

September 21, 2018

The Board of Trustees
City of Grosse Pointe Woods Employees Retirement System
Grosse Pointe Woods, Michigan

Dear Board Members:

The purpose of the annual actuarial valuation of the City of Grosse Pointe Woods Employees Retirement System as of June 30, 2018 is to:

- Compute the liabilities associated with benefits likely to be paid on behalf of current retired and active members of the Retirement System,
- Compare accrued assets with accrued liabilities to assess the funded condition of the Retirement System, and
- Compute the City's recommended contribution rate for the Fiscal Year beginning July 1, 2019.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. Data concerning active members, retirees, beneficiaries and assets was provided by the City. This data has been reviewed for reasonableness, but no attempt has been made to audit such information. The valuation was based on the provisions of the Retirement System as amended through June 30, 2018. The actuarial assumptions used in this valuation represent reasonable expectations of future experience under the System. This report was prepared under the direction of a member of the American Academy of Actuaries who meets the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Denise M. Jones

Senior Consultant



Sandra W. Rodwan

Member, American Academy of Actuaries

***City of Grosse Pointe Woods
Employees Retirement System***

Actuarial Valuation as of June 30, 2018

Table of Contents

Section One: Valuation Summary

Valuation Summary.....	1
------------------------	---

Section Two: Actuarial Calculations – Funding

Computed Contribution Rates.....	3
Unfunded Actuarial Accrued Liability.....	4
Comments and Conclusion	6

Section Three: Retirement System Benefit Provisions

Benefit Provision Summary	7
---------------------------------	---

Section Four: Actuarial Assumptions and Methods

Actuarial Assumptions	11
Actuarial Methods	15

Section Five: Valuation Data

Asset Summary.....	16
Participant Summary	17

Section Six: Supplemental Annuities

Computed Contribution Rates.....	22
Benefit Provision Summary	23
Asset Summary.....	24
Participant Summary	25



Section One:
Valuation Summary



Purpose of Valuation

The purpose of the annual actuarial valuation of the City of Grosse Pointe Woods Employees Retirement System as of June 30, 2018 is to:

- ❖ Compute the liabilities associated with benefits likely to be paid on behalf of current retired and active members of the Retirement System,
- ❖ Compare accrued assets with accrued liabilities to assess the funded condition of the Retirement System, and
- ❖ Compute the City's recommended contribution rate for the Fiscal Year beginning July 1, 2019.

This valuation is exclusive of post-retirement health benefits.

Liabilities and Funded Condition of Retirement System

Total accrued pension liabilities of the Retirement System as of June 30, 2018, were computed to be \$53,727,415. The funding value of accrued assets allocated to pensions was \$40,346,840. The ratio of the funding value of accrued assets allocated to pensions to accrued pensions liabilities was 75.1%.

Funding Value of Assets

A funding value of assets was used for the June 30, 2018 valuation. The funding value spreads the difference between the actual and assumed investment return over 5 years.

Computed City Contribution Rate

The City's normal cost contribution rate for pensions was computed to be 12.56% for General members and 16.71% for Public Safety members. Amortizing the unfunded accrued liability over 25 years resulted in an amortization payment of 17.88% of member payroll.

Retirement System Experience

Overall recognized experience of the Retirement System during the year ended June 30, 2018 was unfavorable. The recognized rate of investment return on the smoothed funding value of assets was less than the assumed rate (5.75% vs. 7.75%). The smoothed funding value includes carry-forwards of positive and negative experience from the prior four years.

Benefit Provision Changes

There were no benefit changes included in this valuation.

Assumption and Method Changes

None

Participant Data

	06/30/2018		06/30/2017	
	Number	Payroll	Number	Payroll
Active Members				
General	44	\$2,231,844	45	\$2,258,831
Public Safety	<u>29</u>	<u>2,312,271</u>	<u>28</u>	<u>2,235,014</u>
Total Active Members	73	\$4,544,115	73	\$4,493,845
Retirees and Beneficiaries				
General	50	1,052,951	49	\$995,238
Public Safety	<u>50</u>	<u>2,155,770</u>	<u>51</u>	<u>2,031,135</u>
Total Retirees and Beneficiaries	100	3,208,721	100	3,026,373
Inactive Vested Members				
General	14	\$161,188	13	\$153,449
Public Safety	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total Inactive Vested Members	14	\$161,188	13	\$153,449

Financial Data

	06/30/2018	06/30/2017
Funding Value of Assets	\$40,346,840	\$40,086,619
Market Value of Assets	37,828,401	37,614,854



Section Two:

***Actuarial Calculations –
Funding***



Computed Contribution Rates for The Year Beginning July 1, 2019

The contribution rates shown below are expressed as percents of active member payroll.

The normal cost can be viewed as the long-term on-going cost of the Retirement System.

The unfunded actuarial accrued liability was amortized as a level percent of payroll over 25 years. The 25 year period is the same as the period used last year to amortize the excess of accrued assets over accrued liabilities.

<u>FOR PENSIONS</u>	<u>Percents of Payroll</u>	
	<u>General</u>	<u>Public Safety</u>
Normal Cost		
Regular Retirement	9.48%	12.12%
Pre-retirement Death	0.26	0.34
Disability	0.55	2.92
Withdrawal	<u>2.27</u>	<u>1.33</u>
Total Normal Cost	12.56	16.71
Member Portion	5.05	5.84
City’s Computed Normal Cost	7.51	10.87
Total Unfunded Accrued Liability	17.88	17.88
City’s Contribution Rate for Pensions	25.39%	28.75%
City’s Dollar Contribution*	\$601,014	\$705,061

*Based on valuation payroll of \$2,231,884 and \$2,312,271 for General and Public Safety respectively, projected to mid-way through the contribution fiscal year.

Unfunded Actuarial Accrued Liability

	<u>6/30/2018</u>	<u>6/30/2017</u>
Actuarial Accrued Liability	\$53,727,415	\$50,976,140
Assets Allocated to Funding	<u>40,346,840</u>	<u>40,086,619</u>
Unfunded Actuarial Accrued Liability	\$13,380,575	\$10,889,521

**Computed City Contributions –
(Excluding Supplemental Annuities)**

Fiscal Year Beginning July 1	Valuation Date June 30	Computed Dollar Contributions	Actual Dollar Contributions	Computed Percent of Payroll	
				General	Public Safety
1999	1998	\$389,980	\$401,475	0.00%	3.30%
2000	1999 (a)	234,977	312,475	0.00	0.00
2001	2000	44,773	306,070	0.00	0.00
2002	2001	266,451	306,000	0.00	0.00
2003	2002	534,143	534,143	0.00	0.00
2004	2003	1,019,328	1,106,564	1.40	5.74
2005	2004 (a)	1,349,607	1,220,333	8.12	12.64
2006	2005 (a)	841,374	1,306,228	12.54	15.50
2007	2006 (a)	1,016,356	1,016,356	15.21	18.59
2008	2007	1,037,161	1,115,843	14.65	17.98
2009	2008 (a)*	452,284	955,635	6.22	7.98
2010	2009	754,106#	751,202	10.56	12.26
2011	2010	786,228	712,463	12.64	14.28
2012	2011	743,380	767,521	12.55	14.25
2013	2012	891,295	888,696	15.29	16.99
2014	2013	906,319	889,829	16.12	18.14
2015	2014	843,859	925,683	16.82	19.24
2016	2015*	1,080,507	1,076,052	20.28	23.57
2017	2016	1,206,160	1,230,649	23.55	26.03
2018	2017	1,107,656		22.31	24.18
2019	2018	1,306,074		25.39	28.75

(a) After changes in benefit provisions and/or actuarial assumptions.

* Reflects amortization of the credit for accrued assets in excess of accrued liabilities for all valuations except 2005, 2006 and 2007 and 2009.

Prior to the fiscal year beginning July 1, 2006, contribution amounts included health insurance.

Based on valuation payroll.

Note: Results prior to 2008 are based on reports provided by previous actuarial firm.

History of Assets and Accrued Liabilities

Valuation Date June 30	Valuation Assets	Actuarial Accrued Liabilities	Funded Ratio	Unfunded Actuarial Accrued Liabilities
1990	\$16,860	\$13,914	121.2%	\$(2,946)
1995	22,757	20,442	111.3	(2,135)
1996	24,251	20,354	119.1	(3,897)
1997	26,876	20,533	130.9	(6,343)
1998	30,018	22,403	134.0	(7,615)
1999 (a)	33,785	26,108	129.4	(7,677)
2000	36,943	27,097	136.3	(9,846)
2001	38,298	29,108	131.6	(9,190)
2002	37,739	30,427	124.0	(7,312)
2003	35,745	32,137	111.2	(3,608)
2004 (a)	34,404	33,804	101.8	(600)
2005 (a)	33,329	36,141	92.2	2,812
2006 (a)	33,549	36,846	91.1	3,297
2007	35,801	38,744	92.4	2,943
2008 (a)	37,728	36,310	103.9	(1,418)
2009	37,149	40,417	91.9	3,268
2010(a)	36,074	41,541	86.8	5,467
2011	37,667	42,738	88.1	5,071
2012	37,369	44,747	83.5	7,378
2013	37,171	44,950	82.7	7,779
2014	37,751	45,453	83.1	7,702
2015(a)	39,363	49,481	79.6	10,118
2016(a)	39,271	51,299	76.6	12,028
2017	40,087	50,976	78.6	10,889
2018	40,347	53,727	75.1	13,381

(a) After changes in actuarial assumptions.

Results shown throughout this report for years prior to 2008 were prepared by the previous actuarial firm.

Comments and Conclusion

Comments: Overall recognized experience of the Retirement System during the year ended June 30, 2018 was unfavorable. The recognized rate of investment return on the smoothed funding value of assets was less than the assumed rate (5.75% vs. 7.75%). The smoothed funding value includes carry-forwards of positive and negative experience from the prior four years.

Conclusion: The Retirement System is funding benefits in accordance with a sound level percent of payroll funding objective.



Section Three:

***Retirement System
Benefit Provisions***



Benefit Provision Summary

Regular Retirement ***(No reduction factor for age)***

Eligibility:

General, Dispatchers/Paramedics and Public Safety members:

Age 50 with 25 years of service, age 55 with 20 years of service, or age 60 with 10 or more years of service.

Annual Benefit:

General members - Hired prior to April, 2011:

Final Average Compensation (FAC) times the sum of 2.0% times the first 25 years of service plus 1.0% times years of service in excess of 25 years.

General members - Hired after April, 2011:

Final Average Compensation (FAC) times 1.75% times years of service.

Dispatchers/Paramedics – Hired prior to July 1, 2011:

2.125% of Final Average Compensation (FAC) times service.

Dispatchers/Paramedics – Hired after July 1, 2011:

1.75% of Final Average Compensation (FAC) times service.

Public Safety Officers and Command – Hired prior to July 1, 2011:

2.5% of Final Average Compensation (FAC) times service to a maximum of 75% of FAC.

Public Safety Officers and Command – Hired after July 1, 2011:

2.0% of Final Average Compensation (FAC) times service to a maximum of 75% of FAC.

Type of Final Average Compensation:

General members: Highest 4 years of compensation.

Dispatchers/Paramedics: Highest 3 years of compensation.

Public Safety: Highest 3 calendar years of compensation out of the last eight calendar years prior to retirement.

***Deferred Retirement
(Vested benefit)***

Eligibility:

General members: 10 years of service.

Dispatchers/Paramedics and Public Safety members: 10 years of credited service or age 50 with 15 of more years of service.

Annual Benefit:

Computed as regular retirement but based on service and final average compensation at time of termination. Benefits begin at age 60.

Duty Disability Retirement

Eligibility:

No age or service requirements.

Annual Benefit:

Computed as regular retirement with additional service credit granted to the earlier of the date the member would attain age 55 years or the date the member would have satisfied regular retirement eligibility conditions had the member continued in City employment.

General and Dispatchers/Paramedic members have worker's compensation offsets.

Public Safety members, depending upon whether or not they are eligible for a service retirement at the time of injury, may elect to choose between worker's compensation benefits or a disability pension.

Non-Duty Disability

Eligibility:

10 or more years of credited service.

Annual Benefit:

Computed as a regular retirement.

Duty Death in Service Survivor's Pension

Eligibility:

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

Annual Benefit:

Upon termination of worker's compensation a benefit equal to the worker's compensation amount shall be paid to the widow, unmarried children under 18 and dependent parents. Maximum benefit to the widow: 50% of final average compensation, to the children: 20% of final average compensation, and to the parents: 16-2/3% of final average compensation.

Non-Duty Death in Service Survivor's Pension

Eligibility:

10 years of service.

Annual Benefit:

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

Post-Retirement Cost-of-Living

Annual adjustments based upon changes in the Consumer Price Index subject to a maximum increase of 2.5% of the adjusted retirement allowance. The cost-of-living adjustment shall be paid on both the base pensions and, for retirements on or after 7/1/90, supplemental annuity distributions.

Employees hired on or after 7/1/2015 are not eligible.

Member Contributions

General Members: 5.0% of annual compensation.

Dispatchers/Paramedics Members: 6.0% of annual compensation.

Public Safety Members - Hired prior to July 1, 2011: 6.0% of annual compensation.

Public Safety - Hired after July 1, 2011: 5.0% of annual compensation.

Annuity Withdrawal

A member may withdraw accumulated member contributions in a lump sum at retirement. The retirement allowance is reduced by the actuarial equivalent of the annuity withdrawn, based on actuarial assumptions concerning interest and mortality used in the annual actuarial valuation.

Pop-Up Provision

Upon the death of the beneficiary, a retiree who had previously selected either Option II or Option III will have the retirement allowance recomputed as a straight life allowance.



Section Four:

***Actuarial Assumptions
And Methods***



Actuarial Assumptions

Economic Assumptions

- (i) **Interest Rate** 7.75% (net of expenses)
- (ii) **Salary Increases**
 - Wage Inflation 3.5%
 - Merit and Longevity Age-related rates

Sample Annual Rates of Salary Increase

Sample Ages	Inflation	Merit and Longevity	
		General	Public Safety
20	3.5%	3.8%	3.0%
25	3.5	3.1	3.0
30	3.5	2.7	2.6
35	3.5	2.4	1.1
40	3.5	2.1	0.2
45	3.5	1.7	0.2
50	3.5	1.1	0.2
55	3.5	0.7	0.1
60	3.5	0.2	0.0

Demographic Assumptions

(i) Mortality

RP-2014 Mortality Table

Sample Ages	Future Life Expectancy (Years)	
	Men	Women
55	28.2	30.7
60	24.1	26.3
65	20.1	22.0
70	16.2	18.0
75	12.7	14.3
80	9.5	10.9

(ii) Disability

Sample Ages	Percent Becoming Disabled Within Next Year	
	General	Public Safety
20	0.04%	0.08%
25	0.04	0.15
30	0.04	0.30
35	0.04	0.49
40	0.10	0.68
45	0.15	0.87
50	0.25	1.06
55	0.49	1.26
60	1.20	1.46

(iii) Termination of Employment

Service related rates for first 5 years of employment. Age related rates after first 5 years of employment

Sample Ages	Years of Service	% Separating Within One Year	
		General Members	Public Safety
ALL	0	20.00%	12.00%
	1	15.00	9.00
	2	12.00	8.00
	3	10.00	7.00
	4	8.00	6.00
25	5 & Over	6.00	4.50
30		6.00	3.90
35		5.00	2.30
40		3.00	0.90
45		2.00	0.50
50		2.00	0.50
55		1.30	0.50
60		1.30	0.50

(iv) Retirement Rates

Age-related rates

**Active Members Retiring within Year
Following Attainment of Indicated Retirement Age**

Age Retiring	% Retiring Within One Year	
	General	Public Safety
50	30%	40%
51	25	40
52	20	30
53	20	30
54	20	30
55	30	40
56	30	30
57	25	30
58	25	30
59	25	30
60	30	40
61	15	15
62	35	20
63	15	15
64	15	15
65	60	60
66	30	30
67	40	40
68	50	50
69	90	70
70	100	100

Members were assumed to be eligible for retirement after attaining age 50 with 25 years of service or age 55 with 20 years of service, or age 60 with 10 or more years of service.

Actuarial Method Used for the Valuation

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

- ❖ The annual normal costs for each individual active member, payable from date of hire to date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;
- ❖ Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Financing of Unfunded Actuarial Accrued Liability. Unfunded actuarial accrued liabilities were amortized as a level percent of payroll over the same 25 year period used in the prior year's valuation.

Active member payroll was assumed to increase 3.5% a year.



Section Five:
Valuation Data



Asset Summary

As of June 30, 2018, the market value of assets was reported to be \$37,828,401. The funding value of assets as of June 30, 2018 was \$40,346,840.

Derivation of Funding Value of Assets

A. Funding Value 6/30/2017	\$40,086,619
B. Market Value 06/30/2018	37,828,401
C. Market Value 06/30/2017	37,614,854
D. Non-Investment Net Cash Flow	(1,986,510)
E. Investment Income	
E1. Market Total B-C-D	2,200,057
E2. Amount for Immediate Recognition (7.75%)	3,029,736
E3. Amount for Phased-In Recognition E1.-E2.	(829,679)
F. Phased-In Recognition of Investment Income	
F1. Current Year 0.20 x E3.	(165,936)
F2. First Prior Year	188,124
F3. Second Prior Year	(885,310)
F4. Third Prior Year	(648,445)
F5. Fourth Prior Year	728,562
F6. Total Phased-In Amount	(783,005)
G. Funding Value 06/30/2016 A+D+E2+F6	40,346,840
H. Difference Between Market and Funding Value	(2,518,439)
I. Rate of Return Based on Funding Value	5.75%
J. Rate of Return on Market Value	5.68%

Participant Summary

Retirees and Beneficiaries Included in the Valuation

There were 100 retirees and survivor beneficiaries included in the valuation, with annual pensions totaling \$3,207,630. There was 1 new retiree added to General. There were no retirees removed from General and one removed from Public Safety during the year ended June 30, 2018.

There were also 14 vested inactive members included in the valuation, with deferred pensions totaling \$161,188.

Pensions Being Paid Historical Schedule

Valuation Date June 30	No.	Annual Pensions	Average Pension	Discounted Value of Pensions	
				Total	Average
1985	45	\$372,747	\$8,283	\$4,633,062	\$102,957
1990	53	528,200	9,966	6,226,086	117,473
1995	64	779,106	12,174	9,080,522	141,883
2000	73	1,301,569	17,830	16,145,352	221,169
2001	76	1,428,339	18,794	17,730,248	233,293
2002	76	1,475,277	19,412	18,207,960	239,578
2003	81	1,649,089	20,359	20,247,071	249,964
2004	81	1,679,714	20,737	20,285,831	250,442
2005	83	1,756,466	21,162	21,204,118	255,471
2006	83	1,838,834	22,155	22,199,981	267,470
2007	85	1,934,698	22,761	23,067,937	271,387
2008	83	1,919,668	23,129	21,966,186	264,653
2009	85	2,083,133	24,507	24,748,740	291,162
2010	94	2,465,221	26,226	28,869,449	307,122
2011	96	2,571,790	26,789	30,458,222	317,273
2012	97	2,640,806	27,225	31,413,587	323,851
2013	96	2,692,624	28,048	31,989,823	333,227
2014	102	2,907,941	28,509	34,336,412	336,631
2015	101	2,966,859	29,375	36,200,190	358,418
2016	100	3,005,426	30,054	37,377,798	373,778
2017	100	3,026,373	30,264	37,221,505	372,215
2018	100	3,208,721	32,087	39,297,434	392,974

Retirees and Beneficiaries - June 30, 2018

Attained Age	General		Public Safety		Fire Specialist		Totals	
	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions
40-44			2	\$81,171			2	\$81,171
45-49					1	28,303	1	28,303
50-54			3	156,986			3	156,986
55-59	4	88,853	6	304,031	1	23,721	11	416,605
60-64	7	133,571	6	332,046	2	59,942	15	525,559
65-69	9	227,825	9	379,664			18	607,489
70-74	4	43,879	10	379,321			14	423,200
75-79	8	171,483	8	335,638			16	507,121
80-84	8	127,537	3	125,128			11	252,665
85-89	2	39,275	1	13,451			3	52,726
90-94	3	89,810					3	89,810
100-104	1	18,731					1	18,731
Totals	46	\$940,964	48	\$2,107,436	4	\$111,966	98	\$3,160,366

Also included in the valuation are 2 alternate payees with annual benefits of \$48,307.

General Active Members - June 30, 2018
Age and Service Distribution

Attained Age	Service							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
20-24	1							1	\$79,941
25-29	2							2	72,230
30-34	4	2	1					7	288,914
35-39	1		1					2	96,906
40-44	2		0	4	1			7	339,473
45-49	2		1	3	2	1		9	537,076
50-54	2				2			4	210,417
55-59	2			2	1	1		6	283,533
60-64		1		2			1	4	231,857
65-69		1		1				2	91,537
Total	16	4	3	12	6	2	1	44	\$2,231,884

Group Averages:

Age: 46.0 years
Service: 11.1 years
Annual Pay: \$50,724

Public Safety Active Members - June 30, 2018
Age and Service Distribution

Attained Age	Service					Totals	
	0-4	5-9	10-14	15-19	20-24	No.	Payroll
25-29	3					3	\$175,499
35-39		1	5	3		9	751,668
40-44			2	3		5	455,292
45-49	2		1	3		6	446,582
50-54	1				3	4	320,557
55-59			1	1		2	162,673
Total	6	1	9	10	3	29	\$2,312,271

Group Averages:

Age: 42.3 years
 Service: 13.2 years
 Annual Pay: \$79,733

Active Members – Comparative Summary

	June 30, 2018		June 30, 2017	
	General	Public Safety	General	Public Safety
Active Members	44	29	45	28
Valuation Payroll	\$2,231,884	\$2,312,271	\$2,258,430	\$2,235,014
Average Compensation	\$50,724	\$79,733	\$50,196	\$79,822
Average Age (yrs.)	46.0	42.3	47.4	42.4
Average Service (yrs.)	11.1	13.2	11.8	13.4



Section Six:
Supplemental Annuities



Computed Contributions for Supplemental Annuities Beginning July 1, 2019

<u>CONTRIBUTIONS FOR</u>	<u>City Contributions Expressed As Dollars Per Active Member</u>	
	<u>General</u>	<u>Public Safety</u>
Normal Cost	\$794	\$0
Unfunded Actuarial Accrued Liability	<u>4,851</u>	<u>682</u>
Total Per Member	\$5,645	\$682

Actuarial accrued liability, \$3,395,078 was reduced by accrued assets, \$1,751,892, and the resulting unfunded actuarial accrued liability, \$1,643,186, was amortized as level dollar payments over a period of 10 years, the same period used for the June 30, 2017 valuation.

Contributions for Public Safety are shown per active member for historical reasons; there are no active Public Safety members currently eligible. The dollar amount of the Public Safety contribution is \$19,775.

Supplemental Annuities

Eligibility:

Age 50 with 25 years of service, age 55 with 20 years of service, or age 60 with 20 years of service. General members who qualify for a disability retirement are also eligible. Public Safety members with retirements effective after December 31, 1994 are not eligible.

Amount:

Years of Service	Per Month
10-14	\$250.00
15-19	300.00
20-24	350.00
25 & Over	400.00

Post-Retirement Adjustments

Eligibility:

Retirements effective on or after July 1, 1990.

Benefit:

The amounts in the above table are increased 2.5% compounded each year following retirement.

Post-Retirement Survivor Benefits:

50% of the benefit is payable to the spouse of a deceased member.

Asset Summary for Supplemental Annuities

The reported market value of assets was used for the valuation of Supplemental Annuities.

Reserves	June 30,	
	2018	2017
Total	\$1,751,892	\$1,610,132

Supplemental Annuities Summary

	<u>No.</u>	<u>Annual Annuities</u>	<u>Average</u>	<u>Discounted Value of Annual Annuities</u>
General	49	\$227,829	\$4,650	\$2,361,804
Public Safety	8	33,250	4,156	287,892
Total	57	\$261,079	\$4,580	\$2,649,696

Historical Comparison

Valuation Date June 30	General		Public Safety		Computed Contribution Per Active Member	
		Annual Supp.		Annual Supp.	General	Public Safety
	No.	Annuities	No.	Annuities		
1995	29	122,738	12	43,301	2,830	731
1996	27	117,995	13	48,341	2,652	803
1997	27	118,755	13	48,463	2,443	778
1998	29	126,684	13	47,145	2,190	726
1999	31	134,630	13	45,303	2,527	800
2000	32	139,275	12	44,008	2,537	843
2001	33	143,957	12	44,280	2,810	801
2002	34	150,600	12	44,558	3,008	810
2003	36	158,745	12	44,843	3,282	892
2004	35	157,881	12	45,136	3,620	875
2005	35	156,979	12	43,035	3,488	850
2006	35	158,696	12	40,943	3,460	791
2007	35	161,173	12	41,257	3,563	737
2008	37	167,435	12	45,189	3,508	998
2009	38	169,675	12	43,527	3,865	946
2010	43	189,117	11	38,228	4,329	887
2011	46	202,614	10	35,965	4,836	807
2012	47	209,510	10	36,352	5,575	883
2013	47	213,202	10	36,590	5,787	945
2014	50	222,371	10	36,751	5,777	851
2015	51	231,823	9	34,504	6,392	957
2016	48	218,913	9	34,513	6,061	866
2017	48	201,049	9	34,733	5,242	754
2018	49	227,829	8	33,250	5,645	682

#Supplemental annuities discontinued for Public Safety retiring 1/1/95 and later.

A post-retirement increase provision is applicable for retirements effective on or after July 1, 1990.