



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

Prepared as of June 30, 2020





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

October 30, 2020

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 Fund of the School Employees Retirement System of Ohio (SERS) prepared as of June 30, 2020. 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 3.67% of active payroll payable for the fiscal year ending June 30, 2020 is required to fund the benefits.

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.

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 other than plan design features.

In order to prepare the results in this report we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

We note that as we are preparing this report, the world is in the midst of a pandemic. We have considered available information, but do not believe that there is yet sufficient data to warrant the modification of any of our assumptions. We will continue to monitor the situation and advise the Board in the future of any adjustments that we believe would be appropriate.



October 30, 2020
Board of Trustees
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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
President

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, 2020

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2020, 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, 2020	June 30, 2019
Active members included in valuation		
Number	156,579	159,363
Annual Compensation	\$3,477,578,726	\$3,462,524,396
Service Retirees		
Number	31,282	31,605
Disability Retirees		
Number	2,793	2,955
Spouses of Retirees		
Number	5,153	5,246
Spouses of Deceased Retirees		
Number	1,624	1,680
Survivor Benefit Recipients		
Number	682	731
Children		
Number	322	330
Deferred Vested		
Number	5,654	5,464
Assets		
Market Value	\$482,611,478	\$463,810,679
Unfunded Accrued Liability	\$1,313,892,066	\$1,734,921,700
Actuarial Accrued Liability	\$1,796,503,544	\$2,198,732,379
Funded Ratio (MVA/AAL)	26.86%	21.09%
Employer Contribution Rate		
Normal	2.09%	2.53%
Accrued Liability	<u>1.58%</u>	<u>2.10%</u>
Total	3.67%	4.63%
Employer Contribution Toward Health Care*	1.50%	1.50%
Accrued liability amortization period	30	30

* Includes 1.50% of payroll surcharge



2. 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 (if any) allocated to the health care fund. However, based on a Board Resolution dated October 15, 2020, 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%. This rate includes the anticipated revenue from the minimum surcharge level for FY2020 of \$23,000.
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, primarily due to the removal of the ACA Health Insurer Fee, which was repealed on December 20, 2019, resulting in lower claims projections.
5. The impact of the COVID-19 pandemic was considered in this valuation; however, no changes were incorporated at this time due to the level of uncertainty regarding the impact on both plan costs and contribution levels going forward. Given the uncertainty regarding COVID-19 (e.g., the impact of routine care being deferred, direct COVID-19 treatment and prevention costs, changes in contribution and budget projections), continued monitoring of the impact on the Plan's liability will be required.
6. 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

The PrimeTime Health Plan and AultCare PPO Plan for enrollees with Medicare Part B will not be offered in 2021 due to increasing costs. Effective January 1, 2021, enrollees in these plans will be automatically enrolled in the Aetna Medicare Plan (PPO).

Premiums

Premiums will remain the same in 2021 for enrollees in the Aetna Medicare Plan (PPO).

There will be a premium decrease for enrollees in the Aetna Traditional Choice Plan.



Non-Medicare Eligible

Premiums

There will be a premium increase in 2021 for enrollees in the Aetna Choice POS II Plan.

There will be a premium decrease for enrollees in the AultCare PPO 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, 2021 SERS will offer a Health Reimbursement Arrangement (HRA) option.

Medicaid

Participants eligible for Medicaid in 2021 will not be eligible for SERS health care.

7. The statute sets a contribution cap of 24.00% of payroll: 14.00% from employers and 10.00% 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 14.00% 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, 2020 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
156,579	\$3,477,578,726	\$22,210	47.5	7.7

The following table shows an eight-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
6/30/2020	156,579	3,477,578,726	22,210	2.2

**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	31,282	76.0
Disability Retirees	2,793	69.2
Spouses	7,459	78.3
Children	322	30.0
Total	41,856	75.6

This valuation also includes 5,654 inactive members eligible for health care.



SECTION III – ASSETS

1. As of June 30, 2020 the total market value of assets amounted to \$482,611,478.

Asset Summary Based on Market Value			
(1)	Assets at June 30, 2019	\$	463,810,679
(2)	Contributions and Misc. Revenue		145,573,374
(3)	Investment Gain (Loss)		8,262,049
(4)	Benefit Payments		<u>(135,034,624)</u>
(5)	Assets at June 30, 2020	\$	482,611,478
	(1) + (2) + (3) + (4)		
(6)	Annualized Rate of Return*		1.8 %

*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, 2020.

1. The total health care valuation balance sheet shows that the System has total future health care liabilities of \$2,520,606,814 of which \$613,571,119 is for the future benefits payable for present retiree members and beneficiaries of deceased members; \$12,403,183 is for the future benefits payable for current deferred vested members; and \$1,894,632,512 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 \$482,611,478 as of June 30, 2020. The difference of \$2,037,995,336 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 \$2,037,995,336 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 2.09% 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 \$724,103,270. When this amount is subtracted from \$2,037,995,336 which is the present value of the total future contributions to be made by the employer, there remains \$1,313,892,066 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 1.58% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of \$1,313,892,066 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, 2020 is shown below.

Experience Gain/(Loss) (\$ Thousands)

(1)	UAAL* as of 6/30/19	\$ 1,734,922
(2)	Normal cost from last valuation	87,870
(3)	Expected employer contributions	161,012
(4)	Interest accrual: [(1) + (2)] x .0525 - (3) x .0525/2	<u>91,470</u>
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$ 1,753,250
(6)	Change due to claims and retiree premiums**	491,417
(7)	Expected UAAL after changes: (5) - (6)	\$ 1,261,833
(8)	Actual UAAL* as of 6/30/20	\$ 1,313,892
(9)	Total gain/(loss): (7) - (8)	\$ (52,059)
	(a) Contribution shortfall	(82,588)
	(b) Investment Gain/(Loss)	(16,365)
	(c) Experience Gain/(Loss) (9) - (9a) - (9b)	\$ 46,894
(10)	Accrued Liabilities as of 6/30/20	\$ 1,796,504
(11)	Experience Gain/(Loss) as percent of actuarial accrued liabilities at end of year (9c) / (10)	2.6%

* *unfunded actuarial liability*

** *The major cause of the gain was the lower than anticipated claims for Medicare-Eligible retirees, which are based upon the Aetna Medicare Plan (PPO) and the Aetna Traditional Choice Plan. Beginning in plan year 2021, these plan premium rates exclude the ACA Health Insurer Fee, which was repealed on December 20, 2019, resulting in lower claims projections.*



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 6/30/20
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.	\$ (6.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.2
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	17.5
Claims Increases (Including Wrap Plan). If there are smaller claims increases than assumed creates a gain; larger, a loss.	491.4
New Members. Additional accrued liability attributable to members who entered the plan since the last valuation.	(18.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(16.4)
Contribution Shortfall. If there are more contributions than the ARC, there is a gain. If less contributions, a loss.	(82.6)
Death After Retirement. If retiree members live longer than assumed, there is a loss. If not as long, a gain.	16.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	55.1
Gain (or Loss) During Year From Financial Experience	\$ 455.8
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	(16.4)
Composite Gain (or Loss) During Year	\$ 439.4



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 FY2020.

Required Contribution Rates

Contribution for	Amount	% of Payroll
A. Normal Cost	\$ 74,892,078	2.09%
B. Member Contributions*	\$ 0	0.00%
C. Employer Normal Cost: [A - B]	\$ 74,892,078	2.09%
D. Unfunded Actuarial Accrued Liability**	\$ 56,717,005	1.58%
E. Total Recommended Employer Contribution Rate: [C + D]	\$ 131,609,083	3.67%
F. Employer Contribution Toward Health Care ⁺	\$ 53,778,506	1.50%

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

** Based on 30-year amortization of the UAAL from June 30, 2020.

+ Includes 1.50% payroll surcharge.

Eleven-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
2020	0.00	1.50	1.50



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, 2020. Additional information will be provided in separate reports.

Valuation date	6/30/2020
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	3.00%
Wage increases	3.50%
Medical Trend Assumption	
Pre-Medicare	7.00% - 4.75%
Medicare	5.25% - 4.75%
Year of Ultimate Trend	2023 - 2029



Nine-Year 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
6/30/2020	483	1,797	1,314	26.9	3,478	37.8



Nine-Year 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
June 30, 2020	161,011,895	48,187,050	32,349,114	80,536,164	50.0



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, 2020 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2019.

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

	June 30, 2020	June 30, 2019
ASSETS		
Current market value of assets	\$ 482,611,478	\$ 463,810,679
Prospective contributions		
Employer normal contributions	724,103,270	854,634,648
Unfunded accrued liability contributions	<u>1,313,892,066</u>	<u>1,734,921,700</u>
Total prospective contributions	<u>\$ 2,037,995,336</u>	<u>\$ 2,589,556,348</u>
 Total assets	 <u>\$ 2,520,606,814</u>	 <u>\$ 3,053,367,027</u>
LIABILITIES		
Present value of benefits payable on account of present retiree members and beneficiaries	\$ 613,571,119	\$ 788,785,002
Present value of benefits payable on account of active members	1,894,632,512	2,240,307,955
Present value of benefits payable on account of deferred vested members	<u>12,403,183</u>	<u>24,274,070</u>
 Total liabilities	 <u>\$ 2,520,606,814</u>	 <u>\$ 3,053,367,027</u>



The following nine-year 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.

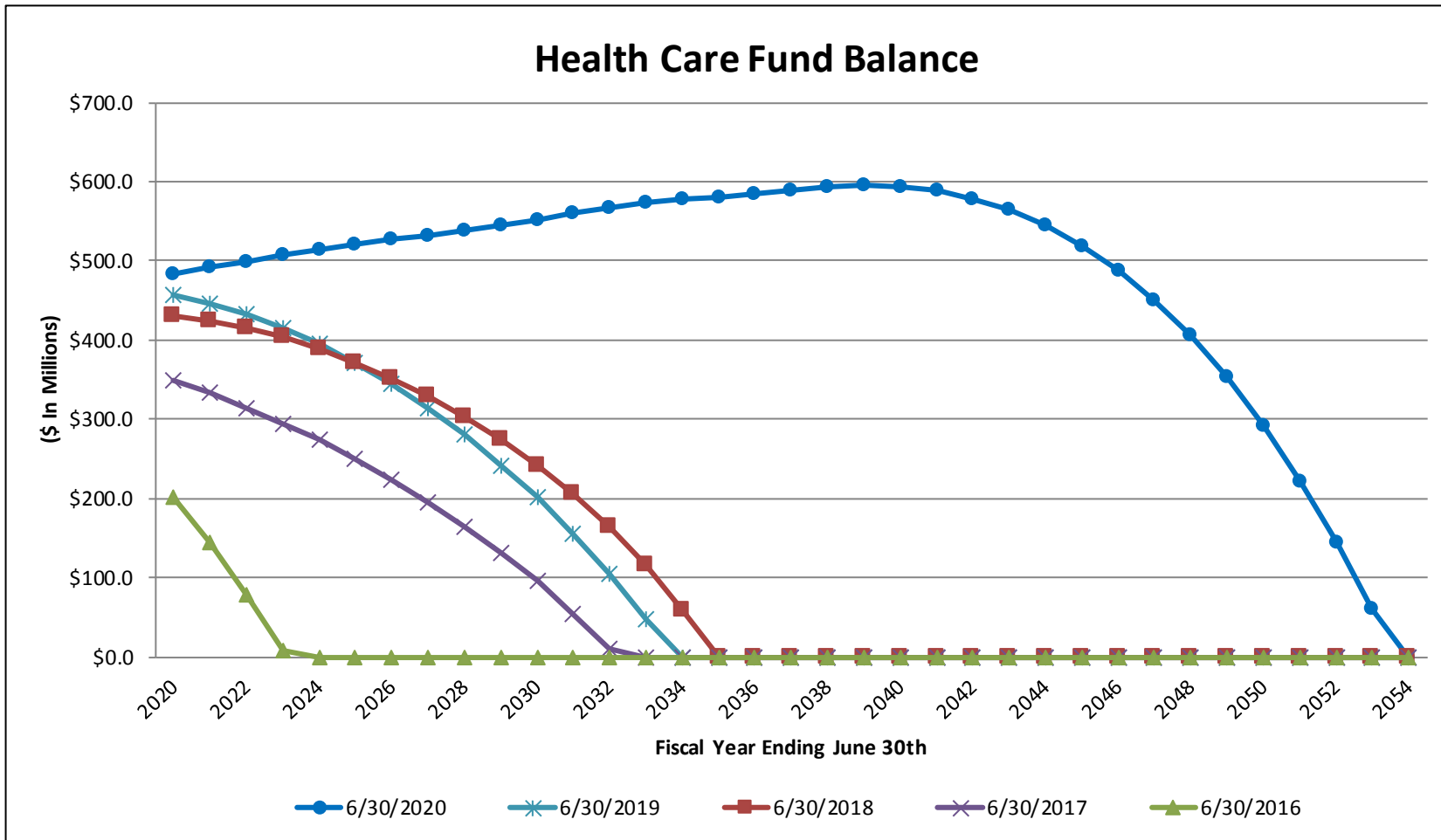
Solvency Test
(\$ Millions)

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset		
	(1) Active Member Contributions	(2) Retiree Members & Beneficiaries	(3) Active Members (Employer Financed Portion)			(1)	(2)	(3)
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	
6/30/2020	0	626	1,171	483	100.0	77.1	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 7.50% future asset rate of return assumption, on a payroll growth assumption of 3.50% per year, and on the assumption that the health contribution rate will be 0.00%, plus a health care surcharge of 1.50%. These projections assume there will be no health care cost increases due to ACA law changes or COVID-19 impact other than anticipated health care trend.





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
2020	7.00%	5.250%
2021	6.75	5.125
2022	6.50	5.00
2023	6.25	4.75
2024	6.00	4.75
2025	5.75	4.75
2026	5.50	4.75
2027	5.25	4.75
2028	5.00	4.75
2029 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%	100.0%*
Wraparound Plan	10.0%	N/A

**The adjustment on the Medicare assumption was due to Aetna MedicareSM Plan (PPO) being the only available option for future Retirees effective January 1, 2021.*

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%

**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.

Retiree Costs			
Medicare Status	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Non-Medicare	\$1,398	N/A	\$1,051
Medicare A	\$146	\$746	N/A
Medicare B Only	\$421	N/A	N/A

Spouse Costs			
Medicare Status	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Non-Medicare	\$1,118	N/A	\$839
Medicare A	\$146	\$746	N/A
Medicare B Only	\$421	N/A	N/A

Children Costs			
Medicare Status	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Non-Medicare	\$350	N/A	\$185
Medicare A	\$146	\$746	N/A

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 2020 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	\$13,932	\$11,869	\$11,244	\$14,328	\$8,844	\$7,092	\$5,568
Prescription Drug	2,412	2,273	1,968	2,412	2,052	1,776	1,044

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	\$180	\$180	\$156	\$156	\$420	\$72
Prescription Drug	1,488	1,488	1,464	1,488	1,500	1,464



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, 2020

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 10 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 10 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 10 years of service.

Members attaining 25 years of service after August 1, 2017: Attainment of age 62 with at least 10 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 10 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.

2021 RETIREE 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
- ◇ Wraparound HRA

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)

The following pages contain information that was provided by SERS in the 2021 Open Enrollment Guide and the 2021 Member Health Care Guide.



2021 Contribution Rates

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Service Retirement Date on or before July 1, 1989 Premiums			
5-9.999 years			
Without Medicare	\$734		\$560
With Medicare A & B	\$117	\$408	
With Medicare B Only	\$297		
10-24.999 years			
Without Medicare	\$280		\$219
With Medicare A & B	\$64	\$166	
With Medicare B Only	\$127		
25 years & over			
Without Medicare	\$280		\$219
With Medicare A & B	\$64	\$166	
With Medicare B Only	\$64		

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Service Retirement Date August 1, 1989 through July 1, 2008 Premiums			
10-14.999 years			
Without Medicare	\$1,433		\$1,086
With Medicare A & B	\$198	\$781	
With Medicare B Only	\$558		
15-19.999 years			
Without Medicare	\$734		\$560
With Medicare A & B	\$117	\$408	
With Medicare B Only	\$297		
20-24.999 years			
Without Medicare	\$385		\$298
With Medicare A & B	\$76	\$222	
With Medicare B Only	\$166		
25 years & over			
Without Medicare	\$280		\$219
With Medicare A & B	\$64	\$166	
With Medicare B Only	\$64		



**2021 Contribution Rates
(continued)**

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Service Retirement Date on or after August 1, 2008 Premiums*			
10-19.999 years			
Without Medicare	\$1,433		\$1,086
With Medicare A & B	\$198	\$781	
With Medicare B Only	\$558		
20-24.999 years			
Without Medicare	\$734		\$560
With Medicare A & B	\$117	\$408	
With Medicare B Only	\$297		
25-29.999 years			
Without Medicare	\$454		\$350
With Medicare A & B	\$84	\$259	
With Medicare B Only	\$84		
30-34.999 years*			
Without Medicare	\$315		\$245
With Medicare A & B	\$68	\$184	
With Medicare B Only	\$68		

* Further reductions for each year over 35.

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Disability Benefit Recipient Premiums			
5-9.999 years			
Without Medicare	\$734		\$560
With Medicare A & B	\$117	\$408	
With Medicare B Only	\$297		
10-24.999 years			
Without Medicare	\$496		\$382
With Medicare A & B	\$89	\$281	
With Medicare B Only	\$208		
25 years & over			
Without Medicare	\$280		\$219
With Medicare A & B	\$64	\$166	
With Medicare B Only	\$64		



**2021 Contribution Rates
(continued)**

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Spouse Premiums (Service Retiree, Disability Recipient, or Member's Qualified Service)			
Up to 25 years			
Without Medicare	\$1,153		\$874
With Medicare A & B	\$198	\$781	
With Medicare B Only	\$558		
25-29.999 years			
Without Medicare	\$1,041		\$790
With Medicare A & B	\$182	\$706	
With Medicare B Only	\$182		
30 years & over			
Without Medicare	\$929		\$706
With Medicare A & B	\$166	\$632	
With Medicare B Only	\$166		

Years of Service	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Child Premiums			
Child w/o Medicare A	\$280		\$165
Child with Medicare A & B	\$149	\$557	



SERS' Non-Medicare Plans

Non-Medicare plans are available to benefit recipients and dependents under age 65 and not Medicare eligible. Beginning 1/1/2021, however, members who are under age 65 that are eligible for Medicaid are not eligible for the SERS Health Care Plan coverage.

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 2021 Open Enrollment Guide.

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

2021 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 reinstate the Wraparound program for 5-10 years.



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.



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. AultCare provides 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	<p>Express Scripts</p> <p><u>Retail 30-day max:</u> \$7.50 generic, 25% preferred brand (\$25 min, \$100 max)</p> <p><u>Mail order 90-day max:</u> \$15 generic, 25% preferred brand (\$45 min, \$200 max)</p> <p><u>Insulin Retail:</u> 25% or \$25 max preferred brand, 25% or \$45 max non-preferred brand</p> <p><u>Insulin Mail Order:</u> 25% or \$60 preferred brand, 25% or \$115 max non-preferred brand</p> <p><u>Specialty medications:</u> 25% of cost (\$25 min, \$100 max)</p> <p><u>Specialty Mail order 90-day max:</u> 25% of cost (\$25 min, \$67 max per 30 day supply)</p>	<p>AultCare</p> <p><u>Retail 30-day max:</u> \$7.50 generic, 25% preferred brand (\$25 min, \$100 max)</p> <p><u>Mail order 90-day max:</u> \$15 generic, 25% preferred brand (\$45 min, \$200 max) Non-preferred at 100%</p> <p><u>Insulin Retail:</u> \$30 preferred brand, \$45 non-preferred brand</p> <p><u>Insulin Mail Order:</u> \$60 preferred brand, \$115 non-preferred brand</p> <p><u>Specialty medications:</u> \$100 co-pay</p> <p><u>Specialty Mail order:</u> \$100 co-pay; 30-day supply only</p>



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

Benefit	Maximum Reimbursement
Deductible up to \$1,800	<p 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 MedicareSM
Plan (PPO)

Annual Out-of-Pocket Maximum	\$3,000 per person
Deductible	None
Primary Care Office Visit	\$20 co-pay
Specialist Office Visit	\$30 co-pay
Outpatient Diagnostic X-Ray	\$25 co-pay
Outpatient Diagnostic Lab	100% coverage
Urgent Care	\$40 co-pay
Emergency Room	\$100 co-pay
Ambulance	\$80 co-pay
Inpatient Hospital	\$150 co-pay per day 1-5, then 100%
Outpatient Surgery /Procedures	15% coinsurance up to \$200 max
Skilled Nursing Facility (100-day max)	Co-pay: \$0 per day 1-10, \$25 per day 11-20, \$50 per day 21-100
Home Health Care	100% coverage
Hospice	Covered per Medicare
Outpatient Short-Term Rehab	\$20 co-pay
Chiropractic	\$20 co-pay limited to Medicare coverage
Durable Medical Equipment	20% coinsurance
Prescription Drugs	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 preferred brand, 25% or \$45 max non-preferred brand <u>Insulin Mail Order:</u> 25% preferred brand (\$45 min, \$60 max), 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)



SCHEDULE D
DETAILED TABULATIONS OF THE DATA

All Retirees, Spouses and Dependents Receiving Health Care
Male and Female Demographic Breakdown
As of June 30, 2020
Tabulated by Attained Ages

Attained Age	Number of		Total Number
	Males	Females	
Under 20	28	49	77
20-24	53	61	114
25-29	17	33	50
30-34	2	4	6
35-39	0	5	5
40-44	9	5	14
45-49	15	12	27
50-54	89	113	202
55-59	411	508	919
60-64	1,170	2,085	3,255
65-69	2,174	4,703	6,877
70-74	2,354	5,745	8,099
75-79	2,052	5,262	7,314
80-84	1,929	4,824	6,753
85-89	1,222	3,340	4,562
90-94	529	2,070	2,599
95-99	120	718	838
100	4	56	60
101	0	27	27
102	1	26	27
103	6	9	15
104	2	3	5
105 & Over	0	11	11
Total	12,187	29,669	41,856



**Schedule of Retiree Members Added to and Removed from Rolls
Last Nine 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	7,833,624	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
6/30/2020	2,058	6,645,569	2,749	4,275,713	41,856	69,600,381	(15.92)%	1,663

* 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, 2020
Tabulated by Attained Ages

Attained Age	Number of		Total Number
	Males	Females	
Under 35	12	10	22
35-39	40	52	92
40-44	113	209	322
45-49	154	414	568
50-54	230	827	1,057
55-59	302	1,397	1,699
60 & Over	342	1,552	1,894
Total	1,193	4,461	5,654



Total Active Members as of June 30, 2020
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	2,323							2,323
Avg Pay	\$7,452							\$7,452
20-24	9,361	101						9,462
Avg Pay	\$9,981	\$25,394						\$10,145
25-29	9,529	984	30					10,543
Avg Pay	\$14,116	\$30,391	\$36,719					\$15,700
30-34	8,538	1,969	398	26				10,931
Avg Pay	\$14,948	\$32,104	\$40,108	\$43,808				\$19,023
35-39	9,879	2,705	905	342	57			13,888
Avg Pay	\$15,275	\$30,961	\$41,965	\$45,863	\$52,104			\$20,974
40-44	10,293	3,507	1,260	766	395	19		16,240
Avg Pay	\$14,309	\$27,821	\$37,427	\$45,738	\$49,454	\$57,216		\$21,408
45-49	9,846	4,171	2,207	1,480	884	268	32	18,888
Avg Pay	\$13,998	\$26,867	\$33,316	\$39,714	\$48,305	\$52,284	\$53,038	\$23,327
50-54	8,322	3,922	2,995	2,510	1,850	629	193	20,421
Avg Pay	\$14,357	\$27,069	\$29,801	\$35,468	\$40,386	\$52,441	\$55,295	\$25,576
55-59	6,627	3,348	2,962	3,652	3,657	1,485	639	22,370
Avg Pay	\$14,024	\$26,109	\$29,778	\$32,547	\$36,425	\$41,996	\$50,538	\$27,504
60-64	5,212	2,511	2,079	2,659	3,390	1,967	980	18,798
Avg Pay	\$12,490	\$25,294	\$29,916	\$32,953	\$34,106	\$37,318	\$43,393	\$27,129
65-69	3,094	1,100	747	721	958	741	780	8,141
Avg Pay	\$9,218	\$20,920	\$28,175	\$32,939	\$34,797	\$35,798	\$39,146	\$22,936
70 & over	2,141	679	416	319	247	229	543	4,574
Avg Pay	\$7,297	\$15,515	\$20,923	\$26,987	\$30,063	\$33,811	\$33,827	\$16,836
Totals	85,165	24,997	13,999	12,475	11,438	5,338	3,167	156,579
Avg Pay	\$13,275	\$27,191	\$31,797	\$35,150	\$37,551	\$40,862	\$42,971	\$22,210

Averages:
Age: 47.5
Service: 7.7
Annual Pay: \$22,210



Male Active Members as of June 30, 2020
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	1,270							1,270
Avg Pay	\$7,727							\$7,727
20-24	4,175	58						4,233
Avg Pay	\$10,201	\$30,661						\$10,482
25-29	3,904	484	18					4,406
Avg Pay	\$14,178	\$35,072	\$43,628					\$16,593
30-34	2,930	740	216	21				3,907
Avg Pay	\$15,660	\$38,086	\$44,514	\$45,920				\$21,665
35-39	2,813	864	395	194	32			4,298
Avg Pay	\$17,116	\$39,811	\$50,246	\$53,917	\$62,541			\$26,722
40-44	3,147	820	371	288	181	11		4,818
Avg Pay	\$14,651	\$36,367	\$50,698	\$58,292	\$58,260	\$62,749		\$25,479
45-49	3,294	894	479	348	292	129	21	5,457
Avg Pay	\$13,071	\$34,887	\$47,345	\$56,473	\$61,838	\$59,981	\$54,243	\$26,298
50-54	3,080	942	514	418	391	235	83	5,663
Avg Pay	\$14,171	\$33,943	\$42,634	\$52,871	\$58,967	\$66,678	\$59,659	\$28,839
55-59	2,480	972	628	544	509	275	244	5,652
Avg Pay	\$14,851	\$32,200	\$40,710	\$47,329	\$54,040	\$59,571	\$58,091	\$31,405
60-64	2,148	919	626	539	437	257	269	5,195
Avg Pay	\$13,561	\$29,426	\$36,700	\$45,284	\$48,500	\$53,529	\$56,944	\$29,610
65-69	1,330	538	306	223	170	91	142	2,800
Avg Pay	\$10,594	\$23,681	\$32,804	\$41,956	\$44,573	\$50,086	\$55,327	\$23,649
70 & over	966	365	216	129	49	37	51	1,813
Avg Pay	\$8,573	\$18,086	\$23,760	\$30,689	\$39,236	\$39,184	\$45,384	\$16,360
Totals	31,537	7,596	3,769	2,704	2,061	1,035	810	49,512
Avg Pay	\$13,410	\$33,175	\$41,751	\$49,347	\$54,274	\$58,207	\$56,486	\$23,905

Averages:
Age: 45.7
Service: 5.9
Annual Pay: \$23,905



Female Active Members as of June 30, 2020
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	1,053							1,053
Avg Pay	\$7,121							\$7,121
20-24	5,186	43						5,229
Avg Pay	\$9,804	\$18,290						\$9,873
25-29	5,625	500	12					6,137
Avg Pay	\$14,074	\$25,861	\$26,355					\$15,058
30-34	5,608	1,229	182	5				7,024
Avg Pay	\$14,575	\$28,502	\$34,879	\$34,937				\$17,553
35-39	7,066	1,841	510	148	25			9,590
Avg Pay	\$14,541	\$26,807	\$35,551	\$35,306	\$38,744			\$18,397
40-44	7,146	2,687	889	478	214	8		11,422
Avg Pay	\$14,158	\$25,213	\$31,889	\$38,174	\$42,007	\$49,609		\$19,690
45-49	6,552	3,277	1,728	1,132	592	139	11	13,431
Avg Pay	\$14,463	\$24,679	\$29,427	\$34,562	\$41,631	\$45,140	\$50,739	\$22,120
50-54	5,242	2,980	2,481	2,092	1,459	394	110	14,758
Avg Pay	\$14,466	\$24,896	\$27,142	\$31,991	\$35,406	\$43,948	\$52,002	\$24,324
55-59	4,147	2,376	2,334	3,108	3,148	1,210	395	16,718
Avg Pay	\$13,529	\$23,617	\$26,837	\$29,959	\$33,577	\$38,001	\$45,873	\$26,186
60-64	3,064	1,592	1,453	2,120	2,953	1,710	711	13,603
Avg Pay	\$11,739	\$22,908	\$26,994	\$29,818	\$31,976	\$34,882	\$38,266	\$26,182
65-69	1,764	562	441	498	788	650	638	5,341
Avg Pay	\$8,180	\$18,278	\$24,962	\$28,902	\$32,688	\$33,798	\$35,544	\$22,563
70 & over	1,175	314	200	190	198	192	492	2,761
Avg Pay	\$6,249	\$12,526	\$17,859	\$24,473	\$27,793	\$32,776	\$32,629	\$17,148
Totals	53,628	17,401	10,230	9,771	9,377	4,303	2,357	107,067
Avg Pay	\$13,195	\$24,579	\$28,130	\$31,222	\$33,875	\$36,690	\$38,327	\$21,426

Averages:
Age: 48.3
Service: 8.5
Annual Pay: \$21,426



Active Members as of June 30, 2020
Tabulated by Annual Pay

Annual Pay	Number of Active Members			Portion of Total Number	
	Men	Women	Totals	Group	Cumulative
Less than \$1,000	2,338	4,242	6,580	4.2%	4.2%
\$1,000 - 1,999	2,914	3,766	6,680	4.3%	8.5%
2,000 - 2,999	3,498	3,613	7,111	4.5%	13.0%
3,000 - 3,999	3,268	3,111	6,379	4.1%	17.1%
4,000 - 4,999	2,462	2,820	5,282	3.4%	20.5%
5,000 - 5,999	1,800	2,697	4,497	2.9%	23.3%
6,000 - 6,999	1,532	2,616	4,148	2.6%	26.0%
7,000 - 7,999	1,186	2,489	3,675	2.3%	28.3%
8,000 - 8,999	1,012	2,365	3,377	2.2%	30.5%
9,000 - 9,999	869	2,391	3,260	2.1%	32.6%
10,000 - 11,999	1,494	5,045	6,539	4.2%	36.7%
12,000 - 13,999	1,489	5,076	6,565	4.2%	40.9%
14,000 - 15,999	1,282	5,135	6,417	4.1%	45.0%
16,000 - 17,999	1,326	5,633	6,959	4.4%	49.5%
18,000 - 19,999	1,330	6,161	7,491	4.8%	54.3%
20,000 - 24,999	2,970	14,899	17,869	11.4%	65.7%
25,000 - 29,999	2,427	10,097	12,524	8.0%	73.7%
30,000 - 35,999	2,780	7,757	10,537	6.7%	80.4%
36,000 and over	13,535	17,154	30,689	19.6%	100.0%
Totals	49,512	107,067	156,579		



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.