Actuarial Section

Helping Idaho public employees build a secure retirement.

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Retirement Board
Public Employee Retirement System
State of Idaho
P.O. Box 83720
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Members of the Board:

Milliman has performed annual actuarial valuations for the Public Employee Retirement System of Idaho since the System's inception. It is anticipated that future actuarial valuations will be performed every year with the next valuation to be as of July 1, 2011. Various benefit increases have occurred since the System was established in 1965. The most recent significant benefit changes were effective July 1, 2000.

Contribution Rates

The financing objective of the System is to establish contribution rates that will tend to remain level as percentages of payroll. From 1993 to 2010, the total contribution rate has been between 15.82% and 18.75%; year by year detail including employer and member rates is shown in the table on the following page.

At July 1, 2002, the combined overall contribution rate was 15.78%. Our July 1, 2002 valuation found that the contribution rates were not sufficient to amortize the unfunded actuarial accrued liability within 25 years of the valuation date, as required by Section 59-1322, Idaho Code. Therefore, in November 2002, the Board approved three 1% contribution rate increases to take effect on July 1, 2004, July 1, 2005, and July 1, 2006. Effective July 1, 2003, the contribution rate for Fire and Police employers was also increased by 0.1% to offset the cost of the $100,000 duty related death benefit. The July 1, 2004 contribution rate increase took effect as scheduled. Due to investment gains, the other two increases were deferred and ultimately in October 2007 the Board cancelled the scheduled contribution rate increases.

The July 1, 2009 valuation found that the contribution rates were insufficient to amortize the unfunded actuarial accrued liability within 25 years of the valuation date. Therefore, in December 2009, the Board approved three contribution rate increases to take effect: 1.5% on July 1, 2011, 1.5% on July 1, 2012, and 2.28% on July 1, 2013.

The historical changes in contribution rates since 1993 are shown in the table below. Note that weighted total values may change even if rates by group do not change.

		Weighted Total		Fire & Police		General/Teachers	
Year of Change	Total Rate	Member Rate	Employer Rate	Member Rate	Employer Rate	Member Rate	Employer Rate
1993	17.16%	6.51%	10.65%	7.82%	10.87%	6.38%	10.63%
1994	18.75	7.12	11.63	8.53	11.85	6.97	11.61
1998	17.78	6.75	11.03	8.10	11.25	6.60	11.01
2000	15.78	5.98	9.80	7.21	10.01	5.86	9.77
2003	15.82	6.01	9.81	7.21	10.11	5.86	9.77
2004	16.84	6.41	10.43	7.65	10.73	6.23	10.39
2008	16.88	6.44	10.44	7.65	10.73	6.23	10.39
2009	16.89	6.45	10.44	7.69	10.73	6.23	10.39
2010	16.89	6.45	10.44	7.69	10.73	6.23	10.39

Contribution rates increases are scheduled for July 1, 2011 (increase in the total rate of 1.5%), July 1, 2012 (1.5%) and July 1, 2013 (2.28%).

Our July 1, 2010, actuarial valuation found that the System's rates are sufficient to pay the System's normal cost rate of 13.90% if the future scheduled contribution rate increases are reflected. As of July 1, 2010, there is an unfunded actuarial liability of $2,555.8 million. The current rates are sufficient to amortize the Unfunded Actuarial Accrued Liability (UAAL) in 17.5 years.

Funding Status

Based on the July 1, 2010 actuarial valuation, the unfunded actuarial accrued liability was decreased by $392.9 million due to a large asset gain recognized as of July 1, 2010. Specifically, the System's assets earned a gross return before expenses of 12.53%, which is 4.78% above the actuarial assumption of 7.75%. All other actuarial experience gains and losses decreased the actuarial accrued liability by $211.1 million. Thus, the total experience gain for the year was $604.0 million.

Also, the actuarial accrued liability was increased by $130.5 million because actual contributions plus assumed investment returns were less than the normal cost and the interest on the unfunded actuarial accrued liability. Scheduling the three contribution rate increases mentioned above decreased the actuarial accrued liability by $38.9 million. The assumption changes adopted based on the 2010 Experience Study decreased the actuarial accrued liability by $82.7 million. The March 1, 2010 Retro-COLA increased the actuarial accrued liability by $124.3 million.

All of these items then resulted in a total actuarial gain of $470.8 million and a change in funding status from a 74.1% funding ratio on July 1, 2009 to 78.9% on June 30, 2010. The funding ratio is the ratio of the actuarial value of the assets over the value of the actuarial accrued liability.

Assumptions

Our July 1, 2010 actuarial valuation report presented summaries of the actuarial assumptions and methods used in the valuation. The last major experience study, completed in July 2010, covered the period July 1, 2005 through June 30, 2009. The next major experience study, to be completed in 2012, will cover the period July 1, 2007 through June 30, 2010.

Certification Statement

In preparing our actuarial valuation reports, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of such 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.

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 our best estimate of anticipated experience affecting the System. The Retirement Board has the final decision regarding the appropriateness of the assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: 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 or additional cost or contribution requirements based on the plan's funded status); 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.

The assumptions and methods used for funding purposes meet the parameters set for the disclosures presented in the financial section by Government Accounting Standards Board (GASB) Statement No. 25, Financial Reporting for Defined Benefit Plans and Note Disclosures for Defined Contribution Plans. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

The enclosed Exhibits 1 through 9 provide further related information. Milliman is completely responsible for these exhibits. Specifically, they are:

- Exhibit 1 Summary of Actuarial Assumptions and Methods
- Exhibit 2 Schedule of Active Member Valuation Data
- Exhibit 3 Schedule of Retiree and Beneficiary Valuation Data
- Exhibit 4 Schedule of Funding Progress
- Exhibit 5 Solvency Test
- Exhibit 6 Analysis of Actuarial Gains or Losses
- Exhibit 7 Schedule of Contributions from the Employer and All Other Contributing Entities
- Exhibit 8 Schedule of Contributions from the Employer Expressed as a Percentage of Payroll
- Exhibit 9 Provisions of Governing Law

Milliman's work is prepared solely for the internal business use of the System. To the extent that Milliman's work is not subject to disclosure under applicable public records 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 exception(s):

(a) The System 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.

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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.

Respectfully submitted,

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EXHIBIT 1: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS EFFECTIVE JULY 1, 2010

1. Investment Return (Adopted July 1, 2004)

The annual rate of investment return on the assets of the System is assumed to be 7.75% (including 0.50% for expenses) compounded annually.

2. Actuarial Value of Assets (Adopted July 1, 1994)

All assets are valued at market as of the valuation date.

3. Actuarial Assumptions

The actuarial assumptions and methods were adopted by the Board based upon recommendations from the retained actuary. The actuarial assumptions are based on periodic studies of the System's actual experience.

4. Mortality (Adopted July 1, 2010)

Contributing Members, Service Retirement Members, and Beneficiaries:

- **Teachers**

  Males RP-2000 Combined Table for Healthy Individuals for males, set back three years.

  Females RP-2000 Combined Table for Healthy Individuals for females, set back three years.

- **Fire & Police**

  Males RP-2000 Combined Table for Healthy Individuals for males, with no offset.

  Females RP-2000 Combined Table for Healthy Individuals for females, set forward one year.

  10% of Fire and Police active member deaths are assumed to be duty related. This assumption was adopted July 1, 2008.

- **General Employees and All Beneficiaries**

  Males RP-2000 Combined Table for Healthy Individuals for males, with no offset.

  Females RP-2000 Combined Table for Healthy Individuals for females, set back one year.

  All mortality tables are adjusted with generational mortality adjustments using projection scale AA as shown in Table A-11B of the July 1, 2010 valuation report. The projection scale is applied from the year 2000 to the year in which the mortality assumption is being applied.

Disabled Members

For disabled members, the mortality rates used in the valuation are the rates from the RP-2000 table for disabled individuals for respective sexes, with a one-year setback for males and a two-year set forward for females.

All mortality tables are adjusted with generational mortality adjustments using projection scale AA as shown in Table A-11B of the July 1, 2010 valuation report. The projection scale is applied from the year 2000 to the year in which the mortality assumption is being applied.

5. Service Retirement (Adopted July 1, 2008)

Annual rates of retirement assumed to occur among persons eligible for a service retirement are illustrated in the following table:

	Fire & Police		General Employees			
			Male		Female	
Age	First Year Eligible	Thereafter	First Year Eligible	Thereafter	First Year Eligible	Thereafter
55	24%	20%	25%	10%	30%	20%
60	24	25	30	18	30	20
65	50	45	65	75	60	65
70	*	*	25	25	25	20

	Teachers			
	Male		Female	
Age	First Year Eligible	Thereafter	First Year Eligible	Thereafter
55	21%	5%	10%	10%
60	21	20	30	20
65	50	65	65	65
70	*	*	*	*

* *For all ages older than the age indicated, retirement is assumed to occur immediately.*

6. Early Retirement (Adopted July 1, 2008)

Annual rates of retirement assumed to occur among persons eligible for a reduced early retirement benefit are illustrated in the following table:

		General Employees		Teachers	
Age	Fire & Police	Male	Female	Male	Female
50	6%	*	*	*	*
55	7	3%	4%	10%	6%
60		8	8	13	15

* *For all ages younger than the age indicated, withdrawal is assumed to occur (see Section 7).*

7. Other Terminations of Employment (Adopted July 1, 2008)

Assumed annual rates of termination are illustrated below. Rates are based only on years of service.

Years of Service	Fire and Police	General Employees Male	General Employees Female	Teachers Male	Teachers Female
5	8.0%	11.5%	12.5%	6.5%	7.0%
10	5.2	6.3	7.4	3.4	3.6
15	3.2	3.9	4.4	2.1	2.0
20	1.8	2.6	3.1	1.4	1.4
25	1.5	1.8	2.5	1.2	1.2
30	1.5	1.5	2.5	1.2	1.2

8. Disability Retirement (Adopted July 1, 2008)

Annual rates assumed for disability retirement are illustrated in the following table:

Age	Fire & Police	General Employees Male	General Employees Female	Teachers Male	Teachers Female
25	.01%	.01%	.01%	.02%	.05%
35	.03	.06	.04	.02	.04
45	.13	.12	.11	.07	.07
55	.37	.47	.29	.32	.27

25% of Fire and Police active member disabilities are assumed to be duty related. This assumption was adopted July 1, 2009.

Note that rates shown in items 5-8 are central rates of decrement.

9. Future Salaries (Adopted July 1, 2010)

In general, the total annual rates at which salaries are assumed to increase include 4.00% per annum for increase in the general wage level of the membership plus increases due to promotions and longevity. The general wage level increases are due to inflation and increases in productivity. The total ultimate rates assumed are illustrated below.

Years of Service	Fire and Police	General Employees Male	General Employees Female	Teachers Male	Teachers Female
5	7.95%	6.50%	7.00%	7.38%	8.11%
10	6.29	5.56	5.92	6.29	6.50
15	5.51	4.94	5.02	5.25	4.94
20	5.04	4.68	4.68	4.52	4.52

10. Vesting (Adopted July 1, 2008)

The following table illustrates the assumed probability that vested terminating members will elect to receive deferred benefits instead of withdrawing accumulated contributions.

Age	Fire and Police	General Employees Male	General Employees Female	Teachers Male	Teachers Female
25	48%	56%	60%	75%	73%
35	53	65	70	75	81
45	70	68	73	75	84
55	--	--	--	--	--

11. Growth in Membership (Adopted July 1, 2010)

In general, the combined effects of stable active membership and salary levels are assumed to produce a 4.00% average annual expansion in the payroll of covered members.

12. Interest on Employee Contributions (Adopted July 1, 2004)

The credited interest rate on employee contributions is assumed to be 7.25%.

13. Postretirement Benefit Increases (Cost of Living Adjustments)

A nondiscretionary postretirement increase of 1% per year is assumed for the valuation. See Exhibit 3 for total discretionary and nondiscretionary increases granted by the Board for the past ten years.

14. Actuarial Cost Method

The entry age actuarial cost method is used as specified by Idaho law. The aggregate normal cost rate is based on separate rates developed for each valuation group. The normal cost rates used in this valuation were calculated based on all current active members, for each sex and type of employee in this valuation. The actuarial present values of projected benefits and of projected salaries for all active members were calculated. The ratio of the two is the aggregate normal cost rate. The aggregate rate remains unchanged between valuations, unless actuarial assumptions, benefits or contribution rates are changed. The current aggregate normal cost rate was adopted July 1, 2008.

The unfunded actuarial accrued liability (UAAL) created by this method, including gains and losses, is amortized as a level percentage of the System's projected payroll.

Commencing July 1, 2007, 1.49% of the payroll of higher education faculty covered by the Optional Retirement Program (ORP) is payable to PERSI until July 1, 2025. Commencing July 1, 1997, 3.83% of the payroll of community college and post-secondary vocational educational institutions covered by the ORP is payable to PERSI until July 1, 2011. The difference between the future ORP contributions and the actuarial accrued liability computed under the actuarial cost method is the portion of the actuarial accrued liability used to determine the UAAL, or funding reserve, for PERSI.

15. Experience Studies

The last experience study was completed in 2010 for the period July 1, 2005 through June 30, 2009 and reviewed mortality and all economic assumptions. All economic & demographic assumptions other than mortality will be studied in 2012 for the period from July 1, 2007 through June 30, 2011. Assumptions were adopted as noted.

16. Recent Changes

At its July 27, 2010 meeting, the Board adopted new mortality and economic assumptions as described in the July 27, 2010 Board meeting materials.

The assumption changes are:

- The setback for Male Teacher mortality was changed from two years to three years.
- The setback for Female Teacher mortality was changed from two years to three years.
- The set forward for Female Fire & Police mortality was changed from zero years to one year.
- The setback for Disabled Male mortality was changed from two years to one year.
- The set forward for Disabled Female mortality was changed from one year to two years.
- The annual investment expense assumption was changed from 0.35% to 0.40% of assets.
- The annual administrative expense assumption was changed from 0.15% to 0.10% of assets.
- The Wage Growth Assumption was changed from 4.50% to 4.00%.
- The inflation assumption changed from 3.75% to 3.50%.

In 2009, the Board adopted a Retroactive COLA of 2.48% effective March 1, 2010.

Public Employee Retirement System of Idaho

EXHIBIT 2: SCHEDULE OF ACTIVE MEMBER VALUATION DATA

		Annual Salaries *		
Valuation Date July 1	Number	Annual Valuation Payroll	Average Annual Pay	% Increase in Average Annual Pay
2001	62,125	$1,924,389,000	$30,976	4.0%
2002	62,376	2,036,004,000	32,641	5.4
2003	62,385	2,063,615,000	33,079	1.3
2004	63,385	2,124,040,000	33,510	1.3
2005	64,391	2,197,385,000	34,126	1.8
2006	64,762	2,294,317,000	35,427	3.8
2007	65,800	2,397,470,000	36,436	2.8
2008	66,765	2,540,568,000	38,052	4.4
2009	67,813	2,644,665,000	38,999	2.5
2010	67,020	2,622,461,000	39,130	0.3

* *Actuarial valuation payroll is computed as the sum of the annualized salaries for all active members, and differs from the actual payroll shown in the financial section of the annual report.*

EXHIBIT 3: SCHEDULE OF RETIREE AND BENEFICIARY VALUATION DATA [1]

Valuation Date July 1	Number			COLA Percentage Increases Granted Previous March 1
	Total	Added	Removed	
2001	23,253	1,840	1,043	3.4%
2002	24,018	1,612	847	2.7
2003	24,991	1,790	817	1.0
2004	26,043	1,875	823	2.2
2005	27,246	1,959	756	2.7% + 100% restoration
2006	28,438	2,073	881	3.6
2007	29,619	2,101	920	3.8
2008	30,912	2,160	867	2.0
2009	32,197	2,235	950	1.0
2010	33,625	2,335	908	-1.48% + 2.48% Partial Restoration

Valuation Date July 1	Annual Benefits				
	Total Rolls End of Year	Added to Rolls [2]	Removed from Rolls	Average	% Increase in Average
2001	$235,269,000	$33,251,000	$7,531,000	$10,118	8.4%
2002	255,374,000	26,672,000	6,567,000	10,633	5.1
2003	279,219,000	30,190,000	6,345,000	11,173	5.1
2004	307,410,000	35,243,000	7,052,000	11,804	5.6
2005	343,077,000	42,022,000	6,355,000	12,592	6.7
2006	381,677,000	46,085,000	7,485,000	13,421	6.6
2007	422,196,000	49,182,000	8,663,000	14,254	6.2
2008	459,077,000	45,072,000	8,191,000	14,851	4.2
2009	491,946,000	42,698,000	9,829,000	15,279	2.9
2010	526,020,000	43,382,000	9,308,000	15,644	2.4

(1) Information regarding the number of retirees and beneficiaries added to, and removed from, the rolls was not used in the actuarial valuations.

(2) Includes postretirement increases.

Public Employee Retirement System of Idaho

EXHIBIT 4: SCHEDULE OF FUNDING PROGRESS
(ALL DOLLAR AMOUNTS IN MILLIONS)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL) (1)	Present Value of Future ORP Contributions	Unfunded Actuarial Accrued Liabilities (UAAL) (2)	Funded Ratio (3)	Covered Payroll (4)	UAAL as a Percentage of Covered Payroll
July 1, 2001	$6,492.8	$6,751.3	$72.2	$186.3	97.2%	$1,975.3	9.4%
July 1, 2002	6,062.1	7,209.5	71.7	1,075.7	84.9	2,047.1	52.5
July 1, 2003	6,297.8	7,578.8	66.4	1,214.6	83.8	2,057.7	59.0
July 1, 2004	7,420.2	8,154.8	63.5	671.1	91.7	2,115.4	31.7
July 1, 2005	8,208.8	8,778.7	61.3	508.6	94.2	2,208.7	23.0
July 1, 2006	9,177.1	9,699.0	60.2	461.7	95.2	2,343.5	19.7
July 1, 2007	10,945.8	10,431.9	59.5	(573.4)	105.5	2,421.0	(23.7)
July 1, 2008	10,402.0	11,211.8	60.9	748.9	93.3	2,578.9	29.0
July 1, 2009	8,646.0	11,732.2	59.6	3,026.6	74.1	2,683.5	112.8
July 1, 2010	9,579.8	12,187.9	52.3	2,555.8	78.9	2,684.4	95.2

(1) Actuarial present value of benefits less actuarial present value of future normal costs based on entry age actuarial cost method.

(2) Actuarial accrued liabilities less actuarial value of assets and present value of future ORP contributions. Amounts reported in this table do not include the value of any discretionary COLA or Gain Sharing allocations granted after the valuation date. If negative, amount is referred to as a funding reserve.

(3) Funded Ratio is the ratio of the actuarial value of assets over the actuarial accrued liabilities less the present value of future ORP contributions.

(4) Covered Payroll includes compensation paid to all active employees on which contributions are calculated. Covered Payroll differs from the Active Member Valuation Payroll shown in Exhibit 2 which is an annualized compensation of only those members who were active on the actuarial valuation date.

Public Employee Retirement System of Idaho

EXHIBIT 5: SOLVENCY TEST
(ALL DOLLAR AMOUNTS IN MILLIONS)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities for: Active Member Contributions (A)	Retirees and Beneficiaries (B)	Active Members (Employer Financed Portion) (C)	Portion of Actuarial Accrued Liabilities Covered by Assets (A)	(B)	(C)
July 1, 2001	$6,492.8	$1,502.0	$2,487.6	$2,761.7	100	100.0%	90.6
July 1, 2002	6,062.1	1,622.4	2,665.3	2,921.8	100	100.0	60.7
July 1, 2003	6,297.8	1,677.8	2,882.9	3,018.1	100	100.0	57.6
July 1, 2004	7,420.2	1,717.7	3,198.1	3,239.0	100	100.0	77.3
July 1, 2005	8,208.8	1,875.1	3,606.7	3,296.9	100	100.0	82.7
July 1, 2006	9,177.1	2,142.5	4,088.9	3,467.6	100	100.0	84.9
July 1, 2007	10,945.8	2,335.6	4,582.9	3,513.4	100	100.0	100.0
July 1, 2008	10,402.0	2,642.0	5,022.9	3,546.9	100	100.0	77.2
July 1, 2009	8,646.0	2,867.7	5,396.2	3,468.3	100	100.0	11.0
July 1, 2010	9,579.8	2,813.7	5,820.0	3,554.2	100	100.0	26.6

Public Employee Retirement System of Idaho

EXHIBIT 6: ANALYSIS OF ACTUARIAL GAINS OR LOSSES
(ALL DOLLAR AMOUNTS IN MILLIONS)

	Gain(Loss) for Period		
	2007-2008	**2008-2009**	**2009-2010**
Investment Income			
Investment income was greater (less) than expected.	$ (1,274.6)	$ (2,442.9)	$ 392.9
Pay Increases			
Pay increases were less (greater) than expected.	(15.0)	102.4	260.3
Membership Growth			
(Additional) liability for new members.	(19.1)	(21.4)	(11.8)
Return to Employment			
Less (more) reserves were required for terminated members returning to work.	(2.4)	(17.0)	(9.5)
Death After Retirement			
Retirees died younger (lived longer) than expected.	0.6	0.3	0.7
Cost of Living Adjustment (COLA)			
Different Automatic COLA than expected	NA	124.3	NA
Other			
Miscellaneous gains (and losses) resulting from other causes. (1)	(46.5)	(32.3)	(28.6)
Total Gain (Loss) During the Period From Actuarial Experience	$ (1,357.0)	$ (2,286.6)	$ 604.0
Contribution Income			
Actual contributions were greater (less) than the normal cost and interest on the Unfunded Actuarial Accrued Liability.	97.7	9.6	(130.5)
Non-Recurring Items			
Changes in actuarial assumptions caused a gain (loss) (2)	(17.6)	(1.3)	82.7
Changes in actuarial methods caused a gain (loss)	None	None	None
Changes in plan provisions caused a gain (loss) (3)	None	(2.0)	38.9
Composite Gain (Loss) During the Period	$ (1,276.9)	$ (2,280.3)	$ 595.1

Note: Effects related to losses are shown in parentheses. Numerical results are expressed as a decrease (increase) in the actuarial accrued liability.

(1) *Reflects losses on active and inactive member experience.*

(2) *For 2007-2008, this reflects changes made to the demographic assumptions as described in the July 30, 2008 Active Member Experience Study. For 2008-2009, this reflects changes to value zero salary vested employees using current vested member PVB/EECI ratio. For 2009-2010, this reflects changes made to the mortality and economic assumptions as described in the July 27, 2010, Board meeting materials.*

(3) *For 2008-2009, this reflects the addition of a lump sum disability benefit for safety members. For 2009-2010, this reflects scheduled rate increases.*

EXHIBIT 7: SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER AND ALL OTHER CONTRIBUTING ENTITIES (ALL DOLLAR AMOUNTS IN MILLIONS)

Fiscal Year Ending	Covered Employee Payroll (1)	Actual PERSI Employer Contributions Dollar Amount (2)	Actual ORP Contributions Dollar Amount	Total Actual Employer Contributions	Annual Required Contribution (ARC) (3)	Percentage of ARC Dollars Contributed
6/30/05	$2,208.7	$230.4	$5.8	$236.2	$236.7	100%
6/30/06	2,343.5	244.4	6.4	250.8	238.1	105
6/30/07	2,421.0	252.8	6.7	259.5	235.4	110
6/30/08	2,578.9	269.2	4.1	273.3	251.4	109
6/30/09	2,683.5	280.2	4.4	284.6	232.0	123
6/30/10	2,684.4	280.2	4.7	284.9	260.3 (4)	109

(1) Computed as the dollar amount of the actual PERSI employer contribution made as a percentage of payroll divided by the Actual PERSI contribution rate expressed as a percentage of payroll.

(2) The actual PERSI employer contributions are expressed as a percentage of payroll. Employer contributions are made as a percentage of actual payroll in accordance with statute and the Board's Funding Policy. Thus, the actual employer contributions set by both statute and the Board's Funding Policy may differ from the computed ARC employer contribution rate for GASB disclosure purposes. Dollar amounts shown exclude additional receipts due to merger of retirement systems.

(3) For PERSI employers, the Annual Required Contribution (ARC) is equal to the normal cost rate plus a 25-year amortization of any Unfunded Actuarial Accrued Liability or minus a 25-year amortization of any Funding Reserve amount. The ARC determined as of the valuation date is applicable for employer fiscal years commencing October 1 of the calendar year following the valuation date. For Optional Retirement Plan (ORP) employers, the ARC is equal to 1.49% of salaries of university members in the ORP until 2025 and 3.83% of salaries of junior college members in the ORP until 2011.

(4) See Table C-5 of the valuation for further disclosures. The ARC of 9.523% for the PERSI fiscal year ending June 30, 2010 is based on three months at 8.09% as computed in the 2007 valuation and nine months at 10.00% as computed in the 2008 valuation.

Public Employee Retirement System of Idaho

EXHIBIT 8: SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER EXPRESSED AS A PERCENTAGE OF PAYROLL

Fiscal Year Ending	Actual PERSI Employer Contribution % (1)	Annual Required Contribution (ARC) % (2)	Percentage of ARC Contributed
6/30/05	10.43%	10.453%	100%
6/30/06	10.43	9.885	105
6/30/07	10.44	9.448	110
6/30/08	10.44	9.588	109
6/30/09	10.44	8.483	123
6/30/10	10.44	9.523 (3)	109

(1) The actual PERSI employer contributions are expressed as a percentage of payroll. Employer contributions are made as a percentage of actual payroll in accordance with statute and the Board's Funding Policy. Thus, the actual employer contributions set by both statute and the Board's Funding Policy may differ from the computed ARC employer contribution rate for GASB disclosure purposes. Dollar amounts shown exclude additional receipts due to merger of retirement systems.

(2) For PERSI employers, the Annual Required Contribution (ARC) is equal to the normal cost rate plus a 25-year amortization of any Unfunded Actuarial Accrued Liability or minus a 25-year amortization of any Funding Reserve amount. The ARC determined as of the valuation date is assumed applicable for employers commencing October 1 of the calendar year following the valuation date. For Optional Retirement Plan (ORP) employers, the ARC is equal to 1.49% of salaries of university members in the ORP until 2025 and 3.83% of salaries of junior college members in the ORP until 2011.

(3) See Table C-5 of the valuation for further disclosures. The ARC of 9.523% for the PERSI fiscal year ending June 30, 2010 is based on three months at 8.09% as computed in the 2007 valuation and nine months at 10.00% as computed in the 2008 valuation.

Public Employee Retirement
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EXHIBIT 9: PROVISIONS OF GOVERNING LAW

All actuarial calculations are based on our understanding of the statutes governing the Public Employee Retirement System of Idaho, as contained in Sections 59-1301 through 59-1399, inclusive, of the Idaho Code, with amendments effective through July 1, 2010. The benefit and contribution provisions of this law are summarized briefly below, along with corresponding references to the Idaho Code. This summary does not attempt to cover all the detailed provisions of the law. Only those benefits in effect through July 1, 2010 are considered in this valuation. The items in parentheses are the provisions applicable to firefighters and police officers. The items in parentheses are the provisions applicable to firefighters and police officers.

Effective Date

The effective date of the Retirement System was July 1, 1965.

Member Contribution Rate

The member contribution rate effective July 1, 2010 is 6.23% (7.69%) of salary. Increases in the contribution rates are scheduled for July 1, 2011, July 1, 2012, and July 1, 2013, as described in Section 5 of the July 1, 2010 Actuarial Valuation report.

When the scheduled rate increases take effect, the member contribution rate will be fixed at 60% (72%) of the employer contribution rate. For firefighters and police officers, the 72% adjustment is applied after reducing the employer rate by 0.10% for the 2003 addition of a $100,000 death benefit for fire and police members who die in the line of duty. After the 72% is applied, the resulting rate is increased by 0.04% for the lump sum duty disability benefit. Member contributions have been "picked up" on a pre-tax basis by the employer since June 30, 1983 (Sections 59-1331 and 59-1332).

Employer Contribution Rate

The employer contribution rate is set by the Retirement Board (Section 59-1322). Future scheduled rate increases at July 1, 2011, July 1, 2012, and July 1, 2013, are reflected in this valuation as described in Section 5 of the July 1, 2010 Actuarial Valuation report.

Service Retirement Allowance

Eligibility

Age 65 (60) with five years of service, including six months of membership service (Section 59-1341).

Service Retirement Allowance (continued)

Amount of Allowance
For each year of credited service, the annual service retirement allowance is 2.0% (2.3%) of the highest 42-month average salary (Section 59-1342).

Minimum Benefit
$60 ($72) annual allowance for each year of service. The dollar amounts increase after 1974 according to the rate of cost of living increases in retirement allowances (Section 59-1342).

Maximum Benefit
In no case may a member's regular retirement benefit exceed the highest three-year average salary of the member (Section 59-1342).

Normal Form
Straight life retirement allowance plus any death benefit (Section 59-1351).

Optional Form
Actuarial equivalent of the normal form under the options available, according to the mortality and interest basis adopted by the Board (Section 59-1351).

Early Retirement Allowance

Eligibility
Age 55 (50) with five years of service, including six months of membership service (contributing members only) (Section 59-1345).

Amount of Allowance
Full accrued service retirement allowance if age plus service equals 90 (80); otherwise, the accrued service retirement allowance, reduced by 3% for each of the first five years by which the early retirement date precedes the date the member would be eligible to receive the full accrued benefit, and by 5.75% for each additional year (Section 59-1346).

Vested Retirement Allowance

Eligibility
Former contributing members with five years of membership service are entitled to receive benefits after attaining age 55 (50) (Section 59-1345).

Amount of Allowance
Same as early retirement allowance (Section 59-1345).

Disability Retirement Allowance

Eligibility
Five years of membership service. For a police officer or a firefighter hired after July 1, 1993 who is disabled from an occupational cause, there is no service requirement (Section 59-1352).

Disability Retirement Allowance (continued)

Amount of Allowance
Projected service retirement allowance based on accrued service plus service projected to age 65 (60) (latter limited to excess of 30 years over accrued service) less any amount payable under workers' compensation law (Section 59-1353).

Normal Form
Temporary annuity to age 65 (60) plus any death benefit. Service retirement allowance becomes payable at age 65 (60) (Section 59-1354).

Safety Member Lump Sum Duty Disability Benefit
Fire and Police members who are disabled in the line of duty are eligible for a $100,000 lump sum benefit, in addition to the annuity benefits discussed above (Section 59-1352A).

Death Benefits

After Retirement
Under the normal form of the retirement allowance, the excess, if any, of the member's accumulated contributions with interest at retirement over all payments received. Otherwise, payable according to the option elected (Section 59-1361).

Before Retirement

A. An automatic joint and survivor option applied to the actuarial equivalent of the member's accrued service retirement allowance is paid to the surviving spouse of a member with at least five years of service who dies while:

 i. contributing;
 ii. not contributing, but eligible for benefits; or
 iii. retired for disability,

or

B. If a member with at least five years of service has no spouse, a lump sum payment is made equal to twice the accumulated contributions with interest (Section 59-1361).

or

C. If a member with at least five years of service has no spouse, a lump sum payment is made equal to twice the accumulated contributions with interest (Section 59-1361).

Fire and police members are entitled to an additional $100,000 payment if death occurs in the line of duty. (Section 59-1361 A).

Withdrawal Benefits

Accumulated contributions with interest (Section 59-1358). The interest rate is determined by the Board (Section 59-1301(26)).

Postretirement Increases

Postretirement benefit increases are based on changes in the Consumer Price Index. The measurement period for changes in the CPI-U is August to August. The COLA changes are implemented effective on the March 1 following the measurement period.

If the CPI-U increases by at least 1%, the COLA is at least 1%. If the CPI-U increases by more than 1%, an additional postretirement increase of up to 5% each year (but not more than the increase in the CPI-U) may be authorized by the Board, subject to the approval of the Legislature, if it finds that the System's assets are no less in value than its actuarial liabilities, including those created by the additional increase.

If the CPI-U increases by less than 1% or decreases, the COLA is automatic, based on the change in the CPI. If a negative COLA is applicable, the negative COLA cannot decrease benefits by more than 6%. Additionally, a negative COLA cannot decrease a member's benefit below the amount of the benefit at the initial benefit date.

If a COLA is implemented that is less than the increase in the CPI-U, members' benefits will not retain their full inflation-adjusted purchasing power. In such cases, the Board may implement a Restoration of Purchasing Power (ROPP) COLA at a later date to bring those members closer to 100% of inflation adjusted purchasing power. As with a discretionary COLA, a ROPP is subject to approval of the Legislature and requires that the System's assets are no less in value than its actuarial liabilities, including those created by the additional increase. (Section 59-1355).

Gain Sharing

Beginning in 2000, under Section 59-1309, Idaho Code, the Board may allocate all or a portion of "extraordinary gains" to active and retired members and employers as Gain Sharing.

Extraordinary gains are defined as the excess, if any, at the close of the fiscal year of the Assets over Actuarial Accrued Liabilities plus an amount necessary to absorb a one standard deviation market event without increasing contribution rates, as determined by the Board. Under the Board's current investment policy, assets in excess of a 113% funded ratio are considered extraordinary gains. The Board has the authority to rescind the Gain Sharing up to the date of distribution.

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November 9, 2010

Retirement Board
Public Employee Retirement System of Idaho
607 North 8th Street
Boise, Idaho 83702

Dear Board Members:

At your request, we performed a review of the 2008 and draft 2010 experience study reports and the July 1, 2009 annual actuarial valuation of the Public Employee Retirement System of Idaho (PERSI). As a result of our review, we believe that the work performed in the 2008 and 2010 experience studies and the results of the annual actuarial valuations are overall reasonable.

A summary of our specific findings are:

- The actuarial assumptions used in the valuations are generally reasonable and overall appropriate. We have identified a few areas where further consideration or refinement may be warranted.
    - The market value of assets is used in the annual actuarial valuation of PERSI. Although this is one reasonable approach, we suggest that PERSI consider the advantages and disadvantages of using an alternate asset valuation method. Specifically, one that would smooth out short-term fluctuations in the market value of assets. Most public pension systems use a smoothed value of assets in order to reduce the volatility in computed contribution rates.
    - The assumed rate of post retirement Cost of Living Adjustments (COLA) used in the annual valuation of PERSI is 1% per year. COLA adjustments have averaged between 2% and 3% over the last 10 and 20 year periods. We suggest that consideration be given to using a higher assumed post retirement COLA in the annual valuations of PERSI and reviewing the current practice with the System's outside auditor for consistency with present and proposed GASB reporting standards.
    - The 2009 valuation of PERSI excludes the IRC Section 415 and 401(a)(17) limitation provisions. Although these exclusions do not appear to have a material impact on 2009 valuation results, we suggest that consideration be given to adding the limits prescribed by these Code sections.
- The entry age normal funding method is appropriate and consistent with PERSI funding objectives. Although the method used in the PERSI valuations determines the normal cost percentage somewhat differently than the usual application of the method, the modification does not materially impact the funding of the system.
- With respect to the experience studies and 2009 regular actuarial valuation, the retained actuary (Milliman) is performing its actuarial function in a reasonable and acceptable manner.
- The actuarial valuation work was prepared by credentialed actuaries who are members of the Society of Actuaries and the American Academy of Actuaries.
- The recommended contribution rate is reasonable and consistent with the funding objective of PERSI.
- The determination of valuation liabilities appear reasonable based on the description of benefits provided and the assumptions and methods used by Milliman.

We wish to thank Don Drum, the PERSI staff and Milliman without whose willing cooperation this review could not have been completed.

Respectfully submitted,

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Norman L. Jones, FSA, EA, MAAA

W. James Koss, ASA, EA, MAAA

LMG:bd