GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

CITY OF LANSING EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT

DECEMBER 31, 2009

OUTLINE OF CONTENTS

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December 16, 2010

The Board of Trustees
City of Lansing Employees' Retirement System
Lansing, Michigan

Dear Board of Trustees:

Submitted in this report are the results of the Sixty-Ninth Annual Actuarial Valuation of the assets, actuarial values, and contribution requirements associated with benefits provided by the City of Lansing Employees' Retirement System.

The date of the valuation was December 31, 2009.

Valuation results, comments and conclusions are contained in Section A.

The valuation was based upon information, furnished by your Secretary, concerning Retirement System benefits, financial transactions, and individual members, terminated members, retirants and beneficiaries. Data was checked for year-to-year consistency, but was not otherwise audited by us. This information is summarized in Section B.

Descriptions of the actuarial cost methods and actuarial assumptions are contained in Section C, along with a glossary of technical terms.

One or more of the undersigned actuaries submitting this report are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

To the best of our knowledge, this report is complete and accurate and was made in accordance with generally recognized actuarial methods of the American Academy of Actuaries in compliance with the laws governing the operation of the Retirement System. The actuarial assumptions used for the valuation produce results which we believe individually and in the aggregate are reasonable.

Respectfully submitted,

David L. Hoffman

Brad Lee Armstrong, FCA, MAAA, ASA, EA

Carrie Richards, ASA, MAAA

DLH:BLA:mrb

SECTION A

VALUATION RESULTS, COMMENTS AND CONCLUSIONS

FINANCIAL OBJECTIVE

The financial objective of the Retirement System is 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 citizens. This objective meets the requirements of the laws governing the operation of the Retirement System and Article IX, Section 24 of the Constitution of the State of Michigan.

CONTRIBUTION RATES

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

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

(1) cover the actuarial present value of benefits assigned to the current year by the actuarial cost methods described in Section C (the normal cost); and

(2) amortize over a period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (unfunded actuarial accrued liability).

Contribution requirements for the fiscal year beginning July 1, 2010 are shown on page A-2.

CONTRIBUTIONS COMPUTED TO MEET THE FINANCIAL OBJECTIVE OF THE RETIREMENT SYSTEM FOR THE FISCAL YEAR BEGINNING JULY 1, 2010

Contributions for	Contributions Expressed as Percents of Member Payroll
Normal Cost	
Age & service benefits	12.30 %
Disability benefits	0.94
Survivor benefits:	
Pre-retirement	0.66
Post-retirement	0.00
Termination benefits:	
Deferred age & service benefits	0.54
Refunds of member contributions	0.21
Total normal cost	14.65
Member portion	4.33
City normal cost*	10.32
Amortization Payment	
Retired members and beneficiaries	0.00
Active and vested terminated members	12.31
Total amortization payment	12.31
Total City Contribution Requirement	22.63 %

* *Weighted average normal cost for new employees.*

The computed City contribution requirement, 22.63%, is a weighted average of the computed contribution to the Retirement System and to the Alternate Retirement Plan. The contribution rate is designed to be a level percentage of the combined payroll of all City employees, members of both the Retirement System and the Alternate Retirement Plan. A procedure for determining dollar contribution amounts to the Retirement System is described on page A-3.

The computed effective City contribution rate to the Retirement System alone is 22.63%. Comparative contribution amounts for prior fiscal years are shown on page A-7.

Unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over an open period of 30 years. The characteristics of this method of amortizing unfunded actuarial accrued liabilities are illustrated on page C-6.

DETERMINING DOLLAR CONTRIBUTIONS

For any period of time, the percent-of-payroll contribution rate needs to be converted to dollar amounts. We recommend the following procedure:

Contribute the following annual amount on November 1, 2010: $7,297,083.

This dollar amount is derived by multiplying the City's combined percent-of-payroll contribution requirement (22.63%) by the combined valuation payroll for the Retirement System $(30,601,855) and the Alternate Retirement Plan $ 0, and then subtracting off 6.7% of payroll, which is the City's contribution to the Alternate Retirement Plan (6.0%) and the long-term disability plan (assumed to be 0.7%), multiplied by the valuation payroll for the Alternate Retirement Plan. Active Member payroll is projected 16 months at 4% per annum to reflect the assumed November 1 contribution date. The combined payroll projection and interest adjustment factor is equal to 1.0537.

$7,297,083	(22.63% times $30,601,855 times 1.0537)
0	(6.70% times $ 0 times 1.0537)
$7,297,083	City's 11/1/2010 contribution to Retirement System

The above amount is assumed to be contributed on November 1, 2010. If contributions are made on a later schedule, interest should be added at the rate of 0.643% (compounded) for each month of delay.

FINANCIAL OBJECTIVE ACHIEVEMENT TESTS

The Retirement System's financial objective is to meet long-term benefit promises through contributions that remain approximately level from year-to-year as a percent of active 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***. Year-by-year computed contribution rates are displayed on page A-7.

There is no single all-encompassing test to measure a retirement system's funding progress and current funded status. Measures based on the actuarial accrued liability are shown on page A-5 and are described below:

The ratio of valuation assets to the actuarial accrued liability. The ratio is expected to gradually increase in the absence of benefit improvements and changes in actuarial assumptions.

The ratio of the unfunded actuarial accrued liability to member payroll. In a soundly financed retirement system, the amount of the unfunded actuarial accrued liability will be controlled and prevented from increasing in the absence of benefit improvements or strengthening of actuarial assumptions. However, in an inflationary environment it is seldom practical to impose this control on dollar amounts which are depreciating in value. The ratio is a relative index of condition where inflation is present in both items. The ratio is expected to gradually decrease in the absence of benefit improvements and changes in actuarial assumptions.

FINANCIAL OBJECTIVE ACHIEVEMENT TESTS - COMPARATIVE STATEMENT

Valuation Date December 31	(1) Valuation Assets	(2) Member Payroll	(3) Actuarial Accrued Liability**	Funded Ratio (1) / (3)	Unfunded Accrued Liability** (4) Dollars (3) - (1)	Unfunded Accrued Liability** % of payroll (4) / (2)
			($ Amounts in Thousands)			
1995 @	$ 105,074	$18,209	$ 139,052	75.6 %	$ 33,978	186.6 %
1996	114,420	18,169	143,915	79.5	29,495	162.3
1997 @#	127,444	18,332	161,792	78.8	34,348	187.4
1998	143,268	17,820	170,775	83.9	27,507	154.4
1999 #	161,958	19,312	187,150	86.5	25,192	130.4
2000	177,855	19,521	194,017	91.7	16,162	82.8
2000 #	177,855	19,521	198,396	89.6	20,541	105.2
2001	191,311	20,282	216,777	88.3	25,466	125.6
2001 @	191,311	20,282	213,648	89.5	22,337	110.1
2002	192,920	19,098	215,405	89.6	22,484	117.7
2003	192,494	30,579	220,343	87.4	27,850	91.1
2003 #!	199,329	30,579	221,088	90.2	21,759	71.2
2004	206,200	32,383	231,377	89.1	25,177	77.7
2004 #	206,200	32,383	231,389	89.1	25,189	77.8
2005	207,881	30,851	241,861	86.0	33,980	110.1
2005 #	207,881	30,851	241,882	85.9	34,001	110.2
2006	208,765	31,944	248,529	84.0	39,764	124.5
2006 @	208,765	31,944	251,427	83.0	42,661	133.6
2007	208,572	31,797	254,356	82.0	45,784	144.0
2008	200,600	29,688	258,331	77.7	57,731	194.5
2009	**193,324**	**30,602**	**262,298**	**73.7**	**68,974**	**225.4**

 # After changes in benefit provisions.
! After changes in methods.
@ After changes in actuarial assumptions.
******** *Prior to the revised 1997 valuation, the present value of credited projected benefits and the unfunded present value are reported.*

The Short Condition Test is another way of looking at a system's progress under its funding program - based on the actuarial accrued liability. In a short condition test, the plan's valuation assets are compared with: 1) active member contributions on deposit; 2) the liabilities for future benefits to present retired lives; 3) the liabilities allocated to 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 valuation assets (except in rare circumstances). In addition, the liabilities assigned to service already rendered by active members (liability 3) will be partially covered by the remainder of valuation assets. The larger the funded portion of liability 3, the stronger the condition of the system. Liability 3 being fully funded is uncommon, and not necessarily a by-product of level percent-of-payroll financing methods.

The schedule below illustrates the history of liabilities 1, 2 and 3.

Short Condition Test - Comparative Statement

	Actuarial Accrued Liability **						
Valuation Date Dec. 31	(1) Active Member Contr.	(2) Retirants and Benef.	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liability Covered by Assets (1)	(2)	(3)
	($ Amounts in Thousands)						
1995	$ 3,491	$ 84,869	$ 47,577	$ 105,074	100 %	100 %	35.1 %
1995 @	3,491	86,275	49,286	105,074	100	100	31.1
1996	3,782	87,795	52,338	114,420	100	100	43.6
1997	3,982	92,001	54,563	127,444	100	100	57.7
1999	3,864	99,427	82,628	161,958	100	100	71.0
1999 #	3,864	99,427	83,859	161,958	100	100	70.0
2000	6,078	103,914	84,025	177,855	100	100	80.8
2000 #	6,078	103,914	88,404	177,855	100	100	76.8
2001	6,388	107,876	102,513	191,311	100	100	75.2
2001 ^	6,388	108,107	99,153	191,311	100	100	77.5
2002	7,292	115,395	92,718	192,920	100	100	75.7
2003	10,709	128,275	81,359	192,494	100	100	65.8
2003 #!	10,709	128,275	82,104	199,329	100	100	73.5
2004	11,705	138,525	81,147	206,200	100	100	69.0
2004 #	11,705	138,525	81,159	206,200	100	100	69.0
2005	11,014	165,147	65,700	207,881	100	100	48.3
2005 #	11,014	165,147	65,721	207,881	100	100	48.3
2006	11,566	170,199	66,764	208,765	100	100	40.4
2006 @	11,566	170,199	69,662	208,765	100	100	38.8
2007	12,537	170,679	71,140	208,572	100	100	35.6
2008	12,708	176,095	69,528	200,600	100	100	17.0
2009	**13,989**	**176,133**	**72,176**	**193,324**	**100**	**100**	**4.4**

 # After changes in benefit provisions.
! After changes in methods.
@ After changes in actuarial assumptions.
^ After changes in actuarial assumptions and data corrections.
*** Prior to the revised 1997 valuation, the present value of credited projected benefits is shown.*

COMPUTED AND ACTUAL CITY CONTRIBUTIONS
COMPARATIVE STATEMENT

Fiscal Year Beginning July 1	Valuation Date Dec. 31	Actual Dollar Contribution		Valuation Payroll	% of Payroll Contributions		
					Retirement System		Combined Plans
		Actual	1/1 Equivalent ~		Computed	Estimated Actual	Computed!
1991	1990 #@	$3,146,245 *	$3,218,008 *	$22,203,831	14.49 %	14.49 %	13.60 %
1992	1991 #	3,405,533 *	3,483,210 *	22,511,345	15.47	15.47	14.34
1994	1993	3,907,020 *	3,953,824 *	17,217,014	23.21	22.96	20.08
1995	1994 #	4,093,934 *	4,183,049 *	17,484,225	23.95	23.92	19.10
1996	1995	-	-	18,208,670	22.42	-	17.85
1996	1995 @	4,328,939 *	4,378,030 *	18,208,670	24.32	24.05	19.23
1997	1996	4,092,720 *	4,144,416 *	18,169,270	23.00	22.81	17.79
1998	1997	-	-	18,332,082	21.21	-	16.21
1998	1997 @#	3,333,711 *	3,414,292 *	18,332,082	18.66	18.62	14.48
1999	1998	3,138,410 *	3,240,681 *	17,819,526	16.56	17.32	12.76
2000	1999	-	-	19,312,138	15.35	-	11.73
2000	1999 #	3,215,244 *	3,280,418 *	19,312,138	15.65	15.97	11.92
2001	2000	-	-	19,520,643	14.52	-	11.29
2001	2000 #	3,104,837 *	3,163,117 *	19,520,643	14.95	15.24	12.43
2002	2001	-	-	20,281,819	15.83	-	12.64
2002	2001 **	3,500,000	3,545,183	20,281,819	16.69	16.59	13.20
2003	2002	3,465,937	3,510,680	19,098,473	17.23	17.23	13.17
2004	2003	-	-	30,579,238	15.69	-	15.30
2004	2003 #@	4,675,076	4,735,429	30,579,238	14.51	14.51	14.17
2005	2004			32,382,545	14.37		14.31
2005	2004 #	4,901,502	4,964,778	32,382,545	14.37	14.37	14.31
2006	2005			30,851,025	16.09		16.02
2006	2005 #	5,230,668	5,298,193	30,851,025	16.09	16.09	16.02
2007	2006			31,943,723	16.72		16.72
2007	2006 @	6,142,000	6,221,290	31,943,723	17.89	18.25	17.89
2008	2007	6,355,613	6,437,661	31,796,784	18.05	18.97	18.05
2009	2008	6,043,861	6,121,884	29,688,203	20.69	19.32	20.69
2010	**2009**			**30,601,855**	**22.63**		**22.63**

 # After changes in benefit provisions.

@ After changes in actuarial assumptions or methods.

*** After changes in actuarial assumptions and data corrections.*

~ The actual contribution and the equivalent midyear contribution (January 1) are both shown, based on 7% annual interest (8% interest beginning in the 1998/99 fiscal year). This is done because the computed contribution rate is based on a mid-year contribution assumption.

** Excludes contribution for post-retirement health insurance.*

! Beginning in 1990 a weighted average contribution rate is shown for the Retirement System and the Alternate Retirement Plan Combined. Because it is a partially closed System, the computed contribution rate for the Retirement System alone will increase over time.

COMMENTS, RECOMMENDATIONS AND CONCLUSION

Comment A: The activities of the Retirement System and its members generated an experience loss during the plan year ended December 31, 2009. This result was primarily due to lower-than-assumed rate of investment return (based on the 5-year smoothed market value) offset somewhat by lower pay increases than expected. The comparative schedules on pages A-5, A-6 and A-7 reflect the results.

Comment B: The Retirement System is now an open plan. Formerly, new employees (other than UAW members) became members of the Alternate Retirement Plan, a defined contribution (money purchase) plan. As of December 31, 2009, 0 employees were reported as active in the Alternate Retirement Plan.

The financial objective of the Retirement System is to finance the System with contributions that remain level as a percent of active member payroll. The December 31, 2009 actuarial valuation determines a computed City contribution rate, 22.63% of payroll, which is designed to remain approximately level as a percentage of the payroll of the Retirement System going forward. As of December 31, 2009, valuation assets exceed the market value of assets by about $30.7 million. This amount represents investment losses that have not been recognized for valuation purposes. Without investment gains the employer contribution rate is expected to increase by about 6% of active member payroll in the next few years.

Comment C: The market value of system assets was $176 million as of December 31, 2009. For purposes of the valuation, and in continuance of past practice, valuation assets were $207 million. The effect of recognizing this difference is discussed in Comment B above. So even though there was a 20% rate of return on market value of assets last year, this valuation is still based on an asset value that exceeds market value by 17% due to the graduated recognition of investment experience.

Comment D: A separate VEBA trust has been established to receive contributions for and to pay post-retirement health care benefits for employees hired after 2003 or 2004 depending on their employment classification. The Health Care Reserve will continue to operate for the benefit of members not covered by the VEBA trust.

Recommendation: The retirement ordinance requires a transfer each year to bring the Reserve for Retired Benefit Payments into balance with the liability for current retirees and beneficiaries. We recommend that the following amount be transferred, as of December 31, 2009, from the Reserve for Employer Contributions (RERC) to the Reserve for Retired Benefit Payments (RRBP):

December 31, 2009 Transfer	
From RERC	To RRBP
$ (3,741,739)	$ 3,741,739

In preparing this actuarial valuation, it was assumed that the above reserve transfer had been completed.

Each January 1, beginning January 1, 1999, benefits will be increased for eligible retirees and beneficiaries. Each December 31 prior to a January 1 benefit increase, a transfer is to be made from the Members' Benefit Fund (MBF) to the Reserve for Retired Benefit Payments (RRBP) in an amount to fully fund the cumulative benefit increases to be paid the coming calendar year. We recommend that the following amount be transferred, as of December 31, 2009, from the MBF to the RRBP, to fund the cumulative benefit increases expected to be paid in 2010:

December 31, 2009 Transfer	
From MBF	To RRBP
$(822,865)	$ 822,865

In preparing this actuarial valuation, it was assumed that the above reserve transfer had not yet been completed. This transfer will be recognized in next year's valuation report.

Conclusion: It is the actuary's opinion that the required contribution rate determined by the most recent actuarial valuation is sufficient to meet the System's financial objective, presuming continued receipt of required contributions when due.

ACTUARIAL BALANCE SHEET - DECEMBER 31, 2009

Present Resources and Expected Future Resources

A. Valuation Assets	
1. Net assets from System financial statements (market value)	$176,768,482
2. Valuation adjustment	30,667,945
3. Health insurance reserve	(14,112,199)
4. Valuation assets allocated to pensions	193,324,228
B. Actuarial Present Value of Expected Future Employer Contributions	
1. For normal costs	29,641,054
2. For unfunded actuarial accrued liabilities	68,974,131
3. Total	98,615,185
C. Actuarial Present Value of Expected Future Member Contributions	13,097,288
D. Total Actuarial Present Value of Present and Expected Future Resources	$305,036,701

Actuarial Present Value of Expected Future Benefit Payments and Reserves

A. To Retirees and Beneficiaries	$176,133,432
B. To Vested Terminated Members	4,491,470
C. To Present Active Members	
1. Allocated to service rendered prior to valuation date	65,089,689
2. Allocated to service likely to be rendered after valuation date	42,738,342
3. Total	107,828,031
D. Total Actuarial Present Value of Expected Future Benefit Payments	288,452,933
E. Reserves	
1. Member's benefit fund	16,583,768
2. Unallocated investment income	none
3. Total	16,583,768
F. Total Actuarial Present Value of Expected Future Benefit Payments and Reserves	$305,036,701

DERIVATION OF PENSION ACTUARIAL GAIN (LOSS)
YEAR ENDED DECEMBER 31, 2009

The actuarial gains or losses realized in the operation of the Retirement System provide an experience test. Gains and losses are expected to cancel each other over a period of years (in the absence of double-digit inflation) and sizable year-to-year fluctuations are common. Detail on the derivation of the pension actuarial gain (loss) is shown below, along with a year-by-year comparative schedule.

		2009
1) UAAL* at start of year		$57,730,991
2) Employer Normal cost for pensions	+	3,175,978
3) Actual employer contributions for pensions	-	6,043,861
4) Interest accrual	+	4,259,566
5) Expected UAAL before changes		59,122,674
6) Change from benefit changes		0
7) Change from revised assumptions or methods or data corrections		0
8) Expected UAAL after changes		59,122,674
9) Actual UAAL at end of year		68,974,131
10) Pension gain (loss): (8) -(9)		(9,851,457)
11) Pension gain (loss) as percent of actuarial accrued liabilities at start of year ($241,501,934)		(4.1)%

* *Unfunded actuarial accrued liability.*

Valuation Date December 31	Pension Actuarial Gain (Loss) As % of Beginning Accrued Pension Liabilities
1995	2.8 %
1996	4.0
1997	4.8
1998	5.4
1999	2.4
2000	5.5
2001	(1.7)
2002	0.1
2003	(2.6)
2004	(1.5)
2005	(3.9)
2006	(2.3)
2007	(1.1)
2008	(4.9)
2009	**(4.1)**

PROJECTION OF CASH FLOW AND LIABILITIES*
($ IN THOUSANDS)

Year Ending Dec. 31	City Contributions	Member Contributions	Investment Income**	Benefit Payments	Contribution Refunds	Valuation Assets	End of Year Actuarial Liability#
2009						$176,740	$245,715
2010	$7,297	$1,208	$4,969	$18,722	$105	170,572	252,814
2011	8,274	1,372	3,059	19,381	66	162,946	257,957
2012	9,090	1,441	3,597	19,997	60	156,100	263,037
2013	9,855	1,512	16,397	20,625	53	162,234	268,040
2014	9,877	1,588	14,312	21,223	57	165,751	272,988
2015	10,069	1,664	15,142	21,793	67	169,765	277,932
2016	10,245	1,745	15,884	22,310	78	174,231	282,949
2017	10,404	1,835	16,489	22,873	88	178,953	288,006
2018	10,546	1,930	16,946	23,427	92	183,782	293,121
2019	10,690	2,027	17,441	23,957	96	188,781	298,324

* *Based upon the System's current actuarial assumptions being met each of the next 10 years, including 8% market value returns. Please refer to Comment B on page A-8 for additional essential information.*

** *Includes recognitions of scheduled investment gains (losses) known as of this valuation date.*

\# *The liability measure is the Entry-Age Actuarial Accrued Liability and excludes the Members' Benefit Fund.*

SECTION B

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA SUBMITTED BY THE RETIREMENT SYSTEM

BRIEF SUMMARY OF BENEFIT PROVISIONS - (DECEMBER 31, 2009)

MEMBERSHIP:

Teamsters, Exempt, District Court, Executive Pay Plan, Police 911, and UAW: Newly hired employees do become members of the Retirement System.
Elected Officials: Newly hired employees do not become members of the Retirement System.

REGULAR RETIREMENT (NO REDUCTION FACTOR FOR AGE):

Old Plan

Eligibility –

Teamsters, Exempt, District Court, Executive Pay Plan, Elected Officials and Police 911: 8 or more years of service and attainment of the earlier of a) age 58, or b) the age at which age plus service equals or exceeds 65.

UAW: Age 50 with 25 or more years of service or age 58 with 8 or more years of service.

Annual Amount –

Teamsters, Exempt, District Court Exempt, Executive Pay Plan and Police 911: Final average compensation times the sum of a) 2.80% times the first 35 years of credited service, plus b) 1.5% times the next 5 years of service, plus c) 1.0% times credited service in excess of 40 years to a 100% maximum.

UAW: Final average compensation times the sum of a) 2.75% times the first 35 years of credited service, plus b) 1.5% times the next 5 years of service, plus c) 1.0% times credited service in excess of 40 years to a 100% maximum.

Elected Officials: Final average compensation times the sum of a) 2.75% times the first 35 years of credited service, plus b) 1.5% times the next 5 years of service, plus c) 1.0% times credited service in excess of 40 years to a 100% maximum.

District Court Teamsters: Total service times 2.3% times final average compensation.

Type of Final Average Compensation - Highest 2 consecutive years out of last 10.

Mandatory Retirement Age - None.

New Plan

Eligibility –

Teamsters, Exempt, District Court Teamsters, District Court Exempt, Executive Pay Plan, Police 911 and UAW: Age 50 with 25 or more years of service or age 58 with 8 or more years of service.

Annual Amount –

Teamsters, Exempt, District Court Teamsters, District Court Exempt, Executive Pay Plan and Police 911: Final average compensation times 1.6% times credited service.

UAW: Final average compensation times 2.75% times credited service.

Type of Final Average Compensation - Highest 2 consecutive years out of last 10.

Mandatory Retirement Age - None.

DEFERRED RETIREMENT (VESTED BENEFIT):

Eligibility - 8 years of service. Benefit is payable at age 58 for New Plan members. For Old Plan Teamsters, Exempt, District Court, Executive Pay Plan, Elected Officials and Police 911 the deferred benefit is payable at the age at which age plus service equals 65.

Annual Amount - Same as regular retirement but based upon service and final average compensation at termination.

DUTY DISABILITY RETIREMENT:

Eligibility - No age or service requirements.

Annual Amount - Computed as regular retirement with additional service credit granted to age 60. During worker's compensation period disability benefit cannot exceed the difference between final compensation and worker's compensation.

NON-DUTY DISABILITY RETIREMENT:

Eligibility - 10 years of service.

Annual Amount - Computed as regular retirement. Minimum benefit is 25% of final average compensation.

DUTY DEATH BEFORE RETIREMENT:

Eligibility - Payable upon expiration of worker's compensation to the survivors of a member who died in the line of duty.

Annual Amount - Same amount that was paid by worker's compensation to spouse, children under 21 years of age and dependent parents.

NON-DUTY DEATH BEFORE RETIREMENT:

Eligibility - 8 years of service credits. Also payable in case of death of a vested former member during the benefit deferral period (commences when former member would have attained age 58).

Annual Amount - Computed as regular retirement but actuarially reduced in accordance with a 100% joint and survivor election, provided employee a) is married, or b) has named an Option A beneficiary to the Board of Trustees.

POST-RETIREMENT BENEFIT ADJUSTMENTS:

One-time increases were granted in 1984 , 1987, and 1998. Beginning in 1999 eligible retirees and beneficiaries receive annual benefit increases financed by the Members' Benefit Fund.

SOCIAL SECURITY COVERAGE:

Yes.

MEMBER CONTRIBUTIONS :

Old Plan	Police 911:	7.25% of compensation.
	UAW:	1.70% of compensation.
	Teamsters 214:	3.75% of compensation.
	Teamsters 580:	3.50% of compensation.
	District Court Teamsters:	3.50% of compensation.
	District Court Exempt:	4.50% of compensation.
	Exempt:	3.75% of compensation.
	Executive Pay Plan:	3.75% of compensation.
	Elected Officials:	3.25% of compensation.
New Plan	UAW:	1.70% of compensation.
	Teamsters 580, District Court Teamsters, District Court Exempt, Police 911:	5.50% of compensation.
	All Others:	6.50% of compensation.

UNISEX SURVIVOR BENEFIT FACTORS:

Teamsters, Exempt, District Court, Executive Pay Plan, Elected Officials, and UAW: "Topping-Up" Table.
Police 911: "No-Cost" Tables.

REPORTED FUND BALANCE (MARKET VALUE)

Reserves	Reported Fund Balance December 31, 2009	2008
Reserve for Employees' Contributions	$ 24,136,692	$ 22,103,418
Reserve for Employer Contributions	(50,455,870)	(61,041,488)
Reserve for Retired Benefit Payments	172,391,693	167,235,556
Reserve for Health Insurance	14,112,199	12,825,359
Reserve for Members' Benefit Fund	16,583,768	16,828,570
Reserve for Undistributed Investment Income	none	none
Total Fund Balance	$ 176,768,482	$ 157,951,415

Valuation assets are equal to reported market value of assets, except that only 20% of the difference between the market-to-market rate of return and the projected rate of return (the actuarial assumption) is recognized each year. Such spreading reduces the fluctuation in the City's computed contribution rate which might otherwise be caused by market value fluctuations. The details of the spreading technique are shown on page B-6. The present method was adopted for the 1992 year. The valuation assets as of December 31, 2009 total $207,436,427. Subtracting the $14,112,199 for health insurance results in valuation assets allocated to pension benefits as of December 31, 2009 total $193,324,228.

In financing actuarial accrued liabilities, valuation assets allocated to pensions of $193,324,228 were distributed as follows:

Reserves for	Valuation Assets Applied to Actuarial Accrued Liabilities for: Active Members	Retirants & Beneficiaries	Allocated Reserve	Totals
Employees' Contributions	$ 24,136,692			$ 24,136,692
Employer Contributions	(54,197,609)	$ 3,741,739		(50,455,870)
Retired Benefit Payments		172,391,693		172,391,693
Members' Benefit Fund			$ 16,583,768	16,583,768
Valuation Asset Adjustment	30,667,945			30,667,945
Totals	$ 607,028	$ 176,133,432	$ 16,583,768	$ 193,324,228

DERIVATION OF CERTAIN RESERVES
AS SUBMITTED BY THE CITY

Reserve for Members' Benefit Fund

Reserve for Members' Benefit Fund Balance 01/01/09		$ (16,078,314.12)		
	12 Month Smoothed Rate	4.99%		
	Gross Investment Income			$802,307.87
(If Income Positive)	Less: 3/8 of Invest. Income on First 8% Annual Rate			
	3/8 of Annual Rate - 8% Return	475,918.10		
	3/8 of Smoothed Rate	296,853.91		
	(Use the Lower of the Two Above Calculations)			
	Investment Income to Health Care Reserve			296,853.91
	Annual Investment Income			$505,453.96

Investment Income to be Recorded Jan - Dec

Reserve for Members' Benefit Fund Balance 01/01/10 is $16,828,570 + $505,454 - $750,256 (December 31, 2008 Transfer)

Health Care Reserve

Health Care Reserve Fund Balance 01/01/09	$ 12,825,359.48		
Portfolio Rate of Return for Period	4.99%		
Investment Income - Smoothed Rate		639,985.44	
Plus: 3/8 of Investment Income from Member Reserve		296,853.91	
Annual Investment Income		$936,839.35	
Investment Income to be Recorded Jan - Dec			$ 936,839.35

Health care Reserve Fund 01/01/10 is $12,825,359 + $936,839 + $350,000 (City Contribution)

DERIVATION OF VALUATION ASSETS
MARKET VALUE WITH 20% RECOGNITION OF THE DIFFERENCE BETWEEN THE MARKET RATE OF RETURN AND THE PROJECTED RATE OF RETURN

	Year Ended December 31,						
	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Beginning of Year:							
(1) Market Value	$214,655,062	$216,453,631	$157,951,415				
(2) Valuation Assets	218,983,361	220,650,155	213,424,872				
End of Year:							
(3) Market Value	216,453,631	157,951,415	176,768,482				
(4) Net Additions to Assets, Excluding Investment Income and Admin. Expenses	(9,170,420)	(9,458,115)	(10,868,341)				
(5) Total Investment Income =(3)-(1)-(4)	10,968,989	(49,044,101)	29,685,408				
(6) Projected Rate of Return	8.0%	8.0%	8.0%				
(7) Projected Investment Income =(6)x[(2)+.5x(4)]	17,151,852	17,273,688	16,639,256				
(8) Investment Income in Excess of Projected Income	(6,182,863)	(66,317,789)	13,046,152				
(9) Excess Investment Income Recognized This Year (5 year recognition)							
(9a) From This Year	(1,236,573)	(13,263,558)	2,609,230				
(9b) From One Year Ago	1,158,948	(1,236,573)	(13,263,558)	$ 2,609,230			
(9c) From Two Years Ago	(1,027,407)	1,158,948	(1,236,573)	(13,263,558)	$ 2,609,230		
(9d) From Three Years Ago	(672,267)	(1,027,407)	1,158,948	(1,236,573)	(13,263,558)	$ 2,609,230	
(9e) From Four Years Ago	(4,537,339)	(672,266)	(1,027,407)	1,158,950	(1,236,571)	(13,263,557)	$ 2,609,232
(9f) Total Recognized Investment Gain	(6,314,638)	(15,040,856)	(11,759,360)				
(10) Change in Valuation Assets =(4)+(7)+9[a..e]	1,666,794	(7,225,283)	(5,988,445)				
End of Year:							
(11) Market Value	216,453,631	157,951,415	176,768,482				
(12) Valuation Assets = (2)+(10)	220,650,155	213,424,872	207,436,427				
(13) Valuation Assets / Market Value	**102%**	**135%**	**117%**				

SUMMARY OF CURRENT ASSET INFORMATION REPORTED FOR VALUATION

Assets

	December 31, 2009	December 31, 2008
Cash & Short-Term Investments	**$ 10,466,070**	$ 9,126,556
Stocks	**94,643,887**	69,637,878
Bonds	**70,485,827**	73,286,091
Real Estate	**6,631,000**	9,780,000
Receivables	**(5,338,298)**	(3,649,296)
Total Assets	**176,888,486**	158,181,229
Less Accounts Payable	**(120,005)**	(229,814)
Net Assets Available for Benefits	**$ 176,768,482**	$ 157,951,415

Revenues and Expenses

	December 31, 2009	December 31, 2008
Balance - January 1	**$157,951,415**	$216,453,631
Revenues		
Employees' contributions	**1,370,171**	1,338,414
Employer contributions	**6,393,861** *	6,708,640 *
Investment income	**30,431,137**	(48,316,044)
Miscellaneous	**0**	0
Expenses		
Benefit payments	**17,885,800**	17,505,169
Refunds of member contributions	**0**	0
Administrative expenses	**745,729**	728,057
Miscellaneous#	**746,573**	0
Balance - December 31	**$176,768,482**	**$157,951,415**

* *Includes **$350,000** contribution for post-retirement health insurance in **2009** and **$353,027** in **2008**.*

\# *In 2009, transfer of accumulated contributions to MERS for Zoo employees.*

ASSET INFORMATION REPORTED FOR VALUATION
COMPARATIVE STATEMENT

Year Ended Dec. 31	Assets Beginning of Year	Revenues: Employee Contrib.	Revenues: Employer Contrib.	Revenues: Investment Income	Revenues: Misc. Income	Expenses: Retirement Benefits	Expenses: Contrib. Refunds	Expenses: Misc. Expenses	Assets Year-End
1988	$ 55,367,025	$ 434,335	$2,761,499	$ 2,780,408	$ 0	$ 2,310,024	$48,045	$ 282,045	$ 58,703,153
1989	58,703,153	512,353	2,698,486	5,769,605	0	2,817,478	33,157	1,313,335 *	63,519,627
1990	63,519,627	671,200	3,093,815	5,067,001	0	3,001,243	58,382	350,422	68,941,596
1991	68,941,596	599,690	3,171,245	7,181,203	0	3,297,435	30,623	2,303,143 @	74,262,533
1992	74,262,533	518,216	3,455,533	8,956,551	0	3,974,510	18,591	463,048	82,736,684
1993	82,736,684	321,897	3,804,734	11,832,139	0	7,535,014	48,664	668,420 #	90,443,356
1994	90,443,356	324,969	4,007,020	8,251,792	0	7,563,802	6,637	335,831	95,120,867
1995	95,120,867	349,811	4,218,934	8,931,721	0	7,631,402	40,813	755,002	100,194,116
1996	100,194,116	347,404	4,921,777	11,044,134	0	7,853,933	16,804	635,900	108,000,794
1997	108,000,794	520,414	4,308,758	19,448,092	31,298,116 **	8,141,570	5,661	678,576	154,750,367
1998	154,750,367	332,867	4,048,932	29,080,286	0	8,729,997	6,320	712,133	178,764,002
1999	178,764,002	379,283	3,856,063	12,051,773	0	9,030,889	0	969,389	185,050,843
2000	187,862,226	341,305	4,017,060	10,687,912	0	9,574,957	0	922,208	192,411,338
2001	189,599,955	3,710,242 ^	3,954,734	(2,580,866)	0	10,333,050	0	688,333	183,662,682
2002	183,662,682	536,683	3,572,000	(12,763,998)	0	10,993,808	0	893,133	163,120,426
2003	163,120,426	754,253	4,083,946	29,070,699	0	12,330,222	0	834,731	183,864,371
2004	183,864,371	5,198,072	5,074,254	17,270,617	0	13,531,876	0	605,235	197,270,203
2005	197,270,203	1,571,970	5,501,502	12,281,306	0	14,779,998	0	640,899	201,204,084
2006	201,204,084	1,547,559	5,930,668	23,304,761	0	16,763,015	0	568,994	214,655,063
2007	214,655,063	1,343,895	6,501,718	11,928,520	0	17,016,033	0	959,532	216,453,631
2008	216,453,631	1,338,414	6,708,640	(48,316,044)	0	17,505,169	0	728,057	157,951,415
2009	**157,951,415**	**1,370,171**	**6,393,861**	**30,431,137**	**0**	**17,885,800**	**0**	**745,729**	**177,515,055**

* *Includes $965,705 transfer to Lansing Housing Commission.*
@ *Includes $1,898,938 transfer to Defined Contribution Plan.*
\# *Includes $133,902 transfer to Defined Contribution Plan.*
** *Adjusts from cost value to market value.*
^ *Includes **$3,101,670** for members transferring from the defined contribution plan back into the defined benefit plan.*

RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS
COMPARATIVE STATEMENT

Year Ended Dec. 31	Added to Rolls			Removed from Rolls		Rolls End of Year		% Incr. in Annual Benefits	Average Annual Benefit	Present Value of Benefits	Expected Removals
	No.	Annual Benefits	Post-Ret. Incr.	No.	Annual Benefits	No.	Annual Benefits				
1983	18	$ 125,301	$ 56,458	13	$ 31,207	358	$ 1,398,399	12.1 %	$ 3,906	$ 13,188,264	13.7
1984	22	130,888		15	32,538	365	1,496,749	7.0	4,101	13,982,520	14.2
1985	28	226,181		14	34,190	379	1,688,740	12.8	4,456	15,962,244	14.7
1986	33	254,767		19	73,915	393	1,869,592	10.7	4,757	17,963,328	15.3
1987	25	180,925	33,235	21	92,770	397	1,990,982	6.5	5,015	18,897,180	16.1
1988	54	818,118		13	70,521	438	2,738,579	37.5	6,252	27,497,364	16.0
1989	19	219,990		18	77,414	439	2,881,155	5.2	6,563	28,734,144	17.2
1990	23	257,741		14	79,808	448	3,059,088	6.2	6,828	30,615,624	17.8
1991	31	419,177		19	101,727	460	3,376,538	10.4	7,340	33,877,584	18.7
1992	163	4,286,563		17	89,970	606	7,573,131	124.3	12,497	85,618,956	19.5
1993	22	283,769		27	184,150	601	7,672,750	1.3	12,767	86,013,924	21.2
1994	13	125,474		27	180,396	587	7,617,828	(0.7)	12,978	84,838,560	21.3
1995	23	300,113		30	211,309	580	7,706,632	1.2	13,287	86,275,220	21.2
1997	33	566,210		20	122,360	594	8,339,102	5.6	14,039	92,000,808	21.2
1998	24	485,749	169,780	16	122,506	602	8,872,125	6.4	14,738	88,476,276	22.0
1999	23	479,128	58,043	14	188,664	611	9,220,632	3.9	15,091	99,426,744	22.8
2000	34	642,866	55,621	24	173,085	621	9,746,034	5.7	15,694	103,913,652	23.4
2001	52	946,039	57,382	27	202,646	646	10,546,809	8.2	16,326	108,106,632	23.5
2002	49	1,112,475	76,197	26	190,256	669	11,545,225	9.5	17,257	115,395,084	23.8
2003	60	1,706,698	56,264	24	248,748	705	13,059,439	13.1	18,524	128,274,924	24.5
2004	41	885,768	105,169	32	265,024	714	13,785,352	5.6	19,307	138,525,325	23.8
2005	78	2,681,597	54,506	18	199,120	774	16,322,335	18.4	21,088	165,146,943	25.5
2006	24	585,874	105,697	15	155,025	783	16,858,881	3.3	21,531	170,198,697	26.8
2007	31	719,678	62,299	35	581,758	779	17,059,100	1.2	21,899	170,679,294	25.4
2008	36	897,862	101,689	22	300,414	793	17,758,237	4.1	22,394	176,095,046	28.1
2009	**21**	**441,468**	**65,378**	**15**	**286,136**	**799**	**17,978,947**	**1.2**	**22,502**	**176,133,432**	**26.4**

RETIRANTS AND BENEFICIARIES DECEMBER 31, 2009
BY TYPE OF BENEFITS BEING PAID

Type of Benefits Being Paid	No.	Annual Benefits Being Paid	Average Annual Benefits
Age and Service Benefits			
Regular benefit - benefit terminating at death of retirant	246	$ 5,384,619	$21,889
Option I benefit - cash refund annuity plus pension terminating at death of retirant	8	70,650	8,831
Option A benefit - 100% joint and survivor	253	7,157,192	28,289
Option B benefit - 50% joint and survivor	145	3,671,859	25,323
Benefit being paid survivor beneficiary of deceased retirant	97	1,072,375	11,055
Total age and service benefits	749	17,356,695	23,173
Casualty Benefits			
Duty disability benefits			
Regular	3	40,515	13,505
Option I	1	7,600	7,600
Option A	7	185,029	26,433
Option B	2	25,888	12,944
Survivor beneficiary	3	17,650	5,883
Totals	16	276,682	17,293
Non-duty disability benefits			
Regular	1	471	471
Option A	4	55,300	13,825
Option B	2	26,264	13,132
Survivor beneficiary	7	48,626	6,947
Totals	14	130,661	9,333
Benefit being paid survivor beneficiary of deceased members			
Non-duty death	20	214,909	10,745
Totals	20	214,909	10,745
Total casualty benefits	50	622,252	12,445
Total Benefits Being Paid	**799**	**$17,978,947**	**$22,502**

RETIRANTS AND BENEFICIARIES - BY ATTAINED AGES
DECEMBER 31, 2009

Attained Ages	Age and Service Retirants		Disability Retirants		Survivor Beneficiaries	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
17					1	$ 12,841
18					1	10,263
41					1	6,672
43	2	$ 71,313				
44	1	22,601			1	42,493
45	2	58,503				
46	4	91,842				
47	1	25,280				
48	2	46,365			1	3,834
49	4	115,308	1	471		
50	7	231,935				
51	6	224,721				
52	15	396,592			2	16,884
53	19	613,315			1	10,779
54	21	642,042	1	38,757	1	18,000
55	34	1,103,990	3	58,579		
56	22	787,194	1	7,174		
57	26	750,735	1	10,951		
58	26	739,377	1	50,193	1	16,633
59	29	860,730	1	10,439	2	32,423
60	28	899,903			1	26,455
61	28	862,858	1	17,630	2	15,759
62	28	775,868	4	84,000	3	38,422
63	24	601,993			2	60,338
64	16	449,802			2	36,118
65	27	767,266			3	23,637
66	19	491,318	1	16,865	2	46,497
67	20	418,614	1	5,585	2	26,445
68	19	417,258			7	104,319
69	13	181,383			6	42,768

(Continued on next page)

RETIRANTS AND BENEFICIARIES - BY ATTAINED AGES
DECEMBER 31, 2009 - (CONCLUDED)

Attained Ages	Age and Service Retirants No.	Age and Service Retirants Annual Benefits	Disability Retirants No.	Disability Retirants Annual Benefits	Survivor Beneficiaries No.	Survivor Beneficiaries Annual Benefits
70	19	$ 500,323			2	$ 15,484
71	10	206,669	1	15,449	5	46,757
72	15	323,811			5	72,854
73	13	282,244			3	41,717
74	13	363,008			1	10,553
75	7	111,081			4	25,946
76	11	236,050			2	25,854
77	13	246,978			3	58,511
78	13	235,830			5	46,750
79	17	242,035			7	77,130
80	5	65,076			2	19,204
81	6	115,280	1	8,301	1	3,602
82	8	117,809	2	16,673	5	30,107
83	11	130,814			1	17,567
84	6	74,337			4	22,741
85	10	104,696			7	42,045
86	4	44,985			3	15,892
87	6	61,508			8	83,295
88	7	59,666			5	28,316
89					2	14,717
90	3	24,983			1	18,186
91	4	30,353			1	2,994
92	2	12,188			4	22,736
93	1	9,968			2	10,458
94	1	6,941				
95					1	4,948
96	2	12,781			1	3,616
101	2	16,800				
Totals	**652**	**$ 16,284,320**	**20**	**$ 341,067**	**127**	**$ 1,353,560**

VESTED TERMINATED MEMBERS* - BY ATTAINED AGES
DECEMBER 31, 2009

Attained Ages	No.	Estimated Annual Benefits
34	1	$ 3,997
39	1	3,389
40	1	3,922
43	4	78,957
44	2	27,793
45	4	61,851
46	2	56,959
47	5	86,893
48	3	36,408
49	3	24,626
50	5	37,039
51	2	41,872
52	3	23,567
54	4	31,099
55	7	61,786
56	5	38,175
57	4	22,572
59	2	19,471
60	2	11,388
64	2	11,291
Totals	**62**	**$683,055**

***** *Includes 5 inactive-actives.*

ACTIVE MEMBERS - DECEMBER 31, 2009
TABULATED BY MEMBER GROUPS

	No.	Annual Payroll	Average Age	Average Service Vesting	Average Service Credited	Average Pay
Old Plan	265	$13,253,889	49.5 years	15.9 years	15.9 years	$50,015
New Plan	305	17,347,966	45.7	6.9	6.7	56,879
Totals	570	$30,601,855				

ACTIVE MEMBERS INCLUDED IN VALUATION
COMPARATIVE STATEMENT

Valuation Date Dec. 31	Active Members	Vested Term. Members	Valuation Payroll	Average Age	Average Service	Average Pay	% Increase
1990	714	50	$ 22,203,831	42.0	12.2	$ 31,098	9.0
1991	693	50	22,511,345	42.5	12.8	32,484	4.5
1992	530	56	16,676,669	41.0	11.7	31,465	(3.1)
1993	512	48	17,217,014	41.6	12.4	33,627	6.9
1994	510	57	17,484,225	42.3	13.1	34,283	2.0
1995	505	55	18,208,670	43.1	13.6	36,057	5.2
1996	497	58	18,169,270	43.8	14.0	36,557	1.4
1997	488	59	18,332,082	44.1	14.2	37,566	2.8
1998	474	57	17,819,526	44.8	14.6	37,594	0.1
1999	474	52	19,312,138	45.5	14.6	40,743	8.4
2000	497	54	19,520,643	45.9	14.8	39,277	(3.6)
2001	474	49	20,281,819	46.3	16.2	42,789	8.9
2002	440	50	19,098,473	46.7	15.3	43,406	1.4
2003	658	48	30,579,238	44.3	7.6	46,473	7.1
2004	688	43	32,382,545	45.0	11.1	47,068	1.3
2005	655	47	30,851,025	44.4	8.8	47,101	0.1
2006	645	48	31,943,723	45.2	9.3	49,525	5.1
2007	627	54	31,796,784	46.0	9.8	50,713	2.4
2008	574	63	29,688,203	46.7	10.0	51,722	2.0
2009	**570**	**62**	**30,601,855**	**47.5**	**11.0**	**53,687**	**3.8**

ACTIVE MEMBERS - DECEMBER 31, 2009
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date							Totals	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	4							4	$ 159,499
25-29	13	4						17	708,494
30-34	13	15	1					29	1,357,671
35-39	9	40	4	3				56	2,955,805
40-44	14	53	17	9	4			97	5,201,208
45-49	13	47	28	21	13	4		126	6,732,161
50-54	10	35	19	15	24	8	2	113	6,320,663
55-59	3	22	10	15	19	4	4	77	4,222,129
60	2	3	5	1	3			14	812,812
61	1	4	2	1	3			11	677,460
62		6	6					12	731,277
63		1		1	2			4	218,838
64		1						1	44,292
66			3		1			4	237,567
67		2						2	109,269
70			1					1	59,600
73		1	1					2	53,110
Totals	**82**	**234**	**97**	**66**	**69**	**16**	**6**	**570**	**$ 30,601,855**

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

Age:	47.5	years.
Service:	11.0	years.

SECTION C

FINANCIAL PRINCIPLES, ACTUARIAL VALUATION PROCESS, ACTUARIAL COST METHODS, ACTUARIAL ASSUMPTIONS, AND DEFINITIONS OF TECHNICAL TERMS

BASIC FINANCIAL PRINCIPLES 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 pension promises to a group of employees. As each member of the retirement program acquires a unit of service credit the member is, 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 requirement by having as its ***financial objective the establishment and receipt of 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 contributions objective means that the contribution rate must be at least:

> ***Normal Cost*** (the present value of future benefits assigned to members' 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).

The accumulation of invested assets ***is a by-product of level percent-of-payroll contributions, not the objective***. Investment income becomes the third major contributor to the retirement program, and the amount is directly related to the amount of contributions and investment performance.

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:

B = C + I - E

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

The aggregate amount of Contributions received on behalf of the group

... plus ...

Investment earnings on contributions received and not required for immediate cash payments of benefits

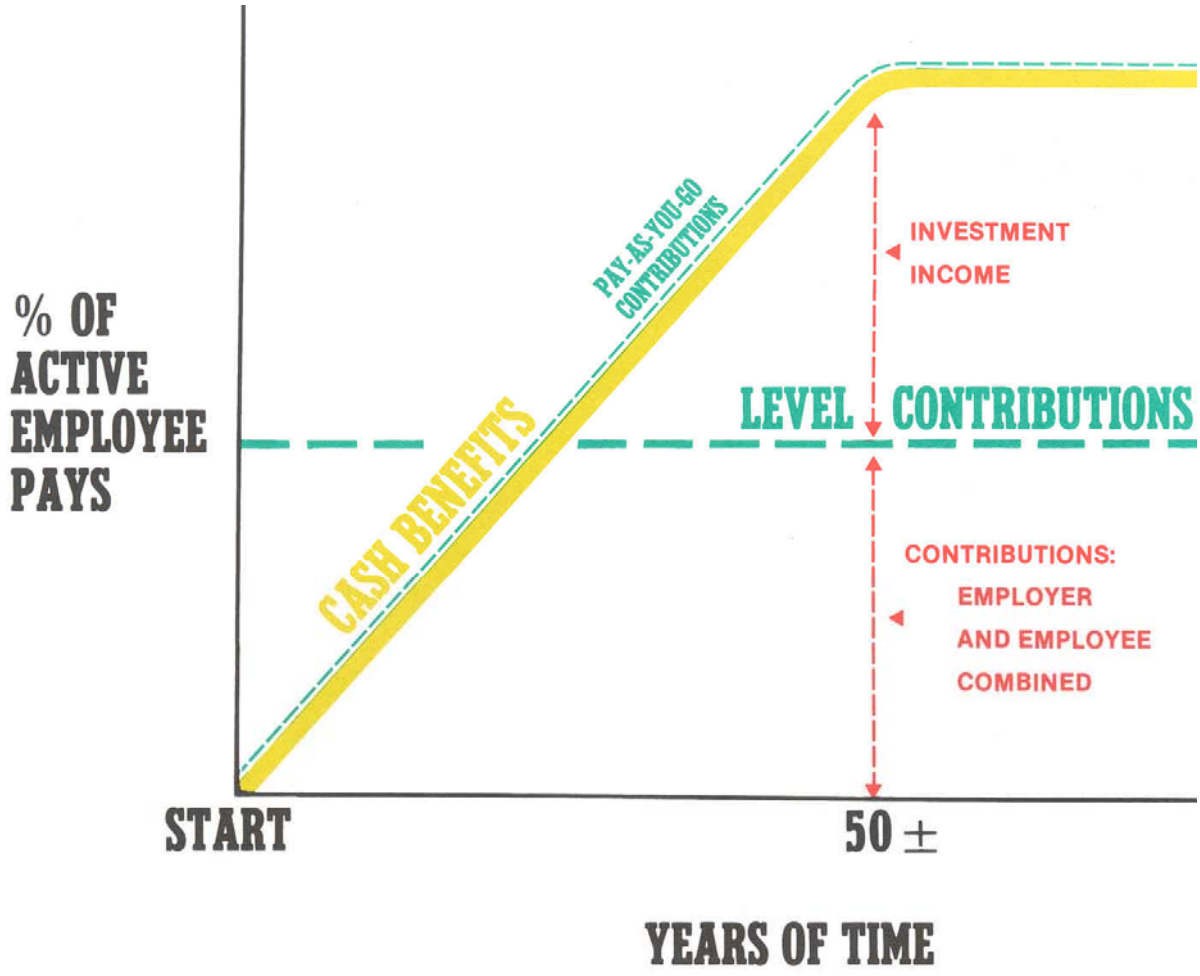
... minus ...

The Expenses of operating the program.

There are retirement programs designed to defer the bulk of contributions far into the future. The present contribution rate for such systems is ***artificially low***. The fact that the contribution rate is destined to increase relentlessly to a much higher level, is often ignored.

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 him, 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**

THE ACTUARIAL VALUATION PROCESS

The financing diagram on the previous page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is an ***increasing contribution method***; and the ***level contribution method*** which equalizes contributions between the generations.

The actuarial valuation is the mathematical process by which the level contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

A. ***Covered Person Data***, furnished by plan administrator

Retired lives now receiving benefits

Former employees with vested benefits not yet payable

Active employees

B. + ***Asset data*** (cash & investments), furnished by plan administrator

C. + ***Assumptions concerning future financial experience in various risk areas***, which assumptions are established by the Board of Trustees after consulting with the actuary

D. + ***The funding method*** for employer contributions (the long-term, planned pattern for employer contributions)

E. + ***Mathematically combining the assumptions, the funding method, and the data***

F. = ***Determination of***:

Plan financial position

and/or New Employer Contribution Rate

ACTUARIAL COST METHODS USED FOR THE VALUATION

Normal Costs. Normal cost and the allocation of actuarial present values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

(i) the annual normal costs for each individual active member, payable from the member's actual date of employment to projected date of retirement, are sufficient to accumulate the actuarial present value of the member's benefit at the time of retirement;

(ii) each annual normal cost is a constant percentage of the member's year-by-year projected covered pay;

(iii) the normal costs are computed based on the benefit provisions affecting new employees.

Actuarial Accrued Liabilities. The total actuarial present value of future benefits and future payroll were computed using the benefit provisions applicable to each present employee (both Retirement System and Alternate Retirement Plan members). Subtracting the present value of future normal costs results in the actuarial accrued liability.

Amortization of Unfunded Actuarial Accrued Liabilities. Unfunded actuarial accrued liabilities were amortized by level percent-of-payroll contributions (principal and interest combined) over a period of 30 years. Future payrolls of both Retirement System and Alternate Retirement Plan members were used to determine the level percent of payroll amortization payment.

Active member payroll was assumed to increase 4.0% a year for the purpose of determining the level percent contributions. Characteristics of this method of amortization are illustrated on page C-6.

FINANCING UNFUNDED ACTUARIAL ACCRUED LIABILITIES WHICH WERE CALCULATED USING AN INFLATION ASSUMPTION OF 4.00% AND AN INVESTMENT RETURN ASSUMPTION OF 8.00% COMPOUNDED ANNUALLY

Level % of Payroll Amortization: Open Amortization 30 Years Perpetually in the Future

Year	Active Employee Payroll	Unfunded Actuarial Accrued Liability	Annual Contributions		UAAL as % of Payroll
			Dollars	% of Payroll	
	(----------$ in Thousands----------)				
1	$30,602	$68,974	$3,767	12.31 %	225.4 %
2	31,826	70,443	3,845	12.08	221.3
3	33,099	71,892	3,926	11.86	217.2
4	34,423	73,406	4,007	11.64	213.2
5	35,800	74,926	4,092	11.43	209.3
6	37,232	76,517	4,177	11.22	205.5
7	38,721	78,116	4,263	11.01	201.7
8	40,270	79,720	4,353	10.81	198.0
9	41,881	81,403	4,444	10.61	194.4
10	43,556	83,092	4,539	10.42	190.8
11	45,298	84,869	4,634	10.23	187.4
12	47,110	86,654	4,730	10.04	183.9
13	48,995	88,446	4,831	9.86	180.5
14	50,954	90,335	4,932	9.68	177.3
15	52,993	92,233	5,034	9.50	174.0
16	55,112	94,139	5,142	9.33	170.8
17	57,317	96,153	5,250	9.16	167.8
18	59,609	98,177	5,359	8.99	164.7
19	61,994	100,209	5,474	8.83	161.6
20	64,473	102,362	5,590	8.67	158.8
21	67,052	104,528	5,706	8.51	155.9
22	69,735	106,703	5,823	8.35	153.0
23	72,524	108,884	5,947	8.20	150.1
24	75,425	111,206	6,072	8.05	147.4
25	78,442	113,538	6,197	7.90	144.7
26	81,580	115,879	6,331	7.76	142.0
27	84,843	118,379	6,465	7.62	139.5
28	88,236	120,893	6,600	7.48	137.0
29	91,766	123,419	6,736	7.34	134.5
30	95,437	125,953	6,881	7.21	132.0

ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS

The actuary calculates contribution requirements and actuarial present values for a retirement system by applying actuarial assumptions to the benefit provisions and people information of the system, using the actuarial cost methods described on page C-5.

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

(i) long-term rates of investment return to be generated by the assets of the system.

(ii) patterns of pay increases to members.

(iii) rates of mortality among members, retirants and beneficiaries.

(iv) rates of withdrawal of active members.

(v) rates of disability among active members.

(vi) the age patterns of actual retirements.

In making a valuation, the actuary calculates the monetary effect of each assumption for as long as a present covered person survives - - - a period of time which can be as long as a century.

The employer contribution rate has been computed to remain level from year-to-year so long as benefits and the basic experience and make-up of members do not change. Examples of favorable experience which would tend to reduce the employer contribution rate are:

(1) Investment returns in excess of 8.0% per year.

(2) Member non-vested terminations at a higher rate than outlined on page C-12.

(3) Mortality among retirants and beneficiaries at a higher rate than indicated by the 1983 Group Annuity Mortality Table set forward 1 year for males and 1 year for females.

(4) Increases in the number of active members.

Examples of unfavorable experience which would tend to increase the employer contribution rate are:

(1) Pay increases in excess of the rates outlined on page C-10.

(2) An increase in the rate of retirement over the rates outlined on page C-13.

(3) A pattern of hiring employees at older ages than in the past.

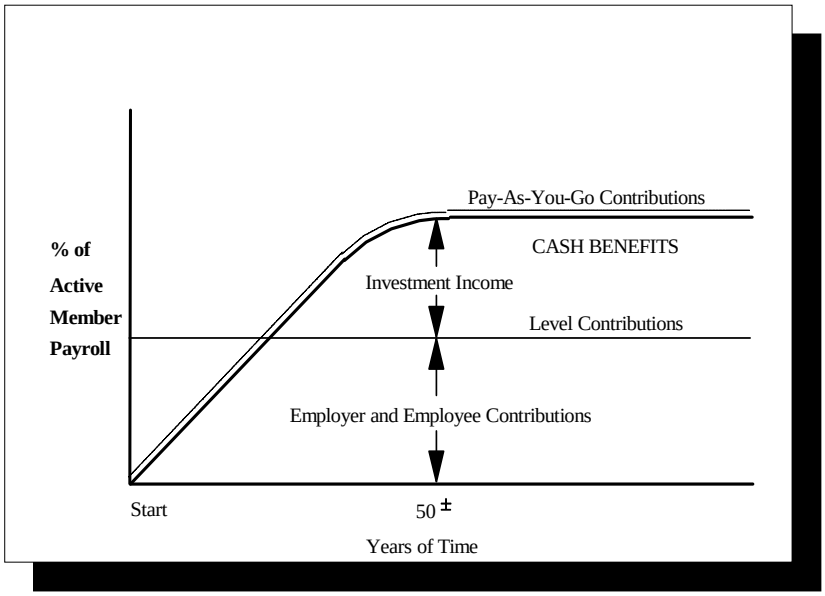
Actual experience of the system will not coincide exactly with assumed experience, regardless of the choice of the assumptions, the skill of the actuary or the precision of the calculations. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time one or more of the assumptions is modified to reflect experience trends (but not random or temporary year-to-year fluctuations).

SELECTION OF ASSUMPTIONS USED IN ACTUARIAL VALUATIONS

Economic Assumptions

Investment return
Pay increases to individual employees:
  the portion for economic changes
Active member group size and
  total payroll growth



Demographic Assumptions

Actual ages at service retirement
Pay increases to individual members:
  the portion for merit & seniority
Disability while actively employed
Separations before retirement
Mortality after retirement
Mortality before retirement

RELATIONSHIP BETWEEN PLAN GOVERNING BODY AND THE ACTUARY

The actuary should have the primary responsibility for choosing the ***demographic*** assumptions used in the actuarial valuation, making use of specialized training and experience.

The actuary and other professionals can provide guidance concerning the choice of suitable ***economic*** assumptions, but the basis of the economic assumptions is the assumed rate of ***inflation***, a quantity which defies accurate prediction by anyone. Given an assumed rate of future inflation, however, it is very important that this rate be applied in a consistent manner in deriving the assumed rate of investment return, the economic portion of the assumption on pay increases to individual employees, and the assumed rate of growth of active member payroll. Consistent application of assumptions is an area in which the actuary has specialized training.

A sound procedure is that the actuary suggests reasonable alternatives for economic assumptions, followed by discussion involving the actuary, the Plan Governing Body, and other professionals, and the Plan Governing Body then makes a final choice from the various alternatives.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

Investment Return (net of administrative expenses).

8.0% per year compounded annually. This rate consists of a real rate of return of 4.0% a year plus a long-term rate of inflation of 4.0% a year.

This assumption is used to equate the value of payments due at different points in time and was first used for the revised December 31, 1997 valuation. Approximate rates of investment return, for the purpose of comparisons with assumed rates, are shown below. Actual increases in average active member pay are also shown for comparative purposes.

	Year Ended December 31					December 31, 2009	
	2009	2008	2007	2006	2005	3 Year Average	5 Year Average
Rate of Investment Return	2.3%	1.0%	5.1%	5.6%	5.0%	2.8%	3.8%
Increase in Average Pay	3.8	2.0	2.4	5.1	0.1	2.7	2.7

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 net of expenses, A is the beginning of year valuation assets, and B is the end of year valuation assets.

These rates of return should not be used for measurement of an investment advisor's performance or for comparisons with other systems -- ***to do so will mislead***.

Pay Projections. These assumptions are used to project current pays to those upon which benefits will be based. The assumptions were first used for the December 31, 2001 valuation.

Annual Rate of Pay Increase for Sample Ages

Sample Ages	Base (Economic)	Merit & Longevity
20	4.0%	3.5%
25	4.0	3.5
30	4.0	2.6
35	4.0	2.1
40	4.0	1.6
45	4.0	1.1
50	4.0	0.8
55	4.0	0.4
60	4.0	0.0

Annual Rate of Pay Increase for Sample Service

Sample Service	Merit & Longevity
5	3.5%
10	2.5
15	1.5
20	0.0

For example, the expected pay increase for a 40 year old member with 10 years of service would be 8.1% (4.0% + 1.6% + 2.5%).

If the number of active members remains constant, the total active member payroll will increase 4.0% annually, the base portion of the individual pay increase assumptions. This increasing payroll (including the payroll of members of the Alternate Retirement Plan) was recognized in amortizing unfunded actuarial accrued liabilities.

Changes actually experienced in average pay and total payroll have been as follows:

	Year Ended December 31					December 31, 2009	
Increase in	2009	2008	2007	2006	2005	3 Year Average	5 Year Average
Average pay	**3.8%**	2.0%	2.4%	5.1%	0.1%	2.7%	2.7%
Total payroll*	**3.1**	(6.6)	(0.5)	2.8	(4.7)	(1.3)	(1.2)

** Including Alternate Retirement Plan members.*

Mortality Table. The 1983 Group Annuity Mortality Table, set forward 1 year for men and 1 year for women. These tables were set forward 10 years for disability retirants. This table was first used for the December 31, 2006 valuation. Sample values follow:

Sample Ages	Actuarial Present Value of $1 Monthly for Life		Future Life Expectancy (Years)	
	Men	Women	Men	Women
55	122.84	133.39	23.97	29.31
60	112.85	125.49	19.83	24.78
65	100.71	115.40	15.95	20.43
70	87.49	102.84	12.54	16.34
75	73.58	88.69	9.60	12.69
80	60.07	74.30	7.21	9.63

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement.

Rates of separation from active membership. The 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 remaining in employment.

Sample Ages	Years of Service	% of Active Members Separating Within Next Year
ALL	0	7.0%
	1	4.0
	2	3.0
	3	3.0
	4	3.0
25	5 & Over	2.5
30		2.5
35		2.3
40		1.5
45		1.3
50		0.7
55		0.7
60		0.7
65		0.7

The rates were first used for the December 31, 2006 valuation.

Rates of Disability. These assumptions represent the probabilities of active members becoming disabled.

Sample Ages	Percent Becoming Disabled Within Next Year
20	0.07 %
25	0.07
30	0.07
35	0.13
40	0.25
45	0.44
50	0.83
55	1.13
60	1.80
65	2.40

These rates were first used for the December 31, 2006 valuation. It was assumed that 50% of disability benefits payable would be duty-related and 50% not related to duty.

Rates of Retirement. These rates are used to measure the probabilities of an eligible member retiring during the next year.

Retirement Ages	Percents of Active Members Retiring Within Next Year: Rule of 65 Members	UAW	New Plan Members
45	10 %	- %	- %
46	10	-	-
47	10	-	-
48	10	-	-
49	10	-	-
50	11	45	45
51	11	30	30
52	11	30	30
53	11	30	30
54	11	40	40
55	15	40	40
56	15	40	40
57	15	20	20
58	15	10	10
59	15	10	10
60	25	20	20
61	25	35	35
62	25	20	20
63	25	20	20
64	25	20	20
65	100	100	100

A member covered by the Rule of 65 was assumed to be eligible for retirement after attaining age 45 with 8 or more years of service and with age plus service totaling at least 65; or age 58 with 8 or more years of service. These rates were first used for the December 31, 2006 valuation.

UAW members were assumed to be eligible for retirement after attaining age 50 with 25 or more years of service, or age 58 with 8 or more years of service. These rates were first used for the December 31, 2006 valuation.

Members covered under the new plan were assumed to be eligible for retirement after attaining age 50 with 25 or more years of service, or age 58 with 8 or more years of service. These rates were first used for the December 31, 2006 valuation.

Active Member Group Size. The number of active members, including members of the Alternate Retirement Plan, was assumed to remain constant. This assumption is unchanged from previous valuations. The number of active members in the Retirement System alone will decline over time.

SUMMARY OF ASSUMPTIONS USED
DECEMBER 31, 2009

Pensions in an Inflationary Environment

Value of $1,000/month Retirement Benefit
To an Individual Who Retires at Age 58
In an Environment of 4.0% Inflation

Age	Value
58	$1,000
59	962
60	925
65	760
70	625
75	514
80	422
85	347

The life expectancy of a 58 year old male retiree is age 80. The life expectancy for a 58 year old female retiree is age 85. 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.

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption:	90% of males and 90% of females are assumed to be married for purposes of death-in-service benefits.
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.
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.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and mortality decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during retirement eligibility.
Normal Form of Benefit:	The assumed normal form of benefit is the straight life form.
Loads:	Age and service benefits were loaded by 3% for certain groups with "topping up" option factors.
Incidence of Contributions:	Contributions are assumed to be received on September 1st following the valuation date.

DEFINITIONS OF TECHNICAL TERMS

Accrued Service - Service credited under the system, which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability - The difference between the actuarial present value of system benefits and the actuarial present value of future normal costs. Also referred to as "past service liability."

Actuarial Assumptions - Estimates of future 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 benefits" between future normal costs and actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent - One series of payments is said to be actuarially equivalent to another series of payments if the two series have the same actuarial present value.

Actuarial Gain (Loss) - The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities -- during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.

Actuarial Present Value - The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payments.

Amortization - Paying off an interest-discounted amount with periodic payments of interest and (generally) principal -- as opposed to paying off with a lump sum payment.

Credited Projected Benefit - The portion of a member's projected benefit attributable to service before the valuation date - allocated based on the ratio of accrued service to projected total service and based on anticipated future compensation.

Normal Cost - The portion of the actuarial present value of future benefits that is assigned to the current year by the actuarial cost method. Sometimes referred to as "current service cost."

Unfunded Actuarial Accrued Liabilities - The difference between actuarial accrued liabilities and valuation assets. Sometimes referred to as "unfunded past service liability" or "unfunded supplemental present value."

Most retirement systems have unfunded actuarial accrued liabilities. They arise each time new benefits are added and each time an actuarial loss occurs.

The existence of unfunded actuarial accrued liabilities is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liabilities do not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liabilities and the trend in their amount (after due allowance for devaluation of the dollar).

SECTION D

DISCLOSURES REQUIRED BY THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

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

ACTUARIAL ACCRUED LIABILITY

The actuarial accrued liability is a measure intended to help users assess (i) a pension fund's funded status on a going-concern basis, and (ii) progress being made toward accumulating the assets needed to pay benefits as due. Allocation of the actuarial present value of projected benefits between past and future service was based on the individual entry-age actuarial cost method. Assumptions, including projected pay increases, were the same as used to determine the Retirement System's level percent-of-payroll annual required contribution between entry-age and assumed exit age. Entry-age was established by subtracting credited service from current age on the valuation date.

The preceding methods comply with the financial reporting standards established by the Governmental Accounting Standards Board.

The entry-age actuarial accrued liability was determined as part of an actuarial valuation of the plan as of December 31, 2009. Significant actuarial assumptions used in determining the entry-age actuarial accrued liability include (a) a rate of return on the investment of present and future assets of 8% per year compounded annually, (b) projected salary increases of 4.0% per year compounded annually, attributable to inflation, (c) additional projected salary increases ranging from 0.0% to 7.0% per year, depending on age and service, attributable to seniority/merit and (d) and the assumption that benefits will not increase after retirement.

At December 31, 2009, the unfunded actuarial accrued liability was $68,974,131, determined as follows:

Actuarial Accrued Liability:	
Active participants (292 vested and 278 non-vested)	$ 65,089,689
Retired participants and beneficiaries currently receiving benefits (799 recipients)	176,133,432
Vested terminated participants not yet receiving benefits (57 vested, 5 inactive-actives)	4,491,470
Member Benefit Reserve	16,583,768
Total Actuarial Accrued Liability	262,298,359
Actuarial Value of Assets (smoothed market value)#	193,324,228
Unfunded Actuarial Accrued Liability	$ 68,974,131

 # Excluding reserve for health insurance.

During the period from December 31, 2008 to December 31, 2009 the System experienced a net change of $3,967,855 in the actuarial accrued liability. There were no changes in benefit provisions, actuarial assumptions or methods.

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date December 31	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age# (b)	Unfunded AAL (b)-(a)	Funded Ratio (a)/(b)	Active Member Covered Payroll (c)	Unfunded AAL as a Percentage of Active Member Covered Payroll ((b-a)/c)
			($ amounts in thousands)			
2001 ^	$191,311	$213,648	$22,337	89.5 %	$20,282	110.1 %
2002	192,920	215,405	22,484	89.6	19,098	117.7
2003 *!	199,329	221,088	21,759	90.2	30,579	71.2
2004 *	206,200	231,389	25,189	89.1	32,383	77.8
2005 *	207,881	241,882	34,001	85.9	30,851	110.2
2006 **	208,765	251,427	42,661	83.0	31,944	133.6
2007	208,572	254,356	45,784	82.0	31,797	144.0
2008	200,600	258,331	57,731	77.7	29,688	194.5
2009	**193,324**	**262,298**	**68,974**	**73.7**	**30,602**	**225.4**

 # Excluding the contingency reserves in the Reserve for Retired Benefit Payments.

** After changes in benefit provisions.*

! After changes in methods.

^ After changes in actuarial assumptions and data corrections.

*** After changes in actuarial assumptions.*

Analysis of the dollar amounts of actuarial value of assets, actuarial accrued liability, or unfunded actuarial accrued liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides one indication of the system's funded status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the plan. The unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of covered payroll approximately adjusts for the effects of inflation and aids analysis of the progress being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan.

CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

The Retirement System's financial objective provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are designed to accumulate sufficient assets to pay benefits when due. The normal cost and amortization payment for the year ended June 30, 2010 were determined using an entry-age actuarial funding method. Unfunded actuarial accrued liabilities were amortized as a level percent-of-payroll over an open period of 30 years.

During the year ended June 30, 2010 employer contributions totaling $6,043,861 (excludes $350,000 contribution for health insurance) were made in accordance with contribution requirements determined by an actuarial valuation of the plan as of December 31, 2008. The employer contributions consisted of $3,175,978 for normal cost and $2,867,883 for amortization of the unfunded actuarial accrued liability. Employer contributions represented 19.32% of projected valuation payroll. Employer contributions, if any, made after December 31, 2009 are not reflected here.

Significant actuarial assumptions used to compute contribution requirements were the same as those used to compute the standardized measure of the actuarial accrued liability.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Valuation Date December 31	Annual Required Contribution# ($ in Thousands)	Percentage Contributed
2001	1999	$3,215	100.0 %
2002	2000	3,105	100.0
2003	2001	3,567	98.1
2004	2002	3,466	100.0
2005	2003	4,675	100.0
2006	2004	4,900	100.0
2007	2005	5,231	100.0
2008	2006	6,022	100.0
2009	2007	6,048	107.1
2010	2008	6,472	93.4
2011	**2009**	**7,297**	

 # Due on September 1st, prior to the fiscal year ending June 30, 2006, due on November 1st thereafter.

GRS
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One Towne Square
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Southfield, MI 48076-3723
248.799.9000 phone
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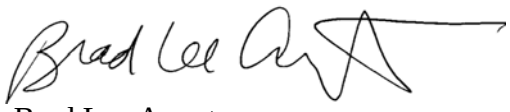
December 16, 2010

Ms. Karen Williams
City of Lansing Retirement Office
124 W. Michigan Avenue
8th Floor, City Hall
Lansing, Michigan 48933

Dear Karen:

Please find enclosed twenty-five copies of the report of the Sixty-Ninth Annual Actuarial Valuation of the City of Lansing Employees' Retirement System.

Sincerely,



Brad Lee Armstrong

BLA:mrb
Enclosures

cc: Price-Waterhouse, Coopers (+1 report copy)