

**SCHOOL EMPLOYEES RETIREMENT
SYSTEM OF OHIO**

JANUARY 1, 2008

**ACTUARIAL VALUATION
OF RETIREE HEALTH CARE BENEFITS**

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April 4, 2008

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

Dear Members of the Board:

This report presents the results of the January 1, 2008 actuarial valuation of the School Employees Retirement System of Ohio retiree health care benefits. The valuation was prepared in accordance with, and for the purpose of financial disclosure under, Governmental Accounting Standards Statement No. 43 (GASB 43).

Plan benefits include medical and prescription drug benefits for SERS members and their beneficiaries. The valuation is based on the plan provisions in effect on January 1, 2008, including plan changes adopted in 2007 and effective in 2008.

The actuarial assumptions and methods used in the valuation were selected in compliance with the requirements under GASB 43. The demographic assumptions are consistent with the assumptions used in the June 30, 2007 actuarial valuation of the SERS pension plan benefits. The discount rate is 5.25%, selected in accordance with GASB 43.

The results of our calculations and analysis indicate that the Annual Required Contribution (ARC) for 2008 is 11.61% of payroll. This can be compared to the employer rate allocation toward health care benefits, including the surcharge, of 5.68% for fiscal 2008. The funded status (i.e., the ratio of assets to liabilities) of retiree health care benefits is 8.67%.

Detailed summaries of the financial results of the valuation are shown in this report. To the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice. It should be recognized, however, that significant differences between actual experience and these assumptions could occur. Moreover, other sets of reasonable assumptions can yield materially lesser or greater results.

The undersigned actuaries are Members of the American Academy of Actuaries (AAA) and meet the qualification standards of the AAA to render the opinion contained herein.

Respectfully submitted,



Peter B. Ford, ASA
Principal, Consulting Actuary



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Director, Consulting Actuary

**SCHOOL EMPLOYEES RETIREMENT
SYSTEM OF OHIO
RETIREE HEALTH CARE BENEFITS**

**ACTUARIAL VALUATION
JANUARY 1, 2008**

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I – Management Summary

Introduction

This report presents the results of the January 1, 2008 actuarial valuation of the School Employees Retirement System of Ohio's retiree health care benefits for SERS members. As a non-guaranteed benefit subject to change, health care is not funded on a full reserve basis. Nevertheless, the purpose of this valuation is to determine the value, on a full reserve basis, of projected retiree health care benefits for current and future retirees and their dependents. SERS will be required to disclose the full reserve cost of retiree health care, in accordance with GASB 43 for the fiscal year ending June 30, 2008.

The principal valuation results include:

- The funded status of the plan as of January 1, 2008, based on the accrued liability and the market value of assets as of that date, is 8.67%.
- The annual required contribution rate (ARC) to fund health care on a full reserve basis is 11.61% of payroll.

The valuation was based upon membership and financial data submitted by the System.

Purpose of Valuation

GASB Statement 43 was issued to provide more complete, reliable and useful financial reporting regarding the costs and financial obligations incurred when public entities provide post-employment benefits other than pensions (OPEB). Commensurate with the implementation of GASB 43, SERS will begin reporting the Annual Required Contribution and unfunded accrued liability. The main purpose of this valuation is to determine the Annual Required Contribution rate that is measured under GASB 43. The valuation is based on benefit provisions and retiree premium schedules in effect on January 1, 2008, and plan changes effective later in 2008.

I – Management Summary

Plan Changes in 2008

Effective beginning in 2008, the Board has adopted several changes to the health care plan including:

- Future disabled members subsidized at the same level as non-disabled members;
- A change in the share of the cost borne by current and future spouses;
- A revised subsidy schedule for future retirees;
- The introduction of Medicare Advantage plans; and
- The joining of a prescription drug collaborative with Ohio retirement systems.

Health Care Funded Status

As shown in Table 1, the actuarially determined accrued liability for retiree health care benefits is \$4.51 billion. Assets in the health care premium stabilization fund as of January 1, 2008 are \$391 million. The unfunded accrued liability is \$4.12 billion.

2008 Health Care Contribution Rate

Of the total employer contribution rate of 14% of payroll, 9.82% is needed in 2008 to appropriately fund guaranteed pension benefits, survivor benefits, and Medicare Part B reimbursements and, accordingly, the Board allocates 4.18% to health care. A ten-year history of employer contributions to the health care plan is shown on the following page. In addition, SERS is collecting a surcharge of 1.50% of payroll from employers for 2008 for a total health care contribution rate of 5.68%.

I – Management Summary

Ten-Year History of Employer Contributions

Fiscal Year Ending June 30	Employer Health Care Contribution Rate	Surcharge Percentage	Total Health Care Contribution Rate
1999	6.30%	1.47%	7.77%
2000	8.45%	1.34%	9.79%
2001	9.80%	1.17%	10.97%
2002	7.44%	1.07%	8.51%
2003	5.83%	1.30%	7.13%
2004	4.91%	1.50%	6.41%
2005	3.43%	1.50%	4.93%
2006	3.42%	1.50%	4.92%
2007	3.32%	1.50%	4.82%
2008	4.18%	1.50%	5.68%

The actuarially determined health care contribution rate is 11.61%. This amount comprises 5.45% for normal cost, plus 6.16% to amortize the unfunded accrued liability of \$4.12 billion over 30 years.

Determination of 5.25% Discount Rate

GASB 43 requires that the discount rate (investment return assumption) used in the valuation be the estimated long-term yield on investments that are expected to finance postemployment benefits. Depending on the method by which a plan is financed, the relevant investments could be plan assets, employer assets or a combination of plan and employer assets. The investment return should reflect the nature and the mix of both current and expected investments and the basis used to determine the actuarial value of assets.

I – Management Summary

The School Employees Retirement System of Ohio retiree health care plan is partially funded. As such, the investments expected to be used to finance the payment of benefits are a combination of plan and employer assets. For the 2007 valuation, SERS developed a 5.25% discount rate based on a percentage of ARC methodology, which we understand was approved by the System's auditor. We validated this assumption using alternative methodologies for this valuation and believe the discount rate assumption is still appropriate. Therefore, this assumption was used for the 2008 valuation and will be revisited in more depth at the next periodic experience review.

Health Care-related Assumptions

Separate trend assumptions are developed for pre-Medicare and post-Medicare medical benefits, and prescription drug benefits. Rates of increase in costs (i.e., trend rates) for medical and prescription drug plans have continued to outpace inflation for a number of years. We have assumed this will continue over the short term with rates decreasing over time until an ultimate trend rate is reached. The trend assumption used for valuation purposes is summarized on page 29 of the report.

Since increases in medical costs over the long-term can be volatile and difficult to predict, there is a wide range of acceptable trend assumptions. In addition, the valuation results are very sensitive to the trend assumption selected. Therefore, much attention is given when developing this assumption.

I – Management Summary

The short-term trend rate assumptions are established with an emphasis towards the influences of the health care marketplace as a whole while also considering the cost characteristics of the employer plan. It is assumed that over the long-term, health care costs ultimately will be constrained by the public's ability and willingness to pay the higher cost of medical services and therefore the ultimate trend rate is viewed as the expected annual plan increase once medical costs are constrained.

For the January 1, 2008 valuation, the short-term trend assumptions are consistent with the rates used in last year's valuation. However, we have updated the ultimate trend rates to be 5.5% in order to be consistent across all types of coverage.

In addition, we refined the use of the age-related morbidity assumption for the January 1, 2008 valuation. In the initial GASB 43 valuation it was assumed that the HMO and Medicare Advantage private fee-for-service plans were fully insured and community-rated. Based on discussions with SERS staff for this valuation it is now our understanding that the non-Medicare HMO plans are experience-rated and therefore the costs for these plans should be age adjusted. In addition, while it is possible that the premiums for the Medicare Advantage private fee-for-service plans are based on the experience of a larger pool of plan participants, it is likely that the SERS retiree specific claims experience will influence the plan's premium given the size of the SERS covered population. Therefore, we also have assumed age-adjusted costs for these plans. Lastly, there is emerging evidence that the impact of aging is not as significant for prescription drug costs. Therefore, we have revised the age-related morbidity assumption to be half of the medical rates for prescription drug costs.

I – Management Summary

Medicare Part D

Under the Medicare Prescription Drug, Improvement and Modernization Act of 2003, sponsors of retiree prescription drug plans can apply for a 28% subsidy for the qualified prescription drug costs of their retirees. To be eligible for the subsidy, the plan coverage must be at least as valuable on an actuarial basis to the Medicare Part D coverage and the sponsor must provide notices of creditable prescription drug coverage to individuals entitled to Medicare Part D.

However, in accordance with GASB Technical Bulletin No. 2006-1, for purposes of determining actuarial liability and the fund's annual required contribution under GASB 43, there is no reduction in the plan's per capita costs for anticipated Medicare Part D subsidy payments reflected in this valuation. While the Part D subsidy cannot be reflected in determining the liabilities of the plan, these payments can be considered as additional contributions to the plan. For example, Part D subsidy payments of \$20.2 million were contributed to the health care fund for the fiscal year ending June 30, 2007.

II – Summary of Valuation Results

This section outlines the results of the January 1, 2008 actuarial valuation of the School Employees Retirement System of Ohio's retiree health care benefits.

Tables 1 and 2 on the following pages summarize the valuation results for retiree health care benefits in effect on January 1, 2008. These results are based on the assumptions and methods described in Section V. All liabilities and contribution rates are net of retiree contributions.

- **Table 1** presents a summary of the actuarial valuation results for retiree health care benefits as of January 1, 2008. These results are compared to those of the prior year.
- **Table 2** shows the value of the Health Care Stabilization Fund as of December 31, 2007.
- **Table 3** shows an analysis of the change in unfunded accrued liability from January 1, 2007 to January 1, 2008.
- **Table 4** shows the Schedule of Funding Progress under GASB 43. The Schedule of Funding Progress shows the history of the plan's funded status since the initial application of GASB 43. The initial application of GASB 43 for SERS was the fiscal year ending June 30, 2007.
- **Table 5** shows the Schedule of Employer Contributions under GASB 43. This schedule shows the history of employer contributions compared to the Annual Required Contribution for health care.

II – Summary of Valuation Results

TABLE 1

**RETIREE HEALTH CARE BENEFITS
SUMMARY OF RESULTS OF ACTUARIAL VALUATION
AS OF JANUARY 1, 2008
(\$ amounts in thousands)**

Item	January 1, 2008	January 1, 2007
Membership Data		
1. Number of Members		
a) Active Members	123,013	123,266
b) Retirees and Inactives, Spouses and Beneficiaries	<u>58,405</u>	<u>60,238</u>
c) Total	181,418	183,504
2. Covered Payroll for Prior Calendar Year	\$ 2,648,497	\$ 2,597,601
Valuation Results		
3. Total Liability		
a) Active Members	\$ 4,060,405	\$ 4,003,244
b) Retirees and Inactives, Spouses and Beneficiaries	<u>2,038,499</u>	<u>1,885,798</u>
c) Total	\$ 6,098,904	\$ 5,889,042
4. Accrued Liability		
a) Active Members	\$ 2,474,478	\$ 2,421,574
b) Retirees and Inactives, Spouses and Beneficiaries	<u>2,038,499</u>	<u>1,885,798</u>
c) Total	\$ 4,512,977	\$ 4,307,372
5. Assets	\$ 391,128	\$ 339,505
6. Unfunded Accrued Liability (4)–(5)	\$ 4,121,849	\$ 3,967,867
7. Funded Status (5)/(4)	8.67%	7.88%
Contribution Rate*		
8. Actuarially Determined Contribution Rate		
a) Normal Cost	5.45%	5.46%
b) 30-Year Amortization of Unfunded Accrued Liability	<u>6.16</u>	<u>6.04</u>
c) Total	11.61%	11.50%
9. Employer Contribution Toward Health Care	5.68%	4.82%

* Based on covered payroll for prior calendar year increased by the payroll growth assumption.

II – Summary of Valuation Results

TABLE 2

**HEALTH CARE STABILIZATION FUND
AS OF DECEMBER 31, 2007**

1. Balance as of December 31, 2006	\$ 339,504,818
2. Contributions During Period January 1, 2007 to December 31, 2007	
(a) Employer Contribution	\$ 165,740,480
(b) Health Care Premiums	69,751,475
(c) Retiree Drug Subsidy	<u>20,948,171</u>
(d) Total	\$ 256,440,126
3. Payouts During Period January 1, 2007 to December 31, 2007	\$ 229,835,888
4. Investment Income	\$ 25,018,741
5. Balance as of December 31, 2007 (1) + (2d) – (3) + (4)	\$ 391,127,797
6. Rate of Return $2*(4) / [(1) + (5) - (4)]$	7.1%

II – Summary of Valuation Results

TABLE 3

**ANALYSIS OF CHANGE IN UNFUNDED ACCRUED LIABILITY
AS OF JANUARY 1, 2008
(\$ in thousands)**

1. Unfunded Accrued Liability as of January 1, 2007	\$	3,967,867
2. Credits and Debits During Period		
(a) Normal Cost	\$	145,016
(b) Employer Contributions		(165,740)
(c) Medicare Retiree Drug Subsidy		(20,948)
(d) Interest at 5.25% to January 1, 2008		207,233
(e) Total	\$	165,561
3. Expected Unfunded Accrued Liability at January 1, 2008 (1) + (2e)	\$	4,133,428
4. Change Due to New Trend Rates & Aging Assumption	\$	(22,165)
5. Expected Unfunded Accrued Liability After Change (3) + (4)	\$	4,111,263
6. Actual Unfunded Accrued Liability at January 1, 2008	\$	4,121,849
7. Net Experience (Loss) (5) - (6)	\$	(10,586)
8. Reasons for Net Experience (Loss)		
(a) Gain (Loss) on Assets	\$	6,496
(b) Gain (Loss) on Liabilities		(17,082)
(c) Total	\$	(10,586)

II – Summary of Valuation Results

TABLE 4

**SCHEDULE OF FUNDING PROGRESS
GASB STATEMENT NO. 43 DISCLOSURE
(\$ Amounts in Thousands)**

Valuation as of January 1	(a) Actuarial Value of Assets	(b) Actuarial Accrued Liability	(c) Unfunded Actuarial Accrued Liability (b)-(a)	(d) Funded Ratio (a)/(b)	(e) Covered Payroll	(f) UAAL as a % of Payroll (c)/(e)
2007	\$339,505	\$4,307,372	\$3,967,867	7.9%	\$2,597,601	152.8%
2008	391,128	4,512,977	4,121,849	8.7%	2,648,497	155.6%

The above information is provided for the June 30, 2008 GASB 43 disclosure.

II – Summary of Valuation Results

TABLE 5

**SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB STATEMENT NO. 43 DISCLOSURE
(\$ Amounts in Thousands)**

Year Ended June 30	Annual Required Contribution	Percentage Contributed
2008	*	*
2007	\$299,380	63.8%

- * The ARC amount is the ARC percentage times covered payroll for the fiscal year. The percentage contributed is the total contribution (employer contribution and RDS subsidy) for the fiscal year divided by the ARC amount. The 2007 ARC amount is based on the 2007 ARC percentage of 11.50% and payroll of \$2,603,300,211. The percentage contributed is based on employer contributions of \$170,948,247 and an RDS subsidy of \$20,202,965. The 2008 ARC amount and the percentage contributed will be determined after fiscal 2008 has ended and will be reported in the January 1, 2009 valuation report.

Additional information as of the latest actuarial valuation follows:

Valuation Date:	January 1, 2008
Actuarial Cost Method:	Entry Age
Amortization Method:	Level Percent of Payroll, Open
Amortization Period:	30 Years
Asset Valuation Method:	Fair Market Value

Actuarial Assumptions:

— Investment Return (Discount Rate)	5.25%
— Projected Salary Increases	4.50% - 24.75%
— Payroll Increases	4.00%
— Price Inflation Assumption	3.50%
— Trend Rates:	

	<u>Initial Rate</u>	<u>Ultimate Rate</u>	<u>Ultimate Year</u>
• Pre-Medicare PPO	10.00%	5.50%	2013
• Post-Medicare PPO	10.00%	5.50%	2013
• Pre-Medicare HMO	9.50%	5.50%	2012
• Post-Medicare HMO	9.50%	5.50%	2012
• Rx Drug	11.00%	5.50%	2014

III – Retiree Health Care Benefit Provisions

ELIGIBILITY FOR COVERAGE AND EFFECTIVE DATE OF COVERAGE

Eligibility for service retirement is attainment of one of the following:

- Age 65 with at least 10 years of creditable service,
- 30 years of creditable service, regardless of age,
- Age 55 with at least 25 years of creditable service, or
- Age 60 with at least 10 years of creditable service

Eligibility for disability retirements is five years of creditable service. Members who terminated with at least ten years of service are eligible upon attainment of age 60.

For **service retirees**, coverage becomes effective the later of:

- the effective date of retirement, or
- the first of the month following the date the application is received by SERS.

For **disabled members**, coverage becomes effective the later of:

- the effective date of the disability benefit, or
- the first of the month following the approval of the disability.

For **survivor benefit recipients (survivors of deceased retirees or deceased active members)**, coverage becomes effective:

- the effective date of the survivor benefit if the benefit application is received within three months of the member's death, or
- the first of the month after receipt if the benefit application is not received within three months.

HEALTH CARE PLANS OFFERED BY SERS

Coverage Features

All health care plans provide these health care benefits:

- Hospital benefits: inpatient, semiprivate room-and-board expenses, limited to medically necessary days.
- Skilled nursing facility benefits: inpatient, semiprivate room charges.
- Medical benefits: reasonable and medically necessary physicians' charges, hospital outpatient charges, laboratory expenses and charges for treatment of nervous and mental disorders.
- Qualified home health care services.
- Hospice care for terminally ill patients under a hospice care program.

III – Retiree Health Care Benefit Provisions

- Coverage for routine physical examinations (HMO only), immunizations and inoculations.
- Prescription drugs.

Types of Plans

A variety of health care plans are available to SERS members. The type of health plan(s) for which a member is eligible depends upon Medicare status and the geographic location of permanent residence. A description of these plans for 2008 is as follows.

III – Retiree Health Care Benefit Provisions

Indemnity (Traditional) Plan — Aetna Indemnity, Medical Mutual Indemnity.

- **Eligibility** — SERS benefit recipients and their covered dependents who live outside a PPO/Managed Care network area.
- **Description** — “Traditional” health insurance in which reimbursement is made either to the enrollee or directly to the provider, up to a predetermined dollar amount or benefit limit. Payments are based on usual, customary and reasonable (UCR) fees, as established by the health plan administrator. Any health care provider can be used. There are no provider networks, but a member choosing the Indemnity Plan must also select a plan administrator — either Aetna or Medical Mutual.

	Aetna or Medical Mutual Indemnity
Deductible	\$340/person \$700/family
Co-Insurance Limit	\$1,500/person \$3,000/family
Office Visit	80%
Specialist	80%
Inpatient Hospital	80% after \$250 hospital admit deductible
Emergency Room	80% after \$340 deductible
Durable Medical Equipment	80%
Nursing Home Skilled Care	80%/365 days
Home Health Care	80%

III – Retiree Health Care Benefit Provisions

Health Maintenance Organization (HMO) — Aetna, Kaiser and Paramount.

- **Eligibility** — SERS benefit recipients and covered dependents who reside in one of the HMOs area, which depends upon the County.

Note: Enrollees who have end-stage renal disease or are in hospice are not eligible to enroll in Kaiser. Also, under most of the HMOs, if a member leaves Ohio for more than 90 consecutive days a year, he or she is not eligible to enroll.

- **Description** — A prepaid health plan in which physicians, hospitals and other health care providers either contract with or are employed directly by the HMO to provide services. An enrollee is required to use doctors and hospitals in the network for all care, including prescription drugs. There is no coverage outside the HMO network except for urgent care or a medical emergency unless covered under Medicare.

Preferred Provider Organization (PPO) — Aetna Managed Care, AultCare PPO, Medical Mutual PPO.

- **Eligibility** — SERS benefit recipients and their covered dependents who reside in a PPO network area. **Note:** If benefit recipients are eligible for Medicare, the managed care network no longer applies.
- **Description** — A group of selected health care providers who have agreed to offer comprehensive services at preset reimbursement levels. These providers, which include physicians and hospitals, are referred to as “network” providers. Enrollees may use non-network providers, but will have higher out-of-pocket costs.

— The AultCare PPO is a PPO for Medicare and non-Medicare benefit recipients and their dependents.

III – Retiree Health Care Benefit Provisions

Non-Medicare Plan Benefits — As described in Pages 16-17 of the 2008 SERS Health Care Manual.

	Aetna or MMO PPO In-Network	AultCare PPO In-Network	Aetna HMO Non-Medicare	Kaiser HMO Non-Medicare	Paramount HMO Non-Medicare
Deductible	\$340/person \$700/family	\$340/person \$700/family	None	None	None
Co-Insurance Limit	\$1,500/person \$3,000/family	\$1,500/person \$3,000/family	\$1,500/person \$3,000/family	\$2,000/person \$6,000/family	\$1,500/person \$3,000/family
Lifetime Max	\$2,500,000	\$2,500,000	None	None	None
Office Visit	\$25 PPO	\$25 PPO	\$25 co-pay	\$15 co-pay	\$15 co-pay
Specialist	\$25 PPO	\$25 PPO	\$30 co-pay	\$15 co-pay	\$30 co-pay
Surgery	80%	80%	100%	100%	100%
Inpatient Hospital	80% after \$250 hospital admit deductible	80% after \$250 hospital admit deductible	\$250 co-pay for each stay, 100% thereafter	\$250 co-pay per benefit period, then 100% thereafter	\$250 co-pay for each stay, 100% thereafter
Emergency Room	80% after \$340 deductible	80%	\$50 co-pay, waived if admitted	\$50 co-pay, waived if admitted	\$50 co-pay, waived if admitted
Ambulance	80%	80%	100% if emergency	\$50 co-pay	100%
Outpatient Diagnostic X- Ray	80% after \$340 deductible	80%	100%	100%	100%
Outpatient Diagnostic Lab	80% after \$340 deductible	80%	100%	100%	100%
Outpatient Surgery	100%	80%	100%	\$15 co-pay	100%
Chiropractic	80%	80%	Not covered	Not covered	Not covered
Durable Medical Equipment	80%	80%	80%	80%	80%
Skilled Nursing Facility	80%/365 days	80%/365 days	100% day 1-20, \$75 day 21-100	100%/100 days	100% day 1-15, \$95 day 16-100
Home Health Care	80%	80%	100%	100%	100%
Hospice	100% inpatient, 80% outpatient	100% inpatient, 30 day lifetime limit, 80% outpatient \$5,000 lifetime limit	100%	100%	100%
Routine Physical Exam Includes Pneumonia, Flu, Hepatitis B and Immunizations	Not covered	Not covered	100%	\$15 co-pay	100%

III – Retiree Health Care Benefit Provisions

Medicare Plan Benefits — As described in Pages 18-19 of the 2008 SERS Health Care Manual.

	AultCare Medicare Advantage HMO	Aetna Medicare Advantage PFFS	Medical Mutual Medicare Advantage PFFS	Kaiser HMO Medicare	Paramount Medicare Advantage HMO
Deductible	None	None	None	None	None
Co-Insurance Limit	None	None	None	\$2,000/single \$6,000/family	None
Lifetime Max	None	None	None	None	None
Office Visit	\$20 co-pay	\$25 co-pay	\$25 co-pay	\$25 co-pay	\$20 co-pay
Specialist	\$25 co-pay	\$25 co-pay	\$25 co-pay	\$25 co-pay	\$25 co-pay
Surgery	100%	100%	100%	100%	100%
Inpatient Hospital	\$250 co-pay / 100%	\$250 co-pay / 100%	\$250 co-pay / 100%	\$250 co-pay for each stay, 100% thereafter	\$250 co-pay for each stay, 100% thereafter
Emergency Room	\$50 co-pay / waived if admitted	\$50 co-pay / waived if admitted	\$50 co-pay / waived if admitted	\$50 co-pay / waived if admitted	\$50 co-pay / waived if admitted
Ambulance	\$75 co-pay	80%	80%	\$50 co-pay	100%
Outpatient Diagnostic X- Ray	100%	\$25 co-pay	\$25 co-pay	100%	100%
Outpatient Diagnostic Lab	100%	100%	100%	100%	100%
Outpatient Surgery	100%	100%	100%	\$25 co-pay	100%
Chiropractic	\$25 co-pay	\$35 co-pay	\$25 co-pay	\$25 co-pay for manual manipulations/ sublex	\$25 co-pay (ltd to Medicare coverage)
Durable Medical Equipment	85%	100%	100%	100%	80%
Skilled Nursing Facility	\$0 per day 1-15, \$20 per day 16-30, \$0 per day 31-100	\$0 per day 1-10, \$25 per day 11-20, \$50 per day 21-100	\$0 per day 1-10, \$25 per day 11-20, \$50 per day 21-100	100% / 100 days	100% day 1-15, \$95 day 16-100
Home Health Care	100%	100%	100%	100%	100%
Hospice	100%	Covered per Medicare rules	Covered per Medicare rules	Covered per Medicare rules	Covered per Medicare rules
Routine Physical Exam Includes Pneumonia, Flu, Hepatitis B and Immunizations	100%	100%	100%	\$25 co-pay	100%

III – Retiree Health Care Benefit Provisions

PRESCRIPTION DRUG COVERAGE

For all medical plans except Kaiser HMO

Prescription drug services are included but are administered under a separate plan by Express Scripts or, for AultCare, by BioScrip Pharmacy.

The member's copayment for up to a 34-day supply of prescription drugs purchased at participating retail pharmacies is 20% of the cost of the preferred drug or 35% for non-preferred brand drugs. Prescription drugs purchased from nonparticipating pharmacies are not reimbursed.

The copayment for up to a 90-day supply of prescription drugs purchased through the Express Scripts or BioScrip Pharmacy mail-service pharmacy is \$15 for generic drugs, \$45 for preferred brand name drugs and \$80 for non-preferred brand-name drugs.

For Kaiser HMO

The member participates in a mail-service or retail pharmacy program under a separate plan. The copayment for up to a 90-day supply of prescription drugs purchased from the mail-service pharmacy is \$25. The copayment for up to a 31-day supply of prescription drugs from the retail pharmacy is \$10.

For more detailed plan features, see the 2008 Health Care Program Manual¹.

¹ Available at <http://www.ohsers.org/GD/DocumentManagement/DocumentDownload.aspx?DocumentID=3422>

III – Retiree Health Care Benefit Provisions

Premium Summary

Members who enroll in a SERS health care plan are responsible for paying all or part of the cost of health care coverage through a monthly premium deduction, co-payments/coinsurance and deductibles. SERS pays the remaining cost. The monthly premium rates differ, depending on the health care plan selected, the member's retirement date, years of service and his or her Medicare status.

Retirements prior to August 1, 2008

Members will receive a subsidy according to the following schedule:

Service at Retirement	Retiree Paid Percentage
0 – 9.999	No Coverage
10 – 14.999	100%
15 – 19.999	50%
20 – 24.999	25%
25 – 29.999	17.5%
30 and Over	17.5%

Service retirees with 15 or more years of service are eligible for access and a premium subsidy. Service retirees with at least 10 years of service but less than 15 years have access to coverage, but pay 100% of their health care premium.

All disability retirees pay 17.5% of the premium. If, upon conversion to service retirement under the new disability plan, the retiree does not have 10 years of service (including the years on disability), the retiree is not eligible to continue participation in the health care program.

For low income retirees (those with income below 125% of the federal poverty level), premiums are decreased by 25%.

III – Retiree Health Care Benefit Provisions

Retirements on or after August 1, 2008

Members will receive a subsidy according to the following schedule:

Service at Retirement	Retiree Paid Percentage
0 – 9.999	No Coverage
10 - 19.999	100%
20 - 24.999	50%
25 - 29.999	30%
30 - 34.999	20%
35 and Over*	15%

*1% premium reduction for each year over 35.

Disability retirees will be subject to the revised member schedule described above.

Spouses and Children

All spouses, current and future will be subject to the following subsidy schedule, effective January 1, 2008:

Service of Member	Spouse Paid Percentage
1.5 - 24.999	100%
25 - 29.999	90%
30 and Over	80%

Children will be subsidized at 70%.

III – Retiree Health Care Benefit Provisions

2008 Rates – Retiree and Dependent Monthly Premiums

For Those Who Retire Before 8/1/2008

Years of Service	Aetna/MMO Managed Care/ Medicare Advantage Premiums	AultCare PPO Premiums	Aetna HMO Non- Medicare Premiums	Kaiser HMO Premiums	Paramount HMO Premiums
10-14.999 (100%)					
Without Medicare A	\$1,017	\$690	\$1,026	\$921	\$1,143
With Medicare A*	\$221	\$102		\$234	\$207
15-19.999 (50%)					
Without Medicare A	\$509	\$345	\$513	\$460	\$572
With Medicare A	\$111	\$51		\$117	\$104
20-24.999 (25%)					
Without Medicare A	\$254	\$172	\$256	\$230	\$286
With Medicare A	\$55	\$26		\$59	\$52
25 & over (17.5%)					
Without Medicare A	\$178	\$121	\$180	\$161	\$200
With Medicare A	\$39	\$18		\$41	\$36
Spouse Premiums					
Retiree's Qualified Years					
Up to 25					
Without Medicare	\$809	\$551	\$816	\$739	\$909
With Medicare	\$221	\$102	\$221	\$234	\$207
25-29.999					
Without Medicare	\$728	\$496	\$735	\$665	\$818
With Medicare	\$199	\$92	\$199	\$211	\$186
30 & over					
Without Medicare	\$647	\$440	\$653	\$591	\$727
With Medicare	\$177	\$82	\$177	\$187	\$166
Child Without Medicare A	\$124	\$84	\$124	\$115	\$138
Child With Medicare A	\$155	\$72	\$221	\$164	\$145

* Medical Mutual is \$220

III – Retiree Health Care Benefit Provisions

2008 Rates – Retiree and Dependent Monthly Premiums

For Those Who Retire On or After 8/1/2008

Years of Service	Aetna/MMO Managed Care/ Medicare Advantage Premiums	AultCare Premiums	Aetna HMO Non- Medicare Premiums	Kaiser Premiums	Paramount Premiums
10-19.999 (100%)					
Without Medicare A	\$1,017	\$690	\$1,026	\$921	\$1,143
With Medicare A*	\$221	\$102		\$234	\$207
20-24.999 (50%)					
Without Medicare A	\$509	\$345	\$513	\$460	\$572
With Medicare A	\$111	\$51		\$117	\$104
25-29.999 (30%)					
Without Medicare A	\$305	\$207	\$308	\$276	\$343
With Medicare A	\$66	\$31		\$70	\$62
30-34.999 (20%)					
Without Medicare A	\$203	\$138	\$205	\$184	\$229
With Medicare A	\$44	\$20		\$47	\$41
35 (15%)					
Without Medicare A	\$153	\$103	\$154	\$138	\$171
With Medicare A	\$33	\$15		\$35	\$31
Spouse Premiums Retiree's Qualified Years Up to 25					
Without Medicare	\$809	\$551	\$816	\$739	\$909
With Medicare	\$221	\$102	\$221	\$234	\$207
25-29.999					
Without Medicare	\$728	\$496	\$735	\$665	\$818
With Medicare	\$199	\$92	\$199	\$211	\$186
30 & over					
Without Medicare	\$647	\$440	\$653	\$591	\$727
With Medicare	\$177	\$82	\$177	\$187	\$166
Child Without Medicare A	\$124	\$84	\$124	\$115	\$138
Child With Medicare A	\$155	\$72	\$221	\$164	\$145

1% reduction for each year over 35.

* Medical Mutual is \$220.

III – Retiree Health Care Benefit Provisions

Medicare Part B

Medicare Part B liabilities are reported in SERS' pension actuarial valuation report. Contributions for Part B are made to the pension fund and Part B reimbursements are paid from the pension fund. As such, these amounts are excluded from this report.

This valuation report does not include the dental plan because it is our understanding that SERS provides no subsidy for this benefit.

IV – Participant Data

The participant data as of January 1, 2008 is summarized in the following tables:

- **Table 6** summarizes the number of participants by status.
- **Table 7** summarizes the active members by age and years of service.
- **Table 8** summarizes the retired participants and covered dependents by health care plan enrollment (for those participants currently enrolled in retiree health care coverage).

IV – Participant Data

TABLE 6

NUMBER OF PARTICIPANTS AS OF JANUARY 1, 2008

Status	Number
Active Members	123,013
Inactive Members	
Eligible for Allowances	3,636
Retirees and Beneficiaries	
Retirees	
Service Retirees	35,408
Disability Retirees	<u>4,341</u>
Total	39,749
Beneficiaries	
Spouses of Retirees	9,471
Spouses of Deceased Retirees	2,845
Survivor Benefit Recipients	2,117
Children	<u>587</u>
Total	15,020
Total Retirees and Beneficiaries	54,769
GRAND TOTAL	181,418

IV – Participant Data

TABLE 7

ACTIVE MEMBERSHIP DATA AS OF JANUARY 1, 2008

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 25	4,795	163								4,958
25-29	4,282	1,099	91							5,472
30-34	3,855	1,969	474	35						6,333
35-39	5,425	3,740	1,212	366	70					10,813
40-44	6,926	6,001	2,763	948	531	131				17,300
45-49	5,202	7,347	4,877	2,245	1,298	817	147			21,933
50-54	4,143	5,209	5,381	3,673	2,416	1,239	573	47		22,681
55-59	2,852	3,217	2,838	2,993	3,125	1,592	438	124	9	17,188
60-64	1,536	2,055	1,307	1,502	1,723	1,222	635	102	16	10,098
Over 64	<u>1,161</u>	<u>1,227</u>	<u>763</u>	<u>626</u>	<u>753</u>	<u>767</u>	<u>572</u>	<u>294</u>	<u>74</u>	<u>6,237</u>
Total	40,177	32,027	19,706	12,388	9,916	5,768	2,365	567	99	123,013
Average Age:					47.6					
Average Years of Service:					9.9					

IV – Participant Data

TABLE 8**CURRENT ENROLLMENT OF RETIRED PARTICIPANTS
AS OF JANUARY 1, 2008**

Age Last Birthday	Aetna/MMO Managed Care/Indem	Aultcare PPO	Aetna HMO	Kaiser HMO	Paramount HMO	Aetna PFFS	AultCare MA	MMO PFFS	Total
Service Retirees									
Under 55	182	12	81	10	4	-	-	-	289
55-59	531	36	328	49	13	-	-	2	959
60-64	1,554	136	874	94	21	7	1	1	2,688
65-69	324	23	97	178	52	3,430	128	1,413	5,645
70-74	48	2	-	191	121	4,866	135	1,226	6,589
75-79	38	1	-	186	134	5,372	53	393	6,177
Over 79	77	-	-	294	131	12,268	45	246	13,061
Total	2,754	210	1,380	1,002	476	25,943	362	3,281	35,408
Disability Retirees									
Under 55	453	10	154	37	10	46	-	17	727
55-59	441	8	153	34	11	44	1	16	708
60-64	520	23	181	26	13	72	-	26	861
65-69	56	1	14	13	18	494	7	82	685
70-74	3	-	-	10	10	472	2	38	535
75-79	4	-	-	12	8	368	-	8	400
Over 79	4	-	-	4	2	408	1	6	425
Total	1,481	42	502	136	72	1,904	11	193	4,341
Spouses of Retirees	1,094	83	191	258	128	6,207	218	1,292	9,471
Spouses of Deceased Retirees	47	-	6	49	30	2,604	18	91	2,845
Survivor Benefit Recipients	244	9	56	43	18	1,575	15	157	2,117
Children	350	20	75	23	4	103	4	8	587
Total	5,970	364	2,210	1,511	728	38,336	628	5,022	54,769

V – Assumptions and Methods

ASSUMPTIONS

DISCOUNT RATE: 5.25% per annum, compounded annually.

SALARY INCREASES: Assumed annual rates of salary increases are as follows:

Service	Base (Economy)	Merit & Seniority	Total Increase
0	4.00%	20.75%	24.75%
1	4.00	13.25	17.25
2	4.00	10.75	14.75
3	4.00	8.75	12.75
4	4.00	7.75	11.75
5	4.00	5.75	9.75
6	4.00	4.75	8.75
7	4.00	3.75	7.75
8	4.00	2.75	6.75
9	4.00	1.75	5.75
10 - 14	4.00	0.75	4.75
15 & Over	4.00	0.50	4.50

HEALTH CARE COST TREND ASSUMPTION: The 2008 per-capita costs are assumed to increase by the following percentages each year.

Calendar Year	Indemnity/PPO		HMO*		Rx Drug
	Under 65	Over 65	Under 65	Over 65	
2008	10.00%	10.00%	9.50%	9.50%	11.00%
2009	9.00	9.00	8.50	8.50	10.00
2010	8.00	8.00	7.50	7.50	9.00
2011	7.00	7.00	6.50	6.50	8.00
2012	6.00	6.00	5.50	5.50	7.00
2013	5.50	5.50	5.50	5.50	6.00
2014 and later	5.50	5.50	5.50	5.50	5.50

* HMO trends are for medical and prescription drug expenditures combined.

V – Assumptions and Methods

ADMINISTRATIVE EXPENSE: Per-capita costs were assumed to include administrative expenses of the medical plans.

MEMBER PARTICIPATION: Future eligible service retirees are assumed to elect to participate in the program based on their service at retirement. These assumptions are summarized in the following table:

Service at Retirement	Participation Assumption
10 – 14.999	25%
15 – 19.999	45%
20 - 24.999	70%
25 - 29.999	75%
30 - 34.999	80%
35 and Over	90%

50% of members who retire from an inactive status are assumed to elect coverage. 100% of members who become disabled are assumed to elect coverage.

DEPENDENTS OF FUTURE RETIREES: Participation is expressed as a percentage of covered members as follows:

<u>Male</u>	<u>Female</u>
50%	40%

Husbands were assumed to be three years older than wives.

PLAN ELECTION: We assumed the plan elections below for future retirees. We have assumed the election patterns regarding the choice of the various HMO or PPO plans by future retirees will be consistent with the elections of the current retirees.

	Non-Medicare	Medicare
PPO / PFFS	67%	96%
HMO	33%	4%

V – Assumptions and Methods

Within each of these categories, individuals were assumed to elect the following plans:

	<u>Non-Medicare</u>	<u>Medicare</u>
<u>PPO/PFFS</u>		
Aultcare PPO	7.2%	0.1%
Aetna/MMO Ind/PPO	92.8%	1.3%
Aetna FFS	0.0%	63.5%
Aultcare Medicare Advantage	0.0%	2.8%
MMO FFS	0.0%	32.3%
<u>HMO</u>		
Aetna	85.3%	0.0%
Kaiser	11.0%	65.1%
Paramount	3.7%	34.9%

PER CAPITA HEALTH CARE COSTS: Health care costs were based on the reported 2008 premium equivalent rates and HMO/Medicare Advantage premiums provided by SERS, which are shown below. While our review indicates that the 2007 aggregate premium for the covered population was sufficient to cover the overall claims and administrative costs for the retiree health care program for 2007, we did not verify these premium equivalent rates were actually representative of the claim costs of particular groups as analysis of claim costs was outside of the scope of this review. In addition, we did not review the expected cost savings anticipated due to Ohio prescription drug collaborative assumed in developing the 2008 prescription drug costs. Future Medicare-eligible retirees were assumed to have the same Medicare election characteristics (i.e., Medicare Parts A & B or B only) as the current Medicare-eligible retirees.

V – Assumptions and Methods

2008 Monthly Average Age Per Capita Costs

Total Medical Cost	Indemnity / PPO		HMO		
	Aetna/ MMO	AultCare	Aetna	Kaiser	Paramount
A. Retiree without Medicare	\$846	\$529	\$855	\$598	\$972
B. Retiree with Medicare A	57*	62	57	172	43
C. Retiree with Medicare B only	375**	529	442	803	318
D. Spouse without Medicare	668	418	675	473	768
E. Spouse with Medicare A	57*	62	57	172	43
F. Spouse with Medicare B only	375**	418	442	803	318

Total Drug Cost	Indemnity / PPO		HMO		
	Aetna/ MMO	AultCare	Aetna	Kaiser	Paramount
A. Retiree without Medicare	\$171	\$161	\$171	\$322	\$171
B. Retiree with Medicare A	164	40	164	62	164
C. Retiree with Medicare B only	164	161	164	62	164
D. Spouse without Medicare	141	133	141	266	141
E. Spouse with Medicare A	164	40	164	62	164
F. Spouse with Medicare B only	164	133	164	62	164

* \$56 for MMO PFFS, \$160 for Aetna Indemnity

** \$442 for Aetna PFFS

V – Assumptions and Methods

AGE-RELATED MORBIDITY: The assumed increases in the claims costs per year of age for retirees and spouses are as follows:

Age	Annual Increase	
	Medical	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

V – Assumptions and Methods

MORTALITY, RETIREMENT, WITHDRAWAL AND DISABILITY: Assumed rates are as follows:

Mortality Rates*				
Attained Age	Healthy		Disabled	
	Males	Females	Males	Females
20	.048%	.028%	2.104%	1.826%
30	.078	.033	2.204	1.958
40	.100	.065	2.304	2.090
50	.233	.131	2.404	2.222
60	.709	.386	3.906	2.366
70	2.173	1.271	4.861	2.601
80	5.586	3.536	7.812	5.547

* Mortality rate for retirees and survivors are based on the 1994 Group Annuity Mortality table with male and female ages set back one year. Mortality for active members is 60% of the retiree table for males and 50% for females. Mortality for disabled members is developed from experience.

Retirement Rates		
Attained Age	Male	Female
50 – 54	40.0%	33.0%
55	25.0	25.0
56 – 57	20.0	20.0
58 – 59	15.0	20.0
60	10.0	20.0
61	10.0	15.0
62	15.0	15.0
63	10.0	10.0
64	10.0	10.0
65	25.0	25.0
66 – 74	20.0	20.0
75	100.0	100.0

V – Assumptions and Methods

Withdrawal Rates	
Years of Service	Unisex Rate
0	55.00%
1	20.00
2	15.00
3	10.00
4	7.50
5	6.50
10	5.00
15	3.75
20	3.50

Disability Rates		
Attained Age	Male	Female
30	.112%	.075%
35	.371	.075
40	.405	.157
45	.506	.187
50	.825	.394
55	.825	.608

FUTURE EXPENSES: The assumed discount rate is net of the anticipated future administrative expenses of the fund.

METHODS

ACTUARIAL COST METHOD: Entry Age Normal Cost Method with normal cost rate determined as level percentage of overall payroll based on individual calculation of present value of future normal cost. Gains and losses are reflected in the accrued liability. Amortization is over an open 30-year period as a level percentage of payroll.

ASSET VALUATION METHOD: Market value of assets.

V – Assumptions and Methods

PAYROLL GROWTH: 4.00% per annum compounded annually.

REPLACEMENT OF RETIRING MEMBERS: SERS provided data for active members as of June 30, 2007 and data for retired members as of January 1, 2008. The active member population reported as of June 30, 2007 was adjusted to January 1, 2008 by removing members receiving health care benefits as of January 1, 2008 and replacing them with hypothetical active members according to the profile of new entrants.

DATA

CENSUS AND ASSETS: The valuation was based on active and inactive members of the System as of June 30, 2007, and retired members and spouses of the System as of January 1, 2008, and does not account for future members. Assets are as of December 31, 2007. All census and asset data was supplied by the System.

VI – Glossary of Terms

Accrued Liability	The present value as of the valuation date of all of the prior normal costs of the plan. It is the portion of the present value of future plan benefits attributable by the Actuarial Cost Method to service accrued as of the valuation date. If all assumptions were realized and contributions equal to the normal cost were made annually from the inception of the plan, the accrued liability would equal the plan assets. Mathematically, the accrued liability is equal to the difference between (a) the present value of future plan benefits, and (b) the present value of future normal cost. Referred to as “actuarial accrued liability” in GASB 43.
Actuarial Assumptions	Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, 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	The cost of a pension or retiree health care plan should be recognized during the working lifetime of the members who are ultimately going to receive benefits, preferably by actually funding amounts sufficient to provide completely for each member’s benefit at the time of retirement. The mathematical budgeting procedure for allocating the cost of benefits is called the “actuarial cost method.” The cost method allocates the dollar amount of the “present value of future plan benefits” between the “present value of future normal cost” and the “accrued liability.” Sometimes referred to as the “actuarial funding method.”
Actuarially Required Contribution Rate	The contribution rate that would be necessary to advance fund benefits based on the assumptions used. In this valuation, that rate is equal to the normal cost plus amortization of the unfunded accrued liability over a 30-year period. The assumptions in this valuation reflect the fact that some benefits will be funded out of employer assets directly, and not out of the Fund of the Plan.
Advance Fund	Funding on a full reserve basis. See definition of full reserve basis.
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.

VI – Glossary of Terms

Entry Age Normal Cost Method

A funding method based upon the premise that if all assumptions are realized, the annual contribution as a percentage of payroll for an individual will remain level from year to year. This premise means that the present value of all future normal costs at a member's hire age (i.e., entry age) is exactly equal to the present value of all future benefits. If the trend rate is greater than the assumed overall payroll growth, then entry age normal cost contributions for the entire covered population would be expected to increase year to year as an overall percentage of payroll.

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.

Full Reserve Basis

The philosophy behind every proper funding method is that benefits should be funded during the working lifetime of the members. This means that at retirement, contributions plus interest on those contributions are sufficient to provide completely for the benefits expected to be paid out. This advance funding is called funding on a full reserve basis.

Funded Status

The percentage of the total accrued liability that the assets represent.

Market Value of Assets

The value of assets segregated in the trust fund to provide benefits. The market value is the amount that the plan could reasonably expect to receive for its investments as of the valuation date in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale.

Normal Cost

The annual cost of the benefits that accrue during the year. The normal cost is the amount necessary to be contributed to pay for the benefits that are earned during the year. It is the cost of keeping the fund at the desired level if the assumptions are realized and if the assets equal the accrued liability (i.e., the cost under "normal" circumstances). Sometimes referred to as "current service cost."

Present Value

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

Present Value of Future Plan Benefits

The value as of the valuation date of all of the benefits expected to be paid in the future based upon the actuarial assumptions.

VI – Glossary of Terms

Present Value of Future Normal Cost	The value as of the valuation date of all of the future normal costs of the plan based upon the actuarial assumptions.
Setback in Age	Used in applying rates of mortality. Setback in age means assuming that the age of a member is younger than it actually is. For example, if the male mortality is setback by one year that means a male age 50 is assumed to be age 49 for purposes of applying the mortality table.
Set forward in Age	Used in applying rates of mortality. Set forward in age means assuming that the age of a member is older than it actually is. For example, if the female mortality is set forward by one year that means a female age 50 is assumed to be age 51 for purposes of applying the mortality table.
Trend Rates	The assumed annual rates of increase in the base year total per capita costs and retiree contributions for medical and prescription drug benefits.
Usual, Customary and Reasonable Fees (UCR)	The charges for services and supplies that a plan administrator has determined to be the prevailing levels in the geographic area where they are furnished.
Unfunded Accrued Liability	The difference between the actuarial accrued liability and the valuation assets.