
Oklahoma Municipal Retirement Fund

ACTUARIAL VALUATIONS UNDER GASB STATEMENT 68

For Fiscal Years Ending on or Before July 1, 2015

January 30, 2015

Prepared by

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GASB Statement 68

Introduction

Valuation Results

Discount Rate

Introduction

Determines pension expense and balance sheet recognition for government entities on accrual method accounting

Effective for fiscal years beginning after June 15, 2014

Balance sheet entries determined on a measurement date no earlier than the end of the prior fiscal year

Pension expense determined over the 12-month period ending on the measurement date

Measurement date: July 1, 2014

Valuation Results

Summary for all OkMRF plans combined

Sample Exhibits

- Mooreland
- Medford

**Oklahoma Municipal Retirement Fund
All Plans Combined**

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance at 6/30/2013	<u>\$ 494,179,567</u>	<u>\$ 405,653,425</u>	<u>\$ 88,526,141</u>
Changes for the Year:			
Service cost	14,585,667		14,585,667
Interest cost	37,283,889		37,283,889
Difference between expected and actual experience	0		0
Contributions -- Employer		21,325,666	(21,325,666)
Contributions -- Employee		5,661,758	(5,661,758)
Net investment income		66,146,153	(66,146,153)
Benefit payments, including ee contributions refunds	(23,682,022)	(23,682,022)	0
Benefit changes due to plan amendments	(4,330,739)		(4,330,739)
Administrative expense		(986,891)	986,891
Other changes			0
Net changes	<u>23,856,795</u>	<u>68,464,664</u>	<u>(44,607,869)</u>
Balance at 6/30/2014	<u><u>\$ 518,036,362</u></u>	<u><u>\$ 474,118,089</u></u>	<u><u>\$ 43,918,272</u></u>

SENSITIVITY OF NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

	1% Decrease 6.50%	Current Disc Rate 7.50%	1% Increase 8.50%
Net Pension Liability	\$ (11,144,488)	\$ 43,918,272	\$ 110,400,981

**Oklahoma Municipal Retirement Fund
All Plans Combined**

PENSION EXPENSE

Service Cost	\$ 14,585,667
Interest Cost	37,283,889
Expected Return on Plan Investments	(31,058,957)
Administrative Expenses	986,891
Employee Contributions	(5,661,758)
Amortization of Deferred Outflows and Inflows	
Actuarial gains and losses	0
Changes in assumptions	0
Investment gains and losses	(7,017,441)
Benefit Changes Due to Plan Amendments	<u>(4,330,739)</u>
Pension Expense for Fiscal 2015	\$ 4,787,551

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Mooreland, Oklahoma**

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance at 6/30/2013	<u>\$ 1,352,009</u>	<u>\$ 1,133,446</u>	<u>\$ 218,563</u>
Changes for the Year:			
Service cost	32,119		32,119
Interest cost	100,761		100,761
Difference between expected and actual experience	0		0
Contributions -- Employer		44,666	(44,666)
Contributions -- Employee		15,141	(15,141)
Net investment income		181,021	(181,021)
Benefit payments, including ee contributions refunds	(82,788)	(82,788)	0
Benefit changes due to plan amendments	12,512		12,512
Administrative expense		(2,721)	2,721
Other changes			0
Net changes	<u>62,604</u>	<u>155,320</u>	<u>(92,717)</u>
Balance at 6/30/2014	<u><u>\$ 1,414,612</u></u>	<u><u>\$ 1,288,766</u></u>	<u><u>\$ 125,846</u></u>

SENSITIVITY OF NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

	1% Decrease 6.50%	Current Disc Rate 7.50%	1% Increase 8.50%
Net Pension Liability	<u>\$ 266,053</u>	<u>\$ 125,846</u>	<u>\$ 5,841</u>

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Mooreland, Oklahoma**

RECONCILIATION OF TOTAL PENSION LIABILITY

Total Pension Liability at 6/30/2013	\$	1,352,009
Service Cost		32,119
Interest Cost		100,761
Benefit Payments		<u>(82,788)</u>
Projected Total Pension Liability at 6/30/2014	\$	1,402,101
Benefit Changes Due to Plan Amendments		12,512
Actuarial (Gain)/Loss		<u>0</u>
Total Pension Liability at 6/30/2014	\$	1,414,612

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Mooreland, Oklahoma**

RECONCILIATION OF PLAN NET FIDUCIARY POSITION

Market Value of Assets at 6/30/2013	\$	1,133,446
Employer Contributions		44,666
Employee Contributions		15,141
Net Investment Income		181,021
Benefit Payments		(82,788)
Administrative Expenses		<u>(2,721)</u>
Market Value of Assets at 6/30/2014	\$	1,288,766

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Mooreland, Oklahoma**

PENSION EXPENSE

Service Cost	\$	32,119
Interest Cost		100,761
Expected Return on Plan Investments		(77,970)
Administrative Expenses		2,721
Employee Contributions		(15,141)
Amortization of Deferred Outflows and Inflows		
Actuarial gains and losses		0
Changes in assumptions		0
Investment gains and losses		(20,610)
Benefit Changes Due to Plan Amendments		<u>12,512</u>
Pension Expense for Fiscal 2015	\$	34,391

Oklahoma Municipal Retirement Fund
Employee Retirement System of Mooreland, Oklahoma

AMORTIZATION OF DEFERRED (INFLOWS) AND OUTFLOWS

	Fiscal Year Established	Deferred (Inflow)/Outflow	Amortization Years	Balance before Current Recognition	Current Recognition	Balance after Current Recognition
Actuarial (gains)/losses						
	2015	0	N/A	0	0	0
Total current recognition					0	
Remaining deferred (inflows)						0
Remaining deferred outflows						0
Changes in assumptions						
	N/A					
Total current recognition					0	
Remaining deferred (inflows)						0
Remaining deferred outflows						0
Investment (gains)/losses						
	2015	(103,052)	5	(103,052)	(20,610)	(82,442)
Total current recognition					(20,610)	
Remaining deferred (inflows)						(82,442)
Remaining deferred outflows						0

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Medford, Oklahoma**

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance at 6/30/2013	<u>\$ 2,605,474</u>	<u>\$ 1,876,799</u>	<u>\$ 728,675</u>
Changes for the Year:			
Service cost	44,653		44,653
Interest cost	196,534		196,534
Difference between expected and actual experience	0		0
Contributions -- Employer		111,109	(111,109)
Contributions -- Employee		16,409	(16,409)
Net investment income		313,444	(313,444)
Benefit payments, including ee contributions refunds	(60,449)	(60,449)	0
Benefit changes due to plan amendments	(106,422)		(106,422)
Administrative expense		(4,650)	4,650
Other changes			0
Net changes	<u>74,316</u>	<u>375,864</u>	<u>(301,548)</u>
Balance at 6/30/2014	<u><u>\$ 2,679,789</u></u>	<u><u>\$ 2,252,663</u></u>	<u><u>\$ 427,126</u></u>

SENSITIVITY OF NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

	1% Decrease 6.50%	Current Disc Rate 7.50%	1% Increase 8.50%
Net Pension Liability	<u>\$ 763,843</u>	<u>\$ 427,126</u>	<u>\$ 147,263</u>

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Medford, Oklahoma**

RECONCILIATION OF TOTAL PENSION LIABILITY

Total Pension Liability at 6/30/2013	\$	2,605,474
Service Cost		44,653
Interest Cost		196,534
Benefit Payments		<u>(60,449)</u>
Projected Total Pension Liability at 6/30/2014	\$	2,786,212
Benefit Changes Due to Plan Amendments		(106,422)
Actuarial (Gain)/Loss		<u>0</u>
Total Pension Liability at 6/30/2014	\$	2,679,789

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Medford, Oklahoma**

RECONCILIATION OF PLAN NET FIDUCIARY POSITION

Market Value of Assets at 6/30/2013	\$ 1,876,799
Employer Contributions	111,109
Employee Contributions	16,409
Net Investment Income	313,444
Benefit Payments	(60,449)
Administrative Expenses	<u>(4,650)</u>
Market Value of Assets at 6/30/2014	\$ 2,252,663

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Medford, Oklahoma**

PENSION EXPENSE

Service Cost	\$	44,653
Interest Cost		196,534
Expected Return on Plan Investments		(157,854)
Administrative Expenses		4,650
Employee Contributions		(16,409)
Amortization of Deferred Outflows and Inflows		
Actuarial gains and losses		0
Changes in assumptions		0
Investment gains and losses		(31,118)
Benefit Changes Due to Plan Amendments		<u>(106,422)</u>
Pension Expense for Fiscal 2015	\$	(65,968)

Discount Rate

General Rule

General Rule Applied to Funding Policy

Possible Exceptions

General Rule

A single blended discount rate reflecting

- the expected long term rate of return to the extent are expected to be sufficient to meet benefit payments
- the yield on 20-year, tax exempt general obligation municipal bonds rated AA/Aa or higher

Benefit payments are for all current participants, including expected future accruals

Assets include anticipated future contributions on behalf of current participants, and other contributions expected to be applied to the current unfunded liability

General Rule Applied to Funding Policy

The funding policy is designed to fund all participants' benefits over their working lifetimes

Unfunded liabilities may arise from:

- granting of past service upon joining OkMRF
- benefit improvements applied to past service
- actual experience less favorable than assumed

Unfunded liabilities funded over a fixed period not to exceed 30 years

Sample projection: Sallisaw

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Sallisaw, Oklahoma**

Table 1: Projection of Contributions

Year	Projected Covered-Employee Pay			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Contributions from Current Employees (d)	Employer Contributions for Current Employees (e)	Contributions Related to Payroll of Future Employees (f)	Total Contributions (g) = (d) + (e) + (f)
1	3,448,603	49,418	3,498,021	241,402	605,930	2,785	850,117
2	3,134,216	503,726	3,637,942	219,395	539,912	61,913	821,220
3	2,922,357	861,103	3,783,459	204,565	477,995	98,347	780,907
4	2,784,207	1,150,591	3,934,798	194,894	428,194	120,167	743,255
5	2,641,624	1,450,566	4,092,190	184,914	378,161	136,064	699,138
6	2,490,819	1,765,058	4,255,877	174,357	337,102	151,765	663,225
7	2,351,503	2,074,609	4,426,112	164,605	308,112	169,440	642,158
8	2,226,920	2,376,237	4,603,157	155,884	283,285	185,002	624,172
9	2,095,757	2,691,527	4,787,283	146,703	259,004	199,793	605,500
10	1,951,855	3,026,919	4,978,775	136,630	234,452	214,194	585,276
11	1,835,866	3,342,060	5,177,926	128,511	214,424	225,398	568,332
12	1,716,257	3,668,785	5,385,043	120,138	194,995	235,762	550,895
13	1,579,460	4,020,985	5,600,444	110,562	174,637	246,136	531,334
14	1,475,233	4,349,229	5,824,462	103,266	158,799	253,512	515,577
15	1,361,466	4,695,974	6,057,440	95,303	142,733	260,546	498,582
16	1,266,735	5,033,004	6,299,738	88,671	129,387	265,682	483,741
17	1,169,735	5,381,993	6,551,728	81,881	116,449	270,160	468,491
18	1,056,346	5,757,451	6,813,797	73,944	102,526	274,646	451,116
19	967,204	6,119,145	7,086,349	67,704	91,547	277,180	436,432
20	874,050	6,495,753	7,369,803	61,183	80,698	279,135	421,017
21	782,244	6,882,351	7,664,595	54,757	70,458	280,231	405,446
22	711,095	7,260,083	7,971,178	49,777	62,488	279,668	391,933
23	639,359	7,650,667	8,290,026	44,755	54,808	278,247	377,810
24	585,702	8,035,925	8,621,627	40,999	48,961	275,139	365,099
25	528,082	8,438,410	8,966,492	36,966	43,013	270,850	350,829
26	471,899	8,853,253	9,325,151	33,033	37,393	264,588	335,015
27	419,848	9,278,310	9,698,157	29,389	32,260	254,986	316,635
28	347,362	9,738,722	10,086,084	24,315	25,671	239,069	289,055
29	300,614	10,188,913	10,489,527	21,043	20,706	198,945	240,695
30	260,406	10,648,702	10,909,108	18,228	12,852	0	31,081
31	222,279	11,123,193	11,345,472	15,560	10,970	0	26,530
32	188,229	11,611,063	11,799,291	13,176	9,290	0	22,466
33	155,445	12,115,818	12,271,263	10,881	7,672	0	18,553
34	127,013	12,635,100	12,762,113	8,891	6,269	0	15,160
35	98,037	13,174,561	13,272,598	6,863	4,839	0	11,701
36	76,797	13,726,705	13,803,502	5,376	3,790	0	9,166

Table 1: Projection of Contributions

Year	Projected Covered-Employee Pay			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Contributions from Current Employees (d)	Employer Contributions for Current Employees (e)	Contributions Related to Payroll of Future Employees (f)	Total Contributions (g) = (d) + (e) + (f)
37	62,056	14,293,586	14,355,642	4,344	3,063	0	7,407
38	48,154	14,881,714	14,929,868	3,371	2,377	0	5,747
39	37,605	15,489,457	15,527,062	2,632	1,856	0	4,488
40	28,827	16,119,318	16,148,145	2,018	1,423	0	3,441
41	20,870	16,773,200	16,794,071	1,461	1,030	0	2,491
42	14,306	17,451,527	17,465,834	1,001	706	0	1,708
43	10,613	18,153,854	18,164,467	743	524	0	1,267
44	7,561	18,883,485	18,891,046	529	373	0	902
45	5,044	19,641,643	19,646,687	353	249	0	602
46	3,274	20,429,281	20,432,555	229	162	0	391
47	1,602	21,248,255	21,249,857	112	79	0	191
48	739	22,099,112	22,099,851	52	36	0	88
49	287	22,983,558	22,983,845	20	14	0	34
50	0	23,903,199	23,903,199	0	0	0	0
51	0	24,859,327	24,859,327	0	0	0	0
52	0	25,853,700	25,853,700	0	0	0	0
53	0	26,887,848	26,887,848	0	0	0	0
54	0	27,963,362	27,963,362	0	0	0	0
55	0	29,081,897	29,081,897	0	0	0	0
56	0	30,245,173	30,245,173	0	0	0	0
57	0	31,454,979	31,454,979	0	0	0	0
58	0	32,713,179	32,713,179	0	0	0	0
59	0	34,021,706	34,021,706	0	0	0	0
60	0	35,382,574	35,382,574	0	0	0	0
61	0	36,797,877	36,797,877	0	0	0	0
62	0	38,269,792	38,269,792	0	0	0	0
63	0	39,800,584	39,800,584	0	0	0	0
64	0	41,392,607	41,392,607	0	0	0	0
65	0	43,048,311	43,048,311	0	0	0	0
66	0	44,770,244	44,770,244	0	0	0	0
67	0	46,561,054	46,561,054	0	0	0	0
68	0	48,423,496	48,423,496	0	0	0	0
69	0	50,360,436	50,360,436	0	0	0	0
70	0	52,374,853	52,374,853	0	0	0	0
71	0	54,469,847	54,469,847	0	0	0	0
72	0	56,648,641	56,648,641	0	0	0	0
73	0	58,914,587	58,914,587	0	0	0	0
74	0	61,271,170	61,271,170	0	0	0	0
75	0	63,722,017	63,722,017	0	0	0	0

Table 1: Projection of Contributions

Year	Projected Covered-Employee Pay			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Contributions from Current Employees (d)	Employer Contributions for Current Employees (e)	Contributions Related to Payroll of Future Employees (f)	Total Contributions (g) = (d) + (e) + (f)
76	0	66,270,898	66,270,898	0	0	0	0
77	0	68,921,733	68,921,733	0	0	0	0
78	0	71,678,603	71,678,603	0	0	0	0
79	0	74,545,747	74,545,747	0	0	0	0
80	0	77,527,577	77,527,577	0	0	0	0
81	0	80,628,680	80,628,680	0	0	0	0
82	0	83,853,827	83,853,827	0	0	0	0
83	0	87,207,980	87,207,980	0	0	0	0
84	0	90,696,299	90,696,299	0	0	0	0
85	0	94,324,151	94,324,151	0	0	0	0
86	0	98,097,117	98,097,117	0	0	0	0
87	0	102,021,002	102,021,002	0	0	0	0
88	0	106,101,842	106,101,842	0	0	0	0
89	0	110,345,916	110,345,916	0	0	0	0
90	0	114,759,752	114,759,752	0	0	0	0
91	0	119,350,142	119,350,142	0	0	0	0
92	0	124,124,148	124,124,148	0	0	0	0
93	0	129,089,114	129,089,114	0	0	0	0
94	0	134,252,679	134,252,679	0	0	0	0
95	0	139,622,786	139,622,786	0	0	0	0
96	0	145,207,697	145,207,697	0	0	0	0
97	0	151,016,005	151,016,005	0	0	0	0
98	0	157,056,645	157,056,645	0	0	0	0
99	0	163,338,911	163,338,911	0	0	0	0
100	0	169,872,468	169,872,468	0	0	0	0

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Sallisaw, Oklahoma**

Table 2: Projection of the Pension Plan's Fiduciary Net Position

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
1	12,739,508	850,117	1,103,490	28,027	945,101	13,403,209
2	13,403,209	821,220	1,088,804	29,487	994,302	14,100,439
3	14,100,439	780,907	1,081,505	31,021	1,045,322	14,814,143
4	14,814,143	743,255	1,104,899	32,591	1,096,544	15,516,452
5	15,516,452	699,138	1,162,953	34,136	1,145,398	16,163,900
6	16,163,900	663,225	1,204,131	35,561	1,191,066	16,778,498
7	16,778,498	642,158	1,243,094	36,913	1,234,900	17,375,550
8	17,375,550	624,172	1,292,873	38,226	1,277,136	17,945,759
9	17,945,759	605,500	1,357,190	39,481	1,316,799	18,471,387
10	18,471,387	585,276	1,397,236	40,637	1,353,960	18,972,750
11	18,972,750	568,332	1,443,795	41,740	1,389,183	19,444,730
12	19,444,730	550,895	1,527,206	42,778	1,420,830	19,846,471
13	19,846,471	531,334	1,573,750	43,662	1,448,494	20,208,887
14	20,208,887	515,577	1,630,265	44,460	1,472,984	20,522,723
15	20,522,723	498,582	1,720,257	45,150	1,492,557	20,748,455
16	20,748,455	483,741	1,765,801	45,647	1,507,245	20,927,994
17	20,927,994	468,491	1,813,353	46,042	1,518,384	21,055,474
18	21,055,474	451,116	1,846,677	46,322	1,526,067	21,139,659
19	21,139,659	436,432	1,906,954	46,507	1,529,614	21,152,245
20	21,152,245	421,017	1,929,761	46,535	1,529,150	21,126,115
21	21,126,115	405,446	1,963,323	46,477	1,525,383	21,047,143
22	21,047,143	391,933	1,974,054	46,304	1,518,574	20,937,292
23	20,937,292	377,810	1,956,420	46,062	1,510,473	20,823,093
24	20,823,093	365,099	2,002,095	45,811	1,499,768	20,640,054
25	20,640,054	350,829	2,007,947	45,408	1,485,313	20,422,841
26	20,422,841	335,015	1,992,487	44,930	1,469,027	20,189,466
27	20,189,466	316,635	2,035,503	44,417	1,449,282	19,875,463
28	19,875,463	289,055	2,007,285	43,726	1,425,781	19,539,288
29	19,539,288	240,695	1,985,969	42,986	1,399,599	19,150,626
30	19,150,626	31,081	1,991,518	42,131	1,362,558	18,510,616
31	18,510,616	26,530	1,950,505	40,723	1,315,952	17,861,869
32	17,861,869	22,466	1,914,307	39,296	1,268,532	17,199,264
33	17,199,264	18,553	1,871,445	37,838	1,220,324	16,528,858
34	16,528,858	15,160	1,830,669	36,363	1,171,475	15,848,459
35	15,848,459	11,701	1,784,003	34,867	1,122,091	15,163,381
36	15,163,381	9,166	1,738,140	33,359	1,072,361	14,473,408

Table 2: Projection of the Pension Plan's Fiduciary Net Position

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
37	14,473,408	7,407	1,705,093	31,841	1,021,821	13,765,701
38	13,765,701	5,747	1,638,903	30,285	971,176	13,073,437
39	13,073,437	4,488	1,574,096	28,762	921,652	12,396,720
40	12,396,720	3,441	1,514,510	27,273	873,109	11,731,487
41	11,731,487	2,491	1,447,871	25,809	825,689	11,085,987
42	11,085,987	1,708	1,386,721	24,389	779,552	10,456,137
43	10,456,137	1,267	1,320,183	23,004	734,798	9,849,015
44	9,849,015	902	1,250,938	21,668	691,849	9,269,161
45	9,269,161	602	1,182,383	20,392	650,921	8,717,908
46	8,717,908	391	1,110,810	19,179	612,249	8,200,558
47	8,200,558	191	1,039,758	18,041	576,099	7,719,049
48	7,719,049	88	970,592	16,982	542,567	7,274,131
49	7,274,131	34	903,444	16,003	511,705	6,866,423
50	6,866,423	0	838,105	15,106	483,565	6,496,776
51	6,496,776	0	775,371	14,293	458,181	6,165,294
52	6,165,294	0	714,847	13,564	435,575	5,872,458
53	5,872,458	0	656,060	12,919	415,801	5,619,279
54	5,619,279	0	599,733	12,362	398,907	5,406,092
55	5,406,092	0	545,731	11,893	384,924	5,233,391
56	5,233,391	0	494,211	11,513	373,883	5,101,549
57	5,101,549	0	446,009	11,223	365,780	5,010,096
58	5,010,096	0	401,200	11,022	360,578	4,958,453
59	4,958,453	0	359,591	10,909	358,241	4,946,194
60	4,946,194	0	321,161	10,882	358,738	4,972,890
61	4,972,890	0	285,745	10,940	362,042	5,038,247
62	5,038,247	0	253,038	11,084	368,143	5,142,268
63	5,142,268	0	222,600	11,313	377,057	5,285,411
64	5,285,411	0	194,172	11,628	388,828	5,468,439
65	5,468,439	0	167,689	12,031	403,515	5,692,234
66	5,692,234	0	143,302	12,523	421,180	5,957,589
67	5,957,589	0	121,109	13,107	441,877	6,265,251
68	6,265,251	0	100,786	13,784	465,675	6,616,357
69	6,616,357	0	82,467	14,556	492,654	7,011,988
70	7,011,988	0	66,369	15,426	522,887	7,453,080
71	7,453,080	0	52,415	16,397	556,447	7,940,716
72	7,940,716	0	40,607	17,470	593,415	8,476,054
73	8,476,054	0	30,831	18,647	633,882	9,060,458
74	9,060,458	0	22,906	19,933	677,957	9,695,576
75	9,695,576	0	16,679	21,330	725,769	10,383,336

Table 2: Projection of the Pension Plan's Fiduciary Net Position

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
76	10,383,336	0	11,890	22,843	777,471	11,126,073
77	11,126,073	0	8,318	24,477	833,248	11,926,525
78	11,926,525	0	5,741	26,238	893,312	12,787,858
79	12,787,858	0	3,921	28,133	957,909	13,713,712
80	13,713,712	0	2,667	30,170	1,027,319	14,708,194
81	14,708,194	0	1,814	32,358	1,101,856	15,775,879
82	15,775,879	0	1,215	34,707	1,181,868	16,921,825
83	16,921,825	0	802	37,228	1,267,737	18,151,531
84	18,151,531	0	521	39,933	1,359,875	19,470,952
85	19,470,952	0	334	42,836	1,458,732	20,886,514
86	20,886,514	0	210	45,950	1,564,789	22,405,142
87	22,405,142	0	130	49,291	1,678,566	24,034,286
88	24,034,286	0	80	52,875	1,800,622	25,781,953
89	25,781,953	0	48	56,720	1,931,556	27,656,741
90	27,656,741	0	28	60,845	2,072,014	29,667,882
91	29,667,882	0	16	65,269	2,222,687	31,825,284
92	31,825,284	0	9	70,016	2,384,318	34,139,577
93	34,139,577	0	5	75,107	2,557,702	36,622,167
94	36,622,167	0	3	80,569	2,743,696	39,285,291
95	39,285,291	0	2	86,428	2,943,214	42,142,076
96	42,142,076	0	1	92,713	3,157,242	45,206,604
97	45,206,604	0	0	99,455	3,386,833	48,493,983
98	48,493,983	0	0	106,687	3,633,120	52,020,416
99	52,020,416	0	0	114,445	3,897,317	55,803,288
100	55,803,288	0	0	122,767	4,180,726	59,861,247

Possible Exceptions

Plans amortizing an unfunded liability that have an unusually high average employee age and a high ratio of retirees to active employees

- Copan

Plans contributing less than the actuarially determined contribution

- Nichols Hills

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Copan, Oklahoma**

Table 1: Projection of Contributions

Year	Projected Covered-Employee Pay			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Contributions from Current Employees (d)	Employer Contributions for Current Employees (e)	Contributions Related to Payroll of Future Employees (f)	Total Contributions (g) = (d) + (e) + (f)
1	114,189	40,393	154,582	1,713	5,660	1,026	8,399
2	108,464	52,301	160,765	1,627	7,275	3,029	11,931
3	104,560	62,635	167,196	1,568	6,853	3,531	11,953
4	101,879	72,005	173,883	1,528	6,404	3,866	11,798
5	98,756	82,082	180,839	1,481	5,944	4,188	11,613
6	95,582	92,491	188,072	1,434	5,515	4,489	11,438
7	92,366	103,230	195,595	1,385	5,121	4,777	11,284
8	89,116	114,303	203,419	1,337	4,750	5,045	11,131
9	85,904	125,651	211,556	1,289	4,402	5,288	10,978
10	81,620	138,398	220,018	1,224	4,022	5,552	10,799
11	77,429	151,390	228,819	1,161	3,670	5,788	10,620
12	62,521	175,450	237,971	938	2,851	6,392	10,180
13	55,642	191,848	247,490	835	2,441	6,657	9,933
14	49,644	207,746	257,390	745	2,095	6,865	9,705
15	41,771	225,914	267,686	627	1,697	7,106	9,429
16	29,861	248,532	278,393	448	1,167	7,438	9,053
17	23,597	265,932	289,529	354	888	7,568	8,809
18	18,733	282,377	301,110	281	678	7,636	8,596
19	9,051	304,103	313,154	136	315	7,809	8,260
20	6,519	319,161	325,680	98	219	7,775	8,091
21	4,691	334,017	338,708	70	151	7,710	7,932
22	3,373	348,883	352,256	51	105	7,619	7,774
23	0	366,346	366,346	0	0	7,553	7,553
24	0	381,000	381,000	0	0	7,395	7,395
25	0	396,240	396,240	0	0	7,210	7,210
26	0	412,090	412,090	0	0	6,982	6,982
27	0	428,573	428,573	0	0	6,677	6,677
28	0	445,716	445,716	0	0	6,203	6,203
29	0	463,545	463,545	0	0	5,131	5,131
30	0	482,086	482,086	0	0	0	0
31	0	501,370	501,370	0	0	0	0
32	0	521,425	521,425	0	0	0	0
33	0	542,282	542,282	0	0	0	0
34	0	563,973	563,973	0	0	0	0
35	0	586,532	586,532	0	0	0	0
36	0	609,993	609,993	0	0	0	0
37	0	634,393	634,393	0	0	0	0
38	0	659,769	659,769	0	0	0	0
39	0	686,159	686,159	0	0	0	0
40	0	713,606	713,606	0	0	0	0

Table 1: Projection of Contributions

Year	Projected Covered-Employee Pay			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Contributions from Current Employees (d)	Employer Contributions for Current Employees (e)	Contributions Related to Payroll of Future Employees (f)	Total Contributions (g) = (d) + (e) + (f)
41	0	742,150	742,150	0	0	0	0
42	0	771,836	771,836	0	0	0	0
43	0	802,709	802,709	0	0	0	0
44	0	834,818	834,818	0	0	0	0
45	0	868,211	868,211	0	0	0	0
46	0	902,939	902,939	0	0	0	0
47	0	939,056	939,056	0	0	0	0
48	0	976,619	976,619	0	0	0	0
49	0	1,015,683	1,015,683	0	0	0	0
50	0	1,056,311	1,056,311	0	0	0	0
51	0	1,098,563	1,098,563	0	0	0	0
52	0	1,142,506	1,142,506	0	0	0	0
53	0	1,188,206	1,188,206	0	0	0	0
54	0	1,235,734	1,235,734	0	0	0	0
55	0	1,285,164	1,285,164	0	0	0	0
56	0	1,336,570	1,336,570	0	0	0	0
57	0	1,390,033	1,390,033	0	0	0	0
58	0	1,445,634	1,445,634	0	0	0	0
59	0	1,503,460	1,503,460	0	0	0	0
60	0	1,563,598	1,563,598	0	0	0	0
61	0	1,626,142	1,626,142	0	0	0	0
62	0	1,691,188	1,691,188	0	0	0	0
63	0	1,758,835	1,758,835	0	0	0	0
64	0	1,829,189	1,829,189	0	0	0	0
65	0	1,902,356	1,902,356	0	0	0	0
66	0	1,978,450	1,978,450	0	0	0	0
67	0	2,057,588	2,057,588	0	0	0	0
68	0	2,139,892	2,139,892	0	0	0	0
69	0	2,225,488	2,225,488	0	0	0	0
70	0	2,314,507	2,314,507	0	0	0	0
71	0	2,407,087	2,407,087	0	0	0	0
72	0	2,503,371	2,503,371	0	0	0	0
73	0	2,603,506	2,603,506	0	0	0	0
74	0	2,707,646	2,707,646	0	0	0	0
75	0	2,815,952	2,815,952	0	0	0	0
76	0	2,928,590	2,928,590	0	0	0	0
77	0	3,045,733	3,045,733	0	0	0	0
78	0	3,167,563	3,167,563	0	0	0	0
79	0	3,294,265	3,294,265	0	0	0	0
80	0	3,426,036	3,426,036	0	0	0	0
81	0	3,563,077	3,563,077	0	0	0	0
82	0	3,705,600	3,705,600	0	0	0	0
83	0	3,853,824	3,853,824	0	0	0	0

Table 1: Projection of Contributions

Year	Projected Covered-Employee Pay			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Contributions from Current Employees (d)	Employer Contributions for Current Employees (e)	Contributions Related to Payroll of Future Employees (f)	Total Contributions (g) = (d) + (e) + (f)
84	0	4,007,977	4,007,977	0	0	0	0
85	0	4,168,297	4,168,297	0	0	0	0
86	0	4,335,028	4,335,028	0	0	0	0
87	0	4,508,430	4,508,430	0	0	0	0
88	0	4,688,767	4,688,767	0	0	0	0
89	0	4,876,317	4,876,317	0	0	0	0
90	0	5,071,370	5,071,370	0	0	0	0
91	0	5,274,225	5,274,225	0	0	0	0
92	0	5,485,194	5,485,194	0	0	0	0
93	0	5,704,602	5,704,602	0	0	0	0
94	0	5,932,786	5,932,786	0	0	0	0
95	0	6,170,097	6,170,097	0	0	0	0
96	0	6,416,901	6,416,901	0	0	0	0
97	0	6,673,577	6,673,577	0	0	0	0
98	0	6,940,520	6,940,520	0	0	0	0
99	0	7,218,141	7,218,141	0	0	0	0
100	0	7,506,867	7,506,867	0	0	0	0

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Copan, Oklahoma**

Table 2: Projection of the Pension Plan's Fiduciary Net Position

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
1	33,849	8,399	10,660	74	2,453	33,967
2	33,967	11,931	10,707	75	2,590	37,707
3	37,707	11,953	10,746	83	2,869	41,700
4	41,700	11,798	10,959	92	3,155	45,602
5	45,602	11,613	11,325	100	3,427	49,217
6	49,217	11,438	10,221	108	3,732	54,058
7	54,058	11,284	10,318	119	4,086	58,991
8	58,991	11,131	10,423	130	4,446	64,015
9	64,015	10,978	10,410	141	4,817	69,260
10	69,260	10,799	10,634	152	5,195	74,467
11	74,467	10,620	12,209	164	5,520	78,235
12	78,235	10,180	12,796	172	5,765	81,212
13	81,212	9,933	13,300	179	5,960	83,626
14	83,626	9,705	14,967	184	6,071	84,251
15	84,251	9,429	16,047	185	6,068	83,517
16	83,517	9,053	16,443	184	5,985	81,928
17	81,928	8,809	16,664	180	5,849	79,742
18	79,742	8,596	16,917	175	5,668	76,913
19	76,913	8,260	17,461	169	5,423	72,967
20	72,967	8,091	17,086	161	5,135	68,947
21	68,947	7,932	16,676	152	4,843	64,895
22	64,895	7,774	16,239	143	4,550	60,837
23	60,837	7,553	16,047	134	4,245	56,455
24	56,455	7,395	15,415	124	3,934	52,244
25	52,244	7,210	14,856	115	3,633	48,116
26	48,116	6,982	14,301	106	3,335	44,027
27	44,027	6,677	13,734	97	3,039	39,911
28	39,911	6,203	13,127	88	2,735	35,635
29	35,635	5,131	12,526	78	2,397	30,559
30	30,559	0	11,908	67	1,851	20,435
31	20,435	0	11,271	45	1,116	10,235
32	10,235	0	10,622	23	410	0
33	0	0	9,964	0	9,964	0
34	0	0	9,299	0	9,299	0
35	0	0	8,638	0	8,638	0
36	0	0	7,971	0	7,971	0
37	0	0	7,285	0	7,285	0
38	0	0	6,592	0	6,592	0
39	0	0	5,905	0	5,905	0
40	0	0	5,210	0	5,210	0
41	0	0	4,512	0	4,512	0
42	0	0	3,829	0	3,829	0
43	0	0	3,187	0	3,187	0

Table 2: Projection of the Pension Plan's Fiduciary Net Position

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
44	0	0	2,605	0	2,605	0
45	0	0	2,078	0	2,078	0
46	0	0	1,609	0	1,609	0
47	0	0	1,219	0	1,219	0
48	0	0	906	0	906	0
49	0	0	657	0	657	0
50	0	0	463	0	463	0
51	0	0	319	0	319	0
52	0	0	216	0	216	0
53	0	0	142	0	142	0
54	0	0	92	0	92	0
55	0	0	58	0	58	0
56	0	0	36	0	36	0
57	0	0	22	0	22	0
58	0	0	13	0	13	0
59	0	0	8	0	8	0
60	0	0	6	0	6	0
61	0	0	4	0	4	0
62	0	0	3	0	3	0
63	0	0	2	0	2	0
64	0	0	1	0	1	0
65	0	0	1	0	1	0
66	0	0	1	0	1	0
67	0	0	0	0	0	0
68	0	0	0	0	0	0
69	0	0	0	0	0	0
70	0	0	0	0	0	0
71	0	0	0	0	0	0
72	0	0	0	0	0	0
73	0	0	0	0	0	0
74	0	0	0	0	0	0
75	0	0	0	0	0	0
76	0	0	0	0	0	0
77	0	0	0	0	0	0
78	0	0	0	0	0	0
79	0	0	0	0	0	0
80	0	0	0	0	0	0
81	0	0	0	0	0	0
82	0	0	0	0	0	0
83	0	0	0	0	0	0
84	0	0	0	0	0	0
85	0	0	0	0	0	0
86	0	0	0	0	0	0
87	0	0	0	0	0	0
88	0	0	0	0	0	0
89	0	0	0	0	0	0

Table 2: Projection of the Pension Plan's Fiduciary Net Position

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
90	0	0	0	0	0	0
91	0	0	0	0	0	0
92	0	0	0	0	0	0
93	0	0	0	0	0	0
94	0	0	0	0	0	0
95	0	0	0	0	0	0
96	0	0	0	0	0	0
97	0	0	0	0	0	0
98	0	0	0	0	0	0
99	0	0	0	0	0	0
100	0	0	0	0	0	0

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Copan, Oklahoma**

Table 3: Actuarial Present Values of Projected Benefit Payments

Year (a)	Projected Beginning Fiduciary Net Position (b)	Projected Benefit Payments (c)	Projected Benefit Payments		Actuarial Present Values of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments (d)	"Unfunded" Portion of Benefit Payments (e)	Present Value of "Funded" Benefit Payments (f) = (d) / (1 + 7.50%) ^ (a)	Present Value of "Unfunded" Benefit Payments (g) = (e) / (1 + 3.29%) ^ (a)	Present Value of Benefit Payments Using the Single Discount Rate (h) = (c) / (1 + 6.45%) ^ (a)
1	33,849	10,660	10,660	0	9,916	0	10,014
2	33,967	10,707	10,707	0	9,265	0	9,449
3	37,707	10,746	10,746	0	8,651	0	8,910
4	41,700	10,959	10,959	0	8,206	0	8,536
5	45,602	11,325	11,325	0	7,888	0	8,286
6	49,217	10,221	10,221	0	6,623	0	7,026
7	54,058	10,318	10,318	0	6,219	0	6,663
8	58,991	10,423	10,423	0	5,844	0	6,323
9	64,015	10,410	10,410	0	5,429	0	5,932
10	69,260	10,634	10,634	0	5,159	0	5,693
11	74,467	12,209	12,209	0	5,510	0	6,140
12	78,235	12,796	12,796	0	5,372	0	6,046
13	81,212	13,300	13,300	0	5,195	0	5,904
14	83,626	14,967	14,967	0	5,438	0	6,241
15	84,251	16,047	16,047	0	5,423	0	6,286
16	83,517	16,443	16,443	0	5,169	0	6,051
17	81,928	16,664	16,664	0	4,873	0	5,761
18	79,742	16,917	16,917	0	4,602	0	5,494
19	76,913	17,461	17,461	0	4,419	0	5,327
20	72,967	17,086	17,086	0	4,022	0	4,897
21	68,947	16,676	16,676	0	3,652	0	4,490
22	64,895	16,239	16,239	0	3,308	0	4,108
23	60,837	16,047	16,047	0	3,041	0	3,813
24	56,455	15,415	15,415	0	2,717	0	3,441
25	52,244	14,856	14,856	0	2,436	0	3,116
26	48,116	14,301	14,301	0	2,181	0	2,817
27	44,027	13,734	13,734	0	1,949	0	2,542
28	39,911	13,127	13,127	0	1,733	0	2,282
29	35,635	12,526	12,526	0	1,538	0	2,046
30	30,559	11,908	11,908	0	1,360	0	1,827
31	20,435	11,271	11,271	0	1,198	0	1,625
32	10,235	10,622	0	10,622	0	3,770	1,439
33	0	9,964	0	9,964	0	3,424	1,268
34	0	9,299	0	9,299	0	3,094	1,111
35	0	8,638	0	8,638	0	2,782	970
36	0	7,971	0	7,971	0	2,486	841
37	0	7,285	0	7,285	0	2,199	722
38	0	6,592	0	6,592	0	1,927	614
39	0	5,905	0	5,905	0	1,671	516
40	0	5,210	0	5,210	0	1,427	428
41	0	4,512	0	4,512	0	1,197	348
42	0	3,829	0	3,829	0	983	278
43	0	3,187	0	3,187	0	792	217

Table 3: Actuarial Present Values of Projected Benefit Payments

Year (a)	Projected Beginning Fiduciary Net Position (b)	Projected Benefit Payments (c)	Projected Benefit Payments		Actuarial Present Values of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments (d)	"Unfunded" Portion of Benefit Payments (e)	Present Value of "Funded" Benefit Payments (f) = (d) / (1 + 7.50%) ^ (a)	Present Value of "Unfunded" Benefit Payments (g) = (e) / (1 + 3.29%) ^ (a)	Present Value of Benefit Payments Using the Single Discount Rate (h) = (c) / (1 + 6.45%) ^ (a)
44	0	2,605	0	2,605	0	627	167
45	0	2,078	0	2,078	0	484	125
46	0	1,609	0	1,609	0	363	91
47	0	1,219	0	1,219	0	266	65
48	0	906	0	906	0	192	45
49	0	657	0	657	0	135	31
50	0	463	0	463	0	92	20
51	0	319	0	319	0	61	13
52	0	216	0	216	0	40	8
53	0	142	0	142	0	26	5
54	0	92	0	92	0	16	3
55	0	58	0	58	0	10	2
56	0	36	0	36	0	6	1
57	0	22	0	22	0	3	1
58	0	13	0	13	0	2	0
59	0	8	0	8	0	1	0
60	0	6	0	6	0	1	0
61	0	4	0	4	0	1	0
62	0	3	0	3	0	0	0
63	0	2	0	2	0	0	0
64	0	1	0	1	0	0	0
65	0	1	0	1	0	0	0
66	0	1	0	1	0	0	0
67	0	0	0	0	0	0	0
68	0	0	0	0	0	0	0
69	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0
71	0	0	0	0	0	0	0
72	0	0	0	0	0	0	0
73	0	0	0	0	0	0	0
74	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0
76	0	0	0	0	0	0	0
77	0	0	0	0	0	0	0
78	0	0	0	0	0	0	0
79	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0
81	0	0	0	0	0	0	0
82	0	0	0	0	0	0	0
83	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0
87	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0
89	0	0	0	0	0	0	0

Table 3: Actuarial Present Values of Projected Benefit Payments

Year (a)	Projected Beginning Fiduciary Net Position (b)	Projected Benefit Payments (c)	Projected Benefit Payments		Actuarial Present Values of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments (d)	"Unfunded" Portion of Benefit Payments (e)	Present Value of "Funded" Benefit Payments (f) = (d) / (1 + 7.50%) ^ (a)	Present Value of "Unfunded" Benefit Payments (g) = (e) / (1 + 3.29%) ^ (a)	Present Value of Benefit Payments Using the Single Discount Rate (h) = (c) / (1 + 6.45%) ^ (a)
90	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0
Total					148,338 +	28,077 =	176,415

(0)

**Oklahoma Municipal Retirement Fund
Employee Retirement System of Nichols Hills, Oklahoma**

EMPLOYER CONTRIBUTION HISTORY

Fiscal Year Ending 6/30	Actuarially Determined Contribution Rate	Actual Contribution Rate	Portion Actually Contributed
2010	20.91%	16.04%	0.7673
2011	22.78%	18.00%	0.7902
2012	22.59%	20.00%	0.8854
2013	20.04%	20.04%	0.9999
2014	19.85%	20.38%	1.0267
2015	14.11%	20.04% *	1.4201
2016	12.03%		

* year-to date