School Employees Retirement System of Ohio

Comprehensive
Annual
Financial
Report
for the
Year Ended
June 30,1986

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School Employees Retirement System of Ohio Comprehensive Annual Financial Report for the Year Ended June 30,1986

Prepared By SERS Staff

Thomas R. Anderson Executive Director



THE SCHOOL EMPLOYEES RETIREMENT BOARD OF OHIO



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JOHN W. FRANK Controller

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ORGANIZATIONAL CHART

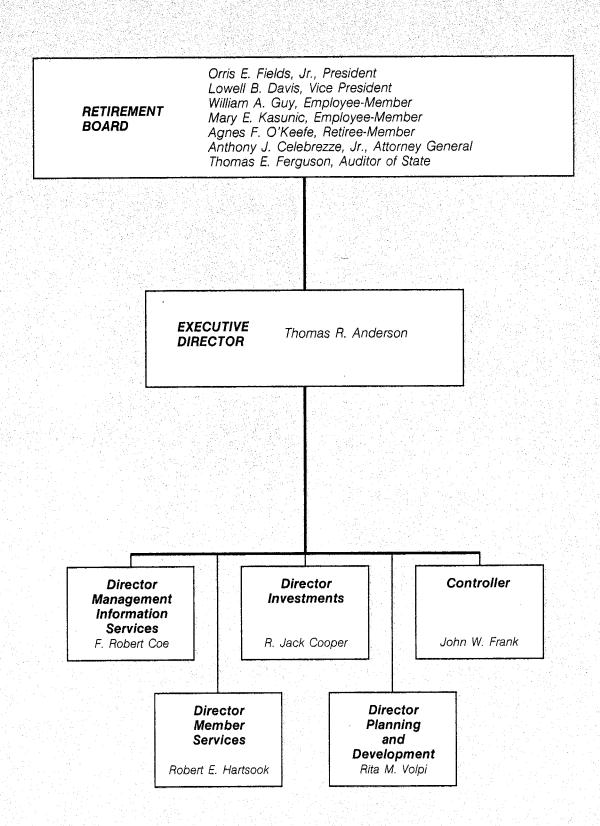


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SCHOOL EMPLOYEES RETIREMENT SYSTEM

45 North Fourth Street

Columbus, Ohio 43215

Telephone (614) 221-5853

January 7, 1987

President and Members of the Retirement Board: School Employees Retirement System

Dear President and Members:

The comprehensive annual financial report of the School Employees Retirement System (SERS) is submitted herewith. This report contains statements of financial condition, results of operation of the benefit programs administered by the SERS, schedules of significant data regarding the operation of the Retirement System, and the opinion of our certified public accountant, Peat, Marwick, Mitchell & Co. In addition, there is an Actuarial Section containing the opinion of our independent actuary, Gabriel, Roeder, Smith & Company, an Investment Section containing the investment report and schedules of portfolio activity, and the Plan Summary.

Accounting System and Reports

This report was prepared in accordance with generally accepted accounting principles of governmental accounting and reporting as pronounced by the American Institute of Certified Public Accountants and the National Council of Governmental Accounting.

Transactions of the SERS are reported on the accrual basis of accounting. Our internal accounting controls are designed to insure the safekeeping of member contributions and to provide a reasonable degree of reliability regarding all of our financial records. During the past year we modified our administrative budget process to: 1) assign departmental responsibility for expenses and cost containment; and 2) directly relate expenses to our tactical and strategic plans. This comprehensive budget approach permits us not only to review the actual vs. planned expenses, but also to compare administrative expenses to stated organizational goals and objectives.

Review of Operations

Continued emphasis on productivity in 1986 enabled SERS to process a record number of service retirement applications in an orderly and timely fashion. Including thirteen regional conferences sponsored by SERS, the board and staff participated in seventy-three member meetings throughout the state. Revisions to the Retirement Manual, the Member Handbook, the Treasurer's Manual, and to all

of our leaflets keep all of our publications as current as possible.

This was also a record year for our investment portfolio, the bulk of which is managed internally by an experienced and professional staff. Portfolio rates of return and other information are in the Investment Section of this Report.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the School Employees Retirement System of Ohio for its comprehensive annual financial report for the fiscal year ended June 30, 1985.

In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to conform to the Certificate of Achievement Program requirements, and we are submitting it to GFOA to determine its eligiblity for another certificate.

Financial Highlights

Revenues:

Revenues from employee and employer contributions were \$79 million and \$130.5 million, respectively, while income from investments totaled \$171.1 million. This represents an increase over 1985 of 8% for employee contributions, 9.5% for employer contributions, and 11.2% for investment income. Contribution rates for both employees and employers remained unchanged from the prior year.

Expenses:

Expenses are incurred primarily for the purpose for which the Retirement System was created; namely, the payment of benefits. Included in the total expenses for fiscal 1986 were benefit payments, refunds of contributions due to member termination or death, transfers of contributions to other Ohio Systems to provide benefits for those members who hold membership in more than one system, and ad-

Financial Highlights (Continued)

ministrative expenses. Expenses for fiscal 1986 totaled \$183.4 million, an increase of 13% over 1985 expenses. Increases in the number of benefit recipients, the average benefit paid, and health care expense combined to increase benefit expense by \$20 million, accounting for nearly all of the increase in total System expenses for the fiscal year.

Funding and Reserves:

Funds are derived from the excess of revenues over expenses, and are accumulated by the Retirement System in order to meet current and future benefit obligations to retirees and beneficiaries. The higher the level of funding, the larger the accumulation of assets and the greater the investment income potential.

Net income for the fiscal year 1986 resulted in an increase in fund balances of \$200.5 million. This increase is \$13.6 million greater than the total increase in fund balances for the fiscal year 1985.

The actuarial valuation for funding purposes, dated June 30, 1986 reflects an unfunded accrued liability for basic benefits of \$889 million. This liability represents the difference between the computed actuarial accrued liability for basic benefits to be paid members and retirants (\$2,669 million) and total of fund balances and expected value of future payments for state subsidies (\$1,780 million.) The current basic benefit portion (8.5%) of the employer contribution rate of 14% is sufficient to amortize this unfunded accrued liability over 48 years.

Additional information regarding funding is provided within the Actuarial Section (pages 22 to 25 of this report.)

Investments

The School Employees Retirement System invests the previously mentioned funds in order to maximize both current income yield and long-term appreciation. For the fiscal year ended June 30, 1986, investments provided 44.6% of the System's total revenues while employee and employer contributions provided 20.6% and 34%, respectively; and other sources accounted for the remaining 0.8%.

At June 30, 1986, our investment portfolio was structured as follows: 46.9% in debt securities; 29.8% in equity securities; 12.2% in short-term investments; and 11.1% in real estate.

Portfolio composition, rates of return, and analysis of signifi-

cant economic conditions, and additional information concerning our investments are presented in the Investment Section (pages 32 to 43.)

Future Prospects

The relentless increase in the cost of providing postretirement health care continues to pose a major challenge
for SERS. Through stringent cost-containment and costsharing measures SERS has kept the annual per retiree
claims cost at the lowest level of the five statewide
systems. The relatively low average salary of SERS
members, however, puts SERS at the top when it comes to
the cost of post-retirement health care as a percent of total
member pay. This year 5.5% of the total employer contribution rate of 14% has been allocated to fund health
care benefits. As pointed out in the actuarial portion of this
report, this allocation is not sufficient to provide level cost
financing of this benefit. SERS is supporting legislation
(H.B. 1060, 116th General Assembly) which will provide additional funds for this benefit.

Ackowledgements

The preparation of this report is the result of the combined effort of the System's staff under the direction of the Retirement Board. It is intended to provide complete and reliable information as a basis for making management decisions, to disclose compliance with legal provisions, and as a means of determining responsible stewardship for the assets contributed by the members and their employers.

This report is being mailed to all employer members of the System and other interested parties.

Respectfully submitted,

Thomas & Auderson

W. Finck

Thomas R. Anderson Executive Director

John W. Frank Controller

Certificate of Achievement for Excellence in Financial Reporting

Presented to

School Employees Retirement System, Ohio

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 1985

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to governmental units and public employee retirement systems whose comprehensive annual financial reports (CAFR's) are judged to substantially conform to program standards.

CORPORATION SEAL SOLUTION OF THE CONTROL OF THE CON

Betty Jo Harker President Jelfrey L. Frans

Executive Director

Financial Section

Auditors' Opinion

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AUDITORS' OPINION



Peat, Marwick, Mitchell & Co. Certified Public Accountants Two Nationwide Plaza Columbus, Ohio 43215 614-221-3181

Honorable Thomas E. Ferguson Auditor of State State of Ohio

The Retirement Board School Employees Retirement System of Ohio:

We have examined the balance sheets of the School Employees Retirement System of Ohio as of June 30, 1986 and 1985 and the related statements of revenues, expenses and changes in fund balance and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of the School Employees Retirement System of Ohio at June 30, 1986 and 1985 and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Our examinations were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information included in Schedules I through IV is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the examinations of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Peak, Marwick, Mitchell & Co.

January 5, 1987

BALANCE SHEET

June 30, 1986 and 1985		1986		1985
Assets:	_			
Cash	\$		\$	428,419
Receivables:				
Contributions:		66,889,712	•	60,576,671
Employers		7,355,788		6,866,775
Employees State of Ohio subsidies		1,450,433		1,578,723
Accrued investment income		16,522,986		19,419,480
Investment sale proceeds		1,399,288		32,183,585
Total receivables	\$	93,618,207	\$	120,625,234
Investments, at cost (market \$2,073,465,579 and			-	
\$1,697,945,355, respectively)(notes 5 and 6)		1,797,254,760		1,601,207,790
Property and equipment, at cost (note7)		8,257,608		7,683,727
Less accumulated depreciation		1,825,153		1,426,245
Net property and equipment	-	6,432,455		6,257,482
Other assets		556,264		265,820
Total assets	\$	1,897,861,686	\$	1,728,784,745
Liabilities:				4
Accounts payable and accrued expenses	\$	473,130	\$	451,179
Investment commitments payable		6,800,962		39,453,298
Accrued health care benefits payable		9,588,913		8,492,834
Notes payable		4,070,146		4,244,681
Other liabilities		687,710		409,592
Total liabilities	\$	21,620,861	\$	53,051,584
Net assets available for benefits	\$	1,876,240,825	\$	1,675,733,161
Fund balance (note 8): Actuarial present value of credited				
projected benefits for:				
Current retirants and beneficiaries	\$	1,688,209,450	\$.	1,511,799,217
Present inactive members		136,308,948		111,168,934
Active members:		.== 0.0.100		100 500 000
Member contributions		475,218,163		432,528,863
Employer financed portion		1,041,036,677		857,983,917
Total actuarial present value of		2 240 772 229		2,913,480,931
araditad avalantad baasita		3,340,773,238		2,010,400,301
credited projected benefits				
credited projected benefits Unfunded actuarial present value of credited projected benefits payable		(1,464,532,413)		(1,237,747,770)

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN FUND BALANCE

Years ended June 30, 1986 and 1985		1986	1985		
Revenues:					
Contributions:			_		
Employers (note 4)	\$	130,507,996	\$	119,145,737	
Employees		78,979,863		73,117,682	
State of Ohio subsidies		1,450,433		1,578,723	
Transfer from other Ohio systems		1,883,386		1,425,653	
	\$	212,821,678	\$	195,267,795	
Investment income (loss):			_		
Interest and dividends	\$	132,840,993	\$	126,576,303	
Real estate income, net of depreciation				,	
expense of \$2,446,676 in 1986 and		10 070 010		10 500 660	
\$2,336,846 in 1985		12,672,310		12,500,660 14,960,421	
Net realized gain on sale of investments		34,461,091		14,900,421	
Loss on options traded, net of option expense of \$15,577,895 in 1986 and \$3,586,244 in 1985		(8,858,718)		(103,355)	
01 \$15,577,695 III 1960 and \$5,500,244 III 1905	\$	171,115,676	\$	153,934,029	
Total revenues	\$ \$	383,937,354	\$	349,201,824	
Expenses:					
Benefits:	\$	108,321,454	\$	96,910,985	
Retirement Disability	Ψ	11,785,441	•	10,527,898	
Survivor		8,360,152		8,004,136	
Health care		37,499,209		30,778,698	
Death		640,517		563,433	
	\$	166,606,773	\$	146,785,150	
Refund of employee contributions		9,058,221		8,373,795	
Administrative expenses		5,863,596		5,673,205	
Transfer to other Ohio systems		1,901,100		1,486,990	
Total expenses	\$	183,429,690	\$	162,319,140	
Net income	\$	200,507,664	\$	186,882,684	
Fund balance, beginning of year	-	1,675,733,161		1,488,850,477	
Fund balance, end of year	\$	1,876,240,825	\$	1,675,733,161	

STATEMENT OF CHANGES IN FINANCIAL POSITION

Years ended June 30, 1986 and 1985	1986		1985
Resources provided by:			
From operations: Net income Items which do not use working capital: Depreciation and amortization	\$ 200,507,66 364,06		186,882,684 381,002
Total resources provided from operations	200,871,72		187,263,686
Other	51,67		22,190
Total resources provided	\$ 200,923,40	4 \$	187,285,876
Resources used by:			
Additions to property and equipment	590,71 290,44		100,990 108,207
Increase in other assets Repayment of notes payable	174,53		174,535
Net increase in working capital	199,867,71	2	186,902,144
Total resources used	\$ 200,923,40	\$	187,245,876
Changes in components of working capital:			
Increase (decrease) in current assets:			/- m · m · m
Cash	(428,41) (27,007,02)		(254,743) 23,037,640
Receivables Investments	196,046,97	•	187,870,056
	\$ 168,611,52	24 \$	210,652,953
Increase (decrease) in current liabilities:	,		
Accounts payable and accrued expenses	21,95		92,489
Investment commitments payable	(32,652,33		24,713,736
Accrued health care benefits payable Other liabilities	1,096,07 278,11		(1,386,235) 330,819
Other habilities	\$ (31,256,18		23,750,809
Net increase in working capital	\$ 199,867,77		186,902,144
not morozoo in trotting capital			
See accompanying notes to financial statements.			

NOTES TO FINANCIAL STATEMENTS June 30, 1986 and 1985

(1) Description of the System

(A) Organization - The School Employees Retirement System of Ohio (SERS) was established by the Ohio General Assembly in 1937 to provide retirement benefits to employees of Ohio public schools who are not required to possess a certificate in order to perform their duties. Responsibility for the organization and administration of SERS is vested in the Retirement Board.

Employer and employee membership data follow:

	June 30,		
Employer Members	1986	1985	
Local	376	376	
City	192	192	
County	86	86	
Village	49	49	
Vocational	49 ·	49	
Technical	. 13	13	
College	2	2	
Other	2	1	
	769	768	
Employee Members			
Current retirants and beneficiaries	41,037	38,708	
Inactive vested members	7,925	7,597	
Active plan members: Vested Nonvested	53,062 35,248	54,159 32,679	
Total active			
plan participants	88,310	86,838	

(B) Benefits - Members are eligible for normal retirement benefits upon reaching age 65 and earning 30 years of service credit. The benefit is equal to 2% of the member's final average salary, as defined, multiplied by the number of years of credited service. Early retirement with reduced benefits is available upon reaching (a) age 55 and 25 years of service credit or (b) age 60 and 5 years of service credit.

In addition to retirement benefits, SERS also provides for disability benefits, survivor benefits, death benefits and health care benefits. Members are eligible for disability benefits after completion of 5 years of eligible service. Qualified dependents of a deceased member are eligible for monthly survivor benefits. Death benefits of \$500 are payable upon the death of a retirant to a designated beneficiary. All members receiving a benefit from SERS are eligible to receive health care benefits. Members who retire effective July 1, 1986 or later must have at least 10 or more years of service credit to qualify for the health care benefits.

Members with credited service in the State Teachers Retirement System (STRS) or Public Employees Retirement System (PERS) are eligible to receive transferred credit from either or both of those systems. Any service which is not concurrent with service within SERS will be included in the determina-

tion of retirement benefits. Similarly, a member with credited service in SERS may transfer such service to STRS or PERS upon retirement.

Upon termination of a member's school employment, the member's accumulated contribution, without interest, is refundable.

(C) Contributions - The Ohio Revised Code requires contributions by active members and their employers. Contribution rates are established by the Retirement Board within the allowable rates established by the Ohio Revised Code. Active members and their employers are required to contribute 8.75% and 14%, respectively, of active member payroll. An Employees' Saving Fund (Account) is established for member contributions. Contributions may be refunded to a member who withdraws from SERS or to the member's beneficiary following the member's death.

(2) Summary of Significant Accounting Policies

The accompanying financial statements include all the organizations, activities and functions in which SERS exercises oversight responsibility. Determination of oversight responsibility included consideration of such factors as financial interdependency, selection of governing authority, designation of management, ability to significantly influence operations and accountability for fiscal matters.

The following are the significant accounting policies followed by SERS.

(A) Investments - Income on all investments is recognized on the accrual basis.

Corporate and government bonds and obligations with fixed maturities are reported at cost (as of the trade date) adjusted for amortization of premiums and accretion of discounts.

Investments in residential mortgage-backed securities are carried at the amount of unpaid principal balance of the securities, adjusted for accretion of discounts.

Investments in first mortgage loans are carried at the amount of unpaid principal balance of the loan.

Investments in common stocks are carried at cost. Gains and losses on stock sales are recognized on the basis of the average cost of the stocks sold.

Gain or loss on options traded is earned on premiums received from selling covered call stock options. Premiums received are earned ratably over the term of the option or until the option is exercised, closed, or expired. Option expense is recognized when the option is closed.

Investments in short-term obligations, principally certificates of deposit, commercial paper, U.S. Treasury bills and bank repurchase agreements are carried at cost, which approximates market value.

NOTES TO FINANCIAL STATEMENTS (Continued) June 30, 1986 and 1985

(A) Investments (continued)

Investments in real estate are carried at cost. Depreciation on buildings is provided using the straight-line method over the estimated useful lives of the property (40 to 45 years).

- **(B) Depreciation (Non-Investment Assets)** Depreciation is provided using the straight-line method over the estimated useful lives of the related assets.
- (C) Federal Income Tax Status During the years ended June 30, 1986 and 1985 SERS qualified under the provision of the Internal Revenue Code and was exempt from Federal income taxes.
- **(D)** Accrued Health Care Benefits Payable Amounts accrued for health care benefits payable are based upon estimates furnished by the claims administrator. Such estimates have been developed from prior claims experience.
- **(E) Reclassification -** Certain reclassifications of information for 1985 have been made to conform to the 1986 presentation.

(3) Actuarial Cost Method and Assumptions

Employer contributions are allocated between basic retirement benefits and health care benefits. The current employer contribution rate (14% of payroll) is allocated 8.5% to basic retirement benefits and 5.5% to health care benefits. Employer contribution rates, for basic retirement benefits, are determined using the entry age normal actuarial cost method. This method produces an employer contribution rate consisting of (1) an amount for normal cost (the estimated amount necessary to finance benefits earned by employees during the current service year), and (2) an amount for amortization of the unfunded actuarial accrued liability as of June 30, 1986 over 48 years. Employer contribution rates for health care benefits are sufficient to fund current health care benefits on a cash basis (4.3% of payroll) but are not sufficient to provide level cost financing of the health care benefit.

The following significant assumptions were used in the actuarial valuations as of June 30:

Actuarial Assumption	1986	1985
Rate of return on investment	7.5% compounded annually, with an 2% additional rate of return annually July 1, 1986 through June 30, 1991	7.5% compounded annually
Projected salary increases	4.5% compounded annually, attributable to inflation, additional increases ranging from .5% to 3% per year attributable to seniority and merit	4.5% compounded annually, attributable to inflation, additional increases ranging from .5% to 3% per year attributable to seniority an merit
Post-retirement mortality	1971 Group Annuity Table projected to 1984 for men and women, set back 1 year for women	1955 American Annuity Table; set ahead 1 year for men and set back 5 years for women
Rates of withdrawal from active service for reasons other than death, rates of disability and expected retirement ages	Developed on basis of actual plan experience	Developed on basis of actual plan experience
Health care premiums	4.5% annual increase with 25% of eligible female retirants and 60% of eligible male retirants electing the joint survivor form of payment and 25% of eligible female retirants and 50% of eligible male retirants electing to cover spouses for health care	4.5% annual increase with 25% of eligible retirants electing joint survivor form of payment and 25% of eligible retirants electing to cover spouses for health care
Medicare	All recipients are eligible for Medicare on attainment of age 65 or immediately if retired for disability	All recipients are eligible for Medicare on attainment of age 65 or immediately if retired for disability

(4) Funding Requirement Determinations and Actual Contributions

Included in employer contributions were \$121,676,000 and \$112,592,000 for 1986 and 1985, respectively, equivalent to 14 percent of active member payroll for 1986 and 1985 of \$869,111,000 and \$804,230,000 respectively. Amounts contributed by employers for basic retirement benefits were in accordance with actuarially computed funding require-

ment determinations.

The components of employer contributions are as follows: (1) \$54,754,000 and \$50,666,000 (6.3% of active member payroll) for normal costs in 1986 and 1985, respectively, and (2) \$66,922,000 and \$61,926,000 (7.7% of active member payroll) for amortization of the unfunded actuarial accrued liability in 1986 and 1985, respectively.

School Employees Retirement System Of Ohio

NOTES TO FINANCIAL STATEMENTS (Continued)

(5) Investments

A summary of investments as of each June 30 follo	ws: 19	86	19	85
Corporate and government	Carrying Value	Market Value	Carrying Value	M

Corporate and government	C	arrying Value		Market Value		Carrying Value	^	Market Value
bonds and obligations: Corporate bonds Utility bonds	\$	129,100,975 122,300,604	\$	138,459,333 126,451,104	\$	74,661,252 169,737,107	\$	72,241,271 167,011,577
United States Government and Agency obligations Canadian Government obligations		182,867,906 —		193,788,207	******	181 <u>,</u> 862,785 8,985,292		193,020,218 8,786,797
	\$	434,269,485	\$	458,698,644	\$	435,246,436	\$	441,059,863
First mortgage loans:								
GNMA modified pass-through mortgage-backed securities FHLMC mortgage-backed		198,377,910		208,409,853		197,325,440		199,737,808
participation certificates		130,831,237		134,889,415		98,913,409		101,176,498
FHA/VA guaranteed single-family mortgages		444,243 1.604.413		407,874 1,590,604		539,863 1,887,513		443,805 1.768.748
HUD guaranteed mortgages FHA guaranteed project mortgage		3,441,641		2,533,134		3,509,325		2,228,423
Commercial and industrial mortgages		73,483,903	_	78,917,003		89,240,709	*******	97,502,763
	\$	408,183,347	\$	426,747,883	\$	391,416,259	\$	402,858,045
Common and preferred (1986) stocks	\$	535,014,725	\$	732,997,117	\$	389,537,785	\$	438,176,482
Short-term investments:								
Commercial paper Bankers acceptances		219,290,092 —		219,759,540		194,792,556 9,195,301		195,262,788 9,210,006
	\$	219,290,092	\$	219,759,540	\$	203,987,857	\$	204,472,794
Real estate, land and buildings		99,239,296		122,362,196		101,039,956		121,071,000
Commingled real estate funds		86,257,815 15,000,000		98,204,826 14,695,373		71,079,497 8,900,000		81,453,847 8,853,324
Capital development fund — limited partnership Total investments	•	1,797,254,760		2,073,465,579	\$	1,601,207,790	s	1.697,945,355
i Otal IIIVestilletits		1,731,234,700	=		-	1,001,201,700	==	-,,501,545,500

Market values of securities are based primarily on quotations from national security exchanges. Market value of real estate is based upon appraisals. Market values of the investment in the commingled real estate funds are based on information provided by the fund managers.

(6) Real Estate and Leases

SERS' investment in real estate as of June 30 consists of:

02,10 ,11000		1986	_	1985
Land	\$	18,413,656	\$	18,413,656
Buildings		91,740,478		91,094,482
		110,154,154		109,508,482
Less accumulated				
depreciation	•	10,914,858		8,468,182
	\$	99,239,296	\$	101,039,956
			_	

The following is a summary of minimum future lease payments on noncancellable operating leases related to SERS' investment in real estate as of June 30, 1986:

	-	
lease payments	\$	160,539,459
Total minimum future		
Future lease payments		109,862,905
1991		8,894,811
1990		9,098,810
1989		9,879,254
1988		10,747,445
1987	\$	12,056,234
Year ending June 30		

(7) Property and Equipment (Non-Investment Assets)

A summary of property and equipment at June 30 follows:

	,	1986	1985
Land	\$	1,178,055	\$ 1,178,055
Building and improvements		3,731,436	3,705,818
Furniture and equipment		3,348,117	 2,799,854
		8,257,608	 7,683,727
Less accumulated			
depreciation		1,825,153	1,426,245
	\$	6,432,455	\$ 6,257,482

(8) Actuarial Present Value Of Credited Projected Benefits

For financial reporting purposes, pursuant to NCGA Statement 6, the actuarial present value of credited projected benefits has been computed and included in these financial statements. The actuarial present value of projected benefits consists of:

- (A) the actuarial present value of projected benefits payable to current retirants and beneficiaries
- (B) the actuarial present value of projected benefits payable to terminated vested participants and

NOTES TO FINANCIAL STATEMENTS (Continued)

(C) the actuarial present value of credited projected benefits for active participants.

The actuarial present value of credited projected benefits for active participants represents a portion of the actuarial present value of projected total benefits, giving effect to estimated salary increases to date of retirement. The portion assumed to be credited is the portion represented by the ratio of:

(A) the number of years of covered service rendered as of the date of the valuation to

(B) the total covered service which will have been rendered

as of the expected date of retirement.

The actuarial present value of credited projected benefits and the unfunded portion thereof reported in these financial statements differs from the actuarial accrued liability and the unfunded portion thereof developed for funding requirement determinations because different actuarial cost methods are used for the two purposes.

The total actuarial present values of credited projected benefits were \$3,340,773,238 and \$2,913,480,931 at June 30, 1986 and 1985, respectively, consisting of:

	1986			1985			
	Amount	% of Active Member Payroll		Amount	% of Active Member Payroll		
Actuarial present value of credited projected benefits for:							
Current retirants and beneficiaries Present inactive members	\$ 1,688,209,450 136,308,948	194% 16	\$	1,511,799,217 111,168,934	188% 14		
Total	\$ 1,824,518,398	210%	\$	1,622,968,151	202%		
Actuarial present value of credited projected benefits for active participants:							
Member contributions Employer financed portion	\$ 475,218,163 1,041,036,677	54% 120	\$	432,528,863 857,983,917	54%		
Total .	\$ 1,516,254,840	174%	\$	1,290,512,780	160%		
Total actuarial present value of credited projected benefits	\$ 3,340,773,238	384%	\$	2,913,480,931	362%		

The total actuarial present value of credited projected benefits increased by \$427,292,307 from June 30, 1985 to June 30, 1986. The components of this increase are not available. There were no changes in retirement provisions during the year. Changes in actuarial assumptions are highlighted in note 3.

ADMINISTRATIVE EXPENSE Schedule I

Years ended June 30, 1986 and 1985		1986		1985
Personal services:				
Salaries Retirement contributions Insurance	\$	2,719,708 372,517 233,483	\$	2,383,299 321,274 168,148
Total personal services	\$	3,325,708	\$	2,872,721
Professional services:				
Investment counsel Medical Actuarial and technical Computer support services Auditing Employee training Total professional services	\$	164,225 174,992 161,448 120,975 71,585 39,711 732,936	\$	490,489 146,313 393,097 55,114 22,219 1,107,232
Communications:				
Postage Telephone Retirement counselling services Printing and publications	\$	236,911 45,180 11,719 29,417	\$	220,350 35,708 34,656 37,562
Total communications	\$	323,227	\$	328,276
Other services and charges:				
Equipment repairs and maintenance Building occupancy and maintenance Interest on notes payable Supplies Transportation and travel Equipment rental Surety bonds and insurance Memberships and subscriptions Retirement study commission Miscellaneous Total other services and charges	\$ \$ \$	271,641 211,053 146,672 163,804 101,279 78,333 22,300 26,526 19,804 16,592 1,058,004 5,439,875	\$ \$ \$	259,907 196,922 176,702 130,473 78,539 77,295 20,560 20,590 17,454 5,532 983,974 5,292,203
Depreciation:				•
Furniture and equipment Building	\$	330,329 93,392	\$	288,330 92,672
Total depreciation	\$	423,721	\$	381,002
Total administrative expense	\$	5,863,596	\$	5,673,205
See accompanying auditors' report.				

INVESTMENT SUMMARY Schedule II

Year Ended June 30, 1986

		19	85						19	86	5	% of
		Carrying Value		Market Value		Purchases	Ħ	Sales and ledemptions	Carrying Value		Market Value	Total Market Value
Corporate and govern ment bonds and	-											
obligations	\$	435,246,436	\$	441,059,863	\$	362,673,874	\$	363,650,825	\$ 434,269,485		458,698,644	22.1%
First mortgage loans		391,416,259		402,858,045		127,415,263		110,648,175	408,183,347		426,747,883	20.6
Common stocks		389,537,785		438,176,482		245,035,961		99,559,021	535,014,725		732 _, 997,117	35.4
Short-term investments	ŝ	203,987,857		204,472,794		3,439,573,237		3,424,271,002	219,290,092		219,759,540	10.6
Real estate, land and buildings		101,039,956		121,071,000		646,016		2,446,676	99,239,296		122,362,196	5.9
Commingled real estate funds		71,079,497		81,453,847		15,178,318		****	86,257,815		98,204,826	4.7
Capital development fund — limited partnership		8,900,000		8,853,324		6,100,000		_	15,000,000		14,695,373	.7
Total investments	\$ 1	,601,207,790	\$ 1	,697,945,355	\$	4,196,622,669	\$	4,000,575,699	\$ 1,797,254,760	\$	2,073,465,579	100.0%
See accompanying a	== udit	tors' report			-				 			

See accompanying auditors' report.

Year Ended June 30, 1985

		19	1984					19	985	% of
		Carrying Value		Market Value		Purchases	Sales and Redemptions	Carrying Value	Market Value	Total Market Value
Corporate and govern)-									
obligations	\$	455,203,963	\$	370,094,415	\$	150,180,859	170,138,386	435,246,436	441,059,863	26.0%
First mortgage loans		337,404,764		298,364,034		100,014,439	46,002,944	391,416,259	402,858,045	23.7
Common stocks		353,050,885		364,788,446		289,997,306	253,510,406	389,537,785	438,176,482	25.8
Short-term investment	s	131,049,491		131,631,184		2,623,939,211	2,551,000,845	203,987,857	204,472,794	12.0
Real estate, land and buildings		101,125,666		118,094,000		2,251,136	2,336,846	101,039,956	121,071,000	7.1
Commingled real estate funds		32,002,965		39,773,209		39,076,532		71,079,497	81,453,847	4.8
Capital development fund — limited partnership		3,500,000		3,496,875		5.400.000	_	8,900,000	8,853,324	,6
Total investments			e 1		_		6 2 022 000 427		****	
	=	1,413,337,734	=	.,520,242,103	=	3,£10,033,403	\$3,022,989,427	\$ 1,001,207,790	φ 1,037,343,333	100.0%
See accompanying a	udi	itors' report.								

CASH RECEIPTS AND DISBURSEMENTS

Schedule III

Years ended June 30, 1986 and 1985	1986	1985
Cash balance at beginning of year	\$ 428,419	\$ 683,162
Receipts:		
Contributions:		
Employer	124,194,955	110,155,400
Employees	78,490,850	73,345,602
State of Ohio subsidies	1,578,723	1,720,156
Transfers from other Ohio systems	1,883,386	1,425,653
	<u>\$ 206,147,914</u>	\$ 186,646,81
Investments:		
Investments matured and sold	\$ 4,028,913,320	\$ 3,006,005,054
Investment income	176,458,846	156,501,746
	\$ 4,205,372,166	\$ 3,162,506,800
Other, net		350,279
Total Receipts	\$ 4,411,520,080	\$ 3,349,503,890
Disbursements:		
Benefits:		
Retirement	108,321,454	\$ 96,910,985
Disability	11,785,441	10,527,898
Survivor	8,360,152	8,004,136
Health Care	36,403,130	32,164,933
Death	640,517	563,433
Total benefits	\$ 165,510,694	\$ 148,171,38
Refund of employee contributions	\$ 9,058,221	\$ 8,373,79
Administrative expenses	5,841,645	5,580,710
Investments purchased	4,229,275,005	3,186,145,747
Transfers to other Ohio systems	1,901,100	1,486,990
Other, net	361,834	
Total disbursements	<u>\$ 4,411,948,499</u>	\$ 3,349,758,633
Cash balance at end of year	\$ -	\$ 428,419
See accompanying auditors' report.		

CHANGES IN FUND BALANCE ACCOUNTS Schedule IV

Description of Funds (Accounts)

The Ohio Revised Code requires the establishment and maintenance of specific funds. These funds are classified as accounts for financial reporting purposes and are noted as follows:

(A) Employees' Savings Fund

The Employees' Savings Fund accumulates the contributions deducted from the compensation of members. Contributions may be refunded to a member who withdraws from SERS or to the member's beneficiary, following the member's death. Upon retirement, a member's accumulated contributions are transferred to the Annuity and Pension Reserve Fund.

(B) Employers' Trust Fund

The Employers' Trust Fund is the depository for employer contributions. Based on actuarial valuations, amounts are transferred out of this fund into the Annuity and Pension Reserve Fund and the Survivors' Benefit Fund.

(C)Annuity and Pension Reserve Fund

The Annuity and Pension Reserve Fund is the fund from

which all retirement, health care and death benefits are paid. Funds are transferred into the Annuity and Pension Reserve Fund from the Employees' Savings Fund and Employers' Trust Fund. In addition, contributions by the State of Ohio for supplemental benefits are recorded in this fund.

(D) Survivors' Benefit Fund

The Survivors' Benefit Fund represents amounts transferred from the Employees' Savings Fund and the Employers' Trust Fund for the payment of survivors' benefits.

(E) Guarantee Fund

The Guarantee Fund records all investment earnings of SERS. Annually, investment earnings are transferred to the Annuity and Pension Reserve Fund, the Survivors' Benefit Fund, and the Expense Fund.

(F) Expense Fund

The Expense Fund is used to record all expenses for the administration and management of SERS. Annually, funds are transferred from the Guarantee Fund to cover expenses incurred.

School Employees Retirement System Of Ohio

CHANGES IN FUND BALANCE ACCOUNTS (Continued) Schedule IV (Continued)

A summary of the fund balance accounts follows:

-		urns ionows. Yea	r Ended June 3	0. 1986			
	Employees'	Employers'	Annuity and Pension	Survivors' Benefit	Guarantee	Expense	
Fund balance at	Savings Fund	Trust Fund	Reserve Fund	Fund	Fund	Fund	Total
beginning of year	\$ 432,528,863	\$ (268,594,919)	\$ 1,413,312,555	\$ 98,486,662			\$ 1,675,733,161
Changes for the year:							
Contributions:							
Employers	*****	130,507,996	_	_			130,507,996
Employees	78,979,863			-	-	- .	78,979,863
State of Ohio subsidie		1,450,433		-	well		1,450,433
Investment income		-	\rightarrow	_	171,115,676		171,115,676
Transfer from other Ohio systems	-	_	1,857,400	25,986		_	1,883,386
Benefits:			(100.001.154)				(400 004 454)
Retirement		. —	(108,321,454)		_	_	(108,321,454) (11,785,441)
Disability			(11,785,441)	(8,360,152)	_		(8,360,152)
Survivor			— (37,499,209)	(0,300,732)	_		(37,499,209)
Health Care Death	_		(640,517)		· —		(640,517)
Refunds of			(040,011)				(0.0,0,7)
employee contributions	(9,058,221)		_			(9,058,221)
Administrative expenses						(5,863,596)	(5,863,596)
Transfers to			((05.050)			(4 004 400)
other Ohio systems		- 450,550,000	(1,875,147)	(25,953)	— (171 115 676)	 5,863,596	(1,901,100)
Other transfers	(27,232,342		333,682,345	9,352,375	(171,115,676)	5,665,596	
Net changes	\$ 42,689,300	\$ (18,591,869)	\$ 175,417,977	\$ 992,256			\$ 200,507,664
Fund balance at end of year	\$ 475,218,163	\$ (287,186,788)	\$ 1,588,730,532	\$99,478,918	_		\$ 1,876,240,825
See accompanying au	ditors' report.						
		· · · · · · · · · · · · · · · · · · ·		0 4005			
			r Ended June 3 Annuity and	Survivors'	_		
	Employees'	Employers'	Annuity and Pension	Survivors' Benefit	Guarantee	Expense	Total
Fund balance at	Savings Fund	Employers' Trust Fund	Annuity and Pension Reserve Fund	Survivors' Benefit Fund	Guarantee Fund	Expense Fund	Total
Fund balance at beginning of year		Employers' Trust Fund	Annuity and Pension	Survivors' Benefit			Total \$ 1,488,850,477
	Savings Fund	Employers' Trust Fund	Annuity and Pension Reserve Fund	Survivors' Benefit Fund			
beginning of year	Savings Fund	Employers' Trust Fund	Annuity and Pension Reserve Fund	Survivors' Benefit Fund			
beginning of year Changes for the year:	Savings Fund	Employers' Trust Fund	Annuity and Pension Reserve Fund	Survivors' Benefit Fund			\$ 1,488,850,477 119,145,737
beginning of year Changes for the year: Contributions:	Savings Fund	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund	Survivors' Benefit Fund			\$ 1,488,850,477 119,145,737 73,117,682
beginning of year Changes for the year: Contributions: Employers	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund	Survivors' Benefit Fund	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund	Survivors' Benefit Fund			\$ 1,488,850,477 119,145,737 73,117,682
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund	Survivors' Benefit Fund	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits:	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund \$ 1,279,974,018	Survivors' Benefit Fund \$ 91,188,350	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund \$ 1,279,974,018	Survivors' Benefit Fund \$ 91,188,350	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund \$ 1,279,974,018	\$ 91,188,350 \$ 91,188,350 	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability Survivor	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund \$ 1,279,974,018 1,396,636 (96,910,985) (10,527,898)	Survivors' Benefit Fund \$ 91,188,350	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898) (8,004,136)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability Survivor Health Care	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund \$ 1,279,974,018 \$	\$ 91,188,350 \$ 91,188,350 	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898) (8,004,136) (30,778,698)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability Survivor Health Care Death	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund \$ 1,279,974,018 1,396,636 (96,910,985) (10,527,898)	\$ 91,188,350 \$ 91,188,350 	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898) (8,004,136)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability Survivor Health Care Death Refunds of	\$ 396,230,502 73,117,682	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund \$ 1,279,974,018 \$	\$ 91,188,350 \$ 91,188,350 	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898) (8,004,136) (30,778,698)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability Survivor Health Care Death	Savings Fund \$ 396,230,502	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund \$ 1,279,974,018 \$	\$ 91,188,350 \$ 91,188,350 	Fund		\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898) (8,004,136) (30,778,698) (563,433)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability Survivor Health Care Death Refunds of employee contributions	Savings Fund \$ 396,230,502	Employers' Trust Fund \$ (278,542,393) 119,145,737	Annuity and Pension Reserve Fund \$ 1,279,974,018 \$	\$ 91,188,350 \$ 91,188,350 	Fund	Fund	\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898) (8,004,136) (30,778,698) (563,433) (8,373,795)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability Survivor Health Care Death Refunds of employee contributions Administrative expenses Transfers to	Savings Fund \$ 396,230,502	Employers' Trust Fund \$ (278,542,393) 119,145,737 1,578,723	Annuity and Pension Reserve Fund \$ 1,279,974,018 1,396,636 (96,910,985) (10,527,898) (30,778,698) (563,433)	Survivors' Benefit Fund \$ 91,188,350	Fund	Fund	\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898) (8,004,136) (30,778,698) (563,433) (8,373,795) (5,673,205)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability Survivor Health Care Death Refunds of employee contributions Administrative expenses Transfers to other Ohio systems	Savings Fund \$ 396,230,502 73,117,682 (8,373,795	Employers' Trust Fund \$ (278,542,393) 119,145,737 1,578,723) (110,776,986)	Annuity and Pension Reserve Fund \$ 1,279,974,018	Survivors' Benefit Fund \$ 91,188,350 29,017 (8,004,136) (25,090)	Fund	Fund	\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898) (8,004,136) (30,778,698) (563,433) (8,373,795) (5,673,205)
beginning of year Changes for the year: Contributions: Employers Employees State of Ohio subsidie Investment income Transfer from other Ohio systems Benefits: Retirement Disability Survivor Health Care Death Refunds of employee contributions Administrative expenses Transfers to other Ohio systems Other transfers	Savings Fund \$ 396,230,502 73,117,682 (8,373,795 (28,445,526 \$ 36,298,361	Employers' Trust Fund \$ (278,542,393) 119,145,737 1,578,723) (110,776,986)	Annuity and Pension Reserve Fund \$ 1,279,974,018	Survivors' Benefit Fund \$ 91,188,350 29,017 (8,004,136) (85,090) 15,298,521 \$ 7,298,312	Fund	Fund	\$ 1,488,850,477 119,145,737 73,117,682 1,578,723 153,934,029 1,425,653 (96,910,985) (10,527,898) (8,004,136) (30,778,698) (563,433) (8,373,795) (5,673,205) (1,486,990) ———————————————————————————————————

AUDITOR OF STATE'S LETTER



COLUMBUS, OHIO 43216-1140 (614) 466-4514

DEPUTY AUDITORS:

JAMES A. BOLDEN Administration (614) 466-3786 School Employees Retirement System Columbus, Ohio

RICHARD G. NUSS CPA Dept. of Audit

(614) 466-4971

We have reviewed the report of examination of the School Employees Retirement System for the period ended June 30, 1986, prepared by Peat, Marwick, Mitchell & Co., Certified Public Accountants. Based upon this review, we have accepted this report in lieu of the examination required by Section 117.10 of the Revised Code. The Auditor of State has not examined the accompanying financial statements and, accordingly, is unable to express an opinion on them.

Our review was made in reference to the applicable sections of legislative criteria as reflected by the Ohio Constitution; the Revised Code; policies, procedures and guidelines of the Auditor of State; and local resolutions/ordinances.

RUSSELL L. ROUCH Management Advisory Service (614) 466-2520

THOMAS E. FERGUSON Auditor of State

January 7, 1987

BRUCE DERN Regional Administrator Central Region 2244 S. Hamilton Road Columbus, Ohio 43227 (SIA) 864-3917

Information Line toll free 1-800-282-0370 Actuarial Section

Actuaries' Letter
Statement of Actuaries

ACTUARIES' LETTER

GABRIEL, ROEDER, SMITH & COMPANY ACTUARIES & CONSULTANTS

407 E. Fort Street, Suite 200 Detroit, Michigan 48226 Area 313: 96i-3346

December 16, 1986

The Retirement Board School Employees Retirement System of Ohio Columbus, Ohio

The basic financial objective of SERS is to establish and receive contributions which, expressed as percents of active member payroll, will remain approximately level from generation to generation of Ohio citizens.

In order to determine SERS present financial position and level contribution rates for the future, annual actuarial valuations are made.

The latest completed actuarial valuation is based upon data and assumptions as of June 30, 1986. Conditions and results are shown in our reports.

Assumptions concerning future financial experiences are needed for an actuarial valuation. These assumptions are established by the Board after consulting with the actuary.

A program of annual actuarial gain/loss analysis is in operation; these analyses determine the relationship between assumed financial experience and actual experience,

for each major risk area.

These actuarial gain/loss findings led to the adoption of revised assumptions for the June 30, 1986 actuarial valuation. The revised assumptions produce higher computed liabilities and computed contributions. The principal assumption changes recognize younger retirement ages and reduced mortality during retirement years.

The employer contribution rate is 14% of pay. An SERS policy decision is now allocating 8.5% to basic benefits and 5.5% to health care benefits.

On the basis of the 1986 valuation and the basic benefits and allocated contribution rates then in effect, it is our opinion that the basic benefits portion of SERS is in sound condition in accordance with actuarial principles of level cost financing.

The 5.5% contribution allocated to health benefits is sufficient to cover current health cash benefits, 4.3% of pay; it is not sufficient to provide level cost financing of the health benefits.

To provide level cost financing of the health benefits requires some combination of increased contributions and/or decreased health benefits.

Respectfully submitted,

Gerald B. Sonnenschein

RG Roeder
Richard G. Roeder

RGR:jmg

STATEMENT OF ACTUARIES (Valuation as of June 30, 1986)

Actuarial Cost Method and Assumptions

Employer contribution rates are for basic benefits determined using the entry age normal actuarial cost method. This method produces an employer contribution rate consisting of (1) an amount for normal cost (the estimated amount necessary to finance benefits earned by employees during the current service year), and (2) the amount for amortization of the unfunded actuarial accrued liability as of June 30, 1986 over 48 years.

The present employer contribution rate of 14% of pay is allocated between basic benefits, 8.5% of pay, and health benefits, 5.5% of pay. The 5.5% contribution allocated to health benefits is sufficient to cover current health cash benefits, 4.3% of pay; it is not sufficient to provide level cost financing of the health benefits.

The assumptions used for the actuarial valuation were adopted by the Retirement Board after consulting with the actuary. Differences between assumed and actual experience (actuarial gains and losses) become part of unfunded actuarial accrued liabilities. When these differences between assumed and actual experience have been observed to be sizeable and persistent a change is made to the actuarial assumption.

The valuation assets as of June 30, 1986 were determined on a market related basis. The method used recognizes 20% of the previously unrecognized gains and losses (both realized and unrealized). To this was added the present value of expected future payments for House Bills 284 and 204, or \$7,538,713.

The following significant assumptions were used in the actuarial valuations as of June 30, 1986:

- (1) a rate of return on the investments of 7.5% compounded annually (net after administrative expenses). The real rate of return is the portion of total investment return which is more than the inflation rate. Considering inflation recognition of 4.5 percent, the 7.5 percent investment return rate translates to an assumed real rate of return of 3 percent. (For the period July 1, 1986 to June 30, 1991 the assumed rate of return on investments is 9.5%, reflecting an increase of 2% over the basic rate of return of 7.5%)
- (2) projected salary increases of 4.5%, compounded annually, attributable to inflation;
- (3) additional projected salary increases ranging from .5% to 3% per year attributable to seniority and merit. Pay increase assumptions for individual active members are shown for sample ages in the table below.

INCREASE NEXT YEAR

Sample Age	Merit & Seniority	Base (Economy)	Total
20	3.0%	4.5%	7.5%
30	2.3	4.5	6.8
40	1.8	4.5	6.3
50	1.0	4.5	5.5
60	0.0	4.5	4.5

- (4) post-retirement mortality life expectancies of participants based on the 1971 Group Annuity Mortality Table projected to 1984 for men and women, with women's ages set back 1 year;
- (5) rates of withdrawal from active service before retirement for reasons other than death, rates of disability and expected retirement ages developed on the basis of actual plan experience;
- (6) health care premium increases or 4.5% annually with 25% of eligible female retirants and 60% of eligible male retirants electing a joint survivor form of payment and 25% of eligible female retirants and 50% of eligible male retirants electing to cover spouses for health care; and
- (7) eligibility of all health care benefit recipients for Medicare on attainment of age 65, or immediately if retired for disability.

Health Care Premium Rates:

	Monthly Rates	Reported
Status	1986	1985
Benefit Recipient below age 65	\$ 169.86	\$ 148.10
Spouse below age 65*	83.38	81.09
Benefit recipient above age 65 and eligible for Medicare	35.33	35.63
Spouse above age 65 and eligible for Medicare*	19.35	11.03
Mail order prescription service	14.55	8.83
* System portion.		

Medicare Part B Premium: \$17.90 per month assumed to be effective January 1, 1987, from \$15.50. (This premium is paid by the System.)

The non-economic assumptions are from the June 30, 1986 actuarial valuation and the economic assumptions (except for the additional 2% investment return to 1991) were established for the June 30, 1981 actuarial valuation.

Health Care Benefits

Initially, beginning in 1974, 0.75% was the contribution rate established for health care benefits, and included in a total

STATEMENT OF ACTUARIES (Continued) (Valuation as of June 30, 1986)

Health Care Benefits (Continued)

employer rate then 12.50%. Health care contribution rates have been increased at various times since 1974. The current employer rate of 14% is not sufficient to provide level cost financing of the health care benefits, especially in light of the low salary base of the contributing members. A combination of increased contributions and/or decreased health benefits is necessary to provide level cost financing.

Actuarial Accrued Liabilities

Accrued liabilities are the present value of plan promises

to pay benefits in the future, based upon service already rendered. A liability has been established ("accrued") because the service has been rendered, but the resulting monthly cash benefit may not be payable until years in the future. Accrued liabilities are the result of complex mathematical calulations, which are made annually by the plan's actuaries—specialists who makes such calculations. The results of the computed actuarial accrued liabilities are listed in the following schedule.

Actuarial Accrued Liabilities June 30, 1986

Acti	ıarial
Accrued	Liabilities

Present Value Of	_	Health Care	_1	Basic Benefits
Future monthly benefits and death benefits to present retirants and survivors	\$	460,592,623	\$	1,227,616,827
Monthly benefits and refunds to present inactive members		53,808,473		82,500,475
Service allowances and health care benefits to present active members		331,530,971		1,264,349,296
Disability allowances to present active members		6,085,131		<i>34,703,3</i> 83
Death-after-retirement benefit (\$500) on behalf of present active members				1,683,235
Survivor benefits on behalf of present active members who die before retiring		13,348,243		35,757,959
Refunds of member contributions of present active members				22,862,461
Benefits for present active members		350,964,345		1,359,356,334
Benefits For Present Covered Persons	\$	865,365,441	\$	2,669,473,636

Membership Data

Information regarding active, inactive, and retired members is obtained from computer tapes provided by the retire-

ment system. Membership data contained on the computer tapes is examined and tested for reasonableness.

Active Member Valuation Data, 1982 To 1986

Actuarial Valuation as of June 30	Number of Active Members	Annuai Payroli (millions)	Average Annual Salary
1982	85,883	652.2	7,594
1983	85,186	682.9	8,017
1984	84,761	737.3	8,699
1985	86,838	804.2	9,261
1986	88,310	869.1	9,842

Retirants and Beneficiaries Added To and Removed From Rolls, 1976 to 1986

Fiscal Year Ended June 30	Additions During Year	Deletions During Year	Number at End of Year
1976	2,179	587	21,591
1977	2,291	542	23,340
1978	2,380	627	<i>25,0</i> 93
1979	2,700	798	<i>26,</i> 995
1980	2,605	608	28,992
1981	2,617	775	30,834
1982	2,953	924	32,863
1983	3,215	1,108	34,970
1984	3,145	1,315	36,800
1985	3,233	1,325	38,708
1986	3,807	1,478	41,037

Statistical Section

Assets/Actuarial Liabilities

Unfunded Actuarial Liabilities

Asset Coverage of Liabilities

Revenues by Source

Expenses by Type

Benefit Expenses by Type

Benefit Recipients by Type

Participating Employers

Retirement Averages

COMPARATIVE SUMMARY OF NET ASSETS AVAILABLE FOR BENEFITS AND TOTAL COMPUTED ACTUARIAL LIABILITIES Table |

Fiscal Year	Net Assets Available For Benefits	Total Computed Actuarial Accrued Liabilities	Percentage
1981	\$ 1,073,577,619	\$ 2,024,746,093	53.0%
1982	1,189,392,619	2,256,513,146	52.7
1983	1,314,052,816	2,526,633,147	52.0
1984	1,488,850,477	2,792,981,981	53.3
1985	1,675,733,161	3,085,752,814	54.3
1986	1,876,240,825	3,534,839,077	53.1
See note following Table II.			

SUMMARY OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES Table ||

Fiscal Year	Unfunded Actuarial Accrued Liabilities (UAAL)	Active Member Payroll	UAAL As A % Of Active Member Payroll
1981	\$ 951,168,474	\$ 655,483,198	145.1%
1982	1,067,120,527	<i>652,224,795</i>	163.6
1983	1,212,580,331	682,882,779	177.6
1984	1,304,131,504	737,347,635	176.9
1985	1,410,019,653	804,230,073	175.3
1986	1,658,598,252	869,111,274	190.8
1985	1,410,019,653	804,230,073	175.3

Unfunded Actuarial Accrued Liabilities

Each time a new employer joins the System or an employer adopts a higher level of benefit, unfunded liabilities are created. The law governing the System requires that these additional liabilities be financed systematically over a period of future-years.

In an inflationary economy, the value of dollars is decreasing. This environment results in employee pays increasing in dollar amounts, retirement benefits increasing in dollar amounts, and then, unfunded actuarial accrued liabilities in-

creasing in dollar amounts — all at a time when the actual substance of these items may be decreasing. Looking at just the dollar amounts of unfunded actuarial accrued liabilities can be misleading. Unfunded actuarial accrued liabilities dollars divided by active employee payroll dollars provides an index which helps understanding. The smaller the ratio of unfunded liabilities to active member payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

COMPARATIVE SUMMARY OF ACCRUED LIABILITIES PERCENTAGE COVERED BY NET ASSETS AVAILABLE FOR BENEFITS Table III

Computed Actuarial Accrued Liabilities

Fiscal Member Year Confributions		E	Current Retirants And Beneficiaries	Ac	ctive Members, Employer Financed Portion	Net Assets Available For Benefits	Accru Cov Asse	centage led Liab ered By ets Avail er Benef	ilities Net lable	
								(1)	(2)	(3)
1981	\$	298,254,671	\$	958,966,066	\$	767,525,356	\$ 1,073,577,619	100	81	0
1982		324,180,388		1,071,728,280		860,604,478	1,189,392,619	100	81	0
1983		351,781,439		1,213,688,792		961,162,916	1,314,052,816	100	79	0
1984		396,230,502		1,371,162,368		1,025,589,111	1,488,850,477	100	80	0
1985		432,528,863		1,511,799,217		1,141,424,734	1,675,733,161	100	82	0
1986		475,218,163		1,688,209,450		1,371,411,464	1,876,240,825	100	83	0

NOTE: The ultimate test of financial soundness is the Systems' ability to pay all promised benefits when due. The Systems' progress in accumulating assets to pay all promised benefits can be measured by comparing the present assets of the System with (1) member contributions, (2) the liability for future benefits payable to current retirants and beneficiaries, (3) the employer-financed portion of the liability for benefits payable to active plan participants.

In a System that has been following the discipline of level

percent of payroll financing, the liabilities for active member contributions on deposit (1) and the liabilities for future benefits to present retired lives (2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (3) will be partially covered by the remainder of present assets. The larger the funded portion of liability (3) the stronger the condition of the System. Liability 3 being fully funded is rare.

NOTE: NCGA Statement 6, the authoritative guide to the preparation of this report, requires that we present 10 years of comparative actuarial statistical data, disclosing the progress we have made in accumulating assets to pay benefits when due. Tables I to III present only 6 years of data, since 10 years is not available.

NCGA Statement 6 also states that "...Until 10 years of ac-

tuarial present value of credited projected benefits data become available, the data which are available should be disclosed." In Tables I to III the entry age normal actuarial cost method was used to determine the actuarial liability. The entry age normal actuarial cost method is the same method used to determine employer and employee contribution rates.

REVENUES BY SOURCE Last Ten Years Table IV

Year Ending June 30	c	Member Contributions	Employer Contributions	investment income	Other	Total
1977	\$	36,378,039	\$ 55,681,997	\$ 29,735,598	\$ 1,011,850	\$ 122,807,484
1978		38,912,883	59,693,632	43,129,863	912,035	142,648,413
1979		41,971,918	64,183,954	47,220,797	1,184,656	154,561,325
1980		50,486,674	72,574,779	66,965,956	2,659,240	192,686,649
1981		52,469,568	81,353,991	69,572,728	1,030,754	204,427,041
1982		54,543,053	87,988,507	83,719,002	6,151,973	232,402,535
1983		57,261,897	88,732,787	107,416,567	1,659,544	255,070,795
1984		67,503,890	108,606,711	145,215,463	1,224,116	322,550,180
1985		73,117,682	119,145,737	153,934,029	3,004,376	349,201,824
1986		78,979,863	130,507,996	171,115,676	3,333,819	383,937,354

EXPENSES BY TYPE Last Ten Years Table V

Year Ending June 30	Aggregate Benefit Payments	,	Administrative Expenses	Transfers to Ohio Retirement Systems	Other	Total
1977	\$ 53,821,330	\$	1,843,181	\$ 617,525	\$ 8,822	\$ 56,290,858
1978	62,995,337		1,934,825	743,655	15,947	65,689,764
1979	76,380,937		2,232,180	912,031	13,154	79,538,302
1980	86,590,668		2,367,777	764,675	15,970	89,739,090
1981	93,005,719		3,092,593	844,547	22,950	96,965,809
1982	112,044,340		3,425,836	1,006,803		116,476,979
1983	128,451,107		4,051,778	1,215,546		133,718,431
1984	139,676,067		4,658,760	1,181,012	879,498	146,395,337
1985	155,158,945		5,673,205	1,486,990		162,319,140
1986	175,664,994		5,863,596	1,901,100		183,429,690

BENEFIT EXPENSES BY TYPE Last Ten Years Table VI

BENEFITS

Year Ending				Health	
June 30	Service	Disability	Survivor	Care	Refunds
1977	\$ 35,223,220	\$ 3,306,082	\$ 4,129,714	\$ 5,277,046	\$ 5,885,268
1978	39,821,999	3,958,026	4,500,933	6,772,412	7,941,967
1979	44,834,588	4,743,472	4,855,008	11,290,894	10,656,975
1980	49,938,156	5,619,031	5,221,125	15,809,333	10,003,023
1981	55,597,625	6,328,456	5,567,213	17,084,324	8,428,101
1982	64,708,104	· 7,294,601	6,240,292	23,460,414	10,340,929
1983	75,497,557	8,076,576	6,756,619	28,959,381	9,160,974
1984	85,444,144	9,270,155	7,389,851	29,153,910	8,418,007
1985	96,910,985	10,527,898	8,004,136	30,778,698	8,937,228
1986	108,321,454	11,785,441	8,360,152	37,499,209	9,698,738

NUMBER OF BENEFIT RECIPIENTS BY TYPE Last Ten Years Table VII

Year Ending				
June 30	Service	Disability	Survivor	Total
1977	19,774	1,510	2,056	23,340
1978	21,233	1,716	2,144	25,093
1979	22,869	1,867	2,259	26,995
1980	<i>24</i> ,539	2,083	2,370	28,992
1981	26,120	2,237	2,477	30,834
1982	27,955	2,343	2,565	32,863
1983	29,839	2,473	2,658	34,970
1984	31,467	2,602	2,731	36,800
1985	33,145	2,754	2,809	38,708
1986	3 <i>5</i> ,266	2,898	2,873	41,037

NUMBER OF PARTICIPATING EMPLOYERS Last Ten Years Table VIII

Year	Total	Counties	Locals	Cities	Villages	Colleges	Technical	Vocational	Other
					_	_			01.701
1976	770	87	386	183	49	2	13	49	1
1977	769	87	384	184	49	2	13	49	1
1978	769	87	381	187	49	2	13	49	1
1979	768	86	381	187	49	2	13	49	1
1980	768	86	378	189	49	2	13	50	1
1981	769	86	378	189	49	2	13	51	1
1982	769	87	376	191	49	2	13	50	1
1983	769	87	375	192	49	2	13	50	1
1984	769	87	376	192	49	2	13	49	1
1985	768	86	376	192	49	2	13	49	1
1986	769	86	376	192	49	2	13	49	2

RETIREMENT AVERAGES Last Ten Years Table IX

Service Retirement

Year Ending June 30	Service Credit	Monthly Amount	Age	Salary
1977	15.672	\$174.21	63.64	\$ 5,974.37
1978	15.969	184.01	63.64	6,265.35
1979	16.495	200.63	63.28	6,821.83
1980	16.326	209.82	63.32	7,221.61
1981	16.626	218.08	63.22	7,495,31
1982	16.578	229.24	63.25	8.069.35
1983	16.617	250.60	63.14	8,603.00
1984	17.427	292.43	63.85	9,939.34
1985	17.821	315.79	63.82	10,525.29
1986	16.846	304.73	63.64	10,292.51

Disability Retirement

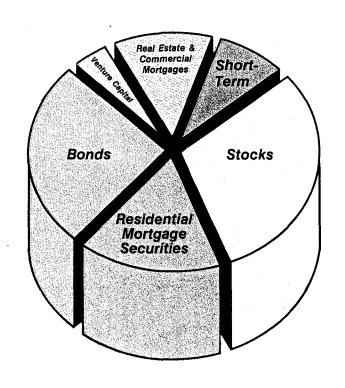
Service	Monthly		
Credit	Amount	Age	Salary
12.026	\$210.87	52.99	\$ 5,559.93
12.239	243.79	52.63	6,373.75
12.963	282.13	<i>52.7</i> 9	7,185.03
13.381	297.37	52.83	7,566.03
12.610	275.07	52.52	7,162.84
13.854	324.63	53.00	8,473.21
13.035	323.05	52.29	8,166.18
14.128	426.96	53.20	10,803.67
12.362	402.31	56.69	10,917.61
13.339	431.18	56.20	10,872.24
	Credit 12.026 12.239 12.963 13.381 12.610 13.854 13.035 14.128 12.362	Credit Amount 12.026 \$210.87 12.239 243.79 12.963 282.13 13.381 297.37 12.610 275.07 13.854 324.63 13.035 323.05 14.128 426.96 12.362 402.31	Credit Amount Age 12.026 \$210.87 52.99 12.239 243.79 52.63 12.963 282.13 52.79 13.381 297.37 52.83 12.610 275.07 52.52 13.854 324.63 53.00 13.035 323.05 52.29 14.128 426.96 53.20 12.362 402.31 56.69

Investment Section:

Investment Portfolio Distribution
Investment Report
Portfolio Summary
Schedules
Exhibits

Investment Policy

INVESTMENT PORTFOLIO DISTRIBUTION



June 30, 1986

23.9% Bonds

18.8% Residential Mortgage Securities

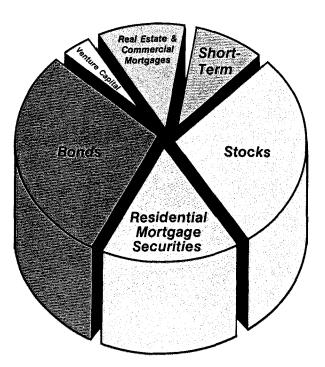
29.5% Stocks

14.9% Real Estate & Commercial Mortgages

12.1% Short-Term

0.8% Venture Capital

June 30, 1985



27.1% Bonds

19.2% Residential Mortgage Securities

24.0% Stocks

16.4% Real Estate & Commercial Mortgages

12.6% Short-Term

0.7% Venture Capital

INVESTMENT REPORT

The U.S. economy showed only modest growth during this past year as exemplified by the U.S. Gross National Product, which increased by only 2% during the fiscal year. Much of the strength in the consumer and housing sectors of the economy was offset by the weakness in the oil and gas, farming and basic manufacturing sectors. Many economists had looked for the decline in the dollar to boost the economic activity domestically, since imported products would become more expensive relative to our own. It now appears, however, that much of the consumer demand continued to be satisfied with imports resulting in continued lackluster growth in the U.S. economy. The dramatic decline in oil prices from \$30 per barrel to \$10 per barrel during the fiscal year was the primary reason for reducing the U.S. inflation rate to below 2% for the period. This decline in oil prices will be beneficial for the U.S. economy longer term, but has caused some severe problems for many industries and banks in the southwestern United States. Even though the unemployment rate in the Southwest is somewhat higher, the unemployment rate for the U.S. as a whole declined during the year to 7.1% at year end.

The year ended June 30, 1986 was another excellent year for the common stock market which rose 35.9% as measured by the S & P 500, after having gained 30.9% in the prior fiscal year. The fixed income markets also performed extremely well, returning approximately 20% for the fiscal year. Lower interest rates allowed existing earnings to be capitalized at a higher price/earnings ratio which resulted in the dramatic increases in common stock prices even though corporate profits were flat for the period. For the coming year, it is hoped that a more stable pricing environment for oil and gas, and continued low interest rates will allow some real growth in the U.S. economy. Inflation is expected to remain low for the next fiscal year, although not as low as experienced in the fiscal year just ended. The proposed tax bill and budget resolution give some hope that the Administration and Congress are coming to grips with the government's huge

spending deficit. Once the uncertainty regarding the effects of the tax bill and budget resolution are settled, much of the volatility in the markets will subside; but until then, the markets, both equity and fixed-income, will probably remain very volatile.

Over the past year a significant amount, approximately \$146 million, was added to the equity portfolios. These portfolios returned 36.7% for the year as compared to the 35.9% return of the \$ & P 500. The actively managed equity fund, which had a return of 48.3% for the period, contributed significantly to the results of the total equity portfolio. In light of our economic outlook for the coming year, a significant portion of next year's cash flow will again be invested in common stocks. It is anticipated that by June 30, 1987 approximately 35% of the Fund will be invested in common stocks.

Growth in the size of the real estate portfolio slowed during the year just ended. Slow growth in the economy and overbuilding in certain geographical areas caused real estate values to increase at a very slow pace during the past year; this made it difficult to find properties that represented good values. This reduced availability of fairly valued properties caused the percent of the Fund invested in real estate to decline from 16.4% to 14.9%. It is anticipated that the coming year will be a better environment in which to invest in real estate. By June 30, 1987 it is anticipated that the Fund will have approximately 17% of its assets invested in real estate investments.

During the past year, the fixed-income portfolios have stabilized at approximately 44% of the total Fund, with bonds representing approximately 24% of the Fund and mortgages representing approximately 20% of the Fund. It is anticipated that the fixed-income portfolios, which generate a significant amount of income to the Fund each year, will remain near these percentage levels in the coming year.

PORTFOLIO SUMMARY Schedule I

Investment Category	Par Value	June 30, 1986 Book Value	Market Value	June 30, 1985 Market Value	June 30, 1984 Market Value
U.S. Government & Agency Bonds	\$ 177,626,600) \$ 182,867,906	\$ 193,788,207 ·	\$ 193,020,218	\$ 118,347,977 ·
Corporate Bonds	255,100,000	250,393,888	263,939,187	239,252,848	242,875,780
Canadian Bonds	_			8,786,797	8,870,658
G.N.M.A. Mortgage- Backed Pass - Thru	201,833,860	198,377,910	208,409,853	199,737,808	143,160,754
F.H.L.M.C. Mortgage- Backed Pass - Thru	133,720,27	3 130,831,237	134,889,415	101,176,498	97,529,578
F.H.A., V.A. & H.U.D. Mortgages	5,490,29	7 5,490,297	4,531,612	4,440,976	4,582,720
Common, Preferred Stocks and Con- vertible Bonds	535,764,72	5 536,022,416	733,968,367	438,176,482	364,788,446
Investment Real Estate (Including Equity Part- icipating Mortgages)	248,225,66	1 237,310,803	275,228,024	273,919,605	193,042,796
Commercial & Indus- trial Mortgages	21,670,21	1 21,670,211	24,256,001	22,990,162	15,560,654
Venture Capital	15,000,00	15,000,000	14,695,373	11,971,167	5,851,616
Short-Term Investments	220,200,00	219,290,092	219,759,540	204,472,794	131,631,184
	\$ 1,814,631,63	0 \$ 1,797,254,760	\$ 2,073,465,579	\$ 1,697,945,355	\$ 1,326,242,163

PORTFOLIO RATES OF RETURN (Average annual total returns for the periods ended June 30)

Schedule II

Asset Category	One Year	Three Year	Five Year
Equity Portfolios	36.7%	16.4%	18.4%
Bond Portfolio	19.4	16.8	. 19.7
Residential Mortgage Portfolio	16.5	17.0	20.4
Short-Term Investment Portfolio	7.9	9.1	10.4
Total Fund	21.3%	15.0%	17.6%

NOTE: Real Estate Portfolio returns are included in the total return of the Fund for each period; and for the last five years these assets have returned 11.8% annually.

QUALITY OF	STOCKS					
Schedule III	Quality Rating	Percent of Stock	the top four quality gra	s owned by the System, the majority fall within quality grades as rated by Standard and pration with respect to the relative stability and		
	A +	33.2%	growth of earnings and dividends. The 1.8 percent in the			
	Α	23.8	non-rated category are banks and insurance companies			
	A -	18.9	which are not rated by Standard and Poor's as a matter of			
	B+	13.2	policy.			
	В	7.7	•			
	₿	1.3	A + Highest	B Below Average		
	C	0.1	A High	B - Low		
	D		A – Above Average	C Lowest		
	Not Rated	1.8	B + Average	D In Reorganization		

DIVIDEND GROWTH FROM COMMON AND PREFERRED STOCKS (Excluding Convertible Bonds)

Schedule IV	Fiscal Year Ended	Dividends Received*	Par Value	
	June 1986 '	\$ 20,867,916	\$	535,014,725
	June 1985	17,328,134		389,537,785
	June 1984	14,845,987		353,050,884
	June 1983	13,187,649		272,728,121
* Cash Basis	June 1982	11,019,698		246,055,095

TWENTY LARGEST COMMON STOCK HOLDINGS (By Market Value) Schedule V

Schedule V		Market	% of Stock
Stock	Shares	Value	Portfolio
International Business Machines Corp.	214,100	\$ 31,365,650	4.28%
Exxon Corp.	276,800	16,850,200	2.30
General Electric Co.	158,100	12,806,100	1.75
Eastman Kodak Co.	190,800	11,185,650	1.53
American Telephone & Telegraph Co.	385,100	9,771,913	1.33
DuPont (E.I) De Nemours & Co.	114,700	9,548,775	1.30
Wal Mart Stores, Inc.	166,400	8,632,000	1.18
General Motors Corp.	109,800	8,523,225	1.16
Pfizer Inc.	104,600	7,478,900	1.02
American Home Products Corp.	82,500	7,425,000	1.01
BellSouth Corp.	105,500	6,620,125	0.90
Southwestern Bell Corp.	59,600	6,526,200	0.89
American International Group, Inc.	49,700	6,405,088	0.87
Phillip Morris Co.	83,000	6,193,875	0.85
Sears, Roebuck & Co.	126,600	6,140,100	0.84
McDonalds Corp.	83,700	<i>6,120,56</i> 3	0.84
Westinghouse Electric Co.	113,700	6,097,163	0.83
Amoco Corp.	95,700	<i>5,765,925</i>	0.79
Coca Cola Co.	45,500	5,710,250	0.78
SmithKline Beckman Corp.	51,900	5,202,975	0.71

School Employees Retirement System Of Ohio

Exhibit 1
DIVERSIFICATION OF STOCKS

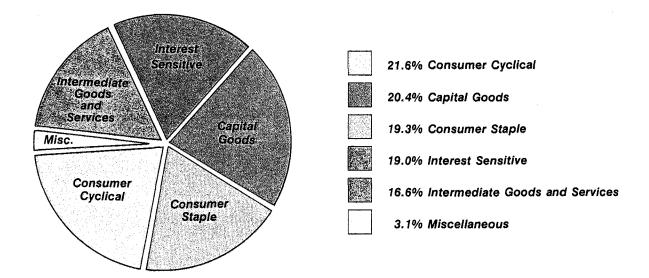


Exhibit 2

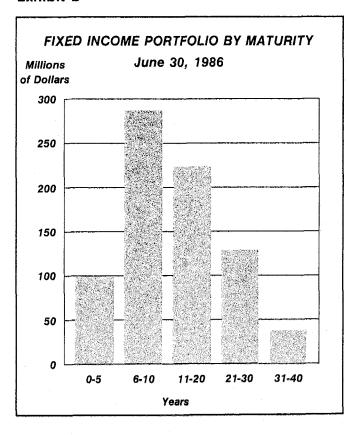


Exhibit 3

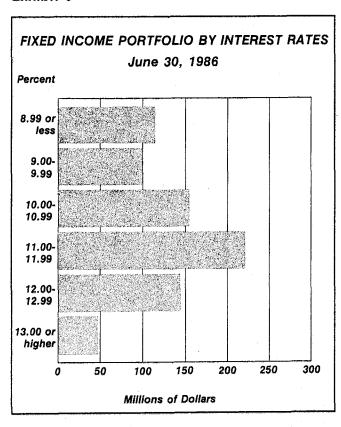
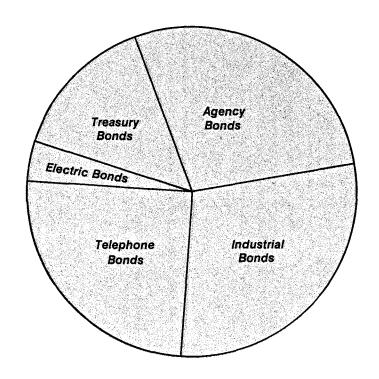


Exhibit 4

BOND PORTFOLIO BY SECTOR
June 30, 1986



29.6% Industrial Bonds

27.2% Agency Bonds

25.1% Telephone Bonds

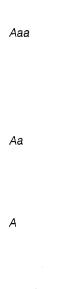
13.9% Treasury Bonds

4.2% Electric Utility Bonds

Exhibit 5

BOND PORTFOLIO QUALITY RATINGS BY MOODY'S June 30, 1986

All of the bonds in the portfolio fall within the top three grades of the nine bond quality ratings established by Moody's Investors Services, Inc.



42.4%

33.4%

24.2%



Exhibit 6

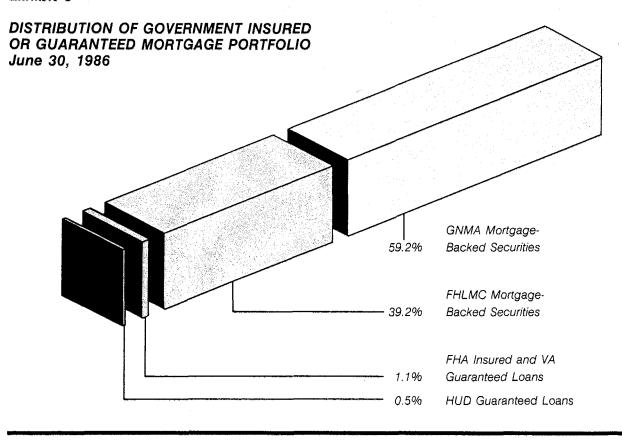


Exhibit 7
REAL ESTATE PORTFOLIO BY GEOGRAPHICAL LOCATION

(Excluding Investments In Commingled Funds)

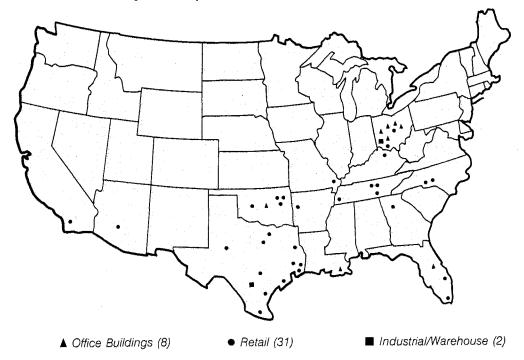
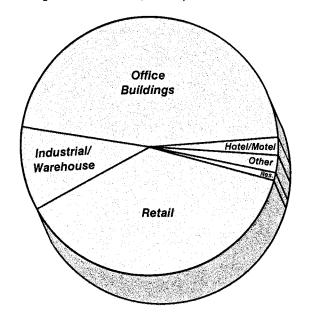


Exhibit 8

REAL ESTATE PORTFOLIO BY PROPERTY TYPE

Percent Of Holdings As Of June 30, 1986 (Based On Market Value)

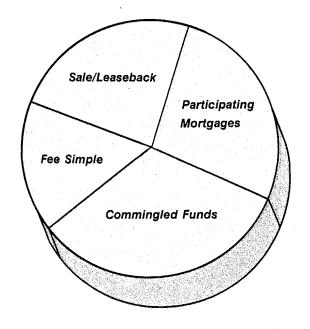


- 45.7% Office Buildings
- 38.3% Retail
- 11.5% Industrial/Warehouse
- 1.9% Hotel/Motel
- 1.9% Other
- 0.7% Residential

Exhibit 9

REAL ESTATE PORTFOLIO BY TYPE OF OWNERSHIP

Percent Of Holdings As Of June 30, 1986 (Based On Market Value)



- 32.5% Commingled Funds
- 27.1% Participating Mortgages
- 24.3% Sale/Leaseback
- 16.1% Fee Simple

INVESTMENT POLICY

This Investment Policy was adopted by the School Employees Retirement Board Of Ohio at its August 2, 1985 meeting.

A. Purpose

The purpose of this Statement of Investment Policy is to define the Retirement Board's investment philosophy and objectives for the School Employees Retirement System of Ohio. This statement sets forth policies and describes the organization and division of responsibilities to prudently implement the Board's philosophy and objectives in accordance with Section 3309.15 of the Ohio Revised Code. It also establishes the framework and specific objectives to monitor investment performance and promote effective communication between the Board and the Investment Staff and Investment Managers.

The contents of this Statement of Investment Policy and the associated Guidelines and Objectives are subject to change at any time by the Board. The Statement will be reviewed and revised periodically to assure that it continues to reflect the attitudes, expectations and objectives of the Board.

B. Background

The School Employees Retirement System of Ohio was established by the state legislature to provide retirement and disability benefits for all non-certificated persons employed by the state's school districts. This purpose is sustained by the member and employer contributions and returns realized from investment of those contributions.

The System is governed by a seven member board, including the Ohio Attorney General and Auditor of State, with responsibility for the investment function as set forth in the Ohio Revised Code. In addition to the investment function, the Ohio Revised Code also sets forth the fiduciary responsibility of the Board and of other fiduciaries in discharging their duties with respect to the fund. This Statement of Investment Policy incorporates and is subject to all restrictions, guidelines and obligations set forth by the Ohio Revised Code.

C. Investment Philosophy

Risk Posture

The Board realizes that its primary objective is to assure that the Plan meet its responsibilities for providing retirement and other benefits. Therefore, it shall always act to assure that the level of investment risk in the portfolio shall be prudent and shall not jeopardize that primary objective.

Return

The Board believes, however, that over the long-term there exists a relationship between the level of investment risk taken and rate of investment return realized. The Board feels that assumption of a moderate level of risk associated with investments is reasonable and

justified in order to enhance potential long-term investment results.

Diversification

The Board seeks diversification by asset class and by investment approach and individual investments within asset classes to reduce overall portfolio risk.

Liquidity Requirements

The System anticipates positive cash flow over the nearterm and intermediate-term. Liquidity, for the purpose of immediate and intermediate-term benefit payments, is therefore not a major consideration in the investment of funds for the foreseeable future.

D. Investment Objectives

In defining investment objectives the Board seeks to enhance the investment returns of the fund in order to permit higher benefits and to achieve lower costs. Therefore, it adopts the following general investment objectives:

Performance Objectives

- A. Maximize Total Return on Assets: Recognizing the System's obligations will increase as a result of inflation, to maximize the total return on assets available for the provision of benefits while operating in accordance with applicable regulatory restrictions and within prudent parameters of risk.
- B. Preservation of Principal: To protect the System from severe depreciation in asset value during adverse market conditions. This objective shall be attained by broad diversification of assets and by careful review of risks.
- C. Competitive Results: To achieve investment results competitive with those of the broad market and of similar funds. Long-term results shall be emphasized.

Risk

- A. Stability: While the Board seeks higher long-term investment results, it also seeks to avoid major fluctuations in year-to-year results.
- B. Risk Level: The Board seeks to maintain a reasonable degree of total portfolio risk, defined as that which would be experienced by similar retirement systems.

Other

Ohio Investments: Where investment characteristics, including return, risk and liquidity, are equivalent, the Board will give careful consideration to investments which will have a positive impact on the economy of Ohio.

E. Implementation Approach

In order to monitor and control the activities within the investment function, the Board has reserved certain responsibilities for itself. It has also delegated certain responsibilities to the Investment Staff, to organizations serving as

School Employees Retirement System Of Ohio

INVESTMENT POLICY (Continued)

E. Implementation Approach (Continued)

Investment Managers and, from time to time, to other consultants or advisors. These are enumerated in Section F, Investment Organization and Responsibilities.

In fulfilling its fiduciary duties, the Retirement Board employs a competent and qualified Investment Staff for the management of the major portion of portfolio assets. In those areas where specialized expertise is required, the Retirement Board employs the services of outside Investment Managers.

The Board has also established a reporting process for regular and timely review and evaluation of investment results. This is described in Section G, Review and Evaluation. Finally, the Board has adopted Investment Guidelines and Objectives for each asset class and each investment management accountability unit within those asset classes. These guidelines also specify long-term target ratios for asset classes. These guidelines also specify long-term target ratios for asset allocations. These guidelines and objectives are regularly evaluated and updated based on market conditions, investment results and the recommendations of the Investment Staff, Investment Managers and other consultants or advisors.

F. Investment Organization and Responsibilities

Responsibilities of the Retirement Board

The Retirement Board recognizes its responsibility to ensure that the assets of the Plan are managed effectively and prudently, in full compliance with all applicable laws, and for the exclusive benefit of participants and beneficiaries. The Board believes it can best manage those responsibilities by delegating certain specific duties to others, as described below. In addition, the Board may designate certain of its members to act as an Investment Committee or a Subcommittee from time to time, and may delegate certain decision-making or fact-finding responsibilities to that committee or subcommittee.

Specific responsibilities of the Retirement Board or its Investment Committee or Subcommittee are as follows:

- A. Ensure that all fiduciaries comply with the Ohio Revised Code and any other applicable regulations and legislation.
- B. Establish investment policies, guidelines and objectives for the assets of the Plan and communicate them to the Investment Staff and Investment Managers.
- C. Appoint and discharge those with responsibility for managing the Plan's assets, including investment managers, consultants and any others involved.
- D. Request, receive and review reports from the Investment Staff and Investment Managers.

Responsibilities of the Investment Staff

The Investment Staff, headed by the Executive Director and the Assistant Director for Investments, shall accept the

following responsibilities. The Executive Director shall:

- A. Obtain necessary reports on the investment results of the Plan's assets on a timely basis as specified in Section G, Review and Evaluation.
- B. Retain any consultants or advisors deemed necessary or desirable for assistance in the investment of Plan assets, and for meeting his responsibilities.
- C. Oversee the investment function.

The Assistant Director for Investments shall accept the following responsibilities:

- A. Administer the policies, guidelines and objectives adopted by the Retirement Board of the School Employees Retirement System of Ohio in compliance with the relevant sections of the Ohio Revised Code.
- B. Inform and communicate to other Plan fiduciaries, including all Investment Managers, the requirements of the Ohio Revised Code and the policies, guidelines and objectives adopted by the Retirement Board, and monitor their compliance.
- C. Prepare annually an Annual Plan for the investment of the Plan's assets with recognition of the target asset mix ratios and the permissible ranges for asset allocation established by the Board.
- D. Implement the Annual Plan, exercising the judgments allowed by the Board as to the asset allocation ranges for that year.
- E. Report to the Board or its Investment Committee any intra-year changes in the Annual Plan or in the policy, guidelines or objectives which the Investment Staff deems desirable or which are recommended by an Investment Manager or other consultants or advisors.
- F. Oversee the activities of the Investment Staff.

Responsibilities of the Investment Managers

Each Investment Manager, including Investment Staff with respect to internally managed assets, shall accept the following responsibilities for the specified investment management accountability unit that it manages.

- A. Manage the assets within its control in compliance with the relevant sections of the Ohio Revised Code and with the policies, guidelines and objectives adopted by the Retirement Board.
- B. Exercise investment discretion within the guidelines and objectives specified, including decisions to buy, hold or sell securities based on the manager's current investment strategy and outlook, and compatible with such objectives.
- C. Inform the Retirement Board or the Investment Committee of any substantial changes in investment strategy, portfolio structure, value of assets, and of any organizational changes including that of ownership, affiliation, organizational structure, financial condition, or changes

INVESTMENT POLICY (Continued)

Responsibilities of the investment Manager (Continued)

in professional personnel staffing the investment management organization.

- D. Prepare reports for the Board or Investment Committee prior to any scheduled meetings but at least on a quarterly basis.
- E. Recommend to the Board or Investment Committee any changes in policy, guidelines or objectives the Investment Manager believes to be desirable.

G. Review and Evaluation

The Board shall review and evaluate periodic reports on the investment results of the Plan's assets, as described below, obtained by the Executive Director. In addition, the Board shall review the periodic reports of each Investment Manager. In these reviews, it is intended that greater emphasis shall be given to long-term results than to short-term results. Following is the intended frequency for the review and evaluation, although these may be altered by the Board as deemed necessary:

Quarterly

Summary Investment Reports — including highlights and commentary of investment performance, asset composition and holdings for each asset class and each investment management accountability unit. These reports shall identify any results which require the attention of the Board.

Investment Manager Reports — prepared by the manager of each investment management accountability unit, reporting on the results of the most recent period.

Annually

Detailed annual investment reports — these reports will include the contents of the quarterly summary reports, as well as additional detail regarding the investment results for each investment management accountability unit.

Written and/or verbal reports presented by the manager of each investment management accountability unit. These shall be scheduled on a staggered basis throughout the year, as determined appropriate by the Board.

PLAN SUMMARY

Purpose

The School Employees Retirement System of Ohio was established in 1937 by the state legislature to provide retirement and disability benefits for all non-certificated persons employed by the state's 769 school districts. This purpose is sustained by the member and employer contributions and the income realized from investments from those contributions.

Administration

The functioning of SERS is supervised by a seven member Board which works in conjunction with the System's Executive Director. Four of the seven Board members are elected by the general membership (those who contribute to SERS) and one is elected by retirants. The Ohio Attorney General and State Auditor, by virtue of their elected office, serve as the remaining two Board members in an ex officio capacity.

The Executive Director is appointed by the Board. This person oversees the administrative operation of the System, and is aided by five directors. Their areas of responsibility are accounting & control, investments, member services, planning & development, and management information services.

Employer Participation

The school employers served by SERS include public schools within the state's cities, villages and counties, as well as local districts, vocational and technical schools, and The University of Akron.

Employers contribute to SERS at the rate of 14.0% of payroll. Some employers pay the System directly on a monthly, quarterly, or annual basis, while others make payments through participation in the Ohio Department of Education's School Foundation Fund.

In addition to forwarding appropriate contribution amounts to SERS, it is the responsibility of the employers to supply SERS with new membership records, members' contribution information, and any data needed at the time of a member's application for benefits or refund of deposits on termination of employment.

Employee Participation

Membership in SERS is divided into several groups based on the activity of a member's SERS account. Member groups are:

A. Active Members — These are persons currently employed by a school employer. Membership is required for anyone working in a position that does not require certification by the Ohio Department of Education. These persons include clerical workers, maintenance personnel, bus drivers, food service workers, playground supervisors, data processing personnel, etc. There are two exceptions to the membership requirements: (1) Persons with student status within a school district may or may not choose to become members of SERS. (2) Persons retired from one of the other Ohio state retirement systems may not become members of SERS. A retired member may not be employed in the schools for 60 calendar days following the effective date of retirement. Thereafter, employment in the school cannot exceed 59 days of the fiscal year, beginning July 1. Active members have an amount equal to 8.75% of their earnings deducted from their gross salaries for each payroll period. These amounts are then forwarded to SERS by the payroll officer, and applied to the member's account at SERS.

- B. Inactive Members These are persons who have contributions on deposit with SERS, but are not currently employed by a school district in the state of Ohio.
- C. Retired/Disabled Members These are persons who have either (1) met the age and service requirements for retirement from service; or (2) become eligible to receive benefits as a result of an injury or illness that prevents the member from performing regularly assigned duties.
- D. Members' Survivors When a member dies before retirement, the qualified beneficiaries become eligible for monthly benefits from SERS.

Refund Of Contributions

A member is entitled to a full refund of contributions with SERS upon termination of school employment. Only the money the member has contributed is refundable. In accordance with Ohio Revised Code, there is a 90-day waiting period after the member's last day of service before the refund can be paid. A refund cancels any claim to benefits offered by SERS.

The refunded amount, plus interest, may be redeposited if, at some later date, the member returns to school service or to any other public service with the state of Ohio. This purchase may be made after the member has been credited with 1.5 years of contributing service.

Service Retirement

Members may retire from school employment if they have attained one of three combinations of age or service:

- 1. Five years of service and age 60, or
- 2. Twenty-five years of service and age 55-60, or
- 3. Thirty years of service at any age.

A member's age is defined to be the actual age a person has reached on the day of retirement. Any change of the

PLAN SUMMARY

date of birth on our records must be substantiated by submitting proof of date of birth to the System.

Service Credit

Service credit is the actual number of years or fraction thereof a person worked within a school district or districts in Ohio schools, plus any other free or purchased service the System recognizes.

Free service is service for which no contributions are required. This includes military service performed while on leave from the school district; service with a school system before establishment of SERS in 1937; or service granted for a period (three years or less) spent off the district's payroll while drawing state worker's compensation for a school job-related accident.

Purchased service is service for which payment plus interest is required. The interest rate is 7.5%. Service must be purchased before the date of retirement if it is to be considered in calculating the member's benefits. Payment may be made in a lump sum or in multiples of one month or more so long as the complete amount due is tendered before retirement. The types of service that can be purchased are:

Military — For service with the armed forces of the U.S., a member may purchase up to 5 years of credit for time spent before working for a school employer or after leaving that employment. There is no restriction placed on the time elapsed between school employment and the time spent in the military. A member may purchase additional service credit if the military service includes prisoner of war time. Purchased credit may not be greater than the member's actual Ohio school employment credit.

Federal, Other State, Or Private Service — The member may purchase credit for service rendered in a school or government position outside the State of Ohio. The amount of service cannot be greater than the member's SERS service nor can it exceed 5 years.

Refunded Service — Service lost due to the payment of a refund may be restored after the member has returned to work and accrued 1.5 years of service covered by SERS, STRS, PERS, PFDPF, or SHPRS. An interest charge is payable in addition to the restored funds.

Compulsory Service — This is service for which the member should have made contributions while working, but did not, for whatever reason. The full amount, plus interest, must be paid before retirement benefits are granted.

Optional Service — This is service during a period when the member was given a choice of contributing or refraining from doing so. In order for the member to purchase this credit in this instance, the employer-school district

must likewise make its contribution, and the employer is under no obligation to do so.

Leave Of Absence — A member returning to work after a period of authorized leave may purchase service credit for the period involved. As with optional service, an employer contribution is required for this service to be granted, but the employer is under no obligation to make payment.

A member who has contributions not only at SERS, but also at State Teachers (STRS) or Public Employees (PERS) Retirement Systems is eligible to receive transferred credit from either or both of those systems. Any service which is not concurrent with (served at the same time as) SERS service will be included in determination of retirement benefits.

Early Retirement Credit

Employers may purchase up to five years of service credit for their eligible employees under an early retirement incentive plan authorized by 1983 legislation. Adoption of a plan is optional and only employers may purchase such credit.

Benefit Calculation

The final average salary is the average of the member's highest three years of earnings while in the school service.

The benefit amount is calculated in this way:

The final average salary amount is multiplied by 2% to determine the value of a year of service credit. This value cannot be less than \$86.00. If it is, \$86.00 is used. The value is then multiplied by the number of years of service credit. This calculation yields the annual retirement benefit amount for a person who has reached age 65 or who has 30 years of service at retirement time.

For "early retirement" (the member is under age 65 or has less than 30 years of service) there is a corresponding percentage of decrease in the required benefit amount to allow for an extended period of retirement. Reduction factors are required by Ohio state law and set by the Board as recommended by the actuary.

Retirement Options

Should the retiring member wish to provide a benefit amount for a beneficiary, this may be done by the selection of one of the optional retirement plans provided for this purpose. Optional plans may be altered by the retired member should the beneficiary die before the retirant or in the event of a divorce.

Disability Retirement

A member prevented from performing regular duties on the job after incurring an injury or illness and before reaching age 60 may apply for monthly disability benefits. To qualify, the member must have at least 5 years service credit. In

School Employees Retirement System Of Ohio

PLAN SUMMARY

Disability Retirement (Continued)

addition to the age and service requirements, the member must:

- Have developed the disabling illness or injury after last becoming a member of SERS;
- Have been recommended for approval by a SERS-sponsored medical review board;
- Have applied for benefits within 2 years of the last day of service with the school district.

The benefit is calculated in the same way as a regular service retirement benefit, except that no reduction is made for being under 65 years of age. SERS grants free credit for each year between the member's date of disability retirement and age 60. Benefits range from a minimum of 30% of final average salary to a maximum of 75% and are granted as long as the member remains disabled (subject to re-examination) or until death.

Death Benefits

The designated beneficiary of any SERS retirant will receive a \$500 lump sum payment upon the retirant's death. If there is no beneficiary, payment is made to the person responsible for the burial expenses or to the retirant's estate.

Survivor Benefits

Qualified dependents of a deceased member may apply for monthly survivor benefits. Such benefits are payable if the member had at least 18 months of Ohio service credit, three of which were served in the 2.5 years prior to the member's death, or if the member was receiving a disability benefit.

If the member was eligible for service retirement but had not yet applied for benefits, the surviving spouse or other single dependent beneficiary of any age can draw a monthly lifetime benefit known as the joint survivor option. Duration of survivor benefits depends primarily on the age and marital status of the dependent(s).

Health Care and Other Benefits

Any person receiving a benefit from SERS is entitled to receive medical insurance. Coverage for a spouse and/or dependent children can be provided by means of a monthly deduction from the benefit. Coverage is offered by the selection of the Aetna insurance company, for those persons in the Cleveland area, the Kaiser health plan, or for those in the Marion area, HealthOhio, Inc.

If the benefit recipient participates in Medicare B, the premium is paid by SERS and is added to the monthly benefit.

An optional prescription drug program is available to all benefit recipients of SERS and their dependents who are covered under the Aetna health care plan. Participants may either choose to obtain prescription drugs from their local pharmacy and receive reimbursement from the Aetna health care plan or they may elect to receive the drugs by mail from a licensed mail order pharmacy for a minimal fee per medication.

Members retiring after June 1, 1986 must have 10 or more years of service credit to qualify for the health care benefits.

Cost Of Living Increases

After 12 months on the benefit rolls, SERS retirants are entitled to an automatic cost of living of 3%. This automatic increase will be paid each year by the Retirement System until the accumulated excess cost of living points fall below 3%. In addition, the legislature has granted several permanent ad hoc increases to SERS retirees, the last such increase being in 1984.

