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

Prepared as of June 30, 2019





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

October 31, 2019

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

Dear Members of the Board:

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, 2019. While not verifying the data at the source, the actuary performed tests for consistency and reasonability. The valuation indicates that an actuarially determined contribution of 4.63% of active payroll payable for the fiscal year ending June 30, 2020 is required to fund the benefits.

On June 2, 2015, GASB Statement No. 74 and GASB Statement No. 75 (GASB 74 and 75) were unanimously adopted by the GASB Board. The disclosure requirements of GASB 74 and 75 will be similar to the disclosure requirements for pension benefits under GASB Statement No. 67 and GASB Statement No. 68. GASB 74 relates to accounting disclosures for plan sponsors and, as such, replaces GASB 43 beginning with fiscal years ending September 30, 2017. GASB 75 relates to accounting disclosures for contributing employers and, as such, replaces GASB 45 beginning with fiscal years ending September 30, 2018. GASB 74 and 75 will require applicable OPEB plan sponsors and contributing employers to disclose the net OPEB liability on the statement of financial position and book an accounting expense based upon the entry age normal actuarial cost method. Beyond the use of a specified actuarial cost method, GASB's new disclosure standards will also require the discount rate used to calculate liabilities to be based upon the yield of 20-year, tax-exempt municipal bonds and the expected rate of return on plan assets, to the extent plan assets are projected to be available for the payment of future benefits. Additionally, GASB 74 and 75 will bring about many other changes in the liability valuation and accounting disclosure processes currently in place which are expected to significantly impact data collection, timing, and effort. As details for the new GASB OPEB disclosure standards emerge, planning and coordination between plan sponsors, contributing employers, actuaries, and auditors is recommended. Separate reports will be prepared to provide accounting information under Governmental Accounting Standards Board Statements No. 74 and 75, when applicable.

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 3.50% 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.



October 31, 2019
Board of Trustees
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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 potential future provisions such as the excise tax on high-value health insurance plans (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.

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 'Alisa Bennett'.

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

A handwritten signature in blue ink, appearing to read 'John J. Garrett'.

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

AB/JJG:jf



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

PREPARED AS OF JUNE 30, 2019

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2019, 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, 2019	June 30, 2018
Active members included in valuation		
Number	159,363	158,343
Annual Compensation	\$3,462,524,396	\$3,332,395,171
Service Retirees		
Number	31,605	32,055
Disability Retirees		
Number	2,955	3,079
Spouses of Retirees		
Number	5,246	5,426
Spouses of Deceased Retirees		
Number	1,680	1,740
Survivor Benefit Recipients		
Number	731	775
Children		
Number	330	346
Deferred Vesteds		
Number	5,464	5,089
Assets		
Market Value	\$463,810,679	\$435,629,637
Unfunded Accrued Liability	\$1,734,921,700	\$2,089,252,492
Actuarial Accrued Liability	\$2,198,732,379	\$2,524,882,129
Funded Ratio (MVA/AAL)	21.09%	17.25%
Employer Contribution Rate		
Normal	2.53%	2.87%
Accrued Liability	<u>2.10%</u>	<u>2.62%</u>
Total	4.63%	5.49%
Employer Contribution Toward Health Care*	1.50%	2.00%
Accrued liability amortization period	30	30

* Includes 1.50% of payroll surcharge



2. The valuation assumes an allocation of 14.00% to the basic benefits and 0.00% to health care. The funding policy requires at least 13.50% of the employers' contributions be allocated to SERS' basic benefits when the funded ratio is 70% but less than 80%, with the remainder allocated to the health care fund. However, based on a Board Resolution dated October 17, 2019, the entire 14.00% employer contribution will be allocated to SERS' basic benefits, therefore setting the health contribution rate at 0.00%, plus a health care surcharge of 1.50%, or 1.50%. This rate includes the anticipated revenue from the minimum surcharge level for FY2020 of \$19,600.
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. Since the previous valuation the plan has experienced actuarial gains due to favorable claims experience for the Medicare-eligible population.
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:

Medicare Eligible

Plan Offerings

Due to low Paramount Elite Medicare Advantage Plan enrollment and higher premiums, the Paramount Elite Medicare Plan will not be offered in 2020. Effective January 1, 2020, Paramount Elite enrollees will be automatically enrolled in the Aetna Medicare Plan (PPO).

Premiums

Premiums will remain the same in 2020 for enrollees in the Aetna Medicare Plan (PPO).

There will be a premium increase for enrollees in the PrimeTime Health Plan.

Preferred Insulin Co-Pay

The preferred insulin co-pay will decrease from \$30 to \$25 under the Express Scripts (Aetna) prescription drug plan.

Non-Medicare Eligible

Premiums

Premiums will remain the same in 2020 for enrollees in the Aetna Choice POS II Plan.

There will be a premium increase for enrollees in the AultCare PPO Plan.



Preferred Insulin Co-Pay

The preferred insulin co-pay will decrease from \$30 to \$25 under the Express Scripts (Aetna) prescription drug plan.

SERS Wraparound Plan

SERS Health Care and Government Relations staff are working with federal officials to extend the Wraparound program for 5-10 years. If approval is not granted by January 1, 2020 SERS will offer a Health Reimbursement Arrangement (HRA) option.

6. The statute sets a contribution cap of 24% of payroll: 14% from employers and 10% from employees. The funding policy states that employer contributions in excess of those required to support the basic benefits may be allocated to retiree health care funding. If the funded ratio is less than 70%, the entire 14% employers' contribution shall be allocated to SERS' basic benefits. If the funded ratio is 70% but less than 80%, at least 13.50% of the employers' contribution shall be allocated to SERS' basic benefits, with the remainder (if any) allocated to the Health Care Fund. If the funded ratio is 80% but less than 90%, at least 13.25% of the employers' contribution shall be allocated to SERS' basic benefits, with the remainder (if any) allocated to the Health Care Fund. If the funded ratio is 90% or greater, the Health Care Fund may receive any portion of the employers' contribution that is not needed to fund SERS' basic benefits.



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, 2019 upon which the valuation was based. Detailed tabulations of the data are given in Schedule D.

Active Members

Number	Payroll	Group Averages		
		Salary	Age	Service
159,363	\$3,462,524,396	\$21,727	47.1	7.5

The following table shows a seven-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
6/30/2013	121,642	2,746,827,535	22,581	(1.3%)
6/30/2014	121,251	2,759,281,606	22,757	0.8
6/30/2015	122,855	2,845,443,802	23,161	1.8
6/30/2016	124,540	2,932,236,551	23,545	1.7
6/30/2017	157,981*	3,302,805,662	20,906	(11.2)
6/30/2018	158,343	3,332,395,171	21,045	0.7
6/30/2019	159,363	3,462,524,396	21,727	3.2

*Effective in FY2017, the active member headcount reflects an increase of members who have been re-categorized from inactive to active status.



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

Retiree Lives

Type of Benefit Recipient	Number	Average Age
Service Retirees	31,605	76.0
Disability Retirees	2,955	68.7
Spouses	7,657	78.4
Children	330	29.8
Total	42,547	75.6

This valuation also includes 5,464 inactive members eligible for health care.



SECTION III – ASSETS

1. As of June 30, 2019 the total market value of assets amounted to \$463,810,679.

Asset Summary Based on Market Value			
(1)	Assets at June 30, 2018	\$	435,629,637
(2)	Contributions and Misc. Revenue		153,865,807
(3)	Investment Gain (Loss)		19,442,905
(4)	Benefit Payments		<u>(145,127,670)</u>
(5)	Assets at June 30, 2019	\$	463,810,679
	(1) + (2) + (3) + (4)		
(6)	Annualized Rate of Return*		4.4 %

*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, 2019.

1. The total health care valuation balance sheet shows that the System has total future health care liabilities of \$3,053,367,027 of which \$788,785,002 is for the future benefits payable for present retiree members and beneficiaries of deceased members; \$24,274,070 is for the future benefits payable for current deferred vested members; and \$2,240,307,955 is for the future benefits payable for present active members. Against these health care liabilities the System has a total market value of assets of \$463,810,679 as of June 30, 2019. The difference of \$2,589,556,348 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future for health care. Of this amount, no future contributions are expected to be made by members, and the balance of \$2,589,556,348 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 2.53% 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 \$854,634,648. When this amount is subtracted from \$2,589,556,348 which is the present value of the total future contributions to be made by the employer, there remains \$1,734,921,700 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 2.10% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of \$1,734,921,700 over 30 years on the assumption that the aggregate payroll for members will increase by 3.50% 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, 2019 is shown below.

Experience Gain/(Loss) (\$ Thousands)

(1)	UAAL* as of 6/30/18	\$ 2,089,252
(2)	Normal cost from last valuation	96,186
(3)	Expected employer contributions	190,093
(4)	Interest accrual: [(1) + (2)] x .0525 - (3) x .0525/2	<u>109,746</u>
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$ 2,105,091
(6)	Change due to claims and retiree premiums	415,296
(7)	Expected UAAL after changes: (5) - (6)	\$ 1,689,795
(8)	Actual UAAL* as of 6/30/19	\$ 1,734,922
(9)	Total gain/(loss): (7) - (8)	\$ (45,127)
	(a) Contribution shortfall	(110,987)
	(b) Investment Gain/(Loss)	(3,657)
	(c) Experience Gain/(Loss) (9) - (9a) - (9b)	\$ 69,517
(10)	Accrued Liabilities as of 6/30/19	\$ 2,198,732
(11)	Experience Gain/(Loss) as percent of actuarial accrued liabilities at start of year (9c) / (10)	3.2%

* *unfunded actuarial accrued liability*



**ANALYSIS OF FINANCIAL EXPERIENCE
Gains and Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience and Actual Experience
(\$ Millions)**

Type of Activity	\$ Gain (or Loss) For Year Ending 6/30/19
Age & Service Retirements. If members retire at older ages or participate in lower numbers, there is a gain. If younger ages or higher participation, a loss.	\$ (3.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(1.6)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(2.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	17.9
Claims Increases (Including Wrap Plan). If there are smaller claims increases than assumed creates a gain; larger, a loss.	415.3
New Members. Additional accrued liability attributable to members who entered the plan since the last valuation.	(20.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(3.7)
Contribution Shortfall. If there are more contributions than the ARC, there is a gain. If less contributions, a loss.	(111.0)
Death After Retirement. If retiree members live longer than assumed, there is a loss. If not as long, a gain.	16.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	63.4
Gain (or Loss) During Year From Financial Experience	\$ 370.2
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0
Composite Gain (or Loss) During Year	\$ 370.2



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 FY2020.

Required Contribution Rates

Contribution for	Amount	% of Payroll
A. Normal Cost	\$ 90,176,668	2.53%
B. Member Contributions*	\$ 0	0.00%
C. Employer Normal Cost: [A - B]	\$ 90,176,668	2.53%
D. Unfunded Actuarial Accrued Liability**	\$ 74,891,665	2.10%
E. Total Recommended Employer Contribution Rate: [C + D]	\$ 165,068,333	4.63%
F. Employer Contribution Toward Health Care ⁺	\$ 53,556,152	1.50%

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

** Based on 30-year amortization of the UAAL from June 30, 2019.

+ Includes 1.50% 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
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
2015	0.82	1.50	2.32
2016	0.00	1.50	1.50
2017	0.00	1.50	1.50
2018	0.50	1.50	2.00
2019	0.50	1.50	2.00



SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 74 and 75 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, 2019. Additional information will be provided in separate reports.

Valuation date	6/30/2019
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	2.75%
Wage increases	3.50%
Medical Trend Assumption	
Pre-Medicare	7.00% - 4.75%
Medicare	5.25% - 4.75%
Year of Ultimate Trend	2022 - 2028



**Schedule of Funding Progress
(\$ 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))
6/30/2012	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
6/30/2015	408	2,425	2,016	16.8	2,845	70.9
6/30/2016	370	2,407	2,037	15.4	2,932	69.5
6/30/2017	382	2,396	2,014	15.9	3,303	61.0
6/30/2018	436	2,525	2,089	17.3	3,332	62.7
6/30/2019	464	2,199	1,735	21.1	3,463	50.1

Schedule of Employer Contributions

Year Ended	Annual Required Contribution (ARC) (a)	Employer Contribution (b)	Federal Subsidies and Other Receipts (c)	Total Contribution (d) = (b)+(c)	Percentage of ARC Contributed (e) = (d)/(a)
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
June 30, 2015	164,182,107	68,904,867	20,084,826	88,989,693	54.2
June 30, 2016	161,566,234	44,855,441	32,493,250	77,348,691	47.9
June 30, 2017	178,034,717	47,672,886	17,341,005	65,013,891	36.5
June 30, 2018	176,950,184	63,539,354	36,517,382	100,056,736	56.5
June 30, 2019	190,092,589	65,877,673	16,067,175	81,944,848	43.1



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, 2019 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2018.

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

	June 30, 2019	June 30, 2018
ASSETS		
Current market value of assets	\$ 463,810,679	\$ 435,629,637
Prospective contributions		
Employer normal contributions	854,634,648	923,117,839
Unfunded accrued liability contributions	<u>1,734,921,700</u>	<u>2,089,252,492</u>
Total prospective contributions	<u>\$ 2,589,556,348</u>	<u>\$ 3,012,370,331</u>
Total assets	<u>\$ 3,053,367,027</u>	<u>\$ 3,447,999,968</u>
LIABILITIES		
Present value of benefits payable on account of present retiree members and beneficiaries	\$ 788,785,002	\$ 947,646,519
Present value of benefits payable on account of active members	2,240,307,955	2,480,042,878
Present value of benefits payable on account of deferred vested members	<u>24,274,070</u>	<u>20,310,571</u>
Total liabilities	<u>\$ 3,053,367,027</u>	<u>\$ 3,447,999,968</u>



The following table provides the solvency test for SERS members. The table allocates the valuation assets of the System to its liabilities based on an order of precedence. The highest order of precedence is active member contributions. The second highest order of precedence are members in pay status, and vested and non-vested terminated members. The lowest order of precedence is the employer financed portion of active member accrued benefits. The liabilities are determined using the System's assumed rate of return.

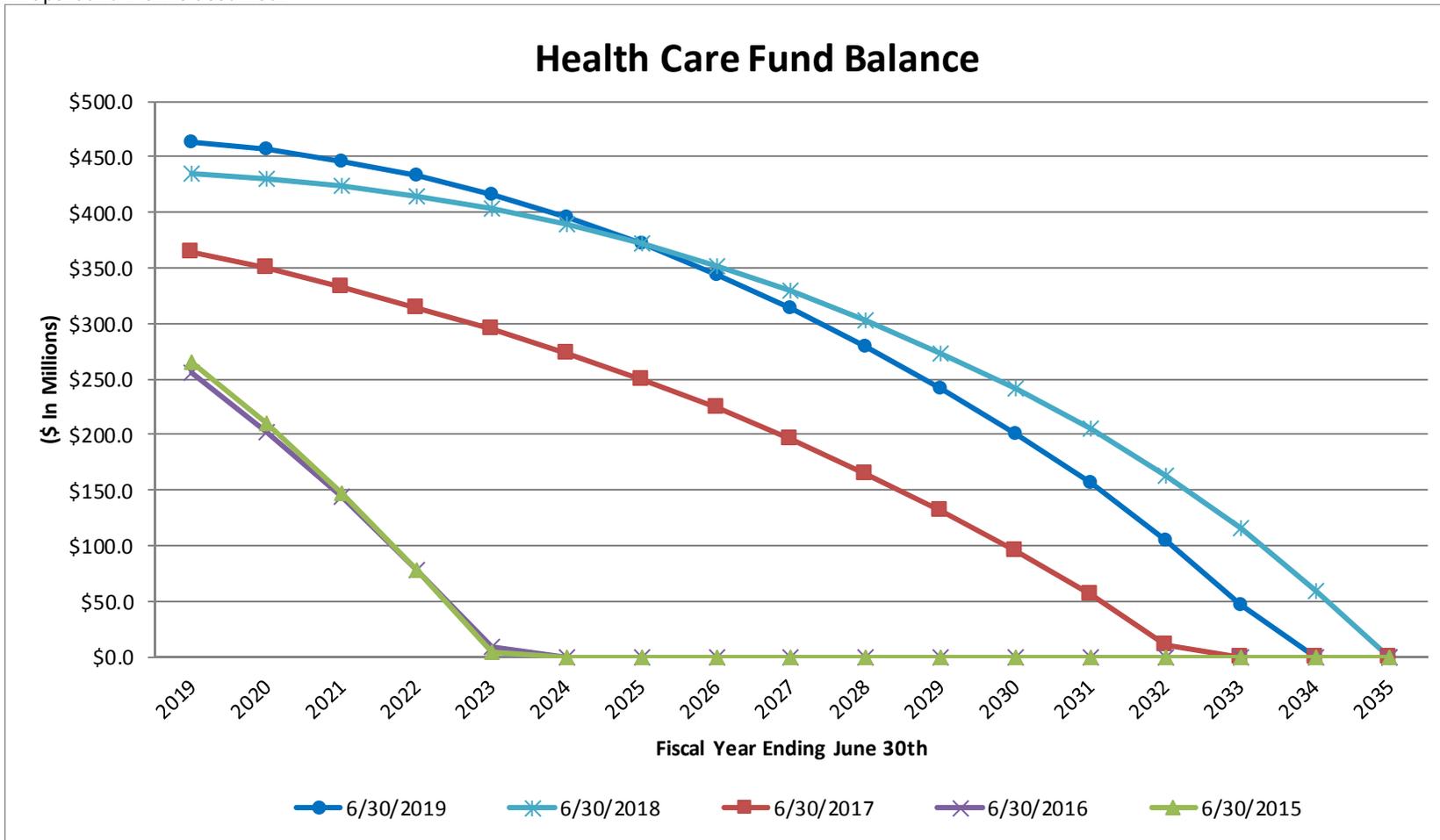
**Solvency Test
(\$ Millions)**

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Actuarial Value of Assets	(1)	(2)	(3)
	Active Member Contributions	Retiree Members & Beneficiaries	Active Members (Employer Financed Portion)				
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
6/30/2015	0	979	1,507	408	100.0	41.7	0.0
6/30/2016	0	918	1,489	370	100.0	40.3	0.0
6/30/2017	0	916	1,480	382	100.0	41.7	0.0
6/30/2018	0	968	1,557	436	100.0	45.0	0.0
6/30/2019	0	813	1,386	464	100.0	57.0	0.0



Solvency Chart

The following chart shows the projected Health Care Fund Balances from the five most recent valuations. The prior year projections were based on the funding policy and assumptions in effect on the prior year valuation dates. The projections are based on a 7.75% future asset rate of return assumption for 2013-2015 and 7.50% starting June 30, 2016 and assumed health care contribution rates based on the pension valuation and the surcharge calculation. Starting with the June 30, 2015 valuation, the new funding policy was taken into account. Starting with the June 30, 2016 valuation, 10% participation in the pre-Medicare Wraparound Plan is assumed.





SCHEDULE B

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The decremental assumptions used in the valuation were adopted by the Board in April, 2016.

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
2019	7.00%	5.25%
2020	6.75	5.13
2021	6.50	5.00
2022	6.25	4.75
2023	6.00	4.75
2024	5.75	4.75
2025	5.50	4.75
2026	5.25	4.75
2027	5.00	4.75
2028 and beyond	4.75	4.75

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	30.0%	0.0%

Wives are assumed to be three years younger than husbands.

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	50.0%	N/A	100.0
10 – 14	25.0%	50.0	50.0%	100.0
15 – 19	45.0	70.0	50.0	100.0
20 – 24	70.0	75.0	50.0	100.0
25 – 29	75.0	75.0	50.0	100.0
30 – 34	80.0	80.0	50.0	100.0
35 and over	90.0	90.0	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	90.0%	94.0%
HMO	0.0%	6.0%
Wraparound Plan	10.0%	N/A

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

Plan Type	Future Retirees*	
	Non-Medicare	Medicare
<u>PPO</u>		
Aetna Choice POS II	95.8%	0.0%
Aetna Medicare SM Plan	0.0%	100.0%
AultCare PPO	4.2%	0.0%
<u>HMO</u>		
PrimeTime	N/A	100.0%

* Future disabled retirees assumed 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 Medicare-eligible 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. The health care premium Discount Program is not available for non-Medicare participants.



MONTHLY EXPECTED MEDICAL/PRESCRIPTION DRUG CLAIMS COSTS (INCLUDES ADMINISTRATIVE EXPENSES): Following are charts detailing expected claims for the year following the valuation date. For the Medicare Advantage plans, the Health Insurance Provider Fee under the Affordable Care Act has been included since the moratoriums in 2017 and 2019 are temporary.

Retiree Costs			
Medicare Status	Aetna Choice POS II and Aetna Medicare SM	Aetna Traditional Choice	AultCare PPO and PrimeTime
Non-Medicare	\$1,358	N/A	\$1,078
Medicare A	\$167	\$944	\$230
Medicare B Only	\$546	N/A	\$1,078

Spouse Costs			
Medicare Status	Aetna Choice POS II and Aetna Medicare SM	Aetna Traditional Choice	AultCare PPO and PrimeTime
Non-Medicare	\$1,087	N/A	\$861
Medicare A	\$167	\$944	\$230
Medicare B Only	\$546	N/A	\$861

Children Costs			
Medicare Status	Aetna Choice POS II and Aetna Medicare SM	Aetna Traditional Choice	AultCare PPO and PrimeTime
Non-Medicare	\$339	N/A	\$190
Medicare A	\$167	\$944	\$230

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. For this valuation, we have assumed 10% participation in the SERS Marketplace Wraparound Plan for pre-Medicare retirees. Current authority allows the Wraparound plan to enroll through 2019 with continuation under discussion. Going forward, administrative and/or legislative action to allow continuation of this plan will be monitored. 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	\$13,368	\$11,420	\$10,800	\$13,536	\$8,537	\$6,720	\$4,992
Prescription Drug	2,604	2,435	2,136	2,604	2,074	1,848	1,116

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	\$384	\$384	\$348	\$432	\$672	\$324
Prescription Drug	1,476	1,476	1,440	1,440	1,464	1,404



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	10.50
10	4.00
15	2.00
20	2.00
25	1.50

Age	Annual Rates of			
	Death *		Disability	
	Male	Female	Male	Female
20	.022%	.013%	.020%	.010%
25	.053	.018	.038	.010
30	.059	.019	.068	.026
35	.063	.024	.122	.055
40	.068	.032	.212	.102
45	.081	.044	.311	.170
50	.126	.074	.411	.300
55	.218	.124	.530	.450
60	.361	.188	.590	.450
65	.607	.274	.550	.300
70	1.071	.415	.300	.200
74	1.570	.629	.300	.200

* Pre-retirement mortality is based on the RP-2014 Blue Collar Mortality Table with fully generational projection and a five year age set-back for both males and females. The above rates represent the base rates used.



Annual Rates of								
Age	Retirement Eligible prior to 8/1/17				Retirement Eligible after 8/1/17			
	Reduced	Reduced (55/25)	First Eligible Unreduced	Subsequent Unreduced	Reduced	Reduced (60/25)	First Eligible Unreduced	Subsequent Unreduced
50			27%	19%				
55		10%	27%	19%				
60	11%	14%	27%	19%		14%	30%	19%
65			25%	19%	11%	14%	30%	19%
70			20%	22%			30%	22%
75			100%	100%			100%	100%

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

Service	Annual Rates of		
	Merit & Seniority (A)	Base (Economy) (B)	Increase Next Year $(1+(A))*(1+(B))$
0	14.20%	3.50%	18.20%
1	5.55	3.50	9.25
2	3.14	3.50	6.75
3	2.17	3.50	5.75
4	1.45	3.50	5.00
5	1.20	3.50	4.75
6	0.97	3.50	4.50
7	0.72	3.50	4.25
8	0.48	3.50	4.00
9	0.24	3.50	3.75
10 & over	0.00	3.50	3.50

PAYROLL GROWTH: 3.50% per annum, compounded annually.

PRICE INFLATION: 3.00% per annum, compounded annually.

DEATH AFTER RETIREMENT: The RP-2014 Blue Collar Mortality Table with fully generational projection and Scale BB, 120% of male rates and 110% of female rates is used to evaluate allowances to be paid. The RP-2000 Disabled Mortality Table with 90% for male rates and 100% for female rates set back five years is used for the period after disability retirement. These assumptions are used to measure the probabilities of each benefit payment being made after retirement.



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, 2019

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 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.

Medicare-eligible 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 are re-verified 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 Years of 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.

In addition, SERS offered a new coverage option beginning in 2017, the Marketplace Wraparound Plan. This option is only available to healthcare participants who are not eligible for Medicare and who are not enrolled in Medicaid. Participants will be able to choose insurance from any insurer offering coverage in the federal Marketplace, and if eligible, receive a federal subsidy to lower the premium and cost-sharing amounts. The SERS Marketplace Wraparound Plan offers additional benefits to help pay for deductibles, co-pays, and other costs.



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.

2020 RETIREE GROUP HEALTH CARE PLAN OPTIONS:

Options available to members without Medicare

- ◇ Aetna Choice POS II with Express Scripts prescription drug coverage
- ◇ AultCare PPO with AultCare prescription drug coverage

Options available to members with Medicare:

- ◇ Aetna MedicareSM Plan (PPO) with Express Scripts Medicare Part D Prescription Drug Plan
- ◇ Aetna Traditional Choice 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)
- ◇ 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 2020 Open Enrollment Guide and the 2020 Member Health Care Guide.



2020 Contribution Rates

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO and PrimeTime
Service Retirement Date on or before July 1, 1989 Premiums			
5-9.999 years			
Without Medicare	\$659		\$574
With Medicare A & B	\$117	\$428	\$150
With Medicare B Only	\$297		\$574
10-24.999 years			
Without Medicare	\$253		\$224
With Medicare A & B	\$64	\$173	\$75
With Medicare B Only	\$127		\$224
25 years & over			
Without Medicare	\$253		\$224
With Medicare A & B	\$64	\$173	\$75
With Medicare B Only	\$64		\$75

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO and PrimeTime
Service Retirement Date August 1, 1989 through July 1, 2008 Premiums			
10-14.999 years			
Without Medicare	\$1,282		\$1,113
With Medicare A & B	\$198	\$821	\$265
With Medicare B Only	\$558		\$1,113
15-19.999 years			
Without Medicare	\$659		\$574
With Medicare A & B	\$117	\$428	\$150
With Medicare B Only	\$297		\$574
20-24.999 years			
Without Medicare	\$347		\$304
With Medicare A & B	\$76	\$232	\$93
With Medicare B Only	\$166		\$304
25 years & over			
Without Medicare	\$253		\$224
With Medicare A & B	\$64	\$173	\$75
With Medicare B Only	\$64		\$75



**2020 Contribution Rates
(continued)**

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO and PrimeTime
Service Retirement Date on or after August 1, 2008 Premiums*			
10-19.999 years			
Without Medicare	\$1,282		\$1,113
With Medicare A & B	\$198	\$821	\$265
With Medicare B Only	\$558		\$1,113
20-24.999 years			
Without Medicare	\$659		\$574
With Medicare A & B	\$117	\$428	\$150
With Medicare B Only	\$297		\$574
25-29.999 years			
Without Medicare	\$409		\$358
With Medicare A & B	\$84	\$271	\$104
With Medicare B Only	\$84		\$104
30-34.999 years*			
Without Medicare	\$284		\$251
With Medicare A & B	\$68	\$192	\$81
With Medicare B Only	\$68		\$81

* Further reductions for each year over 35.

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO and PrimeTime
Disability Benefit Recipient Premiums			
5-9.999 years			
Without Medicare	\$659		\$574
With Medicare A & B	\$117	\$428	\$150
With Medicare B Only	\$297		\$574
10-24.999 years			
Without Medicare	\$447		\$391
With Medicare A & B	\$89	\$294	\$111
With Medicare B Only	\$208		\$391
25 years & over			
Without Medicare	\$253		\$224
With Medicare A & B	\$64	\$173	\$75
With Medicare B Only	\$64		\$75



**2020 Contribution Rates
(continued)**

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO and PrimeTime
Spouse Premiums (Service Retiree, Disability Recipient, or Member's Qualified Service)			
Up to 25 years			
Without Medicare	\$1,032		\$896
With Medicare A & B	\$198	\$821	\$265
With Medicare B Only	\$558		\$896
25-29.999 years			
Without Medicare	\$932		\$810
With Medicare A & B	\$182	\$743	\$242
With Medicare B Only	\$182		\$242
30 years & over			
Without Medicare	\$833		\$724
With Medicare A & B	\$166	\$664	\$219
With Medicare B Only	\$166		\$219

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO and PrimeTime
Child Premiums			
Child w/o Medicare A	\$253		\$168
Child with Medicare A & B	\$149	\$585	\$196



SERS' Non-Medicare Plans

Non-Medicare plans are available to benefit recipients and dependents under age 65 and not Medicare eligible.

Aetna Choice POS II

This is a Preferred Provider Organization (PPO) plan with prescription drug coverage by Express Scripts. The plan is available throughout the United States.

To enroll in this plan, a member must:

- Be under age 65 and not eligible for Medicare

Use of out-of-network providers will increase out-of-pocket costs.

AultCare PPO

This is a Preferred Provider Organization (PPO) plan with prescription drug coverage by AultCare.

To enroll in this plan, a member must:

- Be under age 65 and not eligible for Medicare.
- Live in one of the Ohio counties listed on the map in the 2020 Open Enrollment Guide.

Use of out-of-network providers will increase out-of-pocket costs.

2020 SERS Marketplace Wraparound Plan

The SERS Marketplace Wraparound Plan is available to participants who are not eligible for Medicare and who are not enrolled in Medicaid. Participants are able to choose insurance from any insurer offering coverage in the federal Marketplace. If eligible, participants receive a federal subsidy to lower the premium and cost-sharing amounts. The SERS Market place Wraparound Plan offers additional benefits to help pay for deductibles, co-pays, and other costs.

SERS Health Care and Government Relations staff are working with federal officials to extend the Wraparound program for 5-10 years. If approval is not granted by January 1, 2020 SERS will offer an HRA option.



SERS' Medicare Plans

Aetna Medicare Plan (PPO)

This is a Medicare Advantage plan with Medicare Part D prescription drug coverage administered by Express Scripts.

Ohio Residents: Aetna has a preferred provider network. Use of out-of-network providers will increase out-of-pocket costs.

Non-Ohio Residents: Can use any medical provider that accepts Medicare patients and agrees to file claims with Aetna.

This plan is available throughout the United States. To enroll, members must have:

- Medicare Part B
- Medicare Part A, if eligible

Aetna Traditional Choice Plan

This plan is NOT available for optional enrollment. It is only available in special circumstances. SERS determines when enrollment is appropriate. Medicare Part D prescription drug coverage is administered through Express Scripts.

PrimeTime Health Plan

This is a Medicare Advantage plan with Medicare Part D prescription drug coverage by PrimeTime.

Members must use PrimeTime providers or pay the full cost for services.

To enroll in this plan, members must:

- Have Medicare Part A and Part B.
- Live in one of the Ohio counties listed on the map in the 2020 Open Enrollment Guide.

AultCare PPO

This plan is available to individuals who do not have Medicare Part A but have Medicare Part B only.

Prescription drug coverage is administered by AultCare.

To enroll in this plan, members must:

- Have Medicare Part B only.
 - Live in one of the Ohio counties listed on the map in the 2020 Open Enrollment Guide.



Prescription Drug Coverage

Prescription drug coverage is included in SERS health care coverage and does not require a separate premium. Express Scripts provides the prescription drug coverage for Aetna. PrimeTime and AultCare provide their own prescription coverage. All prescription plans have a formulary of covered medications. These are referred to as preferred medications. Medications not on the formulary are referred to as non-preferred. The amount members are responsible for paying, known as the co-pay, is based on the medication's preferred status. Members pay the least for generic medications. Members pay the most for brand-name medications that are not preferred. Members can get prescriptions at retail pharmacies or through the mail. Members save money by having prescriptions for maintenance medications mailed to their homes.

The following is a partial list of situations or types of medications that are not covered.

- Prescriptions or medications dispensed in a hospital. These are typically covered under the medical plan.
- Prescriptions covered by Workers' Compensation.
- Prescriptions for fertility, erectile dysfunction, or cosmetic drugs.
- Over-the-counter drugs and herbal preparations, including homeopathic preparations.

With the exception of insulin, Express Scripts does not cover non-preferred medications. Members pay the full amount for non-preferred medications, and these costs do not count toward any out-of-pocket maximum or the Medicare coverage gap.

All prescription plans include these common coverage rules:

- Prior Authorization - For some medications, the doctor must contact the drug plan before certain prescriptions can be filled. The prescription is only covered if the doctor is able to confirm that the medication is necessary.
- Quantity Limits - Limits how much of a specific medication members can get at a time.
- Step Therapy - A process where certain medications that have proven to be safe and effective are tried as the first choice rather than starting with a more expensive prescribed medication.

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 (In-Network)	AultCare PPO (In Network)
Annual Combined Medical & Prescription Drug Out-of-Pocket Maximum	\$7,350/person \$14,700/family	\$7,350/person \$14,700/family
Deductible	\$2,000/person \$4,000/family	\$2,000/person \$4,000/family
Primary Care Office Visit	\$20 co-pay	\$20 co-pay
Specialist Office Visit	\$40 co-pay	\$40 co-pay
Outpatient Diagnostic X-Ray and Lab	20% coinsurance	20% coinsurance
Retail Walk-In Clinic	\$20 co-pay	\$20 co-pay
Urgent Care	\$40 co-pay	\$40 co-pay
Emergency Room	\$150 co-pay	\$150 co-pay
Ambulance	20% coinsurance	20% coinsurance
Inpatient Hospital	20% coinsurance after \$250 co-pay	20% coinsurance after \$250 co-pay
Outpatient Surgery	20% coinsurance	20% coinsurance
Skilled Nursing Facility (100-day max)	20% coinsurance	20% coinsurance
Home Health Care	20% coinsurance	20% coinsurance
Hospice Health Care	100% coverage	Inpatient: 100% coverage Outpatient: 20% coinsurance
Outpatient Short-Term Rehab	20% coinsurance	20% coinsurance
Chiropractic	20% coinsurance	20% coinsurance
Durable Medical Equipment	20% coinsurance	20% coinsurance
Prescription Drugs	Express Scripts <u>Retail 30-day max:</u> \$7.50 generic, 25% preferred brand (\$25 min, \$100 max) <u>Mail order 90-day max:</u> \$15 generic, 25% preferred brand (\$45 min, \$200 max) <u>Insulin Retail</u> 25% or \$25 max preferred brand, 25% or \$45 max non-preferred brand <u>Insulin Mail Order</u> 25% or \$60 preferred brand, 25% or \$115 max non-preferred brand <u>Specialty medications:</u> 25% of cost (\$25 min, \$100 max) <u>Specialty Mail order 90-day max:</u> 25% of cost (\$25 min, \$67 max per 30 day supply)	AultCare <u>Retail 30-day max:</u> \$7.50 generic, 25% preferred brand (\$25 min, \$100 max) <u>Mail order 90-day max:</u> \$15 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 <u>Specialty medications:</u> \$100 co-pay <u>Specialty Mail order</u> \$100 co-pay; 30-day supply only



**Non-Medicare Plan Benefits
(continued)**

Benefit	Maximum Reimbursement
Deductible up to \$1,800	<p style="text-align: center;">Reimbursements are limited to \$1,800 per family, per calendar year in accordance with federal limits.*</p>
Covered prescription drugs (50% of the Marketplace plan's prescription drug co-payment/coinsurance up to \$200 per prescription*)	
Physician office visit co-payment up to \$50 per visit*	
Inpatient hospital admission co-payment/coinsurance up to \$300 per admission*	
Imaging (X-rays, CT/PET Scans, MRI) co-payment or coinsurance up to \$100 per service*	
<p>*All benefit category costs in the aggregate are subject to the overall total Maximum Amount under this Plan. Such costs can be used in various combinations but shall not, in the aggregate, exceed the Maximum Amount. Reimbursement is limited to cost sharing after the Participant's Marketplace plan has adjudicated any claim(s). Actual reimbursement may vary according to the Participant's Marketplace plan's terms, but will in no event exceed the Participant's actual out-of-pocket expenses under the applicable Marketplace plan.</p>	
<p>The SERS Wraparound HRA eligible expenses noted above only apply to covered services under your Marketplace plan. Claims for non-covered services are not eligible for reimbursement.</p>	



Medicare Plan Benefits

	Aetna Medicare SM Plan (PPO)	PrimeTime Health Plan
Annual Out-of-Pocket Maximum	\$3,000 per person	\$3,000 per person
Deductible	None	None
Primary Care Office Visit	\$20 co-pay	\$20 co-pay
Specialist Office Visit	\$30 co-pay	\$30 co-pay
Outpatient Diagnostic X-Ray	\$25 co-pay	100% coverage
Outpatient Diagnostic Lab	100% coverage	100% coverage
Urgent Care	\$40 co-pay	\$40 co-pay
Emergency Room	\$100 co-pay	\$100 co-pay
Ambulance	\$80 co-pay	\$80 co-pay
Inpatient Hospital	\$150 co-pay per day 1-5, then 100%	\$150 co-pay per day 1-5, then 100%
Outpatient Surgery /Procedures	15% coinsurance up to \$200 max	\$200 co-pay
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
Home Health Care	100% coverage	100% coverage
Hospice	Covered per Medicare	Covered per Medicare
Outpatient Short-Term Rehab	\$20 co-pay	\$5 co-pay (cardiac rehab at 100% coverage)
Chiropractic	\$20 co-pay limited to Medicare coverage	\$20 co-pay limited to Medicare coverage
Durable Medical Equipment	20% coinsurance	20% coinsurance
Prescription Drugs	<p>Express Scripts Medicare D PDP <u>Retail 30-day max:</u> \$7.50 generic, 25% preferred brand (\$25 min,\$100 max) <u>Mail order 90-day max:</u> \$15 generic, 25% preferred brand (\$45 min, \$200 max) <u>Insulin Retail</u> 25% or \$25 max preferred brand, 25% or \$45 max non-preferred brand <u>Insulin Mail Order</u> 25% or \$60 max preferred brand, 25% or \$115 max non-preferred brand <u>Specialty medications:</u> 25% of cost (\$25 min,\$100 max) <u>Specialty Mail order 90-day max:</u> 25% of cost (\$25 min,\$67 max per 30 day supply)</p>	<p>PrimeTime <u>Retail 30-day max:</u> \$7.50 generic, 25% preferred brand (\$25 min, \$100 max), 50% non-preferred brand <u>Mail order 90-day max:</u> \$15 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 <u>Specialty medications:</u> \$100 co-pay <u>Specialty Mail order</u> \$100 co-pay; 30-day supply only</p>



SCHEDULE D

DETAILED TABULATIONS OF THE DATA

**All Retirees, Spouses and Dependents Receiving Health Care
Male and Female Demographic Breakdown
As of June 30, 2019
Tabulated by Attained Ages**

Attained Age	Number of		Total Number
	Males	Females	
Under 20	30	48	78
20-24	60	68	128
25-29	16	28	44
30-34	1	4	5
35-39	2	3	5
40-44	10	6	16
45-49	14	23	37
50-54	100	127	227
55-59	478	602	1,080
60-64	1,239	2,234	3,473
65-69	2,100	4,709	6,809
70-74	2,193	5,552	7,745
75-79	2,170	5,469	7,639
80-84	2,090	4,922	7,012
85-89	1,230	3,355	4,585
90-94	521	2,125	2,646
95-99	126	763	889
100	0	39	39
101	2	36	38
102	6	17	23
103	3	11	14
104	0	7	7
105 & Over	0	8	8
Total	12,391	30,156	42,547



**Schedule of Retiree Members Added to and Removed From Rolls
Last Eight Fiscal Years**

Year Ended	Added to Rolls		Removed from Rolls*		Rolls at Year-End		% Increase in Projected Benefits	Average Projected Benefits
	Number	Projected Benefits	Number	Projected Benefits	Number	Projected Benefits		
6/30/2012	2,073	9,280,779	3,785	5,391,796	46,439	90,708,513	11.49%	1,953
6/30/2013	2,110	8,977,566	3,217	4,370,993	45,332	100,514,730	10.81%	2,217
6/30/2014	2,251	8,658,731	2,873	4,834,922	44,710	87,007,272	(13.44)%	1,946
6/30/2015	2,329	8,897,861	2,932	4,682,901	44,107	90,855,858	4.42%	2,060
6/30/2016	2,820	10,209,470	2,650	4,258,016	44,277	90,484,518	(0.41)%	2,044
6/30/2017	2,355	10,099,985	2,774	4,834,866	43,858	91,554,056	1.18%	2,088
6/30/2018	2,383	10,099,985	2,820	5,004,204	43,421	90,696,175	(0.94)%	2,089
6/30/2019	1,791	6,375,244	2,665	4,496,857	42,547	82,778,168	(8.73)%	1,946

* The benefits removed from rolls do not include subsidies that were changed due to premium changes, plan election changes or reductions due to members obtaining Medicare eligibility.

**Terminated Vested Members Eligible for Health Care
Male and Female Demographic Breakdown
As of June 30, 2019
Tabulated by Attained Ages**

Attained Age	Number of		Total Number
	Males	Females	
Under 35	14	5	19
35-39	51	68	119
40-44	107	204	311
45-49	152	451	603
50-54	235	800	1,035
55-59	293	1,418	1,711
60 & Over	295	1,371	1,666
Total	1,147	4,317	5,464



**Total Active Members as of June 30, 2019
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	3,125							3,125
Avg Pay	\$8,431							\$8,431
20-24	10,033	87						10,120
Avg Pay	\$9,761	\$26,126						\$9,902
25-29	10,041	855	34					10,930
Avg Pay	\$13,925	\$29,590	\$39,885					\$15,231
30-34	8,819	1,705	411	39				10,974
Avg Pay	\$15,410	\$32,051	\$39,112	\$43,726				\$18,984
35-39	10,180	2,403	946	390	54			13,973
Avg Pay	\$15,465	\$29,911	\$40,612	\$46,948	\$48,885			\$20,660
40-44	10,692	3,085	1,369	814	331	29		16,320
Avg Pay	\$14,351	\$27,395	\$35,544	\$45,518	\$48,875	\$53,204		\$20,918
44-49	10,608	3,880	2,374	1,721	873	250	26	19,732
Avg Pay	\$13,754	\$26,184	\$32,254	\$38,943	\$47,686	\$53,649	\$48,696	\$22,674
50-54	8,604	3,672	3,238	2,969	1,814	653	248	21,198
Avg Pay	\$14,222	\$26,550	\$29,242	\$34,372	\$40,210	\$51,441	\$52,282	\$25,290
55-59	6,989	3,102	3,184	4,112	3,590	1,448	671	23,096
Avg Pay	\$13,808	\$25,576	\$29,099	\$32,244	\$35,592	\$41,629	\$49,274	\$26,940
60-64	5,278	2,273	2,010	2,652	2,897	1,811	999	17,920
Avg Pay	\$12,796	\$24,490	\$30,151	\$32,461	\$33,853	\$37,611	\$43,129	\$26,739
65-69	3,053	965	694	730	814	685	759	7,700
Avg Pay	\$9,288	\$21,408	\$27,794	\$32,495	\$34,242	\$35,211	\$39,056	\$22,554
70 & over	2,004	575	408	319	241	203	525	4,275
Avg Pay	\$7,796	\$15,509	\$21,617	\$24,718	\$30,806	\$32,509	\$32,973	\$16,978
Totals	89,426	22,602	14,668	13,746	10,614	5,079	3,228	159,363
Avg Pay	\$13,275	\$26,647	\$31,165	\$34,659	\$37,171	\$40,886	\$42,545	\$21,727

Averages:
Age: 47.1
Service: 7.5
Annual Pay: \$21,727



**Male Active Members as of June 30, 2019
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	1,775							1,775
Avg Pay	\$8,783							\$8,783
20-24	4,513	54						4,567
Avg Pay	\$9,914	\$29,897						\$10,150
25-29	4,092	400	22					4,514
Avg Pay	\$14,042	\$34,223	\$44,277					\$15,978
30-34	3,067	699	212	31				4,009
Avg Pay	\$16,546	\$38,202	\$43,656	\$46,770				\$21,989
35-39	2,955	781	408	214	25			4,383
Avg Pay	\$17,264	\$37,389	\$49,458	\$55,006	\$61,431			\$25,942
40-44	3,269	742	375	284	162	19		4,851
Avg Pay	\$14,653	\$35,802	\$48,387	\$58,421	\$57,993	\$54,293		\$24,661
44-49	3,520	883	486	395	302	122	9	5,717
Avg Pay	\$13,404	\$33,797	\$46,615	\$54,938	\$60,780	\$60,031	\$53,465	\$25,807
50-54	3,109	863	564	466	398	253	111	5,764
Avg Pay	\$14,526	\$33,317	\$42,520	\$51,335	\$57,450	\$65,017	\$55,981	\$29,033
55-59	2,643	905	673	603	473	261	260	5,818
Avg Pay	\$14,827	\$32,117	\$39,479	\$47,141	\$54,485	\$57,657	\$57,175	\$30,755
60-64	2,153	904	597	540	375	248	282	5,099
Avg Pay	\$14,152	\$27,792	\$38,087	\$44,632	\$49,350	\$53,424	\$55,593	\$29,391
65-69	1,297	485	278	196	136	96	130	2,618
Avg Pay	\$11,061	\$23,611	\$33,104	\$40,658	\$46,455	\$49,466	\$54,252	\$23,334
70 & over	918	316	215	130	63	31	49	1,722
Avg Pay	\$9,038	\$18,175	\$25,764	\$28,080	\$40,102	\$40,623	\$45,097	\$16,972
Totals	33,311	7,032	3,830	2,859	1,934	1,030	841	50,837
Avg Pay	\$13,572	\$32,388	\$41,577	\$48,822	\$54,433	\$57,389	\$55,292	\$23,399

Averages:
Age: 45.1
Service: 5.7
Annual Pay: \$23,399



**Female Active Members as of June 30, 2019
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals
	0-4	5 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	
Under 20	1,350							1,350
Avg Pay	\$7,967							\$7,967
20-24	5,520	33						5,553
Avg Pay	\$9,636	\$19,955						\$9,698
25-29	5,949	455	12					6,416
Avg Pay	\$13,844	\$25,517	\$31,834					\$14,706
30-34	5,752	1,006	199	8				6,965
Avg Pay	\$14,804	\$27,778	\$34,271	\$31,928				\$17,254
35-39	7,225	1,622	538	176	29			9,590
Avg Pay	\$14,729	\$26,311	\$33,903	\$37,150	\$38,070			\$18,246
40-44	7,423	2,343	994	530	169	10		11,469
Avg Pay	\$14,218	\$24,733	\$30,699	\$38,604	\$40,134	\$51,133		\$19,335
44-49	7,088	2,997	1,888	1,326	571	128	17	14,015
Avg Pay	\$13,928	\$23,941	\$28,557	\$34,178	\$40,761	\$47,566	\$46,172	\$21,396
50-54	5,495	2,809	2,674	2,503	1,416	400	137	15,434
Avg Pay	\$14,050	\$24,471	\$26,441	\$31,214	\$35,365	\$42,854	\$49,284	\$23,892
55-59	4,346	2,197	2,511	3,509	3,117	1,187	411	17,278
Avg Pay	\$13,189	\$22,882	\$26,317	\$29,685	\$32,726	\$38,105	\$44,276	\$25,655
60-64	3,125	1,369	1,413	2,112	2,522	1,563	717	12,821
Avg Pay	\$11,862	\$22,309	\$26,798	\$29,350	\$31,549	\$35,102	\$38,227	\$25,685
65-69	1,756	480	416	534	678	589	629	5,082
Avg Pay	\$7,979	\$19,181	\$24,246	\$29,499	\$31,793	\$32,888	\$35,915	\$22,152
70 & over	1,086	259	193	189	178	172	476	2,553
Avg Pay	\$6,746	\$12,256	\$16,997	\$22,405	\$27,516	\$31,046	\$31,724	\$16,982
Totals	56,115	15,570	10,838	10,887	8,680	4,049	2,387	108,526
Avg Pay	\$13,099	\$24,054	\$27,486	\$30,939	\$33,325	\$36,687	\$38,054	\$20,944

Averages:

Age: 48.0
 Service: 8.3
 Annual Pay: \$20,944



**Active Members as of June 30, 2019
Tabulated by Annual Pay**

Annual Pay	Number of Active Members			Portion of Total Number	
	Men	Women	Totals	Group	Cumulative
Less than \$1,000	2,236	4,021	6,257	3.9%	3.9%
\$1,000 - 1,999	2,845	3,713	6,558	4.1%	8.0%
2,000 - 2,999	3,617	3,710	7,327	4.6%	12.6%
3,000 - 3,999	3,495	3,306	6,801	4.3%	16.9%
4,000 - 4,999	2,555	2,948	5,503	3.5%	20.4%
5,000 - 5,999	1,963	2,789	4,752	3.0%	23.3%
6,000 - 6,999	1,505	2,843	4,348	2.7%	26.1%
7,000 - 7,999	1,235	2,593	3,828	2.4%	28.5%
8,000 - 8,999	1,085	2,538	3,623	2.3%	30.7%
9,000 - 9,999	872	2,698	3,570	2.2%	33.0%
10,000 - 11,999	1,731	5,612	7,343	4.6%	37.6%
12,000 - 13,999	1,615	5,518	7,133	4.5%	42.1%
14,000 - 15,999	1,569	5,478	7,047	4.4%	46.5%
16,000 - 17,999	1,430	6,018	7,448	4.7%	51.2%
18,000 - 19,999	1,246	6,205	7,451	4.7%	55.8%
20,000 - 24,999	3,085	14,454	17,539	11.0%	66.8%
25,000 - 29,999	2,416	9,665	12,081	7.6%	74.4%
30,000 - 35,999	2,889	7,728	10,617	6.7%	81.1%
36,000 and over	13,448	16,689	30,137	18.9%	100.0%
Totals	50,837	108,526	159,363		



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.