

SUMMARY OF ASSUMPTIONS USED FOR DGRS ACTUARIAL VALUATIONS

assumptions adopted by board of trustees after consulting with actuary

ECONOMIC ASSUMPTIONS

THE INVESTMENT RETURN RATE used in making the valuation was 7.9% per year, compounded annually (net after administrative and investment expenses). The real rate of return is the portion of total investment return which is more than the inflation rate. The 7.9% total investment return rate translates to a spread of 3.9% over wage inflation and 4.4% to 4.9% over price inflation.

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 4.0% recognizes wage inflation. Wage inflation has historically exceeded price inflation by 0.5% to 1.0% a year, on average. Wage inflation of 4% suggests an underlying rate of price inflation of 3.0% to 3.5%. The merit and/or seniority increase assumption was first used in the June 30, 2003 valuation.

TOTAL ACTIVE MEMBER PAYROLL is assumed to increase 4.0% annually, which is the portion of the individual pay increase assumptions attributable to 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% (150% for disabled members) of the 1983 Group Annuity Mortality Table. This table was first used for the June 30, 2003 valuation.

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

THE PROBABILITIES OF SEPARATION from service (including *death-in-service*

and *disability*) 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 & service pension liabilities and normal cost, vesting liabilities and normal cost, and casualty pension liabilities and normal cost.

UNFUNDED ACTUARIAL ACCRUED LIABILITIES are amortized over a 30-year period, to produce contribution amounts (principal & interest) which are level percent-of-payroll contributions.

EMPLOYER CONTRIBUTION dollars were assumed to be paid in equal monthly installments throughout the employer fiscal year.

PRESENT ASSETS were reported to be valued using a three-year smoothing of the difference

between expected and actual investment income.

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.).

**SUMMARY OF COMPUTED EMPLOYER
CONTRIBUTION RATES
2008 - 2009 FISCAL YEAR**

expressed as percents of active member payroll

CONTRIBUTIONS EXPRESSED AS A PERCENT OF PAYROLL

CONTRIBUTIONS FOR	GENERAL CITY	D.O.T.	WATER*	SEWAGE*	LIBRARY	TOTAL
Normal Cost:						
Age & Service Pensions	7.65%	6.87%	7.15%	6.94%	7.57%	7.39%
Disability Pensions	1.58	1.18	1.64	1.60	1.54	1.53
Death-in-Service Pensions	0.35	0.35	0.41	0.44	0.28	0.37
Employer Normal Cost	9.58	8.40	9.20	8.98	9.39	9.29
Unfunded Actuarial Accrued Liabilities#	(0.06)	2.14	9.42	(8.99)	(0.17)	0.67
COMPUTED EMPLOYER CONTRIBUTION RATES	9.52%	10.54%	18.62%	0.00%	9.22%	9.96%
(Change from last year)	(0.05)	0.61	(1.43)	(0.80)	(1.22)	(0.25)

Unfunded actuarial accrued liabilities (UAAL) were amortized over a 30 year period.

* Water/Sewage combined employer contribution rate would be 10.71% of payroll.

COMMENT

The valuation results shown above do not include a provision for the potential financial effect of retroactive transfers to the 1998 Defined Contribution Plan, which will occur after that plan has been implemented. These transfers may have a material impact on the computed employer contribution rates.

**EMPLOYER COMPUTED CONTRIBUTIONS –
HISTORIC COMPARISON**

As PERCENTS OF VALUATION PAYROLL

VALUATION DATE JUNE 30	GENERAL	D.O.T.	WATER	SEWAGE	HOUSING	LIBRARY	TOTALS
1997(a)	13.47%	12.94%	15.32%	0.00%	9.34%	7.09%	11.84%
1998(a)*	15.80	14.23	17.16	0.00	11.38	9.73	13.75
1999*	15.31	13.70	16.95	0.00	10.48	8.04	13.26
2000	15.19	14.37	17.12	0.00	9.01	6.97	13.37
2001	15.92	15.36	19.12	0.00	9.25	9.20	14.27
2002(a)	19.32	19.51	26.33	0.33	10.90	15.82	18.05
2003	23.45	23.59	29.82	10.09	13.11	21.72	22.72
2004	19.75	19.96	31.71	6.80	0.00	20.40	20.09
2005#	10.35	10.88	20.84	2.04	0.00	11.33	11.06
2006	9.57	9.93	20.05	0.80	0.00	10.44	10.21
2007	9.52%	10.54%	18.62%	0.00%	0.00%	9.22%	9.96%

(a) After changes in actuarial assumptions.

* After plan amendments.

After issuance of POC's

RETIREMENT SYSTEM TOTALS

persons in valuations-comparative statements

ACTIVE MEMBERS

JUNE 30	ACTIVE MEMBERS		ANNUAL PAYROLL	GROUP AVERAGES		AGE YEARS	SERV. YEARS
	NO.	CHANGE		\$	CHANGE		
1997	12,369	+2.3%	\$382,835,917	\$30,951	+3.9%	42.8	11.7
1998	12,261	-0.9	387,022,423	31,565	+2.0	43.3	11.8
1999	11,987	-2.2	383,449,421	31,989	+1.3	43.7	12.1
2000	12,147	+1.3	417,187,666	34,345	+7.4	43.5	12.0
2001	12,744	+4.9	439,636,072	34,497	+0.4	43.3	11.7
2002	12,639	-0.8	440,680,045	34,867	+1.1	43.7	11.8
2003	12,833	+1.5	448,579,064	34,955	+0.3	43.5	11.7
2004	11,791	-8.1	444,596,299	37,706	+7.9	44.5	12.5
2005	9,820	-16.7	390,593,600	39,775	+5.5	45.9	13.8
2006	9,047	-7.9	361,151,456	39,919	+0.4	46.6	14.6
2007	8,971	-0.8%	\$361,701,481	\$40,319	+1.0%	47.0	14.6

RETIREMENT SYSTEM TOTALS CON'T

persons in valuations-comparative statements

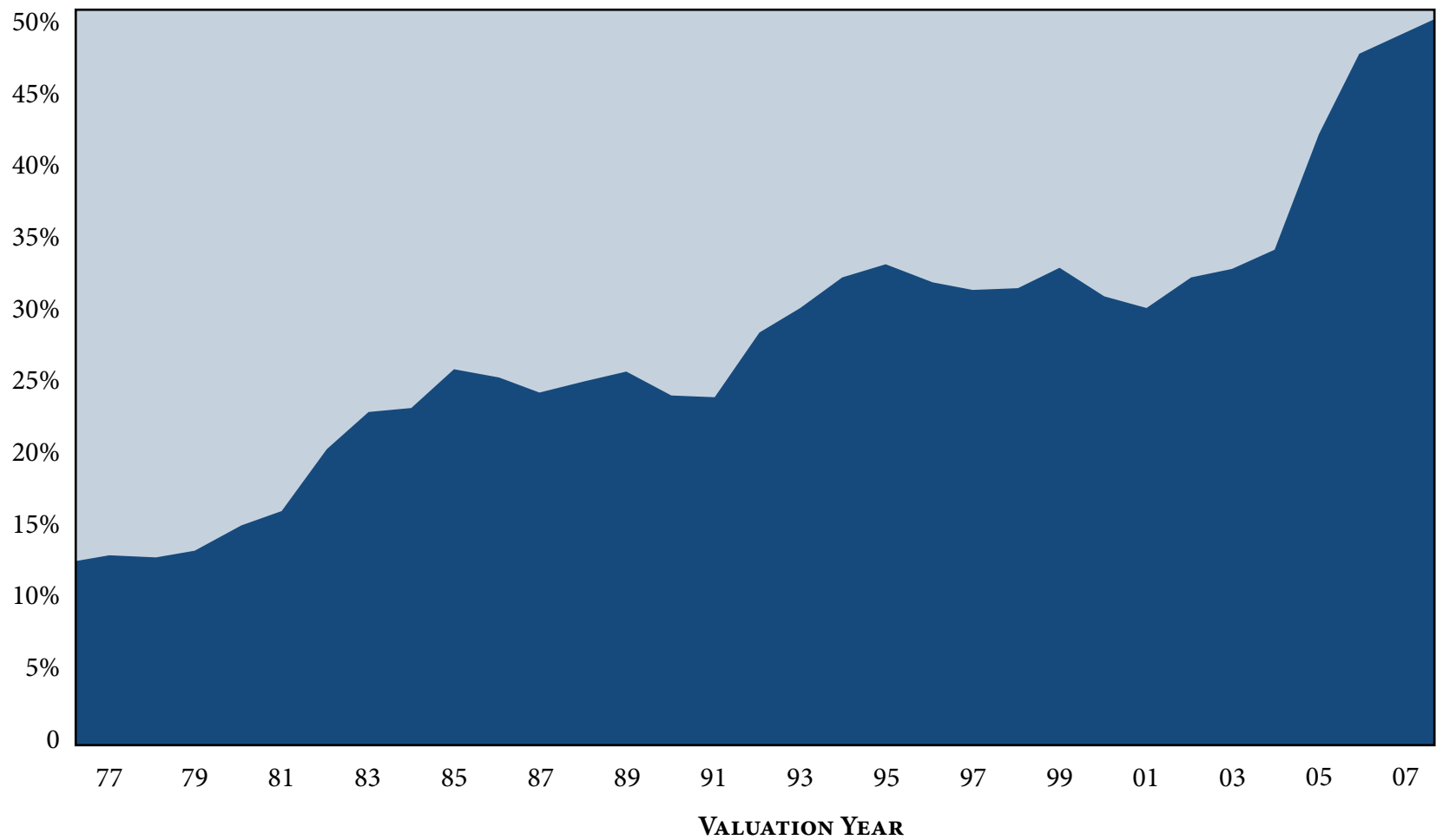
RETIRANTS & BENEFICIARIES

% OF CURRENT ALLOWANCES

JUNE 30	No.	% OF CURRENT ALLOWANCES				ANNUAL ALLOWANCES		
		ANNUITIES	INITIAL PENSIONS	ESCALATORS & OTHER INCREASES	ALLOW.	TOTAL	AVERAGE	%PAYROLL
1997	12,199	2.4%	74.4%	23.2%	100.0%	\$121,255,488	\$9,940	31.7%
1998	11,593	2.3	73.7	24.0	100.0	119,852,820	10,338	31.0
1999	11,537	2.4	76.6	21.0	100.0	127,535,748	11,054	33.3
2000	11,480	2.2	77.7	20.1	100.0	129,354,696	11,268	31.0
2001	11,450	2.3	77.7	20.0	100.0	133,170,804	11,631	30.3
2002	11,363	2.2	78.2	19.6	100.0	140,805,120	12,392	32.0
2003	11,322	2.4	78.3	19.3	100.0	147,024,720	12,986	32.8
2004	11,311	2.6	78.5	18.9	100.0	154,133,460	13,627	34.7
2005	11,396	2.7	79.6	17.7	100.0	165,095,736	14,487	42.3
2006	11,541	2.7	79.6	17.7	100.0	175,193,088	15,180	48.5
2007	11,478	2.7%	79.6%	17.7%	100.0%	\$180,332,688	\$15,711	49.9%

BENEFITS AS A PERCENT OF PAYROLL

PERCENT

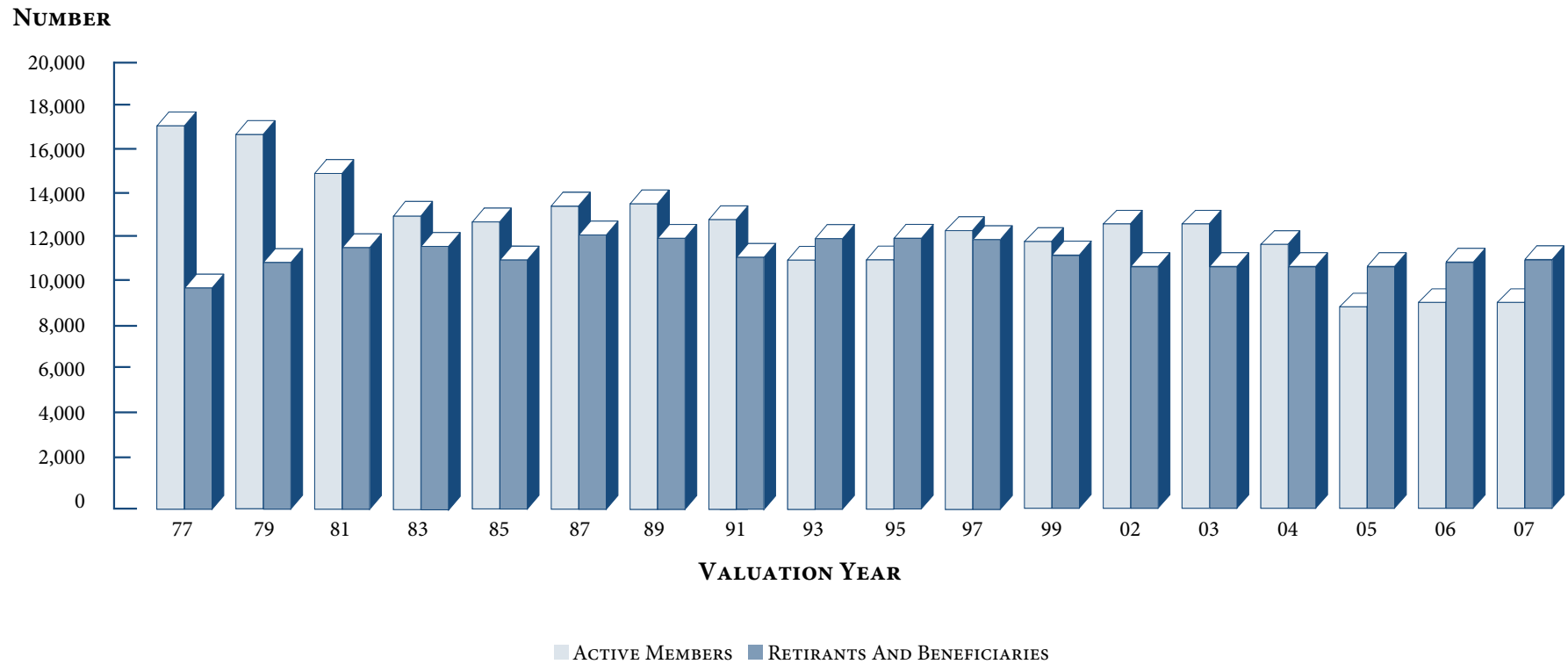


RETIRANTS AND BENEFICIARIES
JUNE 30, 2007

tabulated by year of retirement

YEAR OF RETIREMENT	No.	MONTHLY ALLOWANCES	
		TOTAL	AVERAGE
1950 & before	1	\$192	\$192
1951-1955	8	3,419	427
1956-1960	6	2,137	356
1961-1965	32	13,319	416
1966-1970	118	47,093	399
1971-1975	367	194,416	530
1976-1980	1,089	790,134	726
1981-1985	1,708	1,698,638	995
1986-1990	1,435	1,535,384	1,070
1991-1995	2,057	2,481,659	1,206
1996-2000	1,852	2,821,553	1,524
2001	352	582,092	1,654
2002	447	816,235	1,826
2003	398	787,936	1,980
2004	467	945,104	2,024
2005	543	1,198,749	2,208
2006	456	870,422	1,909
2007	142	239,242	1,685
TOTALS	11,478	\$15,027,724	\$1,309

RETIREMENT SYSTEM TOTALS ACTIVE AND RETIRED MEMBERS



SOLVENCY TESTS

The DGRS 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 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**

JUNE 30	ACTUARIAL ACCRUED LIABILITIES			VALUATION ASSETS	PORTION OF ACCRUED LIABILITIES COVERED BY ASSETS			
	(1) ACTIVE MEMBER CONTR.	(2) RETIRANTS AND BENEF.	(3) PRESENT MEMBERS (EMPLOYER-FINANCED PORTION)		(1)	(2)	(3)	TOTAL
2003	\$689	\$1,447	\$1,135	\$2,538	100%	100%	35%	78%
2004	658	1,546	1,180	2,470	100	100	23	73
2005*	632	1,680	1,035	3,222	100	100	88	96
2006	653	1,755	1,025	3,374	100	100	94	98
2007	\$733	\$1,804	\$1,092	\$3,587	100%	100%	96%	99%

* After POC Transfer

**GASB STATEMENT NO. 25 REQUIRED
SUPPLEMENTARY INFORMATION**

SCHEDULE OF FUNDING PROGRESS

ACTUARIAL VALUATION DATE JUNE 30	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)
1997#	\$2,333,412,893	\$2,528,504,057	\$195,091,164	92.3%	\$382,835,917	51.0%
1998#*	2,582,099,884	2,814,878,226	232,778,342	91.7	387,022,423	60.1
1999*	2,756,614,458	2,900,404,223	143,789,765	95.0	383,449,421	37.5
2000	2,902,433,063	3,077,001,129	174,568,066	94.3	417,187,666	41.8
2001	2,912,146,389	3,179,601,214	267,454,825	91.6	439,636,072	60.8
2002#	2,761,203,680	3,250,514,916	489,311,236	84.9	440,680,045	111.0
2003	2,537,668,376	3,270,627,177	732,958,801	77.6	448,579,064	163.4
2004	2,470,243,470	3,383,926,672	913,683,202	73.0	444,596,299	205.5
2005(a)	3,222,393,861	3,347,387,652	124,993,791	96.3	390,593,600	32.0
2006	3,373,687,677	3,434,288,153	60,600,476	98.2	361,151,456	16.8
2007	\$3,586,550,485	\$3,629,217,059	\$42,666,574	98.8%	\$361,701,481	11.8%

* After plan amendments.

After changes in actuarial assumptions.

(a) After POC Transfer.

RETIREMENT SYSTEM TOTALS

valuation results – comparative statement \$ in millions

JUNE 30	% OF PAYROLL CONTRIBUTIONS FOR					ACTUARIAL ACCRUED LIABILITIES			UNFUNDED/ ACTIVE PAY
	ACTIVE PAYROLL		NORMAL COST	UAAL	ON TIME TOTALS	COMPUTED TOTAL	ACCRUED ASSETS	UNFUNDED	
1997(a)	\$382.8	\$30,951	7.91%	3.93%	11.84%	\$2,528.5	\$2,333.4	\$195.1	0.51%
1998(a)#	387.0	31,565	9.30	4.45	13.75	2,814.9	2,582.1	232.8	0.60
1999#	383.4	31,989	9.29	3.97	13.26	2,900.4	2,756.6	143.8	0.38
2000	417.2	34,345	9.22	4.15	13.37	3,077.0	2,902.4	174.6	0.42
2001	439.6	34,497	9.22	5.05	14.27	3,179.6	2,912.1	267.5	0.61
2002(a)	440.7	34,867	8.74	9.31	18.05	3,250.5	2,761.2	489.3	1.11
2003	448.6	34,955	8.82	13.90	22.72	3,270.6	2,537.7	732.9	1.63
2004	444.6	37,706	8.99	11.10	20.09	3,383.9	2,470.2	913.7	2.06
2005*	390.6	39,775	9.26	1.80	11.06	3,347.4	3,222.4	125.0	0.32
2006	361.2	39,919	9.26	0.95	10.21	3,434.3	3,373.7	60.6	0.17
2007	\$361.7	\$40,319	9.29%	0.67%	9.96%	\$3,629.2	\$3,586.6	\$42.6	0.12%

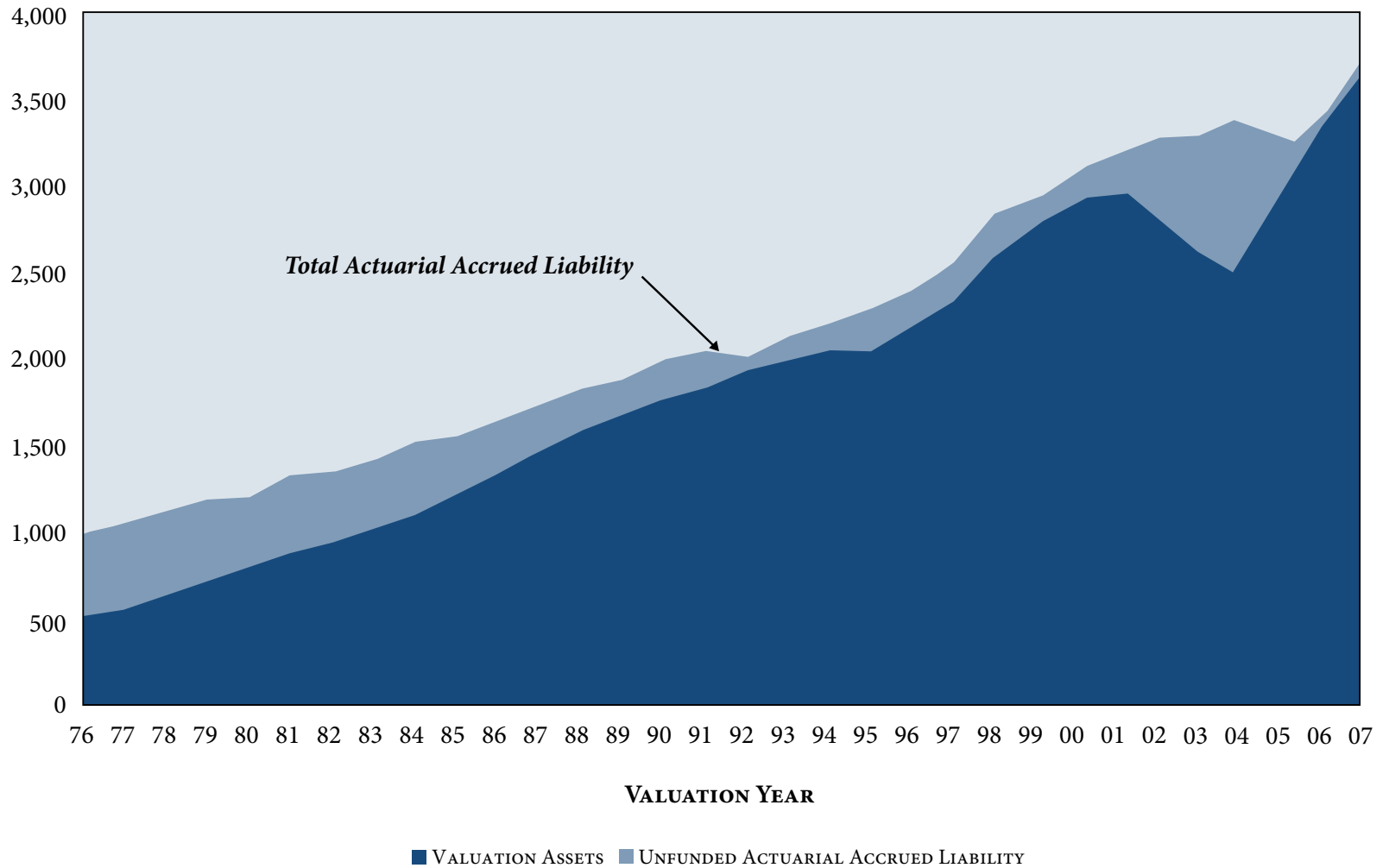
After plan amendments.

(a) After changes in actuarial assumptions.

* After POC Transfer.

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.

RETIREMENT SYSTEM TOTALS ASSETS AND ACCRUED LIABILITIES



RETIREMENT SYSTEM TOTALS
ACTIVE MEMBERS AS OF JUNE 30, 2007

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	13							13	\$215,697
20-24	101	12						113	2,444,459
25-29	162	179	6					347	10,413,733
30-34	180	249	124	4				557	19,351,915
35-39	172	415	278	79	14			958	36,685,131
40-44	167	356	396	274	180	4		1,377	54,572,765
45-49	153	326	326	343	408	179	17	1,752	71,237,338
50-54	110	278	287	258	415	396	87	1,831	76,149,641
55-59	74	161	181	185	255	302	142	1,300	56,615,526
60-64	29	87	93	69	80	92	72	522	24,412,857
65-69	10	31	31	14	11	20	26	143	6,958,327
70-74	3	9	7	4	3	0	11	43	2,048,544
75-79	0	3	2	1	3	0	3	15	595,548
TOTALS	1,177	2,106	1,731	1,231	1,369	999	358	8,971	\$361,701,481

GROUP AVERAGES:

AGE: 47.0 years
 SERVICE: 14.6 years
 ANNUAL PAY: \$40,319

ACTUARIAL COMMENTS

REVISED ASSUMPTIONS AND FUNDING METHODS

Each year as of June 30, the actuarial liabilities of DGRS 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, retirants 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 General 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 findings follows:

RATES OF WITHDRAWALS from service without entitlement to an immediate benefit (other than a separation benefit) were varied but close to current rates. The recommended revised withdrawal assumptions recognize a portion of the observed rates. Full credibility 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 slightly higher than assumed rates in early years (ages

25-35) and generally lower than assumed in later years. As with other decrement changes, the recommended rates partially reflect observed experience.

RETIREMENT EXPERIENCE indicated many more retirements than expected for General female members. All other groups had experience close to expected levels. Recommended rates reflect these trends. This change puts upward pressure on contribution rates.

POST-RETIREMENT MORTALITY RATES observed in the study were slightly greater than the present assumed rates. Consequently, it is recommended that mortality rates be increased, but continue to include a margin for future longevity improvement. This change had a small down-ward effect on contribution rates.

PRE-RETIREMENT MORTALITY EXPERIENCE was inconclusive. Recommended rates are the same as current rates and are

ACTUARIAL COMMENTS CON'T

approximately 80% of post-retirement mortality rates.

NON-DUTY DISABILITY rates were found to be lower than expected for the General 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 higher than previously assumed. Recommended rates partially reflect the observed patterns of duty disability over the past 5 years.

PENSION FUNDING POLICY

The computed employer contribution rates based on the Board of Trustees policy of financing unfunded actuarial accrued liabilities over a period of 30 years (per Board resolution dated February 8, 2006).

EXPERIENCE DURING THE PAST YEAR

Investment experience for the year ended June 30, 2007 was favorable with a market rate of return of 18.1%. However, under the asset valuation method, market gains and losses are spread over a 3-year period and prior years' investment results were much less favorable. Because of the favorable market return, the market value of assets now exceeds the funding value by \$256 million. If market returns average 7.9% or more in future years, the excess will ultimately be recognized and provide some contribution rate relief.

HOUSING COMMISSION

Remaining Housing Commission assets and liabilities were combined with the General Division assets and liabilities.

CONTRIBUTION RECEIVABLE

Financial information submitted for the year indicated employer contributions of \$24,521,431 million were unpaid as of June 30, 2007.

OVERALL FINANCIAL CONDITION

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