Milliman

1921 Gallows Road
Suite 900
Vienna, VA 22182
USA

Main +1 703 917 0143
Fax +1 703 827 9266

milliman.com

February 16, 2011

Via Overnight Delivery

Ms. Sarabeth Snuggs
State Retirement Director
Division of Retirement
1317 Winewood Boulevard, Building 8
Tallahassee, FL 32399

Re: Study Reflecting the Impact to the Florida Retirement System of Modifying the Normal Retirement Age Criteria for New Members Enrolled on or After July 1, 2011

Dear Sarabeth:

As you requested, we have studied the impact to the FRS defined benefit plan of increasing the normal retirement age to age 60 and vested or 30 years of service for the Special Risk Class and to age 65 and vested or 33 years of service for all other classes, for members initially enrolled on or after July 1, 2011.

Background

Currently, the Florida Retirement System defined benefit plan provides an unreduced benefit payable to members at age 55 if vested or with 25 years of service for the Special Risk Class, and at age 62 if vested or with 30 years of service for all other classes. Furthermore, the service accrual rates applicable to Regular Class members and Special Risk Administrative Support Class members increase from 1.60% to 1.68% between age 62 or 30 years of service (age 55 or 25 years of service for Special Risk Administrative Support Class members) to age 65 or 33 years of service (age 58 or 28 years of service for Special Risk Administrative Class members.) The proposal would increase the age and years of service requirements for unreduced retirement benefits, and shift the increase in service accrual rates as follows:

Unreduced Retirement Eligibility:

1. Regular Class, Elected Officers' Classes, and Senior Management Service Class:

   a. Age 65 and vested, or
   b. 33 Years of Creditable service before age 65

2. Special Risk Class and Special Risk Administrative Support Class

   a. Age 60 and vested or
   b. 30 Years of Creditable service before age 60

Service Accrual Rates:

Regular Class	Special Risk Administrative Support Class	Rate
Age 65 with 6 years of creditable service, or 33 years of creditable service	Age 60 with 6 years of creditable service, or 30 years of creditable service	1.60%
Age 66 with 6 years of creditable service, or 34 years of creditable service	Age 61 with 6 years of creditable service, or 31 years of creditable service	1.63%
Age 67 with 6 years of creditable service, or 35 years of creditable service	Age 62 with 6 years of creditable service, or 32 years of creditable service	1.65%
Age 68 with 6 years of creditable service, or 36 years of creditable service	Age 63 with 6 years of creditable service, or 33 years of creditable service	1.68%

Currently vested FRS defined benefit plan members are eligible for DROP participation upon attaining eligibility for normal retirement. Deferral of DROP participation is allowed if the eligible participant has completed 30 years of service (or 25 years for Special Risk Class members). The participant can defer participation in DROP until he reaches age 57 (or age 52 for Special Risk Class members). Instructional Personnel in grades K-12 may defer DROP participation to any age.

Under this proposal, the deferral of DROP participation would be allowed if the eligible participant 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). The participant can defer participation in DROP until he reaches age 60 (or age 55 for Special Risk Class members), except for Instructional Personnel in grades K-12 who may still defer DROP participation to any age.

Currently, if a member terminates employment after eligibility for immediate reduced benefits but prior to eligibility for unreduced retirement, the reduction factor is based on the number of months preceding age 62 (55 for Special Risk). This proposal changes that calculation to base the reductions on the number of months prior to 65 (60 for Special Risk). The reduction factor would remain at 5% per year.

Assumptions and Analysis

The proposal would affect all future active members initially enrolled in the FRS on or after July 1, 2011. Increasing the normal retirement age for future hires would provide a savings to FRS since members would not be eligible for unreduced retirement until later ages, and therefore have a shorter assumed lifetime drawing benefits, in addition to more years to contribute towards the funding of the benefit before retirement.

To study the impact of this proposal, we re-ran the July 1, 2010 valuation for active members changing the definition of normal retirement age (and age at which Regular and Special Risk Administrative Support Class members received the higher service accrual rates) for all members. We determined the impact of this prospective benefit change to be the change in Normal Cost Rates. Because Normal Cost and Present Value of Future Normal Cost (PVFNC) are reduced by this proposal whereas the Present Value of Benefits (PVB) (based on benefits expected to be paid to current active members and former members, as of July 1, 2011 and earlier) is unchanged, the actuarial accrued liability is increased by this proposal. The actuarial accrued liability is defined as PVB less PVFNC. Thus, if PVFNC decreases and PVB remains the same, the actuarial accrued liability would increase. 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 increasing 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.

In addition, we assumed that the increase in the Normal Retirement Age criteria would impact a future member's decision as to when to retire, or participate in DROP, since the member would be eligible for benefits at a later age. The valuation retirement rates include probabilities of a member retiring or entering DROP at each age. Furthermore, the valuation rates are also split into a one year select and ultimate table which represents the probability of a member retiring or entering DROP in the year he first becomes eligible, and the probability of retirement in all years thereafter. Therefore, we only adjusted retirement rate assumptions when the member first becomes eligible to retire or enter DROP, since the proposed change only affects initial eligibility for retirement benefits.

- We primarily reduced the age 57 (age 52 for Special Risk Members) probability of electing DROP and correspondingly increased the age 60 probability of electing to participate in DROP (age 55 for Special Risk Members).

- For non-Special Risk members, we increased the probability of a participant retiring with unreduced benefits at age 65.

- We assume a relatively modest number of non-Special Risk members will retire with reduced benefits at ages 62, 63 and 64.

Please note that the cost impact of the proposed changes may be higher or lower than the figures quoted below depending upon the retirement rates actually experienced. A realistic estimate of retirement rates is critical to determining the actual impact on plan costs; unfortunately the data would not be available until many years after implementation of the proposal.

It is possible that without a corresponding decrease in the benefits in the DC Plan, a greater percentage of future hires, at hire, might initially elect DC Plan participation. This study does not address the potential impact of reducing the future enrollment in the DB Plan. This change would also impact the present calculation of transfers between the DC Plan and the DB Plan.

Results

Appendix A shows the revised retirement rates (inclusive of DROP entry) used in the study at sample ages.

The results for this study are shown in Table I as described below. The table details the results by class. The contribution rates are presented by class of membership and in aggregate, and reflect the increase/(decrease) in the contribution rate.

Section A of Table I includes the normal cost as of the July 1, 2010 valuation, and the impact of the proposal. In addition, the change in liability attributable to the proposal was amortized over 30 years with the payments assumed to remain relatively stable when expressed as a percentage of payroll. Section B of the table shows the change in the unfunded actuarial liability, while Section C of the table translates the estimated change in contribution rates to a reduction in dollars to be paid by employers.

As shown in Table I, the projected impact of the proposal results in a net savings to the System, although there is a projected increase in the actuarial liabilities of $1.9 billion. This benefit change results in a decrease in the composite Normal Cost rate of 1.40% and an increase in the composite UAL rate of 0.40%, and therefore, an overall decrease in contribution levels of 1.00%, for the Composite System. This translates into an estimated overall employer contribution savings of $259 million for Fiscal Year 2011-2012.

The calculations are based on data and other information provided to us by the Division of Retirement for the July 1, 2010 actuarial valuation and supplemented for purposes of this study. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

This analysis is based on methods and assumptions used in the July 1, 2010 actuarial valuation, and the additional assumptions discussed earlier in this letter. The data was based on the July 1, 2010 FRS actuarial valuation database. The results of our study depend on future experience conforming to those actuarial assumptions. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. To the extent future experience deviates from those assumptions, the results of this analysis could vary from the results presented here.

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 product 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. We have not explored any legal issues with respect to the proposed plan changes. We are not attorneys and cannot give legal advice on such issues. We suggest that you review this proposal with counsel.

I, Robert Dezube, am a consulting actuary for Milliman, Inc. I am also a member of the American Academy of Actuaries, and meet their Qualification Standards to render the actuarial opinion contained herein.

Please call if you would like to further discuss this project.

Sincerely,

Milliman, Inc.

Robert

Robert S. Dezube, FSA
Consulting Actuary

Enclosures

RSD/MDJ/KH/ST/GIB06
M:\GIB\GIB06\2010\GIB06_LETTER.DOC

Appendix A
Adjusted Retirement Rates

REGULAR

	Male		Female	
Age	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

	Male		Female	
Age	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%

ELECTED OFFICERS' GROUPS: ESO

	Male		Female	
Age	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%

Appendix A (cont.)
Adjusted Retirement Rates

ELECTED OFFICERS' GROUPS: JUDICIAL

	Male		Female	
Age	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%

SENIOR MANAGEMENT SERVICE

	Male		Female	
Age	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

	Male		Female	
Age	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%

Appendix A (cont.)
Adjusted Retirement Rates

SPECIAL RISK ADMINISTRATIVE SUPPORT

	Male		Female	
Age	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%

FLORIDA RETIREMENT SYSTEM

FISCAL IMPACT ANALYSIS

Impact of Modifying the Normal Retirement Age Criteria For New Members Enrolled on or After July 1, 2011

	FRS	-----Special Risk-----		------Elected Officers' Class----			Senior	Composite		
	Regular	Regular	Administration	Judicial	Leg-Atty-Cab	County	Management	(excluding DROP)	DROP	Composite
A. Contribution Rates										
1. Present System Employer Costs (as reported the July 1, 2010 valuation - Table IV-4)										
a. Normal Cost	9.84%	22.34%	11.26%	19.42%	14.74%	16.79%	11.84%	11.81%	13.79%	11.96%
b. UAL Cost	2.23%	6.72%	25.84%	11.90%	26.72%	26.90%	12.54%	3.16%	5.78%	3.35%
c. Total Cost - FY 2012	12.07%	29.06%	37.10%	31.32%	41.46%	43.69%	24.38%	14.97%	19.57%	15.31%
2. Change in Contribution Rates due to Proposal Effective FY 2012 if Paid by Employer										
a. Normal Cost	-1.11%	-2.78%	-2.11%	-1.39%	-1.46%	-1.26%	-1.26%	-1.36%	-1.81%	-1.40%
b. Amortization of UAL Cost	0.29%	1.34%	0.76%	0.42%	0.72%	0.57%	0.06%	0.43%	0.00%	0.40%
c. Total Change in Cost	-0.82%	-1.44%	-1.35%	-0.97%	-0.74%	-0.69%	-1.20%	-0.93%	-1.81%	-1.00%
B. Additional/(Reduced) Unfunded Liability due to Proposal (000 omitted)	$1,073,860	$835,173	$325	$7,843	$827	$4,442	$5,735	$1,928,205	$0	$1,928,205
C. Additional/(Reduced) Dollars (Normal Cost and Amortization of UAL Cost) Due to Proposal to be paid by Employer for FY 2012 (000 omitted)										
1. State	($21,847)	($12,576)	($30)	($1,055)	($47)	$0	($2,649)	($38,204)	($7,045)	($45,249)
2. School Boards	($89,794)	($286)	$0	$0	$0	($63)	($674)	($90,817)	($16,805)	($107,622)
3. State Universities	($3,347)	($295)	$0	$0	$0	$0	($73)	($3,715)	($1,848)	($5,563)
4. Community Colleges	($4,868)	($24)	$0	$0	$0	$0	($296)	($5,188)	($1,323)	($6,511)
5. Counties	($32,263)	($36,904)	($3)	$0	$0	($220)	($1,789)	($71,179)	($8,775)	($79,954)
6. Other	($8,728)	($2,987)	($1)	$0	$0	($33)	($732)	($12,481)	($1,557)	($14,038)
7. Total	($160,847)	($53,072)	($34)	($1,055)	($47)	($316)	($6,213)	($221,584)	($37,353)	($258,937)