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November 7, 2012

VIA E-MAIL

Paul Cleary
Executive Director
Oregon PERS

Re: Request Number: 2012-008
Benefit Design Cost Analysis - COLA Change Concepts

Dear Paul:

Per your request, this letter estimates the system-wide average effects of several potential change concepts that would impact future cost of living allowance (COLA) calculations for Tier 1, Tier 2 & OPSRP members. The analysis estimates the impact if the change concepts had become effective on December 31, 2011. A change at that time would have affected both the December 31, 2011 actuarial liability and 2013-2015 employer contribution rate calculations. While any change to the system's COLA policy would occur at a later date, estimating the impact as of a December 31, 2011 snapshot date allows for direct comparison to liability and employer contribution rate calculations from the most recently completed actuarial valuation.

The table below has a summary of the valuation results and the estimated individual (i.e., non-cumulative) effect of the concepts on those results. "Accrued Liability" refers to the net present value of projected future benefits allocated to service already completed as of the valuation date in accordance with the current actuarial cost allocation method, while "Total Liability" includes the value attributable to anticipated future service for current active members. The contribution rate shown is a blended rate reflecting the weighted averages of Tier 1, Tier 2 & OPSRP payroll as of the valuation date. The contribution rate is shown on an "uncollared" basis. If a COLA change occurred, the actual impact on collared employer rates would depend on Board policy and/or legislative direction on how to implement such a change.

	12/31/2011 Total Liability ($B)	12/31/2011 Accrued Liability ($B)	2013-2015 Uncollared Base Employer Contribution Rate (% of payroll)
12/31/2011 Valuation Results	$69.2	$61.2	23.7%
Concept 1: Eliminate All Future COLAs	(11.0)	(9.7)	(9.7%)
Concept 2: Eliminate COLA for Next Biennium Only	(1.4)	(1.4)	(1.2%)
Concept 3: Calculate COLA on First $24,000 Only	(5.2)	(4.3)	(4.4%)
Concept 4: Require 10 Year Vesting of COLA	(0.3)	(0.3)	(0.3%)

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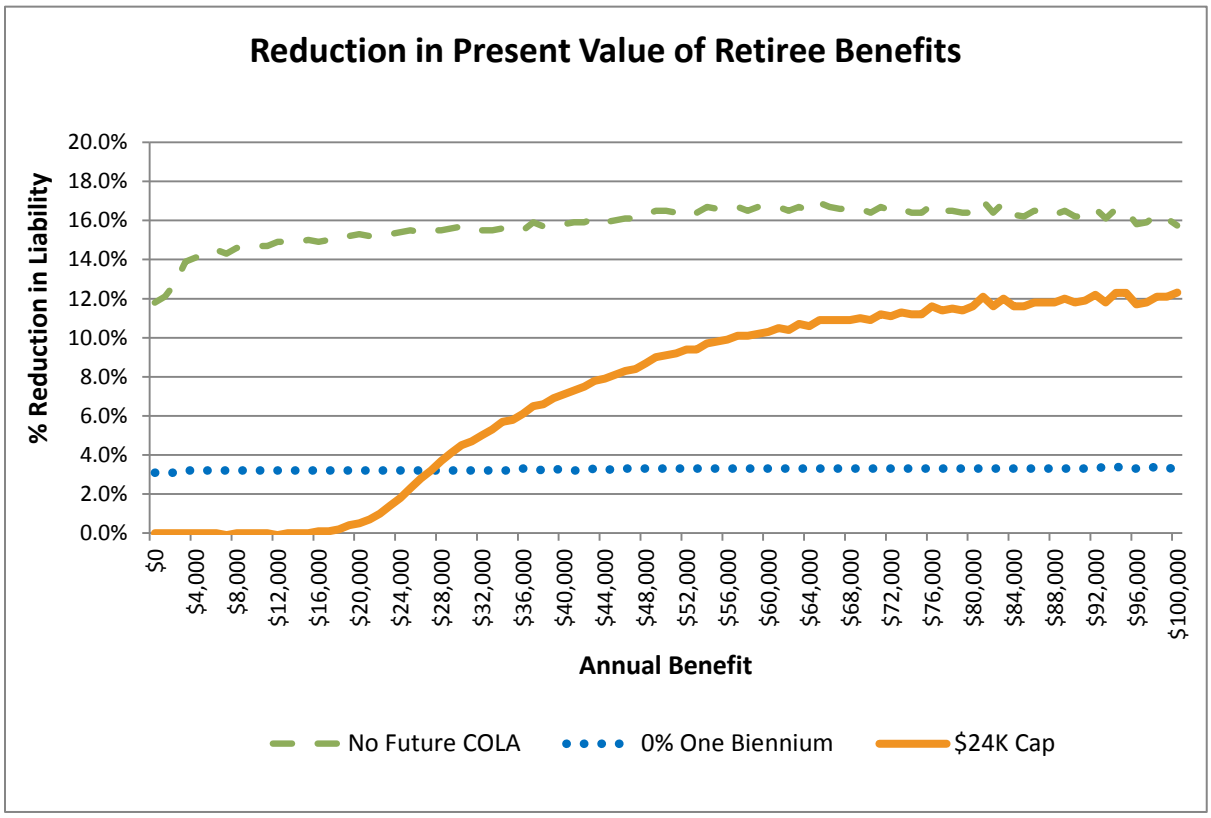
The changes in liabilities and uncollared contribution rates from these concepts would occur via a decrease in projected future benefits for current and future retirees. The chart below shows the percentage reduction in net present value of future benefits of the first three concepts for the approximately 120,000 Tier 1 & Tier 2 retirees and beneficiaries in pay status as of the valuation date.



As can be seen from the chart above, the first two concepts have a fairly uniform effect on current retirees. The $24,000 threshold concept has little or no effect for retirees with a current benefit level well below the threshold grading up to approximately a 12% average effect on retirees with current annual benefits in excess of $100,000. The line for the “no future COLA” concept is not flat due to the underlying demographics of the retiree group. On average, retirees with lower benefits are older. Because of this, the average percentage change for retirees with lower benefit levels is smaller since this group would be anticipated to receive fewer COLA increases due to shorter life expectancy.

Another way the concepts differ is their effect on the net present value of projected future benefits for members who are not yet in benefit payment status. Eliminating the COLA solely for the next biennium almost exclusively affects members that are not active employees. Introducing a 10-year vesting requirement for COLA eligibility primarily affects “inactive” members, who have left covered employment but have not yet commenced benefits. In

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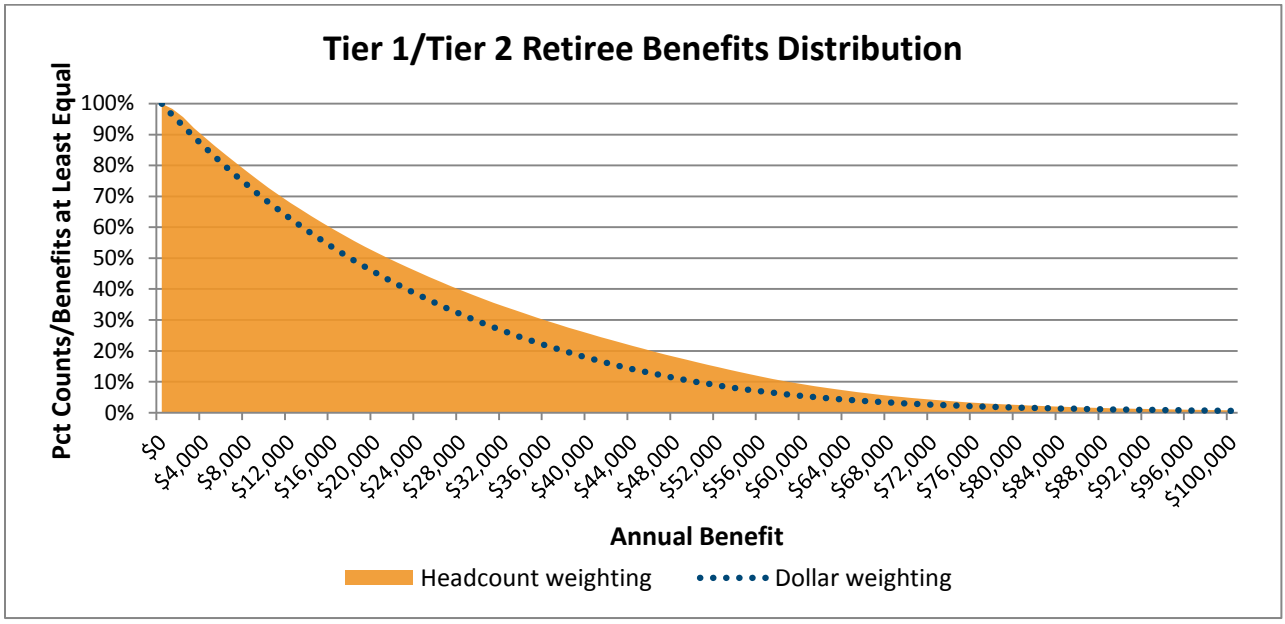
contrast, the other two concepts would have similar effects for both active and currently retired members. This is displayed in the table below.

	Percentage Decrease in 12/31/2011 Total Liability			
	Current Actives	Current Inactives	Current Retirees	System Average
Concept 1: Eliminate All Future COLAs	(15.8%)	(16.6%)	(15.9%)	(15.9%)
Concept 2: Eliminate COLA for Next Biennium Only	(0.3%)	(1.5%)	(3.3%)	(2.0%)
Concept 3: Calculate COLA on First $24,000 Only	(8.1%)	(8.6%)	(7.1%)	(7.6%)
Concept 4: Require 10 year vesting for COLA	(0.1%)	(6.3%)	0.0%	(0.5%)

If the $24,000 threshold level in the third concept was modified, the impact on liabilities and contribution rates would change. While we did not analyze any alternative thresholds in this analysis, the chart below can give a rough sense of the likely impact due to an adjustment in the threshold on current Tier 1/Tier 2 retirees. The chart shows the distribution of those retirees based on their annual benefit as of the valuation date. This is done on both a headcount-weighted basis and a dollar-weighted basis.



The shaded area in the chart indicates that, on a headcount basis, approximately 45% of current retirees have annual benefits at or in excess of $24,000. The dotted line indicates that, on a dollar-weighted basis, approximately 40% of current benefit payment dollars are for amounts in excess of the $24,000 threshold. The dollar-weighted percentage is lower than the headcount-weighted percentage because members with benefits in excess of $24,000 have only a fraction of their total benefit above the threshold. For example, a retiree with a $30,000 annual benefit is fully above the $24,000 threshold on a headcount basis but has only one-fifth

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of his or her benefit dollars ($6,000 out of $30,000 total) fall above the threshold on a dollar-weighted basis.

DATA, METHODS, ASSUMPTIONS AND PROVISIONS

Other than the exceptions and additions noted below, the data, methods, assumptions, and plan provisions used to calculate employer contribution rates are the same as those used in the December 31, 2011 system-wide actuarial valuation report. That information, including a discussion of the inherent limitations of use of actuarial valuation results, is herein incorporated to this letter by reference.

Please note that our analysis does not include any assumed change in participant behavior, bargaining agreements, or employer pay practices as a result of a change in COLA policy. Such potential impacts merit consideration, but are beyond the scope of the analysis requested.

For the first concept it was assumed that no COLA increases were granted to members subsequent to 2011. For the second concept, it was assumed that COLA increases were granted in neither 2012 nor 2013. Further, that concept assumed that no increases were granted in later years to make up for the foregone COLAs. In the third concept, the $24,000 threshold was not indexed to reflect the potential impact of inflation in future years on purchasing power.

In calculating the illustrative changes in uncollared employer base contribution rates shown above, we assumed all changes in Accrued Liability were amortized over a 20-year period as a level percent of payroll using current valuation assumptions. This is the method currently used in the valuation when establishing new Tier 1/Tier 2 amortization bases. If a different amortization method were used, the overall impact on employer rates could be significantly different than shown in this letter.

ACTUARIAL BASIS AND QUALIFICATIONS

In preparing this letter and the valuation report on which it is based, we relied, without audit, on information (some oral and some in writing) supplied by Oregon PERS. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The updated estimates depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

Future actuarial measurements may differ significantly from the current measurements presented in this estimate due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or

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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 additional cost or contribution requirements based on the plan's funded status, or a change in the cost allocation method); and changes in plan provisions or applicable law. Due to the limited scope of this estimate, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the valuation assumptions and adopted the assumptions used in the December 31, 2011 valuation in July 2011.

Actuarial computations presented in this estimate are for purposes of providing a high-level analysis of the requested change concepts to the System. As such, they cannot be relied upon for financial reporting or other purposes, and calculations for purposes other than this use may be significantly different from the estimates contained in this letter. Accordingly, additional determinations may be needed for other purposes.

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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 change concepts. 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. I am a member of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

If you have any questions about our response or need any additional information, please let us know.

Sincerely,

Matt Larrabee, FSA, EA
Consulting Actuary

MRL:sdp
encl.

cc: Steve Rodeman, Debra Hembree, Scott Preppernau

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