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March 11, 2011

milliman.com

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 FRS of Changing the Investment Return Assumption to one of the following: 7.5%, 7.0%, 6.0%, 5.0%, 4.0% or 3.0%

Dear Sarabeth:

As you requested, we have studied the impact to the FRS of revising the investment return assumption from the current rate of 7.75%, effective with the July 1, 2010 valuation. We analyzed the impact under six proposed investment return assumptions: 7.5%, 7.0%, 6.0%, 5.0%, 4.0% and 3.0%. According to statute, the Assumptions Conference has the responsibility of setting the investment return and all other assumptions. The current assumption is 7.75%, net of investment-related expenses.

Background

The investment return assumption is one of the primary elements used to determine the level of future contributions to properly fund FRS's benefits. The investment return assumption should represent the expected long-term rate of return on the actuarial value of assets, considering FRS's asset allocation policy, expected long-term real rates of return on specific asset classes, the underlying inflation rate and investment-related expenses.

Actuarial Standard of Practice No. 27 – Selection of Economic Assumptions for Measuring Pension Obligations (ASOP No. 27) provides guidance to actuaries on selection of assumptions for measuring obligation under defined benefit pension plans. Because the future cannot be accurately predicted, the best an actuary can do is to use professional judgment to estimate possible future economic outcomes. These estimates are based on a combination of past experience, future expectations, and professional judgment. The actuary should consider a number of factors including the purpose and nature of the measurement and appropriate recent and long-term historical economic data. However, ASOP No. 27 explicitly advises the actuary not to give undue weight to recent experience.

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ASOP No. 27 states that other key factors should be given consideration:

- Investment Volatility – Plans investing heavily in those asset classes characterized by high variability of returns may be required to liquidate those assets at depressed values to meet benefit obligations.
- Investment Manager Performance – Anticipating superior (or inferior) investment manager performance may be unduly optimistic (or pessimistic)
- Cash Flow Timing – The timing of expected contributions and benefit payments may affect the plan's liquidity needs and investment opportunities.

Recognizing that there is not one "right answer," ASOP No. 27 calls for the actuary to develop a best estimate range for each economic assumption and then recommend specific points within the ranges. Each economic assumption should individually satisfy this standard. Furthermore with respect to any particular valuation, each economic assumption should be consistent with every other economic assumption over the measurement period.

Besides the investment return rate, economic assumptions generally consist of the inflationary salary increases, and rates of COLA. Economic assumptions are much more driven by the state of the nation's economy than by FRS's experience. They also are usually chosen for the long term.

The current major economic assumptions can be summarized as follows:

| Item | Annual Rate |
|-----------------------|------------------------------|
| Price Inflation | 3.0% |
| Investment Return | 7.75% |
| Individual Salaries: | |
| Inflation | 4.0% |
| Merit & Seniority | Varies By Age and Service |
| Total Payroll Growth: | |
| Inflation | 4.0% |
| Membership Growth | 0% |

These assumptions were developed in 2004 as part of the June 30, 2003 Experience Study with the assistance of the State Board of Administration and materials provided by SBA staff. The Assumptions Conference voted to adopt these economic assumptions first in 2004 and then annually between 2005 and 2008. The economic assumptions were reviewed by Milliman and SBA in 2009 as part of the June 30, 2008 Experience Study. At

that time it was recommended that no changes be made to them. The Assumptions Conference voted to support the current economic assumptions in both 2009 and 2010.

In general the economic assumptions should be developed on a consistent basis. Since the request was only to analyze the Investment Return assumptions, we did not modify any of the other economic assumptions. As such, under two of the scenarios, the inflation component on individual salaries equals or exceeds the expected investment returns.

Analysis

The study involved re-running the July 1, 2010 valuation for active and inactive members under each of the six proposed investment return assumptions. The amortization of the UAL bases reflects the change in interest rate assumption as of July 1, 2011. Amortization bases in effect on July 1, 2010 were brought forward to July 1, 2011 using 7.75% interest. Effective July 1, 2011, the outstanding balance of each base was amortized over the remaining portion of the initial amortization period and the amortization factor was calculated using the proposed investment return assumption. A new amortization base was established to amortize the increase in actuarial liability due to the investment return assumption change. The amortization factor used for the new base was calculated using a 30 year amortization period from the date of the valuation (29 years starting from the first plan year amortization payments are expected to be deposited) and the proposed investment return assumption. Our study presents the revised actuarial liabilities and the development of FY2011-2012 contribution rates.

The FRS funds the cost of DROP through a separate contribution rate paid on the salaries of current DROP participants. For purpose of this study this method was assumed to continue to apply to the adjusted rates used in analyzing these proposals. A more traditional funding of DROP would require a different method of analyzing the proposal. Note that because of the current method of funding DROP (i.e. through one separate contribution rate that applies to any DROP participant), any change in the normal cost or liabilities of any class of membership impacts the DROP contribution rate.

Results

Tables I-VI show the results of our analysis under each of the proposed investment return assumptions as follows:

- Table I: Proposed 7.5% Investment Return Assumption
- Table II: Proposed 7.0% Investment Return Assumption
- Table III: Proposed 6.0% Investment Return Assumption
- Table IV: Proposed 5.0% Investment Return Assumption
- Table V: Proposed 4.0% Investment Return Assumption
- Table VI: Proposed 3.0% Investment Return Assumption

Each table details the results by class and shows the impact of the proposal. The contribution rates are presented by class of membership and in aggregate, and reflect the increase/(decrease) in the contribution rate.

Section A of each table includes the normal cost as of the July 1, 2010 actuarial 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 an increase or a reduction in dollars to be paid by employers.

As part of the Study, and consistent with the methodology used in the July 1, 2010 actuarial valuation, assets were reallocated 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.) The allocation or transferring of assets is part of the Additional/(Reduced) Unfunded Actuarial Liability due to the Proposal shown in Section B of each table.

The following summarizes key components of Tables I-VI:

| Proposed Investment Return Assumption | Increase in Actuarial Liabilities (\$ Billions) | Change in Composite Normal Cost Rate | Change in Composite UAL Rate | Total Change in Composite Rate | Additional Dollars to be Paid By Employer (\$ Billions) |
|---------------------------------------|---|--------------------------------------|------------------------------|--------------------------------|---|
| 7.5% | \$4.4 | 0.74% | 0.81% | 1.55% | \$0.4 |
| 7.0% | \$13.9 | 2.38% | 2.40% | 4.78% | \$1.3 |
| 6.0% | \$36.0 | 6.47% | 5.38% | 11.85% | \$3.3 |
| 5.0% | \$62.9 | 11.96% | 8.11% | 20.07% | \$5.5 |
| 4.0% | \$96.1 | 19.37% | 10.60% | 29.97% | \$8.2 |
| 3.0% | \$137.0 | 29.41% | 12.85% | 42.26% | \$11.6 |

Basis for Analysis

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:

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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.



Ms. Sarabeth Snuggs
March 11, 2011
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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.

A handwritten signature in cursive script that reads 'Robert'.

Robert S. Dezube, FSA
Consulting Actuary

Enclosures

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FLORIDA RETIREMENT SYSTEM
FISCAL IMPACT ANALYSIS

Impact of Changing the Investment Return Assumption to 7.50%
Effective July 1, 2010

| | FRS | | Special Risk | | Elected Officers' Class | | Senior Management | Composite (excluding DROP) | DROP | Composite |
|--|-------------|-----------|----------------|----------|-------------------------|----------|-------------------|----------------------------|-----------|-------------|
| | Regular | Regular | Administration | Judicial | Leg-Atty-Cab | County | | | | |
| 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% | 5.72% | 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 | 0.66% | 1.46% | 0.69% | 1.14% | 0.88% | 0.95% | 0.83% | 0.79% | 0.16% | 0.74% |
| b. Amortization of UAL Cost | 0.73% | 1.11% | 4.94% | 1.05% | 1.34% | 1.12% | 0.83% | 0.79% | 1.16% | 0.81% |
| c. Total Change in Cost | 1.39% | 2.57% | 5.63% | 2.19% | 2.22% | 2.07% | 1.66% | 1.58% | 1.32% | 1.55% |
| B. Additional/(Reduced) Unfunded Liability due to Proposal (\$000 omitted) | | | | | | | | | | |
| | \$2,983,400 | \$825,429 | \$2,445 | \$25,771 | \$2,399 | \$14,751 | \$108,805 | \$3,963,000 | \$462,838 | \$4,425,838 |
| 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 | \$38,928 | \$22,576 | \$128 | \$2,396 | \$148 | \$0 | \$3,949 | \$68,125 | \$5,138 | \$73,263 |
| 2. School Boards | \$153,661 | \$513 | \$0 | \$0 | \$0 | \$191 | \$908 | \$155,273 | \$12,256 | \$167,529 |
| 3. State Universities | \$22,510 | \$529 | \$0 | \$0 | \$0 | \$0 | \$224 | \$23,263 | \$1,347 | \$24,610 |
| 4. Community Colleges | \$10,644 | \$44 | \$0 | \$0 | \$0 | \$0 | \$418 | \$11,106 | \$965 | \$12,071 |
| 5. Counties | \$56,270 | \$66,248 | \$14 | \$0 | \$0 | \$668 | \$2,409 | \$125,609 | \$6,400 | \$132,009 |
| 6. Other | \$15,308 | \$5,361 | \$5 | \$0 | \$0 | \$101 | \$999 | \$21,774 | \$1,136 | \$22,910 |
| 7. Total | \$297,321 | \$95,271 | \$147 | \$2,396 | \$148 | \$960 | \$8,907 | \$405,150 | \$27,242 | \$432,392 |

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FLORIDA RETIREMENT SYSTEM
FISCAL IMPACT ANALYSIS

*Impact of Changing the Investment Return Assumption to 7.00%
Effective July 1, 2010*

| | FRS | | Special Risk | | Elected Officers' Class | | Senior Management | Composite (excluding DROP) | DROP | Composite |
|--|-------------|-------------|----------------|----------|-------------------------|----------|-------------------|----------------------------|-------------|--------------|
| | Regular | Regular | Administration | Judicial | Leg-Atty-Cld | County | | | | |
| 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% | 5.72% | 25.84% | 11.90% | 26.72% | 26.90% | 12.51% | 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 | 2.12% | 4.70% | 2.32% | 3.67% | 2.80% | 3.06% | 2.70% | 2.53% | 0.56% | 2.38% |
| b. Amortization of UAL Cost | 2.15% | 3.32% | 14.58% | 3.09% | 3.95% | 3.28% | 2.41% | 2.33% | 3.40% | 2.40% |
| c. Total Change in Cost | 4.27% | 8.02% | 16.90% | 6.76% | 6.76% | 6.34% | 5.11% | 4.86% | 3.96% | 4.78% |
| B. Additional/(Reduced) Unfunded Liability due to Proposal (000 omitted) | \$9,403,597 | \$2,606,982 | \$7,712 | \$80,946 | \$7,550 | \$46,332 | \$343,793 | \$12,496,912 | \$1,442,497 | \$13,939,409 |
| 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 | \$119,442 | \$70,447 | \$384 | \$7,394 | \$450 | \$0 | \$12,114 | \$210,231 | \$15,415 | \$225,646 |
| 2. School Boards | \$471,928 | \$1,602 | \$0 | \$0 | \$0 | \$585 | \$2,798 | \$476,913 | \$36,766 | \$513,679 |
| 3. State Universities | \$67,874 | \$1,653 | \$0 | \$0 | \$0 | \$0 | \$670 | \$70,197 | \$4,044 | \$74,241 |
| 4. Community Colleges | \$32,517 | \$135 | \$0 | \$0 | \$0 | \$0 | \$1,286 | \$33,938 | \$2,894 | \$36,832 |
| 5. Counties | \$172,736 | \$206,717 | \$40 | \$0 | \$0 | \$2,049 | \$7,424 | \$388,966 | \$19,198 | \$408,164 |
| 6. Other | \$46,988 | \$16,731 | \$14 | \$0 | \$0 | \$308 | \$3,076 | \$57,117 | \$3,406 | \$70,523 |
| 7. Total | \$911,485 | \$297,285 | \$438 | \$7,394 | \$450 | \$2,942 | \$27,368 | \$1,247,362 | \$81,723 | \$1,329,085 |

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FLORIDA RETIREMENT SYSTEM
FISCAL IMPACT ANALYSIS

*Impact of Changing the Investment Return Assumption to 6.00%
Effective July 1, 2010*

| | FRS | | Special Risk | | Elected Officers' Class | | Senior Management | Composite (excluding DROP) | DROP | Composite |
|--|--------------|-------------|----------------|-----------|-------------------------|-----------|-------------------|----------------------------|-------------|--------------|
| | Regular | Regular | Administration | Judicial | Leg-Atty-Ob | County | | | | |
| 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% | 11.64% | 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 | 5.77% | 12.73% | 6.42% | 9.80% | 7.57% | 8.23% | 7.40% | 6.87% | 1.64% | 6.47% |
| b. Amortization of UAL Cost | 4.82% | 7.53% | 22.88% | 6.90% | 8.84% | 7.25% | 5.44% | 5.23% | 7.40% | 5.38% |
| c. Total Change In Cost | 10.59% | 20.26% | 39.30% | 16.70% | 16.41% | 15.48% | 12.84% | 12.10% | 9.04% | 11.85% |
| B. Additional/(Reduced) Unfunded Liability due to Proposal (000 omitted) | | | | | | | | | | |
| | \$24,328,800 | \$6,771,354 | \$20,001 | \$207,913 | \$19,480 | \$119,000 | \$894,354 | \$32,360,902 | \$3,632,508 | \$35,993,410 |
| 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 | \$295,432 | \$177,929 | \$893 | \$18,259 | \$1,092 | \$0 | \$30,245 | \$523,850 | \$35,189 | \$559,039 |
| 2. School Boards | \$1,169,818 | \$4,046 | \$0 | \$0 | \$0 | \$1,429 | \$7,048 | \$1,182,341 | \$83,931 | \$1,266,272 |
| 3. State Universities | \$161,275 | \$4,176 | \$0 | \$0 | \$0 | \$0 | \$1,599 | \$167,050 | \$9,231 | \$176,281 |
| 4. Community Colleges | \$79,643 | \$343 | \$0 | \$0 | \$0 | \$0 | \$3,223 | \$83,209 | \$6,606 | \$89,815 |
| 5. Counties | \$427,739 | \$522,112 | \$94 | \$0 | \$0 | \$4,998 | \$18,700 | \$973,643 | \$43,825 | \$1,017,468 |
| 6. Other | \$116,318 | \$42,258 | \$31 | \$0 | \$0 | \$752 | \$7,740 | \$167,099 | \$7,776 | \$174,875 |
| 7. Total | \$2,250,225 | \$750,864 | \$1,018 | \$18,259 | \$1,092 | \$7,179 | \$68,555 | \$3,097,192 | \$186,558 | \$3,283,750 |

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FLORIDA RETIREMENT SYSTEM
FISCAL IMPACT ANALYSIS

Impact of Changing the Investment Return Assumption to 5.00%
Effective July 1, 2010

| | FRS | | Special Risk | | Elected Officers' Class | | Senior Management | Composite (excluding DROP) | DROP | Composite |
|--|--------------|--------------|--------------|----------------|-------------------------|--------------|-------------------|----------------------------|-------------|--------------|
| | Regular | Regular | Regular | Administration | Judicial | Leg-Atty-Cab | | | | |
| 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% | 11.76% | 19.42% | 14.74% | 16.79% | 11.81% | 13.79% | 11.96% |
| b. UAL Cost | 2.23% | 6.22% | 25.83% | 11.90% | 11.90% | 26.72% | 26.90% | 3.16% | 5.78% | 3.15% |
| c. Total Cost - FY 2012 | 12.07% | 29.06% | 37.10% | 31.32% | 31.32% | 41.46% | 43.69% | 14.97% | 19.57% | 15.31% |
| 2. Change in Contribution Rates due to Proposal Effective FY 2012 if Paid by Employer | | | | | | | | | | |
| a. Normal Cost | 10.68% | 23.36% | 11.99% | 11.99% | 17.78% | 13.91% | 15.05% | 12.69% | 3.31% | 11.96% |
| b. Amortization of UAL Cost | 7.28% | 11.42% | 49.96% | 11.42% | 10.33% | 13.26% | 10.81% | 7.90% | 10.87% | 8.11% |
| c. Total Change in Cost | 17.96% | 34.78% | 61.95% | 61.95% | 28.11% | 27.17% | 25.86% | 20.59% | 14.18% | 20.07% |
| B. Additional/(Reduced) Unfunded Liability due to Proposal (000 omitted) | \$42,613,498 | \$11,904,977 | \$35,216 | \$35,216 | \$361,027 | \$34,019 | \$206,808 | \$56,731,703 | \$6,208,330 | \$62,940,033 |
| 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 | \$499,646 | \$305,392 | \$1,408 | \$1,408 | \$30,725 | \$1,806 | \$0 | \$890,816 | \$55,196 | \$946,012 |
| 2. School Boards | \$1,982,879 | \$6,943 | \$0 | \$0 | \$0 | \$0 | \$2,386 | \$2,004,394 | \$131,654 | \$2,136,048 |
| 3. State Universities | \$261,185 | \$7,169 | \$0 | \$0 | \$0 | \$0 | \$0 | \$270,967 | \$14,480 | \$285,447 |
| 4. Community Colleges | \$133,318 | \$589 | \$0 | \$0 | \$0 | \$0 | \$0 | \$139,457 | \$10,363 | \$149,820 |
| 5. Counties | \$724,264 | \$896,137 | \$148 | \$148 | \$0 | \$0 | \$8,345 | \$1,661,232 | \$68,744 | \$1,729,976 |
| 6. Other | \$196,894 | \$72,530 | \$49 | \$49 | \$0 | \$0 | \$1,254 | \$284,098 | \$12,196 | \$296,294 |
| 7. Total | \$3,798,186 | \$1,288,760 | \$1,605 | \$1,605 | \$30,725 | \$1,806 | \$11,985 | \$5,250,964 | \$292,633 | \$5,543,597 |

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FLORIDA RETIREMENT SYSTEM
FISCAL IMPACT ANALYSIS

Impact of Changing the Investment Return Assumption to 4.00%
Effective July 1, 2010

| | FRS | | Special Risk | | Elected Officers' Class | | Senior Management | Composite (excluding DROP) | DROP | Composite |
|--|--------------|--------------|----------------|-----------|-------------------------|-----------|-------------------|----------------------------|-------------|--------------|
| | Regular | Regular | Administration | Judicial | Leg-Atty-Cab | County | | | | |
| 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 | 17.29% | 37.50% | 19.80% | 28.18% | 22.44% | 24.13% | 22.70% | 20.49% | 5.94% | 19.37% |
| b. Amortization of UAL Cost | 9.53% | 15.01% | 66.02% | 13.31% | 17.27% | 13.97% | 10.96% | 10.35% | 13.86% | 10.60% |
| c. Total Change in Cost | 26.82% | 52.51% | 85.82% | 41.49% | 39.71% | 38.05% | 33.66% | 30.84% | 19.80% | 29.97% |
| B. Additional/(Reduced) Unfunded Liability due to Proposal (\$000 omitted) | | | | | | | | | | |
| | \$65,124,770 | \$18,257,407 | \$54,295 | \$546,188 | \$51,839 | \$313,389 | \$2,425,464 | \$86,773,352 | \$9,283,780 | \$96,057,132 |
| 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 | \$744,049 | \$460,990 | \$1,949 | \$45,335 | \$2,634 | \$0 | \$78,257 | \$1,333,214 | \$77,073 | \$1,410,287 |
| 2. School Boards | \$2,959,479 | \$10,481 | \$0 | \$0 | \$0 | \$3,508 | \$18,563 | \$2,982,031 | \$183,832 | \$3,175,863 |
| 3. State Universities | \$371,544 | \$10,821 | \$0 | \$0 | \$0 | \$0 | \$3,746 | \$386,111 | \$20,218 | \$406,329 |
| 4. Community Colleges | \$196,459 | \$688 | \$0 | \$0 | \$0 | \$0 | \$6,417 | \$205,764 | \$14,470 | \$220,234 |
| 5. Counties | \$1,079,822 | \$1,352,722 | \$206 | \$0 | \$0 | \$12,274 | \$49,264 | \$2,494,288 | \$95,989 | \$2,590,277 |
| 6. Other | \$293,463 | \$109,485 | \$69 | \$0 | \$0 | \$1,845 | \$20,345 | \$425,207 | \$17,030 | \$442,237 |
| 7. Total | \$5,644,816 | \$1,945,387 | \$7,224 | \$45,335 | \$2,634 | \$17,627 | \$178,592 | \$7,836,615 | \$408,612 | \$8,245,227 |

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.

FLORIDA RETIREMENT SYSTEM
FISCAL IMPACT ANALYSIS

Impact of Changing the Investment Return Assumption to 3.00%
Effective July 1, 2010

| | FRS | | Special Risk | | Elected Officers' Class | | Senior Management | Composite (excluding DROP) | DROP | Composite |
|--|--------------|--------------|----------------|-----------|-------------------------|-----------|-------------------|----------------------------|--------------|---------------|
| | Regular | Regular | Administration | Judicial | Leq-Alty-Cab | County | | | | |
| 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 | 2.22% | 6.72% | 23.64% | 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 | 26.24% | 56.32% | 30.65% | 41.80% | 33.96% | 36.26% | 34.97% | 31.02% | 10.10% | 29.41% |
| b. Amortization of UAL Cost | 11.55% | 18.27% | 81.19% | 15.88% | 20.82% | 16.55% | 13.43% | 12.52% | 16.48% | 12.85% |
| c. Total Change in Cost | 37.80% | 74.59% | 111.84% | 57.68% | 54.78% | 52.81% | 48.40% | 43.59% | 26.58% | 42.26% |
| B. Additional/(Reduced) Unfunded Liability due to Proposal (000 omitted) | | | | | | | | | | |
| | \$92,961,187 | \$26,143,393 | \$78,534 | \$770,570 | \$73,786 | \$443,211 | \$3,489,236 | \$123,959,917 | \$13,022,252 | \$136,982,169 |
| 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 | \$1,045,753 | \$654,718 | \$2,537 | \$63,006 | \$3,628 | \$0 | \$111,797 | \$1,881,439 | \$103,464 | \$1,984,903 |
| 2. School Boards | \$4,168,858 | \$14,887 | \$0 | \$0 | \$0 | \$4,867 | \$26,753 | \$4,215,365 | \$246,781 | \$4,462,146 |
| 3. State Universities | \$497,857 | \$15,368 | \$0 | \$0 | \$0 | \$0 | \$5,070 | \$518,295 | \$27,141 | \$545,436 |
| 4. Community Colleges | \$273,222 | \$1,261 | \$0 | \$0 | \$0 | \$0 | \$12,081 | \$286,564 | \$19,424 | \$305,988 |
| 5. Counties | \$1,519,477 | \$1,921,197 | \$269 | \$0 | \$0 | \$17,026 | \$71,007 | \$3,528,976 | \$128,857 | \$3,657,833 |
| 6. Other | \$412,820 | \$155,495 | \$89 | \$0 | \$0 | \$2,559 | \$29,292 | \$600,255 | \$22,862 | \$623,117 |
| 7. Total | \$7,917,987 | \$2,762,926 | \$2,895 | \$63,006 | \$3,628 | \$24,452 | \$256,000 | \$11,030,894 | \$548,529 | \$11,579,423 |

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