

September 17, 2016

The Retirement Board  
City of Sterling Heights Police and Fire Retirement System  
Sterling Heights, Michigan

Dear Board Members:

*The purpose of the annual actuarial valuation of the City of Sterling Heights Police and Fire Retirement System as of June 30, 2016 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, 2017.

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 your staff. 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, 2016. The actuarial assumptions used in this valuation represent reasonable expectations of future experience under the System. This valuation has been prepared under the supervision of a Member of the American Academy of Actuaries who meets the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



Denise M. Jones



Sandra W. Rodwan, M.A.A.A.

***City of Sterling Heights  
Police and Fire Retirement System***

*48<sup>th</sup> Actuarial Valuation as of June 30, 2016*

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***Section One:***  
***Valuation Summary***



### **Purpose of Valuation**

The purpose of the annual actuarial valuation of the City of Sterling Heights Police and Fire Retirement System as of June 30, 2016 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, 2017.

### **Liabilities and Funded Condition of Retirement System**

Accrued liabilities of the Retirement System as of June 30, 2016 were computed to be \$301,281,758. The funding value of accrued assets was \$206,343,809. The ratio of the funding value of accrued assets to accrued liabilities was 68.5%.

### **Funding Value of Assets**

A smoothed market value of assets was used for the June 30, 2016 valuation. This method, which spreads the difference between actual and expected investment return over four years, is the same as the method used for last year's valuation.

### **Computed City's Contribution Rate**

The City's normal cost contribution rate was computed to be 7.34% of total active member and DROP payroll (14.56% total normal cost less 7.22% member contributions). The unfunded accrued liabilities were amortized over 25 years as a level percent of future payroll. The amortization of the unfunded accrued liabilities was 30.26% of member payroll. The City's total contribution for the FY beginning July 1, 2017 was therefore computed to be 37.60% of total member payroll.

### **Retirement System Experience**

Overall Retirement System experience for the year ending June 30, 2016 was unfavorable. The primary source of the unfavorable experience was salary increases which were greater than assumed.

**Assumption and Method Changes**

The RP 2000 projected to 2014 Mortality Table was adopted for this valuation. The salary scale, disability, and withdrawal assumptions were also changed. The assumption changes were adopted by the Board of Trustees following the Experience Study.

**Benefit Provision Change**

There were no benefit changes included in this valuation.

**Participant Data**

	<u>06/30/2016</u>	<u>06/30/2015</u>
Active Members	210	186
Active Member Payroll	\$19,321,315	\$16,589,288
DROP Member Payroll	\$2,100,795	\$4,056,001
Retirees and Beneficiaries	378*	374**
Annual Pensions	\$19,572,072	\$19,569,594
Inactive Vested Members	4	5
Total Estimated Annual Pensions	\$143,743	\$168,426

\*Includes 18 DROP members receiving \$1,383,481 in Annual Benefits.

\*\*Includes 38 DROP members receiving \$2,740,068 in Annual Benefits.

**Financial Data**

	<u>06/30/2016</u>	<u>06/30/2015</u>
Actuarial Value of Assets	\$206,343,809	\$200,823,211
Market Value of Assets	192,115,760	203,358,526



***Section Two:***

***Actuarial Calculations –  
Funding***



**Computed Contribution Rates for the Year Beginning July 1, 2017**

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

The normal cost can be viewed as the long-term on-going cost of the Retirement System. Unfunded actuarial accrued liability as of June 30, 2016 was amortized as a level percent of payroll over 25 years and added to the computed normal cost. The City’s total contribution rate has been computed to be 37.60% of payroll (including DROP payroll) for the fiscal year beginning July 1, 2017.

	<u><b>Percents of Payroll</b></u>
Normal Cost	
Regular Retirement	12.65%
Pre-retirement Death	0.33
Disability	0.96
Withdrawal	<u>0.62</u>
Total Normal Cost	14.56%
Member Portion	7.22
<b>City’s Computed Normal Cost</b>	<b>7.34%</b>
Unfunded Actuarial Accrued Liability	30.26
<b>City’s Total Contribution Rate</b>	<b>37.60%</b>
<b>City’s Dollar Contribution*</b>	<b>\$8,297,366</b>

\*Based on projected active member and DROP payroll.

### Unfunded Actuarial Accrued Liability

	<b>June 30, 2016</b>	<b>June 30, 2015</b>
<b>Actuarial Accrued Liabilities</b>	\$301,281,758	\$289,714,451
<b>Assets Allocated to Funding</b>	<u>206,343,809</u>	<u>200,823,211</u>
<b>Unfunded Actuarial Accrued Liabilities</b>	\$94,937,950	\$88,891,240

### Computed City Contributions

Valuation Date	Fiscal Year Beginning July 1	Recommended Dollar Contributions	Percent of Valuation Payroll
12/31/1997#	1998	\$2,504,024	15.48%
12/31/1998	1999	2,107,873	12.83
12/31/1999	2000	2,197,860	12.24
12/31/2000*	2001	1,634,437	9.18
12/31/2001	2002	2,747,983	14.01
12/31/2002#	2003	3,545,592	17.55
12/31/2003	2004	4,204,831	21.71
12/31/2004*	2005	2,993,592	14.46
12/31/2005	2006	2,646,459	12.86
12/31/2006	2007	1,707,910	8.28
12/31/2007	2008	2,594,194	11.89
12/31/2008*#	2009	4,925,570	19.86
12/31/2009*	2010	6,135,053	24.60
12/31/2010	2011	7,368,876	29.49
12/31/2011*	2012	8,815,031	37.20
12/31/2012#	2013	8,095,472	33.69
12/31/2013#	2014	7,953,970	35.67
12/31/2014	2015	7,986,312	35.76
06/30/2015	2016	7,994,747	37.60
<b>06/30/2016*</b>	<b>2017</b>	<b>8,297,366</b>	<b>37.60</b>

# After changes in benefit provisions.

\* After changes in actuarial assumptions or methods.

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

City of Sterling Heights

Police and Fire Retirement System

## History of Assets and Accrued Liabilities

Valuation Date	Valuation Assets	Actuarial Accrued Liabilities	Funded Ratio	Unfunded Actuarial Accrued Liabilities
12/31/1992#	\$81,784,298	\$86,933,864	94.1%	\$5,149,566
12/31/1993#	92,169,549	96,031,011	96.0	3,861,462
12/31/1994	100,218,140	105,862,760	94.7	5,572,404
12/31/1995#	112,218,140	118,825,355	94.4	6,607,215
12/31/1996	127,129,909	123,395,111	103.0	(3,734,798)
12/31/1997*	142,931,956	131,793,861	108.5	(11,138,095)
12/31/1998	161,133,122	143,031,180	112.7	(18,101,942)
12/31/1999	174,770,699	153,383,231	113.9	(21,387,468)
12/31/2000*	185,771,342	124,915,986	148.7	(60,855,356)
12/31/2001	187,772,035	133,938,061	140.2	(53,833,974)
12/31/2002#	184,609,657	141,187,613	130.8	(43,422,044)
12/31/2003	183,664,050	149,968,630	122.5	(33,695,420)
12/31/2004*	187,265,961	155,818,664	120.2	(31,447,397)
12/31/2005	194,145,450	158,517,125	122.5	(35,628,325)
12/31/2006	204,756,058	156,707,512	130.7	(48,048,546)
12/31/2007	212,365,515	170,201,230	124.8	(42,164,285)
12/31/2008#*	202,192,211	212,914,310	95.0	10,722,099
12/31/2009*	193,164,045	227,549,069	84.9	34,385,024
12/31/2010	185,750,293	237,994,618	78.0	52,244,325
12/31/2011*	173,001,421	260,283,654	66.5	87,282,233
12/31/2012#	177,718,953	269,210,724	66.0	91,491,771
12/31/2013#	186,606,033	276,717,787	67.4	90,111,754
12/31/2014	195,103,903	285,081,193	68.4	89,977,290
06/30/2015	200,823,211	289,714,451	69.3	88,891,240
<b>06/30/2016</b>	<b>206,343,809</b>	<b>299,123,282</b>	<b>69.0</b>	<b>92,779,474</b>
<b>06/30/2016*</b>	<b>206,343,809</b>	<b>301,281,758</b>	<b>68.5</b>	<b>94,937,950</b>

# After changes in benefit provisions.

\* After changes in actuarial assumptions or methods.

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

City of Sterling Heights

Police and Fire Retirement System  
valuation

**Assets and Liabilities**  
**Twenty Year Historical Schedule**

Valuation Date	Actuarial		Valuation		Unfunded		Percent Funded	UAAL as a % of Payroll	Gain/(Loss) as a % of Accrued Liability
	Accrued Liabilities	Liabilities	Assets	Liabilities	Accrued Liabilities	Funded			
12/31/1997*	\$131,793,861		\$142,931,956	\$(11,138,095)			108.5%		8.7%
12/31/1998	143,031,180		161,133,122	(18,101,942)			112.7%		5.0
12/31/1999	153,383,231		174,770,699	(21,387,468)			113.9%		2.1
12/31/2000*	124,915,986		185,771,342	(60,855,356)			148.7%		6.6
12/31/2001	133,938,061		187,772,035	(53,833,974)			140.2%		(5.9)
12/31/2002#	141,187,613		184,609,657	(43,422,044)			130.8%		(9.2)
12/13/2003	149,968,630		183,664,050	(33,695,420)			122.5%		(7.4)
12/31/2004*	155,818,664		187,265,961	(31,447,297)			120.2%		(6.3)
12/31/2005	158,517,125		194,145,450	(35,628,325)			122.5%		2.4
12/31/2006	156,707,512		204,756,058	(48,048,546)			130.7%		7.6
12/31/2007	170,201,230		212,365,515	(42,164,285)			124.8%		(4.4)
12/31/2008#*	212,914,310		202,192,211	10,722,099			95.0%	48.6%	--
12/31/2009*	227,549,069		193,164,045	34,385,024			84.9%	152.8	(9.0)
12/31/2010	237,994,618		185,750,293	52,244,325			78.0%	232.9	(7.8)
12/31/2011	260,283,654		173,001,421	87,282,233			66.5%	454.3	(13.5)
1/31/2012#	269,210,724		177,718,953	91,491,771			66.0%	623.6	(2.5)
12/31/2013#	276,717,787		186,606,033	90,111,754			67.4%	630.2	1.7
12/31/2014	285,081,193		195,103,903	89,977,290			68.4%	585.1	(0.2)
06/30/2015	289,714,451		200,823,211	88,891,240			69.3%	535.8	1.7
06/30/2016	299,123,282		206,343,809	92,779,474			69.0%	433.1	(1.2)
06/30/2016*	301,281,758		206,343,809	94,937,950			68.5%	443.2	(1.2)

#Plan Amended

\*Revised methods and/or assumptions

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

**Demographics and Employer Contributions**

Valuation Date	No.	Active Members			DROP Members			Retirees & Beneficiaries			Employer			
		Total	Average Payroll	% Incr.	No.	\$	% of Pay	No.	Retired	\$	% of Pay	Normal	UAAL	Total
12/31/1995#	256	\$15,159,081	\$59,215	3.5%				122	2.1	\$4,503,909	29.71%	23.16%	2.73%	25.89%
12/31/1996	263	15,190,682	57,759	(2.5)			138	1.9	5,229,252	34.42	23.16	(1.56)	21.60	
12/31/1997*	263	15,251,674	57,991	0.4			153	1.7	5,812,977	38.11	20.55	(5.07)	15.48	
12/31/1998	255	15,490,580	60,747	4.8			165	1.5	6,410,751	41.38	20.94	(8.11)	12.83	
12/31/1999	263	16,930,450	64,374	6.0			178	1.5	7,228,950	42.70	20.88	(8.64)	12.24	
12/31/2000*	261	16,796,531	63,354	0.0			184	1.4	7,524,942	44.80	33.95	(24.77)	9.18	
12/31/2001	271	18,504,190	68,281	7.8			194	1.4	8,024,912	43.37	33.90	(19.89)	14.01	
12/31/2002#	266	18,595,100	69,906	2.4	7	\$ 464,146	199	1.3	8,200,739	44.10	33.12	(15.57)	17.55	
12/31/2003	256	18,271,862	71,374	2.1	14	964,809	213	1.1	8,912,630	48.78	34.32	(12.61)	21.71	
12/31/2004*	256	19,906,323	77,759	8.9	15	1,061,982	223	1.1	9,508,625	47.77	25.71	(11.25)	14.46	
12/31/2005	251	19,787,496	78,835	1.4	18	1,273,334	227	1.0	9,674,813	48.89	25.68	(12.82)	12.86	
12/31/2006	244	19,837,496	81,301	3.1	17	1,204,824	240	0.9	10,555,809	52.00	24.57	(16.29)	8.28	
12/31/2007	253	20,979,120	82,291	2.0	18	1,213,292	247	1.0	11,073,395	52.78	25.94	(14.05)	11.89	
12/31/2008#	249	22,064,557	88,613	7.1	21	1,524,880	260	0.9	11,774,034	53.36	16.79	3.07	19.86	
12/31/2009*	247	22,510,638	91,136	2.8	20	1,458,416	264	0.9	12,078,024	53.65	14.90	9.70	24.60	
12/31/2010	239	22,432,921	93,862	3.0	21	1,607,528	271	0.8	12,438,018	55.45	14.79	14.70	29.49	
12/31/2011*	206	19,213,007	93,267	(0.1)	46	3,408,375	284	0.6	13,320,874	69.33	11.30	25.90	37.20	
12/31/2012#	162	14,671,724	90,566	(0.3)	71	5,363,537	293	0.4	13,875,174	94.57	6.92	26.77	33.69	
12/31/2013#	159	14,300,045	89,937	(0.3)	69	5,223,572	300	0.4	14,295,306	99.97	7.25	28.42	35.67	
12/31/2014	169	15,378,745**	90,998	1.2	55	4,111,448	318	0.5	15,464,181	100.56	7.42	28.34	35.76	
06/30/2015	186	16,589,288	89,190	(0.2)	38	2,740,068	336	0.5	16,829,526	101.45	8.20	29.40	37.60	
06/30/2016*	210	19,321,315	92,006	3.2	18	1,383,481	360	0.6	18,188,591	94.1	7.34	30.26	37.60	

#Plan Amended  
 \*Revised methods and/or assumptions  
 \*\* Adjusted for 27 pay periods.

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

**Comment and Recommendation**

**Comment:** Overall Retirement System experience for the year ending June 30, 2016 was unfavorable. The primary source of the unfavorable experience was salary increases which were greater than assumed.

**Recommendation:** Retired life liabilities including DROPs as of June 30, 2016 were computed to be \$205,071,744, and the Reserve for Retired Benefit Payments was reported to be \$200,828,452. The following transfer from the Reserve for Employer Contributions to the Reserve for Retired Benefit Payments is recommended in order to fully cover the retired life liabilities as of June 30, 2016.

<b>Recommended Transfer</b>	
<b>To Reserve for Retired Benefit Payments</b>	<b>From Reserve for Employer Contributions</b>
\$4,243,292	\$(4,243,292)

**Derivation of Recognized Investment Gain/(Loss)**

1. Valuation Assets BOY	\$200,823,211
2. Contributions	9,524,713
3. Benefit and Administrative Expenses Paid	19,067,461
4. Valuation Assets EOY	206,343,809
5. Investment Return net of expenses ((4)-(1)-(2)+(3))	15,063,346
6. Expected Investment Return at 8.0%	15,684,147
7. Investment Gain/(Loss) (5)-(6)	\$(620,801)

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***Section Three:***

***Retirement System  
Benefit Provisions***



## **Benefit Provision Summary**

### ***Service Retirement***

*Eligibility:* 25 or more years of service regardless of age.

*Annual Benefit:*

Straight life pension equals 2.8% of 3 year average final compensation (AFC) times the first 25 years of service plus 1% of AFC times years of service in excess of 25 years. Maximum benefit is 75% of AFC for Police members and 70% for Fire members. Fire hired after 1/2/13 and MAP hired after 9/17/12: Multiplier for first 25 years is 2.0%.

### ***Deferred Retirement***

*Eligibility:* 10 or more years of service.

*Annual Benefit:*

Computed as service retirement but based upon service, AFC and benefit provisions in effect at termination. Benefit begins at date retirement would have occurred had member remained in employment.

### ***Death After Retirement Survivor's Pension***

*Eligibility:* Payable to a surviving spouse, if any, upon the death of a retired member who was receiving a straight life pension which was effective July 1, 1975 or later.

*Annual Benefit:*

Spouse's pension equals 60% of the straight life pension the deceased retiree was receiving.

### ***Non-Duty Death in Service Survivor's Pension***

*Eligibility:* Payable to a surviving spouse, if any, upon the death of a member with 10 or more years of service.

*Annual Benefit:*

Accrued straight life pension actuarially reduced in accordance with an Option I election.

***Duty Death in Service Survivor's Pension***

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

*Annual Benefit:*

Amount that was paid by worker's compensation or the Option I benefit.

***Duty Disability Retirement***

*Eligibility:* Payable upon the total and permanent disability of a member in the line of duty. Fire members hired after 7/1/85 require at least 10 years of service.

*Annual Benefit:*

To service retirement conversion: 50% of AFC.

At service retirement conversion: Same as a service retirement pension with service credit from date of disability to service retirement conversion.

Service retirement conversion occurs at the earlier of age 55 or the date the member would have had at least 25 years of service.

***Non-Duty Disability***

*Eligibility:* Payable upon the total and permanent disability of a member with 5 or more years of service

*Annual Benefit:*

To Age 55: 1.5% of AFC times years of service.

At Age 55: Same as service retirement.

***Member Contributions***

Police Command: 8% of pay.

MAP: 8% of pay.

Fire members: 8% of pay.

DROP members do not contribute.

***Annuity Withdrawal***

Benefits are actuarially reduced if member contributions are withdrawn at retirement. Actuarial equivalence is based on the following:

- MAP – Merrill Lynch Bond Index interest rate
- COA and Fire – Merrill Lynch Bond Index interest rate up to 8%

***Cost of Living Adjustments***

An additional \$800 (\$500 for pre 7/1/93 MAP members) is paid to pre 7/1/94 COA and Fire retirees each January 1<sup>st</sup> following retirement until death.

***Covered Compensation***

The following is included in compensation for determining AFC:

- Base pay plus
- Overtime and compensatory pay
- Longevity
- Unused holiday, vacation and sick time subject to maximums
- Shift premium

The following lump sum payments at the time of retirement are considered compensation for purposes of determining AFC:

- Unused sick leave\*
- Unused vacation time\*

*Fire Maximums			*Police Maximums	
	56 Hrs	40 Hrs		Hrs
Vacation	295	176	Vacation	150
Sick	90	61	Sick/Personal	50
Personal	25	25		

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*Section Four:*

***Actuarial Assumptions  
And Methods***



**Actuarial Assumptions**

**Economic Assumptions**

**(i) Interest Rate** 8.0% (net of expenses)

**(ii) Salary Increases**  
 Across-the-Board 2%  
 Merit and Longevity Service related rates

**Sample Annual Rates of Salary Increase**

Service	Police			Fire	
	Base	Productivity /Seniority	Total	Productivity /Seniority	Total
1	2.0%	8.5%	10.5%	13.8%	15.8%
2	2.0	7.8	9.8	6.7	8.7
3	2.0	7.2	9.2	17.1	19.1
4	2.0	18.1	20.1	6.3	8.3
5	2.0	16.3	18.3	5.9	7.9
6+	2.0	1.0	3.0	1.0	3.0

**Demographic Assumptions**

**(i) Mortality**

RP 2000 projected to 2014 Mortality Table

Sample Ages	Future Life Expectancy (Years)	
	Men	Women
55	27.5	29.6
60	23.0	25.1
65	18.8	20.8
70	19.9	16.9
75	11.3	13.3
80	8.3	10.1

**(ii) Disability**

Sample Ages	Percent Becoming Disabled Within Next Year
20	0.05%
25	0.07
30	0.09
35	0.13
40	0.20
45	0.30
50	0.50
55	0.85

**(iii) Termination of Employment**

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

<b>Age</b>	<b>Years of Service</b>	<b>Percent of Active Members Terminating within Next Year</b>
All	0	15.00%
	1	10.00
	2	8.50
	3	6.00
	4	4.00
25	5 & Over	1.25
30		1.25
35		1.20
40		0.30
45		0.25
50		0.25
55		0.25
60		0.25

**(iv) Retirement Rates**

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

<b>Years of Service</b>	<b>Probability of Retiring within Next Year</b>	
	<b>Police</b>	<b>Fire</b>
25	70%	80%
26	50	70
27	50	60
28	50	50
29	50	50
30	50	100
31	50	100
32	100	100

### **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 liability was amortized as a level percent of payroll over a 25 year period and added to the computed employer normal cost.

Active member payroll was assumed to increase 3.0% a year for the purpose of determining the level percent of payroll amortization payment.



***Section Five:***  
***Valuation Data***



## Asset Summary

As of June 30, 2016 the market value of assets was reported to be \$192,115,760. The funding value of assets (smoothed market value) was computed to be \$206,343,809.

## Funding Value of Assets

	06/30/2015	06/30/2016
A. Funding Value Beginning of Year	\$195,103,903	\$200,823,211
B. Market Value Beginning of Year	206,101,941	203,358,526
C. Non-Investment Net Cash Flow	(7,664,869)	(9,542,748)
D. Total Return on Investments	4,921,454	(1,700,018)
E. Market Value End of Year	203,358,526	192,115,760
F. Phase-in Factor	25%	25%
G. Projected Investment Income	7,650,859	15,684,147
H. Investment Income in Excess of Projected	(2,729,405)	(17,384,165)
I. Method Change	0	0
J1. Current Year: 025 x H.	(682,351)	(4,346,041)
J2. First Prior Year	174,802	(682,351)
J3. Second Prior Year	4,232,789	174,802
J4. Third Prior Year	2,008,078	4,232,789
J5. Total Phased-In Amount	5,733,318	(620,801)
K. Gross Funding Value End of Year: A+C+G+J5	200,823,211	206,343,809
L. Difference Between Market and Funding Value	2,535,315	(14,228,049)
M. Recognized Yield	7.00%*	7.68%

\*for half year.

## Participant Summary

### Retirees and Beneficiaries Included in the Valuation

There were 378 retirees and beneficiaries included in the valuation, with annual pensions totaling \$19,572,072. Included in this total are 25 alternate payees receiving benefits totaling \$433,112 and 18 DROP/EROP members with benefits totaling \$1,383,481.

There were 21 age and service retirements from DROP with pensions totaling \$1,324,478; 1 new retiree; 1 new EROP; 3 new beneficiaries; 3 new EDROs added and 4 retirees removed in 2016.

### Pensions Being Paid Historical Schedule

Valuation Date	No.	Annual Pensions	Average Pension	Discounted Value of Pensions	
				Total	Average
12/31/2001	194	\$8,024,912	\$41,366	\$89,789,658	\$462,833
12/31/2002	199	8,200,739	41,210	90,778,242	456,172
12/31/2003	213	8,912,650	41,843	98,996,571	464,773
12/31/2004	223	9,508,625	42,640	100,539,756	450,851
12/31/2005	227	9,674,813	42,620	99,019,946	436,211
12/31/2006	240	10,555,809	43,983	101,679,683	423,665
12/31/2007	247	11,073,395	44,701	108,230,658	438,181
12/31/2008	281	13,298,914	47,327	141,906,051	505,004
12/31/2009	284	13,536,440	47,664	143,970,958	506,940
12/31/2010	292	14,045,546	48,101	147,975,238	506,765
12/31/2011	330	16,729,248	50,695	177,723,136	538,555
12/31/2012	364	19,238,111	52,854	205,949,202	565,795
12/31/2013	369	19,518,876	52,897	206,717,743	560,211
12/31/2014	373	19,575,629	52,481	205,020,992	549,654
06/30/2015	374	19,569,594	52,325	203,282,688	543,537
<b>06/30/2016</b>	<b>378</b>	<b>19,572,072</b>	<b>51,778</b>	<b>205,071,744</b>	<b>542,518</b>

**Retired Members and Survivors  
(Including Alternate Payees)**

**Data as of June 30, 2016  
By Attained Age of Recipient**

<b>Attained Age</b>	<b>No.</b>	<b>Annual Pensions</b>
25-29	1	\$32,925
40-44	2	29,886
45-49	23	1,597,285
50-54	55	3,508,827
55-59	55	3,506,826
60-64	64	3,748,752
65-69	63	2,882,202
70-74	65	2,592,865
75-79	36	1,217,213
80-84	14	455,291
<b>Total</b>	<b>378</b>	<b>\$19,572,072</b>

**Active Members - June 30, 2016  
Age and Service Distribution**

Attained Age	Service						No.	Payroll
	0-4	5-9	10-14	15-19	20-24	25-29		
20-24	10						10	\$472,495
25-29	15	0					15	802,791
30-34	20	12	10				42	3,223,288
35-39	6	5	15	5			31	2,838,169
40-44	2	0	14	27	8		51	5,301,923
45-49			5	14	27	1	47	5,129,531
50-54			1	1	7	1	10	1,104,654
55-59					4		4	448,464
<b>Totals</b>	<b>53</b>	<b>17</b>	<b>45</b>	<b>47</b>	<b>46</b>	<b>2</b>	<b>210</b>	<b>\$19,321,315</b>

**Group Averages:**

Age: 39.5 years  
Service: 12.7 years  
Annual Pay: \$92,006

**Active Members – Three-Year Summary**

	06/30/2016	06/30/2015	12/31/2014
Active Members	210	186	169
Valuation Payroll	\$19,321,315	\$16,589,288	\$15,970,236#
Average Compensation	\$92,006	\$89,190	\$94,498
Average Age (yrs.)	39.5	40.0	40.8
Average Service (yrs.)	12.7	13.5	14.6

*#Includes 27 pay periods. Valuation results were adjusted for 26 pay periods. Average pay without the 27<sup>th</sup> pay period was \$90,998.*