%
45	0.02%	0.13%	0.01%	0.10%
50	0.03%	0.18%	0.02%	0.14%
55	0.04%	0.21%	0.02%	0.18%
60	0.06%	0.33%	0.03%	0.28%
65	0.09%	0.52%	0.05%	0.42%
70	0.12%	0.68%	0.06%	0.55%
75	0.18%	1.04%	0.09%	0.81%
80	0.31%	1.77%	0.15%	1.33%
<b>SPECIAL RISK, SPECIAL RISK ADMINISTRATIVE</b>				
	Male		Female	
Age	Duty Death	Non-Duty Death	Duty Death	Non-Duty Death
20	0.02%	0.01%	0.01%	0.01%
25	0.02%	0.02%	0.01%	0.01%
30	0.03%	0.02%	0.02%	0.01%
35	0.05%	0.03%	0.03%	0.02%
40	0.04%	0.06%	0.03%	0.04%
45	0.05%	0.11%	0.03%	0.08%
50	0.05%	0.16%	0.04%	0.13%
55	0.08%	0.23%	0.06%	0.17%
60	0.10%	0.29%	0.08%	0.24%
65	0.15%	0.46%	0.12%	0.35%
70	0.20%	0.60%	0.15%	0.46%
75	0.31%	0.92%	0.23%	0.68%
80	0.52%	1.57%	0.37%	1.11%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

<b>Table A-6 (cont.) Pre-Retirement Mortality Annual Rates</b>		
<b>TRS, SCOERS</b>		
Age	Male	Female
20	0.05%	0.02%
25	0.05%	0.03%
30	0.07%	0.04%
35	0.09%	0.05%
40	0.13%	0.08%
45	0.20%	0.11%
50	0.38%	0.17%
55	0.65%	0.25%
60	1.00%	0.39%
65	1.59%	0.69%
70	2.63%	1.16%
75	0.00%	0.00%
80	0.00%	0.00%
<b>IFAS</b>		
Age	Male	Female
20	0.03%	0.02%
25	0.04%	0.02%
30	0.04%	0.03%
35	0.08%	0.05%
40	0.11%	0.07%
45	0.15%	0.11%
50	0.21%	0.17%
55	0.30%	0.25%
60	0.49%	0.39%
65	0.76%	0.58%
70	0.99%	0.76%
75	0.00%	0.00%
80	0.00%	0.00%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

Table A-7 <sup>1)</sup>		
Post-Retirement Mortality Annual Rates		
REGULAR AND SPECIAL RISK		
Age	Male	Female
20	0.15%	0.01%
25	0.19%	0.02%
30	0.23%	0.03%
35	0.29%	0.05%
40	0.35%	0.09%
45	0.44%	0.14%
50	0.54%	0.23%
55	0.49%	0.33%
60	0.60%	0.54%
65	1.06%	0.87%
70	1.75%	1.46%
75	3.06%	2.46%
80	5.40%	4.13%
85	9.52%	7.11%
90	16.21%	12.09%
95	24.32%	18.64%
100	31.32%	22.76%
105	36.17%	28.09%
110	36.36%	34.94%
115	36.36%	38.33%
120	90.91%	95.83%
ECO, ESO, J, SM, and SRA		
Age	Male	Female
20	0.14%	0.01%
25	0.17%	0.01%
30	0.21%	0.02%
35	0.26%	0.03%
40	0.32%	0.05%
45	0.40%	0.09%
50	0.49%	0.14%
55	0.45%	0.20%
60	0.54%	0.32%
65	0.96%	0.52%
70	1.59%	0.86%
75	2.77%	1.46%
80	4.89%	2.44%
85	8.62%	4.21%
90	14.68%	7.15%
95	22.03%	11.03%
100	28.37%	13.46%
105	32.77%	16.62%
110	32.94%	20.67%
115	32.94%	22.68%
120	82.35%	56.70%

<sup>1)</sup> Rates are shown for 2000. Rates are projected to the valuation date using projection Scale AA.

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

---

<b>Table A-8 Disabled Termination (Mortality and Recovery)</b>		
<b>All Groups</b>		
<b>Age</b>	<b>Male</b>	<b>Female</b>
20	2.09%	2.18%
25	2.09%	2.18%
30	2.09%	1.96%
35	2.09%	1.77%
40	2.09%	1.73%
45	2.09%	1.86%
50	2.14%	2.13%
55	2.62%	2.44%
60	3.11%	2.74%
65	3.71%	3.26%
70	4.63%	3.62%
75	6.07%	4.33%
80	8.08%	6.57%
85	10.47%	9.93%
90	13.56%	14.81%
95	19.77%	22.24%
100	25.47%	33.37%
105	29.41%	50.05%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

**Table A-9  
Other Terminations of Employment Annual Rates**

<b>REGULAR – Male</b>										
Combined Years of Service	Attained Age									
	20	25	30	35	40	45	50	55	60	65
0	32.8%	27.2%	25.8%	25.8%	24.4%	24.4%	23.4%	27.4%	27.4%	27.4%
1	25.4%	18.5%	15.4%	14.3%	12.6%	12.5%	12.2%	12.2%	12.2%	12.2%
2	22.7%	17.2%	14.0%	12.8%	12.0%	11.6%	10.7%	10.7%	10.7%	10.7%
3	18.4%	14.6%	13.2%	12.6%	10.7%	10.3%	9.4%	9.3%	9.3%	9.3%
4	15.8%	12.7%	11.8%	10.9%	9.0%	8.8%	7.9%	7.8%	7.8%	7.8%
5	11.7%	9.7%	8.8%	8.5%	7.4%	6.8%	6.0%	6.8%	6.8%	6.8%
6	11.1%	8.5%	7.8%	7.5%	6.7%	6.5%	5.5%	5.4%	5.4%	5.4%
7	11.1%	8.4%	7.1%	6.8%	6.2%	6.0%	5.3%	5.2%	5.1%	5.1%
8	11.0%	7.7%	6.4%	6.2%	5.8%	5.1%	4.6%	4.4%	4.3%	4.3%
9	10.0%	6.3%	5.5%	5.3%	5.3%	5.1%	4.6%	4.3%	4.2%	4.2%
10 or more	9.8%	6.2%	4.7%	4.2%	3.0%	2.7%	3.0%	4.5%	5.3%	3.7%
<b>REGULAR – Female</b>										
Combined Years of Service	Attained Age									
	20	25	30	35	40	45	50	55	60	65
0	30.3%	26.6%	25.4%	25.4%	24.4%	24.4%	23.2%	23.2%	23.2%	23.2%
1	25.8%	19.8%	16.9%	15.9%	14.0%	13.9%	13.4%	13.4%	13.4%	13.4%
2	22.1%	17.1%	14.5%	13.5%	12.1%	11.9%	11.0%	11.0%	11.0%	11.0%
3	17.4%	13.0%	11.6%	11.2%	10.0%	9.8%	8.8%	8.7%	8.7%	8.7%
4	15.4%	12.9%	11.3%	10.9%	9.1%	8.8%	8.4%	8.3%	8.3%	8.3%
5	13.5%	10.7%	9.4%	9.0%	7.0%	6.7%	6.2%	6.1%	6.1%	6.1%
6	11.4%	9.7%	8.7%	8.0%	6.5%	6.5%	5.9%	5.8%	5.8%	5.8%
7	11.3%	9.2%	8.1%	7.8%	6.3%	6.1%	5.5%	5.4%	5.4%	5.4%
8	10.5%	7.8%	7.1%	6.8%	6.1%	5.8%	5.5%	5.4%	5.4%	5.4%
9	10.2%	7.1%	6.5%	6.2%	5.0%	4.7%	4.6%	4.5%	4.5%	4.5%
10 or more	11.6%	5.3%	5.4%	4.6%	3.3%	3.0%	3.0%	3.0%	3.0%	3.0%
<b>ECO – Male</b>										
Combined Years of Service	Attained Age									
	20	25	30	35	40	45	50	55	60	65
0	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%
1	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%
2	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
3	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
4	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
5	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
6	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
7	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
8	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.6%	13.4%	13.3%	11.5%
9	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.6%	4.4%	4.3%	2.5%
10 or more	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.6%	5.3%	5.2%	3.5%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

<b>Table A-9 (cont.)</b>											
<b>Other Terminations of Employment Annual Rates</b>											
<b>ECO – Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%
2	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
3	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
4	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%
5	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%
6	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
7	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
8	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	11.9%	11.7%	11.6%	10.2%	
9	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.1%	2.8%	2.7%	1.0%	
10 or more	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.1%	3.9%	3.8%	2.4%	
<b>ESO – Male</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%
1	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%
2	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
3	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
4	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
5	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
6	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%
7	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
8	20.2%	20.2%	20.2%	20.2%	20.2%	20.8%	20.0%	18.7%	18.4%	16.7%	
9	6.6%	6.6%	6.6%	6.6%	6.6%	7.2%	6.4%	5.2%	4.9%	3.1%	
10 or more	6.7%	6.7%	6.7%	6.7%	6.7%	7.1%	6.6%	5.7%	5.5%	4.2%	
<b>ESO – Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%
2	15.9%	15.9%	15.9%	15.9%	15.9%	15.9%	15.9%	15.9%	15.9%	15.9%	15.9%
3	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
4	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
8	17.8%	17.8%	17.8%	17.8%	17.8%	18.4%	17.6%	16.3%	16.0%	14.3%	
9	3.5%	3.5%	3.5%	3.5%	3.5%	4.1%	3.3%	2.1%	1.8%	0.0%	
10 or more	10.8%	10.8%	10.8%	10.8%	10.8%	11.4%	10.6%	9.4%	9.1%	7.3%	

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

**Table A-9 (cont.)  
Other Terminations of Employment Annual Rates**

<b>JUDGES - Male</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	
1	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	
2	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	
3	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	
4	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
5	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
6	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
7	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
8	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
9	1.3%	1.3%	1.3%	1.2%	1.2%	1.2%	1.1%	0.8%	0.7%	0.5%	
10 or more	2.0%	2.0%	2.0%	1.9%	1.9%	1.9%	1.7%	1.3%	1.1%	0.7%	
<b>JUDGES – Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
1	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
2	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
3	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
4	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	
5	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
6	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
7	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
8	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
9	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.4%	1.1%	1.0%	0.8%	
10 or more	2.9%	2.9%	2.9%	2.7%	2.7%	2.7%	2.4%	2.0%	1.8%	1.4%	
<b>SENIOR MANAGEMENT – Male</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	
1	27.9%	23.3%	20.7%	19.4%	18.9%	18.8%	18.8%	18.8%	18.8%	18.8%	
2	24.9%	21.4%	19.3%	18.0%	17.2%	16.9%	16.8%	16.8%	16.8%	16.8%	
3	19.5%	18.5%	17.7%	17.1%	16.7%	16.4%	16.2%	16.0%	16.0%	16.0%	
4	15.5%	14.9%	14.5%	13.6%	12.9%	12.6%	12.4%	12.3%	12.2%	12.2%	
5	10.9%	10.5%	10.0%	9.7%	9.3%	8.6%	8.2%	8.1%	8.0%	8.0%	
6	10.6%	10.3%	9.8%	9.3%	9.0%	8.7%	8.4%	8.3%	8.1%	8.1%	
7	10.5%	10.2%	9.7%	9.2%	8.8%	8.5%	8.3%	8.1%	8.0%	8.0%	
8	9.6%	9.5%	9.1%	8.8%	8.5%	8.3%	8.1%	8.0%	7.9%	7.8%	
9	6.6%	6.6%	6.3%	6.1%	5.9%	5.7%	5.6%	5.4%	5.3%	5.3%	
10 or more	4.8%	4.8%	4.1%	3.6%	3.2%	2.9%	3.0%	3.1%	3.5%	2.6%	

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

**Table A-9 (cont.)  
Other Terminations of Employment Annual Rates**

<b>SENIOR MANAGEMENT – Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%
1	25.8%	21.7%	19.6%	18.5%	18.1%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%
2	22.8%	20.0%	18.3%	17.3%	16.7%	16.5%	16.4%	16.4%	16.4%	16.4%	16.4%
3	19.0%	18.0%	17.3%	16.7%	16.2%	15.9%	15.7%	15.6%	15.6%	15.6%	15.6%
4	14.6%	14.0%	13.5%	13.0%	12.7%	12.4%	12.1%	12.0%	11.8%	11.8%	11.8%
5	12.1%	11.3%	10.5%	9.9%	9.4%	9.0%	8.7%	8.6%	8.5%	8.5%	8.5%
6	10.9%	10.6%	10.1%	9.7%	9.4%	9.1%	8.8%	8.7%	8.5%	8.5%	8.5%
7	10.3%	10.1%	9.6%	9.2%	8.8%	8.6%	8.4%	8.2%	8.1%	8.1%	8.1%
8	7.7%	7.6%	7.1%	6.8%	6.5%	6.2%	6.0%	5.9%	5.8%	5.7%	5.7%
9	7.4%	7.4%	6.9%	6.5%	6.1%	5.8%	5.5%	5.3%	5.1%	5.1%	5.1%
10 or more	4.8%	4.8%	3.9%	3.2%	2.7%	2.4%	2.1%	1.9%	1.9%	1.9%	1.9%

<b>SPECIAL RISK – Male</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	21.4%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%
1	10.3%	9.8%	9.5%	8.8%	8.0%	7.3%	6.5%	5.8%	5.3%	5.3%	5.3%
2	8.6%	8.1%	7.7%	7.4%	6.8%	6.0%	5.3%	4.7%	4.7%	4.7%	4.7%
3	8.4%	7.9%	7.5%	7.2%	6.7%	6.0%	5.3%	4.7%	4.7%	4.7%	4.7%
4	7.5%	7.0%	6.7%	6.5%	6.0%	5.5%	5.0%	4.6%	4.6%	4.6%	4.6%
5	5.3%	5.3%	5.3%	5.3%	4.8%	4.3%	3.8%	3.3%	3.3%	3.3%	3.3%
6	5.2%	5.2%	5.2%	5.1%	4.6%	4.1%	3.6%	3.2%	3.2%	3.2%	3.2%
7	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
8	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
9	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%
10 or more	2.3%	2.3%	2.1%	2.0%	1.9%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%

<b>SPECIAL RISK – Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%
1	15.5%	14.2%	13.2%	12.2%	11.2%	10.2%	9.2%	8.4%	8.4%	8.4%	8.4%
2	12.3%	11.6%	10.6%	9.6%	8.6%	7.6%	6.6%	5.8%	5.8%	5.8%	5.8%
3	10.3%	9.8%	9.3%	8.8%	8.3%	7.6%	6.6%	5.6%	5.6%	5.6%	5.6%
4	9.7%	9.2%	8.7%	8.4%	7.6%	7.0%	6.4%	5.4%	5.4%	5.4%	5.4%
5	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	5.3%	5.3%	5.3%	5.3%
6	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.1%	5.1%	5.1%	5.1%
7	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
8	4.2%	4.2%	4.2%	4.2%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%
9	4.2%	4.2%	4.2%	4.1%	4.1%	4.1%	4.0%	4.0%	4.0%	4.0%	4.0%
10 or more	1.9%	1.9%	1.7%	1.5%	2.5%	2.5%	1.6%	4.0%	4.0%	4.0%	4.0%

# ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

**Table A-9 (cont.)  
Other Terminations of Employment Annual Rates**

<b>SPECIAL RISK ADMINISTRATIVE – Male</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	14.6%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%
1	11.3%	10.8%	10.3%	9.9%	9.7%	9.5%	9.4%	9.4%	9.4%	9.4%	9.4%
2	10.4%	9.7%	9.3%	8.9%	8.7%	8.5%	8.4%	8.4%	8.4%	8.4%	8.4%
3	9.7%	9.1%	8.7%	8.3%	7.9%	7.8%	7.7%	7.6%	7.6%	7.6%	7.6%
4	8.8%	8.3%	8.0%	7.8%	7.6%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%
5	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
6	4.4%	4.4%	4.4%	4.2%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
7	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%
8	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%
9	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
10 or more	3.9%	3.9%	3.6%	3.4%	3.2%	3.3%	3.6%	7.5%	7.5%	7.5%	7.5%

<b>SPECIAL RISK ADMINISTRATIVE – Female</b>											
Combined Years of Service	Attained Age										
	20	25	30	35	40	45	50	55	60	65	
0	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%
1	19.4%	18.0%	17.1%	16.5%	16.1%	15.9%	15.7%	15.7%	15.7%	15.7%	15.7%
2	17.5%	16.9%	16.5%	16.2%	15.9%	15.8%	15.7%	15.7%	15.7%	15.7%	15.7%
3	20.3%	19.8%	19.3%	19.0%	18.7%	18.6%	18.4%	18.4%	18.4%	18.4%	18.4%
4	20.8%	20.2%	19.8%	19.4%	19.0%	18.8%	18.7%	18.7%	18.7%	18.7%	18.7%
5	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%
6	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%
7	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%
8	17.8%	17.8%	17.7%	17.7%	17.7%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%
9	17.8%	17.8%	17.8%	17.8%	17.7%	17.7%	17.6%	17.6%	17.6%	17.6%	17.6%
10 or more	18.4%	18.4%	18.1%	17.8%	17.6%	17.7%	18.0%	21.0%	21.0%	21.0%	21.0%

# APPENDIX B

## SUMMARY OF PLAN PROVISIONS



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# SUMMARY OF PLAN PROVISIONS

---

All actuarial calculations are based upon our understanding of Florida Statutes regarding the retirement provisions of the retirement systems. These provisions are briefly summarized below for reference purposes, along with corresponding references to the Statutes. This summary encompasses the major provisions; it does not attempt to cover all of the detailed provisions.

## **PART I: FLORIDA RETIREMENT SYSTEM (FRS)**

The benefit and contribution provisions of the FRS are set forth in Chapter 121 of the Florida Statutes. Provisions relating to other State-administered retirement systems are set forth in other sections of the Florida Statutes, under Chapters 112, 122, and 238.

### **EFFECTIVE DATE**

The effective date of the Florida Retirement System (FRS) was December 1, 1970. The FRS was created with closure and consolidation of the Teachers' Retirement System, the State and County Officers and Employees' Retirement System, and the Highway Patrol Pension Fund. In 1972, the Judicial Retirement System was also consolidated with the Florida Retirement System. The FRS was created to provide a defined benefit retirement, disability, and survivor program for participating public employees. Social Security coverage is also required for all members.

Beginning in 2002, the FRS became one system with two primary programs, the existing Defined Benefit Program and a defined contribution plan alternative to the defined benefit plan known as the Investment Plan (IP). The earliest that any member could participate in the IP was July 1, 2002.

As of July 1, 2007, the Institute for Food and Agricultural Sciences Supplemental Retirement Program was consolidated under the FRS as a closed group.

(Section 121.011(2))

### **MEMBERSHIP**

Membership is a condition of employment for all new state, county, or other participating agency employees filling regularly established positions and employed on or after December 1, 1970, or who elected to transfer from an existing System. Employees may be full-time or part-time and can be elected, appointed, or employed in state government, county government, a state university, or a community college. A city or special district may join the FRS at its option.



# SUMMARY OF PLAN PROVISIONS

---

Effective July 1, 1978, a member in an existing retirement system who is re-employed after termination of employment may remain in that system, provided his or her member contributions have not been withdrawn.

Members of the FRS Defined Benefit Program were provided an educational period about their plan choice options prior to a 90-day election period to elect between the Defined Benefit Program and the Investment Plan (IP). Members newly hired after the election period for their employee group are provided five months after their month of hire to file an election between the two primary programs. Members who do not make an election default into the Defined Benefit Program.

After the initial active or default election to participate in the Defined Benefit Program or the IP, the employee has one opportunity, at the employee's discretion before termination or retirement, to choose to move from the Defined Benefit Program to the IP or from the IP to the Defined Benefit Program.

(Sections 121.051, 121.4501)

## CLASSIFICATION

There are five separate classes of members: Regular Class, Special Risk Class, Special Risk Administrative Support Class, Elected Officers' Class, and Senior Management Service Class. In addition, the Deferred Retirement Option Program is available to defined benefit program members who meet the requirements for normal retirement under the Defined Benefit Program of the FRS.

**Regular Class members** are members not classified as members of the Special Risk Class, Special Risk Administrative Support Class, Elected Officers' Class, or Senior Management Service Class.

**Special Risk Class members** are members employed as law enforcement officers, emergency medical technicians, paramedics, firefighters, firefighter trainers, fire prevention inspectors, correctional officers, correctional probation officers, certain professional health care positions within the Department of Children and Family Services and the Department of Corrections, youth custody officers, or certain forensic positions within a law enforcement agency, or a medical examiner's office who meet the criteria set forth in the Florida Retirement System law and rules.

**Special Risk Administrative Support Class members** are former Special Risk members employed as law enforcement officers, firefighters, correctional officers, or emergency medical technicians who have been moved or been re-assigned to non-Special Risk administrative support positions within a Florida Retirement System Special Risk employing agency.



# SUMMARY OF PLAN PROVISIONS

---

***Elected Officers' Class members*** include the governor, lieutenant governor, cabinet officers, Supreme Court justices, district court of appeals judges, circuit judges, county court judges, state attorneys, public defenders, and elected county officers. Also included are city and special district officers if the employer chose to place their elected officials in this class. All such elected officers may withdraw from the Florida Retirement System, or elect membership in the Senior Management Service Class or, if state officers, in the Senior Management Service Optional Annuity Program.

***Senior Management Service Class members*** are members currently participating in the Florida Retirement System who hold positions in the Senior Management Service of the State of Florida; community college presidents; appointed school board superintendents; county and city managers; selected managerial staff of the Legislature; the Auditor General and managerial staff; the Executive Director of the Ethics Commission; the State University System Executive Service and university presidents; selected managerial staff of the State Board of Administration; judges of compensation claims; selected managerial staff with the Judicial Branch; Chief Deputy Court Administrator; capital collateral regional counsels and assistant capital collateral regional counsels; assistant state attorneys; assistant public defenders; assistant statewide prosecutors or assistant attorneys general; and nonelective managerial positions designated for SMSC membership by local government agencies. Members in this class have either chosen not to participate or are not eligible to participate in the elective Senior Management Service Optional Annuity Program for state senior managers or to withdraw from the FRS if employed by non-state employers. This class became effective February 1, 1987, and members of an existing retirement system and members of the Special Risk or Special Risk Administrative Support Classes who were employed prior to February 1, 1987 could elect to remain in such system or class.

***Deferred Retirement Option Program*** allows members of the Defined Benefit Program of the Florida Retirement System (FRS) in any of the above five classes to elect to retire and have their FRS benefits accumulate in the FRS Trust Fund, earning interest, while the member continues to work for an FRS employer. DROP membership is for a specific and limited period.

(Sections 121.021(12), 121.0515, 121.052, 121.055, 121.091 (13))

## CONTRIBUTIONS

From January 1, 1975, for the state and for school boards, and from October 1, 1975, for other agencies, through June 30, 2011, the total cost of the System was paid by the participating employers.



## SUMMARY OF PLAN PROVISIONS

Beginning July 1, 2011, all Defined Benefit and IP members, except those participating in DROP, are required to pay member contributions equal to 3% of compensation. TRS and SCOERS members already require employee contributions. Member contributions do not accrue interest except for TRS members.

(Section 121.071 (2))

The employer contribution rates for the July 1, 2011 – June 30, 2012 plan year are as follows:

	FRS Regular	Special Risk Regular	Administration	Judicial	Elected Officers Class Leg-Atty-Cab	County	Senior Management	DROP
<b>Defined Benefit Plan</b>								
- Normal Cost Rate	2.79%	8.95%	2.52%	9.27%	5.54%	7.27%	3.82%	3.31%
- UAL Rate	<u>0.56</u>	<u>3.18</u>	<u>1.08</u>	<u>0.82</u>	<u>1.22</u>	<u>1.00</u>	<u>0.40</u>	<u>0.00</u>
- Total DB Rate	3.35	12.13	3.60	10.09	6.76	8.27	4.22	3.31
<b>Investment Plan</b>								
- Employer Rate	6.25%	18.33	8.80	16.63%	10.81	13.61	8.21	n/a
- UAL Rate	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>n/a</u>
- Total IP Rate	6.25	18.33	8.80	16.63	10.81	13.61	8.21	n/a
<b>Blended Uniform Contribution Rates</b>								
- Normal Cost Rate	3.28%	10.21%	4.07%	9.78%	7.02%	9.27%	4.81%	3.31%
- UAL Rate	<u>0.49</u>	<u>2.75</u>	<u>0.83</u>	<u>0.77</u>	<u>0.88</u>	<u>0.73</u>	<u>0.32</u>	<u>0.00</u>
- Total Rate	3.77	12.96	4.90	10.55	7.90	10.00	5.13	3.31

The above rates exclude the 0.03% administrative charge for Investment Plan administration and education (except DROP), and the 1.11% for the financing of the health insurance subsidy described later in this part.

The separate Defined Benefit and Investment Plan rates above were modified by the 2011 Legislature to reflect the legislated blended rates which reflected the 3% required member contribution as well as other plan provision changes specified in 2011 Senate Bill 2100.

(Section 121.71)



# SUMMARY OF PLAN PROVISIONS

---

## FRS DEFINED BENEFIT PROGRAM

### NORMAL RETIREMENT BENEFIT

#### *Eligibility – Members initially enrolled before July 1, 2011 (Tier I)*

- Regular Class
  1. 30 years of creditable service at any age.
  2. Age 62 and 6 or more years of creditable service.(Section 121.021(29)(a)(1))
  
- Special Risk Class
  1. 25 years of special risk service at any age; or
  2. Age 55 and 6 or more years of special risk service; or
  3. Age 52 and 25 years of creditable service, including special risk service and up to a maximum of four years of active duty wartime military service credit.
  4. 30 years of any creditable service, at any age, or age 62 and 6 or more years of creditable service (same requirement as the Regular Class).(Section 121.021(29)(b)(1))
  
- Special Risk Administrative Support Class  
(with six or more years of Special Risk Class service, the same requirements as apply to the Special Risk Class, otherwise same as apply to the Regular Class)  
(Section 121.021(29)(b)(1))
  
- Elected Officers' Class  
(same requirements as apply to Regular Class)  
(Section 121.021(29)(a)(1))
  
- Senior Management Service Class  
(same requirements as apply to Regular Class)  
(Section 121.021(29)(a)(1))

# SUMMARY OF PLAN PROVISIONS

---

## ***Eligibility – Members initially enrolled on and after July 1, 2011 (Tier II)***

- Regular Class
  1. 33 years of creditable service at any age.
  2. Age 65 and 8 or more years of creditable service.(Section 121.021(29)(a)(2))
- Special Risk Class
  1. 30 years of special risk service at any age; or
  2. Age 60 and 8 or more years of special risk service; or
  3. 33 years of any creditable service, at any age, or age 65 and 8 or more years of creditable service (same requirement as the Regular Class).(Section 121.021(29)(b)(2))
- Special Risk Administrative Support Class  
(with eight or more years of Special Risk Class service, the same requirements as apply to the Special Risk Class, otherwise same as apply to the Regular Class)  
(Section 121.021(29)(b)(2))
- Elected Officers' Class  
(same requirements as apply to Regular Class)  
(Section 121.021(29)(a)(2))
- Senior Management Service Class  
(same requirements as apply to Regular Class)  
(Section 121.021(29)(a)(2))

## ***Normal Form***

Straight life benefit (Option 1), payable on the last day of each month, with a guarantee that benefits paid will at least equal member contributions.

(Section 121.091(1))

# SUMMARY OF PLAN PROVISIONS

---

## ***Optional Forms***

10-year certain and life benefit (Option 2), 100% joint and survivor benefit (Option 3), or 66-2/3% joint and survivor benefit (Option 4). If the joint annuitant is the member's non-disabled child, payment ceases upon attainment of the joint annuitant's 25th birthday under the 100% and 66- 2/3% joint and survivor benefit.

(Section 121.091(6))

## ***Dual Retirement***

In the event a member accumulates retirement benefits to commence at different normal retirement ages by virtue of having performed duties for an employer which would entitle him or her to benefits as both a Special Risk Class member and a member of another class, the amount of the benefits payable shall be computed separately with respect to each such age, and the sum of such computed amounts shall be paid. Note that this does not apply to a Special Risk Administrative Support Class member with at least 6 years of Special Risk Class Membership (8 years for members enrolled on or after July 1, 2011) when the Special Risk and Special Risk Administrative Support Classes are the only memberships held because such a member is treated as a Special Risk Class member.

(Section 121.091(2))

## ***Regular Benefit Amount***

The monthly FRS allowance is the product of:

1. Average monthly compensation
  - a. For members initially enrolled before July 1, 2011, is the highest five plan years of creditable service;
  - b. For members initially enrolled on or after July 1, 2011, is the highest eight plan years of creditable service;
2. Creditable service during the applicable period; and
3. The appropriate benefit percentage for periods of service.

(Sections 121.021(17), (24) and (25), 121.091(1))

## SUMMARY OF PLAN PROVISIONS

The appropriate benefit percentages are as follows:

- For Members initially enrolled before July 1, 2011, for Creditable Service as a Regular Class member Subsequent to November 30, 1970:

Retirement at:	Percentage
Age 62 with 6 years of creditable service, or 30 years of creditable service	1.60%
Age 63 with 6 years of creditable service, or 31 years of creditable service	1.63
Age 64 with 6 years of creditable service, or 32 years of creditable service	1.65
Age 65 with 6 years of creditable service, or 33 years of creditable service	1.68

- For Members initially enrolled on or after July 1, 2011, for Creditable Service as a Regular Class member Subsequent to November 30, 1970:

Retirement at:	Percentage
Age 65 with 8 years of creditable service, or 33 years of creditable service	1.60%
Age 66 with 8 years of creditable service, or 34 years of creditable service	1.63
Age 67 with 8 years of creditable service, or 35 years of creditable service	1.65
Age 68 with 8 years of creditable service, or 36 years of creditable service	1.68

(Section 121.091(1))

## SUMMARY OF PLAN PROVISIONS

---

Service as a Special Risk Class member:

Retirement on or After July 1, 2001 with Service Performed During:	Percentage
December 1, 1970 to September 30, 1974	2.00%
October 1, 1974 and thereafter	3.00

(Section 121.091(1))

- For Members initially enrolled before July 1, 2011, for Creditable Service as a Special Risk Administrative Support Class member Subsequent to November 30, 1970:

Retirement at:	Percentage
Age 55 with 6 years of creditable service, or age 52 with 25 years of creditable service, which may include up to four years of active duty wartime military service, or 25 years of creditable service	1.60%
Age 56 with 6 years of creditable service, or age 53 with 26 years of creditable service, which may include up to four years of active duty wartime military service, or 26 years of creditable service	1.63
Age 57 with 6 years of creditable service, or age 54 with 27 years of creditable service, which may include up to four years of active duty wartime military service, or 27 years of creditable service	1.65
Age 58 with 6 years of creditable service, or age 55 with 28 years of creditable service, which may include up to four years of active duty wartime military service, or 28 years of creditable service	1.68

## SUMMARY OF PLAN PROVISIONS

---

- For Members initially enrolled on or after July 1, 2011, for Creditable Service as a Special Risk Administrative Support Class member Subsequent to November 30, 1970:

Retirement at:	Percentage
Age 60 with 8 years of creditable service, or age 57 with 30 years of creditable service, which may include up to four years of active duty wartime military service, or 30 years of creditable service	1.60%
Age 61 with 8 years of creditable service, or age 58 with 31 years of creditable service, which may include up to four years of active duty wartime military service, or 31 years of creditable service	1.63
Age 62 with 8 years of creditable service, or age 59 with 32 years of creditable service, which may include up to four years of active duty wartime military service, or 32 years of creditable service	1.65
Age 63 with 8 years of creditable service, or age 60 with 33 years of creditable service, which may include up to four years of active duty wartime military service, or 33 years of creditable service	1.68

(Section 121.091(1))

- For Service as an Elected Officers' Class member: 3% for each year of creditable service in such class, except 3-1/3% for service in the judicial class. Military service credit is at the rate for Regular Class members.

(Sections 121.052(5)(a) and (d), 121.091(1))

- For Service as a Senior Management Service Class member: 2% for each year of creditable service in such class, after January 31, 1987.

(Section 121.055(4)(d))

# SUMMARY OF PLAN PROVISIONS

---

## ADDITIONAL BENEFIT AMOUNT

In addition, members may receive an additional retirement allowance under the pre-1971 existing systems. The benefit is a percentage of average compensation times the creditable service in that system up to November 30, 1970. The system percentages are:

***State and County Officers and Employees' Retirement System:***

2.00% for creditable service rendered under Division A prior to Social Security coverage; and 1.50% for creditable service rendered under Division B subsequent to Social Security coverage.

***Teachers Retirement System:***

Plan E: 2.00%

(Sections 121.091(1)(c), 122.28, 238.07(7)(a))

## MINIMUM BENEFIT

***Eligibility***

The month following attainment of age 65 by a pensioner, or, in the case of a beneficiary receiving the survivor's portion of a member's benefit, the 65th anniversary of the deceased member's birth. The member must have earned at least 10 years of creditable service and retired under normal retirement.

***Benefit Amount***

An eligible benefit recipient will receive a benefit adjustment to bring the benefit to the calculated minimum benefit. Effective July 1, 2011, the minimum monthly benefit is \$26.24 multiplied by years of creditable service prior to application of the reduction factor for electing an optional form of payment. For retirements on or after July 1, 1987, creditable service for the minimum benefit calculation does not include any service earned on or after that date.

(Section 112.362)



# SUMMARY OF PLAN PROVISIONS

---

## HEALTH INSURANCE SUBSIDY

A subsidy of \$5 per month per year of creditable service, with a minimum of \$30, and a maximum of \$150 per month, shall be paid to retirees and surviving beneficiaries to subsidize health insurance premiums. This benefit is not indexed with the cost of living.

Further, the benefit is funded separately, on a pay-as-you-go basis, and is not part of this actuarial valuation.

(Section 112.363)

## EARLY RETIREMENT

### *Eligibility*

For members initially enrolled before July 1, 2011, six years of creditable service for all classes of membership.

For members initially enrolled on or after July 1, 2011, eight years of creditable service for all classes of membership.

(Section 121.021(30))

### *Benefit Amount*

The normal retirement benefit accrued to the date of early retirement, reduced by 5/12% for each month that the early retirement date precedes the normal retirement date based upon age. The normal retirement date is as follows:

1. Special Risk Class members:
  - a. Initially enrolled before July 1, 2011: Age 55
  - b. Initially enrolled on or after July 1, 2011: Age 60
2. Members in all other Classes
  - a. Initially enrolled before July 1, 2011: Age 62
  - b. Initially enrolled on or after July 1, 2011: Age 65

(Sections 121.021(30), 121.091(3))

# SUMMARY OF PLAN PROVISIONS

---

## NON-DUTY DISABILITY RETIREMENT

### ***Eligibility***

Members are eligible if totally and permanently disabled:

After completing at least 8 years of creditable service (or after 6 years if disability retirement is ordered for a judge by the Supreme Court).

### ***Benefit Amount***

Same as for normal retirement, but based on average monthly compensation and creditable service to the date of disability retirement.

### ***Minimum Benefit Amount***

25% of average monthly compensation.

If the Supreme Court orders disability retirement for a judge, the minimum is two-thirds of compensation at disability. This benefit for a defined benefit plan member is not paid from the FRS Trust Fund. This benefit for an Investment Plan member is paid from the FRS Trust Fund after the member's IP account balance is transferred to the FRS Trust Fund.

(Section 121.091(4))

## LINE-OF-DUTY DISABILITY

### ***Eligibility***

Members are eligible if totally and permanently disabled during the actual performance of duty. There is no service credit requirement.

### ***Benefit Amount***

Same as for normal retirement, but based on average monthly compensation and creditable service to the date of disability retirement.



# SUMMARY OF PLAN PROVISIONS

---

## ***Minimum Benefit Amount***

42% of average monthly compensation, except for the Special Risk and the Special Risk Administrative Support classes whose members are entitled to 65% of average monthly compensation.

If the Supreme Court orders disability retirement for a judge, the minimum is two-thirds of compensation at disability. This benefit for a defined benefit plan member is not paid from the FRS Trust Fund.

(Section 121.091(4))

## **POST-RETIREMENT DEATH BENEFITS**

Based on the optional form elected.

## **NON-DUTY PRE-RETIREMENT DEATH BENEFITS**

### ***Eligibility***

Employment is terminated by death after vested for all classes of membership.

### ***Benefit Amount***

The normal or early retirement benefit amount for which the member would have been eligible had the member retired on his or her date of death and elected the 100% joint and survivor form of payment in favor of his or her beneficiary who is the surviving spouse or other eligible dependent. The monthly benefit is normally payable to the member's beneficiary for the beneficiary's lifetime. If the beneficiary is the member's non-disabled child, payment ceases upon attainment of the beneficiary's 25th birthday.

For members initially enrolled before July 1, 2011 who were within 10 years of normal retirement eligibility, the reduction for early retirement is applied from the earlier of age 62 (age 55 for Special Risk Class and Special Risk Administrative Support Class members) or the date on which the member would have completed 30 years of creditable service, had he or she continued employment.

For members initially enrolled on or after July 1, 2011 who were within 10 years of normal retirement eligibility, the reduction for early retirement is applied from the earlier of age 65 (age 60 for Special Risk Class and Special Risk



## SUMMARY OF PLAN PROVISIONS

---

Administrative Support Class members) or the date on which the member would have completed 33 years of creditable service, had he or she continued employment. The value of this benefit may not be less than the member's accumulated contributions, if any.

(Sections 121.091(3) and (7))

### LINE-OF-DUTY PRE-RETIREMENT DEATH BENEFITS

#### ***Eligibility***

Member died during the actual performance of duty. There is no service credit requirement.

#### ***Benefit Amount***

The surviving spouse will receive one-half of the member's monthly compensation at death. If the spouse dies, or if there is no surviving spouse, the monthly benefits continue until the youngest child is 18.

A surviving spouse may elect to receive a non-duty death benefit in lieu of the duty death benefit.

(Section 121.091(7))

### VESTING

#### ***Eligibility***

For members initially enrolled before July 1, 2011, six years of creditable service for all classes of membership. For members initially enrolled on or after July 1, 2011, eight years of creditable service for all membership classes.

#### ***Benefit Amount***

The normal or early retirement benefit amount based on average monthly compensation and creditable service to the date of termination.

(Sections 121.021(45), 121.091(5))

### DROP – DEFERRED RETIREMENT OPTION PROGRAM

#### ***Eligibility***



## SUMMARY OF PLAN PROVISIONS

---

Vested FRS members are eligible for DROP participation upon attaining eligibility for normal retirement. Deferral of DROP participation for all but K-12 Instructional Personnel is allowed if the eligible participant has completed 30 years of service (or 25 years for Special Risk Class members) and has not reached age 57 (or age 52 for Special Risk Class members). In this case the participant can defer participation in DROP until he reaches age 57 (or age 52 for Special Risk Class members). Instructional Personnel in grades K-12 may defer DROP participation to any age. Participants who reached normal retirement before July 1, 1998 were eligible to participate in DROP for up to 60 months (36 months for Special Risk Class members) beginning July 1, 1998.

Effective July 1, 1998, eligible members can retire without terminating their employment during DROP participation. Monthly retirement benefits will be invested in the FRS Trust Fund, earning tax-deferred interest while the member continues to work for a maximum of 60 months. Upon completion of the maximum five-year period, DROP participation ends and participants must terminate employment with all FRS employers. At that time, the participant will receive payment of the accumulated DROP benefits, and begin receiving his FRS monthly retirement benefit (in the same amount as determined at retirement, plus annual cost-of-living increases).

Effective July 1, 2003, participants employed in eligible instructional positions with a district school board, the Florida School for the Deaf and Blind, or a developmental research school can extend their participation beyond their initial 60-month period, for up to an additional 36 months. The employer must approve the request for DROP extension as well as the period of extension granted to an eligible DROP participant, if any, within the 36-month limit.

### ***Disabled While in DROP***

Participants that became disabled while participating in DROP will continue to accumulate the same monthly benefit in the FRS Trust Fund until termination. Since the normal retirement benefit commenced upon DROP participation, a disability benefit will not be issued.

### ***Death While in DROP***

The designated beneficiary of a participant who dies while participating in DROP will receive all accumulated DROP benefits, and a continuing monthly benefit, if the participant had elected Option 2, 3, or 4. Survivors of DROP participants are not eligible for FRS line-of-duty death benefits.

(Section 121.091 (13))

# SUMMARY OF PLAN PROVISIONS

---

## RETURN OF EMPLOYEE CONTRIBUTIONS

A member who terminates employment but is not eligible to retire, to receive a vested retirement allowance, or to receive a disability pension, or the beneficiary of a member who passed away before satisfying the requirement for a pre-retirement death benefit, will be entitled to a refund of any employee contributions made by the member. No interest is credited on employee contribution accounts.

A vested terminated participant may elect to receive a return of employee contributions in lieu of a retirement benefit.

(Sections 121.071(2)(b), 121.091(7)(a), Sections 121.091(5)(a) and (c))

## COST-OF-LIVING ADJUSTMENT

Senate Bill 2100 (2011) eliminated post-retirement benefit increases on benefits earned on and after July 1, 2011. Benefits earned before July 1, 2011 (except for the health insurance subsidy) will receive post-retirement benefit increases of 3% per year. Tier II members (those initially enrolled on and after July 1, 2011) will receive no post-retirement benefit increases. Tier I members (those initially enrolled before July 1, 2011) will receive post-retirement benefit increases equal to 3% per year multiplied by a fraction, the numerator of which is service through June 30, 2011 and the denominator of which is total service at retirement. Cost-of-Living Adjustments take effect annually on July 1. A pro-rated rate may apply in the initial year of applicability.

(Section 121.101)

## INVESTMENT PLAN

The Investment Plan (IP) is a defined contribution plan offered to eligible members as an alternative to the FRS Defined Benefit Program. The plan is authorized under sec. 401(a) of the Internal Revenue Code.

### Benefits

Under the IP, benefits accrue in individual member accounts funded by employer and, employee contributions made on or after July 1, 2011, and earnings thereon. Benefits are provided through employee-directed investments offered by approved investment providers. Vested benefits are payable upon termination or death as a lump-sum distribution, direct rollover distribution, or periodic distribution. In addition



## SUMMARY OF PLAN PROVISIONS

---

to normal benefits and death benefits, the plan also provides disability coverage as described below.

(Sections 121.4501, 121.591)

### CONTRIBUTIONS

The employer contributions deposited in each participant's IP account are based upon allocation rates established by law for each membership class. This statutorily prescribed percentage of the participant's gross compensation for the reporting month is deducted from the total amount paid by the employer on behalf of all members in the same class of membership based on the uniform contribution rate established by law. Current IP allocation rates are set forth in the following charts. The allocation rates shown in the first chart below do not include the 0.03% charge for IP administration and education, the separate employer contribution assessed to fund the IP disability program, or the contribution of 1.11% for the financing of the health insurance subsidy described later in this part.

(Sections 121.71, 121.72)

The employer allocations to the IP accounts are based on contribution rates as follows:

Classification	2011-2012 Plan Year Rates
Regular	6.00%
Special Risk	17.00
Special Risk Administrative Support	8.35
Elected Officers	
- Judicial	15.90
- State	10.40
- County	13.20
Senior Management Service	7.95

## SUMMARY OF PLAN PROVISIONS

---

The employer contribution rates to fund the disability benefit under the IP are as follows:

Classification	2011-2012 Plan Year Rates
Regular	0.25%
Special Risk	1.33
Special Risk Administrative Support	0.45
Elected Officers	
- Judicial	0.73
- State	0.41
- County	0.41
Senior Management Service	0.26

### HEALTH INSURANCE SUBSIDY

In addition to retirement or death benefits, eligible IP retirees or surviving spouses may receive a subsidy of \$5 per month per year of creditable service, with a minimum of \$30, and a maximum of \$150 per month, to subsidize the cost of health insurance premiums. This benefit is established by law and is not indexed (adjusted for changes in the cost of living). To qualify for this benefit, IP members must terminate employment, retire (take a distribution as a direct payment or rollover) and meet the normal retirement requirements applicable to Defined Benefit Program members as defined under s. 121.021(29).

This benefit is separately funded, on a pay-as-you-go basis, and is not part of this actuarial valuation.

(Section 112.363)

### NON-DUTY DISABILITY RETIREMENT

#### ***Eligibility***

Investment Plan participants who have completed at least eight years of creditable service (or six years of creditable service if disability retirement is ordered for a judge by the Supreme Court) are eligible for regular disability



## SUMMARY OF PLAN PROVISIONS

---

benefits if they become totally and permanently disabled due to injury or illness suffered while actively employed in an FRS-covered position. Upon approval for disability retirement, the IP participant may choose either to retain his/her IP account balance or to surrender his/her account balance to the Defined Benefit Program and receive guaranteed lifetime monthly disability benefits, assuming the member remains disabled.

### ***Benefit Amount***

If the disabled IP participant chooses to retain his/her account balance, he/she may elect to receive the normal benefit payable under the IP. If he/she elects to surrender the account balance and receive lifetime monthly disability benefits, the amount of each monthly payment is calculated in the same manner as provided for regular disability retirement under the Defined Benefit Program and is subject to the same threshold benefit amounts.

(Sections 121.091(4), 121.591(1) and (2))

## LINE-OF-DUTY-DISABILITY

### ***Eligibility***

IP participants are eligible for in-line-of-duty disability benefits if they become totally and permanently disabled due to injury or illness suffered during the actual performance of duty while actively employed in an FRS-covered position. There is no service credit requirement for in-line-of-duty disability benefits. Upon approval for disability retirement, the IP member may choose either to retain his/her IP account balance or to surrender his/her account balance to the Defined Benefit Program and receive guaranteed lifetime monthly disability benefits, assuming the member remains disabled.

### ***Benefit Amount***

If the disabled IP participant elects to retain his/her account balance, he/she may elect to receive the normal benefit payable under the IP. If he/she elects to surrender the account balance and receive lifetime monthly disability benefits, the amount of each monthly payment is calculated in the same manner as provided for line-of-duty disability retirement under the Defined Benefit Program, and is subject to the same threshold benefit amounts.

(Sections 121.091(4), 121.591(1) and (2))

# SUMMARY OF PLAN PROVISIONS

---

## **PART II: TEACHERS' RETIREMENT SYSTEM (TRS)**

The benefit and contribution provisions of the Statutes for this closed system are set forth in Chapter 238 of the Florida Statutes. Certain provisions are from other sections of the Florida Statutes.

### **EFFECTIVE DATE**

The effective date of the Retirement System was July 1, 1939.

(Section 238.02)

### **MEMBERSHIP**

All employees who were teachers in public schools, employees of professional non-profit teachers associations, county superintendents, Department of Education employees and the staff of the Teachers' Retirement System, and who were employed prior to December 1, 1970, are members of the Teachers' Retirement System.

Any member who was hired prior to July 1, 1955, and who did not later elect to join Plan E, retains membership in one of Plans A through D.

Any member who was hired on or after July 1, 1955 and prior to December 1, 1970, or who was hired prior to July 1, 1955 and so elected, is a member of Plan E.

(Sections 238.01(4), 238.05, 238.07(3))

### **MEMBER CONTRIBUTIONS**

All members of Plan E make contributions of 6% of earnable compensation. All members of Plans A through D will make contributions, to be determined by the actuary, to provide the annuities called for by the Statutes. All members contribute 0.25% of earnable compensation for survivor benefits.

(Section 238.09)

# SUMMARY OF PLAN PROVISIONS

---

## EMPLOYER CONTRIBUTIONS

The employer will contribute the amount that, when combined with member contributions, will pay the total cost of the benefits payable. This amount, for Plan E, 11.35%; an additional 1.11% is contributed for the financing of the health insurance subsidy described later in this part.

(Section 238.09)

## NORMAL RETIREMENT BENEFIT

### *Eligibility*

Plan A: Age 60 and 10 years of creditable service, or 30 years of creditable service at any age.

Plan B: Age 55 and 10 years of creditable service, or 30 years of creditable service at any age.

Plan C: Age 55 and 10 years of creditable service, or 30 years of creditable service at any age.

Plan D: Age 50 and 25 years of creditable service, or 30 years of creditable service at any age.

Plan E:

Members prior to July 1, 1963: Age 60 and 10 years of creditable service, or 30 years of creditable service at any age.

Members on or after July 1, 1963: Age 62 and 10 years of creditable service, or 30 years of creditable service at any age.

(Sections 238.07(2) and (9))

### *Normal Form*

Straight life benefit (Option 1), which will be the total of the pension paid by employer contributions plus an annuity based on the member's accumulated contributions.

(Sections 238.07(4), (5), (6) and (7))

## SUMMARY OF PLAN PROVISIONS

---

### **Optional Forms**

Modified cash refund annuity (Option 2).

100% joint & survivor (Option 3).

50% joint and survivor (Option 4).

(Section 238.08)

### **Regular Benefit Amount**

The monthly allowance is:

Plans A & B:

The product of 1/140 of the member's average final compensation and years of membership service; plus

1/70 of average final compensation multiplied by the years of certified prior service; plus

an annuity based on the actuarial equivalent of the member's accumulated contributions.

(Section 238.07(4))

Plan C:

The product of 1/120 of the member's average final compensation and years of membership service; plus

1/60 of average final compensation multiplied by the years of certified prior service; plus

an annuity based on the actuarial equivalent of the member's accumulated contributions.

(Section 238.07(5))

## SUMMARY OF PLAN PROVISIONS

---

### Plan D:

The product of 1/100 of the member's average final compensation and years of membership service; plus

1/50 of average final compensation multiplied by the years of certified prior service; plus

an annuity based on the actuarial equivalent of the member's accumulated contributions.

(Section 238.07(6))

### Plan E:

2% of the member's average final compensation multiplied by years of creditable service.

(Section 238.07(7)(a))

Average Final Compensation

The larger of the highest ten-year average compensation in the 15 years preceding retirement, or the career average salary.

(Section 238.01(14))

## MINIMUM BENEFIT

If a member retires after 30 years of creditable service, he or she shall receive at least \$100 per month. If a member retires under Plans A, B, or C with 10 or more years of service, but less than 30, he or she shall receive an annual retirement allowance equal to 1/60 of \$2,400 multiplied by years of creditable service (but not more than \$100 per month).

(Section 238.07(8))

## ADDITIONAL MINIMUM BENEFIT

### ***Eligibility***

Attainment of age 65 by a pensioner, or, in the case of a beneficiary receiving the pension, the 65th anniversary of the deceased member's birth. The member must have earned at least 10 years of creditable service.



# SUMMARY OF PLAN PROVISIONS

---

## ***Benefit Amount***

Effective July 1, 2010, the minimum monthly benefit is \$25.48 times years of creditable service prior to application of the reduction factor for electing an optional form of payment. For retirements on or after July 1, 1987, creditable service for the minimum benefit calculation does not include any service earned on or after that date.

(Section 112.362)

## **EARLY RETIREMENT BENEFIT**

### ***Eligibility***

Only members of Plan E are eligible for early retirement. The requirement is age 55 and 10 years of creditable service.

(Section 238.07(2)(e)2)

### ***Benefit Amount***

The actuarial equivalent of the retirement benefit accrued at the early retirement date.

(Section 238.07(7)(b))

## **DISABILITY RETIREMENT**

If a member has 10 or more years of creditable service and is certified mentally or physically incapacitated for the performance of duty, and that the disability is permanent, he or she may retire on a disability retirement.

The member shall receive an allowance, as follows:

Plans A, B, C and D: A total retirement allowance equal to the larger of:

1. A factor times average final compensation times years of creditable service;
2. 25% times average final compensation;
3. \$75 per month; and
4. \$40 per year times years of creditable service.



## SUMMARY OF PLAN PROVISIONS

---

However, the disability benefit shall not exceed a factor times average compensation times the possible years of creditable service to the normal retirement date.

The factor is 1/70 for Plans A and B, 1/60 for Plan C, and 1/50 for Plan D.

(Section 238.07(11))

Plan E: The larger of:

1. The accrued benefit based on average final compensation and creditable service at disability; and
2. 25% times average final compensation.

The disability benefit shall not exceed the retirement allowance payable if service had continued to the first date the member would have been eligible for service retirement at the same rate of compensation.

(Section 238.07(11))

### HEALTH INSURANCE SUBSIDY

A monthly subsidy of \$5 per month per year of creditable service, with a minimum of \$30, and a maximum of \$150 per month, shall be paid to retirees and surviving beneficiaries to subsidize health insurance premiums. This benefit is not indexed with the cost of living.

Further, this benefit is funded separately, on a pay-as-you-go basis, and is not part of this actuarial valuation.

(Section 112.363)

### POST-RETIREMENT DEATH BENEFITS

Based on the optional form elected, plus a \$500 lump sum.

(Sections 238.07(16)(b)(7), 238.08(8))

# SUMMARY OF PLAN PROVISIONS

## PRE-RETIREMENT DEATH BENEFITS

### *Payable to Beneficiaries*

Minimum Period of Paid Service of Member in Florida as Regular Full-Time Teacher	Beneficiaries of Deceased Member	Benefits
1. One calendar day	Widow or widower who has care of dependent child or children of the deceased member.	\$190 per month for one child; \$250 per month if more than one child; maximum benefit \$250 per month.
2. One calendar day	One or more dependent children if there is no surviving widow or widower.	\$190 per month per child; maximum benefit \$250 per month if more than one child.
3. One calendar day	Dependent parents 65 years of age or older.	For each parent, \$100 per month for life.
4. One calendar day	Designated beneficiary and, if no designated beneficiary, then the executor or administrator of deceased member.	\$500 lump-sum death benefit payable only once.
5. One calendar day	Dependent widow or widower 50 years of age and less than 65 years of age.	\$150 per month for life.
6. Ten Years	Widow or widower 65 years of age or older.	\$175 per month for life.

If the member dies before completing three years of service, the above benefits are reduced for any Social Security benefits payable.

## SUMMARY OF PLAN PROVISIONS

---

The benefits above are payable only if death occurs while in service, or during the following periods after service is terminated:

Years of Service	Period After Florida Service in Which Death Occurs
3 – 5	2 years
6 – 9	5 years
10 or more	10 years

The above restrictions do not apply if the member is receiving disability payments at time of death.

(Section 238.07(16))

### ***Payable to the Surviving Spouse***

Before 10 years of service: Return of member contributions with interest.

After 10 years of service: Instead of the death benefit described above, the surviving spouse may elect to receive the return of member contributions with interest or a 100% joint & survivor annuity, calculated assuming the member retired on the date of death.

(Section 238.08(5)(a))

## VESTING

### ***Eligibility***

After 10 years of creditable service if the member leaves employee contributions in the System.

### ***Benefit Amount***

The normal retirement benefit based on average final compensation and creditable service to the retirement date.

(Sections 238.07(9), 238.07(14))



# SUMMARY OF PLAN PROVISIONS

---

## DROP – DEFERRED RETIREMENT OPTION PROGRAM

### ***Eligibility***

Vested TRS members are eligible for DROP participation upon attaining eligibility for normal retirement. Deferral of DROP participation for all but K-12 Instructional Personnel is allowed if the eligible participant has completed 30 years of service and has not reached age 57. In this case the participant can defer participation in DROP until he reaches age 57. Instructional Personnel in grades K-12 may defer DROP participation to any age. Participants who reached normal retirement before July 1, 1998, were eligible to participate in DROP for up to 60 months beginning July 1, 1998.

Effective July 1, 1998, eligible members can retire without terminating their employment during DROP participation. Monthly retirement benefits will be invested in the FRS Trust Fund, earning tax-deferred interest while the member continues to work for a maximum of 60 months. Upon completion of the maximum five-year period, DROP participation ends and participants must terminate employment with all FRS employers. At that time, the participant will receive payment of the accumulated DROP benefits, and begin receiving his TRS monthly retirement benefit (in the same amount as determined at retirement, plus annual cost-of-living increases).

Effective July 1, 2003, participants employed in eligible instructional positions with a district school board, the Florida School for the Deaf and Blind, or a developmental research school can extend their participation beyond their initial 60-month period, for up to an additional 36 months. The employer must approve the request for DROP extension as well as the period of extension granted to an eligible DROP participant, if any, within the 36-month limit.

### ***Disabled While in DROP***

Participants that became disabled while participating in DROP will continue to accumulate the same monthly benefit in the FRS Trust Fund until termination. Since the normal retirement benefit commenced upon DROP participation, a disability benefit will not be issued.

# SUMMARY OF PLAN PROVISIONS

---

## ***Death While in DROP***

The designated beneficiary of a participant who dies while participating in DROP will receive all accumulated DROP benefits, and a continuing monthly benefit, if the participant had elected Option 2, 3, or 4. Survivors of DROP participants are not eligible for TRS line-of-duty death benefits.

(Section 121.091 (13))

## **RETURN OF EMPLOYEE CONTRIBUTIONS**

A member who terminates employment but is not eligible to retire will be entitled to a refund of any employee contributions made, with interest.

(Sections 238.07(13), 238.10)

## **COST-OF-LIVING ADJUSTMENTS**

Retirees and beneficiaries of deceased retirees are eligible to receive cost-of-living adjustments identical to those for Florida Retirement System members.

(Section 121.101)

# SUMMARY OF PLAN PROVISIONS

---

## **PART III: STATE AND COUNTY OFFICERS AND EMPLOYEES' RETIREMENT SYSTEM (SCOERS)**

The benefit and contribution provisions of the Statutes are set forth in Chapter 122 of the Florida Statutes. Certain provisions are drawn from other sections of the Florida Statutes. This is a closed system that no longer includes any members in the high hazard or legislative categories.

### **EFFECTIVE DATE**

The effective date of the Retirement System was July 1, 1955.

(Section 122.01(2))

### **MEMBERSHIP**

All full-time employees of the state and its counties not covered by another system who were employed prior to December 1, 1970.

Those members who were hired prior to January 1, 1958 and did not elect to join Division B are in Division A. These members do not contribute to the Social Security system.

Those members who elected to join Division B and those members hired after December 31, 1957 and prior to December 1, 1970 are in Division B. These members contribute to the Social Security system.

(Sections 122.01, 122.24)

### **MEMBER CONTRIBUTIONS**

All members of Division A contribute 6% of salary.

All members of Division B contribute 4% of salary.

(Sections 122.03, 122.27)

### **EMPLOYER CONTRIBUTIONS**

Employer contributions are:

Division A	11.10%
Division B	9.10%



# SUMMARY OF PLAN PROVISIONS

---

To these rates 1.11% is added for the financing of the health insurance subsidy described later in this part.

(Section 122.35)

## **NORMAL RETIREMENT BENEFIT**

### ***Eligibility***

Members prior to July 1, 1963:	Age 60 and 10 years of service, or 30 years of creditable service.
Members after July 1, 1963:	Age 62 and 10 years of service, or 30 years of creditable service.
Members under former Chapters 121 and 134:	30 years of service.

(Sections 122.08(1), 122.08(8), 122.28)

### ***Normal Form***

Straight life benefit (Option 1).

(Section 122.08)

### ***Optional Forms***

Modified cash refund annuity (Option 2).  
50% joint & survivor (Option 3).  
100% joint & survivor (Option 4).

(Section 122.08)

### ***Regular Benefit Amount***

Division A: The monthly allowance is 2% of average final compensation for each year of service rendered.



## SUMMARY OF PLAN PROVISIONS

---

Division B: 2% of average final compensation for each year of service rendered prior to the effective date of Social Security coverage, plus 1.5% of average final compensation for each year of service rendered after the effective date of Social Security coverage.

(Sections 122.08(1), 122.28(1))

### ***Average Final Compensation***

The larger of the highest ten-year average compensation in the fifteen years preceding retirement, or the career average salary.

(Section 122.02(2))

## **MAXIMUM BENEFIT**

Division A: No maximum.

Division B: For those who became members after June 30, 1963, monthly allowance plus Social Security primary insurance amount cannot be greater than 80% of average final compensation. For those who became members before July 1, 1963, there is no maximum.

(Sections 122.28(3), 122.08)

## **MINIMUM BENEFIT**

### ***Eligibility***

Attainment of age 65 by a pensioner, or, in the case of a beneficiary receiving the pension, the 65th anniversary of the deceased member's birth. The member must have earned at least ten years of creditable service and retired under normal retirement.

### ***Benefit Amount***

Effective July 1, 2010, the minimum monthly benefit is \$25.48 times years of creditable service prior to application of the reduction factor for electing an optional form of payment. For retirements on or after July 1, 1987, creditable service for the minimum benefit calculation does not include any service earned on or after that date.

(Section 112.362)

# SUMMARY OF PLAN PROVISIONS

---

## EARLY RETIREMENT BENEFIT

### ***Eligibility***

Age 55 and 10 years of service.

(Section 122.08(2)(a))

### ***Benefit Amount***

The actuarial equivalent of the retirement benefit accrued at the early retirement date.

(Section 122.08(2)(a))

## DISABILITY RETIREMENT

### ***Eligibility***

A member who has 10 or more years of service and becomes permanently and totally disabled may retire with a disability pension.

### ***Benefit Amount***

The benefit will be the same as the regular benefit amount, except that the benefit will not be less than the lesser of 50% of average final compensation or \$75. This minimum benefit does not apply to an officer or employee who has attained age 60 or is receiving Social Security disability.

(Section 122.09)

### ***Minimum Benefit***

A member of Division B shall receive his or her regular benefit amount, but no less than 20% of his or her average final compensation.

(Section 122.28(2))

### ***Form of Benefit***

Straight life annuity. No optional form may be elected.

(Section 122.08(6))

# SUMMARY OF PLAN PROVISIONS

---

## HEALTH INSURANCE SUBSIDY

A monthly subsidy of \$5 per month per year of creditable service, with a minimum of \$30, and a maximum of \$150 per month, shall be paid to retirees and surviving beneficiaries to subsidize health insurance premiums. This benefit is not indexed with the cost of living.

Further, the benefit is funded separately, on a pay-as-you-go basis, and is not part of this actuarial valuation.

(Section 112.363)

## POST-RETIREMENT DEATH BENEFITS

Based on the optional form elected.

(Section 122.08(3))

## PRE-RETIREMENT DEATH BENEFITS

### ***Eligibility***

When employment is terminated by death after 10 years of service if member was eligible for normal or early retirement.

### ***Benefit Amount***

1. If surviving spouse has received a refund of the member's contributions, no benefit is payable.
2. If surviving spouse has not received a refund of the member's contributions, or has repaid the member's contributions, with interest, the spouse is entitled to receive a benefit, calculated assuming the member had retired on his or her date of death and had chosen a 100% joint & survivor option.

(Section 122.08(9))

# SUMMARY OF PLAN PROVISIONS

---

## VESTING

### ***Eligibility***

After 10 years of service if member leaves employee contributions in the System.

### ***Benefit Amount***

The normal or early retirement benefit based on average final compensation and years of service to the date of retirement.

(Section 122.10(1))

## DROP – DEFERRED RETIREMENT OPTION PROGRAM

### ***Eligibility***

Vested SCOERS members are eligible for DROP participation upon attaining eligibility for normal retirement. Deferral of DROP participation for all but K-12 Instructional Personnel is allowed if the eligible participant has completed 30 years of service, and has not reached age 57. In this case the participant can defer participation in DROP until he reaches age 57. Instructional Personnel in grades K-12 may defer DROP participation to any age. Members who reached normal retirement before July 1, 1998 were eligible to participate in DROP for up to 60 months beginning July 1, 1998.

Effective July 1, 1998, eligible members can retire without terminating their employment during DROP participation. Monthly retirement benefits will be invested in the FRS Trust Fund, earning tax-deferred interest while the member continues to work for a maximum of 60 months. Upon completion of the maximum five-year period, DROP participation ends and participants must terminate employment with all FRS employers. At that time, the participant will receive payment of the accumulated DROP benefits, and begin receiving his SCOERS monthly retirement benefit (in the same amount as determined at retirement, plus annual cost-of-living increases).

Effective either July 1, 2003 or July 1, 2004, participants employed in eligible instructional positions with a district school board (2003), the Florida School for the Deaf and Blind (2004), or a developmental research school (2004) can extend their participation beyond their initial 60-month period, for up to an additional 36 months. The employer must approve the request for DROP extension as well as the period of extension granted to an eligible DROP participant, if any, within the 36-month limit.

# SUMMARY OF PLAN PROVISIONS

---

## ***Disabled While in DROP***

Participants that became disabled while participating in DROP will continue to accumulate the same monthly benefit in the FRS Trust Fund until termination. Since the normal retirement benefit commenced upon DROP participation, a disability benefit will not be issued.

## ***Death While in DROP***

The designated beneficiary of a participant who dies while participating in DROP will receive all accumulated DROP benefits, and a continuing monthly benefit, if the participant had elected Option 2, 3, or 4. Survivors of DROP participants are not eligible for SCOERS line-of-duty death benefits.

(Section 121.091 (13))

## **RETURN OF EMPLOYEE CONTRIBUTIONS**

A member who terminates employment but is not eligible to retire, to receive a vested retirement allowance, or to receive a disability pension, or the beneficiary of a member who passed away before satisfying the requirements for a pre-retirement death benefit, will be entitled to a refund of any employee contributions made.

No interest is credited on employee contribution accounts.

(Section 122.10(1))

## **COST-OF-LIVING BENEFITS**

Retirees and beneficiaries of deceased retirees are eligible each July 1 to receive cost-of-living adjustments to their benefits. The adjustments are identical to those for Florida Retirement System members.

(Section 121.101)

# SUMMARY OF PLAN PROVISIONS

---

## **PART IV: INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES SUPPLEMENTAL RETIREMENT PROGRAM (IFAS)**

The benefit and contribution provisions of the Statutes are set forth in Chapter 121 of the Florida Statutes. Certain provisions are drawn from other sections of the Florida Statutes. This is a closed system.

### **EFFECTIVE DATE**

The effective date of the Supplemental Retirement Program was July 1, 1985.

(Section 121.40)

### **MEMBERSHIP**

Employees hired on or before July 1, 1983 who:

- a. hold both state and federal appointments while employed at the Institute,
- b. are not entitled to any benefit from a state-supported retirement system or Social Security based on service as an employee of the Institute, and
- c. are participants in the Federal Civil Service Retirement System.

(Section 121.40)

### **MEMBER CONTRIBUTIONS**

The total cost of the Program is paid by the participating employers.

### **EMPLOYER CONTRIBUTIONS**

Effective July 1, 2008, employer contributions are fixed at 18.75%.

(Section 121.40)



# SUMMARY OF PLAN PROVISIONS

---

## NORMAL RETIREMENT BENEFIT

### *Eligibility*

Age 62 and 10 or more years of creditable service, plus immediate eligibility for retirement benefits under the Federal Civil Service Retirement System (i.e., attainment of age 55 and completion of at least 30 years of service or attainment of age 60 and completion of at least 20 years of service or attainment of age 62 and completion of at least 5 years of service).

(Section 121.40)

### *Normal Form*

Straight life benefit (Option 1).

(Section 121.40)

### *Optional Forms*

Modified cash refund annuity (Option 2).

50% joint & survivor (Option 3).

100% joint & survivor (Option 4).

(Section 121.40)

### *Regular Benefit Amount*

The sum of (a) and (b) less (c) where:

- a. The amount of a monthly retirement benefit that a participant would be entitled to receive under the Florida Retirement System calculated as follows:

The appropriate benefit percentage multiplied by average monthly compensation in the highest five years of credited service, the product then multiplied by the credited years of service, where the appropriate benefit percentage is as follows;



## SUMMARY OF PLAN PROVISIONS

---

<u>Retirement at:</u>	<u>Percentage</u>
Age 62 with 10 years creditable service, or 30 years creditable service	1.60%
Age 63 with 10 years creditable service, or 31 years creditable service	1.63
Age 64 with 10 years creditable service, or 32 years creditable service	1.65
Age 65 with 10 years creditable service, or 33 years creditable service	1.68

- b. An amount equal to the monthly primary insurance amount that a participant would be entitled to receive under Social Security had he been covered for Social Security based only on service after December 1, 1970.
- c. The amount of a monthly retirement benefit that a participant would be entitled to receive under the Federal Civil Service Retirement System calculated as follows:

The sum of (i) and (ii) and (iii) below multiplied by average monthly compensation in the highest three years of credited service:

- i.) 1.50% multiplied by the credited years of service, up to 5, earned after December 1, 1970.
- ii.) 1.75% multiplied by the credited years of service earned after December 1, 1970 in excess of 5 years but not more than 5.
- iii.) 2.00% multiplied by the credited years of service earned after December 1, 1970 in excess of 10 years.

### **Credited Service**

Credited service is earned only for employment subsequent to December 1, 1970. It is awarded as follows:

- a. For service from December 1, 1970 through June 30, 1974 one month of credited service will be earned for each calendar month during which the employee is paid a salary payment.



## SUMMARY OF PLAN PROVISIONS

---

- b. For service from July 1, 1974 through June 30, 1979 one month of credited service will be earned for each calendar month during which the employee is paid at least \$100 in salary payments. In any month that the employee is paid less than \$100 in salary payments, credited service shall be determined by dividing the actual salary payment by \$100.
- a. For service from July 1, 1979 through June 30, 1985 one month of credited service will be earned for each calendar month during which the employee is paid at least \$250 in salary payments. In any month that the employee is paid less than \$250 in salary payments, credited service shall be determined by dividing the actual salary payment by \$250.
- b. For service on or after July 1, 1985 one month of credited service will be earned for each calendar month during which the employee is paid a salary payment.

(Section 121.40)

### MAXIMUM BENEFIT

No maximum.

### MINIMUM BENEFIT

No minimum.

### EARLY RETIREMENT BENEFIT

None.

### DISABILITY RETIREMENT

None.

### HEALTH INSURANCE SUBSIDY

IFAS members are not eligible for the Health Insurance Subsidy.



# SUMMARY OF PLAN PROVISIONS

---

## POST-RETIREMENT DEATH BENEFITS

Based on the optional form elected.

(Section 122.40)

## PRE-RETIREMENT DEATH BENEFITS

### ***Eligibility***

When employment is terminated by death after 10 years of creditable service, or death occurs after termination of employment but while eligible for a terminated vested benefit.

### ***Benefit Amount***

The regular benefit amount for which the member would have been eligible had the member retired on his or her date of death and elected the 100% joint and survivor form of payment in favor of his or her surviving spouse or other dependent. The monthly benefit commences upon the beneficiary attaining age 62 and is payable to the member's beneficiary for the beneficiary's lifetime.

(Section 121.40)

## VESTING

### ***Eligibility***

Attainment of age 60 and 20 or more years of service or attainment of age 55 and 30 or more years of service.

### ***Benefit Amount***

The normal retirement benefit accrued to the date of termination. Benefits may not commence prior to age 62.

(Section 121.40)



# SUMMARY OF PLAN PROVISIONS

---

## **DROP – DEFERRED RETIREMENT OPTION PROGRAM**

### *Eligibility*

IFAS members are not eligible for DROP.

## **COST-OF-LIVING BENEFITS**

Retirees and beneficiaries of deceased retirees are eligible each July 1 to receive cost-of-living adjustments to their benefits. The adjustments are identical to those for Florida Retirement System members.

(Section 121.40)

# APPENDIX C

## MEMBERSHIP DATA



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# MEMBERSHIP DATA

---

This valuation is based upon the membership of the System as of July 1, 2011.

The membership of the System includes employees of the State of Florida and participating political subdivisions. The membership is divided into several categories by System.

Tables C-1 through C-5 present distributions of members receiving service or disability retirement benefits, and of beneficiaries of deceased members. Shown in the tables are the numbers of persons receiving benefits and the total annual benefits received.

Table C-6 summarizes the DROP membership and provides total annual benefits received.

Tables C-7 through C-27 contain summaries of the active members in each category of membership. Values shown in the tables are the numbers of members and their total annual salaries. Table C-27 is the grand total of Tables C-7 through C-26.

Table C-28 presents a summary by System of active membership, payroll, and accumulated employee contributions.

**Table C-1**  
**Florida Retirement System**  
**Annuitants at July 1, 2011**  
**Regular and Early Retirement by Age**

Age	Men	Women	Total
<b>Number of Persons</b>			
Under 50	1,640	1,951	3,591
50 to 54	2,712	3,091	5,803
55 to 59	8,379	12,631	21,010
60 to 64	21,258	33,048	54,306
65 to 69	26,702	43,421	70,123
70 to 74	20,402	34,020	54,422
75 to 79	15,049	25,280	40,329
80 & Up	17,171	36,558	53,729
<b>Total</b>	<b>113,313</b>	<b>190,000</b>	<b>303,313</b>
<b>Annual Benefits (in Thousands)</b>			
Under 50	\$18,006	\$18,566	\$36,572
50 to 54	66,269	37,948	104,217
55 to 59	225,305	192,197	417,502
60 to 64	534,705	593,341	1,128,046
65 to 69	608,438	718,627	1,327,065
70 to 74	425,400	522,912	948,312
75 to 79	316,342	392,464	708,806
80 & Up	345,226	538,380	883,606
<b>Total</b>	<b>\$2,539,691</b>	<b>\$3,014,435</b>	<b>\$5,554,126</b>

**Table C-2**  
**Florida Retirement System**  
**Annuitants at July 1, 2011**  
**Disability Retirement by Age**

Age	Men	Women	Total
<b>Number of Persons</b>			
Under 50	407	557	964
50 to 54	611	945	1,556
55 to 59	962	1,683	2,645
60 to 64	1,166	2,013	3,179
65 to 69	873	1,499	2,372
70 to 74	479	840	1,319
75 to 79	255	395	650
80 & Up	223	478	701
<b>Total</b>	<b>4,976</b>	<b>8,410</b>	<b>13,386</b>
<b>Annual Benefits (in Thousands)</b>			
Under 50	\$6,964	\$6,866	\$13,830
50 to 54	9,848	11,232	21,080
55 to 59	14,845	20,984	35,829
60 to 64	17,593	24,417	42,010
65 to 69	12,794	18,465	31,259
70 to 74	6,658	9,696	16,354
75 to 79	3,284	4,234	7,518
80 & Up	2,660	4,453	7,113
<b>Total</b>	<b>\$74,646</b>	<b>\$100,347</b>	<b>\$174,993</b>

**Table C-3**  
**Florida Retirement System**  
**Potential Annuitants at July 1, 2011**  
**Vested Terminated Members by Age for the Regular,**  
**Senior Management Service, and Elected Officers' Classes**

Age	Men	Women	Total
<b>Number of Persons</b>			
Under 30	111	241	352
30 to 34	696	2,215	2,911
35 to 39	1,812	5,465	7,277
40 to 44	3,269	8,236	11,505
45 to 49	4,856	10,968	15,824
50 to 54	6,035	13,243	19,278
55 to 59	5,203	10,762	15,965
60 & Up	<u>4,193</u>	<u>8,603</u>	<u>12,796</u>
Total	26,175	59,733	85,908

<b>Annual Benefits (in Thousands) *</b>			
Under 30	\$293	\$594	\$887
30 to 34	2,690	8,092	10,782
35 to 39	8,344	23,761	32,105
40 to 44	19,266	42,027	61,293
45 to 49	35,257	61,343	96,600
50 to 54	48,762	79,696	128,458
55 to 59	43,134	67,003	110,137
60 & Up	<u>28,270</u>	<u>40,255</u>	<u>68,525</u>
Total	\$186,016	\$322,771	\$508,787

\* Deferred to Age 62



**Table C-4**  
**Florida Retirement System**  
**Potential Annuitants at July 1, 2011**  
**Vested Terminated Members by Age for the**  
**Special Risk Regular & Administrative Support Classes**

Age	Men	Women	Total
<b>Number of Persons</b>			
Under 30	30	18	48
30 to 34	195	118	313
35 to 39	637	298	935
40 to 44	1,045	386	1,431
45 to 49	1,006	399	1,405
50 to 54	617	270	887
55 to 59	243	84	327
60 & Up	132	47	179
Total	3,905	1,620	5,525
<b>Annual Benefits (in Thousands) *</b>			
Under 30	\$213	\$137	\$350
30 to 34	1,777	1,004	2,781
35 to 39	6,258	2,728	8,986
40 to 44	12,573	4,235	16,808
45 to 49	13,694	5,083	18,777
50 to 54	8,446	3,732	12,178
55 to 59	3,030	1,158	4,188
60 & Up	1,569	587	2,156
Total	\$47,560	\$18,664	\$66,224

\* Deferred to Age 55

# MEMBERSHIP DATA

**Table C-5**  
**Florida Retirement System**  
**Annuitants and Potential Annuitants at July 1, 2011**  
**All Types of Retirement by System**

System	Annuitants	Potential Annuitants	Total
<b>Number of Persons</b>			
Regular	285,197	84,610	369,807
Senior Management Service	2,596	961	3,557
Special Risk	26,587	5,508	32,095
Special Risk Administrative	168	17	185
EOC - Judges	723	35	758
EOC - Legislative/Attorneys/Cabinet	195	92	287
EOC - County Officials	1,233	210	1,443
Total	316,699	91,433	408,132
<b>Annual Benefits (in Thousands)</b>			
Regular	\$4,640,593	\$485,225	\$5,125,818
Senior Management Service	113,042	18,074	131,116
Special Risk	876,445	66,092	942,537
Special Risk Administrative	5,693	132	5,825
EOC - Judges	54,220	1,781	56,001
EOC - Legislative/Attorneys/Cabinet	5,596	1,246	6,842
EOC - County Officials	33,527	2,461	35,988
Total	\$5,729,116	\$575,011	\$6,304,127



**Table C-6**  
**Florida Retirement System**  
**Annuitants at July 1, 2011**  
**DROP Members \***

Age		Men	Women	Total
Number of Persons				
Under	50	457	113	570
	50 to 54	1,783	1,864	3,647
	55 to 59	3,819	6,075	9,894
	60 to 64	5,268	10,842	16,110
	65 to 69	1,939	4,529	6,468
	70 to 74	52	111	163
	75 to 79	13	18	31
	80 & Up	1	5	6
Total		13,332	23,557	36,889
Annual Benefits (in Thousands)				
Under	50	\$27,203	\$5,020	\$32,223
	50 to 54	95,544	53,728	149,272
	55 to 59	147,533	185,353	332,886
	60 to 64	132,786	233,311	366,097
	65 to 69	39,098	75,435	114,533
	70 to 74	329	1,279	1,608
	75 to 79	93	136	229
	80 & Up	2	10	12
Total		\$442,588	\$554,272	\$996,860

\* Includes all DROP members processed by the data collection date. The valuation includes liabilities for an additional 8,170 members who made timely DROP elections prior to July 1, 2011, but whose records were not processed by the data collection date.

# MEMBERSHIP DATA

**Table C-7  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
FRS - Regular: Men**

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20	263	2,381,504				
20 to 24	3,269	65,047,059	214	5,315,397		
25 to 29	6,635	197,058,109	2,556	85,006,913	85	3,131,814
30 to 34	4,840	155,127,589	5,505	219,751,560	1,570	65,828,688
35 to 39	3,768	125,521,226	4,581	189,781,936	3,924	185,308,592
40 to 44	3,776	124,555,316	4,383	182,116,809	4,113	193,978,046
45 to 49	3,863	128,511,585	4,524	186,032,348	3,834	178,087,416
50 to 54	3,556	119,742,559	4,533	184,238,900	4,079	188,176,201
55 to 59	2,869	94,039,761	4,098	162,476,956	3,918	178,059,242
60 to 64	1,657	51,020,919	2,963	116,359,750	2,536	113,812,621
65 & UP	1,174	25,930,927	2,104	64,149,326	1,735	65,674,604
TOTALS	35,670	1,088,936,554	35,461	1,395,229,895	25,794	1,172,057,224

AGE	SERVICE					
	15 TO 20		20 TO 25		25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34	41	1,694,463	1	62,273		
35 to 39	1,102	54,358,736	53	2,737,514		
40 to 44	3,657	199,124,486	1,350	71,522,556	77	3,904,072
45 to 49	3,652	194,511,230	3,881	225,896,673	1,664	92,679,758
50 to 54	3,532	185,998,405	4,193	242,012,713	3,609	226,078,901
55 to 59	3,445	177,386,132	3,828	222,646,406	3,076	193,455,233
60 to 64	2,007	101,811,931	1,974	112,836,226	1,445	92,745,208
65 & UP	990	45,598,862	553	31,380,950	255	17,266,412
TOTALS	18,426	960,484,245	15,833	909,095,311	10,126	626,129,584

AGE	SERVICE					
	30 TO 35		35 TO 40		40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49	76	4,653,125				
50 to 54	637	37,662,503	20	1,192,621		
55 to 59	776	49,948,347	85	4,915,005	2	103,159
60 to 64	371	27,230,586	195	15,166,687	31	2,209,235
65 & UP	174	15,602,893	116	11,597,341	95	8,922,749
TOTALS	2,034	135,097,454	416	32,871,654	128	11,235,143

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20					263	2,381,504
20 to 24					3,483	70,362,456
25 to 29					9,276	285,196,836
30 to 34					11,957	442,464,573
35 to 39					13,428	557,708,004
40 to 44					17,356	775,201,285
45 to 49					21,494	1,010,372,135
50 to 54					24,159	1,185,102,803
55 to 59					22,097	1,083,030,241
60 to 64	1	41,721			13,180	633,234,884
65 & UP	14	1,402,428	9	763,271	7,219	288,289,763
TOTALS	15	1,444,149	9	763,271	143,912	6,333,344,484



# MEMBERSHIP DATA

**Table C-8**  
**Florida Retirement System**  
**Members and Their Salaries at July 1, 2011**  
**FRS - Regular: Women**

AGE	UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20	355	2,637,427				
20 to 24	6,852	146,388,616	259	4,896,478		
25 to 29	16,264	501,026,102	6,432	216,650,105	159	5,172,934
30 to 34	10,282	306,420,598	15,467	579,321,091	4,149	163,612,835
35 to 39	8,337	231,920,560	11,546	409,832,920	11,003	461,327,512
40 to 44	8,538	227,344,507	11,381	375,630,408	10,796	424,617,881
45 to 49	7,624	197,211,552	10,975	343,688,882	10,759	384,882,219
50 to 54	6,147	163,894,267	9,984	314,560,363	10,906	383,735,099
55 to 59	4,373	120,197,558	7,674	250,840,904	8,787	314,577,306
60 to 64	2,122	55,165,157	4,701	149,406,303	4,564	162,230,361
65 & UP	1,109	20,318,025	2,266	54,794,817	2,100	57,197,091
TOTALS	72,003	1,972,524,369	80,685	2,699,622,271	63,223	2,357,353,238

AGE	SERVICE 15 TO 20		SERVICE 20 TO 25		SERVICE 25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34	78	3,129,872				
35 to 39	2,966	132,197,889	82	3,668,262		
40 to 44	9,390	446,846,982	3,382	164,756,388	141	6,657,976
45 to 49	8,386	366,572,362	8,992	467,463,184	3,391	178,360,068
50 to 54	8,654	357,603,011	9,037	436,002,684	7,834	439,569,113
55 to 59	8,271	342,956,770	9,416	449,544,526	6,904	368,142,557
60 to 64	4,034	166,309,156	4,782	231,029,028	3,401	178,020,656
65 & UP	1,208	37,975,994	863	32,114,378	428	17,975,946
TOTALS	42,987	1,853,592,036	36,554	1,784,578,450	22,099	1,188,726,316

AGE	SERVICE 30 TO 35		SERVICE 35 TO 40		SERVICE 40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49	72	3,584,526				
50 to 54	1,108	60,954,561	16	736,616		
55 to 59	1,176	67,885,368	146	7,970,859	4	213,658
60 to 64	513	27,655,944	184	11,500,924	55	3,032,253
65 & UP	237	10,297,920	140	7,348,729	60	3,274,671
TOTALS	3,106	170,378,319	486	27,557,128	119	6,520,582

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20					355	2,637,427
20 to 24					7,111	151,285,094
25 to 29					22,855	722,849,141
30 to 34					29,976	1,052,484,396
35 to 39					33,934	1,238,947,143
40 to 44					43,628	1,645,854,142
45 to 49					50,199	1,941,762,793
50 to 54					53,686	2,157,055,714
55 to 59					46,751	1,922,329,506
60 to 64					24,356	984,349,782
65 & UP	13	773,433	4	310,641	8,428	242,381,645
TOTALS	13	773,433	4	310,641	321,279	12,061,936,783



# MEMBERSHIP DATA

**Table C-9  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
FRS - Special Risk: Men**

AGE	UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24	2,284	77,110,736	96	3,683,383		
25 to 29	3,694	146,684,842	2,523	121,195,386	41	2,270,460
30 to 34	2,085	86,508,943	3,527	185,021,164	1,288	72,870,731
35 to 39	1,385	57,414,240	2,531	136,472,273	2,588	159,328,151
40 to 44	960	39,931,649	1,843	99,213,093	2,096	128,774,843
45 to 49	685	30,920,442	1,139	59,974,416	1,021	60,579,385
50 to 54	455	20,919,250	741	38,844,961	615	35,625,822
55 to 59	232	10,501,367	439	22,026,549	345	18,657,312
60 to 64	82	3,605,153	210	10,589,762	190	10,554,221
65 & UP	10	419,268	36	1,608,297	62	3,554,560
TOTALS	11,872	474,015,890	13,085	678,629,284	8,246	492,215,485

AGE	SERVICE 15 TO 20		SERVICE 20 TO 25		SERVICE 25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34	22	1,249,261				
35 to 39	1,166	77,387,559	17	1,230,423		
40 to 44	2,568	178,527,324	1,521	112,245,524	24	1,831,842
45 to 49	1,517	102,322,613	2,678	203,422,954	532	43,260,984
50 to 54	740	47,044,925	1,379	101,706,853	482	36,643,451
55 to 59	292	16,655,158	333	22,954,904	164	11,490,024
60 to 64	187	10,676,661	142	9,569,660	82	5,819,334
65 & UP	53	3,393,020	27	1,561,213	15	1,236,059
TOTALS	6,545	437,256,521	6,097	452,691,531	1,299	100,281,694

AGE	SERVICE 30 TO 35		SERVICE 35 TO 40		SERVICE 40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49	11	714,238				
50 to 54	61	5,093,753	1	91,010		
55 to 59	70	5,901,219	11	970,811		
60 to 64	34	2,760,321	9	670,449		
65 & UP	13	972,240	5	529,628	1	71,786
TOTALS	189	15,441,771	26	2,261,898	1	71,786

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24					2,380	80,794,119
25 to 29					6,258	270,150,688
30 to 34					6,922	345,650,099
35 to 39					7,687	431,832,646
40 to 44					9,012	560,524,275
45 to 49					7,583	501,195,032
50 to 54					4,474	285,970,025
55 to 59					1,886	109,157,344
60 to 64					936	54,245,561
65 & UP	1	94,704			223	13,440,775
TOTALS	1	94,704			47,361	2,652,960,564



# MEMBERSHIP DATA

**Table C-10  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
FRS - Special Risk: Women**

AGE	UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24	598	20,045,083	10	314,745		
25 to 29	1,170	42,858,453	584	24,887,669	4	219,415
30 to 34	645	24,090,333	1,063	49,022,691	353	18,102,546
35 to 39	461	17,761,437	697	33,220,799	791	43,065,937
40 to 44	310	12,142,337	501	23,429,201	640	33,865,666
45 to 49	206	8,281,164	312	13,990,934	389	20,615,501
50 to 54	137	5,415,546	220	9,923,285	228	11,394,030
55 to 59	86	3,935,243	115	5,624,890	99	4,875,778
60 to 64	20	854,816	52	2,456,964	57	2,660,184
65 & UP	4	194,686	8	358,612	13	566,219
TOTALS	3,637	135,579,098	3,562	163,229,790	2,574	135,365,276

AGE	SERVICE 15 TO 20		SERVICE 20 TO 25		SERVICE 25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34	3	136,307				
35 to 39	282	16,311,708	6	476,997		
40 to 44	697	43,623,111	324	21,688,115	5	454,774
45 to 49	440	25,885,971	729	49,729,327	139	9,680,671
50 to 54	294	16,769,480	406	26,016,713	230	14,563,051
55 to 59	98	5,329,359	110	6,903,759	71	4,740,175
60 to 64	54	2,833,906	43	2,340,924	19	1,026,488
65 & UP	11	591,416	6	299,874	3	186,351
TOTALS	1,879	111,481,258	1,624	107,455,709	467	30,651,510

AGE	SERVICE 30 TO 35		SERVICE 35 TO 40		SERVICE 40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49	1	113,259				
50 to 54	11	841,152				
55 to 59	12	850,615	1	90,918		
60 to 64	3	179,104			1	47,987
65 & UP						
TOTALS	27	1,984,130	1	90,918	1	47,987

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24					608	20,359,828
25 to 29					1,758	67,965,537
30 to 34					2,064	91,351,877
35 to 39					2,237	110,836,878
40 to 44					2,477	135,203,204
45 to 49					2,216	128,296,827
50 to 54					1,526	84,923,257
55 to 59					592	32,350,737
60 to 64					249	12,400,373
65 & UP					45	2,197,158
TOTALS					13,772	685,885,676



# MEMBERSHIP DATA

**Table C-11  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
FRS - Special Risk Administrative Support: Men**

AGE	SERVICE		SERVICE		SERVICE	
	UNDER 5	5 TO 10	5 TO 10	10 TO 15	10 TO 15	10 TO 15
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34			1	36,218	2	73,231
35 to 39					1	42,784
40 to 44						
45 to 49	1	34,392				
50 to 54			1	40,154	2	78,275
55 to 59					1	41,212
60 to 64						
65 & UP						
TOTALS	1	34,392	2	76,372	6	235,502

AGE	SERVICE		SERVICE		SERVICE	
	15 TO 20	20 TO 25	20 TO 25	25 TO 30	25 TO 30	25 TO 30
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39	2	107,347				
40 to 44	3	156,115	3	147,693		
45 to 49			5	293,576		
50 to 54	1	41,180	1	47,534	1	39,235
55 to 59						
60 to 64			2	85,119		
65 & UP						
TOTALS	6	304,642	11	573,922	1	39,235

AGE	SERVICE		SERVICE		SERVICE	
	30 TO 35	35 TO 40	35 TO 40	40 TO 45	40 TO 45	40 TO 45
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE		SERVICE		SERVICE	
	45 TO 50	50 & UP	50 & UP	ALL YEARS	ALL YEARS	ALL YEARS
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34					3	109,449
35 to 39					3	150,131
40 to 44					6	303,808
45 to 49					6	327,968
50 to 54					6	246,378
55 to 59					1	41,212
60 to 64					2	85,119
65 & UP						
TOTALS					27	1,264,065



# MEMBERSHIP DATA

**Table C-12  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
FRS - Special Risk Administrative Support: Women**

AGE	UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39			1	41,881		
40 to 44					1	33,789
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS			1	41,881	1	33,789

AGE	SERVICE 15 TO 20		SERVICE 20 TO 25		SERVICE 25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39	3	126,743				
40 to 44	1	60,566	3	159,042		
45 to 49	2	84,498	3	145,193		
50 to 54	1	44,188	2	74,576	1	36,234
55 to 59						
60 to 64						
65 & UP						
TOTALS	7	315,995	8	378,811	1	36,234

AGE	SERVICE 30 TO 35		SERVICE 35 TO 40		SERVICE 40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39					4	168,624
40 to 44					5	253,397
45 to 49					5	229,691
50 to 54					4	154,998
55 to 59						
60 to 64						
65 & UP						
TOTALS					18	806,710



# MEMBERSHIP DATA

**Table C-13  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
EOC - Judicial: Men**

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39	4	481,772	2	276,943	2	253,013
40 to 44	4	560,819	12	1,590,695	13	1,778,150
45 to 49	7	856,344	11	1,488,388	11	1,387,308
50 to 54	13	1,693,110	16	2,235,358	23	3,199,061
55 to 59	10	1,313,021	16	2,202,487	25	3,539,744
60 to 64	8	1,130,638	20	2,813,325	19	2,670,400
65 & UP	9	1,279,602	8	1,051,470	6	853,068
TOTALS	55	7,315,306	85	11,658,666	99	13,680,744

AGE	SERVICE					
	15 TO 20		20 TO 25		25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44	5	693,711				
45 to 49	7	972,580	12	1,659,678		
50 to 54	23	3,204,274	15	2,100,546	13	1,838,143
55 to 59	26	3,687,533	32	4,505,902	33	4,549,371
60 to 64	12	1,682,628	16	2,235,620	7	982,840
65 & UP	5	702,992	3	426,534		
TOTALS	78	10,943,718	78	10,928,280	53	7,370,354

AGE	SERVICE					
	30 TO 35		35 TO 40		40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54	1	134,280				
55 to 59	4	601,093				
60 to 64	2	284,356				
65 & UP						
TOTALS	7	1,019,729				

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39					8	1,011,728
40 to 44					34	4,623,375
45 to 49					48	6,364,298
50 to 54					104	14,404,772
55 to 59					146	20,399,151
60 to 64					84	11,799,807
65 & UP					31	4,313,666
TOTALS					455	62,916,797



# MEMBERSHIP DATA

**Table C-14**  
**Florida Retirement System**  
**Members and Their Salaries at July 1, 2011**  
**EOC - Judicial: Women**

AGE	SERVICE		SERVICE		SERVICE	
	UNDER 5	5 TO 10	5 TO 10	10 TO 15	10 TO 15	10 TO 15
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39	3	354,881	2	246,074	5	638,059
40 to 44	6	560,088	5	695,558	9	1,206,772
45 to 49	4	552,277	9	1,256,965	16	2,141,082
50 to 54	7	979,848	8	1,053,955	14	1,952,766
55 to 59	4	480,140	6	829,374	14	1,980,620
60 to 64	1	142,178	1	142,178	3	410,738
65 & UP			1	142,178		
TOTALS	25	3,069,412	32	4,366,282	61	8,330,037

AGE	SERVICE		SERVICE		SERVICE	
	15 TO 20	20 TO 25	20 TO 25	25 TO 30	25 TO 30	25 TO 30
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44	10	1,370,355				
45 to 49	11	1,553,278	7	973,682	1	142,178
50 to 54	13	1,825,659	17	2,325,419	10	1,395,858
55 to 59	6	845,170	15	2,102,087	21	2,899,307
60 to 64	5	679,788	5	687,397	12	1,714,037
65 & UP						
TOTALS	45	6,274,250	44	6,088,585	44	6,151,380

AGE	SERVICE		SERVICE		SERVICE	
	30 TO 35	35 TO 40	35 TO 40	40 TO 45	40 TO 45	40 TO 45
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE		SERVICE		SERVICE	
	45 TO 50	50 & UP	50 & UP	ALL YEARS	ALL YEARS	ALL YEARS
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39					10	1,239,014
40 to 44					30	3,832,773
45 to 49					48	6,619,462
50 to 54					69	9,533,505
55 to 59					66	9,136,698
60 to 64					27	3,776,316
65 & UP					1	142,178
TOTALS					251	34,279,946



# MEMBERSHIP DATA

**Table C-15**  
**Florida Retirement System**  
**Members and Their Salaries at July 1, 2011**  
**EOC - Legislators/Attorneys/Cabinet: Men**

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29	2	59,143				
30 to 34	4	100,106	1	29,697	2	59,394
35 to 39	7	238,700	6	158,988	1	29,697
40 to 44	2	49,078	3	86,616	1	29,697
45 to 49	4	108,222	4	108,724		
50 to 54	2	59,144	5	268,865	3	137,324
55 to 59	1	29,697	3	81,055	2	59,394
60 to 64	3	88,341	3	199,407	1	29,697
65 & UP	1	29,697	4	118,788	2	179,774
TOTALS	26	762,128	29	1,052,140	12	524,977

AGE	SERVICE					
	15 TO 20		20 TO 25		25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44	1	29,697				
45 to 49						
50 to 54	2	179,774	1	150,077	1	150,077
55 to 59	4	263,420	1	150,077	1	150,077
60 to 64	1	29,697	3	450,231	1	150,077
65 & UP						
TOTALS	8	502,588	5	750,385	3	450,231

AGE	SERVICE					
	30 TO 35		35 TO 40		40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54	1	150,077				
55 to 59						
60 to 64						
65 & UP					1	150,077
TOTALS	1	150,077			1	150,077

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29					2	59,143
30 to 34					7	189,197
35 to 39					14	427,385
40 to 44					7	195,088
45 to 49					8	216,946
50 to 54					15	1,095,338
55 to 59					12	733,720
60 to 64					12	947,450
65 & UP					8	478,336
TOTALS					85	4,342,603



# MEMBERSHIP DATA

**Table C-16  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
EOC - Legislators/Attorneys/Cabinet: Women**

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29			1	29,697		
30 to 34						
35 to 39						
40 to 44			2	75,244	1	113,593
45 to 49	1	19,631	1	29,697	1	29,697
50 to 54	2	58,894	2	59,394	2	179,774
55 to 59	1	29,697				
60 to 64			1	11,976	1	29,697
65 & UP			2	49,328	3	89,091
TOTALS	4	108,222	9	255,336	8	441,852

AGE	SERVICE					
	15 TO 20		20 TO 25		25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44	1	29,697				
45 to 49	2	90,711	1	150,077		
50 to 54			1	150,077		
55 to 59			1	150,077	1	150,077
60 to 64						
65 & UP						
TOTALS	3	120,408	3	450,231	1	150,077

AGE	SERVICE					
	30 TO 35		35 TO 40		40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29					1	29,697
30 to 34						
35 to 39						
40 to 44					4	218,534
45 to 49					6	319,813
50 to 54					7	448,139
55 to 59					3	329,851
60 to 64					2	41,673
65 & UP					5	138,419
TOTALS					28	1,526,126



# MEMBERSHIP DATA

**Table C-17**  
**Florida Retirement System**  
**Members and Their Salaries at July 1, 2011**  
**EOC - County Officials: Men**

AGE	SERVICE		SERVICE		SERVICE	
	UNDER 5	5 TO 10	5 TO 10	10 TO 15	10 TO 15	10 TO 15
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29	4	146,494				
30 to 34	7	185,352	4	175,986		
35 to 39	8	258,677	3	196,263	4	102,349
40 to 44	21	654,265	11	411,439	7	186,125
45 to 49	16	583,812	15	695,390	14	556,318
50 to 54	26	748,593	25	1,096,602	17	675,371
55 to 59	12	559,565	22	790,585	18	895,298
60 to 64	27	831,979	15	385,714	14	720,551
65 & UP	26	786,520	24	519,500	22	678,535
TOTALS	147	4,755,257	119	4,271,479	96	3,814,547

AGE	SERVICE		SERVICE		SERVICE	
	15 TO 20	20 TO 25	20 TO 25	25 TO 30	25 TO 30	25 TO 30
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44	7	414,387	3	289,337		
45 to 49	10	630,701	6	290,359	5	597,691
50 to 54	16	831,539	11	698,524	7	628,111
55 to 59	23	937,994	8	529,097	16	1,434,484
60 to 64	12	611,293	7	592,685	8	470,949
65 & UP	15	416,741	12	527,709	3	185,371
TOTALS	83	3,842,655	47	2,927,711	39	3,316,606

AGE	SERVICE		SERVICE		SERVICE	
	30 TO 35	35 TO 40	35 TO 40	40 TO 45	40 TO 45	40 TO 45
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54	1	128,688				
55 to 59			1	107,365		
60 to 64	1	140,524			1	95,975
65 & UP	2	67,304	1	3,600		
TOTALS	4	336,516	2	110,965	1	95,975

AGE	SERVICE		SERVICE		SERVICE	
	45 TO 50	50 & UP	50 & UP	ALL YEARS	ALL YEARS	ALL YEARS
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29					4	146,494
30 to 34					11	361,338
35 to 39					15	557,289
40 to 44					49	1,955,553
45 to 49					66	3,354,271
50 to 54					103	4,807,428
55 to 59					100	5,254,388
60 to 64					85	3,849,670
65 & UP					105	3,185,280
TOTALS					538	23,471,711



# MEMBERSHIP DATA

**Table C-18**  
**Florida Retirement System**  
**Members and Their Salaries at July 1, 2011**  
**EOC - County Officials: Women**

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34	2	15,035	2	125,634	1	78,745
35 to 39	5	252,432	3	83,851	4	109,913
40 to 44	5	205,657	3	68,277	3	153,945
45 to 49	7	218,418	3	74,851	4	182,432
50 to 54	11	293,960	8	378,765	13	866,744
55 to 59	10	196,098	8	303,127	20	1,007,282
60 to 64	11	457,701	12	467,634	15	860,712
65 & UP	16	293,238	9	470,135	21	1,072,992
TOTALS	67	1,932,539	48	1,972,274	81	4,332,765

AGE	SERVICE					
	15 TO 20		20 TO 25		25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39	1	40,345				
40 to 44	3	197,753	3	274,948	1	132,725
45 to 49	2	76,173	6	442,896	4	451,540
50 to 54	6	392,209	6	407,952	10	927,830
55 to 59	12	538,457	10	621,796	10	855,108
60 to 64	8	667,320	9	712,180	2	207,571
65 & UP	8	381,934	9	471,877	2	59,513
TOTALS	40	2,294,191	43	2,931,649	29	2,634,287

AGE	SERVICE					
	30 TO 35		35 TO 40		40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49	1	101,802				
50 to 54	3	263,230				
55 to 59	1	87,870				
60 to 64	1	23,988	1	87,989	1	95,505
65 & UP	1	9,000				
TOTALS	7	485,890	1	87,989	1	95,505

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34					5	219,414
35 to 39					13	486,541
40 to 44					18	1,033,305
45 to 49					27	1,548,112
50 to 54					57	3,530,690
55 to 59					71	3,609,738
60 to 64					60	3,580,600
65 & UP					66	2,758,689
TOTALS					317	16,767,089



# MEMBERSHIP DATA

**Table C-19**  
**Florida Retirement System**  
**Members and Their Salaries at July 1, 2011**  
**FRS - Senior Management Service: Men**

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29	181	7,223,983	5	246,854		
30 to 34	111	4,678,503	88	4,806,135	8	604,989
35 to 39	44	2,452,139	64	3,938,566	53	3,802,086
40 to 44	39	2,747,254	57	4,251,295	64	5,605,550
45 to 49	32	3,152,663	50	4,149,824	60	5,537,767
50 to 54	32	3,251,417	43	3,790,482	62	5,821,121
55 to 59	32	3,979,667	53	4,892,233	76	8,255,615
60 to 64	21	2,182,433	47	4,702,202	53	5,863,800
65 & UP	8	647,384	26	2,929,716	27	2,979,724
TOTALS	500	30,315,443	433	33,707,307	403	38,470,652

AGE	SERVICE					
	15 TO 20		20 TO 25		25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34	1	51,253				
35 to 39	15	1,141,872				
40 to 44	85	7,690,289	28	2,955,134	2	194,428
45 to 49	93	9,551,569	131	13,478,997	39	3,707,223
50 to 54	81	7,936,951	119	12,163,928	158	17,358,152
55 to 59	73	7,353,054	104	10,602,573	143	16,592,212
60 to 64	61	6,279,189	45	4,849,848	41	4,777,502
65 & UP	28	2,823,190	23	2,759,839	8	1,312,923
TOTALS	437	42,827,367	450	46,810,319	391	43,942,440

AGE	SERVICE					
	30 TO 35		35 TO 40		40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49	2	161,390				
50 to 54	16	1,895,240				
55 to 59	31	3,641,641	4	354,898		
60 to 64	20	2,351,108	5	979,763	1	180,730
65 & UP	7	907,345	2	385,391	3	373,883
TOTALS	76	8,956,724	11	1,720,052	4	554,613

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29					186	7,470,837
30 to 34					208	10,140,880
35 to 39					176	11,334,663
40 to 44					275	23,443,950
45 to 49					407	39,739,433
50 to 54					511	52,217,291
55 to 59					516	55,671,893
60 to 64					294	32,166,575
65 & UP	1	359,260			133	15,478,655
TOTALS	1	359,260			2,706	247,664,177



# MEMBERSHIP DATA

**Table C-20**  
**Florida Retirement System**  
**Members and Their Salaries at July 1, 2011**  
**FRS - Senior Management Service: Women**

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29	207	8,342,754	3	154,280		
30 to 34	139	6,052,742	117	6,472,470	6	374,500
35 to 39	39	1,749,084	93	5,694,549	103	6,977,639
40 to 44	37	2,655,384	62	4,227,550	97	6,877,380
45 to 49	29	1,881,097	39	2,839,022	63	4,858,216
50 to 54	19	1,397,915	35	3,047,273	58	4,641,598
55 to 59	16	1,442,706	27	2,222,121	48	4,576,232
60 to 64	13	1,184,946	17	1,307,533	22	1,892,163
65 & UP	1	110,377	10	834,535	6	505,457
TOTALS	500	24,817,005	403	26,799,333	403	30,703,185

AGE	SERVICE					
	15 TO 20		20 TO 25		25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39	24	1,827,369	3	190,132		
40 to 44	115	9,685,804	46	3,783,295	6	389,223
45 to 49	101	8,224,889	164	14,398,177	64	5,804,478
50 to 54	74	6,301,605	128	11,693,909	144	14,974,806
55 to 59	77	6,810,484	109	10,517,935	129	12,950,035
60 to 64	22	2,050,379	35	3,393,917	44	4,555,434
65 & UP	7	527,607	9	619,702	5	518,373
TOTALS	420	35,428,137	494	44,597,067	392	39,192,349

AGE	SERVICE					
	30 TO 35		35 TO 40		40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49	3	284,034				
50 to 54	14	1,349,714				
55 to 59	20	2,270,488	4	326,802		
60 to 64	8	922,834	7	870,880	1	92,034
65 & UP	2	181,475	2	154,481		
TOTALS	47	5,008,545	13	1,352,163	1	92,034

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29					210	8,497,034
30 to 34					262	12,899,712
35 to 39					262	16,438,773
40 to 44					363	27,618,636
45 to 49					463	38,289,913
50 to 54					472	43,406,820
55 to 59					430	41,116,803
60 to 64					169	16,270,120
65 & UP			2	207,870	44	3,659,877
TOTALS			2	207,870	2,675	208,197,688



# MEMBERSHIP DATA

**Table C-21  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
TRS - Teachers' Retirement System: Men**

AGE	SERVICE UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE 15 TO 20		SERVICE 20 TO 25		SERVICE 25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE 30 TO 35		SERVICE 35 TO 40		SERVICE 40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64					1	101,315
65 & UP					6	765,860
TOTALS					7	867,175

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		SERVICE ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64					1	101,315
65 & UP	2	248,459			8	1,014,319
TOTALS	2	248,459			9	1,115,634



# MEMBERSHIP DATA

**Table C-22  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
TRS - Teachers' Retirement System: Women**

AGE	SERVICE UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE 15 TO 20		SERVICE 20 TO 25		SERVICE 25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE 30 TO 35		SERVICE 35 TO 40		SERVICE 40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64					4	330,978
65 & UP					9	646,519
TOTALS					13	977,497

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64					4	330,978
65 & UP	1	119,049	1	77,600	11	843,168
TOTALS	1	119,049	1	77,600	15	1,174,146



# MEMBERSHIP DATA

**Table C-23  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
SCOERS - State & County Officers' Employees' R.S.: Men**

AGE	SERVICE UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE 15 TO 20		SERVICE 20 TO 25		SERVICE 25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE 30 TO 35		SERVICE 35 TO 40		SERVICE 40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		SERVICE ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64	1	37,848			1	37,848
65 & UP						
TOTALS	1	37,848			1	37,848



*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# MEMBERSHIP DATA

**Table C-24  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
SCOERS - State & County Officers' Employees' R.S.: Women**

AGE	----- SERVICE -----		----- SERVICE -----		----- SERVICE -----	
	UNDER 5	5 TO 10	5 TO 10	10 TO 15	10 TO 15	10 TO 15
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	----- SERVICE -----		----- SERVICE -----		----- SERVICE -----	
	15 TO 20	20 TO 25	20 TO 25	25 TO 30	25 TO 30	25 TO 30
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	----- SERVICE -----		----- SERVICE -----		----- SERVICE -----	
	30 TO 35	35 TO 40	35 TO 40	40 TO 45	40 TO 45	40 TO 45
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64					1	28,490
65 & UP					1	20,156
TOTALS					2	48,646

AGE	----- SERVICE -----		----- SERVICE -----		----- SERVICE -----	
	45 TO 50	50 & UP	50 & UP	ALL YEARS	ALL YEARS	ALL YEARS
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64					1	28,490
65 & UP					1	20,156
TOTALS					2	48,646



*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

# MEMBERSHIP DATA

**Table C-25  
Florida Retirement System  
Members and Their Salaries at July 1, 2011  
IFAS - Institute of Food and Agricultural Sciences: Men**

AGE	SERVICE UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE 15 TO 20		SERVICE 20 TO 25		SERVICE 25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59					6	671,365
60 to 64					9	1,060,758
65 & UP					2	172,823
TOTALS					17	1,904,946

AGE	SERVICE 30 TO 35		SERVICE 35 TO 40		SERVICE 40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64	2	157,368				
65 & UP	1	91,942				
TOTALS	3	249,310				

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		SERVICE ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59					6	671,365
60 to 64					11	1,218,126
65 & UP					3	264,765
TOTALS					20	2,154,256



# MEMBERSHIP DATA

**Table C-26**  
**Florida Retirement System**  
**Members and Their Salaries at July 1, 2011**  
**IFAS - Institute of Food and Agricultural Sciences: Women**

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						

AGE	SERVICE					
	15 TO 20		20 TO 25		25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59			1	82,619	7	609,293
60 to 64					5	373,724
65 & UP						
TOTALS			1	82,619	12	983,017

AGE	SERVICE					
	30 TO 35		35 TO 40		40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59	1	78,345				
60 to 64	1	68,640				
65 & UP						
TOTALS	2	146,985				

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59					9	770,257
60 to 64					6	442,364
65 & UP						
TOTALS					15	1,212,621



# MEMBERSHIP DATA

**Table C-27**  
**Florida Retirement System**  
**Distribution of Active Participants**  
**Grand Totals**  
**July 1, 2011**

AGE	SERVICE UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20	618	5,018,931				
20 to 24	13,003	308,591,494	579	14,210,003		
25 to 29	28,157	903,399,880	12,104	448,170,904	289	10,794,623
30 to 34	18,115	583,179,201	25,775	1,044,762,646	7,379	321,605,659
35 to 39	14,061	438,405,148	19,529	779,945,043	18,479	860,985,732
40 to 44	13,698	411,406,354	18,263	691,796,185	17,841	797,221,437
45 to 49	12,479	372,331,599	17,082	614,329,441	16,172	658,857,341
50 to 54	10,407	318,454,503	15,621	559,538,357	16,022	636,483,186
55 to 59	7,646	236,704,520	12,461	452,290,281	13,353	536,525,035
60 to 64	3,965	116,664,261	8,042	288,842,748	7,475	301,735,145
65 & UP	2,358	50,009,724	4,498	127,026,702	3,997	133,351,115
TOTALS	124,507	3,744,165,615	133,954	5,020,912,310	101,007	4,257,559,273

AGE	SERVICE 15 TO 20		SERVICE 20 TO 25		SERVICE 25 TO 30	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34	145	6,261,156	1	62,273		
35 to 39	5,561	283,499,568	161	8,303,328		
40 to 44	16,543	888,450,277	6,663	377,822,032	256	13,565,040
45 to 49	14,223	710,476,575	16,615	978,344,773	5,839	334,684,591
50 to 54	13,437	628,173,200	15,316	835,551,505	12,500	754,202,962
55 to 59	12,327	562,763,531	13,968	731,311,758	10,582	618,689,318
60 to 64	6,403	293,631,948	7,063	368,782,835	5,076	291,904,578
65 & UP	2,325	92,411,756	1,505	70,162,076	721	38,913,771
TOTALS	70,964	3,465,668,011	61,292	3,370,340,580	34,974	2,051,960,260

AGE	SERVICE 30 TO 35		SERVICE 35 TO 40		SERVICE 40 TO 45	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34						
35 to 39						
40 to 44						
45 to 49	166	9,612,374				
50 to 54	1,853	108,473,198	37	2,020,247		
55 to 59	2,091	131,264,986	252	14,736,658	6	316,817
60 to 64	956	61,774,773	401	29,276,692	97	6,214,502
65 & UP	437	28,130,119	266	20,019,170	176	14,225,701
TOTALS	5,503	339,255,450	956	66,052,767	279	20,757,020

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20					618	5,018,931
20 to 24					13,582	322,801,497
25 to 29					40,550	1,362,365,407
30 to 34					51,415	1,955,870,935
35 to 39					57,791	2,371,138,819
40 to 44					73,264	3,180,261,325
45 to 49					82,576	3,678,636,694
50 to 54					85,193	3,842,897,158
55 to 59					72,686	3,284,602,904
60 to 64	2	79,569			39,480	1,758,907,051
65 & UP	32	2,997,333	16	1,359,382	16,331	578,606,849
TOTALS	34	3,076,902	16	1,359,382	533,486	22,341,107,570



# MEMBERSHIP DATA

**Table C-28  
Florida Retirement System  
Summary Totals for All Systems  
Number, Total Annualized Payroll and Accumulated Employee  
Contributions of Active Members by System**

<u>System</u>	<u>Number of Members</u>	<u>Total Payroll Payroll</u> (000's omitted)	<u>Accumulated Employee Contributions</u> (000's omitted)
Florida Retirement System			
Regular	465,191	\$18,924,176	\$21,399
Senior Management Service	5,381	468,092	1,539
Florida Retirement System - Special Risk			
Non-Administrative	61,133	3,444,890	4,585
Administrative	45	2,127	0
Florida Retirement System - Elected Officers' Class			
Judicial	706	99,194	249
Leg. / Atty. / Cabinet	113	5,989	85
County Elected Off.	855	41,066	688
Teachers' Retirement System	24	2,337	2,725
State and County Officers' and Employees' Retirement System	3	88	76
Institute of Food and Agricultural Sciences	35	3,438	0
<b>Total</b>	<b>533,486</b>	<b>\$22,991,397</b>	<b>\$31,346</b>
		Average Annual Salary =	\$43,097



# APPENDIX D

# PROJECTIONS



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

Table D-1 presents a projection of total costs of the employers covered by the Florida Retirement System (exclusive of the Investment Plan) during the five-year period following the actuarial valuation date, July 1, 2011. The contributions shown beginning with plan year 2012-2013 are based on the assumption that the contribution levels calculated in this report and in conjunction with Florida law (see next paragraph) are extended throughout the projection period. The contributions shown for plan year 2011-2012 are based on the rates (after blending) on page B-4 of this report.

Table D-2 projects each existing amortization base as of July 1, 2011. Beginning in the July 1, 1998 actuarial valuation with the emergence of the surplus, all UAL bases in existence as that time were considered to be fully amortized. While the Plan was in surplus, the UAL amortization payment or credit was made from the surplus for certain post-1998 benefit increases and the 1998 and 2003 experience studies prior to any use of the surplus for contribution rate reductions or any other Florida Retirement System uses. Now that the plan is no longer in surplus, the UAL payment will be paid by employers as part of the contribution rate.

Table D-3 estimates the available surplus / (UAL) for the next three plan years based on Florida law. The estimates are projections of our July 1, 2011 valuation results, and assume experience occurs as stated in our July 1, 2011 valuation, except that the market value of assets is assumed to earn 7.75% per annum, and some of the stored asset gains will be recognized over this time period.

All three tables also assume that no surplus is available for rate reduction. The amortization methodology recognizes the time value of money.

**Table D-1  
Florida Retirement System  
Projection of Retirement Costs (Excluding Member Contributions)  
July 1, 2011**

(All Amounts in Millions)

	<u>2011 -2012</u>	<u>2012 -2013</u>	<u>2013 -2014</u>	<u>2014 - 2015</u>	<u>2015 - 2016</u>
A. Normal Cost *	\$955	\$1,225	\$1,260	\$1,288	\$1,300
B. UAL Payment / (Surplus Utilization )	<u>\$228</u>	<u>\$1,067</u>	<u>\$1,087 <sup>1)</sup></u>	<u>\$1,102 <sup>1)</sup></u>	<u>\$1,087 <sup>1)</sup></u>
C. Total	\$1,183	\$2,292	\$2,347	\$2,390	\$2,387
D. Social Security	<u>\$1,951</u>	<u>\$2,006</u>	<u>\$2,058</u>	<u>\$2,101</u>	<u>\$2,113</u>
E. Grand Total	\$3,134	\$4,298	\$4,405	\$4,491	\$4,500

\* Includes DROP contributions on behalf of DROP members.

<sup>1)</sup> UAL Payment increase is based on assumed increasing payroll, but does not reflect the recognition and funding of deferred investment gains.

**Table D-2  
Florida Retirement System - July 1, 2011 Valuation  
Funding of UAL / (Surplus) by Duration of Amortization**

Years to Amortize Surplus

	FRS	---- Special Risk ----		-- Elected Officers' Class --			Senior	DROP
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management	
Outstanding UAL Balance / (Surplus)	\$8,660,081	\$5,023,171	\$13,478	\$307,572	\$39,749	\$235,677	\$1,250,496	\$2,514,539
UAL Cost / (Savings) (see Table IV-2)	2.36%	8.32%	37.14%	17.71%	37.41%	32.50%	14.73%	6.21%
Normal Cost Payroll	\$18,913,610	\$3,444,856	\$2,127	\$99,194	\$5,989	\$40,631	\$467,811	\$2,694,740
UAL Payroll <sup>1</sup>	\$20,571,656	\$3,446,476	\$2,127	\$99,265	\$6,009	\$40,806	\$484,468	\$2,694,740
Annual Payment / (Savings) for FY 2012 - 2013	\$504,911	\$298,217	\$822	\$18,283	\$2,338	\$13,792	\$74,217	\$174,037

Amortization Period Calculated Assuming

Level Dollar	NA <sup>2</sup>	NA	NA					
Level Percent of Payroll	28	27	27	28	29	29	28	22

<sup>1</sup> The UAL payroll includes salaries for defined contribution program members who pay only the UAL contribution rate.

<sup>2</sup> Current annual payment / (savings) will never accumulate to the UAL if the earned interest rate is 7.75%.

**Table D-3  
Retirement Plan with FRS Rate Stabilization Mechanism  
Impact of Florida Law on Funding of the FRS Defined Benefit Program <sup>1</sup>**

Updated FY 2012-2013 Forward Based on 07/01/2011 Valuation Results and 07/01/2011 Assets

	In Millions		
	<u>2012 - 13</u>	<u>2013 - 14</u>	<u>2014 - 15</u>
1 Estimated Surplus Available RSM <sup>2</sup>	\$0.0	\$0.0	\$0.0
2 Increase/(Decrease) in Available Surplus from prior year	\$0.0	\$0.0	\$0.0
<b><u>UAL Bases</u></b>			
3 12% Increase in Special Risk benefits (in pay status before 07/01/2000) <sup>3</sup>	(\$25.1)	(\$26.1)	(\$27.1)
4 Special Risk Minimum In-Line-of-Duty Disability Increased to 65% <sup>4</sup>	\$0.4	\$0.4	\$0.4
5 1993 - 1998 Experience Study Assumption Changes <sup>5</sup>	\$31.3	\$32.5	\$33.8
6 1998 - 2003 Experience Study Assumption Changes <sup>5</sup>	\$232.6	\$241.6	\$251.3
7 2003 - 2008 Experience Study Assumption Changes <sup>5</sup>	(\$389.4)	(\$404.9)	(\$421.1)
8 2009 Gain/(Loss) <sup>6</sup>	(\$864.4)	(\$898.7)	(\$931.2)
9 2009 Plan Change (House Bill 479)	\$73.4	\$76.4	\$79.4
10 2010 Experience Gain/(Loss)	(\$65.1)	(\$65.9)	(\$68.5)
11 2010 Plan Change (Senate Bill 2100)	\$71.4	\$72.0	\$74.9
12 2011 Experience Gain/(Loss)	(\$151.7)	(\$157.8)	(\$164.1)
<b>Subtotal [(3) + (4) + (5) + (6) + (7) + (8) + (9) + (10) + (11) + (12)]</b>	<b>(\$1,086.6)</b>	<b>(\$1,130.5)</b>	<b>(\$1,172.2)</b>
13 Across the Board Rate Reduction of 0% <sup>7</sup>	\$0.0	\$0.0	\$0.0
<b>Total [Subtotal + (13)]</b>	<b>(\$1,086.6)</b>	<b>(\$1,130.5)</b>	<b>(\$1,172.2)</b>
14 Surplus Available / (UAL) After Previously Legislated Rate Reduction and using remaining available surplus for Rate Reduction for all classes but DROP [(1) + Total] =	(\$1,086.6)	(\$1,130.5)	(\$1,172.2)

<sup>1</sup> Numbers exclude contributions to the Investment Plan.

<sup>2</sup> Projected surplus based on 07/01/2011 valuation results. Using amortization method that reflects interest.

<sup>3</sup> Assumed to be paid from surplus. In the absence of a surplus there is an additional cost to the Special Risk Regular Class of 0.70% attributable to the 12% increase in pre-2000 retired benefits.

<sup>4</sup> Assumed to be paid from surplus. In the absence of a surplus there is an additional cost to the Special Risk Administrative Class of 0.18% and an additional cost to the Special Risk Regular Class of -0.01% attributable to the Increase in Minimum ILOD Disability Benefit.

<sup>5</sup> Assumed to be paid from surplus. In the absence of a surplus there is an additional charge or credit to each class. See Table IV-2 for details.

<sup>6</sup> Includes FY2009 Experience Gain/Loss and Cumulative Gain/Loss unrecognized while Plan maintained a surplus.

<sup>7</sup> No surplus available for rate reduction.

# APPENDIX E

## COMPARISONS/RECONCILIATION



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

## COMPARISONS/RECONCILIATION

This Appendix contains certain comparative information required by the state. The table below compares actual investment return, aggregate payroll growth, and individual salary increases with the actuarial assumptions.

The next table reconciles the flow of participants from the 2010 actuarial valuation to the 2011 actuarial valuation, while the last table cross-references the required sections of 112.64 with this report.

<b>TABLE E-1</b>			
<b>One-Year Comparisons</b>			
<b>1. Annual Rate of Investment Return on Actuarial Value of Assets</b>			
Period Ending	Actual	Assumed	
June 30, 2009	-6.74%	7.75%	
June 30, 2010	5.30%	7.75%	
June 30, 2011	8.39%	7.75%	
<b>2. Annual Rate of Payroll Growth</b>			
Period Ending	Actual <sup>1) &amp; 2)</sup>	Assumed <sup>2)</sup>	
June 30, 2009	-1.63%	0.00%	
June 30, 2010	-3.37%	0.00%	
June 30, 2011	-3.32%	0.00%	
<b>3. Individual Rates of Salary Increases for Regular Members and Special Risk Members</b>			
Year Ended June 30	Rate of Increase During Year		
	Regular Members	Special Risk	Assumed <sup>3)</sup>
2009	2.3%	5.4%	6.25%
2010	1.6%	2.2%	5.85%
2011	3.7%	5.1%	5.85%

<sup>1)</sup> Payroll excludes DROP members for all years

<sup>2)</sup> The payroll base compared is used for normal cost calculations

<sup>3)</sup> Individual rates vary by age



## COMPARISONS/RECONCILIATION

**TABLE E-2  
FLORIDA RETIREMENT SYSTEM DEFINED BENEFIT PROGRAM  
DATA RECONCILIATION**

	Active Members	Disabled Members	Retired Members and Beneficiaries	DROP Participants	Total
Number reported as of July 1, 2010	556,296	13,180	287,949	33,575	891,000
New Entrants	44,657	0	0	0	44,657
Retirements	(16,014)	742	24,532	(9,260)	0
DROP	(20,744) <sup>1)</sup>	0	0	20,744	0
Terminations, PEORP Transfers and deaths with and without benefit	(30,709)	0	0	0	(30,709)
Cessation of benefit payments	NA	(536)	(9,168)	0	(9,704)
Number reported as of July 1, 2011	533,486	13,386	303,313	45,059	895,244

<sup>1)</sup> Includes 8,170 members electing to DROP between July 1, 2010 and June 30, 2011 whose DROP elections were timely filed with the Division of Retirement but whose data was not included in the valuation database.

# COMPARISONS/RECONCILIATION

**Table E-3**  
**Florida Retirement System**  
**Cross Reference to Section 112.64 Reporting Requirements**

<b>Code Ref</b>		
<b>1 General Information:</b>		
1.003 (3g)	Includes certification by the enrolled actuary (signed and dated)?	Page 3
1.003 (11)	Do procedures follow commonly accepted procedures and determinations?	Page 3
1.003 (4g)	Disclosure of events not taken into account by actuary?	Page 2
1.003 (4g)	Disclosure of trends not assumed to continue (by actuary)?	Page 2
<b>2 Assumptions:</b>		
1.003 (3e)	Description and explanation of all actuarial assumptions?	A-1
1.003 (3f)	Is there a comparison of actual to expected salary increases over the preceding 3-year period?	E-1
1.003 (3f)	Is there a comparison of actual to expected investment returns over the preceding 3-year period?	E-1
1.003 (6)	Do assumptions factor in actual experience?	A-1
1.003 (6)	Is impact of inflation considered?	A-8
1.003 (6)	Any consistent experience gains or losses to suggest assumption changes?	No
1.003 (7)	Listing of changed assumptions?	1-13
<b>3 Plan Provisions &amp; Funding Method:</b>		
1.003 (4c)	Contain a summary of plan provisions?	B-1
1.003 (4d)	Contain a detailed summary of funding method?	A-1
1.003 (5)	Does funding method provide a contribution sufficient to meet the NC and amortize the UAL?	Y(Section IV)
<b>4 Assets &amp; Method:</b>		
1.003 (3a)	Is the MVA breakdown included (by cash, bonds, stocks, and other)?	II-3
1.003 (3a)	Is the "statement value" breakdown included?	No
1.003 (3a)	Is the derivation of AVA included?	II-5
1.003 (8)	Are administrative expenses being paid on a current basis?	II-4
	Asset reconciliation, including:	
1.003 (4j)	- contributions by source	II-4
1.003 (4j)	- interest and dividends	II-4
1.003 (4j)	- realized gains / (losses)	II-4
1.003 (4j)	- unrealized appreciation	II-4
1.003 (4j)	- pension payments	II-4
1.003 (4j)	- contribution refunds	II-4
1.003 (4j)	- expenses	II-4
1.003 (4j)	- other receipts (identified)	II-4 (transfer)
1.003 (4j)	- other disbursements (identified)	II-4 (IP)



# COMPARISONS/RECONCILIATION

---

<b>5 UAL &amp; Amortization Schedule:</b>		
1.003 (3b)	Include a plan to amortize any UAL?	IV-1 & D-3
	Does amortization schedule of UAL exist (as of the valuation date) ...	
1.003 (3c)	- on an annual basis for the next 3-years?	No
1.003 (3c)	- for the final year?	No
1.003 (3c)	Is a statement as to how method was derived included?	A-1
1.003 (3d)	Is a description of actions taken to reduce the UAL included?	Section IV
	Reconciliation of UAL (must include items below):	
1.003 (4h)	- UAL for prior valuation (w/ start date)	IV-6
1.003 (4h)	- Normal Cost, contributions, & accrued interest	No
1.003 (4h)	- Impact of changes (assumption, funding method, amendments, gain/loss)	IV-6
1.003 (4h)	- UAL for current valuation	IV-6
<b>6 Results:</b>		
1.003 (4a)	Valuation Date clearly indicated?	I-1
1.003 (4e)	Are results separated by employee group?	III-3 and Sections IV & V
1.003 (4f)	Is there disclosure of any benefit and expense provided by and/or paid from plan assets for which no liabilities or current costs have been established?	Page 2
1.003 (4i)	Projection of emerging liabilities/cash flow needs for next 10-15 years (optional)	No
1.003 (4l)	Summary of principal results (for current and prior valuation) including:	
	- participant data (counts, total pay, total annual benefits by group)	Appendix C
	- assets (market and actuarial)	II-5
	- PVB (split: active by decrement, tv, ret & ben, dis, and total)	III-3
	- PV of future benefit payments	III-3
	- AL and UAL, i.e., including amount, date, amortization period	III-3
	- PVVB (by group), non-vested PVAB, Total PVAB	V-3
1.003 (4l)	Reconciliation of PVAB, including:	
	- PVAB at beginning of year	V-5
	- changes due to amendment and/or assumptions	V-5
	- change due to decrease in discount period and benefits accrued	V-5
	- Benefits paid	V-5
	- Other changes	V-5
	- Net increase (decrease)	V-5
	- PVAB at end of year	V-5
1.003 (4l)	Pension Cost	
	- Normal cost (shown for each benefit and amount for admin expense)	IV-4
	- Payment to amortize UAL	IV-7
	- Expected plan sponsor contribution (i.e. total of above pieces with interest, also as % of pay)	IV-7
	- Amount to be contributed by members (total and % of pay)	B-3



# COMPARISONS/RECONCILIATION

---

1.003 (4l)	Past Contributions	
	- Required plan sponsor & member contribution	V-9
	- Actual contributions made by: plan sponsor, members, other	V-9
1.003 (4k)	Active member accumulated contributions with interest	V-4
1.003 (4l)	Net actuarial gain / loss	IV-6
1.003 (4l)	Other (PVFS & PVFC at attained age and at entry age, PVFC from other sources, PVF Expected BP)	III-4
<b>7 Data:</b>		
1.003 (4i)	Are membership demographics and financial statistics included?	C-1
1.003 (4i)	Age/service table for actives included?	C-8
1.003 (4i)	Data reconciliation?	E-2
<b>8 Contribution Rate:</b>		
1.003 (4a)	Applicable beginning and ending dates for recommended contribution indicated?	I-3
1.003 (4b)	Are ER and EE contribution rates adequate to meet benefits?	I-3
1.003 (4b)	Are contribution rate changes necessary to achieve or preserve funding?	No
1.003 (7)	Is the impact of assumption or cost method changes indicated?	I-1 & IV-2
1.003 (9)	Were costs to be paid at a later date adjusted for interest and/or salary?	Yes I-3
1.003 (10)	Is the effective date of recommended changes no later than the next fiscal year?	Yes I-3



# APPENDIX F

## GLOSSARY



**FLORIDA RETIREMENT SYSTEM**  
Actuarial Valuation as of July 1, 2011

*This work product was prepared solely for the Department of Management Services for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.*

The following definitions are largely excerpts from a list adopted in 1981 by the major actuarial organizations in the United States. In some cases the definitions have been modified for specific applicability to the Florida Retirement System.

**1. *Accrued Benefit:***

The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.

**2. *Accumulated Benefit Obligation (ABO):***

The actuarial present value of benefits attributed by the pension benefit formula to employee service rendered before a specified date and based on employee service and compensation prior to that date.

**3. *Actuarial Assumptions:***

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation, rates of investment earnings, and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.

**4. *Actuarial Cost Method:***

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Liability.

**5. *Actuarially Equivalent:***

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

**6. *Actuarial Gain/Loss:***

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions during the period between two Actuarial Valuation Dates, as determined in accordance with a particular Actuarial Cost Method.

**7. Actuarial Liability (AL) :**

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

**8. Actuarial Valuation:**

The determination, as of a valuation date, of the Normal Cost, Actuarial Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

**9. Actuarial Value of Assets (AVA):**

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

**10. Amortization:**

Paying an interest-bearing liability by gradual reduction through a series of installments, as opposed to one lump-sum payment.

**11. Amortization Payment:**

That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Liability.

- **Level Percent of Pay:**  
Produces a level series of payments when expressed as a percent of payroll.  
Cash payment increases in line with payroll growth assumption.
- **Level Dollar:**  
Produces a decreasing pattern of payments when expressed as a percent of payroll.  
Cash payment remains level.

**12. Annual Pension Cost (APC):**

Under GASB, when the Net Pension Obligation is positive, the APC is equal to the Annual Required Contribution plus the Interest on the beginning Net Pension Obligation minus the amortization of the Net Pension Obligation. When the Net Pension Obligation is negative, the APC is equal to the Annual Required Contribution minus the Interest on the beginning Net Pension Obligation plus the amortization of the Net Pension Obligation.

**13. Annual Required Contribution (ARC):**

Under GASB, this amount is equal to the Normal Cost plus the Amortization Payment. GASB does not require contributions to be equal to the ARC; however it requires the calculation and reporting of the ARC.

**14. Entry Age Normal Actuarial Cost Method (EAN):**

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Liability.

**15. Funded Ratio:**

Ratio of the assets of a pension plan to its liabilities.

**16. Government Accounting Standards Board (GASB):**

This Board sets standards of state and local accounting and financial reporting.

**17. Interest Rate:**

The rate used to discount projected benefit payments to determine the present value in a valuation.

**18. Market Value of Assets (MVA):**

The price for which an asset could be sold at a particular date. May also be referred to as the Fair Value of Assets.

**19. Normal Cost (NC):**

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

**20. Net Pension Obligation (NPO):**

Under GASB, the cumulative difference between Annual Pension Cost and the employer's contributions to the plan, including the pension liability or asset at transition, if any.

**21. Present Value (PV)/ Actuarial Present Value (APV):**

The value of an amount or series of amounts or cash flows payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions, including selected interest rate.

**22. Projected Benefits:**

Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and anticipated future compensation and service credits.

**23. Projected Unit Credit Actuarial Cost Method (PUC):**

A method under which the projected benefits in an Actuarial Valuation are allocated by a consistent formula to valuation years. The Actuarial Present Value of benefits allocated to a valuation year is called the Normal Cost. The Actuarial Present Value of benefits allocated to all periods prior to a valuation year is called the Actuarial Accrued Liability.

**24. *Unfunded Actuarial Liability***

The excess of the Actuarial Liability over the Actuarial Value of Assets. When the Actuarial Value of Assets exceed Actuarial Liabilities a surplus exists.

**25. *Valuation Date:***

The date as of which the liabilities are determined.