



OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM

ANNUAL ACTUARIAL VALUATION OF RETIREMENT ALLOWANCES

DECEMBER 31, 2002

GABRIEL, ROEDER, SMITH & COMPANY

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August 14, 2003

The Retirement Board
Ohio Public Employees Retirement System
Columbus, Ohio

Ladies and Gentlemen:

The results of the *December 31, 2002 annual actuarial valuation* of the Ohio Public Employees Retirement System, based upon Chapter 145 of the Code as amended, are presented in this report. (The gain/loss analysis of experience and projections of retiree health and Medicare are covered in separate reports.) The purpose of the valuation is to measure the system's funding progress and to determine employer contribution rates for the coming year in accordance with established funding policy.

The individual member statistical data required for the valuations was furnished by your Executive Director and Staff, together with pertinent data on financial operations. Their cooperation in furnishing these materials is acknowledged with appreciation.

The actuarial assumptions used in the valuations are summarized in Section VII of this report. The assumptions are established by the Retirement Board after consulting with the actuary.

The valuation was completed in accordance with standards of practice prescribed by the Actuarial Standards Board and in conformance with Chapter 145 of the Revised Code of Ohio. To the best of our knowledge this report is complete and accurate and the actuarial methods and assumptions produced results which are reasonable.

Respectfully submitted,
GABRIEL, ROEDER, SMITH & COMPANY

Norman L. Jones, F.S.A. Brian B. Murphy, F.S.A.

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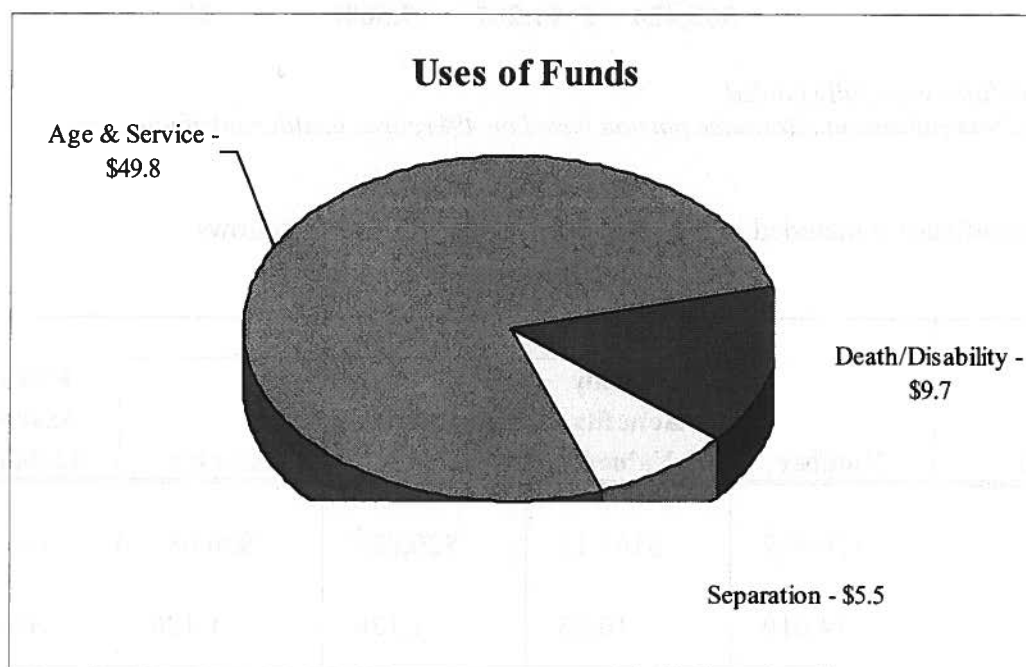
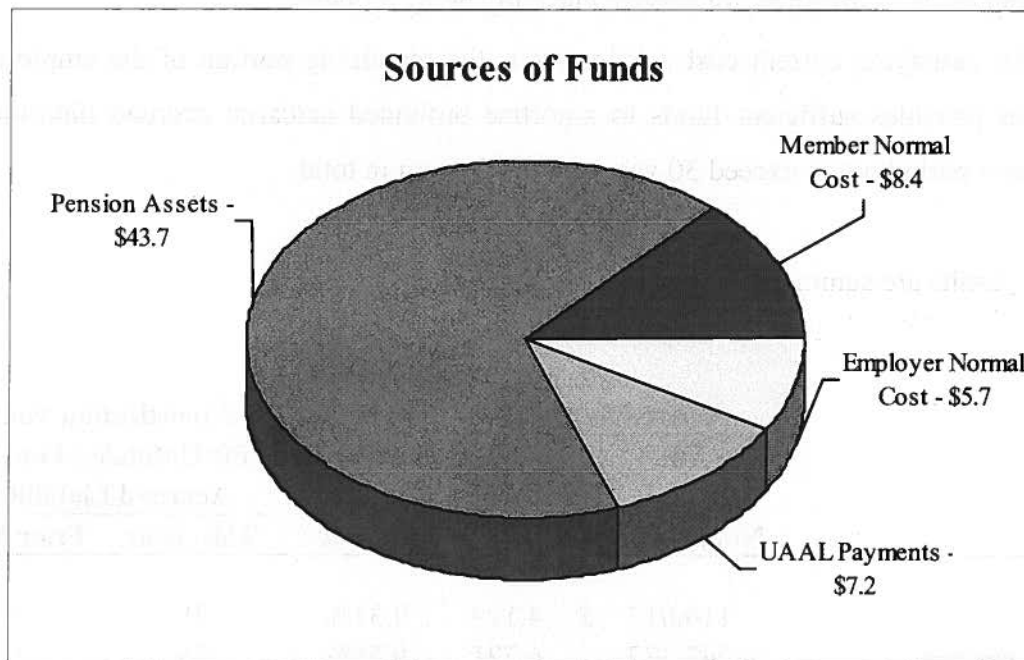
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Retirement System Totals

100

100

**FINANCING \$65.0 BILLION* OF PENSION BENEFIT PROMISES
FOR PRESENT ACTIVE AND RETIRED MEMBERS
DECEMBER 31, 2002
(DOLLAR AMOUNTS IN BILLIONS)**



* Present value of future benefits – all divisions combined.

COMMENTS REGARDING THE FINANCING OF RETIREMENT ALLOWANCES

The December 31, 2002 actuarial valuations of members indicate the following about the portion of employer contribution rates allocated to financing retirement allowances:

- The employer rates are sufficient to fully fund the cost of benefit commitments being made to members for service currently being rendered.
- After satisfying current cost requirements, the remaining portion of the employer rates provides sufficient funds to amortize unfunded actuarial accrued liabilities over a period not to exceed 30 years for the System in total.

Key valuation results are summarized below.

Division	Active Members		Number	(\$Millions)	Rate@	Retirement	
	Annual	Portion of				Allowance	Employer
	Payroll	for Unfunded Pension					
		Amortization Years					
			This Year	Prior Year			
State	110,017 \$	4,129	9.31%	38	*		
Local Government	247,377	6,721	9.55%	25	*		
Law	8,030	357	12.70%	36	*		
Totals	365,424	\$ 11,207	9.56%	29	*		

* Accrued liabilities were fully funded.
@ Fiscal Year 2004 retirement allowance portion based on 4% retiree health contribution rate.

Retirees and beneficiaries included in the valuation totaled 141,019 as follows:

Fund	Number	Monthly Benefits Valued	Actuarial Liabilities	\$ Millions		Ratio of Assets to Liabilities
				Assets#	Liabilities	
A & PR	126,409	\$163.13	\$20,085	\$20,085	1,120	100.0 %
SBF	14,610	10.23	1,120	1,120	100.0 %	
Total	141,019	\$173.36	\$21,205	\$21,205	100.0 %	

After recommended reserve transfers.

COMMENTS

Changes Since Last Valuation.

- 1% interest crediting on employee contributions. This rate first applies to interest credited December 31, 2004, based upon December 31, 2003 balances.
- 4% retiree health & Medicare employer contribution beginning January, 2004.

Experience. Experience was mixed this year. Measured on a market value basis, investment return was disappointing in 2002 for OPERS and for most other retirement funds across the nation. In total, computed accrued liabilities exceed assets by \$7,166,421,235. Unless the investment markets rebound, we will continue to see years when investment losses flow into the valuation. With \$1.9 billion of investment loss related to pre-2003 experience expected to be recognized in the 2003 valuation, it is likely that the next valuation will show unfunded liabilities and an amortization period in excess of 40-50 years based on the present contribution allocation between pension and retiree health benefits and other valuation assumptions.

Additional information concerning 2002 experience will be presented in a separate report of gain/loss experience.

Conclusion. Based on the results of the December 31, 2002 regular annual actuarial valuation, it is our opinion that the Ohio Public Employees Retirement System continues to be in sound financial condition in accordance with actuarial principles of level percent of payroll financing. A rebound in the investment markets is important for OPERS and for every retirement plan in the country.

ACTIVE MEMBERS IN VALUATION GROUP AVERAGES - COMPARATIVE STATEMENT

STATE												
Valuation Group		Dec. 31	Members	Active	Attained	Age	Service Yrs.	Average	Annual Payroll Increase			
Group Averages												
No. of												
Active												
Members												
Age												
Attained												
Service Yrs.												
Average												
Annual Payroll Increase												
6.4 %												
@												
8.1 %												
@												
7.4 %												
@												
6.2 %												
@												
1995												
114,596												
40.4												
8.8												
27,962												
2.0 %												
@												
1997												
114,036												
40.5												
9.1												
29,858												
4.1 %												
1998												
112,323												
41.0												
9.4												
31,159												
4.4 %												
1999												
112,761												
41.2												
9.6												
31,851												
2.2 %												
2000												
113,099												
41.6												
9.7												
34,201												
7.4 %												
2001												
109,219												
42.1												
10.2												
36,589												
2.6 %												
2002												
110,017												
42.0												
10.2												
37,531												
4.3 %												
@												
1975												
149,557												
40.8 yrs.												
6.1 yrs.												
\$ 8,771												
13,035												
8.2 %												
@												
1980												
160,797												
40.7												
7.4												
15,983												
6.2 %												
@												
1985												
158,285												
40.1												
8.3												
19,506												
4.1 %												
@												
1990												
173,220												
41.5												
7.9												
20,384												
0.9 %												
@												
1997												
231,668												
41.4												
7.8												
21,481												
3.1 %												
1998												
234,601												
41.6												
8.0												
22,334												
4.0 %												
1999												
240,005												
41.7												
8.0												
23,276												
4.2 %												
2000												
245,831												
41.8												
8.1												
24,401												
4.8 %												
2001												
243,202												
42.2												
8.4												
26,526												
8.7 %												
2002												
247,377												
42.2												
8.3												
27,171												
2.4 %												
-												
@												
10.0 %												
@												
1980												
3,019												
36.1												
6.8												
16,846												
5.5 %												
@												
1985												
4,207												
36.5												
8.4												
20,103												
6.0 %												
@												
1990												
5,804												
38.6												
9.9												
26,936												
3.2 %												
@												
1995												
6,605												
39.3												
11.1												
32,441												
5.0 %												
1997												
7,256												
39.3												
11.5												
35,680												
3.5 %												
1998												
7,507												
39.3												
11.6												
36,931												
4.3 %												
1999												
7,766												
39.3												
11.4												
38,506												
4.9 %												
2000												
8,045												
39.3												
11.7												
40,387												
5.2 %												
2001												
7,892												
39.3												
11.8												
42,503												
4.5 %												
2002												
8,030												
39.4												
12.0												
44,420												
5 year annual compound rate.												
@												

MARKET VALUE RECONCILIATION OF ASSETS (ALL DIVISIONS COMBINED)

	Calendar Year Ended December 31	
	2002	2001
Beginning Market Value	\$53,972,730,346	\$57,175,180,929
Revenues		
Member Contributions	1,094,343,553	931,050,640
Employer Contributions	1,683,021,503	1,408,392,987
Retiree Health Premiums	28,628,319	26,138,574
Total Revenues	2,805,993,375	2,365,582,201
Expenditures		
Retirement Benefits	2,088,758,535	1,880,704,941
Refunds of Member Contributions	187,051,815	262,681,258
System Paid Retiree Health Care	693,806,431	644,291,631
Member Paid Retiree Health Care	28,628,319	26,138,574
Retiree Medicare Reimbursement	53,572,102	49,192,479
Administrative Expenses	74,801,993	52,567,051
Other	(623,421)	24,027,835
Total Expenditures	3,125,995,774	2,939,603,769
Investment Return		
Ordinary Income	279,151,317	716,876,858
Capital Value Changes	(5,945,582,199)	(3,345,305,873)
Total Investment Return	(5,666,430,882)	(2,628,429,015)
Ending Market Value	\$47,986,297,065	\$53,972,730,346*

* Reported ending market value for the December 31, 2001 actuarial valuation was \$53,893,645,257.

DEVELOPMENT OF FUNDING VALUE OF ASSETS (BASED UPON 4 YEAR PHASE-IN OF DIFFERENCES BETWEEN ACTUAL AND ASSUMED RETURN)

Year Ended December 31	2000	2001	2002	2003	2004
A. Funding Value Beginning of Year	\$53,865,320,048	\$58,580,088,298	\$60,360,882,688	\$53,744,652,713	
B. Market Value End of Year	57,175,180,929	53,893,645,257	47,986,297,065		
C. Market Value Beginning of Year	57,894,315,288	57,175,180,929	53,893,645,257		
D. Non-Investment/Administrative Net Cash Flow	(260,337,913)	(521,455,042)	(245,200,406)		
E. Investment Return					
E1. Market Total:B-C-D	(458,796,446)	(2,760,080,630)	(5,662,147,786)		
E2. Assumed Rate of Return	7.75%	7.75%	8.00%		
E3. Assumed Amount of Return	4,164,474,210	4,519,750,460	4,819,062,599		
E4. Amount Subject to Phase In: E1-E3	(4,623,270,656)	(7,279,831,090)	(10,481,210,385)		
F. Phased-In Recognition of Investment Return					
F1. Current year: 0.25xE4	(1,155,817,664)	(1,819,957,773)	(2,620,302,596)		
F2. First Prior Year	690,977,989	(1,155,817,664)	(2,155,745,810)	(1,919,451,883)	
F3. Second Prior Year	680,589,644	690,977,989			\$ (1,919,451,883)
F4. Third Prior Year	594,881,984	680,589,645			
F5. Total Recognized Investment Gain	810,631,953	(1,604,207,803)	(4,776,048,406)	(1,919,451,883)	(1,919,451,883)
G. Funding Value End of Year					
G1. Preliminary Funding Value End of Year: A+D+E3+F5	58,580,088,298	60,974,175,913	60,158,696,475		
G2. Upper Corridor Limit: 112% x B		60,360,882,688	53,744,652,713		
G3. Lower Corridor Limit: 88% x B		47,426,407,826	42,227,941,417		
G4. Funding Value End of Year	58,580,088,298	60,360,882,688	53,744,652,713		
H. Difference Between Market and Funding Value	(1,404,907,369)	(6,467,237,431)	(5,758,355,648)	(3,838,903,765)	(1,919,451,882)
I. Recognized Rate of Return	9.26%	3.95%	(10.58)%		
J. Market Rate of Return	(0.79)%	(4.85)%	(10.53)%		
K. Ratio of Funding Value to Market Value	102%	112%	112%		

The Funding Value of Assets recognizes assumed investment return (line E3) fully each year. Differences between actual and assumed investment return (line E4) 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 less 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. If assumed rates are exactly realized for 3 consecutive years, funding value will become equal to market value.

ALLOCATION OF FUNDING VALUE OF ASSETS
AMONG DIVISIONS AND USAGE
DECEMBER 31, 2002

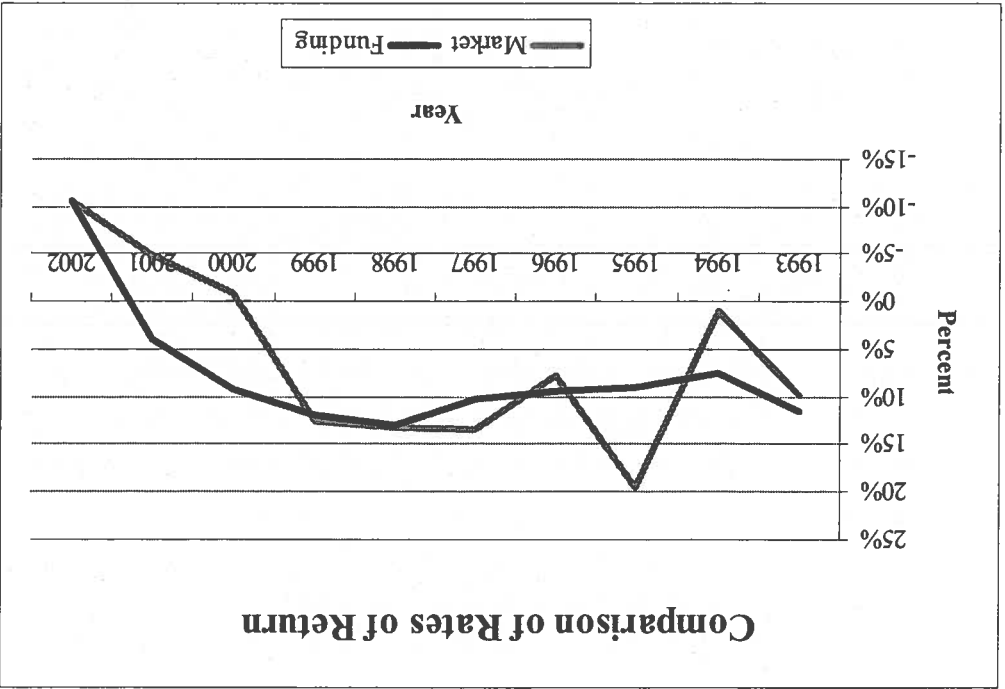
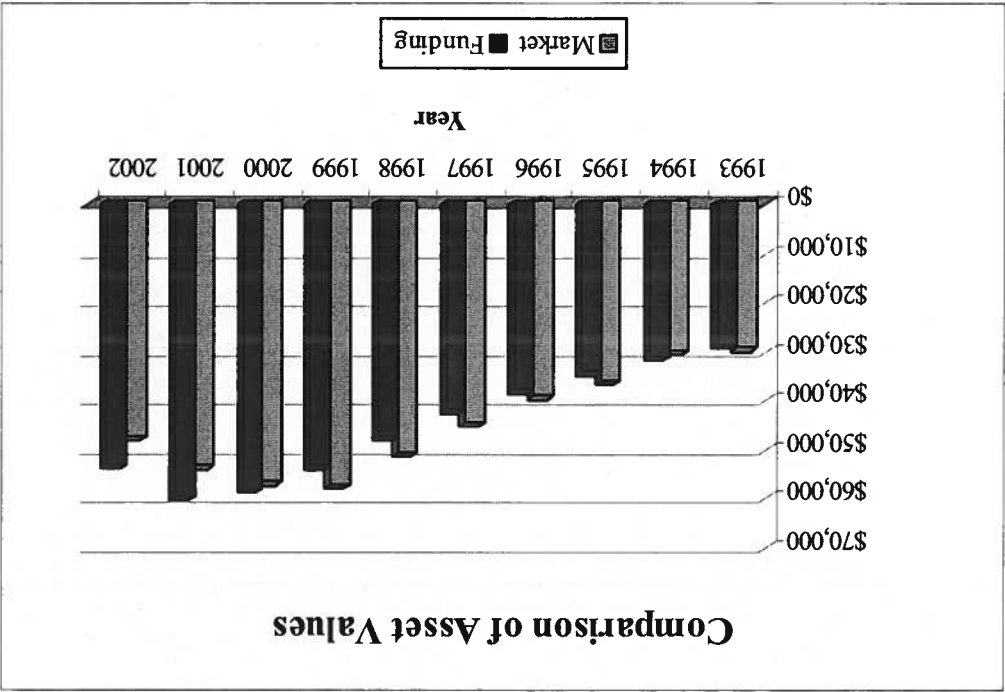
	State	Local	Law	Total
Retirement Assets				
Active and Inactive Member Assets				
Employer Accumulation Fund				
Pension	\$ 3,977,209,156	\$ 5,655,017,042	\$400,756,676	\$ 10,032,982,874
Survivor	0	0	0	0
Employee Savings Fund	3,317,823,753	4,908,800,876	287,235,035	8,513,859,664
Market Value Adjustment -Pension	1,879,628,582	2,575,994,847	167,228,235	4,622,851,664
Market Value Adjustment-Survivor	48,256,143	82,369,338	3,270,433	133,895,914
Total Active and Inactive Assets	9,222,917,634	13,222,182,103	858,490,379	23,303,590,116
Retired Assets				
Annuity and Pension Reserve				
Service Retirement	6,814,789,586	8,839,334,091	396,230,398	16,050,354,075
Disability Retirement	1,280,842,016	1,689,457,914	285,066,312	3,255,366,242
Total A& PR Fund	8,095,631,602	10,528,792,005	681,296,710	19,305,720,317
Survivor Benefit Fund				
S-1	104,983,668	166,016,345	7,922,348	278,922,361
S-2	290,144,451	508,435,438	18,856,418	817,436,307
Total Survivor Benefit Fund	395,128,119	674,451,783	26,778,766	1,096,358,668
Total Retired Assets	8,490,759,721	11,203,243,788	708,075,476	20,402,078,985
Total Retirement Assets	17,713,677,355	24,425,425,891	1,566,565,855	43,705,669,101
Health Assets				
Employer Accumulation Fund				
Market Value Adjustment	3,198,613,779	5,471,594,571	276,173,046	8,946,381,396
	390,639,785	668,234,015	33,728,416	1,092,602,216
Total Health Assets	3,589,253,564	6,139,828,586	309,901,462	10,038,983,612
Total Funding Value of Assets	\$ 21,302,930,919	\$ 30,565,254,477	\$ 1,876,467,317	\$ 53,744,652,713

The above reserves were reported to the Actuary by OPERS. The Actuary calculated the Market Value Adjustment.

ANNUAL REPORT OF THE BOARD OF TRUSTEES

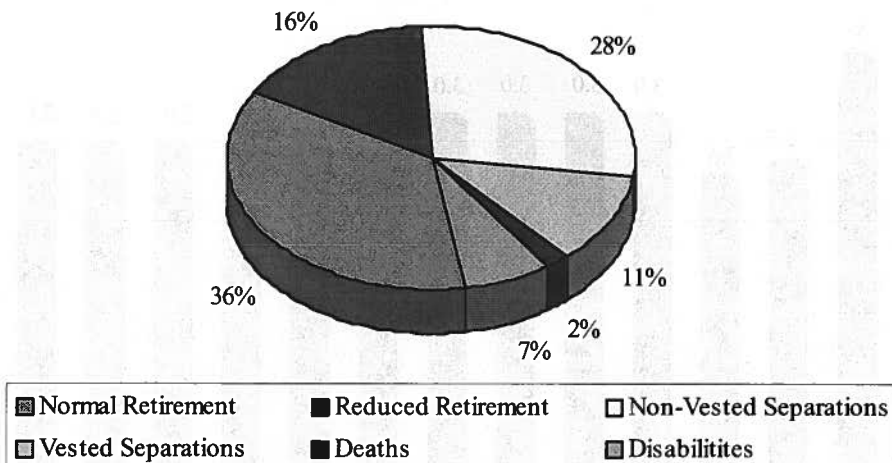
Item	Description	Amount	Percentage of Total Assets	Percentage of Total Liabilities	Percentage of Total Equity
1	Assets				
2	Liabilities				
3	Equity				
4	Total				
5	Assets				
6	Liabilities				
7	Equity				
8	Total				
9	Assets				
10	Liabilities				
11	Equity				
12	Total				
13	Assets				
14	Liabilities				
15	Equity				
16	Total				
17	Assets				
18	Liabilities				
19	Equity				
20	Total				
21	Assets				
22	Liabilities				
23	Equity				
24	Total				
25	Assets				
26	Liabilities				
27	Equity				
28	Total				
29	Assets				
30	Liabilities				
31	Equity				
32	Total				
33	Assets				
34	Liabilities				
35	Equity				
36	Total				
37	Assets				
38	Liabilities				
39	Equity				
40	Total				
41	Assets				
42	Liabilities				
43	Equity				
44	Total				
45	Assets				
46	Liabilities				
47	Equity				
48	Total				
49	Assets				
50	Liabilities				
51	Equity				
52	Total				
53	Assets				
54	Liabilities				
55	Equity				
56	Total				
57	Assets				
58	Liabilities				
59	Equity				
60	Total				
61	Assets				
62	Liabilities				
63	Equity				
64	Total				
65	Assets				
66	Liabilities				
67	Equity				
68	Total				
69	Assets				
70	Liabilities				
71	Equity				
72	Total				
73	Assets				
74	Liabilities				
75	Equity				
76	Total				
77	Assets				
78	Liabilities				
79	Equity				
80	Total				
81	Assets				
82	Liabilities				
83	Equity				
84	Total				
85	Assets				
86	Liabilities				
87	Equity				
88	Total				
89	Assets				
90	Liabilities				
91	Equity				
92	Total				
93	Assets				
94	Liabilities				
95	Equity				
96	Total				
97	Assets				
98	Liabilities				
99	Equity				
100	Total				



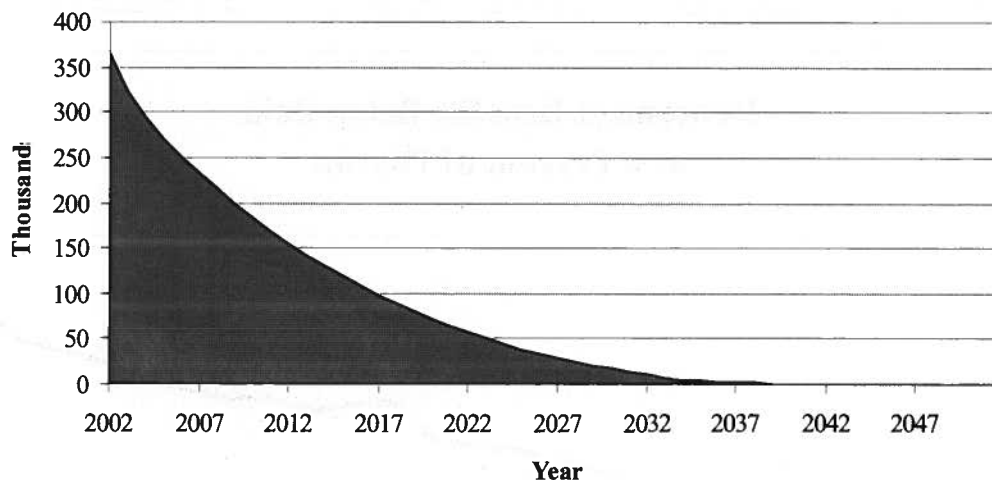


DEVELOPMENT OF PRESENT POPULATION DECEMBER 31, 2002

**Expected Terminations from Active
Employment for Current Active Members**

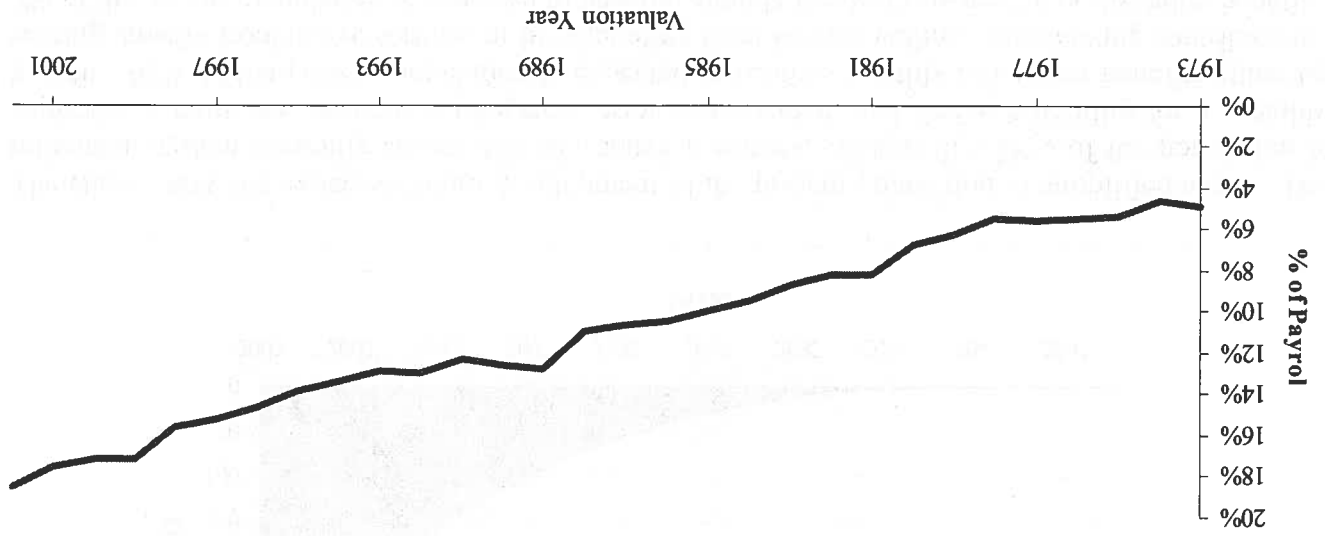


Closed Group Population Projection

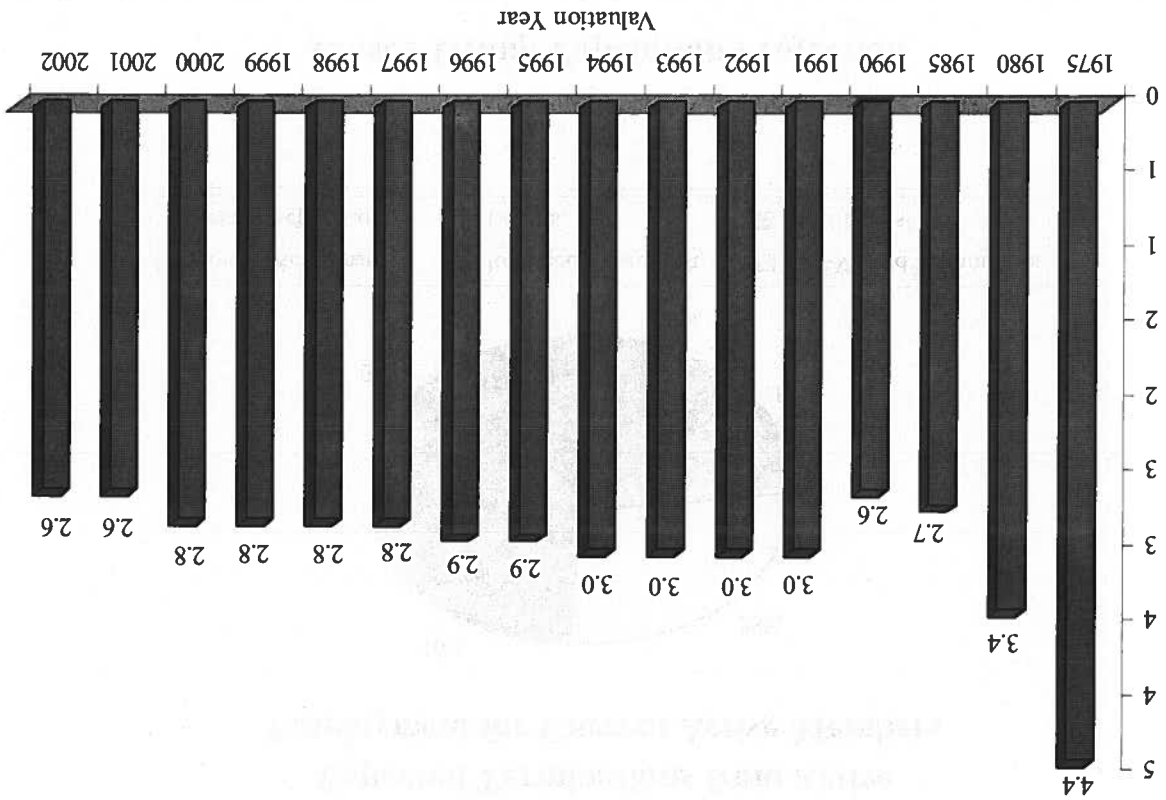


The charts show the expected future development of the present population in simplified terms. The retirement system presently covers 365,424 active members. Eventually, 28% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for a monthly benefit. 63% of the present population is expected to receive monthly retirement benefits either by retiring directly from active service, or by separating from service without withdrawing contributions. 9% of the present population is expected to become eligible for death-in-service or disability benefits. Within 9 years, over half of the covered membership is expected to consist of new hires.

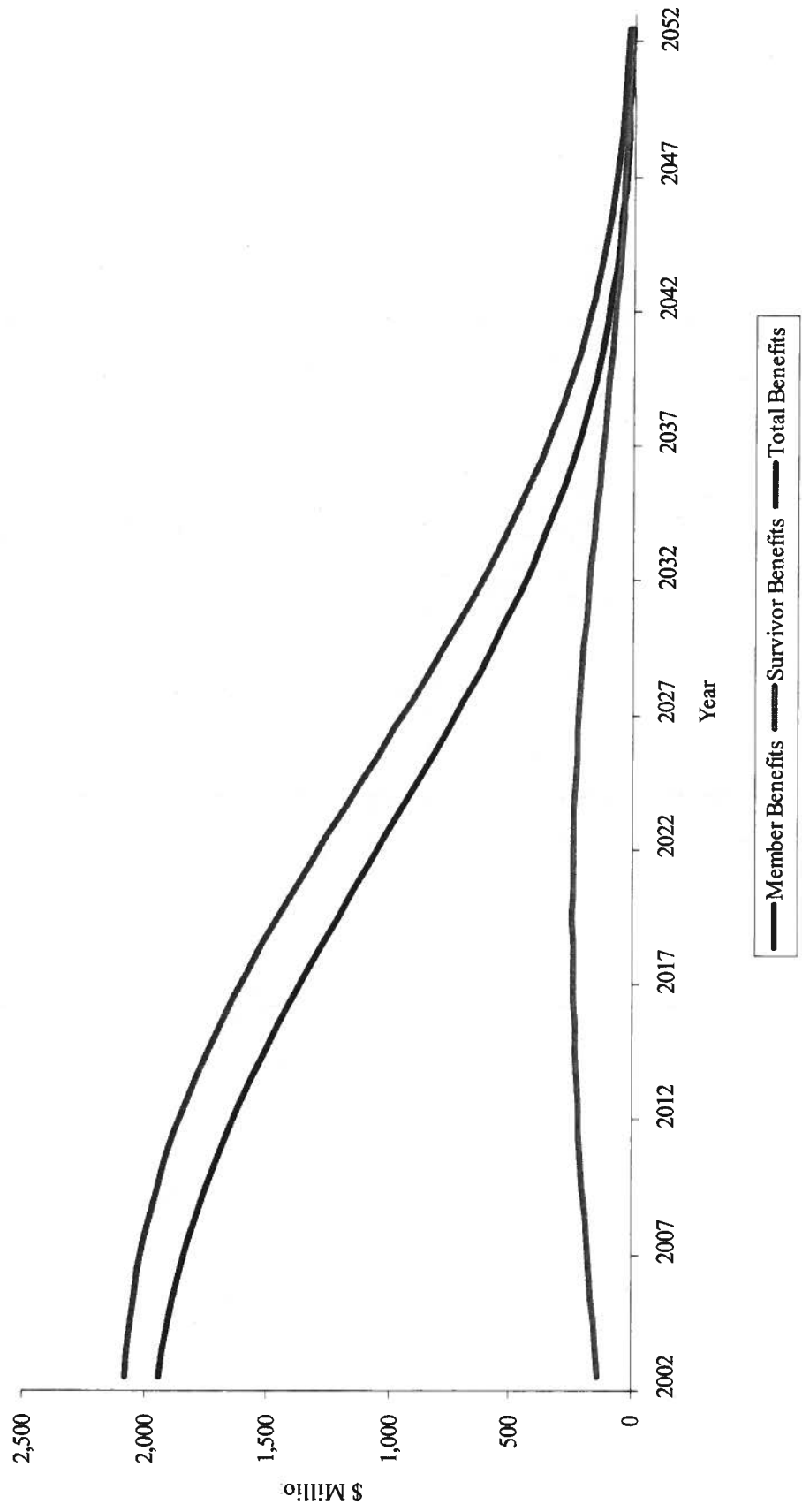
**Retirement Benefits Being Paid
as a Percent of Payroll**



Active Members Per Retired Life



PROJECTED FUTURE BENEFIT PAYMENTS ON BEHALF OF PRESENT RETIRED LIVES



Total future payments: \$50.2 billion
 From present assets: \$21.2 billion
 From future earnings: \$29.0 billion



(b) (1) (i) $\frac{d}{dt} \left(\frac{1}{t} \right) = -\frac{1}{t^2}$
 (b) (1) (ii) $\frac{d}{dt} \left(\frac{1}{t^2} \right) = -\frac{2}{t^3}$
 (b) (1) (iii) $\frac{d}{dt} \left(\frac{1}{t^3} \right) = -\frac{3}{t^4}$
 (b) (1) (iv) $\frac{d}{dt} \left(\frac{1}{t^4} \right) = -\frac{4}{t^5}$
 (b) (1) (v) $\frac{d}{dt} \left(\frac{1}{t^5} \right) = -\frac{5}{t^6}$
 (b) (1) (vi) $\frac{d}{dt} \left(\frac{1}{t^6} \right) = -\frac{6}{t^7}$
 (b) (1) (vii) $\frac{d}{dt} \left(\frac{1}{t^7} \right) = -\frac{7}{t^8}$
 (b) (1) (viii) $\frac{d}{dt} \left(\frac{1}{t^8} \right) = -\frac{8}{t^9}$
 (b) (1) (ix) $\frac{d}{dt} \left(\frac{1}{t^9} \right) = -\frac{9}{t^{10}}$
 (b) (1) (x) $\frac{d}{dt} \left(\frac{1}{t^{10}} \right) = -\frac{10}{t^{11}}$

(b) (2) (i) $\frac{d}{dt} \left(\frac{1}{t} \right) = -\frac{1}{t^2}$
 (b) (2) (ii) $\frac{d}{dt} \left(\frac{1}{t^2} \right) = -\frac{2}{t^3}$
 (b) (2) (iii) $\frac{d}{dt} \left(\frac{1}{t^3} \right) = -\frac{3}{t^4}$
 (b) (2) (iv) $\frac{d}{dt} \left(\frac{1}{t^4} \right) = -\frac{4}{t^5}$
 (b) (2) (v) $\frac{d}{dt} \left(\frac{1}{t^5} \right) = -\frac{5}{t^6}$
 (b) (2) (vi) $\frac{d}{dt} \left(\frac{1}{t^6} \right) = -\frac{6}{t^7}$
 (b) (2) (vii) $\frac{d}{dt} \left(\frac{1}{t^7} \right) = -\frac{7}{t^8}$
 (b) (2) (viii) $\frac{d}{dt} \left(\frac{1}{t^8} \right) = -\frac{8}{t^9}$
 (b) (2) (ix) $\frac{d}{dt} \left(\frac{1}{t^9} \right) = -\frac{9}{t^{10}}$
 (b) (2) (x) $\frac{d}{dt} \left(\frac{1}{t^{10}} \right) = -\frac{10}{t^{11}}$

ALL DIVISIONS
ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2002
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Ages	Years of Service to Valuation Date							Total Number	Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
15-19	14,512							14,512	\$ 106,711,794
20-24	27,721	412						28,133	387,554,308
25-29	23,435	4,491	160					28,086	701,128,222
30-34	20,117	11,937	3,919	130				36,103	1,102,679,294
35-39	17,007	10,064	9,627	3,937	204			40,839	1,357,631,471
40-44	16,925	10,051	9,761	8,610	5,418	378		51,143	1,775,518,365
45-49	15,252	9,802	9,226	7,767	8,589	4,977	196	55,809	2,018,107,005
50	2,555	1,723	1,813	1,356	1,406	1,389	233	10,475	387,924,552
51	2,421	1,587	1,692	1,361	1,310	1,440	286	10,097	381,784,525
52	2,412	1,535	1,575	1,397	1,246	1,372	345	9,882	370,453,720
53	2,088	1,419	1,584	1,299	1,103	1,179	420	9,092	342,351,469
54	2,140	1,368	1,562	1,288	1,078	1,032	515	8,983	332,764,464
55	1,975	1,308	1,424	1,299	1,037	954	485	8,482	308,584,282
56	1,963	1,356	1,558	1,286	1,085	811	489	8,548	306,908,176
57	1,324	881	952	888	675	457	270	5,447	191,810,707
58	1,180	833	918	892	663	439	254	5,179	178,533,914
59	1,120	792	760	801	634	418	212	4,737	159,237,892
60	1,142	852	881	814	731	422	242	5,084	167,266,589
61	971	656	687	627	521	329	197	3,988	132,001,010
62	809	583	570	503	392	251	141	3,249	100,958,132
63	680	488	427	383	297	216	147	2,638	80,074,958
64	672	431	346	275	267	186	119	2,296	66,040,882
65	609	352	336	297	243	163	92	2,092	57,594,970
66	519	284	218	191	129	102	80	1,523	37,138,049
67	503	226	201	151	131	79	72	1,363	31,329,733
68	452	189	152	113	89	61	63	1,119	23,451,392
69	424	174	120	99	63	53	59	992	20,421,615
70 & Over	2,418	1,233	694	419	291	238	240	5,533	81,166,674
Totals	163,346	65,027	51,163	36,183	27,602	16,946	5,157	365,424	\$11,207,128,164

**ALL DIVISIONS
ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2002
BY YEARS OF SERVICE**

Service Years	Active Member Count				Average Active Member Pays
	Males	Females	Total	Total	
0	29,075	32,013	61,088	\$817,408,366	\$13,381
1	15,643	18,971	34,614	661,698,555	19,117
2	12,345	15,797	28,142	677,886,183	24,088
3	9,766	12,052	21,818	593,216,202	27,189
4	7,897	9,787	17,684	518,746,043	29,334
5	7,106	8,281	15,387	464,565,414	30,192
6	6,256	7,389	13,645	437,183,209	32,040
7	5,964	6,587	12,551	414,485,359	33,024
8	6,007	6,528	12,535	440,256,974	35,122
9	5,066	5,843	10,909	377,809,067	34,633
10	4,620	5,222	9,842	357,105,062	36,284
11	5,178	5,948	11,126	402,273,839	36,156
12	4,972	5,793	10,765	423,304,686	39,322
13	4,679	5,325	10,004	391,653,226	39,150
14	4,264	5,162	9,426	378,108,809	40,113
15 & Up	42,977	42,911	85,888	3,851,427,170	44,842
Totals	171,815	193,609	365,424	\$11,207,128,164	\$30,669

RETIREMENT SYSTEM TOTALS
DECEMBER 31, 2002
(\$ MILLIONS)

Division	Active Members		Retired Lives		Actuarial Accrued Liabilities				Unfunded Accrued Liabilities	Amort. Years
	Number	Annual Payroll	Number	Annual Allowances	Active & Inactive Members	Retired Lives	Total	Assets		
State	110,017	\$ 4,129	50,011	\$ 851	\$ 11,822	\$ 8,749	\$20,571	\$ 17,714	\$ 2,857	38
Local	247,377	6,721	88,483	1,168	16,710	11,743	28,453	24,425	4,028	25
Law	8,030	357	2,525	61	1,135	713	1,848	1,567	281	36
Totals	365,424	\$ 11,207	141,019	\$ 2,080	\$ 29,667	\$21,205	\$50,872	\$ 43,706	\$ 7,166	29

SECTION I

Benefits and Conditions Evaluated

Benefit	Condition	Percentage
1. Improved health	1. Improved health	75
2. Increased income	2. Increased income	60
3. Better housing	3. Better housing	50
4. More leisure time	4. More leisure time	40
5. Improved education	5. Improved education	30
6. Better social life	6. Better social life	20
7. Improved family life	7. Improved family life	10
8. Better job opportunities	8. Better job opportunities	5
9. Improved community life	9. Improved community life	2
10. Better overall quality of life	10. Better overall quality of life	1

BENEFITS AND CONDITIONS EVALUATED

Final average salary ("FAS") means the average of the annual earnings for the 3 highest calendar years of compensation.

Age & Service Benefits - State and Local Government Members

Age and service eligibility - A member who (i) has attained age 60 years and has 5 or more years of service credit, or (ii) has attained age 55 years and has 25 or more years of service credit, or (iii) has 30 or more years of service credit, may retire with an age and service retirement allowance.

Age and service allowance - A retiring member's age and service allowance is equal to Ohio service credit times the greater of \$86, or 2.2% of FAS for the first 30 years of service plus 2.5% for years of service over 30 years (H.B. 628). The allowance is then adjusted by factors based on attained age or years of service (whichever yields the higher percentage) as determined in the following schedule:

Attained Age	OR	Years of Service Credit	Percentage of Base Amount
58		25	75%
59		26	80
60		27	85
61		N/A	88
N/A		28	90
62		N/A	91
63		N/A	94
N/A		29	95
64		N/A	97
65		30 or more	100

Maximum allowance is 100% of FAS. Minimum allowance is based upon twice the member's savings funding balance at retirement together with interest credits.

Age & Service Benefits – Law Members (Public Safety) eligible to retire under Ohio Revised Code section 145.33(B)(2)(b)

Age and service eligibility - A law member who (i) has attained age 52 and has 25 or more years of credited service, or (ii) has attained age 62 and has 15 or more years of credited service, or (iii) has attained age 52 and has 15 or more years of credited service, may retire with an age and service allowance. A member covered by these provisions may retire at age 48 with 25 or more years of service subject to the reduction described in 145.33 (C)(1).

Age and service allowance - A retiring member's age and service allowance under eligibility (i) or (ii) above is equal to 2.5% of FAS times the first 25 years of service credit plus 2.1% of FAS times service credit in excess of 25 years (H.B. 628). Maximum allowance is 90% of FAS. A retiring member's age and service allowance under eligibility (iii) above is equal to 1.5% of FAS times years of service credit. Minimum allowance for all law members is based upon twice the member's savings fund balance at retirement together with interest credits.

Age & Service Benefits - Law Members (Law Enforcement) eligible to retire under Ohio Revised Code section 145.33(B)(2)(a)

Age and service eligibility - A law member who is a Sheriff, Deputy Sheriff, or Township Constable or Police Officer and who (i) has attained age 48 and has 25 or more years of credited service, or (ii) has attained age 62 and has 15 or more years of credited service, or (iii) has attained age 52 and has 15 or more years of credited service, may retire with an age and service allowance.

Age and service allowance - A retiring member's age and service allowance under eligibility (i) or (ii) above is equal to 2.5% of FAS times the first 25 years of service credit plus 2.1% of FAS times service credit in excess of 25 years (H.B. 628). Maximum allowance is 90% of FAS. A retiring member's age and service allowance under eligibility (iii) above is equal to 1.5% of FAS times years of service credit. Minimum allowance for all law members is based upon twice the member's savings fund balance at retirement together with interest credits.

Health Care Coverage. Health care coverage is available to persons being paid a monthly allowance from PERS. Members retiring with a normal or early service retirement allowance after June 13, 1986 must have 10 or more years of service credit to be eligible for this benefit.

Medicare premiums. Medicare part B premiums are paid for those eligible, upon proof of coverage.

Members retiring with a normal or early service retirement allowance after June 13, 1986 must have 10 or more years of service credit to be eligible for this benefit.

Disability retirement. The disability program was revised in order to comply with the Older Workers Benefit Protection Act. Employees becoming members after July 29, 1992 are covered by the post July 29, 1992 program. Other members were able to elect coverage under the pre July 29, 1992 program (original plan) or elect to be covered by the post July 29, 1992 program (revised plan).

Features of the original plan are:

- a) Upon becoming permanently disabled after completion of at least 5 years of service but before attaining age 60, a member is eligible for a disability allowance. The service requirement is waived for Law Enforcement members with an on-duty illness or injury.

- b) The amount of the allowance is the service the member would have had if employment had continued to age 60 times (i) 2.2% of FAS (H.B. 628), or (ii) \$86, whichever produces the greater benefit.

- c) Maximum allowance is 75% of FAS, minimum allowance is 30% of FAS.

Features of the revised plan are:

- a) A member may apply at any age after completion of 5 years of service. The service requirement is waived for Law Enforcement members with an on-duty illness or injury.

- b) A disability benefit equal to the greater of 45% of FAS or the actual service credit times 2.2% of FAS (H.B. 628) with no early retirement reduction (maximum 60% of FAS). The disability benefit period is to age 65 if the member is disabled prior to age 60. The benefit period declines gradually from 60 months for members disabled at ages 60 and 61 to 12 months for members disabled at age 69 or older.

- c) After the disability benefit ends, a service retirement benefit equal to the greater of (i) the accrued benefit based on actual service, or (ii) 2.2% of FAS (H.B. 628) times service credit including the period of disability (maximum 45% of FAS). In addition, an amount equal to the cost-of-living increases the member would have received had the member retired on the basis of age and service is paid.

Death while eligible to retire. If a member dies in service after becoming eligible to retire with an age and service allowance and leaves a surviving spouse or other sole dependent beneficiary, the survivor receives the same amount that would have been paid had the member retired the last day of the month of death and elected the 100% joint and survivor form of payment.

Survivor (death-in-service) allowances. If a deceased member had at least 1-1/2 years of contributing service credit, with at least 1/4 year of such service occurring within the 2-1/2 years prior to death, or was receiving a disability benefit, qualified survivors may receive the following monthly benefits. The benefit paid will be the greater of the applicable benefits paid under the following two schedules (H.B. 628):

Schedule 1

<u>Number of Qualified Survivors Affecting the Benefit</u>	<u>Annual Benefit as a % of Deceased Member's FAS</u>	<u>Minimum Monthly Benefit</u>
1	25%	\$250
2	40%	\$400
3	50%	\$500
4	55%	\$500
5 or more	60%	\$500

Schedule 2

<u>Years of Service</u>	<u>Annual Benefit as a % of Deceased Member's FAS</u>
20	29%
21	33%
22	37%
23	41%
24	45%
25	48%
26	51%
27	54%
28	57%
29 or more	60%

Qualifying survivors who are paid benefits under Schedule 2 share equally in the benefits, except that if there is a surviving spouse, the spouse receives the greater of 25% of FAS or \$250.

Service Credit At Retirement	Amount of Death Benefit
5 to 9 years	\$ 500
10 to 14 years	1,000
15 to 19 years	1,500
20 to 24 years	2,000
25 or more years	2,500

benefit in the following amount is payable:

Post-retirement death benefit. Upon the death of an age and service or disability retiree, a death

Post-retirement increases. Each July after June 30, 1971 or the annual anniversary established 12 months after the initial date of retirement, each allowance is increased by 3.0% of the corresponding base allowance, except that no allowance shall exceed the limits established by Section 415 of the Internal Revenue Code.

Qualified survivors of disability benefit recipients have the FAS used in calculating their benefits adjusted for each year between the effective date of the disability benefit and the recipient's date of death. The FAS is adjusted by the lesser of (1) 3% or (2) the actual average percentage change in the CPI.

A qualified parent is a dependent parent aged 65 or older (earlier if mentally or physically incompetent) who received at least one-half support from the member during the 12-month period immediately preceding the member's death.

A qualified child is a child who has never been married and under the age of 18 (or 22 if attending an approved school), or regardless of age is adjudged physically or mentally incompetent at the time of the member's death.

A qualified spouse is the surviving spouse of a deceased member who is age 62 or at any age if the deceased member had 10 or more years of Ohio service credit or if the surviving spouse is caring for a qualified child or is adjudged physically or mentally incompetent.

Deferred benefits. A member with at least 5 years of service credit who leaves service before being eligible for an immediate allowance and who does not withdraw accumulated contributions will be entitled to a deferred allowance at age 60. For law members, the age at which benefits commence depends on the amount of service credit. The amount of the allowance will be based on credited service and final average salary at time of leaving service.

Optional Benefit Forms. Retiring members may elect to have benefits paid in straight life form, in a form that guarantees a minimum number of monthly payments, or in a form that provides a continuation of all or a portion of the monthly benefit to a beneficiary after the death of the retiree. If a retiring member elects benefits in other than straight life form, the monthly amount is adjusted. The adjustment is based upon interest and mortality assumptions (with a blend of male and female mortality rates to produce unisex election factors consistent with the gender distribution of members electing optional forms of payment).

Member contributions. State and local government members contribute 8.5% of salary. The maximum statutory rate is 10% of salary.

Law members who primarily are Sheriffs, Deputy Sheriffs & Township Constables or Police Officers contribute 10.1% of salary effective 1/1/2001. Remaining Law members (Public Safety) contribute 9.0% of salary.

Refund of members accumulated contributions. In the event a member leaves service prior to retirement, the member may elect to receive a refund of contributions with interest and may be eligible to receive an additional amount as described below. These refund provisions are available to all members. If a member dies prior to retirement and survivor benefits are not payable, the member's contributions with interest are paid to a designated beneficiary or other survivor.

Interest is credited annually to member contribution balances. The rate of interest credited is determined by the OPERS Board and will not be greater than 6%. For calendar year 2004, 1% interest will be credited to member contribution balances.

If the member has, or had at the time of death, at least 5 years, but less than 10 years of service credit, an additional 33% of the member's contribution balance will be paid to the member or survivor. If the member has, or had at the time of death, at least 10 years of service credit, an additional 67% of the member's contribution balance will be paid to the member or survivor. The additional amount is not paid if the member is a re-employed retiree, or in the case of a deceased member, was receiving disability benefits at the time of death.

Employer contributions. Each employer contributes the remainder amounts necessary to finance OPERS benefits. Employer contributions are expressed as percents of member covered payroll. The maximum statutory rate for state and local government members is 14%. The maximum statutory rate for law members is 18.1% (H.B. 416, effective 1/1/2001).

SAMPLE BENEFIT COMPUTATION
STATE OR LOCAL MEMBER - NORMAL RETIREMENT
RETIRING DECEMBER 31, 2002
UNDER BENEFIT PROVISIONS EVALUATED

Data:

A.	<u>\$32,000</u>	Final Average Earnings
B.	<u>33</u>	Years of Credited Service
C.	<u>59</u>	Age of Retiree
D.	<u>56</u>	Age of Spouse
E.	<u>100%</u>	Percentage of Pension to Continue to Spouse after retiree's death (Retiree makes the choice of 100% Joint and Survivor with Pop-Up)

Computations:

F.	Formula Benefit: $(0.022 \times 30 \text{ years} + 0.025 \times 3 \text{ years}) \times \$32,000 =$	\$ 23,520
G.	Reduction for Line E Election: $(1 - 0.81174) \times (F) =$	<u>4,428</u>
H.	Benefit Payable to Retiree while Spouse is Alive: $(F) - (G) =$	19,092
I.	Benefit Payable to Spouse after Retiree's Death	19,092
J.	Benefit Payable to Retiree after Spouse's Death	23,520

Projected Benefits:

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2003	\$ 19,092	\$ 19,092	\$ 23,520
2004	19,665	19,665	24,226
2005	20,238	20,238	24,931
2006	20,810	20,810	25,637
2007	21,383	21,383	26,342
2008	21,956	21,956	27,048
2009	22,529	22,529	27,754
2010	23,101	23,101	28,459
2011	23,674	23,674	29,165
2012	24,247	24,247	29,870

SAMPLE BENEFIT COMPUTATION **STATE OR LOCAL MEMBER - EARLY RETIREMENT** **RETIRING DECEMBER 31, 2002** **UNDER BENEFIT PROVISIONS EVALUATED**

Data:

A.	\$32,000	Final Average Earnings
B.	26	Years of Credited Service
C.	59	Age of Retiree
D.	56	Age of Spouse
E.	100%	Percentage of Pension to Continue to Spouse after retiree's death (Retiree makes the choice of 100% Joint and Survivor with Pop-Up)

Computations:

- F. Formula Benefit: $0.022 \times 26 \text{ years} \times \$32,000 =$ \$ 18,304
- G. Adjustment factor for Early Retirement (from schedule) 80%
- H. Adjusted benefit: $(F) \times (G) =$ 14,643
- I. Reduction for Line E Election: $(1 - 0.81174) \times (H) =$ 2,757
- J. Benefit Payable to Retiree while Spouse is Alive: (H) - (I) 11,886
- K. Benefit Payable to Spouse after Retiree's Death 11,886
- L. Benefit Payable to Retiree after Spouse's Death 14,643

Projected Benefits:

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2003	\$ 11,886	\$ 11,886	\$ 14,643
2004	12,243	12,243	15,082
2005	12,599	12,599	15,522
2006	12,956	12,956	15,961
2007	13,313	13,313	16,400
2008	13,669	13,669	16,840
2009	14,026	14,026	17,279
2010	14,382	14,382	17,718
2011	14,739	14,739	18,158
2012	15,095	15,095	18,597

SAMPLE BENEFIT COMPUTATION
SECTION 145.33 (B)(2)(a) LAW MEMBER - NORMAL RETIREMENT
RETIRING DECEMBER 31, 2002
UNDER BENEFIT PROVISIONS EVALUATED

Data:

A.	\$38,000	Final Average Earnings
B.	28	Years of Credited Service
C.	49	Age of Retiree
D.	46	Age of Spouse
E.	100%	Percentage of Pension to Continue to Spouse after retiree's death (Retiree makes the choice of 100% Joint and Survivor with Pop-Up)

Computations:

F.	Formula Benefit: $(0.025 \times 25 \text{ years} + 0.021 \times 3 \text{ years}) \times \$38,000 =$	\$ 26,144
G.	Reduction for Line E Election: $(1 - 0.87869) \times (F) =$	3,172
H.	Benefit Payable to Retiree while Spouse is Alive: $(F) - (G) =$	22,972
I.	Benefit Payable to Spouse after Retiree's Death	22,972
J.	Benefit Payable to Retiree after Spouse's Death	26,144

Projected Benefits:

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2003	\$ 22,972	\$ 22,972	\$ 26,144
2004	23,661	23,661	26,928
2005	24,350	24,350	27,713
2006	25,039	25,039	28,497
2007	25,729	25,729	29,281
2008	26,418	26,418	30,066
2009	27,107	27,107	30,850
2010	27,796	27,796	31,634
2011	28,485	28,485	32,419
2012	29,174	29,174	33,203

SAMPLE BENEFIT COMPUTATION **STATE OR LOCAL MEMBER – TERMINATION BENEFIT** **RETIRED DECEMBER 31, 2002** **UNDER BENEFIT PROVISIONS EVALUATED**

Data:

A.	\$32,000	Final Average Earnings
B.	15	Years of Credited Service
C.	45	Age of Member
D.	42	Age of Spouse
E.	60:57	Ages at Which Benefits are Payable
F.	100%	Percentage of Pension to Continue to Spouse after retiree's death (Retiree makes the choice of 100% Joint and Survivor with Pop-Up)
G.	\$44,000	Accumulated Contributions with Interest at Termination Date

Computations:

- H. Formula Benefit: $(0.022 \times 15 \text{ years} + 0.025 \times 0 \text{ years}) \times \$32,000 =$ \$ 10,560
- I. Adjustment factor for Early Retirement (from schedule) 85%
- J. Adjusted benefit: $(H) \times (I) =$ 8,976
- K. Reduction for Line F Election: $(1 - 0.80366) \times (J) =$ 1,762
- L. Benefit Payable to Retiree while Spouse is Alive: $(J) - (K) =$ 7,214
- M. Benefit Payable to Spouse after Retiree's Death 7,214
- N. Benefit Payable to Retiree after Spouse's Death 8,976
- O. In lieu of a lifetime benefit, terminnee may elect to receive a refund of accumulated contributions with interest plus an additional 67% of eligible accumulated contributions because terminnee had more than 10 years of service. 73,480

Projected Benefits:

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2003	\$ 7,214	\$ 7,214	\$ 8,976
2004	7,430	7,430	9,245
2005	7,647	7,647	9,515
2006	7,863	7,863	9,784
2007	8,080	8,080	10,053
2008	8,296	8,296	10,322
2009	8,513	8,513	10,592
2010	8,729	8,729	10,861
2011	8,945	8,945	11,130
2012	9,162	9,162	11,400

SAMPLE BENEFIT COMPUTATION
SECTION 145.33 (B)(2)(a) LAW MEMBER – TERMINATION BENEFIT
RETIRING DECEMBER 31, 2002
UNDER BENEFIT PROVISIONS EVALUATED

Data:

A.	<u>\$38,000</u>	Final Average Earnings
B.	<u>15</u>	Years of Credited Service
C.	<u>37</u>	Age of Retiree
D.	<u>34</u>	Age of Spouse
E.	<u>52:49</u>	Ages at Which Benefits are Payable
F.	<u>100%</u>	Percentage of Pension to Continue to Spouse after retiree's death (Retiree makes the choice of 100% Joint and Survivor with Pop-Up)
G.	<u>\$46,000</u>	Accumulated Contributions at Termination Date

Computations:

H.	Formula Benefit: $(0.015 \times 15 \text{ years}) \times \$38,000 =$	\$ 8,550
I.	Reduction for Line F Election: $(1 - 0.86085) \times (H) =$	<u>1,190</u>
J.	Benefit Payable to Retiree while Spouse is Alive: $(H) - (I) =$	7,360
K.	Benefit Payable to Spouse after Retiree's Death	7,360
L.	Benefit Payable to Retiree after Spouse's Death	8,550
M.	In lieu of a lifetime benefit, terminee may elect to receive a refund of accumulated contributions with interest plus an additional 67% of eligible accumulated contributions because terminee had more than 10 years of service.	76,820

Projected Benefits:

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2003	\$ 7,360	\$ 7,360	\$ 8,550
2004	7,581	7,581	8,807
2005	7,802	7,802	9,063
2006	8,022	8,022	9,320
2007	8,243	8,243	9,576
2008	8,464	8,464	9,833
2009	8,685	8,685	10,089
2010	8,906	8,906	10,346
2011	9,126	9,126	10,602
2012	9,347	9,347	10,859

SECTION II

Recommendations for Reserve Transfers

DECEMBER 31, 2002 RETIRED LIFE VALUATION RESERVE TRANSFERS

Reserve transfers from the Employer Accumulation Fund to the A & PR Fund and/or Survivor Benefit Funds are recommended in the following instances.

- Whenever the December 31 valuation shows unfunded accrued liabilities or assets in excess of computed liabilities in any of the retired life funds.
- To adjust retired life reserves for the payment of health insurance premiums and Medicare reimbursements for the previous 12 month period if this has not already been done.
- To cover the cost of ad-hoc post retirement benefit increases.
- To adjust retired life reserves for any changes in computed liabilities resulting from assumption changes.

By making these annual adjustments in addition to the regular transfers when allowances are added to the rolls, the ratio of assets to liabilities for retired members and beneficiaries will stay at 100%. Year to year changes in this ratio before recommended transfers will normally be isolated to mortality experience within the retired life group.

In 1992, PERS began making interim benefit payments for certain retirements to shorten the delay between the retirement effective date and receipt of the first monthly check. However, reserve transfers are not made until benefit amounts are final. Transfers for these cases have been accrued based upon supplemental information supplied by PERS staff and are shown on the following page. The accruals, when added to other assets, are intended to put retired life reserves in the same position they would have been in if reserve transfers for the interim benefit cases had been coincident with benefit commencement.

It is recommended that the transfers shown on the following page be made from the Employer Accumulation Fund to the Annuity & Pension Reserve Fund and Survivor Benefit Funds as indicated. The Accrued Transfers is an estimate of pending future transfers for interim cases, and does not require a year end transfer.

RESERVES AND TRANSFERS AFFECTING THE EMPLOYER ACCUMULATION FUND

DECEMBER 31, 2002

	Assets Before Transfers	Transfers		Assets After Transfers	Liabilities	Ratio
		Accrued	Other			
State						
A&PR FUND						
CR,JR&SR	\$ 6,814,789,586	\$226,979,873	\$20,634,893	\$ 7,062,404,352	\$ 7,062,404,352	
BD&DR	1,280,842,016	37,904,892	(35,365,866)	1,283,381,042	1,283,381,042	
TOTAL A&PR	8,095,631,602	264,884,765	(14,730,973)	8,345,785,394	8,345,785,394	100.0%
SBF						
S-1	104,983,668	197,234	(442,654)	104,738,248	104,738,248	
S-2	290,144,451	2,787,018	5,669,684	298,601,153	298,601,153	
TOTAL SBF	395,128,119	2,984,252	5,227,030	403,339,401	403,339,401	100.0%
TOTAL STATE	\$ 8,490,759,721	\$267,869,017	\$ (9,503,943)	\$ 8,749,124,795	\$ 8,749,124,795	100.0%
Local						
A&PR FUND						
CR,JR&SR	\$ 8,839,334,091	\$420,495,767	\$77,244,576	\$ 9,337,074,434	\$ 9,337,074,434	
BD&DR	1,689,457,914	62,845,583	(34,346,292)	1,717,957,205	1,717,957,205	
TOTAL A&PR	10,528,792,005	483,341,350	42,898,284	11,055,031,639	11,055,031,639	100.0%
SBF						
S-1	166,016,345	1,826,220	(1,586,551)	166,256,014	166,256,014	
S-2	508,435,438	5,268,758	8,589,618	522,293,814	522,293,814	
TOTAL SBF	674,451,783	7,094,978	7,003,067	688,549,828	688,549,828	100.0%
TOTAL LOCAL	\$11,203,243,788	\$490,436,328	\$49,901,351	\$11,743,581,467	\$11,743,581,467	100.0%
Law						
A&PR FUND						
CR,JR&SR	\$ 396,230,398	\$ 952,118	\$ 4,114,538	\$ 401,297,054	\$ 401,297,054	
BD&DR	285,066,312	709,733	(2,579,004)	283,197,041	283,197,041	
TOTAL A&PR	681,296,710	1,661,851	1,535,534	684,494,095	684,494,095	100.0%
SBF						
S-1	7,922,348	0	(183,713)	7,738,635	7,738,635	
S-2	18,856,418	108,378	1,621,005	20,585,801	20,585,801	
TOTAL SBF	26,778,766	108,378	1,437,292	28,324,436	28,324,436	100.0%
TOTAL LAW	\$ 708,075,476	\$ 1,770,229	\$2,972,826	\$ 712,818,531	\$ 712,818,531	100.0%
GRAND TOTAL	\$20,402,078,985	\$760,075,574	\$43,370,234	\$21,205,524,793	\$21,205,524,793	100.0%

SECTION III

State Division

STATE DIVISION

Data on active, inactive, retired and money purchase members that was used in the valuation is tabulated briefly below.

Active Members in Valuation December 31, 2002

Groups	Number	Annual Payroll	Average		
			Pay	Age	Service
Men	50,561	\$2,033,584,832	\$40,220	41.8	10.2
Women	59,456	2,095,463,810	35,244	42.2	10.1
Totals	110,017	\$4,129,048,642	\$37,531	42.0	10.2

Also included in the valuation were 22,081 inactive members eligible for deferred retirement allowances or contribution refunds and 3,615 members active in the money purchase plan.

Retired Members in Valuation December 31, 2002

Fund / Type of Allowance	Number	Current Monthly Benefits	Actuarial Liabilities
A & PR Fund			
Superannuation Retirement	38,514	\$56,877,801	\$7,056,631,658
Disability Retirement	6,557	10,312,778	1,283,381,042
Money Purchase	180	59,436	5,772,694
Total A & PR Fund	45,251	67,250,015	8,345,785,394
Total SBF	4,760	3,699,606	403,339,401
Grand Total	50,011	\$70,949,621	\$8,749,124,795

STATE DIVISION EMPLOYER CONTRIBUTIONS TO SUPPORT RETIREMENT ALLOWANCES

EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL
DECEMBER 31, 2002

Contributions for			
Contributions Computed December 31	2002	2001	
		8.31 %	2.05 %
Normal Cost	8.31 %	8.31 %	2.05 %
Age and Service Allowances	2.05 %	2.05 %	0.42 %
Disability Allowances	0.42 %	0.42 %	3.89 %
Survivor's Benefits	3.67 %	14.45 %	14.67 %
Separation Benefits	14.45 %	8.50 %	6.17 %
Total Normal Cost	8.50 %	5.95 %	2.14 %
(Member Current Contributions)	5.95 %	38	#
Employer Normal Cost	38	3.36 %	8.31 %
Unfunded Actuarial Accrued Liabilities	3.36 %	9.31 %	2.14 %
Financing Years*	9.31 %	8.31 %	2.14 %
Total Available Contribution	8.31 %	8.31 %	2.14 %
Total Employer Contribution Rate	8.31 %	8.31 %	2.14 %

State Division accrued liabilities are fully funded.
* The period sufficient to produce the Total Employer Contribution Rate for retirement allowances and survivor benefits.

STATE DIVISION COMPARATIVE STATEMENT

Valuation Date December 31	Active Members in Valuation			Computed Employer Contributions as % of Payroll as a Result of the Actuarial Valuation				
	No.	Annual Payroll		Normal Cost	Unfunded Accrued Liability	Pension Total	Retiree Health	Grand Total
		Total	Average					
			(Millions)					
1990@	98,939	\$ 2,501	\$ 25,281	5.7 %				
1991&	107,025	2,693	25,163	(0.5)%	2.78 %	9.29 %	4.42 %	13.71 %
1992	109,701	2,767	25,224	0.2 %	2.45 %	9.02 %	4.29 %	13.31 %
1993	112,748	2,894	25,673	1.8 %	2.61 %	9.02 %	4.29 %	13.31 %
1994	115,238	3,063	26,580	3.5 %	2.62 %	9.02 %	4.29 %	13.31 %
1995	114,596	3,204	27,962	5.2 %	2.36 %	9.02 %	4.29 %	13.31 %
1996@	115,712	3,319	28,684	2.6 %	2.35 %	9.02 %	4.29 %	13.31 %
1997	114,036	3,405	29,858	4.1 %	2.81 %	9.11 %	4.20 %	13.31 %
1998	112,323	3,500	31,159	4.4 %	2.90 %	9.11 %	4.20 %	13.31 %
1999#	112,761	3,592	31,851	2.2 %	2.90 %	9.01 %	4.30 %	13.31 %
2000	113,099	3,868	34,201	7.4 %	1.32 %	9.01 %	4.30 %	13.31 %
2001@	109,219	3,996	36,589	7.0 %	2.14 %	8.31 %	5.00 %	13.31 %
2002	110,017	4,129	37,531	2.6 %	3.36 %	9.31 %	4.00 %	13.31 %

After benefit changes.

@ Revised actuarial assumptions.

& Reflects inclusion of part-time, seasonal, and temporary employees in compliance with OBRA 90 and revised actuarial assumptions.

NOTE: The above information is for informational purposes only and does not constitute a contract. The actual terms and conditions of the plan are set forth in the plan documents and the applicable laws and regulations.

Employee Information									
Employee ID	Employee Name	Employee Title	Employee Department	Employee Location	Employee Hire Date	Employee Compensation			
						Employee Salary	Employee Bonus	Employee Commission	Employee Total Compensation
1001	John Doe	Software Engineer	Engineering	San Francisco	2015-01-15	\$120,000	\$12,000	0%	\$132,000
1002	Jane Smith	Product Manager	Product	San Francisco	2016-03-01	\$110,000	\$11,000	0%	\$121,000
1003	Robert Johnson	Marketing Specialist	Marketing	New York	2017-06-01	\$85,000	\$8,500	0%	\$93,500
1004	Emily White	Operations Manager	Operations	New York	2018-09-01	\$95,000	\$9,500	0%	\$104,500
1005	Michael Brown	Finance Analyst	Finance	San Francisco	2019-12-01	\$105,000	\$10,500	0%	\$115,500
1006	Sarah Green	Human Resources	HR	New York	2020-03-01	\$75,000	\$7,500	0%	\$82,500
1007	David Black	Software Engineer	Engineering	San Francisco	2021-05-01	\$115,000	\$11,500	0%	\$126,500
1008	Lisa Gray	Product Manager	Product	San Francisco	2022-07-01	\$100,000	\$10,000	0%	\$110,000
1009	James Blue	Marketing Specialist	Marketing	New York	2023-01-01	\$90,000	\$9,000	0%	\$99,000
1010	Patricia Yellow	Operations Manager	Operations	New York	2023-04-01	\$80,000	\$8,000	0%	\$88,000
1011	Christopher Purple	Finance Analyst	Finance	San Francisco	2023-08-01	\$100,000	\$10,000	0%	\$110,000
1012	Amanda Pink	Human Resources	HR	New York	2023-11-01	\$70,000	\$7,000	0%	\$77,000
1013	Benjamin Orange	Software Engineer	Engineering	San Francisco	2024-02-01	\$110,000	\$11,000	0%	\$121,000
1014	Stephanie Red	Product Manager	Product	San Francisco	2024-05-01	\$95,000	\$9,500	0%	\$104,500
1015	Gregory Green	Marketing Specialist	Marketing	New York	2024-08-01	\$85,000	\$8,500	0%	\$93,500
1016	Michelle Blue	Operations Manager	Operations	New York	2024-11-01	\$75,000	\$7,500	0%	\$82,500
1017	Anthony Yellow	Finance Analyst	Finance	San Francisco	2025-01-01	\$105,000	\$10,500	0%	\$115,500
1018	Christina Purple	Human Resources	HR	New York	2025-04-01	\$65,000	\$6,500	0%	\$71,500
1019	Timothy Pink	Software Engineer	Engineering	San Francisco	2025-07-01	\$115,000	\$11,500	0%	\$126,500
1020	Rebecca Orange	Product Manager	Product	San Francisco	2025-10-01	\$100,000	\$10,000	0%	\$110,000
1021	Jonathan Green	Marketing Specialist	Marketing	New York	2026-01-01	\$90,000	\$9,000	0%	\$99,000
1022	Kimberly Blue	Operations Manager	Operations	New York	2026-04-01	\$80,000	\$8,000	0%	\$88,000
1023	Steven Yellow	Finance Analyst	Finance	San Francisco	2026-07-01	\$100,000	\$10,000	0%	\$110,000
1024	Angela Purple	Human Resources	HR	New York	2026-10-01	\$70,000	\$7,000	0%	\$77,000
1025	Benjamin Orange	Software Engineer	Engineering	San Francisco	2027-01-01	\$110,000	\$11,000	0%	\$121,000
1026	Stephanie Red	Product Manager	Product	San Francisco	2027-04-01	\$95,000	\$9,500	0%	\$104,500
1027	Gregory Green	Marketing Specialist	Marketing	New York	2027-07-01	\$85,000	\$8,500	0%	\$93,500
1028	Michelle Blue	Operations Manager	Operations	New York	2027-10-01	\$75,000	\$7,500	0%	\$82,500
1029	Anthony Yellow	Finance Analyst	Finance	San Francisco	2028-01-01	\$105,000	\$10,500	0%	\$115,500
1030	Christina Purple	Human Resources	HR	New York	2028-04-01	\$65,000	\$6,500	0%	\$71,500
1031	Timothy Pink	Software Engineer	Engineering	San Francisco	2028-07-01	\$115,000	\$11,500	0%	\$126,500
1032	Rebecca Orange	Product Manager	Product	San Francisco	2028-10-01	\$100,000	\$10,000	0%	\$110,000
1033	Jonathan Green	Marketing Specialist	Marketing	New York	2029-01-01	\$90,000	\$9,000	0%	\$99,000
1034	Kimberly Blue	Operations Manager	Operations	New York	2029-04-01	\$80,000	\$8,000	0%	\$88,000
1035	Steven Yellow	Finance Analyst	Finance	San Francisco	2029-07-01	\$100,000	\$10,000	0%	\$110,000
1036	Angela Purple	Human Resources	HR	New York	2029-10-01	\$70,000	\$7,000	0%	\$77,000
1037	Benjamin Orange	Software Engineer	Engineering	San Francisco	2030-01-01	\$110,000	\$11,000	0%	\$121,000
1038	Stephanie Red	Product Manager	Product	San Francisco	2030-04-01	\$95,000	\$9,500	0%	\$104,500
1039	Gregory Green	Marketing Specialist	Marketing	New York	2030-07-01	\$85,000	\$8,500	0%	\$93,500
1040	Michelle Blue	Operations Manager	Operations	New York	2030-10-01	\$75,000	\$7,500	0%	\$82,500

STATE DIVISION
DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
DECEMBER 31, 2002

		Allocation by Entry Age	
		(2) Portion Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1)-(2)
Actuarial Present Value	(1) Total Actuarial Present Value		
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$ 8,345,785,394	\$ -	\$ 8,345,785,394
Allowances currently being paid from the Survivors Benefit Fund	403,339,401	-	403,339,401
Age and service allowances based on service rendered before and likely to be rendered after valuation date	12,740,715,348	2,853,430,412	9,887,284,936
Disability allowances likely to be paid present active members who become permanently disabled	1,638,628,663	705,887,328	932,741,335
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	356,057,776	141,698,628	214,359,148
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	2,087,926,150	1,300,354,661	787,571,489
Total	\$25,572,452,732	\$5,001,371,029	\$20,571,081,703
Actuarial Value of Assets			17,713,677,355
Unfunded Actuarial Accrued Liability			\$ 2,857,404,348

STATE DIVISION
DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
COMPARATIVE STATEMENT
(\$ IN MILLIONS EXCEPT AVERAGES)

Dec. 31	Active Payroll		Computed Total	Valuation Assets	Unfunded	Amort. Years	Unfunded /Payroll
	Active and Inactive Member Accrued Liabilities for Retirement Allowances						
1990@	\$2,501	\$25,281	\$ 5,091	\$3,391	\$1,700	34	0.68
1991&	2,693	25,163	5,528	4,030	1,498	32	0.56
1992	2,767	25,224	5,934	4,552	1,382	25	0.50
1993	2,894	25,673	6,671	5,357	1,314	22	0.45
1994	3,063	26,580	7,182	5,956	1,226	21	0.40
1995	3,204	27,962	7,811	6,706	1,105	17	0.34
1996@	3,319	28,684	8,104	7,387	717	8	0.22
1997	3,405	29,858	8,591	8,268	323	3	0.09
1998	3,500	31,159	9,223	9,666	(443)	-	-
1999#	3,592	31,851	10,298	10,474	(176)	-	-
2000	3,868	34,201	11,273	11,558	(285)	-	-
2001@	3,996	36,589	11,352	11,863	(511)	-	-
2002	4,129	37,531	11,822	8,965	2,857	38	0.69

After benefit changes.

@ Revised actuarial assumptions.

& Reflects inclusion of part-time seasonal, and temporary employees in compliance with OBRA 90 and revised actuarial assumptions.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded actuarial accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength. And vice-versa.

STATE DIVISION
MALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2002
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Ages	Years of Service to Valuation Date							Total Number	Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
15-19	860							860	\$9,688,830
20-24	4,284	12						4,296	63,755,023
25-29	3,489	544	4					4,037	110,234,409
30-34	2,729	1,956	541	8				5,234	191,722,695
35-39	2,050	1,678	1,787	718	29			6,262	261,597,515
40-44	1,875	1,411	1,594	1,803	1,081	55		7,819	344,582,327
45-49	1,524	1,163	1,193	1,444	1,755	800	40	7,919	369,024,535
50	260	190	204	245	280	243	29	1,451	69,106,876
51	218	213	196	250	246	259	40	1,422	69,763,154
52	240	188	201	233	234	256	58	1,410	68,659,795
53	211	174	172	217	197	210	96	1,277	64,660,769
54	239	163	195	212	202	218	106	1,335	67,203,606
55	196	133	171	201	161	175	96	1,133	57,240,382
56	203	172	178	200	168	152	109	1,182	59,543,612
57	133	106	119	139	107	80	54	738	37,193,172
58	134	101	98	120	87	56	65	661	31,751,797
59	105	84	90	103	82	51	58	573	28,719,318
60	112	89	107	111	78	49	48	594	27,492,022
61	90	76	85	79	69	39	34	472	22,802,050
62	66	65	63	64	61	21	24	364	16,726,295
63	54	54	39	48	35	17	25	272	13,360,420
64	55	53	33	28	39	24	18	250	11,001,968
65	48	34	30	34	20	10	14	190	8,271,286
66	34	23	20	19	16	12	13	137	6,408,812
67	44	11	16	18	10	5	8	112	4,628,042
68	32	14	12	11	10	6	7	92	3,321,521
69	33	16	12	14	10	2	11	98	3,915,880
70 & Over	177	62	36	31	18	17	30	371	11,208,721
Totals	19,495	8,785	7,196	6,350	4,995	2,757	983	50,561	\$2,033,584,832

STATE DIVISION

FEMALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2002

BY ATTAINED AGE AND YEARS OF SERVICE

Attained Ages	Years of Service to Valuation Date							Total Number	Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
15-19	911	29						911	\$10,343,015
20-24	5,114		16					5,143	77,311,767
25-29	3,981	636						4,633	122,720,131
30-34	3,009	1,903	620	29				5,561	183,522,768
35-39	2,548	1,671	1,721	862	42			6,844	249,957,201
40-44	2,450	1,638	1,724	1,711	1,238	73		8,834	342,632,858
45-49	2,239	1,530	1,689	1,488	1,865	900	36	9,747	392,196,814
50	376	292	362	255	293	263	46	1,887	77,756,171
51	370	243	321	266	293	270	64	1,827	76,964,639
52	331	259	285	296	251	270	65	1,757	73,378,849
53	291	238	280	265	256	206	72	1,608	66,621,330
54	290	210	299	256	213	187	83	1,538	63,644,749
55	249	183	261	281	205	167	84	1,430	58,027,914
56	245	224	276	252	257	144	78	1,476	59,313,579
57	151	151	158	189	150	91	54	944	37,642,402
58	142	108	167	187	149	92	41	886	35,069,027
59	128	103	122	167	156	75	33	784	30,861,843
60	128	101	125	166	180	78	33	811	31,898,581
61	80	78	96	122	127	67	25	595	24,082,542
62	69	64	84	96	92	53	25	483	18,714,864
63	56	50	78	64	57	51	19	375	14,291,169
64	40	33	54	56	51	37	18	289	11,226,367
65	37	27	55	54	69	31	13	286	10,777,052
66	24	28	34	34	31	25	13	189	6,737,736
67	25	12	22	21	28	17	11	136	4,787,276
68	19	8	17	19	23	13	12	111	3,954,782
69	23	6	6	15	9	11	11	81	2,576,428
70 & Over	76	27	37	39	39	38	34	290	8,451,956
Totals	23,402	9,852	8,909	7,190	6,074	3,159	870	59,456	\$2,095,463,810

SECTION IV

Local Government Division

LOCAL GOVERNMENT DIVISION

Data on active, inactive, retired and money purchase members that was used in the valuation is tabulated briefly below.

Active Members in Valuation December 31, 2002

Groups	Number	Annual Payroll	Pay	Age	Service
Men	114,154	\$3,335,555,555	\$29,220	42.8	8.7
Women	133,223	3,385,829,821	25,415	41.7	8.0
Totals	247,377	\$6,721,385,376	\$27,171	42.2	8.3

Also included in the valuation were 40,334 inactive members eligible for deferred retirement allowances or contribution refunds and 12,125 members active in the money purchase plan.

Retired Members in Valuation December 31, 2002

Fund / Type of Allowance	Number	Current Monthly Benefits	Actuarial Liabilities
A & PR Fund	68,666	\$76,491,176	\$9,324,532,089
Superannuation Retirement	9,758	14,437,758	1,717,957,205
Disability Retirement	510	126,663	12,542,345
Money Purchase	78,934	91,055,597	11,055,031,639
Total A & PR Fund	9,549	6,314,172	688,549,828
Total SBF	88,483	\$97,369,769	\$11,743,581,467
Grand Total			

**LOCAL GOVERNMENT DIVISION
EMPLOYER CONTRIBUTIONS TO SUPPORT
RETIREMENT ALLOWANCES
EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL**

Contributions for	Contributions Computed December 31	
	2002	2001
Normal Cost		
Age and Service Allowances	8.47 %	8.46 %
Disability Allowances	1.94 %	1.94 %
Survivor's Benefits	0.47 %	0.48 %
Separation Benefits	3.54 %	3.76 %
Total Normal Cost	14.42 %	14.64 %
(Member Current Contributions)	8.50 %	8.50 %
Employer Normal Cost	5.92 %	6.14 %
Unfunded Actuarial Accrued Liabilities		
Financing Years*	25	#
Total Available Contribution	3.63 %	2.41 %
Total Employer Contribution Rate	9.55 %	8.55 %

Local Government Division accrued liabilities are fully funded.

* The period sufficient to produce the Total Employer Contribution Rate for retirement allowances and survivor benefits.

LOCAL GOVERNMENT DIVISION COMPARATIVE STATEMENT

Valuation Date December 31	Active Members in Valuation			Computed Employer Contributions as % of Payroll as a Result of the Actuarial Valuation					
				Normal Cost	Unfunded Accrued Liability	Pension Total	Retiree Health	Grand Total	
	Annual Payroll								
	No.	Total	Average	Increase					
	(Millions)								
1990@	173,220	\$ 3,379	\$ 19,506	4.4 %	6.02 %	2.67 %	8.69 %	5.26 %	13.95 %
1991&	211,835	3,789	17,884	(8.3)%	5.95 %	2.49 %	8.44 %	5.11 %	13.55 %
1992	218,295	3,953	18,109	1.3 %	5.80 %	2.64 %	8.44 %	5.11 %	13.55 %
1993	220,410	4,159	18,869	4.2 %	5.85 %	2.59 %	8.44 %	5.11 %	13.55 %
1994	221,987	4,366	19,666	4.2 %	6.16 %	2.28 %	8.44 %	5.11 %	13.55 %
1995	223,431	4,555	20,384	3.7 %	6.17 %	2.27 %	8.44 %	5.11 %	13.55 %
1996@	229,954	4,792	20,839	2.2 %	6.16 %	2.28 %	8.44 %	5.11 %	13.55 %
1997	231,668	4,976	21,481	3.1 %	6.15 %	3.20 %	9.35 %	4.20 %	13.55 %
1998	234,601	5,240	22,334	4.0 %	6.17 %	3.18 %	9.35 %	4.20 %	13.55 %
1999#	240,005	5,586	23,276	4.2 %	7.68 %	1.57 %	9.25 %	4.30 %	13.55 %
2000	245,831	5,999	24,401	4.8 %	7.68 %	1.57 %	9.25 %	4.30 %	13.55 %
2001@	243,202	6,451	26,526	8.7 %	6.14 %	2.41 %	8.55 %	5.00 %	13.55 %
2002	247,377	6,721	27,171	2.4 %	5.92 %	3.63 %	9.55 %	4.00 %	13.55 %

After benefit changes.

@ Revised actuarial assumptions.

& Reflects inclusion of part-time, seasonal and temporary employees in compliance with OBRA 90 and revised actuarial assumptions.

IV-3

LOCAL GOVERNMENT DIVISION
DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
DECEMBER 31, 2002

Allocation by Entry Age			Actuarial Present Value	
(3) Actuarial Accrued Liabilities (1)-(2)	(2) Portion Covered By Future Normal Cost Contributions	(1) Total Actuarial Present Value	Actuarial Present Value	
			Allowances currently being paid from the Annuity & Pension Reserve Fund	Allowances currently being paid from the Survivors Benefit Fund
			Age and service allowances based on service rendered before and likely to be rendered after valuation date	Disability allowances likely to be paid present active members who become permanently disabled
			Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members
			Total	Total
			Actuarial Value of Assets	Unfunded Actuarial Accrued Liability
\$ 4,027,556,688				
\$ 28,452,982,579	\$ 8,501,675,236	\$ 36,954,657,815		
24,425,425,891				
1,164,800,229	2,150,740,713	3,315,540,942		
366,335,687	268,671,709	635,007,396		
1,171,611,223	1,146,643,360	2,318,254,583		
14,006,653,973	4,935,619,454	18,942,273,427		
688,549,828	-	688,549,828		
\$ 11,055,031,639	\$ -	\$ 11,055,031,639		

LOCAL GOVERNMENT DIVISION
DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
COMPARATIVE STATEMENT
(\$ IN MILLIONS EXCEPT AVERAGES)

Dec. 31	Active Payroll		Active and InactiveMember Accrued Liabilities for Retirement Allowances				Unfunded /Payroll
			Computed Total	Valuation Assets	Unfunded	Amort. Years	
	Total	Average					
1990@	\$ 3,379	\$19,506	\$ 6,666	\$ 4,335	\$ 2,331	37	0.69
1991&	3,789	17,884	7,479	5,181	2,298	36	0.61
1992	3,953	18,109	8,147	6,046	2,101	27	0.53
1993	4,159	18,869	9,291	7,147	2,144	26	0.52
1994	4,366	19,666	9,894	7,814	2,080	28	0.48
1995	4,555	20,384	10,630	8,856	1,774	21	0.39
1996@	4,792	20,839	11,286	9,940	1,346	15	0.28
1997	4,976	21,481	11,973	11,218	755	5	0.15
1998	5,240	22,334	12,912	13,135	(223)	0	0.00
1999#	5,586	23,276	14,643	14,498	145	2	0.03
2000	5,999	24,401	15,881	16,131	(250)	0	0.00
2001@	6,451	26,526	15,983	16,651	(668)	-	-
2002	6,721	27,171	16,710	12,682	4,028	25	0.60

After benefit changes.

@ Revised actuarial assumptions.

& Reflects inclusion of part-time, seasonal, and temporary employees in compliance with OBRA 90 and revised actuarial assumptions.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength. And vice-versa.

LOCAL GOVERNMENT DIVISION
MALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2002
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Ages	Years of Service to Valuation Date							Total Number	Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
15-19	5,884	8,567	137					5,884	\$41,741,428
20-24	6,492	1,243	53					7,788	185,504,624
25-29	5,989	3,079	1,070	22				10,160	301,184,720
30-34	5,245	2,915	2,604	987	48			11,799	382,468,614
35-39	5,135	2,998	2,351	1,441		110		15,031	516,875,618
40-44	4,692	2,980	2,777	2,387	2,447	1,736	56	17,075	612,956,748
45-49	778	533	522	409	433	521	81	3,277	120,993,851
50	803	427	472	394	360	531	103	3,090	117,411,699
51	813	449	458	397	380	506	138	3,141	117,669,597
52	703	428	467	357	316	432	141	2,844	107,052,372
53	719	407	443	345	332	352	189	2,787	101,142,478
54	703	428	467	357	316	432	141	2,844	107,052,372
55	703	440	375	328	274	340	192	2,652	95,068,268
56	722	423	438	323	268	282	181	2,637	92,424,240
57	494	254	270	215	174	160	108	1,675	56,198,770
58	462	239	258	231	180	147	89	1,606	52,886,573
59	489	266	194	194	145	128	75	1,491	46,350,046
60	488	316	257	235	158	127	89	1,670	51,196,756
61	442	248	203	183	131	99	88	1,394	42,436,583
62	392	236	186	150	100	81	62	1,207	34,380,240
63	327	183	136	119	72	62	58	957	24,944,825
64	365	172	124	75	78	58	47	919	23,074,042
65	332	153	125	103	62	51	40	866	20,642,536
66	293	127	84	63	30	30	27	654	12,366,704
67	290	125	78	38	39	32	22	624	11,394,656
68	277	111	61	34	19	13	22	537	8,788,431
69	255	97	60	27	19	13	15	486	7,440,530
70 & Over	1,545	798	413	178	108	73	84	3,199	36,672,033
Totals	53,696	19,782	15,126	10,145	7,614	5,884	1,907	114,154	\$3,335,555,555

LOCAL GOVERNMENT DIVISION
FEMALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2002
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Ages	Years of Service to Valuation Date							Total Number	Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
15-19	6,857							6,857	\$44,938,521
20-24	9,543	228						9,771	125,647,963
25-29	8,807	1,712	84					10,603	244,833,096
30-34	7,943	4,033	1,363	65				13,404	353,174,769
35-39	6,953	3,412	2,968	1,192	82			14,607	404,479,336
40-44	7,372	3,835	3,118	2,334	1,448	133		18,240	513,570,173
45-49	6,736	4,005	3,396	2,217	2,121	1,354	62	19,891	585,709,971
50	1,131	699	699	415	352	321	74	3,691	111,571,332
51	1,028	693	689	431	348	332	73	3,594	109,319,750
52	1,017	629	606	444	345	289	76	3,406	102,340,190
53	878	570	646	440	306	293	98	3,231	97,290,859
54	886	578	609	454	308	257	117	3,209	95,184,487
55	821	542	607	470	379	246	108	3,173	93,649,670
56	786	533	649	498	370	205	105	3,146	90,549,521
57	543	365	391	334	226	120	50	2,029	57,914,295
58	437	381	387	339	239	135	52	1,970	56,228,271
59	396	339	348	327	233	155	41	1,839	50,788,337
60	409	345	385	293	311	161	64	1,968	54,932,862
61	355	249	300	237	182	119	45	1,487	40,803,170
62	281	215	234	188	133	90	26	1,167	29,900,061
63	243	199	172	146	123	77	43	1,003	25,946,631
64	209	172	132	112	98	63	35	821	20,052,614
65	191	136	120	104	91	70	25	737	17,436,861
66	163	105	78	74	52	35	24	531	11,175,454
67	144	75	84	73	53	25	28	482	10,227,788
68	124	56	62	49	37	29	22	379	7,386,658
69	113	55	42	43	25	27	21	326	6,398,432
70 & Over	619	341	208	170	124	110	89	1,661	24,378,749
Totals	64,985	24,502	18,377	11,449	7,986	4,646	1,278	133,223	\$3,385,829,821

SECTION V Law Division

LAW DIVISION

This Benefit Group consists of Law Enforcement Members and Public Safety Members. Data on active, inactive, retired and money purchase members that was used in the valuation is tabulated briefly below.

Active Members in Valuation December 31, 2002

Groups	Number	Annual Payroll	Average		
			Pay	Age	Service
Men	7,100	\$317,900,560	\$44,775	39.5	12.1
Women	930	38,793,586	41,714	38.8	10.8
Totals	8,030	\$356,694,146	\$44,420	39.4	12.0

Also included in the valuation were 331 inactive members eligible for deferred retirement allowances or contribution refunds and 31 members active in the money purchase plan.

Retired Members in Valuation December 31, 2002

Fund / Type of Allowance	Number	Current Monthly Benefits	Actuarial Liabilities
A & PR Fund			
Superannuation Retirement	1,271	\$2,702,146	\$401,297,054
Disability Retirement	953	2,124,593	283,197,041
Money Purchase	0	0	0
Total A & PR Fund	2,224	4,826,739	684,494,095
Total SBF	301	221,332	28,324,436
Grand Total	2,525	\$5,048,071	\$712,818,531

**LAW DIVISION
EMPLOYER CONTRIBUTIONS TO SUPPORT
RETIREMENT ALLOWANCES
EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL**

Contributions for			
Contributions Computed December 31	2001@		
	2002@		
		Normal Cost	
		Age and Service Allowances	11.51 %
		Disability Allowances	4.43 %
		Survivor's Benefits	0.54 %
		Separation Benefits	2.37 %
		Total Normal Cost	18.85 %
		(Member Current Contributions)	10.08 %
		Employer Normal Cost	8.77 %
		Unfunded Actuarial Accrued Liabilities	
		Financing Years*	36
		Total Available Contribution	3.93 %
		Total Employer Contribution Rate	12.70 %
			11.70 %

Law Division accrued liabilities are fully funded.

* The period sufficient to produce the Total Employer Contribution Rate for retirement allowances and survivor benefits.

@ Weighted average between Public Safety and Law Enforcement.

LAW DIVISION

COMPARATIVE STATEMENT

Valuation Date December 31	Active Members in Valuation			Computed Employer Contributions as % of Payroll as a Result of the Actuarial Valuation				
	No.	Annual Payroll		Normal Cost	Unfunded Accrued Liability	Pension Total	Retiree Health	Grand Total
		Total	Average					
		(Thousands)						
1990@	5,804	\$156,339	\$26,936	9.52 %	1.29 %	10.81 %	5.19 %	16.00 %
1991	6,088	169,008	27,761	9.32 %	1.49 %	10.81 %	5.89 %	16.70 %
1992	5,852	169,337	28,937	9.65 %	1.16 %	10.81 %	5.89 %	16.70 %
1993	6,032	182,576	30,268	9.53 %	1.28 %	10.81 %	5.89 %	16.70 %
1994	6,252	196,467	31,425	9.71 %	1.10 %	10.81 %	5.89 %	16.70 %
1995	6,605	214,273	32,441	9.69 %	1.12 %	10.81 %	5.89 %	16.70 %
1996@	6,742	229,138	33,987	10.50 %	0.74 %	11.24 %	5.46 %	16.70 %
1997	7,256	258,897	35,680	10.49 %	2.01 %	12.50 %	4.20 %	16.70 %
1998	7,507	277,239	36,931	10.48 %	2.02 %	12.50 %	4.20 %	16.70 %
1999#	7,766	299,040	38,506	11.54 %	0.86 %	12.40 %	4.30 %	16.70 %
2000	8,045	324,918	40,387	11.59 %	0.81 %	12.40 %	4.30 %	16.70 %
2001@	7,892	335,432	42,503	8.88 %	2.82 %	11.70 %	5.00 %	16.70 %
2002	8,030	356,694	44,420	8.77 %	3.93 %	12.70 %	4.00 %	16.70 %

After benefit changes.
@ Revised actuarial assumptions.

Member's Name					Member's Address					Member's Telephone				
First Name	Initial	Last Name	Prefix	Suffix	Street	City	State	Zip	Country	Home	Office	Mobile	Fax	Cellular
John	J	Smith	Mr.		123 Main St	Columbus	OH	43201	USA	614-555-1234	614-555-5678	614-555-9012	614-555-3456	614-555-7890
Jane	J	Smith	Mrs.		123 Main St	Columbus	OH	43201	USA	614-555-1234	614-555-5678	614-555-9012	614-555-3456	614-555-7890
Robert	R	Johnson	Mr.		456 Oak Ave	Cincinnati	OH	45202	USA	513-555-2345	513-555-6789	513-555-0123	513-555-4567	513-555-8901
Emily	E	Johnson	Mrs.		456 Oak Ave	Cincinnati	OH	45202	USA	513-555-2345	513-555-6789	513-555-0123	513-555-4567	513-555-8901
Michael	M	Williams	Mr.		789 Elm St	Cleveland	OH	44103	USA	216-555-3456	216-555-7890	216-555-1234	216-555-5678	216-555-9012
Sarah	S	Williams	Mrs.		789 Elm St	Cleveland	OH	44103	USA	216-555-3456	216-555-7890	216-555-1234	216-555-5678	216-555-9012
David	D	Brown	Mr.		101 Pine St	Dayton	OH	45404	USA	937-555-4567	937-555-8901	937-555-2345	937-555-6789	937-555-0123
Lisa	L	Brown	Mrs.		101 Pine St	Dayton	OH	45404	USA	937-555-4567	937-555-8901	937-555-2345	937-555-6789	937-555-0123
James	J	Davis	Mr.		202 Maple Dr	Columbus	OH	43206	USA	614-555-5678	614-555-9012	614-555-3456	614-555-7890	614-555-1234
Karen	K	Davis	Mrs.		202 Maple Dr	Columbus	OH	43206	USA	614-555-5678	614-555-9012	614-555-3456	614-555-7890	614-555-1234
Christopher	C	Garcia	Mr.		303 Birch Ln	Columbus	OH	43207	USA	614-555-6789	614-555-0123	614-555-4567	614-555-8901	614-555-2345
Michelle	M	Garcia	Mrs.		303 Birch Ln	Columbus	OH	43207	USA	614-555-6789	614-555-0123	614-555-4567	614-555-8901	614-555-2345
Andrew	A	Miller	Mr.		404 Cedar Ct	Columbus	OH	43208	USA	614-555-7890	614-555-1234	614-555-5678	614-555-9012	614-555-3456
Stephanie	S	Miller	Mrs.		404 Cedar Ct	Columbus	OH	43208	USA	614-555-7890	614-555-1234	614-555-5678	614-555-9012	614-555-3456
Benjamin	B	Wilson	Mr.		505 Spruce Way	Columbus	OH	43209	USA	614-555-8901	614-555-2345	614-555-6789	614-555-0123	614-555-4567
Olivia	O	Wilson	Mrs.		505 Spruce Way	Columbus	OH	43209	USA	614-555-8901	614-555-2345	614-555-6789	614-555-0123	614-555-4567
Ethan	E	Moore	Mr.		606 Ash Rd	Columbus	OH	43210	USA	614-555-9012	614-555-3456	614-555-7890	614-555-1234	614-555-5678
Avery	A	Moore	Mrs.		606 Ash Rd	Columbus	OH	43210	USA	614-555-9012	614-555-3456	614-555-7890	614-555-1234	614-555-5678
Nathan	N	Lee	Mr.		707 Hickory Pl	Columbus	OH	43211	USA	614-555-0123	614-555-4567	614-555-8901	614-555-2345	614-555-6789
Grace	G	Lee	Mrs.		707 Hickory Pl	Columbus	OH	43211	USA	614-555-0123	614-555-4567	614-555-8901	614-555-2345	614-555-6789
Isaac	I	Clark	Mr.		808 Walnut St	Columbus	OH	43212	USA	614-555-1234	614-555-5678	614-555-9012	614-555-3456	614-555-7890
Chloe	C	Clark	Mrs.		808 Walnut St	Columbus	OH	43212	USA	614-555-1234	614-555-5678	614-555-9012	614-555-3456	614-555-7890
Lucas	L	White	Mr.		909 Chestnut Ave	Columbus	OH	43213	USA	614-555-2345	614-555-6789	614-555-0123	614-555-4567	614-555-8901
Zoe	Z	White	Mrs.		909 Chestnut Ave	Columbus	OH	43213	USA	614-555-2345	614-555-6789	614-555-0123	614-555-4567	614-555-8901
Leo	L	Harris	Mr.		1010 Sycamore Dr	Columbus	OH	43214	USA	614-555-3456	614-555-7890	614-555-1234	614-555-5678	614-555-9012
Madison	M	Harris	Mrs.		1010 Sycamore Dr	Columbus	OH	43214	USA	614-555-3456	614-555-7890	614-555-1234	614-555-5678	614-555-9012
Jack	J	Young	Mr.		1111 Poplar Ln	Columbus	OH	43215	USA	614-555-4567	614-555-9012	614-555-2345	614-555-6789	614-555-0123
Skylar	S	Young	Mrs.		1111 Poplar Ln	Columbus	OH	43215	USA	614-555-4567	614-555-9012	614-555-2345	614-555-6789	614-555-0123
Wyatt	W	King	Mr.		1212 Magnolia Way	Columbus	OH	43216	USA	614-555-5678	614-555-0123	614-555-3456	614-555-7890	614-555-1234
Lyla	L	King	Mrs.		1212 Magnolia Way	Columbus	OH	43216	USA	614-555-5678	614-555-0123	614-555-3456	614-555-7890	614-555-1234
Grayson	G	Wright	Mr.		1313 Dogwood Ct	Columbus	OH	43217	USA	614-555-6789	614-555-1234	614-555-5678	614-555-9012	614-555-2345
Ellie	E	Wright	Mrs.		1313 Dogwood Ct	Columbus	OH	43217	USA	614-555-6789	614-555-1234	614-555-5678	614-555-9012	614-555-2345
Lincoln	L	Scott	Mr.		1414 Redwood Pl	Columbus	OH	43218	USA	614-555-7890	614-555-2345	614-555-6789	614-555-0123	614-555-4567
Adeline	A	Scott	Mrs.		1414 Redwood Pl	Columbus	OH	43218	USA	614-555-7890	614-555-2345	614-555-6789	614-555-0123	614-555-4567
Sebastian	S	Green	Mr.		1515 Cypress St	Columbus	OH	43219	USA	614-555-8901	614-555-3456	614-555-7890	614-555-1234	614-555-5678
Hannah	H	Green	Mrs.		1515 Cypress St	Columbus	OH	43219	USA	614-555-8901	614-555-3456	614-555-7890	614-555-1234	614-555-5678
Julian	J	Baker	Mr.		1616 Juniper Ave	Columbus	OH	43220	USA	614-555-9012	614-555-4567	614-555-8901	614-555-2345	614-555-6789
Valentina	V	Baker	Mrs.		1616 Juniper Ave	Columbus	OH	43220	USA	614-555-9012	614-555-4567	614-555-8901	614-555-2345	614-555-6789
Maxwell	M	Nelson	Mr.		1717 Hawthorn Ln	Columbus	OH	43221	USA	614-555-0123	614-555-5678	614-555-9012	614-555-3456	614-555-7890
Isabella	I	Nelson	Mrs.		1717 Hawthorn Ln	Columbus	OH	43221	USA	614-555-0123	614-555-5678	614-555-9012	614-555-3456	614-555-7890
Samuel	S	Perez	Mr.		1818 Laurel Way	Columbus	OH	43222	USA	614-555-1234	614-555-6789	614-555-0123	614-555-4567	614-555-8901
Sophia	S	Perez	Mrs.		1818 Laurel Way	Columbus	OH	43222	USA	614-555-1234	614-555-6789	614-555-0123	614-555-4567	614-555-8901
Isaac	I	Roberts	Mr.		1919 Birch St	Columbus	OH	43223	USA	614-555-2345	614-555-7890	614-555-1234	614-555-5678	614-555-9012
Charlotte	C	Roberts	Mrs.		1919 Birch St	Columbus	OH	43223	USA	614-555-2345	614-555-7890	614-555-1234	614-555-5678	614-555-9012
Benjamin	B	Turner	Mr.		2020 Elm Ave	Columbus	OH	43224	USA	614-555-3456	614-555-8901	614-555-2345	614-555-6789	614-555-0123
Amelia	A	Turner	Mrs.		2020 Elm Ave	Columbus	OH	43224	USA	614-555-3456	614-555-8901	614-555-2345	614-555-6789	614-555-0123
Lucas	L	Phillips	Mr.		2121 Oak Dr	Columbus	OH	43225	USA	614-555-4567	614-555-9012	614-555-3456	614-555-7890	614-555-1234
Evelyn	E	Phillips	Mrs.		2121 Oak Dr	Columbus	OH	43225	USA	614-555-4567	614-555-9012	614-555-3456	614-555-7890	614-555-1234
Grayson	G	Campbell	Mr.		2222 Pine Ln	Columbus	OH	43226	USA	614-555-5678	614-555-0123	614-555-4567	614-555-8901	614-555-2345
Madison	M	Campbell	Mrs.		2222 Pine Ln	Columbus	OH	43226	USA	614-555-5678	614-555-0123	614-555-4567	614-555-8901	614-555-2345
Julian	J	Evans	Mr.		2323 Cedar St	Columbus	OH	43227	USA	614-555-6789	614-555-1234	614-555-5678	614-555-9012	614-555-3456
Valentina	V	Evans	Mrs.		2323 Cedar St	Columbus	OH	43227	USA	614-555-6789	614-555-1234	614-555-5678	614-555-9012	614-555-3456
Maxwell	M	Ward	Mr.		2424 Spruce Ave	Columbus	OH	43228	USA	614-555-7890	614-555-2345	614-555-6789	614-555-0123	614-555-4567
Isabella	I	Ward	Mrs.		2424 Spruce Ave	Columbus	OH	43228	USA	614-555-7890	614-555-2345	614-555-6789	614-555-0123	614-555-4567
Samuel	S	Reed	Mr.		2525 Ash Ln	Columbus	OH	43229	USA	614-555-8901	614-555-3456	614-555-7890	614-555-1234	614-555-5678
Sophia	S	Reed	Mrs.		2525 Ash Ln	Columbus	OH	43229	USA	614-555-8901	614-555-3456	614-555-7890	614-555-1234	614-555-5678
Isaac	I	Cook	Mr.		2626 Walnut St	Columbus	OH	43230	USA	614-555-9012	614-555-4567	614-555-8901	614-555-2345	614-555-6789
Charlotte	C	Cook	Mrs.		2626 Walnut St	Columbus	OH	43230	USA	614-555-9012	614-555-4567	614-555-8901	614-555-2345	614-555-6789
Benjamin	B	Bell	Mr.		2727 Hickory Pl	Columbus	OH	43231	USA	614-555-0123	614-555-5678	614-555-9012	614-555-3456	614-555-7890
Amelia	A	Bell	Mrs.		2727 Hickory Pl	Columbus	OH	43231	USA	614-555-0123	614-555-5678	614-555-9012	614-555-3456	614-555-7890
Lucas	L	Morgan	Mr.		2828 Dogwood Ct	Columbus	OH	43232	USA	614-555-1234	614-555-6789	614-555-0123	614-555-4567	614-555-8901
Evelyn	E	Morgan	Mrs.		2828 Dogwood Ct	Columbus	OH	43232	USA	614-555-1234	614-555-6789	614-555-0123	614-555-4567	614-555-8901
Grayson	G	Ward	Mr.		2929 Redwood Ln	Columbus	OH	43233	USA	614-555-2345	614-555-7890	614-555-1234	614-555-5678	614-555-9012
Madison	M	Ward	Mrs.		2929 Redwood Ln	Columbus	OH	43233	USA	614-555-2345	614-555-7890	614-555-1234	614-555-5678	614-555-9012
Julian	J	Reed	Mr.		3030 Cypress Ave	Columbus	OH	43234	USA	614-555-3456	614-555-8901	614-555-2345	614-555-6789	614-555-0123
Valentina	V	Reed	Mrs.		3030 Cypress Ave	Columbus	OH	43234	USA	614-555-3456	614-555-8901	614-555-2345	614-555-6789	614-555-0123
Maxwell	M	Cook	Mr.		3131 Juniper St	Columbus	OH	43235	USA	614-555-4567	614-555-9012	614-555-3456	614-555-7890	614-555-1234
Isabella	I	Cook	Mrs.		3131 Juniper St	Columbus	OH	43235	USA	614-555-4567	614-555-9012	614-555-3456	614-555-7890	614-555-1234
Samuel	S	Bell	Mr.		3232 Birch Ln	Columbus	OH	43236	USA	614-555-5678	614-555-0123	614-555-4567	614-555-8901	614-555-2345
Sophia	S	Bell	Mrs.		3232 Birch Ln	Columbus	OH	43236	USA	614-555-5678	614-555-0123	614-555-4567	614-555-8901	614-555-2345
Isaac	I	Ward	Mr.		3333 Elm Ave	Columbus	OH	43237	USA	614-555-6789	614-555-1234	614-555-5678	614-555-9012	614-555-3456
Charlotte	C	Ward	Mrs.		3333 Elm Ave	Columbus	OH	43237	USA	614-555-6789	614-555-1234	614-555-5678	614-555-9012	614-555-3456
Benjamin	B	Reed	Mr.		3434 Oak Dr	Columbus	OH	43238	USA	614-555-7890	614-555-2345	614-555-6789	614-555-0123	614-555-4567
Amelia	A	Reed	Mrs.		3434 Oak Dr	Columbus	OH	43238	USA	614-555-7890	614-555-2345	614-555-6789	614-555-0123	614-555-4567
Lucas	L	Cook	Mr.		3535 Pine St	Columbus	OH	43239	USA	614-555-8901	614-555-3456	614-555-7890	614-555-1234	614-555-5678
Evelyn	E	Cook	Mrs.		3535 Pine St	Columbus	OH	43239	USA	614-555-8901	614-555-3456	614-555-7890	614-555-1234	614-555-5678
Grayson	G	Bell	Mr.		3636 Cedar Ln	Columbus	OH	43240	USA	614-555-9012	61			

LAW DIVISION
DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
DECEMBER 31, 2002

Actuarial Present Value	(1) Total Actuarial Present Value	Allocation by Entry Age	
		(2) Portion Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1)-(2)
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$ 684,494,095	\$ -	\$ 684,494,095
Allowances currently being paid from the Survivors Benefit Fund	28,324,436	-	28,324,436
Age and service allowances based on service rendered before and likely to be rendered after valuation date	1,331,741,836	408,467,248	923,274,588
Disability allowances likely to be paid present active members who become permanently disabled	322,376,685	154,741,836	167,634,849
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	41,785,652	18,440,148	23,345,504
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	104,944,569	83,991,987	20,952,582
Total	\$2,513,667,273	\$665,641,219	\$1,848,026,054
Actuarial Value of Assets			1,566,565,855
Unfunded Actuarial Accrued Liability			\$ 281,460,199

LAW DIVISION
DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
COMPARATIVE STATEMENT
(\$ IN MILLIONS EXCEPT AVERAGES)

Dec. 31	Active Payroll		Computed Total	Valuation Assets	Unfunded	Amort. Years	Unfunded /Payroll
	Total	Average					
	Active and Inactive Member Accrued Liabilities for Retirement Allowances						
1990@	\$ 156	\$26,936	\$ 388	\$ 341	\$ 47	32	0.30
1991	169	27,761	438	399	39	19	0.23
1992	169	28,937	467	452	15	8	0.09
1993	183	30,268	533	512	21	10	0.11
1994	196	31,425	580	555	25	13	0.13
1995	214	32,441	638	612	26	12	0.12
1996@	229	33,987	711	676	35	30	0.15
1997	259	35,680	821	773	48	10	0.19
1998	277	36,931	914	895	19	5	0.07
1999#	299	38,506	1,080	1,038	42	20	0.14
2000	325	40,387	1,175	1,137	38	18	0.12
2001@	335	42,503	1,071	1,149	(78)	-	-
2002	357	44,420	1,135	854	281	36	0.79

After benefit changes.
@ Revised actuarial assumptions.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength. And vice-versa.

LAW DIVISION
MALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2002
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Ages	Years of Service to Valuation Date							Total Number	Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
15-19									
20-24	192	5						197	\$ 5,899,455
25-29	579	311	1					891	33,029,224
30-34	386	857	303	5				1,551	65,293,825
35-39	179	341	492	152	2			1,166	52,366,571
40-44	81	134	284	367	193	7		1,066	51,099,764
45-49	47	102	147	204	371	170	2	1,043	52,090,596
50	7	8	23	27	43	38	3	149	7,628,586
51	1	8	12	18	55	46	6	146	7,481,046
52	11	9	25	25	29	48	7	154	7,774,308
53	4	7	16	17	25	34	11	114	5,837,288
54	6	7	14	15	22	16	20	100	4,981,604
55	5	9	7	16	15	23	5	80	3,976,998
56	7	4	15	13	19	26	16	100	4,780,571
57	3	4	13	9	16	6	4	55	2,589,199
58	5	4	7	14	5	8	7	50	2,334,117
59	2		5	9	14	9	5	44	2,269,635
60	5	1	7	9	3	6	8	39	1,678,746
61	4	4	3	5	12	5	5	38	1,794,934
62	1	3	3	2	4	6	4	23	1,074,000
63		2	2	6	10	9	2	31	1,531,913
64	3	1	3	4	1	4	1	17	685,891
65	1	2	6	2	1	1		13	467,235
66	5	1	2	1			3	12	449,343
67		3	1	1	1		3	9	291,971
68									
69							1	1	90,345
70					1		2	3	133,121
71	1	5		1			1	8	270,274
Totals	1,535	1,832	1,391	922	842	462	116	7,100	\$317,900,560

LAW DIVISION
FEMALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2002
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Ages	Years of Service to Valuation Date							Total Number	Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
20-24	21	1	2					22	\$ 651,527
25-29	87	45	2					134	4,806,738
30-34	61	109	22	1				193	7,780,517
35-39	32	47	55	26	1			161	6,762,234
40-44	12	37	43	44	17			153	6,757,625
45-49	14	22	24	27	30	17		134	6,128,341
50	3	1	3	5	5	3		20	867,736
51	1	3	2	2	8	2		18	844,237
52		1		2	7	3	1	14	630,981
53	1	2	3	3	3	4	2	18	888,851
54		3	2	6	1	2		14	607,540
55	1	1	3	3	3	3		14	621,050
56		1	2	2	3	2		7	296,653
57		1	1	2	2	1		6	272,869
58			1	1	3	1		6	264,129
59			1	1	4			6	248,713
60		1		1	1	1		2	67,622
61				1	2			2	81,731
62				3				5	162,672
63									
64									
65									
66									
67									
68									
69									
70					1			1	51,820
Totals	233	274	164	127	91	38	3	930	\$38,793,586

SECTION VI

Allowances Being Paid to Retirees & Beneficiaries

**MONTHLY ALLOWANCES OF RETIRED LIVES
BY YEAR OF RETIREMENT
AS OF DECEMBER 31, 2002**

Year of Retirement	No.	Initial	Post-Ret. Increase	Total	Average
2002	8,831	\$ 14,918,361	\$ 0	\$ 14,918,361	\$1,689
2001	8,314	12,807,518	393,824	13,201,342	1,588
2000	8,213	11,642,424	647,257	12,289,681	1,496
1999	7,205	9,809,382	724,631	10,534,013	1,462
1998	7,175	8,972,929	826,621	9,799,550	1,366
1997	6,810	8,690,275	1,025,371	9,715,646	1,427
1996	6,734	7,989,050	1,162,253	9,151,303	1,359
1995	6,096	7,025,684	1,215,931	8,241,615	1,352
1990-1994	25,354	24,590,182	6,513,917	31,104,099	1,227
1985-1989	23,993	19,004,673	8,283,621	27,288,294	1,137
1980-1984	17,411	8,907,877	6,117,735	15,025,612	863
1975-1979	10,025	3,652,677	4,739,190	8,391,867	837
1970-1974	3,507	809,467	1,758,771	2,568,238	732
1965-1969	954	186,545	581,414	767,959	805
1960-1964	309	62,591	217,151	279,742	905
Before 1960	88	16,824	73,315	90,139	1,024
TOTAL	141,019	\$139,086,459	\$34,281,002	\$173,367,461	\$1,229

ANNUITY AND PENSION RESERVE FUND
ANNUAL ALLOWANCE, REPORTED ASSETS AND ACTUARIAL LIABILITIES
COMPARATIVE STATEMENT
(\$ MILLIONS)

Valuation Date	Annual Allowances			Reported Assets*	Actuarial Liabilities	Ratio of Assets to Liabilities	Ratio of Active to Retired
	No.	\$ Millions	% of Payroll#				
6/30/1972	36,314	\$ 74	4.7 %	\$ 769	\$ 741	103.7 %	5.7
6/30/1973	38,940	83	4.9 %	871	831	104.7 %	5.5
6/30/1974	41,453	92	4.6 %	984	933	105.5 %	6.4
6/30/1975	45,197	115	5.4 %	1,162	1,111	104.7 %	5.2
6/30/1976	48,675	129	5.5 %	1,294	1,253	103.2 %	4.9
6/30/1977	52,240	150	5.6 %	1,513	1,478	102.3 %	5.2
6/30/1978	55,827	169	5.5 %	1,724	1,698	101.5 %	4.9
6/30/1979	59,303	190	5.9 %	2,007	1,973	101.7 %	4.4
12/31/1979	60,887	207	6.4 %	2,209	2,154	102.6 %	4.3
12/31/1980	64,231	231	6.7 %	2,477	2,424	102.2 %	4.0
12/31/1981@	68,089	272	8.2 %	3,084	2,994	103.0 %	3.7
12/31/1982@	71,253	299	8.2 %	3,173	3,068	103.4 %	3.5
12/31/1983	74,442	333	8.7 % **	3,554	3,428	103.7 %	3.3
12/31/1984	77,493	386	9.5 % **	3,993	3,993	100.0 %	3.2
12/31/1985	80,999	429	10.0 % **	4,498	4,456	100.9 %	3.1
12/31/1986	84,892	474	10.4 % **	4,965	4,935	100.6 %	3.0
12/31/1987	86,924	518	10.6 % **	5,485	5,437	100.9 %	3.0
12/31/1988	89,972	581	10.9 % **	6,182	6,173	100.1 %	2.9
12/31/1989@	92,504	661	12.4 % **	6,985	6,911	101.1 %	2.9
12/31/1990	94,088	706	11.7 % **	7,438	7,338	101.4 %	3.0
12/31/1991	95,843	762	11.5 % **	8,014	7,904	101.4 %	3.4
12/31/1992	98,609	835	12.1 % **	8,814	8,692	101.4 %	3.4
12/31/1993	100,651	901	12.5 % **	9,390	9,356	100.4 %	3.4
12/31/1994	102,587	958	12.6 % **	9,964	9,893	100.7 %	3.3
12/31/1995	104,806	1,036	13.0 % **	10,808	10,737	100.7 %	3.3
12/31/1996@	107,617	1,141	13.7 % **	11,819	11,762	100.5 %	3.3
12/31/1997	110,470	1,233	14.3 % **	12,843	12,755	100.7 %	3.2
12/13/1998	113,000	1,327	14.7 % **	13,885	13,751	101.0 %	3.1
12/31/1999+	115,431	1,530	16.1 % **	14,978	16,139	92.8 %	3.1
12/31/2000	118,620	1,641	16.1 % **	16,980	16,980	100.0 %	3.1
12/31/2001@	121,875	1,775	16.5 % **	18,001	18,001	100.0 %	3.0
12/31/2002	126,409	1,958	17.5 % **	20,085	20,085	100.0 %	2.9

* Including certain recommended transfers and accrued transfers.

Through 1979, June allowances are compared to December payroll.

@ Revised actuarial assumptions.

** Excluding health insurance and Medicare payments.

+ Including estimated effect of legislated benefit changes.

**ANNUITY AND PENSION RESERVE FUND
RETIREES AND BENEFICIARIES DECEMBER 31, 2002
TYPE OF BENEFIT, MONTHLY AMOUNT AND ACTUARIAL LIABILITIES**

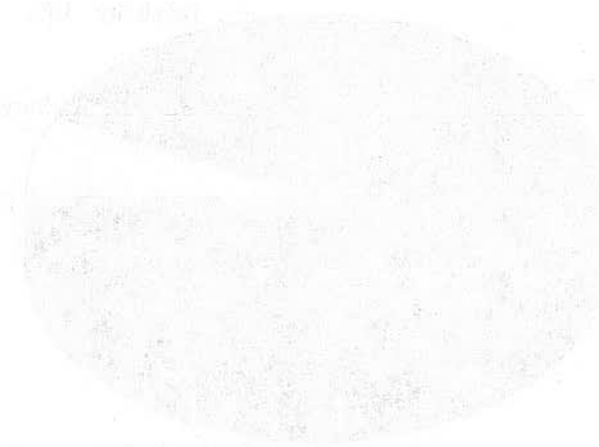
Type of Allowance	Number	% of Current Total \$			Current Total \$	Actuarial Liabilities
		Member Annuities	Initial Pensions	Post-Retirement Pension Increases		
Superannuation Retirement						
Plan A - Joint & 50%	16,471	27.8 %	54.3 %	17.9 %	\$ 25,424,389	\$ 3,312,057,141
Plan B - Straight Life	52,649	27.8 %	51.2 %	21.0 %	62,209,233	6,943,730,446
Plan C - Special Joint & Survivor	8,207	33.3 %	58.0 %	8.7 %	13,944,465	2,002,449,974
Plan D - Joint & 100%	15,168	27.9 %	55.4 %	16.7 %	21,993,936	3,341,223,498
Plan E - Life & 0 to 5 Years Guaranteed	330	24.9 %	49.3 %	25.8 %	345,426	35,540,867
- Life & 6 to 10 Years Guaranteed	466	24.2 %	48.3 %	27.5 %	530,946	52,295,329
- Life & 11 to 15 Years Guaranteed	704	21.6 %	46.3 %	32.1 %	764,109	70,476,378
- Life & 16 to 20 Years Guaranteed	19	33.9 %	51.6 %	14.5 %	22,159	3,184,605
Money Purchase	690	49.5 %	49.5 %	1.0 %	186,099	18,315,038
Survivor Beneficiary - Life Benefit	14,327	19.2 %	43.2 %	37.6 %	10,703,858	1,016,517,435
Survivor Beneficiary - Temporary Benefit	110	27.3 %	51.7 %	21.0 %	132,602	4,985,129
Total Superannuation	109,141				\$136,257,222	\$16,800,775,840
Disability Retirement	17,268	15.5 %	68.4 %	16.1 %	\$ 26,875,129	\$ 3,284,535,288
Total from A & PR	126,409	25.7 %	55.1 %	19.2 %	\$163,132,351	\$20,085,311,128

**ANNUITY AND PENSION RESERVE FUND
RETIREES AND BENEFICIARIES DECEMBER 31, 2002
TYPE OF BENEFIT AND AMOUNT BY SEX OF RECIPIENT**

Type of Allowance	Men		Women		Total	
	Number	Monthly Allowances	Number	Monthly Allowances	Number	Monthly Allowances
Supranuation Retirement						
Plan A - Joint & 50%	12,565	\$20,568,596	3,906	\$ 4,855,793	16,471	\$ 25,424,389
Plan B - Straight Life	16,098	22,841,595	36,551	39,367,638	52,649	62,209,233
Plan C - Special Joint & Survivor	3,858	8,065,771	4,349	5,878,694	8,207	13,944,465
Plan D - Joint & 100%	13,177	19,992,560	1,991	2,001,376	15,168	21,993,936
Plan E - Life & 0 to 5 Years Guaranteed	170	199,821	160	145,605	330	345,426
- Life & 6 to 10 Years Guaranteed	291	355,511	175	175,435	466	530,946
- Life & 11 to 15 Years Guaranteed	497	592,446	207	171,663	704	764,109
- Life & 16 to 20 Years Guaranteed	12	14,608	7	7,551	19	22,159
Money Purchase	508	155,749	182	30,350	690	186,099
Survivor Beneficiary - Life Benefit	835	415,805	13,492	10,288,053	14,327	10,703,858
Survivor Beneficiary - Temporary Benefit	28	36,119	82	96,483	110	132,602
Total Supranuation	48,039	\$73,238,581	61,102	\$63,018,641	109,141	\$136,257,222
Disability Retirement	9,087	\$15,643,289	8,181	\$11,231,840	17,268	\$ 26,875,129
Total from A & PR	57,126	\$88,881,870	69,283	\$74,250,481	126,409	\$163,132,351

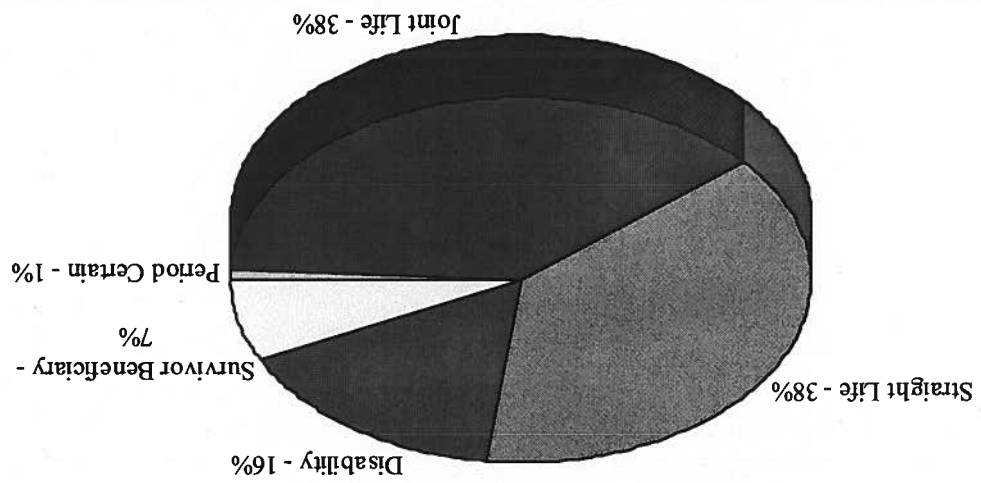
ANNUAL REPORT OF THE
OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM

ANNUAL REPORT OF THE
OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM



**ANNUITIES BEING PAID BY TYPE
DECEMBER 31, 2002**

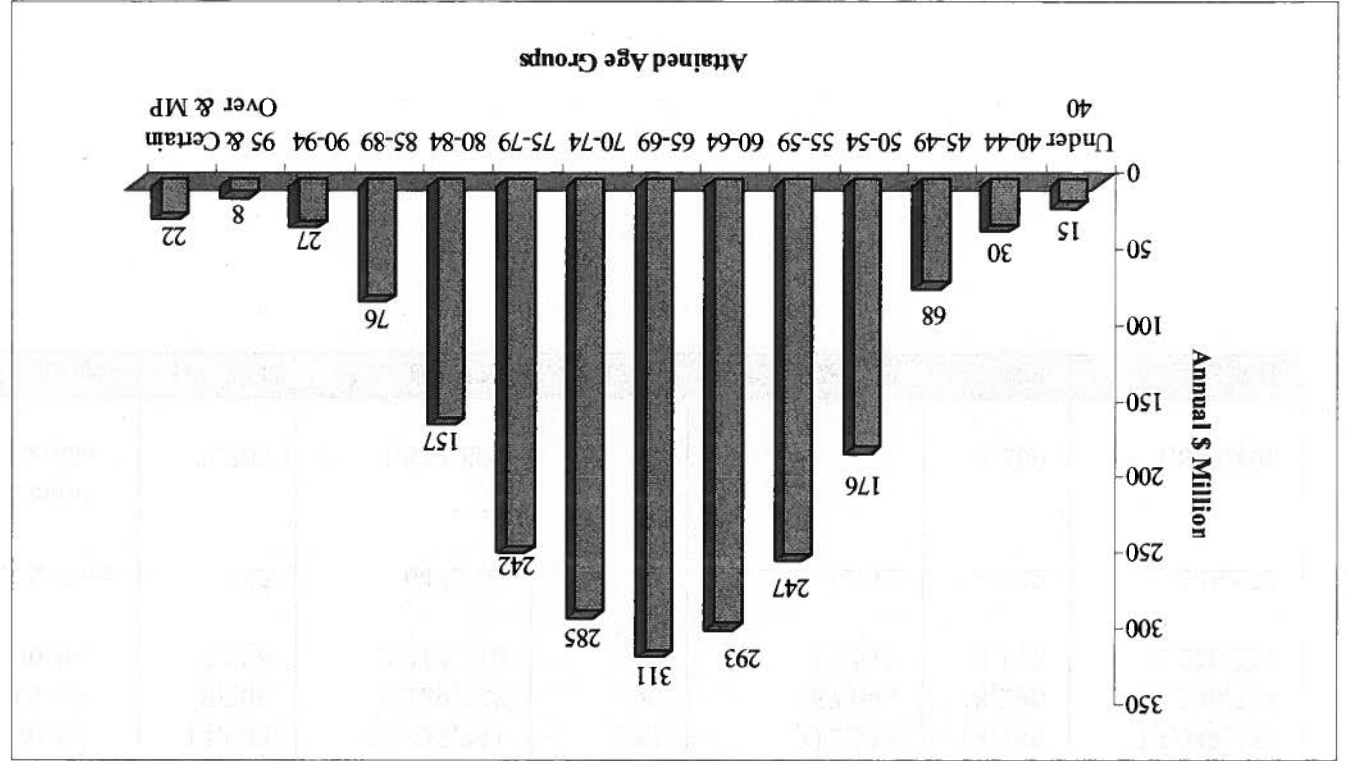
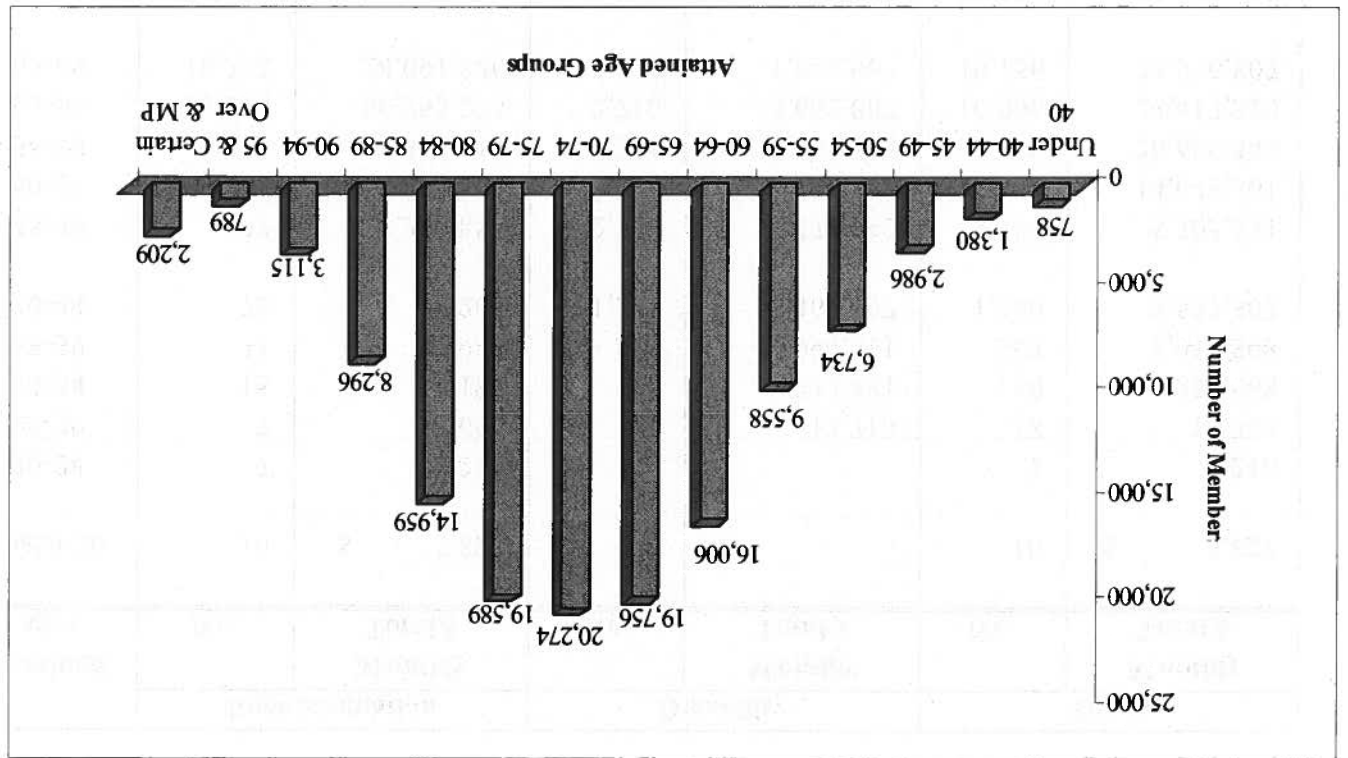
Annuity and Pension Reserve Fund



ANNUITY AND PENSION RESERVE FUND
RETIREES AND BENEFICIARIES DECEMBER 31, 2002
CURRENT MONTHLY TOTAL \$ BY ATTAINED AGES

Attained Ages	Superannuation		Disability		Totals	
	No.	Monthly Total \$	No.	Monthly Total \$	No.	Monthly Total \$
Under 20	10	\$ 5,827			10	\$ 5,827
20-24	7	5,216			7	5,216
25-29	7	3,656	11	\$ 12,710	18	16,366
30-34	15	14,187	145	237,481	160	251,668
35-39	34	17,997	529	994,311	563	1,012,308
40-44	75	75,205	1,305	2,462,097	1,380	2,537,302
45-49	597	1,230,889	2,389	4,474,942	2,986	5,705,831
50-54	3,506	8,884,504	3,228	5,764,857	6,734	14,649,361
55-59	6,302	15,312,118	3,256	5,288,226	9,558	20,600,344
60-64	13,296	20,755,233	2,710	3,662,087	16,006	24,417,320
65-69	18,252	24,091,840	1,504	1,844,967	19,756	25,936,807
70-74	19,285	22,714,884	989	1,046,809	20,274	23,761,693
75-79	18,853	19,467,756	736	694,096	19,589	20,161,852
80-84	14,602	12,735,741	357	312,211	14,959	13,047,952
85-89	8,206	6,229,748	90	67,046	8,296	6,296,794
90-94	3,098	2,214,710	17	11,517	3,115	2,226,227
95 & Over	787	644,903	2	1,772	789	646,675
Period Certain	2,209	1,852,808			2,209	1,852,808
Totals	109,141	\$136,257,222	17,268	\$26,875,129	126,409	\$163,132,351

ANNUITY AND PENSION RESERVE FUND BENEFITS BEING PAID BY ATTAINED AGES DECEMBER 31, 2002



ANNUITY AND PENSION RESERVE FUND
PERCENT OF RECIPIENTS
BY AGE GROUPS
AND YEAR

Attained Age Group	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
Under 30	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
30-39	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%
40-49	3.5%	3.3%	3.2%	3.1%	2.9%	2.8%	2.7%	2.4%	2.1%	2.0%
50-59	12.9%	11.7%	10.7%	9.8%	9.2%	8.6%	7.9%	7.6%	7.2%	7.1%
60-69	28.3%	28.1%	28.2%	28.9%	29.1%	29.4%	29.9%	30.5%	30.9%	32.0%
70-79	31.5%	32.7%	34.0%	35.5%	36.3%	37.1%	37.7%	38.2%	38.6%	38.3%
80-89	18.4%	18.7%	18.5%	18.7%	18.6%	18.4%	18.2%	17.9%	17.8%	17.4%
90 & Over	3.1%	3.1%	3.0%	3.1%	3.0%	2.9%	2.8%	2.7%	2.7%	2.5%
Period Certain	1.7%	1.8%	1.8%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%
TOTALS	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average Age	70.7	71.0	71.2	71.4	71.5	71.6	71.6	71.8	71.4	71.8

STATE DIVISION
SURVIVOR BENEFIT FUND TABULATED BY
TYPE OF BENEFIT BEING PAID AND MONTHLY AMOUNT
DECEMBER 31, 2002

S-1 - Survivor Benefit to Beneficiary of Deceased Member			
Joint and Survivor Computation			
Men	Women	Totals	
91	844	935	
\$ 78,420	927,376	\$1,005,796	
\$ 7,462,937	97,275,311	\$104,738,248	
S-2 - Survivor Benefit to Beneficiary of Deceased Member			
Fixed Rate Amount			
Widower - no child	414	\$ 296,902	\$ 34,952,515
Widower - child	58	37,467	6,256,457
Child's record	81	35,187	1,660,648
Parent	3	2,171	153,847
Other	0	0	0
Subtotals - male	556	371,727	\$ 43,023,467
Widower - no child	2,171	\$ 1,683,756	\$ 194,440,556
Widower - child	240	159,590	29,581,963
Child's record	344	170,790	9,010,710
Parent	4	2,933	261,329
Other	0	0	0
Subtotals - female	2,759	2,017,069	233,294,558
Child only	239	141,674	8,071,939
Totals	3,554	\$ 2,530,470	\$284,389,964
Total Benefits Being Paid from Survivor Benefit Fund			
Men	647	450,147	50,486,404
Women	3,603	2,944,445	330,569,869
Children	239	141,674	8,071,939
Totals	4,489	\$3,536,266	\$389,128,212

LOCAL GOVERNMENT DIVISION
SURVIVOR BENEFIT FUND TABULATED BY
TYPE OF BENEFIT BEING PAID AND MONTHLY AMOUNT
DECEMBER 31, 2002

Group	Number	Current Total	Actuarial Liabilities
S-1 - Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation			
Men	134	\$ 95,015	\$ 8,673,784
Women	1,555	1,447,005	157,582,230
Totals	1,689	\$1,542,020	\$166,256,014
S-2 - Survivor Benefit to Beneficiary of Deceased Member Fixed Rate Amount			
Widower - no child	694	\$ 381,172	\$ 41,974,148
Widower - child	105	52,383	8,723,920
Child's record	145	49,369	2,371,790
Parent	1	796	57,907
Other	0	0	0
Subtotals - male	945	483,720	53,127,765
Widower - no child	4,703	\$3,170,040	\$358,912,946
Widower - child	498	284,222	51,959,417
Child's record	711	318,562	18,737,295
Parent	4	3,884	321,573
Other	0	0	0
Subtotals - female	5,916	3,776,708	429,931,231
Child only	388	216,168	13,402,530
Totals	7,249	\$4,476,596	\$496,461,526
Total Benefits Being Paid from Survivor Benefit Fund			
Men	1,079	578,735	61,801,549
Women	7,471	5,223,713	587,513,461
Children	388	216,168	13,402,530
Totals	8,938	\$6,018,616	\$662,717,540

LAW
SURVIVOR BENEFIT FUND TABULATED BY
TYPE OF BENEFIT BEING PAID AND MONTHLY AMOUNT
DECEMBER 31, 2002

S-1 - Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation			
Men	Women	Totals	
0	43	43	\$ 59,198
\$ 0	7,738,635		\$ 7,738,635
S-2 - Survivor Benefit to Beneficiary of Deceased Member Fixed Rate Amount			
Widower - no child	Widower - child	Child's record	Other
2	2	3	0
\$ 1,782	1,454	1,587	0
306,833	248,093	111,353	0
Subtotals - male	Widower - no child	Widower - child	Child's record
7	109	36	65
4,823	\$ 80,932	24,848	27,174
		4,761,564	1,319,101
			0
Subtotals - female	210	132,954	18,400,623
Child only	21	12,969	591,682
Totals	238	\$150,746	\$19,658,584
Total Benefits Being Paid from Survivor Benefit Fund			
Men	Women	Children	Totals
7	253	21	281
4,823	192,152	12,969	\$209,944
666,279	26,139,258	591,682	\$27,397,219

STATE DIVISION
DEFERRED SURVIVOR BENEFICIARIES
TABULATED BY SEX AND DEFERRED AGE
DECEMBER 31, 2002

Group	Number	Current Total	Actuarial Liabilities
Widowers			
Deferred to age 50	1	\$ 707	\$ 96,354
Deferred to age 62	88	48,387	3,290,435
Deferred to age 65	1	171	10,975
Total	90	49,265	3,397,764
Widows			
Deferred to age 50	7	4,991	669,725
Deferred to age 62	173	108,326	10,125,725
Deferred to age 65	1	758	17,975
Total	181	114,075	10,813,425
Totals	271	\$163,340	\$14,211,189

**LOCAL GOVERNMENT DIVISION
DEFERRED SURVIVOR BENEFICIARIES
TABULATED BY SEX AND DEFERRED AGE
DECEMBER 31, 2002**

Group	Number	Current Total	Actuarial Liabilities
Widowers	Deferred to age 50	3	\$ 48,396
	Deferred to age 62	125	3,869,559
	Deferred to age 65	0	0
	Total	128	3,917,955
	Widows		
Widows	Deferred to age 50	9	895,627
	Deferred to age 62	474	21,018,706
	Deferred to age 65	0	0
	Total	483	21,914,333
	Totals	611	\$25,832,288
		\$295,556	

LAW DIVISION
DEFERRED SURVIVOR BENEFICIARIES
TABULATED BY SEX AND DEFERRED AGE
DECEMBER 31, 2002

Group	Number	Current Total	Actuarial Liabilities
Widowers			
Deferred to age 50	0	\$ 0	\$ 0
Total	0	0	0
Widows			
Deferred to age 50	0	0	0
Deferred to age 62	20	11,388	927,217
Total	20	11,388	927,217
Totals	20	\$11,388	\$927,217

**SURVIVOR BENEFIT FUND
REPORTED ASSETS AND LIABILITIES
DIVISIONS COMBINED**

Valuation Date	Monthly Allowances				\$ Millions		Ratio of Assets to Liabilities
	Current		Deferred		Reported	Actuarial	
	No.	Amount	No.	Amount	Assets + Liabilities	Liabilities	
6/30/1972	6,102	\$ 891,467	1,012	\$ 96,003	\$ 144.7	\$ 127.0	114 %
6/30/1973	6,477	1,053,363	1,009	99,678	164.6	146.3	113 %
6/30/1974	6,826	1,136,949	1,037	106,479	181.7	157.5	115 %
6/30/1975	7,346	1,422,944	1,054	113,690	205.3	177.9	115 %
6/30/1976	7,847	1,557,217	991	118,986	224.8	189.4	119 %
6/30/1977	8,153	1,659,897	1,003	125,094	257.0	204.6	126 %
6/30/1978	8,559	1,799,580	1,004	135,944	301.2	224.5	134 %
6/30/1979	8,971	2,033,403	1,044	155,890	383.0	259.5	148 %
12/31/1980	9,389	2,220,641	1,022	170,246	429.4	285.4	150 %
12/31/1981@	9,629	2,468,950	1,045	191,228	460.6	336.0	137 %
12/31/1982@	9,913	2,654,686	1,006	199,239	499.7	330.6	151 %
12/31/1983	10,132	2,812,639	1,020	225,475	454.7	352.8	129 %
12/31/1984*	11,819	3,119,531	990	248,373	492.2	451.1	109 %
12/31/1985	11,889	3,278,253	979	259,842	532.8	469.6	113 %
12/31/1986	12,054	3,489,915	960	268,931	575.5	451.2	128 %
12/31/1987	12,153	3,656,420	933	279,327	626.1	472.9	132 %
12/31/1988	12,237	3,822,085	941	283,026	490.8	490.8	100 %
12/31/1989@	12,198	4,177,540	941	320,792	525.3	522.1	101 %
12/31/1990	12,182	4,330,622	907	321,218	542.5	537.1	101 %
12/31/1991	12,268	4,528,326	860	314,414	567.9	557.1	102 %
12/31/1992	12,318	4,750,848	852	329,509	589.8	583.3	101 %
12/31/1993	12,437	4,985,681	862	345,937	620.7	607.7	102 %
12/31/1994	12,569	5,207,186	845	347,178	641.5	628.5	102 %
12/31/1995	12,608	5,408,577	866	376,573	668.9	652.4	103 %
12/31/1996@	12,724	5,822,113	878	395,594	711.6	710.6	100 %
12/31/1997	12,856	6,074,566	932	433,430	743.0	740.5	100 %
12/31/1998	13,079	6,337,739	1,060	500,514	780.2	779.6	100 %
12/31/1999#	13,236	7,345,740	989	550,153	801.4	910.9	88 %
12/31/2000	13,317	9,026,315	666	348,886	1,037.4	1,037.4	100 %
12/31/2001@	13,588	9,449,543	993	490,441	1,086.4	1,086.4	100 %
12/31/2002	13,708	9,764,826	902	470,284	1,120.2	1,120.2	100 %

@ Revised actuarial assumptions.
* Benefits increased.
After benefit changes.
+ Includes certain recommended transfers and accrued transfers.

ACTUARIAL METHODS AND ASSUMPTIONS
ADOPTED BY THE BOARD OF ACTUARIES
FOR THE YEAR 1900

SECTION VII

Actuarial Methods and Assumptions

The Board of Actuaries has adopted the following methods and assumptions for the valuation of life insurance policies, and for the determination of the amounts payable on death and on maturity.

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The Board of Actuaries has adopted the following methods and assumptions for the valuation of life insurance policies, and for the determination of the amounts payable on death and on maturity.

The post-retirement mortality rates used in evaluating age and service survivor benefit allowances to be paid were 90% of rates in the 1971 Group Annuity Mortality Male and Female Tables, projected to 1984. Related values are shown on page VII-8. The mortality rates for disability allowances were 300% of rates in the 1983 Group Annuity Mortality Table for Males, and 400% of rates in the 1983 Group Annuity Mortality Table for Females.

NON-ECONOMIC ASSUMPTIONS

The number of active members is assumed to continue at the present number.

The active member payroll is assumed to increase 4.00% annually, which is the portion of the individual pay increase assumptions attributable to wage inflation and overall productivity increases.

Pay increase assumptions for individual active members are shown for sample ages on pages VII-5, VII-6, & VII-7. Part of the assumption for each age is for merit and/or seniority increase, and the other 4.00% recognizes wage inflation and overall productivity increases. No specific price inflation assumption is required to perform the actuarial valuation.

The investment return rate used in making the valuations was 8.00% per year, compounded annually (net after administrative expenses). The assumed real rate of return is the portion of total investment return that is more than the assumed total wage growth rate. Considering other financial assumptions, the 8.00% investment return rate translates to an assumed real rate of return of 4.00%.

ECONOMIC ASSUMPTIONS

The actuarial assumptions used in the valuation are shown in this Section. Both the economic and decrement assumptions were established following the December 31, 2000 actuarial valuations.

Unfunded actuarial accrued liabilities are amortized to produce payments (principal & interest) which are level percent of payroll contributions.

The entry age actuarial cost method of valuation was used in determining liabilities and normal cost. Differences in the past between assumed experience and actual experience ("actuarial gains and losses") become part of actuarial accrued liabilities.

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED FOR PERS ACTUARIAL VALUATIONS ASSUMPTIONS ADOPTED BY RETIREMENT BOARD After Consulting With Actuary

The probabilities of normal and early age and service retirement are shown on page VII-3 and VII-4.

The probabilities of withdrawal from service, disability and death-in-service are shown for sample ages on pages VII-4, VII-5 & VII-6. For withdrawal from service it was assumed that members terminating before age 35, members terminating with less than 5 years of service, and a percentage of all other members would withdraw their contributions and forfeit their entitlement to an employer financed benefit. The percentage is 100% at age 35 and is reduced for each year of age after 35, becoming 0% at age 55 (age 45 for law members). It was assumed that employee contributions would continue to be credited with interest each year at the rate described in Section I. For employee contributions used to calculate the money purchase minimum, 4% interest is assumed to be credited.

Decrements are assumed to occur middle of year. ***Pay increases*** are assumed to occur beginning of year.

The probabilities of having an eligible survivor (spouse, child, parent) in the event of death in service were 80% for state and local government members and 90% for law enforcement members.

Female spouses are assumed to be 3 years younger than male spouses for active member valuation purposes.

Adjustment factors used for valuation purposes include the following:

- a 1% factor is applied to normal retirement, early retirement and vesting liabilities to recognize subsidized option factors,
- a 1% factor is applied to normal retirement and early retirement liabilities to recognize subsidized service purchases,
- Law accrued liabilities are reduced approximately 1.5% to recognize the fact that total service reported is not entirely Law service,
- reported pay was adjusted for active members with less than a year of service whose average monthly pay was less than \$1,500 (\$750 for Local). In these cases, the member's annual pay was adjusted to an annual amount of \$18,000 (\$9,000 for Local).

For Purposes of refunds of member contributions, interest credits are assumed to persist at the level approved by the Board as shown in the summary of benefits. For purposes of money purchase benefits, future interest credits are assumed to be 4% per year.

Employer contributions were assumed to be ***paid in equal installments*** throughout the employer fiscal year.

The Funding Value of Assets recognize assumed investment return fully each year. Differences between actual and assumed investment return are phased in over a closed 4 year period. Funding value is not permitted to deviate from market value by more than 12%.

Present assets (cash & investments) at funding value are shown on pages 8 and 9.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.)

Percent of Eligible Active Members Retiring Within Next Year						
Ages	State		Local Government	Men	Women	Ref
	Men	Women				
	Public Safety	Law Enforcement	Women	Men	Women	
48						48
49						49
50	40%		30%	35%	30%	50
51	40%		30%	35%	30%	51
52	40%		30%	35%	30%	52
53	40%		30%	35%	30%	53
54	40%		30%	35%	30%	54
55	25%		30%	30%	30%	55
56	25%		30%	25%	30%	56
57	25%		30%	25%	30%	57
58	25%		30%	25%	30%	58
59	25%		40%	25%	40%	59
60	30%		50%	25%	50%	60
61	25%		30%	25%	30%	61
62	25%		30%	40%	30%	62
63	30%		30%	40%	30%	63
64	40%		30%	30%	15%	64
65	50%		25%	20%	20%	65
66	25%		25%	20%	20%	66
67	25%		15%	20%	15%	67
68	25%		15%	20%	15%	68
69	25%		15%	20%	15%	69
70	25%		15%	20%	100%	70
71	25%		15%	20%	100%	71
72	25%		15%	20%	100%	72
73	25%		15%	20%	100%	73
74	25%		15%	20%	100%	74
75	25%		15%	20%	100%	75
76	25%		15%	20%	100%	76
77	25%		15%	20%	100%	77
78	25%		15%	20%	100%	78
79	25%		15%	20%	100%	79
80	100%		100%	100%	100%	80

Probabilities of Normal Age and Service Retirement

Probabilities of Early Retirement

Ages	Percent of Eligible Active Members Retiring Within Next Year				
	State		Local Government		Public Safety
	Men	Women	Men	Women	
48					3%
49					3%
50					7%
51					7%
52					
53					
54					
55	12%	14%	10%	12%	
56	12%	14%	10%	12%	
57	12%	14%	10%	12%	
58	12%	14%	10%	12%	
59	12%	14%	10%	18%	
60	12%	20%	10%	18%	
61	12%	14%	10%	15%	
62	18%	14%	15%	15%	
63	18%	14%	15%	15%	
64	15%	14%	12%	12%	
Ref	756	757	758	759	515

STATE SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT & INDIVIDUAL PAY INCREASE ASSUMPTIONS

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
		Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
		Men	Women	Men	Women	Men	Women			
	0			38.00%	36.00%					
	1			18.00%	19.00%					
	2			14.00%	15.00%					
	3			10.00%	12.00%					
	4			8.00%	9.00%					
	5 & Over	0.03%	0.02%	6.00%	7.80%	0.09%	0.07%	4.30%	4.00%	8.30%
		0.04%	0.02%	5.20%	7.00%	0.13%	0.14%	3.00%	4.00%	7.00%
		0.05%	0.03%	4.30%	5.60%	0.24%	0.25%	2.20%	4.00%	6.20%
		0.07%	0.04%	3.50%	4.20%	0.41%	0.36%	1.80%	4.00%	5.80%
45		0.13%	0.06%	2.70%	3.40%	0.61%	0.56%	1.40%	4.00%	5.40%
50		0.23%	0.10%	2.20%	3.10%	0.86%	0.88%	1.20%	4.00%	5.20%
55		0.37%	0.15%	2.10%	2.80%	1.31%	1.30%	0.90%	4.00%	4.90%
60		0.55%	0.25%	2.10%	2.70%	1.86%	1.56%	0.70%	4.00%	4.70%
Ref		#30x0.6sb0	#31x0.6sb0	371 #571x1	372 #572x1	#331x1	#332x1	301		

The pay increase assumptions are age based only, and not service based.

LOCAL GOVERNMENT
SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT
& INDIVIDUAL PAY INCREASE ASSUMPTIONS

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
		Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
		Men	Women	Men	Women	Men	Women			
	0			34.00%	32.00%					
	1			17.00%	18.00%					
	2			12.00%	13.00%					
	3			10.00%	10.00%					
	4			9.00%	9.00%					
	5 & Over									
25		0.03%	0.02%	6.40%	8.00%	0.13%	0.12%	4.30%	4.00%	8.30%
30		0.04%	0.02%	5.40%	6.90%	0.17%	0.13%	3.00%	4.00%	7.00%
35		0.05%	0.03%	4.10%	5.40%	0.28%	0.21%	2.20%	4.00%	6.20%
40		0.07%	0.04%	3.20%	4.20%	0.44%	0.33%	1.80%	4.00%	5.80%
45		0.13%	0.06%	2.70%	3.40%	0.62%	0.45%	1.40%	4.00%	5.40%
50		0.23%	0.10%	2.50%	3.00%	0.90%	0.66%	1.20%	4.00%	5.20%
55		0.37%	0.15%	2.50%	2.90%	1.34%	0.98%	0.90%	4.00%	4.90%
60		0.55%	0.25%	2.50%	2.80%	1.54%	1.35%	0.70%	4.00%	4.70%
Ref		#30x0.6sb0	#31x0.6sb0	373 #573xl	374 #574xl	#333xl	#334xl	301		

The pay increase assumptions are age based only, and not service based.

LAW

SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT & INDIVIDUAL PAY INCREASE ASSUMPTIONS

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
		Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
		Men	Women	Men	Women	Men	Women			
	0			15.00%	15.00%					
	1			9.00%	9.00%					
	2			7.00%	7.00%					
	3			5.00%	5.00%					
	4			5.00%	5.00%					
	5 & Over									
		0.03%	0.02%	3.80%	3.80%	0.27%	0.27%	6.30%	4.00%	10.30%
		0.04%	0.02%	2.90%	2.90%	0.37%	0.37%	4.00%	4.00%	8.00%
		0.05%	0.03%	2.30%	2.30%	0.67%	0.67%	1.60%	4.00%	5.60%
25		0.07%	0.04%	1.50%	1.50%	0.95%	0.95%	0.85%	4.00%	4.85%
30										
35										
40										
45		0.13%	0.06%	1.30%	1.30%	1.47%	1.47%	0.60%	4.00%	4.60%
50		0.23%	0.10%	1.20%	1.20%	2.03%	2.03%	0.50%	4.00%	4.50%
55		0.37%	0.15%	1.20%	1.20%	2.50%	2.50%	0.50%	4.00%	4.50%
60		0.55%	0.25%	1.20%	1.20%	2.88%	2.88%	0.50%	4.00%	4.50%
Ref		#30x0.6sb0	#31x0.6sb0	375 #575x1	375 #575x1	#335x1	#335x1	303		

The pay increase assumptions are age based only, and not service based.

Table 1.1: Actuarial Data

Age	Mortality Rates		Interest Rates	
	qx	Qx	ix	Qx
20	0.0000	0.0000	0.0500	0.0000
25	0.0000	0.0000	0.0500	0.0000
30	0.0000	0.0000	0.0500	0.0000
35	0.0000	0.0000	0.0500	0.0000
40	0.0000	0.0000	0.0500	0.0000
45	0.0000	0.0000	0.0500	0.0000
50	0.0000	0.0000	0.0500	0.0000
55	0.0000	0.0000	0.0500	0.0000
60	0.0000	0.0000	0.0500	0.0000
65	0.0000	0.0000	0.0500	0.0000
70	0.0000	0.0000	0.0500	0.0000
75	0.0000	0.0000	0.0500	0.0000
80	0.0000	0.0000	0.0500	0.0000
85	0.0000	0.0000	0.0500	0.0000
90	0.0000	0.0000	0.0500	0.0000
95	0.0000	0.0000	0.0500	0.0000
100	0.0000	0.0000	0.0500	0.0000

Single Life Retirement Values

Sample Attained Ages	Present Value of \$1 Monthly for Life Increasing 3.0% Annually (First Increase After 1 Year)		Future Life Expectancy (years)	
	Males	Females	Males	Females
50	\$165.46	\$181.30	28.55	34.58
55	152.90	171.13	24.26	29.89
60	138.21	158.37	20.19	25.31
65	121.58	142.99	16.40	20.92
70	104.05	124.89	13.02	16.76
75	87.04	105.31	10.17	13.03
80	70.51	86.11	7.75	9.89
Ref:	#68x0.9sb0	#69x0.9sb0		

SECTION VIII

Financial Principles

Promises Made, and To Be Paid For. As each year is completed, OPERS in effect hands an "IOU" to each member then acquiring a year of service credit --- the "IOU" says: "The Ohio Public Employees Retirement System owes you one year's worth of retirement benefits, payments in cash commencing when you qualify for retirement."

The related *key financial questions* are:

Which generation of taxpayers contributes the money to cover the IOU?

The present taxpayers, who receive the benefit of the member's present year of service? *Or the future taxpayers*, who happen to be in Ohio at the time the IOU becomes a cash demand, years and often decades later?

The law governing OPERS financing intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year. With this financial objective, *the employer contribution rate is expected to remain approximately level from generation to generation of taxpayers.*

There are systems which have a design for deferring contributions to future taxpayers. Lured by a lower contribution rate now, they put aside the consequence that the contribution rate must then relentlessly grow to a level much higher than would be required if a level contribution pattern were followed.

An inevitable by-product of the level-cost design is the accumulation of reserve assets, for decades, and the income produced when the assets are invested. *Investment income* becomes the 3rd and *largest contributor* for benefits to employees, and is interlocked with the contribution amounts required from employees and employers.

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

Normal Cost (the cost of members' service being rendered this year)

... plus ...

Interest on Unfunded Actuarial Accrued Liabilities (unfunded actuarial accrued liabilities are the difference between: liabilities for service already rendered; and the accrued assets of PERS).

Computing Contributions to Support Fund Benefits. From a given schedule of benefits and from employee and asset data, the actuary calculates the contribution rates to support the benefits by means of *an actuarial valuation and a funding method.*

An actuarial valuation has a number of ingredients such as: the rate of investment return which plan assets will earn; the rates of withdrawal of active members who leave covered employment; the rates of mortality; the rates of disability; the rates of pay increases; and the assumed age or ages at actual retirement.

In an actuarial valuation, assumptions must be made as to what the above rates will be for the next year and for decades in the future. The assumptions are established by the Retirement Board after receiving the advice of the actuary.

Reconciling Differences Between Assumed Experience and Actual Experience. Once actual experience has occurred and has been observed, it will not coincide exactly with assumed experience, regardless of the skill of the actuary and the many calculations made. The future can not be predicted with 100% precision.

PERS copes with these continually changing differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is *continuing adjustments in financial position.*

THE ACTUARIAL VALUATION PROCESS

The financing diagram on the opposite page shows the relationship between *the two fundamentally different philosophies of paying* for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is thus an *increasing contribution method*; and, the *level contribution method* which attempts to equalize contributions between the generations.

The actuarial valuation is the mathematical process by which the level contribution rate is determined. The activity constituting the valuation may be summarized as follows:

- A. **Census Data**, including:
 - Retired lives now receiving benefits
 - Former employees with vested benefits not yet payable
 - Active employees

- B. + **Asset data** (cash & investments)

- C. + **Benefit provisions** that establish eligibility and amounts of payments to members

- 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

the following information:

(a) the name of the employee;

(b) the date of birth;

(c) the date of death; and

(d) the date of the last payment.

(e) the date of the last payment.

(f) the date of the last payment.

(g) the date of the last payment.

(h) the date of the last payment.

(i) the date of the last payment.

(j) the date of the last payment.

(k) the date of the last payment.

(l) the date of the last payment.

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(n) the date of the last payment.

(o) the date of the last payment.

(p) the date of the last payment.

(q) the date of the last payment.

(r) the date of the last payment.

(s) the date of the last payment.

(t) the date of the last payment.

(u) the date of the last payment.

(v) the date of the last payment.

(w) the date of the last payment.

GLOSSARY

Accrued Service. The service credited under the plan which was rendered before the date of the actuarial valuation.

Accumulated Benefit Obligation. The actuarial present value of vested and non-vested benefits based on service to date and past and current salary levels.

Actuarial Accrued Liability. The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.”

Actuarial Assumptions. Estimates of future plan 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.

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

Actuarial Equivalent. A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Actuary. A person who is trained in the applications of probability and compound interest to

problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries. The Society of Actuaries is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. It administers a series of examinations leading initially to Associateship and the designation A.S.A. and ultimately to Fellowship with the designation F.S.A.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Experience Gain (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

Funding Value of Assets. The value of current plan assets recognized for valuation purposes. Generally based on a phased-in recognition of all or a portion of market related investment return. Sometimes referred to as Actuarial Value of Assets.

Normal Cost. The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Plan Termination Liability. The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for future service and salary. The termination liability will generally be less than the liabilities computed on a "going concern" basis and is not normally determined in a routine actuarial valuation.

Reserve Account. An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

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

MEANING OF “UNFUNDED ACTUARIAL ACCRUED LIABILITIES”

“Actuarial accrued liabilities” are the present value of the portions of promised benefits that are not covered by future normal cost contributions --- a liability has been established (“accrued”) because the service has been rendered but the resulting monthly cash benefit may not be payable until years in the future.

If “actuarial accrued liabilities” at any time exceed the plan’s accrued assets (cash & investments), the difference is *“unfunded actuarial accrued liabilities.”* This is the common condition. If the plan’s assets equaled the plan’s “actuarial accrued liabilities”, the plan would be termed “fully funded.” This is an unusual condition.

Each time a plan adds a new benefit which applies to service already rendered, an “actuarial accrued liability” is created, which is also an “unfunded actuarial accrued liability” because the plan can’t print instant cash to cover the value of the new benefit promises. Payment for such unfunded actuarial accrued liabilities is spread over a period of years, commonly in the 15-40 year range.

Unfunded actuarial accrued liabilities can occur in another way: if actual plan experience is less favorable than assumed, the difference is added to unfunded actuarial accrued liabilities. For example, in plans where benefits are directly related to an employee’s pay near time of retirement, unfunded actuarial accrued liabilities increased rapidly during the 1970’s because unexpected rates of pay increase created additional actuarial accrued liabilities which could not be matched by reasonable investment results. Most of the unexpected pay increases were the direct result of inflation, which is a very destructive force on financial stability.

The existence of unfunded actuarial accrued liabilities is not bad but the changes from year to year in amount of unfunded actuarial accrued liabilities are important--- “bad” or “good” or somewhere in between.

Nor are unfunded actuarial accrued liabilities a bill payable immediately, but it is important that policy-makers prevent the amount from becoming unreasonably high and *it is vital for plans to have a sound method for making payments toward them* so that they are controlled.

SECTION IX

GASB Reporting

SCHEDULE OF FUNDING PROGRESS
FOR COMPLIANCE WITH GASB STATEMENT NO. 25
(\$ AMOUNTS IN MILLIONS)

The schedule below measures the funding progress with respect to the *retirement allowance* portion of OPERS benefits for compliance with GASB Statement No. 25. Assets and liabilities related to post-employment health care benefits are specifically excluded from the schedule. Assets do, however, include market value adjustments.

Valuation Year	Actuarial Accrued Liabilities (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
1989	\$18,310	\$14,629	\$3,681	80 %	\$5,597	66 %
1990	20,125	16,245	3,880	81 %	6,036	64 %
1991	22,027	18,108	3,919	82 %	6,651	59 %
1992	23,961	20,364	3,597	85 %	6,889	52 %
1993	26,506	23,063	3,443	87 %	7,236	48 %
1994	28,260	25,066	3,194	89 %	7,625	42 %
1995	30,556	27,651	2,905	90 %	7,973	36 %
1995*	30,224	27,651	2,573	91 %	7,973	32 %
1996	32,631	30,534	2,097	94 %	8,340	25 %
1997	34,971	33,846	1,125	97 %	8,640	13 %
1998	37,714	38,360	(646)	102 %	9,017	0 %
1999	43,070	43,060	10	100 %	9,477	0 %
2000	46,347	46,844	(497)	101 %	10,192	0 %
2001	49,095	48,748	347	99 %	10,782	3 %
2001*	47,492	48,748	(1,256)	103 %	10,782	0 %
2002	50,872	43,706	7,166	86 %	11,207	64 %

* Revised actuarial assumptions.

SCHEDULE OF EMPLOYER CONTRIBUTIONS*
FOR COMPLIANCE WITH GASB STATEMENT NO. 25

Year Ended December 31	Annual Required Contributions	Percentage Contributed
1989	\$571,866,966	100%
1990	558,119,779	100%
1991	607,811,880	100%
1992	646,170,989	100%
1993	663,680,518	100%
1994	693,802,578	100%
1995	725,893,573	100%
1996	777,781,045	100%
1997	811,485,028	100%
1998	886,684,171	100%
1999	935,429,955	100%
2000	718,807,713	100%
2001	977,289,238	100%
2002	1,109,983,204	100%

* The amounts reported in this schedule do not include contributions for post-employment healthcare benefits.

1. The first step in the process of determining the actuarial value of a pension plan is to determine the actuarial value of the plan's assets. This is done by comparing the plan's assets to the plan's liabilities. The actuarial value of the plan's assets is the present value of the plan's assets, discounted at the plan's discount rate. The actuarial value of the plan's liabilities is the present value of the plan's liabilities, discounted at the plan's discount rate. The difference between the actuarial value of the plan's assets and the actuarial value of the plan's liabilities is the actuarial value of the plan's surplus.

Assets	Liabilities	Surplus
$A = \sum_{t=0}^{\infty} \frac{A_t}{(1+r)^t}$	$L = \sum_{t=0}^{\infty} \frac{L_t}{(1+r)^t}$	$S = A - L$
$A_t = \text{Assets at time } t$	$L_t = \text{Liabilities at time } t$	$S_t = \text{Surplus at time } t$
$r = \text{Discount rate}$		

**SCHEDULE OF UNFUNDED ACTUARIAL ACCRUED LIABILITY@
FOR COMPLIANCE WITH GASB STATEMENT NO. 25**

	December 31, 2002			
	State Group	Local Group	Law Group	Total
Accrued Liabilities				
Active and Inactive Members	\$ 11,821,956,908	\$ 16,709,401,112	\$ 1,135,207,523	\$ 29,666,565,543
Retirees and Beneficiaries	8,749,124,795	11,743,581,467	712,818,531	21,205,524,793
Total Accrued Liabilities	\$ 20,571,081,703	\$ 28,452,982,579	\$ 1,848,026,054	\$ 50,872,090,336
Assets				
Active and Inactive Members				
EAF*	\$ 3,718,844,082	\$ 5,114,679,363	\$ 396,013,621	\$ 9,229,537,066
ESF	3,317,823,753	4,908,800,876	287,235,035	8,513,859,664
MVA	1,927,884,725	2,658,364,185	170,498,668	4,756,747,578
Total Active and Inactive Assets	8,964,552,560	12,681,844,424	853,747,324	22,500,144,308
Retirees and Beneficiaries				
A & PR Fund*	8,345,785,394	11,055,031,639	684,494,095	20,085,311,128
SBF Fund*	403,339,401	688,549,828	28,324,436	1,120,213,665
Total R&B Assets	8,749,124,795	11,743,581,467	712,818,531	21,205,524,793
Total Assets	\$ 17,713,677,355	\$ 24,425,425,891	\$ 1,566,565,855	\$ 43,705,669,101
Unfunded Actuarial Accrued Liability	\$ 2,857,404,348	\$ 4,027,556,688	\$ 281,460,199	\$ 7,166,421,235

@ The amounts reported in this schedule do not include contributions for post-employment healthcare benefits.
* After reserve transfers

August 14, 2003

Ms. Laurie F. Hacking, Executive Director
Ohio Public Employees Retirement System
277 East Town Street
Columbus, Ohio 43215

Re: Report of December 31, 2002 Actuarial Valuation

Dear Laurie:

Enclosed are 25 bound copies of the final report.

Sincerely,

Norman L. Jones

NLJ/lr
Enclosure

