

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
2007 - 2008 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	7.59%	6.81%	7.10%	6.96%	7.59%	7.34%
Disability Pensions	1.59	1.17	1.65	1.59	1.56	1.54
Death-in-Service Pensions	0.36	0.36	0.41	0.44	0.27	0.38
Employer Normal Cost	9.54	8.34	9.16	8.99	9.42	9.26
Unfunded Actuarial Accrued Liabilities#	0.03	1.59	10.89	(8.19)	1.02	0.95
COMPUTED EMPLOYER CONTRIBUTION RATES	9.57%	9.93%	20.05%	0.80%	10.44%	10.21%
(Change from last year)	(0.78)	(0.95)	(0.79)	(1.24)	(0.89)	(0.85)

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

* Water/Sewage combined employer contribution rate would be 11.68% 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
1996	13.23%	12.52%	15.83%	0.00%	9.74%	7.64%	11.58%
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%

(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		
1996	12,086	+5.0%	\$360,068,578	\$29,792	+4.7%	42.8	11.9
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

RETIREMENT SYSTEM TOTALS CON'T

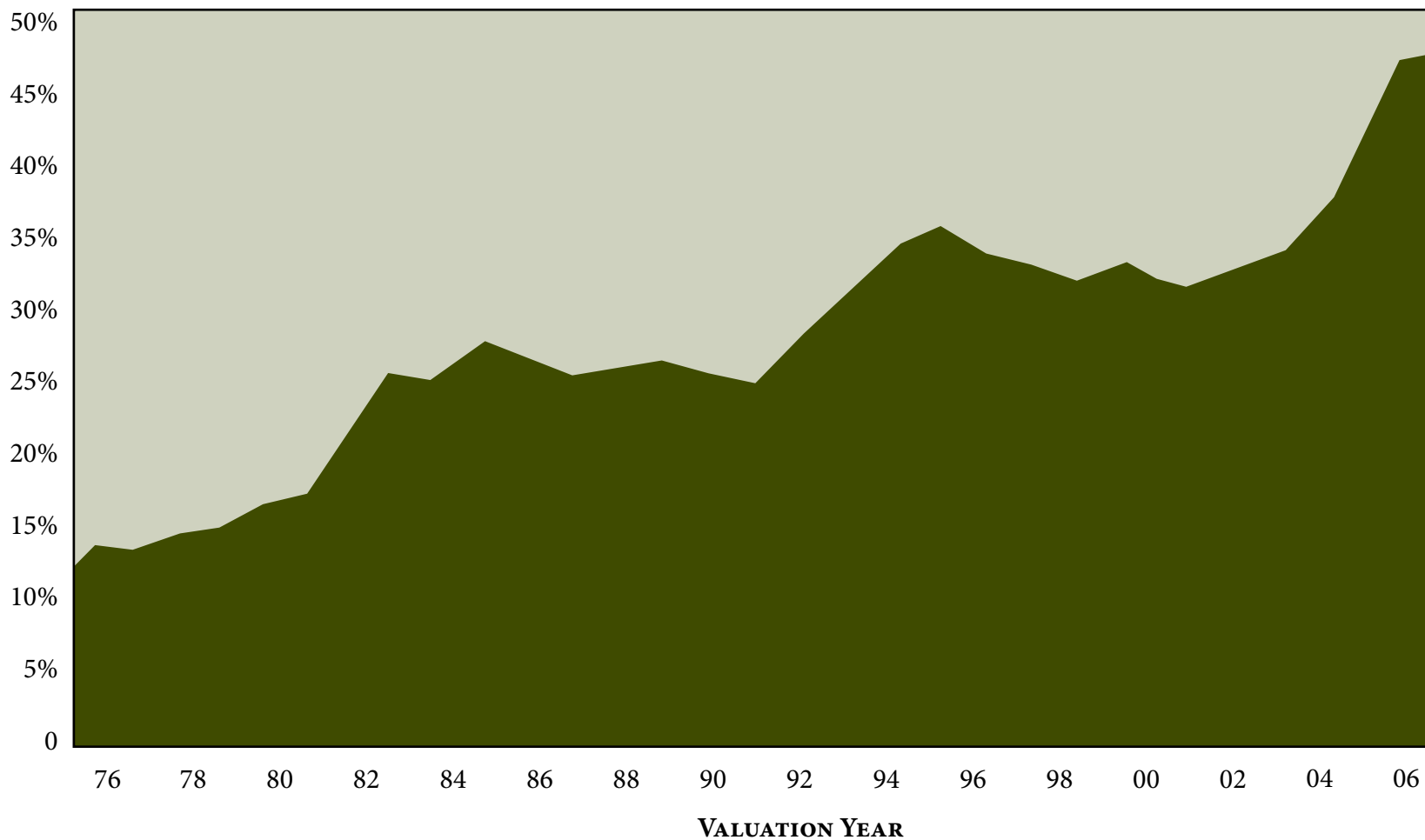
persons in valuations-comparative statements

RETIRANTS & BENEFICIARIES

JUNE 30	No.	% OF CURRENT ALLOWANCES				ANNUAL ALLOWANCES		
		ANNUITIES	INITIAL PENSIONS	ESCALATORS & OTHER INCREASES	ALLOW.	TOTAL	AVERAGE	%PAYROLL
1996	11,889	2.6%	75.5%	21.9%	100.0%	\$115,232,400	\$9,692	32.0%
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%

BENEFITS AS A PERCENT OF PAYROLL

PERCENT

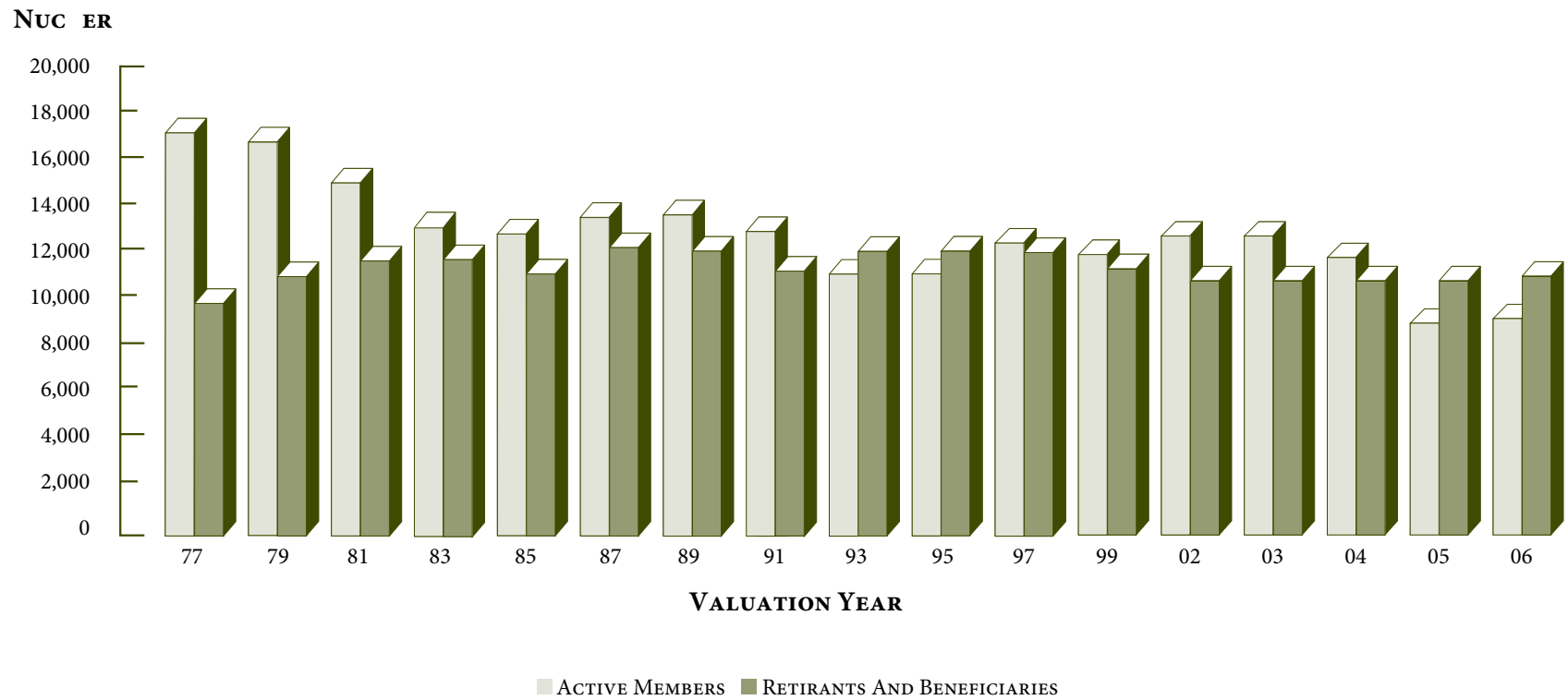


RETIRANTS AND BENEFICIARIES
JUNE 30, 2006

tabulated by year of retirement

YEAR OF RETIREMENT	No.	MONTHLY ALLOWANCES	
		TOTAL	AVERAGE
1950 & before	4	\$1,442	\$361
1951-1955	12	4,515	376
1956-1960	7	2,624	375
1961-1965	48	19,185	400
1966-1970	172	74,736	435
1971-1975	546	309,601	567
1976-1980	1,342	1,021,738	761
1981-1985	1,836	1,860,613	1,013
1986-1990	1,455	1,555,599	1,069
1991-1995	1,843	2,215,261	1,202
1996-2000	1,875	2,816,262	1,502
2001	355	584,445	1,646
2002	451	818,939	1,816
2003	403	788,182	1,956
2004	475	935,892	1,970
2005	533	1,195,666	2,243
2006	184	394,724	2,145
TOTALS	11,541	\$14,599,424	\$1,265

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
2002(a)	\$706	\$1,371	\$1,174	\$2,761	100%	100%	58%	85%
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%

(a) After changes in actuarial assumptions.

* 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)
1995	\$2,043,397,183	\$2,275,210,040	\$231,812,857	89.8%	\$327,615,936	70.8%
1996	2,193,234,516	2,382,866,954	189,632,438	92.0	360,068,578	52.7
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%

* After plan amendments.

After changes in actuarial assumptions.

(a) After POC Transfer.

RETIREMENT SYSTEM TOTALS

valuation results – comparative statement \$ in millions

JUNE 30	<u>ACTIVE PAYROLL</u>			<u>% OF PAYROLL CONTRIBUTIONS FOR</u>			<u>ACTUARIAL ACCRUED LIABILITIES</u>			UNFUNDED/ ACTIVE PAY
	TOTAL	AVERAGE	NORMAL COST	UAAL	ON TIME TOTALS	COMPUTED TOTAL	ACCRUED ASSETS	UNFUNDED		
1995	\$327.6	\$28,451	8.11%	4.80%	12.91%	\$2,275.2	\$2,043.4	\$231.8	0.71%	
1996	360.1	29,729	8.14	3.44	11.58	2,382.8	2,193.2	189.6	0.53	
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%	

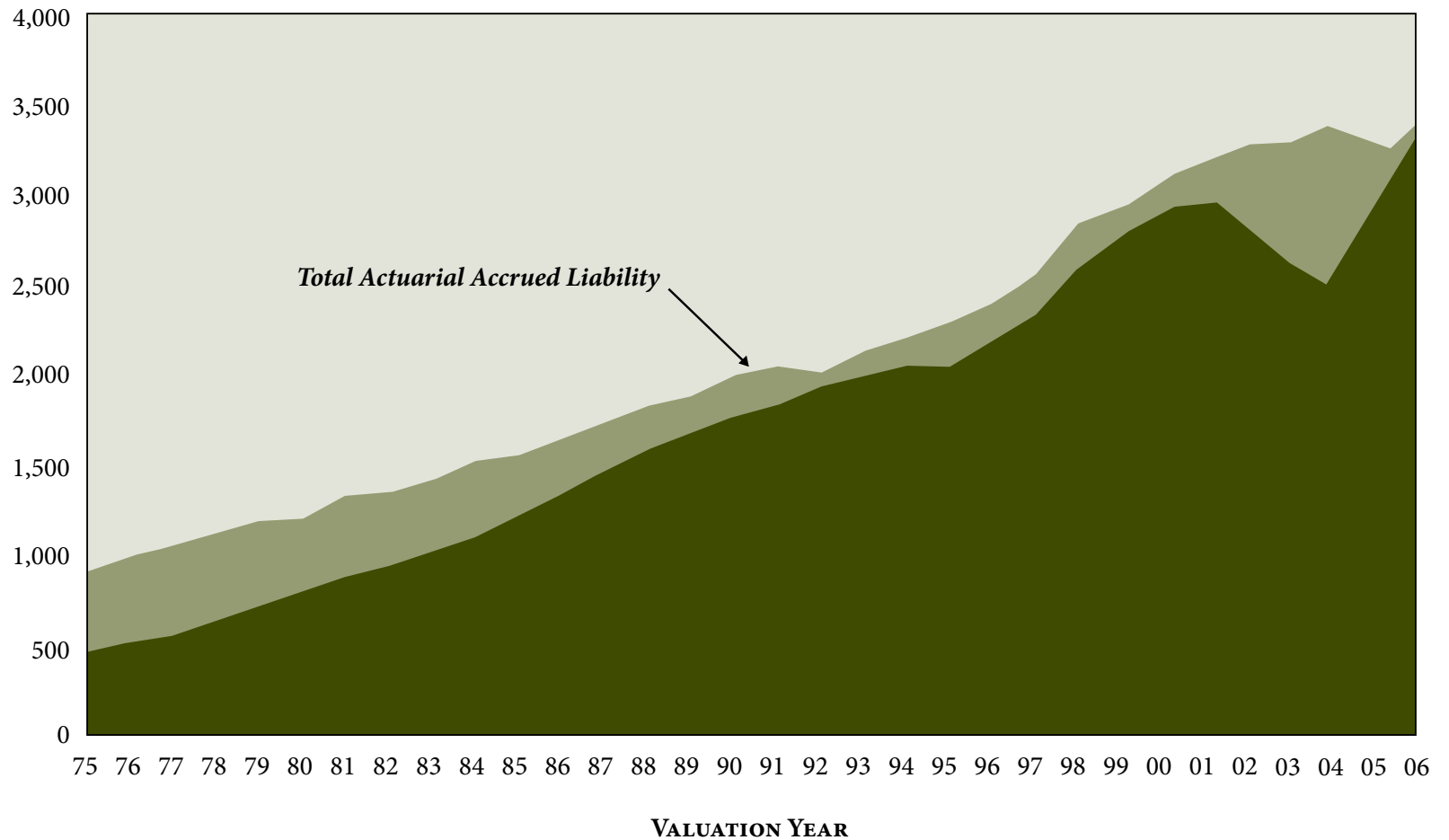
After plan amendments.

(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



■ VCTICVEMB ARRSVR ■ UBAIBNSN ADVICFECT ADDFISN LEC ETEV

RETIREMENT SYSTEM TOTALS
ACTIVE MEMBERS AS OF JUNE 30, 2006

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	21							21	\$326,335
20-24	123	20						143	3,012,111
25-29	178	172	7					357	10,553,199
30-34	161	313	90	2				566	19,723,674
35-39	182	423	253	110	13			981	37,468,653
40-44	149	414	329	368	164	13		1,437	56,079,068
45-49	147	355	282	399	398	233	6	1,820	73,224,586
50-54	102	273	212	292	385	406	72	1,742	72,803,903
55-59	74	176	168	211	248	312	123	1,312	57,234,485
60-64	32	81	76	68	73	95	56	481	22,005,487
65-69	9	29	24	12	15	24	20	133	6,454,168
70-74	9	6	6	8	3	0	7	44	1,904,761
75-79	0	1	1	1	2	0	4	10	361,026
TOTALS	1,188	2,263	1,448	1,471	1,301	1,088	288	9,047	\$361,151,456

GROUP AVERAGES:

AGE: 46.6 years
 SERVICE: 14.6 years
 ANNUAL PAY: \$39,919

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, 2006 was favorable with a market rate of return of 11.6%. 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 \$99 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 \$17,112,437 million were unpaid as of June 30, 2006.

OVERALL FINANCIAL CONDITION

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