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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, 2007. 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 October 1, 1986 through September 30, 1992, the recommended total contribution rates had a weighted average of 14.31% of covered salaries: 8.89% of salary for the employers and 6.4% for Fire & Police members; 5.34% for General/Teachers members.

To cover the cost of the benefit improvements in October 1992, 1993 and 1994, the contribution rates were increased. The contribution rates were temporarily reduced between November 1997 and April 25, 2000 when the Board adopted as permanent the new lower rate of 15.78%, based on the funding status of the system. 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, but the other two increases were delayed by the Board to July 1, 2007 and July 1, 2008. In October 2006, the Board delayed these increases to July 1, 2008 and July 1, 2009.

◆◆ Actuarial Section ◆◆

The historical and future changes are shown in the table below.

Year of Change	Total Rate*	Weighted Total *		Fire & Police		General/Teachers	
		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
2005	16.84	6.41	10.43	7.65	10.73	6.23	10.39
2006	16.85	6.42	10.43	7.65	10.73	6.23	10.39
2007	16.85	6.42	10.43	7.65	10.73	6.23	10.39
2008	17.84	6.80	11.04	8.09	11.34	6.60	11.00
2009	18.83	7.18	11.65	8.53	11.95	6.97	11.61

* Note that actual weighted average total rates may differ slightly from these amounts due to small shifts in the projected future salaries between Fire & Police and General/Teacher members.

Our July 1, 2006 actuarial valuation did not include the scheduled July 1, 2008 and July 1, 2009 increases, and found that the System's rates are sufficient to pay the System's normal cost rate of 14.56%. As of July 1, 2006 there is an unfunded actuarial accrued liability of \$461.7 million. The portion of the total Member and Employer contribution rates shown above that is not needed to pay the System's normal cost is sufficient to amortize the unfunded actuarial accrued liability over 9.8 years. Thus, the current contribution basis meets the requirements of Section 59-1322, Idaho Code, which requires the unfunded actuarial accrued liability to be amortized within 25 years of the valuation date.

Funding Status

Based on the July 1, 2006 actuarial valuation, the unfunded actuarial accrued liability was decreased by \$378.9 million due to a large asset gain recognized as of July 1, 2006. Specifically, the System's assets earned a gross return before expenses of 12.30%, which is 4.55% over the actuarial assumption of 7.75%. All other actuarial experience gains and losses decreased the actuarial accrued liability by \$10.9 million. Thus, the total experience gain for the year was \$389.8 million. Removing the scheduled contribution rate changes from the valuation increased the actuarial accrued liability by \$13.9 million. The mortality assumption change to generational mortality increased the actuarial accrued liability by \$231.0 million.

Also, the actuarial accrued liability was increased by \$5.2 million because actual contributions plus assumed investment returns were less than the normal cost and the interest on the unfunded actuarial accrued liability. The March 1, 2006 COLA increased the actuarial accrued liability by \$92.8 million. All of these items then resulted in a total actuarial gain of \$46.9 million and a change in funding status from a 94.2% funding ratio on July 1, 2005 to 95.2% on June 30, 2006. 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, 2006 actuarial valuation report presented summaries of the actuarial assumptions and methods used in the valuation. The mortality assumptions were revised for the July 1, 2006 valuation as a result of an experience study covering the period July 1, 2001 through June 30, 2005. The next major experience study, to be completed in 2008, will cover the period July 1, 2003 through June 30, 2007.

Certification Statement

In preparing our actuarial valuation reports, we relied, without audit, upon the financial statements prepared by the staff of the System. We also relied upon the member and beneficiary data provided to us by the staff. We compared the data for the July 1, 2006 actuarial valuation with corresponding information from the prior valuation and tested for missing or incomplete items, such as birth dates and hire dates. Based on these tests, we believe the data to be sufficient and reliable for the purposes of our calculations. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

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 Pension Plans and Note Disclosures for Defined Contribution Plans*. The assumptions used in the actuarial valuations were recommended by us and approved by the Board. The Retirement Board has the final decision regarding the appropriateness of the assumptions. They represent our best estimate of future conditions affecting the System, and we believe they are reasonably related to the past experience of the System. Nevertheless, the emerging costs of the System will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions.

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

We, Robert L. Schmidt and Karen I. Steffen, are Consulting Actuaries for Milliman. We are members of the American Academy of Actuaries, Fellows of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Robert L. Schmidt, F.S.A., M.A.A.A.
Consulting Actuary

Karen I. Steffen, F.S.A., M.A.A.A.
Consulting Actuary

KIS/RLS/pap

Public Employee Retirement
System of Idaho

EXHIBIT 1: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS
EFFECTIVE JULY 1, 2006

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, 2006)**

Contributing Members, Service Retirement Members, and Beneficiaries:

• **Teachers**

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

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

• **Fire & Police**

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

Females RP-2000 Combined Table for Healthy Individuals for females, with no setback.

20% of Fire and Police active member deaths are assumed to be duty related.

• **General Employees and All Beneficiaries**

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

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, 2006 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 two year setback for males and a one year set forward for females.

5. Service Retirement (Adopted July 1, 2004)

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

Age	Fire & Police		General Employees			
	First Year Eligible	Thereafter	Male		Female	
			First Year Eligible	Thereafter	First Year Eligible	Thereafter
55	30%	20%	30%	10%	30%	15%
60	30	25	30	15	30	20
65	50	45	80	75	65	65
70	*	*	30	30	30	25

Age	Teachers			
	Male		Female	
	First Year Eligible	Thereafter	First Year Eligible	Thereafter
55	23%	10%	22%	10%
60	23	15	40	20
65	76	65	75	70
70	*	*	*	*

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

6. Early Retirement (Adopted July 1, 2004)

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

Age	Fire & Police	General Employees		Teachers	
		Male	Female	Male	Female
50	6%	*	*	*	*
55	7	3%	3%	7%	6%
60		7	9	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, 2004)

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

Years of Service	Fire and Police	General Employees		Teachers	
		Male	Female	Male	Female
5	8.0%	10.0%	11.0%	6.0%	7.0%
10	4.6	5.5	6.8	3.3	3.3
15	3.2	3.6	4.6	2.0	2.0
20	2.0	2.6	3.4	1.6	1.6
25	2.0	2.0	2.3	1.6	1.6
30	2.0	2.0	2.0	1.6	1.6

8. Disability Retirement (Adopted July 1, 2004)

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

Age	Fire & Police	General Employees		Teachers	
		Male	Female	Male	Female
25	.01%	.05%	.01%	.01%	.03%
35	.03	.10	.02	.05	.05
45	.18	.10	.07	.05	.08
55	.30	.50	.23	.35	.24

9. Future Salaries (Adopted July 1, 2004)

In general, the total annual rates at which salaries are assumed to increase include 4.50% 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		Teachers	
		Male	Female	Male	Female
5	7.8%	6.8%	7.5%	8.5%	9.0%
10	6.7	5.7	6.3	7.3	7.5
15	5.5	5.2	5.3	6.0	6.3
20	5.3	5.0	5.0	5.3	5.3

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

10. Vesting (Adopted July 1, 2004)

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		Teachers	
		Male	Female	Male	Female
25	29%	30%	42%	23%	59%
35	43	53	60	61	80
45	53	63	66	73	83
55	--	--	--	--	90

11. Growth in Membership (Adopted July 1, 2004)

In general, the combined effects of stable active membership and salary levels are assumed to produce a 4.50% 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, 2006.

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, 1990, 3.03% of the payroll of higher education faculty covered by the Optional Retirement Program (ORP) is payable to PERSI until July 1, 2015. 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 for the period July 1, 2001 through June 30, 2005, and reviewed the mortality assumptions. All assumptions except mortality will be studied in 2008 for the period from July 1, 2003 through June 30, 2007. Assumptions were adopted and have remained in effect as noted.

16. Recent Changes

Contribution rates for employers and employees are scheduled to increase over the next few years, with the final increase coming on July 1, 2009. The scheduled contribution rate increases are not included in the July 1, 2006 valuation results, except where noted. In those places where future contribution rate increases are reflected, the rate increases are assumed to take place at July 1, 2007 and July 1, 2008 since this was the schedule in effect on the valuation date. The Board delayed those scheduled increases to July 1, 2008 and July 1, 2009 at the November, 2006 Board meeting.

◆◆ Actuarial Section ◆◆

**Public Employee Retirement
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EXHIBIT 2: SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Valuation Date July 1	Number	Annual Salaries*		
		Annual Valuation Payroll	Average Annual Pay	% Increase in Average Annual Pay
1997	57,237	\$1,511,204,000	\$26,403	3.3%
1998	57,528	1,562,205,000	27,156	2.9
1999	59,248	1,673,056,000	28,243	4.0
2000	60,388	1,798,222,000	29,778	5.4
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

* 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.

◆◆ Actuarial Section ◆◆

**Public Employee Retirement
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EXHIBIT 3: SCHEDULE OF RETIREE AND BENEFICIARY VALUATION DATA **

Valuation Date July 1	Number			COLA Increases Granted Previous March 1
	Total	Added	Removed	
1997	20,499	1,434	838	2.9%
1998	21,134	1,416	781	2.2
1999	21,756	1,464	842	1.6 + 100% restoration
2000	22,456	1,597	897	2.3
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

Valuation Date July 1	Annual Benefits				
	Total Rolls End of Year	Added to Rolls*	Removed from Rolls	Average	% Increase in Average
1997	160,908,000	17,418,000	5,250,000	7,850	5.0
1998	173,519,000	17,894,000	5,283,000	8,210	4.6
1999	193,441,000	25,956,000	6,034,000	8,891	8.3
2000	209,549,000	22,757,000	6,649,000	9,332	5.0
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

* Includes postretirement increases.

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

◆ Actuarial Section ◆

**Public Employee Retirement
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**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, 1997	\$4,609.8	\$4,801.9	\$63.2	\$128.9	97.3%	\$1,575.5	8.2%
July 1, 1998	5,488.2	5,060.0	65.7	(493.9)	109.9	1,627.7	(30.3)
July 1, 1999	6,171.9	5,536.8	68.9	(704.0)	112.9	1,733.5	(40.6)
July 1, 2000	7,032.9	6,105.1	70.5	(998.3)	116.5	1,827.2	(54.6)
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	9,638.8	60.2	461.7	95.2	2,343.5	19.7

(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 payments 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.

◆◆ Actuarial Section ◆◆

**Public Employee Retirement
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**EXHIBIT 5: SOLVENCY TEST
(ALL DOLLAR AMOUNTS IN MILLIONS)**

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities for			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
July 1, 1997	\$ 4,609.8	\$ 1,019.5	\$ 1,617.0	\$ 2,165.4	100.0%	100.0%	91.1%
July 1, 1998	5,488.2	1,089.7	1,766.1	2,204.2	100.0	100.0	100.0
July 1, 1999	6,171.9	1,158.1	1,978.1	2,400.6	100.0	100.0	100.0
July 1, 2000	7,032.9	1,329.7	2,173.8	2,601.6	100.0	100.0	100.0
July 1, 2001	6,492.8	1,502.0	2,487.6	2,761.7	100.0	100.0	90.6
July 1, 2002	6,062.1	1,622.4	2,665.3	2,921.8	100.0	100.0	60.7
July 1, 2003	6,297.8	1,677.8	2,882.9	3,018.1	100.0	100.0	57.6
July 1, 2004	7,420.2	1,717.7	3,198.1	3,239.0	100.0	100.0	77.3
July 1, 2005	8,208.8	1,875.1	3,606.7	3,296.9	100.0	100.0	82.7
July 1, 2006	9,177.1	2,142.5	4,088.9	3,467.6	100.0	100.0	84.9

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

	Gain(Loss) for Period		
	2003-2004	2004-2005	2005-2006
Investment Income			
Investment income was greater (less) than expected.	\$ 650.8	\$ 239.1	\$ 378.9
Pay Increases			
Pay increases were less (greater) than expected.	133.9	88.5	75.9
Membership Growth			
(Additional) liability for new members.	(12.5)	(12.4)	(15.5)
Return to Employment			
Less (more) reserves were required for terminated members returning to work.	(7.0)	(3.9)	(1.8)
Death After Retirement			
Retirees died younger (lived longer) than expected.	6.9	4.3	9.8
Other			
Miscellaneous gains (and losses) resulting from other causes. ⁽¹⁾	<u>16.6</u>	<u>(88.4)</u>	<u>(53.8)</u>
Total Gain (Loss) During the Period From Actuarial Experience	\$ 788.7	\$ 227.2	\$ 393.5
Contribution Income			
Actual contributions were greater (less) than the normal cost and interest on the Unfunded Actuarial Accrued Liability.	(58.2)	13.2	(5.2)
Non-Recurring Items			
Changes in actuarial assumptions caused a gain (loss).	(165.3)	None	(231.0)
Changes in actuarial methods caused a gain (loss).	4.1	(0.7)	(3.7)
Changes in plan provisions caused a gain (loss). ⁽²⁾	<u>8.5</u>	<u>(2.0)</u>	<u>(13.9)</u>
Composite Gain (Loss) During the Period	\$ 577.8	\$ 237.7	\$ 139.7

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

- (1) For 2005-2006, this includes a \$2.6 million loss for reclassification of police members, and a \$51.2 million loss for active and inactive member experience.
- (2) For 2005-2006, this includes a \$13.9 million loss due to the removal of the scheduled contribution rate increases from the funding assumptions.

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**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
6/30/01	\$ 1,975.3	\$ 193.6	\$ 4.3	\$ 197.9 ⁽⁴⁾	\$ 152.2	130%
6/30/02	2,047.1	200.6	4.9	205.5	155.1	132
6/30/03	2,057.7	201.7	5.0	206.7	188.3	110
6/30/04	2,115.4	207.3	5.3	212.6	218.8	97
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

- (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 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 3.03% of salaries of university members in the ORP until 2015 and 3.83% of salaries of junior college members in the ORP until 2011.
- (4) Includes \$77,690,500 of gain sharing credits. Actual cash contributions were \$120,220,992.

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**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
6/30/01	9.80%	7.490%	130%
6/30/02	9.80	7.335	132
6/30/03	9.80	8.91	110
6/30/04	9.80	10.093	97
6/30/05	10.43	10.453	100
6/30/06	10.43	9.885 ⁽³⁾	105

- (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, 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 3.03% of salaries of university members in the ORP until 2015 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 9.885% for the PERSI fiscal year ending June 30, 2006 is based on three months at 10.50% as computed in the 2003 valuation and 9 months at 9.68% as computed in the 2004 valuation.*

**Public Employee Retirement
System of Idaho**

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, 2006. 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, 2006 are considered in this valuation.

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, 2005 is 6.23% (7.65%) of salary.

On November 26, 2002, the Board approved a gradual increase to the combined employer and employee contribution rate. This change will increase the member contribution rate to 6.97% (8.53%) by July 1, 2007. This rate will remain in effect then until the employer contribution rate is again changed, at which time 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%, reflecting the 1993 changes in disability provisions for firefighters and police members and the 2003 addition of a \$100,000 death benefit for fire and police members who die in the line of duty. 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).

The current contribution rates are set by Board rule. Future scheduled rate increases are not reflected in the July 1, 2006 valuation except where noted.

Service Retirement Allowance

Eligibility

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

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

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).

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).

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).

Death Benefits

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

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).

C. If a member has less than five years of service, a lump sum payment is made equal to 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

A 1% annual postretirement increase is effective March of each year. An additional postretirement increase of up to 5% each year 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. Increases are based on a cost-of-living factor reflecting the changes in the Consumer Price Index, subject to a maximum total increase of 6% in any year (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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December 18, 2006

Retirement Board
Public Employee Retirement System
State of Idaho
P.O. Box 83720
Boise, Idaho 83720-0078

Members of the Board:

Milliman has performed annual actuarial valuations of the Idaho Firefighters' Retirement Fund (FRF) from 1981 through 1988 and biennial valuations from July 1, 1990 to July 1, 2000. Since the July 1, 2001 valuation, actuarial valuations have occurred annually. The next actuarial valuation is scheduled for July 1, 2007.

Contribution Rates

FRF covers a closed group of firefighters who were hired before October 1, 1980 and who receive benefits in excess of those provided under the Public Employee Retirement System of Idaho (PERSI). The cost of these excess benefits is paid by member contributions, employer contributions, and receipts from a fire insurance premium tax. Employer contributions comprise two elements: 8.65% of the salaries of covered members and an additional rate applied to the salaries of all firefighters of the employer. The additional rate is designed to meet the costs of the Fund not covered by other resources. Idaho Code Section 59-1394 requires the cost of the excess benefits to be retired by the schedule of contributions over a given period of time not to exceed 50 years.

FRF benefits were offset by PERSI benefits effective October 1, 1980. Effective July 1, 1990, all members hired after June 30, 1978 are to receive the same FRF benefits as members hired earlier.

Effective October 1, 1994, the PERSI benefits and contributions were increased. The FRF additional contribution rate to fund the excess benefits was decreased to 15.40% and the total employer contributions for FRF members remained fixed at 35.90% for Class A & B firefighters and 27.25% for Class D firefighters.

The Retirement Board lowered the PERSI contribution rates starting October 31, 1997 and made the reduction permanent as of April 25, 2000. The FRF excess contribution rate was increased to 17.24% since the total employer contributions for FRF members remained fixed at the 35.90% / 27.25% rates.

The Retirement Board raised the PERSI contribution rates, with the first increase effective July 1, 2004 and additional increases effective July 1, 2005 and July 1, 2006; an additional 0.1% contribution was added to provide for a \$100,000 death benefit for duty-related deaths. The FRF excess contribution rate was maintained at 17.24%. The July 1, 2004 rate increase took effect as scheduled, but the other two rate increases were delayed by the Board to July 1, 2006 and July 1, 2007.

After the July 1, 2006 PERSI and FRF valuation reports were completed, the PERSI Board delayed the effective date of the scheduled contribution rate increases. They are now scheduled to take effect on July 1, 2008 and July 1, 2009.

The total employer contributions for FRF members will also gradually increase to 37.84% / 29.19% by July 1, 2009 due to the increasing PERSI rates.

Funding Status

Based on the July 1, 2006 actuarial valuation, the current schedule of contribution rates will amortize the FRF excess benefit costs by December 31, 2012 or 6.5 years from the valuation date. This is shorter than the expected amortization period of 8.0 years based on the July 1, 2005 valuation. It is shorter than the Fund's original funding goal, which is to amortize the liabilities over 12 years or by June 30, 2018 (40 years from July 1, 1978). The current amortization period is less than the statutory maximum of 50 years.

The unfunded actuarial accrued liability (UAAL) was decreased by \$10.0 million due to an asset gain recognized as of July 1, 2006. Specifically, the Fund's assets earned a gross return before expenses of 12.17% for the 2006 plan year, exceeding the actuarial assumption of 7.75%. The UAAL was decreased by \$1.2 million due to the mortality assumption changes that were made in conjunction with changes to the mortality assumptions for the PERSI base plan. All experience gains and losses (including the asset gain) over the year resulted in the UAAL being decreased by \$11.9 million. Also, the actuarial accrued liability was decreased by \$6.5 million because actual contributions plus assumed investment returns were more than the normal cost and the interest on the unfunded actuarial accrued liability. The funding status increased from a 73.5% funding ratio on July 1, 2005 to 79.7% on June 30, 2006. 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, 2006 actuarial valuation report presented summaries of the actuarial assumptions and methods used in the valuation. The FRF assumptions generally reflect the assumptions used for the PERSI Fire and Police members, but are modified to reflect the characteristics expected of the closed group of FRF members. Several assumptions were changed between July 1, 2003 and July 1, 2004 including the investment return, wage growth assumption, and the inflation assumption. The mortality assumptions for the plan were changed on July 1, 2006 in conjunction with changes to the assumptions for the PERSI base plan, as described in Appendix A of the July 1, 2006 valuation.

Aside from the mortality assumption, there were no changes in actuarial assumptions between the July 1, 2005 and July 1, 2006 valuations. The next major PERSI experience study, to be completed in 2008, will cover the period July 1, 2003 through June 30, 2007.

Certification Statement

In preparing our actuarial valuation report, we relied, without audit, upon the financial statements prepared by the staff of the System. We also relied upon the member and beneficiary data provided us by the staff. We compared the data for the July 1, 2006 actuarial valuation with corresponding information from the prior valuation and tested for missing or incomplete items, such as birth dates and hire dates.

Based on these tests, we believe the data to be sufficient and reliable for the purposes of our calculations. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

The assumptions and methods used for funding purposes do not meet the parameters set for the disclosures presented in the financial section by Government Accounting Standards Board (GASB)

◆◆ Actuarial Section ◆◆

Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*. Thus, separate costs were developed and reported for GASB disclosure purposes. We believe the current funding policy is reasonable for a closed group and based on the FRF funding policy prior to 1980. However, it is expected that actual employer contributions will differ from the Annual Required Contribution (ARC) computed for GASB disclosure purposes.

The assumptions used in the actuarial valuations were recommended by us and approved by the Board. The Retirement Board has the final decision regarding the appropriateness of the assumptions. They represent our best estimate of future conditions affecting the Fund, and we believe they are reasonably related to the past experience of the Fund. Nevertheless, the emerging costs of the Fund will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions.

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	Contribution Rates as a Percent of Pay
Exhibit 9	Provisions of Governing Law

We, Robert L. Schmidt and Karen I. Steffen, are Consulting Actuaries for Milliman. We are members of the American Academy of Actuaries and Fellows of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Robert L. Schmidt, F.S.A., M.A.A.A.
Consulting Actuary

Karen I. Steffen, F.S.A., M.A.A.A.
Consulting Actuary

KIS/RLS/pap

Idaho Firefighters' Retirement Fund

**EXHIBIT 1: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS
EFFECTIVE JULY 1, 2006**

1. Investment Return (Adopted July 1, 2004)

The annual rate of investment return on the assets of the Fund 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 PERSI Board based upon recommendations from the retained actuary. The actuarial assumptions are based on periodic studies of the PERSI total fund's actual experience.

4. Service Retirement (Adopted July 1, 1992)

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

Years Since Becoming Eligible to Retire ⁽¹⁾	Age	Probability of Service Retirement
0 - 4	N/A	10.0%
5+	35 - 49	40.0
	50 - 59	40.0
	60	60.0
	61	30.0
	62	65.0
	63	40.0
	64	40.0
	65 - 69	60.0
	70	<i>Immediate retirement is assumed at age 70</i>

(1) Eligibility occurs after 20 years of service, or attained age 60 with five years of service.

5. Mortality (Adopted July 1, 2006)

The mortality rates used for all members of the Fund, active and retired, are from the RP-2000 Combined Mortality Table for males with generational mortality adjustments, with ages unadjusted. The mortality rates assumed for spouses are from the RP-2000 Combined Mortality Table for females with generational mortality adjustments, with ages set back one year. For disabled members, the mortality rates used in the valuation are from the RP-2000 Mortality Table for disabled males with generational mortality adjustments, set back two years. These tables are illustrated in Table A-4A of the July 1, 2006 valuation report.

The Generational mortality adjustments provide a margin for future mortality improvements. The adjustments are applied from the base year of the tables (2000) to the year in which the mortality assumption is applied. The adjustments are done using the standard RP-2000 projection scale (Scale AA). These tables are illustrated in Tables A-4A and A-4B of the July 1, 2006 valuation report.

6. Disability Retirement (Adopted July 1, 1996)

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

Age	Duty-Related	Non-Duty-Related
25	.030%	.015%
35	.030	.015
45	.100	.100
55	.400	.400

7. Other Terminations of Employment (Adopted July 1, 2002)

Assumed annual rates of termination for persons who are not eligible for service retirement are illustrated below:

Years of Service	Annual Rate
5	8.0%
10	4.0
15	2.5
20	2.0

8. Future Salaries (Adopted July 1, 2004)

In general, the total annual rates at which salaries are assumed to increase include 4.50% per year for increases in the general wage level of membership. The general wage level increases are due to inflation and increases in productivity. Due to the closed group and the aging of the membership, the general wage assumption is assumed to adequately cover any additional increases due to promotions and longevity.

9. Replacement of Terminated Members

The Firefighters' Retirement Fund is a closed group. No new members are permitted. The total number of firefighters in PERSI (including those hired October 1, 1980 and later) is assumed to remain unchanged from year to year.

**10. Postretirement Benefit Increases (Cost of Living Adjustments)
(Adopted July 1, 2004)**

FRF benefits are based on paid salary and are assumed to increase at the same rate as the average paid firefighter's salary, or 4.50% per year. For members whose FRF benefits are offset by their PERSI benefits, the PERSI benefits are assumed to have post-retirement benefit increases of 3.75% per year. The assumptions regarding PERSI future post-retirement benefit increases is part of the funding policy for the FRF.

11. Probability of Marriage

It is assumed that there is an 85% probability that the member has an eligible spouse. The spouse's age is assumed to be three years younger than the member's.

12. Fire Insurance Premiums (Adopted July 1, 2004)

The fire insurance premiums received for the plan year ending June 30, 2006 amounted to \$4,155,314 or approximately 9.23% of all firefighters' covered compensation during the same period. Future fire insurance premiums are expected to provide contributions as a decreasing percentage of compensation, due to the assumption that the firefighters' covered compensation (including Class D members) will increase at the rate of 4.50% per year, but future fire insurance premiums are assumed to increase at a rate of only 3.75% per year. In addition, scheduled decreases in the fire insurance premium tax rate will result in reduced funds being transferred to the FRF plan. The rate for the increase for covered compensation was adopted July 1, 2004. The rate for the increase of fire insurance premiums was adopted July 1, 2004.

13. Actuarial Cost Method (Adopted July 1, 1996) – Funding Policy

The actuarial present value of future benefits not provided by PERSI, less the actuarial value of the assets and the present value of future statutory contributions for Class A & B members, is amortized as a level percentage of covered compensation, which includes the Class D firefighters. This can be considered a modified aggregate cost method. Contributions under this funding policy are reasonable for a closed group of members but are expected to be less than the GASB reported Annual Required Contribution (ARC).

14. Actuarial Cost Method (Adopted July 1, 1998) – GASB Disclosures

For GASB disclosure purposes, costs are determined based on the entry age normal cost method. The actuarial present value of future benefits not provided by PERSI less the present value of future normal costs equals the actuarial accrued liability. The unfunded actuarial accrued liability (UAAL) is equal to the actuarial accrued liability less the actuarial value of the assets. The UAAL is amortized as a level dollar amount over a fixed amortization period. The current amortization period is based on a closed 40-year period from July 1, 1996. The ARC is then the total of the normal cost allocated to the current plan year plus the amortization payment on the UAAL. This assumption was adopted July 1, 1998 but applied retroactively to the July 1, 1996 valuation.

15. Experience Studies

The last experience study was for the period July 1, 2001 through June 30, 2005, and reviewed the mortality assumptions. All assumptions except mortality will be studied in 2008 for the period July 1, 2003 to June 30, 2007. Assumptions were adopted and have remained in effect as noted. The FRF assumptions generally reflect the assumptions used for the PERSI Fire and Police members, but are modified to reflect the characteristics expected of the closed group of FRF members.

16. Recent Changes

The mortality assumptions were modified as of July 1, 2006 in conjunction with changes to the mortality assumptions for the PERSI base plan, as described in Appendix A of the July 1, 2006 valuation report. The investment return assumption, wage growth assumption, and the inflation assumption were modified effective July 1, 2004. Contribution rates will be increasing for PERSI, but since the excess contribution rate for firefighter employers will remain constant, this will not have a significant effect on the funding of the FRF plan.

Idaho Firefighters' Retirement Fund

EXHIBIT 2: SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Valuation Date July 1	Number	Annual Salaries		Annual Increase in Average
		Total ⁽¹⁾	Average	
1994	222	\$ 8,702,000	\$ 39,198	6.2%
1996	194	8,514,433	43,889	5.8
1998	163	7,954,048	48,798	5.4
2000	129	7,174,924	55,620	6.8
2001	103	5,771,086	56,030	0.7
2002	81	4,981,492	61,500	9.8
2003	57	3,750,432	65,797	7.0
2004	42	2,840,572	67,633	2.8
2005	20	1,526,466	76,323	12.8
2006	13	1,034,693	79,592	4.3

(1) Annualized average salaries for covered members for the 12-month period commencing October 1 of the previous calendar year. For years ending after June 30, 2003, the 12-month period is the period from July 1 to June 30 of the previous calendar year.

Idaho Firefighters' Retirement Fund

EXHIBIT 3: SCHEDULE OF RETIREE AND BENEFICIARY VALUATION DATA⁽¹⁾

Valuation Date July 1	Number			COLA
	Total	Added	Removed	Increases Granted Previous January 1
1994	411	50	6	7.15%
1996	431	34	14	3.54
1998	482	72	21	5.00
2000	508	43	17	3.33
2001	526	31	13	7.55
2002	558	41	9	1.51
2003	576	27	9	4.41
2004	582	21	15	2.56
2005	599	25	8	4.33
2006	597	10	12	4.36

Valuation Date July 1	Annual Benefits				Increases in Average
	Total ⁽²⁾	Added ⁽³⁾	Removed	Average	
1994	8,975,984	2,131,836	154,795	21,839	7.0%
1996	10,411,707	1,668,685	232,962	24,157	5.2
1998	12,950,197	2,942,954	404,464	26,868	5.5
2000	14,420,361	1,896,872	426,708	28,387	2.8
2001	16,607,752	2,529,792	342,401	31,574	11.2
2002	17,834,237	1,458,868	232,384	31,961	1.2
2003	19,329,902	1,725,487	229,822	33,559	5.0
2004	20,095,076	1,148,461	383,287	34,528	2.9
2005	21,699,127	1,833,685	229,634	36,226	4.9
2006	22,636,930	1,320,848	383,045	37,918	4.7

- (1) Information regarding the number of retirees and beneficiaries added to, and removed from, the rolls was not used in the actuarial valuations.
- (2) Combined annual benefits from FRF and PERSI. The FRF benefits comprised \$16,777,330 of the 2006 total.
- (3) Includes postretirement increases.

◆◆ Actuarial Section ◆◆

Idaho Firefighters' Retirement Fund

EXHIBIT 4: SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date July 1	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL) ⁽¹⁾	Unfunded Actuarial Accrued Liabilities (UAAL) ⁽²⁾	Funded Ratio	Covered Payroll ⁽³⁾	UAAL as a Percentage of Covered Payroll
1994	\$100.6	\$240.4	\$139.8	41.8%	\$22.6	618.6%
1996	132.1	246.7	114.6	53.5	24.6	465.9
1998	179.0	284.0	105.0	63.0	28.0	375.0
2000	217.8	293.4	75.6	74.2	30.8	245.5
2001	200.4	316.2	115.8	63.4	32.9	352.0
2002	181.5	300.3	118.8	60.4	34.4	345.3
2003	182.7	310.7	128.0	58.8	37.0	345.9
2004	210.4	302.6	92.2	69.5	39.8	231.7
2005	227.2	309.1	81.9	73.5	42.2	194.1
2006	248.8	312.3	63.5	79.7	45.0	141.1

(1) Actuarial present value of future excess benefits less actuarial present value of excess statutory contributions over amounts required by PERSI, for years prior to 1996. For years after 1996, the excess of the actuarial present value of future excess benefits less the present value of future normal cost contributions under the entry age cost method.

(2) Actuarial accrued liabilities less actuarial value of assets.

(3) Covered Payroll includes compensation paid to all active firefighters for whom contributions were made to FRF. Covered Payroll differs from the Active Member Valuation Payroll shown in Appendix C, which is an annualized compensation of only those members hired prior to October 1, 1980 who were active on the actuarial valuation date. For years prior to 1996, Covered Payroll is estimated. See footnote to Exhibit 7.

◆◆ Actuarial Section ◆◆

Idaho Firefighters' Retirement Fund

EXHIBIT 5: SOLVENCY TEST
(all dollar amounts in millions)

Actuarial Valuation Date July 1	Actuarial Value of Assets	Actuarial Liabilities ⁽¹⁾ for			Portion of Actuarial Liabilities Covered by Assets		
		(A)	(B)	(C)	(A)	(B)	(C)
		Active Member Contributions	Retirees and Beneficiaries	Active Members (Employer Financed Portion)			
1994	\$100.6	\$1.3	\$171.8	\$76.8	100.0%	57.8%	0.0%
1996	132.1	1.1	182.5	67.3	100.0	71.8	0.0
1998	179.0	0.9	226.0	60.8	100.0	78.8	0.0
2000	217.8	0.9	239.9	55.0	100.0	90.4	0.0
2001	200.4	0.3	274.5	43.0	100.0	72.9	0.0
2002	181.5	0.2	270.5	30.4	100.0	67.0	0.0
2003	182.7	0.2	289.4	21.5	100.0	63.1	0.0
2004	210.4	0.1	287.7	15.2	100.0	73.1	0.0
2005	227.2	0.1	301.6	7.4	100.0	75.3	0.0
2006	248.8	0.0	308.1	4.2	100.0	80.8	0.0

(1) Computed based on funding policy methods and assumptions.

◆◆ Actuarial Section ◆◆

Idaho Firefighters' Retirement Fund

EXHIBIT 6: ANALYSIS OF ACTUARIAL GAINS OR LOSSES
(all dollar amounts in millions)

	Gain (Loss) for Period		
	2003-2004	2004-2005	2005-2006
Investment Income			
Investment income was greater (less) than expected.	\$ 17.9	\$ 6.2	\$ 10.0
Pay Increases			
Pay increases and COLAs were less (greater) than expected.	6.3	1.1	0.4
Death After Retirement			
Retirees died younger (lived longer) than expected.	6.8	-	-
Other			
Miscellaneous gains (and losses) resulting from other causes.	1.9	(2.2)	0.3
Total Gain (Loss) During the Period From Actuarial Experience	\$ 32.9	\$ 5.1	\$ 10.7
Contribution Income			
Actual contributions plus assumed investment returns were greater (less) than the normal cost and interest on the Unfunded Actuarial Accrued Liability.	3.0	5.2	6.5
Non-Recurring Items			
Changes in actuarial assumptions and benefits caused a gain (loss).	(0.1)	None	1.2
Composite Gain (Loss) During the Period	\$ 35.8	\$ 10.3	\$ 18.4

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

Idaho Firefighters' Retirement Fund

**EXHIBIT 7: SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER
AND ALL OTHER CONTRIBUTING ENTITIES
(actual dollar amounts)**

Fiscal Year Ending	Covered Employee Payroll (1)	Statutory Employer Contributions (2)	Additional Employer Contributions (2)	Insurance Premium Payment from the State	Total Employer Contributions	Annual Required Contribution (ARC) (3)	Percentage of ARC Contributed
Actual Dollar Amounts							
1997	\$26,671,313	\$ 799,570	\$ 4,107,381	\$ 2,575,053	\$ 7,482,004	\$ 9,447,790	79.2%
1998	27,953,792	717,489	4,648,494	2,634,818	8,000,801	9,447,790	84.7
1999	30,091,784	673,975	5,187,823	2,706,956	8,568,754	8,643,708	99.1
2000	30,830,049	615,335	5,315,101	2,744,153	8,674,589	8,643,708	100.4
2001	32,938,022	583,440	5,678,515	2,964,981	9,226,936	6,265,400	147.3
2002	34,426,786	463,017	5,935,178	3,150,114	9,548,309	9,339,992	102.2
2003	37,005,298	352,350	6,379,713	3,383,388	10,115,451	9,447,664	107.1
2004	39,789,908	301,089	7,421,215	4,001,053	11,723,357	10,200,418	114.9
2005	42,198,856	181,916	7,275,080	4,268,619	11,725,615	7,225,585	162.3
2006	45,012,038	106,814	7,760,075	4,155,314	12,022,203	6,455,083	186.2

- (1) Computed as the dollar amount of the actual employer contribution made as a percentage of payroll divided by the contribution rate, expressed as a percentage of payroll.
- (2) Employer contributions are made as a percentage of actual payroll rather than as a dollar amount. The Statutory Employer FRF contributions in excess of PERSI required contributions are payable only on Class A & B active member payroll. The Additional Employer FRF contributions are payable on Class A & B and Class D active member payrolls.
- (3) Starting July 1, 1996, the Annual Required Contributions (ARC) is computed as a dollar amount based on the entry age cost method and future payroll contributions from Class A & B members only. The ARC is computed for GASB reporting purposes only. The actual employer contributions as a percentage of payroll varied from those determined by the actuarial valuation based on the funding policy as shown in Table D-2 of this report. Thus, as long as the actual contributions are made as a percentage of payroll under the current funding policy methods and assumptions, as required by the most recent actuarial valuation, the actual dollar amount of the employer contributions will differ from the dollar amount of the Annual Required Contributions (ARC).

Idaho Firefighters' Retirement Fund

EXHIBIT 8: CONTRIBUTION RATES AS A PERCENT OF PAY

Year ⁽¹⁾	State Contributions	Employer Contributions				Total Employer Contributions For Members	
	Fire Insurance Premium Tax ⁽²⁾	PERSI Rate	Statutory FRF Rate	Additional Rate	Social Security	Hired Before 10/1/80 ⁽³⁾	Hired After 9/30/80 ⁽⁴⁾
Effective Date:	July 1	October 1	January 1	October 1	January 1	October 1	October 1
1994	11.80%	11.85%	8.65%	15.40%	7.65%	35.90%	34.90%
1996	10.88	11.85	8.65	15.40	7.65	35.90	34.90
1998	7.30	10.01	8.65	17.24	7.65	35.90	34.90
2000	7.60	10.01	8.65	17.24	7.65	35.90	34.90
2001	7.10	10.01	8.65	17.24	7.65	35.90	34.90
2002	7.60	10.01	8.65	17.24	7.65	35.90	34.90
2003	7.60	10.11	8.65	17.24	7.65	36.00	35.00
2004	6.60	10.73	8.65	17.24	7.65	36.62	35.62
2005	6.70	10.73	8.65	17.24	7.65	36.62	35.62
2006	6.60	10.73	8.65	17.24	7.65	36.62	35.62

(1) Rates become effective on dates shown in given year. Biennial valuations were performed 1988-2000.

(2) Rate expressed as a percentage of the value of future fire insurance premium taxes over the value of future covered compensation.

(3) PERSI rate plus Statutory FRF rate plus additional rate.

(4) PERSI rate plus additional rate plus Social Security.

Idaho Firefighters' Retirement Fund

EXHIBIT 9: PROVISIONS OF GOVERNING LAW

This exhibit outlines our understanding of the laws governing the Firefighters' Retirement Fund (FRF), compared with the provisions that apply to firefighters of the Public Employee Retirement System of Idaho (PERSI), as contained in Sections 59-1301 through 59-1399 for PERSI and Sections 72-1401 through 72-1472 for FRF, inclusive of the Idaho Code through July 1, 2005. Each currently active firefighter hired before October 1, 1980 is entitled to receive the larger of (a) a benefit based on the FRF provisions, considering all of his service as a firefighter, and (b) a PERSI benefit, based on membership service beginning October 1, 1980 plus prior service rendered before July 1, 1965. Firemen hired October 1, 1980 and later (Class D members) are not entitled to FRF benefits.

In 1990, the law was changed to provide benefits to all members of FRF equally. Prior to the change, members hired after July 1, 1978 and before October 1, 1980 (Class C members) received a lower level of benefits. Class A members are members hired prior to July 1, 1976 who chose Option 1, where contributions are calculated on the basis of statewide average paid firefighter's salary. Benefits are based on the statewide average salary in effect at the date of retirement. Class B members are all Option 2 members hired prior to July 1, 1978, where contributions are calculated on the basis of the individual's annual average salary, but benefits are based on actual pay.

Retirement Provisions Affecting Firefighters in Idaho

July 1, 2006

	<u>Public Employee Retirement System</u>	<u>Firefighters' Retirement Fund</u>
Member Contribution Rate	7.65% of salary, increasing to 8.53% by July 1, 2008.	11.45% of salary. ⁽¹⁾
Service Retirement Allowance		
Eligibility	Age 60 with five years of service, including six months of membership service.	20 years of service. ⁽²⁾
Amount of Annual Allowance	2.30% of the highest 3.5-year average salary for each year of credited service.	40% of final five-year average salary ⁽¹⁾ plus 5.00% of average salary for each year of service in excess of 20 years.
Maximum Benefit	100% highest three-year average salary.	65% of final five-year average salary. ⁽¹⁾
Minimum Benefit	For retirement during or prior to 1974, \$72 annual allowance for each year of service, increasing in subsequent years at the rate of cost-of-living increases in retirement allowances.	None.

(1) *For firefighters employed prior to July 1, 1976 who chose Option 1, contributions are calculated on the basis of the statewide average paid firefighter's salary. Benefits are based on the statewide average salary in effect at the date of retirement.*

For firefighters employed prior to July 1, 1976 who chose Option 2, contributions are based on the individual members' salaries for the prior year. Benefits are based on actual pay.

(2) *Completed years of service. No partial years of service are recognized.*

 **Actuarial Section** 

	Public Employee Retirement System	Firefighters' Retirement Fund
Non-Duty Disability Retirement Allowance		
Eligibility	Five years of membership service.	Five years of service. ⁽²⁾
Amount of Annual Allowance	Projected service retirement allowance based on accrued service plus service projected to age 60 (projected service is limited to excess of 30 years over accrued service), less any amount payable under workers' compensation law.	2.00% of final five-year average salary ⁽¹⁾ times years of service ⁽²⁾ , or same as service retirement benefit if eligible.
Normal Form	Temporary annuity to age 60 plus any death benefit.	Payable for firefighter's lifetime, with 100% of benefit continued to eligible surviving spouse or children.
Duty Disability Retirement Allowance		
Eligibility	If hired after July 1, 1993, no service requirement, otherwise same as non-duty disability retirement.	No age or service requirements.
Amount of Annual Allowance	Same as non-duty disability retirement.	65% of final five-year average salary.
Normal Form	Same as non-duty disability retirement.	Same as non-duty disability retirement.
Special Disability Benefit		
Eligibility	Firefighters hired October 1, 1980 and prior to July 1, 1993, with less than 10 years of service.	None.
Benefit	Same as FRF disability benefit.	None.

(1) *For firefighters employed prior to July 1, 1976 who chose Option 1, contributions are calculated on the basis of the statewide average paid firefighter's salary. Benefits are based on the statewide average salary in effect at the date of retirement.*

For firefighters employed prior to July 1, 1976 who chose Option 2, contributions are based on the individual members' salaries for the prior year. Benefits are based on actual pay.

(2) *Completed years of service. No partial years of service are recognized.*

 **Actuarial Section** 

Public Employee Retirement System

Firefighters' Retirement Fund

Death Benefits Before Retirement

Eligibility	Five years of service for surviving spouse's benefit.	Non-duty death: Five years of service. ⁽²⁾ Duty death: No service requirement. Benefits are payable to surviving spouse or, if no eligible surviving spouse, to unmarried children under 18.
Amount of Benefit	<p>1. Accumulated contribution with interest, or</p> <p>2. The surviving spouse of a member with five years of service who dies while:</p> <ul style="list-style-type: none"> i. contributing; ii. noncontributing, but eligible for benefits; or iii. retired for disability <p>receives an automatic joint and survivor option applied to the actuarial equivalent of the member's accrued service retirement allowance.</p>	100% of the benefit the firefighter would have received as a duty or non-duty disability allowance, depending on cause of his death.
Normal Form	Payable for member's lifetime, with death benefit determined by option selected at retirement.	Payable for firefighter's lifetime, with 100% of benefit continued to eligible surviving spouse or children.
Optional Form	Actuarial equivalent of the normal form under the options available according to the mortality and interest basis adopted by the Board.	None.

Death Benefits After Retirement

Eligibility	Designated beneficiary or estate.	Surviving spouse or, if no eligible surviving spouse, unmarried children under 18.
Amount of Benefit	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.	100% of firefighter's retirement allowance.

(2) Completed years of service. No partial years of service are recognized.

 **Actuarial Section** 

	Public Employee Retirement System	Firefighters' Retirement Fund
Early Retirement Allowance		
Eligibility	Age 50 with five years of service including six months of membership service (contributing members only).	None.
Amount of Allowance	Full accrued service retirement allowance if age plus service equals 80; otherwise, the accrued service retirement allowance reduced by 3.00% for each of the first five years by which the early retirement date precedes the date the member would be eligible to receive his full accrued benefit, and by 5.75% for each additional year.	None.
Vested Retirement Allowance		
Eligibility	Former contribution members with five years of membership service are entitled to receive benefits after attaining age 50.	Firefighters who terminate after five years of service ⁽²⁾ are entitled to receive benefits beginning at age 60.
Amount of Allowance	Same as early retirement allowance.	2.00% of final five-year average salary times years of service ⁽²⁾ .
Withdrawal Benefit	Accumulated contributions with interest.	Accumulated contributions with interest.
Post-Retirement Increases		
Amount of Adjustment	<p>A 1.00% annual postretirement increase is effective each January. An additional postretirement increase of up to 5.00% each year may be authorized by the Board if it finds that the value of the System's assets are no less than its actuarial liabilities, including those created by the additional increase.</p> <p>Increases are based on a cost-of-living factor reflecting the changes in the Consumer Price Index, subject to a maximum total increase of 6.00% in any year.</p>	Benefits increase or decrease by the same percentage by which the average paid firefighter's salary increases or decreases.

(2) Completed years of service. No partial years of service are recognized.

October 20, 2006

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

Re: Actuarial Review

Dear Members of the Board:

At your request, we have performed a review of the 2004 and 2006 Investigations of Experience and the July 1, 2006 Annual Actuarial Valuation of the Public Employee Retirement System of Idaho (PERSI).

We find that the actuarial assumptions and methodologies appropriately develop actuarial values of the System. We have also replicated the results of the July 1, 2006 actuarial valuation, and there are no material differences in the valuation results.

Our specific findings are:

- The actuarial assumptions used in the valuations are reasonable and appropriate. We have identified a few areas where consideration of refinement may be warranted.
- The Entry Age Normal Funding Method is appropriate. Although the method as applied in the PERSI valuations utilizes the normal cost percentage somewhat differently than the usual application of the method, the modification does not materially impact the funding of the System.
- PERSI uses market value of assets in the actuarial valuation. This is a reasonable approach, but we have suggested that PERSI consider the pros and cons of using an asset valuation method that would smooth out short-term fluctuations in market value.
- Milliman is performing the actuarial function in a reasonable and acceptable manner.
- The valuations were prepared by fully qualified actuaries in accordance with applicable Actuarial Standards of Practice.
- The contribution rates recommended are reasonable and consistent with the funding objective of PERSI.
- Valuation results are reasonable and based on the appropriate benefits as described in the Idaho Statute.

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

Sincerely,

W. James Koss, ASA, EA, MAAA

Alan E. Sonnanstine, ASA, MAAA

WJK/AES:dm