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October 27, 2008

Board of Trustees
Oklahoma Public Employees Retirement System
5801 N. Broadway Extension, Suite 400
P.O. Box 53007
Oklahoma City, OK 73152-3007

**Re: Certification of July 1, 2008 Actuarial Valuation of the
Oklahoma Public Employees Retirement System (OPERS)**

Dear Members of Board:

At your request, we have completed an actuarial valuation of the Oklahoma Public Employees Retirement System (OPERS) as of July 1, 2008 for the purpose of determining the actuarial contribution rate for the fiscal year ending June 30, 2009 and calculating and analyzing key financial measurements. Actuarial valuations are performed annually. The valuation results reflect a new set of actuarial assumptions adopted by the Board in May 2008 as the result of an Experience Study. The Board also adopted a new methodology for amortizing the unfunded actuarial accrued liability, the level percent of payroll methodology. The valuation reflects the four percent COLA, for members who were retired as of June 30, 2007, granted by the 2008 legislature. However, the valuation process anticipates that a COLA will be granted so there was no impact on the unfunded actuarial accrued liability.

All of the information and supporting schedules in the Actuarial Section have been provided by Milliman, Inc. We also provided the *Schedule of Funding Progress* and *Schedule of Employer Contributions*, which appear in the Financial Section of the System's Annual Report.

In preparing our report, we relied, without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, member data and financial information. In our examination of these 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.

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 which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board (ASB) and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting recommendations of the American Academy of Actuaries.

We hereby further certify that, in our opinion, each actuarial assumption used is reasonably related to the experience of the System and to reasonable expectations which, in combination, represent our best estimate of anticipated experience under the System. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and has adopted the assumptions shown later in this section. The assumptions comply with the requirements of Statement 25 of the Governmental Accounting Standards Board.

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.

Actuarial computations presented in this report are for purposes of determining the actuarial contribution rates for funding the System. Actuarial computations under GASB Statement No. 25, as amended by GASB 50, are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ. The calculations in this report have been made on a basis consistent with our understanding of the System's funding requirements and goals, and of GASB Statement No. 25. 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.

In addition to these results, 74 Okla. Stat, Section 909.1(H) requires disclosure of valuation results under prescribed assumptions. This information is provided elsewhere in the System's Annual Report.

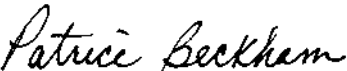
We would like to express our appreciation to the OPERS staff, who gave substantial assistance in supplying the data on which this report is based.

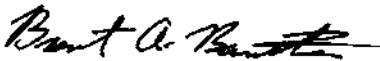
I, Patrice A. Beckham F.S.A., am a Member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

I, Brent A. Banister F.S.A., am a Member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

MILLIMAN, Inc.

Sincerely,


Patrice A. Beckham, F.S.A.
Consulting Actuary


Brent A. Banister, F.S.A.
Consulting Actuary

Summary of Principal Valuation Results

The key results for the July 1, 2008 valuation are presented below, along with a comparison to the prior valuation results.

	7/1/2008 Valuation	7/1/2007 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members*	45,120	44,712	0.9
Retired and Disabled Members and Beneficiaries	26,033	25,233	3.2
Inactive Members	5,580	5,637	(1.0)
Total Members	76,733	75,582	1.5
Projected Annual Salaries of Active Members*	\$ 1,682,663,413	\$ 1,626,737,832	3.4
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 376,147,494	\$ 346,932,229	8.4
*Includes "No Application" members			
2. ASSETS AND LIABILITIES			
Total Actuarial Accrued Liability	\$ 8,894,287,254	\$ 8,413,248,130	5.7
Market Value of Assets	6,255,207,565	6,640,477,411	(5.8)
Actuarial Value of Assets	6,491,928,362	6,110,230,058	6.2
Unfunded Actuarial Accrued Liability	2,402,358,892	2,303,018,072	4.3
Funded Ratio	73.0%	72.6%	0.6
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost Rate	12.46%	12.34%	1.0
Amortization of Unfunded Actuarial Accrued Liability	10.13%	13.39%	(24.3)
Budgeted Expenses	<u>0.39%</u>	<u>0.40%</u>	(2.5)
Actuarial Required Contribution Rate	22.98%	26.13%	(12.1)
Less Estimated Member Contribution Rate	<u>4.04%</u>	<u>4.02%</u>	0.5
Employer Actuarial Required Contribution Rate	18.94%	22.11%	(14.3)
Less Statutory State Employer Contribution Rate	<u>14.50%</u>	<u>13.50%</u>	7.4
Contribution Shortfall	4.44%	8.61%	(48.4)

Summary of Actuarial Assumptions and Methods

1. The investment return rate used in the valuation was 7.5 percent per year, net of investment expenses, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of return in excess of the inflation rate. Considering other financial assumptions, the 7.5 percent investment return rate translates to an assumed real rate of return of 4.5 percent.
2. The RP-2000 Mortality Table projected to 2010 using Scale AA for males and females is used for preretirement and postretirement mortality for all non-disabled members and beneficiaries.
3. The probabilities of withdrawal from service, together with individual pay increase assumptions, are shown in Schedule 1.
4. The probabilities of retirement with an age and service allowance are shown in Schedules 2A, 2B and 2C.
5. Benefits are assumed to increase two percent each year due to future ad hoc cost-of-living increases.
6. The individual entry-age normal actuarial cost method of valuation was used in determining actuarial accrued liability and normal cost. Actuarial gains and losses reduce or increase the unfunded actuarial accrued liability and are amortized over the remaining amortization period (19 years as of July 1, 2008). The amortization method was changed this year from level dollar to level percent of pay method.
7. The actuarial value of assets is based on a five-year moving average of expected actuarial values and market values. A preliminary expected value is determined equal to the prior year's actuarial value of assets plus net cash flow for the year ending on the valuation date, assuming the valuation investment return. The expected actuarial asset value is equal to the preliminary expected actuarial value plus the unrecognized investment gains and losses as of the beginning of the previous fiscal year. Twenty percent (20%) of the gain/loss as measured by the difference between the expected actuarial value and the market value at the valuation date is added to the preliminary expected actuarial value plus twenty percent (20%) of the unrecognized gains or losses for the four preceding fiscal years. The final result is constrained to a value no less than 80% and no more than 120% of the market value at the valuation date.
8. The actuarial assumptions and methods used in the valuation were adopted by the Board based upon the recommendations of the actuary. The assumptions and methods used for the July 1, 2008 valuation were adopted by the Board based on System experience through June 30, 2007.
9. There were changes in the actuarial assumptions since the prior valuation including
 - Increase the inflation assumption from 2.50% to 3.00%.
 - Set the general wage growth assumption to 4.25%.
 - Modify retirement rates for Regular, Elected and Hazardous Duty employees.
 - Extend the select period for the termination of employment assumption from 5 to 10 years
 - Introduce a new assumption regarding election of a refund by terminating vested members.

Summary of Actuarial Assumptions and Methods (continued)

10. There were three changes in the plan provisions since the prior valuation:

- 1) A four percent (4%) COLA for members who were retired as of June 30, 2007 and still receiving a benefit as of July 1, 2008.
- 2) A retiree may not return to work with the same agency for a period of one year unless the member waives the receipt of their OPERS benefit and returns to work as a regular employee. This also applies to performing services under contract with the same employer.
- 3) A benefit cap of 100% of a member's highest annual salary applies for current OPERS members who are elected after August 21, 2008. Members who are elected officials prior to the effective date of August 21, 2008 are not affected. Members who join OPERS after August 21, 2008 receive a benefit comprised of two separate calculations. Their non-elected years will be multiplied by 2%, and their elected years multiplied by the applicable percentage elected and paid for by the member.

The four percent (4%) COLA is reflected in the valuation results. However, the valuation process anticipates that a COLA will be granted so there was no change in the unfunded actuarial accrued liability resulting from the legislation. Although items (2) and (3) are expected to have a positive impact on the System's funding over the long term, they had no impact on the valuation results.

Summary of Actuarial Assumptions and Methods (continued)

Schedule 1

Withdrawal From Active Employment Before Age & Service Retirement and Individual Pay Increase Assumptions

Sample Ages	Withdrawal After Ten- Year Select Period	Percent Increase in Individual's Pay During Next Year
25	8.00%	8.4%
30	8.00	7.1
35	6.80	6.2
40	4.80	5.9
45	3.20	5.6
50	3.20	5.2
55	3.20	5.1

Schedule 2A

Percent of Eligible Non-Elected Active Members Retiring Within Next Year Those Eligible for Unreduced Retirement

Retirement Ages	Percent	Retirement Ages	Percent
50	20%	61	20%
51	20%	62	30%
52	20%	63	15%
53	20%	64	15%
54	20%	65	30%
55	10%	66	20%
56	10%	67	20%
57	11%	68	20%
58	12%	69	25%
59	13%	70	100%
60	14%		

Summary of Actuarial Assumptions and Methods (continued)

Schedule 2B

**Percent of Eligible Non-Elected Active Members Retiring Within Next Year
Those Not Eligible for Unreduced Retirement and
Department of Corrections Members With Less Than 20 Years of Service**

Retirement Ages	Percent	Retirement Ages	Percent
55	4%	63	22%
56	5%	64	25%
57	5%	65	40%
58	6%	66	25%
59	7%	67	23%
60	7%	68	22%
61	20%	69	21%
62	40%	70	100%

Schedule 2C

**Percent of Eligible Active Members Retiring Within Next Year
Department of Corrections Members With More Than 20 Years of Service**

Service	Percent
20	20%
21 – 24	15%
25 – 29	20%
30 – 34	25%
35	100%

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll ¹	Annual Average Pay	% Increase in Average Pay
July 1, 2008	45,120	\$1,682,663,413	\$37,293	2.50
July 1, 2007	44,712	1,626,737,832	36,383	5.49
July 1, 2006	45,472	1,568,350,023	34,490	4.16
July 1, 2005	43,918	1,454,210,509	33,112	2.88
July 1, 2004	43,000	1,383,965,233	32,185	(1.17)
July 1, 2003	43,350	1,411,719,256	32,566	(0.55)
July 1, 2002	44,292	1,450,317,127	32,745	8.64
July 1, 2001	43,696	1,317,043,030	30,141	2.94
July 1, 2000	43,775	1,281,505,876	29,279	5.96
July 1, 1999	44,116	1,219,031,066	27,633	3.84

¹The annual payroll shown above differs from the covered payroll shown in the Financial Section. The annual payroll reflects total compensation paid during the fiscal year. (The covered payroll reflects compensation up to the maximum compensation levels applicable for that year on which employee and employer contributions are based).

Schedule of Retirants, Disabled Retirants, and Beneficiaries Added to and Removed from Rolls

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase in Annual Allowances	Average Annual Allowances
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances		
June 30, 2008	1,526	\$23,815,666	790	\$8,508,891	26,033	\$376,147,494	8.42	\$14,449
June 30, 2007	1,620	25,583,722	759	8,045,442	25,233	346,932,229	5.21	13,749
June 30, 2006	1,413	19,788,298	720	7,124,367	24,372	329,736,666	7.96	13,529
June 30, 2005	1,483	22,520,925	794	7,927,922	23,679	305,435,002	4.88	12,899
June 30, 2004	1,554	21,706,661	711	6,847,103	22,990	291,233,630	9.27	12,668
June 30, 2003	1,406	19,968,509	711	6,364,104	22,147	266,566,903	5.20	12,036
June 30, 2002	1,305	17,512,521	716	6,241,483	21,452	253,395,228	10.11	11,812
June 30, 2001	1,309	16,663,109	752	6,718,226	20,863	230,121,114	4.66	11,030
June 30, 2000	1,344	15,679,120	671	5,324,291	20,306	219,877,693	9.63	10,828
June 30, 1999	1,303	13,425,106	629	5,311,921	19,633	200,555,038	4.88	10,215

Analysis of Financial Experience

Gains & Losses in Actuarial Accrued Liability During the Year Ended June 30, 2008 Resulting from Differences Between Assumed Experience & Actual Experience

Type of Activity	(Gain) or Loss for Year 2008
1. Age & Service Retirements. Generally, if members retire at older ages or with greater benefits than assumed, there is a gain. If they retire at younger ages or have higher average pays, a loss occurs.	\$ 11,000,000
2. Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	4,400,000
3. Deaths. If more deaths occur than assumed, there is a gain. If fewer, there is a loss.	(70,400,000)
4. Withdrawal from Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	33,000,000
5. Pay Increases. If there are smaller pay increase than assumed, there is a gain. If greater increases, a loss.	(42,100,000)
6. New Entrants. All new entrants to the System create a loss.	33,800,000
7. Other. Miscellaneous gains and losses resulting from data adjustments, employee transfers, valuation methods, etc.	14,100,000
8. (Gain) or Loss During Year From Financial Experience.	<u>(36,000,000)</u>
9. Composite (Gain) or Loss During Year.	<u>\$ (52,200,000)</u>

Summary of System Provisions

<i>Effective Date:</i>	The System became effective January 1, 1964. The fiscal year is July 1 to June 30.
<i>Employees Included:</i>	<p>All permanent employees of the State of Oklahoma, legislated agencies, and any other employer such as county, county hospital, city, or trust in which a municipality is the primary beneficiary, are eligible to join if:</p> <ul style="list-style-type: none">• the employee is not eligible for or participating in another retirement system authorized under Oklahoma law, is covered by Social Security and not participating in the U.S. Civil Service Retirement System,• the employee is scheduled for 1,000 hours per year and salary is not less than the hourly rate of the monthly minimum wage for State employees (for employees of local government employers, not less than the hourly rate of the monthly minimum wage for such employees). <p>Membership is mandatory for new eligible employees on the first of the month following employment.</p>
<i>Employee and Employer Contributions:</i>	3.5% of pay for most State employees and 13.5% for employers with scheduled increases of 1.0% each year until fiscal year 2011. Local employees, elected officials, members covered by the Department of Corrections Hazardous Duty provisions, and members who elect the step up provision contribute at varying rates.
<i>Final Average Compensation:</i>	Generally the highest annual average of any thirty-six months within the last ten years of participating service.
<i>Retirement Date:</i>	
<i>Normal:</i>	Age 62 (age 60 for elected officials), 80 age/service points if hired before July 1, 1992, 90 age/service points if hired on or after July 1, 1992. 20 years of service for certain members covered by the Department of Corrections Hazardous Duty provisions and certain Oklahoma Military Department Firefighters.
<i>Early:</i>	Age 55 with 10 years of service.
<i>Normal Retirement Benefit:</i>	General formula is 2% of final average compensation multiplied by years of credited service.

Summary of System Provisions (continued)

<i>Disability Benefit:</i>	After eight years of service, provided the member qualifies for disability benefits as certified either by the Social Security Administration or the Railroad Retirement Board. Benefit is determined by the normal retirement formula based on service and salary history at date of disability. The benefit is payable immediately without actuarial reduction.
<i>In-service Death Benefit:</i>	<p>If the deceased member was vested, the benefit that would have been paid the member had he retired and elected the joint and 100% survivor option (Option B).</p> <p>For elected officials, it is 50% of the benefit that would have been paid the member had he retired.</p>
<i>Postretirement Death Benefit:</i>	\$5,000 lump-sum.
<i>Forms of Payment:</i>	Life annuity, joint and 50% survivor, joint and 100% survivor annuity, life annuity with a minimum of 120 monthly payments, and Medicare Gap Benefit option.
<i>Supplemental Medical Insurance Premium:</i>	The System will contribute the lesser of \$105 per month or the Medicare Supplement Premium to the Oklahoma State and Education Employee's Group Health Insurance Program (or other eligible employer health plans) for members receiving retirement benefits.

Solvency Test

The OPERS funding objective is to be able to pay long-term benefit promises through contributions that remain approximately level from year to year as a percent of salaries earned by members. In this way, members and employers in each year pay their fair share for retirement service accrued in that year by OPERS members.

If the retirement system follows level contribution rate financing principles, the system will pay all promised benefits when due – the ultimate test of financial soundness.

A short-term solvency test is one means of monitoring OPERS funding progress. In a short-term solvency test, the retirement System's present valuation assets are compared with: 1) active member contributions on deposit, 2) the liabilities for future benefits to persons who have retired and the liabilities for terminated employees with vested benefits, and 3) the liabilities for service already rendered by active members. In a system that has been following the discipline of level contribution rate financing, the liabilities for member contributions on deposit (liability 1), the liabilities for future benefits to present retirees and the liabilities for future benefits for terminated employees (liability 2) will be fully covered by present assets, except in rare circumstances.

In addition, the liabilities for service already rendered by members (liability 3) will be partially covered by the remainder of present assets. Generally, if the system has been using level contribution rate financing, the funded portion of liability 3 will increase over time; however, a decrease generally occurs in those years when substantial benefit improvements are granted by the Legislature. It is unusual for liability 3 to be fully funded. The funded ratio of the System based on total actuarial accrued liabilities (1 + 2 + 3) provides an indication of how well the System is funded.

The schedule below illustrates the progress of funding the actuarial accrued liabilities of OPERS.

Actuarial Accrued Liability and Valuation Assets (in thousands)						Portion of Actuarial Accrued Liability Covered by Reported Assets			
Date	Active Member Contributions (Liability 1)	Retirees, Beneficiaries and Terminated Vested Members (Liability 2)	Employer Financed Portion of Active Members (Liability 3)	Total Liability (1 + 2 + 3)	Reported Assets ¹	(1)	(2)	(3)	Funded Ratio of Total Accrued Actuarial Liability
July 1, 1999	254,787	2,455,786	2,469,212	5,179,785	4,261,624	100	100	62.8	82.3 ²
July 1, 2000	277,697	2,723,695	2,693,333	5,694,725	4,785,555	100	100	66.2	84.0
July 1, 2001	285,434	3,068,730	2,836,064	6,190,228	5,110,227	100	100	61.9	82.6
July 1, 2002	314,610	3,114,272	3,210,838	6,639,720	5,299,781	100	100	58.3	79.8
July 1, 2003	337,656	3,458,516	3,178,411	6,974,583	5,354,796	100	100	49.0	76.8
July 1, 2004	357,219	3,636,307	3,121,252	7,114,778	5,412,167	100	100	45.5	76.1
July 1, 2005	377,543	3,908,960	3,288,917	7,575,420	5,450,665	100	100	35.4	72.0
July 1, 2006	383,990	4,069,604	3,461,064	7,914,658	5,654,276	100	100	34.7	71.4
July 1, 2007	409,159	4,363,690	3,640,399	8,413,248	6,110,230	100	100	36.7	72.6
July 1, 2008	439,754	4,623,210	3,831,323	8,894,287	6,491,928	100	100	37.3	73.0

¹Actuarial value of assets based on the smoothing technique adopted by Board.

²Decrease from prior year is mostly due to the addition of a 2% annual ad hoc COLA assumption.