City of Wyoming
Employees Retirement System

Annual Actuarial Valuation
as of June 30, 2017

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September 15, 2017

Retirement Board
City of Wyoming Employees Retirement System
Wyoming, Michigan

Re: City of Wyoming Employees Retirement System Actuarial Valuation as of June 30, 2017

Dear Board Members:

The results of the June 30, 2017 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, 2019. 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, 2017. 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.

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

The signing actuaries 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,

James D. Anderson

James D. Anderson, FSA, EA, MAAA

Mark Buis

Mark Buis, FSA, EA, FCA, MAAA

JDA/MB:mrb

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SECTION A

VALUATION RESULTS, COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

Funding Objective

Per the plan document, the financial objective of the Defined Benefit Plan is to require Employer contributions to the Defined Benefit Plan each year which shall be sufficient to fully fund the actuarial cost of benefits likely to be paid on account of services rendered by Participants during the current year and finance the unfunded actuarial cost of benefits likely to be paid on account of services rendered by Participants prior to the current year over a period of years. The contributions shall be computed by the Actuary as level percents of Participant payroll in accordance with generally recognized actuarial principles. The contributions shall be appropriated by Employer and paid to the Defined Benefit Plan.

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, 2018 are presented on page A-2.

Computed Contributions for the Fiscal Year Beginning July 1, 2018

City's Contributions for	Other Funds A	Other Funds B	General	Police	Fire
Normal Cost					
Service pensions	13.23 %	12.83 %	14.07 %	16.46 %	17.57 %
Disability pensions	1.55	1.63	1.62	1.80	1.02
Survivor pensions	0.38	0.39	0.35	0.27	0.27
Refunds of Member Contributions	0.12	0.13	0.11	0.25	0.29
Total Normal Cost	15.28	14.98	16.15	18.78	19.15
Member Contributions (weighted average)	1.67	1.84	1.73	5.59	6.00
Unfunded Actuarial Accrued Liability					
Retired members and beneficiaries	0.00	0.00	0.00	0.00	0.00
Active and vested terminated members	22.37	20.08	17.28	17.67	15.82
Total Unf'd. Actuarial Accr. Liab.	22.37	20.08	17.28	17.67	15.82
Total Computed Contributions for Pensions	35.98 %	33.22 %	31.70 %	30.86 %	28.97 %
City's Projected $ Requirement	$578,586	$802,129	$654,658	$1,230,606	$362,310

Unfunded Actuarial Accrued Liabilities were amortized as a level dollar amount over a closed 22-year period.

Determining Dollar Contributions

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, 2017

	Other Funds A	Other Funds B	General	Police	Fire	Total
A. Accrued Liability						
1. For retirees and beneficiaries	$ 22,719,854	$28,968,645	$20,842,891	$31,596,679	$12,122,511	$116,250,580
2. For vested terminated members	2,498,970	3,509,266	2,026,597	3,040,009	127,803	11,202,645
3. For present active members						
a. Value of expected future benefit payments	10,027,918	15,158,569	13,984,870	27,686,236	8,292,047	75,149,640
b. Value of future normal costs	1,782,431	3,007,844	2,225,533	5,131,859	1,525,473	13,673,140
c. Active member accrued liability: (a) - (b)	8,245,487	12,150,725	11,759,337	22,554,377	6,766,574	61,476,500
4. Total accrued liability	33,464,311	44,628,636	34,628,825	57,191,065	19,016,888	188,929,725
B. Present Assets (Funding Value)	29,179,742	38,967,262	30,235,976	48,968,077	16,731,881	164,082,938
C. Unfunded Accrued Liability: (A.4) - (B)	4,284,569	5,661,374	4,392,849	8,222,988	2,285,007	24,846,787
D. Funding Ratio: (B) / (A.4)	87.2%	87.3%	87.3%	85.6%	88.0%	86.8%
E. Market Value of Assets[1]	29,670,430	39,622,537	30,744,425	49,791,527	17,013,245	166,842,164
F. Funding Ratio: Market Value Basis (E) / (A.4)	88.7%	88.8%	88.8%	87.1%	89.5%	88.3%

[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
	Other Funds A	Other Funds B	General	Police	Fire	
2002			10.40 %	10.71 %	7.24 %	10.17 %
2002 (23)*			10.40	10.67	7.24	10.16
2002 (24)*			7.38	6.38	1.75	6.57
2003			9.77	9.29	6.67	9.34
2003 (25)*			6.94	5.83	3.67	6.33
2004			9.11	7.95	6.80	8.57
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	3.00
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			20.27	21.58	22.30	20.82
2015 (36)*			36.12	31.40	32.55	34.52
2016			41.96	34.64	31.73	39.40
2017	40.07 %	36.97 %	36.49	33.32	29.31	35.20
2017 (37)*	**35.98**	**33.22**	**31.70**	**30.86**	**28.97**	**32.04**

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

Prior to the June 30, 2015 valuation, Other Funds A and Other Funds B were combined with the General group. For the June 30, 2015 and June 30, 2016 valuations, Motor Pool, Clean Water Plant, and Water Treatment Plant had separately computed rates; prospectively, these three groups are contained within Other Funds A.

(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-17.

	Dollar Amounts in Thousands	
		Experience Indicator
Valuation Date June 30	Valuation Assets	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)
2017 (37)*	**164,083**	**4,931**

* *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 — Actuarial P.V. of Cred. Proj. Benefits**	Continuation Tests — 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 (36)*	182,644	82.1	32,762	230.0
2016	188,855	82.0	33,983	281.4
2017	**192,260**	**85.3**	**28,177**	**238.7**
2017 (37)*	**188,930**	**86.8**	**24,847**	**210.5**

* *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 members 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 June 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.

(37) Includes the following change in actuarial assumptions:
- The price inflation assumption used was 2.75%. As a result, the COLA rate applied to members eligible for future cost-of-living increases changed from 1.6% annually to 1.1% annually.

Comments, Recommendations, Conclusion

COMMENT A: Prior to the June 30, 2015 valuation, employer contributions were calculated for the General, Police, and Fire groups. For the June 30, 2015 and June 30, 2016 valuations, the General group was further subdivided into four total groups: Motor Pool, Clean Water Plant, Water Treatment Plan, and the remaining General employees. The June 30, 2017 valuation reflects an additional reorganization of the employer groups. For the June 30, 2017 valuation, employer contributions were calculated for each of the following five main groupings (subgroups have been included for informational purposes):

- Other Funds A
  - Motor Pool (MP)
  - Clean Water Plant (CWP)
  - Water Treatment Plan (WTP)
  - Risk
- Other Funds B
  - Public Works (PW)
  - Parks
  - Housing
  - Building Inspections (BI)
- General
- Police
- Fire

COMMENT B: For the June 30, 2017 valuation, the City supplied a market value of asset reconciliation based upon the previous employer groups – MP, CWP, WTP, General, Police, and Fire. The following procedure was used to adjust the assets provided by the City (based on the previous employer groupings) to assets that could be used in the current valuation (based on the new employer groupings):

(1) The market value of assets was reconciled from June 30, 2016 to June 30, 2017 based upon the previous employer groupings.

(2) The reconciliation of assets for each of the groups was aggregated to develop a total market value of assets reconciliation from June 30, 2016 to June 30, 2017.

(3) The funding value of assets was developed in aggregate (see page B-6).

(4) The aggregate funding value of assets was allocated based on the previous employer groupings. 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.

(5) The preliminary funding value of assets for the Other Funds A group equals the sum of the funding value of assets for the MP, CWP, and WTP groups.

(6) The General group from the June 30, 2016 valuation was split primarily between the Other Funds B group and the remaining General group, with a handful of participants transferring to the Other Funds A group. The June 30, 2017 funding value of assets for the General group (as defined by the previous employer groupings) was allocated amongst the Other Funds A, Other Funds B, and remaining General group in proportion to the final June 30, 2017 actuarial accrued liability for the participants transferring.

Comments, Recommendations, Conclusion (Continued)

(7) The market value of assets for each of the employer groups based upon the new employer groupings is the funding value of assets for each group multiplied by the ratio of the aggregate market value of assets to the aggregate funding value of assets.

(8) Prospectively, the City should supply market value asset reconciliations, including both non-investment and investment cash flow items, based on the new employer groupings.

The market value of assets and the funding value of assets for each of the employer groups for the June 30, 2017 valuation are as follows:

	Market Value of Assets	Funding Value of Assets
Other Funds A	$29,670,430	$29,179,742
Other Funds B	39,622,537	38,967,262
General	30,744,425	30,235,976
Police	49,791,527	48,968,077
Fire	17,013,245	16,731,881
Total	166,842,164	164,082,938

COMMENT C: For consistency with a 2.75% price inflation assumption, this valuation reflects a change in assumed cost-of-living increases from 1.6% annually to 1.1% annually for eligible participants. Changes in assumptions decreased the actuarial accrued liabilities approximately $3.3 million and decreased the employer contributions by approximately $0.4 million.

COMMENT D: Computed contribution requirements decreased from the prior year from $4,628,523 to $3,628,289. The contribution decrease is primarily attributable to the above noted change in assumptions, experience over the year being favorable, and the scheduled recognition of the increase in employee contribution rate for those Other Fund A, Other Fund B, and General employees who elected to contribute to maintain a higher benefit multiplier as part of the recent reform.

COMMENT E: Aggregate experience during the year ending June 30, 2017 was more favorable than assumed, generating an overall experience gain of approximately $4.9 million as indicated on page A-17. The actuarial gain was approximately 2.6% of the beginning of year Actuarial Accrued Liabilities. The primary source of the gain was higher than assumed recognized investment return with respect to the funding value of assets. Additionally, lower than assumed pay increases and lower than assumed cost-of-living adjustments also contributed to the positive experience during the year.

Comments, Recommendations, Conclusion (Continued)

COMMENT F: As of June 30, 2017, Actuarial Accrued Liability exceeds valuation assets for all groups. Unfunded Actuarial Accrued Liability (UAAL) was amortized as a level dollar amount over a closed 22 years and added to the computed normal cost.

COMMENT G: 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.

COMMENT H: 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 favorable investment performance during prior years, unrecognized investment gains exist that are scheduled to be recognized during the next four years. Absent future actuarial losses, this is expected to put downward 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 Funding Value of Assets. If the City's weighted average required contribution shown on page A-4 (32.04%) had been determined using the Market Value of Assets as of June 30, 2017, the result would have been approximately 29.71% 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.

Comments, Recommendations, Conclusion (Concluded)

ORDINANCE COMPLIANCE: The June 30, 2017 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, 2017. 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, 2017
Other Funds A	$	22,719,854
Other Funds B		28,968,645
General		20,842,891
Police*		31,596,679
Fire		12,122,511
Total	$	116,250,580

** The reserve for Police Retired Benefit Payments includes $95,180 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.

Other Observations

General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected Plan Contributions and Funded Status

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.25% on the actuarial value of assets), it is expected that:

(1) The unfunded actuarial accrued liabilities will be fully amortized after 22 years, and
(2) The funded status of the plan will increase gradually towards a 100% funded ratio.

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded status measurement presented in this report is based upon the actuarial accrued liability and the actuarial value of assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

(1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, in other words of transferring the obligations to a unrelated third party in an arm's length market value type transaction.
(2) The measurement is dependent upon the actuarial cost method which, in combination with the plan's amortization policy, affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. A funded status measurement in this report of 100% is not synonymous with no required future contributions. If the funded status were 100%, the plan would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit).
(3) The measurement would produce a different result if the market value of assets were used instead of the actuarial value of assets, unless the market value of assets is used in the measurement.

Limitation of Project Scope: Actuarial standards do not require the actuary to evaluate the ability of the plan sponsor or other contributing entity to make required contributions to the plan when due. Such an evaluation was not within the scope of this project and is not within the actuary's domain of expertise. Consequently, the actuary performed no such evaluation.

Pension Experience Gain (Loss)
Comparative Schedule

($ amounts in thousands)

	Thousands of Dollars			
	Year Ended June 30			
	2017	2016	2015	2014
(1) UAAL* at start of period	$ 33,983	$32,762	$18,932	$23,412
(2) + Employer Normal cost	1,702	2,125	2,255	2,272
(3) + Interest accrual	2,349	2,451	1,553	1,901
(4) - Employer Contributions	4,925	3,949	4,262	4,180
(5) Expected UAAL before changes	33,109	33,389	18,478	23,405
(6) +/- Change from amendments	0	0	0	(524)
(7) +/- Change in assumptions	(3,331)	0	22,370	0
(8) +/- Change in cost method	0	0	0	0
(9) Expected UAAL after changes	29,778	33,389	40,848	22,881
(10) Actual UAAL	24,847	33,983	32,762	18,932
(11) Gain (loss) (9) - (10)	$ 4,931	$ (594)	$ 8,086	$ 3,949

** UAAL: Unfunded Actuarial Accrued Liability.*

Unfundea Actuarial Accrued Liability
June 30, 2017

A. Actuarial Accrued Liability	$	188,929,725
B. Assets allocated to funding		164,082,938
C. Unfunded Actuarial Accrued Liability	$	24,846,787

City's Computed and Actual Contributions - Comparative Schedule

Fiscal Year	Valuation Date June 30	City Dollar Contributions** Recommended	Actual	City's Recommended % of Payroll Contributions
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	4,924,584	34.52
17/18	2016	4,628,523		39.40
18/19	**2017**	**3,985,877**		**35.20**
18/19	**2017** (37)*	**3,628,289**		**32.04**

* *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, 2017
(Excluding Health Insurance Premiums)

Present Resources and Expected Future Resources

A. Actuarial value of System assets:	
1. Net assets from System financial statements (market)	$166,842,164
2. Funding value adjustment	(2,759,226)
3. Actuarial value of assets	164,082,938
B. Present value of expected future City Contributions:	
1. For normal costs	10,747,834
2. For unfunded actuarial accrued liability	24,846,787
3. Total	35,594,621
C. Present value of expected future member Contributions	2,925,306
D. Total Present and Expected Future Resources	$202,602,865

Present Value of Expected Future Benefit Payments

A. To retirants and beneficiaries:	
1. Annual pensions	$ 116,250,580
2. Reserve	none
3. Total	116,250,580
B. To vested terminated members	11,202,645
C. To present active members:	
1. Allocated to service rendered prior to valuation date	61,476,500
2. Allocated to service likely to be rendered after valuation date	13,673,140
3. Total	75,149,640
D. Total Present Value of Expected Future Benefit Payments	$202,602,865

SECTION B

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

Summary of Benefit Provisions Evaluated or Considered (June 30, 2017)

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. Effective July 1, 2016, FAS for 'Other General Members' no longer includes overtime.

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, 2017) (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, 2017) (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.

Summary of Benefit Provisions Evaluated or Considered (June 30, 2017) (Concluded)

Member Contributions:

General:	*Other General members* 2% of base wages to keep 2.35% multiplier (effective June 30, 2016).	
	Administrative and Contract members 1% of base wages (effective June 30, 2016) and 2% of base wages (effective June 30, 2018) to keep 2.35% multiplier.	
Police:	*Police Command*	4.59% of gross pay effective July 1, 2015 5.59% gross of pay effective July 1, 2016
	Police Patrol	4.59% of gross pay effective July 1,2015 5.59% gross of pay effective July 1, 2016
Fire:	4.50% of gross pay effective January 1, 2016 5.00% gross of pay effective July 1, 2016 6.00% gross of pay effective July 1, 2017	

City Contributions: Actuarially determined amounts which are sufficient to cover both (i) normal costs of the plan, and (ii) financing of unfunded actuarial accrued liabilities over a selected period of future years.

Automatic Post-Retirement Adjustments: Annual increase for Police Command members (at least 60 years of age who retire after July 1, 1992 and who entered the Police Command Unit on or before July 1, 2008) and Administrative members equal to 40% of the average annual increase in CPI, except in 2007 when contract language specified no increase. Increase is limited to 5% per year.

Defined Contribution Plan: The Defined Benefit plan is closed to new hires. New members are automatically enrolled in the Defined Contribution plan.

Accounting Information
Year Ended June 30, 2017

Revenues:		
a. Member contributions	$	380,084
b. City contributions		
1. For pensions		4,924,584
2. For DROP plan contribution		50,913
c. Investment income		
1. Interest and dividends		3,418,209
2. Gain or (loss) on sales (realized and unrealized)		15,628,936
3. Amortization of premiums and discounts		none
4. Other – miscellaneous		36,153
d. Total	$	24,438,879
Expenditures:		
a. Benefits paid, including refunds of member contributions	$	10,302,308
b. DROP plan distributions		0
c. Other expenses		625,203
d. Total	$	10,927,511
Reserve Increase:		
Total revenues minus total expenditures	$	13,511,368

Assets and Reserves
June 30, 2017

Assets: (at market value)		**Reserve Accounts:**	
a. Cash	$ 1,961,892		
b. Receivables	1,333,003	a. Member contributions	$ 2,399,929
c. Government issues	22,594,464	b. Reserve for benefits	
d. Corporate bonds	14,723,654	now being paid	76,897,811
e. Equities	112,804,182	c. Pension Reserve	87,449,244
f. Real estate investments	15,145,529	d. Health Insurance Reserve *	0
g. Liabilities	(1,720,560)	e. DROP Plan Reserve	95,180
Total	$ 166,842,164	Total	$ 166,842,164

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

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								
	2013	2014	2015	2016	2017	2018	2019	2020	2021
Beginning of Year:									
(1) Market Value	$124,229,394	$134,717,975	$152,993,444	$156,337,880	$153,330,796				
(2) Valuation Assets	129,191,375	130,037,060	139,935,062	149,881,929	154,872,346				
End of Year:									
(3) Market Value	134,717,975	152,993,444	156,337,880	153,330,796	166,842,164				
(4) Net Additions to Assets, Excluding Investment Income & Admin. Expense	(4,966,722)	(4,561,846)	(4,775,656)	(5,765,484)	(4,946,727)				
(5) Total Investment Income = (3) - (1) - (4)	15,455,303	22,837,315	8,120,092	2,758,400	18,458,095				
(6) Projected Rate of Return	7.75%	7.75%	7.75%	7.25%	7.25%	7.25%			
(7) Projected Investment Income = (6) x [(2) + .5 x (4)]	9,819,871	9,901,101	10,659,911	10,657,441	11,048,926				
(8) Investment Income in Excess of Projected Income = (5)-(7)	5,635,432	12,936,214	(2,539,819)	(7,899,041)	7,409,169				
(9) Excess Investment Income Recognized This Year (5-year recognition)									
(9a) From This Year	1,127,086	2,587,242	(507,963)	(1,579,808)	1,481,834				
(9b) From One Year Ago	(1,528,095)	1,127,086	2,587,242	(507,963)	(1,579,808)	$1,481,834			
(9c) From Two Years Ago	2,384,338	(1,528,095)	1,127,086	2,587,242	(507,963)	(1,579,808)	$1,481,834		
(9d) From Three Years Ago	(11,821)	2,384,338	(1,528,095)	1,127,086	2,587,242	(507,963)	(1,579,808)	$1,481,834	
(9e) From Four Years Ago	(5,978,972)	(11,824)	2,384,342	(1,528,097)	1,127,088	2,587,246	(507,967)	(1,579,809)	$1,481,833
(10) Change in Valuation Assets = (4) + (7) + 9[a..e]	845,685	9,898,002	9,946,867	4,990,417	9,210,592				
End of Year:									
(3) Market Value	134,717,975	152,993,444	156,337,880	153,330,796	166,842,164				
(11) Valuation Assets = (2)+(10)	130,037,060	139,935,062	149,881,929	154,872,346	164,082,938				
(12) Valuation Assets Net HI Reserve	130,037,060	139,935,062	149,881,929	154,872,346	164,082,938				
Rate of Return Based on Smoothed Method	4.6%	11.3%	10.7%	7.3%	9.3%				
Ratio of Market Value to Valuation Assets	103.6%	109.3%	104.3%	99.0%	101.7%				
Market Value Rate of Return	12.7%	17.2%	5.4%	1.8%	12.2%				

Retirants and Beneficiaries June 30, 2017
Comparative Schedule

Year Ended June 30	Added to Rolls No.	Added to Rolls Annual Pensions		Removed from Rolls No.	Removed from Rolls Annual Pensions	Rolls End of Year No.	Rolls End of Year 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
2017	**30**	**691,245**		**12**	**231,777**	**399**	**10,517,192**

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

The June 30, 2017 end of year retiree count and total pension amount includes 1 DROP participant with an annual benefit of $50,913.

Retirants and Beneficiaries June 30, 2017
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	Discounted Value of Pensions Average
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
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
2017	**4.6**	**0.4**	**89.1**	**26,359**	**116,250,580**	**291,355**

The June 30, 2017 end of year retiree count and total pension amount includes 1 DROP participant with an annual benefit of $50,913.

Retirants and Beneficiaries June 30, 2017

	Averages			New Retirants During 16/17 Averages	
Number	Attained Age	Retirement Age	Current Annual Pension	Age	Annual Pension
399	69.4	57.2	$26,359	57.1	$20,654

Tabulated by Valuation Divisions

Divisions	No.	Annual Pensions
Other Funds A	73	$ 2,132,365
Other Funds B	110	2,614,743
General	88	1,863,231
Police	91	2,825,715
Fire	37	1,081,138
Totals	399	$ 10,517,192

The June 30, 2017 Police retiree count and total pension amount includes 1 DROP participant with an annual benefit of $50,913.

Retirants and Beneficiaries June 30, 2017

Type of Pensions Being Paid	No.	Annual Pensions
Age and Service		
Straight Life Pension - benefit terminating at death of retirant	114	$ 2,872,512
10-Year Certain	18	472,825
Option A Pension – joint and survivor benefit	131	3,744,008
Option B Pension – modified joint and survivor benefit	54	1,800,848
Survivor Beneficiary	43	738,320
Total Age and Service Pensions	360	$ 9,628,513
Casualty Pensions		
Duty Disability		
Straight Life	2	$ 56,615
10-Year Certain	4	129,194
Option A	9	205,295
Option B	4	95,977
Survivor	1	2,327
Non Duty Disability		
Straight Life	2	24,376
10-Year Certain	2	52,779
Option A	2	41,659
Survivor	8	148,096
Non Duty Death - Spouse	5	132,361
Total Casualty Pensions	39	888,679
Total Pensions Being Paid	**399**	**$ 10,517,192**

The June 30, 2017 end of year retiree count and total pension amount includes 1 DROP participant with an annual benefit of $50,913.

Retirants and Beneficiaries June 30, 2017
Tabulated by Attained Age

Attained Age	No.	Annual Pensions
Under 40	1	$ 45,543
40 - 44	3	63,126
45 - 49	4	122,429
50 - 54	15	408,536
55 - 59	30	1,079,947
60 - 64	95	2,965,242
65	22	665,116
66	15	463,852
67	15	416,833
68	24	577,159
69	12	322,039
70	18	414,159
71	4	116,229
72	10	157,945
73	7	152,061
74	11	273,551
75	6	221,451
76	14	289,146
77	10	262,163
78	6	125,228
79	6	101,548
80	9	171,762
81	7	156,924
82	7	112,616
83	5	60,827
84	11	258,096
85	7	120,180
86	3	75,706
87	5	53,857
88	3	48,019
89	2	31,957
90	2	37,506
91	2	31,192
92	1	27,442
93	2	42,781
94	5	45,024
Totals	**399**	**$ 10,517,192**

The June 30, 2017 end of year retiree count and total pension amount includes 1 DROP participant with an annual benefit of $50,913.

Inactive Vested Members Included in Valuation
June 30, 2017

Inactive vested members included in the valuation totaled 67 with estimated deferred pensions of $1,555,976. The table below includes 16 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
39	2	$ 37,309
40	1	12,509
42	1	12,763
43	5	81,255
44	6	95,713
45	2	45,475
46	5	100,896
47	6	105,366
48	4	173,684
49	7	192,801
50	6	138,744
51	2	68,990
52	2	53,305
53	4	98,027
54	1	36,838
55	1	42,370
56	1	39,198
57	2	55,173
58	1	14,667
59	3	28,347
61	1	32,316
62	3	37,342
68	1	52,888
Totals	**67**	**$ 1,555,976**

Active Members June 30, 2017
Tabulated by Valuation Divisions

Valuation Divisions	No.	Annual Payroll
Other Funds A	25	$ 1,642,906
Other Funds B	37	2,436,704
General	32	2,184,297
Police Officers	48	4,221,078
Fire	16	1,320,819
Total Active Members	**158**	**$11,805,804**

Number Added to and Removed from Active Membership

Year Ended	Number Added During Year		Terminations During Year								Active Members End of Year
			Retirement		Disabled		Died-in-Service		Other Withdrawal		
June 30	A	E	A	E	A	E	A	E	A	E	Year
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
2017	**0**	**0**	**6**	**9.5**	**1**	**1.2**	**0**	**0.2**	**1**	**1.0**	**158**

Active Members June 30, 2017
Comparative Schedule

Valuation Date June 30	Active Members: Other Funds A [2]	Other Funds B [3]	General	Police	Fire	Total	Valuation Payroll		Average Age	Average Service	Average Pay
1985			246	71	26	343	$ 8,695,553		41.6 yrs.	13.1 yrs.	$25,351
1990			248	74	27	349	10,828,357		42.0	13.9	31,027
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	34		101	52	18	205	14,244,381	[1]	48.9	19.9	69,485
2016	25		74	49	18	166	12,075,663	[1]	48.3	20.3	72,745
2017	**25**	**37**	**32**	**48**	**16**	**158**	**11,805,804**		**49.0**	**21.2**	**74,720**

(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. For the June 30, 2015 and June 30, 2016 valuations, MP, CWP, and WTP were summarized as three separate groups. Starting with the June 30, 2017 valuation, MP, CWP, WTP, and the Risk groups combined to form the Other Funds A group.*

(3) *Prior to the June 30, 2017 valuation, Other Funds B was combined with the General group.*

Other Funds A Members June 30, 2017
by Nearest Age and Years of Service

Nearest	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
30-34			1					1	$ 65,203
35-39			1					1	55,394
40-44				1				1	76,034
45-49			1	1	3			5	314,646
50-54			1	3	2	2	2	10	707,851
55-59					2		1	3	158,373
60					1			1	59,838
61				1				1	50,843
62							1	1	92,571
63				1				1	62,153
Totals			**4**	**7**	**8**	**2**	**4**	**25**	**$ 1,642,906**

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

Age: 51.2 years

Service: 21.7 years

Annual Pay: $65,716

Other Funds B Members June 30, 2017
by Nearest Age and Years of Service

Nearest	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
35-39				2				2	$ 122,623
40-44			1	4	3			8	471,000
45-49			2	5	3	2		12	786,226
50-54				1	3	3	2	9	616,942
55-59				1	1			2	142,178
60				2		1	1	4	297,735
Totals			**3**	**15**	**10**	**6**	**3**	**37**	**$ 2,436,704**

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

Age: 48.8 years

Service: 21.0 years

Annual Pay: $65,857

Age: 48.8 years

Service: 21.0 years

Annual Pay: $65,857

General Members June 30, 2017
by Nearest Age and Years of Service

Nearest	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
40-44				1				1	$ 83,890
45-49				4	1	1		6	443,496
50-54			3	2	5	1	4	15	1,035,656
55-59				1	3	1	1	6	339,001
60							1	1	80,836
61				2				2	156,446
68							1	1	44,972
Totals			**3**	**10**	**9**	**3**	**7**	**32**	**$ 2,184,297**

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

Age:	53.2 years
Service:	23.0 years
Annual Pay:	$68,259

Police Officers June 30, 2017
by Nearest Age and Years of Service

Nearest	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
30-34			1					1	$ 72,707
35-39			1	2				3	236,079
40-44			1	11	5			17	1,468,888
45-49				4	12	4		20	1,823,513
50-54				1	3	1		5	451,933
55-59						1		1	88,856
60					1			1	79,102
Totals			**3**	**18**	**21**	**6**		**48**	**$ 4,221,078**

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

Age:	45.6 years
Service:	20.4 years
Annual Pay:	$87,939

Firefighters June 30, 2017
by Nearest Age and Years of Service

Nearest	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
35-39			1	1				2	$ 170,480
40-44				1	2			3	251,085
45-49				3	1			4	332,573
50-54				1	5			6	483,151
55-59					1			1	83,530
Totals			**1**	**6**	**9**			**16**	**$ 1,320,819**

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:	19.6 years
Annual Pay:	$82,551

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 22 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
2017	**2016**	**2015**	**2014**	**2013**	**Average**
9.3%	7.3%	10.7%	11.3%	4.6%	8.6%

The rate of price inflation -- a rate of price inflation of 2.75% is consistent with other economic assumptions in this report.

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.

	Present Salary Resulting in Salary of $1,000		Percent Increase in Salary During Next Year	
Sample Ages	**At Age 65 General***	**At Age 60 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, Other Funds A, and Other Funds B members.*

Actual valuation payroll has increased at the following rates.

	Year Ended June 30					5-Year
	2017	2016	2015	2014	2013	Average
Increase in pay for members active at both beginning and end of year	1.7 %	4.1 %	2.1 %	4.7 %	2.9 %	3.1 %

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:

	Single Life Retirement Values			
Sample	Present Value of $1 Monthly for Life		Future Life Expectancy (Years)	
Ages	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:

	Number Retiring Per 100 Eligible		
Age	**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, Other Funds A, and Other Funds B 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, Other Funds A, and Other Funds B 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, Other Funds A, and Other Funds B members.*

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

Summary of Assumptions Used
June 30, 2017
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.
Cost-of-Living Adjustment:	Annual increase for those eligible assumed to be 1.1% annually.

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. Please see the corresponding GASB 67/68 reports for relevant accounting figures.

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)
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
2017 *	**164,083**	**188,930**	**24,847**	**86.8**	**11,806**	**210.5**

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

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
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	4,925	100
2018	2016	39.40	4,629	-	-
2019	**2017**	**32.04**	**3,628**	-	-

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, 2017 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 22 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, 2017
Actuarial cost method	Entry Age
Amortization method	Level dollar
Remaining amortization period	22 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 1.1% compounded annually.

Membership of the plan consisted of the following at June 30, 2017, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits	399
Terminated plan members entitled to but not yet receiving benefits	67
Active plan members	158
Total	624

GRS Retirement Consulting

800.521.0498 | P: 248.799.9000 | F: .248. 799.9020 | www.grsconsulting.com

September 15, 2017

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

Dear Rosa:

Enclosed are fifteen copies of the June 30, 2017 Annual Actuarial Valuation of the City of Wyoming Employees Retirement System.

Respectfully submitted,

James D. Anderson

James D. Anderson, FSA, EA, MAAA

JDA:dj
Enclosures

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

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