



Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve



GASB Statement No. 74 Report

For the

Retiree Health Care Fund

of the

School Employees Retirement System of Ohio

Prepared as of June 30, 2021





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

October 29, 2021

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

Ladies and Gentlemen:

Presented in this report is information to assist the School Employees Retirement System of Ohio (System) in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 74. The information is presented for the period ending June 30, 2021. The calculations in this report have been made on a basis that is consistent with our understanding of this accounting standard (GASB 74). Please note that the discount rate used to determine the Total OPEB Liability changed from 2.63% at the Prior Measurement Date to 2.27% at the current Measurement Date.

The annual actuarial valuation performed as of June 30, 2021 was used as the basis for the information presented in this report. The valuation was based upon data, furnished by the System staff, concerning active, inactive and retired members along with pertinent financial information. This information was reviewed for completeness and internal consistency, but was not audited by us. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete our results may be different and our calculations may need to be revised. Please see the actuarial valuation for additional details on the funding requirements for the System including actuarial assumptions and methods and the funding policy.

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.

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.

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.



October 29, 2021

Page 2

To the best of our knowledge, the information contained in this report is complete and accurate. The calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board. The calculations are based on the current provisions of the System, and on actuarial assumptions that are internally consistent and individually reasonable based on the actual experience of the System. In addition, the calculations were completed in compliance with applicable law and, in our opinion, meet the requirements of GASB 74.

The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 74 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

We, Alisa Bennett, FSA and John Garrett, ASA, are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. We are available to answer any questions on the material contained in this report or to provide explanations or further details as may be appropriate.

Respectfully submitted,

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

Alisa Bennett, FSA, EA, FCA, MAAA
President

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

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

AB/JJG:jf



TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
	Summary of Principal Results	1
	Introduction	2
I	Notes to Financial Statements	4
II	Required Supplementary Information	9
<u>Schedule</u>		
A	Required Supplementary Information Tables	12
B	Summary of Main Benefit Provisions	15
C	Statement of Actuarial Assumptions	27



REPORT OF THE ANNUAL GASB STATEMENT NO. 74

RETIREE HEALTH CARE

SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

SUMMARY OF PRINCIPAL RESULTS

Valuation Date (VD):	June 30, 2021
Prior Measurement Date:	June 30, 2020
Measurement Date (MD):	June 30, 2021
Membership Data:	
Retirees and Beneficiaries	35,598
Inactive Vested Members	5,972
Inactive Non-Vested Members	0
Active Employees	<u>146,646</u>
Total	188,216
Single Equivalent Interest Rate (SEIR):	
Long-Term Expected Rate of Return	7.00%
Municipal Bond Index Rate at Prior Measurement Date	2.45%
Municipal Bond Index Rate at Measurement Date	1.92%
Year in which Fiduciary Net Position is Projected to be Depleted	2042
Single Equivalent Interest Rate at Prior Measurement Date	2.63%
Single Equivalent Interest Rate at Measurement Date	2.27%
Net OPEB Liability:	
Total OPEB Liability (TOL)	\$2,492,912,153
Fiduciary Net Position (FNP)	<u>600,330,188</u>
Net OPEB Liability (NOL = TOL – FNP)	\$1,892,581,965
FNP as a percentage of TOL	24.08%



INTRODUCTION

This report, prepared as of June 30, 2021 (the Measurement Date), presents information to assist the School Employees Retirement System of Ohio in meeting the requirements of GASB 74. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of the System performed as of June 30, 2021 (the Valuation Date).

GASB 74 requires the determination of the Total OPEB Liability (TOL) utilizing the Entry Age Normal actuarial cost method. The Net OPEB Liability (NOL) is then set equal to the TOL minus the Plan's Fiduciary Net Position (FNP) (basically the fair (market) value of assets). The benefit provisions recognized in the calculation of the TOL are summarized in Schedule B.

Among the items needed for the liability calculation is the discount rate, or Single Equivalent Interest Rate (SEIR), as described by GASB 74. To determine the SEIR, the FNP must be projected, using GASB 74 guidelines, into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the members and beneficiaries of the System on the Measurement Date. If the FNP is not projected to be depleted at any point in the future, the long-term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted at a future measurement date, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long-term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. The rate used, if necessary, for this purpose is the Fidelity General Obligation 20-year Municipal Bond Index Rate (1.92%).

Our calculations indicate that the FNP is projected to be depleted, so the Municipal Bond Index Rate is used in the determination of the SEIR for both the June 30, 2020 and the June 30, 2021 TOL. The SEIR is 2.27% at June 30, 2021 and 2.63% at June 30, 2020. Please see Paragraph 35.b.(2) for more explanation of the development of the SEIR.



The FNP projections are based upon the School Employees Retirement System's financial status on the Measurement Date, the indicated set of methods and assumptions, and the requirements of GASB 74. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing plan basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the fund will actually run out of money, the financial condition of the System, or the System's ability to make benefit payments in future years.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 74 for note disclosure and Required Supplementary Information (RSI).



SECTION I – NOTES TO FINANCIAL STATEMENTS

The material presented herein will follow the order presented in GASB 74. Paragraph numbers are provided for ease of reference.

Paragraphs 34.a. (1)-(3): This information will be supplied by the System.

Paragraph 34.a. (4): The data required regarding the membership of the School Employees Retirement System of Ohio were furnished by the Staff of the Retirement System. The following table summarizes the membership of the System as of June 30, 2021, the date of the valuation used to determine the June 30, 2021 Total OPEB Liability.

Membership

	Number
Retirees Or Their Beneficiaries Currently Receiving Benefits	35,598
Inactive Members Entitled To But Not Yet Receiving Benefits	5,972
Active Members	146,646
Total	<u>188,216</u>

Paragraphs 34.a. (5)-(6) and Paragraphs 34.b.-e.: This information will be supplied by the System.

Paragraph 35.a. (1)-(4): As stated earlier, the NOL is equal to the TOL minus the FNP. That result, as of June 30, 2021, is presented in the following table.

	Fiscal Year Ending June 30, 2021
Total OPEB Liability	\$2,492,912,153
Fiduciary Net Position	<u>600,330,188</u>
Net OPEB Liability	\$1,892,581,965
Ratio of Fiduciary Net Position to Total OPEB Liability	24.08%



Paragraph 35.b.: This paragraph requires information to be disclosed regarding the actuarial assumptions and other inputs used to measure the TOL. The complete set of actuarial assumptions and other inputs utilized in developing the TOL are outlined in Appendix C. The TOL as of June 30, 2021 was determined based on an actuarial valuation prepared as of June 30, 2021, using the following actuarial assumptions and other inputs, which are based on the results of the most recent actuarial experience study, which covered the five-year period ending June 30, 2020:

Price Inflation	2.40%
Salary increases, including price inflation	3.25% - 13.58%
Long-term Rate of Return, net of investment expense, including price inflation	7.00%
Municipal Bond Index Rate	
Prior Measurement Date	2.45%
Measurement Date	1.92%
Year FNP is projected to be depleted	2042
Single Equivalent Interest Rate, net of plan investment expense, including price inflation	
Prior Measurement Date	2.63%
Measurement Date	2.27%
Health care Cost Trend Rate	Pre-Medicare: 6.750% - 4.400% Medicare: 5.125% - 4.400%

Base Mortality

Healthy Retirees – PUB-2010 General Employee Amount Weighted Below Median Healthy Retiree mortality table projected to 2017 with ages set forward 1 year and adjusted 94.20% for males and set forward 2 years and adjusted 81.35% for females.

Disabled Retirees – PUB-2010 General Disabled Retiree mortality table projected to 2017 with ages set forward 5 years and adjusted 103.3% for males and set forward 3 years and adjusted 106.8% for females.

Contingent Survivors - PUB-2010 General Amount Weighted Below Median Contingent Survivor mortality table projected to 2017 with ages set forward 1 year and adjusted 105.5% for males and adjusted 122.5% for females.

Actives – PUB-2010 General Amount Weighted Below Median Employee mortality table.

Mortality Projection

Mortality rates are projected using a fully generational projection with Scale MP-2020.



Paragraph 35.b.(1)

Sensitivity analysis: The disclosure of the sensitivity of the Net OPEB Liability to changes in the health care cost trend rate.

Paragraph 35.b.(2)

(a) Discount rate (SEIR): The discount rate used to measure the TOL at June 30, 2021 was 2.27%. The discount rate used to measure the TOL at the Prior Measurement Date was 2.63%.

(b) Projected cash flows: The projection of cash flows used to determine the discount rate assumed that plan contributions from members and the System will be made at the current contribution rates as set out in state statute:

- a. State contribution rate: 1.50% of covered payroll; which reflects 1.50% payroll surcharge, with 0.00% additional contribution from the basic benefits plan. The additional contribution of 0.00% is based on a Board Resolution dated October 21, 2021, which allocated the entire 14.00% employer contribution to SERS' basic benefits.
- b. Administrative expenses in the prior year were projected forward with price inflation as an estimate for administrative expenses in current and future years. The portion of expenses in future years allocated to the current members was based on the proportionate share of covered payroll in each year for the remainder of the existing members to the total covered payroll for all members.
- c. Both pension and OPEB benefits are paid by the trust as a whole.

Based on those assumptions, the System's FNP was projected to not be available to make all projected future benefit payments of current System members, so the Municipal Bond Index Rate is used in the determination of the SEIR for both the June 30, 2020 and the June 30, 2021 TOL. The SEIR is 2.27% at June 30, 2021 and 2.63% at June 30, 2020.

The FNP projections are based upon the System's financial status on the Measurement Date, the indicated set of methods and assumptions, and the requirements of GASB 74. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing System basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the fund will actually run out of money, the financial condition of the System, or the System's ability to make benefit payments in future years.



- (c) Long-term rate of return:** The long-term expected return on plan assets is reviewed as part of the regular experience studies prepared every five years for the System. The most recent analysis, performed for the period covering fiscal years 2015 through 2020, is outlined in a report adopted by the Board on April 15, 2021. Several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.
- (d) Municipal bond rate:** A municipal bond rate used in determining the discount rate was 1.92% on the Measurement Date.
- (e) Periods of projected benefit payments:** Projected future benefit payments for all current plan members until benefit payments ran out.



(f) Assumed asset allocation: The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Cash	2.00%	(0.33%)
US Equity	24.75	5.72
Non-US Equity Developed	13.50	6.55
Non-US Equity Emerging	6.75	8.54
Fixed Income / Global Bonds	19.00	1.14
Private Equity	11.00	10.03
Real Estate / Real Assets	16.00	5.41
Multi-Asset Strategies	4.00	3.47
Private Debt / Private Credit	3.00	5.28

(g) Sensitivity analysis: This paragraph requires disclosure of the sensitivity of the NOL to changes in the health care cost trend rates and the discount rate. The following exhibit presents the NOL of the Plan, calculated using the health care cost trend rates, as well as what the Plan's NOL would be if it were calculated using a health care cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate. Similarly, the exhibit presents the NOL of the System, calculated using the discount rate of 2.27%, as well as the System's NOL calculated using a discount rate that is 1-percentage-point lower (1.27% or 1-percentage-point higher (3.27%) than the current rate.

Net OPEB Liability			
Discount Rate	Health Care Cost Trend Rates		
	1% Decrease	Current	1% Increase
1% Increase (3.27%)		\$1,531,047,864	
Current (2.27%)	\$1,457,133,024	\$1,892,581,965	\$2,474,208,058
1% Decrease (1.27%)		\$2,345,138,104	

Paragraph 35.c.: The TOL at June 30, 2021 is based upon an actuarial valuation prepared as of June 30, 2021.



SECTION II – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 36.a.-c.: The required tables of schedules are provided in Schedule A.

Paragraph 36.d. and 37: The money-weighted rates of return will be supplied by the System.

Paragraph 38: The following information should be noted regarding the RSI, particularly for the *Schedule of Employer Contributions*:

Changes of benefit and funding terms: There have been no changes to the benefit provisions.

Changes in actuarial assumptions:

2021

- This discount rate changed from 2.63% to 2.27%
- The investment rate of return was reduced from 7.50% to 7.00%
- Assumed rate of inflation was reduced from 3.00% to 2.40%
- The investment rate of return was reduced from 7.50%
- Payroll Growth Assumption was reduced from 3.50% to 1.75%
- Assumed real wage growth was increased from 0.50% to 0.85%
- Rates of withdrawal, retirement and disability were updated to reflect recent experience.
- Rate of health care participation for future retirees and spouses was updated to reflect recent experience.
- Mortality among active members was updated to the following:
 - PUB-2010 General Amount Weighted Below Median Employee mortality table.
- Mortality among service retired members was updated to the following:
 - PUB-2010 General Employee Amount Weighted Below Median Healthy Retiree mortality table projected to 2017 with ages set forward 1 year and adjusted 94.20% for males and set forward 2 years and adjusted 81.35% for females.
- Mortality among beneficiaries was updated to the following:
 - PUB-2010 General Amount Weighted Below Median Contingent Survivor mortality table projected to 2017 with ages set forward 1 year and adjusted 105.5% for males and adjusted 122.5% for females.
- Mortality among disabled member was updated to the following:
 - PUB-2010 General Disabled Retiree mortality table projected to 2017 with ages set forward 5 year and adjusted 103.3% for males and set forward 3 years and adjusted 106.8% for females.
- Mortality rates are projected using a fully generational projection with Scale MP-2020.



2016

- Assumed rate of inflation was reduced from 3.25% to 3.00%
- Payroll Growth Assumption was reduced from 4.00% to 3.50%
- Assumed real wage growth was reduced from 0.75% to 0.50%
- Rates of withdrawal, retirement and disability were updated to reflect recent experience.
- Mortality among active members was updated to the following:
 - RP-2014 Blue Collar Mortality Table with fully generational projection and a five year age set-back for both males and females.
- Mortality among service retired members, and beneficiaries was updated to the following:
 - RP-2014 Blue Collar Mortality Table with fully generational projection with Scale BB, 120% of male rates, and 110% of female rates.
- Mortality among disable member was updated to the following:
 - RP-2000 Disabled Mortality Table, 90% for male rates and 100% for female rates, set back five years is used for the period after disability retirement.



Method and assumptions used in calculations of actuarially determined contributions.

The System is funded with fixed contribution rates for the state and with varying contributions for employees based on their job and personal elections. The Actuarially Determined Contributions in the *Schedule of Employer Contributions* are calculated as of the beginning of the fiscal year in which contributions are reported.

The following actuarial methods and assumptions (from the June 30, 2020 actuarial valuation) were used to determine the Actuarially Determined Contribution reported for Fiscal Year End 2021 in that schedule:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	Market Value
Price Inflation	2.40%
Salary increase, including price inflation	3.50% - 18.20%
Long-term Rate of Return, net of investment expense, including price inflation	5.25%
Health care Cost Trend Rate	Pre-Medicare: 7.00% - 4.75% Medicare: 5.25% - 4.75%

Please see the information presented earlier in regard to Paragraph 38 for detailed information on the benefit changes and assumption changes that may have impacted the Actuarially Determined Contributions shown in the *Schedule of Employer Contributions*.



SCHEDULE A

**REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY
GASB 74 Paragraph 36.a**

	2021	2020	2019	2018	2017
Total OPEB liability					
Service Cost	159,635,250	164,641,764	160,601,083	155,385,800	183,787,494
Interest	69,007,716	94,783,974	117,411,967	109,982,145	94,687,883
Benefit changes	0	0	0	0	0
Difference between expected and actual experience	(67,242,883)	(772,465,329)	(653,300,118)	53,656,583	0
Changes of assumptions	(260,284,207)	260,375,382	217,194,383	(102,900,217)	(346,945,601)
Benefit payments *	<u>(64,142,473)</u>	<u>(69,997,414)</u>	<u>(73,206,711)</u>	<u>(72,071,363)</u>	<u>(86,257,389)</u>
Net change in total OPEB liability	(163,026,597)	(322,661,623)	(231,299,396)	144,052,948	(154,727,613)
Total OPEB liability - beginning	2,655,938,750	2,978,600,373	3,209,899,769	3,065,846,821	3,220,574,434
Total OPEB liability - ending (a)	2,492,912,153	2,655,938,750	2,978,600,373	3,209,899,769	3,065,846,821
Plan net position					
Contributions - employer	73,592,929	80,536,164	81,944,848	100,056,736	65,013,891
Contributions - non-employer	0	0	0	0	0
Contributions - member	0	0	0	0	0
Net investment income	111,580,200	11,139,059	22,009,627	28,167,652	35,730,747
Benefit payments *	<u>(64,142,473)</u>	<u>(69,997,414)</u>	<u>(73,206,711)</u>	<u>(72,071,363)</u>	<u>(86,257,389)</u>
Administrative expense	(3,311,946)	(2,877,010)	(2,566,722)	(2,632,948)	(2,582,204)
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net change in plan net position	117,718,710	18,800,799	28,181,042	53,520,077	11,905,045
Plan net position - beginning	482,611,478	463,810,679	435,629,637	382,109,560	370,204,515
Plan net position - ending (b)	600,330,188	482,611,478	463,810,679	435,629,637	382,109,560
Net OPEB liability - ending (a) - (b)	1,892,581,965	2,173,327,272	2,514,789,694	2,774,270,132	2,683,737,261

*Benefit payments are net of retiree contributions

Note: Schedule is intended to show 10-year trend. Additional years will be reported as they become available.



SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY
GASB 74 Paragraph 36.b

	2021	2020	2019	2018	2017
Total OPEB Liability	2,492,912,153	2,655,938,750	2,978,600,373	3,209,899,769	3,065,846,821
Plan Net Position	<u>600,330,188</u>	<u>482,611,478</u>	<u>463,810,679</u>	<u>435,629,637</u>	<u>382,109,560</u>
Net OPEB Liability	1,892,581,965	2,173,327,272	2,514,789,694	2,774,270,132	2,683,737,261
Ratio of Plan Net Position to Total OPEB Liability	24.08%	18.17%	15.57%	13.57%	12.46%
Covered-employee payroll	3,449,254,911	3,477,578,726	3,462,524,396	3,332,395,171	3,303,055,969
Net OPEB Liability as a percentage of covered- employee payroll	54.87%	62.50%	72.63%	83.25%	81.25%

Note: Schedule is intended to show 10-year trend. Additional years will be reported as they become available.



SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 74 Paragraph 36.c

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Actuarially determined employer contribution	126,587,655	161,011,895	190,092,589	189,387,339	178,034,717	161,566,234	164,182,107	190,390,431	171,402,038	155,857,785
Actual employer contributions	<u>73,592,929</u>	<u>80,536,164</u>	<u>81,944,848</u>	<u>100,056,736</u>	<u>65,013,891</u>	<u>77,348,691</u>	<u>88,989,693</u>	<u>75,297,406</u>	<u>45,489,443</u>	<u>56,476,230</u>
Annual contribution deficiency (excess)	52,994,726	80,475,731	108,147,741	89,330,603	113,020,826	84,217,543	75,192,414	115,093,025	125,912,595	99,381,555
Covered-employee payroll	3,449,254,911	3,477,578,726	3,462,524,396	3,332,395,171	3,303,055,969	2,932,236,551	2,845,443,802	2,759,281,606	2,746,827,535	2,788,153,585
Actual contributions as a percentage of covered-employee payroll	2.13%	2.32%	2.37%	3.00%	1.97%	2.64%	3.13%	2.73%	1.66%	2.03%



SCHEDULE B

SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO Summary of Main Benefit Provisions as of June 30, 2021

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 health care 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.

2022 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 Plan 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 2022 *Open Enrollment Guide* and the 2022 *Member Health Care Guide*.



2022 Contribution Rates

Years of Service	Aetna Choice POS II and Aetna Medicare SM	Aetna Traditional Choice	AultCare PPO
Service Retirement Date on or before July 1, 1989 Premiums			
5-9.999 years			
Without Medicare	\$780		\$555
With Medicare A & B	\$117	\$408	
With Medicare B Only	\$297		
10-24.999 years			
Without Medicare	\$296		\$217
With Medicare A & B	\$64	\$166	
With Medicare B Only	\$127		
25 years & over			
Without Medicare	\$280		\$217
With Medicare A & B	\$64	\$166	
With Medicare B Only	\$64		

Years of Service	Aetna Choice POS II and Aetna Medicare SM	Aetna Traditional Choice	AultCare PPO
Service Retirement Date August 1, 1989 through July 1, 2008 Premiums			
10-14.999 years			
Without Medicare	\$1,524		\$1,075
With Medicare A & B	\$198	\$781	
With Medicare B Only	\$558		
15-19.999 years			
Without Medicare	\$780		\$555
With Medicare A & B	\$117	\$408	
With Medicare B Only	\$297		
20-24.999 years			
Without Medicare	\$407		\$295
With Medicare A & B	\$76	\$222	
With Medicare B Only	\$166		
25 years & over			
Without Medicare	\$296		\$217
With Medicare A & B	\$64	\$166	
With Medicare B Only	\$64		



**2022 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	\$1,524		\$1,075
With Medicare A & B	\$198	\$781	
With Medicare B Only	\$558		
20-24.999 years			
Without Medicare	\$780		\$555
With Medicare A & B	\$117	\$408	
With Medicare B Only	\$297		
25-29.999 years			
Without Medicare	\$482		\$347
With Medicare A & B	\$84	\$259	
With Medicare B Only	\$84		
30-34.999 years*			
Without Medicare	\$333		\$243
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	\$780		\$555
With Medicare A & B	\$117	\$408	
With Medicare B Only	\$297		
10-24.999 years			
Without Medicare	\$526		\$378
With Medicare A & B	\$89	\$281	
With Medicare B Only	\$208		
25 years & over			
Without Medicare	\$296		\$217
With Medicare A & B	\$64	\$166	
With Medicare B Only	\$64		



**2022 Contribution Rates
(continued)**

Years of Service	Aetna Choice POS II and Aetna Medicare SM	Aetna Traditional Choice	AultCare PPO
Spouse Premiums (Service Retiree, Disability Recipient, or Member's Qualified Service)			
Up to 25 years			
Without Medicare	\$1,227		\$866
With Medicare A & B	\$198	\$781	
With Medicare B Only	\$558		
25-29.999 years			
Without Medicare	\$1,108		\$783
With Medicare A & B	\$182	\$706	
With Medicare B Only	\$182		
30 years & over			
Without Medicare	\$989		\$700
With Medicare A & B	\$166	\$632	
With Medicare B Only	\$166		

Years of Service	Aetna Choice POS II and Aetna Medicare SM	Aetna Traditional Choice	AultCare PPO
Child Premiums			
Child w/o Medicare A	\$296		\$163
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 *2022 Open Enrollment Guide*.

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

2022 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 Marketplace 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 <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)</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 <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%</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)**

SERS Marketplace Wraparound Plan

Benefit	Maximum Reimbursement
Deductible	Reimbursements are limited to \$1,800 per family, per calendar year in accordance with federal limits.*
Covered prescription drugs	
Physician office visit co-payment	
Inpatient hospital admission co-payment/coinsurance	
Imaging (X-rays, CT/PET Scans, MRI) co-payment or coinsurance	
*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.	
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.	



Medicare Plan Benefits

Aetna Medicare SM 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 C

STATEMENT OF ACTUARIAL ASSUMPTIONS

The decremental assumptions used in the valuation were adopted by the Board on April 15, 2021.

INTEREST RATE: 2.27% 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
2021	6.75%	5.125%
2022	6.50	5.00
2023	6.25	4.75
2024	6.00	4.40
2025	5.75	4.40
2026	5.50	4.40
2027	5.25	4.40
2028	5.00	4.40
2029	4.75	4.40
2030 and beyond	4.40	4.40

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
Over 85	0.00	0.00



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

Retiree Gender	Spouse Coverage	Dependent Child Coverage
Male	25.0%	0.0%
Female	25.0	0.0

Wives are assumed to be three years younger than husbands.

Pre-65 Participants:

Years of Service	Service Retiree Participation	Disabled Retiree Participation	Deferred Vested Retiree Participation	Death in Service Surviving Spouse Participation
1.5 – 4	N/A	N/A	N/A	100.0%
5 – 9	N/A	25.0%	N/A	100.0
10 – 14	25.0%	25.0	50.0%	100.0
15 – 19	25.0	45.0	50.0	100.0
20 – 24	45.0	50.0	50.0	100.0
25 – 29	50.0	75.0	50.0	100.0
30 – 34	75.0	75.0	50.0	100.0
35 and over	90.0	90.0	50.0	100.0

Post-65 Participants:

Years of Service	Service Retiree Participation	Disabled Retiree Participation	Deferred Vested Retiree Participation	Death in Service Surviving Spouse Participation
1.5 – 4	N/A	N/A	N/A	100.0%
5 – 9	N/A	70.0%	N/A	100.0
10 – 14	25.0%	70.0	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	85.0	85.0	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 follows:

Plan Type	Future Retirees	
	Non-Medicare	Medicare
PPO	90.0%	100.0%
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	96.0%	0.0%
Aetna Medicare SM Plan	0.0	100.0
AultCare PPO	4.0	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 (INCLUDING 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	\$1,489	N/A	\$1,040
Medicare A	\$152	\$652	N/A
Medicare B Only	\$361	N/A	N/A

Spouse Costs			
Medicare Status	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Non-Medicare	\$1,192	N/A	\$831
Medicare A	\$152	\$652	N/A
Medicare B Only	\$361	N/A	N/A

Children Costs			
Medicare Status	Aetna Choice POS II and Aetna MedicareSM	Aetna Traditional Choice	AultCare PPO
Non-Medicare	\$373	N/A	\$184
Medicare A	\$152	\$652	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 2021 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	\$14,604	\$12,440	\$11,880	\$15,108	\$8,676	\$7,596	\$5,736
Prescription Drug	2,652	2,488	2,184	2,664	2,184	1,932	1,164

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	\$144	\$468	\$84
Prescription Drug	1,560	1,560	1,536	1,548	1,572	1,524



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

Service	Annual Rates of Withdrawal
0	40.00%
1	19.00
2	11.00
3	9.00
4	8.00
5	6.50
10	3.50
15	2.25

Age	Annual Rates of			
	Death *		Disability	
	Male	Female	Male	Female
20	.041%	.013%	.020%	.010%
25	.041	.012	.039	.010
30	.052	.019	.071	.028
35	.068	.030	.127	.059
40	.096	.047	.214	.106
45	.143	.072	.313	.180
50	.218	.107	.414	.300
55	.320	.157	.530	.450
60	.466	.238	.590	.450
65	.682	.380	.533	.300
70	1.025	.627	.300	.200
74	1.461	.937	.300	.200

* Pre-retirement mortality is based on the PUB-2010 General Amount Weighted Below Median Employee Mortality Table with fully generational projection using the MP-2020 projection scale. 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			21%	19%				
55		10%	27%	19%				
57		10%	27%	19%			30%	19%
60	43%	15%	27%	19%		6%	30%	19%
62	43%	15%	27%	19%	5%	6%	30%	19%
65			50%	33%	15%	17%	30%	19%
68			50%	33%			30%	18%
70			50%	33%			30%	18%
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	10.00%	3.25%	13.58%
1	3.00	3.25	6.35
2	1.75	3.25	5.06
3	1.25	3.25	4.54
4	1.00	3.25	4.28
5-9	0.75	3.25	4.02
10-15	0.50	3.25	3.77
16-17	0.25	3.25	3.51
18 & over	0.00	3.25	3.25

PAYROLL GROWTH: 1.75% per annum, compounded annually.

PRICE INFLATION: 2.40% per annum, compounded annually.



DEATH AFTER RETIREMENT: These assumptions are used to measure the probabilities of each benefit payment being made after retirement.

SERVICE RETIREMENT: PUB-2010 General Employee Amount Weighted Below Median Healthy Retiree mortality table projected to 2017 with ages set forward 1 year and adjusted 94.20% for males and set forward 2 years and adjusted 81.35% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

DISABLED RETIREMENT: PUB-2010 General Disabled Retiree mortality table projected to 2017 with ages set forward 5 years and adjusted 103.3% for males and set forward 3 years and adjusted 106.8% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

CONTINGENT SURVIVOR: PUB-2010 General Amount Weighted Below Median Contingent Survivor mortality table projected to 2017 with ages set forward 1 year and adjusted 105.5% for males and adjusted 122.5% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally

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

ASSET VALUATION METHOD: Market value.