



## SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

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LISA J. MORRIS  
*Executive Director*

HELEN M. NINOS  
*Deputy Executive Director*

November 24, 2014

Bethany Rhodes, Director/General Counsel  
Ohio Retirement Study Council  
88 E. Broad St., Suite 1175  
Columbus, OH 43215

Dear Bethany:

As required by section 3309.21(A) of the Ohio Revised Code, enclosed please find two new annual valuations prepared by SERS' actuary for our fiscal year ended June 30, 2014: the *Report on the Annual Basic Benefits Valuation*, and the *Report on the Retiree Health Care Valuation*.

As you review these reports, please feel free to contact us if you have any questions.

Sincerely,

**Lisa J. Morris**  
Executive Director

Enclosures

c: The Honorable Dave Burke, Chair, Senate Government Oversight and Reform  
The Honorable Lynn Wachtmann, Chair, House Health and Aging  
Timothy Keen, Director, Office of Budget and Management

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### RETIREMENT BOARD

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**Report on the Annual Basic Benefits Valuation of the  
School Employees Retirement System of Ohio**

**Prepared as of June 30, 2014**





# Cavanaugh Macdonald

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*The experience and dedication you deserve*

November 14, 2014

Board of Trustees  
School Employees Retirement System  
Of Ohio  
300 East Broad Street  
Suite 100  
Columbus, OH 43215-3746

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the basic benefits provided under the School Employees Retirement System of Ohio (SERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2014.

The date of the valuation was June 30, 2014.

The valuation was based upon data, furnished by the Executive Director and the SERS staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the SERS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

Future actuarial results may differ significantly from the current results 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

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The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

A handwritten signature in blue ink that reads 'Thomas J. Cavanaugh'.

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA  
Chief Executive Officer

A handwritten signature in blue ink that reads 'John J. Garrett'.

John J. Garrett, ASA, FCA, MAAA  
Principal and Consulting Actuary

A handwritten signature in blue ink that reads 'Todd B. Green'.

Todd B. Green, ASA, FCA, MAAA  
Principal and Consulting Actuary

TJC/JJG:kc

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**REPORT ON THE ANNUAL VALUATION OF THE  
SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO**

**PREPARED AS OF JUNE 30, 2014**

**SECTION I – SUMMARY OF PRINCIPAL RESULTS**

1. This report, prepared as of June 30, 2014, presents the results of the annual actuarial valuation of the basic benefits provided under the System, including pension, Medicare Part B reimbursement and post-retirement death benefits. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

**SUMMARY OF PRINCIPAL RESULTS**

	June 30, 2014	June 30, 2013
<b>Active members included in valuation</b>		
Number	121,251	121,642
Annual Compensation	\$2,759,281,606	\$2,746,827,535
<b>Retirees</b>		
Number	72,605	70,771
Annual allowances	\$958,537,700	\$898,267,601
<b>Deferred Vesteds</b>		
Number	7,049	7,246
Annual deferred allowances	\$29,152,306	\$29,094,575
<b>Assets (net of Health Care Assets)</b>		
Market related actuarial value	\$12,030,478,476	\$11,125,960,356
Market value	\$12,820,884,107	\$11,300,482,029
<b>Unfunded Accrued Liability</b>	<b>\$5,851,348,695</b>	<b>\$6,121,200,722</b>
<b>Funded Ratio (MVA/AAL)</b>		
Basic Benefits	68.07%	65.30%
Medicare Part B	32.71%	30.64%
Post-retirement Death Benefits	60.00%	55.88%
<b>Employer Contribution Rate</b>		
Normal	1.41%	1.30%
Accrued liability	<u>11.77</u>	<u>12.56</u>
Total	13.18%	13.86%
Accrued liability amortization period (years)	28	29



2. The statute sets a contribution cap of 24% of payroll; 14% from employers and 10% from employees. Employer contributions in excess of those required to support the basic benefits may be allocated to retiree health care funding.
3. The valuation balance sheet showing the results of the valuation is given in Schedule A.
4. Comments on the valuation results are given in Section IV, comments on the experience and the sources of actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.
5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.



## SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's staff. The following tables summarize the membership of the system as of June 30, 2014 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

### Active Members

Number	Payroll	Group Averages		
		Salary	Age	Service
121,251	\$2,759,281,606	\$22,757	48.6	10.0

The total number of active members includes 57,548 vested members and 63,703 non-vested members. The vesting requirement is five years for members who retire prior to August 1, 2017 and ten years for those who retire on and after August 1, 2017.

The following table shows a six-year schedule of active member valuation data.

### SCHEDULE OF SERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2009	125,465	\$2,787,390,954	\$22,216	4.2%
6/30/2010	126,015	2,842,660,159	22,558	1.5
6/30/2011	125,337	2,852,378,614	22,758	0.9
6/30/2012	121,811	2,788,153,585	22,889	0.6
6/30/2013	121,642	2,746,827,535	22,581	(1.3)
6/30/2014	121,251	2,759,281,606	22,757	0.8





The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

### Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retirees and Beneficiaries	62,739	\$835,635,006	\$13,319	74.8
Disability	5,482	87,699,272	15,998	65.1
Survivors	4,384	35,203,422	8,030	71.7
Total in SERS	72,605	\$958,537,700	\$13,202	73.9

This valuation also includes 100,121 inactive members eligible for a contribution refund only (including 50,797 members reported separately who had completed one or more years of service before terminating). Their contributions totaled \$211,777,589 as of June 30, 2014. There were also 7,049 terminated vested members with annual deferred pension benefits of \$29,152,306. Included in the "Retiree" numbers in the above table are 10,391 re-employed retirees with account balances of \$74,456,479 (including employer contributions and interest), 447 re-retirees receiving only an annuity from their contributions and their employers' matching contributions, and 497 re-retirees receiving such annuities in addition to their regular pension benefits. The sum of the annuity payments attributable to these re-retirees is \$3,645,480.



### SECTION III – ASSETS

1. As of June 30, 2014 the total market value of assets amounted to \$13,234,742,308. All figures include the combined Pension Trust Fund, Medicare B Fund, Death Benefit Fund and Health Care Fund but exclude the QEBA Fund.

Asset Summary Based on Market Value		
(1)	Assets at June 30, 2013	\$ 11,679,663,055
(2)	Contributions and Misc. Revenue	867,148,920
(3)	Investment Gain (Loss)	1,917,413,416
(4)	Benefit Payments	(1,229,483,083)
(5)	Assets at June 30, 2014 (1) + (2) + (3) + (4)	\$ 13,234,742,308
(6)	Annualized Rate of Return*	16.7 %

2. The four-year smoothed market related actuarial value of assets used for the current valuation was \$12,030,478,476. Schedule B shows the development of the actuarial value of assets as of June 30, 2014. Again all figures include the combined Pension Trust Fund, Medicare B Fund, Death Benefit Fund and Health Care Fund but exclude the QEBA Fund.

Asset Summary Based on Actuarial Value		
(1)	Assets at June 30, 2013	\$ 11,505,141,382
(2)	Contributions and Misc. Revenue	867,148,920
(3)	Investment Gain (Loss)	1,301,529,458
(4)	Benefit Payments	(1,229,483,083)
(5)	Assets at June 30, 2014 Before Application of Corridor (1) + (2) + (3) + (4)	\$ 12,444,336,677
(6)	Annualized Rate of Return*	11.5 %

\*Based on the approximation formula:  $I/[0.5 \times (A + B - I)]$ , where

- I = Investment Gain (Loss)
- A = Beginning of year asset value
- B = End of year asset value



#### **SECTION IV - COMMENTS ON VALUATION**

Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2014.

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of \$20,534,905,680, of which \$10,141,959,924 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, \$581,477,029 is for the prospective benefits payable on account of present inactive members, and \$9,811,468,727 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of \$12,030,478,476 as of June 30, 2014. The difference of \$8,504,427,204 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, \$2,386,907,773 is the present value of future contributions expected to be made by members, and the balance of \$6,117,519,431 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 1.18% of payroll for basic pension benefits, 0.02% of payroll for post-retirement death benefits, and 0.21% of payroll for Medicare Part B benefits are required to provide the benefits of the System for the average member of SERS. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of \$266,170,736.
3. For pension benefits, it is recommended that the unfunded accrued liability contribution rate payable by the employers on account of retirement benefits be set at 11.21% of payroll. For post-retirement death benefits, it is recommended that the unfunded accrued liability contribution rate payable by the employers on account of retirement benefits be set at 0.03% of payroll. Finally for Medicare Part B benefits, it is recommended that the unfunded accrued liability contribution rate payable by the employers on account of retirement benefits be set at 0.53% of payroll. These rates are sufficient to amortize the unfunded accrued liability of \$5,851,348,695 over 28 years based on the assumption that the aggregate payroll for SERS members will increase by 4.00% each year.
4. The present value of the total future contributions to be made by the employers for basic benefits is the sum of the future employer normal contributions and the unfunded accrued liability contributions and equals \$6,117,519,431.



## SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) match exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2014 is shown below (\$ millions).

### Experience Gain/(Loss)

Total Basic June 30,		2014	2013	2012	2011	2010	2009
(1) UAAL from last valuation	\$	6,121.2	6,357.7	5,811.9	4,312.5	4,745.8	2,689.4
(2) Normal cost from last valuation		308.9	311.9	334.3	392.0	386.3	373.4
(3) Contributions		700.7	695.1	696.7	682.4	703.7	586.9
(4) Interest accrual: [(1) + (2) - (3)*.5] x .0775		471.2	490.0	449.3	349.1	382.4	221.5
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	\$	6,200.6	6,464.5	5,898.8	4,371.2	4,810.8	2,697.4
(6) Change due to plan amendments		0.0	(27.8)	(194.7)	0.0	0.0	0.0
(7) Change due to new actuarial assumption or methods		0.0	0.0	0.0	436.2	0.0	0.0
(8) Expected UAAL after changes: (5) + (6) + (7)	\$	6,200.6	6,436.7	5,704.1	4,807.4	4,810.8	2,697.4
(9) Actual UAAL from this valuation	\$	5,851.3	6,121.2	6,357.7	5,811.9	4,312.5	4,745.8
(10) Total Gain/(loss): (8) - (9)	\$	349.3	315.5	(653.6)	(1,004.5)	498.3	(2,048.4)
(11) Investment Gain/(loss):	\$	403.3	241.0	(692.2)	(1,082.9)	390.6	(2,265.0)
(12) Non-Investment Gain/(loss)	\$	(54.0)	74.4	38.6	67.4	107.8	216.7

Pension June 30,		2014	2013	2012	2011	2010	2009
(1) UAAL from last valuation	\$	5,838.1	6,072.1	5,531.0	4,056.8	4,486.0	2,455.9
(2) Normal cost from last valuation		303.0	305.9	327.9	383.9	378.5	365.9
(3) Contributions		677.8	673.0	673.7	659.0	679.9	564.5
(4) Interest accrual: [(1) + (2) - (3)*.5] x .0775		449.7	468.2	428.0	318.6	362.0	203.2
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	\$	5,913.0	6,173.2	5,613.2	4,100.3	4,546.6	2,460.5
(6) Change due to plan amendments		0.0	(27.1)	(189.0)	0.0	0.0	0.0
(7) Change due to new actuarial assumption or methods		0.0	0.0	0.0	424.5	0.0	0.0
(8) Expected UAAL after changes: (5) + (6) + (7)	\$	5,913.0	6,146.1	5,424.2	4,524.8	4,546.6	2,460.5
(9) Actual UAAL from this valuation	\$	5,574.6	5,838.1	6,072.1	5,531.0	4,056.8	4,486.0
(10) Total Gain/(loss): (8) - (9)	\$	338.4	308.0	(647.9)	(1,006.2)	489.8	(2,025.5)
(11) Investment Gain/(loss):	\$	398.0	237.9	(683.6)	(1,068.1)	386.4	(2,235.0)
(12) Non-Investment Gain/(loss)	\$	(59.6)	70.1	35.7	61.9	103.4	209.5



**SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES**

**Experience Gain/(Loss)**

Medicare Part B June 30,		2014	2013	2012	2011	2010	2009
(1)	UAAL from last valuation	\$ 268.3	270.0	266.5	244.5	248.0	226.6
(2)	Normal cost from last valuation	5.4	5.5	5.9	7.4	7.1	6.8
(3)	Contributions	21.5	20.7	21.5	22.2	22.6	21.7
(4)	Interest accrual: [(1) + (2) - (3)*.5] x .0775	20.4	20.5	20.3	18.7	19.5	17.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$ 272.6	275.3	271.2	248.3	252.0	229.5
(6)	Change due to plan amendments	0.0	(0.6)	(5.6)	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0	10.5	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 272.6	274.7	265.6	258.8	252.0	229.5
(9)	Actual UAAL from this valuation	\$ 262.7	268.3	270.0	266.5	244.5	248.0
(10)	Total Gain/(loss): (8) - (9)	\$ 9.9	6.4	(4.4)	(7.7)	7.5	(18.5)
(11)	Investment Gain/(loss):	\$ 4.5	2.6	(7.3)	(12.8)	3.5	(25.1)
(12)	Non-Investment Gain/(loss)	\$ 5.4	3.8	2.9	5.1	4.0	6.6

Post-Retirement Death Benefits June 30,		2014	2013	2012	2011	2010	2009
(1)	UAAL from last valuation	\$ 14.8	15.6	14.4	11.2	11.8	6.9
(2)	Normal cost from last valuation	0.5	0.5	0.5	0.7	0.7	0.7
(3)	Contributions	1.4	1.4	1.5	1.2	1.2	0.7
(4)	Interest accrual: [(1) + (2) - (3)*.5] x .0775	1.1	1.2	1.1	0.9	1.0	0.6
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$ 15.0	15.9	14.5	11.6	12.3	7.5
(6)	Change due to plan amendments	0.0	(0.1)	(0.1)	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0	1.2	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 15.0	15.8	14.4	12.8	12.3	7.5
(9)	Actual UAAL from this valuation	\$ 14.0	14.8	15.6	14.4	11.2	11.8
(10)	Total Gain/(loss): (8) - (9)	\$ 1.0	1.0	(1.2)	(1.6)	1.1	(4.3)
(11)	Investment Gain/(loss):	\$ 0.8	0.5	(1.3)	(2.0)	0.7	(4.9)
(12)	Non-Investment Gain/(loss)	\$ 0.2	0.5	0.1	0.4	0.4	0.6



## ANALYSIS OF FINANCIAL EXPERIENCE

### Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (\$ Millions)

Type of Activity	\$ Gain (or Loss) For Year Ending 6/30/14			
	Pension	Medicare Part B	Post-Retirement Death Benefits	Total Basic Benefits
<b>Age &amp; Service Retirements.</b> If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (122.0)	\$ (0.5)	\$ (0.1)	\$ (122.6)
<b>Disability Retirements.</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	(55.3)	(0.6)	(0.1)	(56.0)
<b>Death-in Service Benefits.</b> If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	0.0	0.0	0.1
<b>Withdrawal From Employment.</b> If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	43.0	5.1	0.2	48.3
<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	103.4	0.0	0.0	103.4
<b>New Members.</b> Additional accrued liability attributable to members who entered the plan since the last valuation.	(26.7)	(1.4)	(0.1)	(28.2)
<b>Investment Income.</b> If there is a greater investment income than assumed, there is a gain. If less income, a loss.	398.0	4.5	0.8	403.3
<b>Death After Retirement.</b> If retired members live longer than assumed, there is a loss. If not as long, a gain.	2.5	0.5	0.1	3.1
<b>Other.</b> Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(4.6)</u>	<u>2.3</u>	<u>0.2</u>	<u>(2.1)</u>
<b>Gain (or Loss) During Year From Financial Experience</b>	\$ 338.4	\$ 9.9	\$ 1.0	\$ 349.3
<b>Non-Recurring Items.</b> Adjustments for plan amendments, assumption changes and method changes	0.0	0.0	0.0	0.0
<b>Composite Gain (or Loss) During Year</b>	\$ 338.4	\$ 9.9	\$ 1.0	\$ 349.3



## SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers.

### Required Contribution Rates

Contribution for	Pension	Post-Retirement Death Benefits	Medicare Part B	Total Basic Benefits
A. Normal Cost:				
(1) Service retirement benefits	6.53%			
(2) Disability benefits	0.76			
(3) Survivor benefits	0.16			
(4) Refunds	3.73			
(5) Total	11.18%	0.02%	0.21%	11.41%
B. Member Contributions	10.00%	0.00%	0.00%	10.00%
C. Employer Normal Cost: [A(5) - B]	1.18%	0.02%	0.21%	1.41%
D. Unfunded Actuarial Accrued Liability Contributions	11.21%	0.03%	0.53%	11.77%
E. Total Recommended Employer Contribution Rate:[C+D]	12.39%	0.05%	0.74%	13.18%



**SECTION VII - ACCOUNTING INFORMATION**

Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED MEMBERS  
AS OF JUNE 30, 2014**

<b>GROUP</b>	<b>Total</b>
Retirees and beneficiaries currently receiving benefits	72,605
Terminated employees entitled to benefits but not yet receiving benefits	7,049
Active Members	<u>121,251</u>
Total	200,905

Another such item is the Schedule of Funding Progress for pension, post-retirement death and Medicare Part B benefits separately as shown in the following table.





**SCHEDULE OF FUNDING PROGRESS**  
(\$ In Millions)

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (b - a) / (c)
<b>Pension Benefits</b>						
6/30/2009	\$ 9,704	\$ 14,190	\$ 4,486	68.4%	\$ 2,787	161.0%
6/30/2010	10,766	14,823	4,057	72.6	2,843	142.7
6/30/2011	10,378	15,910	5,532	65.2	2,852	194.0
6/30/2012	10,266	16,338	6,072	62.8	2,788	217.8
6/30/2013	10,988	16,826	5,838	65.3	2,747	212.5
6/30/2014	11,882	17,457	5,575	68.1	2,759	202.1
<b>Medicare Part B</b>						
6/30/2009	\$ 113	\$ 361	\$ 248	31.3%	\$ 2,787	8.9%
6/30/2010	122	367	244	33.3	2,843	8.6
6/30/2011	116	382	266	30.3	2,852	9.3
6/30/2012	113	383	270	29.5	2,788	9.7
6/30/2013	119	387	268	30.6	2,747	9.8
6/30/2014	128	390	262	32.7	2,759	9.5
<b>Post-Retirement Death Benefits</b>						
6/30/2009	\$ 19	\$ 31	\$ 12	61.3%	\$ 2,787	0.4%
6/30/2010	21	32	11	65.6	2,843	0.4
6/30/2011	19	33	14	57.6	2,852	0.5
6/30/2012	18	34	16	52.9	2,788	0.6
6/30/2013	19	34	15	55.9	2,747	0.5
6/30/2014	21	35	14	60.0	2,759	0.5



The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2014. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2014
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	28 years
Asset valuation method	4 Year Smoothed Market
Actuarial assumptions	
Investment rate of return*	7.75%
* Includes price inflation at	3.25%
Projected salary increases^	4.00% - 22.00%
^ Includes wage inflation at	4.00%
Cost-of-living adjustment	3.00%



### Schedule of Employer Contributions

Year Ended	Annual Required Contribution	Percentage Contributed
<b>Pension Benefits</b>		
June 30, 2009	268,645,839	100.0%
June 30, 2010	378,201,685	100.0
June 30, 2011	355,959,304	100.0
June 30, 2012	376,816,938	100.0
June 30, 2013	380,083,642	100.0
June 30, 2014	382,098,970	100.0
<b>Medicare Part B</b>		
June 30, 2009	21,688,294	100.0%
June 30, 2010	22,619,935	100.0
June 30, 2011	22,172,922	100.0
June 30, 2012	21,450,368	100.0
June 30, 2013	20,672,040	100.0
June 30, 2014	21,517,805	100.0
<b>Post-Retirement Death Benefits</b>		
June 30, 2009	734,970	100.0
June 30, 2010	1,225,772	100.0
June 30, 2011	1,166,996	100.0
June 30, 2012	1,454,763	100.0
June 30, 2013	1,398,442	100.0
June 30, 2014	1,412,852	100.0



## SCHEDULE A

### Valuation Balance Sheet and Solvency Test

The following valuation balance sheet shows the assets and liabilities of the retirement system as of the current valuation date of June 30, 2014 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2013. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

#### VALUATION BALANCE SHEETS SHOWING THE ASSETS AND LIABILITIES OF THE SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

	June 30, 2014	June 30, 2013
<b>ASSETS</b>		
Current actuarial value of assets	\$ 12,030,478,476	\$ 11,125,960,356
Prospective contributions		
Member contributions	\$ 2,386,907,773	\$ 2,408,904,452
Employer normal contributions	266,170,736	242,384,715
Unfunded accrued liability contributions	<u>5,851,348,695</u>	<u>6,121,200,722</u>
Total prospective contributions	<u>\$ 8,504,427,204</u>	<u>\$ 8,772,489,889</u>
Total assets	<u>\$ 20,534,905,680</u>	<u>\$ 19,898,450,245</u>
<b>LIABILITIES</b>		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 10,141,959,924	\$ 9,498,497,493
Present value of benefits payable on account of active members	9,811,468,727	9,821,290,890
Present value of benefits payable on account of inactive and deferred vested members	<u>581,477,029</u>	<u>578,661,862</u>
Total liabilities	<u>\$ 20,534,905,680</u>	<u>\$ 19,898,450,245</u>



The following tables provide the solvency test for SERS members.

**Solvency Test**  
(\$ in Millions)

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	(1)	(2)	(3)
<b>Pension Benefits</b>							
6/30/2009	\$ 2,470	\$ 7,496	\$ 4,224	\$ 9,704	100.0%	96.5%	0.0%
6/30/2010	2,569	7,850	4,404	10,766	100.0	100.0	7.9
6/30/2011	2,749	8,525	4,636	10,378	100.0	89.5	0.0
6/30/2012	2,826	9,190	4,322	10,266	100.0	81.0	0.0
6/30/2013	2,860	9,796	4,196	10,988	100.0	83.0	0.0
6/30/2014	2,892	10,437	4,128	11,882	100.0	86.1	0.0
<b>Medicare Part B</b>							
6/30/2009	\$ 0	\$ 239	\$ 121	\$ 113	100.0%	47.1%	0.0%
6/30/2010	0	239	128	122	100.0	51.1	0.0
6/30/2011	0	245	138	116	100.0	47.3	0.0
6/30/2012	0	251	132	113	100.0	45.1	0.0
6/30/2013	0	255	132	119	100.0	46.5	0.0
6/30/2014	0	259	131	128	100.0	49.3	0.0
<b>Post-Retirement Death Benefits</b>							
6/30/2009	\$ 0	\$ 24	\$ 7	\$ 19	100.0%	79.2%	0.0%
6/30/2010	0	25	7	21	100.0	84.0	0.0
6/30/2011	0	26	7	19	100.0	74.0	0.0
6/30/2012	0	26	8	18	100.0	69.7	0.0
6/30/2013	0	27	7	19	100.0	72.6	0.0
6/30/2014	0	27	8	21	100.0	75.9	0.0



**SCHEDULE B**  
**Development of Actuarial Value of Assets**

Valuation date June 30:	2013	2014	2015	2016	2017
A. Actuarial Value Beginning of Year	\$ 10,752,023,254	\$ 11,505,141,382			
B. Market Value End of Year	11,679,663,055	13,234,742,308			
C. Market Value Beginning of Year	10,686,768,799	11,679,663,055			
D. Cash Flow					
D1. Contributions	\$ 740,601,623	\$ 746,817,383			
D2. Other Revenue	135,705,046	127,867,227			
D3. Benefit Payments	(1,169,136,796)	(1,229,483,083)			
D4. Net Transfers	<u>(22,301,557)</u>	<u>(7,535,690)</u>			
D5. Net	\$ (315,131,684)	\$ (362,334,163)			
E. Investment Income					
E1. Market Total: B.-C.-D5.	\$ 1,308,025,940	\$ 1,917,413,416			
E2. Assumed Rate (Net of Expenses)	7.75%	7.75%			
E3. Amount for Immediate Recognition	816,013,229	891,133,438			
E4. Amount for Phased-In Recognition	492,012,711	1,026,279,978			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.25 * E4.	\$ 123,003,178	\$ 256,569,995	\$ 0	\$ 0	\$ 0
F2. First Prior Year	(225,310,707)	123,003,178	256,569,995	0	0
F3. Second Prior Year	256,133,554	(225,310,707)	123,003,178	256,569,995	0
F4. Third Prior Year	98,410,558	256,133,554	(225,310,707)	123,003,178	256,569,995
F5. Total Recognized Investment Gain/(Loss)	\$ 252,236,583	\$ 410,396,020	\$ 154,262,466	\$ 379,573,173	\$ 256,569,995
G. Preliminary Actuarial Value End of Year:					
A.+D5.+E3.+F5.	\$ 11,505,141,382	\$ 12,444,336,677			
H. Corridor					
H1. 80% of Market Value	\$ 9,343,730,444	\$ 10,587,793,846			
H2. 120% of Market Value	\$ 14,015,595,666	\$ 15,881,690,770			
I. Actuarial Value End of Year:					
G. Not Less than H1. or Not Greater than H2	\$ 11,505,141,382	\$ 12,444,336,677			
J. Difference Between Market & Actuarial Values	\$ 174,521,673	\$ 790,405,631	\$ 636,143,168	\$ 256,569,995	\$ 0
K. Health Care Valuation Assets	\$ 379,181,026	\$ 413,858,201			
L. Basic Benefits Valuation Assets	\$ 11,125,960,356	\$ 12,030,478,476			

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 4 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.



**SCHEDULE C**

**STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS**

The actuarial assumptions used in the valuation were adopted by the Board in April, 2011.

INTEREST RATE: 7.75% per annum, compounded annually (net after all System expenses).

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed rates of separation from active service are as follows:

Service	Annual Rates of Withdrawal
0	45.00%
1	31.00
2	23.00
3	17.00
4	13.00
5	9.00
10	4.00
15	2.00
20	2.00
25	1.50

Age	Annual Rates of			
	Death		Disability	
	Male	Female	Male	Female
20	.013%	.007%	.020%	.020%
25	.017	.007	.038	.020
30	.020	.009	.068	.026
35	.021	.012	.122	.054
40	.027	.018	.210	.100
45	.040	.024	.310	.168
50	.065	.036	.410	.260
55	.111	.057	.510	.360
60	.199	.111	.550	.400
65	.363	.216	.550	.400
70	.593	.343	.550	.400
74	.851	.510	.550	.400



Annual Rates of Normal Retirements		
Age	Male	Female
50	28.0%	25.0%
55	20.0	21.0
60	18.0	17.0
62	20.0	20.0
65	25.0	25.0
70	14.0	14.0
75	100.0	100.0

For members who are not eligible to retire prior to August 1, 2017, the assumed rates of retirement in the first year of eligibility for a normal retirement and upon completing 30 years of service are 28%. The assumed rates of early retirement for members who retire prior to August 1, 2017 are 14% for males and 13% for females aged 55 to 59 and 8.5% for males and 9.5% for females aged 60 to 64.

**SALARY INCREASES:** Representative values of the assumed annual rates of salary increases are as follows:

Service	Annual Rates of		
	Merit & Seniority	Base (Economy)	Increase Next Year
0	18.00%	4.00%	22.00%
1	8.00	4.00	12.00
2	5.50	4.00	9.50
3	4.00	4.00	8.00
4	3.00	4.00	7.00
5	2.00	4.00	6.00
6	1.25	4.00	5.25
7	1.00	4.00	5.00
8	0.50	4.00	4.50
9	0.25	4.00	4.25
10-14	0.00	4.00	4.00
15 & over	0.00	4.00	4.00

**PAYROLL GROWTH:** 4.00% per annum, compounded annually.

**PRICE INFLATION:** 3.25% per annum, compounded annually.

**DEATH AFTER RETIREMENT:** The mortality table, for post-retirement mortality, used in evaluating allowances to be paid is the 1994 Group Annuity Mortality Table, set back one year for both men and women. Special tables are used for the period after disability retirement. This assumption is used to measure the probabilities of each benefit payment being made after retirement. There is sufficient margin





in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

MARRIAGE ASSUMPTION: 80% married with the husband three years older than his wife.

VALUATION METHOD: Entry age normal cost method. Entry age is established on an individual basis.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule A. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 25% of the difference between market value and expected market value. The actuarial value of assets cannot be less than 80% or more than 120% of market value.



## SCHEDULE D

### SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO Summary of Benefit and Contribution Provisions

<b>Contributions for Basic Benefits</b>	Members contribute 10% of pay and employers contribute 14% of pay. Employer contributions not required to finance basic benefits are allocated to the health care program.
<b>Final Average Salary</b>	Average annual salary over the member's three highest years of service.
<b>Normal Retirement</b>	
Condition for Retirement	
<i>Retire before August 1, 2017 or have 25 years of service or more on or before August 1, 2017</i>	Attainment of age 65 with at least five years of creditable service, or completion of 30 years of creditable service, regardless of age.
<i>Members attaining 25 years of service after August 1, 2017</i>	Attainment of age 67 with at least ten years of creditable service, or attainment of age 57 with at least 30 years of creditable service. Buy-up option available.
Amount of Allowance	The annual retirement allowance payable shall not be greater than 100% of final average salary, and is the greater of: <ol style="list-style-type: none"><li>1. Money Purchase - the greater of: The sum of:<ol style="list-style-type: none"><li>a. An annuity based on the value of the member's accumulated contributions at retirement</li><li>b. A pension equal to the annuity</li><li>c. For members who have 10 or more years of service credit prior to 10/1/1956, an annual benefit of \$180.</li></ol></li><li>2. Defined Benefit - the greater of: The sum of:<ol style="list-style-type: none"><li>a. 2.2% of final average salary multiplied by the member's years of service up to 30,</li><li>b. 2.5% of final average salary multiplied by the member's years of service in excess of 30,</li></ol>or:<ol style="list-style-type: none"><li>c. \$86 multiplied by the years of service.</li></ol></li></ol>



## Early Retirement

### Condition for Early Retirement

*Retire before August 1, 2017 or have 25 years of service or more on or before August 1, 2017*

Not eligible for unreduced service retirement but has attained age 55 with at least 25 years of service, or age 60 with five years of service.

*Members attaining 25 years of service after August 1, 2017*

Attainment of age 62 with at least ten years of creditable service, or attainment of age 60 with at least 25 years of creditable service.

### Amount of Allowance

*Retire before August 1, 2017 or have 25 years of service or more on or before August 1, 2017*

Normal retirement allowance accrued to the date of early retirement. The Defined Benefit amount determined above is adjusted by the following percentages based on attained age or years of service:

<u>Attained Age</u>	<u>Years of Ohio Service Credit</u>	<u>Percentage</u>
58	25	75%
59	26	80
60	27	85
61		88
	28	90
62		91
63		94
	29	95
64		97

*Members attaining 25 years of service after August 1, 2017*

Actuarial equivalent of the normal retirement allowance accrued to the date of early retirement. The Defined Benefit amount determined above is actuarially adjusted for the years before age 65 (age 67 if after August 1, 2017) or 30 years of service, whichever is shorter, but in no event is the adjusted benefit less than the following percentages of the Defined Benefit amount based on years of service:

<u>Years of Ohio Service Credit</u>	<u>Percentage</u>
25	75%
26	80
27	85
28	90
29	95

## Disability Retirement

### Condition for Retirement

An allowance is paid upon becoming permanently disabled after completion of at least 5 years of total service credit.

### Amount of Allowance

1. For those who were active members prior to July 29, 1992 and did not elect the benefit structure outlined below, an allowance based on service to date of



disablement, plus, if the age at disablement is less than 60, continuous service to age 60. The allowance is computed in the same manner as the defined benefit service retirement allowance, subject to a minimum of 30% of FAS and a maximum of 75% of FAS. It is payable for life, unless terminated.

2. For those who became active members after July 28, 1992, and for those who were active members prior to July 29, 1992 who so elected, an allowance equal to the greater of (i) 45% of FAS, or (ii) the lesser of 60% of FAS, or the allowance computed in the same manner as the defined benefit service retirement allowance. The allowance will continue until:
  - a. The date the member is granted a service retirement benefit, or
  - b. The date the allowance is terminated, or
  - c. The later of the date the member attains age 65 or the date the disability allowance has been paid for the minimum duration in accordance with the following schedule:

<u>Age at Disability</u>	<u>Minimum Duration In Months</u>
60 and earlier	60
61	60
62	48
63	48
64	36
65	36
66	24
67	24
68	24
69 and older	12

**Death Benefits Prior to Retirement**

**Death While Eligible to Retire**

If a member dies in service after becoming eligible to retire with a service allowance and leaves a surviving spouse or other sole dependent beneficiary, the survivor may elect to receive the same amount that would have been paid had the member retired the last day of the month of death and elected the 100% joint and survivor form of payment.

**Survivor (Death-in-Service) Allowances**

**Condition for Benefit**

Upon the death of a member with at least 1½ years of Ohio service credit and with at least ¼ year of Ohio contributing service credit within 2½ years prior to the date of death, the survivor allowances are payable as follows:

1. **Qualified Spouse:** A monthly allowance commencing at age 62, except that the benefit is payable immediately if: (1) the qualified deceased member had 10 or more years of Ohio service credit; or (2) is caring for a surviving child, or (3) is incompetent.
2. **Qualified Child:** For allowances that commenced before January 7 2013, an allowance is payable to the qualified



child of a deceased member who has never been married and is under age 18, under age 22 and in school, or adjudged incompetent prior to the member's death and the child attaining age 18 or age 22 if attending school. For allowances that commence on or after January 7, 2013 an allowance is payable to the qualified child of a deceased member who has never been married and is under age 19, or adjudged incompetent prior to the member's death and prior to the child attaining age 19.

3. **Qualified Parent's Allowance:** A monthly allowance is payable to a dependent parent age 65 or more.

**Amount of Allowances**

Except when survived by a qualified child(ren), upon the death of a member prior to retirement, the accumulated contributions of the member without interest is payable. Alternatively, the beneficiary may elect the following amounts, payable monthly while eligible:

<b><u>Number of Qualified Survivors</u></b>	<b><u>Annual Benefit as Percent of Member's FAS</u></b>	<b><u>Minimum Monthly Allowance</u></b>
1	25%	\$96
2	40	186
3	50	236
4	55	236
5 or more	60	236

If the deceased member had attained at least 20 years of service, the total benefits payable to all qualified survivors are not less than:

<b><u>Years of Service</u></b>	<b><u>Annual Benefit as Percent of Member's FAS</u></b>
20	29%
21	33
22	37
23	41
24	45
25	48
26	51
27	54
28	57
29 or more	60

**Termination Benefits**

Refund of Members' Accumulated Contributions

In the event a member leaves service before any monthly benefits are payable on his behalf, his accumulated contributions, without interest, may be refunded.

Deferred Benefits

Members who retire prior to August 1, 2017 must have at least 5 years of service credit and those members who retire on and after August 1, 2017 must have at least 10 years of service credit and are eligible to draw the benefit the first of the month following their 62<sup>nd</sup> birthday.



**Normal Form of Benefit**

Single Life Annuity

**Optional Forms of Benefit**

A member upon retirement may elect to receive his allowance in one of the following forms that are computed to be actuarially equivalent to the applicable retirement allowance:

Upon the death of a retiree, 50%, 100%, or some other percentage of his reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

A reduced retirement allowance shall be continued throughout the life of the pensioner, but with the further guarantee of payment to the pensioner, his beneficiary or his estate for a specified number of years certain.

A member can select a partial lump-sum option at retirement. Under this option, the partial lump-sum shall not be less than 6 times and not more than 36 times the unreduced monthly benefit, and the monthly benefit will be actuarially reduced. In addition, the monthly benefit payable cannot be less than 50% of the unreduced amount.

**Post-Retirement Death Benefit**

Regardless of the form of benefit selected, a lump sum benefit of \$1,000 is paid at the death of the retiree.

**Post-Retirement Increases**

On each anniversary of the initial date of retirement, the allowances of all retirees and survivors are increased by 3% of the base benefit.

**Medicare Part B**

Each recipient of a service retirement benefit, a disability benefit or a survivor benefit who was credited with at least 10 years of service and is covered under Medicare Part B and has chosen the health care option, is reimbursed \$45.50 per month for premiums for that coverage. The reimbursement will continue to the spouse upon the death of the retiree in cases where the retiree elected a Joint and Survivor payment form.

**Re-Employed Retirants**

Eligibility Effective

July 1, 1991, service retirees of SERS, or service or disability retirees of one of the other four Ohio retirement systems who are employed in a SERS covered position are required to contribute to a money purchase annuity, a type of defined contribution plan.

Amount of Allowance

Upon termination of employment, a re-employed retirant who has attained age 65 is eligible to receive an annuity based on the amount of his/her accumulated contributions, and an equal amount of employer contributions, plus interest to the effective date of retirement. Effective July 1, 2006 the amount of employer contributions will be determined by the Board. Interest is granted on the reemployed retirant's prior fiscal year account balance, calculated using a rate determined by the SERS Board, compounded annually. The benefit is payable as a lump sum or as an annuity if the amount of such annuity is at



least \$25. Upon termination of employment, a re-employed retirant who has not attained age 65 may request a lump sum refund of his/her own contributions; there is no payment of employer contributions or interest.

Benefits Payable Upon Death

If a re-employed retirant dies while employed, a lump sum payment of the monthly annuity, discounted to the present value using the current actuarial assumption rate of interest, will be paid to his beneficiary.

If a re-employed retirant dies while receiving a monthly annuity, a lump sum payment will be made to a beneficiary in an amount equal to the excess, if any, of the lump sum payment the re-employed retirant would have received at the effective date of retirement over the sum of the annuity payments received by the re-employed retirant to the date of death.

Member Contributions

Each re-employed retirant is required to contribute 10% of his pay by payroll deductions.

Employer Contributions

Employer contributions are expressed as percents of member covered payroll. Employers are required to contribute 14% of payroll.

Other Benefits

Re-employed retirants of SERS are not eligible to receive any of the other benefits provided to SERS members.

**Member Contributions**

10% of salary.



**SCHEDULE E**

**DETAILED TABULATIONS OF THE DATA**

**Schedule of Retired Members Added to and Removed From Rolls  
Last Six Fiscal Years**

<b>Year Ending June 30</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
			<b><u>Number</u></b>			
Beginning of Year	64,818	65,757	66,127	67,221	69,038	70,771
Added	3,103	2,694	3,472	4,137	4,197	4,144
Removed	2,164	2,324	2,378	2,320	2,464	2,310
End of Year	65,757	66,127	67,221	69,038	70,771	72,605
			<b><u>Annual Retirement Allowances</u></b>			
Beginning of Year	\$ 652,373,571	\$ 693,838,994	\$ 729,859,717	\$ 777,910,918	\$ 838,076,567	\$ 898,267,601
Added	41,970,065	37,351,889	49,577,810	61,519,329	62,841,820	61,331,002
Removed	504,642	1,331,166	1,526,603	1,353,680	2,650,786	1,060,903
End of Year	\$ 693,838,994	\$ 729,859,717	\$ 777,910,918	\$ 838,076,567	\$ 898,267,601	\$ 958,537,700
% Increase in Allowances	6.36%	5.19%	6.58%	7.73%	7.18%	6.71%
Average Annual Allowance	\$ 10,552	\$ 11,037	\$ 11,572	\$ 12,139	\$ 12,693	\$ 13,202





**Annuity and Pension Reserve Fund  
Retired Information June 30, 2014  
Retired Members By Type of Benefit**

Amount of Monthly Benefit		Total	Service	Disability	Survivor
\$ 1 - \$	250	11,210	10,179	88	943
251 -	500	11,691	9,896	544	1,251
501 -	750	10,601	8,925	813	863
751 -	1,000	8,680	7,239	888	553
1,001 -	1,500	12,040	10,278	1,333	429
1,501 -	2,000	7,056	6,041	846	169
Over	2,000	<u>10,880</u>	<u>9,734</u>	<u>970</u>	<u>176</u>
		72,158	62,292	5,482	4,384

Average Monthly Benefit	\$ 1,116	\$ 1,333	\$ 669
Average Age	74.3	65.1	71.7

The 62,292 service retirees shown in the table above are comprised of 57,059 service retirees and 5,233 beneficiaries of deceased retirees. Excluded from the 57,059 service retirees are 447 re-retirees that are receiving a pension-only benefit resulting from the annuitization of the contributions accumulated during active membership. Multiple benefit recipients accounts for the higher total headcount than shown elsewhere in the report.



**Annuity and Pension Reserve Fund  
Retired Information June 30, 2014  
Tabulated by Attained Ages**

Attained Age	Retirement		Disability Retirement		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	0	\$ -	82	\$ 1,173,537	82	\$ 1,173,537
45-49	23	\$ 791,781	194	\$ 3,186,961	217	\$ 3,978,742
50-54	514	\$ 17,633,796	517	\$ 9,743,361	1,031	\$ 27,377,157
55-59	1,832	\$ 56,718,480	1020	\$ 19,814,522	2,852	\$ 76,533,002
60-64	6,570	\$ 113,610,702	1222	\$ 21,975,992	7,792	\$ 135,586,694
65-69	11,366	\$ 171,711,040	844	\$ 13,979,520	12,210	\$ 185,690,560
70-74	11,303	\$ 155,998,599	619	\$ 8,745,280	11,922	\$ 164,743,879
75-79	10,075	\$ 127,762,588	461	\$ 4,940,364	10,536	\$ 132,702,952
80-84	7,508	\$ 82,375,254	309	\$ 2,747,792	7,817	\$ 85,123,046
85-89	5,125	\$ 45,844,336	148	\$ 1,066,223	5,273	\$ 46,910,559
90 & Over	3,190	\$ 21,933,029	66	\$ 325,719	3,256	\$ 22,258,748
Totals	57,506	\$ 794,379,605	5,482	\$ 87,699,271	62,988	\$ 882,078,876

The 57,506 service retirees shown in the table above are comprised of 57,059 unique service retirees, and 447 unique re-retirees. The re-retirees included in the tabulation above are those that are receiving a pension-only benefit resulting from the annuitization of the contributions accumulated during active membership.



**Annuity and Pension Reserve Fund  
Survivors of Annuitants Information June 30, 2014  
Tabulated by Attained Ages**

Attained Age	Life Annuities		Periods Certain		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	38	\$ 160,805	8	\$ 64,737	46	\$ 225,541
45-49	21	\$ 116,132	6	\$ 65,001	27	\$ 181,134
50-54	48	\$ 266,762	3	\$ 28,149	51	\$ 294,912
55-59	103	\$ 1,226,274	2	\$ 4,505	105	\$ 1,230,779
60-64	165	\$ 1,818,558	3	\$ 84,349	168	\$ 1,902,907
65-69	333	\$ 3,441,907	7	\$ 48,860	340	\$ 3,490,767
70-74	586	\$ 5,275,275	11	\$ 99,348	597	\$ 5,374,624
75-79	868	\$ 7,144,351	5	\$ 45,182	873	\$ 7,189,532
80-84	1,134	\$ 9,101,775	2	\$ 11,802	1,136	\$ 9,113,577
85-89	1,074	\$ 7,780,888	0	\$ -	1,074	\$ 7,780,888
90 & Over	816	\$ 4,470,741	0	\$ -	816	\$ 4,470,741
Totals	5,186	\$ 40,803,468	47	\$ 451,934	5,233	\$ 41,255,402



**All Benefit Recipients  
Male and Female Demographic Breakdown  
June 30, 2014**

Attained Age	Number of		Total
	Males	Females	Number
Under 20	30	21	51
20-24	7	13	20
25-29	5	4	9
30-34	4	12	16
35-39	11	19	30
40-44	44	70	114
45-49	140	191	331
50-54	570	674	1,244
55-59	1,364	1,863	3,227
60-64	2,386	6,023	8,409
65-69	3,498	9,751	13,249
70-74	3,429	9,732	13,161
75-79	3,106	8,992	12,098
80-84	2,333	7,199	9,532
85-89	1,478	5,303	6,781
90-94	631	2,783	3,414
95-99	127	682	809
100	3	43	46
101	6	23	29
102	1	15	16
103	1	8	9
104	0	6	6
105 & Over	1	3	4
<b>Total</b>	<b>19,175</b>	<b>53,430</b>	<b>72,605</b>



**Survivor Benefit Fund**  
**Survivors of Deceased Active Member Information June 30, 2014**  
**Tabulated by Attained Ages**

<b>Attained Age</b>	<b>No.</b>	<b>Annual Benefits</b>
Under 45	112	\$ 1,273,789
45-49	87	\$ 1,074,407
50-54	162	\$ 1,872,081
55-59	270	\$ 2,978,757
60-64	449	\$ 4,437,856
65-69	699	\$ 6,172,801
70-74	642	\$ 4,704,813
75-79	689	\$ 5,389,556
80-84	579	\$ 3,738,989
85-89	434	\$ 2,380,488
90 & Over	261	\$ 1,179,887
Totals	4,384	\$ 35,203,422



**Total Active Members as of June 30, 2014  
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
Under 20	755							755
Avg Pay	\$5,793							\$4,373,490
20-24	5,446	88						5,534
Avg Pay	\$8,079	\$19,789						\$45,737,443
25-29	5,454	780	51					6,285
Avg Pay	\$12,997	\$26,250	\$32,026					\$92,992,573
30-34	4,890	1,525	517	64				6,996
Avg Pay	\$14,388	\$28,948	\$36,095	\$39,034				\$135,662,824
35-39	5,327	2,063	1,040	410	34			8,874
Avg Pay	\$13,374	\$25,757	\$36,068	\$39,088	\$44,249			\$179,420,365
40-44	6,405	3,305	2,124	1,026	288	43		13,191
Avg Pay	\$12,922	\$23,018	\$31,049	\$39,284	\$44,653	\$43,996		\$279,847,079
44-49	5,819	4,257	3,553	2,157	732	411	65	16,994
Avg Pay	\$13,179	\$21,774	\$27,483	\$33,429	\$43,688	\$45,310	\$49,108	\$392,927,968
50-54	4,781	4,155	4,880	4,189	1,775	1,113	398	21,291
Avg Pay	\$14,122	\$22,135	\$26,732	\$29,665	\$35,572	\$44,368	\$48,749	\$546,130,662
55-59	3,651	3,069	3,919	4,513	3,009	1,722	747	20,630
Avg Pay	\$14,364	\$23,053	\$27,206	\$28,906	\$32,088	\$37,026	\$45,868	\$554,839,114
60-64	2,123	1,795	2,068	2,300	2,067	1,940	784	13,077
Avg Pay	\$13,301	\$22,353	\$28,196	\$29,671	\$31,304	\$34,220	\$38,709	\$356,356,688
65-69	1,040	795	752	616	609	749	592	5,153
Avg Pay	\$9,457	\$19,928	\$25,426	\$29,076	\$31,240	\$31,949	\$31,680	\$124,418,905
70 & over	538	485	385	209	179	221	454	2,471
Avg Pay	\$8,175	\$12,985	\$18,552	\$23,095	\$27,323	\$26,909	\$28,792	\$46,574,494
<b>Totals</b>	<b>46,229</b>	<b>22,317</b>	<b>19,289</b>	<b>15,484</b>	<b>8,693</b>	<b>6,199</b>	<b>3,040</b>	<b>121,251</b>
<b>Avg Pay</b>	<b>\$12,606</b>	<b>\$22,998</b>	<b>\$28,153</b>	<b>\$30,783</b>	<b>\$33,896</b>	<b>\$37,090</b>	<b>\$39,155</b>	<b>\$22,757</b>

Averages:  
Age: 48.6  
Service: 10.0  
Annual Pay: \$22,757



**Male Active Members as of June 30, 2014  
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
Under 20	454							454
Avg Pay	\$6,212							\$2,820,397
20-24	2,565	51						2,616
Avg Pay	\$8,245	\$22,800						\$22,310,287
25-29	2,494	397	38					2,929
Avg Pay	\$13,143	\$29,814	\$35,003					\$45,943,827
30-34	1,974	663	268	32				2,937
Avg Pay	\$14,990	\$33,721	\$42,754	\$48,023				\$64,942,466
35-39	1,828	637	354	189	23			3,031
Avg Pay	\$14,620	\$32,419	\$46,588	\$47,447	\$44,885			\$73,868,273
40-44	2,004	757	484	343	128	17		3,733
Avg Pay	\$13,677	\$31,312	\$44,954	\$50,817	\$50,870	\$49,325		\$97,650,257
44-49	1,939	840	593	460	292	197	29	4,350
Avg Pay	\$13,458	\$30,157	\$41,562	\$48,674	\$55,476	\$49,025	\$55,502	\$125,928,383
50-54	1,706	996	748	585	334	432	208	5,009
Avg Pay	\$15,428	\$28,905	\$40,198	\$45,494	\$50,094	\$53,865	\$51,516	\$162,508,420
55-59	1,562	967	837	616	416	404	325	5,127
Avg Pay	\$15,867	\$28,697	\$38,679	\$43,043	\$46,673	\$49,774	\$51,889	\$167,811,427
60-64	1,074	771	637	431	336	316	203	3,768
Avg Pay	\$14,588	\$25,603	\$36,197	\$41,070	\$45,307	\$48,021	\$50,687	\$116,854,218
65-69	558	420	318	174	102	105	83	1,760
Avg Pay	\$11,152	\$23,285	\$30,172	\$36,840	\$40,095	\$43,370	\$44,169	\$44,316,766
70 & over	279	254	222	88	46	38	45	972
Avg Pay	\$9,723	\$15,920	\$21,895	\$28,453	\$33,838	\$33,974	\$38,595	\$18,705,283
<b>Totals</b>	<b>18,437</b>	<b>6,753</b>	<b>4,499</b>	<b>2,918</b>	<b>1,677</b>	<b>1,509</b>	<b>893</b>	<b>36,686</b>
<b>Avg Pay</b>	<b>\$13,141</b>	<b>\$28,897</b>	<b>\$39,040</b>	<b>\$44,575</b>	<b>\$48,157</b>	<b>\$49,632</b>	<b>\$50,259</b>	<b>\$25,723</b>

Averages:  
Age: 46.6  
Service: 8.0  
Annual Pay: \$25,623

**Female Active Members as of June 30, 2014  
Tabulated by Attained Ages and Years of Service**



Attained Age	Years of Service to Valuation Date							Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
Under 20	301							301
Avg Pay	\$5,160							\$1,553,093
20-24	2,881	37						2,918
Avg Pay	\$7,931	\$15,638						\$23,427,156
25-29	2,960	383	13					3,356
Avg Pay	\$12,874	\$22,556	\$23,323					\$47,048,746
30-34	2,916	862	249	32				4,059
Avg Pay	\$13,980	\$25,277	\$28,928	\$30,044				\$70,720,358
35-39	3,499	1,426	686	221	11			5,843
Avg Pay	\$12,723	\$22,780	\$30,639	\$31,939	\$42,920			\$105,552,093
40-44	4,401	2,548	1,640	683	160	26		9,458
Avg Pay	\$12,578	\$20,554	\$26,945	\$33,493	\$39,680	\$40,511		\$182,196,822
44-49	3,880	3,417	2,960	1,697	440	214	36	12,644
Avg Pay	\$13,040	\$19,714	\$24,662	\$29,297	\$35,865	\$41,891	\$43,958	\$266,999,584
50-54	3,075	3,159	4,132	3,604	1,441	681	190	16,282
Avg Pay	\$13,397	\$20,001	\$24,295	\$27,095	\$32,206	\$38,343	\$45,721	\$383,622,242
55-59	2,089	2,102	3,082	3,897	2,593	1,318	422	15,503
Avg Pay	\$13,240	\$20,456	\$24,090	\$26,672	\$29,748	\$33,119	\$41,231	\$387,027,686
60-64	1,049	1,024	1,431	1,869	1,731	1,624	581	9,309
Avg Pay	\$11,983	\$19,906	\$24,635	\$27,042	\$28,586	\$31,535	\$34,523	\$239,502,471
65-69	482	375	434	442	507	644	509	3,393
Avg Pay	\$7,495	\$16,168	\$21,949	\$26,019	\$29,459	\$30,087	\$29,644	\$80,102,139
70 & over	259	231	163	121	133	183	409	1,499
Avg Pay	\$6,508	\$9,757	\$13,998	\$19,199	\$25,069	\$25,442	\$27,714	\$27,869,212
<b>Totals</b>	<b>27,792</b>	<b>15,564</b>	<b>14,790</b>	<b>12,566</b>	<b>7,016</b>	<b>4,690</b>	<b>2,147</b>	<b>84,565</b>
<b>Avg Pay</b>	<b>\$12,251</b>	<b>\$20,439</b>	<b>\$24,841</b>	<b>\$27,580</b>	<b>\$30,487</b>	<b>\$33,054</b>	<b>\$34,537</b>	<b>\$21,470</b>

Averages:  
Age: 49.6  
Service: 10.8  
Annual Pay: \$21,470



Active Members as of June 30, 2014



By Annual Pay

Annual Pay	Number of Active Members			Portion of Total Number	
	Men	Women	Totals	Group	Cumulative
Less than \$1,000	218	239	457	0.4%	0.4%
\$1,000 - 1,999	1,202	1,230	2,432	2.0%	2.4%
2,000 - 2,999	2,164	2,059	4,223	3.5%	5.9%
3,000 - 3,999	2,349	2,241	4,590	3.8%	9.7%
4,000 - 4,999	1,693	2,267	3,960	3.3%	12.9%
5,000 - 5,999	1,357	2,241	3,598	3.0%	15.9%
6,000 - 6,999	1,044	2,159	3,203	2.6%	18.5%
7,000 - 7,999	811	2,221	3,032	2.5%	21.0%
8,000 - 8,999	713	2,369	3,082	2.5%	23.6%
9,000 - 9,999	694	2,282	2,976	2.5%	26.0%
10,000 - 11,999	1,252	4,421	5,673	4.7%	30.7%
12,000 - 13,999	1,203	4,607	5,810	4.8%	35.5%
14,000 - 15,999	1,219	5,214	6,433	5.3%	40.8%
16,000 - 17,999	1,200	6,329	7,529	6.2%	47.0%
18,000 - 19,999	1,180	5,982	7,162	5.9%	52.9%
20,000 - 24,999	2,314	12,035	14,349	11.8%	64.7%
25,000 - 29,999	2,048	7,925	9,973	8.2%	73.0%
30,000 - 35,999	3,013	6,786	9,799	8.1%	81.1%
36,000 and over	11,012	11,958	22,970	18.9%	100.0%
<b>Totals</b>	<b>36,686</b>	<b>84,565</b>	<b>121,251</b>		



## **SCHEDULE F**

### **GAIN/LOSS ANALYSIS DETAILS**

#### **COMMENTS**

Regular actuarial valuations measure the Retirement System's present financial position and contributions adequacy by calculating and financing the liabilities created by the present benefit program. This process involves discounting to present values the future benefit payments on behalf of present active and retired members and their survivors. However, valuations do not produce information regarding the amount of increases or decreases in unfunded actuarial accrued liabilities (UAAL) -- gain/loss analyses do.

The overall gain/loss to the Retirement System is the difference between the actual UAAL and the expected UAAL. A gain/loss analysis shows the breakdown of the overall system gain/loss by economic and non-economic risk areas. The economic risk areas are investment return and pay increases. The non-economic risk areas are service retirement, disability retirement, death in active service, termination (vested and non-vested), retiree mortality, and new members. Gains and losses resulting from data adjustments, timing of financial transactions, etc. are included separately as a miscellaneous item.

It is expected that actual experience will not coincide with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Changes in actuarial assumptions should be made for risk areas when the differences between actual and expected experience are consistently sizable over a period of years. Differences over a relatively short period of time may or may not be indicative of long-term trends, which are the basis of actuarial assumptions.

The actuarial assumptions used in this analysis were adopted by the Board in April 2011.

Any historical information and data shown in the report with a valuation date prior to June 30, 2008 were obtained from the previous actuary's report.



**School Employees Retirement System of Ohio**  
**Experience Gains & Losses By Risk Area**  
**Comparative Schedule**  
**(\$ Millions)**

Year Ending June 30	Gain (Loss) by Risk Area									\$	% of AAL
	Economic			Non-Economic							
	Pay Increases	Investment	Age & Service Retirement	Disability	Death In Service	Withdrawal	New Members	Retired Lives	Other <sup>+</sup>		
2005*	101.6	(397.4)	(82.6)	2.1	(0.7)	52.7	(42.7)	12.4	(81.7)	(436.3)	(3.9)
2006*	76.4	44.7	37.9	1.2	0.2	(52.9)	(36.7)	15.8	(145.4)	(58.8)	(0.5)
2007*	121.0	504.3	13.4	0.9	(0.3)	(73.2)	(37.2)	(10.2)	(1.1)	517.6	4.1
2008	95.8	(6.6)	(96.1)	(3.5)	(0.6)	8.1	(51.3)	72.4	81.2	99.4	6.1
2009	107.5	(2,265.2)	(50.8)	(28.7)	(0.6)	(11.9)	(50.4)	51.8	200.1	(2,048.2)	(14.0)
2010	182.5	390.5	(40.6)	(23.4)	(0.5)	11.0	(38.1)	46.5	(29.6)	498.3	3.4
2011	198.4	(1,082.9)	(59.2)	(28.1)	(0.7)	15.4	(36.4)	(1.0)	(10.0)	(1,004.5)	(6.2)
2012	178.7	(692.0)	(154.8)	(47.7)	(0.2)	46.5	(29.8)	51.9	(6.2)	(653.6)	(3.9)
2013	219.2	241.0	(121.9)	(53.6)	0.0	61.1	(35.1)	2.9	1.9	315.5	1.8
2014	103.4	403.3	(122.6)	(56.0)	0.1	48.3	(28.2)	3.1	(2.1)	349.3	2.0

\* Reported by a prior actuary

+ Includes effect of changes in data, timing of financial transactions, etc.



The market related actuarial value of assets is based on a four-year average of adjusted market value returns. The difference between the actual returns at market value for the year and expected returns is determined. Twenty-five percent (25%) of that difference is added to the expected value along with corresponding amounts from each of the prior three years.

The actuarial value of assets for the basic benefits as of June 30, 2014 was \$12,030,478,476. The value for the previous year was \$11,125,960,356.

**School Employees Retirement System of Ohio  
Development of Gain (Loss) for Basic Benefits  
From Investment Return  
For the Year Ended June 30, 2014  
(\$ Millions)**

	<u>\$ Millions</u>
1. Actuarial value of assets as of June 30, 2013	\$ 11,126.0
2. Actuarial value of assets as of June 30, 2014	
a. Actual	12,030.5
b. If 7.75% assumed investment return was achieved for all phased-in years recognized in the asset method	11,627.2
3. Gain (Loss): 2a minus 2b	<u>\$ 403.3</u>



**Pay Increases During the 2013- 2014 Valuation Year  
To Members Active at Beginning and End of Year**

Central Age Group Beginning of Year	Number	Pay Increases	
		Actual	Expected
Under 25	2,148	(0.62)%	18.02%
25	3,794	6.77	13.01
30	4,777	6.54	9.57
35	6,446	5.31	8.06
40	10,334	5.33	7.03
45	14,450	4.68	6.14
50	19,282	3.67	5.30
55	19,677	2.96	4.97
60	13,193	2.32	4.86
65 & Over	8,081	1.93	4.90
Total	102,182	3.73	6.00



**Members Who Became Age & Service Retirees During the 2013- 2014 Valuation Year  
(Retirement With Allowance Beginning Immediately)**

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 plus	
Under 50					44		19	63
50					6		15	21
51					10		26	36
52					13	1	25	39
53					9	2	36	47
54					15	3	33	51
55					16	23	55	94
56					10	30	46	86
57					16	25	32	73
58					16	33	52	101
59					17	35	37	89
60		20	38	56	76	60	60	310
61		15	26	39	37	57	49	223
62		27	39	48	51	58	35	258
63		20	40	27	35	57	46	225
64		19	30	22	33	48	49	201
65		30	59	49	83	92	76	389
66		23	37	45	53	66	55	279
67		15	35	22	31	39	31	173
68		11	20	14	17	25	32	119
69		20	24	12	18	24	30	128
70 & Over		60	115	80	47	62	124	488
<b>Totals</b>	<b>0</b>	<b>260</b>	<b>463</b>	<b>414</b>	<b>653</b>	<b>740</b>	<b>963</b>	<b>3,493</b>

	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 plus	
Avg. Monthly Benefit	\$ 0	\$ 327	\$ 606	\$ 844	\$ 1,075	\$ 1,403	\$ 2,349	\$ 1,331
Avg. FAS	\$ 0	\$ 20,285	\$ 26,788	\$ 29,537	\$ 30,229	\$ 33,109	\$ 41,922	\$ 32,618
Number of Retirees	0	260	463	414	653	740	963	3,493

Average Age: 63.5  
Average Service: 22.5



**Members Who Died in 2013- 2014 Valuation Year  
With a Death-in-Service Allowance Payable**

Central Age Group Beginning of Year	Number
Under 25	
25	
30	
35	0
40	3
45	4
50	16
55	9
60	20
65	13
70 & Over	7
Total	72

Average Age: 57.3  
Average Service: 17.2



**Members Who Died in 2013- 2014 Valuation Year  
and Received a Refund of Contributions**

Central Age Group Beginning of Year	Number
Under 25	
25	
30	1
35	3
40	4
45	
50	1
55	2
60	2
65	
70 & Over	
Total	13

Average Age: 49.0  
Average Service: 3.2





**Members Who Became Disability Retirees  
During the 2013- 2014 Valuation Year**

Central Age Group Beginning of Year	Number
Under 25	
25	
30	
35	2
40	7
45	30
50	48
55	102
60	79
65	7
70 & Over	6
Total	281

Average Age: 54.2  
Average Service: 13.5  
Average FAS: \$30,674



**Members Receiving a Refund of Contributions  
or Becoming Inactive Without a Refund in  
the 2013- 2014 Valuation Year  
(Non-vested Terminations)**

<b>Central Age Group Beginning of Year</b>	<b>Number</b>
Under 25	861
25	2,348
30	1,558
35	1,182
40	1,193
45	1,465
50	1,286
55	1,115
60	602
65	274
70 & Over	192
<b>Total</b>	<b>12,076</b>

Average Age: 39.0  
Average Service: 2.6



**Members Who Became Inactive  
in the 2013- 2014 Valuation Year  
with a Deferred Allowance  
(Vested Terminations)**

Central Age Group Beginning of Year	Number
Under 25	0
25	0
30	2
35	15
40	24
45	44
50	94
55	131
60	137
65	40
70 & Over	12
Total	499

Average Age: 54.2  
Average Service: 13.4



## **SCHEDULE G**

### **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 series of payments is called an actuarial equivalent of another series of payments if the two series have the same actuarial present value.

**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.

**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.

**Plan Termination Liability.** The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for future service and salary. The termination liability will generally be less than the liabilities computed on a "going concern" basis and is not normally determined in a routine actuarial valuation.

**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. Generally based on book value plus a portion of unrealized appreciation or depreciation.



**APPENDIX A**

**ACTUARIAL ACCRUED LIABILITIES  
AS OF JUNE 30, 2014**

<b>Present Value of:</b>	<b>Pension Benefits</b>	<b>Medicare Part B</b>	<b>Post-Retirement Death Benefit</b>	<b>Total Basic Benefits</b>
Future benefits to present retirees and survivors	\$ 9,868,848,889	\$ 247,172,381	\$ 25,938,654	\$ 10,141,959,924
Benefits and refunds to present inactive members	568,105,460	12,133,430	1,238,139	581,477,029
Allowances to present active members				
Service	6,761,642,792	114,890,661	7,033,657	6,883,567,110
Disability	266,863,707	4,542,620	394,282	271,800,609
Survivor benefits	92,741,372	1,665,344	-	94,406,716
Withdrawal	(101,486,678)	10,021,215	81,246	(91,384,217)
Total Active AAL	7,019,761,193	131,119,840	7,509,185	7,158,390,218
Total AAL	<u>\$ 17,456,715,542</u>	<u>\$ 390,425,651</u>	<u>\$ 34,685,978</u>	<u>\$ 17,881,827,171</u>



**APPENDIX B**

**BREAKDOWN OF TOTAL AND ACCRUED LIABILITIES  
AS OF JUNE 30, 2014**

	Total Liability	Accrued Liability
Active Members		
Retirement	\$8,257,403,670	\$6,761,642,792
Death	128,023,666	92,741,372
Disability	450,243,445	266,863,707
Termination	792,458,122	(101,486,678)
Medicare Part B	171,952,253	131,119,840
Death after Retirement	<u>11,387,571</u>	<u>7,509,185</u>
Total	\$9,811,468,727	\$7,158,390,218
Retirees		
Retirement/Survivor/Disability	\$9,868,848,889	\$9,868,848,889
Medicare Part B	247,172,381	247,172,381
Death after Retirement	<u>25,938,654</u>	<u>25,938,654</u>
Total	\$10,141,959,924	\$10,141,959,924
Deferred Vested Members	294,647,465	294,647,465
Inactive Members	<u>286,829,564</u>	<u>286,829,564</u>
Total Actuarial Values	\$20,534,905,680	\$17,881,827,171
Actuarial Value of Assets		<u>12,030,478,476</u>
Unfunded Actuarial Accrued Liability		\$5,851,348,695



**APPENDIX C**  
**COMPARATIVE SCHEDULE**  
**AS OF JUNE 30, 2014**

Valuation Date June 30	Active Members				Retired Lives				Accrued Liability	Valuation Assets \$ Millions	UAAL
	Number	Payroll \$ Millions	Average Salary		Number		Annual Benefits				
			\$	% Increase	Retired	Active / Retired	\$ Millions	% of Payroll			
2005	122,855	2,453	19,963	2.7	61,433	2.0	527.9	21.5	11,961	8,893	3,137 *
2006	123,266	2,553	20,714	3.8	62,521	2.0	566.8	22.2	12,627	9,542	3,155 *
2007	123,013	2,603	21,163	2.2	63,529	1.9	607.4	23.3	13,303	10,640	2,734 *
2008	124,370	2,652	21,322	0.8	64,818	1.9	652.4	24.6	14,062	11,372	2,689
2009	125,465	2,787	22,216	4.2	65,757	1.9	693.8	24.9	14,582	9,836	4,746
2010	126,015	2,843	22,558	1.5	66,127	1.9	729.9	25.7	15,222	10,909	4,312
2011	125,337	2,852	22,758	0.9	67,221	1.9	777.9	27.3	16,325	10,513	5,812
2012	121,811	2,788	22,889	0.6	69,038	1.8	838.1	30.1	16,755	10,397	6,358
2013	121,642	2,747	22,581	-1.3	70,771	1.7	898.3	32.7	17,247	11,126	6,121
2014	121,251	2,759	22,757	0.8	72,605	1.7	958.5	34.7	17,882	12,030	5,851

\* after the adjustment to reflect health care asset restatement



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**Report on the Retiree Health Care  
Valuation of the  
School Employees Retirement System of Ohio**

**Prepared as of June 30, 2014**







# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

November 6, 2014

Board of Trustees  
School Employees Retirement System  
Of Ohio  
300 East Broad Street  
Suite 100  
Columbus, OH 43215-3746

Dear Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require actuarial valuations of retiree medical and other post-employment benefit plans. We have submitted the results of the annual actuarial valuation of the Retiree Health Care Valuation of the School Employees Retirement System of Ohio (SERS) prepared as of June 30, 2014. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that the Annual Required Contribution (ARC) required by GASB Statement 45 is 5.77% of active payroll payable for the fiscal year ending June 30, 2015. Any net claims or premiums paid for retiree health care are considered contributions toward the ARC. Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

The medical and drug benefits of the Plan are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method with the normal cost rate determined as a level percentage of payroll. GASB requires the discount rate used to value a plan be based on the likely return of the assets held in trust to pay benefits. The discount rate used in this valuation is 5.25%. Gains and losses are reflected in the unfunded accrued liability that is amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.00% annually. The assumptions recommended by the actuary are, in the aggregate, reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan and meet the parameters for the disclosures under GASB 43 and 45.

The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by amounts employers and retirees can afford (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, plan changes, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the Plan's liability will be required.

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November 6, 2014  
Board of Trustees  
Page 2

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Thomas J. Cavanaugh'.

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA  
Chief Executive Officer

A handwritten signature in blue ink, appearing to read 'Alisa Bennett'.

Alisa Bennett, FSA, FCA, EA, MAAA  
Principal and Consulting Actuary

TJC/AB:lb



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**REPORT ON THE ANNUAL VALUATION OF THE  
SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO**

**PREPARED AS OF JUNE 30, 2014**

**SECTION I – SUMMARY OF PRINCIPAL RESULTS**

1. This report, prepared as of June 30, 2014, presents the results of the annual actuarial valuation of retiree health care offered to SERS members. For convenience of reference, the principal results of the valuation and a comparison with the preceding valuation results are summarized in the following table.

	June 30, 2014	June 30, 2013
<b>Active members included in valuation</b>		
Number	121,251	121,642
Annual Compensation	\$2,759,281,606	\$2,746,827,535
<b>Service Retirees</b>		
Number	31,559	31,615
<b>Disability Retirees</b>		
Number	3,560	3,669
<b>Spouses of Retirees</b>		
Number	6,066	6,413
<b>Spouses of Deceased Retirees</b>		
Number	2,059	2,093
<b>Survivor Benefit Recipients</b>		
Number	976	1,048
<b>Children</b>		
Number	490	494
<b>Deferred Vesteds</b>		
Number	4,481	4,336
<b>Assets</b>		
Market Value	\$413,858,201	\$379,181,026
<b>Unfunded Accrued Liability</b>	\$2,061,751,051	\$2,539,118,459
<b>Actuarial Accrued Liability</b>	\$2,475,609,252	\$2,918,299,485
<b>Funded Ratio (MVA/AAL)</b>	16.72%	12.99%
<b>Employer Contribution Rate</b>		
Normal	2.82%	3.26%
Accrued Liability	<u>2.95%</u>	<u>3.64%</u>
Total	5.77%	6.90%
Employer Contribution Toward Health Care*	2.32%	1.64%
Accrued liability amortization period	30	30

\* Includes 1.50% of payroll surcharge



2. The employer health contribution rate is set at 2.32%. This rate includes the anticipated revenue from the minimum surcharge level for the 2014-2015 fiscal year of \$20,450.
3. The valuation balance sheet showing the results of the valuation is given in Schedule A.
4. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by the employer are given in Section VI.
5. There were no changes in interest rate, or age related morbidity assumptions since the last valuation. The following changes were reflected in this valuation:
  - 2015 Medicare Plan Changes include:
    - Aetna will have a preferred provider network for members residing in Ohio.
    - The out-of-pocket maximum is lower for most Medicare plans.
    - HealthSpan (formerly Kaiser) is changing its Medicare coverage and no new members are allowed to join in 2015.
  - 2015 Non-Medicare Plan Changes include:
    - Some out-of-pocket costs are changing including changes to the deductibles, primary care visit co-pays, specialist office visit co-pay, urgent care visit co-pay, and coverage in a skilled nursing facility is now limited to 100 days.
    - Out-of-pocket maximums now include the deductibles, co-pays and coinsurance for in-network services in accordance with the Affordable Care Act. Medical plan costs are tracked separately from prescription drug costs.
  - An early retirement assumption has been added for members retiring after August 1, 2017.
6. Schedule B details the actuarial assumptions and methods employed. Schedule C gives a summary of the benefit and contribution provisions of the plan.



## **SECTION II – MEMBERSHIP DATA**

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2014 upon which the valuation was based. Detailed tabulations of the data are given in Schedule D.

### **Active Members**

<b>Number</b>	<b>Payroll</b>	<b>Group Averages</b>		
		<b>Salary</b>	<b>Age</b>	<b>Service</b>
121,251	\$2,759,281,606	\$22,757	48.6	10.0

The following table shows a six-year schedule of active member valuation data.

### **SCHEDULE OF SERS ACTIVE MEMBER VALUATION DATA**

<b>Valuation Date</b>	<b>Number</b>	<b>Annual Payroll</b>	<b>Annual Average Pay</b>	<b>% Increase in Average Pay</b>
6/30/2009	125,465	\$2,787,390,954	\$22,216	4.2%
6/30/2010	126,015	2,842,660,159	22,558	1.5
6/30/2011	125,337	2,852,378,614	22,758	0.9
6/30/2012	121,811	2,788,153,585	22,889	0.6
6/30/2013	121,642	2,746,827,535	22,581	(1.3)
6/30/2014	121,251	2,759,281,606	22,757	0.8



The following table shows the number of retired members and their beneficiaries receiving health care as of the valuation date as well as average ages.

**Retired Lives**

Type of Benefit Recipient	Number	Average Age
Service Retirees	31,559	76.1
Disability Retirees	3,560	66.9
Spouses	9,101	77.9
Children	490	26.5
Total	44,710	75.2

This valuation also includes 4,481 inactive members eligible for health care.



### SECTION III – ASSETS

1. As of June 30, 2014 the total market value of assets amounted to \$413,858,201.

Asset Summary Based on Market Value			
(1)	Assets at June 30, 2013	\$	379,181,026
(2)	Contributions and Misc. Revenue		173,964,433
(3)	Investment Gain (Loss)		48,707,210
(4)	Benefit Payments		<u>(187,994,468)</u>
(5)	Assets at June 30, 2014	\$	413,858,201
	(1) + (2) + (3) + (4)		
(6)	Annualized Rate of Return*		13.1 %

\*Based on the approximation formula:  $I/[0.5 \times (A + B - I)]$ , where

- I = Investment Gain (Loss)
- A = Beginning of year asset value
- B = End of year asset value





#### **SECTION IV - COMMENTS ON VALUATION**

Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2014.

1. The total valuation balance sheet on account of health care shows that the System has total prospective health care liabilities of \$3,340,402,966, of which \$952,544,998 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, \$15,658,777 is for the prospective benefits payable to current deferred vested members, and \$2,372,199,191 is for the prospective benefits payable on account of present active members. Against these health care liabilities the System has a total market value of assets of \$413,858,201 as of June 30, 2014. The difference of \$2,926,544,765 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of health care. Of this amount, \$0 is the present value of future contributions expected to be made by members, and the balance of \$2,926,544,765 represents the present value of future contributions payable by SERS.
2. SERS' contributions on account of health care consists of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 2.82% of payroll are required to provide the benefits of the System for the average new member of SERS.
3. Prospective employer normal contributions on account of health care at the above rates have a present value of \$864,793,714. When this amount is subtracted from \$2,926,544,765, which is the present value of the total future contributions to be made by the employer, there remains \$2,061,751,051 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by SERS on account of health care be set at 2.95% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of \$2,061,751,051 over 30 years on the assumption that the aggregate payroll for members will increase by 4.00% each year.



## **SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES**

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2014 is shown below (\$ thousands).

### **Experience Gain/(Loss)**

(1)	UAAL* as of 6/30/13	\$	2,539,118
(2)	Normal cost from last valuation		89,482
(3)	Expected employer contributions		190,390
(4)	Interest accrual: [(1) + (2) - (3)] x .0525		<u>128,006</u>
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$	2,566,216
(6)	Change due to plan amendments		0
(7)	Change due to new actuarial assumptions		36,081
(8)	Change due to claims and retiree premiums		(561,218)
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	\$	2,041,079
(10)	Actual UAAL as of 6/30/14	\$	2,061,751
(11)	Total gain/(loss): (9) - (10)	\$	(20,672)
	(a) Contribution shortfall		(118,114)
	(b) Investment gain		29,168
	(c) Experience gain/(loss) (11) - (11a) - (11b)	\$	68,274
(12)	Accrued liabilities as of 6/30/13	\$	2,918,299
(13)	Experience gain/(loss) as percent of actuarial accrued liabilities at start of year (11c) / (12)		2.3%

\* unfunded actuarial accrued liability



## ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities  
Resulting from Difference Between  
Assumed Experience & Actual Experience  
(\$ Millions)

Type of Activity	\$ Gain (or Loss) For Year Ending 6/30/14
<b>Age &amp; Service Retirements.</b> If members retire at older ages, there is a gain. If younger ages, a loss.	\$ 2.7
<b>Disability Retirements.</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	3.8
<b>Death-in Service Benefits.</b> If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.5)
<b>Withdrawal From Employment.</b> If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	51.0
<b>Claims Increases.</b> If there are smaller claims increases than assumed creates a gain; larger, a loss.	561.2
<b>New Members.</b> Additional accrued liability attributable to members who entered the plan since the last valuation.	(31.4)
<b>Investment Income.</b> If there is a greater investment income than assumed, there is a gain. If less income, a loss.	29.2
<b>Contribution Shortfall.</b> If there are more contributions than the ARC, there is a gain. If less contributions, a loss.	(118.1)
<b>Death After Retirement.</b> If retired members live longer than assumed, there is a loss. If not as long, a gain.	24.3
<b>Other.</b> Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	19.3
<b>Gain (or Loss) During Year From Financial Experience</b>	\$ 540.5
<b>Non-Recurring Items.</b> Adjustments for plan amendments, assumption changes and method changes	(36.1)
<b>Composite Gain (or Loss) During Year</b>	\$ 504.4



**SECTION VI – REQUIRED CONTRIBUTION RATES**

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2014/2015 fiscal year.

**Required Contribution Rates**

Contribution for	Amount	% of Payroll
A. Normal Cost	\$ 77,821,168	2.82%
B. Member Contributions*	\$ 0	0.00%
C. Employer Normal Cost: [A - B]	\$ 77,821,168	2.82%
D. Unfunded Actuarial Accrued Liability**	\$ 81,289,114	2.95%
E. Total Recommended Employer Contribution Rate: [C+D]	\$ 159,110,282	5.77%
F. Employer Contribution Toward Health Care <sup>+</sup>	\$ 64,015,333	2.32%

\* The liabilities are net of retiree contributions towards their health care.

\*\* Based on 30-year amortization of the UAAL from June 30, 2014.

+ Includes 1.50% of payroll surcharge.

**Ten-Year History of Employer Contribution Rates**

Fiscal Year Ending June 30	Employer Health Care Contribution Rate	Surcharge Percentage	Total Health Care Contribution Rate
2005	3.43%	1.50%	4.93%
2006	3.42	1.50	4.92
2007	3.32	1.50	4.82
2008	4.18	1.50	5.68
2009	4.16	1.50	5.66
2010	0.46	1.50	1.96
2011	1.43	1.50	2.93
2012	0.55	1.50	2.05
2013	0.16	1.50	1.66
2014	0.14	1.50	1.64



**SECTION VII - ACCOUNTING INFORMATION**

Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2014. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2014
Actuarial cost method	Entry Age
Amortization	Level Percent Open
Remaining amortization period	30 years
Asset valuation method	Market Value
Actuarial assumptions	
Investment rate of return*	5.25%
* Includes price inflation at	3.25%
Wage increases	4.00%
Medical Trend Assumption	
Pre-Medicare	7.75% - 5.00%
Medicare	6.00% - 5.00%
Year of Ultimate Trend	2018 - 2019

Another required item of disclosure is the Schedule of Funding Progress shown in the following table.



**SCHEDULE OF FUNDING PROGRESS**  
(\$ in Millions)

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c))
6/30/2009	\$376	\$4,280	\$3,904	8.8%	\$2,787	140.1%
6/30/2010	325	2,369	2,044	13.7	2,843	71.9
6/30/2011	356	2,410	2,054	14.8	2,852	72.0
6/30/2012	355	2,691	2,336	13.2	2,788	83.8
6/30/2013	379	2,918	2,539	13.0	2,747	92.4
6/30/2014	414	2,476	2,062	16.7	2,759	74.7

**Schedule of Employer Contributions**

Year Ended	Annual Required Contribution (ARC) (a)	Employer Contribution (b)	Retiree Drug Subsidy (RDS) and Other Contributions (c)	Total Contribution (d) = (b)+(c)	Percentage of ARC Contributed (e) = (d)/(a)
June 30, 2009	\$373,789,127	\$163,411,488	\$23,504,101	\$186,915,589	50.0%
June 30, 2010	315,535,278	60,142,014	24,414,855	84,556,869	26.8
June 30, 2011	169,146,052	86,908,283	0	86,908,283	51.4
June 30, 2012	155,857,785	56,476,230	0	56,476,230	36.2
June 30, 2013	171,402,038	45,489,443	0	45,489,443	26.5
June 30, 2014	190,390,431	46,097,206	29,200,200	75,297,406	39.5



## SCHEDULE A

### Valuation Balance Sheet

The following valuation balance sheet shows the assets and liabilities of the retirement system as of the current valuation date of June 30, 2014 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2013.

#### VALUATION BALANCE SHEETS SHOWING THE ASSETS AND LIABILITIES OF THE SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

	June 30, 2014	June 30, 2013
<b>ASSETS</b>		
Current market value of assets	\$ 413,858,201	\$ 379,181,026
Prospective contributions		
Employer normal contributions	864,793,714	1,023,128,041
Unfunded accrued liability contributions	<u>2,061,751,051</u>	<u>2,539,118,459</u>
Total prospective contributions	<u>\$ 2,926,544,765</u>	<u>\$ 3,562,246,500</u>
Total assets	<u>\$ 3,340,402,966</u>	<u>\$ 3,941,427,526</u>
<b>LIABILITIES</b>		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 952,544,998	\$ 1,142,242,620
Present value of benefits payable on account of active members	2,372,199,191	2,784,849,764
Present value of benefits payable on account of deferred vested members	<u>15,658,777</u>	<u>14,335,142</u>
Total liabilities	<u>\$ 3,340,402,966</u>	<u>\$ 3,941,427,526</u>



The following table provides the solvency test for SERS members.

**Solvency Test  
(\$ in Millions)**

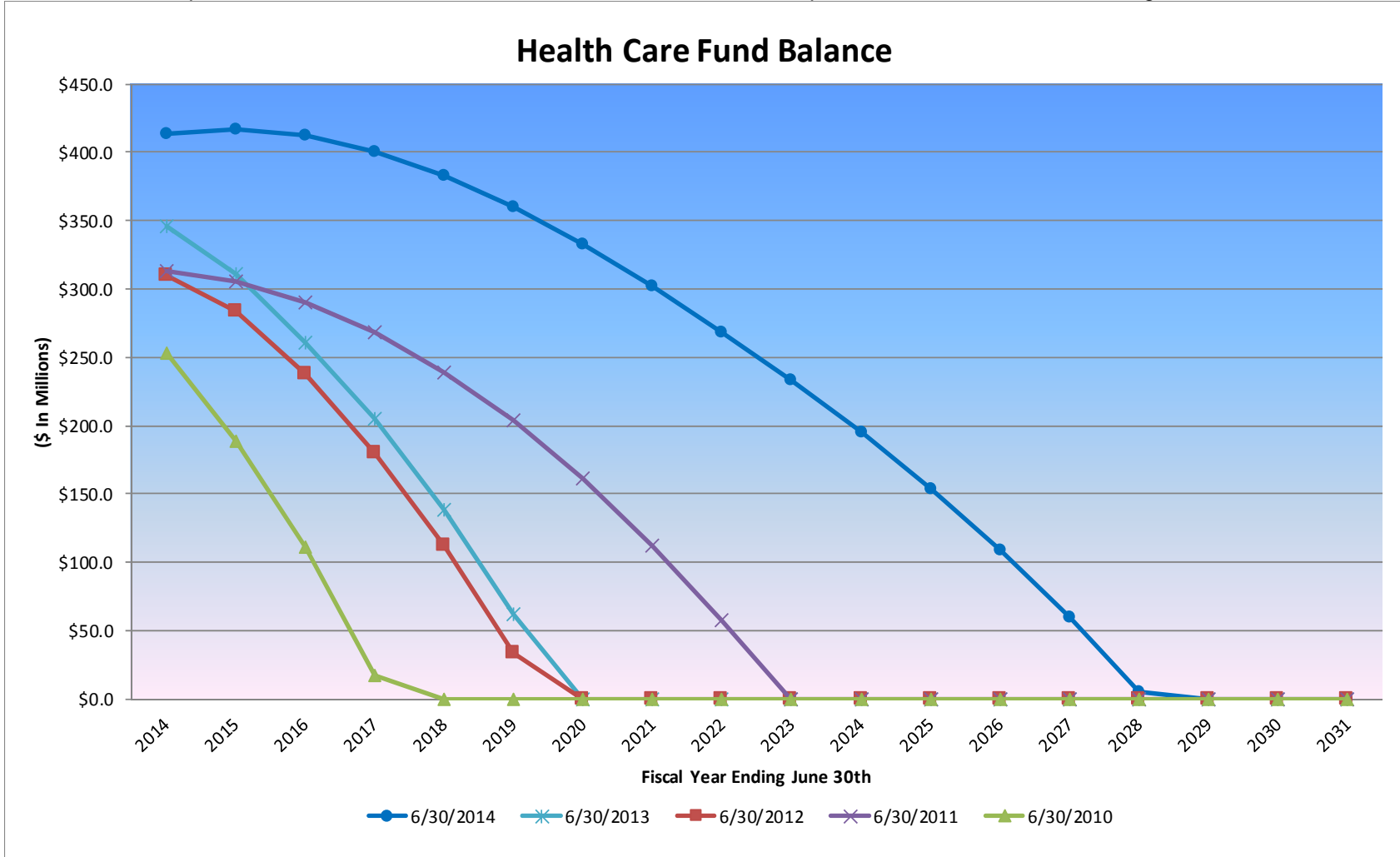
Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)			(1)	(2)	(3)
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)					
6/30/2009	\$0	\$1,895	\$2,385	\$376	100.0%	19.8%	0.0%	
6/30/2010	0	970	1,399	325	100.0	33.5	0.0	
6/30/2011	0	897	1,513	356	100.0	39.7	0.0	
6/30/2012	0	1,074	1,617	355	100.0	33.1	0.0	
6/30/2013	0	1,157	1,761	379	100.0	32.8	0.0	
6/30/2014	0	968	1,508	414	100.0	42.8	0.0	





### Solvency Chart

The following chart shows the projected Health Care Fund Balances from the five most recent valuations. The prior year projections are based on assumptions as of the prior year valuation dates. Starting with the June 30, 2011 valuation, the projections are based on a 7.75% future asset rate of return assumption and assumed health care contribution rates based on the pension valuation and the surcharge calculation.





**SCHEDULE B**

**STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS**

The decremental assumptions used in the valuation were adopted by the Board in April, 2011.

INTEREST RATE: 5.25% per annum, compounded annually (net after all System expenses).

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions:

Calendar Year	Non-Medicare*	Medicare*
2014	7.75%	6.00%
2015	6.75	5.75
2016	6.25	5.50
2017	5.75	5.25
2018	5.25	5.00
2019 and beyond	5.00	5.00

\* Contributions are assumed to be 0% in calendar year 2014.

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase	
	Medical	Prescription Drug
Under 41	0.00%	0.00%
41 – 45	2.50	1.25
46 – 50	2.60	1.30
51 – 55	3.20	1.60
56 – 60	3.40	1.70
61 – 65	3.70	1.85
66 – 70	3.20	1.60
71 – 75	2.40	1.20
76 – 80	1.80	0.90
81 – 85	1.30	0.65
85 and over	0.00	0.00

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of retiree participation and spouse coverage are as follows:

Retiree Gender	Spouse Coverage	Dependent Child Coverage
Male	50.0%	0.0%
Female	40.0%	0.0%

Wives are assumed to be three years younger than husbands.



ANTICIPATED PLAN PARTICIPATION (continued):

Years of Service	Service Retiree Participation	Disabled Retiree Participation	Deferred Vested Retiree Participation	Death in Service Surviving Spouse Participation
1.5 – 5	N/A	N/A	N/A	100.0%
5 – 9	N/A	100.0%	N/A	100.0
10 – 14	25.0%	100.0	50.0%	100.0
15 – 19	45.0	100.0	50.0	100.0
20 – 24	70.0	100.0	50.0	100.0
25 – 29	75.0	100.0	50.0	100.0
30 – 34	80.0	100.0	50.0	100.0
35 and over	90.0	100.0	50.0	100.0

ANTICIPATED PLAN ELECTIONS: The assumed annual rates of member plan elections are as follows:

Plan Type	Future Retirees	
	Non-Medicare	Medicare
PPO	94.4%	94.0%
HMO	5.6%	6.0%

Anticipated plan elections within the above plan types are further expanded below:

Plan Type	Future Retirees*	
	Non-Medicare	Medicare
<u>PPO</u>		
Medical Mutual PPO	95.8%	0.0%
Aetna Medicare <sup>SM</sup> Plan	0.0%	100.0%
AultCare PPO	4.2%	0.0%
<u>HMO</u>		
PrimeTime	0.0%	34.5%
HealthSpan	79.4%	41.2%
Paramount HMO	20.6%	24.3%

\* Future disabled retirees are assumed to have 85% Non-Medicare coverage and 15% Medicare coverage before age 65.

ANTICIPATED MEDICARE COVERAGE AT AGE 65: The assumed annual rates of future retirees obtaining Medicare coverage at age 65 are as follows:

Medicare Coverage	Percent Covered
No Medicare at age 65	1.0%
Medicare Part A	98.0%
Medicare Part B Only	1.0%

Current service retirees, disabled benefit recipients, spouses and dependent children under age 65 were assumed to have similar Medicare coverage at age 65 as their post-Medicare counterparts.



HEALTH CARE PREMIUM DISCOUNT PROGRAM PARTICIPATION: Current service retirees, disabled benefit recipients, spouses and dependent children reported as qualifying for the Health Care Premium Discount Program were assumed to continue participating in the program for their lifetime. Future service retirees, disabled benefit recipients and spouses are assumed to be ineligible for the Health Care Premium Discount Program.

MONTHLY EXPECTED MEDICAL/PRESCRIPTION DRUG CLAIMS COSTS (INCLUDES ADMINISTRATIVE EXPENSES): Following are charts detailing expected claims for the year following the valuation date:

Retiree Costs						
Medicare Status	Aetna Choice POS II and Aetna Indemnity	Medical Mutual PPO	Aetna Medicare <sup>SM</sup>	AultCare PPO and PrimeTime	HealthSpan	Paramount HMO
Non-Medicare	\$1,157	\$1,157	n/a	\$925	\$936	\$1,398
Medicare A	\$551	n/a	\$188	\$216	\$308	\$243
Medicare B Only	n/a	n/a	\$483	\$925	\$1,192	\$595

Spouse Costs						
Medicare Status	Aetna Choice POS II and Aetna Indemnity	Medical Mutual PPO	Aetna Medicare <sup>SM</sup>	AultCare PPO and PrimeTime	HealthSpan	Paramount HMO
Non-Medicare	\$983	\$983	n/a	\$739	\$751	\$1,116
Medicare A	\$551	n/a	\$188	\$216	\$308	\$243
Medicare B Only	n/a	n/a	\$483	\$739	\$1,192	\$595

Children Costs						
Medicare Status	Aetna Choice POS II and Aetna Indemnity	Medical Mutual PPO	Aetna Medicare <sup>SM</sup>	AultCare PPO and PrimeTime	HealthSpan	Paramount HMO
Non-Medicare	\$290	\$290	n/a	\$163	\$167	\$249
Medicare A	\$551	n/a	\$188	\$216	\$308	\$243

The above amounts are shown as average costs and represent premiums paid to insurers.



ANNUAL EXPECTED MEDICAL/PRESCRIPTION DRUG COSTS (INCLUDES ADMINISTRATIVE EXPENSES) (continued): In the valuation, the premium costs are converted to age 65 amounts, age adjusted and blended based on actual elections for current retirees, current disabled retirees, current retiree spouses and current dependent children, and based on projected elections for future retirees and future spouses. The age adjusted and blended amounts are as follows:

Annual Pre-65 Blended Costs Age Adjusted to 65							
Pre-65 Cost Type	Future Service Retirees	Future Disabled Retirees	Future Spouses	Current Service Retires	Current Disabled Retirees	Current Retiree Spouses	Current Dependent Children
Medical	\$12,952	\$11,110	\$10,970	\$12,791	\$10,616	\$7,282	\$4,877
Prescription Drug	2,300	2,158	1,951	2,304	2,109	1,771	867

Annual 65 & Older Blended Costs Age Adjusted to 65						
65 & Older Cost Type	Future Service Retirees	Future Disabled Retirees	Future Spouses	Current Service Retires	Current Disabled Retirees	Current Retiree Spouses
Medical	\$ 670	\$ 670	\$ 639	\$ 664	\$ 788	\$ 582
Prescription Drug	1,353	1,353	1,335	1,337	1,358	1,312



SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed rates of separation from active service are as follows:

Service	Annual Rates of Withdrawal
0	45.00%
1	31.00
2	23.00
3	17.00
4	13.00
5	9.00
10	4.00
15	2.00
20	2.00
25	1.50

Age	Annual Rates of			
	Death		Disability	
	Male	Female	Male	Female
20	.013%	.007%	.020%	.020%
25	.017	.007	.038	.020
30	.020	.009	.068	.026
35	.021	.012	.122	.054
40	.027	.018	.210	.100
45	.040	.024	.310	.168
50	.065	.036	.410	.260
55	.111	.057	.510	.360
60	.199	.111	.550	.400
65	.363	.216	.550	.400
70	.593	.343	.550	.400
74	.851	.510	.550	.400

Annual Rates of Normal Retirements		
Age	Male	Female
50	28.0%	25.0%
55	20.0	21.0
60	18.0	17.0
62	20.0	20.0
65	25.0	25.0
70	14.0	14.0
75	100.0	100.0

For members retiring after August 1, 2017 under the new eligibility requirements, the rates of retirement in the first year of eligibility are assumed to increase to 28% at age 67 and the assumed rates of early retirement are 8.5% for males aged 60 to 66, and 9.5% for females aged 60 to 66. The assumed rates of early retirement for members who retire prior to August 1, 2017 are 14% for males and 13% for females aged 55 to 59, and 8.5% for males and 9.5% for females aged 60 to 64.



SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Service	Annual Rates of		
	Merit & Seniority	Base (Economy)	Increase Next Year
0	18.00%	4.00%	22.00%
1	8.00	4.00	12.00
2	5.50	4.00	9.50
3	4.00	4.00	8.00
4	3.00	4.00	7.00
5	2.00	4.00	6.00
6	1.25	4.00	5.25
7	1.00	4.00	5.00
8	0.50	4.00	4.50
9	0.25	4.00	4.25
10-14	0.00	4.00	4.00
15 & over	0.00	4.00	4.00

PAYROLL GROWTH: 4.00% per annum, compounded annually.

PRICE INFLATION: 3.25% per annum, compounded annually.

DEATH AFTER RETIREMENT: The mortality table, for post-retirement mortality, used in evaluating allowances to be paid is the 1994 Group Annuity Mortality Table, set back one year for both men and women. Special tables are used for the period after disability retirement. This assumption is used to measure the probabilities of each benefit payment being made after retirement. There is sufficient margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

VALUATION METHOD: Entry age normal cost method. Entry age is established on an individual basis.

ASSET VALUATION METHOD: Market value.



## SCHEDULE C

### SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO Summary of Main Plan Provisions as of June 30, 2014

#### **ELIGIBILITY FOR ACCESS TO RETIREE HEALTH CARE:**

##### **Normal Retirement:**

*Retire before August 1, 2017 or have 25 years of service or more on or before August 1, 2017:* Attainment of age 65 with at least ten years of creditable service, or completion of 30 years of creditable service, regardless of age.

*Members attaining 25 years of service after August 1, 2017:* Attainment of age 67 with at least ten years of creditable service, or attainment of age 57 with at least 30 years of creditable service. Buy-up option available.

##### **Early Retirement:**

*Retire before August 1, 2017 or have 25 years of service or more on or before August 1, 2017:* Not eligible for unreduced service retirement but has attained age 55 with at least 25 years of service, or age 60 with ten years of service.

*Members attaining 25 years of service after August 1, 2017:* Attainment of age 62 with at least ten years of creditable service, or attainment of age 60 with at least 25 years of creditable service.

**Disability Retirement:** Permanently disabled after completion of at least 5 years of total service credit.

**Survivor Allowances:** Beneficiary must be receiving monthly benefits due to the death of a member, age and service retiree or disability benefit recipient.

**Termination:** Members that terminated with at least ten years of creditable service and have attained age 60 (age 62 for those becoming members after May 13, 2008 and for members retiring after August 1, 2017).

#### **PREMIUM PAYMENTS:**

Retirees, spouses and dependent children pay either all or a portion of the cost of health care and prescription drug coverage as well as a \$35 monthly surcharge. The remainder of the cost is paid by SERS.

Retirees, spouses and dependent children may qualify for the Health Care Premium Discount Program if their household income falls at or below a specified level. Income limits are updated annually and those wishing to participate in the program must apply every year. Retirees, spouses and dependent children qualifying for the program will receive a 25% discount in their monthly health care premiums.





**PREMIUM PAYMENTS (Continued):**

The following schedule lists the percentage of the retiree premium paid by service retirees:

Years of Service	Retirement Date on or before July 1, 1989	Retirement Date August 1, 1989 through July 1, 2008	Retirement Date on or after August 1, 2008
	Service Retiree Premium Contribution Percentage		
5 – 9	50.0%	N/A	N/A
10 – 14	17.5	100.0%	100.0%
15 – 19	17.5	50.0	100.0
20 – 24	17.5	25.0	50.0
25 – 29	17.5	17.5	30.0
30 – 34	17.5	17.5	20.0
35 and over	17.5	17.5	15.0*

\* Additional 1% reduction for each year over 35.

The following schedule lists the percentage of the retiree premium paid by disability benefit recipients:

Years of Service	Disabled Benefit Recipient Premium Contribution Percentage
5 – 9	50.0%
10 – 24	33.0
25 and over	17.5

The following schedule lists the percentage of the spouse premium paid by spouses of retirees:

Service Retiree, Disability Recipient, or Member's Qualified Service	Spouse Premium Contribution Percentage
1.5 – 24	100.0%
25 – 29	90.0
30 and over	80.0

Dependent children pay 70.0% of the child premium.

**OTHER POST-EMPLOYMENT BENEFITS:** Health care and prescription drug coverage is provided in all post-employment group health care plan options. Dental and vision coverage are made available to retirees, spouses and dependent children at the full cost.



## **2015 RETIREE GROUP HEALTH CARE PLAN OPTIONS:**

### **Options available to members without Medicare**

- ◇ Aetna Choice POS II with Express Scripts prescription drug coverage (only available to members with special circumstances)
- ◇ AultCare PPO with AultCare prescription drug coverage
- ◇ HealthSpan with HealthSpan prescription drug coverage
- ◇ Medical Mutual of Ohio PPO with Express Scripts prescription drug coverage
- ◇ Paramount HMO with Express Scripts prescription drug coverage

### **Options available to members with Medicare:**

- ◇ Aetna Medicare<sup>SM</sup> Plan (PPO) with Express Scripts Medicare Part D Prescription Drug Plan
- ◇ Aetna Indemnity Plan with Express Scripts Medicare Part D Prescription Drug Plan (only available to members with special circumstances)
- ◇ AultCare PPO with AultCare prescription drug coverage (only available to members with Part B Only)
- ◇ HealthSpan HMO with HealthSpan Medicare Part D prescription drug coverage (not available to new members in 2015)
- ◇ Paramount Elite Medicare Advantage with Express Scripts Medicare Part D Prescription Drug Plan
- ◇ PrimeTime Health Plan through AultCare with PrimeTime Medicare Part D prescription drug coverage

The following pages contain information that was provided by SERS in the 2015 Open Enrollment Guide and the 2015 Member Health Care Guide.



**2015 Contribution Rates**

<b>Years of Service</b>	Aetna Choice POS II and Aetna Indemnity	Medical Mutual PPO	Aetna Medicare <sup>SM</sup>	AultCare PPO and PrimeTime	HealthSpan	Paramount HMO
<b>Service Retirement Date on or before July 1, 1989 Premiums</b>						
5-9.999 years						
Without Medicare	\$638	\$638		\$498	\$503	\$734
With Medicare A & B	\$311		\$144	\$143	\$189	\$156
With Medicare B Only			\$288	\$498	\$631	\$333
10-24.999 years & over						
Without Medicare	\$246	\$246		\$197	\$199	\$280
With Medicare A & B	\$131		\$73	\$73	\$89	\$78
With Medicare B Only			\$123	\$197	\$244	\$139
25 years & over						
Without Medicare	\$246	\$246		\$197	\$199	\$280
With Medicare A & B	\$131		\$73	\$73	\$89	\$78
With Medicare B Only			\$73	\$73	\$89	\$78

<b>Years of Service</b>	Aetna Choice POS II and Aetna Indemnity	Medical Mutual PPO	Aetna Medicare <sup>SM</sup>	AultCare PPO and PrimeTime	HealthSpan	Paramount HMO
<b>Service Retirement Date August 1, 1989 through July 1, 2008 Premiums</b>						
10-14.999 years						
Without Medicare	\$1,241	\$1,241		\$960	\$971	\$1,443
With Medicare A & B	\$586		\$253	\$251	\$343	\$278
With Medicare B Only			\$540	\$960	\$1,227	\$630
15-19.999 years						
Without Medicare	\$638	\$638		\$498	\$503	\$734
With Medicare A & B	\$311		\$144	\$143	\$189	\$156
With Medicare B Only			\$288	\$498	\$631	\$333
20-24.999 years						
Without Medicare	\$337	\$337		\$266	\$269	\$385
With Medicare A & B	\$173		\$89	\$89	\$112	\$96
With Medicare B Only			\$161	\$266	\$333	\$184
25 years & over						
Without Medicare	\$246	\$246		\$197	\$199	\$280
With Medicare A & B	\$131		\$73	\$73	\$89	\$78
With Medicare B Only			\$73	\$73	\$89	\$78



**2015 Contribution Rates  
(continued)**

<b>Years of Service</b>	<b>Aetna Choice POS II and Aetna Indemnity</b>	<b>Medical Mutual PPO</b>	<b>Aetna Medicare<sup>SM</sup></b>	<b>AultCare PPO and PrimeTime</b>	<b>HealthSpan</b>	<b>Paramount HMO</b>
<b>Service Retirement Date on or after August 1, 2008 Premiums*</b>						
10-19.999 years						
Without Medicare	\$1,241	\$1,241		\$960	\$971	\$1,443
With Medicare A & B	\$586		\$253	\$251	\$343	\$278
With Medicare B Only			\$540	\$960	\$1,227	\$630
20-24.999 years						
Without Medicare	\$638	\$638		\$498	\$503	\$734
With Medicare A & B	\$311		\$144	\$143	\$189	\$156
With Medicare B Only			\$288	\$498	\$631	\$333
25-29.999 years						
Without Medicare	\$397	\$397		\$313	\$316	\$455
With Medicare A & B	\$200		\$100	\$100	\$127	\$108
With Medicare B Only			\$100	\$100	\$127	\$108
30-34.999 years*						
Without Medicare	\$276	\$276		\$220	\$222	\$315
With Medicare A & B	\$145		\$79	\$78	\$97	\$84
With Medicare B Only			\$79	\$78	\$97	\$84

\* Further reductions for each year over 35.

<b>Years of Service</b>	<b>Aetna Choice POS II and Aetna Indemnity</b>	<b>Medical Mutual PPO</b>	<b>Aetna Medicare<sup>SM</sup></b>	<b>AultCare PPO and PrimeTime</b>	<b>HealthSpan</b>	<b>Paramount HMO</b>
<b>Disability Benefit Recipient Premiums</b>						
5-9.999 years						
Without Medicare	\$638	\$638		\$498	\$503	\$734
With Medicare A & B	\$311		\$144	\$143	\$189	\$156
With Medicare B Only			\$288	\$498	\$631	\$333
10-24.999 years						
Without Medicare	\$433	\$433		\$340	\$344	\$496
With Medicare A & B	\$217		\$107	\$106	\$137	\$115
With Medicare B Only			\$202	\$340	\$428	\$231
25 years & over						
Without Medicare	\$246	\$246		\$197	\$199	\$280
With Medicare A & B	\$131		\$73	\$73	\$89	\$78
With Medicare B Only			\$73	\$73	\$89	\$78



**2015 Contribution Rates  
(continued)**

<b>Years of Service</b>	Aetna Choice POS II and Aetna Indemnity	Medical Mutual PPO	Aetna Medicare <sup>SM</sup>	AultCare PPO and PrimeTime	HealthSpan	Paramount HMO
<b>Spouse Premiums (Service Retiree, Disability Recipient, or Member's Qualified Service)</b>						
Up to 25 years						
Without Medicare	\$1,060	\$1,060		\$774	\$786	\$1,151
With Medicare A & B	\$586		\$253	\$251	\$343	\$278
With Medicare B Only			\$540	\$774	\$1,227	\$630
25-29.999 years						
Without Medicare	\$958	\$958		\$700	\$711	\$1,039
With Medicare A & B	\$531		\$231	\$230	\$312	\$254
With Medicare B Only			\$231	\$230	\$312	\$254
30 years & over						
Without Medicare	\$855	\$855		\$626	\$636	\$928
With Medicare A & B	\$476		\$209	\$208	\$282	\$229
With Medicare B Only			\$209	\$208	\$282	\$229

	Aetna Choice POS II and Aetna Indemnity	Medical Mutual PPO	Aetna Medicare <sup>SM</sup>	AultCare PPO and PrimeTime	HealthSpan	Paramount HMO
<b>Child Premiums</b>						
<b>Child w/o Medicare A</b>	\$204	\$204		\$149	\$152	\$210
<b>Child with Medicare A &amp; B</b>	\$421		\$187	\$186	\$251	\$205



## **SERS' Non-Medicare Plans**

### **2015 Aetna Choice POS II**

The Aetna Choice POS II plan is not available for optional enrollment. It is available only if a benefit recipient, or one or more covered family members, is enrolled in the SERS Aetna Medicare<sup>SM</sup> Plan PPO, and eligible dependents are not eligible for Medicare and are under age 65. Prescription drug coverage is administered through Express Scripts.

### **2015 AultCare PPO**

The AultCare PPO plan is available to a benefit recipient if the benefit recipient is under age 65 and not eligible for Medicare and lives in an AultCare PPO service area. The AultCare PPO plan is a Preferred Provider Organization (PPO) plan. Recipients enrolled in the AultCare PPO plan may use out-of network providers at a potentially increased cost. Prescription drug coverage is administered through AultCare.

The AultCare PPO plan is available in the following Ohio counties: Ashland, Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Knox, Mahoning, Medina, Muskingum, Portage, Richland, Stark, Summit, Tuscarawas, and Wayne.

### **2015 HealthSpan HMO**

The HealthSpan HMO plan is available to a benefit recipient if the benefit recipient is under age 65 and not eligible for Medicare and lives in a HealthSpan HMO service area. The HealthSpan HMO plan is a Health Maintenance Organization (HMO) plan. Recipients enrolled in the HealthSpan HMO plan must use HealthSpan HMO providers. Prescription drug coverage is administered through HealthSpan Pharmacy.

The HealthSpan HMO plan is available in the following Ohio counties: Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, Stark, Summit, and Wayne.



**SERS' Non-Medicare Plans  
(continued)**

**2015 Medical Mutual of Ohio PPO**

The Medical Mutual of Ohio (MMO) PPO plan is available to a benefit recipient if the benefit recipient is under age 65 and not eligible for Medicare and lives in a MMO service area. The MMO PPO plan is a Preferred Provider Organization (PPO) plan. Recipients enrolled in the MMO PPO plan may use out-of-network providers at a potentially increased cost. Prescription drug coverage is administered through Express Scripts.

The MMO PPO plan is available throughout Ohio. The MMO PPO is also available in most other states.

**2015 Paramount HMO**

The Paramount HMO plan is available to a benefit recipient if the benefit recipient is under age 65 and not eligible for Medicare and lives in a Paramount HMO service area. The Paramount HMO plan is a Health Maintenance Organization (HMO) plan. Recipients enrolled in the Paramount HMO plan must use Paramount HMO providers. Prescription drug coverage is administered through Express Scripts.

The Paramount HMO plan is available in the following Ohio counties: Allen, Defiance, Erie, Fulton, Hancock, Henry, Huron, Lucas, Ottawa, Paulding, Putnam, Sandusky, Seneca, Williams, and Wood, and in the following Michigan counties: Lenawee and Monroe.



## **SERS' Medicare Plans**

### **2015 Aetna Medicare<sup>SM</sup> Plan (PPO)**

The Aetna Medicare<sup>SM</sup> Plan (PPO) is available to a benefit recipient if the benefit recipient has Medicare Part A and/or Medicare Part B. The Aetna Medicare<sup>SM</sup> Plan (PPO) is a Medicare Advantage (MA) plan. MA plans have a contract with Medicare to provide Medicare coverage. This plan is a Preferred Provider Organization (PPO) plan with an Extended Service Area (ESA) that allows members to use medical providers, such as doctors and hospitals, which may or may not be in the Aetna provider network as long as the provider accepts Medicare patients, and the provider will file claims with Aetna. Medicare Part D prescription drug coverage is administered through Express Scripts.

The Aetna Medicare<sup>SM</sup> Plan (PPO) is available throughout the U.S.

### **2015 Aetna Indemnity Plan**

The Aetna Indemnity Plan is not available for optional enrollment. It is available only under special circumstances. SERS determines when enrollment is appropriate. Medicare Part D prescription drug coverage is administered through Express Scripts.

### **2015 AultCare PPO**

The AultCare PPO plan is available to a benefit recipient if the recipient has Medicare Part B only and lives in an AultCare PPO service area. The AultCare PPO plan is not a Medicare Advantage plan. Prescription drug coverage is administered through AultCare.

The AultCare PPO plan is available in the following Ohio counties: Ashland, Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Knox, Mahoning, Medina, Muskingum, Portage, Richland, Stark, Summit, Tuscarawas, and Wayne.





## **SERS' Medicare Plans (continued)**

### **2015 HealthSpan Plan**

The HealthSpan Plan is available to a benefit recipient if the recipient has Medicare Part A and/or Medicare Part B and lives in a HealthSpan service area and was enrolled in the plan prior to 2015. This plan allows members to use HealthSpan HMO providers or out-of-network providers who accept Original Medicare. Out-of network claims must be submitted directly to Medicare by the provider. Medicare Part D prescription drug coverage is administered through HealthSpan Pharmacy.

The HealthSpan Plan is available in the following Ohio counties: Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit.

### **2015 Paramount Elite Medicare Advantage**

The Paramount Elite Medicare Advantage plan is available to a benefit recipient if the recipient has Medicare Part A and Medicare Part B and lives in a Paramount Elite Medicare Advantage service area. The Paramount Elite plan is a Medicare Advantage plan. Recipients enrolled in the Paramount Elite Medicare Advantage must use Paramount HMO providers. Medicare Part D prescription drug coverage is administered through Express Scripts.

The Paramount Elite Medicare Advantage plan is available in the following Ohio counties: Fulton, Henry, Lucas, Ottawa, Williams, and Wood, and in the following Michigan counties: Lenawee and Monroe.

### **2015 PrimeTime Health Plan**

The PrimeTime Health Plan is available to a benefit recipient if the recipient has Medicare Part A and Part B and lives in a PrimeTime Health Plan service area. The PrimeTime Health Plan is a Medicare Advantage plan through AultCare. Recipients enrolled in the PrimeTime Health Plan must use PrimeTime HMO providers. Medicare Part D prescription drug coverage is administered through PrimeTime.

The PrimeTime Health Plan is available in the following Ohio counties: Carroll, Columbiana, Harrison, Holmes, Jefferson, Mahoning, Stark, Summit, Tuscarawas, and Wayne.



## Prescription Drug Coverage

### Express Scripts Prescription Plan

Prescription drug coverage is administered through Express Scripts for members enrolled in the following health plans:

- ◇ Aetna Choice POS II (members without Medicare)
- ◇ Medical Mutual of Ohio PPO (members without Medicare)
- ◇ Paramount HMO (members without Medicare)
- ◇ Aetna Medicare<sup>SM</sup> Plan (PPO) (members with both Medicare Part A and Medicare Part B and members with Medicare Part B only)
- ◇ Aetna Indemnity Plan (members with both Medicare Part A and Medicare Part B)
- ◇ Paramount Elite Medicare Advantage (members with both Medicare Part A and Medicare Part B and members with Medicare Part B only)

Members that are enrolled in a Non-Medicare plan may receive up to a 30-day supply per retail prescription. Members enrolled in a Medicare plan (members who have Medicare Part A and/or Medicare Part B) may receive up to a 90-day supply per retail prescription. Members pay \$5 for generic, 25% of formulary (\$25 minimum and \$100 maximum) for preferred brand and 100% for a non-preferred brand prescription (50% if enrolled in a Medicare plan). Members may also receive a 90-day supply of their prescriptions via mail-order with a co-pay of \$12 for generic, 25% of formulary (minimum \$45 and maximum \$200) for preferred brand, and 100% of the cost for a non-preferred brand prescription (50% if enrolled in a Medicare plan).

Members pay special co-payments for insulin prescriptions. Members pay 25% or \$30 maximum for preferred brand, and 25% or \$45 maximum for a non-preferred brand retail 30-day supply prescription. Mail-order copayments are 25% or \$60 maximum for preferred brand, and 25% or \$115 maximum for a non-preferred brand 90-day supply prescription.

Members filling prescriptions at a pharmacy outside of the Express Scripts network are required to pay 100% of SERS' cost of the drug.

Members with Medicare Part B that are enrolled in the Aetna Medicare<sup>SM</sup> Plan (PPO) or Paramount Elite Medicare Advantage may have some supplies and medicines covered through their health plan rather than the Express Scripts prescription drug plan.



## **Prescription Drug Coverage (continued)**

### **AultCare and PrimeTime Pharmacy**

Members enrolled in the AultCare PPO plan (members without Medicare and members with Medicare Part B only) and members enrolled in the PrimeTime Health Plan (members with both Medicare Part A and Medicare Part B), may receive up to a 30-day supply per retail prescription. The co-pay is \$5 for generic, 25% of formulary (\$25 minimum and \$100 maximum) for preferred brand and 100% for a non-preferred brand prescription (50% if enrolled in a Medicare plan). Members may also receive a 90-day supply of their prescriptions via mail-order with a co-pay of \$12 for generic, 25% of formulary (minimum \$45 and maximum \$200) for preferred brand, and 100% of the cost for a non-preferred brand prescription (50% if enrolled in a Medicare plan).

Members pay special co-payments for insulin prescriptions. Members pay \$30 for preferred brand, and \$45 for a non-preferred brand retail 30-day supply prescription. Mail-order copayments are \$60 for preferred brand, and \$115 for a non-preferred brand 90-day supply prescription.

### **HealthSpan Pharmacy**

Members enrolled in the HealthSpan (members without Medicare) plan may receive up to a 31-day supply per retail prescription with a co-pay of \$10. Members may also receive a 62-day supply of their prescriptions via mail-order with a co-pay of \$25.

Members enrolled in HealthSpan plan (members with both Medicare Part A and Medicare Part B and members with Medicare Part B only) may receive up to a 31-day supply per retail prescription. The co-pay is \$15 for generic and \$30 for preferred brand prescriptions. Members may also receive a 62-day supply of their prescriptions via mail-order with a co-pay of \$15 for generic and a co-pay of \$30 for preferred brand prescriptions.

### **Medicare Part D Prescription Drugs**

SERS' health plan participants enrolled in a Medicare plan are automatically covered under a Medicare Part D prescription drug plan through SERS and should not enroll in a separate Medicare Part D plan. Enrolling in another Part D plan would cause cancellation of SERS coverage for both medical and prescription drug benefits per federal law.



### Non-Medicare Plan Benefits

	Aetna Choice POS II & MMO PPO	AultCare PPO	HealthSpan (formerly Kaiser)	Paramount HMO
Medical Annual				
Out-of-Pocket Maximum	\$4,000/person \$8,000/family	\$4,000/person \$8,000/family	\$4,000/person \$8,000/family	\$4,000/person \$8,000/family
Prescription Drug				
Out-of-Pocket Maximum	\$2,600/person \$5,200/family	\$2,600/person \$5,200/family	\$2,600/person \$5,200/family	\$2,600/person \$5,200/family
Deductible	\$1,250/person \$2,500/family	1,250/person \$2,500/family	1,250/person \$2,500/family	1,250/person \$2,500/family
Primary Care				
Office Visit	\$20 co-pay	\$20 co-pay	\$20 co-pay	\$20 co-pay
Specialist Office Visit	\$40 co-pay	\$40 co-pay	\$40 co-pay	\$40 co-pay
Outpatient Short-Term Rehab	20% coinsurance	20% coinsurance	20% coinsurance	\$40 co-pay
Inpatient Hospital	20% coinsurance after \$250 co-pay	20% coinsurance after \$250 co-pay	20% coinsurance after \$250 co-pay	20% coinsurance
Emergency Room	20% coinsurance	20% coinsurance	20% coinsurance	20% coinsurance
Ambulance	20% coinsurance	20% coinsurance	20% coinsurance	20% coinsurance
Urgent Care	\$40 co-pay	\$40 co-pay	\$40 co-pay	\$40 co-pay
Outpatient Diagnostic X-Ray and Lab	20% coinsurance	20% coinsurance	20% coinsurance	20% coinsurance
Outpatient Surgery	20% coinsurance	20% coinsurance	20% coinsurance	20% coinsurance
Chiropractic	\$20 co-pay	\$20 co-pay	\$20 co-pay (20 visit limit)	\$20 co-pay
Durable Medical Equipment	20% coinsurance	20% coinsurance	20% coinsurance	20% coinsurance
Skilled Nursing Facility (100-day max)	20% coinsurance	20% coinsurance	20% coinsurance	Co-pay: \$0 per day 1-20, \$95 per day 21-100
Home Health Care	20% coinsurance	20% coinsurance	20% coinsurance	20% coinsurance
Hospice Health Care	100% coverage	Inpatient: 20% coinsurance (30-day lifetime limit) Outpatient: 20% coinsurance	100% coverage	20% coinsurance
Prescription Drugs	<b>Express Scripts</b> <u>Retail 30-day max:</u> \$5 generic, 25% preferred brand (\$25 min, \$100 max) <u>Mail order 90-day max:</u> \$12 generic, 25% preferred brand (\$45 min, \$200 max) Non-preferred at 100% <u>Insulin Retail</u> 25% or \$30 max preferred brand, \$45 max non-preferred brand <u>Insulin Mail Order</u> 25% or \$60 preferred brand, \$115 max non-preferred brand	<b>AultCare</b> <u>Retail 30-day max:</u> \$5 generic, 25% preferred brand (\$25 min, \$100 max) <u>Mail order 90-day max:</u> \$12 generic, 25% preferred brand (\$45 min, \$200 max) Non-preferred at 100% <u>Insulin Retail</u> \$30 preferred brand, \$45 non-preferred brand <u>Insulin Mail Order</u> \$60 preferred brand, \$115 non-preferred brand	<b>HealthSpan</b> <u>Retail 31-day max:</u> \$10 co-pay <u>Mail order 62-day max:</u> \$25 co-pay	<b>Express Scripts</b> <u>Retail 30-day max:</u> \$5 generic, 25% preferred brand (\$25 min, \$100 max) <u>Mail order 90-day max:</u> \$12 generic, 25% preferred brand (\$45 min, \$200 max) Non-preferred at 100% <u>Insulin Retail</u> 25% or \$30 max preferred brand, \$45 max non-preferred brand <u>Insulin Mail Order</u> 25% or \$60 preferred brand, \$115 max non-preferred brand



### Medicare Plan Benefits

	Aetna Medicare <sup>SM</sup> Plan (PPO)	PrimeTime Health Plan	HealthSpan (formerly Kaiser)	Paramount Elite Medicare Advantage
Annual Out-of-Pocket Maximum	\$3,000 per person	\$3,000 per person	\$3,400 per person	\$3,000 per person
Primary Care Office Visit	\$20 co-pay	\$20 co-pay	\$20 co-pay	\$20 co-pay
Specialist Office Visit	\$40 co-pay	\$40 co-pay	\$40 co-pay	\$40 co-pay
Outpatient Short-Term Rehab	\$25 co-pay/\$40 co-pay for cardiac & pulmonary rehab	\$5 co-pay	\$20 co-pay	\$35 co-pay
Inpatient Hospital	\$150 co-pay per day 1-5, then 100%	\$150 co-pay per day 1-5, then 100%	\$100 co-pay per day 1-5, then 100%	\$150 co-pay per day 1-5, then 100%
Emergency Room	\$65 co-pay, waived if admitted	\$65 co-pay, waived if admitted	\$65 co-pay, waived if admitted	\$65 co-pay, waived if admitted
Ambulance	20% coinsurance	\$75 co-pay	\$50 co-pay	100% coverage
Urgent Care	\$40 co-pay	\$40 co-pay	\$40 co-pay	\$40 co-pay
Outpatient Diagnostic X-Ray	\$25 co-pay	100% coverage	100% coverage	100% coverage
Outpatient Diagnostic Lab	100% coverage	100% coverage	100% coverage	100% coverage
Outpatient Surgery (Facility Only)	\$200 co-pay per surgery	\$200 co-pay per surgery	\$200 co-pay per surgery	\$200 co-pay per surgery
Chiropractic	\$15 co-pay limited to Medicare coverage	\$15 co-pay limited to Medicare coverage	\$20 co-pay for manual manipulations/sublux	\$20 co-pay limited to Medicare coverage
Durable Medical Equipment	20% coinsurance	20% coinsurance	20% coinsurance	20% coinsurance
Skilled Nursing Facility (100-day max)	Co-pay: \$0 per day 1-10, \$25 per day 11-20, \$50 per day 21-100	Co-pay: \$0 per day 1-15, \$20 per day 16-30, \$0 per day 31-100	100% coverage for days 1-100	Co-pay: \$0 per day 1-20, \$95 per day 21-100
Home Health Care	100% coverage	100% coverage	100% coverage	100% coverage
Hospice	Covered per Medicare	Covered per Medicare	Covered per Medicare	Covered per Medicare
Prescription Drugs	<b>Express Scripts Medicare D PDP</b> <u>Retail 30-day max:</u> \$5 generic, 25% preferred brand (\$25 min, \$100 max) , 50% non-preferred brand <u>Mail order 90-day max:</u> \$12 generic, 25% preferred brand (\$45 min, \$200 max) Non-preferred at 50% of cost <u>Insulin Retail</u> 25% or \$30 max preferred brand, \$45 max non-preferred brand <u>Insulin Mail Order</u> 25% or \$60 preferred brand, \$115 max non-preferred brand	<b>PrimeTime</b> <u>Retail 30-day max:</u> \$5 generic, 25% preferred brand (\$25 min, \$100 max), 50% non-preferred brand <u>Mail order 90-day max:</u> \$12 generic, 25% preferred brand (\$45 min, \$200 max), 50% non-preferred brand <u>Insulin Retail</u> \$30 preferred brand, \$45 non-preferred brand <u>Insulin Mail Order</u> \$60 preferred brand, \$115 non-preferred brand	<b>HealthSpan</b> <u>Retail 31-day max:</u> \$15 generic, \$30 preferred brand <u>Mail order 62-day max:</u> \$15 generic, \$30 preferred brand	<b>Express Scripts Medicare D PDP</b> <u>Retail 30-day max:</u> \$5 generic, 25% preferred brand (\$25 min, \$100 max) , 50% non-preferred brand <u>Mail order 90-day max:</u> \$12 generic, 25% preferred brand (\$45 min, \$200 max) Non-preferred at 50% of SERS' cost <u>Insulin Retail</u> 25% or \$30 max preferred brand, \$45 max non-preferred brand <u>Insulin Mail Order</u> 25% or \$60 preferred brand, \$115 max non-preferred brand



**SCHEDULE D**

**DETAILED TABULATIONS OF THE DATA**

**All Retirees, Spouses and Dependents Receiving Health Care  
Male and Female Demographic Breakdown  
June 30, 2014  
Tabulated by Attained Ages**

Attained Age	Number of		Total Number
	Males	Females	
Under 20	83	79	162
20-24	89	90	179
25-29	28	33	61
30-34	2	2	4
35-39	4	7	11
40-44	11	8	19
45-49	42	50	92
50-54	248	265	513
55-59	752	970	1,722
60-64	1,152	2,173	3,325
65-69	1,666	4,503	6,169
70-74	2,396	5,710	8,106
75-79	2,718	5,878	8,596
80-84	2,073	4,704	6,777
85-89	1,279	3,971	5,250
90-94	577	2,324	2,901
95-99	109	606	715
100	4	41	45
101	3	23	26
102	2	19	21
103	2	4	6
104	0	4	4
105 & Over	1	5	6
<b>Total</b>	<b>13,241</b>	<b>31,469</b>	<b>44,710</b>



**Schedule of Retired Members Added to and Removed From Rolls  
Last Six Fiscal Years**

<b>Fiscal Year Ending</b>	<b>Beginning of Year</b>	<b>Added</b>	<b>Removed</b>	<b>End of Year</b>
6/30/2009	52,904	2,317	3,356	51,865
6/30/2010	51,865	1,779	3,039	50,605
6/30/2011	50,605	1,842	4,296	48,151
6/30/2012	48,151	2,073	3,785	46,439
6/30/2013	46,439	2,110	3,217	45,332
6/30/2014	45,332	2,251	2,873	44,710

**Terminated Vested Members Eligible for Health Care  
Male and Female Demographic Breakdown  
June 30, 2014  
Tabulated by Attained Ages**

<b>Attained Age</b>	<b>Number of</b>		<b>Total Number</b>
	<b>Males</b>	<b>Females</b>	
Under 35	12	9	21
35-39	44	56	100
40-44	67	163	230
45-49	129	347	476
50-54	233	847	1,080
55-59	271	1,303	1,574
60 & Over	169	831	1,000
<b>Total</b>	<b>925</b>	<b>3,556</b>	<b>4,481</b>



**Total Active Members as of June 30, 2014  
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
Under 20	755							755
Avg Pay	\$5,793							\$4,373,490
20-24	5,446	88						5,534
Avg Pay	\$8,079	\$19,789						\$45,737,443
25-29	5,454	780	51					6,285
Avg Pay	\$12,997	\$26,250	\$32,026					\$92,992,573
30-34	4,890	1,525	517	64				6,996
Avg Pay	\$14,388	\$28,948	\$36,095	\$39,034				\$135,662,824
35-39	5,327	2,063	1,040	410	34			8,874
Avg Pay	\$13,374	\$25,757	\$36,068	\$39,088	\$44,249			\$179,420,365
40-44	6,405	3,305	2,124	1,026	288	43		13,191
Avg Pay	\$12,922	\$23,018	\$31,049	\$39,284	\$44,653	\$43,996		\$279,847,079
44-49	5,819	4,257	3,553	2,157	732	411	65	16,994
Avg Pay	\$13,179	\$21,774	\$27,483	\$33,429	\$43,688	\$45,310	\$49,108	\$392,927,968
50-54	4,781	4,155	4,880	4,189	1,775	1,113	398	21,291
Avg Pay	\$14,122	\$22,135	\$26,732	\$29,665	\$35,572	\$44,368	\$48,749	\$546,130,662
55-59	3,651	3,069	3,919	4,513	3,009	1,722	747	20,630
Avg Pay	\$14,364	\$23,053	\$27,206	\$28,906	\$32,088	\$37,026	\$45,868	\$554,839,114
60-64	2,123	1,795	2,068	2,300	2,067	1,940	784	13,077
Avg Pay	\$13,301	\$22,353	\$28,196	\$29,671	\$31,304	\$34,220	\$38,709	\$356,356,688
65-69	1,040	795	752	616	609	749	592	5,153
Avg Pay	\$9,457	\$19,928	\$25,426	\$29,076	\$31,240	\$31,949	\$31,680	\$124,418,905
70 & over	538	485	385	209	179	221	454	2,471
Avg Pay	\$8,175	\$12,985	\$18,552	\$23,095	\$27,323	\$26,909	\$28,792	\$46,574,494
<b>Totals</b>	<b>46,229</b>	<b>22,317</b>	<b>19,289</b>	<b>15,484</b>	<b>8,693</b>	<b>6,199</b>	<b>3,040</b>	<b>121,251</b>
<b>Avg Pay</b>	<b>\$12,606</b>	<b>\$22,998</b>	<b>\$28,153</b>	<b>\$30,783</b>	<b>\$33,896</b>	<b>\$37,090</b>	<b>\$39,155</b>	<b>\$22,757</b>

Averages:  
Age: 48.6  
Service: 10.0  
Annual Pay: \$22,757





**Male Active Members as of June 30, 2014  
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
Under 20	454							454
Avg Pay	\$6,212							\$2,820,397
20-24	2,565	51						2,616
Avg Pay	\$8,245	\$22,800						\$22,310,287
25-29	2,494	397	38					2,929
Avg Pay	\$13,143	\$29,814	\$35,003					\$45,943,827
30-34	1,974	663	268	32				2,937
Avg Pay	\$14,990	\$33,721	\$42,754	\$48,023				\$64,942,466
35-39	1,828	637	354	189	23			3,031
Avg Pay	\$14,620	\$32,419	\$46,588	\$47,447	\$44,885			\$73,868,273
40-44	2,004	757	484	343	128	17		3,733
Avg Pay	\$13,677	\$31,312	\$44,954	\$50,817	\$50,870	\$49,325		\$97,650,257
44-49	1,939	840	593	460	292	197	29	4,350
Avg Pay	\$13,458	\$30,157	\$41,562	\$48,674	\$55,476	\$49,025	\$55,502	\$125,928,383
50-54	1,706	996	748	585	334	432	208	5,009
Avg Pay	\$15,428	\$28,905	\$40,198	\$45,494	\$50,094	\$53,865	\$51,516	\$162,508,420
55-59	1,562	967	837	616	416	404	325	5,127
Avg Pay	\$15,867	\$28,697	\$38,679	\$43,043	\$46,673	\$49,774	\$51,889	\$167,811,427
60-64	1,074	771	637	431	336	316	203	3,768
Avg Pay	\$14,588	\$25,603	\$36,197	\$41,070	\$45,307	\$48,021	\$50,687	\$116,854,218
65-69	558	420	318	174	102	105	83	1,760
Avg Pay	\$11,152	\$23,285	\$30,172	\$36,840	\$40,095	\$43,370	\$44,169	\$44,316,766
70 & over	279	254	222	88	46	38	45	972
Avg Pay	\$9,723	\$15,920	\$21,895	\$28,453	\$33,838	\$33,974	\$38,595	\$18,705,283
<b>Totals</b>	<b>18,437</b>	<b>6,753</b>	<b>4,499</b>	<b>2,918</b>	<b>1,677</b>	<b>1,509</b>	<b>893</b>	<b>36,686</b>
<b>Avg Pay</b>	<b>\$13,141</b>	<b>\$28,897</b>	<b>\$39,040</b>	<b>\$44,575</b>	<b>\$48,157</b>	<b>\$49,632</b>	<b>\$50,259</b>	<b>\$25,723</b>

Averages:  
Age: 46.6  
Service: 8.0  
Annual Pay: \$25,723



**Female Active Members as of June 30, 2014  
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
Under 20	301							301
Avg Pay	\$5,160							\$1,553,093
20-24	2,881	37						2,918
Avg Pay	\$7,931	\$15,638						\$23,427,156
25-29	2,960	383	13					3,356
Avg Pay	\$12,874	\$22,556	\$23,323					\$47,048,746
30-34	2,916	862	249	32				4,059
Avg Pay	\$13,980	\$25,277	\$28,928	\$30,044				\$70,720,358
35-39	3,499	1,426	686	221	11			5,843
Avg Pay	\$12,723	\$22,780	\$30,639	\$31,939	\$42,920			\$105,552,093
40-44	4,401	2,548	1,640	683	160	26		9,458
Avg Pay	\$12,578	\$20,554	\$26,945	\$33,493	\$39,680	\$40,511		\$182,196,822
44-49	3,880	3,417	2,960	1,697	440	214	36	12,644
Avg Pay	\$13,040	\$19,714	\$24,662	\$29,297	\$35,865	\$41,891	\$43,958	\$266,999,584
50-54	3,075	3,159	4,132	3,604	1,441	681	190	16,282
Avg Pay	\$13,397	\$20,001	\$24,295	\$27,095	\$32,206	\$38,343	\$45,721	\$383,622,242
55-59	2,089	2,102	3,082	3,897	2,593	1,318	422	15,503
Avg Pay	\$13,240	\$20,456	\$24,090	\$26,672	\$29,748	\$33,119	\$41,231	\$387,027,686
60-64	1,049	1,024	1,431	1,869	1,731	1,624	581	9,309
Avg Pay	\$11,983	\$19,906	\$24,635	\$27,042	\$28,586	\$31,535	\$34,523	\$239,502,471
65-69	482	375	434	442	507	644	509	3,393
Avg Pay	\$7,495	\$16,168	\$21,949	\$26,019	\$29,459	\$30,087	\$29,644	\$80,102,139
70 & over	259	231	163	121	133	183	409	1,499
Avg Pay	\$6,508	\$9,757	\$13,998	\$19,199	\$25,069	\$25,442	\$27,714	\$27,869,212
<b>Totals</b>	<b>27,792</b>	<b>15,564</b>	<b>14,790</b>	<b>12,566</b>	<b>7,016</b>	<b>4,690</b>	<b>2,147</b>	<b>84,565</b>
<b>Avg Pay</b>	<b>\$12,251</b>	<b>\$20,439</b>	<b>\$24,841</b>	<b>\$27,580</b>	<b>\$30,487</b>	<b>\$33,054</b>	<b>\$34,537</b>	<b>\$21,470</b>

Averages:  
Age: 49.6  
Service: 10.8  
Annual Pay: \$21,470



**Active Members as of June 30, 2014  
By Annual Pay**

Annual Pay	Number of Active Members			Portion of Total Number	
	Men	Women	Totals	Group	Cumulative
Less than \$1,000	218	239	457	0.4%	0.4%
\$1,000 - 1,999	1,202	1,230	2,432	2.0%	2.4%
2,000 - 2,999	2,164	2,059	4,223	3.5%	5.9%
3,000 - 3,999	2,349	2,241	4,590	3.8%	9.7%
4,000 - 4,999	1,693	2,267	3,960	3.3%	12.9%
5,000 - 5,999	1,357	2,241	3,598	3.0%	15.9%
6,000 - 6,999	1,044	2,159	3,203	2.6%	18.5%
7,000 - 7,999	811	2,221	3,032	2.5%	21.0%
8,000 - 8,999	713	2,369	3,082	2.5%	23.6%
9,000 - 9,999	694	2,282	2,976	2.5%	26.0%
10,000 - 11,999	1,252	4,421	5,673	4.7%	30.7%
12,000 - 13,999	1,203	4,607	5,810	4.8%	35.5%
14,000 - 15,999	1,219	5,214	6,433	5.3%	40.8%
16,000 - 17,999	1,200	6,329	7,529	6.2%	47.0%
18,000 - 19,999	1,180	5,982	7,162	5.9%	52.9%
20,000 - 24,999	2,314	12,035	14,349	11.8%	64.7%
25,000 - 29,999	2,048	7,925	9,973	8.2%	73.0%
30,000 - 35,999	3,013	6,786	9,799	8.1%	81.1%
36,000 and over	11,012	11,958	22,970	18.9%	100.0%
<b>Totals</b>	<b>36,686</b>	<b>84,565</b>	<b>121,251</b>		



## **SCHEDULE E**

### **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 series of payments is called an actuarial equivalent of another series of payments if the two series have the same actuarial present value.

**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.

**Age-Related Morbidity.** Assumed increase to the net incurred claims related to increase in age.

**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.

**Health Care Cost Trend Rates.** The annual assumed rate of increase for both claims and contributions.

**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.

**Plan Termination Liability.** The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for future service and salary. The termination liability will generally be less than the liabilities computed on a "going concern" basis and is not normally determined in a routine actuarial valuation.

**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. Generally based on book value plus a portion of unrealized appreciation or depreciation.