Gabriel Roeder Smith & Company
Consultants & Actuaries

CITY OF ROYAL OAK RETIREMENT SYSTEM

59TH ACTUARIAL VALUATION REPORT

AS OF JUNE 30, 2007

November 2, 2007

The Board of Trustees
City of Royal Oak Retirement System
Royal Oak, Michigan

Dear Board Members:

The results of the ***59th Annual Actuarial Valuation*** of the City of Royal Oak Retirement System are presented in this report. The purpose of the valuation was to measure the System's funding progress and to determine the employer contribution rate for the ensuing fiscal year.

The valuation was based upon information, furnished by the City, concerning Retirement System benefits, financial transactions, and individual active, terminated and retired members and beneficiaries. Data was checked for internal and year-to-year consistency, but was not otherwise audited by the actuary.

The date of the valuation was ***June 30, 2007.***

To the best of our knowledge, this report is complete and accurate and was made in accordance with standards of practice prescribed by the Actuarial Standards Board. We believe that in the aggregate, the actuarial assumptions used for the valuation produce results which are reasonable.

Respectfully submitted,

Mark Buis, FSA, MAAA

Louise M. Gates, ASA, MAAA

MB/LMG:lr

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SECTION A

VALUATION RESULTS

FUNDING OBJECTIVE

The funding objective of the Retirement System is to establish and receive contributions, expressed as percents of active member payroll, which will accumulate assets during members' periods of employment that will be sufficient to finance benefits throughout their retirement years.

CONTRIBUTION RATES

The Retirement System is supported by member contributions, City contributions and investment income from Retirement System assets.

Contributions which satisfy the funding objective are determined by the annual actuarial valuation and are sufficient to:

- Cover the actuarial present value of benefits allocated to the current year by the actuarial cost method described in Section C (the normal cost); and
- Finance over a reasonable period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (the unfunded actuarial accrued liability).

Computed contribution rates for the fiscal year beginning July 1, 2008 are shown on page A-2.

The City's established weighted average contribution rate of 20.60% is sufficient to finance the employer normal cost and to amortize the actuarial accrued liability in excess of the assets ($19,162,450 as of June 30, 2007) as a level percent-of-payroll over a period of 30 years.

CONTRIBUTIONS TO PROVIDE BENEFITS
FISCAL YEAR BEGINNING JULY 1, 2008

Total Contribution for	Computed Contributions Expressed as Percents of Active Member Payroll		
	General & Water	Police Officers & Fire Fighters	Weighted Average
Normal Cost			
Age and service benefits	12.76 %	14.27 %	13.53 %
Disability	1.73 %	3.05 %	2.41 %
Death	0.65 %	0.55 %	0.60 %
Deferred service pensions	0.68 %	0.64 %	0.66 %
Future refunds of member contributions	0.12 %	0.13 %	0.13 %
Totals	15.94 %	18.64 %	17.33 %
Member Contributions	2.29 %	2.00 %	2.14 %
Employer Normal Cost	13.65 %	16.64 %	15.19 %
Unfunded Actuarial Accrued Liability*	3.92 %	6.85 %	5.41 %
Computed Employer Rate	**17.57%**	**23.49%**	**20.60%**
Dollar Amount Based on June 30, 2007 Payroll (adjusted for lag between valuation date and fiscal year)	$1,815,881	$2,514,354	$4,330,235

* *Amortized as a level percent-of-payroll over 30 years.*

Determining Employer Dollar Contributions

For any period of time, the percent-of-payroll contribution rate should be converted to dollars -- and then contributed to the Retirement System.

Recommended Procedure: (1) at the end of each payroll period, multiply the active member payroll for the period by the employer contribution percent; and (2) promptly contribute the dollar amount so determined.

Active member payroll reported to us for this valuation was $9,985,625 for General and Water members and $10,341,965 for Police and Fire members. Applying the employer contribution rate of 17.57% to the General and Water member payroll (adjusted for lag between valuation date and fiscal year) produces annual employer contributions of $1,815,881 for the General and Water group. Applying the employer contribution rate of 23.49% to the Police and Fire member payroll (adjusted for lag between valuation date and fiscal year) produces annual employer contributions of $2,514,354 for the Police and Fire group.

DERIVATION OF EXPERIENCE GAIN (LOSS)
YEAR ENDED JUNE 30, 2007

Actual experience will never (except by coincidence) coincide exactly with assumed experience. Gains and losses often cancel each other over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of this year's experience gain (loss) is shown below.

		All Groups Combined (Amounts in $1,000)
(1)	UAAL* at start of year	$20,975
(2)	Normal cost from last valuation	3,718
(3)	Actual member and employer contributions	5,185
(4)	Interest accrual	1,569
(5)	Expected UAAL before changes	21,077
(6)	Change in benefit provisions	0
(7)	Change from assumption revision	0
(8)	Expected UAAL after changes	21,077
(9)	Actual UAAL	19,162
(10)	Gain (loss): (8) - (9)	1,915
(11)	% of beginning of year AAL	1.2 %

* *Unfunded actuarial accrued liability.*

Valuation Date	**Experience Gain (Loss) As % of Beginning of Year Accrued Liability**
6/30/1998	11.6 %
6/30/1999	9.6 %
6/30/2000	6.4 %
6/30/2001	(3.8)%
6/30/2002	(11.1)%
6/30/2003	(12.0)%
6/30/2004	(10.2)%
6/30/2005	(5.9)%
6/30/2006	(2.5)%
6/30/2007	1.2 %

SUMMARY STATEMENT OF SYSTEM RESOURCES AND OBLIGATIONS
JUNE 30, 2007

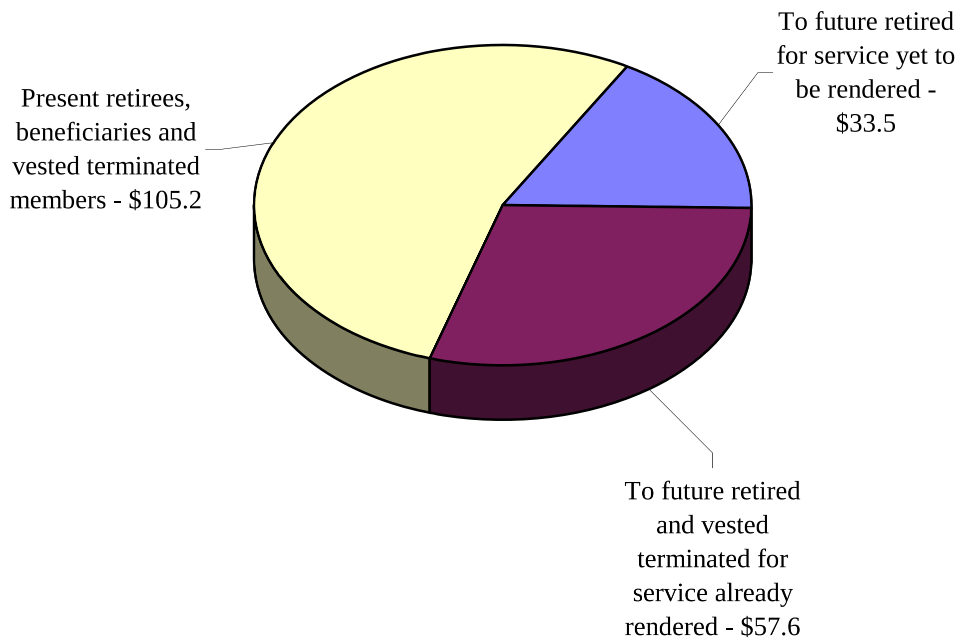
Present Resources and Expected Future Resources

A. Present valuation assets	
1. Net assets from system financial statement	$147,593,169
2. Market value adjustment	(3,973,956)
3. Actual valuation assets	143,619,213
B. Actuarial present value of expected future employer contributions	
1. For normal costs	29,233,091
2. For unfunded actuarial accrued liabilities	19,162,450
3. Totals	48,395,541
C. Actuarial present value of expected future member contributions	4,309,027
D. Total Present and Expected Future Resources	**$196,323,781**

Present Value of Expected Future Benefit Payments and Reserves

A. To retirees and beneficiaries	$ 102,967,374
B. To vested terminated members	2,191,029
C. To present active members	
1. Allocated to service rendered prior to valuation date	57,623,260
2. Allocated to service likely to be rendered after valuation date	33,542,118
3. Totals	91,165,378
D. Total Actuarial Present Value of Expected Future Benefit Payments	**$196,323,781**

ALLOCATION OF $196.3 MILLION OF BENEFIT PROMISES AS OF JUNE 30, 2007



COMMENTS, RECOMMENDATIONS AND CONCLUSION

COMMENT A: Contribution requirements decreased from the prior year, from 21.33% of payroll to 20.60% of payroll. This was primarily due to the favorable investment return and salary increases that were lower than expected.

COMMENT B: For the year ended June 30, 2007, net investment return of 12.6% was above the assumed level of 7.75% on a market value basis. Under the asset valuation method, investment gains and losses are spread over a 4-year period. After combining the phase-in of investment gains and losses for the current and prior three years, there was a net recognized asset gain for the year of $1.7 million.

COMMENT C: As a result of the favorable system experience, the funded status of the plan increased from 86.7% last year to 88.2% as of June 30, 2007. On a market value basis, the funded status is 90.7% as of June 30, 2007.

RESERVE TRANSFERS: The actuarial present value of benefits payable to General retirees and beneficiaries on the rolls as of June 30, 2007 exceeded the Reserve for Retired Benefit Payments for General members by $1,360,644. The actuarial present value of benefits payable to Police/Fire retirees and beneficiaries on the rolls as of June 30, 2007, exceeded the reserves allocated to the Police/Fire division by $4,312,264. In accordance with the Retirement System Ordinance, we recommend the transfer of $1,360,644 from the Reserve for Employer Contributions to the General Reserve for Retired Benefit Payments and $4,312,264 from the Reserve for Employer Contributions to the Police/Fire Reserve for Retired Benefit Payments. In accordance with the current administrative procedures, since the reserve for Undistributed Investment Income is greater than 10% of the Market Value of the fund, a transfer of $7,715,040 should be made from the reserve for Undistributed Investment Income to the reserve for Employer Contributions.

CONCLUSION: We certify that the valuation is complete and accurate and was made in accordance with generally recognized actuarial methods. The actuarial assumptions summarized in Section C are in aggregate a reasonable representation of the past and anticipated future experience of the System.

ACTUARIAL ACCRUED LIABILITIES & ASSETS COMPARATIVE STATEMENT

Valuation Date	Actuarial Accrued Liability (AAL) ($1,000s)	Valuation Assets ($1,000s)	Unfunded Actuarial Accrued Liability (UAAL) ($1,000s)	Ratio of Valuation Assets to AAL	Ratio of UAL to Valuation Payroll
5-31-84*	$ 49,397	$ 35,642	$ 13,755	72.2 %	139.2 %
5-31-85	52,062	38,438	13,624	73.8 %	132.5 %
5-31-86	52,625	41,593	11,032	79.0 %	105.6 %
5-31-87*	57,698	45,963	11,735	79.7 %	102.1 %
5-31-88	61,331	51,036	10,295	83.2 %	86.0 %
5-31-89*	65,212	54,259	10,953	83.2 %	93.8 %
5-31-90*	68,924	58,438	10,486	84.8 %	84.2 %
5-31-91*	73,106	62,262	10,844	85.2 %	82.7 %
5-31-92*	77,429	69,859	7,570	90.2 %	58.9 %
6-30-93*	84,193	77,427	6,766	92.0 %	49.5 %
6-30-94*	88,519	88,519	0	100.0 %	-
6-30-95*	92,495	97,795	(5,300)	105.7 %	-
6-30-96	94,730	105,572	(10,842)	111.4 %	-
6-30-97	97,622	116,317	(18,695)	119.2 %	-
6-30-98	102,995	132,289	(29,294)	128.4 %	-
6-30-99	107,934	147,433	(39,499)	136.6 %	-
6-30-00	111,515	159,268	(47,753)	142.8 %	-
6-30-00*	113,215	159,268	(46,053)	140.7 %	-
6-30-01*	121,589	162,586	(40,997)	133.7 %	-
6-30-02	128,303	156,403	(28,100)	121.9 %	-
6-30-03*	136,529	146,740	(10,211)	107.5 %	-
6-30-04*	146,386	137,851	8,535	94.2 %	-
6-30-05*	152,016	134,773	17,243	88.7 %	82.7 %
6-30-06	158,239	137,264	20,975	86.7 %	102.7 %
6-30-07	162,782	143,619	19,163	88.2 %	94.3 %

* *After changes in benefit provisions and/or actuarial assumptions and actuarial cost methods.*

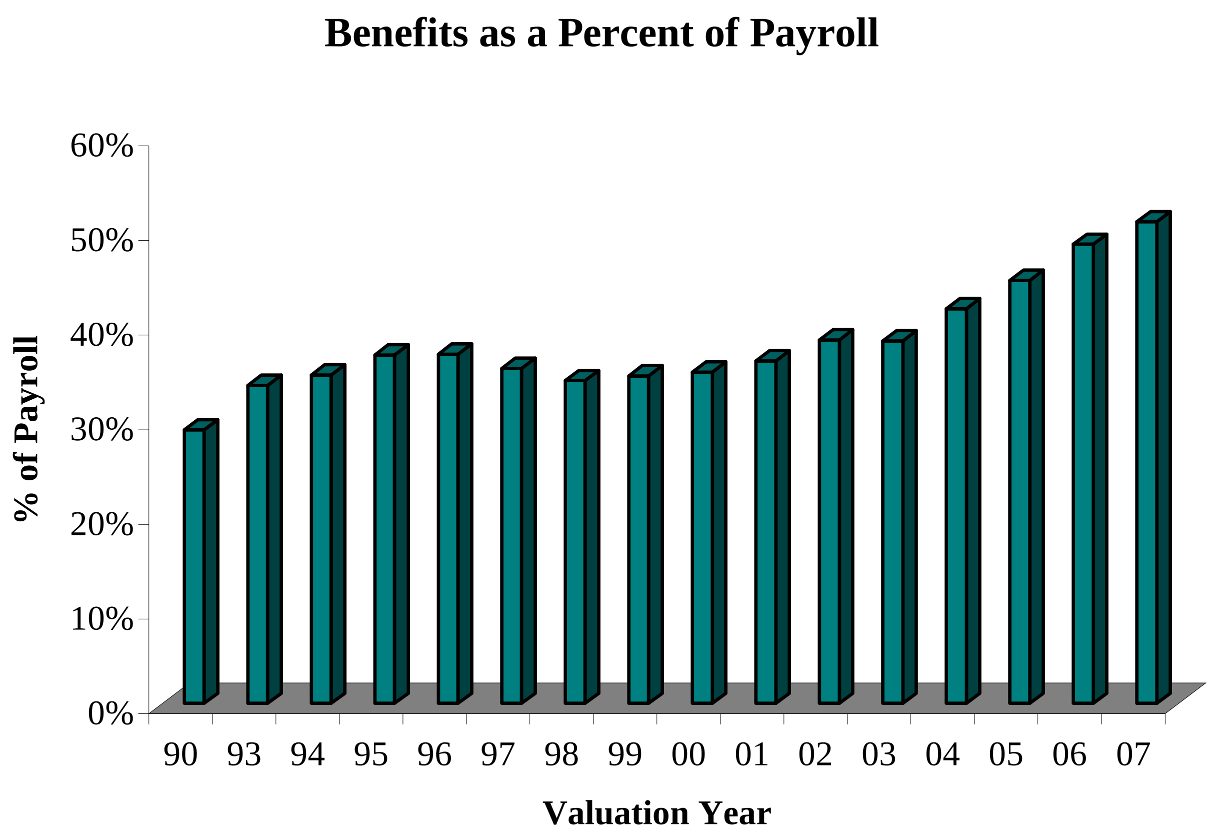
The Ratio of Present Assets to AAL is a traditional measure of a system's funding progress. Except in years when the system is amended or actuarial assumptions are revised, this ratio can be expected to increase (or decrease) gradually toward 100%.

The Ratio of UAAL to Valuation Payroll is another relative index of condition. Unfunded actuarial accrued liabilities represent debt, while active member payroll represents the system's capacity to collect contributions to pay toward debt. The lower the ratio, the greater the financial strength - and vice-versa.

COMPUTED EMPLOYER CONTRIBUTIONS
COMPARATIVE STATEMENT

Valuation Date	Active Members No.	Valuation Payroll Total	Valuation Payroll Average	Valuation Payroll % Incr.	Retirees & Beneficiaries No.	Active Per Retired	Annual Allowances $	Annual Allowances % of Payroll	Employer Contributions As Payroll Percents General & Water	Police & Fire	Wt. Avg.
5-31-83	348	$ 8,847,234	$25,423	(7.1)%	263	1.30	$1,792,492	20.3 %	17.77 %	25.53 %	
5-31-84*	360	9,878,860	27,441	11.7 %	271	1.30	1,910,405	19.3 %	16.64 %	23.28 %	
5-31-85	358	10,280,426	28,716	4.1 %	288	1.20	2,125,341	20.7 %	16.49 %	22.68 %	
5-31-86	359	10,450,609	29,110	1.7 %	297	1.20	2,236,500	21.4 %	16.05 %	21.24 %	
5-31-87*	363	11,491,099	31,656	10.0 %	311	1.20	2,495,645	21.7 %	16.34 %	22.60 %	
5-31-88	364	11,974,522	32,897	4.2 %	330	1.10	2,842,657	23.7 %	15.75 %	22.26 %	
5-31-89*	357	11,681,433	32,721	(2.4)%	363	0.98	3,535,678	30.3 %	17.39 %	22.32 %	
5-31-90*	360	12,453,638	34,593	6.6 %	368	0.98	3,594,058	28.9 %	16.95 %	23.12 %	
5-31-91*	357	13,112,701	36,730	5.3 %	374	0.95	3,763,075	28.7 %	16.50 %	24.52 %	
5-31-92	352	12,844,067	36,489	(2.0)%	395	0.89	4,317,111	33.6 %	15.53 %	23.58 %	
6-30-93*	364	13,664,416	37,540	6.4 %	407	0.89	4,597,263	33.6 %	17.02 %	22.50 %	
6-30-94*#	360	14,109,602	39,193	3.3 %	415	0.87	4,894,145	34.7 %	11.85 %	15.16 %	0.13 %
6-30-95*	370	14,595,387	39,447	3.4 %	427	0.87	5,375,306	36.8 %	9.45 %	9.75 %	9.59 %
6-30-96	371	14,991,326	40,408	2.7 %	427	0.87	5,529,852	36.9 %	5.07 %	6.20 %	5.62 %
6-30-97	384	15,949,326	41,535	6.4 %	430	0.89	5,647,518	35.4 %	0.60 %	0.42 %	0.53 %
6-30-98	392	17,181,869	43,831	7.7 %	426	0.92	5,865,307	34.1 %	0.00 %	0.00 %	0.00 %
6-30-99	385	17,501,352	45,458	1.9 %	429	0.90	6,051,286	34.6 %	0.00 %	0.00 %	0.00 %
6-30-00*	396	18,129,821	45,782	3.6 %	437	0.91	6,346,060	35.0 %	0.00 %	0.00 %	0.00 %
6-30-01*	397	18,962,345	47,764	4.6 %	447	0.89	6,865,032	36.2 %	0.00 %	0.00 %	0.00 %
6-30-02	394	19,368,385	49,158	2.1 %	458	0.86	7,429,422	38.4 %	0.00 %	0.00 %	0.00 %
6-30-03*	391	20,138,113	51,504	4.0 %	456	0.86	7,710,821	38.3 %	3.79 %	10.20 %	6.90 %
6-30-04*	378	20,569,285	54,416	2.1 %	474	0.80	8,575,578	41.7 %	16.27 %	22.87 %	19.55 %
6-30-05*	365	20,839,464	57,094	1.3 %	479	0.76	9,305,818	44.7 %	16.76 %	23.52 %	20.12 %
6-30-06	351	20,431,658	58,210	(2.0)%	479	0.73	9,908,394	48.5 %	18.25 %	24.30 %	21.33 %
6-30-07	346	20,327,590	58,750	(0.5)%	482	0.72	10,342,238	50.9 %	17.57 %	23.49 %	20.60 %

* *After changes in benefit provisions.*
\# *Actuarial assumptions revised.*


Benefits as a Percent of Payroll
60%
50%
40%
30%
20%
10%
0%
% of Payroll
90
93
94
95
96
97
98
99
00
01
02
03
04
05
06
07
Valuation Year

SECTION B

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

SUMMARY OF BENEFIT PROVISIONS EVALUATED
JUNE 30, 2007

REGULAR RETIREMENT (no reduction factor for age):

Eligibility – Permanent:

AFSCME, Executive Department Heads, Department Heads and Deputies, Professional and Technical, Police Service Aides, Teamsters: Age 55 with 25 years of service or age 60 with 5 years of service.

Supervisors, Local 270M: Age 50 with 30 years of service or age 60 with 5 years of service.

Police Command, Police Officers, Detectives, Fire Fighters: Any age with 25 years of service or age 55 with 10 years of service.

Temporary Eligibility (Assumed to continue until new contracts have been settled):

Executive Department Heads, Department Heads and Deputies, AFSCME, Professional and Technical, Supervisors, Teamsters: Age 50 with 25 years of service, age 55 with 20 years of service, or age 60 with 5 years of service.

Local 270M: Any age with 30 years of service, age 50 with 25 years of service, age 55 with 20 years of service, or age 60 with 5 years of service.

Type of Final Average Compensation (FAC):

AFSCME, Executive Department Heads, Professional & Technical, Supervisors, Police Command, Detectives, Fire Fighters: Highest 2 years out of last 10 years.

Department Heads & Deputies, Local 270M, Police Officers, Police Service Aides, Teamsters: Highest 2 consecutive years out of last 10 years.

Annual Amount:

AFSCME, Executive Department Heads, Department Heads and Deputies, Professional and Technical, Local 270M, Supervisors: Total service years multiplied by 2.5% for the first 20 years of service and 2.2% thereafter of FAC with a maximum allowance of 75% of FAC.

Teamsters: For employees hired before 4/29/2004, 2.8% for the first 20 years of service and 1.5% thereafter. For employees hired after 4/29/2004, 2.5% for the first 20 years of service and 2.2% thereafter of FAC. All employees have a maximum allowance of 75% of FAC.

Police Officers, Detectives, Police Command, Fire Fighters: Total service years multiplied by 2.8% of FAC with a maximum allowance of 75% of FAC.

Police Service Aides: Total service years multiplied by 2.5% for the first 20 years of service and 2.2% thereafter of FAC with a maximum allowance of 80% of FAC.

SUMMARY OF BENEFIT PROVISIONS EVALUATED
JUNE 30, 2007

DEFERRED RETIREMENT (vested benefit):

Eligibility:

AFSCME, Executive Department Heads, Department Heads and Deputies, Professional and Technical, Local 270M, Supervisors, Police Service Aides: 5 years of service.
Police Officers, Police Command, Detectives, Fire Fighters: 10 years of service.

Annual Amount:

Same as regular retirement but based upon service and final average compensation at time of termination.

AFSCME, Executive Department Heads, Department Heads and Deputies, Professional & Technical, Police Service Aides, Teamsters: Payable at age 55 with 25 years of service or age 60 with 5 years of service.

Supervisors, Local 270M: Payable at age 50 with 30 years of service or age 60 with 5 years of service.

Police Officers, Police Command, Detectives, Fire Fighters: Payable at age 55 with 10 years of service.

DUTY DISABILITY RETIREMENT:

Eligibility - No age or service requirements.

Annual Amount:

AFSCME: 66-2/3% of base monthly salary at time of disability, with recomputation to 70% after 5 years of disability and 75% after 10 years. Benefit is payable until attaining minimum retirement requirements.

Executive Department Heads, Department Heads & Deputies: 66% of base monthly salary at time of disability. Benefit is payable until voluntary retirement age.

Professional & Technical, Supervisors, Local 270M, Teamsters: 66-2/3% of base monthly salary at time of disability. Benefit is payable until voluntary retirement age for Professional & Technical and Teamsters and until age 60 for Supervisors and Local 270M.

Police Officers, Police Command, Detectives, Police Service Aides: 66-2/3% of base monthly salary, where salary is adjusted for negotiated pay increases for physical disabilities and remains the salary at the time of disability for psychological disabilities. Workers' compensation is offset. Benefit is payable until age 55 for Police Officers, Police Command, and Detectives and until age 60 for Police Service Aides.

Fire Fighters: 66-2/3% of base monthly salary at time of disability. Worker's compensation is offset. Benefit is payable until voluntary retirement age.

Duty Disability Maximum Monthly Benefit:

Executive Department Heads, Department Heads & Deputies:	$5,000
Professional & Technical:	$3,500
AFSCME, Local 270M, Supervisors, Teamsters, Police Officers, Police Command, Detectives, Police Service Aides, Fire Fighters:	No maximum

NON-DUTY DISABILITY RETIREMENT:

Eligibility:

Local 270-M: 10 years of service.

AFSCME, Executive Department Heads, Department Heads and Deputies, Professional and Technical, Supervisors, Police Officers, Police Command, Detectives, Police Service Aides, Fire Fighters: 5 years of service.

Annual Amount:

AFSCME: 66-2/3% of base monthly salary at time of disability. Benefit is payable until attaining minimum retirement requirements.

Fire Fighters: 50% of base monthly salary at time of disability. Benefits are payable the same as duty disability.

Executive Department Heads, Department Heads and Deputies, Professional and Technical, Local 270M, Supervisors, Police Officers, Police Command, Police Service Aides, Detectives: Benefits are the same as duty disability.

DUTY DEATH BEFORE RETIREMENT:

Eligibility - No age or service requirements.

Annual Amount - Computed as regular retirement but with additional service credit from date of death until date age 60 would have been attained. Spouse is paid 75% of regular retirement benefit; 1 or 2 unmarried children under age 19 are paid 10% of regular retirement benefit per child; 3 or more unmarried children under age 19 are paid an equal share of 25% of regular retirement benefit. Worker's Compensation payments are offset.

NON-DUTY DEATH BEFORE RETIREMENT:

Eligibility - 3 years of service.

Annual Amount - Same as duty death before retirement.

AUTOMATIC DEATH BENEFIT AFTER RETIREMENT:

75% of a retiree's straight life pension will be continued to an eligible surviving spouse upon retiree's death with no corresponding reduction in straight life pension.

LUMP SUM DEATH BENEFIT AFTER RETIREMENT:

$4,000 for all divisions.

SUMMARY OF BENEFIT PROVISIONS EVALUATED
JUNE 30, 2007

MEMBER CONTRIBUTIONS:

	Percent of Annual Compensation	
	To Social Security Wage Base	**Over Social Security Wage Base**
Judges	1.20%	1.20%
AFSCME, Police Service Aides	1.50	3.50
Executive Department Heads, Department Heads and Deputies, Teamster, Professional and Technical	2.00	4.00
Local 270M	3.00	5.00
Supervisors	3.00	3.00
Police Officers, Detectives, Police Command, Fire Fighters	2.00	2.00

ANNUITY WITHDRAWAL:

Members may withdraw their accumulated member contributions upon retirement with a corresponding reduction in pension amount.

COVERED COMPENSATION:

AFSCME, Executive Department Heads, Department Heads and Deputies, Professional and Technical, Local 270M, Supervisors: Covered compensation includes base salary, longevity and up to 96 hours of sick leave incentive pay.

Teamsters: Covered compensation includes base salary and up to 96 hours of sick leave incentive pay.

Police Command: Covered compensation includes base salary, longevity, payment in lieu of holidays, uniform allowance, up to 96 hours of sick leave incentive pay and required administrative time.

Fire Fighters: Covered compensation includes base salary, longevity, payment in lieu of holidays, uniform allowance, cleaning allowance, food allowance, sick leave incentive pay and paramedic premium.

Police Officers, Police Service Aides: Covered compensation includes base salary, longevity, payment in lieu of holidays, up to 120 hours of sick and personal business days, and up to 200 hours from the vacation bank.

Detectives: Covered compensation includes base salary, longevity and payment in lieu of holidays, 24 personal business hours, up to 96 hours sick leave incentive pay and up to 200 hours from the vacation bank.

RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS
COMPARATIVE STATEMENT

Valuation Date	Added to Rolls* No.	Added to Rolls* Annual Allowances	Removed from Rolls # No. A	Removed from Rolls # No. E	Removed from Rolls # Annual Allowances	Net Increase No.	Net Increase Annual Allowances	Rolls End of Year No.	Rolls End of Year Annual Allowances
5/31/83	42	$ 453,290	10		$ 41,420	32	$411,870	263	$1,792,492
5/31/84	17	175,727	9		57,814	8	117,913	271	1,910,405
5/31/85	29	283,601	12	8.8	68,665	17	214,936	288	2,125,341
5/31/86	17	147,292	8	9.3	36,133	9	111,159	297	2,236,500
5/31/87	22	288,998	8	9.9	29,853	14	259,145	311	2,495,645
5/31/88	26	403,952	7	10.1	56,940	19	347,012	330	2,842,657
5/31/89	41	748,391	8	10.7	55,370	33	693,021	363	3,535,678
5/31/90	15	184,697	10	11.8	126,317	5	58,380	368	3,594,058
5/31/91	18	292,334	12	12.8	123,317	6	169,017	374	3,763,075
5/31/92	37	668,965	16	13.6	114,929	21	554,036	395	4,317,111
6/30/93	27	408,146	15	13.9	127,994	12	280,152	407	4,597,263
6/30/94	26	456,550	18	14.3	159,668	8	296,882	415	4,894,145
6/30/95	21	513,916	9	13.5	32,755	12	481,161	427	5,375,306
6/30/96	12	272,020	12	13.5	117,474	0	154,546	427	5,529,852
6/30/97	19	349,731	16	9.8	232,065	3	117,666	430	5,647,518
6/30/98	12	300,261	16	6.8	82,472	(4)	217,789	426	5,865,307
6/30/99	24	369,781	21	15.2	183,802	3	185,979	429	6,051,286
6/30/00	25	532,563	17	15.6	237,789	8	294,774	437	6,346,060
6/30/01	18	585,533	8	16.2	66,561	10	518,972	447	6,865,032
6/30/02	27	648,282	16	17.3	83,892	11	564,390	458	7,429,422
6/30/03	24	512,343	26	18.1	230,945	(2)	281,399	456	7,710,821
6/30/04	31	1,003,875	13	18.4	139,118	18	864,757	474	8,575,578
6/30/05	27	953,722	22	19.5	223,481	5	730,240	479	9,305,818
6/30/06	21	824,024	21	16.4	221,448	0	602,576	479	9,908,394
6/30/07	24	631,164	21	17.4	197,320	3	433,844	482	10,342,238

* *Includes beneficiaries of deceased retirees.*

\# *Includes deceased retirees with beneficiaries.*

A - Represents actual number.
E - Represents expected number based on actuarial assumptions.

RETIREES AND BENEFICIARIES JUNE 30, 2007
TABULATED BY TYPE OF ALLOWANCE BEING PAID

Type of Allowances Being Paid	General & Water No.	General & Water Amount	Police Officers & Fire Fighters No.	Police Officers & Fire Fighters Amount	Totals No.	Totals Amount
	Annual Retirement Allowances					
Age and Service Allowances						
Regular allowance						
Terminating at death of retirant	67	$ 974,524	18	$ 561,694	85	$1,536,218
75% of benefit continuing to spouse	130	2,769,178	141	4,763,969	271	7,533,147
100% Joint & Survivor benefit	2	10,628	2	7,493	4	18,121
50% Joint & Survivor benefit	3	12,899	1	6,635	4	19,534
Survivor beneficiary of deceased retirant	46	327,903	41	527,092	87	854,995
Domestic Relations Order Recipient	6	74,517	2	29,050	8	103,567
Total Age and Service Allowances	254	$4,169,649	205	$5,895,933	459	$10,065,582
Casualty Allowances						
Duty Disability Allowances						
Terminating at death of retirant						
Joint & Survivor benefit	1	$ 4,444	1	$ 22,780	2	$ 27,224
Survivor beneficiary of deceased retirant						
Totals	1	$ 4,444	1	$ 22,780	2	$ 27,224
Non-Duty Disability Allowances						
Terminating at death of retirant						
Joint & Survivor benefit						
Survivor beneficiary of deceased retirant						
Totals						
Duty Death Allowances						
Survivor beneficiary			1	$ 4,860	1	$ 4,860
Child(ren) beneficiary						
Totals			1	$ 4,860	1	$ 4,860
Non-Duty Death Allowances						
Spouse beneficiary	8	$ 70,949	9	$ 160,496	17	$ 231,445
Child(ren) beneficiary			3	13,127	3	13,127
Totals	8	$ 70,949	12	$ 173,623	20	$ 244,572
Total Casualty Allowances	9	$ 75,393	14	$ 201,263	23	$ 276,656
Total Allowances Being Paid	**263**	**$4,245,042**	**219**	**$6,097,196**	**482**	**$10,342,238**

RETIREES AND BENEFICIARIES JUNE 30, 2007
TABULATED BY ATTAINED AGES

	Age and Service		Casualty		Totals	
Attained Ages	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**	**No.**	**Annual Allowances**
Under 40			4	$ 15,824	4	$ 15,824
40-44	4	$ 167,724			4	167,724
45-49	7	310,540	1	37,878	8	348,418
50-54	19	850,508			19	850,508
55-59	54	2,143,445	4	95,366	58	2,238,811
60-64	62	1,771,775	1	4,860	63	1,776,635
65-69	75	1,822,013	2	33,707	77	1,855,720
70-74	52	972,971	4	40,076	56	1,013,047
75-79	72	1,092,351	3	19,671	75	1,112,022
80-84	63	624,931	2	25,189	65	650,120
85-89	33	224,774	1	1,797	34	226,571
90 & Over	18	84,550	1	2,288	19	86,838
Totals	**459**	**$10,065,582**	**23**	**$276,656**	**482**	**$10,342,238**

INACTIVE MEMBERS JUNE 30, 2007
TABULATED BY ATTAINED AGES

Also included in the valuation were 29 General members and 5 Police/Fire members who are eligible for estimated deferred allowances of $418,745 upon retirement. Some of these 34 inactive members are presently covered under either a long-term disability insurance policy or worker's compensation.

Attained Ages	No.	Estimated Deferred Annual Allowances
40	1	$ 5,460
41	1	4,100
44	3	49,308
45	1	27,613
47	3	47,173
48	2	19,268
50	1	16,467
51	1	5,637
52	4	43,900
53	2	16,560
54	3	33,355
55	2	34,705
56	5	31,738
57	1	13,762
58	2	60,465
60	1	7,318
64	1	1,916
Totals	**34**	**$418,745**

ACTIVE MEMBERS -- COMPARATIVE SCHEDULE

Valuation Date	Active Members	Valuation Payroll	Average Age	Average Service	Average Pay	Average % Pay Increase
5-31-88	364	$11,974,522	43.3 yrs.	12.6 yrs.	$32,897	3.9 %
5-31-89	357	11,681,433	42.0	11.2	32,721	(0.5)%
5-31-90	360	12,453,638	42.0	11.4	34,593	5.7 %
5-31-91	357	13,112,701	42.2	11.8	36,730	6.2 %
5-31-92	352	12,844,067	41.9	11.6	36,489	(0.7)%
6-30-93	364	13,664,416	41.7	11.5	37,540	2.9 %
6-30-94	360	14,109,602	41.6	11.3	39,193	4.4 %
6-30-95	370	14,595,387	41.3	10.8	39,447	0.6 %
6-30-96	371	14,991,326	41.5	10.9	40,408	2.4 %
6-30-97	384	15,949,325	41.8	10.8	41,535	2.8 %
6-30-98	392	17,181,869	41.8	10.8	43,831	5.5 %
6-30-99	385	17,501,352	42.4	11.5	45,458	3.7 %
6-30-00	396	18,129,821	42.2	11.0	45,782	0.7 %
6-30-01	397	18,962,345	42.7	11.1	47,764	4.3 %
6-30-02	394	19,368,385	43.1	10.9	49,158	2.9 %
6-30-03	391	20,138,113	43.2	11.1	51,504	4.8 %
6-30-04	378	20,569,285	43.5	10.9	54,416	5.7 %
6-30-05	365	20,839,464	43.7	11.0	57,094	4.9 %
6-30-06	351	20,431,658	43.9	11.4	58,210	2.0 %
6-30-07	346	20,327,590	44.1	11.8	58,750	0.9 %

ACTIVE MEMBERS - JUNE 30, 2007

Group	Active Members	Valuation Payroll
Local 270M	55	$ 2,466,173
Department Heads and Deputies	24	1,911,318
Professional & Technical	46	2,405,182
AFSCME	52	2,237,083
Foremen and Supervisors	6	396,528
Judges	2	96,770
Teamsters Hired Before 4/29/2004	0	0
Teamsters Hired After 4/29/2004	0	0
Police Service Aides	10	472,571
Police	64	4,091,427
Fire	60	4,048,575
Police Command	16	1,327,142
Police Detectives	7	522,135
Police/Fire Department Heads	4	352,686
Total	**346**	**$20,327,590**

ACTIVE MEMBERS ADDED TO AND REMOVED FROM ROLLS

Year Ended	Number Added During Year A	Number Added During Year E	Terminations During Year: Normal Retirement A	Normal Retirement E	Disabled A	Disabled E	Death Service A	Death Service E	Other Terminations A	Other Terminations E	Active Members End of Year
5-31-88	27	26	14	10.1	0	2.8	3	1.3	9	12.3	364
5-31-89	36	43	33	13.4	1	2.7	0	1.2	9	12.9	357
5-31-90	24	21	6	12.9	0	2.8	1	1.2	14	12.3	360
5-31-91	16	19	8	11.0	1	2.6	1	1.1	9	13.6	357
5-31-92	24	29	21	11.7	0	2.7	1	1.0	7	13.2	352
6-30-93	30	18	12	12.9	0	2.4	2	1.0	4	11.6	364
6-30-94	25	29	16	10.5	2	2.3	1	1.1	10	11.3	360
6-30-95	37	27	14	10.5	2	2.3	2	1.0	9	11.9	370
6-30-96	27	26	8	10.2	0	1.4	0	0.9	18	11.8	371
6-30-97	30	17	8	9.3	0	1.3	0	0.8	9	14.0	384
6-30-98	23	15	9	11.2	0	1.4	0	0.8	6	14.5	392
6-30-99	21	28	11	10.5	0	1.4	0	0.7	17	14.5	385
6-30-00	38	27	12	10.1	0	1.3	0	0.9	15	13.5	396
6-30-01	27	26	13	9.5	1	1.3	0	0.9	12	14.9	397
6-30-02	25	28	15	7.4	1	1.3	2	0.9	10	14.6	394
6-30-03	16	19	12	9.8	2	1.3	0	0.8	5	14.1	391
6-30-04	19	32	21	10.8	0	1.3	1	0.9	10	12.5	378
6-30-05	14	27	20	9.5	0	1.3	0	0.9	7	12.1	365
6-30-06	7	21	18	5.9	2	1.4	0	0.7	1	7.7	351
6-30-07	13	18	13	4.8	0	1.5	0	0.7	5	6.5	346
Last 5 Years			84	40.8	4	6.8	1	4.0	28	52.9	

A - Represents actual number.

E - Represents expected number based on actuarial assumptions.

GENERAL AND WATER MEMBERS
(INCLUDES POLICE SERVICE AIDES)
BY ATTAINED AGE AND YEARS OF SERVICE

Age	Years of Accrued Service							Totals	
Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Salary
20-24									
25-29	3	1						4	$ 156,578
30-34	6	5	3					14	668,619
35-39	5	11	4					20	831,892
40-44	4	9	9	7	2			31	1,666,452
45-49	1	12	13	8	6			40	2,065,835
50-54	1	17	4	7	6	5		40	2,111,979
55-59	5	8	5	6	3	1		28	1,403,650
60	2				1		1	4	318,306
61		1	3					4	203,608
63				1				1	53,454
64		1	1					2	88,675
65		1	2					3	151,077
66		1						1	46,973
69			1					1	50,296
70			1		1			2	168,231
Totals	**27**	**67**	**46**	**29**	**19**	**6**	**1**	**195**	**$9,985,625**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Group Averages

Age:	47.6	years
Service:	11.5	years
Annual Pay:	$51,208	

POLICE AND FIRE MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE

Age	Years of Accrued Service							Totals	
Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Salary
20-24	4							4	$ 189,746
25-29	12							12	617,936
30-34	6	13	1					20	1,270,166
35-39	3	13	20	5				41	2,867,749
40-44	1	4	10	16	1			32	2,284,011
45-49	1	1	4	12	8			26	1,854,296
50-54		1	1	4	7	1		14	1,089,923
55-59					1	1		2	168,138
Totals	**27**	**32**	**36**	**37**	**17**	**2**		**151**	**$10,341,965**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Group Averages

Age:	39.7 years
Service:	12.2 years
Annual Pay:	$68,490

SUMMARY OF REPORTED ASSET INFORMATION AS OF JUNE 30, 2007 (MARKET VALUE)

Balance Sheet

Reported Assets		Reserves for	
Cash & equivalents	$ 1,000	Member contributions	$ 9,546,307
Other short-term	6,933,937	Employer contributions	18,278,039
Receivables & accruals	318,402	Retired benefit payments	97,294,466
Equities	96,470,615	Undistributed investment income	22,474,357
Fixed income	45,356,370		
Real estate investments	0		
Accounts payable	(1,487,155)		
Total Current Assets	**$147,593,169**	**Total Reserves**	**$147,593,169**

Revenues and Expenditures

	2006-07	2005-06
Balance - Beginning of year	$136,507,062	$133,498,077
Revenues		
Member contributions	1,129,400	1,392,013
Employer contributions	4,055,421	3,768,869
Investment income	17,831,033	9,604,437
Total	23,015,854	14,765,319
Expenditures		
Benefit payments	10,336,481	9,828,034
Health insurance premiums for retired member	0	0
Refund of member contributions	623,558	955,932
Administrative & investment expenses	969,708	972,368
Total	11,929,747	11,756,334
Balance - End of year	$147,593,169	$136,507,062

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

Year Ended June 30:	2006	2007	2008	2009	2010
A. Funding Value Beginning of Year	$134,773,019	$137,263,998			
B. Market Value End of Year	136,507,062	147,593,169			
C. Market Value Beginning of Year	133,498,077	136,507,062			
D. Non-Investment Net Cash Flow	(5,623,084)	(5,775,218)			
E. Investment Income					
E1. Market Total: B-C-D	8,632,069	16,861,325			
E2. Amount for Immediate Recognition: (7.75%)	10,227,014	10,414,170			
E3. Amt. for Phased In Recognition: E1-E2	(1,594,945)	6,447,155			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.25 x E3	(398,736)	1,611,789			
F2. First Prior Year	(63,936)	(398,736)	$1,611,789		
F3. Second Prior Year	567,148	(63,936)	(398,736)	$1,611,789	
F4. Third Prior Year	(2,217,427)	567,146	(63,937)	(398,737)	$1,611,788
F5. Total Recognized Investment Gain	(2,112,951)	1,716,263	1,149,116	1,213,052	1,611,788
G. Funding Value End of Year: A+D+E2+F5	137,263,998	143,619,213			
H. Difference Between Market & Funding Value	(756,936)	3,973,956	2,824,840	1,611,788	0
I. Recognized Rate of Return	**6.1%**	**9.0%**			
J. Market Value Rate of Return	6.6%	12.6%			
K. Ratio of Funding Value to Market Value	100.6%	97.3%			

The Funding Value of Assets recognizes assumed investment income (line E2) fully each year. Differences between actual and assumed investment income (line E3) 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. The Funding Value of Assets is **unbiased** with respect to Market Value. At any time it may be either greater or less than Market Value. If actual and assumed rates of investment income are exactly equal for 4 consecutive years, the Funding Value will become equal to Market Value.

SECTION C

SUMMARY OF VALUATION METHODS AND ASSUMPTIONS

BASIC FINANCIAL OBJECTIVE AND OPERATION OF THE RETIREMENT SYSTEM

Benefit Promises Made Which Must Be Paid For: A retirement program is an orderly means of handing out, keeping track of, and financing contingent pension promises to a group of employees. As each member of the retirement program acquires a unit of service credit they are, in effect, handed an "IOU" which reads: "The Retirement System promises to pay you one unit of retirement benefits, payments in cash commencing when you retire."

The principal related financial question is: When shall the money required to cover the "IOU" be contributed? This year, when the benefit of the member's service is received? Or, some future year when the "IOU" becomes a cash demand?

The Constitution of the State of Michigan is directed to the question:

> "Financial benefits arising on account of service rendered in each fiscal year shall be funded during that year and such funding shall not be used for financing unfunded accrued liabilities."

This Retirement System meets this constitutional requirement by having the following **Financial Objective: To establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year to year** and will not have to be increased for future generations of taxpayers.

Translated into actuarial terminology, a level percent-of-payroll contribution objective means that the contribution rate must be at least:

> *Normal Cost* (the current value of benefits likely to be paid on account of member's service being rendered in the current year).
>
> ... plus ...
>
> *Interest on the Unfunded Actuarial Accrued Liability* (the difference between the actuarial accrued liability and current system assets).

If contributions to the retirement program are less than the preceding amount, the difference, plus investment earnings not realized thereon, will have to be contributed at some later time, or, benefits will have to be reduced, to satisfy the fundamental fiscal equation under which all retirement programs must operate; that is:

$$\mathbf{B = C + I - E}$$

Benefit payments to any group of members and their beneficiaries cannot exceed the sum of:

Contributions received on behalf of the group.

. . . plus . . .

Investment earnings on contributions received.

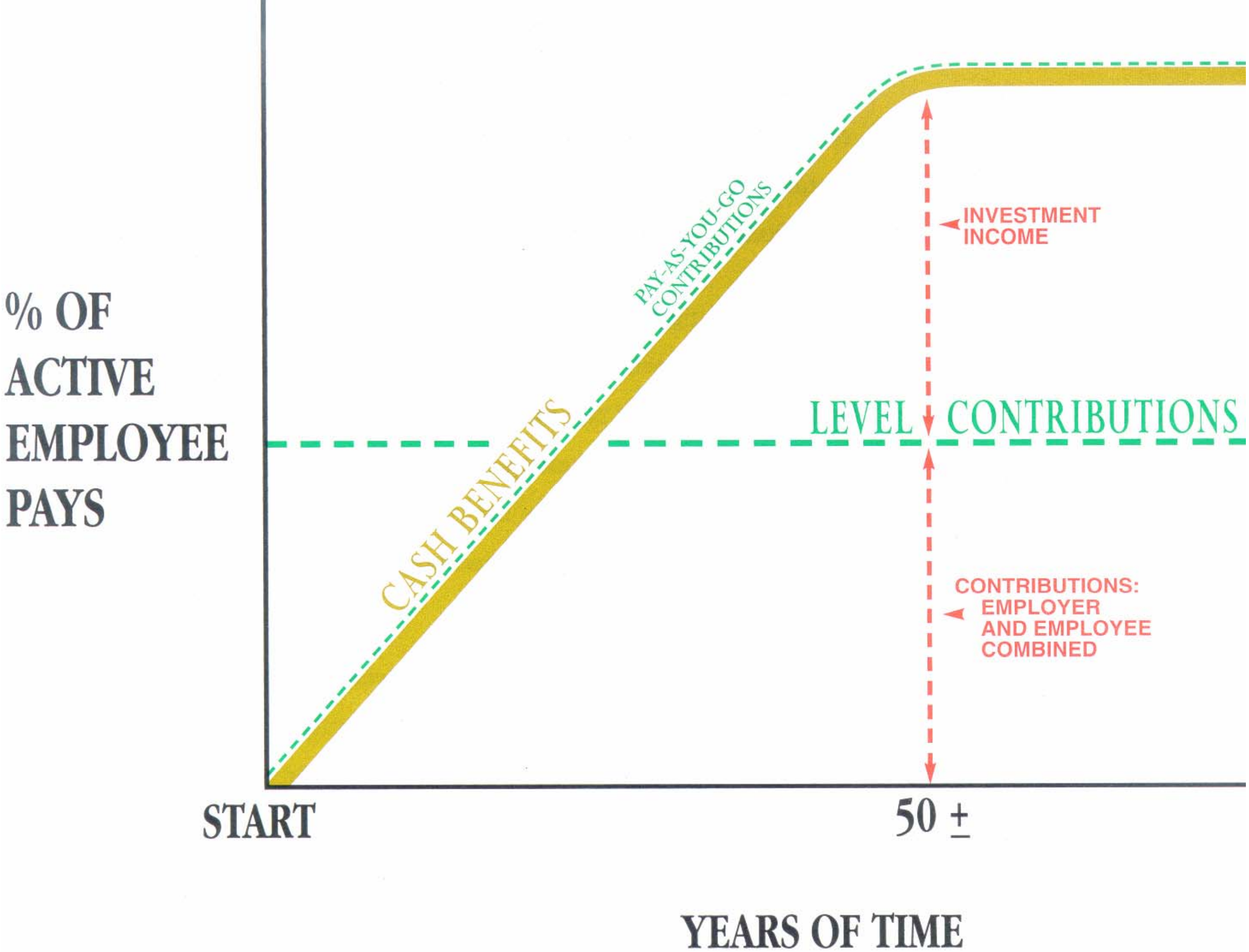
. . . minus . . .

Expenses incurred in operating the program.

A by-product of the level percent-of-payroll contribution objective is the accumulation of invested assets for varying periods of time. Invested assets are a by-product of level percent-of-payroll contributions, not the objective. Investment income becomes a major contributor to the retirement program, and the amount is directly related to the amount of contributions and investment performance.

There are retirement programs designed to defer the bulk of contributions far into the future. Lured by artificially low present contributions, such programs ignore the inevitable consequence of a relentlessly increasing contribution rate -- to a level greatly in excess of the level percent-of-payroll rate. ***This method of financing is prohibited in Michigan by the State Constitution***.

Computed Contribution Rate Needed to Finance Benefits: From a given schedule of benefits and from the data furnished, the actuary calculates the contribution rate by means of an actuarial valuation - the technique of assigning monetary values to the risks assumed in operating a retirement program.

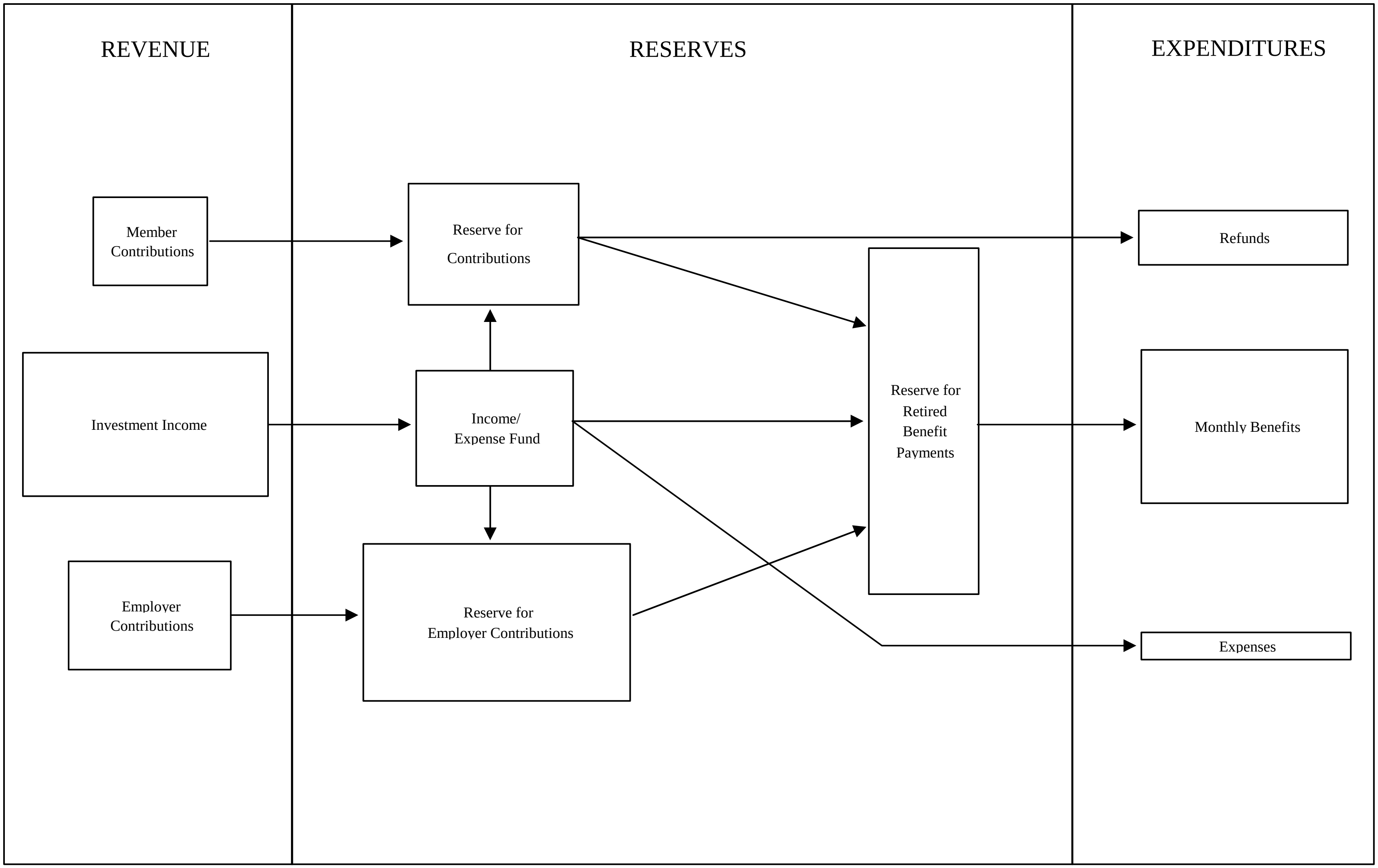


CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

- Economic Risk Areas
    - Rates of investment return
    - Rates of pay increase
    - Changes in active member group size
- Non-Economic Risk Areas
    - Ages at actual retirement
    - Rates of mortality
    - Rates of withdrawal of active members (turnover)
    - Rates of disability

FLOW OF MONEY THROUGH THE RETIREMENT SYSTEM



VALUATION METHODS

Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using an individual **entry-age normal cost** valuation method having the following characteristics:

- the annual normal costs for each individual active member, payable from the date of employment to the date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;

- each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Financing of Unfunded Actuarial Accrued Liabilities: Unfunded actuarial accrued liabilities were amortized by level (principal & interest combined) percent-of-payroll contributions over a period of **30** years.

ACTUARIAL ASSUMPTIONS USED IN THE VALUATION

The actuary calculates the contribution requirements and benefit values of the plan by applying actuarial assumptions to the benefit provisions and census data furnished, using the valuation method described on page C-5.

The principal areas of financial risk which require assumptions about future experience are:

- long-term rates of investment income
- patterns of salary increases
- rates of mortality before and after retirement
- rates of withdrawal from active membership
- rates of disability among members and their subsequent rates of recovery
- probabilities of retirement at various ages after benefit eligibility

In a valuation the monetary effect of each assumption, for each distinct experience group, is projected for the next year and for each year over the next half-century or longer.

Actual experience will not coincide exactly with assumed experience, regardless of the skill of the actuary, the completeness of the data and the precision of the many calculations that are made. Each valuation provides a complete recalculation of system obligations based upon assumptions regarding future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of small adjustments of the computed contribution rate.

From time-to-time it is appropriate to modify one or more of the assumptions to reflect basic experience trends (but not random year-to-year fluctuations).

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefit amounts will be based.

Sample Ages	Annual Rate of Salary Increase for Sample Age: Base (Economic)	Merit & Longevity: General & Water	Merit & Longevity: Police-Fire
20	3.5%	3.8%	3.0%
25	3.5%	3.1%	3.0%
30	3.5%	2.7%	3.0%
35	3.5%	2.4%	2.1%
40	3.5%	2.1%	0.8%
45	3.5%	1.7%	0.2%
50	3.5%	1.1%	0.1%
55	3.5%	0.7%	0.0%
60	3.5%	0.2%	0.0%
65	3.5%	-	-
Ref		5	225

The rate of investment return was 7.75% per year, compounded annually, net after administrative and investment expenses. This assumption is used to make money payable at one point in time equal in value to a different amount of money payable at another point in time.

The assumed real return for funding purposes is the net rate of return in excess of average salary increases. Considering other assumptions used in the valuation, the 7.75% translates to a real return of approximately 4.25%. Experience over the last 5 years has been more favorable than assumed, as illustrated below.

		Year Ending June 30: 2007	2006	2005	2004	2003	5 Year Average
(1)	Nominal rate*	9.0 %	6.1 %	2.6 %	0.1 %	(1.2)%	3.3 %
(2)	Increase in CPI	2.7 %	4.3 %	2.5 %	3.3 %	2.1 %	3.0 %
(3)	Average salary increase	0.9 %	2.0 %	4.9 %	5.7 %	4.8 %	3.6 %
(4)	Real return						
	- investment purposes						0.3 %
	- funding purposes						(0.4)%

* *The nominal rate of return was computed using the approximate formula: i = I divided by 1/2 (A+B-I), where I is recognized investment income, A is the beginning of year funding value and B is the end of year funding value.*

The mortality table was the 1994 Group Annuity Mortality Table multiplied by 110%. This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement.

Sample Attained Ages	Single Life Retirement Values: Present Value of $1 Monthly for Life		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	$136.42	$142.76	29.80	34.03
55	128.19	136.18	25.29	29.33
60	118.00	127.62	21.01	24.78
65	106.21	117.34	17.08	20.51
70	93.44	105.55	13.60	16.60
75	79.50	91.49	10.51	12.96
80	64.91	76.08	7.85	9.75
Ref.	261 x 1.10	262 x 1.10		

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

Retirement Ages	Percent of Eligible Active Members Retiring: General	Police Service Aides	Police Officers & Detectives
45-49			100%
50	15%		100%
51	10%		100%
52	10%		100%
53	10%		100%
54	10%		100%
55	10%	15%	100%
56	10%	10%	100%
57	10%	10%	100%
58	10%	10%	100%
59	10%	10%	100%
60	10%	10%	100%
61	10%	10%	
62	30%	10%	
63	15%	10%	
64	15%	10%	
65	50%	10%	
66	40%	10%	
67	40%	30%	
68	40%	15%	
69	40%	15%	
70	100%	100%	
Ref.	625	623	1

Years of Service	Percent of Eligible Active Members Retiring Police Command & Fire Fighters
25	35%
26	35%
27	35%
28	20%
29	20%
30	20%
31	20%
32	20%
33	20%
34	20%
35	20%
36	20%
37	20%
38	20%
39	20%
40	100%
Ref.	576

A member was assumed to be eligible for retirement after satisfying the following requirements:

Group	Eligibility Requirements for Retirement
Local 270M	30 years of service regardless of age; or 50 years of age with 25 years of service; or 55 years of age with 20 years of service; or 60 years of age with 5 years of service.
Other General & Water	50 years of age with 25 years of service; or 55 years of age with 20 years of service; or 60 years of age with 5 years of service.
Police Command, Police Officers, Detectives & Fire Fighters	25 years of service regardless of age; or 55 years of age with 10 or more years of service.
Police Service Aides	55 years of age with 25 years of service; or 60 years of age with 5 or more years of service.

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members terminating employment before eligibility for an immediate benefit.

Sample Ages	Years of Service	% of Active Members Separating Within Next Year General	Police	Fire
ALL	0	12.00%	10.00%	10.00%
	1	9.00%	7.00%	7.00%
	2	7.00%	5.00%	5.00%
	3	5.00%	4.00%	4.00%
	4	4.50%	3.50%	3.50%
25	5 & Over	5.00%	3.50%	3.50%
30		4.50%	2.90%	2.90%
35		3.55%	1.50%	1.50%
40		1.45%	0.60%	0.60%
45		0.75%	0.50%	0.50%
50		0.75%	0.50%	0.50%
55		0.75%	0.50%	0.50%
60		0.75%	0.50%	0.50%
65		0.75%	0.50%	0.50%
Ref.		29 55	30 54	30 54

Rates of disability were as follows. This assumption measures the probability of members retiring with a disability benefit.

Sample Ages	% of Active Members Becoming Disabled Within Next Year — General & Water: Male	Female	Police & Fire
20	0.07%	0.03%	0.10%
25	0.09%	0.05%	0.15%
30	0.10%	0.07%	0.25%
35	0.14%	0.13%	0.30%
40	0.21%	0.19%	0.70%
45	0.32%	0.28%	0.80%
50	0.52%	0.45%	0.95%
55	0.92%	0.76%	1.10%
60	1.53%	1.10%	1.20%
Ref.	33	34	45

Loading Factor: In the valuation process a person's salary is assumed to increase by a certain percentage each year (see page C-7). However, compensation for benefit purposes includes things such as sick leave incentive pay which are not reported for the valuation. In order to more accurately calculate contribution requirements, the General active normal retirement liabilities were increased by 3.0% to account for the items not reported for valuation purposes, and Police/Fire active normal retirement liabilities were increased by 4.0%. As additional experience emerges, the ratios will be periodically adjusted to better estimate the effect of inclusion of additional items in final average compensation.

Final Average Compensation With and Without Extra Compensation Items
New General Retirees

Year Ending June 30	Final Average Compensation With Extras	Final Average Compensation Without Extras	Ratio
2003	$ 374,516	$ 366,782	1.021
2004	796,585	772,138	1.032
2005	832,434	806,775	1.032
2006	780,739	756,118	1.033
2007	368,581	359,998	1.024
Totals	$3,152,854	$3,061,811	1.030

Final Average Compensation With and Without Extra Compensation Items
New Police/Fire Retirees

Year Ending June 30	Final Average Compensation With Extras	Final Average Compensation Without Extras	Ratio
2003	$ 381,594	$ 365,739	1.043
2004	645,123	621,923	1.037
2005	668,633	610,426	1.095
2006	588,052	556,844	1.056
2007	529,024	477,168	1.109
Totals	$2,812,426	$2,632,100	1.069

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS
JUNE 30, 2007

Marriage Assumption: 90% of males and 90% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.

Pay Increase Timing: Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

Pay Annualization: Reported pay for members with less that twelve contributing months was annualized by the ratio of 12 to the number of contribution months in the year.

Decrement Timing: Decrements of all types are assumed to occur mid-year.

Eligibility Testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

Decrement Relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

Decrement Operation: All decrements the first 5 years of service. Only mortality operates during retirement eligibility.

Service Credit Accruals: It is assumed that members accrue one year of service credit per year.

Loads: Age and Service Retirement Present Values for General and Police/Fire members were loaded by 3.0% and 4.0% respectively to account for the additional amount included in the FAC due to unused sick time and unused vacation time.

Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

Normal Form of Benefit: A 75% automatic joint and survivor payment is the assumed normal form of benefit for married people.

Benefit Service: Exact fractional service is used to determine the amount of benefit payable.

GLOSSARY

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."

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

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.

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.

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."

Valuation Assets: The value of current plan assets recognized for valuation purposes. Generally based on book value plus a portion of unrealized appreciation or depreciation.

MEANING OF "UNFUNDED ACTUARIAL ACCRUED LIABILITIES"

"Actuarial accrued liabilities" are ***the portion of the present value of plan promises to pay benefits in the future not covered by future normal cost contributions***. A liability has been established ("accrued") because service has been rendered, but the resulting monthly cash benefit may not be payable until years in the future. Actuarial accrued liabilities are the results of complex mathematical calculations, which are made annually by the plan's actuary.

If "actuarial accrued liabilities" at any time exceed the plan's accrued assets, 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 assets do not immediately increase 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 20-40 year range.

Unfunded actuarial accrued liabilities can occur in another way: if actual experience is less favorable than assumed experience, the difference is added to unfunded actuarial accrued liabilities. For example, in plans where benefits are directly related to pay near time of retirement, unfunded actuarial accrued liabilities increase when unexpected rates of pay increase create additional actuarial accrued liabilities which are not offset by higher than assumed investment income. Most unexpected pay increases are the direct result of inflation, which is a very destructive force affecting financial stability.

The existence of unfunded actuarial accrued liabilities is not a cause for concern, but the changes from year to year in amount of unfunded actuarial accrued liabilities are important.

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

Value of $1,000/month Retirement Benefit
to an Individual Who Retires at Age 55
in an Environment of 3.5% Inflation

	COLA Rate	
Age	**2.5%**	**0%**
55	$1,000	$1,000
56	990	966
57	981	934
58	971	902
59	962	871
60	953	842
65	907	709
70	864	597
75	824	503
80	784	423
85	747	356

The life expectancy of a 55-year-old male retiree is to age 78. The life expectancy for a 55-year-old female retiree is to age 83. Half of the people will outlive their life expectancy. The effects of even moderate amounts of inflation can be significant for those who live to an advanced age.

SECTION D

REQUIRED BY STATEMENT NO. 25 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

This information is presented in draft form for review by the City's auditor. Please let us know if there are any changes so that we may maintain consistency with the City's financial statements.

GASB Statement No. 25 Required Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date:	June 30, 2007
Actuarial cost method:	Entry-Age
Amortization method:	Level percent
Remaining amortization period:	30 years open
Asset valuation method:	4-year smoothed market
Actuarial assumption:	
Investment rate of return	7.75%
Projected salary increases	3.5% - 7.3%
Includes inflation at	3.5%
Cost-of-living adjustments	None

Membership of the plan consisted of the following at June 30, 2007, the date of the latest actuarial valuation.

Retirees and beneficiaries receiving benefits	482
Terminated plan members entitled to but not yet receiving benefits	34
Active plan members	346
Total	862

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL) Entry-Age	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
6-30-98	$132,289,359	$ 102,995,320	$(29,294,039)	128.4 %	$17,181,869	-
6-30-99	147,432,723	107,934,001	(39,498,722)	136.6 %	17,501,352	-
6-30-00	159,267,910	113,215,274	(46,052,636)	140.7 %	18,129,821	-
6-30-01	162,586,122	121,588,930	(40,997,192)	133.7 %	18,962,345	-
6-30-02	156,402,936	128,303,318	(28,099,618)	121.9 %	19,368,385	-
6-30-03	146,739,571	136,529,458	(10,210,113)	107.5 %	20,138,113	-
6-30-04	131,980,258	146,386,162	14,405,904	90.2 %	20,569,285	70.0%
6-30-05	134,773,019	152,016,446	17,243,427	88.7 %	20,839,464	82.7%
6-30-06	137,263,998	158,239,077	20,975,079	86.7 %	20,431,658	102.7%
6-30-07	143,619,213	162,781,663	19,162,450	88.2 %	20,327,590	94.3%

Schedule of Employer Contributions

Fiscal Year Beginning	Contribution Rates as Percents of Valuation Payroll	Computed Dollar Contribution Based on Projected Payroll	Actual Annual Contributions
7-1-99	0.00 %	$ 0	$ 0
7-1-00	0.00 %	0	0
7-1-01	0.00 %	0	0
7-1-02	0.00 %	0	0
7-1-03	0.00 %	0	0
7-1-04	6.90 %	1,427,055	1,340,215
7-1-05	20.92 %	4,426,805	3,768,869
7-1-06	20.12 %	4,301,317	4,055,421
7-1-07	21.33 %	4,510,584	
7-1-08	20.60 %	4,330,235	

November 2, 2007

Mr. Don Johnson
Director of Finance
City of Royal Oak
211 S. Williams Street
Royal Oak, Michigan 48067

Re: City of Royal Oak Retirement System

Dear Don:

Enclosed are seventeen copies of the report of the annual actuarial valuation as of June 30, 2007.

Sincerely,

Mark Buis

Mark Buis

MB:lr
Enclosures

cc: Thomas Darling, CPA (+1 copy)