

CITY OF WYOMING EMPLOYEES RETIREMENT SYSTEM
ANNUAL ACTUARIAL VALUATION
AS OF JUNE 30, 2016



October 13, 2016

Retirement Board
City of Wyoming Employees Retirement System
Wyoming, Michigan

Re: City of Wyoming Employees Retirement System Actuarial Valuation as of June 30, 2016

Dear Board Members:

The results of the June 30, 2016 Annual Actuarial Valuation of the City of Wyoming Employees Retirement System are presented in this report.

The computed contribution rate shown on page A-2 may be considered as a minimum contribution rate that complies with city ordinance. Users of this report should be aware that contributions made at that rate do not guarantee benefit security. Given the importance of benefit security to any retirement system, we suggest that contributions to the System in excess of those presented in this report be considered.

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. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the System's funding progress and to determine the employer contribution rate for the fiscal year ending June 30, 2018. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The findings in this report are based on data and other information through June 30, 2016. 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

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

In addition, this report was prepared using certain assumptions as described in the section of this report entitled Actuarial Assumptions Used for the Valuation.

This report has been prepared by individuals 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 Wyoming Employees Retirement System as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards.

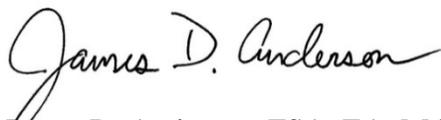
James D. Anderson is a Member of the American Academy of Actuaries (MAAA) and meets the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing individuals are independent of the plan sponsor.

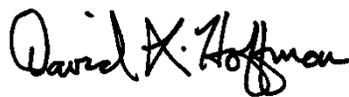
Gabriel, Roeder, Smith & Company will be pleased to review this valuation and report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY



James D. Anderson, FSA, EA, MAAA



David L. Hoffman

JDA/DLH:dj

SECTION A

**VALUATION RESULTS, COMMENTS,
CONCLUSIONS, AND RECOMMENDATIONS**

FUNDING OBJECTIVE

The funding 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 is stated in Section 90.77 of the Retirement System Ordinance.

The annual actuarial valuations determine how well the objective is being met.

CONTRIBUTION RATES

The Retirement System is supported by City contributions, the investment income obtained on system assets and employee contributions (for certain groups). The City contributes actuarially determined contributions to provide the amount needed to meet the funding objective.

City contributions cover both (i) normal cost, and (ii) financing of Unfunded Actuarial Accrued Liability over a period of future years. Normal cost is the portion of system costs allocated to the current year by the actuarial cost method described in Section C. The Unfunded Actuarial Accrued Liability (UAAL) is the portion of system costs not covered by present system assets and future normal costs.

The contribution requirements for the fiscal year beginning July 1, 2017 are presented on page A-2.

**COMPUTED CONTRIBUTIONS FOR THE FISCAL YEAR
BEGINNING JULY 1, 2017**

<u>City's Contributions for</u>	<u>Motor Pool</u>	<u>Clean Water Plant</u>	<u>Water Treatment Plant</u>	<u>General</u>	<u>Police</u>	<u>Fire</u>
Normal Cost						
Service pensions	11.23 %	13.84 %	13.20 %	13.82 %	16.82 %	18.18 %
Disability pensions	1.61	1.52	1.56	1.64	1.81	0.97
Survivor pensions	0.42	0.39	0.37	0.38	0.27	0.27
Refunds of Member Contributions	0.20	0.11	0.13	0.13	0.25	0.29
Total Normal Cost	13.46	15.86	15.26	15.97	19.15	19.71
Member Contributions (weighted average)	2.00	1.15	1.35	1.35	5.59	6.00
Unfunded Actuarial Accrued Liability						
Retired members and beneficiaries	0.00	0.00	0.00	0.00	0.00	0.00
Active and vested terminated members	27.25	32.76	43.41	27.34	21.08	18.02
Total Unf'd. Actuarial Accr. Liab.	27.25	32.76	43.41	27.34	21.08	18.02
Total Computed Contributions for Pensions	38.71 %	47.47 %	57.32 %	41.96 %	34.64 %	31.73 %
City's Projected \$ Requirement	\$63,378	\$371,271	\$349,470	\$2,009,204	\$1,445,169	\$390,031

Unfunded Actuarial Accrued Liabilities were amortized as a level dollar amount over a closed 23-year period.

DETERMINING DOLLAR CONTRIBUTIONS

Historically, the City has contributed dollar amounts at the end of each payroll period which are equal to the City's percent contribution requirement multiplied by the covered active member payroll for the period. Since the System is closed, this method should be closely monitored throughout the fiscal year with adjustments, if necessary, to reach the City's Projected Requirement shown above. Alternatively, the City's Projected Dollar Requirement can be used as the only basis for determining contributions throughout the fiscal year. The method of determining dollar contributions should be reviewed periodically for consistency with reporting.

DETERMINATION OF UNFUNDED ACCRUED LIABILITY AS OF JUNE 30, 2016

	<u>Motor Pool</u>	<u>Clean Water Plant</u>	<u>Water Treatment Plant</u>	<u>General</u>	<u>Police</u>	<u>Fire</u>	<u>Total</u>
A. Accrued Liability							
1. For retirees and beneficiaries	\$ 930,397	\$10,197,110	\$10,109,577	\$50,761,023	\$31,706,707	\$10,710,037	\$114,414,851
2. For vested terminated members	409,958	2,459,438	997,843	6,609,855	3,235,785	623,421	14,336,300
3. For present active members							
a. Value of expected future benefit payments	1,226,733	4,695,321	3,692,827	30,128,014	26,740,672	8,583,873	75,067,440
b. Value of future normal costs	<u>135,898</u>	<u>979,223</u>	<u>720,921</u>	<u>5,949,530</u>	<u>5,607,523</u>	<u>1,570,181</u>	<u>14,963,276</u>
c. Active member accrued liability: (a) - (b)	<u>1,090,835</u>	<u>3,716,098</u>	<u>2,971,906</u>	<u>24,178,484</u>	<u>21,133,149</u>	<u>7,013,692</u>	<u>60,104,164</u>
4. Total accrued liability	2,431,190	16,372,646	14,079,326	81,549,362	56,075,641	18,347,150	188,855,315
B. Present Assets (Funding Value)	<u>1,928,052</u>	<u>13,481,575</u>	<u>11,098,698</u>	<u>66,637,189</u>	<u>45,972,502</u>	<u>15,754,330</u>	<u>154,872,346</u>
C. Unfunded Accrued Liability: (A.4) - (B)	<u>503,138</u>	<u>2,891,071</u>	<u>2,980,628</u>	<u>14,912,173</u>	<u>10,103,139</u>	<u>2,592,820</u>	<u>33,982,969</u>
D. Funding Ratio: (B) / (A.4)	<u>79.3%</u>	<u>82.3%</u>	<u>78.8%</u>	<u>81.7%</u>	<u>82.0%</u>	<u>85.9%</u>	<u>82.0%</u>
E. Market Value of Assets ⁽¹⁾	<u>1,907,488</u>	<u>13,353,659</u>	<u>11,011,853</u>	<u>65,952,994</u>	<u>45,507,644</u>	<u>15,597,158</u>	<u>153,330,796</u>
F. Funding Ratio: Market Value Basis (E) / (A.4)	<u>78.5%</u>	<u>81.6%</u>	<u>78.2%</u>	<u>80.9%</u>	<u>81.2%</u>	<u>85.0%</u>	<u>81.2%</u>

⁽¹⁾ Allocation to divisions provided by the City.

FUNDING PROGRESS INDICATORS

Testing how well the financial objective is being met can be done in many ways. There is no single all-encompassing test. The following indicators provide measures of funding achievement. *Values related to health insurance premiums are not included in the amounts shown.*

- (1) *Achieving level contribution rates* reflects long-term fundamental funding achievement. If the contributions to the System are level in concept and faithfully executed, and if the System continues its operations plan indefinitely, the System will meet all promised benefit payments when due – the ultimate indicator.

The following schedule indicates recommended contributions (*excluding contributions for health insurance premiums*) for a year period. Deliberate events which have affected contributions are indicated in the notes on pages A-7 through A-11.

Valuation Date June 30	As Percents of Valuation Payroll						Weighted Average
	Motor Pool (MP) ⁽¹⁾	Clean Water Plant (CWP) ⁽¹⁾	Water Treatment Plant (WTP) ⁽¹⁾	General	Police	Fire	
1999 (19)*				8.54 %	9.59 %	6.45 %	8.62 %
2000 (20)*				9.14	10.19	5.41	9.05
2001 (21)*				9.04	10.06	4.93	8.93
2001 (22)*				8.61	9.48	4.09	8.41
2002				10.40	10.71	7.24	10.17
2002 (23)*				10.40	10.67	7.24	10.16
2003				9.77	9.29	6.67	9.34
2003 (25)*				6.94	5.83	3.67	6.33
2004 (26)*				9.35	7.95	6.80	8.72
2005				11.76	9.11	3.45	10.38
2005 (27)*				11.76	9.11	9.52	10.89
2006				16.63	12.81	10.66	15.12
2006 (28)*				17.08	12.81	10.09	15.37
2007				11.74	9.53	4.37	10.50
2007 (29)*				12.31	9.53	4.37	10.87
2008				10.22	8.45	3.23	9.09
2008 (30)*				10.95	10.61	3.23	10.15
2009				15.98	17.60	2.07	15.10
2009 (31)*				14.36	15.39	10.52	14.27
2010 (32)*				17.27	15.72	13.45	16.52
2011				17.18	18.00	16.82	17.38
2012				23.08	20.60	19.89	22.04
2012 (33)*				25.20	24.29	23.75	24.79
2013				27.61	26.71	27.56	27.16
2013 (34)*				27.02	26.71	27.56	26.99
2014				25.47	24.17	24.60	25.01
2014 (35)*				25.12	24.17	24.60	24.80
2015	17.59 %	19.88 %	20.95 %	20.27	21.58	22.30	20.82
2015 (36)*	30.62	35.88	40.88	36.12	31.40	32.55	34.52
2016	38.71	47.47	57.32	41.96	34.64	31.73	39.40

* Refer to notes on pages A-7 through A-11.

⁽¹⁾ Prior to the June 30, 2015 valuation, MP, CWP and WTP were combined with the General group.

- (2) *The actuarial present value of gains or losses realized in the operation of the Retirement System* - an experience indicator. Gains and losses are expected to cancel each other over a period of years (in the absence of double-digit inflation) but sizable year-to-year fluctuations are common. Further details on the derivation of the gain (loss) are shown on page A-15.

Valuation Date June 30	Dollar Amounts in Thousands	
	Valuation Assets	Experience Indicator
		Experience Gain or (Loss) for Year
1980 (5)*	\$ 7,287	**
1985 (7)*	16,953	\$ 129
1990 (12)*	33,499	(47)
1995 (15)*	52,374	2,063
2000 (20)*	103,402	2,208
2001 (22)*	108,676	(233)
2002 (24)*	110,715	(5,195)
2003 (25)*	111,389	(4,755)
2004 (26)*	111,034	(4,282)
2005 (27)*	110,582	(2,668)
2006 (28)*	113,663	(5,307)
2007 (29)*	121,400	5,829
2008 (30)*	129,496	1,161
2009 (31)*	129,667	(4,089)
2010 (32)*	129,277	(3,876)
2011	131,248	(999)
2012 (33)*	129,191	(8,336)
2013 (34)*	130,037	(1,288)
2014 (35)*	139,935	3,949
2015 (36)*	149,882	8,086
2016	154,872	(594)

* Refer to notes on pages A-7 through A-11.

** Not available.

- (3) *The ratio of valuation assets to the actuarial present value of credited projected benefits* allocated in the proportion accrued service is to projected total service - an ongoing plan indicator. The ratio is expected to increase in the absence of benefit enhancements. Prior to 6/30/98, the APVCPB was computed in accordance with the Pension Benefit obligation information pursuant to GASB Statement No. 5, issued November, 1986. Beginning with the 6/30/98 valuation the accrued liability computed for funding purposes is used in place of the APVCPB, pursuant to GASB Statement No. 25, which supersedes GASB Statement No. 5.
- (4) *The ratio of the unfunded actuarial present value of credited projected benefits to member payroll* - an ongoing plan indicator. In a soundly financed retirement system, the amount of the unfunded actuarial present value of credited projected benefits will be controlled and prevented from increasing in the absence of benefit enhancements. 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 decrease in the absence of benefit enhancements.

Valuation Date June 30	Dollar Amounts in Thousands			
	Continuation Tests			
	Actuarial P.V. of Cred. Proj. Benefits**	Funded Ratio	Unf'd. Act. P.V. of Cred. Proj. Benefits	Ratio to Member Payroll
1980	\$ 8,267	88.1 %	\$ 980	15.6 %
1985 (7)*	16,980	99.8	26	0.4
1990 (12)*	34,003	98.5	504	4.7
1995 (15)*	50,585	103.5	(1,789)	-
2000 (20)*	84,081	123.0	(19,321)	-
2001 (22)*	88,504	122.8	(20,173)	-
2002 (24)*	94,573	117.1	(16,141)	-
2003 (25)*	97,359	114.4	(14,031)	-
2004 (26)*	102,175	108.7	(8,859)	-
2005 (27)*	106,174	104.2	(4,408)	-
2006 (28)*	115,225	98.6	1,563	6.8
2007 (29)*	118,313	102.6	(3,087)	-
2008 (30)*	126,166	102.6	(3,330)	-
2009 (31)*	130,793	99.1	1,126	5.5
2010 (32)*	135,611	95.3	6,333	32.4
2011	138,810	94.6	7,562	41.9
2012 (33)*	150,963	85.6	21,771	129.8
2013 (34)*	153,449	84.7	23,412	147.3
2014 (35)*	158,867	88.1	18,932	120.2
2015	160,274	93.5	10,392	73.0
2015 (36)*	182,644	82.1	32,762	230.0
2016	188,855	82.0	33,983	281.4

* Refer to notes on pages A-7 through A-11.

** Entry-age Actuarial Accrued Liability beginning with the 1998 valuation.

The funded status measure shown above is not appropriate for assessing the sufficiency of System assets to cover the estimated cost of settling the System's benefit obligations, nor for assessing the need for, or amount of, future contributions.

NOTES RELATING TO FUNDING PROGRESS INDICATORS

- (1) Includes amendment to Ordinance effective December 1974 (applicable to Police Officers).
- (2) Includes amendment to Ordinance effective July 1, 1977 providing 10-year vesting for Administrative and Supervisory employees.
- (3) Includes amendment to Ordinance providing non-contributory status for Administrative and Supervisory employees, Police Officers and Firefighters.
- (4) Includes amendment to Ordinance providing 10-year vesting and non-contributory status for General employees and an increase in the benefit formulas for General employees and Police Officers. The maximum number of years in the Police Officer formula will be phased-in to 30 years effective July 1, 1988.
- (5) Includes revision of assumed rate of investment return from 5.5% to 6.5%.
- (6) Includes revision of assumed rate of investment return from 6.5% to 7.5%.
- (7) Includes amendment to Ordinance providing 10-year vesting for Firefighters and changes in the benefit formula for all employees.
- (8) Includes change to 2.0% formula factor (from 1.8%) for General members (excluding Dispatchers and Telephone Operators) and Fire Administrative members.
- (9) Includes change from 5-year Final Average Compensation to 3-year Final Average Compensation for General and Fire Administrative members.
- (10) Includes: a) change from 5-year Final Average Compensation to 3-year Final Average Compensation for General members (excluding Dispatchers and Telephone Operators) and Fire members; and b) change to 2.0% formula factor for Fire members.
- (11) Includes: a) change from 10 to 5-year requirement for regular retirement, deferred retirement, non-duty disability and non-duty death benefits for Administrative members in all divisions; and b) increase in formula factor to 2.2% from 2.0% for all Police members and Administrative members in all divisions; to 2.0% from 1.8% for General Dispatchers and Telephone Operators.
- (12) Includes: a) increase in formula factor to 2.2% from 2.0% for all Fire members; increase to 2.1% from 2.0% for General union members; and b) automatic post-retirement increase provision for all Administrative members.

NOTES RELATING TO FUNDING PROGRESS INDICATORS

- (13) Includes: a) early retirement eligibility for Administrative members at age 55 with 5 years of credited service; and b) automatic post-retirement increase provision for Police Command members who retire on or after age 60.
- (14) Includes an increase in formula factor to 2.25% from 2.20% for non-supervisory Police members. The increase in the employer contribution rate for Fire members reflects the retirement of two members whose normal cost had been negligible due to their age and service characteristics.
- (15) Includes an increase in formula factor to 2.2% from 2.1% for General members (excluding Dispatchers and Telephone Operators).
- (16) Includes: a) a change in actuarial cost method from individual attained-age to individual entry-age normal cost; b) an increase in the amortization period for unfunded accrued liability or funding credit to 25 years from 10 years (from 26 years for health); and c) a change in actuarial assumptions, all as recommended in an experience study which covered the period from July 1, 1989 to June 30, 1994. The following benefit provision changes were also included:
- The type of final average salary for General Dispatchers and Telephone Operators changes to the highest 3 consecutive years out of the last 5 years from the highest 5 consecutive years out of the last 10 years; and
 - The Duty Disability benefit for the non-supervisory Police members is now subject to Special Rules as described in an amendment to Schedule D, Section 91.40(6)(c) of the Code of the City of Wyoming.
- (17) Includes the following changes in benefit provisions:
- The formula factor for supervisory Police members increases to 2.25% from 2.20%.
 - The Duty Disability benefit for Police members changes to 50% of final average salary at the time of disability until attaining minimum age for normal retirement. Normal retirement benefit calculations shall include the time the member was receiving disability benefits and will be based on the monthly average the member would have earned during the 36 months preceding normal retirement age if the member was actively employed. The previous Duty Disability benefit for Police members had been computed in the same manner as the regular retirement benefit based on credited service (10-year minimum) and final average salary at time of termination.
- (18) Includes the following changes in benefit provisions:
- The formula factor for all Fire and General members (excluding Dispatchers and Telephone Operators) increases to 2.25% from 2.20%.
 - The early retirement reduction factor for general changes to .002 from .004.

NOTES RELATING TO FUNDING PROGRESS INDICATORS

- (19) Includes the following changes in benefit provisions:
- The formula factor for all Fire and Administrative members increases to 2.35% from 2.25%.
 - The early retirement reduction factor for Administrative members changes to .002 from .004.
- (20) Includes the following changes in benefit provisions:
- The formula factor for General Dispatchers and Telephone Operators increases to 2.25% from 2.00%.
 - The formula factor for all other General members increases to 2.35% from 2.25%.
 - The formula factor for Police members increases to 2.35% from 2.25%.
 - The premium for post-retirement health insurance payable to age 60 for Police Command members increases to \$10 per month times years of credited service, not to exceed 30 years from \$8 per month times years of credited service, not to exceed 30 years.
- (21) Includes revised demographic and economic assumptions. These assumption changes were adopted by the Retirement Board at their January 22, 2001 meeting.
- (22) Includes new amortization policy as adopted by the Retirement Board specifically at 18-year open period for pension and 30-year open period for post-retirement health costs.
- (23) Includes an increase in the formula factor for Police Patrol to 2.5% from 2.35% and an increase in the contribution rate for Police Patrol to 1.59% from 0%.
- (24) Includes a change in the asset derivation method from a 4-year smoothed market value to a 5-year smoothed market value, along with a change in the amortization period from 18 years to 10 years for pension.
- (25) Includes revision of assumed rate of investment return from 7.5% to 7.75% and closing the amortization period for pension.
- (26) Includes the following change in benefit provisions:
- Employer right to rehire retirees (Ordinance No. 7-04).
 - Eliminate the early retirement reduction for benefits payable after age 60 if retired under the 2004 Voluntary Retirement Incentive Plan (Ordinance No. 14-04).
 - Establishment of a Deferred Retirement Option Plan (DROP) (Ordinance No. 15-04).
 - Establish separate trust to provide for the funding of retiree medical benefits (Ordinance No. 16-04).

NOTES RELATING TO FUNDING PROGRESS INDICATORS

- (27) Includes the following change in benefit provisions:
- Changing retirement eligibility for Firefighters from age 55 and 10 years of service to age 50 and 10 years of service.
 - Firefighters must make contributions of 1% of pay.
- (28) Includes the following change in benefit provisions:
- General – Administrative members and Firefighters hired after September 6, 2005 will be automatically enrolled in the Defined Contribution plan. They will not participate in this defined benefit plan. As a result, contribution requirements for the General and Fire groups are based on level dollar amortization of unfunded accrued liability. Results for Police continue to be based on level percent of pay amortization.
- (29) Includes the following change in benefit provisions:
- General Non-Administrative members hired after February 6, 2006, Police Command members hired after February 20, 2006, and Police Dispatch members hired after February 7, 2006 will be automatically enrolled in the Defined Contribution plan. They will not participate in this defined benefit plan. Effective July 1, 2007, General Administrative members retiring early after July 1, 2007 will not have their benefit reduced.
- (30) Includes the following change in benefit provisions:
- The formula factor for Police Patrol increases to 2.7% from 2.5% and the contribution rate for Police Patrol increases to 3.59% from 1.59%.
 - The formula factor for Police Command increases to 2.7% from 2.35% and the contribution rate for Police Command increases to 3.59% from 0%.
 - The formula factor for General Dispatchers and Telephone Operators increases to 2.35% from 2.25%.
 - The automatic post-retirement increases provision is removed for Police Command members retiring after July 1, 2008.
 - Maximum DROP account accumulation period for Police Command members has been reduced to 3 years from 5 years.
 - Police Non-Supervisory members hired after September 4, 2007 will be automatically enrolled in the Defined Contribution plan. They will not participate in this defined benefit plan.
- (31) Includes new amortization policy as adopted by the Retirement Board of 30-year amortization over a closed period.
- (32) The formula factor for Fire increases to 2.7% from 2.35% for a maximum of 30 years, and the member contribution rate increases to 4.00% from 1.00%.
- (33) Includes revised mortality assumptions. These assumption changes were adopted by the Retirement Board. Also includes changes to benefit provisions for non-administrative General members. These changes include reduction of the 2.35% multiplier to 1.95% beginning 6/30/2016.

NOTES RELATING TO FUNDING PROGRESS INDICATORS

(34) Includes the following changes in benefit provisions:

- General Union members will receive 1.95% of FAS effective June 30, 2016 for all future accrued service, unless they elect to contribute 2% of base wages to keep the 2.35% multiplier.
- General Union members will no longer count overtime pay as pensionable earnings for purposes of determining benefit amounts.

(35) Includes the following changes in benefit provisions:

- General Administrative members will receive 2.15% of FAS effective July 1, 2016 for accrued service through June 30, 2018 unless they elect to contribute 1% of base wages to keep the 2.35% multiplier, and 1.95% of FAS effective July 1, 2018 for all future accrued service thereafter, unless they elect to contribute 2% of base wages to keep the 2.35% multiplier.

(36) Includes the following changes in benefit provisions and actuarial assumptions:

- The maximum period of accumulation for benefits in a DROP account was decreased from 5 to 3 years.
- Actuarial assumptions were updated in accordance with the Experience Study for the period July 1, 2010 to June 30, 2014, including:
 - a decrease in the wage inflation assumption from 4.50% to 3.50%.
 - a decrease in the investment rate of return assumption from 7.75% to 7.25%.
 - updating the mortality tables to the RP-2014 Healthy Annuitant Mortality Table projected to 2020 using the MP-2014 mortality improvement scale; the mortality tables for disabled lives to the RP-2014 Disabled Retirees projected to 2020 using the MP-2014 mortality improvement scale; and the mortality tables for current active employees to the RP-2014 Mortality Tables for Employees projected to 2020 using the MP-2014 mortality improvement scale.
 - Updating retirement rates for General members.

COMMENTS, RECOMMENDATIONS, CONCLUSION

COMMENT A: Aggregate experience during the year ending June 30, 2016 was less favorable than assumed, generating an overall experience loss of about \$0.6 million as indicated on page A-15. The actuarial loss was approximately 0.3% of the beginning of year Actuarial Accrued Liabilities. Fewer retiree deaths than assumed was the primary source of the loss, offset slightly by higher than assumed recognized investment return on valuation assets.

Investment income greater than or less than expected based on the investment return assumption, is recognized over a 5-year period under the current asset valuation method. Due to unfavorable investment performance during prior years, unrecognized investment losses exist that are scheduled to be recognized during the next four years. Absent future actuarial gains, this is expected to put upward pressure on the required contribution amounts. The System's funded status would be different if based on the Market Value of Assets instead of the Actuarial Value of Assets. If the City's weighted average required contribution shown on page A-4 (39.40%) had been determined using the Market Value of Assets as of June 30, 2016, the result would have been approximately 40.63% of payroll. In addition, the closure of the System to new hires results in declining valuation payroll which can put upward pressure on the City's contribution rate if the City's projected dollar contributions are unchanged (or even declining at a slower rate than payroll is declining) from year-to-year.

COMMENT B: As of June 30, 2016, Actuarial Accrued Liability exceeds valuation assets for all groups. Unfunded Actuarial Accrued Liability (UAAL) was amortized as a level dollar amount over a closed 23 years and added to the computed normal cost.

COMMENT C: On May 2, 2016, General members made one of the following elections with regard to their pension benefits: 1) maintain their current benefit multiplier prospectively in exchange for increased employee contributions; 2) receive a lower benefit multiplier prospectively in exchange for maintaining no employee contributions; 3) freeze their participation in the defined benefit plan in exchange for participation in a defined contribution plan prospectively; or 4) convert their defined benefit to a lump sum to be deposited into a defined contribution plan with future prospective defined contribution accruals. While previous valuations reflected the change in benefit provisions with an assumption for potential participant elections; this valuation incorporates the actual elections.

COMMENTS, RECOMMENDATIONS, CONCLUSION (CONTINUED)

COMMENT D: Prior to the June 30, 2015 valuation, employer contributions were calculated for the General, Police, and Fire groups. Starting with the June 30, 2015 valuation, the General group was further subdivided into four total groups: Motor Pool, Clean Water Plant (CWP), Water Treatment Plan (WTP), and the remaining General employees. As such, the valuation reflects separate assets for the six groups. For purposes of this valuation, the City supplied the reconciliation of assets for each group, including both non-investment and investment cash flow items for the fiscal year ending June 30, 2016. Using this asset reconciliation as a starting point, we further adjusted the market value of assets for these groups to reflect participant movement between the groups during the year. In cases where a participant moved from one group to another during the year, we transferred an asset amount equal to the funded portion of their accrued liability. For purposes of transferring assets, the following assumptions were utilized: 1) asset transfers were assumed to occur at the end of the year; 2) the funded portion was based upon the funded ratio from the previous valuation in the group transferred from; 3) the market value of assets was used as the basis of the funded portion; and 4) the accrued liability is based on the current year's accrued liability.

For purposes of calculating the smoothed funding value of assets for each group, the funding value of assets was developed in total first. Utilizing the beginning of year funding value of assets for each group from the prior year and the current year's non-investment cash flow, the investment income from the aggregate funding value of assets development was allocated to the different groups in proportion to each group's average funding value of assets. Please see page B-6 for a development of the market value of assets and the funding value of assets by group.

COMMENT E: The City indicated with this valuation that there are participants whose benefits are funded equally between the CWP and WTP groups. While this sort of relationship had been indicated previously for inactive (deferred or retired) participants, the City supplied approximately a half dozen active records with this shared benefit arrangement for this valuation. As such, the development of the employer contributions for the current valuation incorporates this funding mechanism. For active participants with this shared CWP-WTP funding mechanism, the employer contributions developed in this report assume that the employer contributes the CWP employer contribution rate to 50% of the participant's pay and the WTP employer contribution rate to 50% of the participant's pay.

**COMMENTS, RECOMMENDATIONS, CONCLUSION
(CONCLUDED)**

ORDINANCE COMPLIANCE: The June 30, 2016 actuarial present value of retirement allowances exceeds the balance in the Reserve for Retired Benefit Payments in total. The Retirement System Ordinance provides for a transfer from the Reserve for Employer Contributions to the Reserve for Retired Benefit Payments to fully fund the retired life liability. For this valuation, the City did not supply a reserve breakdown for all of the employer contribution groups. Therefore, we are supplying the actuarial present value of retirement allowances for each group as of June 30, 2016. This same amount should be shown as a reserve for Retired Benefit Payments in the Retirement System’s accounting.

	Reserve for Retired Benefit Payments as of June 30, 2016	
	<hr/>	
Motor Pool	\$	930,397
Clean Water Plant		10,197,110
Water Treatment Plant		10,109,577
General		50,761,023
Police*		31,706,707
Fire		10,710,037
Total	<hr/>	<hr/>
	\$	114,414,851

** The reserve for Police Retired Benefit Payments includes \$42,564 in DROP account balance.*

CONCLUSION: It is the actuary’s opinion that the required contribution rates determined by the most recent actuarial valuation are sufficient to meet the System’s funding objective, presuming continued timely receipt of required contributions.

**PENSION EXPERIENCE GAIN (LOSS)
COMPARATIVE SCHEDULE**

(\$ AMOUNTS IN THOUSANDS)

	Thousands of Dollars			
	Year Ended June 30			
	2016	2015	2014	2013
(1) UAAL* at start of period	\$ 32,762	\$18,932	\$23,412	\$21,771
(2) + Employer Normal cost	2,125	2,255	2,272	2,302
(3) + Interest accrual	2,451	1,553	1,901	1,775
(4) - Employer Contributions	3,949	4,262	4,180	3,298
(5) Expected UAAL before changes	33,389	18,478	23,405	22,550
(6) +/- Change from amendments	0	0	(524)	(426)
(7) +/- Change in assumptions	0	22,370	0	0
(8) +/- Change in cost method	0	0	0	0
(9) Expected UAAL after changes	33,389	40,848	22,881	22,124
(10) Actual UAAL	33,983	32,762	18,932	23,412
(11) Gain (loss) (9) - (10)	\$ (594)	\$ 8,086	\$ 3,949	\$ (1,288)

* UAAL: *Unfunded Actuarial Accrued Liability.*

UNFUNDED ACTUARIAL ACCRUED LIABILITY
JUNE 30, 2016

A. Actuarial Accrued Liability	\$	188,855,315
B. Assets allocated to funding		154,872,346
C. Unfunded Actuarial Accrued Liability	\$	33,982,969

CITY'S COMPUTED AND ACTUAL CONTRIBUTIONS - COMPARATIVE SCHEDULE

Fiscal Year	Valuation Date June 30	City Dollar Contributions**		City's Recommended % of Payroll Contributions
		Recommended	Actual	
02/03	2001 (22)*	\$2,805,722	\$2,916,383	8.41 %
03/04	2002	4,182,339	-	10.17
03/04	2002 (23)*	4,180,009	-	10.16
03/04	2002 (24)*	3,343,541	3,267,506	6.57
04/05	2003	2,244,140	-	9.34
04/05	2003 (25)*	1,520,921	1,874,868	6.33
05/06	2004	2,102,613	-	8.57
05/06	2004 (26)*	2,139,415	2,048,261	8.72
06/07	2005	2,366,943		10.38
06/07	2005 (27)*	2,483,238	2,538,326	10.89
07/08	2006	3,538,824		15.12
07/08	2006 (28)*	3,596,530	3,487,953	15.37
08/09	2007	2,529,309		11.03
08/09	2007 (29)*	2,493,731	2,466,011	10.87
09/10	2008	2,007,488		9.09
09/10	2008 (30)*	2,188,266	2,280,304	10.15
10/11	2009	3,107,256		15.1
10/11	2009 (31)*	2,936,111	3,061,784	14.27
11/12	2010	3,027,804		15.48
11/12	2010 (32)*	3,230,031	3,050,104	16.52
12/13	2011	3,135,463	3,298,175	17.38
13/14	2012	3,696,469		22.04
13/14	2012 (33)*	4,157,285	4,179,682	24.79
14/15	2013	4,316,366		27.16
14/15	2013 (34)*	4,287,998	4,262,117	26.99
15/16	2014	3,939,697		25.01
15/16	2014 (35)*	3,906,139	3,949,470	24.80
16/17	2015	2,965,113		20.82
16/17	2015 (36)*	4,917,556		34.52
17/18	2016	4,628,523		39.40

* Refer to notes on pages A-7 through A-11.

** Includes contributions for health insurance premiums for retirants and beneficiaries beginning in FY 82/83. Excludes contributions for health insurance premiums for retirants and beneficiaries beginning in FY 04/05.

**ACTUARIAL BALANCE SHEET JUNE 30, 2016
(EXCLUDING HEALTH INSURANCE PREMIUMS)**

Present Resources and Expected Future Resources

A. Actuarial value of System assets:	
1. Net assets from System financial statements (market)	\$153,330,796
2. Funding value adjustment	1,541,550
3. Actuarial value of assets	154,872,346
B. Present value of expected future City Contributions:	
1. For normal costs	11,824,320
2. For unfunded actuarial accrued liability	33,982,969
3. Total	45,807,289
C. Present value of expected future member Contributions	
	3,138,956
D. Total Present and Expected Future Resources	\$203,818,591

Present Value of Expected Future Benefit Payments

A. To retirants and beneficiaries:	
1. Annual pensions	\$ 114,414,851
2. Reserve	none
3. Total	114,414,851
B. To vested terminated members	14,336,300
C. To present active members:	
1. Allocated to service rendered prior to valuation date	60,104,164
2. Allocated to service likely to be rendered after valuation date	14,963,276
3. Total	75,067,440
D. Total Present Value of Expected Future Benefit Payments	\$203,818,591

SECTION B

**SUMMARY OF BENEFIT PROVISIONS AND
VALUATION DATA**

SUMMARY OF BENEFIT PROVISIONS EVALUATED OR CONSIDERED (JUNE 30, 2016)

Regular Retirement (no reduction factor for age):

Eligibility –

General: *Other General members* age 60 with 10 or more years of credited service.

Administrative and Contract members age 60 with 5 or more years of credited service.

Emergency Communications Operators members age 55 with 10 or more years of credited service.

Police: Age 50 with 10 or more years of credited service.

Fire: Age 50 with 10 or more years of credited service.

Annual Amount –

General: *Other General members* 2.35% of FAS times credited service (1.95% of FAS beginning June 30, 2016 if they elect not to contribute 2% of base wages).

Administrative and Contract members 2.35% of FAS times credited service (2.15% of FAS beginning July 1, 2016 and 1.95% of FAS beginning July 1, 2018 if they elect not to contribute 1% of base wages beginning July 1, 2016 and 2% of base wages beginning July 1, 2018).

Emergency Communications Operators members 2.35% of FAS times credited service.

Police: *Police Command members* 2.70% of FAS times credited service up to 30 years.

Police Patrol members 2.70% of FAS times credited service up to 30 years.

Fire: 2.70% of FAS times credited service up to 30 years.

Final Average Salary (FAS) - Average of annual compensations for the period of 3 consecutive years producing the highest average and contained within the last 5 years immediately preceding retirement.

DROP

Eligibility – Police Command meeting regular retirement eligibility.

DROP Account – Monthly additions of 100% of regular retirement benefit under option elected at time of DROP accumulated at 4% annual interest. Maximum period of accumulation is 3 years.

Distributions – Lump sum payment of DROP account at time of exit from employment plus direct payment of future monthly retirement benefits under option elected at time of DROP.

**SUMMARY OF BENEFIT PROVISIONS EVALUATED OR CONSIDERED
(JUNE 30, 2016)
(CONTINUED)**

Early Retirement (age reduction factor used):

Eligibility –

General: *Other General members* age 55 with 10 or more years of credited service.

Administrative and Contract members age 55 with 5 or more years of credited service.

Annual Amount – Computed in the same manner as regular retirement amount, but for *Other General members* reduced by .002 for each month age at early retirement precedes regular retirement age. For retirements of *Other General members* on or after June 30, 2016 the reduction shall be .001 if the member has 25 or more years of service. For retirements of *Administrative and Contract members* on or after July 1, 2007, there will be no reduction factor unless they became a member of the unit (transferred from another unit) after July 1, 2007 and have less than 25 years of service.

Deferred Retirement (vested benefit):

Eligibility –

General: *Other General members* any age with 10 or more years of credited service.

Administrative and Contract members any age with 5 or more years of credited service.

Emergency Communications Operators members any age with 10 or more years of credited service.

Police: any age with 10 or more years of credited service.

Fire: any age with 10 or more years of credited service.

Annual Amount - Accrued regular retirement amount based on credited service and FAS at time of termination, payable beginning at age 60 for General, age 50 for Police and age 50 for Fire.

Duty Disability Retirement:

Eligibility - Total and permanent disability incurred in line of duty with the city for which worker's compensation is being paid.

Annual Amount - Computed in same manner as the regular retirement amount based on credited service and FAS at time of termination. Minimum service credit used is 10 years.

Police and Fire: Normal retirement benefit calculation will be re-adjusted at normal retirement age (50) to include the time the member was receiving disability benefits and will be based on the monthly average the member would have earned during the 36 months preceding normal retirement age if the member was actively employed.

SUMMARY OF BENEFIT PROVISIONS EVALUATED OR CONSIDERED
(JUNE 30, 2016)
(CONTINUED)

Non-Duty Disability Retirement:

General: *Other General members* total and permanent disability after 10 or more years of credited service.

Administrative and Contract members total and permanent disability after 5 or more years of credited service.

Emergency Communications Operators members total and permanent disability after 10 or more years of credited service. This unit does not have any active members and this no longer applies.

Police: Total and permanent disability after 10 or more years of credited service.

Fire: Total and permanent disability after 10 or more years of credited service.

Annual Amount - Computed in same manner as the regular retirement amount based on credited service and FAS at time of termination.

Duty Death Before Retirement:

Eligibility - Death in line of duty with the city for which worker's compensation is being paid.

Annual Amount - Refund of member's accumulated contributions. Amount to surviving spouse and children computed in same manner as the regular retirement amount based on credited service and FAS at time of death with a minimum of 25% of member's FAS. Additional amount to spouse continues to remarriage or death. Additional amount to children continues to earlier of marriage or attainment of age 18 years.

Non-Duty Death Before Retirement:

Eligibility - Any age with 10 or more years of credited service, 5 or more years of credited service for Administrative members.

Annual Amount - Option A actuarial equivalent of regular retirement amount based on credited service and FAS at time of death for spouse or qualified dependent. Option C for non-spouse benefit, in absence of spouse or with agreement of spouse.

**ACCOUNTING INFORMATION
YEAR ENDED JUNE 30, 2016**

Revenues:

a. Member contributions	\$	260,361
b. City contributions		
1. For pensions		3,949,470
2. For DROP plan contribution		42,564
c. Investment income		
1. Interest and dividends		2,406,186
2. Gain or (loss) on sales (realized and unrealized)		921,088
3. Amortization of premiums and discounts		none
4. Other – miscellaneous		37,906
		37,906
d. Total	\$	7,617,575

Expenditures:

a. Benefits paid, including refunds of member contributions ⁽¹⁾	\$	10,017,879
b. DROP plan distributions		0
c. Other expenses		606,780
		606,780
d. Total	\$	10,624,659

Reserve Increase:

Total revenues minus total expenditures	\$	(3,007,084)
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⁽¹⁾ Benefits paid includes \$367,121 lump sum payout to member who elected to convert accrued defined benefit to lump sum.

**ASSETS AND RESERVES
JUNE 30, 2016**

Assets: (at market value)

a. Cash	\$	1,412,130
b. Receivables		1,731,990
c. Government issues		22,510,697
d. Corporate bonds		14,781,395
e. Equities		102,849,512
f. Real estate investments		14,548,568
g. Liabilities		(4,503,496)
		(4,503,496)
Total	\$	153,330,796

Reserve Accounts:

a. Member contributions	\$	2,124,151
b. Reserve for benefits now being paid		81,552,905
c. Pension Reserve		69,611,176
d. Health Insurance Reserve *		0
e. DROP Plan Reserve		42,564
		42,564
Total	\$	153,330,796

* This amount was used in financing accrued liability for post-retirement health insurance.

MARKET VALUE OF ASSETS AS OF JUNE 30, 2016

	<u>Motor Pool</u>	<u>Clean Water Plant</u>	<u>Water Treatment Plant</u>	<u>General</u>	<u>Police</u>	<u>Fire</u>	<u>Total</u>
Beginning of Year Market Value of Assets	\$ 1,865,327	\$ 12,736,276	\$ 9,866,584	\$ 70,213,104	\$ 46,043,123	\$ 15,613,466	\$ 156,337,880
Non-Investment Income							
Total Contributions (Employer, Employee, and DROP)	65,255	367,064	179,309	1,839,516	1,348,443	452,808	4,252,395
Benefit Payments and Refunds of Member Contributions ⁽¹⁾	56,665	760,889	928,156	4,651,417	2,698,185	922,567	10,017,879
Net Non-Investment Income	8,590	(393,825)	(748,847)	(2,811,901)	(1,349,742)	(469,759)	(5,765,484)
Investment Income							
Gain/loss on investments, interest and dividends, and miscellaneous	41,042	275,266	208,373	1,514,496	995,464	337,593	3,372,234
Expenses	7,471	50,105	37,930	275,677	181,201	61,450	613,834
Net Investment Income	33,571	225,161	170,443	1,238,819	814,263	276,143	2,758,400
End of Year Market Value of Assets Before Transfers	1,907,488	12,567,612	9,288,180	68,640,022	45,507,644	15,419,850	153,330,796
Asset Transfers Due to Changing Groups							
Transfers In	-	1,330,911	1,875,775	152,102	-	177,308	3,536,096
Transfers Out	-	(544,864)	(152,102)	(2,839,130)	-	-	(3,536,096)
Net Transfer	-	786,047	1,723,673	(2,687,028)	-	177,308	-
End of Year Market Value of Assets After Transfers	\$ 1,907,488	\$ 13,353,659	\$ 11,011,853	\$ 65,952,994	\$ 45,507,644	\$ 15,597,158	\$ 153,330,796
Market Value Rate of Return	<u>1.80%</u>	<u>1.80%</u>	<u>1.80%</u>	<u>1.80%</u>	<u>1.80%</u>	<u>1.80%</u>	<u>1.80%</u>
Funding Value Adjustment	20,564	127,916	86,845	684,195	464,858	157,172	1,541,550
End of Year Funding Value of Assets	\$ 1,928,052	\$ 13,481,575	\$ 11,098,698	\$ 66,637,189	\$ 45,972,502	\$ 15,754,330	\$ 154,872,346
Funding Value Rate of Return	<u>7.32%</u>	<u>7.32%</u>	<u>7.32%</u>	<u>7.32%</u>	<u>7.32%</u>	<u>7.32%</u>	<u>7.32%</u>

⁽¹⁾ Benefits paid includes \$367,121 lump sum payout to member who elected to convert accrued defined benefit to lump sum.

**DERIVATION OF SMOOTHED MARKET VALUE
BASED ON 20% RECOGNITION OF THE DIFFERENCE BETWEEN
THE MARKET RATE OF RETURN AND THE PROJECTED RATE OF RETURN**

	Year Ended June 30						
	2014	2015	2016	2017	2018	2019	2020
Beginning of Year:							
(1) Market Value	\$134,717,975	\$152,993,444	\$156,337,880				
(2) Valuation Assets	130,037,060	139,935,062	149,881,929				
End of Year:							
(3) Market Value	152,993,444	156,337,880	153,330,796				
(4) Net Additions to Assets, Excluding Investment Income & Admin. Expense	(4,561,846)	(4,775,656)	(5,765,484)				
(5) Total Investment Income							
= (3) - (1) - (4)	22,837,315	8,120,092	2,758,400				
(6) Projected Rate of Return	7.75%	7.75%	7.25%	7.25%			
(7) Projected Investment Income							
= (6) x [(2) + .5 x (4)]	9,901,101	10,659,911	10,657,441				
(8) Investment Income in Excess of Projected Income							
= (5)-(7)	12,936,214	(2,539,819)	(7,899,041)				
(9) Excess Investment Income Recognized This Year (5-year recognition)							
(9a) From This Year	2,587,242	(507,963)	(1,579,808)				
(9b) From One Year Ago	1,127,086	2,587,242	(507,963)	\$ (1,579,808)			
(9c) From Two Years Ago	(1,528,095)	1,127,086	2,587,242	(507,963)	\$ (1,579,808)		
(9d) From Three Years Ago	2,384,338	(1,528,095)	1,127,086	2,587,242	(507,963)	\$ (1,579,808)	
(9e) From Four Years Ago	(11,824)	2,384,342	(1,528,097)	1,127,088	2,587,246	(507,967)	\$ (1,579,809)
(10) Change in Valuation Assets = (4) + (7) + 9[a..e]	9,898,002	9,946,867	4,990,417				
End of Year:							
(3) Market Value	152,993,444	156,337,880	153,330,796				
(11) Valuation Assets = (2)+(10)	139,935,062	149,881,929	154,872,346				
(12) Valuation Assets Net HI Reserve	139,935,062	149,881,929	154,872,346				
Rate of Return Based on Smoothed Method	11.3%	10.7%	7.3%				
Ratio of Market Value to Valuation Assets	109.3%	104.3%	99.0%				
Market Value Rate of Return	17.2%	5.4%	1.8%				

RETIRANTS AND BENEFICIARIES JUNE 30, 2016 COMPARATIVE SCHEDULE

Year Ended June 30	Added to Rolls		Removed from Rolls		Rolls End of Year	
	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions
1975	3	\$ 4,658 *	2	\$ 2,314	16	\$ 19,811
1980	8	33,671			40	112,140
1985	7	31,606	1	1,374	61	232,207
1990	12	192,440	3	22,098	98	791,506
1991	15	186,921	4	32,103	109	946,324
1992	9	134,073	3	7,346	115	1,073,051
1993	22	386,867	3	29,053	134	1,430,865
1994	9	136,836	6	38,058	137	1,529,643
1995	23	418,540	6	55,242	154	1,892,941
1996	11	236,812	2	22,795	163	2,106,958
1997	14	287,471	5	17,739	172	2,376,690
1998	7	160,775	4	23,254	175	2,514,211
1999	19	386,723	6	46,334	188	2,854,600
2000	11	199,220	5	30,242	194	3,023,578
2001	15	375,004	3	18,945	206	3,379,637
2002	19	500,451	2	61,229	223	3,818,858
2003	20	471,135	5	59,109	238	4,230,884
2004	10	257,854	6	72,281	242	4,416,457
2005	28	657,467	10	153,882	260	4,920,041
2006	9	273,407	13	127,902	256	5,065,546
2007	11	209,107	8	61,800	259	5,212,853
2008	20	602,763	5	115,253	274	5,700,363
2009	19	594,138	9	157,847	284	6,136,654
2010	22	570,153	11	77,710	295	6,629,097
2011	20	686,316	7	165,129	308	7,150,284
2012	31	1,009,472	7	91,020	332	8,068,736
2013	18	573,312	10	193,959	340	8,448,089
2014	17	490,598	5	84,647	352	8,854,040
2015	24	759,892	12	277,462	364	9,336,470
2016	23	807,589	6	86,335	381	10,057,724

* Includes cost-of-living adjustment of \$595.56 payable beginning January 1, 1975.

RETIRANTS AND BENEFICIARIES JUNE 30, 2016
COMPARATIVE SCHEDULE

Year Ended June 30	% Incr. in Annual Pensions	No. of Active Per Retired	Pensions as % of Active Payroll	Average Annual Pension	Discounted Value of Pensions	
					Total	Average
1970	(1.3) %	28.9	0.3 %	\$ 787	\$ 81,408	\$ 9,045
1975	13.4	21.4	0.5	1,238	177,560	11,098
1980	42.9	9.6	1.8	2,804	1,106,998	27,675
1985	15.0	5.6	2.7	3,807	2,134,239	34,988
1990	27.4	3.6	7.3	8,077	7,943,958	81,061
1991	19.6	3.2	8.4	8,682	9,750,107	89,451
1992	13.4	3.1	9.1	9,331	11,013,607	95,770
1993	33.3	2.7	11.1	10,678	15,060,291	112,390
1994	6.9	2.7	11.2	11,165	15,889,845	115,984
1995	23.8	2.3	13.9	12,292	19,800,632	128,576
1996	11.3	2.4	14.0	12,926	22,407,750	137,471
1997	12.8	2.4	14.4	13,818	25,184,993	146,424
1998	5.8	2.5	14.2	14,367	26,290,606	150,232
1999	13.5	2.3	15.6	15,184	29,834,092	158,692
2000	5.9	2.3	15.1	15,585	31,171,607	160,678
2001	11.8	2.2	16.4	16,406	35,104,643	170,411
2002	13.0	2.0	17.9	17,125	39,612,631	177,635
2003	10.8	1.9	19.2	17,777	42,865,108	180,105
2004	4.4	1.8	19.7	18,250	43,803,773	181,007
2005	16.3	1.5	23.6	18,923	48,061,939	184,854
2006	3.0	1.5	22.1	19,787	49,164,382	192,048
2007	2.9	1.5	23.3	20,127	50,159,151	193,665
2008	9.4	1.3	26.5	20,804	55,533,767	202,678
2009	7.7	1.2	29.8	21,608	59,742,554	210,361
2010	8.0	1.1	33.9	22,472	64,018,512	217,012
2011	7.9	0.9	39.6	23,215	69,160,462	224,547
2012	12.8	0.8	48.1	24,303	81,377,089	245,112
2013	4.7	0.7	53.2	24,847	84,667,701	249,023
2014	4.8	0.6	56.2	25,154	88,106,433	250,302
2015	5.4	0.6	65.5	25,650	105,648,228	290,242
2016	7.7	0.4	83.3	26,398	114,414,851	300,301

RETIRANTS AND BENEFICIARIES JUNE 30, 2016

Number	Averages			New Retirants During 15/16	
	Attained Age	Retirement Age	Current Annual Pension	Age	Annual Pension
381	69.5	57.3	\$26,398	58.8	\$38,548

Tabulated by Valuation Divisions

Divisions	No.	Annual Pensions
General	199	\$ 4,432,168
Motor Pool	3	76,348
Clean Water Plant ⁽¹⁾	33	1,117,139
Water Treatment Plant	25	726,078
Police	88	2,748,772
Fire	33	957,219
Totals	381	\$ 10,057,724

⁽¹⁾ Includes 12 members whose liabilities were split equally between Clean Water Plant and Water Treatment Plant groups.

RETIRANTS AND BENEFICIARIES JUNE 30, 2016

<u>Type of Pensions Being Paid</u>	<u>No.</u>	<u>Annual Pensions</u>
Age and Service		
Straight Life Pension - benefit terminating at death of retiree	103	\$ 2,630,390
10-Year Certain	17	431,442
Option A Pension – joint and survivor benefit	128	3,716,527
Option B Pension – modified joint and survivor benefit	56	1,881,486
Survivor Beneficiary	<u>40</u>	<u>584,232</u>
Total Age and Service Pensions	344	\$ 9,244,077
Casualty Pensions		
Duty Disability		
Straight Life	2	\$ 56,456
10-Year Certain	4	129,194
Option A	7	136,175
Option B	4	90,592
Survivor	1	2,327
Non Duty Disability		
Straight Life	2	24,376
10-Year Certain	2	52,779
Option A	3	64,959
Survivor	7	124,602
Non Duty Death - Spouse	<u>5</u>	<u>132,187</u>
Total Casualty Pensions	<u>37</u>	<u>813,647</u>
Total Pensions Being Paid	<u>381</u>	<u>\$ 10,057,724</u>

RETIRANTS AND BENEFICIARIES JUNE 30, 2016
TABULATED BY ATTAINED AGE

Attained Age	No.	Annual Pensions
Under 40	1	\$ 45,543
40 - 44	3	63,126
45 - 49	4	105,662
50 - 54	12	490,592
55 - 59	28	985,542
60 - 64	99	3,128,221
65	14	450,624
66	16	465,615
67	22	499,222
68	13	366,300
69	18	413,599
70	5	148,592
71	10	157,813
72	7	151,887
73	11	273,362
74	6	221,173
75	14	288,883
76	10	261,862
77	6	125,030
78	6	101,548
79	8	163,612
80	7	156,644
81	6	102,956
82	4	38,854
83	11	257,397
84	9	150,388
85	5	110,349
86	5	53,743
87	3	47,909
88	3	36,070
89	2	37,412
90	3	39,064
91	1	27,338
92	3	43,471
93	5	45,024
102	1	3,296
Totals	381	\$ 10,057,724

**INACTIVE VESTED MEMBERS INCLUDED IN VALUATION
JUNE 30, 2016**

Inactive vested members included in the valuation totaled 82 with estimated deferred pensions of \$1,878,538. The table below includes 20 active members who elected to freeze their defined benefit as of June 30, 2016 and enter the defined contribution plan beginning July 1, 2016.

Attained Age	No.	Estimated Deferred Annual Pensions
38	2	\$ 37,309
39	1	12,509
41	1	12,763
42	5	81,255
43	6	95,713
44	2	45,475
45	5	100,896
46	6	105,366
47	4	173,684
48	7	192,801
49	9	210,459
50	2	68,990
51	2	53,305
52	3	64,227
53	1	36,838
54	4	111,903
55	1	39,198
56	2	55,173
57	1	14,667
58	3	42,609
59	9	182,601
60	1	32,316
61	3	37,342
65	1	18,251
67	1	52,888
Totals	82	\$ 1,878,538

**ACTIVE MEMBERS JUNE 30, 2016
TABULATED BY VALUATION DIVISIONS**

<u>Valuation Divisions</u>	<u>No.</u>	<u>Annual Payroll⁽¹⁾</u>
General Members	74	\$ 4,875,204
Motor Pool	3	172,830
Clean Water Plant ⁽²⁾	11	774,394
Water Treatment Plant ⁽²⁾	11	660,797
Police Officers	49	4,185,909
Fire	18	1,406,529
Total Active Members	166	\$12,075,663

⁽¹⁾ Valuation payroll was adjusted by a factor of 26/27 due to an extra pay period.

⁽²⁾ The Clean Water Plant count and payroll include 2 members indicated as having a 50/50 split between CWP and WTP. The Water Treatment Plant count and payroll include 4 members indicated as having a 50/50 split between CWP and WTP.

NUMBER ADDED TO AND REMOVED FROM ACTIVE MEMBERSHIP

Year Ended June 30	Number Added During Year		Terminations During Year								Active Members End of Year
	A	E	Normal Retirement		Disabled		Died-in- Service		Other Withdrawal		
			A	E	A	E	A	E	A	E	
1997	44	19	12	8.6	1	0.8	0	0.9	6	15.4	410
1998	33	14	5	5.8	1	0.9	0	0.9	8	17.1	429
1999	37	28	10	6.1	6	0.9	0	0.9	12	21.4	438
2000	21	17	6	6.8	1	0.9	0	0.9	10	17.6	441
2001	34	27	12	5.2	4	0.9	0	1.0	11	11.0	448
2002	21	23	13	6.9	2	1.5	0	1.0	8	13.5	446
2003	20	20	9	6.7	1	1.5	0	0.9	10	12.7	446
2004	6	14	6	8.3	0	1.4	1	1.0	7	12.0	438
2005	5	45	17	8.7	1	1.5	0	1.0	27	10.3	398
2006	11	14	4	9.1	1	1.5	1	1.0	8	7.9	395
2007	6	13	8	10.4	0	1.6	1	1.1	4	7.0	388
2008	0	31	13	11.2	1	1.6	1	1.2	16	5.9	357
2009	0	0	11	11.5	1	1.7	1	1.2	11	4.5	333
2010	0	0	15	10.4	0	1.6	0	1.2	6	3.6	312
2011	1	0	14	9.5	3	1.5	0	1.2	14	2.8	282
2012	0	0	24	10.8	0	1.3	0	1.1	5	2.2	253
2013	0	0	8	7.8	1	1.2	0	0.6	10	1.9	234
2014	0	0	9	9.8	1	1.2	0	0.6	2	1.6	222
2015	0	0	11	11.5	2	1.2	0	0.6	4	1.4	205
2016	1	0	17	12.0	1	1.2	0	0.3	22	1.2	166

ACTIVE MEMBERS JUNE 30, 2016 COMPARATIVE SCHEDULE

Valuation Date June 30	Active Members							Valuation Payroll	Average		
	Gen.	MP ⁽²⁾	CWP ^{(2),(3)}	WTP ^{(2),(3)}	Police	Fire	Total		Age	Service	Pay
1980	282				75	26	383	\$ 6,289,532	38.0 yrs.	8.9 yrs.	\$16,422
1985	246				71	26	343	8,695,553	41.6	13.1	25,351
1990	248				74	27	349	10,828,357	42.0	13.9	31,027
1991	251				74	26	351	11,288,361	41.9	14.1	32,161
1992	252				76	26	354	11,856,395	42.2	14.3	33,493
1993	262				78	28	368	12,902,885	41.3	13.2	35,062
1994	261				78	25	364	13,599,955	41.7	13.7	37,363
1995	257				79	25	361	13,630,668	41.2	12.9	37,758
1996	265				87	33	385	15,078,468	40.9	12.6	39,165
1997	288				89	33	410	16,455,280	40.6	11.9	40,135
1998	294				97	33	429	17,690,669	41.1	10.5	41,237
1999	299				101	38	438	18,309,889	40.7	11.5	41,803
2000	302				100	39	441	20,073,442	41.1	11.8	45,518
2001	307				103	38	448	20,645,491	41.1	11.7	46,084
2002	308				100	38	446	21,336,450	41.1	11.7	47,840
2003	306				102	38	446	22,002,419	41.4	11.9	49,333
2004	299				101	38	438	22,467,047	42.2	12.7	51,295
2005	280				88	30	398	20,881,320	43.1	13.6	52,466
2006	281				84	30	395	22,874,078	43.7	14.2	57,909
2007	272				85	31	388	22,410,946	44.3	14.8	57,760
2008	245				82	30	357	21,550,441	45.0	15.7	60,365
2009	230				74	29	333	20,572,189	45.7	16.3	61,778
2010	217				70	25	312	19,554,838	46.2	17.0	62,676
2011	193				66	23	282	18,038,609	46.9	17.5	63,967
2012	167				63	23	253	16,768,082	47.0	17.6	66,277
2013	155				58	21	234	15,889,933	47.8	18.3	67,906
2014	146				55	21	222	15,749,774	48.4	19.2	70,945
2015	101	4	18	12	52	18	205	14,244,381	⁽¹⁾ 48.9	19.9	69,485
2016	74	3	11	11	49	18	166	12,075,663	⁽¹⁾ 48.3	20.3	72,745

⁽¹⁾ Valuation payroll was adjusted by a factor of 26/27 due to an extra pay period.

⁽²⁾ Prior to the June 30, 2015 valuation, MP, CWP and WTP were combined with the General group.

⁽³⁾ Starting with the June 30, 2016 valuation, number count includes members indicated as being split 50/50 between CWP and WTP. Members with this arrangement are summarized in the group reported by the City.

**GENERAL MEMBERS JUNE 30, 2016
BY NEAREST AGE AND YEARS OF SERVICE**

Nearest Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll ⁽¹⁾
35-39			1	3				4	\$ 278,837
40-44			1	3	3			7	440,567
45-49			4	10	4	2		20	1,319,979
50-54			5	5	5	10	3	28	1,892,336
55-59			1	5	1	2	2	11	696,835
60				2	1			3	201,872
67							1	1	44,778
Totals			12	28	14	14	6	74	\$ 4,875,204

⁽¹⁾ Valuation payroll was adjusted by a factor of 26/27 due to an extra pay period.

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

Age: 50.2 years
Service: 21.0 years
Annual Pay: \$65,881

**MOTOR POOL MEMBERS JUNE 30, 2016
BY NEAREST AGE AND YEARS OF SERVICE**

Nearest Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll ⁽¹⁾
50-54						2	1	3	\$ 172,830
Totals						2	1	3	\$ 172,830

⁽¹⁾ Valuation payroll was adjusted by a factor of 26/27 due to an extra pay period.

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

Age: 52.3 years
Service: 29.0 years
Annual Pay: \$57,610

**CLEAN WATER PLANT MEMBERS JUNE 30, 2016
BY NEAREST AGE AND YEARS OF SERVICE**

Nearest Age	Years of Service to Valuation Date						Totals		
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No. ⁽²⁾	Valuation Payroll ^{(1),(2)}
30-34			1					1	\$ 61,781
40-44				1				1	66,109
45-49			1	1		1		3	204,024
50-54				1	1			2	183,521
55-59					1			1	58,371
61							1	1	84,735
62			1	1				2	115,853
Totals			3	4	2	1	1	11	\$ 774,394

⁽¹⁾ Valuation payroll was adjusted by a factor of 26/27 due to an extra pay period.

⁽²⁾ The Clean Water Plant count and payroll include 2 members indicated as having a 50/50 split between CWP and WTP.

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

Age: 51.3 years
Service: 19.7 years
Annual Pay: \$70,399

**WATER TREATMENT PLANT MEMBERS JUNE 30, 2016
BY NEAREST AGE AND YEARS OF SERVICE**

Nearest Age	Years of Service to Valuation Date						Totals		
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No. ⁽²⁾	Valuation Payroll ^{(1),(2)}
30-34			1					1	\$ 56,621
40-44				1				1	73,401
45-49				1	2			3	181,573
50-54				2		1		3	192,992
55-59					2			2	103,056
60				1				1	53,154
Totals			1	5	4	1		11	\$ 660,797

⁽¹⁾ Valuation payroll was adjusted by a factor of 26/27 due to an extra pay period.

⁽²⁾ The Water Treatment Plant count and payroll include 4 members indicated as having a 50/50 split between CWP and WTP.

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

Age: 49.3 years
Service: 20.0 years
Annual Pay: \$60,072

**POLICE OFFICERS JUNE 30, 2016
BY NEAREST AGE AND YEARS OF SERVICE**

Nearest Age	Years of Service to Valuation Date						Totals		
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll ⁽¹⁾
30-34		1						1	\$ 73,029
35-39			1	4				5	404,807
40-44		1		14	4			19	1,613,718
45-49				7	11	1		19	1,707,672
50-54				1	1	1		3	228,337
55-59				1		1		2	158,346
Totals		2	1	27	16	3		49	\$ 4,185,909

⁽¹⁾ Valuation payroll was adjusted by a factor of 26/27 due to an extra pay period.

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

Age: 44.7 years

Service: 19.5 years

Annual Pay: \$85,427

FIREFIGHTERS JUNE 30, 2016
BY NEAREST AGE AND YEARS OF SERVICE

Nearest Age	Years of Service to Valuation Date						Totals		
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll ⁽¹⁾
35-39			1	1				2	\$ 133,820
40-44				3	1			4	330,640
45-49			1	3	1			5	389,835
50-54				1	4			5	391,565
55-59					2			2	160,669
Totals			2	8	8			18	\$ 1,406,529

⁽¹⁾ Valuation payroll was adjusted by a factor of 26/27 due to an extra pay period.

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

Age: 47.3 years
Service: 18.8 years
Annual Pay: \$78,140

SECTION C

SUMMARY OF VALUATION METHODS AND ACTUARIAL ASSUMPTIONS

VALUATION METHODS

Entry Age Normal 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** valuation method having the following characteristics:

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

Financing of Unfunded Actuarial Accrued Liability. Unfunded Actuarial Accrued Liability (UAAL) was amortized as a level dollar amount over a closed period of 23 years.

Asset Valuation Method. The valuation assets are developed using a 5-year smoothing technique. The difference between the expected return on assets (using the valuation interest rate assumption) and the actual return on assets is phased-in over a 5-year period.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

The actuary calculates the contribution requirements and benefit values of the Retirement System by applying actuarial assumptions to the benefit provisions and people information furnished, using the valuation methods described on page C-1. All actuarial assumptions are based on future expectations, not market measures.

The principal areas of economic and risk assumptions are:

- (i) Long-term rates of investment income likely to be generated by the assets of the Retirement System,
- (ii) Patterns of salary increases to be experienced by members,
- (iii) Rate of mortality among members, retirees and beneficiaries,
- (iv) Rates of withdrawal of active members without entitlement to a deferred retirement benefit,
- (v) Rates of disability among members and their subsequent rates of recovery, and
- (vi) The age and service distribution of actual retirements.

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

Once actual experience has occurred and been observed it is unlikely that it will coincide exactly with assumed experience. 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 small adjustments of the computed contribution rate.

From time-to-time it becomes necessary to adjust the package of risk measurements to reflect basic experience trends -- but not random year-to-year fluctuations. We will recommend changes whenever we feel they are appropriate.

Assumptions were reviewed and updated based on the 2010 – 2014 Experience Study, which includes the rationale for these assumptions.

The rate of investment return (an economic assumption) used was 7.25% a year, compounded annually. This assumption was first used for the June 30, 2015 valuation. The assumption consists of 3.75% for assuming maturity and principal risks (real return) and 3.50% in recognition of wage inflation. This assumption is used to discount the value of future payments. Actual recognized investment return for purposes of the actuarial valuation, based on the mean actuarial value of assets, has been as follows:

Year Ended June 30					5-Year Average
2016	2015	2014	2013	2012	
7.3%	10.7%	11.3%	4.6%	1.7%	7.1%

The rates of salary increase (an economic assumption) used are in accordance with the following graded table. These assumptions were first used for the June 30, 2015 valuation. The assumption consists of 3.50% in recognition of wage inflation and a graded allowance for promotion and longevity.

The assumption is used to project current salaries to those upon which pension amounts will be based.

Sample Ages	Present Salary Resulting in Salary of \$1,000		Percent Increase in Salary During Next Year	
	At Age 65	At Age 60	General*	Police-Fire
	General*	Police-Fire		
20	\$ 98	\$ 164	7.3 %	6.5 %
25	138	224	6.6	6.5
30	188	305	6.2	6.1
35	253	401	5.9	4.6
40	335	489	5.6	3.7
45	437	586	5.2	3.7
50	557	703	4.6	3.7
55	692	840	4.2	3.6
60	840	1,000	3.7	3.5
65	1,000	---	3.5	3.5

* Includes General, Motor Pool, Clean Water Plant and Water Treatment Plant members.

Actual valuation payroll has increased at the following rates.

	Year Ended June 30					5-Year Average
	2016	2015	2014	2013	2012	
Increase in pay for members active at both beginning and end of year	4.1 %	2.1 %	4.7 %	2.9 %	3.3 %	3.4 %

The mortality table (a risk assumption) used was the RP-2014 Healthy Annuitant Mortality Table projected to 2020 using the MP-2014 mortality improvement scale. This assumption is used to measure the probabilities of each pension payment being made after retirement. This table was first used for the June 30, 2015 valuation. The provision for future improvements in mortality is built into the projection to 2020. Sample values follow:

Sample Ages	Single Life Retirement Values			
	Present Value of \$1 Monthly for Life		Future Life Expectancy (Years)	
	Men	Women	Men	Women
50	\$149.16	\$153.03	34.78	37.43
55	142.94	147.51	30.37	32.87
60	135.28	140.37	26.10	28.39
65	125.73	131.33	21.97	24.04
70	114.04	120.19	18.02	19.87
75	100.16	106.86	14.31	15.96
80	84.33	91.54	10.92	12.36

For disabled retirees, the mortality table used to measure the probabilities of each pension payment being made after retirement was the RP-2014 Mortality Table for Disabled Retirees projected to 2020 using the MP-2014 mortality improvement scale.

For active employees, the mortality table used to measure the probabilities of dying before retirement was the RP-2014 Mortality Tables for Employees projected to 2020 using the MP-2014 mortality improvement scale.

The rates of retirement (a risk assumption) used to measure the probability of eligible members retiring during the year following attainment of the indicated age were as follows:

Age	Number Retiring Per 100 Eligible		
	General*	Police	Fire
50	-	30	30
51	-	20	20
52	-	15	15
53	-	15	15
54	-	15	15
55	20	10	10
56	10	10	10
57	10	15	15
58	10	25	25
59	10	30	30
60	30	100	100
61	20	100	100
62	30	100	100
63	20	100	100
64	20	100	100
65	30	100	100
66	30	100	100
67	40	100	100
68	50	100	100
69	60	100	100
70	100	100	100

** Includes General, Motor Pool, Clean Water Plant and Water Treatment Plant members.*

The General rates were first used for the June 30, 2015 valuation; Police and Fire rates were first used for the June 30, 2001 valuation.

Rates of separation from active membership (a risk assumption) were as follows: (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	Number Separating Within Next Year (Per 100 Members)		
		General*	Police	Fire
ALL	0	15.00	8.00	8.00
	1	10.00	6.00	6.00
	2	8.00	4.50	4.50
	3	7.00	3.00	3.00
	4	6.00	2.00	2.00
25	5 & Over	5.00	2.50	2.50
30		4.50	2.00	2.00
35		3.55	1.10	1.10
40		1.45	0.40	0.40
45		0.75	0.40	0.40
50		0.75	0.40	0.40
55		0.75	0.40	0.40
60		0.75	0.40	0.40
65		0.75	0.40	0.40

* Includes General, Motor Pool, Clean Water Plant and Water Treatment Plant members.

Rates for General and Police were revised effective June 30, 2001.

Rates of disability (a risk assumption) measure the probabilities of active members retiring with a disability benefit.

Sample Ages	% of Active Members Becoming Disabled Within Next Year		
	General *	Police	Fire
20	0.15 %	0.10 %	0.10 %
25	0.18	0.15	0.15
30	0.20	0.25	0.20
35	0.29	0.30	0.25
40	0.42	0.70	0.50
45	0.65	0.80	0.65
50	1.05	0.95	0.80
55	1.84	1.10	0.95
60	3.06	1.20	1.00

* Includes General, Motor Pool, Clean Water Plant and Water Treatment Plant Members.

Rates for General and Police were revised effective June 30, 2001.

SUMMARY OF ASSUMPTIONS USED
JUNE 30, 2016
MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption:	100% of males and 100% 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:	A (2.0%) load was added to General Union active member liabilities to estimate the impact of the removal of overtime pay from pensionable earnings beginning 6/30/2016.
Cost-of-Living Adjustment:	Annual increase for those eligible assumed to be 1.6% annually.
Valuation Payroll:	An adjustment of 26/27 was made for the valuation payroll to account for the extra pay period for the June 30, 2016 valuation.

SECTION D

SUPPLEMENTARY INFORMATION

NOTE: GASB Statements No. 67 and No. 68 are effective for Governmental Retirement Plans for the fiscal year beginning after June 15, 2013 (GASB Statement No. 67) and the fiscal year beginning after June 15, 2014 (GASB Statement No. 68). These statements replace GASB Statements No. 25, No. 27 and No. 50. Future actuarial reports will reflect these changes.

SUPPLEMENTARY INFORMATION
(\$ AMOUNTS IN THOUSANDS)

SCHEDULE OF FUNDING PROGRESS
(EXCLUDING HEALTH INSURANCE)

Actuarial Valuation Date June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2007 *	\$ 121,400	\$ 118,313	\$ (3,087)	102.6 %	\$ 22,411	(13.8) %
2008 *	129,496	126,166	(3,330)	102.6	21,550	(15.5)
2009 *	129,667	130,793	1,126	99.1	20,572	5.5
2010 *	129,277	135,611	6,333	95.3	19,555	32.4
2011	131,248	138,810	7,562	94.6	18,039	41.9
2012 *	129,191	150,963	21,771	85.6	16,768	129.8
2013 *	130,037	153,449	23,412	84.7	15,890	147.3
2014 *	139,935	158,867	18,932	88.1	15,750	120.2
2015 *	149,882	182,644	32,762	82.1	14,244	230.0
2016	154,872	188,855	33,983	82.0	12,076	281.4

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

During the year ended June 30, 2016 the plan experienced a net change of \$6,211,227 in the Actuarial Accrued Liabilities.

SUPPLEMENTARY INFORMATION
(\$ AMOUNTS IN THOUSANDS)

SCHEDULE OF EMPLOYER CONTRIBUTIONS
(EXCLUDING HEALTH INSURANCE)

Fiscal Year Ending June 30	Actuarial Valuation Date June 30	Contribution Rates as Percents of Valuation Payroll	Computed Dollar Contribution Based on Projected Valuation Payroll	Actual Required Contribution Based on Actual Payroll	Percentage Contributed
2003	2001	8.41 %	\$1,842	\$1,858	100 %
2004	2002	6.57	1,531	1,496	100
2005	2003	6.33	1,521	1,388	100
2006	2004	8.72	2,139	2,048	100
2007	2005	10.89	2,483	2,538	100
2008	2006	15.37	3,597	3,488	100
2009	2007	10.87	2,494	2,466	100
2010	2008	10.15	2,188	2,280	100
2011	2009	14.27	2,936	3,062	100
2012	2010	16.52	3,230	3,050	100
2013	2011	17.38	3,135	3,298	100
2014	2012	24.79	4,157	4,180	100
2015	2013	26.99	4,288	4,262	100
2016	2014	24.80	3,906	3,949	100
2017	2015	34.52	4,918	-	-
2018	2016	39.40	4,629	-	-

The Retirement System's financial objective provides for periodic employer contributions at actuarially determined rates that are designed to accumulate sufficient assets to pay benefits when due. The normal cost and amortization payment for the year ended June 30, 2016 were determined using an entry age actuarial funding method. Unfunded Actuarial Accrued Liabilities (UAAL) were amortized as a level dollar over a closed period of 23 years.

SUPPLEMENTARY INFORMATION

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

Valuation date	June 30, 2016
Actuarial cost method	Entry Age
Amortization method	Level dollar
Remaining amortization period	23 years closed
Asset valuation method	Open 5-year smoothed market
Actuarial assumptions:	
Investment rate of return	7.25%
Projected salary increases*	3.5% - 7.3%
*Includes wage inflation at	3.5%
Cost-of-living adjustments	Annual increase for those eligible assumed to be 1.6% compounded annually.

Membership of the plan consisted of the following at June 30, 2016, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits	381
Terminated plan members entitled to but not yet receiving benefits	82
Active plan members	<u>166</u>
Total	629

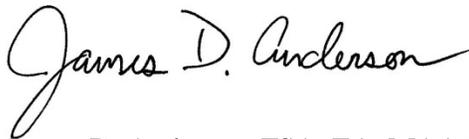
October 13, 2016

Ms. Rosa R. Ooms
Deputy Finance Director
City of Wyoming
1155 28th Street, S.W. – City Hall
Wyoming, Michigan 49509

Dear Rosa:

Enclosed are thirteen copies of the June 30, 2016 Annual Actuarial Valuation of the City of Wyoming Employees Retirement System.

Respectfully submitted,



James D. Anderson, FSA, EA, MAAA

JDA:dj
Enclosures

cc: Mr. Stephen W. Blann (1 report copy)
Rehmann Robson