

CITY OF ST. CLAIR SHORES EMPLOYEES RETIREMENT SYSTEM
62ND ACTUARIAL VALUATION REPORT
AS OF JUNE 30, 2014

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January 8, 2015

The Retirement Board
City of St. Clair Shores
Employees Retirement System
St. Clair Shores, Michigan

Dear Board Members:

The results of the 62nd Annual Actuarial Valuation of the liabilities, reserves and contribution rates associated with benefits provided by the City of St. Clair Shores Employees Retirement System are presented in this report. The purpose of the valuation was to measure the System's funding progress and to compute an employer contribution for the ensuing fiscal year, and to determine the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 27. A separate report was issued to provide actuarial information for GASB Statement No. 67.

The valuation was based upon data, furnished by the City, concerning financial operations, individual retirants, beneficiaries and members. Data was not audited by the actuary. We are not responsible for the accuracy or completeness of the information provided.

This report was requested by the Retirement Board and may be provided to parties other than the Board only in its entirety and only with permission of the Board.

The date of the valuation was June 30, 2014.

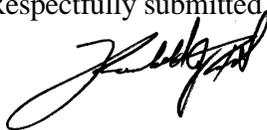
The undersigned actuaries are independent of the plan sponsor.

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.

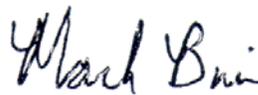
Mark Buis and Randall J. Dziubek are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the City of St. Clair Shores 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 Board.

Respectfully submitted,



Randall J. Dziubek, ASA, EA, MAAA



Mark Buis, FSA, EA, MAAA

RJD/MB:dj

SECTION A

VALUATION RESULTS

Funding Objective

The funding objective of the Retirement System is to establish and receive sufficient contributions to cover benefits payable without passing the cost on to future generations of citizens.

Contributions

The Retirement System is supported by member contributions, City's contributions and investment income from Retirement System assets.

Contributions which satisfy the funding objective are determined by the annual actuarial valuation and are sufficient to:

- (1) cover the actuarial costs allocated to the current year by the actuarial cost methods described in Section C (the normal cost); and
- (2) finance over a period of future years the actuarial cost not covered by present assets and anticipated future normal costs (unfunded actuarial accrued liability).

Contribution requirements for the fiscal year beginning July 1, 2015 are shown on page A-2.

The Board of Trustees of the City of St. Clair Shores Employees Retirement System confirms that the System provides for payment of the required employer contribution as described in Section 20m of Michigan Public Act No. 728.

City's Computed Contributions

Contributions for	For Fiscal Year Beginning July 1,	
NORMAL COST	2015	2014
Age and service pensions	\$ 503,130	\$ 504,063
Death before retirement pensions	17,985	17,937
Disability pensions	30,898	30,814
Total	552,013	552,814
MEMBERS' CONTRIBUTIONS		
Gross contributions	40,582	40,012
Less prospective refunds	5,073	5,059
Available for pensions	35,509	34,953
CITY'S NORMAL COST	516,504	517,861
UNFUNDED ACTUARIAL ACCRUED LIABILITIES#	\$1,946,317	\$1,994,645
TOTAL CITY CONTRIBUTIONS *	\$2,462,821	\$2,512,506

* Contribution amounts for prior fiscal years are shown on page A-6.

Unfunded actuarial accrued liabilities were financed as a level dollar amount over a period of 20 years for the fiscal year beginning July 1, 2014. For the fiscal year beginning July 1, 2015 unfunded actuarial accrued liabilities were financed as a level dollar amount over a period of 19 years.

Derivation of Experience Gain (Loss)

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is expected that gains and losses will cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain (loss) is shown below, along with a year-by-year comparative schedule.

(1) UAAL* at start of year	\$ 20,357,028
(2) Total normal cost	557,873
(3) Actual contributions for pensions	2,602,215
(4) Interest accrual ((1) + 1/2 [(2)-(3)]) x 8.00%	1,546,789
(5) Expected UAAL* before changes (1) + (2) - (3) + (4)	19,859,475
(6) Change from benefit improvements	0
(7) Change from assumptions	0
(8) Expected UAAL* before changes (5) + (6) + (7)	19,859,475
(9) Actual UAAL*	19,429,729
(10) Gain (loss) (8) - (9)	\$ 429,746

* *Unfunded actuarial accrued liabilities.*

<u>Valuation Date</u>	<u>Experience Gain (Loss) As % of Beginning Accrued Liability</u>
6-30-07	2.2 %
6-30-08	(2.0)
6-30-09	2.3
6-30-10	(7.1)
6-30-11	(6.1)
6-30-12	(4.1)
6-30-13	(0.4)
6-30-14	0.8

Summary Statement of System Resources and Obligations

	June 30, 2014	June 30, 2013
A. Present valuation assets		
1. Net assets from System financial statements*	\$40,457,640	\$36,475,015
2. Valuation adjustment	(1,557,392)	816,549
3. Valuation assets	38,900,248	37,291,564
 B. Actuarial present value of expected future employer contributions		
1. For normal costs	3,184,544	3,306,652
2. For unfunded actuarial accrued liability	19,429,729	20,357,028
3. Total	22,614,273	23,663,680
 C. Actuarial present value of expected future member contributions		
	253,040	259,825
 D. Total actuarial present value of present and expected future resources		
	\$61,767,561	\$61,215,069

* *Market Value.*

Actuarial Present Value of Expected Future Benefit Payments

A. To retired members and beneficiaries	\$42,211,131	\$42,033,392
B. To vested terminated members	1,682,982	2,046,522
C. To present active members		
1. Allocated to service rendered prior to valuation date	14,435,864	13,568,678
2. Allocated to service likely to be rendered after valuation date	3,437,584	3,566,477
3. Total	17,873,448	17,135,155
 D. Total actuarial present value of expected future benefit payments		
	\$61,767,561	\$61,215,069

In financing the actuarial accrued liabilities, the valuation assets of \$38,900,248 were distributed as shown below:

Reserves for	Present Valuation Assets Applied to			Totals
	Member Actuarial Accrued Liability	Retired Life Actuarial Liabilities	Contingency Reserve	
Employees' Contributions	\$ 577,328			\$ 577,328
Employer Contributions	(3,888,211)	\$27,272,400		23,384,189
Retired Benefit Payments		14,938,731		14,938,731
Undistributed Income				0
Totals	\$ (3,310,883)	\$42,211,131	\$ none	\$38,900,248

Assets were applied against actuarial accrued liabilities in determining unfunded actuarial accrued liabilities as follows:

	Retired Lives	Active Members	Total
Computed Actuarial Accrued Liabilities	\$42,211,131	\$16,118,846	\$58,329,977
Applied Assets	42,211,131	(3,310,883)	38,900,248
Unfunded Actuarial Accrued Liabilities	\$ none	\$ 19,429,729	\$ 19,429,729

Comparative Schedule

Valuation Date	Actuarial Accrued Liabilities & Reserves	Accrued Assets	Percent Funded	Unfunded Actuarial Accrued Liabilities & Reserves		City's Contribution Rate@
				Dollars	Amortization Period	
06/30/05	\$50,931,381	\$41,062,064	80.6 %	\$ 9,869,317	20 yrs.	25.97 %
06/30/06	52,481,690	42,222,117	80.5	10,259,573	19	26.62 **
06/30/07	53,868,304	44,702,803	83.0	9,165,501	18	26.21 *
06/30/08	55,873,969	45,610,111	81.6	10,263,858	25	\$1,866,531 #
06/30/09	54,466,034	43,364,264	79.6	11,101,770	24	1,812,824 #
06/30/10	55,767,178	41,130,494	73.8	14,636,684	23	2,090,393 *
06/30/11	56,714,374	38,612,848	68.1	18,101,526	22	2,379,350
06/30/12	56,805,539	36,435,503	64.1	20,370,036	21	2,561,038
06/30/13	57,648,592	37,291,564	64.7	20,357,028	20	2,512,506
06/30/14	58,329,977	38,900,248	66.7	19,429,729	19	2,462,821

@ Beginning with the June 30, 2008 valuation, level dollar financing was used. Prior valuations used level percent of payroll.

* Retirement System amended.

Revised actuarial assumptions and/or methods.

Percent Funded is the Ratio of Valuation Assets to Actuarial Accrued Liabilities. This is a traditional measure of a system's funding progress. Except in years when the system is amended or actuarial assumptions are revised, this ratio can be expected to increase gradually toward 100%.

Comments

ACTUARIAL EXPERIENCE: Retirement System experience during the year ended June 30, 2014 was more favorable than expected, resulting in a gain of \$429,746. The gain was primarily attributable to recognized investment income that was more than assumed, offset by losses caused by fewer withdrawals and higher than expected pay increases among active members.

As of June 30, 2014 there are \$1.6 million of unrecognized investment gains that will be gradually recognized over the next three years. Recognition of these gains will put downward pressure on required contributions over the next several years.

The Actuarial Standards of Practice with regard to the mortality assumption has recently been revised. ASOP No. 35 Disclosure Section 4.1.1 now states *“The disclosure of the mortality assumption should contain sufficient detail to permit another qualified actuary to understand the provision made for future mortality improvement. If the actuary assumes zero mortality improvement after the measurement date, the actuary should state that no provision was made for future mortality improvement.”*

The membership size in this group is not sufficiently large to determine if there is a margin for mortality improvements. However, based upon our experience with a broad cross section of public sector plans similar in nature to this plan, it is our opinion that there is no provision for future mortality improvement in the current mortality assumption.

We recommend that prior to the next actuarial valuation consideration be given to performing an Experience Study to review the mortality assumption as well as all other key actuarial assumptions.

Given the System is closed to new entrants, it is anticipated that over time the cash flow needs of the System will lead to adjustments to the allocation of assets between investment classes. This is likely to result in lower expected investment returns in the future. The current investment return assumption is 8%. A lower investment return assumption would result in increases to System liabilities and annual required contributions.

CERTIFICATION: To the best of our knowledge and belief the valuation is complete and accurate and was made in accordance with generally recognized actuarial methods. The actuarial assumptions summarized in Section C are individually and in the aggregate, a reasonable representation of the past and anticipated future experience of the System.

SECTION B
VALUATION DATA

Brief Summary of Benefit Provisions (June 30, 2014)

Regular Retirement (No reduction factor for age)

Eligibility - Age 50 with 25 years of service, or age 60 with 10 or more years of service.

Annual Amount – **AFSCME, Court Non-Union, Court Clerical, and PEA:** Total service multiplied by 2.5% of average final compensation with a maximum of 80% of average final compensation.

Dispatchers: Total service multiplied by 2.5% of average final compensation with a maximum of 75% of average final compensation.

AR4: Total service multiplied by 2.5% of average final compensation with a maximum of 62.5% of average final compensation. Maximum benefit for AR4 members cannot exceed base pay as of termination date.

Type of Average Final Compensation - Highest 5 non-consecutive years out of last 10. Court Clerical and Dispatchers – Highest 5 consecutive years out of last 10.

Deferred Retirement (Vested Benefit)

Eligibility - 10 years of service, benefit begins at age 60.

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

Duty Disability Retirement

Eligibility - No age or service requirement.

Annual Amount - Computed as regular retirement with a minimum benefit of 20% of average final compensation. Upon termination of worker's compensation or age 60, whichever occurs first, benefit is recomputed to include additional service credit for the period worker's compensation was paid.

Non-Duty Disability Retirement

Eligibility - 10 or more years of service.

Annual Amount - Computed as regular retirement.

Death-in-Service Survivor Pension

Eligibility - 10 years of service.

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

Summary of Current Asset Information Furnished for Valuation

BALANCE SHEET

<u>Current Assets</u>		<u>Reserves for</u>	
Cash & Equivalents	\$ 1,708,860	Employees' Contributions	\$ 577,328
Receivables & Accruals	865,558	Employer Contributions	24,941,581
Bonds	2,133,647	Retired Benefit Payments	14,938,731
Common Stocks	8,908,597	Excess Earnings Reserve	719,061
ADR	3,100,469		
Foreign Stocks	2,686,247		
Real Estate	797,870		
Mortgages	2,588,895		
Foreign Gov. & Agencies	268,711		
Other Fixed Income	6,400,048		
Other Equities	12,241,218		
Other Assets (Securities lending)	1,624,131		
Accounts payable	(479,611)		
Amount due to Broker (Securities lending)	(1,667,939)		
Total Current Assets	\$41,176,701	Total Reserves	\$41,176,701
Market Adjustment*	(1,557,392)	Market Adjustment*	(1,557,392)
Total Valuation Assets**	\$39,619,309	Total Valuation Assets**	\$39,619,309

* See page B-4 for derivation of the market adjustment.

** Includes the Excess Earnings Reserve. For purposes of the valuation, the Excess Earnings Reserve is removed, resulting in the June 30 balance shown below.

REVENUES AND EXPENDITURES

	<u>2014</u>
Balance July 1, 2013 ##	\$37,291,564
Revenues	
Employees' contributions	41,177
Employer contributions	2,561,038
Medicare reimbursement#	268,020
Recognized investment income (valuation purposes)	3,647,459
Expenditures	
Benefit payments	4,640,990
Refund of member contributions	0
Medicare payments#	268,020
Balance June 30 ##	\$38,900,248

Medicare payments to retirees are paid monthly by the custodian from Retirement System assets. At the end of each quarter, these amounts are reimbursed to the System by the City.

Excludes the Excess Earnings Reserve.

Development of Funding Value of Assets

Year Ended June 30:	2013	2014	2015	2016	2017
A. Funding Value Beginning of Year	\$36,435,503	\$37,291,564			
B. Market Value End of Year	36,475,015	40,457,640			
C. Market Value Beginning of Year	35,390,198	36,475,015			
D. Non-Investment Net Cash Flow	(1,988,237)	(2,038,775)			
E. Investment Income					
E1. Market Total: B - C - D	3,073,054	6,021,400			
E2. Amount for Immediate Recognition (8.0%)	2,835,311	2,901,774			
E3. Amount for Phased-In Recognition: E1-E2	237,743	3,119,626			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.25 x E3	59,436	779,907			
F2. First Prior Year	(901,200)	59,436	\$ 779,907		
F3. Second Prior Year	807,541	(901,200)	59,436	\$ 779,907	
F4. Third Prior Year	43,210	807,542	(901,198)	59,435	\$ 779,905
F5. Total Recognized Investment Gain (Loss)	8,987	745,685	(61,855)	839,342	779,905
G. Funding Value End of Year: A + D + E2 + F5	37,291,564	38,900,248			
H. Difference between Market & Funding Value	(816,549)	1,557,392			
I. Recognized Rate of Return - Funding Value	8.03%	10.06%			
J. Recognized Rate of Return - Market Value	8.93%	16.98%			

The Funding Value of Assets recognizes assumed investment income (line E.2) fully each year. Differences between actual and assumed investment income (line E.3) are phased-in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than market value. The Funding Value of Assets is unbiased with respect to Market Value. At any time it may be either greater or less than Market Value. If actual and assumed rates of investment income are exactly equal for 4 consecutive years, the Funding Value will become equal to Market Value except for the Excess Earnings Reserve.

Retiree and Beneficiary Comparative Schedule

Year Ended June 30	Added to Rolls		Removed from Rolls		Rolls End of Year				% Incr. In Annual Pensions	Average Pension	Expected Removals	
	No.	Annual Pensions	No.	Annual Pensions	No.	Active Per Retired	Annual Pensions				No.	\$
							Dollars	% of Pay*				
1985	13	\$ 151,488	3	\$ 9,742	91	2.2	\$ 687,354	13.7 %	30.0 %	\$ 7,553	2.2	\$ 13,789
1986	12	108,953	3	13,146	100	1.7	783,161	17.6	13.9	7,832	2.4	14,047
1987	20	189,357	2	7,351	118	1.4	965,167	22.8	23.2	8,179	2.7	15,948
1988	12	93,213	5	25,351	125	1.3	1,033,029	24.3	7.0	8,264	3.0	18,804
1989	13	120,242	5	38,817	133	1.2	1,114,454	24.4	7.9	8,379	3.3	21,399
1990	10	121,449	3	25,967	140	1.2	1,209,936	24.7	7.6	8,642	3.5	23,721
1991	12	115,340	6	23,695	146	1.1	1,301,581	26.8	7.6	8,915	3.8	26,564
1992	4	52,214	2	12,910	148	1.1	1,340,885	26.1	3.0	9,060	4.0	29,661
1993	8	76,157	7	37,863	149	1.1	1,379,179	25.8	2.9	9,256	4.3	32,537
1994	13	182,612	1	8,297	161	1	1,553,494	26.6	12.6	9,649	4.6	35,545
1995	11	221,649	6	43,953	166	0.9	1,731,190	30.8	11.4	10,429	5.2	41,238
1996	13	251,022	6	69,322	173	1.1	1,912,890	33.3	10.5	11,057	5.5	45,700
1997	11	162,889	8	78,664	176	0.9	1,997,115	31.6	4.4	11,347	5.7	48,811
1998	9	187,510	6	43,223	179	0.9	2,141,402	32.8	7.2	11,963	6.2	53,260
1999	16	289,747	12	163,410	183	0.9	2,267,739	32.0	5.9	12,392	5.6	49,841
2000	6	163,121	8	66,733	181	1.0	2,364,127	31.3	4.3	13,061	5.8	52,574
2001	8	147,094	5	38,062	184	0.9	2,473,159	33.8	4.6	13,441	5.9	56,028
2002	9	190,085	11	88,107	182	0.9	2,575,137	32.7	4.1	14,149	6.0	57,982
2003	8	233,641	4	30,096	186	0.8	2,778,682	37.9	7.9	14,939	6.0	61,381
2004	15	454,673	10	96,771	191	0.8	3,136,584	45.0	12.9	16,422	6.5	66,604
2005	14	440,795	10	51,437	195	0.7	3,525,942	54.0	12.4	18,082	6.7	70,640
2006	6	230,143	9	128,414	192	0.7	3,627,671	53.5	2.9	18,894	7.2	84,343
2007	14	271,387	8	69,238	198	0.6	3,829,820	58.4	5.6	19,343	7.3	89,201
2008	6	108,961	5	19,817	199	0.6	3,918,964	59.0	2.3	19,693	7.6	96,874
2009	5	101,229	6	90,820	198	0.6	3,929,373	58.4	0.3	19,845	7.2	90,602
2010	12	206,333	6	72,949	204	0.5	4,062,757	63.8	3.4	19,915	7.7	98,271
2011	12	225,699	6	98,440	210	0.5	4,190,016	71.4	3.1	19,952	8.4	107,628
2012	8	190,569	5	85,405	213	0.4	4,295,180	81.0	2.5	20,165	9.0	114,822
2013	18	444,226	14	195,321	217	0.4	4,544,085	98.8	5.8	20,940	9.6	123,626
2014	7	176,718	10	118,734	214	0.4	4,602,069	99.8	1.3	21,505	9.4	129,877

* Pay used for this purpose is the payroll for the now closed group of active members.

Retiree and Beneficiary Data June 30, 2014
Tabulated by Type of Pensions Being Paid

Type of Pensions Being Paid	No.	Annual Pensions
Age and Service Pensions		
Regular pension - benefit		
Terminating at death of retirant	77	\$1,696,050
Option A pension - joint and survivor		
Benefit	63	1,531,502
Option B pension - modified joint and		
survivor benefit	27	744,196
Survivor beneficiary of deceased age		
and service retiree	29	345,455
Other - benefit being paid to an ex-spouse	<u>7</u>	<u>83,226</u>
Total age and service pensions	203	\$4,400,429
Casualty Pensions		
Duty disability		
Regular pension	2	35,190
Non-Duty Disability pensions		
Regular pension	4	72,041
Option A pension		
Option B pension	1	10,617
Survivor beneficiary of deceased	1	1,296
Non-duty disability retiree	<u>1</u>	<u>5,133</u>
Total	9	124,277
Non-duty death - spouse	2	77,363
Total casualty pensions	<u>11</u>	<u>201,640</u>
Total Pensions Being Paid	214	\$4,602,069

Retiree and Beneficiary Data June 30, 2014
Tabulated by Age

Attained Age	No.	Annual Pensions
45 - 49	1	\$ 5,133
50 - 54	3	71,662
55 - 59	14	462,449
60 - 64	46	1,233,090
65	8	280,913
66	10	246,234
67	8	209,050
68	4	150,375
69	13	372,864
70	3	38,400
71	6	75,938
72	4	83,534
73	4	98,098
74	4	104,653
75	5	106,385
76	6	111,626
77	1	11,434
78	5	103,704
79	5	68,983
80	2	15,295
81	8	81,803
82	8	114,967
83	5	109,142
84	5	68,813
85	9	120,886
86	3	38,349
87	4	32,538
88	4	39,694
89	4	46,597
90	2	20,513
91	3	15,714
92	2	28,154
93	2	23,950
95	1	6,647
96	1	1,634
99	1	2,848
Totals	214	\$4,602,069

Average Age at Retirement: 57.6 years.
Average Age Now: 72.7 years.

Comparative Schedules

Active Members in Valuation

Valuation Date June 30	Active Members	Valuation Payroll	Average			
			Age	Service	Pay	% Inc.
1990	168	\$4,889,949	46.4 yrs.	12.5 yrs.	\$29,107	4.0 %
1991	159	4,858,321	46.0	13.0	30,555	5.0
1992	162	5,139,022	46.1	13.8	31,722	3.8
1993	166	5,353,229	45.8	13.7	32,248	1.7
1994	160	5,838,352	45.5	13.5	36,490	13.2
1995	157	5,623,083	44.7	13.4	35,816	(1.8)
1996	156	5,752,354	44.8	13.0	36,874	2.9
1997	163	6,311,705	44.5	12.2	38,722	5.0
1998	162	6,520,030	44.7	12.2	40,247	3.9
1999	167	7,090,025	44.4	11.1	42,455	5.5
2000	173	7,543,720	44.5	11.2	43,605	2.7
2001	169	7,316,759	45.1	11.5	43,294	(0.7)
2002	169	7,868,956	45.8	11.5	46,562	7.5
2003	154	7,324,919	46.6	11.4	47,564	2.2
2004	145	6,969,930	46.7	11.1	48,068	1.1
2005	134	6,532,301	47.0	10.7	48,749	1.4
2006	134	6,783,425	47.5	10.6	50,623	3.8
2007	124	6,557,936	47.2	11.4	52,887	4.5
2008	121	6,647,356	47.5	12.1	54,937	3.9
2009	117	6,726,665	48.3	12.8	57,493	4.7
2010	109	6,371,328	48.8	13.6	58,453	1.7
2011	98	5,865,873	49.0	14.6	59,856	2.4
2012	92	5,299,757	49.5	15.2	57,606	(3.8)
2013	78	4,599,115	48.8	15.6	58,963	2.4
2014	75	4,611,639	49.4	16.4	61,489	4.3

Active Members Added to and Removed from Rolls

Year Ended	Number Added During Year		Terminations During Year										Active Members End of Year
			Normal Retirement		Disability Retirement		Died-in- Service		Withdrawal				
	A	E	A	E	A	E	A	E	Vested	Other	Total		
06/30/10	0	0	5	8.2	1	0.4	0	0.2	1	1	2	3.0	109
06/30/11	0	0	6	9.1	0	0.3	0	0.2	3	2	5	2.4	98
06/30/12	1	0	4	7.6	0	0.4	0	0.2	3	0	3	2.0	92
06/30/13	0	0	11	9.0	0	0.3	1	0.2	1	1	2	1.8	78
06/30/14	0	0	3	4.8	0	0.3	0	0.2	0	0	0	1.6	75

A represents actual number.

E represents expected number.

**Active Members June 30, 2014
By Age and Years of Service**

Age	Years of Service to Valuation Date							No.	Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up		Salary	Average
30-34		4	2					6	\$ 363,435	\$60,573
35-39		2	2	2				6	313,407	52,235
40-44		2	5	5				12	678,884	56,574
45-49		2	4	2	1			9	578,687	64,299
50-54		1	3	7	3		1	15	979,012	65,267
55-59			4	10	2	2	2	20	1,232,064	61,603
61				1				1	105,630	105,630
62			1		1			2	85,747	42,874
63				1				1	69,604	69,604
64				2				2	141,506	70,753
65+				1				1	63,663	63,663
Totals		11	21	31	7	2	3	75	\$4,611,639	\$61,489

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

Age: 49.4 years

Service: 16.4 years

Annual Pay: \$61,489

Inactive Vested Members June 30, 2014

Tabulated by Age

Age	No.	Estimated Deferred Annual Pensions
41	1	\$ 6,691
44	2	82,912
45	1	12,215
46	1	12,983
47	1	8,883
48	1	28,594
49	1	21,403
50	4	42,011
52	2	20,946
55	3	42,647
57	2	28,664
59	2	12,964
Totals	21	\$320,913

Average Age Now: 51.3 years.

SECTION C

VALUATION METHODS AND ASSUMPTIONS

Actuarial Cost Method

The actuarial cost method is the procedure for allocating the actuarial present value of benefits and expenses to time periods. The method used for your valuation is known as the *individual entry-age actuarial cost method*, and has the following characteristics:

- The annual normal costs for each individual active member is sufficient to accumulate the value of the member's pension at the time of retirement.
- Each annual normal cost is a constant percentage of the member's year-by-year projected pensionable compensation.

The unfunded actuarial accrued liability was financed as a level dollar of member payroll over a period of 19 years.

The valuation assets used for funding purposes is derived as follows: prior year valuation assets are increased by contribution and expected investment income (net of expenses) and reduced by refunds and benefit payments. To this amount is added 25% of the difference between expected and actual investment income for each of the previous four years.

Actuarial Assumptions Used for the Valuation

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

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

- long-term rates of investment return to be generated by the assets of the System
- patterns of pay increases to members
- rates of mortality among members, retirants and beneficiaries
- rates of withdrawal of active members (without entitlement to a retirement benefit)
- rates of disability among members
- the age patterns of actual retirements

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

Actual experience of the System will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

Valuation Assumptions

The rate of investment return was 8.0% (net of expenses) a year, compounded annually. This assumption is used to make money payable at one point in time equal in value to an amount of money payable at another point in time. The assumed real rate of return (the net return in excess of the wage inflation rate) was 4.0%. Economic experience during the last 5 years has been as follows:

	Year Ending					5-Year Average
	6/30/14	6/30/13	6/30/12	6/30/11	6/30/10	
1) Nominal rate of return#	10.1 %	8.0 %	(0.1)%	(0.4)%	(0.1)%	3.5%
2) Increase in CPI	2.1	1.8	1.7	3.6	1.1	2.1%
3) Average salary increase*	4.2	1.7	(3.7)	3.7	3.1	1.8%
4) Real return:						
- investment purposes	8.0	6.2	(1.8)	(4.0)	(1.2)	1.4%
- funding purposes	5.9	6.3	3.7	(4.1)	(3.2)	1.7%
- assumption	4.0	4.0	4.0	4.0	4.0	4.0%

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

* Based on members who were active both at the beginning and end of the year.

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefit amounts will be based. Base wage growth was set to 2.5% for 2012-2019.

Sample Salary Adjustment Factors Used To Project Salaries in Years 2020 and Beyond

Sample Ages	Percent Increase in Salary During Next Year	
	Base	Promotion & Seniority
20	4.0 %	3.7 %
25	4.0	3.2
30	4.0	2.7
35	4.0	2.2
40	4.0	1.4
45	4.0	0.7
50	4.0	0.2
55	4.0	0.0

Mortality Table. The mortality table used was the RP2000 table projected to 2008. This table was first used for the June 30, 2008 valuation. This table provides no margin for future mortality improvement. Sample values follow:

Sample Ages	Single Life Retirement Values			
	Present Value of \$1 Monthly for Life		Future Life Expectancy (Years)	
	Men	Women	Men	Women
50	\$136.86	\$139.34	31.61	34.01
55	129.71	133.01	26.94	29.30
60	120.48	124.83	22.45	24.75
65	109.24	114.86	18.25	20.48
70	96.28	103.27	14.43	16.57
75	81.46	90.15	10.98	13.03
80	65.68	75.64	8.02	9.90

This estimate is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. For disability purposes, the mortality is set forward ten years.

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

Retirement Ages	Percent of Active Members Retiring within Next Year
50	20 %
51	20
52	20
53	20
54	20
55	25
56	25
57	25
58	25
59	25
60	30
61	30
62	30
63	30
64	30
65	100

These rates were first used for the June 30, 2008 valuation.

Rates of separation from active membership are represented by the following table: (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	% of Active Members Separating within Next Year
ALL	0	15.00 %
	1	12.00
	2	10.00
	3	8.00
	4	6.00
25	5 & Over	5.00
30		5.00
35		4.50
40		3.00
45		2.60
50		1.50
55		1.50
60		1.50

The rates were first used for the June 30, 2008 valuation.

Vested members who terminate with a benefit worth less than 100% of their own accumulated contributions were assumed to forfeit their vested benefit.

Rates of disability are represented by the following table:

Sample Ages	Percent Becoming Disabled within Next Year
20	0.03%
25	0.05%
30	0.07%
35	0.13%
40	0.19%
45	0.28%
50	0.45%
55	0.76%
60	1.10%

These rates were first used for the June 30, 1986 valuation. For purposes of the valuation we assume that all disabilities are ordinary, as opposed to non-duty disabilities.

Miscellaneous and Technical Assumptions

June 30, 2014

Marriage Assumption:	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing:	Beginning of the valuation year.
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.
Decrement Operation:	All decrements the first 5 years of service. Only mortality operates during retirement eligibility.
Service Credit Accruals:	It is assumed that members accrue one year of service credit per year.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
Normal Form of Benefit:	Straight life benefit terminating at death of retiree.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.

Glossary

Actuarial Accrued Liability. The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

Accrued Service. The service credited under the plan which was rendered before the date of the actuarial valuation.

Actuarial Assumptions. Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent. A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Experience Gain (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

Glossary

Funding Value of Assets. The value of assets derived by spreading the capital value changes (unrealized and realized gain and losses) in equal dollar installments over four years. This treatment removes the timing of investment activities from the valuation process.

Normal Cost. The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost". Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Reserve Account. An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability. The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

Valuation Assets. The value of current plan assets recognized for valuation purposes.

SECTION D

CERTAIN DISCLOSURES REQUIRED BY STATEMENT NO. 27 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

This information is presented in draft form for review by the System's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the System's financial statements.

The information on the following pages should be used for Employer Reporting under GASB Statement No. 27. Information to be used for plan reporting is now issued in a separate report in accordance with GASB Statement No. 67.

GASB Statement No. 27 Required Supplementary Information

Actuarial Valuation Date	Actuarial Value of Assets (a)	Schedule of Funding Progress			Covered Payroll (c)	UAAL as a % of Covered Payroll ((b - a) / c)
		Actuarial Accrued Liability (AAL) -- Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)		
2005	\$41,062,064	\$50,931,381	\$ 9,869,317	80.6 %	\$6,532,301	151.1 %
2006 *#	42,222,117	52,481,690	10,259,573	80.5	6,783,425	151.2
2007 *	44,702,803	53,868,304	9,165,501	83.0	6,557,936	139.8
2008 #	45,610,111	55,873,969	10,263,858	81.6	6,647,356	154.4
2009 #	43,364,264	54,466,034	11,101,770	79.6	6,726,665	N/A
2010 *	41,130,494	55,767,178	14,636,684	73.8	6,371,328	N/A
2011	38,612,848	56,714,374	18,101,526	68.1	5,865,873	N/A
2012	36,435,503	56,805,539	20,370,036	64.1	5,299,757	N/A
2013	37,291,564	57,648,592	20,357,028	64.7	4,599,115	N/A
2014	38,900,248	58,329,977	19,429,729	66.7	4,611,639	N/A

Schedule of Employer Contributions

Fiscal Yr. Ended June 30	Val. Yr. Ended June 30	Contribution Rates As Percents of Valuation Payroll	Computed Dollar Contribution Based on Valuation	Annual Required Contribution Based on Actual Payroll
2007	2005	25.97 %	\$ 1,812,227	\$ 1,780,567
2008	2006 *#	26.62	1,915,169	1,835,943
2009	2007 *	26.21	1,822,990	1,823,179
2010	2008 #	N/A	1,866,531	1,866,531
2011	2009 #	N/A	1,812,824	1,808,157
2012	2010 *	N/A	2,090,393	2,095,060
2013	2011	N/A	2,379,350	2,379,350
2014	2012	N/A	2,561,038	2,561,038
2015	2013	N/A	2,512,506	-
2016	2014	N/A	2,462,821	-

* Retirement System amended.

Revised actuarial assumptions and/or methods.

GASB Statement No. 27 Required 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, 2014
Actuarial cost method:	Entry Age
Amortization method:	Level dollar
Remaining amortization period:	19 years (closed)
Asset valuation method:	4 year smoothed market
Actuarial assumptions:	
Investment rate of return	8.0%
Projected salary increases*	4.0% - 7.7%
Includes inflation at	4.0%
Cost-of-living adjustments (Compounded)	

Retiree's (effective 7/1/93)	5% cost-of-living increases at age 60 or five years after retirement, whichever is later, with a second increase of 5% five years after the first increase.
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* Wage inflation is assumed to be 2.5% for 2014-2019.

Membership of the plan consisted of the following at June 30, 2014, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits	214
Terminated plan members entitled to but not yet receiving benefits	21
Active plan members	75
Total	310

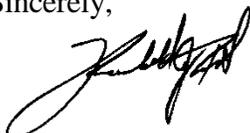
January 8, 2015

Secretary of the Retirement Board
City of St. Clair Shores Employees
Retirement System
27600 Jefferson Circle Drive
St. Clair Shores, Michigan 48081-9971

Dear Board Members:

Enclosed are twenty-five copies of the report of the 62nd Annual Actuarial Valuation for the City of St. Clair Shores Employees Retirement System.

Sincerely,



Randall J. Dziubek

RJD:dj
Enclosures