





Ohio Public Employees Retirement System

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ANNUAL ACTUARIAL VALUATION OF RETIREMENT ALLOWANCES DECEMBER 31, 2000

GABRIEL, ROEDER, SMITH & COMPANY



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GABRIEL, ROEDER, SMITH & COMPANY

onsultants & Actuaries

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August 13, 2001

The Retirement Board Public Employees Retirement System of Ohio Columbus, Ohio

Ladies and Gentlemen:

The results of the December 31, 2000 annual actuarial valuation of the Public Employees Retirement System of Ohio, 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.

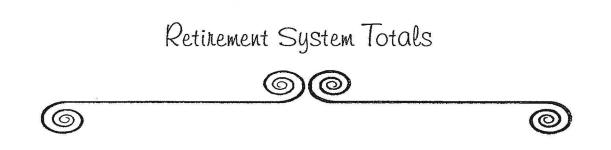
The actuarial assumptions used in the valuations are summarized in Section VIII of this report. The assumptions are established by the Retirement Board after consulting with the actuary.

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.

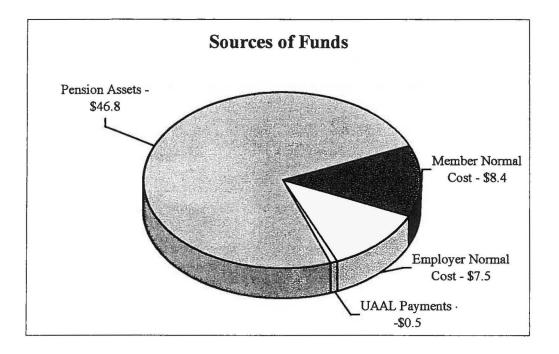
> Respectfully submitted, GABRIEL, ROEDER, SMITH & COMPANY

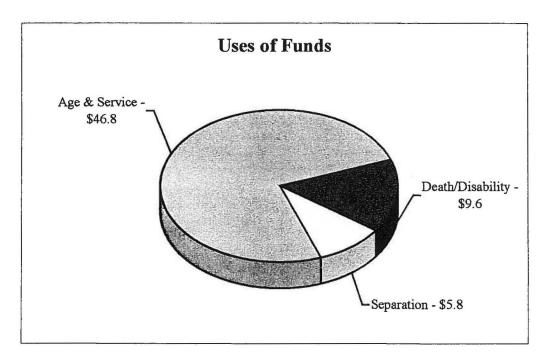
Norman L. Jones, F.S.A. Brian B. Murphy, F.S.A.

BBM/lr



FINANCING \$62.2 BILLION* OF PENSION BENEFIT PROMISES FOR PRESENT ACTIVE AND RETIRED MEMBERS DECEMBER 31, 2000 (DOLLAR AMOUNTS IN BILLIONS)





* Present value of future benefits – all divisions combined.

The December 31, 2000 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 either (i) sufficient funds to amortize unfunded actuarial accrued liabilities over a period not to exceed 30 years, or (ii) a margin for future unfavorable experience.

Key valuation results are summarized below.

	Active	Men	nbers	Retirement Allowance	Amortiza	Amortization Years			
		Annual Payroll		Portion of Employer	for Unfunded Pensio Accrued Liabilities				
Division	Number	(\$1	Millions)	Rate	This Year	Prior year			
State	113,099	\$	3,868	9.01%	*	*			
Local Government	245,831		5,999	9.25%	*	2			
Law Enforcement Group A	1,501		59	12.40%	16	18			
Law Enforcement Group B	6,544		266	12.40%	19	21			
Totals	366,975	\$	10,192						

* Accrued liabilities are fully funded.

Retirants and beneficiaries included in the valuation totaled 132,603 as follows:

Division	Number	Monthly Benefits Valued	Actuarial Liabilities	Assets#	Ratio of Assets to Liabilities
A & PR	118,620	\$136.77	\$16,980	\$16,980	100.0 %
SBF	13,983	9.37	1,037	1,037	100.0 %
Total	132,603	\$146.14	\$18,017	\$18,017	100.0 %

After recommended reserve transfers

COMMENTS

Experience. Experience was mixed this year. Measured on a market value basis, investment return was disappointing in 2000 for Ohio PERS and for most other retirement funds across the nation. Because of previously unrecognized gains carried over from prior years, the funding value rate of return exceeded the assumed rate by a small margin (please see page 8). In total, recognized assets exceed computed accrued liabilities by \$496,730,130, but it is important to remain aware that the funding value of assets exceeds the market value by about three times that amount. Unless the investment markets turn around, we will soon see years when investment losses begin flowing into the valuation. Additional information concerning 2000 experience will be presented in a separate report of gain/loss experience.

Conclusion. Based on the results of the December 31, 2000 regular annual actuarial valuation, it is our opinion that the Public Employees Retirement System of Ohio continues to be in sound financial condition in accordance with actuarial principles of level percent of payroll financing.

ACTIVE MEMBERS IN VALUATION GROUP AVERAGES - COMPARATIVE STATEMENT

\bigcirc		No. of		Group Averages						
		Active	Attained	Attained Accrued Annual Payro						
Valuation Group	Dec. 31	Members	Age	Service Yrs.	Average	Increa	ise			
STATE	1975	83,220	40.6 yrs.	6.5 yrs.	\$ 9,441	6.4 %	@			
	1980	92,872	39.4	7.3	13,934	8.1 %	@			
	1985	89,256	39.2	8.4	18,677	7.4 %	@			
	1990	98,939	40.7	8.1	25,281	6.2 %	@			
	1995	114,596	40.4	8.8	27,962	2.0 %	@			
	1996	115,712	40.3	8.9	28,684	2.6 %	-			
	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 %				
LOCAL GOV'T	1975	149,557	40.8 yrs.	6.1 yrs.	\$ 8,771	4.3 %	@			
	1980	160,797	40.7	7.4	13,035	8.2 %	@			
	1985	158,285	40.1	8.3	15,983	6.2 %	@			
	1990	173,220	41.5	7.9	19,506	4.1 %	@			
	1995	223,431	41.2	7.6	20,384	0.9 %	@			
0	1996	229,954	41.2	7.7	20,839	2.2 %				
	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 %				
LAW ENFORCEMENT										
GROUP A	1999	889	39.3 утѕ.	11.4 yrs.	\$ 42,119	-				
	2000	1,501	39.0	11.0	\$ 39,535	-				
LAW ENFORCEMENT										
GROUP B	1975	2,111	35.0 yrs.	4.9 yrs.	\$ 10,467					
	1980	3,019	36.1	6.8	16,846	10.0 %	@			
	1985	4,207	36.5	8.4	20,103	5.5 %	@			
	1990	5,804	38.6	9.9	26,936	6.0 %	@			
	1995	6,605	39.3	11.1	32,441	3.2 %	@			
	1996	6,742	39.3	11.3	33,987	4.8 %				
	1997	7,256	39.3	11.5	35,680	5.0 %				
	1998	7,507	39.3	11.6	36,931	3.5 %				
	1999	6,877	39.3	11.4	38,039	3.0 %				
	2000	6,544	39.4	11.9	40,583	6.7 %				

@ 5 year annual compound rate.

MARKET VALUE RECONCILIATION OF ASSETS (ALL DIVISIONS COMBINED)

	Calendar Year Er	nded December 31
	2000	1999
Beginning Market Value	\$57,894,315,287	\$51,399,531,028
Revenues		
Member Contributions	879,844,987	826,331,533
Employer Contributions	1,171,674,955	1,327,889,681
Retiree Health Premiums	22,131,597	19,189,167
Total Revenues	2,073,651,539	2,173,410,381
Expenditures		
Retirement Benefits	1,656,264,159	1,505,940,162
Refunds of Member Contributions	81,830,823	120,631,483
System Paid Retiree Health Care	515,135,494	479,644,355
Member Paid Retiree Health Care	22,131,597	19,189,167
Retiree Medicare Reimbursement	44,470,800	43,954,994
Administrative Expenses	39,891,334	31,414,286
Other	14,156,579	4,135,535
Total Expenditures	2,373,880,786	2,204,909,982
Investment Return		
Ordinary Income	2,477,080,547	2,406,504,189
Realized Capital Value Changes	1,106,464,093	3,028,502,222
Unrealized Capital Value Changes	(4,002,449,751)	1,091,277,450
Total Investment Return	(418,905,111)	6,526,283,861
Ending Market Value	\$57,175,180,929	\$57,894,315,288

DEVELOPMENT OF FUNDING VALUE OF ASSETS

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

Year Ended December 31	1998	1999	2000	2001	2002	2003
A. Funding Value Beginning of Year	\$42,562,579,341	\$48,141,431,295	\$53,865,320,048			
B. Market Value End of Year	51,399,531,028	57,894,315,288	57,175,180,929			
C. Market Value Beginning of Year	45,283,541,063	51,399,531,028	57,894,315,288			
D. Non-Investment/Administrative Net Cash Flow	91,486,391	(85,315)	(260,337,913)			
E. Investment Return						
E1. Market Total:B-C-D	6,024,503,574	6,494,869,575	(458,796,446)			
E2. Assumed Rate of Return	7.75%	7.75%	7.75%			
E3. Assumed Amount of Return	3,302,144,997	3,730,957,619	4,164,474,210			
E4. Amount Subject to Phase In: E1-E3	2,722,358,577	2,763,911,956	(4,623,270,656)			
F. Phased-In Recognition of Investment Return						
F1. Current year: 0.25xE4	680,589,644	690,977,989	(1,155,817,664)			
F2. First Prior Year	594,881,983	680,589,644	690,977,989	\$ (1,155,817,664)		
F3. Second Prior Year	26,566,834	594,881,983	680,589,644	690,977,989	\$ (1,155,817,664)	
F4. Third Prior Year	883,182,105	26,566,833	594,881,984	680,589,645	690,977,989	\$ (1,155,817,60
F5. Total Recognized Investment Gain	2,185,220,566	1,993,016,449	810,631,953	215,749,970	(464,839,675)	(1,155,817,60
G. Funding Value End of Year: A+D+E3+F5	48,141,431,295	53,865,320,048	58,580,088,298			
H. Difference Between Market and Funding Value	3,258,099,733	4,028,995,240	(1,404,907,369)	(1,620,657,339)	(1,155,817,664)	-
I. Recognized Rate of Return	12.88%	11.89%	9.26%			
J. Market Rate of Return	13.29%	12.64%	-0.79%			

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.

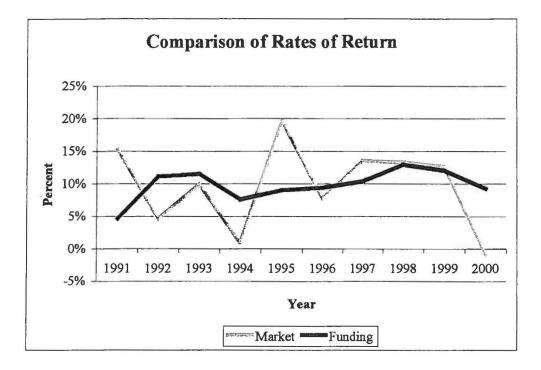
ALLOCATION OF FUNJING VALUE OF ASSETS Among Divisions and Usage

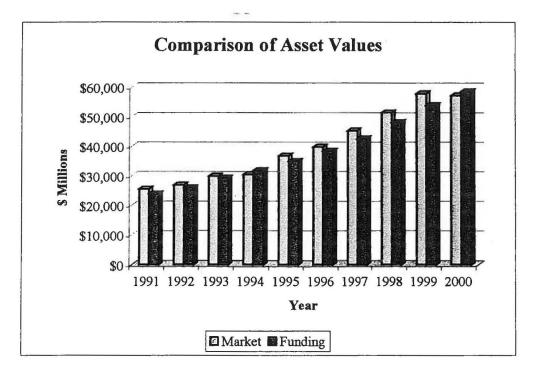
DECEMBER 31, 2000

	State	Local	Law A	Law B	Total
Retirement Assets					
Active and Inactive Member Assets					
Employer Accumulation Fund					
Pension	\$ 6,805,612,275	\$ 9,412,455,442	\$ 119,856,683	\$ 621,641,312	\$ 16,959,565,712
Survivor	0	0	0	0	0
Employee Savings Fund	2,930,913,793	4,259,900,889	43,099,874	213,781,943	7,447,696,499
Market Value Adjustment -Pension	1,763,311,568	2,402,836,712	16,958,669	136,751,952	4,319,858,901
Market Value Adjustment-Survivor	34,914,679	58,463,797	-	2,258,764	95,637,240
Total Active and Inactive Assets	11,534,752,315	16,133,656,840	179,915,226	974,433,971	28,822,758,352
Retired Assets					
Annuity and Pension Reserve					
Service Retirement	6,099,281,479	7,857,303,098	0	259,433,152	14,216,017,729
Disability Retirement	1,107,926,678	1,559,298,507	0	219,198,789	2,886,423,974
Total A& PR Fund	7,207,208,157	9,416,601,605	0	478,631,941	17,102,441,703
Survivor Benefit Fund					
S-1	111,734,635	165,198,209	0	7,739,171	284,672,015
S-2	223,761,967	396,582,847	0	13,965,388	634,310,202
Total Survivor Benefit Fund	335,496,602	561,781,056	0	21,704,559	918,982,217
Total Retired Assets	7,542,704,759	9,978,382,661	0	500,336,500	18,021,423,920
Total Retirement Assets	19,077,457,074	26,112,039,501	179,915,226	1,474,770,471	46,844,182,272
Health Assets					
Employer Accumulation Fund	3,807,441,267	6,503,743,819	50,323,565	268,180,011	10,629,688,662
Market Value Adjustment	396,235,278	676,835,848	5,237,106	27,909,132	1,106,217,364
Total Health Assets	4,203,676,545	7,180,579,667	55,560,671	296,089,143	11,735,906,026
Total Funding Value of Assets	\$ 23,281,133,619	\$ 33,292,619,168	\$ 235,475,897	\$ 1,770,859,614	\$ 58,580,088,298

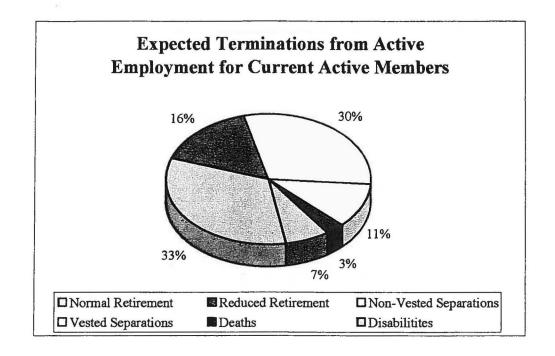
The above reserves were reported to the Actuary by PERS. The Actuary calculated the Market Value Adjustment. The Actuary also separated the assets between the two Law groups. The separation shown between Law A and Law B for health assets is an approximation.

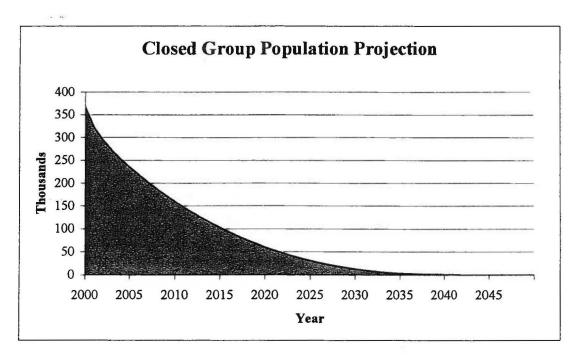
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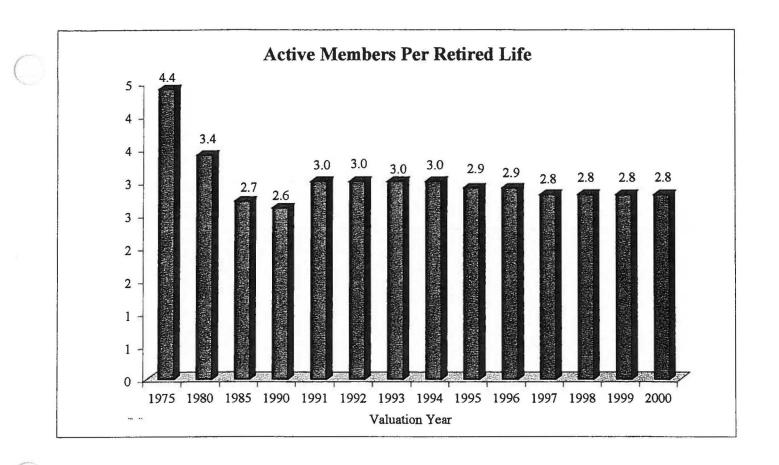


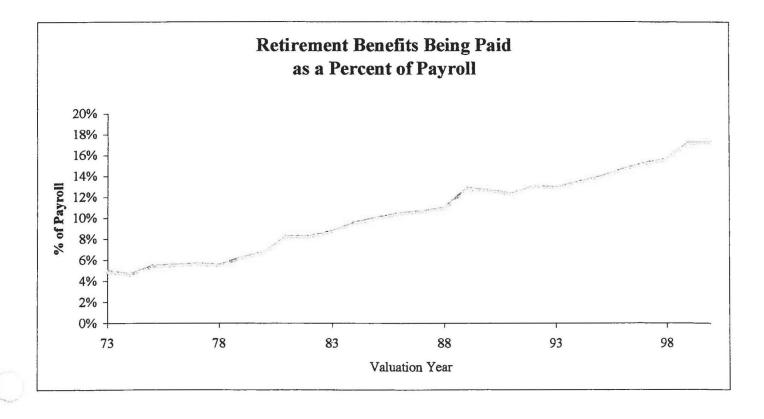
DEVELOPMENT OF PRESENT POPULATION DECEMBER 31, 2000

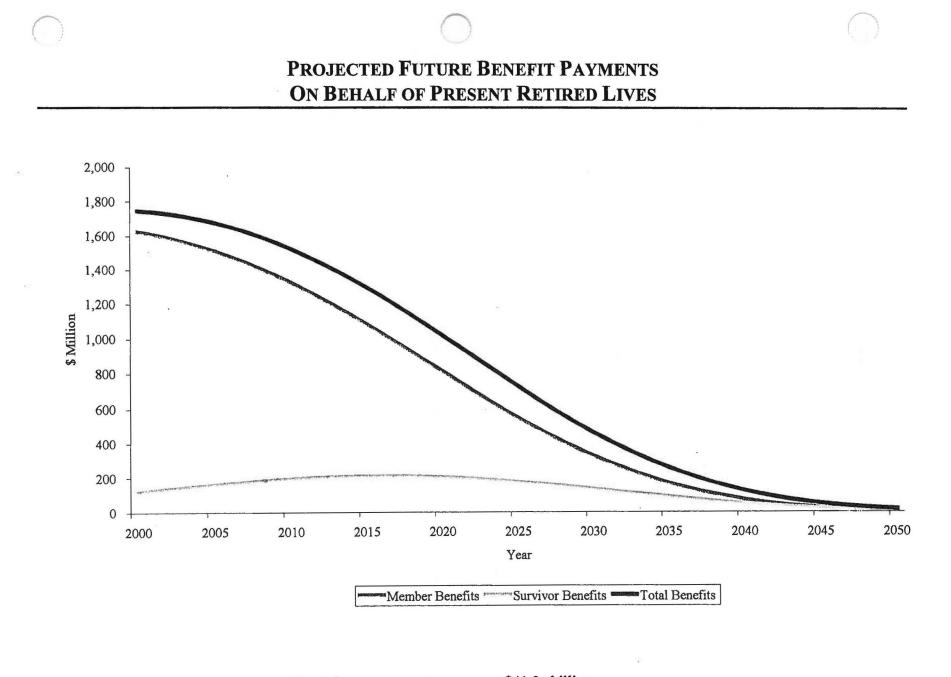




The charts show the expected future development of the present population in simplified terms. The retirement system presently covers 366,975 active members. Eventually, 30% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for a monthly benefit. 60% 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. 10% 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.







Total future payments:	\$41.3	billion
From present assets:	\$18.0	billion
From future earnings:	\$23.3	billion

Ohio Public Employees Retirement System

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ALL DIVISIONS ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2000 BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Ye	Total						
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	Payroll
15-19	14,605							14,605	\$64,315,930
20-24	26,488	309						26,797	279,080,079
25-29	25,459	4,726	144					30,329	664,420,513
30-34	21,643	12,013	4,357	151				38,164	1,046,709,102
35-39	18,515	10,460	10,768	4,349	395			44,487	1,345,016,634
40-44	18,423	10,456	10,224	8,632	6,138	366		54,239	1,727,738,544
45-49	15,174	9,645	9,463	7,294	8,493	4,602	173	54,844	1,845,504,620
249.145									
50	2,647	1,649	1,737	1,387	1,367	1,320	192	10,299	359,233,220
51	2,366	1,677	1,689	1,209	1,221	1,253	270	9,685	337,687,392
52	2,374	1,593	1,682	1,233	1,171	1,202	353	9,608	333,830,653
53	2,134	1,521	1,584	1,251	1,162	1,041	388	9,081	310,110,598
54	2,187	1,612	1,735	1,263	1,214	954	453	9,418	319,151,635
55	1,435	1,020	1,102	833	715	571	267	5,943	199,078,356
56	1,341	938	1,038	861	711	490	262	5,641	184,628,565
57	1,277	873	909	808	703	423	253	5,246	167,863,997
58	1,337	979	1,037	909	780	456	268	5,766	178,577,993
59	1,090	833	949	767	681	393	240	4,953	155,846,907
60	952	716	807	691	619	335	171	4,291	129,983,856
61	830	622	645	515	447	287	191	3,537	129,983,830
62	769	568	504	449	447	254	151	3,114	90,948,851
63	683	476	480	400	328	234	128	2,730	76,881,472
63 64	626	419	304	301	253	157	109	2,750	55,191,655
04	020	117	504	501	255	157	107	2,107	55,171,055
65	546	332	298	248	213	133	89	1,859	46,346,489
66	514	290	202	170	139	96	73	1,484	32,890,345
67	491	232	160	130	96	70	77	1,256	26,626,301
68	471	204	137	94	79	79	47	1,111	21,199,331
69	409	164	134	101	62	53	36	959	16,973,164
							- •		
70 & Over	2,257	1,408	514	378	315	243	245	5,360	69,134,077
Totals	167,043	65,735	52,603	34,424	27,717	15,013	4,440	366,975	\$10,191,561,591

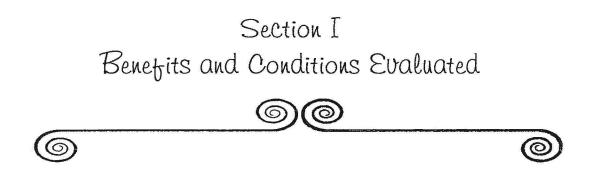
ALL DIVISIONS ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2000 BY YEARS OF SERVICE

Service	Ac	tive Member Cou	Active Mem	ber Pays	
Years	Years Males Females		Total	Total	Average
0	31,422	38,480	69,902	\$735,396,797	\$10,520
1	16,349	20,013	36,362	643,294,331	17,691
2	11,197	13,533	24,730	545,192,246	22,046
3	9,105	10,444	19,549	472,268,835	24,158
4	7,540	8,960	16,500	439,205,443	26,619
5	7,021	7,830	14,851	415,308,363	27,965
6	7,044	7,547	14,591	444,185,838	30,442
7	5,835	6,603	12,438	374,196,029	30,085
8	5,190	5,916	11,106	354,334,266	31,905
9	5,913	6,836	12,749	408,552,514	32,046
10	5,601	6,668	12,269	429,311,525	34,992
11	5,288	6,072	11,360	400,617,342	35,266
12	4,734	5,811	10,545	385,039,782	36,514
13	4,468	5,111	9,579	356,868,855	37,255
14	4,148	4,702	8,850	337,219,037	38,104
15 & Up	41,483	40,111	81,594	3,450,570,388	42,290
Totals	172,338	194,637	366,975	\$10,191,561,591	\$27,772

RETIREMENT SYSTEM TOTALS DECEMBER 31, 2000 (\$ MILLIONS)

						Actuarial	Accrued J	Liabilities				
	Active Members Retired Lives Active &					Unfu	inded					
_		Annual		A	nnual	Inactive	Retired			Acc	rued	Amort.
Division	Number	Payroll	Number	Alle	owances	Members	Lives	Total	Assets	Liab	ilities	Years
State	113,099	\$ 3,868	47,462	\$	722	\$ 11,274	\$ 7,519	\$18,793	\$ 19,077	\$	(284)	*
Local	245,831	5,999	83,090		988	15,881	9,981	25,862	26,112		(250)	*
Law Enforcement A	1,501	59	-		-	185	-	185	180		5	16
Law Enforcement B	6,544	266	2,051		43	990	517	1,507	1,475		32	19
Totals	366,975	\$ 10,192	132,603	\$	1,753	\$ 28,330	\$18,017	\$46,347	\$ 46,844	\$	(497)	

* Accrued liabilities are fully funded.



()

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 as determined in the following schedule:

Attained		Years of	Percentage of
Age	OR	Service Credit	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 Enforcement Members eligible to retire under Ohio Revised Code section 145.33(B)(2)(a)

Age and service eligibility - A law enforcement 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.

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 enforcement members is based upon twice the member's savings fund balance at retirement together with interest credits.

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

Age and service eligibility - A law enforcement 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 enforcement 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.
- 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

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

Schedule 2

	Annual Benefit as a % of
Years of Service	Deceased Member's FAS
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.

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.

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 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.

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.

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 the average percentage change in the Consumer Price Index (CPI) plus an accumulation amount if prior year CPIs exceeded 3.0%. Any percentage of change in the CPI in any year that is in excess of 3.0% is accumulated and used to determine increases in future years. The maximum annual increase is 3.0%. The minimum recomputed allowance equals the initial allowance.

Post-retirement death benefit. Upon the death of an age and service or disability retiree, a death benefit in the following amount is payable:

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	

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 enforcement 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 Enforcement Benefit Group A members contribute 9.0% of salary.

Law Enforcement Benefit Group B members who primarily are Sheriffs, Deputy Sheriffs & Township Constables or Police Officers contribute 10.1% of salary effective 1/1/2001.

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 with the exception of certain members in Law Enforcement Benefit Group B. 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.

Beginning interest will be credited annually to member contribution balances. The rate of interest credited is determined by the PERS Board and will not be greater than 6%.

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.

Law Enforcement Benefit Group B members who were hired at an age that would permit them to achieve 25 years of Law Enforcement service credit prior to age 52 if they did not terminate employment are **not** eligible for the enhanced refund provisions described above. Such members may receive refunds of contributions in accordance with law as it existed prior to the passage of Senate Bill 144.

Employer contributions. Each employer contributes the remainder amounts necessary to finance PERS 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 enforcement members is 18.1% (H.B. 416, effective 1/1/2001).

SAMPLE BENEFIT COMPUTATION STATE OR LOCAL MEMBER - NORMAL RETIREMENT RETIRING DECEMBER 31, 2000 UNDER BENEFIT PROVISIONS EVALUATED

Data:

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

Computations:

F. Formula Benefit: (0.022 x 30 years + 0.025 x 3 years) x \$32,000 =	\$ 23,520
G. Reduction for Line E Election $(1 - 0.81756) \times (F) =$	4,291
H. Benefit Payable to Retiree while Spouse is Alive: (F) - (G) =	19,229
I. Benefit Payable to Spouse after Retiree's DeathJ. Benefit Payable to Retiree after Spouse's Death	19,229 23,520

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2001	\$ 19,229	\$ 19,229	\$ 23,520
2002	19,806	19,806	24,226
2003	20,383	20,383	24,931
2004	20,960	20,960	25,637
2005	21,536	21,536	26,342
2006	22,113	22,113	27,048
2007	22,690	22,690	27,754
2008	23,267	23,267	28,459
2009	23,844	23,844	29,165
2010	24,421	24,421	29,870

SAMPLE BENEFIT COMPUTATION STATE OR LOCAL MEMBER - EARLY RETIREMENT RETIRING DECEMBER 31, 2000 UNDER BENEFIT PROVISIONS EVALUATED

Data:

A.	\$32,000	Final Average Earnings
в. Т	26	Years of Credited Service
С.	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 x 26 years x \$32,000 =	\$ 18,304
G.	Adjustment factor for Early Retirement (from schedule)	80%
H.	Adjusted benefit: (F) x (G) =	14,643
I.	Reduction for Line E Election $(1 - 0.81756) \times (H) =$	 2,672
J.	Benefit Payable to Retiree while Spouse is Alive: (H) - (I)	11,972
K. L.	Benefit Payable to Spouse after Retiree's Death Benefit Payable to Retiree after Spouse's Death	11,972 14,643

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2001	\$ 11,972	\$ 11,972	\$ 14,643
2002	12,331	12,331	15,082
2003	12,690	12,690	15,522
2004	13,049	13,049	15,961
2005	13,408	13,408	16,400
2006	13,767	13,767	16,840
2007	14,127	14,127	17,279
2008	14,486	14,486	17,718
2009	14,845	14,845	18,158
2010	15,204	15,204	18,597

SAMPLE BENEFIT COMPUTATION SECTION 145.33 (B)(2)(B) LAW MEMBER - NORMAL RETIREMENT RETIRING DECEMBER 31, 2000 UNDER BENEFIT PROVISIONS EVALUATED

Data:

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

Computations:

F. Formula Benefit: (0.025 x 25 years + 0.021 x 3 years) x \$38,000 =	\$ 26,144
G. Reduction for Line E Election $(1 - 0.88728) \times (F) =$	2,947
H. Benefit Payable to Retiree while Spouse is Alive: (F) - (G) =	23,197
I. Benefit Payable to Spouse after Retiree's DeathJ. Benefit Payable to Retiree after Spouse's Death	23,197 26,144

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2001	\$ 23,197	\$ 23,197	\$ 26,144
2002	23,893	23,893	26,928
2003	24,589	24,589	27,713
2004	25,285	25,285	28,497
2005	25,981	25,981	29,281
2006	26,677	26,677	30,066
2007	27,373	27,373	30,850
2008	28,068	28,068	31,634
2009	28,764	28,764	32,419
2010	29,460	29,460	33,203

SAMPLE BENEFIT COMPUTATION STATE OR LOCAL MEMBER – TERMINATION BENEFIT RETIRING DECEMBER 31, 2000 UNDER BENEFIT PROVISIONS EVALUATED

Data:

Α.	\$32,000	Final Average Earnings
В.	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 Temination Date

Computations:

H.	Formula Benefit: (0.022 x 15 years + 0.025 x 0 years) x \$32,000 =	\$ 10,560
I.	Adjustment factor for Early Retirement (from schedule)	85%
J.	Adjusted benefit: (H) x (I) =	8,976
K.	Reduction for Line F Election: $(1 - 0.80900) \times (J) =$	 1,714
L.	Benefit Payable to Retiree while Spouse is Alive: (J) - (K) =	7,262
	Benefit Payable to Spouse after Retiree's Death Benefit Payable to Retiree after Spouse's Death	7,262 8,976
Ο.	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.	73,480

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2001	\$ 7,262	\$ 7,262	\$ 8,976
2002	7,479	7,479	9,245
2003	7,697	7,697	9,515
2004	7,915	7,915	9,784
2005	8,133	8,133	10,053
2006	8,351	8,351	10,322
2007	8,569	8,569	10,592
2008	8,787	8,787	10,861
2009	9,004	9,004	11,130
2010	9,222	9,222	11,400

SAMPLE BENEFIT COMPUTATION SECTION 145.33 (B)(2)(B) LAW MEMBER – TERMINATION BENEFIT RETIRING DECEMBER 31, 2000 UNDER BENEFIT PROVISIONS EVALUATED

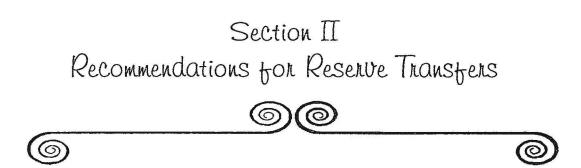
Data:

Α.	\$38,000	Final Average Earnings
В.	15	Years of Credited Service
C.	37	Age of Retiree
D.	34	Age of Spouse
E.	52:49	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.	\$46,000	Accumulated Contributions at Temination Date

Computations:

H.	Formula Benefit: (0.015 x 15 years) x \$38,000 =	\$	8,550
I.	Reduction for Line F Election: $(1 - 0.86885) \times (H) =$		1,121
J.	Benefit Payable to Retiree while Spouse is Alive: (H) - (I) =		7,429
	Benefit Payable to Spouse after Retiree's Death Benefit Payable to Retiree after Spouse's Death		7,429 8,550
М.	In lieu of a lifetime benefit, terminee may elect to receive a refund of accumulated contributions at the time of termination.		46,000

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2001	\$ 7,429	\$ 7,429	\$ 8,550
2002	7,652	7,652	8,807
2003	7,874	7,874	9,063
2004	8,097	8,097	9,320
2005	8,320	8,320	9,576
2006	8,543	8,543	9,833
2007	8,766	8,766	10,089
2008	8,989	8,989	10,346
2009	9,212	9,212	10,602
2010	9,434	9,434	10,859



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.

	Assets	Transfers		Assets After		
	Before Transfers	Accrued	Other	Transfers	Liabilities	Ratio
State						<u></u>
A&PR FUND						
CR, JR&SR	\$ 6,099,281,479	\$ 135,150,220	(160,908,526)	\$6,073,523,173	\$ 6,073,523,173	
BD&DR	1,107,926,678	60.077,411	(92,616,502)	1,075,387,587	1,075,387,587	
TOTAL A&PR	7,207,208,157	195,227,631	(253,525,028)	7,148,910,760	7,148,910,760	100.0%
SBF			(1,1 10,5 10,700	100.070
S-1	111,734,635	1,544,665	(1,743,819)	111,535,481	111,535,481	
S-2	223,761,967	5,920,154	29,183,167	258,865,288	258,865,288	
TOTAL SBF	335,496,602	7,464,819	27,439,348	370,400,769	370,400,769	100.0%
TOTAL STATE	\$ 7,542,704,759	\$202,692,450	\$(226,085,680)	\$7,519,311,529	\$ 7,519,311,529	100.0%
Local			T			
A&PR FUND			·			
CR,JR&SR	\$ 7,857,303,098	\$182,247,143	(202,133,561)	\$7,837,416,680	\$ 7,837,416,680	
BD&DR	1,559,298,507	60,247,666	(119,175,401)	1,500,370,772	1,500,370,772	
TOTAL A&PR	9,416,601,605	242,494,809	(321,308,962)	9,337,787,452	9,337,787,452	100.0%
SBF	5- C					
S-1	165,198,209	3,910,890	4,476,889	173,585,988	173,585,988	
S-2	396,582,847	10,163,899	62,510,236	469,256,982	469,256,982	
TOTAL SBF	561,781,056	14,074,789	66,987,125	642,842,970	642,842,970	100.0%
TOTAL LOCAL	\$ 9,978,382,661	\$256,569,598	\$(254,321,837)	\$9,980,630,422	\$ 9,980,630,422	100.0%
Law Group A		I		1		
A&PR FUND						*
CR,JR&SR	\$ 0	\$0	\$0	\$0	0	
BD&DR	0	0	0	0	0	
TOTAL A&PR	0	0	0	0	0	
SBF						
S-1	0	0	0	0	0	•
S-2	0	0	0	0	0	,
TOTAL SBF	0	0	0	0	0	
TOTAL LAW GROUP A	\$ 0	\$ 0	\$0	\$0	\$ 0	
Law Group B			l l	1		
A&PR FUND	2					
CR,JR&SR	\$ 259,433,152	\$13,750,165	(1,716,636)	\$271,466,681	\$ 271,466,681	
BD&DR	219,198,789	14,522,391	(11,862,519)	221,858,661	221,858,661	
TOTAL A&PR	478,631,941	28,272,556	(13,579,155)	493,325,342	493,325,342	100.0%
SBF						
S-1	7,739,171	225,107	958,376	8,922,654	8,922,654	
S-2	13,965,388	497,294	748,197	15,210,879	15,210,879	
TOTAL SBF	21,704,559	722,401	1,706,573	24,133,533	24,133,533	100.0%
TOTAL LAW GROUP B	\$ 500,336,500	\$ 28,994,957	\$(11,872,582)	\$517,458,875	\$ 517,458,875	100.0%
GRAND TOTAL	\$18,021,423,920	\$488,257,005	\$(492,280,099)	\$18,017,400,826	\$18,017,400,826	100.0%



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

		Annual	Average		
Groups	Number	Payroll	Pay	Age	Service
Men	52,030	\$1,918,544,526	\$36,874	41.3	9.8
Women	61,069	1,949,556,586	31,924	41.8	9.7
Totals	113,099	\$3,868,101,112	\$34,201	41.6	9.7

Active Members in Valuation December 31, 2000

Also included in the valuation were 21,779 inactive members eligible for deferred retirement allowances or contribution refunds and 1,739 members active in the money purchase plan.

Retired Members in Valuation December 31, 2000

Fund / Type of Allowance	Number	Current Total \$	Actuarial Liabilities
A & PR Fund			
Superannuation Retirement	36,931	\$48,614,732	\$6,069,685,107
Disability Retirement	5,782	8,150,618	1,075,387,587
Money Purchase	127	38,469	3,838,066
Total A & PR Fund	42,840	56,803,819	7,148,910,760
Total SBF	4,622	3,370,744	370,400,769
Grand Total	47,462	\$60,174,563	\$7,519,311,529

STATE DIVISION EMPLOYER CONTRIBUTIONS TO SUPPORT RETIREMENT ALLOWANCES

EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL DECEMBER 31, 2000

	Contributions Cor	nputed December 31
Contributions for	2000	1999
Normal Cost		
Age and Service Allowances	9.78 %	9.77 %
Disability Allowances	1.90 %	1.89 %
Survivor's Benefits	0.72 %	0.72 %
Separation Benefits	3.79 %	3.80 %
Total Normal Cost	16.19 %	16.18 %
(Member Current Contributions)	8.50 %	8.50 %
Employer Normal Cost	7.69 %	7.68 %
Unfunded Actuarial Accrued Liabilities		
Financing Years*	#	#
Total Available Contribution	1.32 %	1.33 %
Total Employer Contribution Rate	9.01 %	9.01 %

State Division accrued liabilities are fully funded.

* The period sufficient to produce an Employer Contribution Rate of 9.01% of payroll for retirement allowances and survivor benefits.

STATE DIVISION Comparative Statement

	Ac	tive Membe	ers in Valuat	ion	Total	Employer C	ontributior	is as % of F	ayroll
		А	Annual Payroll		Normal	Unfunded	Basic	Retiree	Grand
December 31	No.	Total Average		Increase	Cost	Accrued	Total	Health	Total
		(Millions)							
1990@	98,939	\$ 2,501	\$ 25,281	5.7 %	6.51 %	2.78 %	9.29 %	4.42 %	13.71 %
1991&	107,025	2,693	25,163	(0.5)%	6.57 %	2.45 %	9.02 %	4.29 %	13.31 %
1992	109,701	2,767	25,224	0.2 %	6.41 %	2.61 %	9.02 %	4.29 %	13.31 %
1993	112,748	2,894	25,673	1.8 %	6.40 %	2.62 %	9.02 %	4.29 %	13.31 %
1994	115,238	3,063	26,580	3.5 %	6.66 %	2.36 %	9.02 %	4.29 %	13.31 %
1995	114,596	3,204	27,962	5.2 %	6.67 %	2.35 %	9.02 %	4.29 %	13.31 %
1996@	115,712	3,319	28,684	2.6 %	6.21 %	2.81 %	9.02 %	4.29 %	13.31 %
1997	114,036	3,405	29,858	4.1 %	6.21 %	2.90 %	9.11 %	4.20 %	13.31 %
1998	112,323	3,500	31,159	4.4 %	6.21 %	2.90 %	9.11 %	4.20 %	13.31 %
1999	112,761	3,592	31,851	2.2 %	6.24 %	2.77 %	9.01 %	4.30 %	13.31 %
1999#	112,761	3,592	31,851	2.2 %	7.68 %	1.33 %	9.01 %	4.30 %	13.31 %
2000	113,099	3,868	34,201	7.4 %	7.69 %	1.32 %	9.01 %	4.30 %	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.

STATE DIVISION DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES COMPARATIVE STATEMENT

		Allocation I	oy Entry Age
	(1)	(2)	(3)
	Total	Portion	Actuarial
	Actuarial	Covered By	Accrued
	Present	Future Normal	Liabilities
Actuarial Present Value December 31, of	Value	Cost Contributions	(1)-(2)
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$ 7,148,910,760	\$-	\$ 7,148,910,760
Allowances currently being paid from the Survivors Benefit Fund	370,400,769	_	370,400,769
Age and service allowances based on service rendered before and likely to be rendered after valuation date	12,994,593,710	3,666,138,768	9,328,454,942
Disability allowances likely to be paid present active members who become permanently disabled	1,554,851,786	690,706,968	864,144,818
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring Separation benefits (refunds of contributions	620,014,418	264,144,947	355,869,471
and deferred allowances) likely to be paid to present active and inactive members	2,198,345,935	1,473,492,228	724,853,707
Total	\$24,887,117,378	\$6,094,482,911	\$18,792,634,467
Actuarial Value of Assets			19,077,457,074
Unfunded Actuarial Accrued Liability			\$ (284,822,607)

STATE DIVISION Development of Unfunded Actuarial Accrued Liabilities Comparative Statement (\$ in Millions Except Averages)

			Active and f				
	Active	Payroll	Computed	Valuation	С.Ф.	Amort.	Unfunded
Dec. 31	Total	Average	Total	Assets	Unfunded	Years	/Payroll
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	9,809	11,061	(1,252)	-	-
1999#	3,592	31,851	10,298	10,474	(176)	-	-
2000	3,868	34,201	11,273	11,558	(285)	–	-

After benefit changes.

@ Revised actuarial assumptions.

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

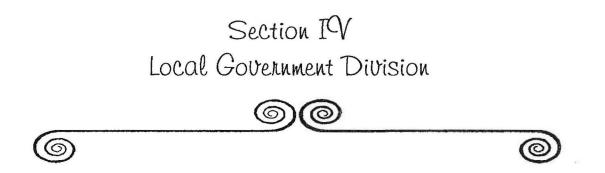
While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded actuarial accrued liabilities represent plan debt, while active 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, 2000 BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Ye	ars of Ser	vice to Va	luation D	ate		Total	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	Payroll
15-19	852							852	\$4,670,891
20-24	4,198	12						4,210	45,086,988
25-29	3,872	566	10					4,448	107,520,633
30-34	3,053	2,133	650	11	-			5,847	196,111,444
35-39	2,385	1,773	2,106	827	47			7,138	273,670,946
40-44	2,022	1,408	1,717	1,846	1,101	41		8,135	332,264,769
45-49	1,555	1,133	1,417	1,417	1,651	711	28	7,912	346,670,722
		2							
50	270	215	232	261	257	251	36	1,522	69,508,380
51	260	207	239	217	214	255	45	1,437	66,272,085
52	268	187	226	233	241	243	81	1,479	70,475,792
53	210	175	210	207	193	203	69	1,267	60,312,371
54	233	198	238	209	204	177	97	1,356	64,567,602
55	161	116	163	150	102	107	56	855	40,719,106
56	140	113	124	121	106	91	67	762	35,424,911
57	125	109	120	96	84	78	63	675	32,496,302
58	131	117	123	119	85	73	60	708	31,010,919
59	94	109	99	95	88	55	49	589	26,615,189
<i>(</i> 0			07			10		505	
60	77	80	97	112	65	42	32	505	22,800,071
61	83	72	65	66	54	41	41	422	18,635,734
62	78	63	55	66	45	44	31	382	16,324,357
63	60	44	57	50	31	25	29	296	12,653,875
64	55	35	39	38	27	29	21	244	10,747,592
(5	20	20	2	20	10	1.7	10	175	71(0.070
65	39	35	26	30	18	14	13	175	7,162,072
66	44	24	23	18	17	7	14	147	5,372,306
67	39	24	15	23	9	9	12	131	5,047,395
68	34	16	13	10	11	6	12	102	3,638,443
69	30	12	11	11	3	7	6	80	3,087,284
70 & Over	164	57	37	25	16	21	34	354	9,676,347
Totals	20,532	9,033	8,112	6,258	4,669	2,530	896	52,030	\$1,918,544,526

STATE DIVISION FEMALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2000 BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Ye	ars of Ser	vice to Va	luation D	ate		Total	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	Payroll
20									
15-19	854							854	\$4,216,295
20-24	4,966	34						5,000	50,080,810
25-29	4,187	694	22					4,903	114,784,096
30-34	3,419	2,143	790	49				6,401	191,739,712
35-39	2,764	1,806	2,155	868	109			7,702	257,837,659
40-44	2,761	1,753	2,009	1,731	1,362	60		9,676	343,109,828
45-49	2,297	1,620	1,849	1,417	1,764	812	38	9,797	366,602,197
50	396	269	350	265	280	239	42	1,841	71,005,801
51	345	268	321	260	253	213	54	1,714	65,735,977
52	347	248	357	243	223	186	54	1,658	63,307,018
53	297	226	340	241	240	152	78	1,574	59,032,070
54	321	262	371	239	267	165	82	1,707	64,464,194
	100	174	224	1.50	170	104	61	1 005	40.040.041
55	190	174	224	150	172	124	51	1,085	40,943,341
56	182	127	217	188	149	100	47	1,010	37,187,726
57	155	119	176	162	161	77	40	890	33,159,256
58	157	115 105	194	183	182	90 77	34	955	34,657,193
59	104	105	176	174	166	77	31	833	31,383,689
60	88	95	153	142	144	87	22	731	26,731,729
61	73	62	122	93	94	58	28	530	19,489,667
62	60	62	98	77	111	42	23	473	17,883,968
63	55	47	88	79	90	44	22	425	15,115,842
64	39	49	56	50	58	26	16	294	10,168,664
65	28	21	47	45	49	25	13	228	7,843,837
66	27	19	30	32	30	17	13	168	5,809,496
67	31	17	19	19	19	20	15	140	4,233,242
68	22	7	13	13	16	16	5	92	2,862,106
69	26	12	15	14	12	8	5	92	2,337,754
70 & Over	66	36	31	42	54	31	36	296	7,833,419
Totals	24,257	10,390	10,223	6,776	6,005	2,669	749	61,069	\$1,949,556,586



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

<u></u>		Annual	Average				
Groups	Number	Payroll	Pay	Age	Service		
Men	113,166	\$3,001,855,339	\$26,526	42.5	8.5		
Women	132,665	2,996,687,804	22,588	41.2	7.6		
Totals	245,831	\$5,998,543,143	\$24,401	41.8	8.1		

Active Members in Valuation December 31, 2000

Also included in the valuation were 40,809 inactive members eligible for deferred retirement allowances or contribution refunds and 6,622 members active in the money purchase plan.

Retired Members in Valuation December 31, 2000

		Current	Actuarial
Fund / Type of Allowance	Number	Total \$	Liabilities
A & PR Fund			
Superannuation Retirement	64,815	\$64,488,180	\$7,829,952,735
Disability Retirement	8,804	11,964,163	1,500,370,772
Money Purchase	364	72,920	7,463,945
Total A & PR Fund	73,983	76,525,263	9,337,787,452
Total SBF	9,107	5,820,498	642,842,968
			di d
Grand Total	83,090	\$82,345,761	\$9,980,630,420

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

	Contributions Con	nputed December 31
Contributions for	2000	1999
Normal Cost		
Age and Service Allowances	9.29 %	9.28 %
Disability Allowances	2.11 %	2.11 %
Survivor's Benefits	0.72 %	0.72 %
Separation Benefits	4.06 %	4.07 %
Total Normal Cost	16.18 %	16.18 %
(Member Current Contributions)	8.50 %	8.50 %
Employer Normal Cost	7.68 %	7.68 %
Unfunded Actuarial Accrued Liabilities		
Financing Years*	#	2
Total Available Contribution	1.57 %	1.57 %
Total Employer Contribution Rate	9.25 %	9.25 %

Local Government Division accrued liabilities are fully funded.

* The period sufficient to produce an Employer Contribution Rate of 9.25% of payroll for retirement allowances and survivor benefits.

LOCAL GOVERNMENT DIVISION **COMPARATIVE STATEMENT**

	Ac	tive Membe	ers in Valuat	ion	Total	Employer C	ontribution	ns as % of I	Payroll
		A	nnual Payro	oll	Normal	Unfunded	Basic	Retiree	Grand
December 31	No.	Total	Average	Increase	Cost	Accrued	Total	Health	Total
		(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 %	6.21 %	3.04 %	9.25 %	4.30 %	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 %

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After benefit changes. Revised actuarial assumptions. *

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

LOCAL GOVERNMENT DIVISION DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES DECEMBER 31, 2000

		Allocation b	y Entry Age
	(1)	(2)	(3)
	Total	Portion	Actuarial
	Actuarial	Covered By	Accrued
	Present	Future Normal	Liabilities
Actuarial Present Value December 31, of	Value	Cost Contributions	(1)-(2)
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$ 9,337,787,452	\$ -	\$ 9,337,787,452
Allowances currently being paid from the Survivors Benefit Fund	642,842,968	-	642,842,968
Age and service allowances based on service rendered before and likely to be rendered after valuation date	18,141,149,250	5,174,521,490	12,966,627,760
Disability allowances likely to be paid present active members who become permanently disabled	2,426,787,837	1,169,899,058	1,256,888,779
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring Separation benefits (refunds of contributions	902,567,306	388,022,987	514,544,319
and deferred allowances) likely to be paid to present active and inactive members	3,516,040,755	2,372,789,935	1,143,250,820
Total	\$34,967,175,568	\$9,105,233,470	\$25,861,942,098
Actuarial Value of Assets			26,112,039,501
Unfunded Actuarial Accrued Liability			\$ (250,097,403)

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

			Active and f				
	Active	Payroll	Computed	Valuation		Amort.	Unfunded
Dec. 31	Total	Average	Total	Assets	Unfunded	Years	/Payroll
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	13,912	14,837	(925)	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)	-	-

After benefit changes.

@ Revised actuarial assumptions.

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

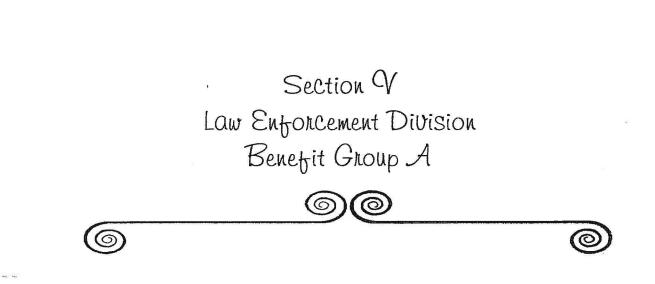
While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member 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, 2000 BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Ye	ars of Ser	vice to Va	luation D	ate	5 5 25 ⁻⁷ 5 ⁻¹ 1	Total	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	Payroll
15-19	5,767						;	5,767	\$26,724,591
20-24	7,686	90		а.				7,776	80,556,906
25-29	6,964	1,340	26					8,330	172,651,859
30-34	6,399	3,120	1,123	24				10,666	280,957,419
35-39	5,509	3,132	2,887	1,153	100	C		12,781	379,729,435
40-44	5,435	3,137	3,077	2,452	1,690	128		15,919	505,769,866
45-49	4,645	2,849	2,748	2,158	2,583	1,734	45	16,762	561,728,601
50	848	487	470	423	425	493	60	3,206	111,907,675
51	765	505	463	356	378	446	104	3,017	105,199,385
52	774	470	438	367	342	459	127	2,977	101,285,275
53	711	464	412	323	339	408	148	2,805	95,006,915
54	708	484	440	342	322	364	163	2,823	94,219,915
	10.4	202	007		101	201	101	1 500	CC 000 104
55	494	302	287	214	191	201	101	1,790	56,837,184
56	488	263	272	237	182	171	91	1,704	54,359,422
57	510	272	218	195	171	140	90	1,596	47,508,771
58	565	320	317	216	186	141	98	1,843	53,654,533
59	456	281	254	200	146	143	99	1,579	46,779,849
60	445	259	214	189	158	98	68	1,431	39,102,967
61	364	235	203	189	108	93	71	1,431	33,397,996
62	360	233	167	137	108	93 77	63	1,231	29,905,905
63	341	196	151	134	74	87	52	1,140	25,827,482
63 64	317	182	100	104	74	45	32	851	17,030,687
04	517	102	100	104	/1	45	J2	001	17,050,067
65	302	173	103	67	69	47	29	790	16,730,601
66	290	146	72	57	32	24	23	644	11,082,759
67	291	119	61	40	27	14	24	576	9,311,004
68	297	109	59	39	13	26	16	559	7,986,732
69	238	89	63	37	15	18	10	472	6,284,434
	200	07		51	15	10	14	774	0,207,737
70 & Over	1,416	937	279	185	110	88	79	3,094	30,317,171
Totals	53,385	20,183	14,904	9,799	7,855	5,445	1,595	113,166	\$3,001,855,339

LOCAL GOVERNMENT DIVISION FEMALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2000 BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Ye	ars of Ser	vice to Va	luation D	ate		Total	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	Payroll
15-19	7,131							7,131	\$28,685,092
20-24	9,388	168						9,556	97,161,461
25-29	9,640	1,749	79					11,468	230,953,687
30-34	8,309	3,779	1,530	63				13,681	318,317,555
35-39	7,668	3,380	3,106	1,292	133		in .	15,579	380,954,683
40-44	8,097	3,950	3,150	2,207	1,756	132		19,292	493,600,464
45-49	6,594	3,945	3,285	2,020	2,082	1,188	61	19,175	516,111,138
				3 - C					
50	1,125	659	659	399	355	276	50	3,523	97,115,076
51	988	678	651	349	330	285	62	3,343	92,254,328
52	975	673	639	370	326	266	73	3,322	90,849,240
53	912	642	610	456	369	243	84	3,316	90,045,212
54	916	650	676	453	386	208	101	3,390	89,829,402
			8215 M. 2005	800 900 C	12 TAN 141		147 mg	and brokenes	stations as more a pro-
55	586	414	418	304	233	123	55	2,133	57,097,177
56	528	429	411	302	261	117	49	2,097	54,699,312
57	486	371	383	340	270	122	49	2,021	51,663,869
58	482	422	396	380	315	142	65	2,202	56,734,275
59	433	335	417	287	271	106	54	1,903	48,857,785
60	340	279	337	242	242	96	41	1,577	39,233,631
61	309	251	252	188	174	88	49	1,311.	33,176,925
62	270	219	178	162	132	86	37	1,084	25,501,974
63	226	185	177	138	130	77	23	956	22,385,992
64	212	149	108	107	96	55	37	764	16,594,015
			101	100				6.00	1.018.1-0
65	173	101	121	103	75	44	32	649	14,017,179
66	152	101	77	63	59	47	22	521	10,464,723
67	130	71	64	48	40	27	25	405	7,901,940
68	118	71	52	30	37	31	11	350	6,386,541
69	115	50	45	38	32	20	13	313	5,192,330
	(0)	274	100	105	104	100	0.5	1 (02	00 000 700
70 & Over	606	376	165	125	134	102	95	1,603	20,902,798
Totals	66,909	24,097	17,986	10,466	8,238	3,881	1,088	132,665	\$2,996,687,804



This Benefit Group consists of Law Enforcement Members other than Sheriffs, Deputy Sheriffs, and Township Police. Data on active, inactive, retired and money purchase members that was used in the valuation is tabulated briefly below.

		Annual	Average				
Groups	Number	Payroll	Pay	Age	Service		
Men	1,314	\$52,295,548	\$39,799	39.0	11.2		
Women	187	7,046,259	37,681	39.2	9.8		
Totals	1,501	\$59,341,807	\$39,535	39.0	11.0		

Active Members in Valuation December 31, 2000

Also included in the valuation were 0 inactive members eligible for deferred retirement allowances or contribution refunds and 0 members active in the money purchase plan.*

Retired Members in Valuation December 31, 2000*

Fund / Type of Allowance	Number	Current Total \$	Actuarial Liabilities
A & PR Fund			
Superannuation Retirement	0	\$0	\$0
Disability Retirement	0	0	0
Money Purchase	0	0	0
Total A & PR Fund	0	0	0
Total SBF	0	0	0
Grand Total	0	\$0	\$0

 Law Enforcement inactive members and retired lives who terminated active membership prior to 1/1/2000 are included in Benefit Group B.

LAW ENFORCEMENT DIVISION BENEFIT GROUP A EMPLOYER CONTRIBUTIONS TO SUPPORT RETIREMENT ALLOWANCES EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL

	Contributions Cor	nputed December 31
Contributions for	2000	1999
Normal Cost		
Age and Service Allowances	13.19 %	13.60 %
Disability Allowances	3.63 %	3.34 %
Survivor's Benefits	0.98 %	0.89 %
Separation Benefits	2.89 %	2.96 %
Total Normal Cost	20.69 %	20.79 %
(Member Current Contributions)	9.00 %	9.00 %
Employer Normal Cost	11.69 %	11.79 %
Unfunded Actuarial Accrued Liabilities		
Financing Years*	16	18
Total Available Contribution	0.71 %	0.61 %
Total Employer Contribution Rate	12.40 %	12.40 %

* The period sufficient to produce an Employer Contribution Rate of 12.40% of payroll for retirement allowances and survivor benefits.

LAW ENFORCEMENT DIVISION BENEFIT GROUP A **COMPARATIVE STATEMENT**

	Act	tive Membe	rs in Valuat	tion	Total	Employer C	ontribution	1s as % of F	ayroll
		Α	Annual Payroll		Normal	Unfunded	Basic	Retiree	Grand
December 31	No.	Total	Average	Increase	Cost	Accrued	Total	Health	Total
		(Thou	(Thousands)						
1990@	5,804	\$156,339	\$26,936	5.4 %	9.52 %	1.29 %	10.81 %	5.19 %	16.00 %
1991	6,088	169,008	27,761	3.1 %	9.32 %	1.49 %	10.81 %	5.89 %	16.70 %
1992	5,852	169,337	28,937	4.2 %	9.65 %	1.16 %	10.81 %	5.89 %	16.70 %
1993	6,032	182,576	30,268	4.6 %	9.53 %	1.28 %	10.81 %	5.89 %	16.70 %
1994	6,252	196,467	31,425	3.8 %	9.71 %	1.10 %	10.81 %	5.89 %	16.70 %
		7					2		
1995	6,605	214,273	32,441	3.2 %	9.69 %	1.12 %	10.81 %	5.89 %	16.70 %
1996@	6,742	229,138	33,987	4.8 %	10.50 %	0.74 %	11.24 %	5.46 %	16.70 %
1997	7,256	258,897	35,680	5.0 %	10.49 %	2.01 %	12.50 %	4.20 %	16.70 %
1998	7,507	277,239	36,931	3.5 %	10.48 %	2.02 %	12.50 %	4.20 %	16.70 %
1999+	889	37,444	42,119	n/a	10.74 %	1.66 %	12.40 %	4.30 %	16.70 %
1999#	889	37,444	42,119	n/a	11.79 %	0.61 %	12.40 %	4.30 %	16.70 %
2000	1,501	59,342	39,535	(6.1)%	11.69 %	0.71 %	12.40 %	4.30 %	16.70 %

Law group split into groups A and B for 1999 valuation. After benefit changes. Revised actuarial assumptions. +

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a)

LAW ENFORCEMENT DIVISION BENEFIT GROUP A DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

		Allocation by Entry Age			
	(1)	(2)	(3)		
	Total	Portion	Actuarial		
	Actuarial	Covered By	Accrued		
	Present	Future Normal	Liabilities		
Actuarial Present Value December 31, of	Value	Cost Contributions	(1)-(2)		
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$ 0	\$-	\$ 0		
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	242,077,422	91,333,641	150,743,781		
Disability allowances likely to be paid present active members who become permanently disabled	48,969,469	24,424,820	24,544,649		
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	13,239,012	6,443,658	6,795,354		
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	23,344,646	20,050,219	3,294,427		
Total	\$327,630,549	\$142,252,338	\$185,378,211		
Actuarial Value of Assets	÷		179,915,226		
Unfunded Actuarial Accrued Liability			\$ 5,462,985		

LAW ENFORCEMENT DIVISION BENEFIT GROUP A Development of Unfunded Actuarial Accrued Liabilities Comparative Statement (\$ in Millions Except Averages)

				Active and Inactive Member Accrued Liabilities for Retirement Allowances				
	Active	Payroll	Computed	Valuation		Amort.	Unfunded	
Dec. 31	Total	Average	Total	Assets	Unfunded	Years	/Payroll	
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+	37	42,119	155	155	0	0	0.00	
1999#	37	42,119	158	155	3	18	0.08	
2000	59	39,535	185	180	5	16	0.08	

+ Law group split into groups A and B for 1999 valuation.

After benefit changes.

@ Revised actuarial assumptions.

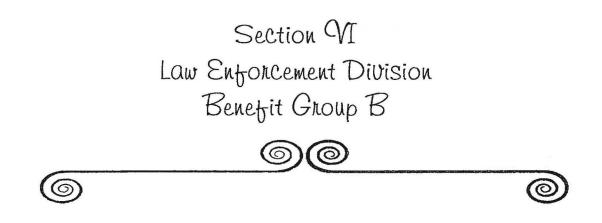
While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member 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 ENFORCEMENT DIVISION BENEFIT GROUP A MALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2000 BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Ye	ars of Ser	vice to Va	luation D	ate		Total	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	Payroll
15-19	1							1	\$19,061
20-24	43	2						45	1,249,519
25-29	140	71	3					214	7,185,250
30-34	85	145	42					272	10,217,616
35-39	37	62	71	23				193	7,757,692
40-44	20	35	53	40	30	0		178	7,200,052
45-49	8	17	30	40	64	29	1	189	8,636,378
						5			
50	3	6	5	4	3	9		30	1,361,735
51		3	3	7	4	10	1	28	1,316,673
52		3	4	6	6	7	3	29	1,329,321
53	1	3	2	3	3	7		19	859,393
54		2	4	2	6	7	2	23	1,063,397
									1,000
55		5	4	4	3	2		18	768,075
56	1	2		3	3	4		13	545,314
57				5	2	2	2	11	492,700
58		3	2	2	1	1	1	10	451,166
59			1	3	4		1	9	386,869
									а -
60	-	2	1	1	1	1	1	7	312,563
61		1	1		4	2	1	9	408,123
62	1			5				1	30,193
63		2				1	1	4	212,446
64	1			2			1	4	208,479
									ŕ
65	1	1					1	3	107,833
67					1		1	2	122,110
71	1	ŀ		1				2	53,590
								0.010	anaran 2000000 for
Totals	342	365	226	146	135	82	17	1,314	\$52,295,548

LAW ENFORCEMENT DIVISION BENEFIT GROUP A FEMALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2000 BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Ye	ars of Ser	vice to Va	luation D	ate		Total	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	Payroll
20-24	7							7	\$201,915
25-29	14	8				6		22	712,967
30-34	17	17	2	1				37	1,302,127
35-39	4	13	12	2				31	1,187,323
40-44	3	15	8	5	4			35	1,436,482
45-49	3	6	8	10	2	1		30	1,214,803
50				2	2			4	164,197
51		1	1					2	66,800
52	1			1	2			4	155,882
53				1		1		2	117,197
54					3			3	123,223
									and Andreas have
55		1		1	1			3	113,481
56				1				1	32,840
57			1		1			2	76,607
59				1				1	37,038
61					1			1	34,993
66					1			1	42,260
71	1							1	26,124
Totals	50	61	32	25	17	2		187	\$7,046,259



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

		Annual	Average				
Groups	Number	Payroll	Pay	Age	Service		
Men	5,828	\$238,430,002	\$40,911	39.5	12.1		
Women	716	27,145,527	37,913	38.5	10.3		
Totals	6,544	\$265,575,529	\$40,583	39.4	11.9		

Active Members in Valuation December 31, 2000

Also included in the valuation were 342 inactive members eligible for deferred retirement allowances or contribution refunds and 10 members active in the money purchase plan.

Retired Members in Valuation December 31, 2000

Fund / Type of Allowance	Number	Current Total \$	Actuarial Liabilities
A & PR Fund	<u> </u>		
Superannuation Retirement	1,024	\$1,858,244	\$271,466,681
Disability Retirement	773	1,578,375	221,858,661
Money Purchase	0	0	0
Total A & PR Fund	1,797	3,436,619	493,325,342
Total SBF	254	183,959	24,133,532
Grand Total	2,051	\$3,620,578	\$517,458,874

LAW ENFORCEMENT DIVISION BENEFIT GROUP B EMPLOYER CONTRIBUTIONS TO SUPPORT RETIREMENT ALLOWANCES EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL

	Contributions Cor	nputed December 31		
Contributions for	2000	1999		
Normal Cost				
Age and Service Allowances	14.56 %	14.39 %		
Disability Allowances	3.45 %	3.52 %		
Survivor's Benefits	0.85 %	0.88 %		
Separation Benefits	2.81 %	2.81 %		
Total Normal Cost	21.67 %	21.60 %		
(Member Current Contributions)	10.10 %	10.10 %		
Employer Normal Cost	11.57 %	11.50 %		
Unfunded Actuarial Accrued Liabilities				
Financing Years*	19	21		
Total	0.83 %	0.90 %		
Total Employer Contribution Rate	12.40 %	12.40 %		

* The period sufficient to produce an Employer Contribution Rate of 12.40% of payroll for retirement allowances and survivor benefits.

LAW ENFORCEMENT DIVISION BENEFIT GROUP B **COMPARATIVE STATEMENT**

	Act	tive Membe	rs in Valuat	tion	Total	Employer C	ontribution	is as % of F	ayroll
		A	nnual Payr	oll	Normal	Unfunded	Basic	Retiree	Grand
December 31	No.	Total	Average	Increase	Cost	Accrued	Total	Health	Total
		(Thou	sands)						
1990@	5,804	\$156,339	\$26,936	5.4 %	9.52 %	1.29 %	10.81 %	5.19 %	16.00 %
1991	6,088	169,008	27,761	3.1 %	9.32 %	1.49 %	10.81 %	5.89 %	16.70 %
1992	5,852	169,337	28,937	4.2 %	9.65 %	1.16 %	10.81 %	5.89 %	16.70 %
1993	6,032	182,576	30,268	4.6 %	9.53 %	1.28 %	10.81 %	5.89 %	16.70 %
1994	6,252	196,467	31,425	3.8 %	9.71 %	1.10 %	10.81 %	5.89 %	16.70 %
1995	6,605	214,273	32,441	3.2 %	9.69 %	1.12 %	10.81 %	5.89 %	16.70 %
1996@	6,742	229,138	33,987	4.8 %	10.50 %	0.74 %	11.24 %	5.46 %	16.70 %
1997	7,256	258,897	35,680	5.0 %	10.49 %	2.01 %	12.50 %	4.20 %	16.70 %
1998	7,507	277,239	36,931	3.5 %	10.48 %	2.02 %	12.50 %	4.20 %	16.70 %
1999+	6,877	261,596	38,039	3.0 %	10.70 %	1.70 %	12.40 %	4.30 %	16.70 %
1999#	6,877	261,596	38,039	3.0 %	11.50 %	0.90 %	12.40 %	4.30 %	16.70 %
2000	6,544	265,576	40,583	6.7 %	11.57 %	0.83 %	12.40 %	4.30 %	16.70 %

Law group split into groups A and B for 1999 valuation. After benefit changes. Revised actuarial assumptions. +

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a)

LAW ENFORCEMENT DIVISION BENEFIT GROUP B DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

		Allocation by Entry Age				
	(1)	(2)	(3)			
	Total	Portion	Actuarial			
	Actuarial	Covered By	Accrued			
	Present	Future Normal	Liabilities			
Actuarial Present Value December 31, of	Value	Cost Contributions	(1)-(2)			
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$ 493,325,342	\$ -	\$ 493,325,342			
Allowances currently being paid from the Survivors Benefit Fund	24,133,532	-	24,133,532			
Age and service allowances based on service rendered before and likely to be rendered after valuation date	1,229,332,379	400,994,258	828,338,121			
Disability allowances likely to be paid present active members who become permanently disabled	201,416,616	94,090,244	107,326,372			
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	49,814,685	22,591,530	27,223,155			
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	104,596,316	77,445,472	27,150,844			
Total	\$2,102,618,870	\$595,121,504	\$1,507,497,366			
Actuarial Value of Assets			1,474,770,471			
Unfunded Actuarial Accrued Liability			\$ 32,726,895			

LAW ENFORCEMENT DIVISION BENEFIT GROUP B Development of Unfunded Actuarial Accrued Liabilities Comparative Statement (\$ in Millions Except Averages)

				Active and Inactive Member Accrued Liabilities for Retirement Allowances						
	Active	Payroll	Computed	Valuation		Amort.	Unfunded			
Dec. 31	Total	Average	Total	Assets	Unfunded	Years	/Payroll			
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+	262	38,039	852	904	(52)	-	-			
1999#	262	38,039	922	883	39	21	0.15			
2000	266	40,583	990	957	33	19	0.12			

+ Law group split into groups A and B for 1999 valuation.

After benefit changes.

@ Revised actuarial assumptions.

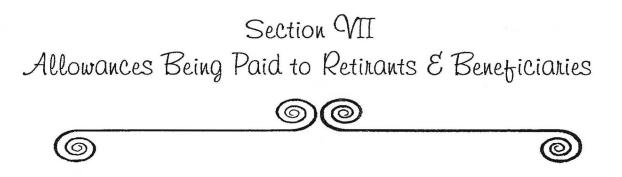
While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member 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 ENFORCEMENT DIVISION BENEFIT GROUP B MALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2000 BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Yea	ars of Ser	vice to Va	luation D	ate		Total	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	Payroll
20-24	170	3						173	4,044,063
25-29	556	264	4					824	26,813,828
30-34	321	613	205	2				1,141	43,479,503
35-39	123	260	378	166	5			932	38,785,072
40-44	70	127	189	318	180	4		888	39,655,500
45-49	59	66	109	203	318	122		877	40,190,160
50	5	11	21	29	43	49	4	162	7,702,882
51	6	13	8	17	36	41	4	125	6,014,408
52	8	9	14	11	30	40	15	127	5,971,583
53	2	8	8	18	14	27	9	86	4,290,407
54	9	15	5	18	24	32	8	111	4,692,372
			ľ						
55	4	8	5	9	11	14	3	54	2,377,528
56	2	4	13	5	8	7	8	47	2,086,673
57	1	2	9	9	11	4	9	45	2,234,070
58	2 2	2	4	8	9	8	10	43	1,909,038
59	2	3	2	7	6	11	6	37	1,716,636
60	2	1	3	4	5	11	7	33	1,545,160
61	1	1	2	11	12	5	1	33	1,447,874
62			6	10	4	5	1	26	1,237,251
63	1	2	7	3	2	1	1	17	637,499
64	2	4	1			2	2	11	402,618
	- 1								
65	3	1	1	2	2	3	1	13	448,735
66	1					1	1	3	118,801
67		1	1					2	10,610
68		1		2	1		2	6	221,741
69		1		1				2	71,362
70	2	2	1		1	1		7	208,565
71	1		1				1	3	116,063
Totals	1,353	1,422	997	853	722	388	93	5,828	\$238,430,002

LAW ENFORCEMENT DIVISION BENEFIT GROUP B FEMALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2000 BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date							Total	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	Payroll
20-24	30						s	30	\$698,417
25-29	86	34						120	3,798,193
30-34	40	63	15					110	4 502 706
		34		1	- 1		2	119	4,583,726
35-39	25		53	18	1			131	5,093,824
40-44	15	31	21	33	15	1	а – о	116	4,701,583
45-49	13	9	17	29	29	5		102	4,350,621
50		2		4	2	3		11	467,474
51	2	2	3	3	6	3		19	827,736
52	1	3	4	2	1	1		12	456,542
53	1	3	2	2	4		2	12	447,033
54		1	1		2	1	5	5	191,530
	ſ		_				()		
55	1		1	1	2		. 1	5	222,464
56			1	4	2			7	292,367
57			2	1	3	.B.		6	232,422
58			1	1	2	1		5	160,869
59	1					1		2	69,852
60	6	1	2	1	4			7	257,735
62		2	_					2	65,203
63		_			1			1	48,336
64				1	1			1	39,600
65	1			1				1	36,232
68					1		1	2	103,768
Totals	214	184	123	101	76	16	2	716	\$27,145,527



MONTHLY ALLOWANCES OF RETIRED LIVES BY YEAR OF RETIREMENT AS OF DECEMBER 31, 2000

Year of Retirement	No.	Initial	Post-Ret. Increase	Total	Average
2000	7,424	\$ 10,795,777	\$ O	\$ 10,795,777	\$1,454
1999	7,240	9,885,988	181,197	10,067,185	1,390
1998	7,331	9,160,630	337,674	9,498,304	1,296
1997	7,024	8,946,531	564,161	9,510,692	1,354
1996	6,917	8,189,509	738,065	8,927,574	1,291
1995	6,322	7,257,770	854,631	8,112,401	1,283
1994	5,596	5,487,735	792,879	6,280,614	1,122
1993	5,193	5,401,892	935,559	6,337,451	1,220
1992	5,863	5,806,518	1,216,611	7,023,129	1,198
1991	4,993	4,881,579	1,251,597	6,133,176	1,228
1985-1990	30,458	24,076,119	8,770,430	32,846,549	1,078
1980-1984	19,573	9,906,706	6,200,614	16,107,320	823
1975-1979	12,074	4,348,698	5,308,813	9,657,511	800
1970-1974	4,681	1,083,372	2,238,883	3,322,255	710
1965-1969	1,345	257,945	765,522	1,023,467	761
1960-1964	435	84,669	285,767	370,436	852
Before 1960	134	24,910	102,151	127,061	948
TOTAL	132,603	\$115,596,348	\$30,544,554	\$146,140,902	\$1,102 -

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

	Annual Allowances]	Ratio of	Ratio of
Valuation		\$	% of	Reported	Actuarial	Assets to	Active to
Date	No.	Millions	Payroll#	Assets*	Liabilities	Liabilities	Retired
06/30/1972	36,314	\$ 74	4.7 %	\$ 769	\$ 741	103.7 %	5.7
06/30/1973	38,940	83	4.9 %	871	831	104.7 %	5.5
06/30/1974	41,453	92	4.6 %	984	933	105.5 %	6.4
06/30/1975	45,197	115	5.4 %	1,162	1,111	104.7 %	5.2
06/30/1976	48,675	129	5.5 %	1,294	1,253	103.2 %	4.9
06/30/1977	52,240	150	5.6 %	1,513	1,478	102.3 %	5.2
06/30/1978	55,827	169	5.5 %	1,724	1,698	101.5 %	4.9
06/30/1979	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	1,426	15.0 % **	14,978	14,820	101.1 %	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

* 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 RETIRANTS AND BENEFICIARIES DECEMBER 31, 2000 TYPE OF BENEFIT, MONTHLY AMOUNT AND ACTUARIAL LIABILITIES

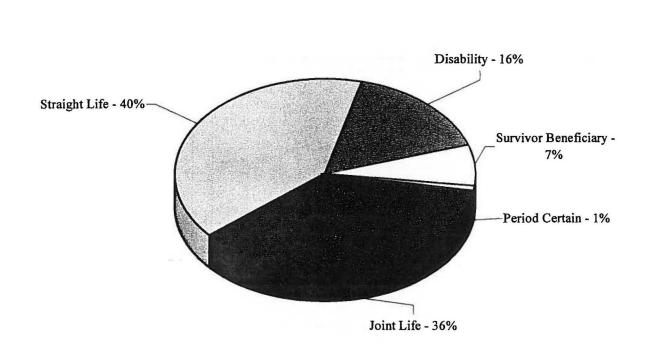
		%	of Current To	otal \$		· · · · · · · · · · · · · · · · · · ·
			Post-Retirement			
		Member	Initial	Pension	Current	Actuarial
Type of Allowance	Number	Annuities	Pensions	Increases	Total \$	Liabilities
	× -1					
Superannuation Retirement				2		
Plan A - Joint & 50%	15,581	26.7 %	54.8 %	18.5 %	\$ 21,937,280	\$ 2,874,761,779
Plan B - Straight Life	51,016	26.6 %	51.2 %	22.2 %	53,588,841	5,958,166,925
Plan C - Special Joint & Survivor	6,200	33.0 %	59.7 %	7.3 %	9,604,189	1,419,995,385
Plan D - Joint & 100%	14,276	26.6 %	55.9 %	17.5 %	18,342,682	2,803,074,409
Plan E - Life & 0 to 5 Years Guaranteed	349	23.1 %	48.8 %	28.1 %	351,213	35,345,089
- Life & 6 to 10 Years Guaranteed	504	22.8 %	48.1 %	29.1 %	527,184	51,707,470
- Life & 11 to 15 Years Guaranteed	760	20.9 %	46.8 %	32.3 %	793,261	75,684,137
- Life & 16 to 20 Years Guaranteed	21	25.1 %	53.4 %	21.5 %	32,293	3,968,773
Money Purchase	491	50.0 %	50.0 %	0.0 %	111,389	11,302,011
Survivor Beneficiary - Life Benefit	13,930	18.6 %	43.2 %	38.2 %	9,644,066	943,029,153
Survivor Beneficiary - Temporary Benefit	133	26.0 %	52.7 %	21.3 %	140,147	5,371,403
Total Superannuation	103,261				\$ 115,072,545	\$14,182,406,534
Disability Retirement	15,359	15.2 %	68.6 %	16.2 %	\$ 21,693,156	\$ 2,797,617,020
Total from A & PR	118,620	24.7 %	.55.2 %	20.1 %	\$136,765,701	\$16,980,023,554

ANNUITY AND PENSION RESERVE FUND RETIRANTS AND BENEFICIARIES DECEMBER 31, 2000 TYPE OF BENEFIT AND AMOUNT BY SEX OF RECIPIENT

· · · · · · · · · · · · · · · · · · ·	Men		W	omen	Total	
E.	Monthly			Monthly		Monthly
Type of Allowance	Number	Allowances	Number	Allowances	Number	Allowances
Superannuation Retirement						
Plan A - Joint & 50%	12,130	\$18,092,629	3,451	\$ 3,844,651	15,581	\$ 21,937,280
Plan B - Straight Life	15,653	19,789,481	35,363	33,799,360	51,016	53,588,841
Plan C - Special Joint & Survivor	3,049	5,815,159	3,151	3,789,030	6,200	9,604,189
Plan D - Joint & 100%	12,492	16,805,781	1,784	1,536,901	14,276	18,342,682
Plan E - Life & 0 to 5 Years Guaranteed	188	217,030	161	134,183	349	351,213
- Life & 6 to 10 Years Guaranteed	322	365,588	182	161,596	504	527,184
- Life & 11 to 15 Years Guaranteed	558	632,773	202	160,488	760	793,261
- Life & 16 to 20 Years Guaranteed	14	25,399	7	6,894	21	32,293
		8				
Money Purchase	359	94,039	132	17,350	491	111,389
Survivor Beneficiary - Life Benefit	700	346,969	13,230	9,297,097	13,930	9,644,066
Survivor Beneficiary - Temporary Benefit	27	31,334	106	108,813	133	140,147
Total Superannuation	45,492	\$62,216,182	57,769	\$52,856,363	103,261	\$ 115,072,545
Disability Retirement	8,172	\$ 12,771,626	7,187	\$ 8,921,530	15,359	\$ 21,693,156
Total from A & PR	53,664	\$74,987,808	64,956	\$61,777,893	118,620	\$136,765,701

ANNUITIES BEING PAID BY TYPE DECEMBER 31, 2000

Annuity and Pension Reserve Fund



ANNUITY AND PENSION RESERVE FUND RETIRANTS AND BENEFICIARIES DECEMBER 31, 2000 CURRENT MONTHLY TOTAL \$ BY ATTAINED AGES

	Super	rannuation	Di	sability]	fotals
Attained		Monthly		Monthly		Monthly
Ages	No.	Total \$	No.	Total \$	No.	Total \$
Under 20	11	\$ 6,354			11	\$ 6,354
20-24	7	3,483			7	3,483
25-29	7	2,746	16	22,846	23	25,592
30-34	14	6,546	130	203,815	144	210,361
35-39	32	13,583	548	944,684	580	958,267
40-44	63	43,786	1,232	2,108,980	1,295	2,152,766
45-49	375	695,602	2,148	3,700,817	2,523	4,396,419
50-54	2,737	6,396,783	2,683	4,452,797	5,420	10,849,580
55-59	4,620	10,252,019	2,673	3,790,482	7,293	14,042,501
60-64	12,037	16,974,543	2,390	2,959,295	14,427	19,933,838
65-69	17,603	21,291,272	1,420	1,595,241	19,023	22,886,513
70-74	19,844	21,336,738	1,051	1,025,205	20,895	22,361,943
75-79	18,720	17,510,486	672	589,642	19,392	18,100,128
80-84	13,871	10,805,557	304	242,975	14,175	11,048,532
85-89	7,635	5,295,986	77	48,587	7,712	5,344,573
90-94	2,871	2,113,092	13	6,259	2,884	2,119,351
95 & Over	687	502,486	2	1,531	689	504,017
Period						
Certain	2,127	1,821,483			2,127	1,821,483
Totals	103,261	\$115,072,545	15,359	\$21,693,156	118,620	\$136,765,701

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

Attained Age Group	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
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%	0.5%	0.5%	0.5%	0.5%	0.5%
40-49	3.2%	3.1%	2.9%	2.8%	2.7%	2.4%	2.1%	2.0%	1.9%	1.7%
50-59	10.7%	9.8%	9.2%	8.6%	7.9%	7.6%	7.2%	7.1%	6.9%	6.6%
60-69	28.2%	28.9%	29.1%	29.4%	29.9%	30.5%	30.9%	32.0%	32.8%	33.2%
70-79	34.0%	35.5%	36.3%	37.1%	37.7%	38.2%	38.6%	38.3%	38.5%	38.8%
80-89	18.5%	18.7%	18.6%	18.4%	18.2%	17.9%	17.8%	17.4%	16.8%	16.6%
90 & Over	3.0%	3.1%	3.0%	2.9%	2.8%	2.7%	2.7%	2.5%	2.4%	2.3%
Period Certain	1.8%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%
TOTALS	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average Age	71.2	71.4	71.5	71.6	71.6	71.8	71.4	71.8	71.7	71.7

STATE DIVISION Survivor Benefit Fund Tabulated by Type of Benefit Being Paid and Monthly Amount December 31, 2000

Group	Number	Current Total	Actuarial Liabilities						
S. 1 Surv	S-1 - Survivor Benefit to Beneficiary of Deceased Member								
5-1 - Sulv.		ivor Computation	eu member						
Men	95	\$ 76,572	\$ 7,759,119						
Women	902	937,109	103,776,362						
Totals	997	\$1,013,681	\$111,535,481						
S-2 - Survi	ivor Benefit to Be	neficiary of Decease	ed Member						
	Fixed Ra	ate Amount							
Widower - no child	352	\$219,926	\$ 25,889,527						
Widower - child	60	34,147	5,913,224						
Child's record	87	32,848	1,330,485						
Parent	2	1,640	132,142						
Other	0	0	0						
Subtotals - male	501	288,561	33,265,378						
Widower - no child	2,147	\$1,535,283	\$171,614,952						
Widower - child	235	148,568	28,450,893						
Child's record	330	154,717	8,484,187						
Parent	4	2,762	282,234						
Other	0	0	0						
Subtotals - female	2,716	1,841,330	208,832,266						
Child only	204	113,799	6,605,361						
Totals	3,421	\$2,243,690	\$248,703,005						
Total Be	nefits Being Paid	from Survivor Ben	efit Fund						
Men	596	365,133	41,024,497						
Women	3,618	2,778,439	312,608,628						
Children	204	113,799	6,605,361						
Totals	4,418	\$3,257,371	\$360,238,486						

LOCAL GOVERNMENT DIVISION Survivor Benefit Fund Tabulated by Type of Benefit Being Paid and Monthly Amount December 31, 2000

Group	Number	Current Total	Actuarial Liabilities						
S. 1. Survivor Donofit to Donoficiary of Desegoed Member									
S-1 - Survivor Benefit to Beneficiary of Deceased Member									
Joint and Survivor Computation									
Men	124	\$ 86,452	\$ 8,222,945						
Women	1,634	1,458,289	165,363,043						
Totals	1,758	\$1,544,741	\$173,585,988						
S-2 - Survi	vor Benefit to Be	neficiary of Decease	ed Member						
	Fixed Ra	ate Amount							
Widower - no child	608	\$ 307,362	\$ 34,171,005						
Widower - child	85	38,064	6,472,244						
Child's record	118	34,871	1,747,799						
Parent	1	757	61,100						
Other	0	0	0						
Subtotals - male	812	381,054	42,452,148						
Widower - no child	4,541	\$2,911,787	\$325,369,313						
Widower - child	490	266,402	50,381,948						
Child's record	712	302,795	19,098,526						
Parent	5	4,046	367,650						
Subtotals - female	5,748	3,485,030	395,217,437						
Child only	341	183,550	11,172,884						
Totals	6,901	\$4,049,634	\$448,842,469						
Total Ber	nefits Being Paid	from Survivor Ben	efit Fund						
Men	026	167 506	50,675,093						
	936	467,506 4,943,319	560,580,480						
Women	7,382	4,943,319 183,550							
Children	341	the second s	11,172,884						
Totals	8,659	\$5,594,375	\$622,428,457						

LAW ENFORCEMENT GROUP B DIVISION SURVIVOR BENEFIT FUND TABULATED BY TYPE OF BENEFIT BEING PAID AND MONTHLY AMOUNT DECEMBER 31, 2000

Group	Number Current Total Actuarial Liabilitie									
C. 1. Summing Donald to Donald in a Donald March of										
S-1 - Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation										
Some and Survivor Computation										
Men	0	\$	0		\$	0				
Women	45		62,548		8,922,6	54				
Totals	45	\$	62,548		\$8,922,6	54				
S-2 - Surv	ivor Benefit to Be	neficiary	of Decease	ed Membe	er					
	Fixed Ra	te Amou	nt							
Widower - no child	1	\$	737	\$	134,3	21				
Widower - child	2		1,454		261,2					
Child's record	3		1,448		104,2					
Other	0		0		100	0				
Subtotals - male	6		3,639		499,7	77				
Widower - no child	77	\$	52,210		\$ 7,902,3	02				
Widower - child	36		22,828		4,497,2	98				
Child's record	61		24,079		1,161,1	03				
Other	1		612		65,2	31				
Subtotals - female	175		99,729		13,625,9	34				
Child only	14		8,653		292,9	30				
Totals	195	\$	112,021		\$14,418,6	41				
Total Be	nefits Being Paid	from Sur	vivor Ben	efit Fund						
Men	6		3,639		499,7	77				
Women	220		162,277		22,548,5					
Children	14		8,653		292,9					
Totals	240	\$	174,569		\$23,341,2					

STATE DIVISION DEFERRED SURVIVOR BENEFICIARIES TABULATED BY SEX AND DEFERRED AGE DECEMBER 31, 2000

Group	Number	Current Total	Actuarial Liabilities
Widowers			
Deferred to age 50	3	\$ 1,665	\$ 180,192
Deferred to age 62	55	28,208	1,861,211
Deferred to age 65	8	1,819	85,520
Total	66	31,692	2,126,923
Widows			
Deferred to age 50	14	10,876	1,580,215
Deferred to age 62	122	70,230	6,377,641
Deferred to age 65	2	575	77,504
Total	138	81,681	8,035,360
Totals	204	\$113,373	\$10,162,283

LOCAL GOVERNMENT DIVISION DEFERRED SURVIVOR BENEFICIARIES TABULATED BY SEX AND DEFERRED AGE DECEMBER 31, 2000

Group	Number	Current Total	Actuarial Liabilities
Widowers			
Deferred to age 50	1	\$ 507	\$ 84,550
Deferred to age 62	71	29,489	1,906,089
Deferred to age 65	8	1,114	112,464
Total	80	31,110	2,103,103
Widows			
Deferred to age 50	29	22,979	3,271,857
Deferred to age 62	337	171,782	15,011,572
Deferred to age 65	2	252	27,981
Total	368	195,013	18,311,410
Totals	448	\$226,123	\$20,414,513

LAW ENFORCEMENT DIVISION BENEFIT GROUP B DEFERRED SURVIVOR BENEFICIARIES TABULATED BY SEX AND DEFERRED AGE DECEMBER 31, 2000

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	14	9,390	792,238
Total	14	9,390	792,238
Totals	14	\$9,390	\$792,238

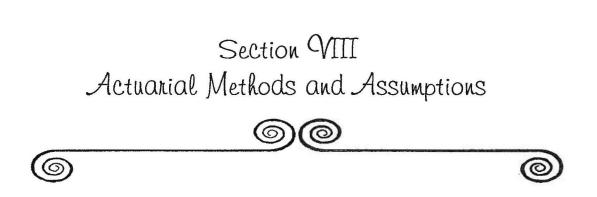
SURVIVOR BENEFIT FUND REPORTED ASSETS AND LIABILITIES DIVISIONS COMBINED

		Monthly A	llowances		\$ Mil	lions	Ratio of
Valuation	Cu	irrent	De	ferred	Reported	Actuarial	Assets to
Date	No.	Amount	No.	Amount	Assets	Liabilities	Liabilities
06/30/1972	6,102	\$ 891,467	1,012	\$ 96,003	\$ 144.7	\$ 127.0	114 %
06/30/1973	6,477	1,053,363	1,009	99,678	164.6	146.3	113 %
06/30/1974	6,826	1,136,949	1,037	106,479	181.7	157.5	115 %
06/30/1975	7,346	1,422,944	1,054	113,690	205.3	177.9	115 %
06/30/1976	7,847	1,557,217	991	118,986	224.8	189.4	119 %
06/30/1977	8,153	1,659,897	1,003	125,094	257.0	204.6	126 %
06/30/1978	8,559	1,799,580	1,004	135,944	301.2	224.5	134 %
06/30/1979	8,824	1,914,251	1,039	146,549	355.2	245.1	145 %
12/31/1979	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 %
12/13/1998	13,079	6,337,739	1,060	500,514	780.2	779.6	100 %
12/31/1999+	13,236	6,609,854	989	486,262	801.4	803.9	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 %

@ Revised actuarial assumptions.

- * Benefits increased.
- # After benefit changes.

+ Reported asset amounts include accrued transfers.



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

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.

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

The actuarial assumptions used in the valuation are shown in this Section. Both the economic and decrement assumptions were established following the December 31, 1995 actuarial valuations.

ECONOMIC ASSUMPTIONS

The investment return rate used in making the valuations was 7.75% 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 7.75% investment return rate translates to an assumed real rate of return of 3.00%.

Pay increase assumptions for individual active members are shown for sample ages on pages VIII-4, VIII-5, & VIII-6. Part of the assumption for each age is for merit and/or seniority increase, and the other 4.75% recognizes wage inflation and overall productivity increases.

Price Inflation is assumed to persist at a level that will result in payment of the maximum post retirement increase in each future year.

The active member payroll is assumed to increase 4.75% annually, which is the portion of the individual pay increase assumptions attributable to wage inflation and overall productivity increases.

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

NON-ECONOMIC ASSUMPTIONS

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 VIII-7. The mortality rates for disability allowances were the same as those for age and service retirees 10 years older.

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

The probabilities of withdrawal from service, disability and death-in-service are shown for sample ages on pages VIII-4, VIII-5 & VIII-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 enforcement members).

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 2% 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 Enforcement accrued liabilities are reduced approximately 1.5% to recognize the fact that total service reported is not entirely Law Enforcement service,
- reported accumulated contributions (which exclude credited interest) are adjusted for interest crediting using factors based upon historical crediting interest rates and assumed pay increases.

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.

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									
	St	ate	T T	Local Government						
Ages	Men Women		Men	Women	Enforcement					
50-54	15%	20%	23%	20%	25%					
55-58	15%	20%	23%	20%	20%					
59	18%	21%	20%	20%	20%					
60	20%	22%	25%	25%	15%					
61	21%	25%	25%	28%	15%					
62	22%	30%	27%	30%	15%					
63	25%	30%	28%	30%	15%					
64	25%	30%	30%	30%	15%					
65	25%	25%	25%	25%	30%					
66	25%	20%	25%	25%	30%					
67	25%	20%	20%	20%	25%					
68	25%	20%	20%	20%	25%					
69-79	25%	20%	20%	20%	30%					
80	100%	100%	100%	100%	100%					
Ref	505	506	507	508	511					

Probabilities of Normal Age and Service Retirement

* For Law Benefit Group B, the rates from 48 to 50 are 25%, and the rates for 68 and up are 100%

Probabilities of Early Retirement

		Percent of Eligible Active Members Retiring Within Next Year									
	Sta	ate	Local Go	vernment	Law						
Ages	Men	Women	Men	Women	Enforcement						
48					3%						
49					3%						
50					7%						
51					7%						
55	15%	18%	10%	12%							
56	15%	18%	10%	12%							
57	15%	18%	10%	12%							
58	15%	18%	10%	12%							
59	15%	18%	10%	12%							
60	12%	15%	12%	13%							
61	12%	15%	12%	13%							
62	12%	15%	15%	13%							
63	15%	15%	15%	13%							
64	18%	18%	15%	13%							
Ref	503	504	509	510	515						

SIATE

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

					tive Membe		·····		rease Assu ndividual H	-
Sample	Years of	De		withdrawal Disability			Merit &	Base	Increase	
Ages	Service	Men	Women	Men	Women	Men	Women			Next Year
M							<u> </u>		<u>`````````````````````````````````````</u>	
	0			39.00%	35.00%					
	1			17.00%	17.00%					
	2			13.00%	14.00%					
	3			9.00%	10.00%					
	4			6.50%	8.00%					
25	5 & Over	0.04%	0.02%	6.20%	7.30%	0.07%	0.06%	3.86%	4.75%	8.61%
30		0.05%	0.03%	5.16%	6.66%	0.08%	0.06%	2.62%	4.75%	7.37%
35		0.07%	0.04%	4.18%	5.20%	0.16%	0.11%	2.06%	4.75%	6.81%
40		0.11%	0.06%	3.36%	4.00%	0.27%	0.21%	1.66%	4.75%	6.41%
45		0.19%	0.08%	2.64%	3.36%	0.46%	0.37%	1.20%	4.75%	5.95%
50		0.34%	0.13%	2.28%	2.90%	0.75%	0.69%	0.88%	4.75%	5.63%
55		0.55%	0.19%	2.08%	2.52%	1.26%	0.94%	0.68%	4.75%	5.43%
60		0.84%	0.32%	0.60%	0.70%	2.06%	1.50%	0.54%	4.75%	5.29%
Ref		#68x0.7sb0	#69x0.7sb0	183	184	#191x1	#120x1	148		
				#324x1	#325x1					<u> </u>

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

		Percent of Active Members					Pay Increase Assumptions				
Commle	Variat	Separating Within the Next YearDeathWithdrawalDisability					For An Individual Employee Merit & Base Increase				
Sample	Years of						Disability		Base	Increase	
Ages	Service	Men	Women	Men	Women	Men	Women	Seniority	(Economy)) Next Year	
	0			36.00%	34.50%						
	1			17.00%	18.00%						
	2			13.00%	14.00%						
	3			10.00%	11.00%						
	4			8.00%	9.00%						
25	5 & Over	0.04%	0.02%	6.80%	8.40%	0.07%	0.06%	3.86%	4.75%	8.61%	
30		0.05%	0.03%	5.40%	7.28%	0.11%	0.09%	2.62%	4.75%	7.37%	
35		0.07%	0.04%	4.40%	5.72%	0.25%	0.15%	2.06%	4.75%	6.81%	
40		0.11%	0.06%	3.52%	4.40%	0.39%	0.26%	1.66%	4.75%	6.41%	
45		0.19%	0.08%	3.08%	3.76%	0.62%	0.39%	1.20%	4.75%	5.95%	
50		0.34%	0.13%	2.82%	3.36%	0.95%	0.63%	0.88%	4.75%	5.63%	
55		0.55%	0.19%	2.58%	2.96%	1.46%	0.97%	0.68%	4.75%	5.43%	
60		0.84%	0.32%	0.60%	0.80%	1.88%	1.70%	0.54%	4.75%	5.29%	
Ref		#68x0.7sb0	#69x0.7sb0	185	186	#192x1	#193x1	148			
				#326x1	#327x1				I	<u> </u>	

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

LAW ENFORCEMENT

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

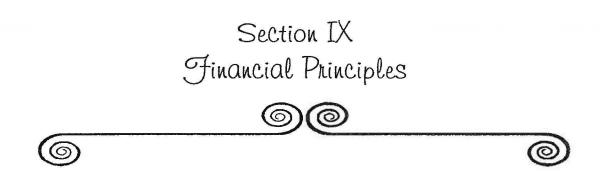
				ent of Active Member ing Within the Next Y	Pay Increase Assumptions For An Individual Employee				
Sample	Years of	De	ath	Withdrawal	Disability	Merit &	Base	Increase	
Ages	Service	Men	Women	Men & Women	Men & Women	Seniority	(Economy)	Next Year	
	0			18.00%					
	1			10.00%					
	2			8.00%					
	3			7.00%					
	4			6.00%					
			1						
25	5 & Over	0.04%	0.02%	4.80%	0.20%	5.10%	4.75%	9.85%	
30		0.05%	0.03%	3.52%	0.26%	3.10%	4.75%	7.85%	
35		0.07%	0.04%	2.78%	0.42%	2.10%	4.75%	6.85%	
40		0.11%	0.06%	2.32%	0.62%	1.70%	4.75%	6.45%	
45		0.19%	0.08%	1.96%	1.06%	1.35%	4.75%	6.10%	
50		0.34%	0.13%	1.62%	1.54%	1.14%	4.75%	5.89%	
55		0.55%	0.19%	1.60%	2.12%	1.00%	4.75%	5.75%	
60		0.84%	0.32%	0.50%	2.76%	0.70%	4.75%	5.45%	
Ref		0.7 * 68	0.7 * 69	187	194	150			
				328		<u> </u>	l	L]	

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

Sample Attained	Monthly Increasing 3.	Yalue of \$1 7 for Life 0% Annually e After 1 Year)	Future Life Expectancy (years)			
Ages	Males	Females	Males	Females		
50	\$169.73	\$186.48	28.55	34.58		
55	156.48	175.64	24.26	29.89		
60	141.12	162.15	20.19	25.31		
65	123.82	146.02	16.40	20.92		
70	105.70	127.19	13.02	16.76		
75	88.21	106.96	10.17	13.03		
80	71.30	87.22	7.75	9.89		
Ref:	:#68x0.9sb0	:#69x0.9sb0				

Single Life Retirement Values

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FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES OF PERS

Promises Made, and To Be Paid For. As each year is completed, PERS in effect hands an "IOU" to each member then acquiring a year of service credit --- the "IOU" says: "The Public Employees Retirement System of Ohio 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 PERS 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* 3^{rd} *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 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:

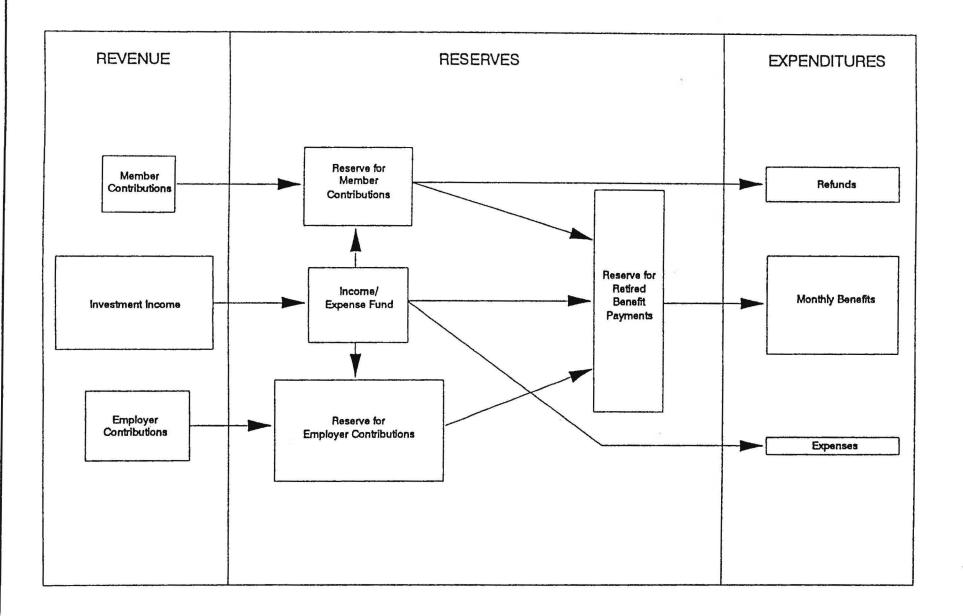
A. Census Data, including:

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
- $G_{\cdot} = Determination of:$

Plan Financial Position; and/or New Employer Contribution Rate

Flow of Money Through the Retirement System



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."

"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.



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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 PERS benefits for compliance with GASB Statement No. 25. Assets and liabilities related to postemployment 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
1987	\$16,231	\$11,975	\$4,256	74 %	\$4,543	94 %
1987	17,246	13,249	3,997	77 %	5,307	75 %
1988	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 %

* Revised actuarial assumptions.

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%

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

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

	December 31, 2000						
	State	Local	Law A		Law B		
	Group	Group		Group		Group	Total
Accrued Liabilities							
Active and Inactive Members	\$ 11,273,322,938	\$ 15,881,311,678	\$	185,378,211	\$	990,038,492	\$ 28,330,051,319
Retirees and Beneficiaries	7,519,311,529	9,980,630,420		0		517,458,874	18,017,400,823
Total Accrued Liabilities	\$ 18,792,634,467	\$ 25,861,942,098	\$	185,378,211	\$	1,507,497,366	\$ 46,347,452,142
Assets							
Active and Inactive Members							
EAF*	\$ 6,829,005,505	\$ 9,410,207,681	\$	119,856,683	\$	604,518,937	\$ 16,963,588,806
ESF	2,930,913,793	4,259,900,889		43,099,874		213,781,943	7,447,696,499
MVA	1,798,226,247	2,461,300,509		16,958,669		139,010,716	4,415,496,141
Total Active and Inactive Assets	11,558,145,545	16,131,409,079		179,915,226		957,311,596	28,826,781,446
Retirees and Beneficiaries							
A & PR Fund*	7,148,910,760	9,337,787,452		0		493,325,342	16,980,023,554
SBF Fund*	370,400,769	642,842,970		0		24,133,533	1,037,377,272
Total R&B Assets	7,519,311,529	9,980,630,422		0		517,458,875	18,017,400,826
Total Assets	\$ 19,077,457,074	\$ 26,112,039,501	\$	179,915,226	\$	1,474,770,471	\$ 46,844,182,272
Unfunded Actuarial Accrued Liability	\$ (284,822,607)	\$ (250,097,403)	\$	5,462,985	\$	32,726,895	\$ (496,730,130)

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

After reserve transfers

