

CITY OF OWOSSO EMPLOYEES RETIREMENT SYSTEM SEVENTY-FIRST ANNUAL ACTUARIAL VALUATION DECEMBER 31, 2015

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April 7, 2016

Board of Trustees City of Owosso Employees Retirement System Owosso, Michigan

Re: City of Owosso Employees Retirement System Actuarial Valuation as of December 31, 2015

Dear Board Members:

The results of the December 31, 2015 Annual Actuarial Valuation of the City of Owosso Employees Retirement System are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

The purposes of the valuation are to measure the System's funding progress and to determine the employer contribution rate for the fiscal year beginning July 1, 2016 in accordance with Board policy. Users of this report should note that employer contributions at the levels contained herein do not guarantee benefit security. A separate report will be issued that contains information needed for reporting under GASB Statements No. 67 and No. 68.

This report should not be relied on for any purpose other than the purposes described. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The valuation was based upon information furnished by the City, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the City.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

Board of Trustees April 7, 2016 Page 2

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the City of Owosso Employees Retirement System as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

Mark Buis and Laura Frankowiak are Members of the American Academy of Actuaries and meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing individuals are independent of the plan sponsor.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

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Kenneth G. Alberts

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Mark Buis, FSA, MAAA

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Laura Frankowiak, ASA, MAAA

SECTION A VALUATION RESULTS

Computed Contributions Expressed as Percents of Annual Pay for the Fiscal Year Beginning July 1, 2016 Using Entry Age Funding Method

		0	0	Fire	
Contributions for		General	Police	Dept.	Total
Number of Active Members		27	11	18	56
Actuarial Accrued Liabilities	9	\$21,585,513	\$5,805,304	\$9,494,717	\$36,885,534
Assets		18,710,286	5,494,880	9,090,980	33,296,146
Unfunded Actuarial Accrued Liabilities		2,875,227	310,424	403,737	3,589,388
Total Normal Cost - %		13.33%	16.11%	17.36%	
Members' Contributions - %		6.00	11.00	7.50	
City's Normal Cost - %		7.33	5.11	9.86	
Unfunded Actuarial Accrued Liabilities - %		23.95	3.01	3.29	
UAL Payment	\$	300,806	\$ 31,529	\$ 33,915	\$ 366,250
City's Normal Cost - \$		92,044	32,843	101,689	226,576
TOTAL CITY CONTRIBUTIONS					
Effective 7/1/2016 - 9	%	31.28%	10.38%	13.15%	
Effective 7/1/2016 (Mid of FY contribution) - \$	\$	392,850	\$ 64,372	\$ 135,604	\$ 592,826
Effective 7/1/2016 (End of FY contribution) - \$	\$	407,145	\$ 66,732	\$ 140,570	\$ 614,448
Amortization Period (in years)		13	13	13	
For every \$1,000 of Contingency Reserve					
Released, the Employer Contribution Decreases*:	9	\$ 0	\$ 73	\$ 88	\$ 161

* The change in contingency reserve is dependent on the timing of the City's contributions.

Contributions shown above are based on the Board's current funding policy. The Board should regularly review/re-evaluate the funding policy. The Board is free to adopt higher employer contributions if it feels higher contributions are warranted.

Timing of Contribution Payments

The contribution requirements in this report anticipate regular payments throughout the year. Examples would be at each payroll date or in 12 monthly installments. If the employer contribution pattern is significantly different, an adjustment to the costs may be appropriate. For example, a lump sum contribution at the beginning of the year is available for investment throughout the year and, therefore, ought to be somewhat smaller than 12 monthly payments. Similarly, a lump sum contribution at the end of the year will not generate any investment income that year and so must be greater than 12 monthly payments. Examples of this are shown below using an interest rate equal to the valuation rate of investment return to adjust for timing differences:

	Each Payment	Total for Year
Lump Sum at Beginning of Fiscal Year (7/1/2016):	\$572,438	\$572,438
Lump Sum at End of Fiscal Year (6/30/2017):	614,448	614,448
Lump Sum at Middle of Fiscal Year (12/31/2016):	592,826	592,826
Twelve Monthly Installments (starting July 2016):	49,402	592,826

Illustration is based on the calculated mid-year contributions adjusted to the beginning of year or end of year based on simple interest, by division.

Valuation Assets and Actuarial Accrued Liability

In financing the actuarial accrued liabilities, the valuation assets of \$33,296,146 were distributed as shown below.

	Present Valuation Assets Applied to				
Reserves for	Member Actuarial Accrued Liabilities	Retired Life Actuarial Liabilities	Contingency Reserve	Totals	
Employees' Contributions	\$ 3,419,674			\$ 3,419,674	
Employer Contributions	4,878,122	\$ 103,316		4,981,438	
Retired Benefit Payments		24,823,348	\$814,031	25,637,379	
Undistributed Investment Income	(742,345)			(742,345)	
Totals	\$ 7,555,451	\$24,926,664	\$814,031	\$33,296,146	

Contingency Reserve						
Valuation Year	(General		Police	Fire	Total
2002*	\$	257,480	\$	207,161	\$ 661,454	\$ 1,126,095
2003*		332,125		174,762	660,099	1,166,986
2004*		149,603		234,935	329,028	713,566
2005		379,612		242,833	630,448	1,252,893
2006		374,388		209,771	629,568	1,213,727
2007		403,449		344,481	616,305	1,364,235
2008		366,855		351,453	707,770	1,426,078
2009		297,674		468,166	697,978	1,463,818
2010		505,101		480,114	689,335	1,674,550
2011		566,173		524,232	650,227	1,740,632
2011#		424,630		393,174	487,670	1,305,474
2012#@		366,148		481,920	425,067	1,273,135
2013^		379,078		669,336	381,914	1,430,328
2013^!		118,258		575,524	178,077	871,859
2014		-		583,098	271,295	854,393
2015		-		602,246	211,785	814,031

Historical Comparison of Contingency Reserve by Division

- * Prior to 2005, General Union and General Non-Union were summarized as General for purposes of the actuarial valuation. Prior to 2005, Police Command and Police Patrol were summarized as Police for purposes of the actuarial valuation. For the purpose of this exhibit, the combined General and Police groups pre-2005 have been summarized with General Union and Police Patrol respectively.
- # After the release of $\frac{1}{4}$ of the contingency reserve as approved by the Board as of $\frac{12}{31}/2011$.
- @ After transfer of \$74,000 from WWTP to Sewage.
- [^] Beginning in 2013, the WWTP, Sewage, General Union, General Non-Union, and Water groups are combined into one General Group. The Police Command and Police Patrol were also combined into one Police group for purposes of the actuarial valuation.
- ! After actuarial assumptions and/or methods revised.

General Police Fire Total A. Accrued Liability 1. For retirees and beneficiaries a. Retiree Liability \$ 14,294,036 \$ 4,087,831 \$ 6,544,797 \$ 24,926,664 b. Contingency Reserve 0 602,246 211,785 814,031 2. For vested terminated members 1,308,060 0 0 1,308,060 0 0 0 0 3. For pending MERS transfer 4. For present active members a. Value of expected benefit payments 2,224,092 4,318,661 13,673,946 7,131,193 b. Value of future normal costs 1,147,776 1,108,865 1,580,526 3,837,167 c. Active member liability: (a) - (b) 5,983,417 1,115,227 2,738,135 9.836,779 21,585,513 5. Total 5,805,304 9,494,717 36,885,534 B. Present Assets (valuation basis) 18,710,286 5,494,880 33,296,146 9.090.980 C. Unfunded Accrued Liability (Excess Assets) as of 12/31/2015: (A.5) - (B) 310,424 3,589,388 2,875,227 403,737 D. Employer Normal Cost (for period 1/1/16 to 6/30/16) 13,013 46,281 52,633 111,927 E. Expected Employer Contribution Payable 6/30/2016 458,141 37,920 133,082 629,143 F. Interest Adjustment to 6/30/2016 104,227 11,253 14,635 130,115 G. Projected Unfunded Accrued Liability (Excess Assets) as of $\frac{6}{30}/2016$: (C) + (D) - (E) + (F) 2,567,594 296,770 337,923 3,202,287

Development of Unfunded Accrued Liability Using Entry Age Funding Method

_	City's Computed C	City's Computed Contributions for			
Valuation		Policemen [^]			
Date	General	and			
December 31	Members	Firemen			
2003#	0.00	0.17			
2004#(a)	0.00	0.00			
2005#(a)(b)	2.67	1.30			
2006(a)(b)	4.28	1.54			
2007(b)	2.53	3.88			
2008(b)	10.19	4.77			
2009#(b)	10.90	5.48			
2010(b)	18.43	9.21			
2011(a)(b)	25.99	15.83			
2012#	28.60	11.09			
2013(a)	29.27	9.63			
2014	33.57	10.74			
2015#	31.28	11.95			

Employer Contribution History

After benefit provisions changed.

(a) After actuarial assumptions and/or methods revised.

- (b) Closed groups financed using the Aggregate method.
- [^] The City's Contribution for Police Patrol has a maximum of 4% until the 2015 valuation. However, the contribution percentage on this page includes the additional contribution for the Police Command group, since the Policemen group includes both divisions.

Development of Experience Gain (Loss) Year Ended June 30, 2015

Actual experience will never (except by coincidence) exactly match assumed experience. It is hoped that *gains* and *losses* will cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the development of the experience gain (loss) is shown below.

		General	Police	Fire	Total
(1)	UAAL* at start of year	\$3,469,631	\$213,156	\$472,902	\$4,155,689
(2)	NC from last val: (Total)	171,218	101,746	169,972	442,936
(3)	Actual contributions: (Total)	526,866	121,444	191,319	839,629
(4)	Interest Accrual: [(1) + 1/2 [(2) - (3)]] x 0.0725	238,656	14,740	33,512	286,908
(5)	Expected UAAL before changes: $(1) + (2) - (3) + (4)$	3,352,639	208,198	485,067	4,045,904
(6)	Change from benefit improvements	0	32,269	(6,629)	25,640
(7)	Change from revised actuarial methods	0	0	0	0
(8)	Change from revised actuarial assum.	0	0	0	0
(9)	Expected UAAL after changes: $(5) + (6) + (7) + (8)$	\$3,352,639	\$240,467	\$478,438	\$4,071,544
(10)	Actual UAAL at end of year	2,875,227	310,424	403,737	3,589,388
(11)	Gain (Loss): (9) - (10)	477,412	(69,957)	74,701	482,156
(11a)	AAL at start of year	21,712,397	5,572,970	9,428,904	36,714,271
(12)	Gain (Loss) as percent of AAL# at start of year	2.20%	(1.26%)	0.79%	1.31%

* Unfunded Actuarial Accrued Liability

Actuarial Accrued Liabilities

Historical Comparative Schedules

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Entry Age Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2007	\$33,894,127	\$28,860,834	\$(5,033,293)	117.4 %	\$4,052,300	-
2008	32,567,350	29,857,841	(2,709,509)	109.1	4,042,417	-
2009#	32,187,590	30,042,649	(2,144,941)	107.1	3,952,336	-
2010	31,529,473	31,251,375	(278,098)	100.9	3,672,267	-
2011*	29,624,891	33,523,677	3,898,786	88.4	3,746,852	104%
2012#	30,611,263	34,120,683	3,509,420	89.7	3,333,049	105%
2013*	31,913,449	35,821,262	3,907,813	89.1	3,108,992	126%
2014	32,558,582	36,714,271	4,155,689	88.7	2,938,821	141%
2015#	33,296,146	36,885,534	3,589,388	90.3	2,891,530	124%

* Revised actuarial assumptions and/or methods.

After benefit provisions changed.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Valuation Year Ended December 31	Contribution Rates as Percents of Valuation Payroll	Computed Dollar Contribution Based on Projected Valuation Payroll*	Actual Contribution	Percentage Contributed
2008	2006	3.20 %	\$ 130,844	\$ 130,844	100%
2009	2007	3.02	128,117	128,117	100
2010	2008	7.90	328,824	328,824	100
2011	2009	8.50	350,599	350,599	100
2012	2010	14.31	550,684	550,684	100
2013	2011	21.29	829,038	829,038	100
2014	2012	20.24	701,388	701,388	100
2015	2013	19.06	600,769	600,769	100
2016	2014	21.28	629,143		
2017	2015	20.23	614,448		

* End of year dollar amount is shown beginning fiscal year ending June 30, 2017.

The funded status shown above is not a measure of the plan's settlement costs. A funded status of 100% or above is not an indication of the need for future contributions. A funded status below 100% is an indication that future contributions are needed.

Actuarial Balance Sheet as of December 31, 2015

A. Accrued value of System assets:	
1. Net assets from System financial statements	\$31,948,137
2. Funding value adjustment	1,348,009
3. Valuation assets	33,296,146
 B. Present value of expected future employer contributions: 1. For normal costs 2. For unfunded actuarial accrued liabilities 	1,878,362 3,589,388
3. TotalC. Present value of expected future member contributions	5,467,750 1,958,805
D. Total Present and Expected Future Resources	\$40,722,701

A. To retirees and beneficiaries	\$25,740,695
B. To vested terminated members	1,308,060
C. To present active members:1. Allocated to service rendered prior to valuation date2. Allocated to service likely to be rendered after valuation date3. Total	9,836,779 3,837,167 13,673,946
D. Total Actuarial Present Value of Expected Future Benefit Payments	\$40,722,701

Comments

Comment A: The System was closed to General Union and Police Command Officers new entrants effective January 1, 2005 and General Non-Union new entrants effective January 1, 2006. The plan is open for Police Patrol and Fire groups.

Comment B: The following plan provision changes are reflected in the valuation for the first time this year:

- Fire member contributions are 7.0% of annual compensation, 7.5% effective 7/1/2016, and 8.0% effective 7/1/17.
- Police Union member contributions are 12.0% of annual contribution, employer responsible for the remainder. Effective 7/1/2016 employees annual contribution will decrease to 11.0%, employer responsible for the remainder. Effective 7/1/2017 employees annual contribution will decrease to 10.0%, employer responsible for the remainder.

Comment C: Experience during the year was more favorable than assumed. The primary sources of favorable experience were:

- Gains related to investment activity (the recognized rate of investment return was 7.59% compared with the assumed rate of investment return of 7.25%);
- Gains related to retiree mortality (6 deaths compared with 3.4 expected);
- Gains related to pay increases for Fire and General divisions;
- Losses related to pay increases for Police; and
- Gains related to turnover for General members.

Comment D: The Retirement System currently has a contingency reserve of approximately \$814 thousand. This reserve is the excess of the Reserve for Retired Benefit Payments over the accrued liabilities for retirees and beneficiaries.

See page A-4 for additional details regarding the contingency reserve amounts by group.

Comments (Concluded)

Comment E: With the consolidation of the Police Patrol (an open group with fluctuating member contributions) and Police Command (a closed group with no current active members), the employer contributions were determined separately and added together. As such, the retirement system may need to maintain assets separately for these two groups going forward, unless there is a re-opening of the Command group, to prevent Police Patrol member contributions from changing (up or down) as a result of the funded status of Command member liabilities.

Comment F: The computed Employer contribution effective July 1, 2016 is \$592,826, assuming periodic payments throughout the fiscal year or a lump sum payment in the middle of the fiscal year.

Comment G: The actuarial value of assets recognized a 7.59% rate of return, despite the market rate of return of (0.20)%. This difference is due to the 4-year smoothing. The portion of this year's loss recognized in the actuarial value of assets was offset by the gains from prior years continuing to be recognized this year. As recognition of those prior gains are completed, there will be upward pressure on contributions as the remainder of this year's loss is recognized over the next 3 years.

Comment H: Observations for next experience review:

- All assumptions continue to be reasonable.
- The industry trend on the mortality assumption is to move away from static projections of mortality improvements to generational projections of mortality improvement.

Comment I: The amount of the transfer to MERS on behalf of the Police Officer who was promoted to the Command group was less than the liabilities released. While this appears to be a gain for the System, it may ultimately result in increasing contributions to MERS if the methods and assumptions used for this valuation prove to be better estimates of future activity than those used by MERS.

SECTION B VALUATION DATA

Brief Summary of Benefit Provisions (December 31, 2015)

Regular Retirement (no reduction factor for age)

Eligibility - General* Non-Union: Age 60 with 10 or more years of service.

General* Union: Age 55 with 25 or more years of service or age 60 with 10 or more years of service.

Police: Age 50 with 25 or more years of service or age 55 with 10 or more years of service.

Fire: Any age with 25 or more years of service or age 55 with 10 or more years of service if hired prior to 6/30/93. Age 50 with 25 or more years of service or age 55 with 10 or more years of service if hired after 6/30/93.

Annual Amount - General* Non-Union: Final Average Compensation (FAC) times 2.5% for all years of service to a maximum 80% of FAC, effective 7/1/2010.

Fire: FAC times the sum of a) 2.80% for the first 25 years of service plus b) 1.0% for years of service in excess of 25 years to a maximum of 80% FAC.

Police: FAC times 2.80% for all years of service to a maximum 80% of FAC.

General* Union - FAC times 2.50% for all years of service to a maximum of 80% FAC.

Type of Final Average Compensation - Highest 3 consecutive years out of last 10. Some lump sums included.

* Includes WWTP, Water, and Sewage.

Deferred Retirement (vested benefit)

Eligibility - 10 or more years of service. Benefit begins at age 60.

Annual Amount - Computed as a regular retirement but based upon service and final average compensation at time of termination.

Duty Disability Retirement

Eligibility - No age or service requirements. Must be in receipt of worker's compensation.

Annual Amount - Computed as a regular retirement. Minimum benefit to age 65 is 20% of final average compensation. Upon termination of worker's compensation, additional service credit is granted and benefit is recomputed.

Non-Duty Disability Retirement

Eligibility - 10 or more years of service.

Annual Amount - Computed as a regular retirement. Minimum benefit to age 65 is 20% of final average compensation.

Duty Death Before Retirement

Eligibility - No age or service requirements. Must be in receipt of worker's compensation.

Annual Amount - Refund of accumulated contributions or, upon termination of worker's compensation, a benefit to the spouse, unmarried children under 18 and dependent parents equal to the worker's compensation payment.

Non-Duty Death Before Retirement

Eligibility - 10 or more years of service.

Annual Amount - Computed as a regular retirement but actuarially reduced in accordance with a 100% joint and survivor election.

Post-Retirement Increases

Annual increase - 1.4% of the base pension for the first 10 years of retirement.

Member Contributions

General, Police Non-Union	6.0% of annual compensation.
Fire	7.0% of annual compensation, 7.5% effective 7/1/2016, and 8.0% effective 7/1/2017.
Police Union	12.0% of annual contribution, employer responsible for the remainder. Effective 7/1/2016 employees annual contribution will decrease to 11.0%, employer responsible for the remainder. Effective 7/1/2017 employees annual contribution will decrease to 10.0%, employer responsible for the remainder.

Membership

General City Union (including WWTP, Water, and Sewage) employees hired on or after January 1, 2005, and General City Non-Union (including WWTP, Water, and Sewage) employees and Police Command Officers hired on or after January 1, 2006 are not covered by this Retirement System.

Retirants and Beneficiaries Comparative Statement

				Removed		olls End					
Valuation	Ac	ided to Rolls	f	rom Rolls	(of Year	% Incr. in		Present	Active	Pensions
Date		Annual		Annual		Annual	Annual	Average	Value of	Per	as a % of
Dec. 31	No.	Pensions*	No.	Pensions	No.	Pensions	Pensions	Pension	Pensions	Retiree	Pay
1991	4	\$ 76,248	3	\$ 12,643	83	\$ 596,676	11.9%	\$ 7,189	\$6,194,711	1.2	19.70%
1992	6	59,014	3	25,569	86	630,121	5.6	7,327	6,455,404	1.2	20.41
1993		12,468	2	4,508	84	638,081	1.3	7,596	6,383,541	1.2	19.78
1994	5	29,230	3	4,664	86	662,647	3.8	7,705	6,486,947	1.2	19.72
1995	2	46,143	3	7,064	85	701,726	5.9	8,256	6,918,988	0.8	28.87
1996	2	11,415	7	12,934	80	700,207	(0.2)	8,753	6,743,764	0.8	31.74
1997	2	47,931	2	25,613	80	722,975	3.3	9,037	6,856,333	0.8	29.57
1998	4	22,510	6	60,410	78	685,075	(5.2)	8,783	6,431,181	0.9	27.60
1999	3	96,306	2	2,583	79	778,798	7.7	9,858	7,416,876	0.8	29.81
2000	2	54,935	3	18,350	78	815,383	4.7	10,454	7,807,925	1.3	21.52
2001	8	171,244	4	42,562	82	944,065	15.8	11,513	9,172,050	1.2	24.78
2002	7	119,045	4	32,234	85	1,030,876	9.2	12,128	10,126,061	1.2	26.84
2003	1	17,294	10	31,998	76	1,016,172	(1.4)	13,371	9,841,684	1.3	25.45
2004	4	115,408	6	33,752	74	1,097,828	8.0	14,836	10,609,898	1.3	27.47
2005	3	62,062	3	22,700	74	1,137,190	3.6	15,367	10,861,853	1.3	27.32
2006	5	207,589	2	2,865	77	1,341,914	18.0	17,427	13,043,591	1.2	34.12
2007	3	125,438	7	37,612	73	1,429,740	6.5	19,585	13,864,399	1.2	35.28
2008	1	63,419	4	33,043	70	1,460,116	2.1	20,859	14,063,424	1.3	36.12
2009	4	95,927	2	29,187	72	1,526,856	4.6	21,206	14,688,020	1.2	38.63
2010	4	252,797	1	22,320	75	1,757,333	15.1	23,431	16,795,936	1.0	47.85
2011	4	133,694	3	26,612	76	1,864,415	6.1	24,532	17,718,104	1.0	49.76
2012	6	247,091	4	57,258	78	2,054,248	10.2	26,337	19,536,094	0.9	61.63
2013	10	312,029	5	57,844	83	2,308,433	12.4	27,812	23,305,303 @	0.8	74.25
2014	5	163,556	4	41,881	84	2,430,108	5.3	28,930	24,627,565	0.7	82.69
2015	5	135,504	6	78,885	83	2,486,727	2.3	29,961	24,926,664	0.7	86.00
		,		,		, , ,		*			

* Includes post retirement increases.

@ After changes in actuarial assumptions/methods.

Retirants and Beneficiaries as of December 31, 2015 Tabulated by Type of Pensions Being Paid

Type of Pensions Being Paid	No.	Annual Pension
Age and Service Pensions		
Regular pension - benefit		
terminating at death	33	\$1,180,296
Option A pension - 10-year		
certain and life thereafter	1	35,028
Option B pension - joint and		
last survivor benefit	18	454,317
Option C pension - modified		
joint and last survivor	13	515,417
Pension to survivor beneficiary		
of deceased retirant	13	175,704
Total age and service pensions	78	\$2,360,762
Casualty Pensions		
Duty disability		
Regular Pension		
Non-Duty disability		
Regular Pension	3	\$ 93,296
Pension to survivor beneficiary		
of deceased retirant		
Non-Duty disability	1	13,300
Pension to survivor beneficiary		
of deceased member		
Non-Duty death	1	19,369
Total casualty pensions	5	\$ 125,965
		()
Total Pensions Being Paid	83	\$2,486,727

	Age	and Service		Casualty	Totals		
Attained		Annual		Annual		Annual	
Age	No.	Allowances	No.	Allowances	No.	Allowances	
50 - 54	3	\$ 126,089	1	\$ 13,300	4	\$ 139,389	
55 - 59	10	331,434	1	20,919	11	352,353	
60 - 64	13	432,648	2	80,134	15	512,782	
65 - 69	12	555,601	1	11,612	13	567,213	
70 - 74	7	267,932			7	267,932	
76	4	162,109			4	162,109	
77	2	41,696			2	41,696	
78	3	87,624			3	87,624	
79	4	97,068			4	97,068	
80	4	96,400			4	96,400	
81	1	1,721			1	1,721	
82	2	23,624			2	23,624	
83	1	1,669			1	1,669	
85	3	43,431			3	43,431	
88	1	16,646			1	16,646	
89	3	24,697			3	24,697	
90+	5	50,373			5	50,373	
Totals	78	\$2,360,762	5	\$125,965	83	\$2,486,727	

Retirants and Beneficiaries as of December 31, 2015 Tabulated by Attained Ages

Average Age at Retirement:58.1 years.Average Age Now:71.2 years.

Attained Ages	No.	Annual Deferred Pension		
50	1	\$ 8,542		
53	2	54,550		
55	1	13,257		
56	1	17,192		
59	1	35,671		
Totals	6	\$129,212		

Inactive Members as of December 31, 2015 Tabulated by Attained Ages

Average Age Now: 54.9 years

Comparative Statement

Valuation	А	ctive M	embers		Vested			A	verage	
Date					Term.	Valuation				%
Dec. 31	General*	P-F	Water	Total	Member	Payroll	Age	Service	Pay	Change
1996	27	32	3	62	4	\$ 2,205,901	44.2	14.3	\$ 35,579	1.0%
1997	30	32	3	65	4	2,444,848	43.9	13.6	37,613	5.7
1998	30	34	3	67	4	2,486,108	44.9	13.9	37,106	(1.3)
1999	30	34	3	67	4	2,612,348	43.6	13.1	38,990	5.1
2000	51	32	15	98	6	3,788,920	44.3	13.7	38,662	(0.8)
2001	48	34	15	97	6	3,809,203	43.2	12.8	39,270	1.6
2002	52	33	15	100	4	3,840,501	43.6	12.7	38,405	(2.2)
2003	50	34	14	98	3	3,993,163	44.8	13.6	40,747	6.1
2004	49	33	15	97	3	3,996,822	44.7	13.3	41,204	1.1
2005	49	34	15	98	3	4,162,066	45.1	13.6	42,470	3.1
2006	45	29	15	89	3	3,933,310	44.9	13.7	44.194	4.1
2000	43	33	13	90	4	4,052,300	47.0	14.9	45,026	1.9
2007	43	32	14	88	4	4,042,417	46.5	14.9	45,937	2.0
2009	40	32	11	83	3	3,952,336	46.4	14.0	47,619	3.7
2010	37	29	10	76	3	3,672,267	47.4	15.9	48,319	1.5
									- ,	
2011	36	31	10	77	3	3,746,852	47.2	15.5	48,660	0.7
2012	33	29	7	69	6	3,333,049	47.0	15.5	48,305	(0.7)
2013	29	30	5	64	6	3,108,992	45.6	14.1	48,578	0.6
2014	26	28	4	58	6	2,938,821	46.0	14.3	50,669	4.3
2015	27	29	*	56	6	2,891,530	45.6	13.8	51,634	1.9

* Beginning with the December 31, 2015 valuation, General members includes all non-police/fire divisions.

Valuation payroll in 2009 was adjusted to account for 27 pay periods during the year. Valuation payroll in 2012 was adjusted to remove the one-time payout of unused sick leave for Firefighters.

Active Members Added to and Removed from Rolls

	Number	Terminations During Year								
	Added	Nor	rmal			Die	d-in-	Ot	ther	Active
Year	During Year	Retir	ement	Disa	abled	Ser	vice	With	drawal	Members
Ended	Α	Α	Ε	Α	Е	Α	Ε	Α	Ε	End of Year
2006	2	3	1.2	2	0.2		0.2	6	3.4	89
2007	6	2	0.9		0.2		0.2	3	2.6	90
2008		1	2.7		0.2		0.2	1	2.7	88
2009		4	3.2		0.2		0.2	1	2.4	83
2010		4	1.2		0.2		0.2	3	2.1	76
2011	7	3	1.3		0.2	1	0.2	2	1.7	77
2012	3	5	1.9		0.2		0.2	6	2.2	69
2013	5	7	1.6	1	0.2		0.2	2	2.0	64
2014	2	4	1.5		0.2		0.1	4	1.8	58
2015	3	3	2.6		0.2		0.1	2	1.5	56
2006-2015	28	36	18.1	3	2.0	1	1.8	30	22.4	

A represents actual number.

E represents expected number.

									Totals
Attained	Attained Years of Service on Valuation Date								Valuation
Age	0-4	5-9	10-14	15-19	No.	Payroll			
30-34									
35-39			2					2	\$ 60,913
40-44			1					1	65,796
45-49			1	2		1		4	183,733
50-54			2	2	1			5	236,392
55-59			2	4	1	2	2	11	521,932
60-64			1			1	1	3	182,194
65-69			1					1	39,301
Totals	0	0	10	8	2	4	3	27	\$1,290,261

General Members as of December 31, 2015 By Age and Years of Service

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

Group Averages:

Age: 53.5 years Service: 19.2 years Annual Pay: \$47,787

									Tot	als
Attained	Years of Service on Valuation Date								V	aluation
Age	0-4	0-4 5-9 10-14 15-19 20-24 25-29 30 Plus						No.		Payroll
20.24										
20-24										
25-29	3							3	\$	168,250
30-34	2		1					3		148,442
35-39	1	1	3					5		298,088
40-44										
45-49										
50-54										
55-59										
60-64										
Totals	6	1	4	0	0	0	0	11	\$	614,780

Police Members as of December 31, 2015 By Age and Years of Service

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

Group Averages:

Age: 32.9 years Service: 6.8 years Annual Pay: \$55,889

									Totals
Attained	tained Years of Service on Valuation Date								Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20.24	2							2	¢ 01 (01
20-24	2							2	\$ 91,601
30-34	2							2	103,946
35-39		2						2	97,227
40-44	4				1			5	277,137
45-49			3	1				4	224,313
50-54			1		1			2	133,339
55-59						1		1	58,926
60-64									
Totals	8	2	4	1	2	1	0	18	\$ 986,489

Fire Department Members as of December 31, 2015 By Age and Years of Service

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

Group Averages:

Age: 41.7 years Service: 9.9 years Annual Pay: \$54,805

Development of Funding Value of Retirement System Assets

Year Ended December 31:	2014	2015	2016	2017	2018
A. Funding Value Beginning of Year	\$31,913,449	\$32,558,582			
B. Market Value End of Year	33,683,719	31,948,137			
C. Market Value Beginning of Year	33,392,670	33,683,719			
D. Non-Investment Net Cash Flow	(1,531,769)	(1,670,920)			
Investment Income %	7.25%	7.25%			
E. Investment Income					
E1. Market Total: B-C-D	1,822,818	(64,662)			
E2. Amount for Immediate Recognition	2,258,198	2,299,926			
E3. Amount for Phased-In Recognition: E1-E2	(435,380)	(2,364,588)			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.25 x E3	(108,845)	(591,147)			
F2. First Prior Year	643,121	(108,845)	\$ (591,147)		
F3. Second Prior Year	165,429	643,121	(108,845)	\$ (591,147)	
F4. Third Prior Year	(781,001)	165,429	643,122	(108,845)	\$ (591,147)
F5. Total Recognized Investment Gain	(81,296)	108,558	(56,870)	(699,992)	(591,147)
G. Funding Value End of Year: A+D+E2+F5	\$32,558,582	\$33,296,146			
H. Difference between Market & Funding Value	\$ 1,125,137	\$ (1,348,009)			
I. Funding Value Recognized Rate of Return	6.99%	7.59%			
J. Market Value Recognized Rate of Return	5.59%	(0.20)%			

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 retirement are exactly equal for 3 consecutive years, the Funding Value will become equal to Market Value.

Summary of Asset Information as of December 31, 2015 Furnished for Valuation

Valuation Assets (Funding	Reserves			
Cash & Equivalents	\$ 108,232	Employees' Contributions	\$ 3,419,674	
U.S. Notes & Bills	0	Employer Contributions	3,633,429	
Short-term Investment Funds	1,167,617	Retired Benefit Payments	25,637,379	
Common Stocks	18,149,086	Unallocated Reserves	(742,345)	
Preferred Stocks	89,906			
Equities - Other	3,758,985			
Bonds	8,709,967			
Accounts Payable	(35,656)			
Net System Assets (market value)	\$31,948,137	Total Reserves	\$31,948,137	
Funding Value Adjustment	1,348,009	Funding Value Adjustment	1,348,009	
Total Valuation Assets	\$33,296,146	Total Valuation Assets	\$33,296,146	

BALANCE SHEET

REVENUES AND **E**XPENDITURES

	2015	2014
Valuation Assets - January 1	\$32,558,582	\$31,913,449
Revenues		
Employees' contributions	238,860	221,638
Employer contributions	600,769	701,388
Net Investment income	2,408,484	2,176,902
Expenditures		
Benefit payments	2,504,312	2,444,889
Refund of member contributions	6,237	9,906
Valuation Assets - December 31	\$33,296,146	\$32,558,582

SECTION C OPERATION OF THE SYSTEM

Financial Objective

Benefit Promises Made Which Must Be Paid For. A retirement system 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 Employees 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 present value of benefits likely to be paid on account of 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).

If contributions to the retirement system 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 systems must operate; that is:

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

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

<u>Contributions</u> received on behalf of the group ... plus ...

Investment earnings on contributions received and not required for immediate payment of benefits ... minus ...

Expenses incurred in operating the program.

There are retirement systems 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*.

A by-product of the level percent-of-payroll contributions objective is the accumulation of invested assets. Investment income on accumulated assets becomes a major contributor to the retirement system, and the amount is directly related to the amount of contributions and investment performance.

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

SECTION D VALUATION METHODS AND ASSUMPTIONS

Actuarial Cost Method

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 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; death or disability;
- Each annual normal cost is a constant percentage of the member's year by year projected covered pay.

UAAL (as well as Assets in excess of Actuarial Accrued Liabilities) were amortized by over a 13-year closed period (starting July 1, 2016). The amortization method was level percent-of-payroll for the open groups and level dollar for the closed groups.

Unless otherwise noted, the rationale for all assumption and methods was the 2013 method and assumption review.

Asset Valuation Method

An essential step in the valuation process is comparing valuation assets with computed liabilities. Valuation assets are those assets that are recognized for funding purposes.

Asset valuation methods are distinguished by the timing of the recognition of investment income. Total investment income is the sum of ordinary income and capital value changes. Under a pure market value approach, ordinary investment income and all capital value changes would be recognized immediately. Because of market volatility, use of pure market values in retirement funding can result in volatile contribution rates and unstable financial ratios, contrary to management objectives.

Under the current asset valuation method (see page B-11), assumed investment return is recognized fully each year. Differences between actual and assumed investment return are phased-in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, the funding value will tend to be less than the market value. Conversely, during periods when investment performance is less than the assumed rate, funding value will tend to be greater than market value.

Actuarial Assumptions Used for the Valuations

The contribution requirements and benefit values of the System are calculated by applying actuarial assumptions to the benefit provisions and people information furnished, using the actuarial cost method described on the previous page.

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

- Long-term rates of investment return to be generated by the assets of the Fund;
- Patterns of pay increases to members;
- Rates of mortality among members, retirants and beneficiaries;
- Rates of withdrawal of active members (without entitlement to a retirement benefit);
- Rates of disability among members; and
- The age patterns of actual retirements.

The monetary effect of each assumption is calculated for as long as a present covered person survives - - - a period of time which can be as long as a century.

Actual experience of the System will not coincide exactly with assumed experience, regardless of the choice of the assumptions. 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 it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year to year fluctuations).

The assumed rate of investment return was 7.25% (net of expenses) a year, compounded annually. This assumption is used to make money payable at one point in time equal in value to an amount of money payable at another point in time. The assumed real rate of return (the net return in excess of the wage inflation rate) was 4.25%. Economic experience during the last 5 years has been as follows:

	Year Ending December 31			5-Year		
	2015	2014	2013	2012	2011	Average
1) Nominal rate of return*	7.6%	7.0%	8.3%	8.0%	(1.6%)	5.8%
2) Increase in CPI	0.7	0.8	1.5	1.7	3.0	1.5%
 Average salary increase Real return 	1.9	4.3	0.6	(0.7)	0.7	1.3%
- investment purposes						4.3%
- funding purposes						4.5%
- assumption						4.25%

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

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.

Salary Increase Assumptions for an Individual Member		Salary Increase Assumptions for an Individual Member				
Years of	Base	Merit & Seniority	Years of	Base	Merit &	Seniority
Service	(Economic)	General	Service	(Economic)	Police	Fire
1	3.0%	0.0%	1	3.0%	10.0%	5.0%
2	3.0%	0.0%	2	3.0%	5.0%	4.5%
3	3.0%	0.0%	3	3.0%	1.5%	4.0%
4	3.0%	0.0%	4	3.0%	1.0%	3.5%
5	3.0%	0.0%	5	3.0%	0.8%	3.0%
6	3.0%	0.0%	6	3.0%	0.5%	2.5%
7 & Up	3.0%	0.0%	7 & Up	3.0%	0.0%	0.0%

If the number of active members remains constant, then the total active member payroll will increase 3.0% annually, the base portion of the individual salary increase assumptions.

The rate of price inflation was assumed to be 2.5%. Although this assumption is not directly used in the valuation, it was used to determine the reasonable range for the investment return assumption.

The real wage growth was assumed to be 0.5%, resulting in a total wage inflation assumption of 3.0%, as shown in the salary increase tables.

The rate of payroll growth was assumed to be 3.0% for the open groups. This assumption was used to finance UAAL for the open groups (level dollar financing was used for the closed groups).

These economic assumptions were first used for the December 31, 2013 valuation.

Sample	Present V	alue of \$1	Futu	re Life	
Attained	Monthly for Life		Expectancy (years)		
Ages	Men	Women	Men	Women	
45	\$154.72	\$156.27	37.54	39.46	
50	148.84	150.73	32.77	34.63	
55	140.89	143.37	28.04	29.88	
60	130.74	134.14	23.47	25.31	
65	118.50	123.10	19.17	21.02	
70	104.41	110.47	15.22	17.06	
75	88.00	96.22	11.58	13.47	
80	70.35	80.35	8.42	10.23	

The mortality table used was the RP-2000 Combined Healthy Mortality Table projected to 2020 using Projection Scale AA. A margin for future mortality improvements is contained in the projection.

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. For valuation purposes, pre-retirement deaths are assumed to be non-duty. For disability purposes, the mortality is set forward ten years.

This assumption was first used for the December 31, 2013 valuation.

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

Retirement	General, Sewage, W	ater, and WWTP		
Ages	Non-Union	Union	Police	Fire
45-49			20%	20%
50			20%	20%
51			20%	15%
52			20%	10%
53			20%	10%
54			20%	10%
55	20%	20%	20%	10%
56	15%	15%	20%	10%
57	10%	10%	20%	10%
58	10%	10%	20%	10%
59	10%	10%	20%	20%
60	10%	10%	100%	100%
61	10%	10%		
62	15%	15%		
63	25%	25%		
64	30%	30%		
65	100%	100%		

Percent of Eligible Active Members Retiring within Next Year

This assumption was first used for the December 31, 2013 valuation.

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 remaining in employment.

Sample	Years of	% of Active Members Separating within One Year		
Ages	Service	General	Fire	Police
ALL	0	20.00%	12.00%	20.00%
	1	15.00%	9.00%	15.00%
	2	10.00%	7.00%	10.00%
	3	8.00%	5.00%	8.00%
	4	7.00%	4.50%	7.00%
25	5 & Over	4.50%	4.50%	6.75%
30		3.90%	4.35%	5.85%
35		2.30%	3.50%	3.45%
40		0.90%	2.10%	1.35%
45		0.50%	1.00%	0.75%
50		0.50%	0.62%	0.75%
55		0.50%	0.50%	0.75%
60		0.50%	0.50%	0.75%

This assumption was first used for the December 31, 2013 valuation.

Rates of disability were as follows:

	% of Active Members Becoming			
	Disabled within Next Year			
Sample	General, Water,	Police		
Ages	WWTP & Sewage	and Fire		
20	0.02%	0.05%		
25	0.02%	0.08%		
30	0.02%	0.12%		
35	0.03%	0.21%		
40	0.07%	0.31%		
45	0.13%	0.46%		
50	0.27%	0.73%		
55	0.44%	1.23%		
60	0.67%	1.77%		
65	1.00%	1.58%		

For valuation purposes, pre-retirement disabilities are assumed to be non-duty.

This assumption was first used for the December 31, 2013 valuation.

Summary of Assumptions

Marriage Assumption:	100% of males and 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.
Decrement Timing:	Normal Retirement is assumed to occur at the beginning of the year and all other decrements are assumed to occur at the end of the 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 turnover do not operate during retirement eligibility.
Normal Form of Benefit:	The assumed normal form of benefit is the straight life form.
Liability Adjustments:	Active member liabilities and normal costs were increased by 10% for Police, 7% for Fire hired before 6/30/1993, 4% for Fire hired after 6/30/1993, and 8% for all others to model end of career payments that are included in final average compensation (such as sick leave payouts).
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year.
Police Patrol Refund Cost:	Normal cost and accrued liabilities for Police Patrol refunds were based on an estimated long-term member contribution rate of 10%.
Fire Refund Cost:	Normal cost and accrued liabilities for Fire refunds were based on an estimated long-term member contribution rate of 8.0%.

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, turn-over 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.

Funding Value of Assets. The value of assets derived by spreading the difference between actual investment return and expected investment return in equal dollar installments over four years. This treatment removes the timing of investment activities from the valuation process.

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.

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."



One Towne Square Suite 800 Southfield, MI 48076-3723

April 7, 2016

Mr. Ronald J. Tobey City Treasurer City of Owosso Employees Retirement System City Hall 301 W. Main Street Owosso, Michigan 48867-2958

Dear Mr. Tobey:

Enclosed are thirteen copies of the Seventy-First Annual Actuarial Valuation report for the City of Owosso Employees Retirement System.

Sincerely yours,

Kenned & allet

Kenneth G. Alberts

KGA:ah

cc: Mr. Doug Deeter (Rehmann Robson) E-Mail Ms. Christine M. Wilson (Graystone Consulting) E-Mail