

Florida Retirement System Actuarial Assumption Estimating Conference

Executive Summary for October 1, 2012

The Florida Retirement System Actuarial Assumption Conference met on October 1, 2012, and retained the assumptions used in prior years for 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 \$18.0 billion (as finally reported in the December 2011 Actuarial Valuation) to \$19.2 billion.

This is the fourth 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, Fiscal Year 2011-12 had growth well below the desired return (0.22% versus 7.75%). Currently, the system is only 86.9% funded on an actuarial basis.

The preliminary report addressed information received through July 1, 2012. The final report will be based on these assumptions and released in December 2012.

KEY ECONOMIC ASSUMPTIONS

Used in 2009, 2010, 2011 and 2012 Actuarial Valuations

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
• Investment Earnings	7.75%*	Same	Same	Same
• General Wage Increase	4.00%**	Same	Same	Same
• Post-Retirement Benefit Increase	3.00%	Same	Same	Same
• Growth in Membership	0.00%	Same	Same	Same

*Includes a 3.0% inflation assumption.

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

The Conference also adopted a conceptual proposal to review a number of potential changes to the actuarial assumptions that have been offered over the last year. In this regard, the Conference requested that there be one or more special studies (under the auspices of the Division of Retirement) to look at several economic and noneconomic issues in greater depth. To accomplish this, the principals will prepare a list of specific issues that need to be evaluated, and submit the recommendations to the Appropriations Committees and the Governor's Office. The Conference noted that the recommended studies should not delay funding decisions regarding the UAL during the upcoming session.

Florida Retirement System

The Actuarial Assumption Estimating Conference

Including Preliminary July 1, 2012 Actuarial Valuation Results

Presented by:

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Consulting Actuary

October 1, 2012



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Overview

- Key Assumptions
- Historical Analysis
- 2012 Valuation
- Discussion Points
- Projections
- Appendix

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Key Economic Assumptions

Used in 2011 & 2012 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

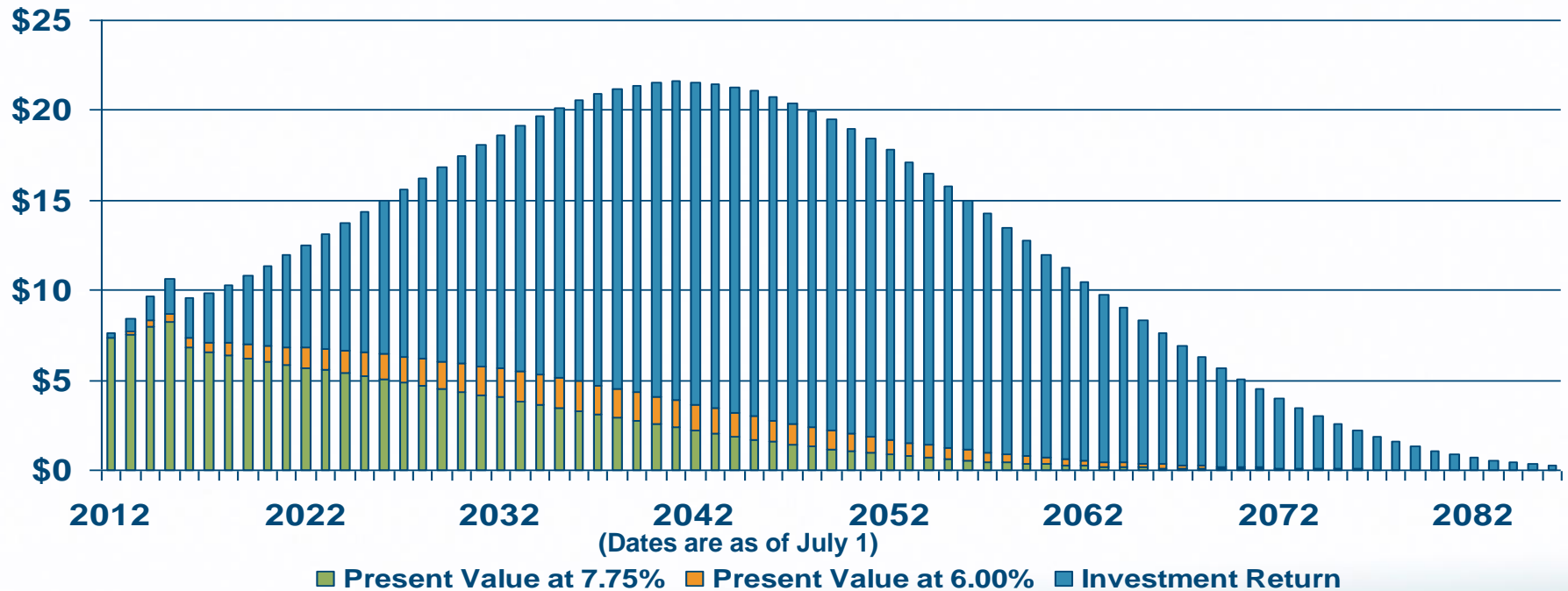
*** Applicable only to service earned before July 1, 2011; there are no post-retirement benefit increases for service earned on or after July 1, 2011

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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 the Investment Plan). The green portion represents each year's benefit payments, discounted at 7.75% to July 1, 2012 (i.e., 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)



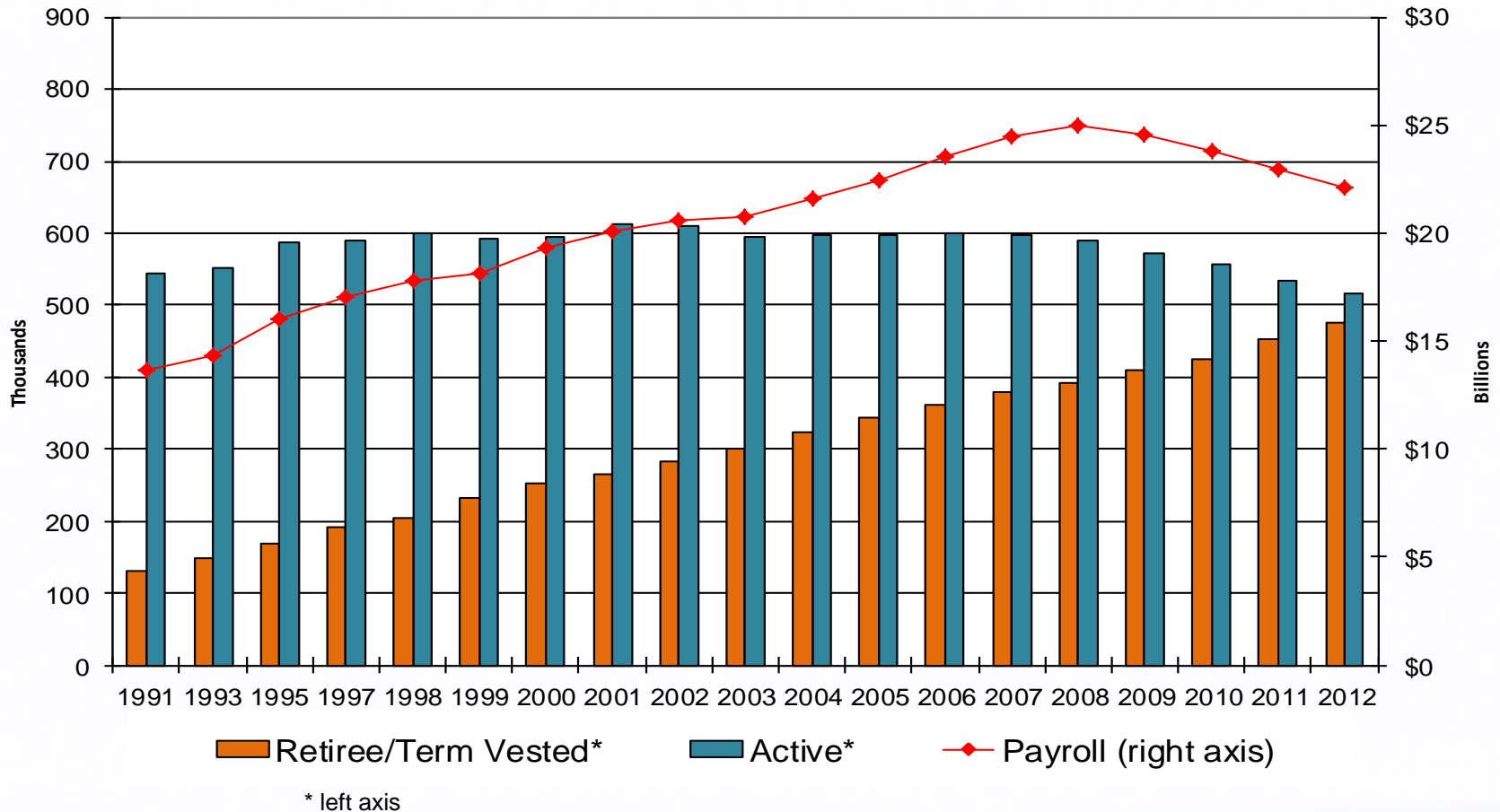
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Historical Analysis

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

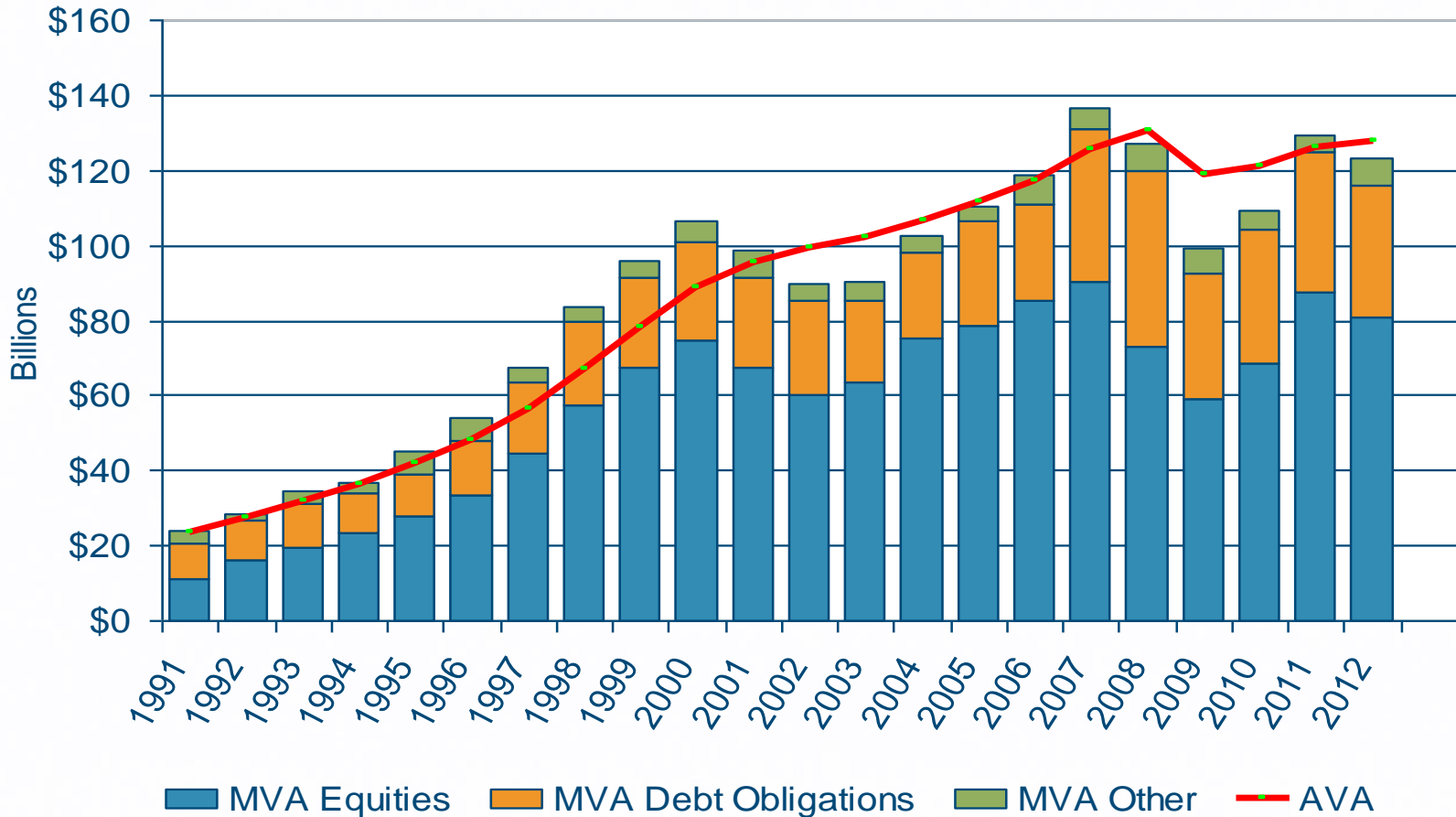
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Membership & Employer Payroll



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Market & Actuarial Value of Assets



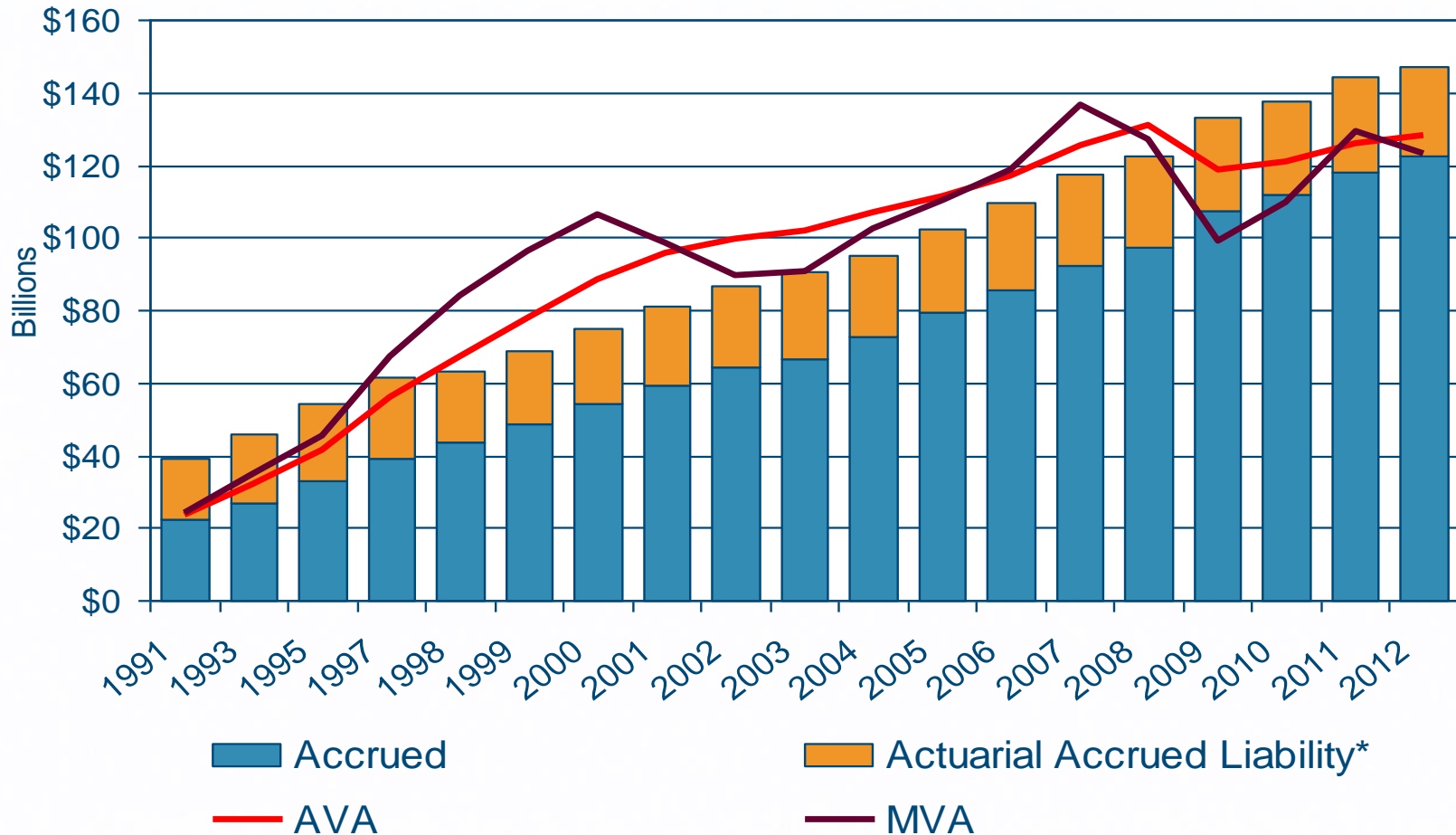
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Actuarial Liability

	<u>Actuarial Accrued Liability</u>	<u>Actuarial Value of Assets</u>	<u>Unfunded Actuarial Liability</u>
2011 Valuation	\$144.1	\$126.1	\$18.0
2012 Valuation	\$147.1	\$127.9	\$19.2

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Assets and Liabilities

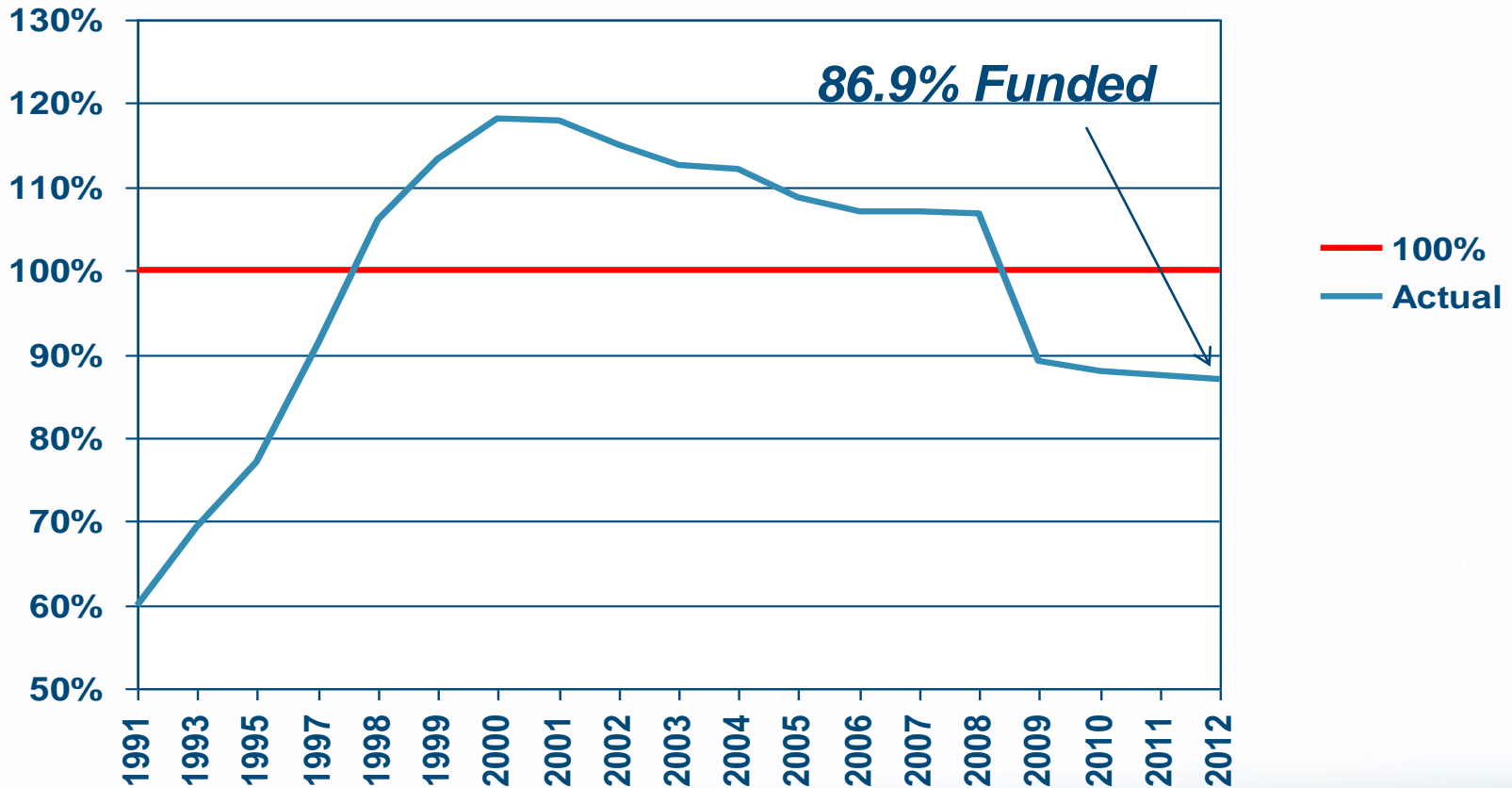


*Under the Entry Age Actuarial Cost Method, Actuarial Accrued Liability is equal to Present Value of Projected Benefits (PVB) less Present Value of Future Normal Cost (PVFNC)

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Funding Target:

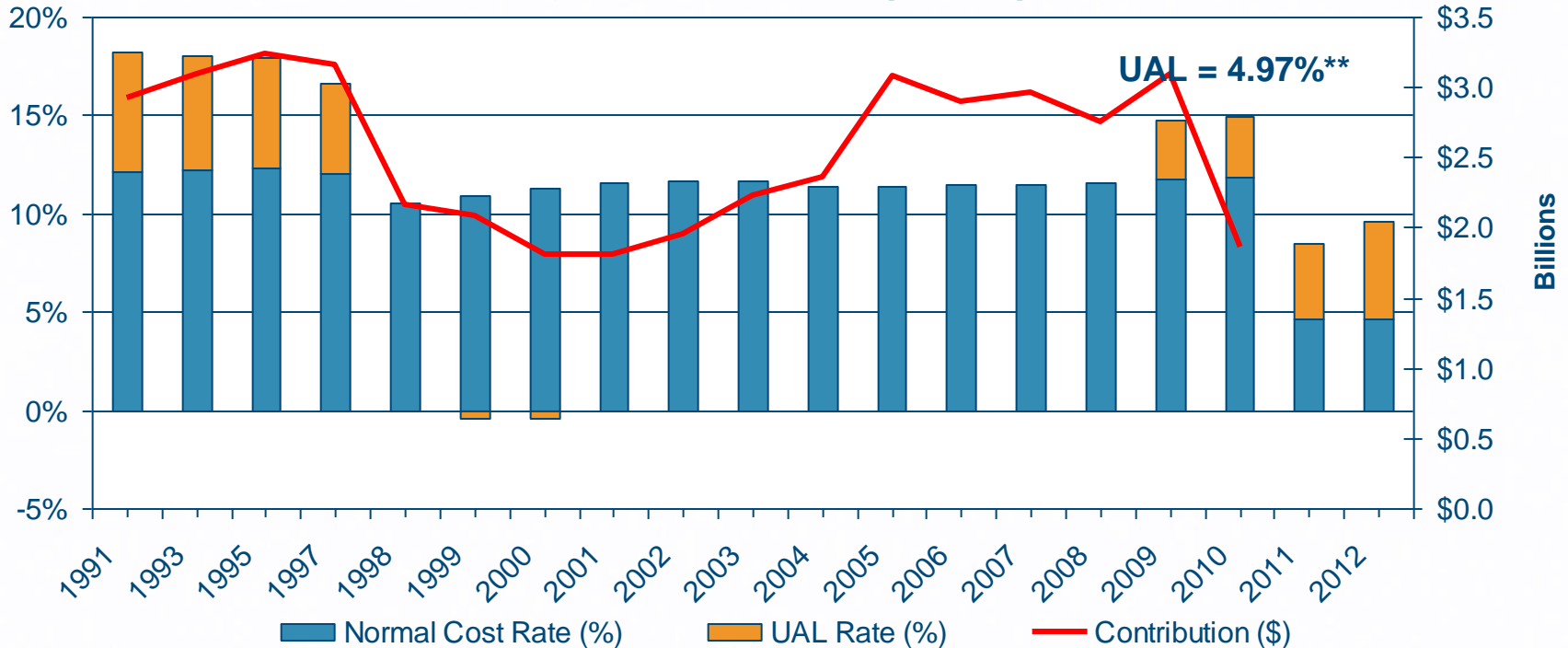
Actuarial Value of Assets / Actuarial Liabilities



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Contributions

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

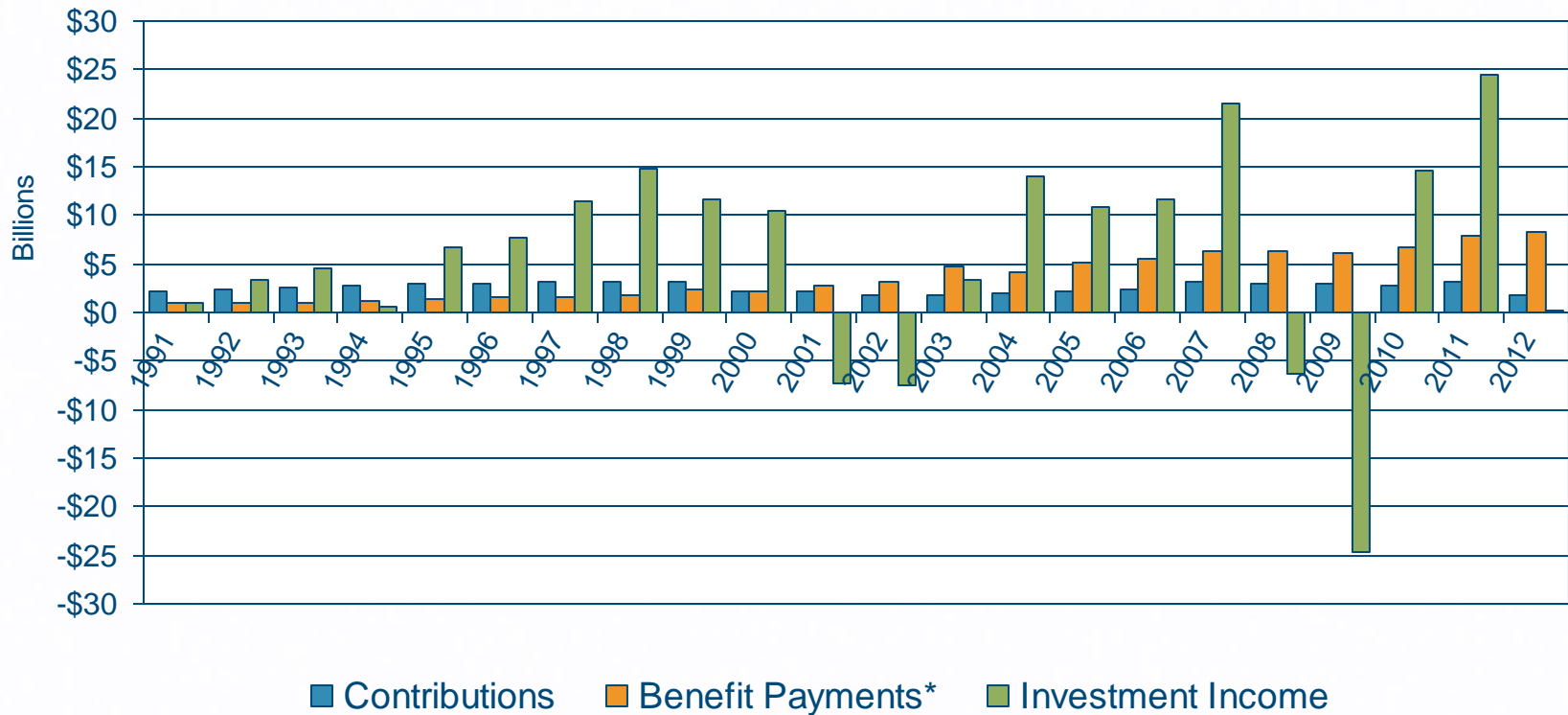


*For example, contributions for FY 2012 are shown in 2010 because the 2010 actuarial valuation developed contribution rates for FY 2012.

**For purposes of this presentation, the 2012 UAL rate was approximated as the rate needed to amortize the entire UAL within 30 years.

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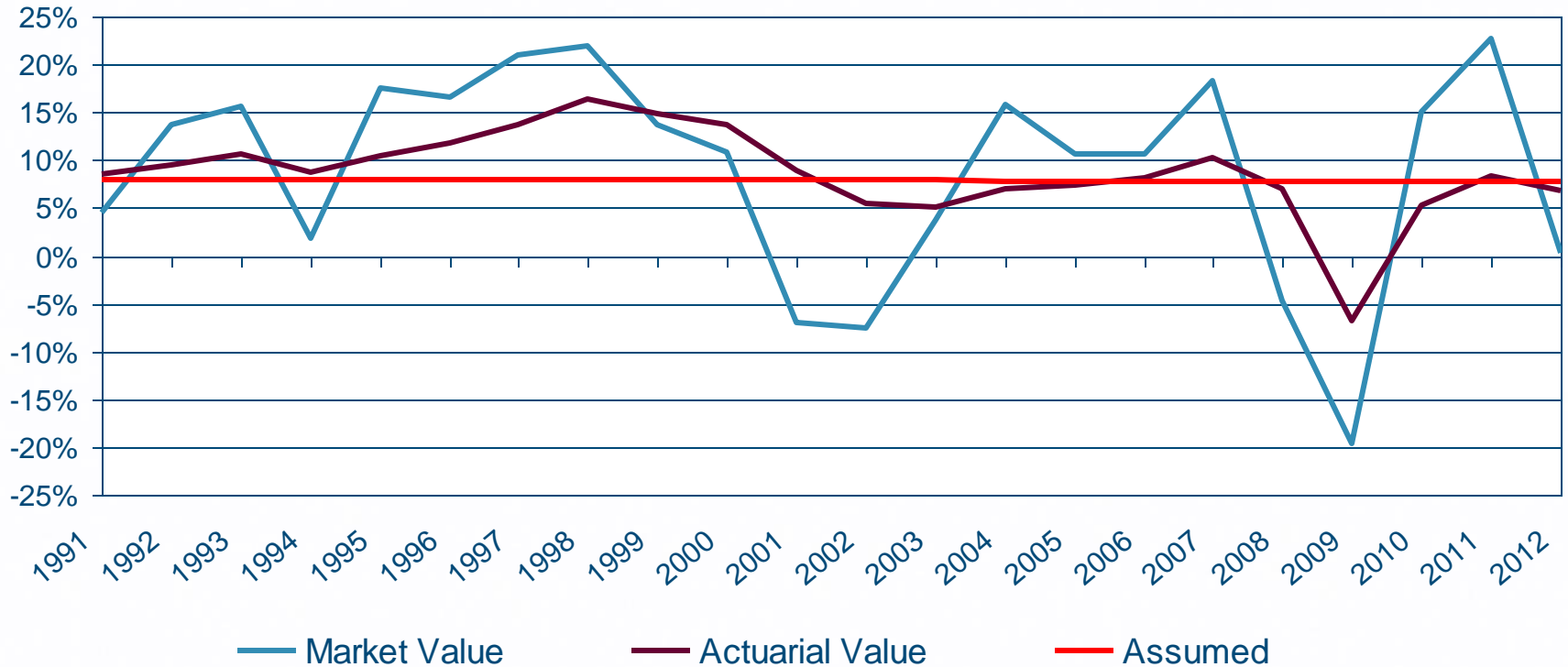
Plan Cash Flows



* Includes Transfers to IP; Initial Transfers in 2003 were \$353 Million. Also see Slide 22.

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Historic Asset Returns



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2012 Valuation

- Valuation Highlights
- Assets and Smoothing
- Composite Funding Levels
- Normal Cost Rates
- Allocation of Assets
- Summary of IP Elections

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2012 Valuation Highlights

- Results are based on the actuarial assumptions 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.
- Results are based on plan provisions as currently enacted.
- Fourth year that FRS is not in a surplus position
- Asset performance lagged investment return assumption
- AVA exceeds MVA by 4% or \$5.0 billion

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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.

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Assets: MVA vs. AVA

(\$ in Billions)

<u>Year</u>	<u>MVA</u>	<u>MVA Return</u>	<u>AVA</u>	<u>AVA Return</u>
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	129.1	22.79	126.1	8.39
2012	122.9	0.22	127.9	6.74

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 22.79%, but deferred losses in prior years dampened the impact on the AVA. The MVA return in 2011-12 was 0.22%, resulting in the AVA once again exceeding the MVA.

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Composite Funding Levels

	<u>2011 Val</u>	<u>2012 Val</u>	<u>Change</u>
Actuarial Liability	\$144.1	\$147.1	2.1%
Actuarial Value of Assets	\$126.1	\$127.9	1.4%
Unfunded Actuarial Liability	\$18.0	\$19.2	6.7%
% Funded	87.5%	86.9%	

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Normal Cost Rates

<u>Employer</u>	<u>2011 VAL (A)</u>	<u>2012 VAL (B)</u>	<u>Change (B) – (A)</u>
FRS Regular	3.54%	3.53%	-0.01%
Special Risk			
Regular	10.74%	10.75%	0.01%
Administration	3.43%	3.76%	0.33%
Elected Officers' Class			
Judicial	9.93%	9.98%	0.05%
Leg-Atty-Cab	6.38%	6.42%	0.04%
Local	8.20%	8.30%	0.10%
Senior Management Service	4.80%	4.77%	-0.03%
Composite Rate (without DROP)	4.68%	4.68%	0.00%
Composite Rate with DROP equal 4.33% in 2011 and 4.63% in 2012	4.64%	4.68%	0.04%

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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	\$97.6	\$25.2	\$0.1	\$1.0	\$0.1	\$0.5	\$3.4	\$19.2	\$147.1
2. Unadjusted AVA	87.1	20.1	0.1	0.7	0.1	0.3	2.0	17.5	127.9
3. UAL: (1) – (2)	10.5	5.1	0.0	0.3	0.0	0.2	1.4	1.7	19.2
4. Aggregate Funded Percentage: (2) / (1)									86.9%
5. DROP Assets required to meet Aggregate Funded Percentage								\$16.7	
6. Proportion of DROP Liability	0.7260	0.2194	0.0002	0.0156	0.0010	0.0050	0.0328	0.0000	1.0000
7. DROP Assets to be reallocated	\$0.7	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.9)	-
8. Allocated AVA: (2) + (7)	87.8	20.3	0.1	0.7	0.1	0.3	2.0	16.6	127.9
9. Final UAL: (1) – (8)	\$9.8	\$4.9	\$0.0	\$0.3	\$0.0	\$0.2	\$1.4	\$2.6	\$19.2

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

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Investment Plan Contingent Liability - July 1, 2012

<u>Employer</u>	<u>Remaining "Original" Participants</u>	<u>Contingent Liability (000 omitted)</u>
FRS Regular	7,686	\$215,005
Special Risk		
Regular	253	10,652
Administration	1	(24)
Elected Officer's Class		
Judicial	5	(654)
Leg-Atty-Cab	5	201
Local	10	102
Senior Management Service	<u>189</u>	<u>9,815</u>
2012 TOTAL	8,149	\$235,098
<u>For Comparison:</u>		
2011 TOTAL	8,822	\$236,275
2003 TOTAL	21,043	\$312,915
Net Assets transferred to IP in 2003:		\$353,193

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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.

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Discussion Points (continued)

- Third Year that Legislated Contribution rates do not fully fund the UAL

Membership Class	Fiscal Year 2010-2011		Fiscal Year 2011-2012		Fiscal Year 2012-2013	
	Recommended	Legislated	Recommended	Legislated	Recommended	Legislated
FRS Regular	12.01%	9.69%	12.07%	3.35%	5.90%	4.13%
Special Risk Regular	29.67%	22.23%	29.06%	12.13%	19.06%	14.05%
Special Risk Admin	31.29%	12.22%	37.10%	3.60%	40.57%	4.56%
EOC – Judicial	32.99%	20.71%	31.32%	10.09%	27.64%	10.78%
EOC – Leg-Atty-Cab	38.63%	15.69%	41.46%	6.76%	43.79%	7.63%
EOC – Local	43.54%	17.76%	43.69%	8.27%	40.70%	9.23%
Senior Management Svc	24.04%	13.99%	24.38%	4.22%	19.53%	5.23%
Composite w/o DROP	14.97%	11.70%	14.97%	4.69%	8.24%	5.63%
DROP	20.07%	11.14%	19.57%	3.31%	10.54%	4.33%
Composite w/ DROP	15.34%	11.66%	15.31%	4.60%	8.46%	5.51%

- The above recommended rates are blended with the Investment Plan contribution rates to derive the uniform blended rates employers contribute.
- Contribution Rates for Fiscal 2011-12 and Fiscal 2012-13 do not include the 3% required employee contributions.

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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 funding from the two plans were designed to be approximately the same.
- Since then:
 - 2011 SB 2100
 - Mandated 3% employee contributions from all current and future members of the IP and DB Plan, with a proportional reduction in employer contribution rates
 - Reduced the potential level and value of benefits for both current and future enrollees in the DB Plan beginning July 1, 2011.
 - 2012 HB 5005
 - Further reduced the employer 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 or vice-versa. The time lag since the 2012 change is too brief to see any trends. These elections may have an impact on future results.

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Changing Investment Return Assumption

- Economic and market outlook invites an examination of the investment return assumption, which is currently 7.75%
- Liability discount rate should be in line with the long-term investment return assumption
- Following completion of the 2010 valuation, we completed a study showing the impact to the DB Plan of using various lower investment return assumptions. Lowering the assumption from 7.75% to 7.50% would have increased the July 1, 2010 Actuarial Liability by approximately 3.2%. The analysis was done prior to enactment of SB 2100.
- Must consider several economic assumptions in conjunction with investment return: inflation, general wage increase and payroll growth.

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Actuarial Liability & Asset Projections

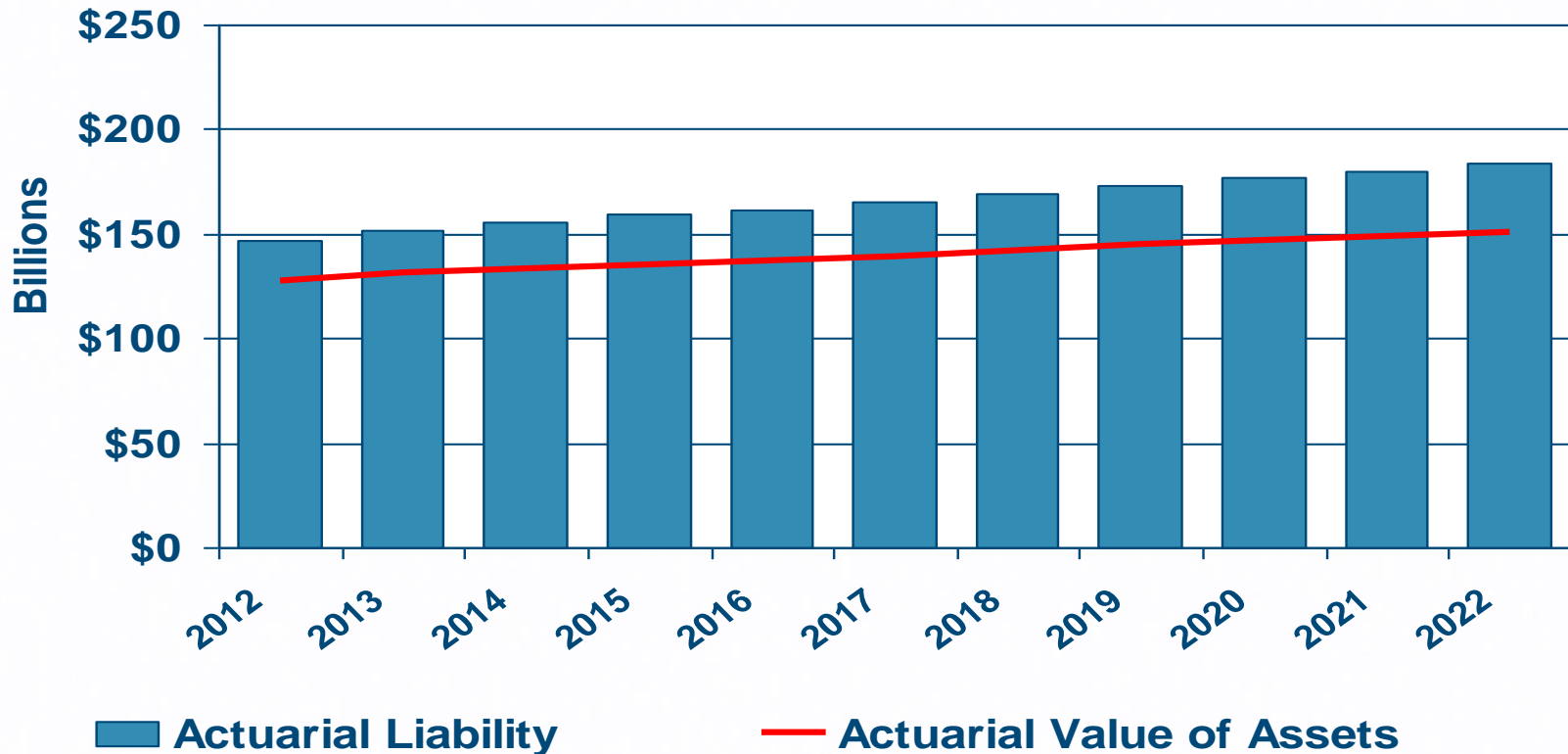
- Assuming 7.75% constant investment returns

*** All returns are on a Market Value basis

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Comparison of Actuarial Liabilities & Assets

(Assuming Constant 7.75% Investment Returns)



Employer & Employee contributions assumed to be 8.42% of payroll. Rate set to equal FY12-13 composite rate.

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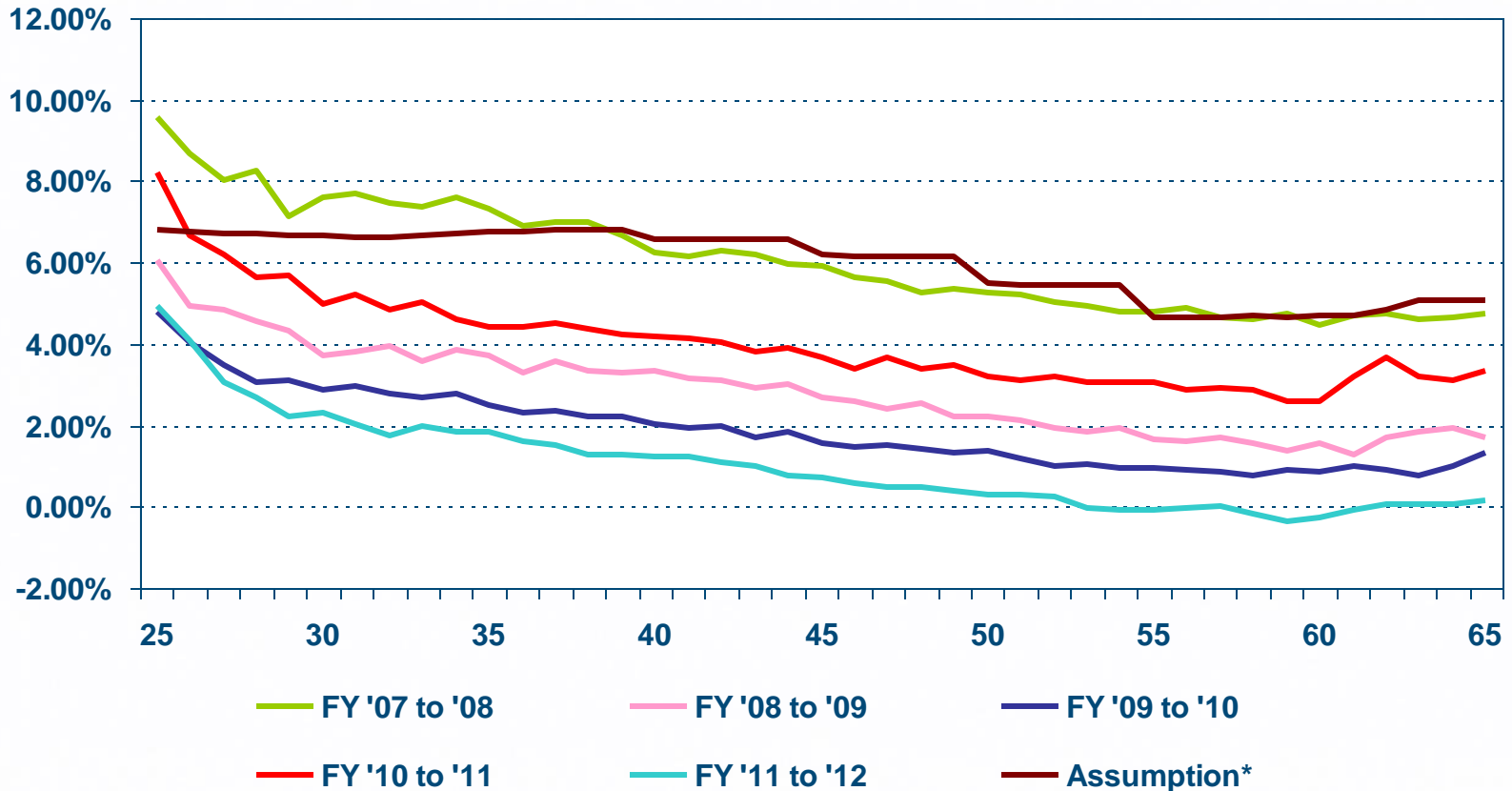
Appendix

- Salary Experience
 - Compare last five years

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Salary Experience

(All Actives – Last five fiscal years)



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

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Conclusion

The purpose of this presentation is to provide preliminary results of the July 1, 2012 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 during Fiscal Years 2003-2008. The new assumptions were first used in the Fiscal Year 2009 Valuation, and have been modified subsequently 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.

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Review of 2012 Asset-Liability and Asset Allocation Update

IAC Meeting
March 19, 2012

Hewittennisknupp

An Aon Company

Agenda

Section 1: Asset Liability Update

- Background
 - Pension finance
 - Overview of AL process
- Assumptions
- Projected results
 - Contribution rates
 - Funded status
- Risk-reward analysis
 - Long-term economic cost
 - Short-term funded status shortfall risk
- Forward-looking issues

Section 2: Liquidity Analysis

Section 3: Asset Allocation Update

Section 4: Appendix

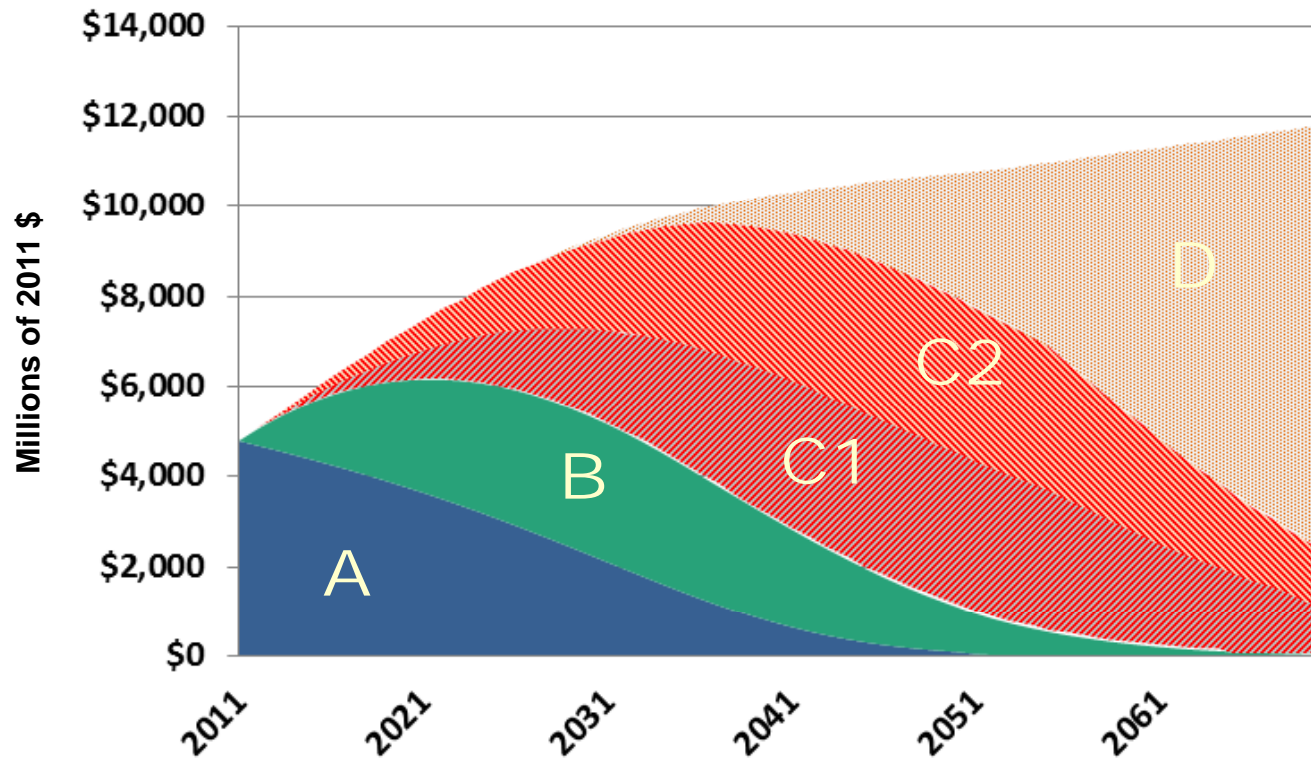


Asset Liability Update

Pension Finance

- Pension obligations
 - Future benefit cash flows
 - Types of liability measures (i.e. discounted value of future cash flows)
 - Current accrued benefit obligations
 - Target level for long-term funding
- Funding approaches
 - Corporate plan model = focus on short term balance sheet exposures
 - Public plan model = focus on long term cost levels
- Investment policy, to balance competing objectives:
 - Earn high returns over the long term, using the available “equity risk premium”
 - Control risk
 - Long term cost uncertainty
 - Short term cost volatility
 - Short term balance sheet exposures

Pension Obligations – Future Benefit Cash Flows



A = benefits for current retirees
B = benefits already accrued/earned for current employees
C1+C2 = benefits yet to be earned for current employees
(C1 = portion allocated by actuarial method for past service)
D = benefits for future employees

Pension Obligations – Liability Measures

- A liability measure is calculated by:
 - Taking future cash flow estimates
 - Discounting the value of each yearly amount by some rate of interest, or discount rate
 - Adding all these values into a single amount
- Different liability amounts result from:
 - Including different portions of the total future cash flow stream
 - Using different discount rates
 - A higher rate to reflect the expected future investment return (e.g. 7.75%)
 - A risk-free, or low risk, bond yield (e.g. 5.5% - 6.0%)
- Different calculations may be more appropriate for certain purposes:
 - Measuring current balance sheet exposure
 - Accumulated Benefit Obligation (“ABO”) measure – includes cash flow segments A + B
 - Can be measured using either low risk bond yields, or expected portfolio return
 - Guiding long term funding rates
 - For corporate plans, the ABO measure based on current bond yields is used
 - For public plans, the funding target is
 - ♦ More comprehensive – it includes cash flow segment C1
 - ♦ Based on the actuary’s estimate of expected portfolio return (currently 7.75% for FRS)

Pension Liability Measures

Estimated FRS Pension Liability at 7/1/2011 (billions):

Benefit payment layer:	----- Discount Rate -----		Discount 7.75% Expected Return
	7.75% Expected Return	6.00% AA Corp. Bond Yields	
A	\$ 90	\$ 108 *	\$ 90
B	\$ 28	\$ 38 *	\$ 28
C1	NA	NA	\$ 26
Total	\$ 118	\$ 146 *	\$ 144

* rough estimate

ABO measured
at 7.75% --
disclosed in
FRS annual
report

ABO measured
at 6.00% --
comparable to
corporate plan
measurement

Funding target
used by
actuary to
determine
funding rates

Steps in the Asset-Liability Process

- Establish assumptions and simulate key economic variables (1,000 scenarios)
 - Inflation
 - Interest rates
 - Asset class returns, volatility and correlations
- Use simulations to develop plan financial results over forecast period
 - Liabilities
 - Assets
 - Costs
- Summarize and graph results
 - Trends
 - Range and distribution of results (i.e. uncertainty or risk)
- Test impact of alternative asset allocation targets
 - Fixed income
 - vs.
 - All other asset classes: referred to as “risk assets”, where some additional risk is taken in order to earn an expected spread return over fixed income

Steps in Developing Expected Returns

- U.S. bonds: based on current yields and expected yield changes
- U.S. equities: add an equity risk premium to the U.S. bond expected return
- All other asset classes – returns will be consistent with U.S. equity and U.S. bonds, in proportion to their equity risk premiums
- Volatility and correlation assumptions for all classes are based on the standard Hewitt EnnisKnupp assumption set (2012 Q1)

U.S. Equity Return

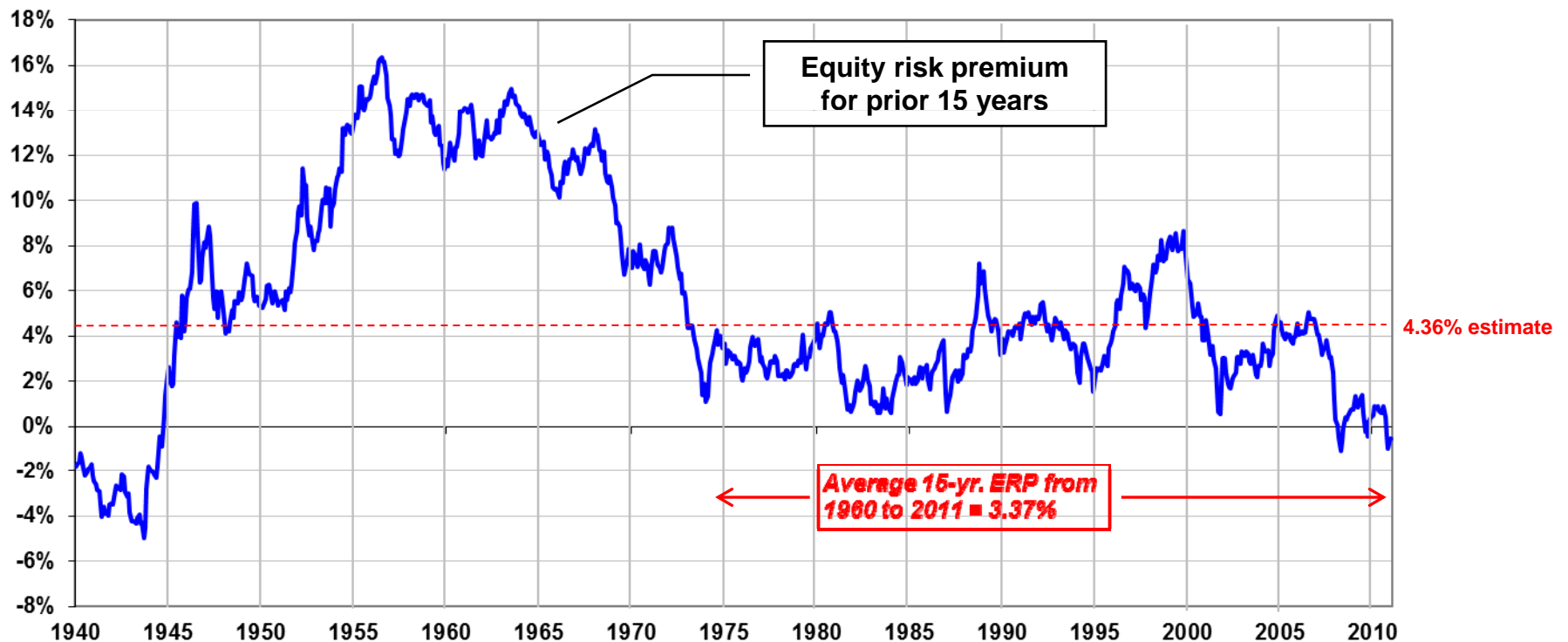
- For the 2012 asset liability update we used an equity risk premium assumption equal to 4.36%, the average of the assumptions used by the four SBA investment consultants. The resulting expected average compounded return for U.S. equities is equal to 7.4% (the U.S. bond expected return of 3.0% plus the equity risk premium of 4.4%):

	2010 AL Study	2011 AL Update	2012 AL Update
Price inflation	2.40%	2.15%	2.10%
US bond returns	4.60%	4.20%	3.00%
Risk premium for US equities			
HEK	2.40%	3.60%	4.50%
Callan	4.00%	4.25%	4.50%
Wilshire	3.25%	3.50%	4.65%
Mercer	3.80%	3.80%	3.80%
Average	3.36%	3.79%	4.36%
US equity returns	7.96%	7.99%	7.36%

All returns are 15-year geometric average expected returns.

Equity Risk Premium

- The equity risk premium 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 equity risk premiums over 15-year time periods are not very stable:

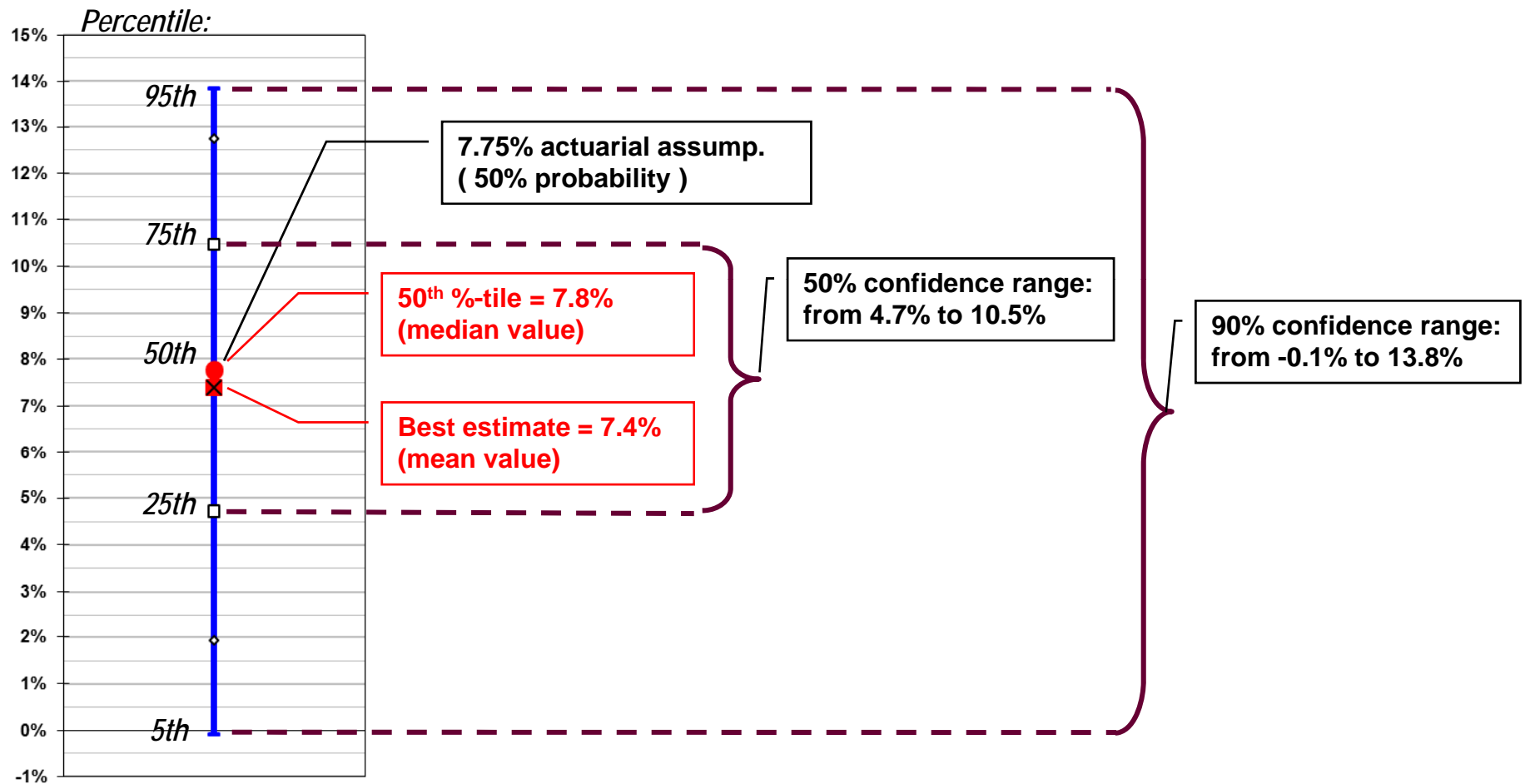


Best Estimate Return – 75% Risk Assets + 25% Fixed Income

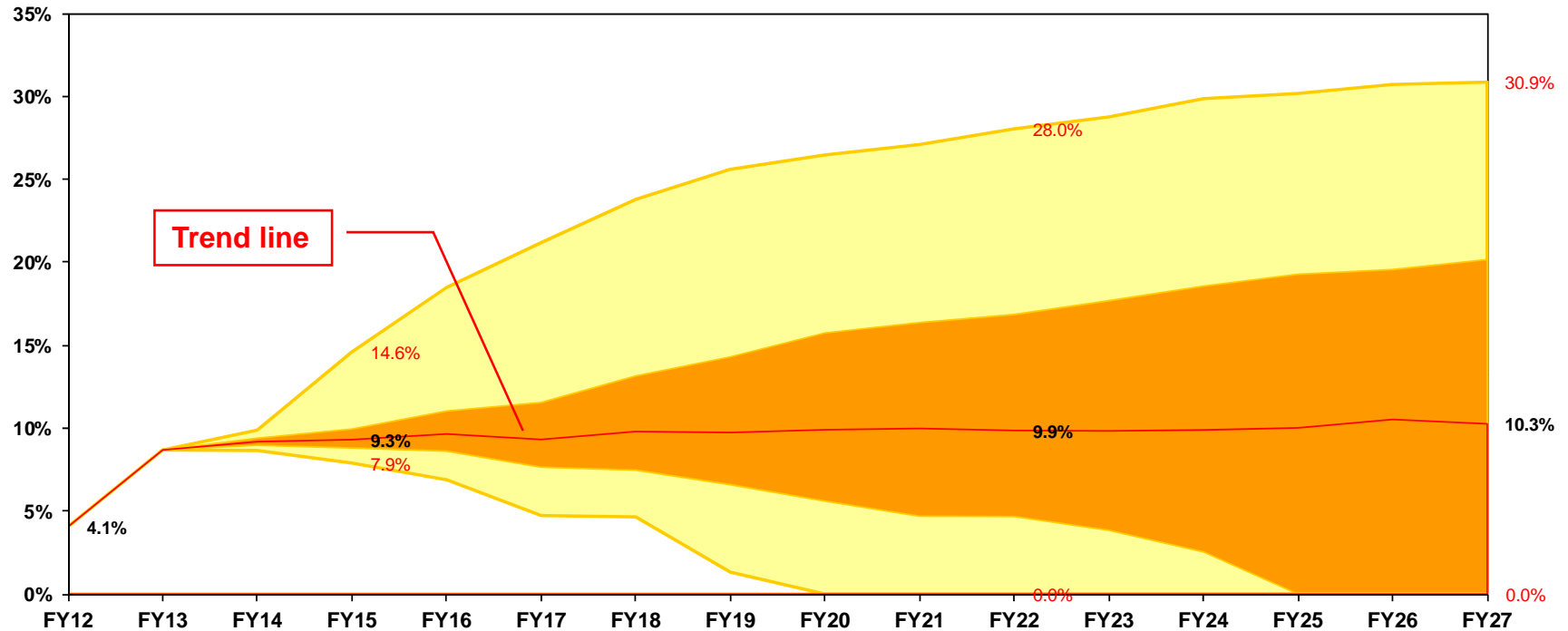
	<u>Current Policy Targets*</u>	<i>--- Expected Average Return ---</i>		<u>Standard Deviation</u>	
		<u>Compounded</u>	<u>Single Year</u>		
Global Equity	52%	8.5%	10.6%	20.8%	
Private Equity	5%	9.2%	13.2%	28.3%	
Real Estate	7%	7.1%	8.4%	16.3%	
Strategic					
Debt-oriented	3%	9.5%	10.1%	10.5%	Risk Assets
HF - Absolute Return	2%	5.8%	6.3%	9.3%	
HF - Equity Long/Short	2%	7.7%	8.4%	11.5%	
HF - Open Mandate	2%	7.3%	7.8%	10.6%	
Infrastructure	2%	8.5%	10.2%	18.3%	
US Bonds	24%	3.0%	3.1%	3.5%	Fixed Income
Cash	1%	2.2%	2.2%	1.3%	
Inflation		2.1%			
Total Portfolio					
Gross		7.5%	8.4%		
Expenses		0.14%	0.14%		
Net - Nominal Return		7.4%	8.3%	13.0%	
Net - Real Return		5.3%			

* Allocation targets based on "Expanded Authority" policy, with typical diversification within the "Strategic" class

Range of Possible 15-Year Compound Returns -- Nominal



Range of Employer Contribution Rates (DB Plan Only) – Current 75% Risk Asset Allocation

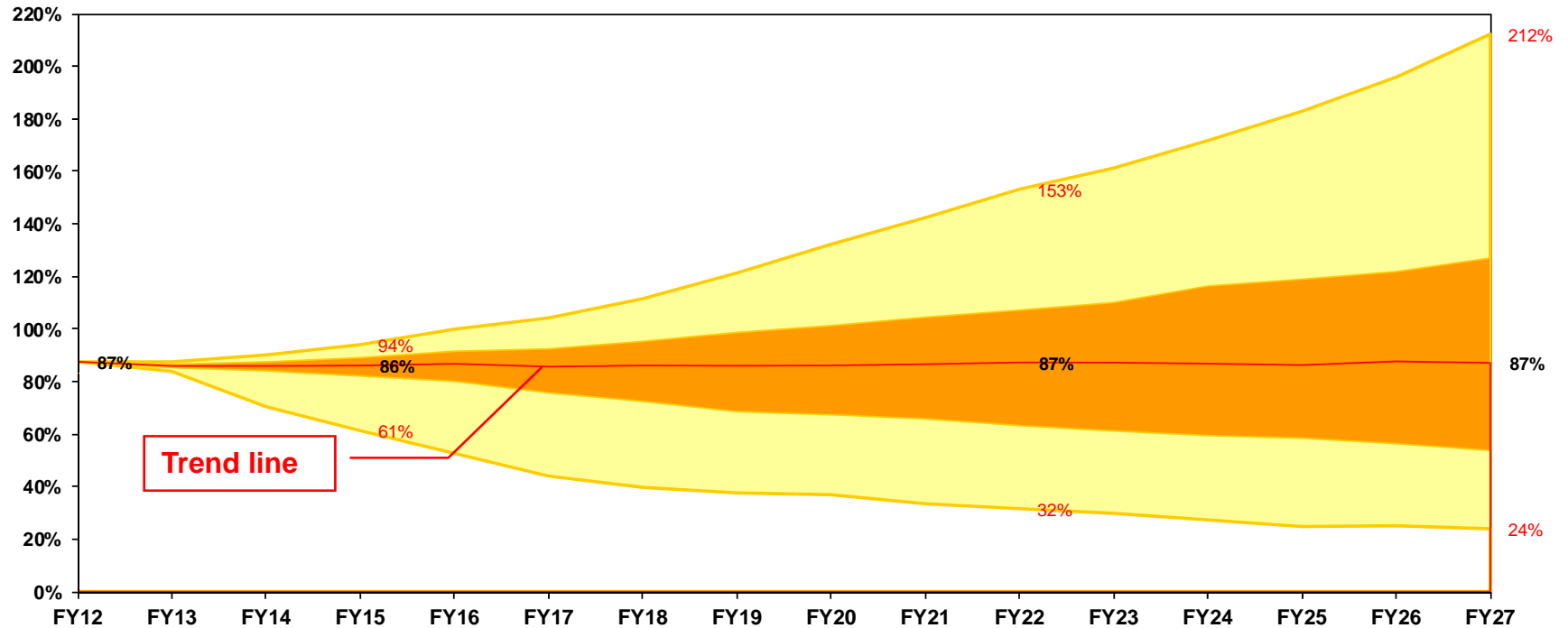


%-tile values:

5%	4.1%	8.7%	8.6%	7.9%	6.9%	4.7%	4.7%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
25%	4.1%	8.7%	9.0%	8.8%	8.6%	7.6%	7.5%	6.6%	5.6%	4.7%	4.7%	3.8%	2.5%	0.0%	0.0%	0.0%
50%	4.1%	8.7%	9.2%	9.3%	9.7%	9.3%	9.8%	9.7%	9.9%	10.0%	9.9%	9.8%	9.9%	10.0%	10.5%	10.3%
75%	4.1%	8.7%	9.4%	9.9%	11.0%	11.5%	13.1%	14.3%	15.7%	16.4%	16.8%	17.7%	18.6%	19.3%	19.6%	20.2%
95%	4.1%	8.7%	9.9%	14.6%	18.5%	21.2%	23.8%	25.6%	26.5%	27.1%	28.0%	28.8%	29.9%	30.2%	30.7%	30.9%

Dark shaded area indicates the 50% probability zone, and light shaded area indicates the 90% probability zone.

Range of Funded Ratios – Current 75% Risk Asset Allocation



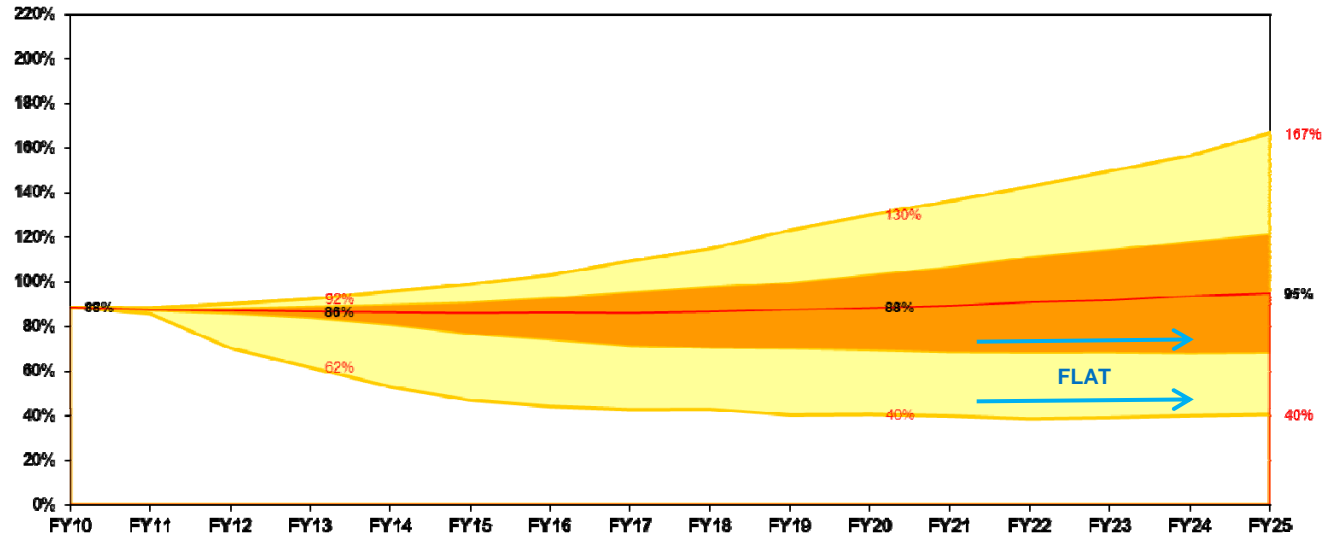
%-tile values:

5%	87%	84%	70%	61%	53%	44%	40%	38%	37%	33%	32%	30%	27%	25%	25%	24%
25%	87%	85%	84%	82%	80%	76%	72%	69%	67%	66%	63%	61%	59%	58%	56%	54%
50%	87%	86%	86%	86%	87%	86%	86%	86%	86%	87%	87%	87%	87%	86%	88%	87%
75%	87%	87%	87%	89%	91%	92%	95%	99%	101%	104%	107%	110%	116%	119%	122%	127%
95%	87%	87%	90%	94%	100%	104%	111%	121%	132%	142%	153%	161%	172%	183%	196%	212%

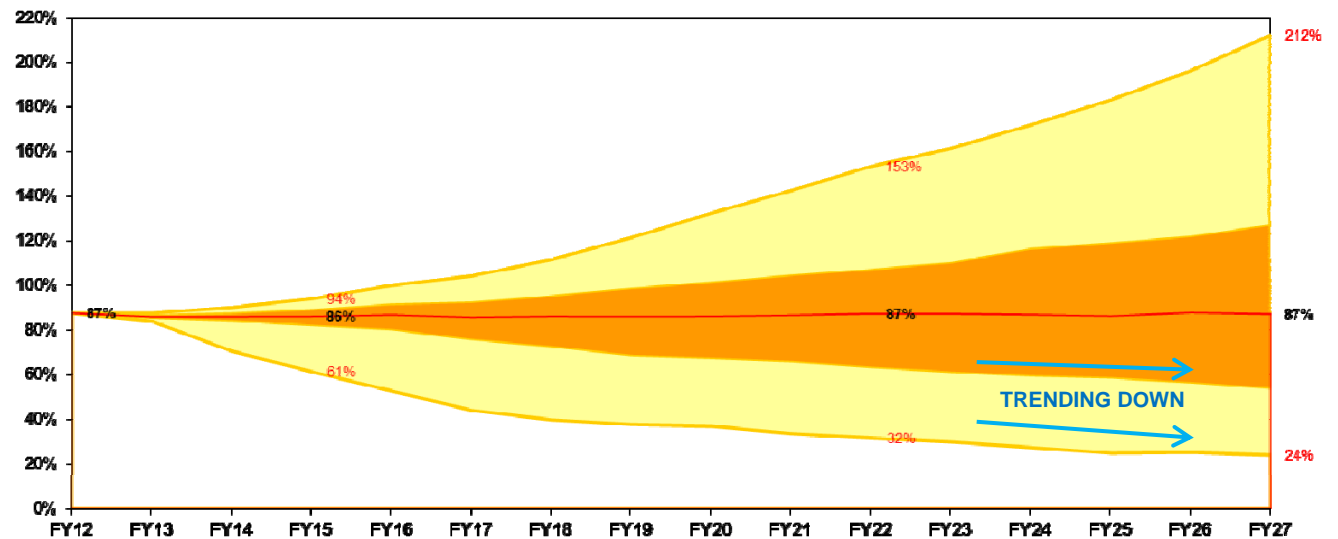
Dark shaded area indicates the 50% probability zone, and light shaded area indicates the 90% probability zone.

Range of Funded Ratios – Compare 2010 With 2012

From 2010 AL study
Before plan changes



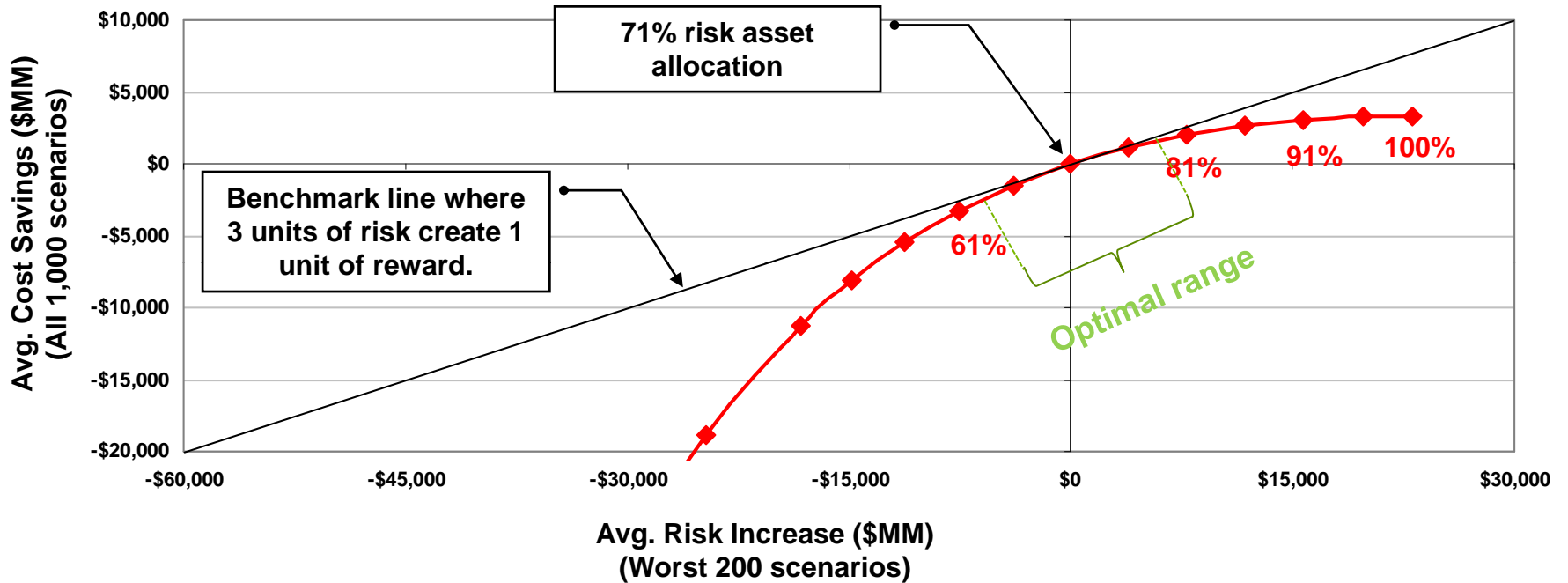
From 2012 AL study
After plan changes



Risk – Reward Analysis

- Review the 2010 AL study and asset allocation study
- Analysis of 2012 update results
 - Long-term risk-reward based on “Economic Cost”
 - Economic Cost reflects the contributions required over the next 15 years, plus (or minus) an adjustment to reflect the plan’s unfunded liability (or surplus) at the end of the 15 year projection period.
 - Our reward measure is the average Economic Cost across all 1,000 scenarios.
 - Our risk measure is the average Economic Cost for the worst 20%, or 200 scenarios, reflecting the higher cost when investment returns underperform expectations.
 - Short-term risk analysis, focused on funded ratio shortfall probabilities.

2010 Risk-Reward Analysis: Based on Long-Term Economic Cost

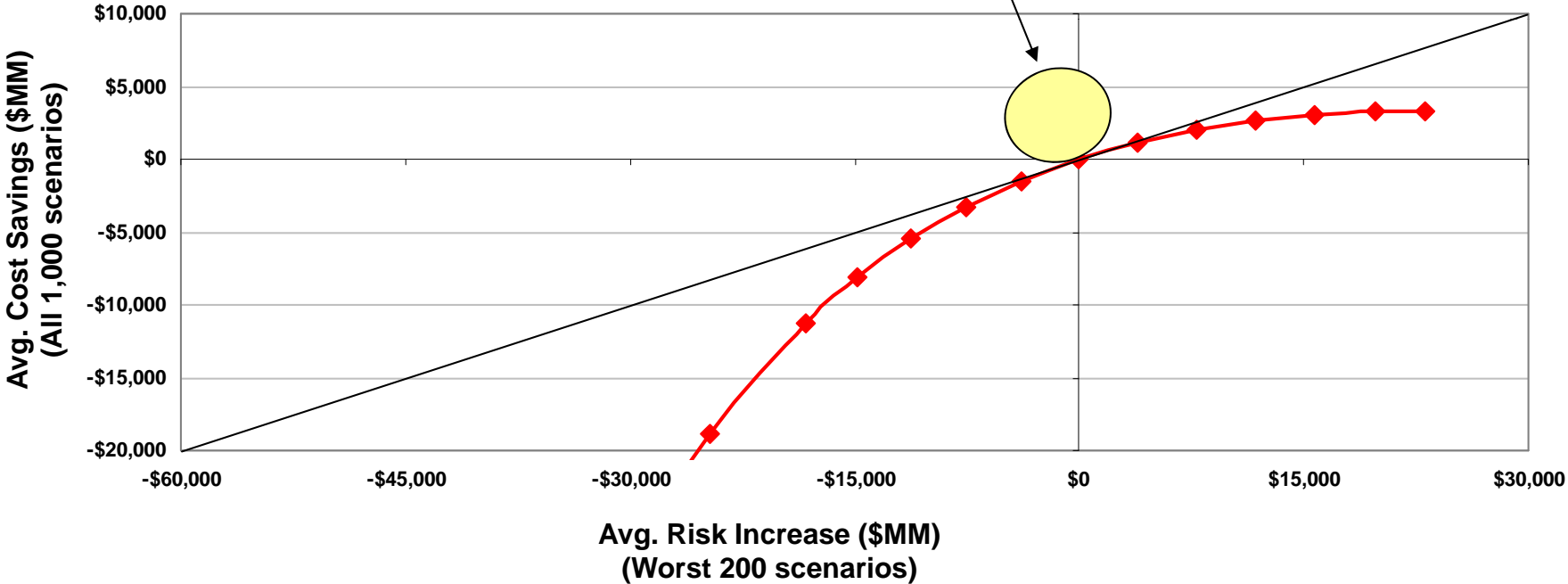


Asset/Liability Study Phase 1: How much overall portfolio risk?

Conclusion: The current (June 2010) policy is right in the middle of the risk-reward optimal range, suggesting maintenance of the current level of risk.

Investment Policy Phase 2: Diversification

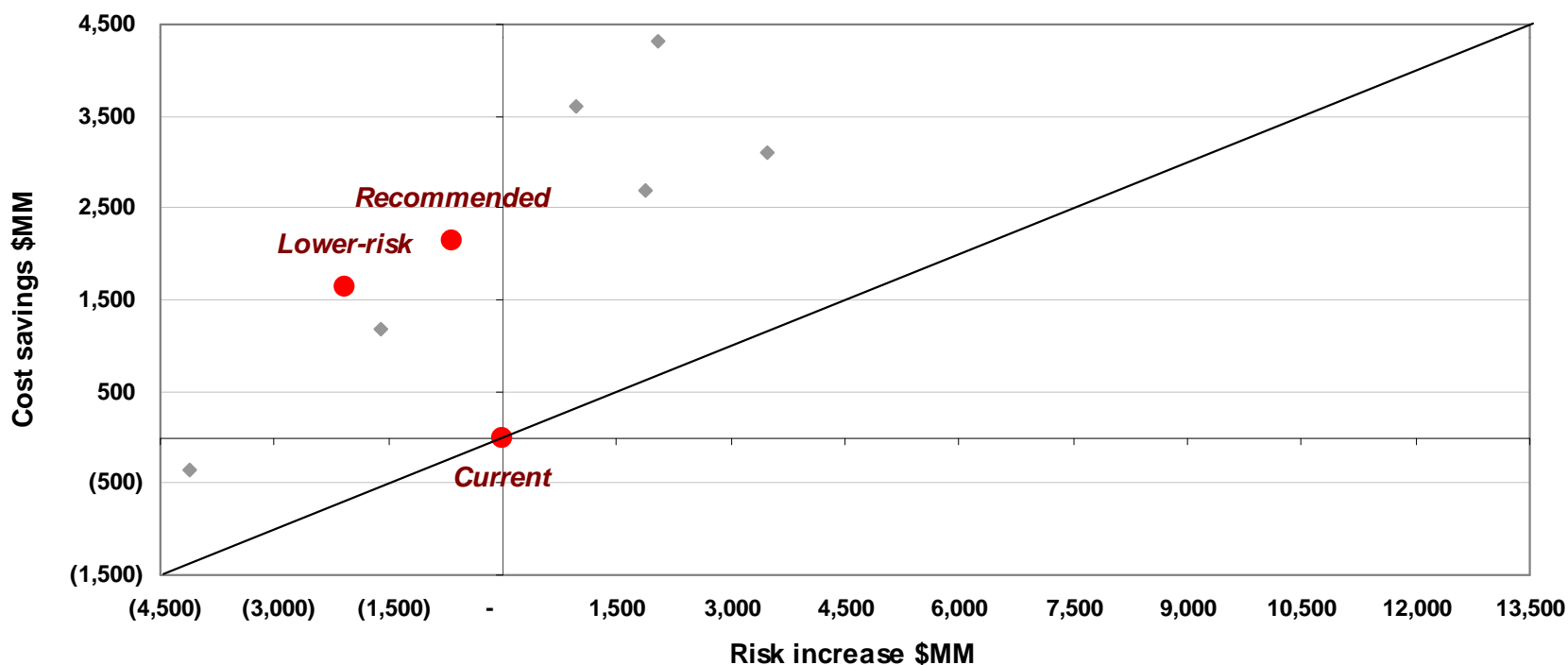
Phase 2: Can we improve results with better diversification—finding solutions in the shaded space below?



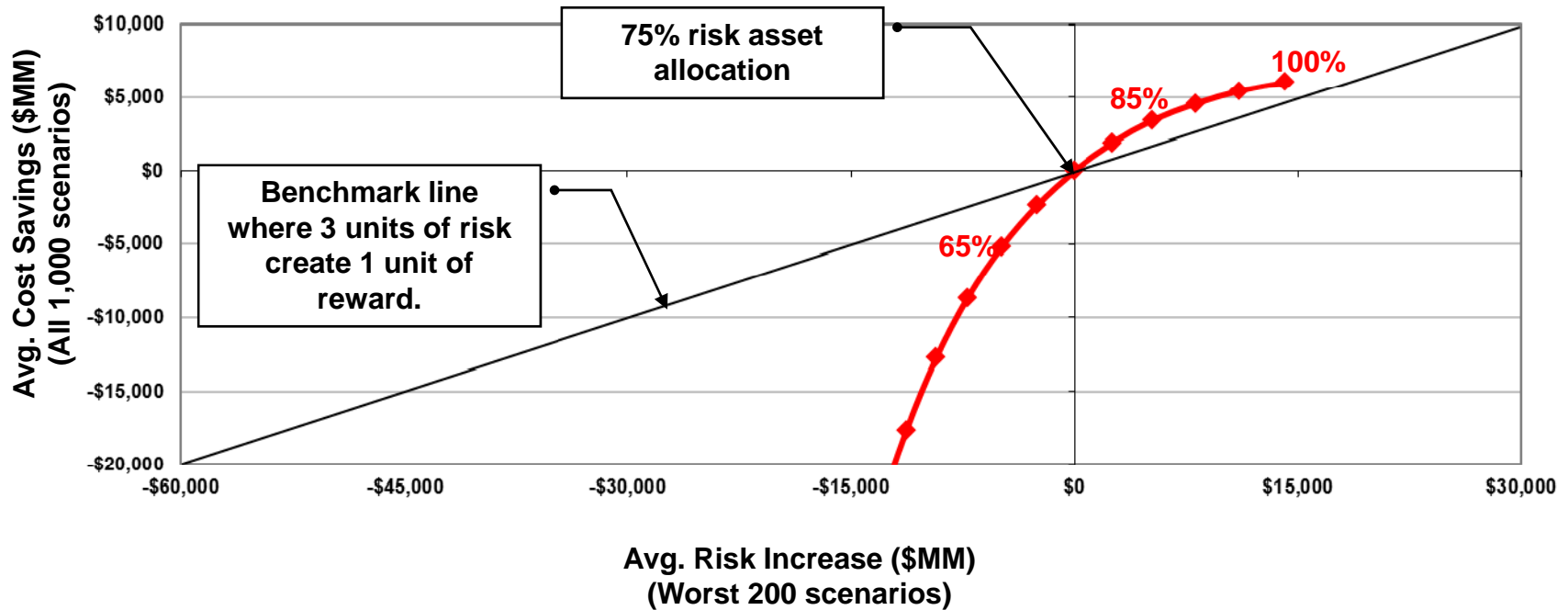
2010 Final Recommendation

Diversification changes can improve the results.

The Recommended policy, which will be presented, offers long-term cost savings of \$2.1 billion, with a modest reduction in risk. A Lower-Risk alternative offers savings of \$1.6 billion, with a more substantial reduction in the risk.

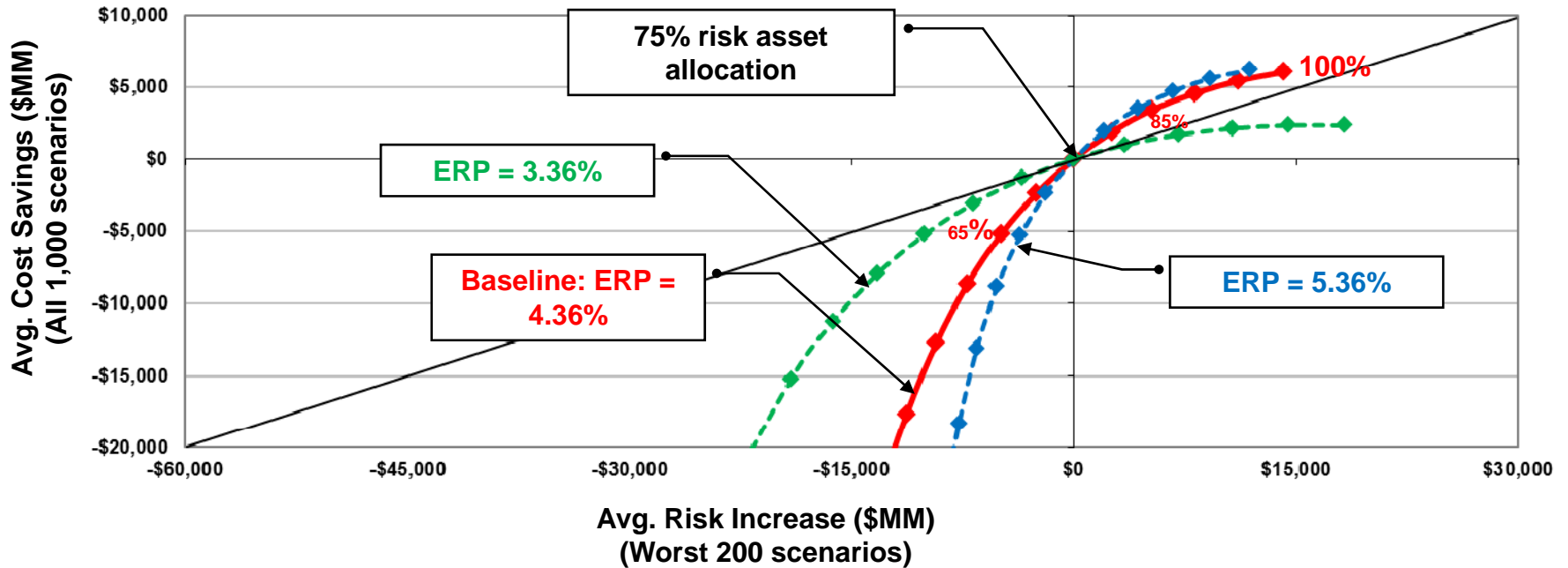


2012 Risk-Reward Analysis: Based on Long-Term Economic Cost



Observation: The risk-reward curve has shifted in the direction of suggesting a higher allocation to risk assets. However, there are no real marginal gains beyond an 85% allocation target.

2012 Risk-Reward Analysis: Sensitivity to Equity Risk Premium Assumption



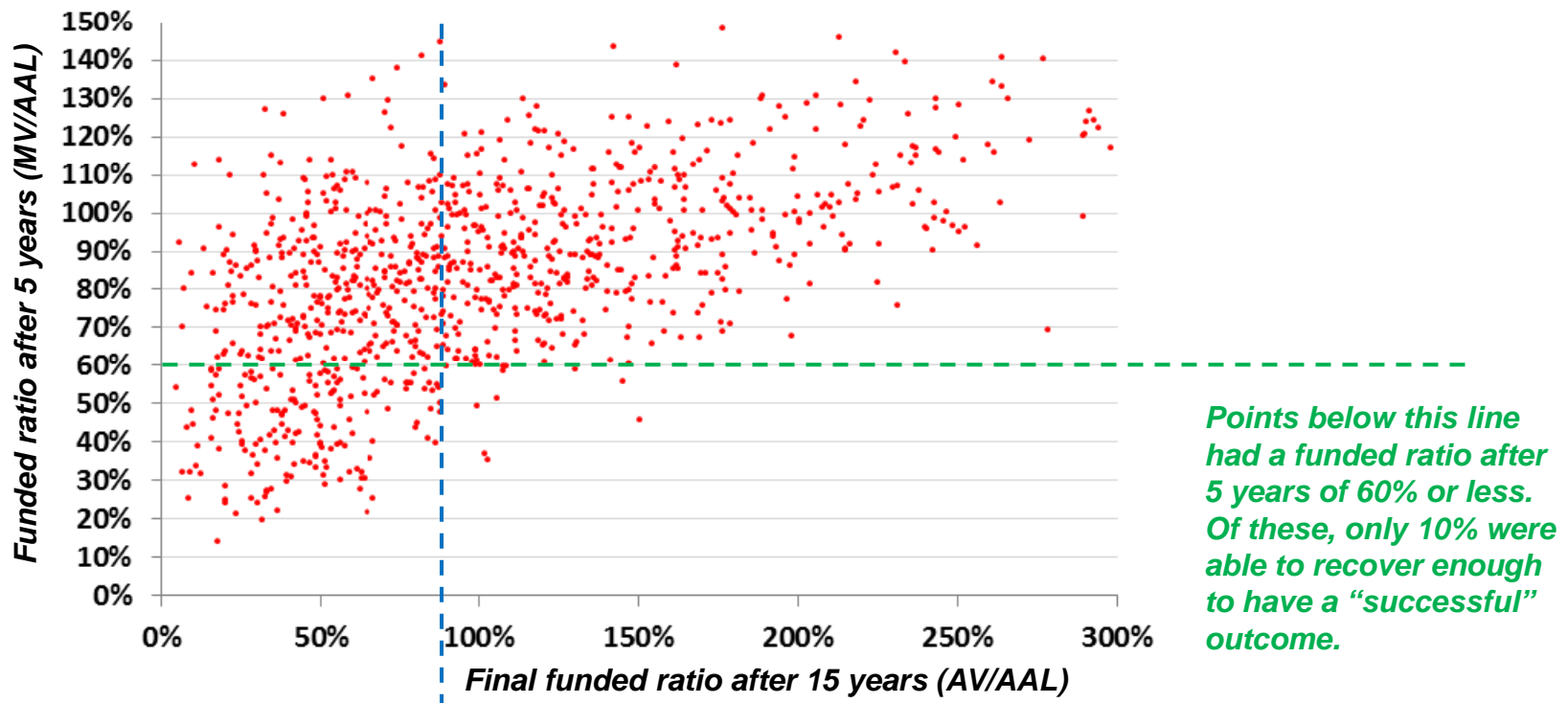
Observation: The shift in the risk-reward curve appears to be almost entirely due to the increased equity risk premium assumption now (4.36%), versus the assumption used in the 2010 study (3.36%). The green line above, based on a 3.36% equity risk premium assumption supports the current 75% allocation to risk assets.

Short-Term Risk

- The comparative graphs on page 15 (range of funded ratios, 2010 vs. 2012), suggest that the funding structure may be less resilient now – i.e. less able to recover from adverse experience.
- This may, in turn, influence the willingness to accept certain investment risks – specifically the risk that poor investment returns in the short term may put the plan “in a hole” from which it is hard to recover.
- We can use the AL results to explore short term risk by using a funded ratio shortfall metric, for example “What is the probability that the funded status after 5 years falls to 60% or below?”

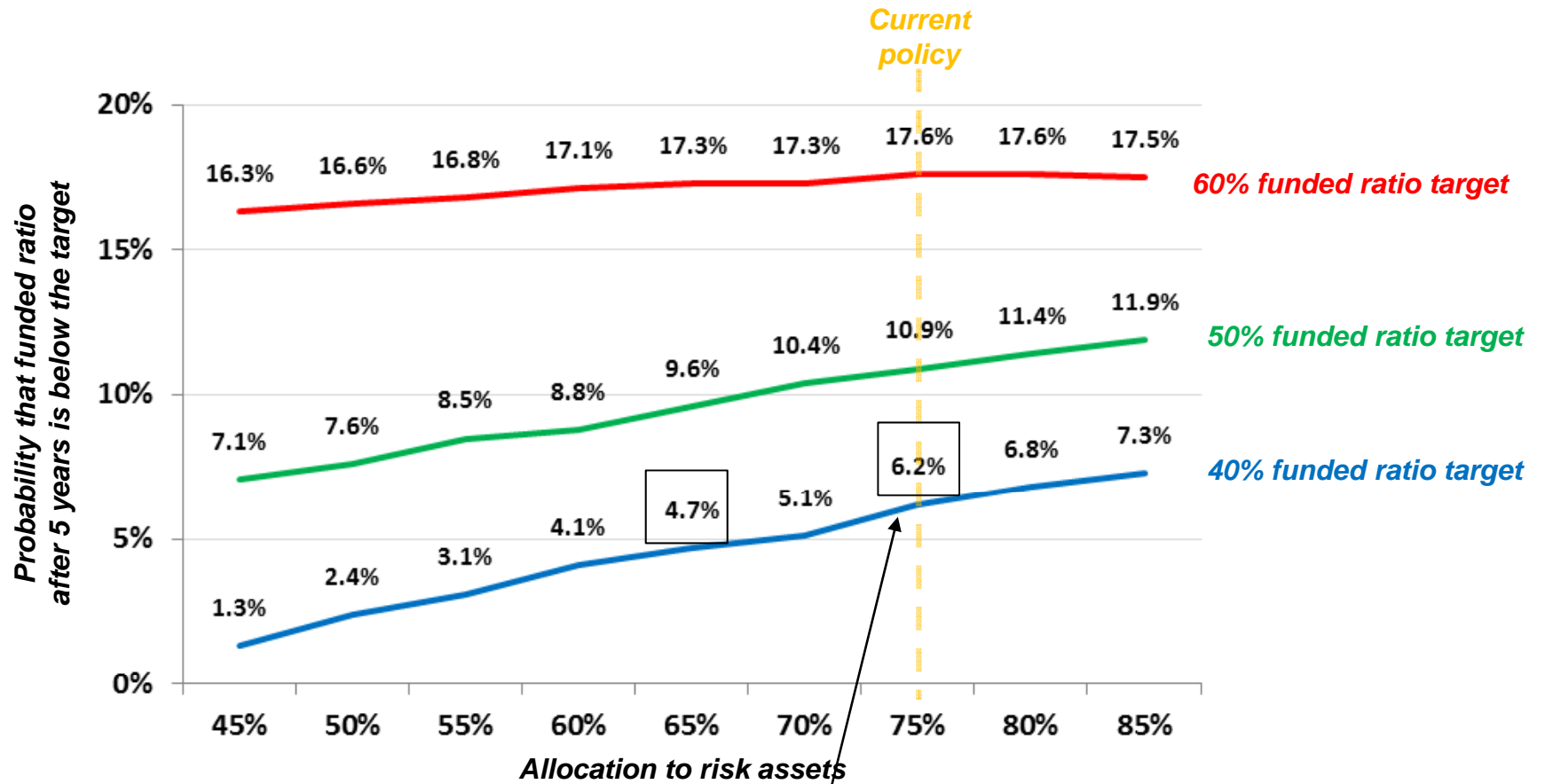
Correlation Between Short-Term and Long-Term Results

- This chart shows the 1,000 scenarios in a scatterplot where the left axis is the funded ratio after 5 years, and the bottom axis is the final funded ratio after 15 years. There is a clear correlation between these two metrics. Our focus is to see, roughly, where adverse short term outcomes create a high likelihood of unsuccessful final outcomes.



This line indicates a final funded ratio of 85%. Points to the right have at least an 85% funded ratio – we can label these as “successful” outcomes.

Short-Term Funded Ratio Shortfall Analysis



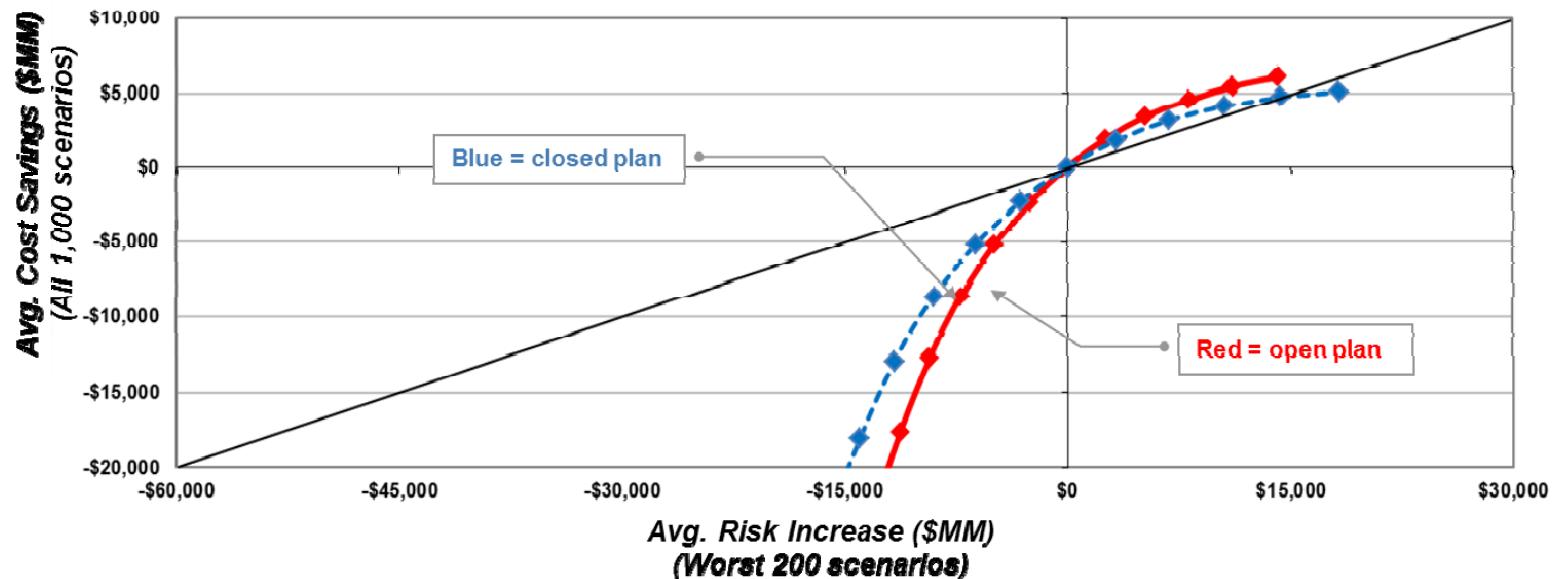
Under current policy there is a 6.2% chance that the funded ratio after 5 years will be below 40%. With a 65% risk asset allocation, this probability falls to 4.7%.

Impact of Pension Funding and/or Benefit Policy Changes

- Immediate -- Continue to defer funding of UAL.
 - May amount to about \$1 billion lower contribution for FY 2013-2014.
 - Equivalent to a one-time negative investment return “headwind” of about 0.8%.
 - Shortfall would be amortized over 30 years and added to future cost rate.
 - Would lower funded status slightly.
- Later? – Change in actuarial assumptions for cost calculations
 - For example, lower assumed return assumption from 7.75% to 7.25% and lower wage increase assumption from 4% to 3%.
 - Employer cost would increase (maybe about 2% of payroll).
 - Reported funded status would decrease (maybe about 7-8 percentage points).
 - After testing our model, we find that the risk-reward curve based on our long-term economic cost metric would remain almost unchanged.
 - To be considered by the FRS Actuarial Assumption Estimating Conference
- Later? – Revised funding cost methodology
 - Goal would be to provide more funding support if return targets are not met, and mitigate the risk of persistent low funded ratios if returns fall below target levels.
 - Could include changes in the amortization method (either shorter period and/or level dollar amounts, instead of level percent of payroll method).
 - Could include a change in the actuarial cost method (switch to “traditional” Entry Age, from the current “ultimate” Entry Age method).
 - Issues here would also be considered by the FRS Actuarial Assumption Estimating Conference.

Impact of Pension Funding and/or Benefit Policy Changes (cont'd.)

- Later? -- Switch the default election from DB pension (now) to Investment Plan.
 - Projected IP elections likely to move from 25% up to 50%+
 - We ran model with a 54% IP election rate – there was no significant change in the risk-reward curve.
- Later? -- Close the DB pension to new hires.
 - There is a shift in the risk-reward curve towards somewhat less risk. Initially, the shift will be fairly small, but the effect is likely to become more pronounced over time





Liquidity Analysis

Sources and Uses of Liquidity

Outflow: Benefit Payments (Annuities / DROP / ABO Transfers)

Annual as % of Total Fund					
Percentile	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
95%	7.8%	10.4%	12.7%	17.4%	16.8%
75%	7.1	8.1	8.8	11.1	9.5
50%	6.8	7.3	7.7	9.1	7.6
25%	6.6	6.9	6.9	7.9	6.3
5%	6.2	6.1	6.0	6.5	5.1

Inflow: Employer & Employee Contributions

Annual as % of Total Fund					
Percentile	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
95%	2.8%	3.7%	5.6%	8.2%	10.6%
75%	2.6	2.8	2.9	3.2	3.6
50%	2.5	2.5	2.4	2.4	2.4
25%	2.4	2.3	2.1	2.0	1.8
5%	2.3	2.0	1.7	1.4	1.1

Sources and Uses of Liquidity (Cont.)

Net Cash Outflow: Benefit Payments – Employer & Employee Contributions

Annual as % of Total Fund					
Percentile	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
95%	5.0%	6.8%	7.6%	10.2%	7.2%
75%	4.5	5.3	5.8	7.6	5.7
50%	4.3	4.9	5.2	6.7	5.0
25%	4.2	4.5	4.8	5.9	4.5
5%	4.0	4.1	4.2	5.0	3.9

Internal Fund Cash Flow

Recurring Cash Yield on Investments

<u>Asset Class</u>	<u>Policy Allocation</u>	Cash Return	
		<u>Long-Term</u>	<u>Stressed</u>
U.S. Equities	23%	3.6%	2.0%
Foreign Equities	29%	4.2	2.0
Core Fixed Income	24%	2.7	2.7
Cash	1%	1.0	1.0
Real Estate	7%	4.3	3.0
Private Equity	5%	0.0	0.0
Strategic Investments	11%	0.0	0.0
Total Fund	100%	3.0%	1.9%

Non-Recurring Cash Flow – Range for RE + PE + SI combined likely to be -0.5% to -1.5% of total fund value.

Alternatives to Enhance Liquidity

- Increase cash allocation
- Implement a duration-neutral barbell into the fixed income allocation
 - A short-duration fund (maturity 1-3 years, duration 2 years) for liquidity
 - A long-duration fund (duration 11-12 years) to maintain a market-based duration
 - Example
 - Target 3 years of liquidity, based on net cash outflow from previous slide
 - Requires a short-duration fund allocation of about 10%
 - The required long-duration fund allocation would be about 4-5%
 - The balance of the fixed income portfolio would remain in a core strategy
 - Issues
 - Laddered maturity structure for short-duration fund?
 - Utilize credit bonds?
 - Tactical implementation for long-duration fund?
 - Rebalancing protocol?
- Increase allocation to classes with higher cash returns (e.g. real estate)

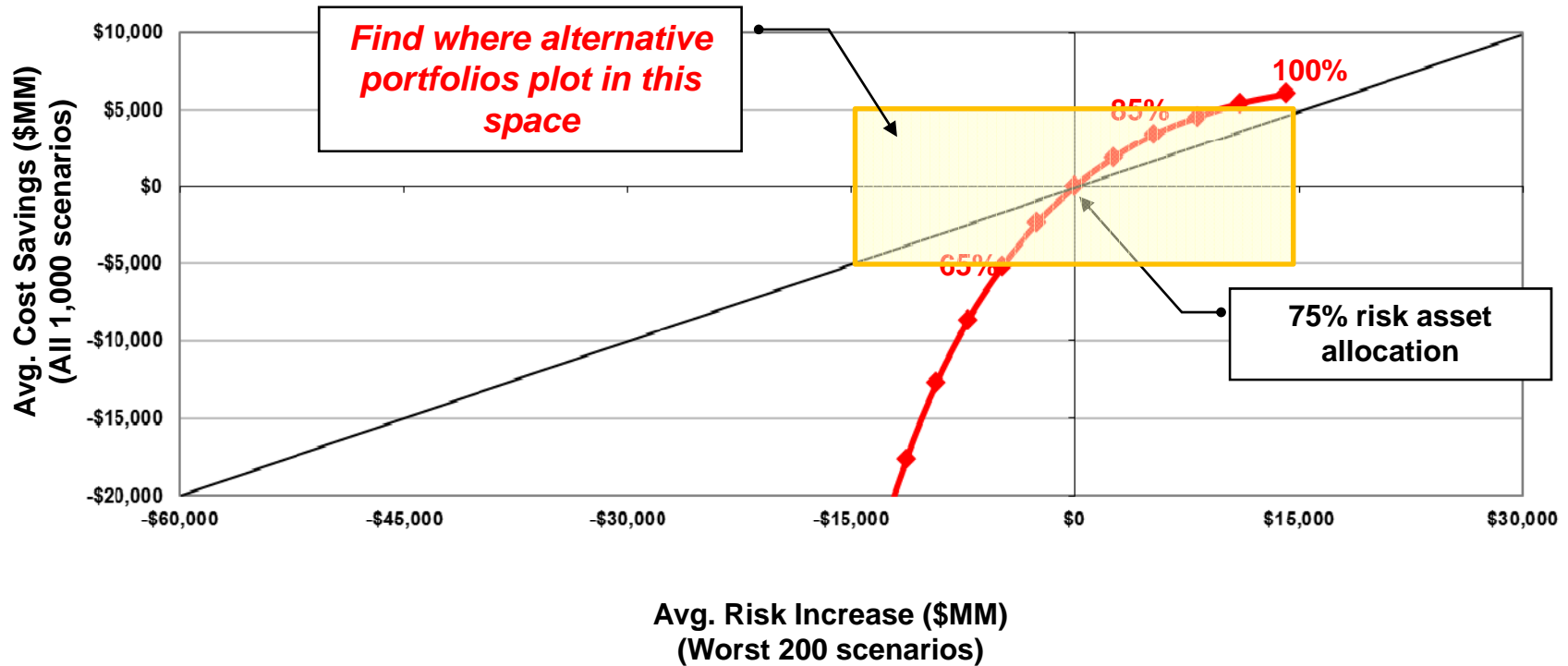
Liquidity Options: Analysis of Cost Impact

Economic Cost Metric (\$ Billion)	Reward (All 1,000)	Risk (Worst 200)
Current (1% Cash)	\$66,029	\$191,318
3% Cash	\$66,615	\$191,973
% Change from Current	0.89%	0.34%
Sample Barbell	\$65,468	\$190,740
% Change from Current	-0.85%	-0.30%



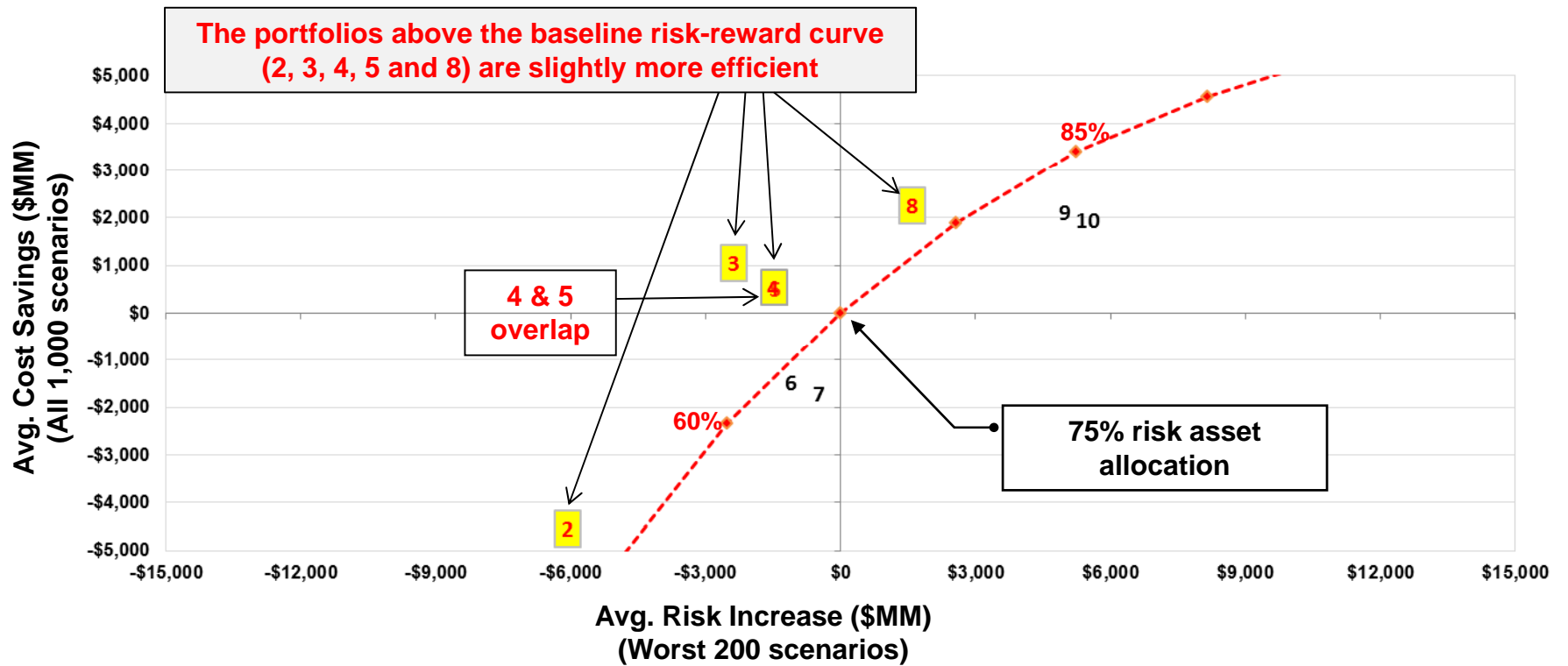
Asset Allocation Update

Asset Allocation – Drilling Down



Observation: The risk-reward curve has shifted in the direction of suggesting a higher allocation to risk assets. However, there are no real marginal gains beyond an 85% allocation target.

Asset Allocation – Alternative Portfolios



NOTE: All results shown here are based on the current fixed income framework (1% cash + balance in core) – but any of the alternative portfolios could also include revised fixed income structures with increased liquidity. All of these portfolios are shown in the appendix.

Asset Allocation – Alternative Portfolios

	----- Alternative Portfolios -----					
	2	3	4	5	Current policy: Expanded	8
	10% to FI	EQ to SI (7%)	EQ to RE/SI (5%)	EQ to RE (5%)		FI to RE/SI (5%)
Global Equity	42%	45%	47%	47%	52%	52%
Real Estate (Broad Market)	7%	7%	10%	12%	7%	10%
Private Equity	5%	5%	5%	5%	5%	5%
Debt-Oriented Funds	3%	5%	4%	3%	3%	4%
Commodities	0%	0%	0%	0%	0%	0%
Absolute Return HFs	2%	4%	3%	2%	2%	3%
Hedge Funds – Equity Long/Short (Universe)	2%	3%	2%	2%	2%	2%
Open Mandate HFs	2%	3%	2%	2%	2%	2%
Infrastructure	2%	3%	2%	2%	2%	2%
Core Fixed Income (Market Duration)	34%	24%	24%	24%	24%	19%
Cash	1%	1%	1%	1%	1%	1%
Expected Geometric Return						
Nominal Gross	7.02%	7.51%	7.51%	7.51%	7.54%	7.76%
Expenses	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%
Nominal Net	6.88%	7.37%	7.37%	7.37%	7.40%	7.62%
Real Net	4.85%	5.35%	5.34%	5.34%	5.37%	5.60%
Expected Risk (Annual Return S.D.)	10.97%	12.01%	12.29%	12.33%	12.95%	13.29%
Sharpe Ratio	0.442	0.444	0.434	0.433	0.414	0.420

Asset Allocation – Alternative Portfolios (cont'd.)

	----- Alternative Portfolios -----					
	2	3	4	5	Current policy: Expanded	8
	10% to FI	EQ to SI (7%)	EQ to RE/SI (5%)	EQ to RE (5%)		FI to RE/SI (5%)
Global Equity	42%	45%	47%	47%	52%	52%
Real Estate (Broad Market)	7%	7%	10%	12%	7%	10%
Private Equity	5%	5%	5%	5%	5%	5%
Debt-Oriented Funds	3%	5%	4%	3%	3%	4%
Commodities	0%	0%	0%	0%	0%	0%
Absolute Return HFs	2%	4%	3%	2%	2%	3%
Hedge Funds – Equity Long/Short (Universe)	2%	3%	2%	2%	2%	2%
Open Mandate HFs	2%	3%	2%	2%	2%	2%
Infrastructure	2%	3%	2%	2%	2%	2%
Core Fixed Income (Market Duration)	34%	24%	24%	24%	24%	19%
Cash	1%	1%	1%	1%	1%	1%
Long-term economic cost:						
Cost savings	\$ (4,547)	\$ 1,060	\$ 544	\$ 526	\$ -	\$ 2,259
Risk increase	\$ (6,079)	\$ (2,378)	\$ (1,492)	\$ (1,495)	\$ -	\$ 1,588
Funded ratio shortfall risk after 5 years:						
<60%	16.7%	16.7%	17.0%	17.0%	17.6%	17.3%
Probabilities that 15-yr. returns:						
Net nominal return > 7.75%	43.9%	51.5%	51.5%	51.5%	50.4%	53.3%
Net nominal return > 7.25%	49.9%	55.7%	55.4%	55.4%	55.6%	58.0%
Net real return > 5.00%	52.2%	56.9%	56.8%	56.7%	56.8%	58.2%

Messages from the Asset-Liability / Asset Allocation Update

- Some conflicting indicators on target risk for overall portfolio:
 - The risk-reward curve based on long term economic cost suggests a possible increase in the allocation to risk assets, driven by a higher equity risk premium.
 - There are reasons to avoid more short-term risk exposure, because a significant funded ratio shortfall in the near term can be difficult to recover from.
 - Key issues:
 - The current higher equity risk premium is driven by low fixed income yields, and expected returns, which are likely to revert to more normal levels in a few years.
- More liquidity can be obtained, either:
 - With an opportunity cost (i.e. hold more cash), or
 - With more complexity (i.e. liquidity barbell approach)
 - Cost of moving assets
 - Timing for entry into long duration bonds
- Current assumptions show opportunities for more efficiency through diversification, with increased allocations to real estate and strategic investments.



Appendix

Full Set of Alternative Portfolios

	2	3	4	5	6	7	Current policy: Expanded	8	9	10
	10% to FI	EQ to SI (7%)	EQ to RE/SI (5%)	EQ to RE (5%)	EQ to Timber/Bank Loans/EMD	EQ to Diversifying (10%)		FI to RE/SI (5%)	FI to Timber/Bank Loans/EMD	FI to Diversifying (10%)
Global Equity	42%	45%	47%	47%	42%	42%	52%	52%	52%	52%
Real Estate (Broad Market)	7%	7%	10%	12%	7%	7%	7%	10%	7%	7%
Private Equity	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Debt-Oriented Funds	3%	5%	4%	3%	3%	3%	3%	4%	3%	3%
Commodities	0%	0%	0%	0%	0%	4%	0%	0%	0%	4%
Absolute Return HFs	2%	4%	3%	2%	2%	2%	2%	3%	2%	2%
Hedge Funds – Equity Long/Short (Universe)	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%
Open Mandate HFs	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%
Infrastructure	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%
Timberland	0%	0%	0%	0%	2%	0%	0%	0%	2%	0%
Core Fixed Income (Market Duration)	34%	24%	24%	24%	24%	24%	24%	19%	14%	14%
Cash	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
High Yield Bonds	0%	0%	0%	0%	0%	3%	0%	0%	0%	3%
Bank Loans	0%	0%	0%	0%	4%	0%	0%	0%	4%	0%
Emerging Market Bonds	0%	0%	0%	0%	4%	3%	0%	0%	4%	3%
Expected Geometric Return										
Nominal Gross	7.02%	7.51%	7.51%	7.51%	7.27%	7.30%	7.54%	7.76%	7.79%	7.80%
Expenses	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%
Nominal Net	6.88%	7.37%	7.37%	7.37%	7.13%	7.16%	7.40%	7.62%	7.65%	7.66%
Expected Risk (Annual Return S.D.)										
Sharpe Ratio	10.97%	12.01%	12.29%	12.33%	11.27%	11.62%	12.95%	13.29%	13.26%	13.60%
	0.442	0.444	0.434	0.433	0.452	0.441	0.414	0.420	0.423	0.414

Assumptions

	Expected Geometric Return	Expected Risk
Global Equity	8.5%	20.8%
Real Estate (Broad Market)	7.1%	16.3%
Private Equity	9.2%	28.3%
Debt-Oriented Funds	9.5%	10.5%
Commodities	4.8%	21.5%
Absolute Return HFs	5.8%	9.3%
Hedge Funds – Equity Long/Short (Universe)	7.7%	11.5%
Open Mandate HFs	7.3%	10.6%
Infrastructure	8.5%	18.3%
Timberland	6.3%	8.0%
Core Fixed Income (Market Duration)	3.0%	3.5%
Cash	2.2%	1.3%
High Yield Bonds	5.5%	14.1%
Bank Loans	5.2%	6.8%
Emerging Market Bonds	5.1%	14.1%

FLORIDA RETIREMENT SYSTEM
Actuarial Valuation
as of
July 1, 2012



November 2012

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November 30, 2012

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, 2012, for determining contribution payments for Plan Year 2013-2014. 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, 2012 actuarial valuation which develops contribution rates for the Plan Year 2013-2014. 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 Legislature's decision on the funding of 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, 2012

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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 those requirements referenced in this paragraph 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, other than the assumption used for future payroll growth for amortization purposes, are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. As noted previously, the payroll growth assumption was adopted by the FRS Assumptions Conference. 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,

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, 2012

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, 2012 actuarial valuation of the Florida Retirement System (FRS) Defined Benefit Program. In this section, we compare the 2011 and 2012 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, 2011. 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, remained at 4.68% of payroll on July 1, 2012. 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.
- Plan Year 2012-2013 was the third year that legislated contribution rates will not fully fund the unfunded actuarial liability. This defers funding to future years and depresses the Funded Percentage. Table IV-5 summarizes and compares the recommended and legislated contribution rates, by class, over the last three years.
- The unfunded actuarial liability (including DROP liability) changed due to an additional year of experience. In the July 1, 2011 actuarial valuation report, the actuarial liability exceeded the actuarial value of assets by \$18.0 billion. On July 1, 2012 the actuarial liability exceeds the actuarial value of assets, yielding a UAL of \$19.3 billion, excluding additional liability funded through the DROP contribution rate. This marks the fourth consecutive actuarial valuation where the FRS has a UAL.
- 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, 2012, approximately 17% 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, 2012 is \$235 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, 2011 actuarial valuation results with July 1, 2012 actuarial results. The difference column shows the change between the July 1, 2012 valuation results and the July 1, 2011 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, 2012, the actuarial value of assets is 104.04% of the market value of assets.

EXECUTIVE SUMMARY

	Valuation Results (numbers in \$ billions)		
	July 1, 2011	July 1, 2012	Difference
1. Actuarial Liability	\$144.1	\$147.2	\$ 3.1
2. Actuarial Value of Assets	\$126.1	\$127.9	\$ 1.8
3. Unfunded Actuarial Liability (1 – 2)	\$ 18.0	\$ 19.3	\$ 1.3
4. Funded Percentage (2 / 1)	87.5%	86.9%	(0.60%)

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, 2012 the FRS has an unfunded actuarial liability of \$19.3 billion.

The comparative FRS Regular and Special Risk contribution rates resulting from the 2011 valuation and this valuation are as follows:

	July 1, 2011		July 1, 2012		Difference	
	Valuation Results		Valuation Results			
	FRS Reg	Special Risk	FRS Reg	Special Risk		
Normal Cost	3.54%	10.74%	3.53%	10.75%	-0.01%	0.01%
UAL Cost	<u>2.36%</u>	<u>8.32%</u>	<u>2.56%</u>	<u>8.13%</u>	<u>0.20%</u>	<u>-0.19%</u>
Preliminary FRS Contribution Rate Additional UAL Contribution/(Rate Reduction) less than Actuarially Determined	5.90%	19.06%	6.09%	18.88%	0.19%	-0.18%
Administrative Charge	-1.78%	-5.06%	Not determined			
Enacted DB FRS Contribution Rate (Prior to blending for the uniform rate structure)	0.00%	0.00%	Not determined			
	4.12%	14.00%	Not determined			



EXECUTIVE SUMMARY

The July 1, 2011 valuation provided proposed contribution rates for plan year 2012-2013. 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 2012-2013 are significantly less than the sum of the Normal Cost rates and UAL Cost rates determined by the July 1, 2011 valuation. Thus, the contribution being made to fund the UAL in plan year 2012-2013 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, 2013 assuming no further gains or losses.

The current valuation calculates contribution rates for plan year 2013-2014. 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 6,009 members from 986,677 as of July 1, 2011, to 992,686 as of July 1, 2012, an increase of 0.6%. The total annualized payroll of active members (exclusive of DROP members) decreased by 3.86%, from \$22.97 billion as of July 1, 2011 to \$22.09 billion as of July 1, 2012, a \$0.88 billion decrease in payroll.

A summary of membership change by status follows:

	Valuation Results: Counts		
	July 1, 2011	July 1, 2012	% Change
Active Members	533,486	517,287	-3.0%
Terminated Vested Members	91,433	103,151	12.8%
Retired Members	316,699	331,694	4.7%
DROP Members	<u>45,059</u>	<u>40,554</u>	-10.0%
Total Members	986,677	992,686	0.6%



D. Experience

Several factors contributed to the changes in the FRS's assets, liabilities and contribution rates between July 1, 2011 and July 1, 2012. These factors included:

1. Assets:

The assets of the FRS, measured on an actuarial basis (i.e., smoothed), increased by \$1.814 billion. This change was attributable to the following:

Change Due to:

• Contributions Received	\$1.867
• Payment of Benefits, and Expenses	(8.331)
• Investment Experience	8.278
Total	\$1.814 billion

Of this total change, an increase of \$3.056 billion was expected, based on our assumption that the assets of the FRS would earn 7.75% during plan year 2011-2012. However, the actual annualized investment return on the actuarial value of assets was 6.74% resulting in an investment loss of \$1.243 billion. On a market value basis, the assets of the FRS earned 0.21%.

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

Asset Bases	Rates of Return*		
	2009/2010	2010/2011	2011/2012
Market Value	15.03%	22.79%	0.21%
Actuarial Value	5.30%	8.39%	6.74%

* Assumes net cash-flow occurs mid-year

2. *Liabilities:*

The actuarial liabilities of the FRS increased by \$3.070 billion. This increase is attributable to the following:

Change due to:

- Expected increase based on prior valuation \$4.413
- Plan Change \$0

Actual (Gains) / Losses

• Healthy Retiree, Beneficiary & Terminated Vested Death	(0.856)	¹
• Disabled Retiree Death	(0.006)	
• Inactive Data Clean-Up	2.081	⁴
• Active Withdrawal	0.706	^{2 & 3}
• Active Retirement and DROP from Active	2.204	
• Active Death	0.016	
• Active Disability	0.004	
• Salary Increases less than expected	(2.875)	
• New Actives	0.541	³
• Rehires	0.062	
• Demographics/Other	(3.220)	
Total Increase	\$3.070	Billion

¹ The retiree mortality experience was a \$217.6 million gain.

² Includes IP and transfers between membership classes.

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

⁴ The 2012 database reflected 9,006 new terminated vested members, as compared to 485 in 2011.

The current financing method (see page I-13) for the DROP 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 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 \$1.257 billion. The increase is attributable to the following:

Change due to:

• Expected Increase based on Prior Valuation	\$1.357
• Unfavorable Investment Experience	1.243
• Favorable Liability Experience	(1.343)
Total	\$1.257 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 --		Senior	Grand Total
	Regular	Regular	Administration	Judges	Leg-Atty-Cab	County	Management	
Investment (Gain)/Loss (excluding DROP)	\$847,370	\$193,408	\$709	\$6,511	\$542	\$2,984	\$19,286	\$1,070,809
Allocation of DROP Investment (Gain)/Loss	<u>135,942</u>	<u>31,028</u>	<u>114</u>	<u>1,045</u>	<u>87</u>	<u>479</u>	<u>3,094</u>	<u>171,787</u>
Total Investment (Gain)/Loss	\$983,312	\$224,436	\$822	\$7,556	\$628	\$3,462	\$22,381	\$1,242,597
Liability (Gain)/Loss (excluding DROP)	\$192,795	(\$510,797)	\$16	\$12,088	(\$3,246)	(\$3,985)	\$67,469	(\$245,660)
Additional (Gain)/Loss due to DROP	<u>(741,144)</u>	<u>(299,080)</u>	<u>(450)</u>	<u>(9,784)</u>	<u>(68)</u>	<u>(3,859)</u>	<u>(43,031)</u>	<u>(1,097,417)</u>
Total Liability (Gain)/Loss	(\$548,350)	(\$809,877)	(\$434)	\$2,304	(\$3,314)	(\$7,844)	\$24,439	(\$1,343,077)
<u>Liability (Gain)/Loss by Source</u>								
Healthy Inactive Experience	(\$670,463)	(\$148,056)	(\$196)	(\$2,692)	(\$4,269)	(\$8,212)	(\$22,565)	(\$856,453)
Disabled Inactive Experience	(8,721)	2,849	9	23	0	(351)	(123)	(6,314)
Inactive New Entrants	1,739,429	276,099	256	11,683	95	6,616	46,540	2,080,718
Active Withdrawal ¹	211,553	469,621	2,998	12,909	(182)	6,565	2,171	705,635
Active Retirement and DROP from Active	1,498,974	599,046	778	17,665	(170)	5,349	82,109	2,203,751
Active Death	15,372	(1,378)	2	222	3	(1)	1,396	15,616
Active Disability	7,859	(3,872)	(4)	(179)	(6)	(39)	514	4,273
Salary Increases less than Expected	(2,168,575)	(644,831)	(603)	(10,961)	(288)	(4,895)	(45,080)	(2,875,233)
New Actives ¹	260,436	264,310	718	1,263	5	702	13,951	541,385
Rehires	61,641	2,257	0	(139)	(76)	5	(1,587)	62,101
Demographics/ Other	<u>(1,495,855)</u>	<u>(1,625,922)</u>	<u>(4,392)</u>	<u>(27,490)</u>	<u>1,574</u>	<u>(13,583)</u>	<u>(52,887)</u>	<u>(3,218,556)</u>
Total Liability (Gain)/Loss	(\$548,350)	(\$809,877)	(\$434)	\$2,304	(\$3,314)	(\$7,844)	\$24,439	(\$1,343,077)
Total UAL (Gain)/Loss	\$434,962	(\$585,442)	\$388	\$9,859	(\$2,686)	(\$4,382)	\$46,819	(\$100,480)

¹ 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, 2011 Normal Cost	3.54%	10.74%	3.43%	9.93%	6.38%	8.20%	4.80%
• UAL Cost (Certain Post-1998 Benefit Changes, 1998 and 2003 and 2008 Experience Studies, and certain Gains/Losses)	2.36%	8.32%	37.14%	17.71%	37.41%	32.50%	14.73%
• Rate Reduction less than Actuarially Recommended	<u>-1.78%</u>	<u>-5.06%</u>	<u>-36.00%</u>	<u>-16.87%</u>	<u>-36.16%</u>	<u>-31.47%</u>	<u>-14.30%</u>
• Total July 1, 2011 Contribution Rate ¹	4.12%	14.00%	4.57%	10.77%	7.63%	9.23%	5.23%
B • July 1, 2011 Normal Cost	3.54%	10.74%	3.43%	9.93%	6.38%	8.20%	4.80%
• Impact of							
- Retirements, Disabilities, Terminations, and Transfers within membership classes	-0.04%	-0.02%	0.27%	-0.01%	0.05%	0.03%	-0.07%
- Actual Salary Increases	0.00%	0.00%	0.04%	0.00%	-0.03%	0.02%	0.00%
- New Entrants (excludes transfers)	0.02%	0.03%	0.02%	-0.01%	0.02%	-0.19%	0.01%
- 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%	0.24%	0.03%
• July 1, 2012 Normal Cost (July 1, 2011 Normal Cost plus "Impact of . . .")	3.53%	10.75%	3.76%	9.98%	6.42%	8.30%	4.77%
• UAL Cost (See Table IV-2)	<u>2.56%</u>	<u>8.13%</u>	<u>42.15%</u>	<u>18.39%</u>	<u>34.50%</u>	<u>33.57%</u>	<u>16.24%</u>
• Total July 1, 2012 Contribution Rate	6.09%	18.88%	45.91%	28.37%	40.92%	41.87%	21.01%

¹ See Page B-4, Defined Benefit Column.



E. Graphs

Chart A: ASSET / LIABILITIES

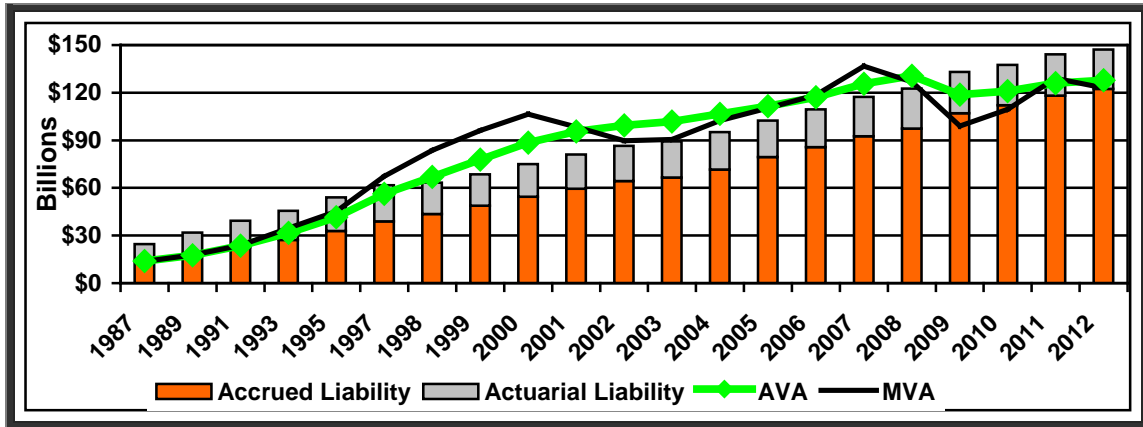


Chart B: CASH FLOWS

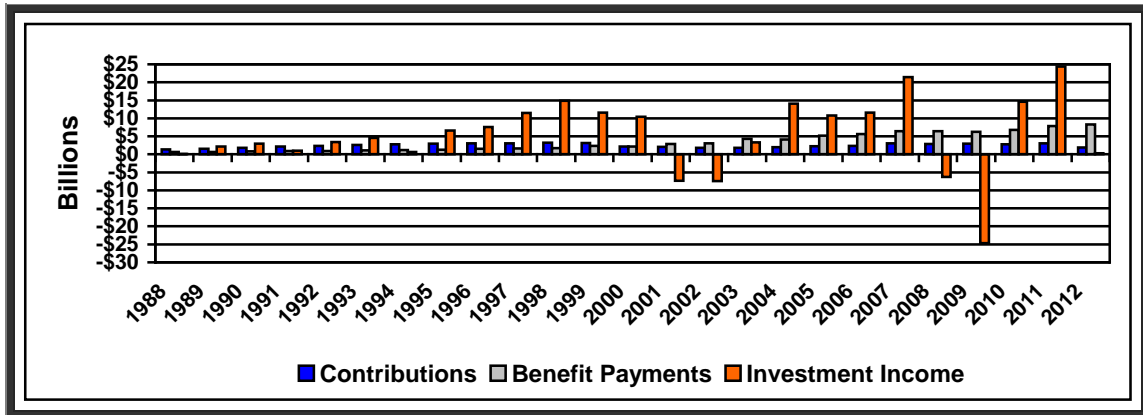
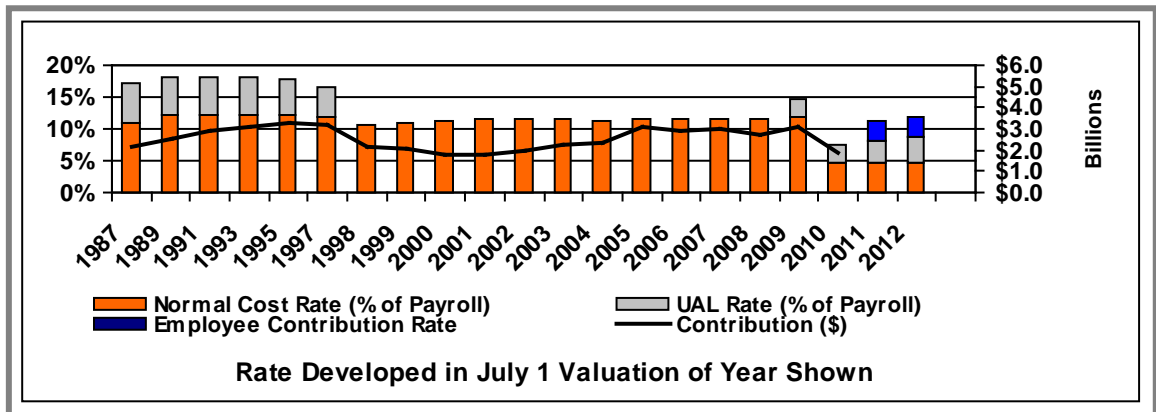


Chart C: CONTRIBUTION RATE (as % of Payroll) and CONTRIBUTIONS*



* As discussed earlier, the contribution rate developed in this report is for plan year 2013 – 2014. 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 2010 represents the July 1, 2010 valuation results as amended by SB2100 and the actual contributions for the 2011-2012 plan year. In 1999 through 2009, surplus assets were used to reduce rates below normal cost. Starting with the 2010 valuation results, the term contribution 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 2012-2013 are based on the July 1, 2011 actuarial valuation, and subsequent legislative action.
- 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 2009-2011 period more than offset the deferred investment losses from the unfavorable investment returns in 2007-2009, however, the System experienced unfavorable investment returns once again in 2011-2012. As of July 1, 2012 there are deferred investment losses, meaning the market value investment returns need to exceed the assumed rate of return during the 2012-2013 plan year in order to avoid an investment loss on an actuarial value basis. Favorable investment returns in the future would decrease the unfunded actuarial liability more rapidly; whereas unfavorable investment returns in the future will require larger contributions in order to pay down the UAL. 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) ^{1) & 2)} measured as of		
PY 2012–2013	PY 2013–2014	July 1, 2012	July 1, 2013	July 1, 2014
7.75%	7.75%	\$19,301	\$21,577	\$22,959
0.00%	7.75%	19,301	23,439	26,570
0.00%	0.00%	19,301	23,439	28,348
7.91% ³⁾	7.91% ³⁾	19,301	21,539	22,845

1) Numbers in Millions

2) The results are based on the actual contribution rates legislated for the Plan Year 2012-2013 (based on the July 1, 2011 valuation) and the full actuarially determined contribution rates for Plan Year 2013-2014 (based on this valuation). If contribution rates legislated are less than the actuarially determined contribution rates, the estimated UALs would be higher than shown.

3) The estimated market value as of September 30, 2012 was \$126.85 billion as supplied by the State Board of Administration. Based on expected cash flows, if the market return was 7.91% for the 2012-13 plan year, the July 1, 2013 market value would be \$126.85 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, 2011 to July 1, 2012, the payroll, in aggregate, used for amortization contributions decreased by 1.2%. Should this trend continue and our assumption not be modified, the net result will be lower UAL contributions resulting in an increase in the UAL and in future recommended 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 near 17% 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. However, the comparable attractiveness of the IP due to Senate Bill 2100 was reduced by the passage of House Bill 5005 in 2012, which reduced the employer contribution percentage to the IP. The time lag since the 2012 change is too brief to see any trends.
- 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.

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 7.01% 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 4.63%, compared with 4.33% determined by the July 1, 2011 valuation. The total DROP contribution rate for the July 1, 2012 valuation is 11.64% of DROP payroll (the sum of the 4.63% DROP contribution rate plus the 7.01% UAL contribution).

SECTION II

ASSETS



FLORIDA RETIREMENT SYSTEM
Actuarial Valuation as of July 1, 2012

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, 2012. On that date the assets available for the payment of benefits are appraised. The 2011 asset values do not reflect any changes made to the financial statements after preparation of the 2011 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, 2012 the actuarial value of assets is 104.04% of the market value of assets.

Six tables are presented in this section, summarizing the financial resources of the System on July 1, 2012. The assets are analyzed by category in Table II-1. Table II-2 shows the reconciliation of assets from July 1, 2011 to July 1, 2012. Table II-3 provides a detailed development of the July 1, 2012 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 to the various classes from 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 2011 and 2012.

The data for Table II-1 (Market Value as of July 1, 2012) 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>	Market Value as of July 1,	
	<u>2011</u>	<u>2012</u>
1. Common Stock	\$87,693,841	\$80,785,299
2. Bonds	\$37,362,710	\$34,937,695
3. Real Estate	\$7,285,791	\$8,176,282
4. Temporary Investments	\$4,459,882	\$4,954,524
5. Cash – Including Certificates of Deposit	\$664,018	\$1,120,565
6. Receivables	\$3,605,150	\$2,421,857
7. Miscellaneous	\$378	\$363
8. Reverse Purchase Agreements	<u>\$1,000,000</u>	<u>\$2,055,000</u>
Gross Assets	\$142,071,770	\$134,451,585
9. Current Liabilities and Reserves	<u>(\$12,948,415)</u>	<u>(\$11,530,197)</u>
Total Net Assets	\$129,123,355	\$122,921,388

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

Total Net Assets as of June 30, 2011	\$129,123,355,436
+ Contributions by Source:	
Pension Contributions – State ^{1 & 3}	317,054,651
Pension Contributions - Non-State ^{1 & 3}	1,185,856,830
Pension Contributions - IP	33,737,861
Pension Contributions - Employees	806,140,587
Transfer from ORP	7,554,953
Transfer from OAP	12,080
Other	0
+ Interest and Dividends:	
Interest Income	1,140,664,061
Dividend Income	1,783,693,431
Real Estate Income	437,865,482
Other ²	(209,578,824)
+Net Realized and Unrealized Appreciation:	
	(2,890,377,522)
- Pension Payments: ³	7,354,373,801
- Contribution Refunds:	1,672,624
- Disbursements – IP	1,433,898,961
- Expenses: ²	15,645,825
- Transfers to Other Funds and Departments ¹ :	8,999,397
Total Net Assets as of June 30, 2012	\$122,921,388,418

¹ Includes IP Administrative fees.

² 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.

³ Includes IP contributions and disbursements of \$482,862,347 which are excluded in the development of the AVA.

**Table II-3
Florida Retirement System
Development of 2012
Actuarial Value of Assets**

1. FRS Market Value of Assets on July 1, 2011	\$129,123,355,436
2. Actuarial Value of Assets on July 1, 2011	\$126,078,053,225
3. 2011/2012 Net Cash Flow (Contributions less Benefits and Expenses)	(\$6,464,233,646)
4. Value of Assets, July 1, 2012, if Items 2 and 3 earned an assumed rate of 7.75%	\$129,134,379,650
5. Market Value of Assets, July 1, 2012	\$122,921,388,418
6. Net Assets (Actuarial Value Basis) Available for Benefits Prior to Application of Corridor 4 + ((5 - 4) x 20%)	\$127,891,781,409
7. 120% of Market Value [120% (5)]	\$147,505,666,102
8. 80% of Market Value [80% (5)]	\$98,337,110,734
9. Actuarial Value of Assets on July 1, 2012 Lesser of (6) and (7), but not less than (8)	\$127,891,781,409
10. Ratio of July 1, 2012 Actuarial Value of Assets to July 1, 2012 Market Value	104.04%

**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, 2011	\$86,021,737	\$19,413,294	\$73,306	\$669,089	\$56,565	\$312,275	\$1,962,149	\$17,569,638	\$126,078,053
2. Total Contribution for the Plan Year	1,215,256	519,043	161	13,692	672	5,274	36,817	76,580	1,867,496
3. Benefit Payments and other Disbursements	5,712,888	1,104,134	6,691	64,591	6,658	39,888	147,673	1,249,205	8,331,728
4. Estimated Investment Earnings during the Year	5,645,031	1,288,450	4,720	43,371	3,609	19,876	128,484	1,144,419	8,277,960
5. Unadjusted Actuarial Value of Assets: (1) + (2) - (3) + (4)	87,169,136	20,116,653	71,496	661,562	54,188	297,537	1,979,777	17,541,432	127,891,781
6. Net Transfers (see Table II-5)	594,357	179,743	201	12,752	822	4,067	26,878	(818,820)	0
7. Allocated Actuarial Value of Assets by Class, July 1, 2012: (5) + (6)	\$87,763,493	\$20,296,396	\$71,697	\$674,314	\$55,010	\$301,604	\$2,006,655	\$16,722,612	\$127,891,781



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								\$19,245,727	\$147,193,166
2. Actuarial Value of Assets Before Reallocation								17,541,432	127,891,781
3. Unfunded Actuarial Liability (UAL): (1) – (2)								\$1,704,295	\$19,301,385
4. Aggregate Funded Percentage: (2) / (1)								91.14%	86.89%
5. DROP Assets Required to Meet Aggregate Funded Percentage: (1) x (4) [Total System] – (2)								(\$818,820)	
6. Proportion of DROP Liability by Class	0.7259	0.2195	0.0002	0.0156	0.0010	0.0050	0.0328	N/A	1.0000
7. DROP Assets to be Reallocated ¹	\$594,357	\$179,743	\$201	\$12,752	\$822	\$4,067	\$26,878	(\$818,820)	0

¹ These adjustments bring DROP from 91.14% funded to 86.89% funded.

**Table II-6
Florida Retirement System**

A. Rates of Return on Investments ¹

<u>Asset Bases</u>	Rates of Return		
	<u>2009/2010</u>	<u>2010/2011</u>	<u>2011/2012</u>
Market Value	15.03%	22.79%	0.21%
Actuarial Value	5.30%	8.39%	6.74%

¹ Assumes net cash flow occurs mid-year.

B. Allocation of Assets at Market Value

<u>Asset Category</u>	<u>July 1, 2011</u>	<u>July 1, 2012</u>
Stocks	67.91%	65.72%
Bonds	28.94%	28.42%
Real Estate	5.64%	6.65%
Temporary Investments	3.45%	4.03%
Cash	0.51%	0.91%
Other (includes receivables & payables)	-6.45%	-5.73%
	100%	100%

SECTION III

LIABILITIES



FLORIDA RETIREMENT SYSTEM
Actuarial Valuation as of July 1, 2012

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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, 2012. 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 2011 valuation and the 2012 valuation. In Table III-2, the 2012 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 current active 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, 2011 Valuation	July 1, 2012 Valuation
1. Actuarial Liabilities for:		
(a) Active Members	\$54,497,795	\$52,972,250
(b) Retired, Disabled and Beneficiary Members	64,903,070	69,915,462
(c) Terminated Vested Members	4,637,774	5,059,727
(d) DROP	<u>20,084,177²⁾</u>	<u>19,245,727</u>
2. Total Actuarial Liability	\$144,122,816	\$147,193,166
3. Actuarial Value of Assets	<u>\$126,078,053</u>	<u>\$127,891,781</u>
4. Unfunded Actuarial Liability / (Surplus)	\$18,044,763	\$19,301,385
5. Investment Plan Contingent Liability ¹⁾	<u>\$236,275</u>	<u>\$235,098</u>
6. Surplus Available for Rate Reduction	\$0	\$0

¹⁾ See Table III-3.

²⁾ DROP liabilities at July 1, 2011 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 2011 valuation database.

**Table III-2
Florida Retirement System
Actuarial Liabilities
July 1, 2012
(\$ 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	\$51,035,613	\$17,712,709	\$10,431	\$491,640	\$24,116	\$173,590	\$1,816,330	\$0	\$71,264,429
b. Retired, Disabled and Beneficiary Members	54,145,028	12,866,887	75,573	628,809	64,214	387,204	1,747,747	19,245,727	89,161,189
c. Terminated Vested Members	<u>4,167,073</u>	<u>672,285</u>	<u>1,835</u>	<u>19,956</u>	<u>9,842</u>	<u>22,985</u>	<u>165,751</u>	<u>0</u>	<u>5,059,727</u>
d. Total Present Value of Benefits (a)+(b)+(c)	109,347,714	31,251,881	87,839	1,140,405	98,172	583,779	3,729,828	19,245,727	165,485,345
2. Present Value of Future Normal Cost (Actives):	\$11,741,029	\$6,067,974	\$1,118	\$129,211	\$3,955	\$33,886	\$315,006	\$0	\$18,292,179
3. Actuarial Liabilities for:									
a. Active Members (1a – 2)	\$39,294,584	\$11,644,735	\$9,313	\$362,429	\$20,161	\$139,704	\$1,501,324	\$0	\$52,972,250
b. Retired, Disabled and Beneficiary Members (1b)	54,145,028	12,866,887	75,573	628,809	64,214	387,204	1,747,747	19,245,727	89,161,189
c. Terminated Vested Members (1c)	<u>4,167,073</u>	<u>672,285</u>	<u>1,835</u>	<u>19,956</u>	<u>9,842</u>	<u>22,985</u>	<u>165,751</u>	<u>0</u>	<u>5,059,727</u>
d. Total Actuarial Liability (a)+(b)+(c)	\$97,606,685	\$25,183,907	\$86,721	\$1,011,194	\$94,217	\$549,893	\$3,414,822	\$19,245,727	\$147,193,166
4. Actuarial Value of Assets	\$87,763,493	\$20,296,396	\$71,697	\$674,314	\$55,010	\$301,604	\$2,006,655	\$16,722,612	\$127,891,781
5. Unfunded Actuarial Liability / (Surplus)	\$9,843,192	\$4,887,511	\$15,024	\$336,880	\$39,207	\$248,289	\$1,408,167	\$2,523,115 ¹	\$19,301,385
6. Present Value of Future Pay	\$173,033,915	\$42,436,933	\$16,014	\$975,434	\$44,041	\$310,637	\$3,751,313	\$0	\$220,568,287

¹ 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, 2012
(\$ in Thousands)**

	<u>FRS Regular</u>	<u>-----Special Risk-----</u>		<u>-----Elected Officers' Class-----</u>			<u>Senior Management</u>	<u>DROP</u>	<u>Total System</u>
		<u>Regular</u>	<u>Administration</u>	<u>Judicial</u>	<u>Leg-Atty-Cab</u>	<u>County</u>			
<u>As of July 1, 2011</u>									
Contingent Liability	\$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
<u>As of July 1, 2012</u>									
Contingent Liability ^{1 & 2}	\$215,006	\$10,652	(\$24)	(\$654)	\$201	\$102	\$9,815	N/A	\$235,098
Participant Counts	7,686	253	1	5	5	10	189	N/A	8,149

¹ The contingent liability is not included in the actuarial liabilities of FRS.

² The contingent liability as of July 1, 2012 is calculated as the July 1, 2003 contingent liability increased by nine 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, 2012

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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, 2012 membership data to be effective for the Plan Year beginning July 1, 2013.

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

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 fourth 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 a 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 members initially enrolled before July 1, 2011 will continue to earn benefits at levels greater than those annually earned by members initially enrolled on or after July 1, 2011. 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 fourth 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 \$2.6 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.

Table IV-5 compares the legislated employer contribution rates to those recommended in the actuarial valuations for the prior Plan years. The legislated rates have been less than the recommended rates meaning the amortization of the UAL is not being funded fully.

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

CONTRIBUTIONS

	2013 – 2014 Plan Year (in millions)
1 Estimated Current Year Surplus Available RSM	\$0
2 Increase/(Decrease) in Available Surplus from prior year	\$0
<u>Amortization of UAL Bases</u>	
3 12% Increase in Special Risk benefits (in pay status before 07/01/2000)	(\$26.2)
4 Special Risk Minimum In-Line-of-Duty Disability Increased to 65%	\$0.3
5 1993-1998 Experience Study Assumption Changes	\$33.7
6 1998-2003 Experience Study Assumption Changes	\$243.4
7 2003-2008 Experience Study Assumption Changes	(\$404.9)
8 2009 Experience Gain/(Loss)	(\$899.4)
9 2009 Plan Change (House Bill 479)	\$76.8
10 2010 Experience Gain/(Loss)	(\$67.6)
11 2010 Plan Change (Senate Bill 2100)	\$73.3
12 2011 Experience Gain/(Loss)	(\$157.4)
13 2012 Experience Gain/(Loss)	<u>\$5.6</u>
Subtotal [(3) + (4) + (5) + (6) + (7) + (8) + (9) + (10) + (11) + (12) + (13)]	(\$1,122.4)
14 Across the Board Rate Reduction of 0%	<u>\$0</u>
Total [Subtotal + (14)]	(\$1,122.4)
15 Surplus Available / (UAL Amortization) [(1) + Total] =	(\$1,122.4)

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

C. CHANGES SINCE PRIOR VALUATION

None.



**Table IV-1
Florida Retirement System
Normal Cost Rates by Decrement
July 1, 2012**

	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%	2.04%	1.87%	1.71%	4.00%	3.23%	1.53%	NA	1.59%
2. Regular Retirement	4.03%	10.03%	3.56%	10.09%	4.22%	6.99%	5.10%	NA	4.99%
3. Non-Duty Death	0.13%	0.26%	0.06%	0.48%	0.21%	0.29%	0.15%	NA	0.15%
4. Line of Duty Death	0.10%	0.25%	0.19%	0.18%	0.15%	0.16%	0.11%	NA	0.12%
5. Non-Duty Disability	0.22%	0.47%	0.15%	0.39%	0.19%	0.21%	0.17%	NA	0.25%
6. Line of Duty Disability	<u>0.04%</u>	<u>0.48%</u>	<u>0.28%</u>	<u>0.08%</u>	<u>0.07%</u>	<u>0.06%</u>	<u>0.04%</u>	<u>NA</u>	<u>0.10%</u>
7. Total Normal Cost	6.02%	13.53%	6.11%	12.93%	8.84%	10.94%	7.10%	NA	7.20%
8. Refund of Employee Contributions	0.49%	0.24%	0.58%	0.06%	0.50%	0.31%	0.63%	NA	0.46%
9. Expected Employee Contributions ¹	<u>-2.98%</u>	<u>-3.02%</u>	<u>-2.93%</u>	<u>-3.01%</u>	<u>-2.92%</u>	<u>-2.95%</u>	<u>-2.96%</u>	<u>NA</u>	<u>-2.98%</u>
10. Net Normal Cost	3.53%	10.75%	3.76%	9.98%	6.42%	8.30%	4.77%	NA	4.68%

¹ 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, 2012**

	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%	0.76%	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%	0.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
c. 1998 Experience Study (1999)**	-0.12%	-0.22%	-1.32%	0.00%	0.00%	0.00%	-0.05%	0.00%	-0.12%
d. 2003 Experience Study (2004)	-1.00%	-1.27%	34.79%	1.84%	2.27%	5.85%	3.02%	-0.19%	-0.86%
e. 2008 Experience Study (2009)	1.53%	0.94%	3.70%	1.13%	1.86%	1.66%	0.77%	1.50%	1.44%
f. 2008-2009 (Gains) / Losses	2.03%	8.65%	-6.10%	13.07%	24.39%	25.63%	11.58%	3.27%	3.20%
g. 2009-2010 (Gains) / Losses	0.35%	-0.69%	3.24%	-1.21%	2.58%	0.29%	0.40%	0.60%	0.24%
h. 2009-2010 Plan Changes (HB 479)	-0.28%	-0.33%	0.00%	-1.43%	-0.74%	-1.03%	-0.64%	0.00%	-0.27%
i. 2010-2011 (Gains) / Losses	0.36%	0.42%	7.59%	4.48%	7.41%	1.88%	1.48%	2.09%	0.56%
j. 2010-2011 Plan Changes (SB 2100)	<u>-0.44%</u>	<u>0.77%</u>	<u>-1.48%</u>	<u>0.17%</u>	<u>0.12%</u>	<u>0.04%</u>	<u>-1.06%</u>	<u>0.00%</u>	<u>-0.26%</u>
k. Total UAL Bases	2.43%	9.02%	40.62%	18.05%	37.89%	34.32%	15.50%	7.27%	4.02%
2. 2011-2012 (Gains) / Losses	<u>0.13%</u>	<u>-0.89%</u>	<u>1.53%</u>	<u>0.34%</u>	<u>-3.39%</u>	<u>-0.75%</u>	<u>0.74%</u>	<u>-0.26%</u>	<u>-0.02%</u>
3. Total UAL Contribution Rates	2.56%	8.13%	42.15%	18.39%	34.50%	33.57%	16.24%	7.01%	4.00%

* 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, 2012
(\$ in Thousands)**

	FRS	---- Special Risk ----		-- Elected Officers' Class --			Senior	DROP	Total
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management		
1. July 1, 2011 Valuation UAL	\$8,660,081	\$5,023,171	\$13,478	\$307,572	\$39,749	\$235,677	\$1,250,496	\$2,514,539	\$18,044,763
2. Expected UAL / (Surplus)	9,397,384	5,384,643	14,501	331,033	42,733	253,357	1,348,289	2,629,924	19,401,864
3. Actuarial Accrued Liability (Table III-2)	97,606,685	25,183,907	86,721	1,011,194	94,217	549,893	3,414,822	19,245,727	147,193,166
4. Actuarial Value of Assets (Table II-4)	87,763,493	20,296,396	71,697	674,314	55,010	301,604	2,006,655	16,722,612	127,891,781
5. Total UAL / (Surplus) (3 - 4)	\$9,843,192	\$4,887,511	\$15,024	\$336,880	\$39,207	\$248,289	\$1,408,167	\$2,523,115	\$19,301,385
6. Net Transfers	0	0	0	0	0	0	0	0	0
7. UAL Bases as of July 1, 2012									
a. Special Risk-Regular 12% Pre-2000	\$0	\$324,560	\$0	\$0	\$0	\$0	\$0	\$0	\$324,560
b. Special Risk 65% In Line of Disability	0	(2,724)	51	0	0	0	0	0	(2,673)
c. 1998 Experience Study	(301,601)	(91,311)	(328)	42	2	5	(2,718)	0	(395,908)
d. 2003 Experience Study	(3,042,909)	(621,639)	10,378	27,422	2,065	34,709	213,203	(67,583)	(3,444,354)
e. 2008 Experience Study	5,312,376	521,788	1,255	19,178	1,925	11,190	61,694	601,323	6,530,729
f. 2009 Experience Gain/Loss	32,634,744	7,190,116	18,868	485,158	58,951	229,691	1,201,573	(21,324,786)	20,494,316
g. Unrecognized Gain/Loss while in Surplus	(25,217,147)	(2,045,515)	(19,018)	(237,928)	(30,297)	(30,794)	(144,904)	22,302,120	(5,423,483)
h. 2009 Plan Change (HB 479)	(974,304)	(181,975)	0	(24,238)	(765)	(6,943)	(51,089)	0	(1,239,315)
i. 2010 Experience Gain/Loss	1,228,794	(390,399)	1,123	(20,965)	2,730	1,998	33,077	245,947	1,102,304
j. 2010 Plan Change (SB 2100)	(1,559,911)	436,241	(512)	3,014	124	285	(86,658)	0	(1,207,417)
k. 2011 Experience Gain/Loss	1,317,342	245,502	2,684	79,349	7,998	13,216	124,111	872,904	2,663,106
l. 2012 Experience Gain/Loss	445,808	(497,132)	523	5,847	(3,526)	(5,068)	59,878	(106,809)	(100,479)
m. Total Bases	\$9,843,192	\$4,887,511	\$15,024	\$336,880	\$39,207	\$248,289	\$1,408,167	\$2,523,115	\$19,301,385
8. New UAL Base	\$445,808	(\$497,132)	\$523	\$5,847	(\$3,526)	(\$5,068)	\$59,878	(\$106,809)	(\$100,479)

**Table IV-4
Florida Retirement System
Employer Contribution Rates
July 1, 2012 Valuation for Plan Year Beginning July 1, 2013**

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	¹ (including DROP)
1. Normal Cost ²	3.53%	10.75%	3.76%	9.98%	6.42%	8.30%	4.77%	4.68%	4.63%	4.67%
2. UAL Cost ²	2.56%	8.13%	42.15%	18.39%	34.50%	33.57%	16.24%	3.69%	7.01%	4.00%
3. Total Cost [(1) + (2)] ²	6.09%	18.88%	45.91%	28.37%	40.92%	41.87%	21.01%	8.37%	11.64%	8.67%
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)]	6.09%	18.88%	45.91%	28.37%	40.92%	41.87%	21.01%	8.37%	11.64%	8.67%

¹ 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.

² 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.

**Table IV-5
Florida Retirement System
Employer Contribution Rates ^{1) & 2)}**

Summary of Legislated Contribution Rates for Prior Three Plan Years, which do not fully fund UAL

Membership Class	Plan Year 2010-2011		Plan Year 2011-2012		Plan Year 2012-2013	
	Recommended	Legislated	Recommended	Legislated	Recommended	Legislated
FRS Regular	12.01%	9.69%	12.07%	3.35%	5.90%	4.13%
Special Risk Regular	29.67%	22.23%	29.06%	12.13%	19.06%	14.05%
Special Risk Administrative	31.29%	12.22%	37.10%	3.60%	40.57%	4.56%
EOC - Judicial	32.99%	20.71%	31.32%	10.09%	27.64%	10.78%
EOC – Leg-Atty-Cab	38.63%	15.69%	41.46%	6.76%	43.79%	7.63%
EOC - Local	43.54%	17.76%	43.69%	8.27%	40.70%	9.23%
Senior Management Svc	24.04%	13.99%	24.38%	4.22%	19.53%	5.23%
Composite w/o DROP	14.97%	11.70%	14.97%	4.69%	8.24%	5.63%
DROP	20.07%	11.14%	19.57%	3.31%	10.54%	4.33%
Composite w/ DROP	15.34%	11.66%	15.31%	4.60%	8.46%	5.51%

¹⁾ The above recommended rates are blended with the Investment Plan contribution rates to derive the uniform blended rates employers contribute.

²⁾ Contribution Rates for Plan Year 2011-2012 and Plan Year 2012-2013 do not include the 3% required employee contributions.



SECTION V

ACCOUNTING STATEMENTS



FLORIDA RETIREMENT SYSTEM
Actuarial Valuation as of July 1, 2012

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

Accounting Standards Codification (ASC) 960 - - Plan Accounting - - Defined Benefit Pension Plans, formerly titled 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 information¹⁾.

The ASC 960 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) is 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, 2012. All of the calculations presented in that table are based on the actuarial assumptions used in the valuation, as described in Appendix A, except salaries are not projected to increase. 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.

Table V-3 reconciles the ABO determined as of the prior valuation, July 1, 2011, to the ABO as of July 1, 2012. 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

1) In 2012, GASB issued Statements No. 67 and No. 68 which will supersede Statements Nos 25 and 27, respectively. Statement Number 67 will be effective for fiscal 2013-2014, while Statement Number 68 will be effective for fiscal 2014-2015. The impact of these two new promulgations are not reflected in this report.

ACCOUNTING STATEMENT

similar information for the total FRS comparing several years' results in addition to the July 1, 2012 results. Table V-6 shows the Solvency Test for the FRS for the 2010, 2011, and 2012 valuations. The Solvency Test compares the actuarial accrued liabilities to the market value of assets. The Statement No. 25 liabilities are 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-13.)

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, 2010 and July 1, 2011) 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 and fiscal 2011-2012, actual contributions were less than expected meaning the FRS employers contributed less than the actuarially determined contributions, assuming 30 year amortization of the unfunded actuarial liability. Fiscal 2011-2012 marks the first year that cumulative contributions do not exceed actuarially determined contributions, both adjusted with interest. The Annual Required Contribution (ARC) of \$1,962,816,000 for FY 2011-2012 was developed in the 2010 annual valuation as updated by the passage of Senate Bill 2100. The ARC included the sum of the composite contribution rate (including DROP) of 4.84% plus the minimum UAL amortization payment required by GASB. As shown on Table V-7, the Annual Pension Cost (APC) is \$1,949,871,000 and the total employer contribution was actually \$1,185,310,000. Therefore, if GASB 27²⁾ applies, the State's CAFR must reflect a Net Pension Obligation (NPO) of \$210,731,000, as compared to an NPO of (\$553,830,000) as of the prior year.

2) In 2012, GASB issued Statements No. 67 and No. 68 which will supersede Statements Nos 25 and 27, respectively. Statement Number 67 will be effective for fiscal 2013-2014, while Statement Number 68 will be effective for fiscal 2014-2015. The impact of these two new promulgations are not reflected in this report.

Table V-1
Florida Retirement System
Accumulated Benefit Obligation - ASC 960
July 1, 2012
(All Amounts in Thousands)

	FRS	---- Special Risk ----		-- Elected Officers' Class --			Senior	DROP	Total
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management		
A. Accumulated Benefit Obligation									
1. Active Members									
a. Accumulated Member Contributions	\$550,880	\$107,246	\$59	\$3,282	\$291	\$1,634	\$18,246	\$0	\$681,638
Employer - Financed									
b. Vested Benefits	19,701,809	5,155,324	5,141	200,062	11,380	79,249	836,008	0	25,988,973
c. Non - Vested Benefits	1,181,316	310,189	380	10,043	1,043	6,167	31,666	0	1,540,804
d. Total	\$21,434,005	\$5,572,759	\$5,580	\$213,387	\$12,714	\$87,050	\$885,920	\$0	\$28,211,415
2. Annuitants	\$54,145,028	\$12,866,887	\$75,573	\$628,809	\$64,214	\$387,204	\$1,747,747	\$19,245,727	\$89,161,189
3. Other Inactive Members	\$4,167,073	\$672,285	\$1,835	\$19,956	\$9,842	\$22,985	\$165,751	\$0	\$5,059,727
4. Total Accumulated Benefit Obligation	\$79,746,106	\$19,111,931	\$82,988	\$862,152	\$86,770	\$497,239	\$2,799,418	\$19,245,727	\$122,432,331
B. Assets Available for Benefits									
1. Market	\$84,352,648	\$19,507,596	\$68,911	\$648,107	\$52,872	\$289,882	\$1,928,668	\$16,072,704	\$122,921,388
2. Actuarial Basis	\$87,763,493	\$20,296,396	\$71,697	\$674,314	\$55,010	\$301,604	\$2,006,655	\$16,722,612	\$127,891,781
C. Unfunded / (Surplus) Total Accumulated Benefit Obligation,									
Assets at:									
1. Market	(\$4,606,542)	(\$395,665)	\$14,077	\$214,045	\$33,898	\$207,357	\$870,750	\$3,173,023	(\$489,057)
2. Actuarial Basis	(\$8,017,387)	(\$1,184,465)	\$11,291	\$187,838	\$31,760	\$195,635	\$792,763	\$2,523,115	(\$5,459,450)
D. Percent of Accumulated Obligation Funded,									
Assets at:									
1. Market	105.78%	102.07%	83.04%	75.17%	60.93%	58.30%	68.90%	83.51%	100.40%
2. Actuarial Basis	110.05%	106.20%	86.39%	78.21%	63.40%	60.66%	71.68%	86.89%	104.46%



ACCOUNTING STATEMENT

Table V-2
Florida Retirement System
Analysis of Funding Progress - ASC 960
(All Amounts in Thousands)

	July 1, 2010 Reflecting SB2100	July 1, 2011 Valuation Basis	July 1, 2012 Valuation Basis
A. Accumulated Benefit Obligation			
1. Active Members			
a. Accumulated Member Contributions	\$33,659	\$31,339	\$681,638
Employer - Financed			
b. Vested Benefits	28,394,646	26,655,302	25,988,973
c. Non - Vested Benefits	<u>1,881,302</u>	<u>1,811,167</u>	<u>1,540,804</u>
d. Total	\$30,309,607	\$28,497,808	\$28,211,415
2. Annuitants	\$59,953,975	\$64,903,070	\$69,915,462
3. Other Inactive Members	\$4,513,427	\$4,637,774	\$5,059,727
4. DROP	<u>\$14,937,071</u>	<u>\$20,084,177</u>	<u>\$19,245,727</u>
5. Total Accumulated Benefit Obligation	\$109,714,080	\$118,122,829	\$122,432,331
B. Assets Available for Benefits			
1. Market	\$109,511,158	\$129,123,355	\$122,921,388
2. Actuarial Basis	\$120,929,666	\$126,078,053	\$127,891,781
C. Unfunded/(Surplus) Total Accumulated Benefit Obligation,			
Assets at:			
1. Market	\$202,922	(\$11,000,526)	(\$489,057)
2. Actuarial Basis	(\$11,215,586)	(\$7,955,224)	(\$5,459,450)
D. Percent of Accumulated Benefit Obligation Funded,			
Assets at:			
1. Market	99.82%	109.31%	100.40%
2. Actuarial Basis	110.22%	106.73%	104.46%
E. Annual Salaries ¹	\$25,765,362	\$25,686,138	\$24,491,371
F. Unfunded/(Surplus) Accumulated Benefit Obligation as a			
Percent of Salary, Assets at:			
1. Market	0.79%	-42.83%	-2.00%
2. Actuarial Basis	-43.53%	-30.97%	-22.29%
¹ 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, 2011	\$118,122,829
Increase (Decrease) During Year Attributable to:	
Increase for Interest Due to Decrease in Discount Period	\$8,837,689
Benefits Paid – PY 2012	(\$8,331,728)
Benefits Accrued & Other Gains / Losses	\$3,803,541
Plan Provision / Assumption Changes	\$0
Net Increase (Decrease)	\$4,309,502
Actuarial Present Value of Accrued Benefits at July 1, 2012	\$122,432,331

ACCOUNTING STATEMENT

Table V-4
Florida Retirement System
Accounting Statement Information - GASB Statement #25
July 1, 2012
(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	\$550,880	\$107,246	\$59	\$3,282	\$291	\$1,634	\$18,246	\$681,638
b. Annuitants	68,114,905	17,091,609	80,292	928,542	83,542	482,795	2,379,504	89,161,189
c. Other Inactive Members	4,167,073	672,285	1,835	19,956	9,842	22,985	165,751	5,059,727
d. Active Members	<u>39,378,291</u>	<u>11,741,496</u>	<u>9,308</u>	<u>364,210</u>	<u>19,766</u>	<u>139,885</u>	<u>1,494,086</u>	<u>53,147,042</u>
2. Total Actuarial Accrued Liability [1(a) + 1(b) + 1(c) + 1(d)]	\$112,211,149	\$29,612,636	\$91,494	\$1,315,990	\$113,441	\$647,299	\$4,057,587	\$148,049,596
3. Actuarial Value of Assets	100,538,772	23,502,010	86,756	848,467	70,679	392,155	2,452,942	127,891,781
4. Unfunded Actuarial Accrued Liability / (Surplus) (UAAL), [2 - 3]	\$11,672,377	\$6,110,626	\$4,738	\$467,523	\$42,762	\$255,144	\$1,604,645	\$20,157,815
5. Funded Ratio	89.60%	79.36%	94.82%	64.47%	62.30%	60.58%	60.45%	86.38%
6. Covered Payroll	\$20,143,332	\$3,625,665	\$2,503	\$127,563	\$7,512	\$48,592	\$536,204	\$24,491,371
7. UAAL / (Surplus) as a % of Payroll	57.95%	168.54%	189.29%	366.50%	569.25%	525.07%	299.26%	82.31%



ACCOUNTING STATEMENT

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

	July 1, 2010 Reflecting SB 2100	July 1, 2011 Valuation Basis	July 1, 2012 Valuation Basis
1. Actuarial Accrued Liability:			
a. Active Member Contributions	\$33,659	\$31,339	\$681,638
b. Annuitants	74,891,047	84,987,246	89,161,189
c. Other Inactive Members	4,513,427	4,637,774	5,059,727
d. Active Members	<u>58,004,298</u>	<u>55,378,116</u>	<u>53,147,042</u>
2. Total Actuarial Accrued Liability [1(a) + 1(b) + 1(c) + 1(d)]	\$137,442,431	\$145,034,475	\$148,049,596
3. Actuarial Value of Assets	\$120,929,666	\$126,078,053	\$127,891,781
4. Unfunded Actuarial Accrued Liability / (Surplus) (UAAL), [2 - 3]	\$16,512,765	\$18,956,422	\$20,157,815
5. Funded Ratio	87.99%	86.93%	86.38%
6. Covered Payroll ¹	\$25,765,362	\$25,686,138	\$24,491,371
7. UAAL / (Surplus) as a % of Payroll	64.09%	73.80%	82.31%

¹ Includes Drop Salaries



ACCOUNTING STATEMENT

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

	<u>July 1, 2010</u> <u>Valuation Basis</u>	<u>July 1, 2011</u> <u>Valuation Basis</u>	<u>July 1, 2012</u> <u>Valuation Basis</u>
1. Actuarial Accrued Liability for:			
a. Retired and Disabled Members, and Survivors	\$74,891,047	\$84,987,246	\$89,161,189
b. Vested Deferred and Inactive Status Members	4,513,427	4,637,774	5,059,727
c. Active Members			
i) Accumulated employee contributions with interest	33,659	31,339	681,638
ii) Employer-financed liabilities	<u>60,214,244</u>	<u>55,378,116</u>	<u>53,147,042</u>
d. Total	\$139,652,377	\$145,034,475	\$148,049,596
2. Net Assets Available for Benefits at Market Value	\$109,511,158	\$129,123,355	\$122,921,388
3. Ratio of Market Value of Assets to Actuarial Accrued Liabilities: [2 / 1]	78.42%	89.03%	83.03%



ACCOUNTING STATEMENT

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

	ACTUAL		PROJECTED
	<u>7/1/2010 - 6/30/2011</u>	<u>7/1/2011 - 6/30/2012</u>	<u>7/1/2012 - 6/30/2013</u>
1. Unfunded Actuarial Liability (UAL) / (Surplus)	\$16,375,877	\$16,512,765	\$18,956,422
2. Amortization of UAL	886,377	893,787	1,026,055
3. Normal Cost	<u>2,793,665</u>	<u>1,069,029</u>	<u>1,114,109</u>
4. Annual Required Contribution: [2 + 3]	\$3,680,042	\$1,962,816	\$2,140,164
5. Interest on Net Pension Obligation:	(89,603)	(42,922)	16,332
6. Adjustment to Annual Required Contribution:	<u>62,580</u>	<u>29,977</u>	<u>(11,406)</u>
7. Annual Pension Cost: [4 + 5 + 6]	\$3,653,019	\$1,949,871	\$2,145,090
8. Contributions Made:	<u>\$3,050,684</u>	<u>\$1,185,310</u>	NA
9. Percent Contributed: [8 / 4]	83%	60%	NA
10. Increase in Net Pension Obligation: [7 - 8]	602,335	764,561	NA
11. Net Pension Obligation at Beginning of Year:	<u>(1,156,165)</u>	<u>(553,830)</u>	<u>210,731</u>
12. Net Pension Obligation at End of Year:	(553,830)	210,731	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, 2012

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 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%

As a generational table, it reflects mortality improvement both before and after the measurement date. 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
Males	
Under age 45	92.4%
Age 51 and over	73.9%
Ages 46 – 50 are interpolated between the two factors	
Females	
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 ¹⁾	0.2818	0	0.1853	0
Out-of-State Service Credit ²⁾	0	0	0.0910	0.0910

1) Pre-1987 hires only; service is eligible for the COLA.

2) Pre-July 1, 2011 enrollees; service is eligible for the COLA.

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.

ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

TABLE A-1
Summary of Valuation Assumptions
July 1, 2012

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

Table A-2 Salary										
REGULAR – Male										
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%
REGULAR - Female										
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%
ECO, ESO – Male and Female										
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

JUDGES – Male and Female											
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%
SENIOR MANAGEMENT – Male											
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%
SENIOR MANAGEMENT - Female											
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											
SPECIAL RISK – Male											
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%
SPECIAL RISK – Female											
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%
SPECIAL RISK ADMIN – Male and Female											
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**

REGULAR				
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%
ELECTED OFFICERS' GROUPS: ECO, ESO *				
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.				
JUDICIAL				
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**

SPECIAL RISK ADMINISTRATIVE SUPPORT				
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

Table A-3				
Unreduced Retirement Annual Rates – Tier II Members				
REGULAR				
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%
ELECTED OFFICERS' GROUPS: ECO, ESO				
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%
JUDICIAL				
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

Table A-3 (cont.)				
Unreduced Retirement Annual Rates – Tier II 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%	10.2%	25.3%	6.6%
60	37.2%	14.9%	40.0%	12.8%
65	40.3%	21.5%	43.8%	21.4%
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	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%
SPECIAL RISK ADMINISTRATIVE SUPPORT (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

Table A-4 Line-of-Duty Disability Annual Rates		
REGULAR		
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%
ECO, ESO, JUDGES, SENIOR MANAGEMENT		
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%
SPECIAL RISK, SPECIAL RISK ADMINISTRATIVE		
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%
TRS and SCOERS		
Same as Non-Duty Disability		

ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

Table A-5 Non-Duty Disability Annual Rates		
REGULAR		
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%
ECO, ESO, JUDGES, SENIOR MANAGEMENT		
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%
SPECIAL RISK, SPECIAL RISK ADMINISTRATIVE		
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

Table A-6				
Pre-Retirement Mortality Annual Rates				
REGULAR, ECO, ESO, JUDGES, SENIOR MANAGEMENT				
	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%
SPECIAL RISK, SPECIAL RISK ADMINISTRATIVE				
	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

Table A-6 (cont.)		
Pre-Retirement Mortality Annual Rates		
TRS, SCOERS		
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%
IFAS		
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 ¹⁾		
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%

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

ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

Table A-8 Disabled Termination (Mortality and Recovery)		
All Groups		
Age	Male	Female
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**

REGULAR – Male										
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%
REGULAR – Female										
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%
ECO – Male										
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

Table A-9 (cont.)										
Other Terminations of Employment Annual Rates										
ECO – Female										
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%
1	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%
3	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%
5	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%
7	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%
ESO – Male										
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%
1	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%
3	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%
5	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%
7	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%
ESO – Female										
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%
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%
3	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%
5	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	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**

JUDGES - Male											
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%	0.9%
1	0.9%	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%	0.9%
3	0.9%	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%	3.0%
5	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%	0.5%
7	0.5%	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%	0.5%
9	1.3%	1.3%	1.3%	1.2%	1.2%	1.2%	1.1%	0.8%	0.7%	0.5%	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%	0.7%

JUDGES – Female											
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%	1.5%
1	1.5%	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%	1.5%
3	1.5%	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%	4.6%
5	1.5%	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%	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	1.5%	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%	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%	1.4%

SENIOR MANAGEMENT – Male											
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	27.9%	23.3%	20.7%	19.4%	18.9%	18.8%	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%	16.8%
3	19.5%	18.5%	17.7%	17.1%	16.7%	16.4%	16.2%	16.0%	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%	12.2%
5	10.9%	10.5%	10.0%	9.7%	9.3%	8.6%	8.2%	8.1%	8.0%	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%	8.1%
7	10.5%	10.2%	9.7%	9.2%	8.8%	8.5%	8.3%	8.1%	8.0%	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%	7.8%
9	6.6%	6.6%	6.3%	6.1%	5.9%	5.7%	5.6%	5.4%	5.3%	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%	2.6%

ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

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

SENIOR MANAGEMENT – Female										
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	25.8%	21.7%	19.6%	18.5%	18.1%	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%
3	19.0%	18.0%	17.3%	16.7%	16.2%	15.9%	15.7%	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%
5	12.1%	11.3%	10.5%	9.9%	9.4%	9.0%	8.7%	8.6%	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%
7	10.3%	10.1%	9.6%	9.2%	8.8%	8.6%	8.4%	8.2%	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%
9	7.4%	7.4%	6.9%	6.5%	6.1%	5.8%	5.5%	5.3%	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%

SPECIAL RISK – Male										
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%
1	10.3%	9.8%	9.5%	8.8%	8.0%	7.3%	6.5%	5.8%	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%
3	8.4%	7.9%	7.5%	7.2%	6.7%	6.0%	5.3%	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%
5	5.3%	5.3%	5.3%	5.3%	4.8%	4.3%	3.8%	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%
7	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%
9	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%

SPECIAL RISK – Female										
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%
1	15.5%	14.2%	13.2%	12.2%	11.2%	10.2%	9.2%	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%
3	10.3%	9.8%	9.3%	8.8%	8.3%	7.6%	6.6%	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	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	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%
7	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%
9	4.2%	4.2%	4.2%	4.1%	4.1%	4.1%	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%

ACTUARIAL METHODS, PROCEDURES AND ASSUMPTIONS

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

SPECIAL RISK ADMINISTRATIVE – Male											
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%

SPECIAL RISK ADMINISTRATIVE – Female											
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, 2012

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 when the IP was created 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 IP became effective 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 who are 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 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 -- former Special Risk members employed as law enforcement officers, firefighters, correctional officers, or emergency medical technicians who have been moved or been re-

SUMMARY OF PLAN PROVISIONS

assigned to non-Special Risk administrative support positions within a Florida Retirement System Special Risk employing agency.

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 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 enacted for the July 1, 2012 – June 30, 2013 plan year are as follows:

	FRS	Special Risk		Elected Officers Class			Senior	DROP
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management	
Defined Benefit Plan								
- Normal Cost Rate	3.55%	10.75%	3.44%	9.94%	6.41%	8.20%	4.81%	4.33%
- UAL Rate	<u>0.57</u>	<u>3.25</u>	<u>1.13</u>	<u>0.83</u>	<u>1.22</u>	<u>1.03</u>	<u>0.42</u>	<u>0.00</u>
- Total DB Rate	4.12	14.00	4.57	10.77	7.63	9.23	5.23	4.33
Investment Plan								
- Employer Rate	3.55%	12.33%	5.40%	10.96%	6.79%	8.75%	4.93%	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	3.55	12.33	5.40	10.96	6.79	8.75	4.93	n/a
Blended Uniform Contribution Rates								
- Normal Cost Rate	3.55%	11.01%	3.94%	10.02%	6.51%	8.36%	4.84%	4.33%
- 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	4.04	13.76	4.77	10.79	7.39	9.09	5.16	4.33

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.

(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, 2012, the minimum monthly benefit is \$27.03 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 is enrolled before July 1, 2011 and 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). Deferral of DROP participation for all but K-12 Instructional Personnel is allowed if the eligible participant enrolled on or after July 1, 2011, has completed 33 years of service (or 30 years for Special Risk Class members) and has not reached age 60 (or age 55 for Special Risk Class members). In this case the participant can defer participation in DROP until he reaches age 60 (or age 55 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.

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 FRS 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 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.



SUMMARY OF PLAN PROVISIONS

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 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)

Effective July 1, 2012, the employer allocations to the IP accounts are based on contribution rates as follows:

Classification	2012-2013 Plan Year Rates
Regular	3.30%
Special Risk	11.00
Special Risk Administrative Support	4.95
Elected Officers	
- Judicial	10.23
- State	6.38
- County	8.34
Senior Management Service	4.67

SUMMARY OF PLAN PROVISIONS

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

Classification	2012-2013 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 benefits if they become totally and permanently disabled due to injury or illness

SUMMARY OF PLAN PROVISIONS

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, 2012, the minimum monthly benefit is \$27.03 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, 2012, the minimum monthly benefit is \$27.03 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)



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, 2012

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, 2012.

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, 2012
Regular and Early Retirement by Age

Age	Men	Women	Total
Number of Persons			
Under 50	1,610	1,903	3,513
50 to 54	2,658	3,089	5,747
55 to 59	8,509	12,435	20,944
60 to 64	20,346	33,380	53,726
65 to 69	29,240	47,304	76,544
70 to 74	21,968	37,131	59,099
75 to 79	15,613	26,401	42,014
80 & Up	18,130	38,373	56,503
Total	118,074	200,016	318,090
Annual Benefits (in Thousands)			
Under 50	\$19,139	\$19,385	\$38,524
50 to 54	67,161	39,611	106,772
55 to 59	233,416	186,866	420,282
60 to 64	524,113	608,973	1,133,086
65 to 69	690,765	820,804	1,511,569
70 to 74	472,852	592,311	1,065,163
75 to 79	335,668	419,022	754,690
80 & Up	382,884	590,355	973,239
Total	\$2,725,998	\$3,277,327	\$6,003,325

Table C-2
Florida Retirement System
Annuitants at July 1, 2012
Disability Retirement by Age

Age	Men	Women	Total
Number of Persons			
Under 50	388	522	910
50 to 54	584	926	1,510
55 to 59	955	1,683	2,638
60 to 64	1,117	2,016	3,133
65 to 69	952	1,616	2,568
70 to 74	520	933	1,453
75 to 79	269	429	698
80 & Up	222	472	694
Total	5,007	8,597	13,604

Annual Benefits (in Thousands)			
Under 50	\$7,032	\$6,684	\$13,716
50 to 54	9,712	11,249	20,961
55 to 59	15,198	21,314	36,512
60 to 64	17,314	25,635	42,949
65 to 69	14,859	20,209	35,068
70 to 74	7,465	11,393	18,858
75 to 79	3,611	4,800	8,411
80 & Up	2,792	4,561	7,353
Total	\$77,983	\$105,845	\$183,828

Table C-3
Florida Retirement System
Potential Annuitants at July 1, 2012
Vested Terminated Members by Age for the Regular,
Senior Management Service, and Elected Officers' Classes

Age	Men	Women	Total
Number of Persons			
Under 30	140	374	514
30 to 34	771	2,419	3,190
35 to 39	1,872	5,639	7,511
40 to 44	3,488	8,839	12,327
45 to 49	4,799	11,188	15,987
50 to 54	6,211	13,745	19,956
55 to 59	5,486	11,536	17,022
60 & Up	7,074	13,575	20,649
Total	29,841	67,315	97,156
Annual Benefits (in Thousands) *			
Under 30	\$372	\$929	\$1,301
30 to 34	3,002	9,225	12,227
35 to 39	8,924	24,852	33,776
40 to 44	20,421	44,650	65,071
45 to 49	34,759	62,107	96,866
50 to 54	49,576	82,614	132,190
55 to 59	45,474	70,938	116,412
60 & Up	41,702	58,542	100,244
Total	\$204,230	\$353,857	\$558,087

* Deferred to Age 62

Table C-4
Florida Retirement System
Potential Annuitants at July 1, 2012
Vested Terminated Members by Age for the
Special Risk Regular & Administrative Support Classes

Age	Men	Women	Total
Number of Persons			
Under 30	48	15	63
30 to 34	225	115	340
35 to 39	609	277	886
40 to 44	1,110	443	1,553
45 to 49	1,007	424	1,431
50 to 54	684	294	978
55 to 59	279	95	374
60 & Up	283	87	370
Total	4,245	1,750	5,995

Annual Benefits (in Thousands) *			
Under 30	\$373	\$112	\$485
30 to 34	2,124	1,006	3,130
35 to 39	6,171	2,576	8,747
40 to 44	13,314	4,687	18,001
45 to 49	13,552	5,596	19,148
50 to 54	9,676	3,851	13,527
55 to 59	3,554	1,294	4,848
60 & Up	2,785	844	3,629
Total	\$51,549	\$19,966	\$71,515

* Deferred to Age 55

Table C-5
Florida Retirement System
Annuitants and Potential Annuitants at July 1, 2012
All Types of Retirement by System

System	Annuitants	Potential Annuitants	Total
Number of Persons			
Regular	298,404	95,741	394,145
Senior Management Service	2,892	1,056	3,948
Special Risk	28,068	5,975	34,043
Special Risk Administrative	166	20	186
EOC - Judges	734	42	776
EOC - Legislative/Attorneys/Cabinet	192	93	285
EOC - County Officials	<u>1,238</u>	<u>224</u>	<u>1,462</u>
Total	331,694	103,151	434,845
Annual Benefits (in Thousands)			
Regular	\$4,992,033	\$533,080	\$5,525,113
Senior Management Service	129,139	19,515	148,654
Special Risk	963,579	71,357	1,034,936
Special Risk Administrative	5,815	158	5,973
EOC - Judges	56,758	1,981	58,739
EOC - Legislative/Attorneys/Cabinet	5,595	1,086	6,681
EOC - County Officials	<u>34,234</u>	<u>2,425</u>	<u>36,659</u>
Total	\$6,187,153	\$629,602	\$6,816,755

Table C-6
Florida Retirement System
Annuitants at July 1, 2012
DROP Members

Age	Men	Women	Total
Number of Persons			
Under 50	515	109	624
50 to 54	2,041	2,133	4,174
55 to 59	4,112	6,844	10,956
60 to 64	5,525	11,379	16,904
65 to 69	2,310	5,307	7,617
70 to 74	65	155	220
75 to 79	16	35	51
80 & Up	2	6	8
Total	14,586	25,968	40,554
Annual Benefits (in Thousands)			
Under 50	\$32,337	\$5,434	\$37,771
50 to 54	111,581	63,480	175,061
55 to 59	160,480	214,554	375,034
60 to 64	141,570	255,857	397,427
65 to 69	48,052	92,285	140,337
70 to 74	829	2,265	3,094
75 to 79	151	322	473
80 & Up	18	70	88
Total	\$495,018	\$634,267	\$1,129,285

MEMBERSHIP DATA

Table C-7
Florida Retirement System
Members and Their Salaries at July 1, 2012
FRS - Regular: Men

AGE	UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20	261	2,252,799	1	7,286		
20 to 24	3,248	63,620,576	190	4,546,450		
25 to 29	5,979	173,024,414	2,552	82,008,508	79	2,830,884
30 to 34	4,468	140,416,285	5,678	220,497,327	1,514	61,671,874
35 to 39	3,317	106,660,432	4,566	184,128,335	3,806	176,984,390
40 to 44	3,453	112,035,757	4,289	172,089,378	4,074	188,502,294
45 to 49	3,314	106,909,149	4,423	176,878,660	3,682	167,454,394
50 to 54	3,093	99,132,314	4,560	180,080,464	4,037	182,365,682
55 to 59	2,566	80,033,854	4,045	156,203,953	3,913	174,113,536
60 to 64	1,444	41,835,798	2,966	112,966,661	2,462	108,464,589
65 & UP	893	18,929,540	2,018	60,544,674	1,841	70,829,541
TOTALS	32,036	944,850,918	35,288	1,349,951,696	25,408	1,133,217,184

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	39	1,722,112				
35 to 39	1,080	51,565,481	40	2,133,945		
40 to 44	3,769	201,116,363	1,168	61,764,187	76	3,732,292
45 to 49	3,593	186,422,774	3,429	196,196,235	1,583	85,756,340
50 to 54	3,600	184,200,676	3,706	210,084,454	3,822	234,105,625
55 to 59	3,423	170,395,919	3,511	196,382,128	3,274	201,323,727
60 to 64	2,181	106,697,594	1,938	107,001,964	1,599	100,763,294
65 & UP	1,057	46,903,129	561	31,956,011	275	17,208,219
TOTALS	18,742	949,024,048	14,353	805,518,924	10,629	642,889,497

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	86	4,924,267				
50 to 54	830	50,438,523	11	454,615		
55 to 59	976	63,274,488	107	5,995,955	2	110,881
60 to 64	440	31,101,907	180	13,405,611	36	2,116,514
65 & UP	175	15,365,424	130	12,359,879	101	10,308,416
TOTALS	2,507	165,104,609	428	32,216,060	139	12,535,811

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20					262	2,260,085
20 to 24					3,438	68,167,026
25 to 29					8,610	257,863,806
30 to 34					11,699	424,307,598
35 to 39					12,809	521,472,583
40 to 44					16,829	739,240,271
45 to 49					20,110	924,541,819
50 to 54					23,659	1,140,862,353
55 to 59					21,817	1,047,834,441
60 to 64	1	40,981			13,247	624,394,913
65 & UP	20	2,016,938	7	564,104	7,078	286,985,875
TOTALS	21	2,057,919	7	564,104	139,558	6,037,930,770



MEMBERSHIP DATA

Table C-8
Florida Retirement System
Members and Their Salaries at July 1, 2012
FRS - Regular: Women

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20	384	2,808,946				
20 to 24	6,468	134,823,131	250	4,773,008	1	32,868
25 to 29	14,841	448,659,425	6,133	202,041,070	138	4,636,340
30 to 34	9,044	261,397,683	15,725	578,662,481	4,077	158,262,311
35 to 39	7,114	193,021,554	11,434	401,853,940	10,999	457,852,622
40 to 44	7,451	193,626,302	11,101	362,138,826	10,619	415,656,398
45 to 49	6,435	160,927,763	10,570	326,208,248	10,261	365,178,503
50 to 54	5,295	135,379,936	9,784	302,044,182	10,484	362,613,667
55 to 59	3,676	97,266,565	7,590	240,297,995	8,761	307,803,402
60 to 64	1,787	46,352,714	4,648	146,229,725	4,820	169,816,148
65 & UP	884	15,565,266	2,224	54,643,516	2,173	60,176,855
TOTALS	63,379	1,689,829,285	79,459	2,618,892,991	62,333	2,302,029,114

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	82	3,332,508				
35 to 39	2,950	128,631,873	59	2,464,858		
40 to 44	9,759	457,271,139	2,979	145,798,890	148	6,955,681
45 to 49	8,574	366,039,221	8,389	431,548,006	3,410	176,728,367
50 to 54	9,162	364,920,936	8,307	398,291,549	8,001	441,379,874
55 to 59	8,430	335,169,584	8,834	409,736,543	7,190	376,638,388
60 to 64	4,440	178,841,511	4,812	226,618,076	3,948	204,212,270
65 & UP	1,297	41,009,214	844	31,866,942	489	20,352,789
TOTALS	44,694	1,875,215,986	34,224	1,646,324,864	23,186	1,226,267,369

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	95	4,749,632				
50 to 54	1,507	84,605,687	14	717,235		
55 to 59	1,806	104,464,584	182	9,696,654	2	127,605
60 to 64	706	37,993,854	195	11,695,577	60	3,280,906
65 & UP	253	11,088,998	123	6,866,731	68	3,725,329
TOTALS	4,367	242,902,755	514	28,976,197	130	7,133,840

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20					384	2,808,946
20 to 24					6,719	139,629,007
25 to 29					21,112	655,336,835
30 to 34					28,928	1,001,654,983
35 to 39					32,556	1,183,824,847
40 to 44					42,057	1,581,447,236
45 to 49					47,734	1,831,379,740
50 to 54					52,554	2,089,953,066
55 to 59					46,471	1,881,201,320
60 to 64					25,416	1,025,040,781
65 & UP	11	576,795	3	188,468	8,369	246,060,903
TOTALS	11	576,795	3	188,468	312,300	11,638,337,664



MEMBERSHIP DATA

**Table C-9
Florida Retirement System
Members and Their Salaries at July 1, 2012
FRS - Special Risk: Men**

AGE	UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20	3	79,358				
20 to 24	1,857	63,810,974	93	3,582,783		
25 to 29	3,149	123,120,368	2,584	121,655,551	49	2,251,407
30 to 34	1,824	73,683,620	3,685	192,356,744	1,297	73,443,468
35 to 39	1,044	41,678,004	2,543	134,577,160	2,484	153,229,247
40 to 44	816	33,245,582	1,807	96,984,430	2,185	136,835,873
45 to 49	536	24,687,614	1,183	61,280,242	1,083	64,778,233
50 to 54	396	18,762,303	728	38,986,559	655	38,421,862
55 to 59	211	8,971,629	417	20,925,130	354	19,764,325
60 to 64	68	3,156,556	198	10,070,970	205	11,051,656
65 & UP	14	643,157	47	1,971,634	71	3,876,785
TOTALS	9,918	391,839,165	13,285	682,391,203	8,383	503,652,856

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	20	1,130,651				
35 to 39	1,060	68,375,897	12	879,381		
40 to 44	2,653	182,445,643	1,291	94,665,432	39	3,244,797
45 to 49	1,587	107,197,478	2,457	183,962,516	730	59,432,972
50 to 54	760	46,653,019	1,301	94,648,324	632	49,396,183
55 to 59	323	18,295,455	298	19,306,722	160	11,354,221
60 to 64	162	9,162,189	156	10,409,561	85	6,000,040
65 & UP	53	3,221,217	21	1,159,669	19	1,323,716
TOTALS	6,618	436,481,549	5,536	405,031,605	1,665	130,751,929

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	9	725,796				
50 to 54	67	5,463,999				
55 to 59	65	4,944,105	8	661,381		
60 to 64	35	2,830,415	13	846,743	1	103,514
65 & UP	11	836,734	3	295,381	1	69,919
TOTALS	187	14,801,049	24	1,803,505	2	173,433

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20					3	79,358
20 to 24					1,950	67,393,757
25 to 29					5,782	247,027,326
30 to 34					6,826	340,614,483
35 to 39					7,143	398,739,689
40 to 44					8,791	547,421,757
45 to 49					7,585	502,064,851
50 to 54					4,539	292,332,249
55 to 59					1,836	104,222,968
60 to 64					923	53,631,644
65 & UP	1	93,565			241	13,491,777
TOTALS	1	93,565			45,619	2,567,019,859



MEMBERSHIP DATA

Table C-10
Florida Retirement System
Members and Their Salaries at July 1, 2012
FRS - Special Risk: Women

AGE	SERVICE					
	UNDER 5		5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24	413	13,626,956	9	344,376		
25 to 29	946	34,487,894	597	24,762,559	6	273,743
30 to 34	517	19,217,390	1,033	46,800,012	358	18,818,865
35 to 39	333	12,862,666	674	31,298,769	754	41,237,168
40 to 44	263	10,498,866	478	22,206,925	632	34,095,116
45 to 49	164	6,600,143	303	13,137,715	375	19,927,751
50 to 54	109	4,447,062	204	8,953,018	222	11,285,022
55 to 59	53	2,623,180	118	5,528,305	87	4,191,545
60 to 64	21	897,015	41	1,759,868	58	2,777,804
65 & UP	4	190,302	12	486,993	8	310,372
TOTALS	2,823	105,451,474	3,469	155,278,540	2,500	132,917,386

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	9	510,671				
35 to 39	264	15,229,803	1	82,802		
40 to 44	733	44,406,559	273	18,302,619	13	861,514
45 to 49	438	25,779,553	640	42,653,151	183	13,060,414
50 to 54	308	17,447,175	376	24,232,565	258	16,323,589
55 to 59	99	4,904,444	90	5,497,351	77	4,613,748
60 to 64	52	2,471,212	32	1,988,690	26	1,421,458
65 & UP	18	978,699	9	461,114	2	86,183
TOTALS	1,921	111,728,116	1,421	93,218,292	559	36,366,906

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	18	1,217,030				
55 to 59	17	1,097,637	2	217,663		
60 to 64	4	257,923	1	45,066	1	46,245
65 & UP						
TOTALS	39	2,572,590	3	262,729	1	46,245

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24					422	13,971,332
25 to 29					1,549	59,524,196
30 to 34					1,917	85,346,938
35 to 39					2,026	100,711,208
40 to 44					2,392	130,371,599
45 to 49					2,103	121,158,727
50 to 54					1,495	83,905,461
55 to 59					543	28,673,873
60 to 64					236	11,665,281
65 & UP					53	2,513,663
TOTALS					12,736	637,842,278



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-11
Florida Retirement System
Members and Their Salaries at July 1, 2012
FRS - Special Risk Administrative Support: Men**

AGE	UNDER 5		SERVICE 5 TO 10		10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24						
25 to 29						
30 to 34			1	34,967	1	35,642
35 to 39					1	35,646
40 to 44						
45 to 49	1	33,119				
50 to 54					1	38,667
55 to 59					1	39,299
60 to 64						
65 & UP						
TOTALS	1	33,119	1	34,967	4	149,254

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	4	233,002				
40 to 44	5	321,335	3	153,717		
45 to 49			3	158,055		
50 to 54	1	38,660	1	45,818	2	94,432
55 to 59					1	37,041
60 to 64			2	81,966		
65 & UP						
TOTALS	10	592,997	9	439,556	3	131,473

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						
30 to 34					2	70,609
35 to 39					5	268,648
40 to 44					8	475,052
45 to 49					4	191,174
50 to 54					5	217,577
55 to 59					2	76,340
60 to 64					2	81,966
65 & UP						
TOTALS					28	1,381,366



MEMBERSHIP DATA

**Table C-12
Florida Retirement System
Members and Their Salaries at July 1, 2012
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	40,330		
40 to 44					1	32,538
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS			1	40,330	1	32,538

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	1	41,655				
40 to 44	2	94,730				
45 to 49			4	179,667		
50 to 54	3	123,920	1	35,386		
55 to 59						
60 to 64						
65 & UP						
TOTALS	6	260,305	5	215,053		

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	1	37,725				
55 to 59						
60 to 64						
65 & UP						
TOTALS	1	37,725				

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					2	81,985
40 to 44					3	127,268
45 to 49					4	179,667
50 to 54					5	197,031
55 to 59						
60 to 64						
65 & UP						
TOTALS					14	585,951



MEMBERSHIP DATA

**Table C-13
Florida Retirement System
Members and Their Salaries at July 1, 2012
EOC - Judicial: Men**

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	1	123,239				
35 to 39	2	277,917	4	552,916	2	278,265
40 to 44	1	116,866	9	1,170,581	14	1,922,573
45 to 49	7	944,444	7	951,984	18	2,511,816
50 to 54	11	1,535,760	14	1,964,323	19	2,645,184
55 to 59	11	1,433,582	16	2,274,849	24	3,413,627
60 to 64	6	845,170	19	2,670,613	17	2,412,635
65 & UP	4	568,712	15	2,118,565	11	1,563,959
TOTALS	43	5,845,690	84	11,703,831	105	14,748,059

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	4	533,395				
45 to 49	9	1,225,400	12	1,682,853		
50 to 54	14	1,975,746	17	2,366,092	13	1,828,226
55 to 59	27	3,800,059	24	3,352,965	28	3,875,828
60 to 64	18	2,519,745	19	2,701,639	17	2,403,939
65 & UP	6	851,752	6	837,272	1	134,280
TOTALS	78	10,906,097	78	10,940,821	59	8,242,273

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	7	963,654				
60 to 64	2	284,356				
65 & UP						
TOTALS	9	1,248,010				

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					1	123,239
35 to 39					8	1,109,098
40 to 44					28	3,743,415
45 to 49					53	7,316,497
50 to 54					88	12,315,331
55 to 59					137	19,114,564
60 to 64					98	13,838,097
65 & UP					43	6,074,540
TOTALS					456	63,634,781



MEMBERSHIP DATA

Table C-14
Florida Retirement System
Members and Their Salaries at July 1, 2012
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	2	183,128	2	276,458	2	276,458
40 to 44	5	702,441	7	827,400	10	1,350,567
45 to 49	5	588,460	10	1,404,007	16	2,240,976
50 to 54	2	276,458	12	1,690,858	13	1,810,914
55 to 59	3	389,554	9	1,248,573	10	1,413,883
60 to 64	1	142,178	1	142,178	4	552,916
65 & UP			2	284,356		
TOTALS	18	2,282,219	43	5,873,830	55	7,645,714

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	12	1,644,575				
45 to 49	9	1,270,769	10	1,382,728		
50 to 54	16	2,235,358	14	1,943,671	13	1,807,926
55 to 59	5	702,992	13	1,804,009	14	1,943,500
60 to 64	6	829,374	9	1,263,807	13	1,833,403
65 & UP						
TOTALS	48	6,683,068	46	6,394,215	40	5,584,829

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	3	410,738				
60 to 64	2	284,356				
65 & UP						
TOTALS	5	695,094				

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					6	736,044
40 to 44					34	4,524,983
45 to 49					50	6,886,940
50 to 54					70	9,765,185
55 to 59					57	7,913,249
60 to 64					36	5,048,212
65 & UP					2	284,356
TOTALS					255	35,158,969



MEMBERSHIP DATA

Table C-15
Florida Retirement System
Members and Their Salaries at July 1, 2012
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						
30 to 34	6	178,182	1	29,697		
35 to 39	5	151,366	4	218,063	6	178,182
40 to 44	2	59,394	2	70,878	1	29,697
45 to 49	3	89,091	5	148,485		
50 to 54	1	29,697	5	268,865	2	158,669
55 to 59	1	29,697	2	59,394	3	89,091
60 to 64	3	89,091	2	179,774	2	59,394
65 & UP	1	29,697	6	178,182	1	150,077
TOTALS	22	656,215	27	1,153,338	15	665,110

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		
55 to 59	3	209,471	1	29,697	2	300,154
60 to 64	1	29,697	3	450,231	1	150,077
65 & UP	1	29,697				
TOTALS	8	478,336	5	630,005	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						
55 to 59	1	150,077				
60 to 64	1	150,077				
65 & UP					1	150,077
TOTALS	2	300,154			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						
30 to 34					7	207,879
35 to 39					15	547,611
40 to 44					6	189,666
45 to 49					8	237,576
50 to 54					11	787,082
55 to 59					13	867,581
60 to 64					13	1,108,341
65 & UP					10	537,730
TOTALS					83	4,483,466



MEMBERSHIP DATA

Table C-16
Florida Retirement System
Members and Their Salaries at July 1, 2012
EOC - Legislators/Attorneys/Cabinet: 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			1	29,697		
35 to 39						
40 to 44					1	150,077
45 to 49			4	118,788	1	29,697
50 to 54	1	29,697	2	59,394		
55 to 59	2	59,394				
60 to 64			1	29,697		
65 & UP			1	29,697	3	89,091
TOTALS	3	89,091	9	267,273	5	268,865

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	1	29,697				
45 to 49	1	29,697	2	279,049		
50 to 54	1	29,697	1	29,697		
55 to 59	1	150,077	2	300,154		
60 to 64						
65 & UP	1	29,697				
TOTALS	5	268,865	5	608,900		

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					1	29,697
35 to 39						
40 to 44					2	179,774
45 to 49					8	457,231
50 to 54					5	148,485
55 to 59					5	509,625
60 to 64					1	29,697
65 & UP					5	148,485
TOTALS					27	1,502,994



MEMBERSHIP DATA

Table C-17
Florida Retirement System
Members and Their Salaries at July 1, 2012
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	1	65,343	2	68,578		
30 to 34	7	202,457	3	88,735		
35 to 39	10	356,076	4	334,491	2	46,266
40 to 44	17	608,058	6	308,493	12	451,663
45 to 49	15	576,417	11	413,613	11	450,019
50 to 54	19	602,407	17	1,044,763	22	804,276
55 to 59	13	508,320	21	879,596	22	1,053,126
60 to 64	18	923,252	17	575,441	13	517,940
65 & UP	22	511,968	34	895,750	24	796,209
TOTALS	122	4,354,298	115	4,609,460	106	4,119,499

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	4	186,631	3	285,727		
45 to 49	7	371,975	7	287,366	3	339,073
50 to 54	14	706,132	10	677,833	6	545,319
55 to 59	19	808,064	14	962,350	9	611,466
60 to 64	12	644,420	11	702,560	6	530,729
65 & UP	11	246,915	14	546,747	5	156,709
TOTALS	67	2,964,137	59	3,462,583	29	2,183,296

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	4	472,586				
55 to 59	4	376,547	1	110,805		
60 to 64	3	244,938			1	98,218
65 & UP	2	73,239	1	3,600		
TOTALS	13	1,167,310	2	114,405	1	98,218

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					3	133,921
30 to 34					10	291,192
35 to 39					16	736,833
40 to 44					42	1,840,572
45 to 49					54	2,438,463
50 to 54					92	4,853,316
55 to 59					103	5,310,274
60 to 64					81	4,237,498
65 & UP					113	3,231,137
TOTALS					514	23,073,206



MEMBERSHIP DATA

**Table C-18
Florida Retirement System
Members and Their Salaries at July 1, 2012
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	1	8,400	2	109,261		
35 to 39	6	171,037	3	109,590	3	88,092
40 to 44	5	249,587	7	199,472	4	186,303
45 to 49	5	155,050	3	78,570	4	188,862
50 to 54	10	336,615	5	277,163	8	488,166
55 to 59	8	135,123	12	473,692	16	648,089
60 to 64	6	167,695	17	690,898	13	1,014,109
65 & UP	11	231,357	16	706,497	15	702,257
TOTALS	52	1,454,864	65	2,645,143	63	3,315,878

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	4	259,417	3	272,372	1	130,011
45 to 49	1	32,753	4	237,078	5	561,529
50 to 54	4	217,752	7	538,378	9	813,322
55 to 59	13	553,373	9	566,393	11	834,604
60 to 64	13	953,905	8	530,396	3	238,047
65 & UP	17	791,075	9	554,445	3	89,715
TOTALS	52	2,808,275	40	2,699,062	32	2,667,228

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	101,849				
50 to 54	4	332,919				
55 to 59	3	304,343				
60 to 64	1	24,121			1	95,266
65 & UP	1	9,000			1	84,775
TOTALS	10	772,232			2	180,041

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					3	117,661
35 to 39					12	368,719
40 to 44					24	1,297,162
45 to 49					23	1,355,691
50 to 54					47	3,004,315
55 to 59					72	3,515,617
60 to 64					62	3,714,437
65 & UP					73	3,169,121
TOTALS					316	16,542,723



MEMBERSHIP DATA

**Table C-19
Florida Retirement System
Members and Their Salaries at July 1, 2012
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	1	43,782				
25 to 29	185	7,590,996	7	340,831		
30 to 34	129	5,525,768	78	4,310,246	8	573,944
35 to 39	38	2,039,138	74	4,358,192	55	4,053,408
40 to 44	30	1,942,199	55	4,308,800	75	6,279,973
45 to 49	25	2,480,188	47	3,843,266	54	4,799,913
50 to 54	32	3,462,135	36	3,229,551	48	4,538,273
55 to 59	28	3,255,499	52	4,627,779	76	8,311,359
60 to 64	18	2,024,653	42	4,110,473	51	5,376,720
65 & UP	9	983,199	25	2,787,414	34	3,555,472
TOTALS	495	29,347,557	416	31,916,552	401	37,489,062

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	20	1,488,889				
40 to 44	90	8,165,891	23	2,382,472	3	272,713
45 to 49	90	8,589,273	134	14,381,879	35	3,393,583
50 to 54	70	6,976,480	134	13,926,246	161	16,948,574
55 to 59	71	7,051,214	100	10,678,026	138	14,917,725
60 to 64	58	6,136,199	56	5,375,920	57	6,903,415
65 & UP	23	2,582,152	23	2,830,403	6	541,497
TOTALS	422	40,990,098	470	49,574,946	400	42,977,507

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	19	2,109,559				
55 to 59	47	5,571,162	4	350,573		
60 to 64	17	2,326,690	7	1,259,593		
65 & UP	7	958,641	3	411,892	3	452,498
TOTALS	90	10,966,052	14	2,022,058	3	452,498

AGE	SERVICE					
	45 TO 50		50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24					1	43,782
25 to 29					192	7,931,827
30 to 34					215	10,409,958
35 to 39					187	11,939,627
40 to 44					276	23,352,048
45 to 49					385	37,488,102
50 to 54					500	51,190,818
55 to 59					516	54,763,337
60 to 64					306	33,513,663
65 & UP	1	363,820			134	15,466,988
TOTALS	1	363,820			2,712	246,100,150



MEMBERSHIP DATA

Table C-20
Florida Retirement System
Members and Their Salaries at July 1, 2012
FRS - Senior Management Service: Women

AGE	UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24	1	40,502				
25 to 29	217	9,023,505	3	115,695		
30 to 34	131	5,727,907	110	6,113,918	8	571,066
35 to 39	30	1,259,001	92	5,454,198	99	6,658,689
40 to 44	31	2,183,301	61	4,058,848	89	6,530,576
45 to 49	22	1,460,937	37	2,754,123	57	4,654,804
50 to 54	16	1,100,651	31	2,628,365	56	4,458,330
55 to 59	14	1,297,252	26	2,311,329	45	4,249,568
60 to 64	11	1,214,237	21	1,654,318	27	2,246,978
65 & UP	2	178,238	6	464,232	13	1,074,809
TOTALS	475	23,485,531	387	25,555,026	394	30,444,820

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	27	1,902,429	3	207,873		
40 to 44	113	9,333,833	51	4,064,745	2	154,605
45 to 49	97	7,797,998	155	13,633,410	69	5,677,793
50 to 54	74	6,193,246	128	11,258,911	157	16,117,784
55 to 59	52	4,593,866	103	10,159,243	116	11,518,670
60 to 64	33	2,901,056	34	3,295,014	51	5,397,619
65 & UP	6	456,420	7	532,897	5	451,697
TOTALS	402	33,178,848	481	43,152,093	400	39,318,168

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	4	332,762				
50 to 54	21	1,895,116	1	49,340		
55 to 59	19	2,165,437	3	298,826		
60 to 64	9	910,519	9	1,131,120	1	78,251
65 & UP	3	470,745	3	302,383	2	153,537
TOTALS	56	5,774,579	16	1,781,669	3	231,788

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20						
20 to 24					1	40,502
25 to 29					220	9,139,200
30 to 34					249	12,412,891
35 to 39					251	15,482,190
40 to 44					347	26,325,908
45 to 49					441	36,311,827
50 to 54					484	43,701,743
55 to 59					378	36,594,191
60 to 64					196	18,829,112
65 & UP			2	207,870	49	4,292,828
TOTALS			2	207,870	2,616	203,130,392



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MEMBERSHIP DATA

**Table C-21
Florida Retirement System
Members and Their Salaries at July 1, 2012
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	1	23,030				
TOTALS	1	23,030				

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					5	468,866
TOTALS					5	468,866

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						
65 & UP	3	476,343			9	968,239
TOTALS	3	476,343			9	968,239



MEMBERSHIP DATA

**Table C-22
Florida Retirement System
Members and Their Salaries at July 1, 2012
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					2	181,288
65 & UP					11	795,932
TOTALS					13	977,220

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					2	181,288
65 & UP	1	121,564	1	78,101	13	995,597
TOTALS	1	121,564	1	78,101	15	1,176,885



MEMBERSHIP DATA

**Table C-23
Florida Retirement System
Members and Their Salaries at July 1, 2012
SCOERS - State & County Officers' Employees' R.S.: 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						
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						
60 to 64						
65 & UP						
TOTALS						

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						
30 to 34						
35 to 39						
40 to 44						
45 to 49						
50 to 54						
55 to 59						
60 to 64						
65 & UP						
TOTALS						



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MEMBERSHIP DATA

Table C-24
Florida Retirement System
Members and Their Salaries at July 1, 2012
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						
65 & UP					1	26,980
TOTALS					1	26,980

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						
65 & UP					1	26,980
TOTALS					1	26,980



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MEMBERSHIP DATA

**Table C-25
Florida Retirement System
Members and Their Salaries at July 1, 2012
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					2	209,092
60 to 64					10	1,080,463
65 & UP					3	322,461
TOTALS					15	1,612,016

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	152,262				
65 & UP						
TOTALS	2	152,262				

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					2	209,092
60 to 64					12	1,232,725
65 & UP					3	322,461
TOTALS					17	1,764,278



MEMBERSHIP DATA

Table C-26
Florida Retirement System
Members and Their Salaries at July 1, 2012
IFAS - Institute of Food and Agricultural Sciences: Women

AGE	SERVICE		SERVICE		SERVICE	
	UNDER 5	5 TO 10	10 TO 15	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					4	314,795
60 to 64					4	254,073
65 & UP						
TOTALS					8	568,868

AGE	SERVICE		SERVICE		SERVICE	
	30 TO 35	35 TO 40	40 TO 45	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	1	75,553				
60 to 64	2	156,711				
65 & UP						
TOTALS	3	232,264				

AGE	SERVICE		SERVICE		SERVICE	
	45 TO 50	50 & UP	ALL YEARS	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					5	390,348
60 to 64					6	410,784
65 & UP						
TOTALS					11	801,132



MEMBERSHIP DATA

**Table C-27
Florida Retirement System
Distribution of Active Participants
Grand Totals
July 1, 2012**

AGE	SERVICE UNDER 5		SERVICE 5 TO 10		SERVICE 10 TO 15	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20	648	5,141,103	1	7,286		
20 to 24	11,988	275,965,921	542	13,246,617	1	32,868
25 to 29	25,318	795,971,945	11,878	430,992,792	272	9,992,374
30 to 34	16,128	506,480,931	26,317	1,049,033,085	7,263	313,377,170
35 to 39	11,901	358,660,319	19,401	763,202,442	18,213	840,918,433
40 to 44	12,074	355,268,353	17,822	664,364,031	17,717	792,023,648
45 to 49	10,532	305,452,375	16,603	587,217,701	15,562	632,214,968
50 to 54	8,985	265,095,035	15,398	541,227,505	15,567	609,628,712
55 to 59	6,586	196,003,649	12,308	434,830,595	13,312	525,090,850
60 to 64	3,383	97,648,359	7,973	281,080,616	7,672	304,290,889
65 & UP	1,845	37,854,466	4,406	125,111,510	4,194	143,125,427
TOTALS	109,388	3,199,542,456	132,649	4,890,314,180	99,773	4,170,695,339

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	150	6,695,942				
35 to 39	5,406	267,469,029	115	5,768,859		
40 to 44	17,150	905,838,905	5,794	327,690,161	282	15,351,613
45 to 49	14,406	704,756,891	15,246	886,581,993	6,018	344,950,071
50 to 54	14,029	631,898,571	14,004	758,229,001	13,074	779,360,854
55 to 59	12,466	546,634,518	12,999	658,775,581	11,026	628,492,959
60 to 64	6,976	311,186,902	7,080	360,419,824	5,820	331,188,827
65 & UP	2,490	97,099,967	1,494	70,745,500	808	40,667,266
TOTALS	73,073	3,471,580,725	56,732	3,068,210,919	37,028	2,140,011,590

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	195	10,834,306				
50 to 54	2,471	146,573,144	26	1,221,190		
55 to 59	2,949	183,798,325	307	17,331,857	4	238,486
60 to 64	1,224	76,718,129	405	28,383,710	103	6,000,202
65 & UP	452	28,802,781	263	20,239,866	194	16,236,329
TOTALS	7,291	446,726,685	1,001	67,176,623	301	22,475,017

AGE	SERVICE 45 TO 50		SERVICE 50 & UP		ALL YEARS	
	COUNT	SALARY	COUNT	SALARY	COUNT	SALARY
UNDER 20					649	5,148,389
20 to 24					12,531	289,245,406
25 to 29					37,468	1,236,957,111
30 to 34					49,858	1,875,587,128
35 to 39					55,036	2,236,019,082
40 to 44					70,839	3,060,536,711
45 to 49					78,562	3,472,008,305
50 to 54					83,554	3,733,234,012
55 to 59					71,957	3,191,196,820
60 to 64	1	40,981			40,637	1,796,958,439
65 & UP	37	3,649,025	13	1,038,543	16,196	584,570,680
TOTALS	38	3,690,006	13	1,038,543	517,287	21,481,462,083



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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 ¹⁾</u> (000's omitted)	<u>Accumulated Employee Contributions</u> (000's omitted)
Florida Retirement System			
Regular	451,858	\$18,181,136	\$548,096
Senior Management Service	5,328	461,249	18,246
Florida Retirement System - Special Risk			
Non-Administrative	58,355	3,305,878	107,246
Administrative	42	2,020	59
Florida Retirement System - Elected Officers' Class			
Judicial	711	100,823	3,282
Leg. / Atty. / Cabinet	110	6,110	291
County Elected Off.	830	40,430	1,634
Teachers' Retirement System	24	2,190	2,643
State and County Officers' and Employees' Retirement System	1	28	25
Institute of Food and Agricultural Sciences	28	2,620	0
Total	517,287	\$22,102,484	\$681,522
		Average Annual Salary =	\$42,728

¹⁾ Payroll adjusted to represent "Plan Year" payroll.

APPENDIX D

PROJECTIONS



FLORIDA RETIREMENT SYSTEM
Actuarial Valuation as of July 1, 2012

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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, 2012. The contributions shown beginning with plan year 2013-2014 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 2012-2013 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, 2012. 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, 2012 valuation results, and assume experience occurs as stated in our July 1, 2012 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, 2012**

(All Amounts in Millions)

	<u>2012 -2013</u>	<u>2013 -2014</u>	<u>2014 - 2015</u>	<u>2015 - 2016</u>	<u>2016 - 2017</u>
A. Normal Cost *	\$1,138	\$1,176	\$1,205	\$1,221	\$1,223
B. UAL Payment / (Surplus Utilization)	<u>\$229</u>	<u>\$1,103</u>	<u>\$1,119¹⁾</u>	<u>\$1,115¹⁾</u>	<u>\$1,090¹⁾</u>
C. Total	\$1,367	\$2,279	\$2,324	\$2,336	\$2,313
D. Social Security	<u>\$1,864</u>	<u>\$1,918</u>	<u>\$1,963</u>	<u>\$1,988</u>	<u>\$1,990</u>
E. Grand Total	\$3,231	\$4,197	\$4,287	\$4,324	\$4,303

* Includes DROP contributions on behalf of DROP members.

¹⁾ 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, 2012 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)	\$9,843,192	\$4,887,511	\$15,024	\$336,880	\$39,207	\$248,289	\$1,408,167	\$2,523,115
UAL Cost / (Savings) (see Table IV-2)	2.56%	8.13%	42.15%	18.39%	34.50%	33.57%	16.24%	7.01%
Normal Cost Payroll	\$18,171,507	\$3,305,846	\$2,020	\$100,823	\$6,110	\$39,989	\$461,090	\$2,388,887
UAL Payroll ¹	\$20,697,818	\$3,310,003	\$2,020	\$101,169	\$6,161	\$40,158	\$477,760	\$2,388,887
Annual Payment / (Savings) for FY 2013 - 2014	\$551,059	\$279,867	\$885	\$19,349	\$2,211	\$14,020	\$80,692	\$174,159

Amortization Period Calculated Assuming

Level Dollar	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	NA	NA ²
Level Percent of Payroll	31	29	29	30	31	31	30	22 ²

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

² 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 ¹**

Updated FY 2013-2014 Forward Based on 07/01/2012 Valuation Results and 07/01/2012 Assets

	In Millions		
	<u>2013 - 14</u>	<u>2014 - 15</u>	<u>2015 - 16</u>
1 Estimated Surplus Available RSM ²	\$0.0	\$0.0	\$0.0
2 Increase/(Decrease) in Available Surplus from prior year	\$0.0	\$0.0	\$0.0
<u>UAL Bases</u>			
3 12% Increase in Special Risk benefits (in pay status before 07/01/2000) ³	(\$26.2)	(\$27.2)	(\$28.3)
4 Special Risk Minimum In-Line-of-Duty Disability Increased to 65% ⁴	\$0.3	\$0.4	\$0.4
5 1993 - 1998 Experience Study Assumption Changes ⁵	\$33.7	\$35.0	\$36.4
6 1998 - 2003 Experience Study Assumption Changes ⁵	\$243.4	\$250.9	\$261.0
7 2003 - 2008 Experience Study Assumption Changes ⁵	(\$404.9)	(\$421.1)	(\$437.9)
8 2009 Gain/(Loss) ⁶	(\$899.4)	(\$932.3)	(\$969.6)
9 2009 Plan Change (House Bill 479)	\$76.8	\$79.9	\$83.0
10 2010 Experience Gain/(Loss)	(\$67.6)	(\$70.3)	(\$73.1)
11 2010 Plan Change (Senate Bill 2100)	\$73.3	\$76.2	\$79.3
12 2011 Experience Gain/(Loss)	(\$157.4)	(\$163.4)	(\$169.9)
13 2012 Experience Gain/(Loss)	<u>\$5.6</u>	<u>\$5.8</u>	<u>\$6.0</u>
Subtotal [(3) + (4) + (5) + (6) + (7) + (8) + (9) + (10) + (11) + (12) + (13)]	(\$1,122.4)	(\$1,166.1)	(\$1,212.7)
14 Across the Board Rate Reduction of 0% ⁷	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Total [Subtotal + (14)]	(\$1,122.4)	(\$1,166.1)	(\$1,212.7)
15 Surplus Available / (UAL) After Previously Legislated Rate Reduction and using remaining available surplus for Rate Reduction for all classes but DROP [(1) + Total] =	(\$1,122.4)	(\$1,166.1)	(\$1,212.7)

¹ Numbers exclude contributions to the Investment Plan.

² Projected surplus based on 07/01/2012 valuation results. Using amortization method that reflects interest.

³ Assumed to be paid from surplus. In the absence of a surplus there is an additional cost to the Special Risk Regular Class of 0.76% attributable to the 12% increase in pre-2000 retired benefits.

⁴ Assumed to be paid from surplus. In the absence of a surplus there is an additional cost to the Special Risk Administrative Class of 0.20% and an additional cost to the Special Risk Regular Class of -0.01% attributable to the Increase in Minimum ILOD Disability Benefit.

⁵ 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.

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

⁷ No surplus available for rate reduction.

APPENDIX E

COMPARISONS/RECONCILIATION



FLORIDA RETIREMENT SYSTEM
Actuarial Valuation as of July 1, 2012

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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 2011 actuarial valuation to the 2012 actuarial valuation, while the last table cross-references the required sections of 112.64 with this report.

TABLE E-1			
One-Year Comparisons			
1. Annual Rate of Investment Return on Actuarial Value of Assets			
Period Ending	Actual	Assumed	
June 30, 2010	5.30%	7.75%	
June 30, 2011	8.39%	7.75%	
June 30, 2012	6.74%	7.75%	
2. Annual Rate of Payroll Growth			
Period Ending	Actual ¹⁾	Assumed ¹⁾	
June 30, 2010	-2.94%	4.00%	
June 30, 2011	-1.42%	4.00%	
June 30, 2012	-1.18%	4.00%	
3. Individual Rates of Salary Increases for Regular Members and Special Risk Members			
Year Ended June 30	Rate of Increase During Year		
	Regular Members	Special Risk	Assumed ²⁾
2010	1.6%	2.2%	5.85%
2011	3.7%	5.1%	5.85%
2012	0.7%	1.4%	5.85%

¹⁾ The payroll base compared is used for UAL cost calculations and includes payroll for DROP members and certain defined contribution plan participants for whom only UAL contributions are due. The percentages for the prior years are different than those found in the prior reports due to the change in the payroll basis being measured.

²⁾ 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, 2011	533,486	13,386	303,313	45,059	895,244
New Entrants	41,012	0	0	0	41,012
Retirements	(14,988)	762	24,207	(9,981)	0
DROP	(5,476)	0	0	5,476	0
Terminations, IP Transfers and deaths with and without benefit	(36,747)	0	0	0	(36,747)
Cessation of benefit payments	NA	(544)	(9,430)	0	(9,974)
Number reported as of July 1, 2012	517,287	13,604	318,090	40,554	889,535 ¹⁾

1) The total count excludes the 103,151 Terminated Vested participants.

COMPARISONS/RECONCILIATION

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

Code Ref	1 General Information:	
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
	2 Assumptions:	
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?	None
	3 Plan Provisions & Funding Method:	
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?	Section IV
	4 Assets & Method:	
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

5 UAL & Amortization Schedule:		
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-7
1.003 (4h)	- Normal Cost, contributions, & accrued interest	No
1.003 (4h)	- Impact of changes (assumption, funding method, amendments, gain/loss)	IV-7
1.003 (4h)	- UAL for current valuation	IV-7
6 Results:		
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-4
	- PV of future benefit payments	III-4
	- AL and UAL, i.e., including amount, date, amortization period	III-4
	- 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-5
	- Payment to amortize UAL	IV-7
	- Expected plan sponsor contribution (i.e. total of above pieces with interest, also as % of pay)	IV-8
	- Amount to be contributed by members (total and % of pay)	B-3



COMPARISONS/RECONCILIATION

1.003 (4l)	Past Contributions - Required plan sponsor & member contribution - Actual contributions made by: plan sponsor, members, other	IV-9 and V-9 IV-9 and V-9
1.003 (4k)	Active member accumulated contributions with interest	V-4
1.003 (4l)	Net actuarial gain / loss	IV-7
1.003 (4l)	Other (PVFS & PVFC at attained age and at entry age, PVFC from other sources, PVF Expected BP)	III-4
7 Data:		
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
8 Contribution Rate:		
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 Yes, Executive Summary and
1.003 (4b)	Are contribution rate changes necessary to achieve or preserve funding?	IV-8
1.003 (7)	Is the impact of assumption or cost method changes indicated?	NA
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, 2012

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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.