

SUMMARY OF ASSUMPTIONS USED FOR DPFERS ACTUARIAL VALUATIONS

*assumptions adopted by board of trustees
after consulting with actuary*

ECONOMIC ASSUMPTIONS

THE INVESTMENT RETURN RATE used in the valuation was 7.8% per year, compounded annually (net after administrative expenses). The real rate of return is the portion of total investment return which is more than the inflation rate. Considering other financial assumptions, the 7.8% total investment return rate translates to an assumed real rate of return of 3%.

PAY INCREASE ASSUMPTIONS for individual active members have been calculated. Part of the assumption for each age is for a merit and/or seniority increase, and the other 4.8% recognizes inflation.

TOTAL ACTIVE MEMBER PAYROLL is assumed to increase 4.8% annually, which is the portion of the individual pay increase assumptions attributable to wage inflation.

NON-ECONOMIC ASSUMPTIONS

THE NUMBER OF ACTIVE MEMBERS is assumed to continue at the present number.

THE MORTALITY TABLE used to measure retired life mortality was 90% of the 1983 Group Annuity Mortality Table. This table was first used for the June 30, 1998 valuation.

THE PROBABILITIES OF AGE/SERVICE RETIREMENT for members eligible to retire have been calculated. These probabilities were last revised for the June 30, 2003 valuation.

THE PROBABILITIES OF SEPARATION from service (including death-in-service) are shown for sample ages. These probabilities were revised for the June 30, 2003 valuation.

FUNDING METHODS

THE ENTRY AGE ACTUARIAL COST METHOD was used in determining age and service liabilities and normal cost, vesting liabilities and normal cost, and casualty liabilities and normal cost.

DIFFERENCES BETWEEN ASSUMED EXPERIENCE AND ACTUAL EXPERIENCE (“actuarial gains and losses”) become part of actuarial accrued liabilities.

UNFUNDED ACTUARIAL ACCRUED LIABILITIES, IF ANY, are amortized over periods of future years to produce contribution amounts (principal and interest) which are level percent of payroll contributions.

EMPLOYER CONTRIBUTION DOLLARS were assumed to be paid in a single sum on the last day of the employer fiscal year. (Adopted for the 6/30/79 actuarial valuation.)

VALUATION ASSETS recognize investment return above or below the actuarial assumed rate over a three-year period. (Adopted for the 6/30/95 actuarial valuation.)

THE EFFECT OF CHANGES IN ELIGIBILITY FOR NORMAL RETIREMENT DUE TO SERVICE PURCHASES was approximated by increasing computed actuarial accrued liabilities by 5%. In addition, active member accrued liabilities were increased by 2% to approximate the effect of incomplete service data.

THE DATA ABOUT PERSONS NOW COVERED AND ABOUT PRESENT ASSETS were furnished by the System’s administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.

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

2006 - 2007 FISCAL YEAR
**EMPLOYER CONTRIBUTION RATE
 COMPUTED PAYABLE LAST DAY OF FISCAL YEAR**

expressed as percents of active member payroll

CONTRIBUTIONS FOR	CONTRIBUTIONS EXPRESSED AS PERCENTS OF PAYROLL
NORMAL COST	
Age & Service Allowances	22.74%
Disability Allowances	5.64%
Death-in-Service Allowances	0.49%
TOTAL	28.87%
Members Current Contributions:#	4.18%
(Future Refunds)	(0.35)%
Available for Monthly Benefits	3.83%
EMPLOYER NORMAL COST	25.04%
Actuarial Accrued Liabilities	
Total (\$ Millions)	\$3,780.40
Funding Value of Assets	3,757.90
Unfunded Actuarial Accrued Liabilities	
- Dollars (Millions)	22.5
- Amortization Percent	0.48%
COMPUTED EMPLOYER RATE	25.52%
POC portion	##
Remaining Employer Rate	25.52%

Member statutory contributions of 5% to Annuity Savings Fund are not payable during all periods of covered employment. The rate shown is the equivalent rate if paid during all covered employment.

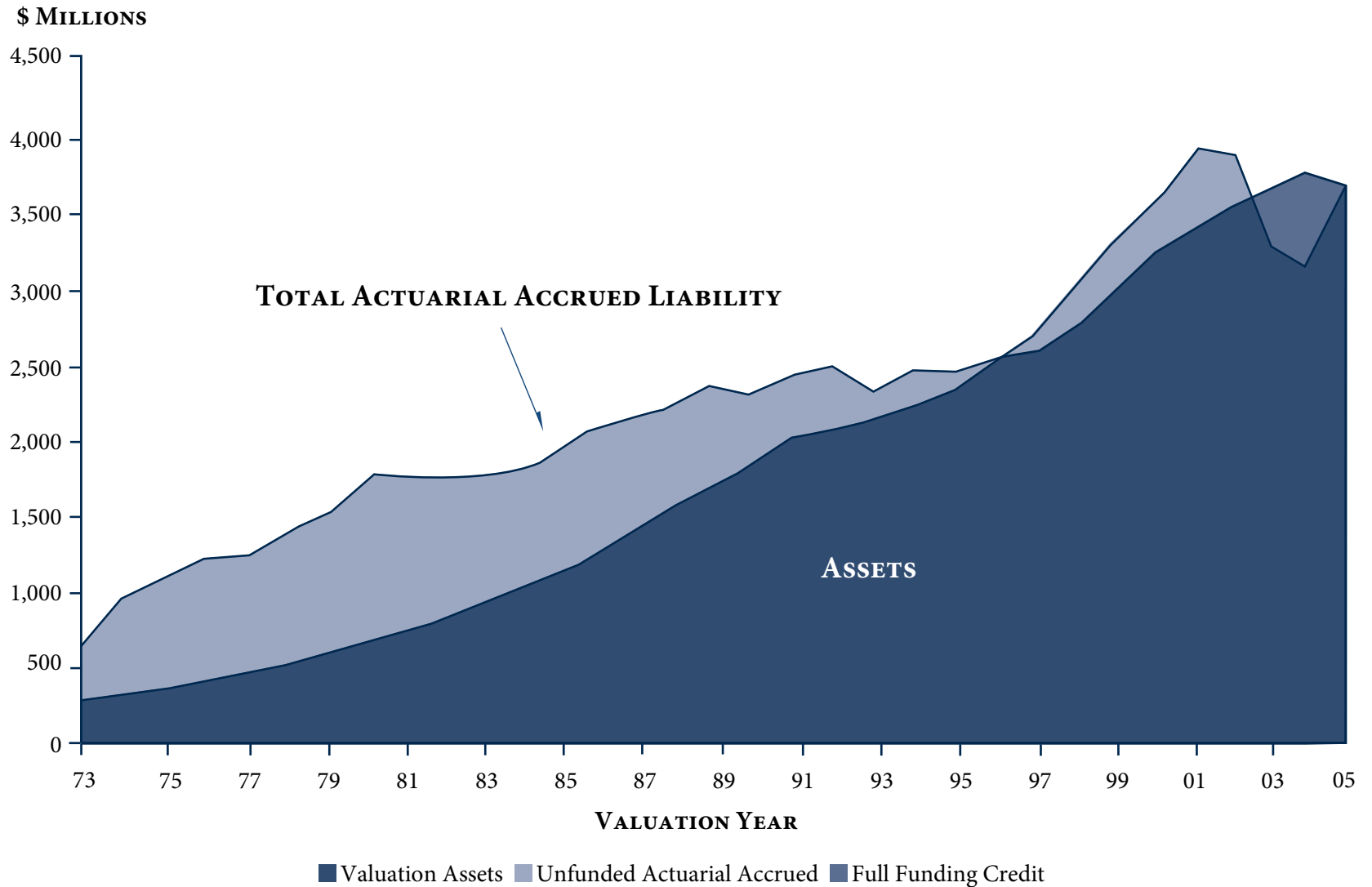
In FY2006, a specific portion of the POC proceeds operated to reduce the FY 2006 employer contribution rate. In FY 2007, the entire POC proceeds operate to reduce the UAAL.

JUNE 30, 2005

ACTUARIAL ACCRUED LIABILITIES

PRESENT VALUE, JUNE 30	AMOUNT
ACCRUED PENSION LIABILITIES	
Retirees and Beneficiaries.....	\$ 2,532,219,410
Inactive Members Future Deferred Pensions	4,359,267
Active Members	953,272,489
Total Accrued Pension Liabilities	3,489,851,166
Pension Fund Balances	3,467,297,763
Unfunded Accrued Pension Liabilities	\$ 22,553,403
ACCRUED ANNUITY LIABILITIES	
Retirees and Beneficiaries	
Future Annuities	\$ 7,707,280
Contingency Reserve	3,522,027
Total	\$ 11,229,307
Members Annuities and Future Refunds	279,366,941
Total Accrued Annuity Liabilities	290,596,248
Annuity Fund Balances	290,596,248
Unfunded Accrued Annuity Liabilities	\$ 0
SYSTEM TOTALS	
ACTUARIAL ACCRUED LIABILITIES	\$ 3,780,447,414
ACCRUED ASSETS	3,757,894,011
UNFUNDED ACTUARIAL ACCRUED LIABILITIES	\$ 22,553,403

RETIREMENT SYSTEM TOTALS
ASSETS AND ACCRUED LIABILITIES



COMPARATIVE STATEMENT

ACTUARIAL ACCRUED LIABILITIES
\$ IN MILLIONS

JUNE 30	ACTIVE PAYROLL		COMPUTED TOTAL	VALUATION ASSETS	UNFUNDED	UNFUNDED/ ACTIVE PAYS	EMPLOYER CONTRIBUTIONS % OF PAYS
	TOTAL	AVERAGE					
1995(a)	\$209.7	\$39,692	\$2,574.2	\$2,443.0	\$131.2	0.6	25.90%
1996	212.7	39,965	2,633.4	2,628.6	4.8	0.0	21.81
1997(b)	217.6	40,145	2,724.1	2,944.2	(220.1)	0.0	7.32
1998*	217.5	40,772	2,976.8	3,325.9	(349.1)	0.0	26.16#
1999@	216.0	40,542	3,724.1	3,668.4	(394.3)	0.0	26.17#
2000*	237.7	43,376	3,342.1	3,964.2	(622.1)	0.0	27.25#
2001	253.3	45,353	3,463.2	3,900.0	(436.8)	0.0	27.22#
2002(a)	248.7	46,203	3,632.0	3,635.1	(3.1)	0.0	23.39#
2003	248.7	47,305	3,721.6	3,205.5	(516.1)	2.1	43.89
2004	258.7	51,126	3,857.5	3,074.5	783.0	3.0	54.36
2005	\$250.5	\$52,197	\$3,780.4	\$3,757.9	\$22.5	0.1	25.52%

(a) After changes in actuarial assumptions.

(b) After changes in actuarial assumptions and temporary full funding credit.

* Plan amended.

Employer normal cost before full funding credit.

@ After \$55.4 million reserve for 1998-99 13th check and ASF distributions.

In an inflationary economy the value of dollars is decreasing. This environment results in employee pays increasing in dollar amounts, retirement benefits increasing in dollar amounts, and then, unfunded accrued liabilities increasing in dollar amounts, all at a time when the actual substance of these items may be decreasing. Looking at just the dollar amounts of unfunded accrued liabilities can be misleading. Unfunded accrued liabilities dollars divided by active employee payroll provides an index which helps understanding. **The smaller the ratio of unfunded liabilities to active member payroll, the stronger the system.** Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

SOLVENCY TESTS

The PFRS funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due – the ultimate test of financial soundness. Testing for level contribution rates is the **long-term solvency test**.

A **short-term solvency test** is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's present assets (cash and investments) are compared with:

- 1) Active member contributions on deposit;
- 2) The liabilities for future benefits to present retired lives;
- 3) The liabilities for service already rendered by active members.

In a system that has been following the discipline of level percent-of-payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) will often be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the System.

SHORT-TERM SOLVENCY TEST 5-YEAR COMPARATIVE STATEMENT (\$ MILLIONS)

JUNE 30	ACTUARIAL ACCRUED LIABILITIES			ASSETS	PORTION OF ACCRUED LIABILITIES COVERED BY ASSETS			
	(1) ACTIVE MEMBER CONTR.	(2) RETIREEES AND BENEF.	(3) PRESENT MEMBERS (EMPLOYER FINANCED PORTION)		(1)	(2)	(3)	TOTAL
2001	\$365	\$2,255	\$843	\$3,900	100%	100%	152%	113%
2002(a)	391	2,299	942	3,635	100	100	100	100
2003	341	2,400	980	3,206	100	100	47	86
2004	303	2,516	1,038	3,075	100	100	25	80
2005	\$279	\$2,543	\$958	\$3,758	100%	100%	98%	99%

(a) After changes in actuarial assumptions.

**GASB STATEMENT 25 REQUIRED
SUPPLEMENTARY INFORMATION**

SCHEDULE OF FUNDING PROGRESS

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS (a)	ACTUARIAL ACCRUED LIABILITY (AAL) -ENTRY AGE (b)	UNFUNDED AAL (UAAL) (b-a)	FUNDED RATIO (a/b)	COVERED PAYROLL (c)	UAAL AS A % OF COVERED PAYROLL ((b-a)/c)
1993#	\$2,255,955,423	\$2,493,225,379	\$237,269,956	90.5%	\$204,289,195	116.1%
1994	\$2,304,360,431	\$2,486,218,878	\$181,858,447	92.7%	\$199,734,550	91.1%
1995#	\$2,443,016,319	\$2,574,189,310	\$131,172,991	94.9%	\$209,733,734	62.5%
1996	\$2,628,627,790	\$2,633,394,644	\$4,766,854	99.8%	\$212,656,401	2.2%
1997#	\$2,944,208,105	\$2,820,330,323	(\$123,877,782)	104.4%	\$217,585,229	-
1998#*	\$3,325,929,721	\$2,976,770,662	(\$349,159,059)	111.7%	\$217,479,443	-
1999	\$3,668,362,979	\$3,274,050,127	(\$394,312,852)	112.0%	\$216,049,687	-
2000*	\$3,964,231,470	\$3,342,123,550	(\$662,107,920)	118.6%	\$237,741,560	-
2001	\$3,900,020,703	\$3,463,248,393	(\$436,772,310)	112.6%	\$253,297,027	-
2002#	\$3,635,106,581	\$3,631,971,488	(\$3,135,133)	100.1%	\$248,663,133	-
2003	\$3,205,516,657	\$3,721,593,210	\$516,076,553	86.1%	\$248,681,461	207.5%
2004	\$3,074,516,589	\$3,857,493,282	\$782,976,693	79.7%	\$258,699,581	302.7%
2005@	\$3,757,894,011	\$3,780,447,414	\$22,553,403	99.4%	\$250,491,872	9.0%

* Plan amended.

After changes in actuarial assumptions.

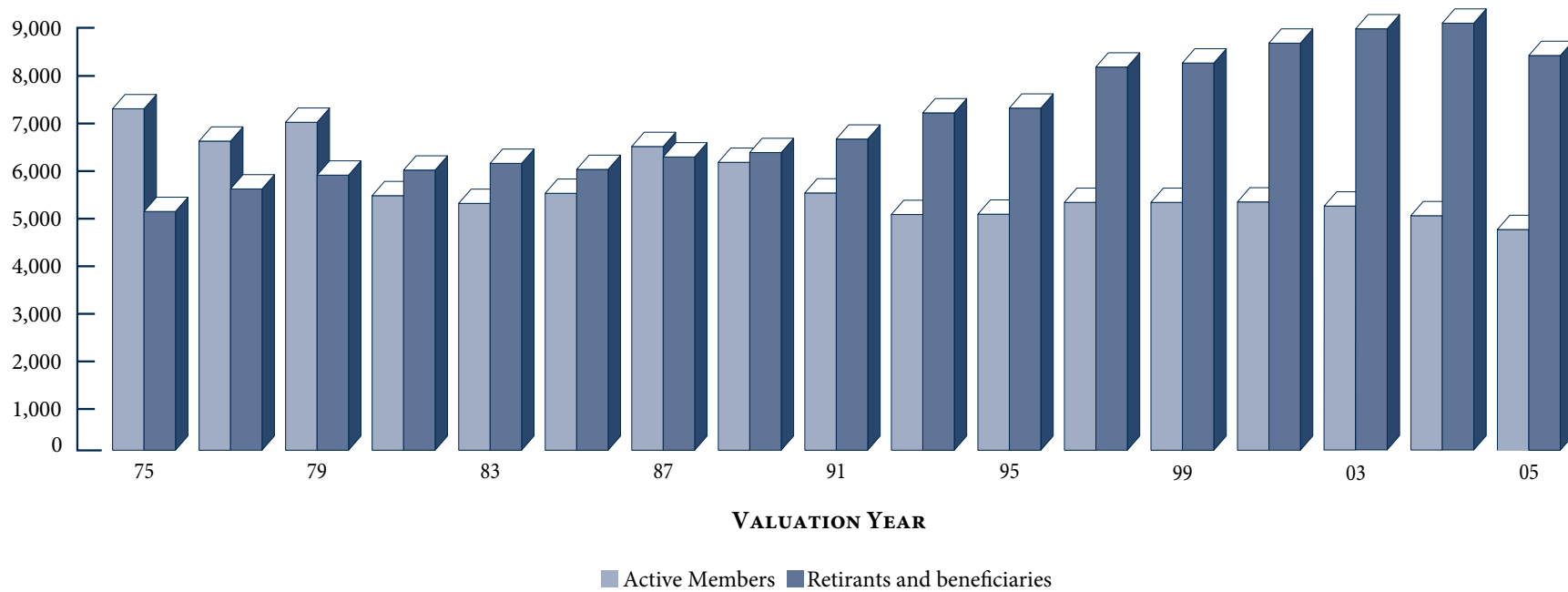
@ After POC Transfer.

**COMPARATIVE STATEMENTS OF
ANNUAL RETIREMENT ALLOWANCES**

being paid to retirants and beneficiaries

JUNE 30	NO. RETIRED		% OF CURRENT ALLOWANCES			CURRENT ALLOWANCES	
	PRE-1969	TOTAL	ANNUITIES	PENSIONS	ESCALATORS	TOTAL	AVERAGE
1995	5,161	7,311	0.9%	61.3%	37.8%	\$138,959,417	\$19,007
1996	5,049	7,469	0.8	62.6	36.6	143,536,485	19,218
1997	5,012	7,743	0.8	63.3	35.9	150,843,744	19,481
1998	4,719	7,750	0.7	65.8	33.5	154,226,437	19,900
1999	4,573	7,883	0.7	68.4	30.9	158,523,816	20,110
2000	4,498	8,079	0.6	70.0	29.4	164,279,376	20,334
2001	4,394	8,166	0.6	67.4	32.0	180,239,652	22,072
2002	4,229	8,179	0.5	68.4	31.1	185,658,396	22,699
2003	4,104	8,277	0.5	69.8	29.7	191,634,636	23,153
2004	3,961	8,328	0.4	68.5	31.1	203,083,524	24,386
2005	3,791	8,376	0.4%	69.5%	30.1%	\$211,114,020	\$25,205

RETIREMENT SYSTEM TOTALS
ACTIVE AND RETIRED MEMBERS



RETIREMENT SYSTEM TOTALS
ACTIVE AND RETIRED MEMBERS

JUNE 30	NO. MEMBERS		TOTAL MEMBERS					AVERAGE PAY	
	1969 PLAN	PRE-1969	No.	% CHANGE	RATIO OF ACTIVE TO RETIRED	ANNUAL PAYROLL	\$	CHANGE	
1995	4,779	505	5,284	+ 2%	0.7	\$209,733,734	\$39,692	+ 2.6%	
1996	4,889	432	5,321	+ 1	0.7	212,656,401	39,965	+ 0.7	
1997	5,049	371	5,420	+ 2	0.7	217,585,229	40,145	+ 0.5	
1998	5,018	316	5,334	- 2	0.7	217,479,443	40,772	+ 1.6	
1999	5,099	230	5,329	0	0.7	216,049,687	40,542	- 0.6	
2000	5,291	190	5,481	+ 3	0.7	237,741,560	43,376	+ 7.0	
2001	5,453	132	5,585	+ 2	0.7	253,297,027	45,353	+ 4.6	
2002	5,290	92	5,382	-4	0.7	248,663,133	46,203	+ 1.9	
2003	5,181	76	5,257	- 2	0.6	248,681,461	47,305	+ 2.4	
2004	5,007	53	5,060	-4	0.6	258,699,581	51,126	+ 8.1	
2005	4,768	31	4,799	-5%	0.6	\$250,491,872	\$52,197	+ 2.1%	

ACTUARIAL & STATISTICAL SECTION

ACTIVE MEMBERS AS OF JUNE 30, 2005

by attained age & years of service

ATTAINED AGE	POLICE MEMBERS YEARS OF SERVICE TO VALUATION DATE							TOTALS	
	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	VALUATION PAYROLL
Under 20.....									
20-24.....	98	7						105	\$3,881,002
25-29.....	204	279	2					485	21,680,408
30-34.....	110	522	103					735	35,164,023
35-39.....	69	297	230	61				657	33,234,036
40-44.....	29	106	109	279	7	1		531	28,314,683
45-49.....	15	41	31	247	68	13	1	416	23,242,092
50-54.....	2	5	10	125	124	56	63	385	22,387,875
55-59.....	1	3	7	14	38	31	113	207	12,248,434
60.....	1		1		4	1	15	22	1,303,181
61.....				1	1	2	5	9	555,913
62.....					1		7	8	447,272
63.....					1	2	5	8	449,271
64.....					1		4	5	295,438
65.....							1	1	47,763
66.....							7	7	391,415
69.....							1	1	71,803
70.....							3	3	183,621
TOTALS	529	1,260	493	727	245	106	225	3,585	\$183,898,230

ATTAINED AGE	FIRE MEMBERS YEARS OF SERVICE TO VALUATION DATE							TOTALS	
	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	VALUATION PAYROLL
Under 20.....									
20-24.....	5	1						6	\$249,573
25-29.....	41	66						107	4,759,463
30-34.....	47	93	28	1				169	7,866,406
35-39.....	17	69	92	67				245	12,278,799
40-44.....	11	25	54	112	25			227	12,135,136
45-49.....	2	10	16	66	51	27	1	173	10,224,061
50-54.....			1	23	22	59	42	147	9,380,830
55-59.....				4	7	27	99	137	9,480,715
60.....							3	3	218,659
TOTALS	123	264	191	273	105	113	145	1,214	\$66,593,642

TOTAL ACTIVE MEMBERS
AS OF JUNE 30, 2005

by attained age & years of service

ATTAINED AGE	YEARS OF SERVICE TO VALUATION DATE							TOTALS	
	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	VALUATION PAYROLL
UNDER 20.....									
20-24	103	8						111	\$4,130,575
25-29	245	345	2					592	26,439,871
30-34	157	615	131	1				904	43,030,429
35-39	86	366	322	128				902	45,512,835
40-44	40	131	163	391	32	1		758	40,449,819
45-49	17	51	47	313	119	40	2	589	33,466,153
50-54	2	5	11	148	146	115	105	532	31,768,705
55-59	1	3	7	18	45	58	212	344	21,729,149
60	1		1		4	1	18	25	1,521,840
61				1	1	2	5	9	555,913
62					1		7	8	447,272
63					1	2	5	8	449,271
64					1		4	5	295,438
65							1	1	47,763
66							7	7	391,415
67									
68									
69							1	1	71,803
70							3	3	183,621
TOTALS	652	1,524	684	1,000	350	219	370	4,799	\$250,491,872

GROUP AVERAGES:

	POLICE	FIRE	TOTAL
Age:	39.3 years	41.9 years	40.0 years
Service:	12.8 years	16.1 years	13.7 years
Annual Pay:	\$51,297	\$54,855	\$52,197

ACTUARIAL COMMENTS

REVISED ASSUMPTIONS AND FUNDING METHODS

Each year as of June 30, the actuarial liabilities of DPFRS are valued. In order to perform the valuation, assumptions must be made regarding the future experience of the System with regard to the following risk areas:

1. Rates of *withdrawal* of active members.
2. Rates of *disability* among active members.
3. Patterns of *salary increases* to active members.
4. Rates of *retirement* among active members.
5. Rates of *mortality* among active members, retirees and beneficiaries.
6. Long-term rates of *investment return* to be generated by system assets.

Assumptions should be carefully chosen and continually monitored. An unrealistic set of assumptions can lead to:

- *Understated costs resulting in either an inability to pay*

benefits when due, or sharp increases in required contributions at some point in the future;

- *Overstated costs resulting in either benefit levels that are kept below the level that could be supported by the computed rate, or an unnecessarily large burden on the current generation of members, employers and taxpayers.*

A single set of assumptions will not be suitable indefinitely. Things change, and our understanding of things (whether or not they are changing) also changes.

In recognition of this, the City Charter provides that assumptions used to value the liabilities of the Policemen and Firemen Retirement System should be studied in depth every five years. The package of assumptions is then adjusted to reflect basic experience trends – but not random year-to-year fluctuations. Actuarial assumptions were revised following the 1997-2002 experience study. A summary of the experience study results follows:

RATES OF WITHDRAWALS from service were varied but higher than current rates. The recommended revised withdrawal assumptions recognize a portion of the observed rates. Full credit is generally not given to a 5-year experience period because it is not known that recent trends will persist indefinitely.

PAY INCREASE RATES (MERIT AND SENIORITY PORTION) were found to be higher than assumed rates, especially for members with fewer than 5-years of service. As with other decrement changes, the recommended rates partially reflect observed experience.

RETIREMENT EXPERIENCE indicated many more retirements than expected for Police members. Retirement experience for Fire members indicated fewer retirements than expected. Each group's results indicated that service is being purchased to allow for earlier retirements. Recommended rates reflect these trends. This change puts upward pressure on contribution rates.

POST-RETIREMENT MORTALITY RATES observed in the study were only slightly greater than the present assumed rates. Consequently, it is recommended that mortality rates remain unchanged since they already include a margin for future longevity improvement.

PRE-RETIREMENT MORTALITY experience was inconclusive. Recommended rates are the same as current rates and are approximately 90% of post-retirement mortality rates.

NON-DUTY DISABILITY rates were found to be lower than expected for both the Police and Fire group. Recommended rates partially reflect the observed lower rates of non-duty disability over the past 5 years.

DUTY DISABILITY rates were found to be much lower than previously assumed for Police and higher for the Fire group. Recommended rates partially reflect the observed patterns of duty disability over the past 5 years.

ACTUARIAL COMMENTS CON'T

VALUATION METHOD. The method used to measure the cost of disability and death-in-service benefits was changed from a 5-year terminal funding method to the entry age normal cost method. The previous method is a carry-over from the original city charter. This change puts all portions of the rate setting process on a consistent basis.

EXPERIENCE DURING THE PAST YEAR

Investment experience for the year ended June 30, 2005 was nearly as expected with a market rate of return of 7.65%. However, under asset valuation method, market gains and losses are spread over a 3-year period and prior investment results for some of the years were slightly less favorable. Those unfavorable results are still being recognized. Because of the favorable market return this year, the market value of assets now exceeds the funding value by \$71 million. If market returns average 7.8% or more in future years, the excess \$71 million will ultimately be recognized and provide some contribution rate relief.

ANNUITY RESERVE FUND

The contingency reserve in the Annuity Reserve Fund is \$3.5 million and the ratio of the ARF balance to computed liabilities is over 140%. The size of the contingency is likely to increase further unless a balance is restored. The Board approved a transfer of \$12 million from the Annuity Reserve Fund to the Pension Accumulation Fund in 2001 and \$5 million in 2005. An additional transfer of \$2 million at this time would reduce the funded ratio to around 120% which would still provide a margin for unforeseen contingencies.

PENSION OBLIGATION CERTIFICATES (POCs)

During the 2005 fiscal year, POC proceeds were paid into the System. We have treated the proceeds as a contribution made during the year

that acted to reduce the unfunded accrued liability. The treatment of the POC for accounting purposes is a matter for the auditor to determine.

CONTRIBUTION RECEIVABLE

Financial information submitted for the year indicated employer contributions of \$61,391,371 were unpaid as of June 30, 2005.

OVERALL FINANCIAL CONDITION

The Retirement System continues in sound actuarial condition in accordance with the principles of level percent-of-payroll financing.