

# ACTUARIAL VALUATION OF THE OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

As of July 1, 2009

### Prepared by

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November 2009

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November 4, 2009

Mr. Danny Lambert Accounting Manager Oklahoma County 320 Robert S. Kerr, Suite 203 Oklahoma City, Oklahoma 73102

Re: Oklahoma County Post Employment Benefits Plan July 1, 2009 GASB 45 Valuation

Dear Mr. Lambert:

As requested, we have prepared an actuarial valuation of the retiree health and life insurance benefits covering the Oklahoma County retired employees.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the Oklahoma County. This information includes, but is not limited to; benefit descriptions, employee 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 or if our assumptions regarding incomplete data are incorrect. 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 information is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We further certify that all costs, liabilities, rates of interest, and other factors under the Plan have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Plan and reasonable expectations) and which, in combination, offer our best estimate of anticipated experience affecting the plan. Nevertheless, the emerging costs will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions. The members' demographic assumptions used in this report were based on those developed for the Oklahoma Public Employees Retirement System (OPERS) valuation as of June 30, 2007. The selection of these assumptions, as discussed with the Oklahoma County Human Resources staff, is based on the assumption that the County's employee and retiree demographics and experience will be similar to the OPERS. The County's experience should be monitored to determine whether continued use of OPERS assumptions are appropriate, or if



Mr. Danny Lambert November 4, 2009 Page 2

the County should use modified assumptions to reflect its own experience. The economic assumptions were also discussed with staff and are based on information regarding asset allocation for the County's funds.

The Other Postemployment Benefits (OPEB) and health cost assumptions were developed by Milliman, and are summarized in Appendix A.

Actuarial computations under GASB No. 45 are for purposes of fulfilling financial accounting requirements for the Oklahoma County (the employer). The calculations in the enclosed exhibits have been made on a basis consistent with our understanding of GASB No. 45. Determinations for purposes other than meeting these financial accounting requirements may be significantly different from the results contained in these exhibits. Accordingly, additional determinations may be needed for other purposes.

This report may not be distributed to any 3<sup>rd</sup> party, to the extent not covered by public records disclosure, unless written consent from Milliman is obtained, in which case the report must be distributed in its entirety. Milliman hereby consents disclosure to the County's auditor for preparation of the County's financial statements. Milliman's work product was prepared exclusively for the County under our contract with the County for a specific and limited purpose. It is a complex technical analysis that assumes a high level of knowledge concerning the County's operations, and uses the County's data and other data provided Milliman, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

We would like to express our appreciation to the County's staff members, especially Debra Clark and Chuck Phillips, who gave substantial assistance in supplying the data on which this report is based. We respectfully submit the following report, and we look forward to discussing it with you.

I, Patricia Ann Kahle, am a Consulting Actuary for Milliman, a member of the American Academy of Actuaries, Fellow of the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

Patricia Ann Kahle, FSA, MAAA, EA Principal and Consulting Actuary

PAK:wp



# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

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# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

# SECTION 1 EXECUTIVE SUMMARY

This report presents the results of our valuation of the Oklahoma County Post Employment Benefits Plan. The purpose of this valuation is to determine the County's Actuarial Accrued Liability (AAL), determine the Annual Required Contribution (ARC), and calculate the disclosure information that is required under the Government Accounting Standards Board, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" Statement Number 45 (GASB No. 45) for fiscal year ending June 30, 2010.

### **GASB No. 45 Reporting Standards**

The results of this valuation have been prepared in accordance with the Government Accounting Standards Board, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" Statement Number 45 (GASB No. 45). GASB No. 45 establishes standards of accounting and financial reporting for postemployment benefits other than pensions, or Other Postemployment Benefits<sup>1</sup> (OPEB). These standards generally take an approach that is consistent with the approach taken in GASB No. 27, "Accounting for Pensions by State and Local Governmental Employers", although certain requirements of GASB No. 45 differ from those requirements to reflect differences between pension benefits and OPEB.

The standard generally requires the measurement of an Annual OPEB Cost and the measurement of the Net OPEB Obligation. The Annual OPEB Cost in the first year of implementation of GASB No. 45 equals the ARC, calculated in accordance with the parameters set forth in GASB No. 45 paragraphs 12 and 13. In subsequent years, the Annual OPEB Cost will equal the ARC, plus an adjustment if the ARC is not funded each year. The standard also sets forth required supplementary information that will need to be included in the County's financial reports to provide historical trend information for the plan: a schedule of funding progress and a schedule of employer contributions as they relate to the plan's ARC. GASB No. 45 covers the benefits provided under the Oklahoma County Post Employment Benefits Plan.

The AAL of the Post Employment Benefits Plan under GASB No. 45 must be actuarially determined in accordance with one of the six acceptable actuarial cost methods set forth in the statement. For this report, we utilized the Projected Unit Credit actuarial cost method (PUC); one of those permitted under the GASB No. 45 parameters. Table 2 displays the AAL of the Post Employment Benefits Plan under PUC. Since there are no assets set aside to pay benefits under the plan, this is also the Unfunded Actuarial Accrued Liability (UAAL) of the plan. This UAAL is used in part to determine the County's ARC.

The County's ARC is the cost of the retiree health benefits accruing during the year, called the Normal Cost, plus amortization of the UAAL. GASB 45 permits an amortization period of 10-30

<sup>&</sup>lt;sup>1</sup> See the Glossary of Terms in Appendix D for terms that appear in capital letters.



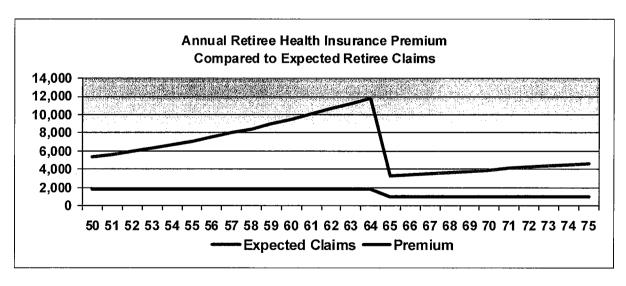
years for the UAAL, and the amortization may be based on a level dollar amount or an increasing amount as a level percentage of expected future pay. This valuation uses an amortization period of 30 years as a level percent of pay to amortize the UAAL as of July 1, 2009 as discussed with Danny Lambert, Accounting Manager. If the County selects a different amortization method, then our results will be different and the ARC will need to be recalculated.

The development of the 2009 ARC is shown in Table 4. The following table summarizes the County's AAL and ARC as of July 1, 2009.

	Health Care Plan	 Life Plan	Total
AAL	\$134,342,551	\$ 1,261,827	\$135,604,378
ARC	\$ 14,086,176	\$ 55,951	\$ 14,142,127

#### **Retiree Contributions**

The actual premium charged to the retiree for coverage is a flat rate for retirees pre- and post-Medicare eligibility, based upon plan coverage selected and regardless of age. As illustrated below, this flat rate is less than the expected claims for most ages. The expected claims displayed below assume a male retiree, and the premium is for the retiree only (no spouse coverage), and represents the retiree paid portion only (i.e. net of the employer contribution). The drop in expected claims at age 65 occurs because Medicare will begin covering a portion of health care costs at age 65.



The difference between the premiums collected and the expected claims is the AAL of the plan.

### **Projected Claims and Contributions**

Table 3 shows the projected claims, net of retiree contributions, for current and future retirees.



### **Assumptions, Data and Procedures**

GASB No. 45 specifies the use of actuarial assumptions based on the actual experience of the covered group, to the extent credible experience is available. The *Milliman Health Cost Guidelines*<sup>TM</sup>, developed by Milliman health actuaries, were used to establish a smooth claim cost curve by age. Sample claims costs and a description of the determination method used are set forth in Appendix A of this report.

Several significant assumptions were utilized in developing the figures presented in this report. In particular, significant assumptions affecting our valuation results include the medical claims costs assumptions, the medical trend assumptions and the discount rate. We determined the 2009 ARC based on a 4.5% discount rate, and 3.0% salary growth (based on discussions with County staff). We believe the 4.5% discount rate is an appropriate return for an unfunded plan based upon the County's current general fund asset allocation, and is consistent with the requirements of GASB No. 45. The salary growth assumption does not impact the UAAL, but does impact the amortization of the UAAL in determining the ARC, for those calculations of the ARC as a level percentage of payroll. A summary of the medical claims costs is shown in Appendix A, along with a discussion of the development of those assumptions.

For this valuation, we changed the medical trend rate from the 2007 valuation to a trend using the Getzen Model with the trend rate beginning in 2009 at 9.0% pre and post-Medicare eligible, grading to 4.7% over 58 years. Dental and Vision Trend rate is assumed to be 5%. Retiree premiums are assumed to increase at the same trend as the respective expected claims cost. We believe the trends reflected in this valuation are in line with long term expectations for increases in medical and dental costs.

We assumed 90% of future retired participants would opt for retiree health care coverage, and 100% of current retired participants would continue coverage. We also assumed that 45% of future retirees who opt for health care coverage would cover a spouse at retirement. Current retirees' spousal coverage was based upon their current coverage status. We assume 35% of future retirees eligible for coverage in the Life Insurance plan will opt for coverage upon retirement, as discussed with the Human Resources department.

The retiree benefit plan provisions are summarized in Appendix B.

The demographic data we received from the County as of July 1, 2009 is summarized in Appendix C.

GASB No. 45 methodology and terminology are explained in Appendices A and D.

#### **Experience Review**

The retiree medical portion of the unfunded actuarial accrued liability increased from \$74,435,252 on July 1, 2007 to \$134,342,551 on July 1, 2009, an increase of \$59,907,299. We expected the unfunded actuarial liability to increase by \$14,722,988, to \$89,158,240, if all our assumptions were met and no changes to the plan or assumptions were made. A detailed accounting of sources of the gain/loss follows:



\$ 74,435,252
\$ 89,158,240
\$ (3,200,344)
(2,896,609)
37,152,515
8,065,480
 6,063,269
\$ 45,184,311
\$ 134,342,551
\$

There was a gain of \$3,200,344 due to demographic experience different than expected, including higher than expected turnover. In addition, the election percentage was changed from 95% to 90% due to plan experience, producing a gain of \$2,896,609. These assumptions will be reexamined in 2011 when we have accumulated four total years of experience.

The most significant cause of the increase in the unfunded actuarial accrued liability is the higher than expected claims costs which produced a loss of \$37,152,515. On review of the claims data from 2007 to 2009, we found that the 2007 data did not include pharmacy claims. There was also a lower than expected increase in the retiree premiums resulting in a loss of \$8,065,480. In examining the data we found that the premiums for participants under age 65 increased about as expected, however the premiums for retirees over age 65 decreased.

The medical trend assumption was also changed to utilize the Getzen trend model. The Getzen trend model is the new standard for the medical assumption.

The retiree life portion of the unfunded actuarial accrued liability decreased from \$1,379,070 on July 1, 2007 to \$1,261,827 on July 1, 2009, a decrease of \$117,243. We expected the unfunded actuarial liability to decrease by \$17,187, to \$1,361,883, if all our assumptions were met and no changes to the plan or assumptions were made. This created a gain for this portion of the plan of \$100,056. This small gain is attributable to demographic experience different than expected, including the clean-up of member data utilized in the 2007 valuation.

### Variability of Results

The results contained in this report represent our best estimates. However, variation from these or any other estimates of future retiree health costs is not only possible but probable. Actual future costs may vary significantly from estimates in this report.

Retiree health costs are especially difficult to estimate due to the uncertainty of future medical costs. These uncertainties result not only from general medical care inflation but also due to the integration with Medicare for retirees over age 65.



# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

# SECTION 2 SUMMARY OF THE LIABILITIES

Table 1 displays the Actuarial Present Value of Total Projected Benefits (PVB) for the Oklahoma County Post Employment Benefits Plan. Total projected benefits include all retiree health benefits estimated to be payable to plan members (retirees and dependents, and current active members) as a result of their service through the valuation date and their expected future service. The PVB as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value of money and the probabilities of payment.

Actuarial Cost Methods are used to allocate the PVB to time periods. The Actuarial Accrued Liability (AAL) represents the portion of the PVB that is not provided for by future Normal Costs and is thus the amount of the liability considered to be accrued at the valuation date. Actuarial Cost Methods accrue benefits over the working lifetime of employees, from the date of hire to the date of assumed exit from employment. The Normal Cost is the portion of the PVB allocated to a valuation year by the Actuarial Cost Method.

Table 2 summarizes the AAL of the Oklahoma County Post Employment Benefits Plan under the Projected Unit Credit actuarial cost method (PUC).

Table 3 displays the estimated payout projection for the next twenty years.



### OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

# ACTUARIAL PRESENT VALUE OF TOTAL PROJECTED BENEFITS (PVB) JULY 1, 2009

	(a)	(b)	(c)	1	(d)		(e)		<b>(f)</b>	(g)
	Future Medical Claims	Retiree Premiums	Net Medical Claims (a) - (b)		Future Life Insurance Claims	_	Retiree nsurance Premiums	Ne	et Insurance Claims (d) - (e)	Net Claims (c) + (f)
Retirees and Dependent	S									
Pre-Medicare Eligible	\$ 17,748,725	\$ 4,121,548	\$ 13,627,177							
Post-Medicare Eligible	46,106,027	10,069,584	36,036,443							
Total	\$ 63,854,752	\$ 14,191,132	\$ 49,663,620	\$	1,678,058	\$	483,005	\$	1,195,053	\$ 50,858,673
Active Employees										
Pre-Medicare Eligible	\$ 81,135,601	\$ 18,238,415	\$ 62,897,186							
Post-Medicare Eligible	<u> 142,199,428</u>	<u>32,643,692</u>	109,555,736							
Total	\$223,335,029	\$ 50,882,107	\$172,452,922	\$	186,163	\$	107,684	\$	78,479	\$172,531,401
Total	\$287,189,781	\$ 65,073,239	\$222,116,542	\$	1,864,221	\$	590,689	\$	1,273,532	\$223,390,074



### OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

# ACTUARIAL ACCRUED LIABILITY (AAL) JULY 1, 2009

	(a)	(b)	(c)	ı	(d)	(e)		(f)	(g)
	Future Medical Claims	Retiree Premiums	Net Medical Claims (a) - (b)		Future Life Insurance Claims	Retiree Insurance Premiums	Ne	et Insurance Claims (d) - (e)	Net Claims (c) + (f)
Retirees and Dependent	s								
Pre-Medicare Eligible	\$ 17,748,725	\$ 4,121,548	\$ 13,627,177						
Post-Medicare Eligible	46,106,027	10,069,584	36,036,443						
Total	\$ 63,854,752	\$ 14,191,132	\$ 49,663,620	\$	1,678,058	\$ 483,005	\$	1,195,053	\$ 50,858,673
Active Employees									
Pre-Medicare Eligible	\$ 39,864,752	\$ 8,976,735	\$ 30,888,017						
Post-Medicare Eligible	69,783,569	<u> 15,992,655</u>	53,790,914						
Total	\$109,648,321	\$ 24,969,390	\$ 84,678,931	\$	159,283	\$ 92,509	\$	66,774	\$ 84,745,705
Total	\$173,503,073	\$ 39,160,522	\$134,342,551	\$	1,837,341	\$ 575,514	\$	1,261,827	\$135,604,378



### OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

### **PROJECTED COUNTY PAID BENEFITS**

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Year Beg. July 1,	Projected Current Retiree Claims	Projected Future Retiree Claims	Total Projected Medical Claims (a) + (b)	Projected Retiree Premiums	Projected Net Medical Claims (c) - (d)	Projected Life Ins. Claims	Projected Life Ins. Premiums	Projected Net Life Insurance Premiums (f) - (g)	Total Projected Net Claims (e) + (h)
2009	3,105,000	373,000	3,478,000	828,000	2,650,000	124,000	48,000	76,000	2,726,000
2010	3,244,000	957,000	4,201,000	995,000	3,206,000	125,000	47,000	78,000	3,284,000
2011	3,395,000	1,584,000	4,979,000	1,172,000	3,807,000	125,000	46,000	79,000	3,886,000
2012	3,536,000	2,177,000	5,713,000	1,341,000	4,372,000	124,000	45,000	79,000	4,451,000
2013	3,573,000	2,786,000	6,359,000	1,501,000	4,858,000	123,000	45,000	78,000	4,936,000
2014	3,658,000	3,416,000	7,074,000	1,665,000	5,409,000	122,000	43,000	79,000	5,488,000
2015	3,696,000	4,086,000	7,782,000	1,829,000	5,953,000	120,000	42,000	78,000	6,031,000
2016	3,706,000	4,789,000	8,495,000	1,992,000	6,503,000	118,000	41,000	77,000	6,580,000
2017	3,684,000	5,391,000	9,075,000	2,139,000	6,936,000	116,000	40,000	76,000	7,012,000
2018	3,724,000	6,133,000	9,857,000	2,308,000	7,549,000	114,000	38,000	76,000	7,625,000
2019	3,697,000	6,933,000	10,630,000	2,479,000	8,151,000	111,000	37,000	74,000	8,225,000
2020	3,738,000	7,617,000	11,355,000	2,647,000	8,708,000	109,000	35,000	74,000	8,782,000
2021	3,759,000	8,335,000	12,094,000	2,814,000	9,280,000	106,000	34,000	72,000	9,352,000
2022	3,734,000	9,025,000	12,759,000	2,977,000	9,782,000	103,000	32,000	71,000	9,853,000
2023	3,599,000	10,009,000	13,608,000	3,160,000	10,448,000	100,000	31,000	69,000	10,517,000
2024	3,548,000	10,748,000	14,296,000	3,325,000	10,971,000	97,000	29,000	68,000	11,039,000
2025	3,574,000	11,552,000	15,126,000	3,507,000	11,619,000	94,000	28,000	66,000	11,685,000
2026	3,542,000	12,273,000	15,815,000	3,666,000	12,149,000	91,000	26,000	65,000	12,214,000
2027	3,564,000	12,951,000	16,515,000	3,831,000	12,684,000	88,000	25,000	63,000	12,747,000
2028	3,497,000	13,670,000	17,167,000	3,989,000	13,178,000	85,000	23,000	62,000	13,240,000



# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

# SECTION 3 DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION AND REQUIRED FINANCIAL STATEMENT DISCLOSURES

The actuarial valuation is prepared under the Projected Unit Credit (PUC) actuarial cost method. Under the principles of the PUC method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated pro-rata to each year of service between entry age and assumed exit. This is referred to as the Actuarial Accrued Liability (AAL).

The portion of this actuarial present value allocated to a valuation year is called the Normal Cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets (if the benefits are funded), and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL). The UAAL is amortized as a level percentage of the projected salaries of the active members, both present and future, over a 30-year period from the valuation date; this is commonly referred to as a "rolling 30 year amortization method". At the County's request we calculated results based on a 30-year level percent of pay basis for illustrative purposes, but the County and its auditor should select an appropriate method within the parameters of GASB No. 45. If the County selects a different amortization method, then our results will be different and the ARC will need to be recalculated.

The Annual Required Contribution (ARC) of the employer is actuarially determined in accordance with Statement No. 45 of the Governmental Accounting Standards Board (GASB No. 45).

Table 4 shows the derivation of the ARC for this valuation under several UAAL amortization scenarios. Table 5 contains the additional Required Financial Statement Disclosure information.



# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

# DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION (ARC) OF THE EMPLOYER

	Health Care Plan	Life Insurance Plan	Total
1. Actuarial Accrued Liability			
a. For retirees and dependents	\$ 49,663,620	\$ 1,195,053	\$ 50,858,673
b. For active participants	<u>84,678,931</u>	<u>66,774</u>	<u>84,745,705</u>
c. Total [(a) + (b)]	\$ 134,342,551	\$ 1,261,827	\$ 135,604,378
2. Actuarial Value of Assets	\$ 0	\$ 0	\$ 0
3. Unfunded Actuarial Accrued Liability [(1) – (2)]	\$ 134,342,551	\$ 1,261,827	\$ 135,604,378
4. Normal Cost	\$ 8,000,061	\$ 2,074	\$ 8,002,135
<ol><li>Amortization of Unfunded Actuarial Accrued Liability</li></ol>	5,479,533	51,467	5,531,000
6. Interest to End of Year	606,582	2,410	608,992
7. Annual Required Contribution [(4) + (5) + (6)]	\$ 14,086,176	\$ 55,951	\$ 14,142,127



Table 5

# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

### REQUIRED FINANCIAL STATEMENT DISCLOSURES

### **DETERMINATION OF NET OPEB OBLIGATION**

For Fiscal Year Ending:	6/30/2010	6/30/2009	6/30/2008
1. Annual Required Contribution (ARC)	\$14,142,127	\$ 8,576,713	\$ 8,576,713
2. Interest on Prior Year Net OPEB Obligation	635,390	326,147	0
3. Adjustment to ARC	<u>575,914</u>	295,618	0
4. Annual OPEB Cost [(1) + (2) - (3)]	\$14,201,603	\$ 8,607,242	\$ 8,576,713
5. Contribution*		1,735,189	1,328,991
6. Increase in Net OPEB Obligation [(4) - (5)]	\$	\$ 6,872,053	\$ 7,247,722
Net OPEB Obligation – Beginning of Year	\$14,119,775	\$ 7,247,722	\$ 0
Estimated Net OPEB Obligation – End of Year	\$	\$14,119,775	\$ 7,247,722

### ANNUAL OPEB COST AND NET OPEB OBLIGATION

Fiscal Year Ended	 Annual OPEB Cost	% of OPEB Cost Contributed	Net OPEB Obligation	
6/30/2008	\$ 8,576,713	15.5%	\$	7,247,722
6/30/2009	\$ 8,607,242	11.7%	\$	14,119,775
6/30/2010	\$ 14,204,661	pending		pending

### SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Va	tuarial lue of ssets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio		vered lyroll	UAAL as a % of Payroll
7/1/2005		N/A	N/A	N/A	N/A		N/A	N/A
7/1/2007	\$	0	\$ 75,814,322	\$ 75,814,322	0.0%	\$	N/A	N/A
7/1/2009	\$	0	\$135,604,378	\$135,604,378	0.0%	\$50,	336,973	269%



Appendix A

# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

### **ACTUARIAL PROCEDURES AND ASSUMPTIONS**

This section of the report describes the actuarial procedures and assumptions used in this valuation.

The assumptions are intended to estimate the future experience of the plan in areas that affect the projected benefit flow. Any variations in future experience from that expected will result in corresponding changes in estimated costs of the plan's benefits.

#### **ACTUARIAL COST METHOD**

The accruing costs of all benefits are measured by the Projected Unit Credit actuarial cost method (PUC). Under the principles of the PUC method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated pro-rata to each year of service between entry age and assumed exit. The portion of this actuarial present value allocated to a valuation year is called the Normal Cost.

#### **FISCAL YEAR**

The County's fiscal year is from July 1 through June 30.

#### **VALUATION DATE**

The valuation date is as of July 1, 2009.

### **DISCOUNT RATE**

4.5%, per annum

#### **INFLATION**

2.8%, per annum

#### SUBSTANTIVE PLAN

The County sponsors a self-funded nonfederal governmental medical, prescription drug, dental, and vision plans for all eligible active and retired County employees less than age 65 and their dependents. Retirees over age 65 participate in an insured Medicare supplement medical plan and the County's self-funded prescription drug plan. A Life Insurance plan is offered to employees hired prior to February 1, 1987. The program is intended to offer comprehensive coverage of most life, medical with prescription drugs, dental, and vision benefits. The pre-Medicare medical claims are administered by Mutual Assurance Administrators. The post-Medicare medical plan is offered by Physician Mutual. The dental coverage is provided through Delta Dental. The vision coverage is provided through Vision Service Plan.

Terms for eligibility for coverage and the commencement of benefits for retirees in the program are summarized in Appendix B, Medical and Life Benefit Plan Summary.

### Oklahoma County Post Employment Benefits Plan



As the employer and plan sponsor, Oklahoma County shares in the cost for the benefit coverage under this program. The terms for the County's contributions are outlined in Appendix B, Medical Benefit Plan Summary.

### **ADMINISTRATIVE EXPENSE**

Claims expenses are loaded into claim costs for all health (medical, dental and vision) and life benefits. The amount loaded for expenses is described under the section "2009 Per Capita Benefit Costs".

### **CENSUS RECORDS AND DATA**

The data used in this valuation consists of demographic and health claims information for active employees, retired employees and their spouses. All of the participant data was supplied by the County as of July 1, 2009 and was accepted for valuation purposes without audit. The data is summarized in Appendix C.

### **DEMOGRAPHIC ASSUMPTIONS**

The demographic assumptions (mortality, disability, withdrawal and retirement) assumptions used are those used in the July 1, 2007 actuarial valuation of the Oklahoma Public Employees Retirement System.

#### **MORTALITY**

Healthy Lives – RP-2000 Combined Healthy Mortality Table projected to 2010 using Scale AA Disabled Lives – RP-2000 Combined Healthy Mortality Table projected to 2010 using Scale AA, set forward fifteen years

#### **DISABILITY**

Graduated rates are used. Sample rates are as follows:

Age	Male	Female
25	0.02%	0.02%
30	0.02	0.03
35	0.05	0.05
40	0.08	0.10
45	0.14	0.16
50	0.41	0.31
55	0.76	0.45
60	0.85	0.63



### **WITHDRAWAL**

Graduated rates based on years of service and age are used. Sample rates are as follows:

Age	0-2 Years	2-3 Years	3-4Years	4-5 Years	5+ Years
25	23.55%	18.91%	17.09%	13.69%	14.26%
30	22.10	17.04	15.54	12.68	10.04
35	20.44	15.35	13.65	12.15	7.69
40	18.09	13.98	12.07	10.94	5.89
45	16.67	12.48	11.31	9.45	4.68
50	14.00	10.85	10.29	8.34	4.36
55	13.14	9.34	8.69	7.04	4.36

Withdrawal rates cease upon the attainment of retirement eligibility.

#### RETIREMENT

Age and service eligibility requirements for retirement are described in Appendix B. The following table summarizes assumed retirement rates for this valuation once the eligibility requirements are met:

Age	Rate	Age	Rate
50	10%	61	35
51	10	62	30
52	10	63	15
53	10	64	25
54	10	65	30
55	10	66	25
56	10	67	23
57	11	68	22
58	12	69	21
59	13	70	100
60	14		

### PROBABILITY OF SPOUSE COVERAGE

45% of future retirees who elect coverage are assumed to elect spousal coverage upon retirement. Actual marital status is used for current retirees. All males are assumed to be 4 years older than females.

### **ELECTION OF RETIREMENT COVERAGE**

All current retired participants are assumed to continue retiree health coverage. 90% of future eligible retired participants are assumed to elect retiree health coverage upon retirement. Spouses continue coverage in the plan until their death.

35% of future eligible retired participants are assumed to elect retiree life insurance coverage upon retirement.



#### 2009 PER CAPITA BENEFIT COSTS

According to GASB 45, it is preferable to use actual plan experience in setting the per capita benefit costs, to the extent possible. The medical claims costs are developed using paid claims, while the dental and vision claims plus administrative costs are developed using the 2009 premium rates from Delta Dental.

The gross monthly medical claim costs are estimates based on total active and retiree medical and prescription drug claims paid between January 1, 2008 and December 31, 2008, as provided by Oklahoma County. We projected the paid claims to the fiscal year beginning July 1, 2009 using an annual trend of 8%.

An incurred adjustment factor of 2.5% was applied to the projected paid claim costs. An administrative expense load of \$34.88 per employee per month was added to the medical incurred claim estimates. The estimated Medicare eligible medical claims were adjusted for the change in plan from self-funded to the Medicare supplement medical plan effective January 1, 2009.

We then estimated the 2009-2010 per capita medical and prescription drug claims costs by applying relative claims factors by age and gender (based on the *Milliman Health Cost Guidelines*™) to the demographic distribution of the group. The resulting estimated annual medical claim costs by age for the fiscal year beginning July 1, 2009 are shown in the following table:

	RETIREE		SPOUSE	
<b>A</b> GE	MALE FEMALE		MALE	FEMALE
50	\$5,347	\$6,278	\$6,449	\$7,421
55	7,129	7,576	8,232	8,691
60	9,518	9,217	10,622	10,322
65	3,291	3,419	3,291	3,419
70	3,983	3,939	3,983	3,939
75	4,660	4,484	4,660	4,484
80	5,168	4,946	5,168	4,946
85	5,478	5,263	5,478	5,263

The 2009 dental rates were trended at 5% to the fiscal year beginning July 1, 2009. The resulting estimated claims plus administrative costs were age and gender adjusted based on Milliman's Health Cost Guidelines and the demographic distribution of the group. The resulting estimated annual dental and vision claim costs by age for the fiscal year beginning July 1, 2009 are shown in the following table:



	RETIREE		SPOUSE	
<b>A</b> GE	MALE	FEMALE	MALE	FEMALE
50	\$316	\$347	\$380	\$411
55	341	362	405	426
60	359	377	423	441
65	369	378	433	442
69+	373	370	437	434

The Pre-65 "Spouse" health claims costs anticipate spouse and dependent coverage.

### **RETIREE PREMIUMS**

The medical and dental premiums listed below are the retiree's portion only for retirees who retired on or after January 1, 1989 or elect dental coverage. The following table illustrates the expected retiree portion of the annual premiums effective from July 1, 2009 to June 30, 2010. The premiums shown are composites of the January 1, 2009 premiums for the various tier options offered, trended to July 1, 2009.

	PRE-65		Post-65	
PLAN	RETIREE SPOUSE		RETIREE	SPOUSE
MEDICAL	\$1,907	\$2,667	\$1,074	\$1,013
DENTAL	\$68	\$152	\$68	\$152

The premiums listed below are the current retiree's portion only for retirees who retired prior to January 1, 1989 and do not elect dental coverage. These premiums are frozen.

PRE-65		Роѕт-65	
RETIREE	SPOUSE	RETIREE	SPOUSE
N/A	N/A	\$252	\$324

Aging is not applied to current or future retiree health contributions since the retiree premiums are determined based upon the overall active and retiree combined rate increase.

#### **HEALTH CARE COST INCREASE OR TREND RATE**

The present value of future health care benefits depends upon the relationship between the assumed annual trend in health care cost increases and the discount rate. Because costs are based on present value calculations, the expense calculations are affected by both of these assumptions. The level of benefits paid out each year also depends on the annual trend assumption.

During 2008, we evaluated the Society of Actuaries (SOA) recently published report on long-term medical trend. That report includes detailed research performed by a committee of economists and actuaries (including a Milliman representative) and proposes the use of the "Getzen Model" named after the professor that developed the model. We believe that the research and the model are fundamentally and technically sound and will advance the body of



knowledge available to actuaries to more accurately project long-term medical trends. At this time, we believe this model is the industry standard for projecting long term medical trends. Milliman has decided to use that model as the foundation for the trend that it recommends to our clients for OPEB valuations.

These trend rates assume that over time, deductibles and out of pocket maximums will be periodically increased as medical trends increase.

Based on these assumptions, we selected the following trend rates using the Getzen model:

FISCAL YEAR ENDING JUNE 30,	MEDICAL TREND	DENTAL TREND
2010	9.00%	5.00%
2011	8.30	5.00
2012	7.20	5.00
2013	6.40	5.00
2014-2016	6.10	5.00
2017-2019	6.00	5.00
2020-2023	5.90	5.00
2024-2028	5.80	5.00
2029-2033	5.70	5.00
2034	5.60	5.00
2035-2036	5.40	5.00
2037-2038	5.30	5.00
2039-2041	5.20	5.00
2042-2045	5.10	5.00
2046-2050	5.00	5.00
2051-2057	4.90	4.90
2058-2067	4.80	4.80
2068 and later	4.70	4.70

Future retiree premiums are assumed to increase with the same trend rates as the health care costs.

The basic relationships between the economic factors assumed are subject to variation. Their absolute levels could also vary significantly from those assumed. However, since it is the relationship between the trend and discount rate that affects the pattern of funding contributions, varying their absolute values while keeping the same spread would not produce dramatic changes in the general patterns produced by these assumptions.

#### **AMORTIZATION PERIOD**

The amortization period of the UAAL used to determine the ARC is assumed to be 30 years (open), as a level percent of pay. For this purpose, the assumed salary growth rate is 3.0%.

### **CHANGES IN ASSUMPTIONS**

- Future Retiree election changed from 95% to 90%.
- Claims updated for 2008 experience.
- Trend changed to Getzen Model.



Appendix B

# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

### MEDICAL AND LIFE BENEFIT PLAN SUMMARY

#### **ELIGIBILITY FOR COVERAGE IN RETIREE HEALTH PROGRAM**

The County provides retiree health program coverage to current and future retirees of the County who qualify for retirement. Members who terminate prior to retirement eligibility are not eligible to participate in the program. The election to participate in the plan must occur upon retirement. The retirement eligibility is based on the following requirements:

- For employees hired prior to January 1, 2005, their age plus service must total 60, and they must be 100% vested.
- For employees hired on or after January 1, 2005, their age plus service must total 75, and they must be 100% vested.

In addition, the retiree must:

- · Have been approved to receive retirement benefits,
- Was covered under the Oklahoma County Health and Dental Plan at the time of retirement, and
- Is paying the required monthly insurance premiums.

### **HEALTH RETIREE CONTRIBUTIONS**

The County will pay 75% of the premium for medical and dental benefits. The following table summarizes the monthly retiree contribution rates by coverage group for the 2009 calendar year.

	Medical	Dental
Retires who Elect Dental Coverage or Retired after January 1, 1989		
Retiree Single, with Medicare	\$85.50	\$5.50
Retiree Single, without Medicare	\$152.50	\$5.50
Retiree & Family, Both with Medicare	\$164.75	\$17.25
Retiree & Family, Both without Medicare	\$368.75	\$17.25
Retiree with Medicare, Spouse without Medicare	\$215.75	\$17.25
Retiree without Medicare, Spouse with Medicare	\$200.75	\$17.25
Retiree with Medicare, Family without Medicare	\$337.75	\$17.25
Retiree, Family without Medicare, Spouse with Medicare	\$322.75	\$17.25
Retiree Dependent Only, with Medicare	\$85.50	\$5.50
Retiree Dependent Only, without Medicare	\$167.50	\$5.50
Retires who Retired prior to January 1, 1989 without Dental Coverage	ge	
Retiree Dependent only, with Medicare	\$27.00	N/A
Retiree and Family, both with Medicare	\$48.00	N/A
Retiree Single with Medicare	\$21.00	N/A

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The county pays 100% of the vision benefits.

#### **DISABILITY BENEFITS**

Any employee who becomes permanently disabled and is 100% vested is eligible for post employment benefits. An employee of the County making an application for disability benefits shall provide at least two physician's statements that such disability is total and permanent in its nature.

#### **DEATH BENEFITS**

The surviving spouse of any employee who has completed at least eight years of service is eligible for post employment benefits in the event of the employee's death.

### **MEDICAL BENEFITS**

Some of the key medical preferred provider benefit plan provisions for pre Medicare eligible retirees are summarized below. Effective January 1, 2009 the Medicare eligible retirees and dependents no longer participate in the County's medical plan. They do however participate in a Medicare supplement plan offered through Physician Mutual. The post Medicare eligible retirees continue to participate in the County's prescription drug plan. This is not intended to be an all inclusive summary of benefits.

Medical	In-Network	Out-of-Network
Annual Deductible	\$300 individual \$900 family	\$1,000 individual No maximum limits for family
Out-of Pocket Maximum (excludes deductibles)	\$3,000 individual \$9,000 family	\$6,000 individual \$18,000 family
Major Medical Lifetime Maximum	\$1,000,000	\$1,000,000
Inpatient Hospital	20% and \$250 copayment	50% after deductible
Emergency Room	\$150 copayment	50% after deductible
Outpatient Hospital Services	No deductible; 20%	50% after deductible
Outpatient Surgery	20% and \$150 copayment	50% after deductible
Inpatient Physician Service	\$20 copay	50% after deductible
Outpatient Office Visit	\$15 copay	50% after deductible
Radiology	No deductible; 20%	50% after deductible
Inpatient Chemical Dependency (\$10,000 Calendar year max)	No deductible, 50% and an additional 30% once Aftercare treatment completed	50% after deductible, an additional 30% once Aftercare treatment completed
Outpatient Chemical Dependency	No deductible, 50% with maximum benefit of \$60 per visit; \$1,000 maximum	50% after deductible, maximum benefit of \$60 per visit; \$500 maximum



Medical	In-Network	Out-of-Network
Inpatient Psychiatric Treatment (\$10,000 Calendar year max)	No deductible, 10%	Not Covered
Outpatient Psychiatric Treatment	No deductible, 50% with maximum benefit of \$50 per visit; \$1,000 maximum	50% after deductible, maximum benefit of \$50 per visit; \$500 maximum
Routine Wellness Benefits	No deductible, 100% with \$500 calendar year max	Not Covered
Prescription Drugs	Retail	Mail (90 day supply)
Generic and Brand	\$5 Generic 20% copay Brand Name (\$15 min.; \$50 max)	\$10 Generic \$50 Brand Name
Specialty Drugs	100% copay	100% copay

### **DENTAL BENEFITS**

Some of the key dental benefit plan provisions are summarized below. This is not intended to be an all inclusive summary of benefits.

	Percentage of Allowable Charge	Deductible	Maximums
Class I Diagnostic and Preventative	100% subject to deductible and maximum limitations	None	\$1,200 combined Class I, II, and III per person per benefit period
Class II Basic	80% subject to deductible and maximum limitations	\$25 per covered person per benefit period	\$1,200 combined Class I, II, and III per person per benefit period
Class III Major Restorative	70% subject to deductible and maximum limitations	\$25 per covered person per benefit period	\$1,200 combined Class I, II, and III per person per benefit period
Class IV Orthodontic*	80% subject to deductible and maximum limitations	None	\$1,200 per eligible dependent child per benefit period

Not all Defined Benefit Plan participants are eligible for dental benefits. The Family Deductible is \$125 per family per benefit period.



#### **VISION BENEFITS**

Copays	In-Network	Out-of-Network
Exam	\$5 copay	\$40 copay
Materials	\$35	Frame \$45; Lenses \$31-61 (single – trifocal)
Elective contacts	\$105 copay	\$105

#### **LIFE BENEFITS**

For employees hired prior to February 1, 1987, the following Life and Accidental Death and Dismemberment (AD&D) Insurance are available:

- Life 50% of the life insurance in effect on February 1, 1987
- AD&D Your amount equal to the Employee's amount of Retiree Life Insurance in force

The retiree must elect Retiree Insurance within 31 days following retirement. The retiree insured \$1.58 per \$1,000 for life insurance and \$0.05 for accidental death and dismemberment.



Appendix C

# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

### **MEMBER DATA**

The following is a summary of the member data used in the July 1, 2009 actuarial valuation to determine present values.

	Active	Retirees	Spouse	Beneficiary	Total
Health Care Plan	1,522	301	121	56	2,000
Life Insurance Plan	112	171	N/A	N/A	283

The enclosed tables summarize the member data by age and service distributions.



Table 6

# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

### **ACTIVE MEMBER DATA AT JULY 1, 2009 – ALL ACTIVE MEMBERS**

### **HEALTH CARE PLAN**

Age	<1	1 - 5	5 - 10	10 - 15	15 – 20	20 - 25	25 - 30	30+	All Years
Under 25	37	102	4	0	0	0	0	0	143
25 to 29	35	174	58	2	0	0	0	0	269
30 to 34	19	72	59	17	0	0	0	0	167
35 to 39	17	58	51	32	12	1	0	0	171
40 to 44	9	48	30	31	20	7	0	0	145
45 to 49	8	50	36	28	27	14	24	0	187
50 to 54	7	36	37	29	17	19	18	2	165
55 to 59	6	26	25	24	12	11	10	11	125
60 to 64	4	20	25	20	6	11	10	5	101
65 & Over	0	10	10	9	8	8	3	1	49
Total	142	596	335	192	102	71	65	19	1,522

### **LIFE INSURANCE PLAN**

Age	<1	1 - 5	5 - 10	10 - 15	15 – 20	20 - 25	25 - 30	30+	All Years
Under 25	0	0	0	0	0	0	0	0	C
25 to 29	0	0	0	0	0	0	0	0	(
30 to 34	0	0	0	0	0	0	0	0	(
35 to 39	0	0	0	0	0	0	0	0	(
40 to 44	0	0	0	0	0	4	0	0	
45 to 49	0	0	0	0	0	4	24	0	2
50 to 54	0	0	0	0	0	11	17	2	3
55 to 59	0	0	0	0	0	6	8	10	2
60 to 64	0	0	0	0	0	5	9	5	1
65 & Over	0	0	0	0	0	4	2	1	
Total	0	0	0	0	0	34	60	18	11



Table 7

# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

### **RETIREE DATA AT JULY 1, 2009**

Age	Health Care Plan Retiree	Health Care Plan Beneficiary	Health Care Plan Total	Life Insurance Plan
Under 50	11	0	11	3
50-54	30	1	31	13
55-59	40	4	44	20
60-64	43	4	47	13
65-69	49	4	53	21
70-74	35	6	41	18
75-79	40	14	54	31
80-84	19	10	29	19
85+	34	13	47	33
Total	301	56	357	171



Appendix D

# OKLAHOMA COUNTY POST EMPLOYMENT BENEFITS PLAN

#### **GLOSSARY OF TERMS**

### **ACTUARIAL ACCRUED LIABILITY**

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Total Projected Benefits and expenses which is not provided for by future Normal Costs.

#### **ACTUARIAL ASSUMPTIONS**

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings; procedures used to determine the Actuarial Value of Assets; and other relevant items.

#### **ACTUARIAL COST METHOD**

A procedure for determining the Actuarial Present Value of Total Projected Benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

### PROJECTED UNIT CREDIT ACTUARIAL COST METHOD (PUC)

Under the principles of the Projected Unit Credit actuarial cost method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated pro-rata to each year of service between entry age and assumed exit. The portion of this actuarial present value allocated to a valuation year is called the Normal Cost.

### ACTUARIAL PRESENT VALUE OF TOTAL PROJECTED BENEFITS

Total projected benefits include all benefits estimated to be payable to plan members (retirees and dependents, terminated employees entitled to future benefits, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value of money and the probabilities of payment.

#### **ACTUARIAL VALUE OF ASSETS**

The value of cash, investments and other property belonging to a plan, as used by the actuary for the purpose of an Actuarial Valuation.

### **AMORTIZATION PERIOD**

This is the amount of the contribution required to pay interest on and to amortize over a given period the Unfunded Actuarial Accrued Liability. A closed amortization period is a specific number



of years counted from one date and reducing to zero with the passage of time; an open amortization period is one that begins again or is recalculated at each actuarial valuation date.

#### ANNUAL OPEB COST

An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.

### ANNUAL REQUIRED CONTRIBUTIONS OF THE EMPLOYER (ARC)

This is the employer's periodic required contribution to a defined benefit OPEB plan, calculated in accordance with the set of requirements for calculating actuarially determined OPEB information included in financial reports.

### **NET OPEB OBLIGATION**

This is the cumulative difference since the effective date of this statement between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

#### **NORMAL COST**

This is the portion of the Actuarial Present Value of Total Projected Benefits allocated to a valuation year by the Actuarial Cost Method.

### OTHER POSTEMPLOYMENT BENEFITS (OPEB)

This refers to postemployment benefits other than pension benefits, including healthcare benefits regardless of the type of plan that provides them, and all other postemployment benefits provided separately from a pension plan, excluding benefits defined as termination benefits or offers.

#### SUBSTANTIVE PLAN

The terms of the postretirement benefit plan as understood by an employer that provides postretirement benefits and the employees who render services in exchange for those benefits. The substantive plan is the basis for the accounting for the plan.

### **UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)**

This is the excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.