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# **ANNUAL REPORT**



**of the**  
**Pennsylvania Public School**  
**Employes' Retirement System**  
**301 Chestnut Street**  
**Harrisburg, PA 17101**

**June 30, 1980**



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# Pennsylvania Public School Employees' Retirement System

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Nell F. Knight, Director, Public Information

## Legal Counsel

Thomas Mangan, Deputy State Attorney General

## Advisors

### Investment Counsel

Mellon Bank, NA  
Mellon Square  
Pittsburgh, PA 15230

### Mortgage Counsel

The Fidelity Bank  
P. O. Box 1300  
Philadelphia, PA 19105

## Actuary

George B. Buck Consulting Actuaries, Inc.  
2 Pennsylvania Plaza  
New York, NY 10001



COMMONWEALTH OF PENNSYLVANIA  
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
BOX 125  
HARRISBURG, PENNSYLVANIA 17108

CHAIRMAN OF THE BOARD

March 1, 1980

Dear Governor Thornburgh:

On behalf of the members of the Board of Trustees of the Public School Employees' Retirement System, I am pleased to present this report for the school year 1979-80.

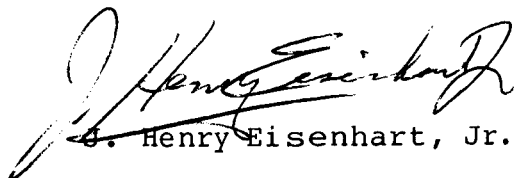
PSERS' year-end figures show a record growth in assets to \$4.860 billion. Receipts reached \$865.6 million including \$316.3 million in investment income, and payments were \$488 million.

Permit me to direct your attention to two opinion letters in this report. The first, from Peat, Marwick, Mitchell & Co., Certified Public Accountants, appears on page 18 and accompanies a balance sheet detailing this System's assets and liabilities. The second is from George B. Buck Consulting Actuaries, Inc., (page 30) and attests to the actuarial soundness of the System to fund its liabilities.

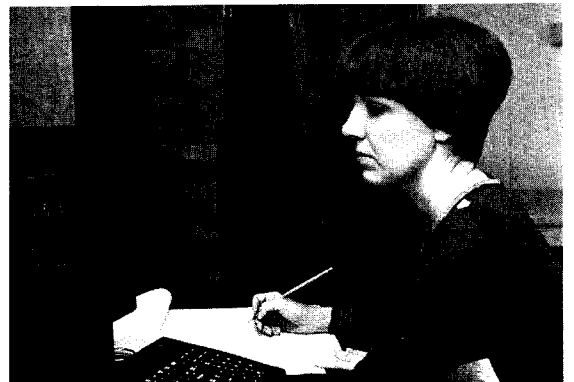
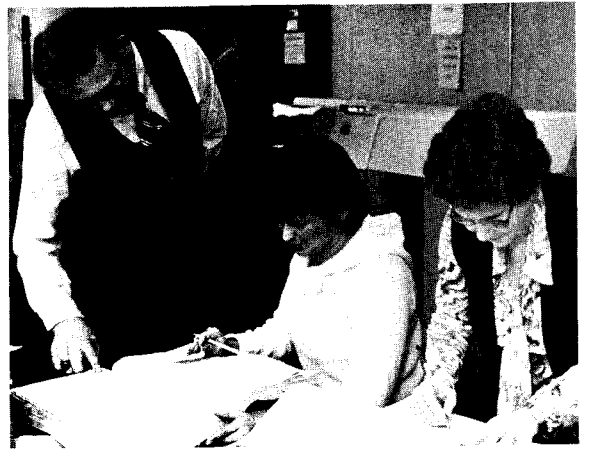
A statement from PSERS Executive Director M. Andrew Sheffler appears on page 8 which discloses significant progress in the System for the better service of our quarter of a million members and sixty-seven thousand annuitants.

We appreciate your continuing personal interest in the System.

Sincerely yours,

  
G. Henry Eisenhart, Jr.







# Executive Director's Report



**M. Andrew Sheffler**

**As in previous years, the Public School Employees' Retirement System has experienced a record growth in assets and has established increased retirement services during fiscal year 1979-80.**

## **INVESTMENTS**

The Fund's total assets increased by \$316 million from \$4.5 billion to \$4.9 billion. Net investment income increased by 20 percent from \$255.9 million to \$307.4 million. Contributions from reporting units, the Commonwealth and active members of the System totaled \$558.1 million. This was \$30.4 million greater than the contributions of the previous fiscal year. A total of \$487.6 million was paid out in retirements, disabilities, death benefits, refunds, transfers to the State Retirement System, and administrative expenses.

Allocations of assets at year-end found the book value of fixed income investments, corporate and government bonds claimed \$2.7 billion or 59.2 percent; common and preferred stocks, \$808.1 million or 17.7 percent; FHA and VA government insured mortgages, \$806.8 million or 17.6 percent; and short term investments, \$250.9 million or 5.5 percent. More important in terms of market value, the equity commitment amounted to \$878.6 million on June 30, 1980.

Results reported by the corporations in which the Retirement Fund is invested in common and preferred stocks have continued to be excellent. Of the stocks owned by the Fund at both the beginning and end of the year, 67 declared higher dividends during the year.

Approximately \$89 million in new federally insured single family residential mortgages and multi-family apartment project mortgage investments were initiated during the year for a net yield of 12 percent. Fifty-six million dollars of this amount was invested in Pennsylvania. In addition, the System invested for the first time in a conventionally financed real estate equity project, a prestigious office building near the White House in Washington, a joint venture with the George Washington University.

The System achieved a number of goals for the fiscal year in completing a second long-range actuarial funding study, the second outside independent financial audit, and an investment policy with guidelines, all of which have confirmed our commitment to a secure Retirement System.

## **ACTUARIAL**

The actuarial valuation method used to measure the financial requirements to support present and future demands upon the Fund is the projected benefit method with level percentage entry age, normal costs, and an open-ended accrued liability. Actuarial gains and losses were reflected in the period remaining to liquidate the unfunded accrued liability.

A reconciliation between the actuary's valuation balance sheet and the financial balance sheet appears on page 34-35. This reconciliation places the Public School Employees' Retirement System's assets in proper perspective with the required obligations projected by George B. Buck Consulting Actuaries, Inc.

A planned funding of the unfunded accrued liability is being effectively pursued. A 25-year projection of this Fund's financial position indicates the accrued liability, as it presently exists, will be funded fully within this period; however, to maintain the planned funding the employers' contribution rates had to be increased to support the recent cost-of-living adjustment granted the annuitants. This adjustment will cost \$1.1 billion over the next 20 years.

## ACCOUNTING

The asset valuation is measured by an accrual accounting system reflecting the amortized cost of bonds and mortgages and the initial cost of stocks.

All income and expenses are recorded in the period earned or contracted regardless of when the cash is received or paid. This is in conformance with accepted accounting principles.

A footnote to the financial balance sheet contains the market value of the investments as a memo figure only. Since the Fund derives 58 percent of its income from fixed investments, which will presumably be held to maturity, the market value will not affect the value of the assets held by this Fund. The market value is listed in compliance with the System's policy for full disclosure.

A penalty on delinquent amounts due from the reporting units plus deductions of past-due contributions from the educational subsidies of the reporting units assisted in raising the level of employer contributions.

## SERVICES

Expanding services and responding to our constituents is our continuing goal. In the area of speeding the flow and use of incoming funds, we have established a means for contributions, interest payments, and dividends to be made directly to a bank. The System will realize increased earnings from this procedure.

More efficient methods of operation to guarantee prompt retirement services are the result of expanded computer capabilities and computer terminals throughout the office and in our six field offices. Our staff is able to compute accurate retirement estimates during counseling sessions, issue refunds more quickly, supply annuitants with the amount of their pensions which is taxable, process members' annual statements of account with more up-to-the-minute information, and respond to correspondence more quickly.

Everyone associated with the System should be pleased with the results of the everyday activities during the past year. For example, a total of 4,599 retirements was processed during the year, and 13,936 refunds were made. Individual retirement estimates totaled 2,943. The field staff traveled more than 108,000 miles to meet with 6,739 active contributors during in-service gatherings and counseled 5,485 members individually.

PSERS publications increased and took on a regularity of reporting with the addition of an information director, responsible for newsletters to members, annuitants, legislators, and reporting units.

## LEGISLATION

On Dec. 18, 1979, Act 130 was signed into law awarding annuitants a cost-of-living increase ranging from 5 to 31 percent. It affected more than 52,800 annuitants scattered throughout the country and, in some cases, outside the United States. The average increase was \$114 a month or \$1,368 a year.

Pending legislation during the year would allot cost-of-living increases to all beneficiaries, make Blue Cross and Blue Shield Medicare payments for annuitants under certain circumstances, and establish a Public Employee Retirement Study Commission.

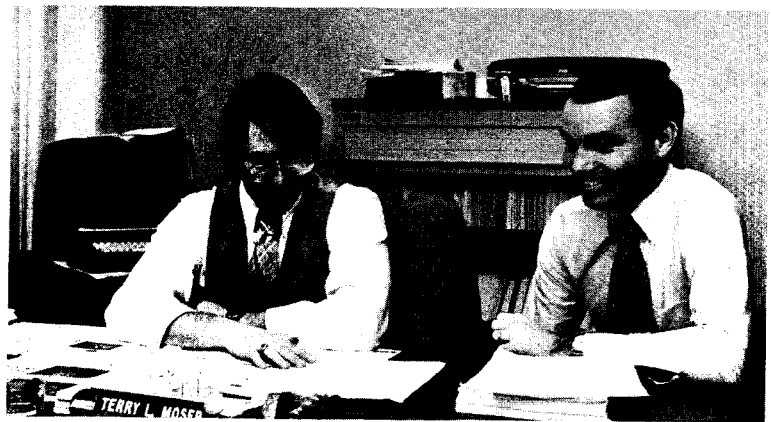
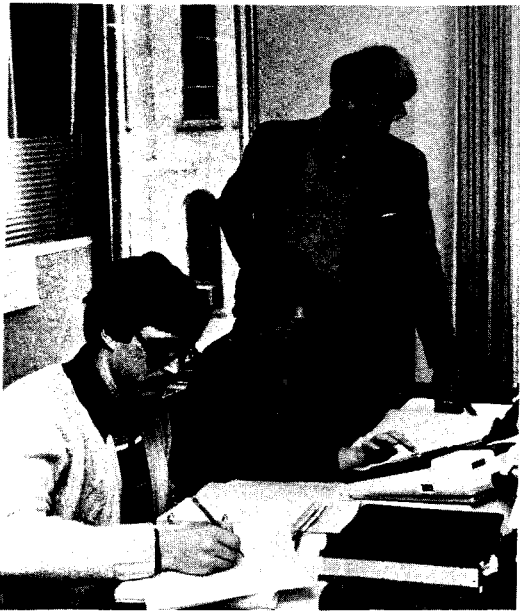
It is a pleasure to report on the outstanding progress of the Retirement System during the fiscal year 1979-80 and to look forward with our members, annuitants, Board members, and staff to the future growth and continued stability of the Fund.



M. Andrew Sheffler  
Executive Director



# *Financial Highlights*



# CONTRIBUTION STATEMENT

June 30

	1980	1979
Contributions from School Districts	\$195,164,681	\$191,247,002
Less: Refunded to School Districts	(36,000)	(161,944)
Plus: Miscellaneous	0	15,683
Sub-Total	\$195,128,681	\$191,100,741
Contributions from Employees	\$157,835,753	\$146,731,519
Less: Refund Checks Returned to Cash	(133,820)	(160,075)
Sub-Total	\$157,701,933	\$146,571,444
Installment Purchases	\$ 3,627,573	\$ 2,072,474
Contributions from Commonwealth	\$201,673,857	\$187,955,000
Total	\$558,132,044	\$527,699,659

# INCOME STATEMENT

June 30

	1980	1979
Investment Income	\$316,255,970	\$260,411,057
Plus: Discounts, Gains & Misc. Revenue (Note 1)	27,586,289	18,486,615
Less: Deductions (Note 2)	(36,625,779)	(23,260,828)
Sub-Total	\$307,216,480	\$255,636,844
Other Revenue	222,475	276,043
Total Net Income	\$307,438,955	\$255,912,887
Distribution of Net Income:		
State Accumulation Account	\$124,557,320	\$ 84,974,900
Members' Savings	59,057,035	53,831,962
Annuity Reserve	123,824,600	117,106,025
Total Distribution	\$307,438,955	\$255,912,887
Note 1:		
Amortization of Discount	\$ 16,440,867	\$ 15,165,826
Amortization of Capitalized Gains	742,516	708,061
Gain on Sale	10,302,040	2,553,825
Miscellaneous Revenue	100,866	58,903
Total	\$ 27,586,289	\$ 18,486,615
Note 2:		
Amortization of Premium	\$ 71,575	\$ 64,907
Amortization of Capitalized Losses	20,623,332	19,821,412
Loss on Sale	13,746,853	1,380,189
Service Fees	1,522,009	1,459,374
Investment Expense	632,079	507,206
Miscellaneous Expense	29,931	27,740
Total	\$ 36,625,779	\$ 23,260,828

# STATEMENT OF PAYMENTS

June 30

	1980	1979
<b>Annuities:</b>		
Superannuation	\$371,907,837	\$294,787,966
Disability	13,890,793	9,663,156
Withdrawal	26,300,692	20,231,630
Refund Annuity	555	759
	\$412,099,877	\$324,683,511
<b>Death Benefits</b>	22,426,342	22,033,411
<b>Lump Sum Option 4</b>	27,865,463	28,025,914
Plus: Replacement Checks Issued	2,737	19,850
Less: Outstanding Checks Returned		
to Cash	0	(191,167)
Annuity Checks Returned		
to Cash	(2,891,706)	(2,894,085)
Sub-Total	\$459,502,713	\$371,677,434
<b>Refunded Principal &amp; Interest</b>	\$18,636,927	\$19,117,156
Less: Refund Checks Returned		
to Cash	(133,820)	(160,075)
Sub-Total	\$18,503,107	\$18,957,081
<b>Net Transfer to State Employees' and Municipal Retirement Systems</b>	5,884,891	5,920,433
<b>Administrative Expenses</b>	3,726,494	3,716,988
<b>Total</b>	\$487,617,205	\$400,271,936

# SUMMARY OF INVESTMENT HOLDINGS

AT PAR	June 30	
	1980	1979
STATE AND MUNICIPALS	\$ 101,000	\$ 117,000
CONSOLIDATED FOODS	1,498,623	1,598,483
INTERNATIONAL & INTER-AMERICAN BANKS	104,924,000	100,045,000
POST OFFICE DEPARTMENT	0	4,856,071
UNIVERSITY OF PITTSBURGH	654,000	752,000
INDUSTRIAL AND COMMERCIAL BONDS	1,594,444,252	1,553,243,831
PUBLIC UTILITIES	700,983,330	724,706,420
FINANCE COMPANIES	297,674,000	273,553,000
RAILROADS—CORPORATE	4,958,000	4,958,000
RAILROADS—EQUIPMENT TRUSTS	10,022,228	12,344,351
SHORT TERM NOTES (At Cost)	59,291,033	103,108,862
U. S. TREASURY BILLS (At Cost)	122,587,854	79,558,134
U. S. TREASURY NOTES	40,000,000	0
REPURCHASE AGREEMENTS (At Cost)	69,050,000	57,550,000
PHILADELPHIA NATIONAL BANK BUILDING	15,597,601	15,774,117
FHA PROJECT MORTGAGES	218,929,486	183,703,673
CAPEHART MORTGAGES	16,509,032	18,656,164
PROJECT MORTGAGE DEBENTURES	3,969,250	4,662,050
FHA AND VA MORTGAGES—FIXED	334,536,005	326,589,112
FHA AND VA MORTGAGES—GRADUATED	12,332,048	252,547
FHA AND VA MORTGAGE FORECLOSURES	3,637,125	3,024,529
COMMON STOCK (At Cost)	803,501,543	786,787,229
PREFERRED STOCK (At Cost)	4,637,000	1,800,000
GNMA FIXED PAYMENT MORTGAGES	79,931,640	24,956,318
GNMA GRADUATED PAYMENT MORTGAGES	173,189,651	70,000,000
TOTAL PAR VALUE	<u>\$4,672,958,701</u>	<u>\$4,352,596,891</u>





# *Auditor's Report*





Peat, Marwick, Mitchell & Co.

Certified Public Accountants

100 Pine Street  
Harrisburg, Pennsylvania 17101  
(717) 233-1071

The Board of Trustees  
Commonwealth of Pennsylvania  
Public School Employees' Retirement System:

We have examined the balance sheets of the Commonwealth of Pennsylvania Public School Employees' Retirement System as of June 30, 1980 and 1979 and the related statements of revenues, expenses and changes in reserves 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 Commonwealth of Pennsylvania Public School Employees' Retirement System at June 30, 1980 and 1979, and the results of its operations and the changes in its reserves for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

The supplementary data included in Schedule 1 are not necessary for a fair presentation of the financial position and results of operations of the Commonwealth of Pennsylvania Public School Employees' Retirement System. The supplementary data have been subjected to the auditing procedures applied in the examination of the basic financial statements and, in our opinion, are stated fairly in all material respects only when considered in conjunction with the financial statements taken as a whole.

*Peat, Marwick, Mitchell & Co.*

October 10, 1980

# Balance Sheet

June 30, 1980 and 1979

	<u>Assets</u>	1980	1979
Cash		\$ 32,431	\$ 115,712
Receivables:			
Contributions:			
Members		20,134,736	19,265,391
Employers		77,806,081	76,658,121
Commonwealth of Pennsylvania:			
Current receivable		46,328,334	44,000,000
Deficit receivable (note 4)		71,185,000	71,995,000
Investments:			
Income receivable		67,424,729	57,677,753
Proceeds receivable		425,885	2,768,347
Other		195,284	298,062
	Total receivables	<u>\$ 283,500,049</u>	<u>\$ 272,662,674</u>
Investments (note 5):			
Corporate and government debentures (including unamortized yield adjust- ments of \$167,223,808 in 1980 and \$164,293,745 in 1979)		\$2,669,925,144	\$2,627,998,783
First mortgage loans		806,798,548	613,204,953
Common and preferred stocks		808,138,543	788,587,229
U. S. Treasury obligations		162,561,891	79,558,134
Other short-term investments		128,341,032	160,658,862
	Total investments	<u>\$4,575,765,158</u>	<u>\$4,270,007,961</u>
Fixed assets		916,974	916,974
		<u>\$4,860,214,612</u>	<u>\$4,543,703,321</u>
	<u>Liabilities and Reserves</u>		
Accounts payable		\$ 3,989,539	\$ 5,703,516
Investment purchases payable		9,737,345	69,465,870
Reserves (note 3):			
Members' savings account		1,578,884,470	1,433,024,329
State accumulation account		948,762,450	776,863,196
Annuity reserve account		2,318,840,808	2,258,646,410
	Total reserves	<u>\$4,846,487,728</u>	<u>\$4,468,533,935</u>
		<u>\$4,860,214,612</u>	<u>\$4,543,703,321</u>

See accompanying notes to financial statements.

# Statement of Revenues, Expenses and Changes in Reserves

Years ended June 30, 1980 and 1979

	Year ended June 30, 1980				Year ended June 30, 1979			
	Total	State Accumulation Account	Members' Savings Account	Annuity Reserve Account	Total	State Accumulation Account	Members' Savings Account	Annuity Reserve Account
<b>Revenue:</b>								
<b>Contributions:</b>								
School districts	\$ 195,128,681	\$195,128,681	—	—	\$ 191,100,741	\$191,100,741	—	—
Employes	161,329,506	—	\$ 161,329,506	—	148,643,918	—	\$ 148,643,918	—
Commonwealth of Pennsylvania	201,673,857	201,673,857	—	—	187,955,000	187,955,000	—	—
	558,132,044	396,802,538	161,329,506	—	527,699,659	379,055,741	148,643,918	—
Investment revenue, net of related expenses (note 5)	307,216,480	124,334,845	59,057,035	\$ 123,824,600	255,636,844	84,698,857	53,831,962	\$ 117,106,025
Other revenue	222,475	222,475	—	—	276,043	276,043	—	—
Total revenue	865,570,999	521,359,858	220,386,541	123,824,600	783,612,546	464,030,641	202,475,880	117,106,025
<b>Expenses:</b>								
Benefits	459,502,714	13,843,641	30,875,465	414,783,608	371,677,434	12,665,390	30,804,217	328,207,827
Refunds	18,503,107	—	18,503,107	—	18,957,081	—	18,957,081	—
Net transfers to (from) State Employees' Retirement System	5,884,891	6,104,259	647,218	(866,586)	5,920,433	7,506,242	627,055	(2,212,864)
Administrative expenses	3,726,494	3,726,494	—	—	3,716,988	3,716,988	—	—
Total expenses	487,617,206	23,674,394	50,025,790	413,917,022	400,271,936	23,888,620	50,388,353	325,994,963
Excess (deficiency) of revenues over expenses	377,953,793	497,685,464	170,360,751	(290,092,422)	383,340,610	440,142,021	152,087,527	(208,888,938)
<b>Transfers between reserves for: (note 3)</b>								
Retirements by members	—	(278,827,511)	(24,785,542)	303,613,053	—	(317,942,705)	(33,365,820)	351,308,525
Annuitants who returned to service	—	2,091,416	284,932	(2,376,348)	—	547,917	85,794	(633,711)
Actuarial requirements	—	(49,050,115)	—	49,050,115	—	7,125,578	—	(7,125,578)
Reserve balance at beginning of year	4,468,533,935	776,863,196	1,433,024,329	2,258,646,410	4,085,193,325	646,990,385	1,314,216,828	2,123,986,112
Reserve balance at end of year	<u>\$4,846,487,728</u>	<u>\$948,762,450</u>	<u>\$1,578,884,470</u>	<u>\$2,318,840,808</u>	<u>\$4,468,533,935</u>	<u>\$776,863,196</u>	<u>\$1,433,024,329</u>	<u>\$2,258,646,410</u>

See accompanying notes to financial statements.

# Notes to Financial Statements

June 30, 1980

## (1) Organization and Description of the System

### (a) Organization

The Commonwealth of Pennsylvania Public School Employees' Retirement System (the "System") was established as of July 18, 1917, under the provision of P.L. 1043, No. 343. The System's designated purpose is to provide retirement allowances and other benefits to members. Membership in the System is mandatory for substantially all full-time public school employees in the Commonwealth. Responsibility for the organization and administration of the System is vested in the Board of Trustees.

### (b) Benefits

Significant amendments to the System were made in 1975 as a result of legislative approval of Act 96. Under the provisions of Act 96, members are eligible for monthly retirement benefits upon reaching (a) age 62; (b) age 60 and 30 or more years of service; or (c) 35 or more years of service. Such benefits are generally equal to 2 percent of the member's final average salary (as defined) multiplied by the number of years of credited service. Early retirement resulting in reduced benefits may be elected after completion of 10 years of service. Under certain features of the System, participants may purchase credit for previous types of educational or military service on a lump-sum or installment purchase basis.

In addition to regular retirement benefits, the System also provides for disability retirement benefits and death benefits. Participants are eligible for disability retirement benefits after completion of five years of eligible service. Death benefits are payable upon the death of an active member who has reached age 62 or who has at least 10 years of eligible service.

Members with credited service in the State Employees' Retirement System may elect to transfer such service to the Public School Employees' Retirement System upon commencement of employment in the public school system. Similarly, a member with credited service in the System may transfer such service to the State Employees' Retirement System upon becoming a member of that system.

Upon termination of a member's employment in the public school sector, the member's accumulated contributions plus interest are refundable from the Members' Savings Account.

### (c) Contributions

The contribution policy is set by Act 96 and requires contributions by active members, employers and the Commonwealth. The rate of contribution for most active members is set by law at 5¼ percent of the member's compensation. The contributions required of employers and the Commonwealth are based upon an actuarial valuation computed as a percentage of the total compensation of all active members during the period for which the amount is determined. For the years ended June 30, 1980 and 1979, the combined amount required from the employers and Commonwealth was 13.31 percent of active member payroll. The employer and the Commonwealth share such cost equally.

### (d) Actuarial Valuation

The contribution policy requires employers and the Commonwealth to make a normal contribution and a past service contribution as determined by a qualified actuary. The System's actuary uses the "entry age normal" method to determine normal costs. As of June 30, 1979, the date of the most recent actuarial report, the actuary computed that, utilizing

the present method of funding, the actuarial liability of the employers and Commonwealth for prior service of \$3,564,814,000 should be funded in approximately 26 years. Such liability includes \$45,819,000 related to unaccrued interest receivable on Commonwealth contributions which were not paid on a timely basis (note 4). In 1979, cost of living increases ranging from 5 percent to 31 percent were granted to annuitants who retired on or before July 1, 1978. The effect of these increases upon the computation of the actuarial liability at June 30, 1979, of \$633,297,000 is included in the actuary's calculation of the unfunded liability.

Significant assumptions underlying the actuarial computations include: (a) assumed rate of return on investments of 5½ percent; (b) assumed rate of salary increases ranging from 6.99 percent at age 25 to 1.89 percent at age 69; (c) assets valued at cost or amortized costs; and (d) mortality, vesting, retirement age and withdrawal estimates based on tables furnished by the actuary.

## (2) Summary of Significant Accounting Policies

The financial statements of the System are prepared on the accrual basis of accounting and conform to generally accepted accounting principles. In order to assist the reader in understanding the accompanying financial statements, a summary of the more significant accounting policies is presented below:

### (a) Investments

Corporate and government debentures with fixed maturities are reported at cost as of the trade date of the transaction adjusted for amortization of premiums and accretion of discounts, both computed on a straight-line basis to the maturity date of the investment. Unamortized yield adjustments represent the deferral of net losses incurred when corporate bonds are exchanged for similar bonds in order to achieve a higher yield. Losses incurred in such transactions are amortized over the life of the bond exchanged.

Investments in first mortgage loans are carried at the amount of the unpaid principal balance of the loan, adjusted for accretion of discounts. Such discounts are amortized on a straight-line basis to the maturity date of the loan for large project loans, or over the average 12-year life of the portfolio for single family mortgages. Income on mortgages is recognized on a monthly basis as earned.

Investments in common and preferred stocks are carried at cost. Gains and losses on stock sales are recognized on the basis of the average cost of the stocks sold. Dividend income is recognized as dividends are declared.

Investments in short-term obligations, principally commercial paper, U.S. Treasury obligations and bank repurchase agreements are carried at cost, which approximates market value. Income on these investments is recognized when earned.

### (b) Fixed Assets

Fixed assets, consisting primarily of data processing equipment, are carried at cost. Other fixed assets are expensed when purchased. The System does not depreciate fixed assets.

### (c) Federal Income Tax Status

During the years ended June 30, 1980 and 1979, the System qualified under the provision of the Internal Revenue Code and was exempt from Federal income taxes.

## (3) Description of Reserves

Act 96 defines the following reserve accounts to be maintained by the System:

### (a) Members' Savings Account

The Members' Savings Account is credited with all contributions made by active mem-

bers of the System. Interest is added to the member's individual account at an annual rate of 4 percent.

Upon death or retirement of a member the accumulated contributions plus interest are transferred to the Annuity Reserve Account for subsequent payment of benefits.

(b) State Accumulation Account

The State Accumulation Account is credited with the contributions of the Commonwealth and the school districts ("employers"). Additionally, interest earnings of the System (after crediting the Members' Savings Account with the aforementioned 4 percent credit and the annuity reserve account with a 5½ percent credit) are credited to this account. Each year, the amounts necessary as determined by the actuary for the payment of retirement and death benefits are transferred from the State Accumulation Account to the Annuity Reserve Account. All administrative expenditures necessary for the operation of the System are paid from the State Accumulation Account.

(c) Annuity Reserve Account

The Annuity Reserve Account represents the amounts transferred from the Members' Savings and State Accumulation accounts, plus additional contributions made by the Commonwealth for the payment of supplemental annuities and cost-of-living increases. All death, disability and retirement benefits are paid from this account. Annual interest of 5½ percent is credited to the Annuity Reserve Account.

(4) Deficit Commonwealth Contributions Receivable

Deficit Commonwealth contributions receivable represent amounts determined by the System's actuary to be necessary to fund current and prospective annuities as defined by Act 96, but which have not been appropriated by the legislature. Such deficits represent underfunding of Commonwealth contributions for fiscal years ended June 30, 1970 to 1973, and amounts withheld by the Commonwealth relating to employers' contributions for Federally-funded salaries. At June 30, 1980 and 1979, no interest was recorded on this receivable.

(5) Investments

The Board of Trustees has the responsibility to invest and reinvest available funds of the System, in accordance with the guidelines and limitations outlined by Act 96. Under these guidelines, the Board may make investments in common and preferred stocks, first mortgage loans and corporate and government obligations in such a manner as to maximize return while maintaining a sound portfolio with minimum risk. By law, investments in common stock are limited to 25 percent of the total assets of the System. Additionally, the amount invested in common stock of any one entity may not exceed 2 percent of the book value of the assets of the System or 5 percent of the total issued and outstanding common stock of that entity at the date of purchase. A maximum of 5 percent of the total assets of the System may be invested in common stocks during any one year.

A summary of investment securities as of June 30, 1980 and 1979, and the approximate market values follows:



	1980		1979	
	Book Value	Market Value	Book Value	Market Value
Corporate and government debentures:				
Municipal bonds	\$ 101,000	\$ 78,716	\$ 117,000	\$ 96,190
U.S. Post Office debentures	—	—	4,856,070	3,593,492
University of Pittsburgh debentures	654,000	523,200	752,000	601,600
International bank bonds	104,924,000	72,917,482	100,045,000	78,050,189
Corporate bonds	1,595,942,875	1,186,704,744	1,554,842,313	1,322,428,564
Utility bonds	700,983,330	448,960,750	724,706,420	532,272,082
Finance company bonds	297,674,000	227,503,497	273,553,000	229,177,141
Railroad debentures	4,958,000	2,903,420	4,958,000	3,129,030
Railroad equipment trusts	10,022,228	8,619,651	12,344,351	11,562,748
FHA debentures	3,969,250	3,969,250	4,662,050	4,662,050
	<u>\$2,719,228,683</u>	<u>\$1,952,180,710</u>	<u>\$2,680,836,204</u>	<u>\$2,185,573,086</u>
Plus unamortized yield adjustments	\$ 167,223,808		\$ 164,293,745	
Less unamortized discount (net of premium)	(216,527,347)		(217,131,166)	
	<u>\$2,669,925,144</u>		<u>\$2,627,998,783</u>	
First mortgage loans:				
FHA guaranteed project mortgages	218,929,486	145,129,900	183,703,673	141,815,500
FHA/VA guaranteed single-family mortgages	350,505,179	265,804,000	329,866,189	269,524,334
Capehart mortgages	16,509,032	12,976,402	18,656,164	15,087,648
GNMA-backed graduated payment mortgages	173,189,651	158,972,255	70,000,000	67,006,058
GNMA-backed fixed payment mortgages	79,931,640	75,420,539	24,956,318	23,871,760
Other mortgages	15,597,601	13,647,900	15,774,117	15,774,117
	<u>\$ 854,662,589</u>	<u>\$ 671,950,996</u>	<u>\$ 642,956,461</u>	<u>\$ 533,079,417</u>
Less unamortized discount	(47,864,041)		(29,751,508)	
	<u>\$ 806,798,548</u>		<u>\$ 613,204,953</u>	

	1980		1979	
	Book Value	Market Value	Book Value	Market Value
Common and preferred stocks:				
Common stocks	\$ 803,501,543	\$ 878,608,507	\$ 786,787,229	\$ 779,401,123
Preferred stocks	4,637,000	5,076,000	1,800,000	1,566,000
	<u>\$ 808,138,543</u>	<u>\$ 883,684,507</u>	<u>\$ 788,587,229</u>	<u>\$ 780,967,123</u>
U.S. Treasury obligations	162,561,891	164,150,254	79,558,134	79,558,134
Other short-term obligations:				
Commercial paper	59,291,032	59,291,032	103,108,862	103,108,862
Bank repurchase agreements	69,050,000	69,050,000	57,550,000	57,550,000
	<u>\$ 128,341,032</u>	<u>\$ 128,341,032</u>	<u>\$ 160,658,862</u>	<u>\$ 160,658,862</u>
Total investments	<u>\$4,575,765,158</u>	<u>\$3,800,307,499</u>	<u>\$4,270,007,961</u>	<u>\$3,739,836,622</u>

The major components of investment revenue for the years ended June 30, 1980 and 1979, are as follows:

	1980	1979
Corporate government debentures	\$185,969,691	\$173,104,537
First mortgage loans	56,588,947	37,280,046
Common and preferred stocks	39,996,002	31,651,168
U.S. Treasury obligations	13,667,168	5,567,708
Other short-term obligations	20,034,162	12,807,598
	<u>\$316,255,970</u>	<u>\$260,411,057</u>
Accretion of discount, net of premium amortization	17,183,383	15,100,919
Net gain (loss) on sales of investments	(3,444,813)	1,173,636
Amortization of yield adjustments	(20,694,907)	(19,113,351)
Total investment revenue before investment expenses	\$309,299,633	\$257,572,261
Investment expenses	(2,083,153)	(1,935,417)
Net investment revenue	<u>\$307,216,480</u>	<u>\$255,636,844</u>

(6) Relationships With Other Commonwealth Agencies

The Treasurer of the Commonwealth of Pennsylvania is designated under Act 96 as the custodian of all cash and investment securities of the System. The Treasurer of the Commonwealth or his designate also serves as a member of the Board of Trustees.

(7) Litigation and Contingencies

The System is subject to various threatened and pending lawsuits which deal with the question of benefit eligibility. Management does not anticipate that the ultimate liability arising from such litigation and threats of litigation will have a material effect on the financial statements of the System.

In addition, the System is a defendant in a class action lawsuit brought by the school districts of the Commonwealth. This litigation deals with the eligibility of members to purchase previous part-time service rendered before July 1, 1975, the date when the legislature authorized, for the first time, membership for these employment categories. Prior to the suit and upon the advice of the Department of Justice, which is defending the action, part-time service credit applications were processed, accepted, and, in certain instances, benefits were paid based thereon. Processing of these applications has been halted pending a judicial determination. If the buyback authority is upheld, the assets of the System and its liability for prior service costs would be increased by an indeterminable amount.

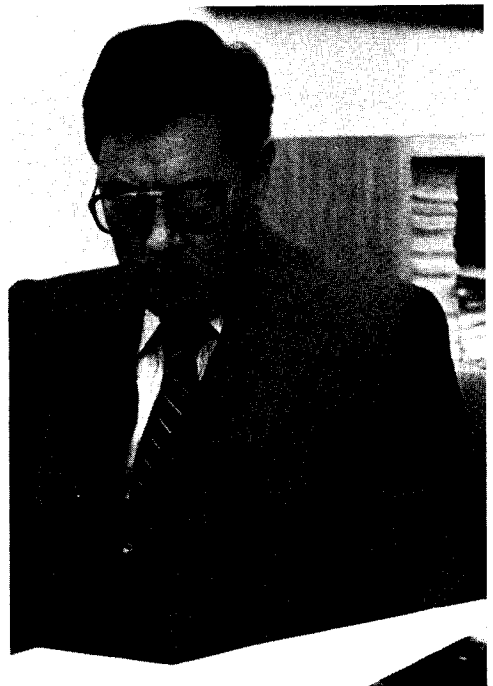
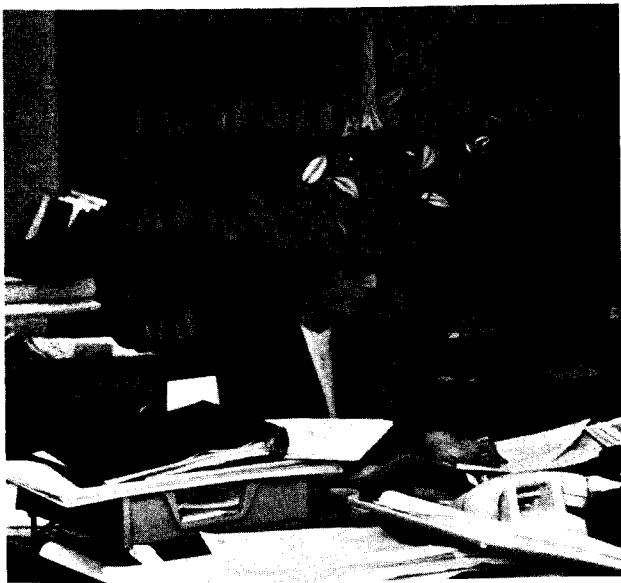
# Schedule of Administrative Expenses

Year ended June 30, 1980

Personnel costs:	
Salaries and wages	\$1,882,729
Social Security contributions	112,436
Retirement contributions	259,056
Employes' insurance contributions	228,921
Other employe benefits	34,672
Total personnel costs	<u>\$2,517,814</u>
Operating costs:	
Auditor General services	46,946
Treasury services	76,818
Civil Service Commission services	8,860
Classification and pay services	944
Purchasing services	293
Data processing services	14,410
Consultant fees	49,010
Legal fees	10,871
Specialized services	149,189
Contracted personnel services	24,790
Printing	31,317
Postage	237,700
Telephone and telegraph	74,681
Dues and subscriptions	2,504
Insurance	886
Electricity	30,001
Motorized equipment supplies and repairs	9,764
Travel	37,941
Contracted maintenance services	100,053
Rent of real estate	164,900
Rent of equipment	36,115
Office supplies	46,640
Miscellaneous expenses and supplies	2,800
Total operating expenses	<u>\$1,157,433</u>
Fixed charges:	
Equipment and machinery	41,120
Furniture and furnishings	10,127
Total fixed charges	<u>\$ 51,247</u>
Total administrative expenses	<u><u>\$3,726,494</u></u>



# *Actuary's Report*



**George B. Buck Consulting Actuaries, Inc.**  
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November 19, 1980

To the Retirement Board  
Public School Employees'  
Retirement System of Pennsylvania  
P. O. Box 125  
Harrisburg, Pennsylvania 17108

**BUCK  
CONSULTANTS**

Ladies and Gentlemen:

We have now completed the June 30, 1979 valuation of the Public School Employees' Retirement System of Pennsylvania. The valuation was prepared on the basis of the data supplied by the Retirement System office, and reflects the benefits in effect as of the valuation date.

The actuarial assumptions used in the valuation are, in the aggregate, reasonable. The actuarial cost method utilized is the entry age normal method with open-end accrued liability, as specified in the statutes. The current assets applicable to the System were supplied by the Retirement System office and were taken at book value.

Based on the valuation results it is recommended that the total employer contribution rate, which is shared equally between the Commonwealth and School Districts, be increased to 15.00 per cent of the payroll of all members on account of the increases to retirees effective July 1, 1979.

The results of the valuation indicate that the rates of contribution, 15.00 per cent of payroll for employers and 5-1/4 per cent of payroll for members, together with the assets currently available are adequate to fund the actuarial liabilities on account of all benefits under the System. The liquidation periods for the four portions of the unfunded accrued liability range from 14 to 26 years from June 30, 1979.

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.



Hugh Gillespie  
Consulting Actuary

**Report on an Actuarial Valuation of the  
Assets and Liabilities of the Public School Employees'  
Retirement System of Pennsylvania  
as of June 30, 1979**

**SECTION I—SUMMARY OF PRINCIPAL RESULTS**

1. This report presents the results of an actuarial valuation of the assets and liabilities of the Public School Employees' Retirement System of Pennsylvania, prepared as of June 30, 1979. For convenience of reference, a comparison of membership statistics for the years ended June 30, 1979 and 1978, and a summary of the principal results of the valuation and a comparison with the preceding year's results are below. Since there have been no changes in the benefit provisions of the System other than increases to retirees as of July 1, 1979, nor in the actuarial assumptions, the results of the valuation for the two years are directly comparable. Therefore, the differences in the expected and actual periods of liquidation of the unfunded accrued liabilities as of June 30, 1979, are the result of the experience during the valuation year. The estimated accrued liability as a result of increases to retirees as of July 1, 1979, is shown as a separate item on the table.

**TABLE I  
COMPARISON OF MEMBERSHIP STATISTICS**

VALUATION DATE	6/30/79	6/30/78
Active members included in valuation		
Number	203,416	208,079
Annual payroll	\$2,565,669	\$2,472,188
Number of accounts not updated or in delinquent school districts	14,984	12,893
Total adjusted active membership		
Number	218,400	220,972
Annual payroll	\$2,754,638	\$2,621,600
Number of inactive and vested accounts	45,956	43,978
Retired membership		
Number	60,999	57,665
Annual annuities	\$321,489*	\$ 304,710

\*Excludes increases effective July 1, 1979, which amount to \$75.1 million



**TABLE II**  
**SUMMARY OF PRINCIPAL RESULTS**  
(Dollar Amounts in Thousands)

VALUATION DATE	6/30/79	6/30/78
Assets (book value)	\$4,514,353	\$4,123,035
Accounts receivable included in assets		
From State:		
Principal amount	\$ 115,995	\$ 160,920
Interest	45,819	37,842
From school districts	76,658	78,509
From members	19,265	22,130
Total	\$ 257,737	\$ 299,401
Total employer contribution rate		
Normal	6.93%	6.93%
Accrued liability	4.83	4.83
Supplemental annuity (excluding 7/1/79 Increase)	1.55	1.55
Supplemental annuity (7/1/79 Increase)	1.69	
Total	15.00%	13.31%
Unfunded accrued liability:		
Before consideration of Act 96	\$1,960,322	\$1,849,058
Increase on account of Act 96	383,959	382,097
Total	\$2,344,281	\$2,231,155
Accrued liability funding period:		
Established prior to Act 96	20 years	20 years
Established on account of Act 96	26 years	27 years
Unfunded supplemental annuity liability:		
Excluding July 1, 1979, increases	\$ 541,417	\$ 555,826
July 1, 1979, increases	633,297	
Total	\$1,174,714	\$ 555,826
Supplemental annuity liability funding period		
Established prior to July 1, 1979	14 years	15 years
July 1, 1979, increases	20 years	
	from 7/1/80	

2. The valuation balance sheet showing the results of the valuation is given in Section III.
3. Comments on the valuation results are given in Section IV and comments on the experience during the valuation year are given in Section V.
4. Schedule A of this report outlines the full set of actuarial assumptions and methods employed. Schedule B gives a summary of the benefit and contribution provisions of the System.

SECTION II—MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the System as of June 30, 1979, upon which the valuation was based. Detailed tabulations of the data are given in Schedule C.

**TABLE III**  
ACTIVE MEMBERSHIP OF SYSTEM  
AS OF JUNE 30, 1979

GROUP	NUMBER	ANNUAL SALARIES
Included in Valuation:		
Men	76,185	\$1,196,026,719
Women	127,231	1,369,642,558
Total	203,416	\$2,565,669,277
Total to Which Adjusted	218,400	\$2,754,638,000

In addition to the above, 45,956 inactive members and vestees were included in the valuation.

**TABLE IV**  
ANNUITANTS AND SURVIVOR ANNUITANTS OF THE SYSTEM  
ON JUNE 30, 1979

CLASS	NUMBER	ANNUAL ANNUITIES
Retired on account of superannuation and those in receipt of withdrawal annuities:		
Men	15,356	\$ 84,417,867
Women	40,855	222,342,855
Total	56,211	\$306,760,722
Retired on account of disability:		
Men	842	\$ 3,252,985
Women	1,610	5,801,839
Total	2,452	\$ 9,054,824
Survivor annuitants in receipt of benefits:		
Men	340	\$ 826,980
Women	1,990	4,846,000
Total	2,330	\$ 5,672,980
Annuities in lieu of return of accumulated deductions:		
Men	6	\$ 733
Women	6	\$ 733
Total	6	\$ 733
Grand Total	60,999	\$321,489,259*

\*Including increases effective July 1, 1979, total annual annuities are approximately \$396.6 million.

**TABLE V**  
**VALUATION BALANCE SHEET**  
**SHOWING FINANCIAL CONDITION OF THE**  
**PUBLIC SCHOOL EMPLOYES' RETIREMENT SYSTEM OF PENNSYLVANIA**  
**AS OF JUNE 30, 1979**  
(amounts in thousands)

ASSETS			
Present assets:			
Members' Savings Account		\$1,433,024	
Annuity Reserve Account (Including Supplemental Retirement Allowance Account):			
Credited to account	\$2,258,647		
Add amount transferable from State Accumulation Account	67,630	2,326,277	
State Accumulation Account:			
Credited to account	\$ 822,682		
Subtract amount transferable to Annuity Reserve Account	67,630	755,052	
Total Present Assets			\$4,514,353
Present value of future contributions by members			1,490,182
Present value of prospective contributions payable to State Accumulation Account:			
Normal contributions		\$2,022,511	
Accrued liability contributions		2,344,281	
Total prospective contributions payable to State Accumulation Account			4,366,792
Present value of prospective accrued liability contributions payable to the Annuity Reserve Account on account of supplemental annuities including increases effective July 1, 1979			1,174,714
Total Assets			\$11,546,041

**TABLE V**  
**VALUATION BALANCE SHEET**  
**SHOWING FINANCIAL CONDITION OF THE**  
**PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM OF PENNSYLVANIA**  
**AS OF JUNE 30, 1979**  
(amounts in thousands)

<b>LIABILITIES</b>	
Present value of benefits on account of past and future contributions by members to the Members' Savings Account	\$ 2,923,206
Present value of annuities now payable to annuitants and survivor annuitants from the Annuity Reserve Account including increases effective July 1, 1979	3,500,991
Present value of prospective annuities payable to members or their beneficiaries from reserves created in the State Accumulation Account as the result of contributions payable by the State and school districts	5,121,844
<b>Total Liabilities</b>	<b><u>\$11,546,041</u></b>

**SECTION III—VALUATION BALANCE SHEET**

The valuation balance sheet shown on the following pages takes into account the contingent assets and liabilities of the Public School Employees' Retirement System of Pennsylvania as well as the funds in hand and shows the financial condition of the System as of June 30, 1979. The present assets shown on the balance sheet are based on a statement furnished by the System's office.

The following amounts have been included as contributions receivable as of the valuation date:

	<b>Amount Receivable As of Valuation Date</b>
Members	\$ 19,265,391
School districts	76,658,121
Commonwealth	
Principal amount	115,995,000
Interest	45,818,656*
<b>Grand Total</b>	<b><u>\$257,737,168</u></b>

\*Calculated on the basis of interest rates applicable to new money investments during appropriate period.

**SECTION IV—COMMENTS ON VALUATION**

The valuation balance sheet brings out the following facts regarding the accounts of the System.

**1. Members' Savings Account**

The Members' Savings Account is the account to which are credited all members' contributions with interest and from which are paid all contributions to members leaving service without annuities. The balance sheet shows that assets credited to the account as of June 30, 1979, are equal to \$1,433,024 thousand and that future contributions by members have a present value of \$1,490,182 thousand. The total past and future contributions of members therefore have a present value of

\$2,923,206 thousand. The liabilities of this account are shown to be equal to this amount since members will receive benefits on account of their contributions equal in value to their contributions.

### 2. Annuity Reserve Account (including Supplemental Retirement Allowance Account)

The Annuity Reserve Account is the account which holds the reserves for the payment of annuities and death benefits on account of annuities and to which are credited the employer contributions for the payment of supplemental annuities. The liabilities on account of annuitants and survivor annuitants were \$3,500,991 thousand as of June 30, 1979, including \$633,297 thousand on account of increases in annuities effective July 1, 1979, and the assets, after taking into account the amount transferable from the State Accumulation Account, were equal to \$2,326,277 thousand. The difference between the liabilities and present assets, or \$1,174,714 thousand, is the present value of future accrued liability contributions payable on account of supplemental annuities which have been granted through July 1, 1979, of which \$541,417 is on account of supplemental annuities granted prior to July 1, 1979. It is recommended that contributions to fund supplemental annuities granted prior to July 1, 1979, be continued at 1.55 percent of total payroll. Contributions at this rate are expected to liquidate the unfunded liability in 14 years. The liability which arose as of July 1, 1979, on account of the increases in annuities effective as of that date is to be funded by level annual payments over a 20-year period commencing as of July 1, 1980. The level payment is equivalent to 1.69 percent of the estimated 1980-81 payroll.

### 3. State Accumulation Account

The State Accumulation Account is the account to which are credited all contributions of the State and school districts other than contributions for supplemental annuities. The liabilities of the account are shown on the balance sheet to be \$5,121,844 thousand and the assets, after taking into account the amounts transferable from the account, are \$755,052 thousand as of June 30, 1979. Therefore, to balance the uncovered liabilities, future contributions are payable by the State and school districts having a value equal to \$4,366,792 thousand.

The law provides that the employers make a normal contribution and an accrued liability contribution. The normal contribution rate is defined as the percentage of the compensation of the average new active member which, if contributed on the basis of his prospective compensation, would be sufficient to provide any benefit payable to him or on his account in excess of that funded by his prospective member contributions.

On the basis of the valuation it is recommended that the normal contribution rate be continued at 6.93 percent of compensation. Future normal contributions at a rate of 6.93 percent have a present value of \$2,022,511 thousand. If this amount is subtracted from \$4,366,792 thousand, the present value of future contributions payable by the employer, there remains \$2,344,281 thousand as the present value of accrued liability contributions. Of this amount, \$383,959 thousand is the unfunded portion of the increase in past service liability on account of the passage of Act 96. On the basis of contributions of .66 percent of payroll, with each payment 4 percent greater than the previous one, this unfunded liability will be liquidated in about 26 years from the valuation date.

The remainder of the unfunded accrued liability, or \$1,960,322 thousand, is attributable to the System prior to the passage of Act 96. It is recommended that accrued liability contributions be continued at the rate of 4.17 percent of payroll with each payment at least 4 percent greater than the previous in order to liquidate this amount. Contributions at this rate are expected to liquidate the unfunded accrued liability of \$1,960,322 thousand within 20 years from June 30, 1979, which compares with a period of 20 years determined in the previous valuation.

The total accrued liability rate is therefore equal to 4.83 percent of payroll.

SECTION V—COMMENTS ON EXPERIENCE

On the basis of the valuation a rate of 15.00 percent is recommended as the total rate payable by school districts and the State. This is equal to the rate recommended on the basis of the June 30, 1978, valuation plus the increase on account of increases to retirees. The retirement and salary experience under the System continues to be financially unfavorable. This is reflected in the fact that there is no decrease in the period over which it is expected that the unfunded accrued liability will be liquidated. A comparison of the valuation results with the projections prepared on the basis of the data submitted for the June 30, 1977, valuation indicates that the unfunded accrued liability and present assets as of June 30, 1979, are very close to those determined on the basis of 7 percent wage inflation and retirement experience following the rates which prevailed during the four year period ended June 30, 1975.

A rough reconciliation of the unfunded accrued liability follows:

TABLE VI  
ROUGH RECONCILIATION OF UNFUNDED ACCRUED LIABILITY

State Accumulation Account	In Millions of Dollars
(1) Unfunded accrued liability 6/30/78	\$2,231.2
(2) Interest at 5½% for 1 year	122.7
(3) Accrued liability contribution with ½ year interest	157.8
(4) Expected unfunded accrued liability 6/30/79 = (1) + (2) - (3)	2,196.1
(5) Actual unfunded accrued liability 6/30/79	2,344.3
(6) Increase above expected	148.2
<hr/>	
(7) Explanation of increase:	
(a) Pensioners' mortality experience	\$ 13.8
(b) Interest surplus	-23.9
(c) Experience among active members	
(i) Salary increases above expected	\$180.9
(ii) New members	-8.8
(iii) Retirements and other separations	-13.8
	<hr/> 158.3
Total	<hr/> \$ 148.2

## SCHEDULE A

### OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: 5½ percent per annum, compounded annually, by statute.

SEPARATIONS FROM SERVICE AND SALARY INCREASE: Representative values of the assumed annual rates of separation and annual rates of salary increases are as follows:

AGE	ANNUAL RATE OF:					
	Withdrawal and Vesting	Death	Disability	Early Retirement	Super- annuation Retirement	Salary Increase
<u>Men</u>						
25	8.46%	.07%	.01%			6.99%
30	6.64	.08	.02			6.32
35	5.47	.13	.03			5.23
40	4.74	.18	.06	.80%		4.14
45	4.11	.29	.11	.80		3.27
50	3.50	.45	.20	.84	3.36%	2.60
55	3.30	.67	.34	2.50	3.58	2.13
60	3.28	.93	.59	2.65	5.12	1.91
65		1.37			15.75	1.90
69		1.83			29.93	1.89
<u>Women</u>						
25	16.79%	.03%	.03%			6.99%
30	11.48	.06	.04			6.32
35	8.15	.08	.04			5.23
40	6.12	.11	.07	.90%		4.14
45	4.91	.15	.12	.90		3.27
50	4.10	.21	.20	1.00	2.31%	2.60
55	3.62	.31	.35	2.50	3.85	2.13
60	3.42	.42	.63	6.95	8.40	1.91
65		.57			22.50	1.90
69		.72			37.00	1.89

DEATH AFTER RETIREMENT: 1963 George B. Buck Mortality Tables for service retirements and dependent beneficiaries and a special mortality table for disability retirements.

VALUATION METHOD: Projected benefit method with level percentage entry age normal cost and open-end unfunded accrued liability. Gains and losses are reflected in the period remaining to liquidate the unfunded accrued liability.

ASSET VALUATION METHOD: Amortized cost on bonds, initial cost on stocks and amortized value of mortgages.

## SCHEDULE B

### SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

A summary of the main benefit and contribution provisions of the System, as interpreted for the valuation, is presented in the following digest. Although there are three classes of membership, Class T-A, Class T-B and Class T-C, for purposes of the valuation, all employees are considered to be members of Class T-C, and the summary contains the benefit and contribution provisions applicable to that class. "Final average salary" is used to mean the highest average annual salary for any three years of service preceding retirement.

A joint coverage member is a school employe who became a member prior to January 1, 1966, but subsequent to May 28, 1957, or who having become a member on or prior to that date elected Social Security coverage. Primary insurance amount of Social Security is the amount computed in accordance with the Federal Social Security Act based on compensation for services covered by the Retirement System. Under Act 525 of 1963 any joint coverage member may become a member of the dual coverage group by filing an election to make contributions and to receive benefits without the reduction on account of Social Security coverage. Such a member must also make up the difference between his accumulated deductions and what they would have been had he not been a joint coverage member. All school employes who become members on and after January 1, 1966, are members of the dual coverage group.

### BENEFITS

#### Superannuation Annuity

##### Condition for Annuity

Any member who has attained age 62 or has attained age 60 and completed 30 or more years of credited service, or has completed 35 years of credited service, may retire upon his own request on a superannuation annuity.

##### Amount of Annuity

The superannuation annuity is equal to 2 percent of the member's final average salary multiplied by the number of his years of credited service.

The minimum superannuation annuity is equal to \$100 for each year of credited service.

After the age at which Social Security benefits become payable, the annuity of a joint coverage member is reduced by an amount equal to 40 percent of the primary insurance amount of his Social Security provided that the reduction in annuity cannot exceed 1 percent of his final average salary for each year of credited service multiplied by the ratio of the sum of three years of highest taxable wages under the Federal Insurance Contributions Act to an amount equal to three times the final average salary and by the ratio of years of credited service after December 31, 1955, to total years of credited service.

#### Withdrawal Annuity

A member separating from service after completing 10 years of credited service may elect to leave his money in the System and receive an immediate annuity which is actuarially equivalent in value to an annuity beginning at the superannuation retirement age at which the member would have qualified for retirement had he remained in service, based on the final average salary and years of service at date of withdrawal. In the case of a member who separates from service after attaining age 55 and completing 25 years of



credited service the annuity is equal to the annuity beginning at the superannuation retirement age at which the member would have qualified for retirement had he remained in service, based on the final average salary and years of service at date of withdrawal, reduced  $\frac{1}{4}$  percent for each month by which withdrawal precedes the aforementioned superannuation age.

After the age at which Social Security benefits become payable, the annuity of a joint coverage member is reduced by an amount equal to 40 percent of the primary insurance amount of his Social Security, subject to the same limitations as are applicable to the superannuation retirement annuity.

#### Disability Annuity

##### Condition for Annuity

Any member who is under superannuation retirement age and is mentally or physically incapacitated for service after five years of credited service is eligible for a disability annuity.

##### Amount of Annuity

The disability annuity is equal to 2 percent of the member's final average salary multiplied by the number of his years of credited service, but not less than  $3\frac{1}{3}$  percent of such final average salary, except that such annuity shall not exceed the rate of annuity to which the member might have been entitled at superannuation retirement age had he remained in service until such age. The minimum disability annuity, including any cost-of-living increases is \$100 for each year of credited service.

#### Vesting Annuity

##### Condition for Annuity

Upon separation from service, a member who has completed 10 or more years of credited service may elect to have his accumulated deductions remain in the System to earn interest, and receive an annuity commencing at superannuation retirement age.

##### Amount of Annuity

The annuity is calculated as a superannuation annuity based upon the member's final average salary and years of credited service to the date of separation from service.

#### Optional Benefits

Upon retirement with 10 or more years of credited service a member may elect to convert his annuity to one of the following equivalent benefits:

Option 1. A reduced benefit with the provision that if he dies before he receives in payments the present value of the benefit as it was at the time of his retirement, the balance if less than \$5,000 shall be paid in a lump sum to his designated beneficiary or if the balance is \$5,000 or more the beneficiary may elect to receive the payment of the balance as a lump sum payment, an annuity having a present value equal to the balance payable or a lump sum payment and an annuity.

Option 2. A reduced benefit with the provision that at his death such benefit shall be continued throughout the life of such other person as he shall have designated at the time of his retirement.

Option 3. A reduced benefit with the provision that at his death one-half of such benefit shall be continued throughout the life of such other person as he shall have designated at the time of his retirement.

Option 4. Such other benefit as shall be certified by the actuary to be of equivalent actuarial value to his regular benefit.

Death Benefit

Any active member or vestee who dies and was eligible for an annuity is considered as having applied for an annuity to become effective the day before his death and in the event he has not elected any option it is assumed that he elected Option 1.

Return of Contributions

Upon separation from service where no other benefit is payable, the member's accumulated deductions are returned to him.

Upon death in service where no other benefit is payable, the member's accumulated deductions are paid to his designated beneficiary or estate.

Upon the death of an annuitant who has elected the maximum annuity, other than a disability annuitant who has 10 years of credited service, the excess of his accumulated deductions at retirement over the annuity payments made is paid to his designated beneficiary or legal representative. Upon the death of a disability annuitant who has 10 years of credited service and who has elected the maximum annuity the excess of the present value of his annuity on his retirement date over payments received is paid to his designated beneficiary.

### CONTRIBUTIONS

By Members

The rate of contribution for each Class T-C member of the single or dual coverage group is  $5\frac{1}{4}$  percent of his compensation.

In the case of joint coverage members the amount of contribution determined at the basic rate is reduced by 40 percent of his Social Security tax exclusive of that portion attributable to disability and medical coverage. A joint coverage member who applies for a superannuation or withdrawal annuity may elect to receive such allowance without the reduction on account of Social Security coverage by paying a lump sum equal to the difference between the amount of accumulated deductions to his credit and the amount which would have been to his credit if contributions had been made without the reduction on account of Social Security coverage.

By State\*

The State contributes a percentage of the total compensation of all members known as the normal contribution, an additional percentage of such compensation known as the accrued liability contribution and a percentage of such compensation known as the supplemental annuity contribution in order to accumulate the required reserves to provide the benefits payable.

\*School districts' contributions match state contributions.

## SCHEDULE C

### STATISTICS

#### TABLE 1

Number And Annual Salaries  
Of Members In Active Service  
Distributed By Age As Of June 30, 1979

Men		Women	
Number	Amount	Number	Amount
26	\$ 50,300	30	\$ 59,108
72	261,188	129	464,033
147	750,877	238	1,068,115
218	1,338,863	329	1,588,471
311	2,113,495	602	3,233,379
689	5,041,548	1,823	12,337,701
908	7,613,924	2,418	19,568,186
1,204	11,257,189	3,021	26,724,528
1,510	15,172,532	3,652	36,119,868
1,878	21,091,802	4,288	45,284,602
2,298	27,792,717	4,720	52,807,996
2,441	31,129,814	4,507	52,146,281
2,758	37,045,521	4,289	50,703,986
2,975	41,756,631	4,182	50,153,941
3,632	53,932,469	4,495	54,376,896
3,071	47,550,814	3,551	43,382,431
2,545	41,116,849	2,836	34,939,131
2,375	39,618,937	2,848	33,914,502
2,544	43,739,357	3,081	35,657,691
2,573	44,955,333	3,131	35,425,951
2,001	35,142,778	2,930	31,155,521
1,813	32,683,423	2,814	30,038,838
1,650	29,320,394	2,792	29,470,134
1,666	30,364,905	2,904	30,140,202
1,688	30,972,918	2,863	29,090,058
1,672	30,913,149	2,892	29,699,187
1,580	28,982,571	2,832	28,230,560
1,584	29,076,302	2,767	28,446,378
1,600	29,766,742	2,662	27,476,693
1,658	31,137,436	2,933	30,907,327
1,693	31,852,862	3,024	32,371,711
1,653	30,483,890	3,037	32,862,581
1,542	28,276,744	2,940	31,158,728
1,606	29,340,023	3,135	33,960,764
1,672	29,738,599	3,045	33,404,312
1,573	28,325,274	2,920	32,417,062
1,648	29,345,836	2,835	30,381,030
1,580	27,077,153	2,896	30,889,166
1,519	25,621,713	2,620	28,095,852
1,396	22,712,539	2,543	27,264,153
1,312	20,738,933	2,643	28,943,888
1,416	21,745,250	2,511	27,539,336

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TABLE 1—Continued

	Men		Women	
	Number	Amount	Number	Amount
60	1,159	17,545,310	2,114	23,571,432
61	1,223	18,028,939	2,219	24,972,423
62	1,099	15,679,690	1,960	22,195,705
63	827	11,719,723	1,392	15,384,976
64	751	10,153,569	1,065	11,927,942
65	627	8,212,021	962	10,423,625
66	289	3,519,774	401	4,398,953
67	144	1,509,557	162	1,389,163
68	102	907,342	67	423,438
69	73	531,038	63	431,327
70	66	512,494	38	232,954
71	38	222,298	25	111,774
72	28	150,650	21	85,979
73	21	124,186	11	64,775
74	19	119,332	9	65,129
75	8	69,797	6	37,034
76	10	55,472	7	23,127
77	3	8,341	1	2,524
78	1	7,592		
al	76,185	\$1,196,026,719	127,231	\$1,369,642,558

TABLE 2

The Number And Annual Salaries  
Of Members In Active Service  
Distributed By Years Of Credited Service  
As Of June 30, 1979

Years Of Service	Men		Women	
	Number	Amount	Number	Amount
0	1,599	\$ 9,923,061	3,885	\$ 17,198,464
1	4,386	32,471,484	13,100	69,672,047
2	3,568	33,271,876	12,086	73,131,117
3	3,678	38,170,316	10,159	76,817,831
4	3,327	39,071,078	7,770	70,650,230
5	4,140	52,935,997	8,717	86,511,157
6	4,177	56,317,393	8,034	86,583,014
7	4,101	57,970,224	7,659	86,242,944
8	3,608	52,396,564	6,660	78,007,099
9	3,743	58,098,264	6,364	80,245,571
10	3,801	61,390,420	5,598	71,802,503
11	3,639	60,322,925	4,807	63,306,126
12	3,350	58,359,587	4,644	61,170,263
13	2,917	51,278,942	4,267	59,141,886
14	2,434	44,304,243	2,954	43,866,685
15	2,154	40,541,832	2,322	35,034,218
16	1,997	37,380,999	2,191	33,571,081
17	1,759	33,704,080	2,010	31,370,620

TABLE 2—Continued

Years Of Service	Men		Women	
	Number	Amount	Number	Amount
18	1,709	33,242,328	1,606	26,332,596
19	1,559	30,833,844	1,590	25,492,072
20	1,586	31,833,049	1,377	22,778,823
21	1,465	29,506,387	1,278	20,854,249
22	1,344	27,707,762	1,122	19,127,221
23	1,278	26,299,476	957	16,983,001
24	1,156	24,386,482	855	14,876,286
25	950	20,744,245	697	12,959,448
26	906	19,684,891	625	11,851,694
27	790	17,348,148	505	9,472,545
28	730	16,077,714	485	9,157,573
29	743	16,774,706	414	7,879,834
30	666	15,277,717	419	7,943,594
31	620	14,197,967	330	6,340,561
32	559	12,770,099	269	5,072,161
33	442	10,279,900	274	5,266,119
34	333	7,834,675	220	4,206,373
35	274	6,602,231	214	4,110,469
36	231	5,501,805	182	3,490,609
37	155	3,589,638	166	3,114,588
38	112	2,668,642	121	2,385,546
39	57	1,409,723	95	1,869,623
40	41	1,063,546	63	1,193,183
41	38	938,276	36	648,089
42	26	605,267	34	612,838
43	22	518,751	33	596,309
44	9	259,018	16	312,589
45	6	161,147	9	168,606
46			7	125,906
47			1	21,609
48			3	56,434
50			1	19,154
Total	76,185	\$1,196,026,719	127,231	\$1,369,642,558

**TABLE 3**

The Number And Annual Annuities  
Of Annuitants On The Retired List  
As Of June 30, 1979, Classified By Age

Retired On Account Of Superannuation And  
Those In Receipt Of Withdrawal Annuities

Age	Men		Women	
	Number	Total Annuities	Number	Total Annuities
29			2	\$ 600
30			3	790
31	1	\$ 755	1	632
32	5	2,113	5	1,962
33	7	3,155	14	5,618
34	21	9,238	18	9,105
35	25	11,666	23	11,189
36	24	12,232	22	11,548
37	28	18,563	24	15,143
38	17	11,484	17	14,334
39	13	9,538	13	12,407
40	12	10,293	17	16,345
41	13	10,216	4	1,904
42	14	11,808	12	12,083
43	16	16,148	11	13,751
44	17	23,519	12	13,953
45	15	17,208	11	11,124
46	13	22,702	17	20,961
47	13	18,758	8	12,541
48	14	30,180	22	41,993
49	7	18,978	26	32,838
50	12	34,017	28	38,410
51	12	28,230	28	42,542
52	20	45,993	33	81,178
53	23	104,821	47	103,109
54	24	135,108	49	141,199
55	25	123,890	68	263,215
56	34	252,545	96	405,748
57	65	547,252	153	737,595
58	81	730,664	173	1,066,150
59	101	961,000	231	1,455,223
60	90	790,482	297	1,856,525
61	172	1,668,708	465	3,242,874
62	244	2,306,950	567	3,734,713
63	497	3,334,962	1,064	6,124,858
64	573	3,661,659	1,359	7,366,667
65	686	4,203,039	1,619	9,122,937
66	1,015	5,787,589	2,071	11,270,504
67	1,086	5,578,404	2,418	13,498,529
68	1,055	5,424,564	2,441	13,695,643
69	993	5,432,879	2,593	14,443,804

TABLE 3—Continued

Age	Men		Women	
	Number	Total Annuities	Number	Total Annuities
70	997	5,364,308	2,532	14,318,856
71	995	5,265,620	2,778	15,868,100
72	907	4,951,029	2,567	14,378,006
73	796	4,183,475	2,365	13,104,618
74	725	3,860,546	2,088	11,377,747
75	645	3,410,967	1,792	9,707,570
76	545	2,753,073	1,577	8,344,359
77	452	2,444,074	1,371	7,308,903
78	358	1,714,436	1,092	5,580,355
79	296	1,381,018	1,030	5,313,216
80	279	1,440,806	790	4,131,150
81	227	1,096,531	769	3,809,469
82	206	1,025,333	698	3,562,913
83	146	759,866	651	3,317,681
84	162	800,974	524	2,619,367
85	116	548,790	446	2,220,526
86	92	474,793	374	1,864,464
87	68	376,436	285	1,418,164
88	64	302,257	239	1,191,183
89	54	241,154	205	981,178
90	38	144,199	128	631,641
91	35	155,571	119	598,695
92	17	79,580	80	397,933
93	20	88,152	66	322,517
94	15	65,325	64	322,005
95	9	35,904	38	188,470
96	4	15,466	38	191,329
97	1	5,184	28	137,202
98	2	10,075	12	60,215
99	1	5,518	12	51,053
100			3	12,431
101	1	6,097	1	5,408
102			5	27,430
103			2	11,258
104			1	5,769
105			1	2,990
106			1	5,159
107			1	1,281
Total	15,356	\$84,417,867	40,855	\$222,342,855
<b>SUMMARY</b>				
No Option	7,971	\$36,385,275	34,479	\$187,748,256
Option 1	2,101	11,500,604	3,797	19,237,032
Option 2	1,464	6,427,251	891	4,296,520
Option 3	3,540	27,309,181	1,566	10,210,206
Option 4	280	2,795,556	122	850,841

**TABLE 4**  
**The Number And Annual Annuities**  
**Of Survivor Annuitants As Of June 30, 1979**  
**Classified By Age**

Age	Men		Women	
	Number	Total Annuities \$	Number	Total Annuities \$
9	1	404		
10			1	359
11	1	881		
12			2	1,010
13			2	1,020
14			2	1,318
16			1	966
20			1	2,405
31			1	2,753
34	1	600	1	1,474
36	1	791	1	1,841
37	1	4,820	1	537
38	1	517		
39			1	1,200
40	1	2,089	1	11,109
41	1	2,145		
42			1	6,736
43	2	3,511	1	4,777
44	1	2,423	1	1,034
45	3	4,560	1	5,220
46			1	396
47			2	2,752
48			3	2,988
49			2	8,395
50	2	1,503	3	2,076
51	1	303	8	27,425
52	1	361	5	22,000
53	1	2,654	7	23,962
54	2	3,094	4	15,283
55	1	2,808	8	25,822
56	1	6,924	8	24,626
57	2	3,598	12	35,114
58	1	1,289	10	42,703
59	4	12,670	18	64,837
60	1	2,587	17	49,905
61	1	556	28	93,069
62	1	3,142	25	83,823
63	2	5,958	29	97,945
64	4	16,671	42	149,468
65	5	17,551	52	157,532
66	10	26,118	45	163,714
67	11	50,418	57	168,935
68	9	34,423	66	185,931
69	10	28,810	66	198,846



TABLE 4—Continued

Age	Men		Women	
	Number	Total Annuities	Number	Total Annuities
70	9	33,065	67	216,313
71	10	35,009	93	258,571
72	13	40,171	76	237,956
73	13	38,236	66	182,514
74	10	25,223	86	238,240
75	12	40,189	75	182,107
76	16	33,956	58	149,166
77	8	15,589	78	169,128
78	12	26,304	72	152,588
79	4	5,633	47	97,737
80	9	17,579	50	110,407
81	9	17,875	64	110,148
82	9	31,144	62	114,048
83	9	14,300	53	82,163
84	9	14,171	51	80,445
85	2	2,017	49	69,536
86	6	9,077	38	50,778
87	8	10,723	36	40,483
88	8	9,542	25	41,865
89	5	8,261	32	35,526
90	4	5,990	22	25,740
91	1	1,270	34	45,900
92	2	1,900	19	20,869
93	2	1,567	13	9,515
94	4	2,884	19	24,137
95	1	781	8	4,650
96	2	3,224	10	5,778
97			9	5,946
98	3	1,733	7	7,730
99	3	2,503	2	1,687
100	3	2,305	3	1,969
101	1	534	8	9,299
102	3	1,474	5	4,478
103	5	1,494	6	5,416
104	1	736	4	4,405
105			1	523
106	1	888	5	4,063
107	1	550	2	1,629
Total	302	\$702,076	1,892	\$4,494,759

**TABLE 5**

The Number And Annual Annuities  
Of Survivor Annuitants As Of June 30, 1979  
Classified By Years of Unexpired Period

Years	Men		Women	
	Number	Total Annuities	Number	Total Annuities
0			1	\$ 1,320
1	5	\$ 11,808	7	17,779
2	2	6,136	7	18,339
3	1	575	9	16,869
4	5	22,710	12	31,126
5	8	30,466	15	54,906
6	2	3,527	9	37,873
7	4	14,420	19	79,069
8	6	18,629	11	45,153
9	5	16,633	8	48,807
Total	38	\$124,904	98	\$351,241

**TABLE 6**

The Number And Annual Annuities  
Of Annuitants On The Retired List  
As Of June 30, 1979, Classified By Age

Retired On Account Of Disability

Age	Men		Women	
	Number	Total Annuities	Number	Total Annuities
27	1	\$ 3,896		
29			1	\$ 3,803
30			3	10,267
31			2	9,093
32	1	3,646	2	7,227
33	2	5,451	2	6,229
34	1	4,624	3	10,051
35			3	14,604
36	2	10,001	2	7,522
37			4	14,189
38	1	3,199	6	22,988
39	1	3,220	3	11,284
40	5	21,583	4	15,091
41	3	18,900	5	21,775
42	5	18,432	6	28,690
43	5	27,356	3	10,092
44	10	37,939	8	30,407
45	7	29,991	8	31,876
46	8	38,237	4	15,852
47	6	29,986	10	44,686
48	10	55,752	13	55,736
49	9	33,527	12	40,190
50	14	73,852	14	53,979
51	15	65,496	22	67,540
52	19	111,830	12	49,901
53	18	91,105	37	189,680
54	39	171,422	31	143,105
55	30	137,204	36	154,139
56	19	81,786	42	157,744
57	39	191,335	57	226,569
58	32	159,630	55	242,399
59	42	186,521	75	314,223
60	60	259,722	70	257,367
61	62	216,612	89	350,455
62	66	231,372	87	311,005
63	53	164,054	82	284,183
64	42	139,649	94	331,326
65	44	160,278	81	253,741
66	33	97,337	88	321,862
67	18	43,561	41	159,778
68	25	66,320	47	168,741
69	22	65,273	53	175,660
70	13	37,357	45	142,279

TABLE 6—Continued

Age	Men		Women	
	Number	Total Annuities	Number	Total Annuities
71	10	25,205	55	165,304
72	10	27,493	49	154,655
73	3	6,737	32	98,874
74	7	17,825	26	82,289
75	1	2,302	17	45,900
76	7	16,228	27	69,867
77	7	1,538	21	61,305
78	5	13,093	14	36,934
79	3	8,660	10	24,869
80	3	7,880	14	34,649
81			10	28,445
82	3	8,298	5	12,793
83			10	31,312
84			8	24,248
85	1	3,575	7	23,750
86	1	2,448	6	19,431
87			8	20,830
88	1	3,510	7	21,045
89	1	1,901	4	13,988
90	1	3,987	4	11,746
91			5	21,367
92	1	2,769	1	3,692
93	1	2,080	2	4,593
94			2	6,834
95			1	3,874
96			1	3,250
97			1	4,767
98			1	3,900
Total	842	\$3,252,985	1,610	\$5,801,839
SUMMARY				
No Option	658	\$2,531,989	1,518	\$5,409,093
Option 1	39	128,529	44	158,574
Option 2	96	355,654	33	149,418
Option 3	49	236,813	15	84,754

### TABLE 7

The Number And Annual Annuities  
Of Annuitants On The Retired List  
As Of June 30, 1979, Classified By Age

Receiving Annuities At Withdrawal

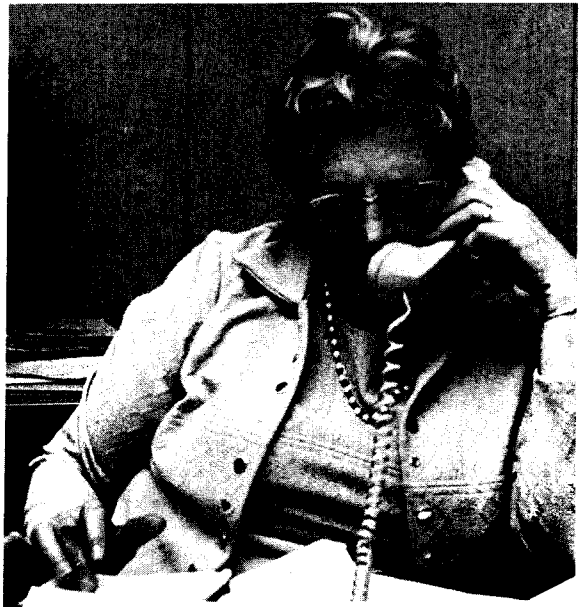
Age	Men		Women	
	Number	Total Annuities	Number	Total Annuities
69			1	\$ 39
81			1	95
86			1	75
88			1	44
91			1	182
92			1	298
Total			6	\$733

**STATEMENT OF FINANCIAL POSITION  
AS OF JUNE 30, 1979**

Financial reserves available for:	<u>IN BILLIONS</u>
The first obligation against the assets to be considered is the active contributing members' savings accounts with 4 percent interest added.	\$ 1.433
The next obligation against the assets is the future annuities payable to the present retirees developed by using an actuarial projection based on life expectancies of the retirees, earnings of the Fund, and what would be owed to their beneficiaries.	\$ 2.326
Balance of the assets available for current contributing members retiring in the future.	<u>\$ .710</u>
A. Total of Money in Reserves	<u><u>\$ 4.469</u></u>
Liabilities on account of:	
Present value of past contributions.	\$ 1.433
Present value of future contributions by members.	\$ 1.490
Present value of annuities payable to present retirees, beneficiaries and their survivors.	\$ 3.501
Present value of annuities that will be required from State and school districts to pay annuities to active contributing members when they retire.	<u>\$ 5.122</u>
B. Total Liabilities	<u><u>\$11.546</u></u>
Uncovered Liabilities (A-B):	<u>\$ 7.077</u>
Less: Money planned to be received for service rendered after June 30, 1979	
By contributing members.	\$ 1.490
By State and school districts.	<u>\$ 2.023</u>
C. Total to be received from members, State, and school districts	\$ 3.513
Less: Interest on Commonwealth deficit not counted in the financial reserves	<u>\$ .046</u>
Unfunded Accrued Liabilities	<u><u>\$ 3.518</u></u>

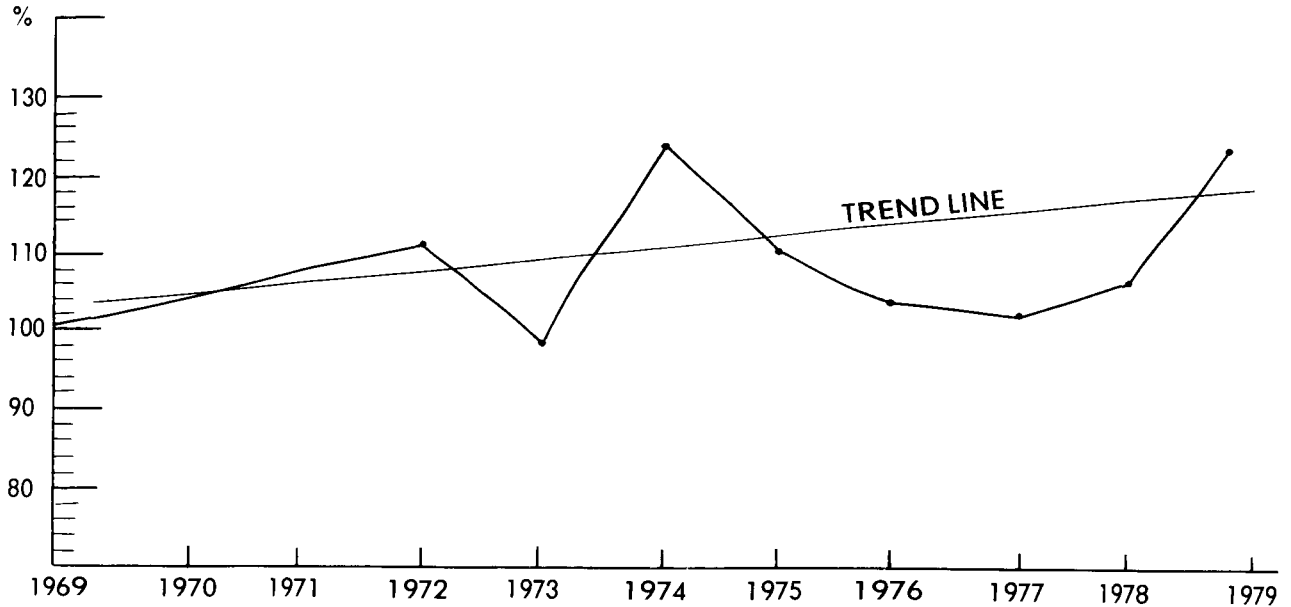


# Graphics





**UNFUNDED ACCRUED LIABILITY AS A  
PERCENT OF ACTIVE MEMBERS' PAYROLL**



The above chart tracks the unfunded accrued liability in relationship to the total wages paid annually to the active members of this System. Increases in future benefits for active members or additional benefits accruing to current annuitants will cause an increase in the ratio of the unfunded liability to the salary level when the salary level remains constant.

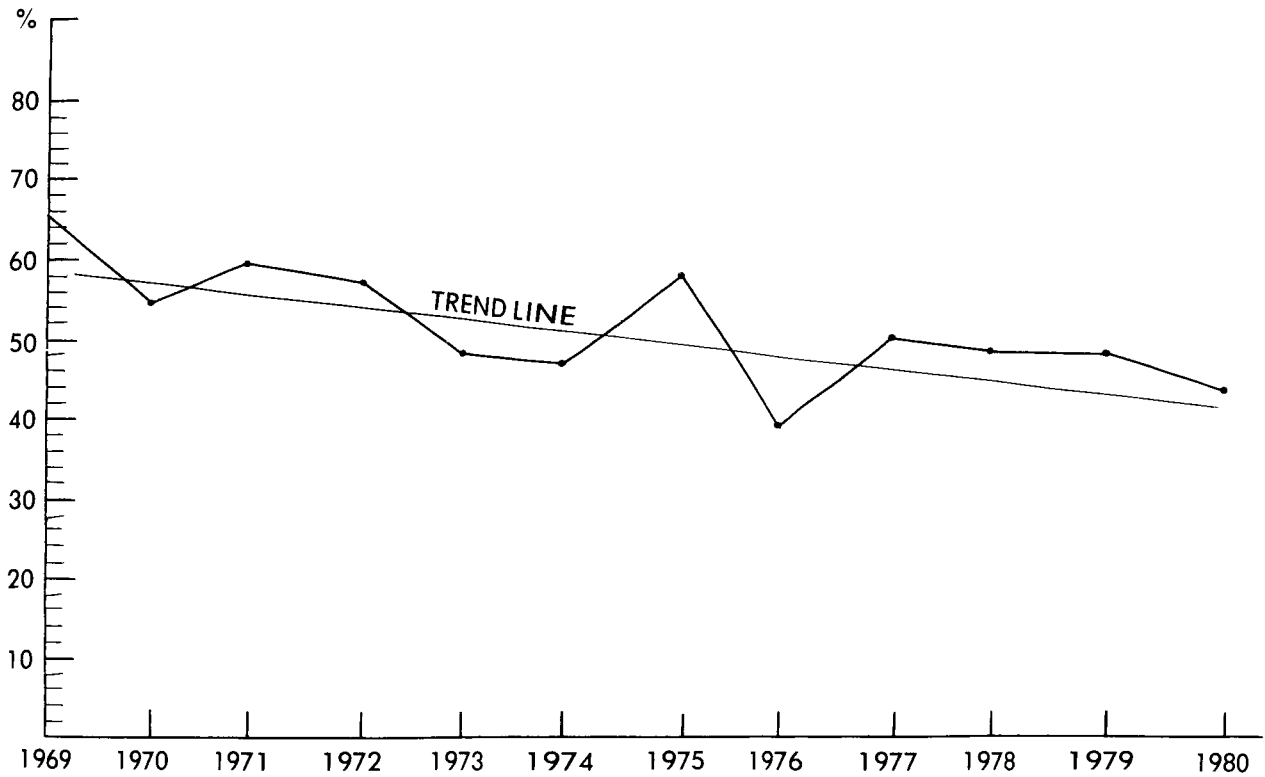
Using 1969 as a base, the annual payroll has increased 2.2 times, 1979 over 1969, whereas the unfunded accrued liability has increased 2.8 times, 1979 over 1969. The unfunded accrued liability is increasing at a faster rate than the annual payroll, the common denominator upon which contributions to the System are based for funding this liability.

The unfunded accrued liability index peaked in 1979 as the result of the cost-of-living increases granted to the retirees by Act 130. The second highest peak was in 1974 as a result of the recodification of the Retirement System under Act 96. This recodification increased benefits, reduced members' contributions, granted a cost-of-living adjustment to the annuitants, and reflected losses against the actuarial assumptions. The third peak occurred in 1972. Although smaller, this increase resulted in changes in the retirement formula used to calculate retirement benefits and placed a minimum allowance of \$100 per month of retirement allowance for each year of service rendered prior to retiring. In 1969 a cost-of-living adjustment to the annuitants was paid which caused an increase in the ratio.

For the most part, the employer rate of contribution was increased over the years to fund these future benefits.

The 25-year actuarial projection shows the unfunded accrued liability increasing until the year 1986 in a 7 percent inflation environment with benefits at current levels. After 1986 the unfunded liability is projected to decrease until all liabilities are covered, estimated to occur in the year 2000.

NET RECEIPTS RETAINED AS PERCENT  
OF TOTAL RECEIPTS



Total disbursements have doubled every six years: 1969-1974, 2.18 times and 1975-1980, 2.03 times. Total receipts (contributions from all sources and investment income) have increased 1.5 times every six year period: 1969-1974 and 1975-1980. This is expressed by the regressive trend line.

It is important that a net receipt position be held in order to fund the unfunded accrued liabilities of this System. If disbursements continue to increase at the pace displayed on this chart, through a liberalization of benefits with increases in the unfunded liabilities, a net receipt position will not be held without substantial increases in the employer rate of contribution.



# Investments



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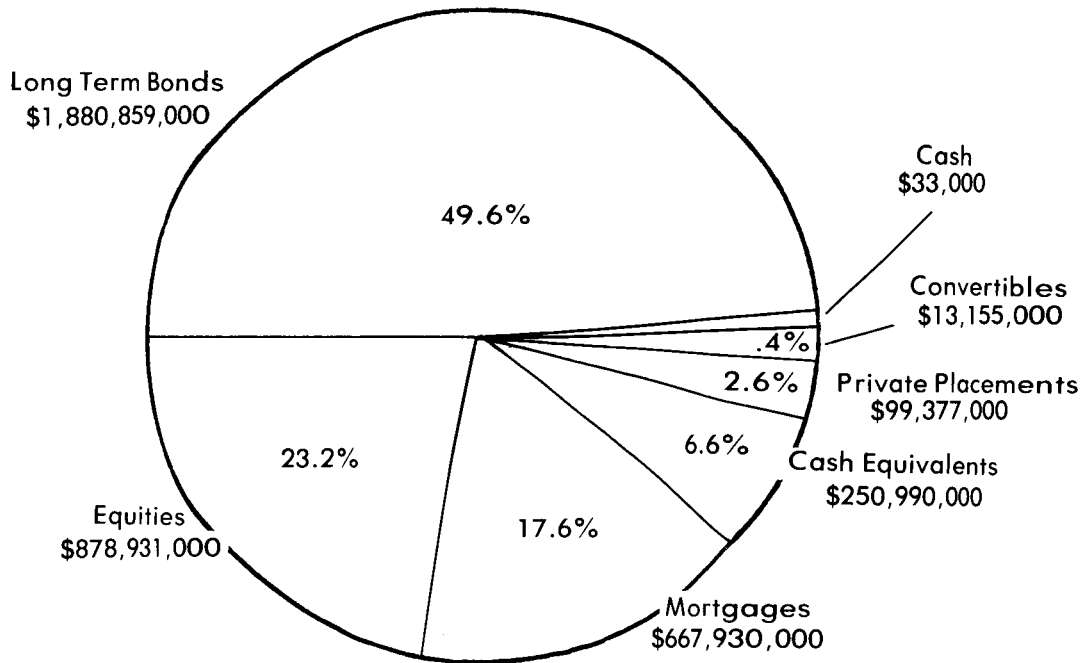
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## Investments at Market Value

\$3,791,275,000



The total market value of assets, on a settlement basis, was \$3,791,275,000 of which equities were \$878,931,000, long-term bonds were \$1,880,859,000, and mortgages amounted to \$667,930,000.

Equity exposure of other state retirement plans studied by an independent outside performance measurement service was 21.1 percent on average compared to PSERS' 23.2 percent. Long-term bonds represent 49.6 percent of the Fund's assets compared to a median exposure of 52.4 percent for the other state retirement plans included in the study. The third area of the study, cash equivalents, represented 6.6 percent of PSERS' assets as compared to the other state plans' median of 10.6 percent.

In reviewing past performance, it has been established that for the last six years, PSERS has been compounding a 7.2 percent rate of return for each fiscal year. Comparing this performance with other state plans, PSERS is slightly below the median which is 7.4 percent as established by a funding performance study.

During the fiscal year ended June 30, 1980, \$305,498,000 on a settlement basis was derived from dividends and interest payments. This income represents a rate of return of 8.8 percent.



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**SCHOOL SYSTEM**

**FOR THE  
FISCAL YEAR  
ENDING  
JUNE 30, 1980**