

OKLAHOMA CITY EMPLOYEE RETIREMENT SYSTEM
ANNUAL ACTUARIAL VALUATION
DECEMBER 31, 2008



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March 19, 2009

The Board of Trustees
Oklahoma City Employee Retirement System
Oklahoma City, Oklahoma

Dear Board Members:

The results of the annual actuarial valuation of the Oklahoma City Employee Retirement System are presented in this report. The purpose of the valuation was to measure the System's funding progress and to determine an appropriate contribution level for the fiscal year beginning July 1, 2010. This report may be provided to parties other than the Board of Trustees only in its entirety and only with the permission of the Board.

The date of the valuation was December 31, 2008.

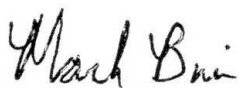
The valuation was based upon information, furnished by the Retirement System Manager, concerning Retirement System benefits, financial transactions, active members, terminated members, retired members and beneficiaries. Data was checked for reasonableness and year-to-year consistency, but was not otherwise audited. This information is summarized in Section B.

To the best of our knowledge, the actuarial valuation is complete and accurate and was made in accordance with generally recognized actuarial methods. We believe the assumptions concerning future experience produce results which are reasonable. Both actuaries submitting this report are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Louise M. Gates ASA, MAAA



Mark Buis, FSA, MAAA

LMG/MB:mrb

SECTION A
VALUATION RESULTS

Funding Objective

The funding objective of the Retirement System is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year-to-year and will not have to be increased for future generations of citizens.

Contribution Rates

The Retirement System is supported by member contributions, City contributions and investment income from Retirement System assets.

Contributions which satisfy the funding objective are determined by the annual actuarial valuation and are sufficient to:

- (1) Cover the actuarial present value of benefits allocated to the current year by the actuarial cost method described in Section C (the normal cost); and
- (2) Finance over a period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (unfunded actuarial accrued liability).

Computed contribution rates for the fiscal year beginning July 1, 2010 are shown on page A-2.

**COMPUTED CONTRIBUTIONS
EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL**

The total computed contribution determined in the 2008 and prior year's valuation are shown below. The 2008 valuation results will be used by the City for the fiscal year beginning July 1, 2010. Please refer to page A-5 for additional information.

Contributions Determined as of the Indicated Valuation Date, December 31st	Percents of Member Payroll	
	2008	2007
Normal Cost		
Service pensions	10.40%	10.36%
Disability pensions	0.58%	0.58%
Survivor pensions		
- Death before retirement	0.51%	0.52%
Termination benefits		
- Deferred service pensions	0.42%	0.43%
- Refunds of current member contributions	1.35%	1.35%
Total Normal Cost	13.26%	13.24%
Unfunded Actuarial Accrued Liability (UAAL)		
Total UAAL Contribution*	(0.49%)	(2.20%)
Total Computed Contribution Rate		
Member Portion	6.00%	6.00%
City's Computed Rate	6.77%	5.04%

* *The unfunded actuarial accrued liability (the UAAL) was amortized as a level percent of active member payroll over a period of 27 years as of December 31, 2008.*

Funding Progress

There is no single all-encompassing indicator to measure a retirement system's funding progress. A traditional measure has been the relationship of valuation assets to actuarial accrued liability - a measure that is influenced by the choice of actuarial cost method. Numeric information using this traditional measure is shown on the following page.

Additional understanding of funding progress can be achieved using the following test, which compares the System's present assets with:

- (1) members' contributions on deposit in the System;
- (2) present value of future benefits to present retired lives; and
- (3) present value of benefits based on service already rendered by active and inactive members.

In a system that has been following the discipline of level percent-of-payroll financing, member contributions on deposit (item 1) and the present value of future benefits to present retired lives (item 2) will be fully covered by present assets (except in rare circumstances). In addition, the present value of benefits based on service already rendered by members (item 3) will be partially covered by the remainder of present assets. The larger the funded portion of item 3, the stronger the condition of the system. Generally, if the system has been using level-percent financing, the funded portion of item 3 will increase over time.

From 1983 through 1996, item 3 was computed in accordance with the Pension Benefit Obligation required by Governmental Accounting Standards Board Statement No. 5.

Beginning with the December 31, 1997 actuarial valuation, item 3 is computed in accordance with Governmental Accounting Standards Board Statement No. 25, which has replaced Statement No. 5. Under Statement No. 25, item (3) is the same amount that is used in computing the level contribution rates and the funding value of assets is shown rather than cost value. Further detail concerning Statement No. 25 is shown in Section D.

A historical comparison of funding progress tests is shown on the following page.

FUNDING PROGRESS TEST
(DOLLAR AMOUNTS IN THOUSANDS)

Accrued Liabilities (AL)									
Valuation Date	(1) Member Contribs.	(2) Retirants and Beneficiaries	(3) Active & Inactive Members⁽¹⁾ (Employer Financed Portion)	Total AL	Assets⁽²⁾	Portion of Liabilities Covered by Assets			
						(1)	(2)	(3)	Overall
12/31/89	\$17,852	\$ 51,518	\$ 37,965	\$ 107,335	\$ 89,190	100 %	100 %	52 %	83 %
12/31/90	19,885	51,738	43,434	115,057	95,145	100	100	54	83
12/31/91	21,724	58,201	51,491	131,416	107,544	100	100	54	82
12/31/92	24,039	59,294	56,040	139,373	122,638	100	100	70	88
12/31/93	26,732	59,703	60,919	147,354	141,078	100	100	90	96
12/31/94	29,028	63,894	67,915	160,837	151,580	100	100	86	94
12/31/95	31,423	67,408	71,283	170,114	168,203	100	100	97	99
12/31/96	33,507	72,225	75,504	181,236	185,368	100	100	105	102
12/31/97	35,654	76,275	107,169	219,098	219,602	100	100	100	100
12/31/98	37,900	82,258	118,498	238,656	260,877	100	100	119	109
12/31/99	39,866	85,724	120,316	245,906	307,872	100	100	152	125
12/31/00	41,550	100,936	180,814	323,300	350,398	100	100	115	108
12/31/01	42,226	116,552	185,819	344,597	372,737	100	100	115	108
12/31/02	44,368	128,120	200,072	372,560	375,382	100	100	101	101
12/31/03	46,654	136,873	207,496	391,023	374,192	100	100	92	96
12/31/04	48,487	150,664	216,013	415,164	381,495	100	100	84	92
12/31/05	54,239	169,752	212,913	436,904	424,182	100	100	94	97
12/31/06	55,557	187,693	214,297	457,547	476,913	100	100	109	104
12/31/07	60,118	204,470	224,239	488,827	529,876	100	100	118	108
12/31/08	62,128	221,456	235,650	519,234	528,664	100	100	104	102

(1) Beginning with the 12/31/97 valuation, Employer Financed Portion is calculated in accordance with Governmental Accounting Standards Board Statement No. 25, which replaces Statement No. 5 used in prior years. This is the same calculation that is used in computing contribution rates.

(2) Beginning with the 12/31/97 valuation, funding value, pursuant to Governmental Accounting Standards Board Statement No. 25 (prior to 12/31/97, Cost Value was used).

COMMENTS

Comment A: There were no benefit changes reported to the actuary in connection with this valuation of the System. There were no assumption or method changes reflected in this valuation of the System. The change in contribution rate over the prior year is due to System experience during calendar year 2008.

Comment B: Experience for the year ended December 31, 2008 was unfavorable. During calendar year 2008, the return on System assets was lower than long term expectations. The market value smoothing techniques used in this valuation of the System recognize both past and present investment experience. The actuarial asset yield for the year was 1.2%. Additional information on the investment experience is provided on page B-4 of this report.

Comment C: The Board's policy is to use any existing surplus as a funding credit to reduce the employer's contribution. As of the valuation date, the System still has a small funding surplus. Given the current state of the financial markets, it is likely that the surplus will erode and City Contribution rates will increase to at least the level of normal cost contributions (at least 7.26% of System member payroll) in the near term. In fact, if the market value of system assets were used in the development of the employer contribution, the City's contribution for fiscal year 2009-2010 would be over 12% of pay. Contribution projections can be a useful planning tool. The Board/City may wish to consider this actuarial service.

Comment D: As of the valuation date, the System's funded ratio (the ratio of the Funding Value of assets to the accrued liabilities of the System) was 102%. Last year the ratio was 108%. The decline in funded ratio over the prior year is due to the investment experience during calendar year 2008. If the funded ratio were measured using the market value of assets as of December 31, 2008 the System would be 80% funded.

UNFUNDED ACTUARIAL ACCRUED LIABILITY
(AMOUNTS IN THOUSANDS OF DOLLARS)

	December 31	
	2008	2007
A. Actuarial present value of future benefits	\$634,628	\$598,867
B. Actuarial present value of future normal costs	115,394	110,040
C. Actuarial accrued liability	519,234	488,827
D. Assets allocated to funding	528,664	529,876
E. Unfunded actuarial accrued liability	(9,430)	(41,049)
F. Ratio of assets to actuarial accrued liability	102%	108%

HISTORICAL SCHEDULE OF CITY CONTRIBUTION RATES
AND THE ASSOCIATED AMORTIZATION PERIOD

Valuation Date December 31	Established City Contribution Rate as a % of Active Member Payroll	Years to Amortize UAL	Years to Liquidate Surplus
1994	8.35 %	13.0	
1995	8.35	8.0	
1996	8.35	3.0	
1997 *	8.35	0.0	
1998	8.35	0.0	
1999	8.35	0.0	
2000 *	7.00	0.0	
2001	7.00	0.0	
2002	7.00		3.8
2003	7.00	40.0	
2004 #	8.25	40.0	
2005	7.94	30.0	
2006	6.16		29.0
2007	5.04		28.0
2008	6.77		27.0

* Retirement System amended

The average established City contribution for the indicated fiscal year

SECTION B

**SUMMARY OF BENEFIT PROVISIONS
AND VALUATION DATA**

SUMMARY OF BENEFIT PROVISIONS EVALUATED OR CONSIDERED (DECEMBER 31, 2008)

Regular Retirement (no reduction factor for age)

Eligibility - Pre 3-1-67 hires: Age 60 with 10 years of service; or, any age with 30 years of service.

Post 3-1-67 hires: Age 65 with 5 years of service; or, any age with 25 years of service.

Annual Amount - Normal retirement benefit: 2% of average final compensation for all years and complete months of service, to a maximum of 100% of AFC.

Average Final Compensation (AFC) - Average earned compensation (excluding compensation for unused vacation and sick leave) during highest 36 months of service out of the last 60 consecutive months of service.

Early Retirement (reduction factor for age)

Eligibility - Age 55 with 5 years of service.

Annual Amount - Same as regular retirement amount but reduced 4% for each full year or portion of a year that payments commence prior to age 65 (age 60 if hired prior to 3-1-67).

Deferred Retirement (vested benefit)

Eligibility - 5 years of service. Benefit begins at age 65 (age 60 if hired prior to 3-1-67) or at age 55 on a reduced basis.

Annual Amount - Same as regular retirement based on service and average final compensation at time of termination.

Duty Disability Retirement

Eligibility - No age or service requirements.

Annual Amount - 40% of average final compensation, reduced if degree of disability is less than total disability.

Non-Duty Disability Retirement

Eligibility - Any age with 15 years of service.

Annual Amount - 2% of average final compensation for each full year of service, plus 1/12 of 2% for each full month of service due to a partial year of service to a maximum of 40% of AFC. Amount is reduced if degree of disability is less than total disability.

SUMMARY OF BENEFIT PROVISIONS EVALUATED OR CONSIDERED

(DECEMBER 31, 2008)

Duty Death Before Retirement

Eligibility - No age or service requirements.

Annual Amount - 20% of average final compensation to an eligible spouse. Payments cease upon death. If there is no eligible spouse, accumulated employee contributions are paid to designated beneficiary. For members eligible under age and service conditions, the benefit is the amount the spouse would have received as a joint annuitant under normal or early retirement conditions.

Non-Duty Death Before Retirement

Eligibility - Any age with 15 years of service.

Annual Amount - Same as duty death.

Post-Retirement Adjustments

Pensions may be adjusted annually (in January) for changes in the Consumer Price Index. Maximum adjustment is 4% per year compounded. The first adjustment is made one year following retirement for those age 65 (60 for pre 3-1-67 hires) or those awarded disability allowances. For all others, the first adjustment is made no earlier than 4 years following retirement.

Post-Retirement Death Benefit

Eligibility – Retiree currently collecting pension benefits from the System.

Amount – A one-time payment of \$5,000 payable upon the death of the retiree. This benefit is payable only upon the death of the retiree, and is payable to the designated beneficiary.

Member Contributions

6% of annual pay.

Employer Contributions

7% of annual payroll effective March 2, 2001 – December 31, 2005.

The actuarially determined contribution rate (up to a maximum of 10% of pay) effective January 1, 2006.

Partial Lump Sum Payment Option

Members who are eligible for Regular Retirement may elect this optional form of payment, which allows for cash at retirement of up to \$30,000. Any remaining monthly retirement benefit is reduced actuarially to reflect the payment of cash at retirement.

ASSET INFORMATION SUBMITTED FOR VALUATION

The net market value of Retirement System assets was reported to be \$417,053,228 as of December 31, 2008. The derivation of the funding value of assets used for the actuarial valuation is shown on the following page.

Revenues and Expenditures – Market Value Basis

	Year Ended December 31,	
	2008	2007
Revenues:		
a. Member contributions	\$ 6,363,043	\$ 6,074,227
b. City contributions	5,851,288	8,069,422
c. Investment income		
1. Interest and dividends	6,558,828	6,924,160
2. Realized & unrealized gain/(loss)	(113,606,729)	24,241,382
d. Other	519,088	196,696
e. Total revenues	(94,314,482)	45,505,887
Expenditures:		
a. Refunds of member contributions	807,503	587,439
b. Benefits paid	18,951,368	18,084,884
c. Administrative expenses	394,462	419,426
d. Investment expenses	1,432,267	1,582,164
e. Other expenses	0	0
f. Total expenditures	21,585,600	20,673,913
Reserve Increase (Decrease):		
Total revenues minus total expenditures	\$ (115,900,082)	24,831,974

Reported Market Value of Assets

	December 31, 2008
Cash & Other	\$ 34,474,098
Fixed Income	140,883,738
Equities	250,926,536
Real Estate	25,470,050
Total Assets	451,754,422
Less Accounts Payable	34,701,194
Net Assets	\$417,053,228

DEVELOPMENT OF VALUATION ASSETS

Year Ended December 31:	2007	2008
A. Funding Value Beginning of Year	\$476,913,001	\$529,876,293
B. Market Value End of Year	532,953,310	417,053,228
C. Market Value Beginning of Year	508,121,336	532,953,310
D. Non-Investment Net Cash Flow	(4,528,674)	(7,544,540)
E. Investment Income		
E1. Market Total: B - C - D	29,360,648	(108,355,542)
E2. Amount for Immediate Recognition (8.0%)	37,971,893	42,088,322
E3. Amount for Phased-In Recognition E1-E2	(8,611,245)	(150,443,864)
F. Phased-In Recognition of Investment Income		
F1. Current Year: 0.25 x E3	\$ (2,152,811)	\$ (37,610,966)
F2. First Prior Year	5,528,162	(2,152,811)
F3. Second Prior Year (method change)	(1,520,874)	5,528,162
F4. Third Prior Year	17,665,596	(1,520,874)
F5. Total	19,520,073	(35,756,489)
G. Funding Value End of Year: A + D + E2 + F5	529,876,293	528,663,586
H. Difference between Market & Funding Value	3,077,017	(111,610,358)
I. Net Recognized Rate of Return - Funding Value Basis	12.11%	1.20%
J. Net Recognized Rate of Return - Market Value Basis	5.80%	(20.48%)
K. Ratio of Funding Value to Market Value	0.99	1.27

RETIRANT AND BENEFICIARY DATA

Valuation Date Dec. 31	No. Pension Recipients				Total Annual Pensions ⁽²⁾	% of Payroll	Average Annual Pension	% Incr. in Total Pensions
	Service	Disability	Survivor	Total				
1989	683	52	184	919	\$ 4,736,258	9.6 %	\$ 5,154	1.2 %
1990	667	52	185	904	4,866,789	8.8	5,384	4.5
1991	643	55	196	894	5,083,200	8.8	5,686	4.4
1992	635	49	203	887	5,275,616	8.6	5,948	3.8
1993	622	53	203	878	5,393,539	8.1	6,143	2.2
1994	621	51	204	876	5,759,562	8.2	6,575	6.8
1995	630	54	198	882	6,131,477	8.8	6,952	5.7
1996	634	55	195	884	6,507,720	9.2	7,362	6.1
1997	634	54	200	888	6,818,103	9.1	7,678	4.8
1998	633	56	202	891	7,134,692	9.0	8,008	4.6
1999	643	56	202	901	7,470,215	9.2	8,291	4.7
2000 ⁽¹⁾	646	61	203	910	9,188,323	11.4	10,097	23.0
2001	694	63	205	962	10,386,513	12.4	10,797	13.0
2002	725	65	210	1000	11,261,772	13.0	11,262	8.4
2003	731	68	207	1,006	11,972,938	14.0	11,902	6.3
2004	773	66	207	1,046	13,038,432	14.7	12,465	8.9
2005	796	67	213	1,076	14,355,655	15.7	13,342	10.1
2006	823	69	221	1,113	15,766,306	16.5	14,166	9.8
2007	854	66	233	1,153	17,117,037	17.2	14,846	8.6
2008	894	59	225	1,178	18,459,873	17.5	15,671	7.8

(1) Reflects a one-time increase resulting from purchasing power study.

(2) Annual pension amounts shown above are reported to the actuary by the City and reflect annual pension payments as of the indicated valuation date.

PENSIONS BEING PAID DECEMBER 31, 2008
TABULATED BY ATTAINED AGE OF RECIPIENT

Attained Ages	Service Pensions		Disability Pensions		Survivor Pensions		Totals	
	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions
40 - 44	1	\$ 21,084			1	\$ 8,568	2	\$ 29,652
45 - 49	25	622,812	4	\$ 37,956	2	16,356	31	677,124
50 - 54	52	1,188,696	11	123,780	10	108,528	73	1,421,004
55 - 59	111	2,209,572	16	153,534	9	69,432	136	2,432,538
60 - 64	131	2,534,772	10	92,652	21	254,700	162	2,882,124
65 - 69	192	3,307,500	6	61,356	20	207,480	218	3,576,336
70 - 74	143	2,515,620	5	40,248	34	389,760	182	2,945,628
75 - 79	109	1,629,936	4	51,660	43	432,963	156	2,114,559
80 - 84	78	1,061,604	1	10,056	42	349,260	121	1,420,920
85 - 89	38	476,088	2	23,208	27	215,508	67	714,804
90+	14	131,124			16	114,060	30	245,184
Totals	894	\$15,698,808	59	\$594,450	225	\$2,166,615	1,178	\$18,459,873

PENSIONS BEING PAID DECEMBER 31, 2008
TABULATED BY YEAR OF RETIREMENT

Year of Retirement	No.	Annual Pensions	
		Total	Average
1960 - 1964	1	\$ 10,052	\$ 10,052
1965 - 1969	1	2,602	2,602
1970 - 1974	7	50,570	7,224
1975 - 1979	21	222,800	10,610
1980 - 1984	41	376,969	9,194
1985	19	236,073	12,425
1986	16	250,071	15,629
1987*	78	1,300,416	16,672
1988	9	76,391	8,488
1989	11	140,806	12,801
1990	12	154,519	12,877
1991	22	250,598	11,391
1992	23	235,600	10,243
1993	20	185,620	9,281
1994	33	460,605	13,958
1995	35	451,294	12,894
1996	43	596,067	13,862
1997	37	493,560	13,339
1998	39	488,200	12,518
1999	44	585,122	13,298
2000	53	667,444	12,593
2001	83	1,515,286	18,256
2002	65	1,023,377	15,744
2003	56	1,017,875	18,176
2004	78	1,385,641	17,723
2005	72	1,391,804	19,331
2006	84	1,633,054	19,441
2007	90	1,660,210	18,447
2008	85	1,597,247	18,791
Totals	1,178	\$18,459,873	\$15,671

* Reflects early retirement incentive program

SYSTEM MEMBERS INCLUDED IN VALUATION COMPARATIVE SCHEDULE

Valuation Date	Number of		Annual Payroll ⁽¹⁾	Active Member Averages			Ratio of Active to Retired Members	% Increase/ (Decrease) in Avg Pay
	Active Members	Inactive Members		Age	Service	Pay		
1988	2,376	26	\$49,024	38.9 yrs.	8.1 yrs.	\$20,633	2.5	6.2 %
1989	2,360	25	49,267	39.3	8.4	20,876	2.6	1.2
1990	2,424	25	55,094	39.6	8.7	22,729	2.7	8.9
1991	2,452	28	57,850	39.9	9.0	23,593	2.7	3.8
1992	2,496	26	61,028	40.4	9.3	24,450	2.8	3.6
1993	2,520	15	66,278	40.9	9.5	26,301	2.9	7.6
1994	2,492	14	70,151	41.6	10.0	28,150	2.8	7.0
1995	2,428	16	69,754	42.2	10.5	28,729	2.8	2.1
1996	2,401	17	70,972	42.8	10.9	29,559	2.7	2.9
1997	2,418	19	74,752	43.3	11.1	30,908	2.7	4.6
1998	2,405	25	79,195	43.7	11.6	32,929	2.7	6.5
1999	2,453	36	80,897	43.8	11.6	32,979	2.7	0.2
2000	2,454	41	80,503	44.0	11.6	32,805	2.7	(0.5)
2001	2,454	49	83,862	44.0	11.4	34,174	2.6	4.2
2002	2,374	55	86,428	44.5	11.7	36,406	2.4	6.5
2003	2,290	61	85,666	45.2	12.3	37,409	2.3	2.8
2004	2,302	54	88,866	45.2	12.3	38,604	2.2	3.2
2005	2,312	58	91,641	45.5	12.3	39,637	2.1	2.7
2006	2,353	62	95,504	45.5	12.1	40,588	2.1	2.4
2007	2,380	66	99,574	45.5	12.0	41,838	2.1	3.1
2008	2,422	71	105,566	45.8	11.9	43,586	2.1	4.2

* In thousands of dollars

INACTIVE MEMBERS - DECEMBER 31, 2008
ELIGIBLE FOR DEFERRED PENSIONS
TABULATED BY ATTAINED AGES

<u>Attained Ages</u>	<u>No.</u>	<u>Estimated Annual Allowances</u>
Under 40	10	\$ 56,521
43	1	6,963
44	2	23,089
45	2	14,921
46	4	37,429
47	3	52,192
48	1	25,395
49	2	16,824
50	2	25,388
51	1	6,416
52	5	45,401
53	5	78,928
54	5	54,484
55	5	52,435
56	1	5,491
57	2	19,316
59	8	95,339
60 & Over	12	135,650
Totals	71	\$752,182

ACTIVE MEMBERS AS OF DECEMBER 31, 2008
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	62							62	\$ 1,790,551
25-29	134	31						165	5,286,884
30-34	128	48	14					190	6,928,532
35-39	116	82	43	27				268	10,386,775
40-44	105	71	56	68	31	2		333	14,394,384
45-49	101	62	63	81	86	40	2	435	19,495,566
50-54	94	53	52	73	71	71	28	442	20,954,139
55-59	42	47	35	62	48	51	38	323	15,721,620
60	3	6	6	9	5	8	4	41	2,263,694
61	7	4	4	8	4	3	3	33	1,636,250
62	8	1	6	6	5	7	2	35	1,915,084
63	3	3	1	1	4	3	2	17	886,674
64	2	5	3	3	4		4	21	1,052,154
65		3	6	4	5		2	20	1,068,089
66			2	2	2	1	1	8	484,668
67	1	1	3	1	2	2	1	11	468,469
68				1				1	41,818
69	2		1				1	4	165,492
70		1						1	16,442
71			1	1			1	3	167,456
72	1		1	2				4	210,551
73	1							1	56,886
74				1			1	2	113,360
76				1				1	39,473
77						1		1	21,089
Totals	810	418	297	351	267	189	90	2,422	\$105,566,100

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Group Averages:

Age: 45.8 years
Service: 11.9 years
Annual Pay: \$43,586

**SCHEDULE OF
RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS
COMPARATIVE STATEMENT ⁽¹⁾**

Year Ended Dec. 31	Added to Rols		Removed from Rols		Rols End of Year			% Incr. In Benefits
	No.	Annual Benefits ⁽²⁾	No.	Annual Benefits	No.	Annual Benefits	Avg. Annual Benefits	
2000	61	\$2,071,548	52	\$353,440	910	\$ 9,188,323	\$ 10,097	23.0 %
2001	107	1,484,844	55	286,654	962	10,386,513	10,797	13.0
2002	82	1,288,646	44	413,387	1000	11,261,772	11,262	8.4
2003	61	1,178,401	55	467,235	1,006	11,972,938	11,902	6.3
2004	85	1,582,646	45	517,152	1,046	13,038,432	12,465	8.9
2005	80	1,835,088	50	517,865	1,076	14,355,655	13,342	10.1
2006	85	1,978,502	48	567,851	1,113	15,766,306	14,166	9.8
2007	95	1,989,651	55	638,920	1,153	17,117,037	14,846	8.6
2008	85	2,109,746	60	766,910	1,178	18,459,873	15,671	7.8

(1) Information concerning retirees and beneficiaries added to and removed from rolls was not consistently available in 1999 and prior years.

(2) Includes post retirement cost-of-living adjustments. The year 2000, reflects increases in connection with special purchasing power study.

SECTION C

ACTUARIAL METHODS, ACTUARIAL ASSUMPTIONS AND DEFINITION OF TECHNICAL TERMS

THE ACTUARIAL VALUATION PROCESS

The *actuarial valuation* is the mathematical process by which actuarial present values and contribution rates are determined. The flow of activity constituting the valuation may be summarized as follows:

- A. ***Census data***, furnished by plan administrator, including:
 - Retired lives now receiving benefits
 - Former employees with vested benefits not yet payable
 - Active employees

- B. + ***Benefit provisions***, furnished by plan administrator

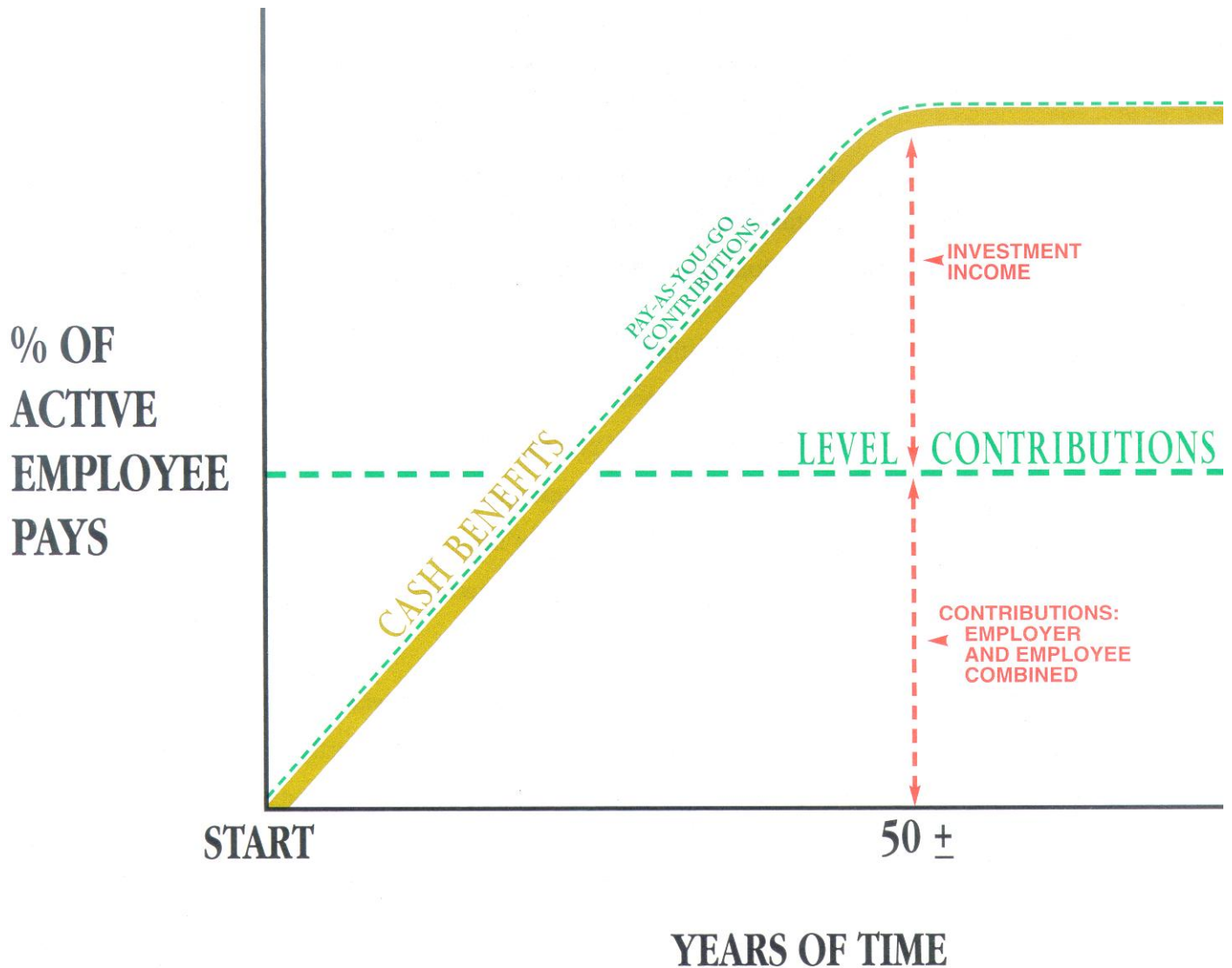
- C. + ***Asset data*** (cash & investments), furnished by plan administrator

- D. + ***Assumptions concerning future experience*** in various risk areas

- E. + The ***funding method*** for employer contributions (the long-term, planned pattern for employer contributions)

- F. + ***Mathematically combining the assumptions, the funding method and the data***

- G. = Determination of:
 - Plan Financial Position and/or
 - New Employer Contribution Rate



CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

- Rates of investment return
- Rates of pay increase
- Changes in active member group size

Non-Economic Risk Areas

- Ages at actual retirement
- Rates of mortality
- Rates of withdrawal of active members (turnover)
- Rates of disability

ACTUARIAL METHODS

Actuarial Cost Method

The actuarial cost method is a procedure for allocating the actuarial present value of pension plan benefits and expenses to time periods. The method used for the valuation is known as the individual entry-age actuarial cost method and has the following characteristics.

- (i) The annual normal costs for each individual active member, payable from the date of employment to the date of retirement, are sufficient to accumulate the value of the member's pension at time of retirement.
- (ii) Each annual normal cost is a constant percentage of the member's year by year projected compensation.

The entry-age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's compensation between the entry age of the member and the assumed exit ages.

The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial accrued liability. Deducting System assets from the actuarial accrued liability determines the unfunded actuarial accrued liability.

Actuarial Value of Assets

The funding value of assets recognizes assumed investment income fully each year. Differences between actual and assumed investment income are phased-in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, funding value of assets will tend to be lower than market value. During periods when investment performance is less than the assumed rate, funding value of assets will tend to be greater than market value. The funding value of assets is unbiased with respect to market value. At any time it may be either greater or less than market value. If assumed rates are exactly realized for 4 consecutive years, it will become equal to market value.

ACTUARIAL ASSUMPTIONS

Funding objective contribution requirements and actuarial present values are calculated by applying actuarial assumptions to the benefit provisions and people information of the System, using the actuarial cost method described on page C-3.

The principal areas of risk which require actuarial assumptions about future experiences are:

- (i) long-term rates of investment return to be generated by the assets of the System
- (ii) patterns of pay increases to members
- (iii) rates of mortality among members and retired lives
- (iv) rates of withdrawal of active members
- (v) rates of disability among active members
- (vi) the age patterns of actual retirements

In a valuation, the monetary effect of each assumption projected is for as long as a present covered person or potential beneficiary survives - - - a period of time which can be as long as a century.

Actual experience of the System will not coincide exactly with assumed experience. From time-to-time one or more of the assumptions are modified to reflect experience trends (but not random or temporary year to year fluctuations).

ACTUARIAL ASSUMPTIONS

Investment Return (net of expenses)

The rate of investment return assumed in the valuation was eight percent (8.0%) per year, compounded annually.

Wage Inflation

The wage inflation rate assumed in this valuation was 4.5% per year. The wage inflation rate is defined to be the portion of total pay increases for an individual that are due to macroeconomic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes rated to individual merit and seniority effects. The assumed real rate of return over wage inflation is 3.5% per year.

Salary Increase Rates

These assumptions are used to project current pays to those which will determine average final compensation.

Sample Ages	Annual Rate of Salary Increase			
	Inflation Component	Productivity	Merit and Longevity	Total
20	4.00 %	0.50 %	3.80 %	8.30 %
25	4.00	0.50	3.10	7.60
30	4.00	0.50	2.70	7.20
35	4.00	0.50	2.40	6.90
40	4.00	0.50	2.10	6.60
45	4.00	0.50	1.70	6.20
50	4.00	0.50	1.10	5.60
55	4.00	0.50	0.70	5.20
60	4.00	0.50	0.20	4.70
65	4.00	0.50	0.00	4.50

The active member population is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll is assumed to grow at the wage inflation rate, 4.5% per year.

Price inflation

The assumed rate of price inflation used in this valuation was 4.0% per year.

Mortality Table

The mortality assumption is used to measure the probabilities of a member dying before retirement and the probability of each benefit payment being made. The 1994 Group Annuity mortality table set forward 1 year for women and 3 years for men was used in this valuation of the System. Sample values are shown below. This was first used in the 12/31/2005 valuation.

Sample Ages	Value at Retirement of		Future Life	
	\$1 Monthly for Life		Expectancy (Years)	
	Men	Women	Men	Women
50	\$130.37	\$139.27	27.95	33.94
55	121.75	132.99	23.52	29.24
60	111.34	124.83	19.39	24.70
65	99.69	115.07	15.66	20.46
70	86.85	103.62	12.34	16.54
75	72.81	89.91	9.40	12.90
80	59.14	74.92	7.00	9.71

Rates of Retirement

Rates of retirement are used to measure the probabilities of an eligible member retiring during the next year, and are summarized below. These rates were first used for the December 31, 2005 valuation.

Age of Member	Percent of Eligible Members Retiring During Next Year	Years of Service	Percent Retiring
50	12%	25	20%
51	8	26	12
52	8	27	12
53	8	28	12
54	8	29	12
55	8	30	12
56	8	31	12
57	8	32	12
58	8	33	12
59	8	34	12
60	8	35	12
61	8	36	12
62	20	37	12
63	8	38	12
64	8	39	12
65	55	40	100
66	25		
67	30		
68	40		
69	70		
70	100		

The service based retirement rates were applied to those members first eligible to retire under "25 and out". The age based retirement rates were applied to members retiring under either 65/5 (60/10 for pre 3/67 hires) or the Plan's early retirement conditions.

The probability of retiring at age 70 was assumed to be 100% regardless of service.

Rates of Separation from Active Membership

This assumption measures the probabilities of a member terminating employment. The rates do not apply to members who are eligible to retire.

Sample Ages	Years of Service	% of Active Members Separating within Next Year
ALL	0	30.00%
	1	20.00
	2	15.00
	3	10.00
	4	7.00
25	5 & Over	7.00
30		6.00
35		4.75
40		3.50
45		2.40
50		1.50
55		1.00
60		1.00

Rates of Disability

This assumption measures the probabilities of a member becoming disabled.

Age of Member	% of Active Members During Next Year	
	Males	Females
25	0.09%	0.05%
30	0.10	0.07
35	0.14	0.13
40	0.21	0.19
45	0.32	0.28
50	0.52	0.45
55	0.92	0.76
60	1.53	1.10

Disabled life mortality is measured by the 1994 Group Annuity Mortality Table set forward by 1 year for women and 3 years for men at time of disability. Rates of recovery from disability were assumed to be zero.

DEFINITIONS OF TECHNICAL TERMS

Actuarial Accrued Liability. The difference between the actuarial present value of System benefits and the actuarial value of future normal costs. Also referred to as "accrued liability" or "actuarial liability."

Actuarial Assumptions. Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Accrued Service. Service credited under the system which was rendered before the date of the actuarial valuation.

Actuarial Equivalent. A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of Retirement System benefits between future normal cost and actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Gain (Loss). The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

Actuarial Present Value. The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

Amortization. Paying off an interest-discounted amount with periodic payments of interest and principal -- as opposed to paying off with lump sum payment.

DEFINITIONS OF TECHNICAL TERMS

Normal Cost. The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method.

Unfunded Actuarial Accrued Liability. The difference between actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded actuarial liability" or "unfunded accrued liability."

The existence of an unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. The unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability and the trend in its amount (after due allowance for devaluation of the dollar).

SUMMARY OF ASSUMPTIONS USED
DECEMBER 31, 2008
MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption:	80% of the population is assumed to be married for purposes of death-in-service benefits.
Pay Increase Timing:	Beginning of year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Decrement Timing:	All decrements were assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Decrement Operation:	Disability and turnover decrements do not operate during retirement eligibility. Neither disability nor mortality operates during the first 5 years of service.
Normal Form of Benefit:	The assumed normal form of benefit is the straight life form.
Expenses:	Assumed investment return is net of administrative and investment expenses.

SECTION D

**DISCLOSURES AND SUPPLEMENTARY
INFORMATION REQUIRED BY
STATEMENTS NO. 25 AND NO. 27 OF THE
GOVERNMENTAL ACCOUNTING STANDARDS
BOARD**

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date December 31,	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Active Member Covered Payroll (c)	UAAL as a Percentage of Active Member Covered Payroll (b-a)/c
1998	\$260,877	\$238,656	\$ (22,222)	109.3 %	\$79,195	(28.1) %
1999	307,872	245,906	(61,967)	125.2	80,897	(76.6)
2000	350,398	323,300	(27,098)	108.4	80,503	(33.7)
2001	372,737	344,597	(28,140)	108.2	83,862	(33.6)
2002	375,382	372,560	(2,822)	100.8	86,428	(3.3)
2003	374,192	391,023	16,831	95.7	85,666	19.6
2004	381,495	415,164	33,669	91.9	88,866	37.9
2005 #	424,182	436,904	12,722	97.1	91,641	13.9
2006	476,913	457,547	(19,366)	104.2	95,504	(20.3)
2007	529,876	488,827	(41,049)	108.4	99,574	(41.2)
2008	528,664	519,234	(9,430)	101.8	105,566	(8.9)

Dollar amounts are in thousands

Changes in methods and assumptions

Analysis of the dollar amounts of the actuarial value of assets, actuarial accrued liability, or actuarial accrued liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides one indication of the System's funded status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the plan. The unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of covered payroll approximately adjusts for the effects of inflation and aids analysis of the progress being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan.

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Actuarial Valuation Date December 31,	Annual Required Contribution ⁽¹⁾
1999	\$6,415,466
2000	6,363,262
2001	6,138,260
2002	6,352,439
2003	5,996,592
2004	6,989,274
2005	8,348,510
2006	8,323,183
2007	7,019,982
2008	5,911,702

⁽¹⁾ For the plan year ending on the valuation date

Note: The City develops the annual required contribution for financial reporting purposes (the City's CAFR) based on the recommendation of the actuary and the City's contribution policy. This information is presented in draft form for review by the City's auditor.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION
SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

Valuation Date	December 31, 2008
Actuarial Cost Method	Individual Entry Age
Amortization Method	Level Percent of payroll
Amortization Period	27 years closed
Asset Valuation Method	4-year smoothed market
Actuarial Assumptions:	
Investment Rate of Return*	8.0%
Projected Salary Increases*	4.5% - 8.3%
*Includes Wage Inflation	4.5%
Cost-of-Living Adjustments	Up to 4.0% per year

SECTION E

**RETIREMENT SYSTEM EXPERIENCE
ACTUAL VS EXPECTED**

**DERIVATION OF EXPERIENCE GAIN (LOSS)
CALENDAR YEARS 2004 - 2008**

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is hoped that gains and losses will cancel each other over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) is shown below, along with a year by year historic comparison.

	Amounts shown are expressed in thousands of dollars				
	2008	2007	2006	2005	2004
(1) UAAL* at start of year	\$ (41,049)	\$ (19,366)	\$ 12,722	\$ 33,669	\$ 16,831
(2) Normal cost from last valuation	13,977	13,164	12,635	12,784	12,379
(3) Actual member and employer contributions	12,214	14,144	15,022	11,887	12,209
(4) Interest accrual on (1), (2) and (3)	(3,213)	(1,588)	922	2,729	1,353
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	(42,499)	(21,934)	11,257	37,295	18,354
(6) Increase due to benefit changes	0	0	0	0	0
(7) Increase due to revised actuarial assumptions	0	0	0	(28,175)	0
(8) Expected UAAL after changes: (5) + (6) + (7)	(42,499)	(21,934)	11,257	9,120	18,354
(9) Actual UAAL at end of year	(9,430)	(41,049)	(19,366)	12,722	33,669
(10) Gain (loss): (8) - (9)	\$ (33,069)	\$ 19,115	\$ 30,623	\$ (3,602)	\$ (15,315)

* *Unfunded actuarial accrued liability (UAAL)*

SERVICE RETIREMENTS DURING THE INDICATED PLAN YEARS

Age Group	Number Retiring in the Indicated Year		
	2008	2007	2006
40-44		2	2
45-49	7	4	12
50-54	7	11	10
55-59	17	19	7
60	1	3	1
61	4	2	5
62	12	8	6
63	2	1	5
64	3	4	2
65	7	3	5
66	4	2	2
67		2	1
68	1	1	2
69	2	1	
70 & Over	1	1	3
Total	68	64	63
Expected	94.7	93.4	88.8

The chart above shows actual versus expected retirements from City employment and does not include retirements from deferred status or disabilities.

**NON-VESTED WITHDRAWALS
FROM ACTIVE MEMBERSHIP
DURING THE INDICATED PLAN YEARS**

Age Groups	Years of Service	Number Terminating during the Indicated Year		
		2008	2007	2006
	0	20	32	17
	1	28	16	25
	2	10	12	18
	3	11	2	5
	4	2	6	12
	Sub-Total	71	68	77
Under 30	5 & Over	2	0	1
30-34		3	2	6
35-39		2	6	5
40-44		7	6	9
45-49		10	11	9
50-54		7	3	5
55-59		1	1	1
60 & Over		1	1	1
Sub-Total		33	30	37
Total *		104	98	114
Expected No.		137.9	136.9	118.7

* Includes people on leave of absence

NUMBER ADDED TO AND REMOVED FROM ACTIVE MEMBERSHIP
ACTUAL & EXPECTED

Valuation Date December 31	Number Added During Year		Retirement		Disabled		Died-In Service		Other Withdrawal		Members End of Year
	A	E	A	E	A	E	A	E	A	E	
1994	147	175	36	34.7	2	7.5	2	6.2	135	178.7	2,492
1995	124	176	36	42.6	5	7.3	4	6.3	143	136.3	2,428
1996	149	176	34	40.8	4	7.5	4	6.4	138	141.6	2,397
1997	190	172	34	42.6	2	7.5	5	6.4	131	138.6	2,419
1998	201	215	32	50.8	1	3.8	5	4.3	178	116.1	2,404
1999	285	240	38	51.6	3	4.1	5	4.6	194	143.4	2,449
2000	309	308	38	54.1	6	4.3	3	4.7	261	159.1	2,454
2001	331	331	82	74.6	4	3.6	5	3.7	240	162.7	2,454
2002	135	215	54	89.1	5	3.1	9	3.7	147	172.2	2,374
2003	120	213	42	87.6	2	3.2	7	3.7	153	146.7	2,290
2004	207	201	62	98.7	1	3.0	3	3.9	129	119.9	2,302
2005	200	190	57	100.2	3	3.1	6	4.1	124	129.6	2,312
2006	238	197	63	88.8	3	3.1	2	3.8	129	131.4	2,353
2007	206	179	64	93.4	1	3.0	5	3.9	109	148.9	2,380
2008	220	178	68	94.7	0	2.8	0	4.0	110	149.5	2,422
2004-2008	1,071	945	314	475.8	8	15.0	16	19.7	601	679.3	

A: Actual experience

E: Expected experience based on actuarial assumptions