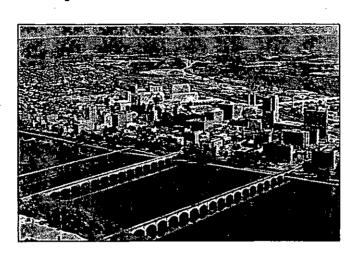
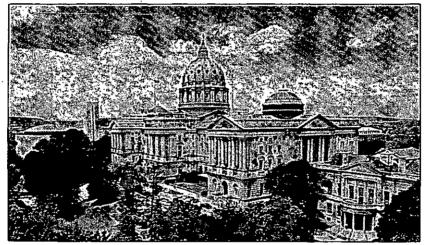
Pennsylvania Public School Employes' Retirement System

Annual Report Year Ended June 30, 1982

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Commonwealth of Pennsylvania

Public School Employes' Retirement System

301 Chestnut Street Harrisburg, PA 17101

Annual Financial Report

Fiscal Year Ended June 30, 1982

M. Andrew Sheffler Executive Director

J. Henry Eisenhart, Jr. Chairperson Board of Trustees

Board of Trustees



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Alfred R. Webb



John Yarnovic

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Investment Advisors

Investment Counsel
Mellon Bank NA
Pittsburgh
Mortgage Counsel
The Fidelity Bank
Philadelphia

Actuary

George B. Buck Consulting Actuaries, Inc. New York Auditor Peat, Marwick, Mitchell and Co. Certified Public Accountants Harrisburg

Letter of Transmittal

The Board of Trustees Public School Employes' Retirement System Harrisburg, PA 17101

The annual report of the Public School Employes' Retirement System (PSERS) for the fiscal year ended June 30, 1982, is submitted herewith. The report consists of five sections: an Introductory Section which contains this letter of transmittal, the Chairman's Report, identification of the administrative organization, and the consulting services utilized by the System; the Financial Section which contains the opinion of the independent certified public accountant and the financial statements of the System; the Actuarial Section which contains the independent consulting actuary's opinion and the results of their latest annual valuation; the fourth section which contains significant statistical data pertaining to PSERS; the last section which details PSERS' investments.

Accounting System and Reports

The report has been prepared in accordance with generally accepted accounting and reporting principles promulgated by the National Council on Governmental Accounting and the American Institute of Certified Public Accountants. This report will be submitted to the Municipal Finance Officers Association for the certificate of conformance annual review.

The accrual basis is the method of accounting used to record assets and liabilities, revenues, and expenses. Revenues for the System are taken into account when earned without regard to date of collection, and expenses are recorded when the corresponding liabilities are incurred regardless of when payment is made. Fixed assets are recorded at cost; however, depreciation is not taken over the useful life of the assets. Bond premium and discount are amortized over the life of the security. The unfunded portion of the actuarial liability is disclosed in the footnotes to the financial statements.

Revenues

Public employe retirement systems are established by law to pay retirement benefits and accumulate the resources with which to pay such benefits. PSERS accumulates its resources through collection of contributions and from income earned on invested contributions. Contributions and investment income for 1982 totaled \$1,117.5 million. This represents an increase of 11.1 percent over 1981 revenues of \$1,005.4 million as shown below.

Revenue Source			Increa	
•	1982	1981	Amou	<u>nt </u>
	(Millions)	(Millions)	(Millions)	%
Member Contributions	\$ 180.6	\$ 175.3	\$ 5.3	3.0
Employer Contributions	501.0	478.9	22.1	4.6
Investment Income	435.9	351.2	84.7	24.1
	\$1,117.5	\$1,005.4	\$ 112.1	11.1

The increase in revenue resulted from (1) increase in the salaries of the participating members from which $5\frac{1}{4}$ percent is deducted as their contribution; (2) an increase in the

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employers' contribution which was brought about by the increased salaries paid. The employer rate of contribution of 15 percent is shared equally by the school districts and the Commonwealth of Pennsylvania and is based on the total salaries paid; and (3) increased investment income attributable primarily to improved earnings on short-term investment and to the increase in the total investments available for earnings.

Expenses

The largest single factor of expense relates to the purpose for which the Retirement System was created: payment of benefits. These payments coupled with the expense to administer the plan, constitute the total expenses of the plan.

Expenses by type for 1982 and 1981 are shown for comparative purposes.

	1982	1981	Increase Amount		
Expenses	(Millions)	(Millions)	(Millions)	%	
Benefits	\$4 50.9	\$4 35.5	\$ 15.4	3.5	
Refunds	19.2	18.2	1.0	5.5	
Disabilities	18.8	13.8	5.0	36.2	
Lump Sum	53.2	43.0	10.2	23.7	
Administrative	5.9	5.1	.8	15.7	
Other	5.0	7.0	(2.0)	(28.6)	
Total	\$553.0	\$522.6	\$30.4	5.8	

The increase in benefit payments resulted from an increase in the number of annuitants receiving payments and an increase in the average benefit paid. The number of benefit claims paid in 1982 increased over 1981 by 2.6 percent. The average benefit paid for retirement, disabilities and withdrawals increased from \$5,119.48 in 1981 to \$5,692.26 in 1982. See table on page 59 for the five year trend.

Administrative expenses amounted to \$5,892,417 for the 1981-82 fiscal year. The budget as established must be approved in legislative bill form by both the State Senate and House Appropriation Committees each fiscal year. See page 25 for a detailed breakdown of these expenses.

Funding

Full funding of a retirement system would require the accumulated assets to equal the actuarial liabilities. Revenue must exceed expenses each year by the amount of pension benefits accrued for the accumulated services of the membership. It is rare for a retirement plan to be fully funded since the actuarial liabilities are projected approximately 20–25 years in advance. Therefore, the difference between the accumulated assets and the actuarial liabilities is the unfunded obligation, which at June 30, 1981, amounted to \$5.2 billion. The chart on page 59 indicates the funding ratios for the last ten years. A systematic planned approach to fund this has been to incorporate this obligation into the employer rate of contribution.

The following summary shows the distribution of the net reserves to the net assets.

	1982	1981	Increase (Decrease)
Assets	(Millions)	(Millions)	(Millions)
Cash & Short Term Investments	\$ 961.3	\$ 567.9	\$393.4
Receivables	318.7	302.2	16.5
Investments	4,621.9	4,474.1	147.8
Fixed Assets	1.2	1.1	1
	\$5,903.1	\$5,345.3	\$ 55 7.8
Less Payables	9.4	16.1	(6.7)
Net Assets	\$5,893.7	\$5,329.2	\$ 564.5
Reserves			
Member	\$1,868.0	\$1,717.7	\$ 150.3
Retirement	2,466.6	2,334.3	132.3
Disability	143.7	129.3	14.4
State Accumulation	1,415.4_	1,147.9	267.5
Net Reserves	\$5,893.7	\$ 5,329.2	\$ 564.5

Member reserves increased \$150.3 million after collecting \$180.6 million from the active members and allocating \$66.0 million from investment income to satisfy the 4 percent interest requirement to each member's account and after deducting \$34.2 million for the option of the retiring members taking out their contributions and interest, paying death benefits and transfers to the State Employes' Retirement System. Refunds in the amount of \$19.2 million were made to the active members leaving the System who requested the return of their contributions plus interest. Further, \$39.8 million was transferred to the retirement reserve for those active members choosing retirement and \$3.1 million for active members granted disability allowances.

The reserve for retirements increased by \$132.2 million after transferring from the state accumulation account \$414.9 million which represents the actuarially determined amount necessary to pay benefits to retiring members. The employe contributions of \$39.8 million and allocated investment earnings of \$130.2 million also increased the reserve for retirements while retirement benefits paid of \$452.6 million were charged to this reserve.

The reserve for disability was increased by \$14.4 million brought about by the increase in the number of disability allowances granted, from 2,983 in 1981 to 3,153 in 1982. This was an increase of 170 active members granted disability under the qualifications of the System.

A team of doctors under contract to PSERS examines the medical records submitted on each disability request and makes their recommendations on each case to the Board. A hearing on the recommendations can be requested by the member, and the Appeals Committee of the Board reviews the data and makes final recommendations in each case.

The state accumulation account increased by \$267.5 million. The Commonwealth of Pennsylvania and the school districts contribute equally as employers to this account. Their combined contributions for the 81-82 fiscal year were \$501.0 million, of which \$414.9 million was transferred for current retirements of active members and \$22.8 million for disability allowances. This reserve was credited with the $5\frac{1}{2}$ percent valuation interest of \$66.8 million from the investment earnings. After satisfying the requirements established by state law to credit the reserve accounts for their appropriate investment income, the remaining

earnings of \$159.8 million were retained in the state accumulation account to assist in reducing the unfunded liability. Death benefits and transfers to the State Employes' Retirement System also reduced this reserve by \$24.2 million. Income from the State Employes' Retirement System amounts to \$1.8 million for the employes transferring to the Public School Employes' Retirement System.

Although PSERS is not fully funded in the sense that the financial assets fully cover the total actuarial liabilities, full funding is the goal of this System, and a 25-year plan to be fully funded by 2001 has been under way for six years.

Investments

Investment income represents a major source of revenue to the System. This income amounted to \$435.9 million in the 1981-82 fiscal year, or 38.9 percent of total revenue received. After deducting \$5.9 million of administrative expenses, \$430 million was distributed to the reserve accounts.

The \$435.9 million investment income was \$84.7 million higher than the \$351.2 million earned for the 80-81 fiscal year. The value of proper funding and improving investment yields tends to be self-evident with this increase.

Approximately \$4.6 billion or 83 percent of the investment portfolio is in long-term investments of stocks, bonds, and mortgages. The remaining \$961.2 million, or 17 percent, is in short-term cash equivalents.

The total time rated return for the year ended June 30, 1982, on the investment portfolio, at market value, was 7.4 percent, placing PSERS in the first quartile of the largest universe of public fund results. This means PSERS out-performed 75 percent of the public funds in this universe due mainly to the strengthening of the fixed income market in which PSERS has invested approximately 56 percent of its portfolio at market value. The fixed income market consists of bonds and mortgages both of which improved in their earnings ratios this year. Also, the short-term investment earnings were strong in the fiscal year with 17 percent of the portfolio, at market, in this category. The return on common stocks was negative; however, most widely accepted national indicators were negative.

The yield at book value has improved over the past five years as follows:

			Treasury			Short-
June 30	Total	Bonds	Notes	Stocks	Mortgages	Term
1982	9.5%	8.9%	14.5%	5.5%	9.5%	13.4%
1981	8.3%	7.9%	12.7%	5.3%	9.2%	13.1%
1980	7.4%	7.5%	12.7%	5.0%	7.9%	12.7%
1979	6.8%	7.3%		4.4%	6.6%	9.7%
1978	6.5%	7.1%		3.9%	6.9%	6.7%

An investment summary appears on page 26 of this report recapping the investment categories in which the activity of investing took place.

The investment policy of the board stipulates that earnings are to be maximized while also maximizing the quality of the investment portfolio. As an achievement toward this end, the Legislature of the Commonwealth has approved a broad spectrum of investments heretofore unavailable to this Board which will assist greatly in maximizing earnings while maintaining the quality of the portfolio.

In the Moody's Bond Rankings, PSERS' bond portfolio was slightly higher than an overall ranking of AA. This is considered a high ranking with the best rank being AAA.

The Standard and Poor's Earnings and Dividend Rankings would place the PSERS common stocks in the rank of A with A+ being the highest rating.

The individual investments held at June 30, 1982, are listed in the last section of this report with our illustrative chart plotting investment income for the ten-year period ended June 30, 1982.

Statistics

Additional statistics are supplied to assist in judging the overall performance of the Fund's activities. They go beyond the collection of revenue and payment of benefits and point to different insights. The six most significant and probably the most helpful are:

	Indicator		Page
1.	Funding Ratio	Ten Years	59
2.	Revenues by Source	Ten Years	58
3.	Expenses by Type	Ten Years	58
4.	Ratio of Net Receipts Retained to Total Receipts	Ten Years	61
5.	Ratio of Unfunded Accrued Liabilities to Active Members'		
	Payroll	Ten Years	60
6.	Cash Flow — Fiscal Year — 1981-82	One Year	62

In the funding ratio, net assets have increased by approximately \$3.0 billion while the actuarial liability increased by \$3.5 billion. This increase in the unfunded liability is being addressed by the Board and the actuary by increasing the employer rate of contribution.

Revenues by source indicates that investment income has averaged, over the last ten years, about 34.1 percent of total revenues ranging from a high of 39.0 percent in the 1982 fiscal year to a low of 31.1 percent in the 1977 fiscal year. A further improvement is expected in future years with the advent of an investment law removing many constraints on the types of investments PSERS can make.

Expenses by type show that since the retirees were given the opportunity beginning July 1, 1975, to receive a lump-sum payment of their contributions plus interest at the time of retirement this option has been exercised by almost every retiring member. An increase in the employer rate of contribution has been necessary to offset the cost of the option. In the ten-year period (1973-1982), benefits paid have increased 230 percent, due to a 130 percent increase in the number of members retiring and a 200 percent increase in salaries upon which the retirements were based.

Net receipts retained in the System to total receipts is represented by a chart with a slightly regressive trend line brought about by increased benefit payments which indicates that the cash available for investment has declined somewhat. This is being addressed by increasing the employer rate of contribution. Improved investment rates of return will also greatly assist in this area.

The unfunded accrued liability when charted to total salaries paid indicates an increase in the ratio of uncovered liabilities to payroll over the last ten years. A 25-year actuarial study through the year 2001 projects the unfunded amount to increase until the year 1993, in a 7 percent inflation environment, and to drop from that point until the year 2001 when the unfunded amount is expected to be minor in relation to salaries paid.

As in the past, cash flow is positive for the fiscal year ended June 30, 1982, and indicates a strong net cash position, tempered somewhat by the trend of the net receipts retained.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform services essential in the operation of PSERS. Statements of certification are provided by the certified public accountant and the actuary. Investment guidelines and manager performance are supplied by a professional investment consultant. A complete listing of these consultants is supplied in this introductory section.

Future Developments

Significant changes are in process in the investment area. Seven additional money managers have been selected to manage the investments of this Fund, four in the equity area and three in the fixed income area. Three of the seven managers are currently under contract and investing the Fund's proceeds, two in the equity area and one in the fixed income area. The remaining four managers will be phased in during the fiscal year ending June 30, 1983. These are in addition to the Mellon Bank, Pittsburgh, Pa., which handles both equities and fixed income transactions for PSERS, and The Fidelity Bank, Philadelphia, Pa., which handles the mortgage investments. Plans are being finalized for the purchase of a new energy efficient computer to assist in performing various functions at a faster pace for less cash.

Miscellaneous

PSERS is an independent agency reporting directly to the Governor of the Commonwealth of Pennsylvania, but it must deal directly with other state agencies and departments, some of which are empowered to audit various payments and prepare the checks for this System. Others perform an after-the-fact audit for compliance with the pension code and other funding restrictions. Budgets and appropriation requests must be routed through the Governor's Budget Office and ultimately approved by the Legislature.

Data

Newsletters have been sent to the active and retired members of PSERS, legislators, and school districts on a periodic basis throughout the fiscal year, to give them information about the Retirement System.

Conclusion

The preparation of this report reflects the combined efforts of the PSERS staff under the leadership of the Board of Trustees and the Executive Director. The report provides financial and actuarial data for the benefit of the membership and general public and portrays the stewardship of the assets.

Respectfully submitted,

M. audien Sheffler

M. Andrew Sheffler Executive Director

Administrative Organization

M. Andrew Sheffler Executive Director

James A. Perry
Assistant Executive Director

Directors

Richard J. McElroy
Fiscal Control

Terry Moser Information Systems

Linda Weidner Contributor Services

Thomas Yagel

Administrative Services

Vacant Chief Counsel

Marsha Mills Assistant Counsel



COMMONWEALTH OF PENNSYLVANIA PUBLIC SCHOOL EMPLOYES' RETIREMENT SYSTEM BOX 125

HARRISBURG, PENNSYLVANIA 17108

December 31, 1982

CHAIRMAN OF THE BOARD

Honorable Dick Thornburgh, Governor of Pennsylvania,

Members of the Legislature, and Members of the Retirement System

Dear Governor Thornburgh, Legislators, and Members:

The responsibility of the trustees in the operation of the Public School Employes' Retirement System (PSERS) has always been fully recognized by the Board. Likewise, the obligation of the trustees to the membership and the general public has found full expression in the Board's management policies.

One of the responsibilities of the Board of Trustees is to prepare annually this financial report which is assembled by the PSERS staff, enabling the participants of PSERS and the general public to obtain a better understanding, of the financial and actuarial conditions of the System and the various factors affecting its operation. Each participating member of PSERS is furnished a summary of this report. A copy of this entire report will be furnished to any member upon request.

Other important responsibilities of the Board of Trustees include the investment of assets of this System, the review of disability benefit requests, and the selection of advisors and consultants to discharge these and other responsibilities of the Board.

In the fiscal year ended June 30, 1982, Ms. Nancy Noonan, former chairperson, completed her term on the Board of Trustees. John Yarnovic was elected by the active members as her replacement. We are confident Mr. Yarnovic will serve with distinction. I was elected chairperson by the Board members as Ms. Noonan's successor. I am cognizant of my responsibilities in this capacity to the membership and general public to assist the staff and the Board in their continued effort to strengthen and improve PSERS.

On behalf of the Board of Trustees, I would take this opportunity to thank the staff, advisors, and participants who consistently strive to maintain PSERS in the forefront among public employe retirement systems in the nation. Serious challenges lie ahead, and with everyone's assistance, these problems will be met.

We ask your continued support in maintaining a financially secure retirement future for the active and retired members of PSERS.

Sincerely,

J. Henry Eisenhart, Jr.

Chairperson

Financial Section

Certified Public Accountants



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

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

We have examined the balance sheets of the Commonwealth of Pennsylvania Public School Employes' Retirement System as of June 30, 1982 and 1981 and the related statements of revenues, expenses and changes in reserves 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 Commonwealth of Pennsylvania Public School Employes' Retirement System at June 30, 1982 and 1981, and the results of its operations, the changes in its reserves 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 on pages 25-27 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.

Reat, Marwick, Mitchell + Co.

September 30, 1982

Balance Sheets

June 30, 1982 and	d 1981	
Assets	1982	1981
Investments (note 5):		
Corporate and government debentures		
(including unamortized yield adjust-		
ments of \$548,186,492 in 1982 and		
\$381,953,825 in 1981)	\$ 2,425,908,820	\$ 2,541,908,593
Treasury notes and bonds	431,452,119	205,672,319
First mortgage loans	900,633,605	884,345,722
Common and preferred stocks	863,842,876	842,316,222
U.S. Treasury bills	90,942,510	65,449,940
Other short-term investments	870,342,592	502,351,576
Total investments	5,583,122,522	5,042,044,372
Receivables:		
Contributions:		
Members	29,434,167	26,543,527
Employers	98,140,517	89,813,712
Commonwealth of Pennsylvania:		
Current receivable	61,651,713	61,176,000
Deficit receivable (note 4)	29,840,610	45,216,000
Investments:		
Income receivable	74,513,504	74,811,009
Proceeds receivable	24,576,573	4,422,189
Other	503,418	218,319
Total receivables	318,660,502	302,200,756
Cash	70,473	14,941
Fixed assets	1,241,635	1,070,068
Total Assets	\$ 5,903,095,132	\$ 5,345,330,147
To Live and		
Liabilities and Reserves	e 7.479.909	& A 145 669
Accounts payable and accrued expenses	\$ 7,472,892	\$ 4,145,663 11,993,443
Investment purchases payable	1,962,658	
Total Liabilities	\$ 9,435,550	\$ 16,139,106
Reserves (note 3):		
State accumulation account	1,415,449,192	1,717,738,874
Members' savings account	1,868,011,828	1,147,907,520
Reserve for retirement	2,466,539,053	2,334,283,646
Reserve for disabilities	143,659,509	129,261,001
Total reserves	5,893,659,582	5,329,191,041
Total Liabilities & Reserves	\$ 5,903,095,132	\$ 5,345,330,147

See accompanying notes to financial statements.

Statements of Revenues, Expenses and Changes in Reserves

Years ended June 30, 1982 and 1981

		Years ended J State Accumulation	une 30, 1982 Members' Savings	Reserve for	
	Total	Account	Account	Retirement	
Revenue:		·			
Contributions:		•			
School Employers	\$ 250,964,336	\$ 250,964,336	_	_	
Employes	180,561,806	_	\$ 180,561,806	_	
Commonwealth of Pennsylvania	250,061,000	250,061,000	_	_	
	681,587,142	501,025,336	180,561,806		
Investment revenue, net of related expenses					
(note 5)	435,888,135	232,451,986	65,967,574	\$ 130,164,133	
Total revenue	1,117,475,277	733,477,322	246,529,380	130,164,133	
Expenses:					
Benefits	522,856,422	17,748,739	33,705,372	452,607,123	
Refunds	19,206,012	_	19,206,012	_	
Net transfers to State				•	
Employes'					
Retirement System	5,051,885	4,551,841	500,044	_	
Administrative expenses	5,892,417	5,892,417			
Total expenses	553,006,736	28,192,997	53,411,428	452,607,123	
Excess (deficiency) of revenues					
over expenses	564,468,541	705,284,325	193,117,952	(322,442,990)	
Transfers between reserves					
for: (note 3)					
Retirements by members		(376,594,029)	(42,982,378)	393,140,815	
Annuitants who returned to service		1,433,976	137,380	(1,025,018)	
Actuarial requirements	_	(62,582,600)	_	62,582,600	
Inactive accounts	_	_	_	_	
Reserve balance at beginning of year	5,329,191,041	1,147,907,520	1,717,738,874	2,334,283,646	
Reserve balance at end of year	\$5,893,659,582	\$1,415,449,192	\$1,868,011,828	\$2,466,539,053	

See accompanying notes to financial statements.

			r ended June 30, 19	B1	
Reserve for		State	Members'	Reserve	Reserve
Disabilities	Total	Accumulation	Savings	for	for
Disabilities	1 Otal	Account	Account	Retirements	Disabilities
_	\$ 238,632,632	\$238,632,632	_	_	_
	175,306,070	-	\$ 175,306,070		_
_	240,230,000	240,230,000	_	_	_
. –	654,168,702	478,862,632	175,306,070	-	_
\$ 7,304,442	351,220,123	156,675,130	64,639,674	\$ 123,551,590	\$ 6,353,729
7,304,442	1,005,388,825	635,537,762	239,945,744	123,551,590	6,353,729
18,795,188	492,339,248	16,008,976	46,701,046	415,812,059	13,817,167
-	18,215,997	——————————————————————————————————————	18,215,997	— —	——————————————————————————————————————
	6,999,959 5,130,308	6,354,639 5,130,308	645,320 —	_	_
18,795,188	522,685,512	27,493,923	65,562,363	415,812,059	13,817,167
(11,490,746)	482,703,313	608,043,839	174,383,381	(292,260,469)	(7,463,438)
26,435,592		(348,845,744)	(25,206,926)	345,355,502	28,697,168
(546,338)	_	910,188	64,386	(864,408)	(110,166)
_	_	(71,349,650)	_	71,349,650	_
	_	10,386,437	(10,386,437)	_	_
129,261,001	4,846,487,728	948,762,450	1,578,884,470	2,210,703,371	108,137,437
\$143,659,509	\$5,329,191,041	\$1,147,907,520	\$1,717,738,874	\$2,334,283,646	\$129,261,001

Statements of Changes in Financial Position For Years Ended June 30, 1982 and June 30, 1981

	198	B2	1981	
Resources provided by:				
Sales and maturities of long-				
term investments \$1	1,049,918,959	\$	690,144,091	
Excess of Revenue over				
Expenses	564,468,541		482,703,313	
Items not requiring resources currently:				
Net Amortized Premium over				
Discount	15,780,804		7,759,195	
Total Resources Provided		\$1,630,168,304		\$1,180,606,599
Resources Used by:				
Purchases of long-term				
investments \$	993,448,146	\$	847,309,870	
Net Increase in working capital	416,702,410		333,143,635	
Current year acquisition of				
equipment	171,567		153,094	
Deferred Bond Swap Yield				
Adjustment	219,846			
Total Resources Used				
		\$1,630,168,304		\$1,180,606,599

Elements of Net Increase (Decrease) in Working Capital For Years Ended June 30, 1982 and June 30, 1981

	1982 Increase (Decrease) Over 1981		1981 Increase (Decrease Over 1980	
Current Assets:				
Cash	\$	55,522	\$	(17,480)
U.S. Treasury Bills		25,492,570		(57,137,914)
Other Short-Term Investments		367,991,016		374,010,544
Contributions Receivable		(3,682,232)		7,295,088
Income Receivable		(297,505)		7,386,280
Investment Proceeds and Other				
Receivables		20,439,483		4,019,339
Total Current Assets	\$	409,998,854	\$	335,555,857
Current Liabilities: Accounts Payable and				
Accrued Expenses	\$	3,327,229	\$	156,124
Investment Purchases Payable		(10,030,785)		2,256,098
Total Current Liabilities	\$	(6,703,556)	\$	2,412,222
Working Capital	\$	416,702,410	\$	333,143,635

Notes to Financial Statements

June 30, 1982

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(1) Organization and Description of the System

(a) Organization

The Commonwealth of Pennsylvania Public School Employes' 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 employes 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. Another recent amendment was made in accordance with Act 152 (effective June 1, 1982) which permitted teachers age 55 with 25 years service to retire with full benefits provided they would retire before September 1, 1982. 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 Employes' Retirement System may elect to transfer such service to the Public School Employes' 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 Employes' 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 51/4 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, 1982 and 1981, the combined amounts required from the employers and the Commonwealth were 15 percent of active member payroll. The employer and the Commonwealth share such cost equally. Effective July 1, 1982, the combined contribution rate was increased to 16 percent.

The 1982-83 budget of the Commonwealth includes an appropriation of \$277.5 million for its required contribution. According to unaudited projections prepared by the System, the Commonwealth's contribution should be approxi-

mately \$293 million.

(d) Actuarial Valuation

The contribution policy requires employers and the Commonwealth to make a normal contribution and a past service contribution as determined by qualified actuary. The System's actuary uses the "entry age normal" method to determine normal costs. As of June 30, 1981, 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 \$5,307,000,000 should be funded in approximately 21 years. Such liability included \$69,818,000 related to unaccrued interest receivable on Commonwealth contributions which were not paid on a timely basis (note 4).

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 cost; and (d) mortality, vesting, retirement age and withdrawal estimates based on tables furnished by the actuary.

As a result of an actuarial study comparing actual to expected experience revised estimates of mortality, vesting, retirement age and withdrawals were adopted in the 1981 valuation. These revisions resulted in an increase in the unfunded accrued liability of approximately \$1,170,000,000.

(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 remaining life of the bond purchased or sold, whichever is shorter.

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 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 certificates of deposit, commercial paper, U.S. Treasury bills 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, 1982 and 1981, 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' Saving Account is credited with all contributions made by active members 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 Reserve for Retirements and Reserve for Disabilities 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, 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 Reserve for Retirements and Reserve for Disabilities. All administrative expenditures necessary for the operation of the System are paid from the State Accumulation Account.

(c) Reserve for Retirements

The Reserve for Retirements 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 and retirement benefits are paid from this account. Annual interest of 5½ percent is credited to the Reserve for Retirements. Prior to this fiscal year, the Reserve for Retirements and the Reserve for Disabilities were combined as the Annuity Reserve Account.

(d) Reserve for Disabilities

The Reserve for Disabilities represents the amounts transferred from the Members' Savings and State Accumula-

tion accounts, plus additional contributions made by the Commonwealth for the payment of supplemental annuities and cost-of-living increases. All disability benefits are paid from this account. Annual interest of 5½ percent is credited to the Reserve for Disabilities. Prior to this fiscal year the Reserve for Disabilities and the Reserve for Retirements were combined as 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. The Commonwealth has agreed to make annual payments of \$9 million in order to satisfy this obligation. At June 30, 1982 and 1981, 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 50 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 summary of investment securities as of June 30, 1982 and 1981, and the approximate market values follows:

	19	82	1981		
	Book	Market	Book	Market	
	Value	Value	Value	Value	
Corporate, government					
and other debentures:					
Corporate bonds	\$1,340,039,433	\$ 736,410,457	\$1,442,396,171	\$ 865,363,774	
Utility bonds	346,363,450	179,224,672	521,552,000	267,293,845	
Financial institution					
bonds	585,655,000	351,237,373	424,975,000	258,262,598	
International bank					
bonds	105,424,000	58,354,905	122,424,000	69,872,663	
Railroad equipment					
trusts & debentures	6,149,887	4,177,098	9,298,573	6,724,438	
FHA debentures	1,746,150	1,746,150	3,098,450	3,098,450	
Municipal bonds	69,000	51,032	85,000	63,095	
University of Pitts-					
burgh debentures	446,000	356,800	552,000	441,600	
Plus unamortized yield					
adjustments	548,186,492		381,953,825	_	
Less unamortized dis-					
count (net of premium)	(508, 170, 592)	_	(364,426,426)		
	2,425,908,820	1,331,558,487	2,541,908,593	1,471,120,463	
Long Term treasury obli-					
gations:					
Treasury notes and					
bonds	445,329,000	414,619,337	219,660,000	196,391,941	
Less unamortized discount	(13,876,881)	—	(13,987,681)	_	
Dess unamortibud discount		414 (10 227		106 201 041	
	431,452,119	414,619,337	205,672,319	196,391,941	
First mortage leans:					
First mortage loans: FHA guaranteed pro-					
	369,122,729	205,785,921	322,710,621	178,563,400	
ject mortgages FHA/VA guaranteed	309,122,129	203, 103,921	322,110,021	170,303,400	
single-family					
mortgages	334,803,643	204,281,635	350,167,956	207,775,986	
GNMA-backed graduated	554,005,045	204,201,033	330,101,330	201,110,900	
payment mortgages	176,310,916	124,496,821	175,250,611	124,550,671	
GNMA-backed fixed	110,510,710	147,770,041	110,200,011	124,000,011	
payment mortgages	76,010,159	60,486,077	78,334,060	62,562,568	
Other mortgages	46,513,408	41,576,106	42,298,631	37,953,643	
~ ***** ******************************	10,010,100	11,010,100	12,270,001	01,700,0 P	
Less unamortized dis-					
count	(102,127,250)		(84,416,157)	_	
		(26 (26 5(0		(11.40/.0/0	
	900,633,605	636,626,560	884,345,722	611,406,268	

	19	982	1981		
	Book Value	Market Value	Book Value	Market ≣Value	
Common and preferred stocks:	vatue	value	value	varue	
Common stocks Preferred stocks	856,846,238 6,996,638	871,466,806 5,607,000	835,319,584 6,996,638	1,048,116,148 7,661,500	
	863,842,876	877,073,806	842,316,222	1,055,777,648	
U.S. Treasury bills Other short-term obligations:	90,942,510	91,762,125	65,449,940	65,515,548	
Certificates of deposit Commercial paper	37,810,000 478,550,842	38,327,647 482,376,621	 274,644,826		
Bank repurchase agreements	353,981,750 870,342,592	357,780,505 878,484,773	227,706,750 502,351,576	227,706,750 502,467,266	
Total investments	\$5,583,122,522	\$4,230,125,088		\$3,902,679,134	

The major components of investment revenue for the years ended June 30, 1982 and 1981, are as follows:

	1982	1981
Corporate, government, and other		
debentures	\$ 179,690,688	184,100,387
First mortgage loans	85,168,982	77,783,158
Common and preferred stocks	46,928,621	43,350,219
U.S. Treasury notes and bonds	42,828,862	15,565,371
U.S. Treasury bills	8,439,400	14,175,200
Other short-term investments	95,295,973	40,798,603
	458,352,526	375,772,938
Accretion of discount	37,832,449	22,207,901
Net gain (loss) on investment		
transactions	(4,062,084)	(14,637,947)
Amortization of yield adjustments	(53,613,253)	(29,967,095)
Total investment revenue		
before investment expenses	438,509,638	353,375,797
Investment expenses	(2,621,503)	(2,155,674)
Net investment revenue	\$4 35,888,135	\$ 351,220,123

(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.

The System had been a defendant in a class action lawsuit brought by the school districts of the Commonwealth. This litigation dealt with the eligibility of members to purchase part-time service rendered before July 1, 1975, the date when the Legislature authorized, for the first time, membership for these employment categories. The Court has ruled that members are eligible to purchase part-time service and the System's liability for prior service costs has been reflected in its actuarial liability.

Comparative Two-Year Schedule of Administrative Expenses

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	June 30, 1982		L	June 30, 1981		981		
	Ac	tual	Bu	dgeted		Actual	•	udgeted
Personnel costs:				C				C
Salaries and wages	\$2,7	709,898	\$ 2	2,745,189	\$ 2	,307,086	\$2	2,445,098
Social Security contributions]	179,404		184,000		147,521		144,081
Retirement contributions	3	387,404		396,000		335,293		333,666
Employes' insurance	3	351,302		396,000		288,589		296,071
Other employe benefits		46,706		52,090		51,171		56,120
Total personnel costs	\$3,6	574,714	\$ 3	,773,279	\$ 3	,129,660	\$ 3	3,275,036
Operating costs:								
Auditor General services	\$	40,289	\$	88,642	\$	79,718	\$	177,178
Treasury services	1	56,507		105,622		169,160		252,080
Civil Service Commission		11,443		11,200		9,990		10,000
Classification and pay		2,413		2,000		2,494		11,500
Purchasing services		2,134		4,550		902		4,657
Data processing services		18,247		17,540		12,471		55,758
Consultant fees		78,930		17,281		43,213		31,462
Legal fees	(50,274)		(38,222)		11,284		61,355
Specialized services	3	20,509		392,683		426,792		641,993
Contracted personnel services		10,988		11,305		24,871		27,933
Printing	1	42,177		149,620		47,908		44,269
Postage	3	61,497		463,659		314,216		390,601
Telephone and telegraph	1	66,082		122,760		106,586		103,410
Dues and subscriptions		4,574		4,350		4,431		3,551
Insurance		714		700		886		100,500
Electricity		58,114		39,653		43,895		55,757
Motorized equipment supplies		6,215		5,589		2,270		14,182
Travel		54,213		46,869		59,301		48,530
Contracted maintenance	1	97,230		219,488		176,716		180,935
Rent of real estate	3	31,040		333,518		203,419		69,203
Rent of equipment	2	03,002		210,499		85,713		62,733
Office supplies		53,116		62,387		66,702		103,236
Miscellaneous expenses		4,544		781		1,880		(142,271)
Total operating expenses	\$ 2,1	73,704	\$ 2	,272,474	\$1	,894,818	\$2	2,308,552
Fixed charges:								
Equipment and machinery	\$	39,672	\$	53,432	\$	80,639	\$	322,263
Furniture and furnishings		4,328		(56,870)		25,192		19,687
Total fixed charges	\$	44,000	\$	(3,438)	\$	105,831	\$	341,950
Total administrative expenses	\$5,8	92,418	\$6	,042,315	\$ 5	,130,309	\$ 5	5,925,538

Investment Summary

(Beginning of Year Date)

Type of Investment	Book 7/1/81	Market 6/81	Purchases	Sales
Bonds, Mortgages, and	(000)	(000)	(000)	(000)
other Debentures:				
Government Bonds	\$ 205,757	\$ 196,455	\$ 273,271	\$ 49,292
Corporate Bonds	2,519,302	1,452,093	469,832	557,756
Corp. Loans and Leaseholds	4,853	4,064	_	425
Convertible Bonds	14,571	11,801	16,422	4,430
Project Mortgage Debenture	3,098	3,098		1,352
Total Bonds	\$2,747,581	\$1,667,511	\$ 979,371	\$ 613,255
FHA/VA Residential Mortgages	\$ 343,748	\$ 207,776	\$ 696	\$ 16,043
FHA Project Mortgages	252,807	178,563	26,921	2,824
GNMAs	245,492	187,113		1,309
Equity Real Estate	26,432	26,433	4,804	64
Other Mortgages	15,867	11,522	<u></u>	227
Total Mortgages	\$ 884,346	\$ 611,407	\$ 32,421	\$ 20,467
Common Stock:				
Financial/International	\$ 30,080	\$ 36,058		
Utilities/Transportation	62,939	81,648		
Consumer Goods/Services	326,072	406,990		
Capital Goods	218,798	267,920		
Basic Materials	197,431	255,500		
Total Common Stock	\$ 835,320	\$1,048,116	\$ 201,503	\$ 193,722
Preferred Stock	\$ 6,997	\$ 7,662		_
Short Term Investments:				
US Treasury Bills	\$ 65,450	\$ 65,516	\$ 280,485	\$ 255,046
Repurchase Agreements	227,706	227,707	2,039,284	1,913,008
Commercial Paper	274,645	274,760	2,254,172	2,050,267
Certificates of Deposit			75,985	38,175
Total Short-Term		· · · · · · · · · · · · · · · · · · ·	··· - 	
Investments	\$ 567,801	\$ 567,983	\$ 4,649,926	\$ 4,256,496
Grand Total	\$5,042,045	\$3,902,679	\$5,643,375	\$5,083,940

Investment Summary—Continued

	Amortized	(End of Year Date)		- E	
Gain/(Loss) on Sales	Premium (Net of Disc.)	Book 6/82	Market 6/82	% Market 6/82	
(000)	(000)	(000)	(000)		
\$ (80)	\$ 1,865	\$ 431,521	\$ 414,670	9.8%	
(17,019)	(22,027)	2,392,332	1,303,607	30.8	
<u> </u>	_	4.428	3.482	.1	
725	48	27,336	22,672	.5	
_	_	1,746	1,746	.0	
\$(16,374)	\$(20,114)	\$2,857,363	\$1,746,177	41.2%	
\$ (1)	\$ 728	\$ 329,128	\$ 204,282	4.8%	
_	2,859	279,763	205,786	4.9	
_	746	244,929	184,983	4.4	
	_	31,172	30,873	.7	
_	_	15,640	10,703	.3	
\$ (1)	\$ 4,333	\$ 900,632	\$ 636,627	15.1%	
		\$ 52,328	\$ 48,847		
	_	52,929	54,649		
	_	296,212	334,230		
	_	206,647	208,652		
	_	248,730	225,089		
\$ 13,745	_	\$ 856,846	\$ 871,467	20.6%	
_	_	\$ 6,997	\$ 5,607	.1%	
\$ 54	_	\$ 90,943	\$ 91,762		
_	_	353,982	357,780		
_	_	478,550	482,377	,	
54		37,810	38,328		
_		\$ 961,285	\$ 970,247	23.0%	
\$(2,576)	(\$15,781)	\$5,583,123	\$4,230,125	100.0%	

Actuarial Section



George B. Buck Consulting Actuaries, Inc.

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September 30, 1982

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

BUCS CONSULTANTS

Ladies and Gentlemen:

We have now completed the June 30, 1981 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 the revised actuarial assumptions adopted by the Retirement Board, and reflects the benefits in effect on the valuation date.

Based on the revised actuarial assumptions the total contribution rate payable by the employers is equal to 18.98 percent of payroll. As part of the phase-in of this rate over the next few years, it is recommended that the total contribution rate payable by employers for the year commencing July 1, 1983 be set equal to 17.06 percent of payroll. The recommended rate of 17.06% includes an additional rate of .06% on account of the temporary early retirement option in effect during the period June 1, 1982 to August 31, 1982.

The revised actuarial assumptions 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.

The results of the valuation on the revised assumptions indicate that the rates of contribution payable by members and employers together with scheduled increases and 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 accrued liability range from 11½ to 24½ years.

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

W. Kempson

John W. Thompson Consulting Actuary

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Report on an Actuarial Valuation of Assets and Liabilities June 30, 1981

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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 Employes' Retirement System of Pennsylvania, prepared as of June 30, 1981. For convenience of reference, a comparison of membership statistics for the years ended June 30, 1981 and 1980, and a summary of the principal results of the valuation and a comparison with the preceding year's results are presented on the next two pages. On the basis of the experience investigation for the five year period ended June 30, 1980, new actuarial assumptions were recommended and adopted and were used as a basis for the valuation as of June 30, 1981. Results of the June 30, 1980, valuation are shown on two bases, one, on the basis of the old actuarial assumptions which are the figures shown in last year's report, and two, on the basis of the revised actuarial assumptions. The results of the June 30, 1981, valuation are based on the revised actuarial assumptions and the contribution rate also reflects the cost of the temporary early retirement program which was in effect from June 1, 1982, through August 31, 1982.

Table I

Comparison of Membership Statistics
(Dollar Amounts in Thousands)

Valuation Date	6/30/81	6/30/80
Active members included in valuation		
Number	206,423	216,333
Annual payroll	\$2,996,660	\$2,915,377
Number of accounts not updated	8,015	2,154
Total adjusted active membership		
Number	214,438	218,487
Annual payroll	\$3,152,967	\$2,967,712
Number of inactive and vested accounts	24,145	20,623
Retired membership		
Number	67,450	64,122
Annual annuities	\$421,012	\$408,056

Table II
Summary of Principal Results
(Dollar Amounts in Thousands)

Valuation Date Assumptions	6/30/81 Revised	6/30/80 Revised	6/30/80 Original
Assets (book value)	\$5,399,010	\$ 4,901,476	\$4,901,476
Accounts receivable included in assets	•-,,	, ,	• -,,,,,,,,
From State:			
Principal amount	\$ 106,392	\$ 117,513	\$ 117,513 .
Interest	69,819	54,988	54,988
From School Districts	89,814	77,806	77,806
From Members	26,543	20,135	20,135
Total	\$ 292,568	\$ 270,442	\$ 270,442
Total employer contribution rate			
Normal	8.75%	8.75%	6.93%
Accrued liability	6.99	6.99	4.83
Supplemental annuity (excluding			
7/1/79 Increase)	1.55	1.55	1.55
Supplemental annuity (7/1/79			
Increase)	1.69	1.69	1.69
Total	18.98%	* 18.98%**	15.00%
Unfunded accrued liability:			
Before consideration of Act 96	\$ 3,475,625	\$ 3,183,285	\$2,186,947
Increase on account of Act 96	611,110	559,710	384,526
Total	\$ 4,086,735	\$3,742,995	\$2,571,473
Accrued liability funding period:			
Established prior to Act 96	22 years	21 years	21 years
Established on account of Act 96	$24\frac{1}{2}$ years	24 years	24 years
Unfunded supplemental annuity liability:			
Excluding July 1, 1979, increases	\$ 501,478	\$ 522,931	\$ 522,931
July 1, 1979, increases	648,967	668,129	668,129
Total	\$ 1,150,445	\$ 1,191,060	\$1,191,060
Supplemental annuity liability funding period			
Established prior to July 1, 1979	11½ years	13 years	13 years
July 1, 1979, increases	19 years	20 years	20 years

^{*}It is recommended that the total employer rate payable for the 1983-84 fiscal year be set at 17.06 percent as part of the phase-in, which includes an additional rate of .06 percent on account of the implementation of the early retirement option during the period June 1, 1982, to August 31, 1982.

^{**}In accordance with the resolution adopted by the Retirement Board the increase above 15 percent is to be phased-in. The total employer rate payable for the 1982-83 fiscal year was set at 16 percent.

- 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, 1981 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, 1981

Group	Number	Annual Salaries
Included in Valuation:		
Men	75,758	\$1,373,383,141
Women	130,665	1,623,276,796
Total	206,423	\$2,996,659,937
Total to Which Adjusted	214,438	\$3,152,967,000

In addition to the above 24,145 inactive members and vestees were included in the valuation.

 ${\it Table\ IV}$ Annuitants and Survivor Annuitants of the System On June 30, 1981

CI	N1		ıual
Class	Number	Anni	uities
Retired on account of superannuation			
and those in receipt of withdrawal annuities:			
Men	17,666	@ 1:12	164,698
Women	44,223	-	176,816
women			
Total	61,889	\$4 00,	341,514
Retired on account of disability:			
Men	1,046	\$ 5,	118,340
Women	1,847	8,	110,287
Total	2,893	\$ 13,	228,627
Survivor annuitants in receipt of			
benefits:			
Men	405	\$ 1,	104,720
Women	2,259	6,	336,247
Total	2,664	\$ 7,	440,967
Annuities in lieu of return of			
accumulated deductions:			
Men	0	\$	0
Women	4	\$	507
Total	4	\$	507
Grand Total	67,450	\$4 21,	011,615

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 Employes' Retirement System of Pennsylvania as well as the funds in hand and shows the financial condition of the System as of June 30, 1981. 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:

	Amount Receivable
	As of Valuation Date
Members	\$ 26,543,527
School Districts	89,813,712
Commonwealth	
Principal amount	106,392,000
Interest	69,818,802*
Grand Total	\$292,568,041

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

Table V

Valuation Balance Sheet Showing Financial Condition As Of June 30, 1981 (amounts in thousands)

Assets

Present assets:			
Members' Savings Account		\$1,717,739	
Annuity Reserve Account			
(including Supplemental			
Retirement Allowance			
Account):			
Credited to account	\$2,463,545		
Add amount transferable from			
State Accumulation Account	262,235	2,725,780	
State Accumulation Account:			
Credited to account	\$ 1,217,726		
Subtract amount transferable			
to Annuity Reserve Account	262,235	955,491	
Total Present Assets			\$ 5,399,010
Present value of future con-			
tributions by members			2,092,567
Present value of prospective			
contributions payable to State			
Accumulation Account:			
Normal contributions		\$3,551,526	
Accrued liability contributions		4,086,735	
Total prospective contribu-			
tions payable to State			
Accumulation Account			7,638,261
Present value of prospective			
accrued liability contributions			
payable to the Annuity Reserve			
Account on account of supple-			
mental annuities			1,150,445
Total Assets			\$ 16,280,283

$Table\ V$

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Valuation Balance Sheet Showing Financial Condition of As Of June 30, 1981 (amounts in thousands)

Liabilities	
Present value of benefits on account of past and future contributions by members to	
the Members' Savings Account	\$ 3,810,306
Present value of annuities now payable to annuitants and survivor annuitants from	
the Annuity Reserve Account	3,876,225
Present value of prospective annuities payable to members or their beneficiaries	
from reserves created in the state Accumulation Account as the result of contribu-	
tions payable by the State and School Districts	8,593,752

Total Liabilities \$16,280,283

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, 1981, are equal to \$1,717,739,000 and that future contributions by members have a present value of \$2,092,567,000. The total past and future contributions of members therefore have a present value of \$3,810,306,000. 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 \$3,876,225,000 as of June 30, 1981, and the assets, after taking into account the amount transferable from the State Accumulation Account, were equal to \$2,725,780,000. The difference between the liabilities and present assets, of \$1,150,445,000, 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 \$501,478,000 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 11½ years. The liability on account of the increases in annuities effective as of July 1, 1979, is to be funded by annual payments of 1.69 percent of the payroll over the balance of the 20-year period commencing July 1, 1980, or 19 years.

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 \$8,593,752,000 and the assets, after taking into account the amounts transferable from the account, are \$955,491,000 as of June 30, 1981. Therefore, to balance the uncovered liabilities, future contributions are payable by the State and school districts having a value equal to \$7,638,261,000.

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 set at 8.75 percent of compensation on the basis of the revised assumptions. Future normal contributions at a rate of 8.75 percent have a present value of \$3,551,526,000. If this amount is subtracted from \$7,638,261,000, the present value of future contributions payable by the employer, there remains \$4,086,735,000 as the present value of accrued liability contributions. Of this amount, \$611,110,000 is the unfunded portion of the increase in past service liability on account of the passage of Act 96. It is recommended that contributions of .96 percent of payroll be made, with each payment 4 percent greater than the previous one. On this basis the unfunded liability will be liquidated in about $24\frac{1}{2}$ years from the valuation date.

The remainder of the unfunded accrued liability, or \$3,475,625,000, is attributable to the System prior to the passage of Act 96. It is recommended that accrued liability contributions be made at the rate of 6.03 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 \$3,475,625,000 in about 22 years from June 30, 1981, which compares with an expected period of 21 years as determined in the previous valuation.

The total accrued liability rate is therefore equal to 6.99 percent of payroll.

The total contribution rate payable to the State Accumulation Account is therefore equal to 15.74 percent of payroll.

Section V — Rate of Contribution Payable by Employers

On the basis of the valuation the total contribution rate payable by employers is 18.98 percent exclusive of the rate payable on account of the early retirement window effective June 1, 1982, through August 31, 1982. In accordance with the resolution by the Board that the increase in rate of 3.98 percent of payroll resulting from the use of revised actuarial assumptions be phased in over a period of years it is recommended that for the year commencing July 1, 1983, the employer contribution rate be set at 17 percent of payroll exclusive of the rate payable for the early retirement window. The early retirement window will add .06 percent of payroll to this rate resulting in a total employer rate of 17.06 percent for the year commencing July 1, 1983.

Section VI — Comments on Experience

Revised rates of separation and mortality tables for service retirements and beneficiaries were adopted on the basis of the experience investigation for the five-year period ended June 30, 1980. Since the increase in rate resulting from the use of the revised assumptions is being phased in over a period of years it is expected that the liquidation periods of the unfunded accrued liability will increase somewhat since full contributions will not be paid until probably the 1985-86 fiscal year. On the basis of the June 30, 1981, valuation the periods of liquidation of the unfunded accrued liabilities of the State Accumulation Account increased somewhat.

A comparison of the results of this valuation with the projections prepared on the basis of the June 30, 1977, valuation is not valid at this time since the actuarial assumptions were changed.

The unfunded accrued liability of \$2,571.5 million shown on the June 30, 1980, report increased \$1,171.5 million as of that date on account of the change in assumptions. A rough reconciliation of the increase in the unfunded accrued liability on account of the experience during the valuation year is as follows:

Table VI
Reconciliation of Unfunded Accrued Liability

State Accumulation Account	In Millions of Dollars
(1) Unfunded accrued liability 6/30/80 before change in actuarial as-	or Doming
sumptions	\$2,571.5
(2) Increase in unfunded accrued liability on account of change in actuari-	
al assumptions	1,171.5
(3) Unfunded accrued liability 6/30/80 after change in actuarial assump-	·
tions = (1) + (2)	3,743.0
(4) Interest at $5\frac{1}{2}$ percent for one year	205.9
(5) Accrued liability contribution with ½ year interest	119.1
(6) Expected unfunded accrued liability $6/30/81 = (3) + (4) - (5)$	3,829.8
(7) Actual unfunded accrued liability 6/30/81	4,086.7
(8) Increase above expected	256.9
(9) Explanation of increase:	
(a) Pensioners' mortality experience	\$ 6.1
(b) Interest surplus	-75.8
(c) Experience among active members	
(i) Salary increases above expected \$28	3.8
(ii) New Members -	3
(iii) Retirements and other separations3	326.6
Total	\$256.9

SCHEDULE A

Outline of Actuarial Assumptions and Methods

INTEREST RATE: 51/2 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:

ANNUAL RATE OF:

	·				& Early ement	Super- Annuation	Salary
				Less Than 25 Yrs. of	25 or More Yrs. of	Retirement	Increase
Age	Withdrawal	Death	Disability	Service MEN	Service		
25	7.70%	.05%	.01%	1.52%			6.99%
30	5.40	.06	.01	1.52			6.32
35	4.52	.06	.02	1.47			5.23
40	4.03	.10	.08	1.10	.12%		4.14
45	3.73	.19	.15	1.00	.14		3.27
50	3.52	.33	.34	1.30	.27	21.00%	2.60
55	3.40	.52	.65	2.30	3.00	15.90	2.13
60	3.36	.72	1.34	3.26	3.60	16.30	1.91
65		.92				35.80	1.90
69		1.08				15.00	1.89
				WOMEN			
25	8.30%	.03%	.01%	7.20%			6.99%
30	7.52	.03	.02	4.40			6.32
35	6.60	.04	.05	2.10			5.23
40	5.52	.06	.07	1.40	1.20%		4.14
45	4.75	.11	.10	1.50	1.20		3.27
50	4.28	.16	.23	2.05	.78	20.80%	2.60
55	4.00	.20	.45	3.00	4.25	14.30	2.13
60	3.95	.25	.79	5.15	7.00	19.35	1.91
65		.34				32.65	1.90
69		.42				22.00	1.89

DEATH AFTER RETIREMENT: 1979 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 employes 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 multi-

plied 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 by 1/4 percent for each month by which withdrawal precedes the aforementioned superannuation age.

A member who had attained age 55 and completed 25 years of credited service was eligible to retire during the period June 1, 1982, through August 31, 1982, with no reduction in his immediate annuity.

A member who had attained age 50, but not age 55, and completed 25 years of credited serv-

ice, was eligible to retire during the period June 1, 1982, through August 31, 1982, and receive an immediate annuity with a reduction of 1/4 percent for each month by which his retirement preceded age 55.

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 33½ 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 5½ 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 cover-

age 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.

Detailed Tabulations of the Data Schedule C

Table 1

The Number and Annual Salaries of Members in Active Service Distributed by Age as of June 30, 1981

Men			Women		
Age	Number	Amount	Number	Amount	
17	3	\$16,847	1	\$2,194	
18	19	39,609	17	49,741	
19	74	330,910	105	437,784	
20	147	860,296	183	980,905	
21	213	1,409,279	231	1,286,715	
22	266	1,948,321	416	2,481,477	
23	580	4,871,457	1,342	9,983,129	
24	814	7,852,060	2,005	18,185,538	
25	977	10,281,169	2,368	23,269,523	
26	1,113	12,359,115	2,629	27,995,016	
27	1,332	16,141,443	3,113	34,935,126	
28	1,589	20,263,457	3,696	43,858,663	
29	1,954	27,283,039	4,274	53,575,099	
30	2,345	34,374,633	4,749	62,017,425	
31	2,398	37,519,259	4,549	60,973,948	
32	2,733	44,166,317	4,403	60,061,247	
33	2,970	50,304,879	4,386	62,152,029	
34	3,614	64,786,213	4,864	68,342,225	
35	3,045	56,331,074	3,873	54,431,537	
36	2,529	48,428,496	3,178	43,974,585	
37	2,387	47,051,303	3,183	43,096,144	
38	2,554	51,370,513	3,535	45,984,460	
39	2,598	53,076,286	3,538	45,779,869	
40	2,031	41,406,582	3,302	40,802,410	
41	1,839	38,336,231	3,081	38,555,446	
4 2	1,674	34,300,707	3,045	37,146,795	
43	1,709	36,165,229	3,127	37,816,177	
44	1,708	36,388,312	3,010	35,609,810	
45	1,685	35,877,580	2,970	35,697,066	
4 6	1,595	33,678,411	2,969	34,621,191	
47	1,591	33,449,063	2,836	34,423,563	
48	1,645	34,606,383	2,734	33,120,325	
49	1,682	35,875,546	2,997	36,953,635	
50	1,709	36,935,157	3,103	38,720,092	
51	1,671	35,299,171	3,078	38,708,242	
52	1,556	32,376,525	2,965	36,524,230	
53	1,621	33,257,381	3,190	39,918,151	
54	1,699	34,220,788	3,054	38,994,834	
55	1,599	32,577,059	2,889	37,054,323	
56	1,630	32,671,607	2,771	34,614,302	

Table 1—Continued

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The Number and Annual Salaries of Members in Active Service Distributed by Age as of June 30, 1981

Men			Women		
Age	Number	Amount	Number	Amount	
57	1,565	29,861,892	2,771	33,773,438	
58	1,468	27,589,828	2,505	30,601,791	
59	1,354	24,211,816	2,356	28,948,443	
60	1,235	21,497,974	2,388	29,427,534	
61	1,244	21,097,572	2,223	27,210,289	
62	978	16,664,039	1,736	21,925,261	
63	827	13,625,258	1,465	18,384,601	
64	675	10,468,614	1,136	14,083,152	
65	513	7,922,674	894	10,788,444	
66	345	4,832,676	552	6,597,678	
67	217	3,120,114	424	4,495,521	
68	142	1,595,729	203	2,185,670	
69	90	878,143	106	873,878	
70	71	604,141	60	364,246	
71	40	250,904	26	162,365	
72	31	252,667	15	67,459	
73	25	159,701	14	54,397	
74	18	112,598	19	95,983	
75	11	67,936	7	39,191	
76	11	81,158	6	62,484	
Total	75,758	\$1,373,383,141	130,665	\$1,623,276,796	

Table 2 The Number and Annual Salaries of Members in Active Service Distributed by Years of Credited Service As of June 30, 1981

Years of	Men			
Service	Number	Amount	Number	Amount
0	961	\$3,398,193	2,300	\$7,536,003
1	3,893	30,952,737	10,740	62,301,339
2	3,514	38,736,864	10,713	82,275,067
3	3,157	37,255,920	10,081	80,191,803
4	2,883	36,337,266	8,860	78,039,545
5	3,009	41,134,474	8,084	83,313,421
6	2,968	43,971,364	7,083	80,570,941
7	3,659	57,363,618	7,813	95,413,652
8	3,718	61,262,186	7,322	95,219,027

Table 2—Continued

The Number and Annual Salaries of Members in Active Service Distributed by Years of Credited Service As of June 30, 1981

Years of	N	Ten	Wo	omen
Service	Number	Amount	Number	Amount
9	3,796	64,554,686	7,028	95,551,397
10	3,351	58,381,890	6,183	87,105,574
11	3,574	66,525,775	6,031	92,988,615
12	3,596	69,773,451	5,199	81,127,102
13	3,450	67,670,730	4,469	70,386,000
14	3,189	65,303,351	4,313	68,070,507
15	2,746	57,043,734	3,901	64,421,214
16	2,341	50,001,738	2,715	47,769,126
17	2,075	45,679,495	2,180	38,993,310
18	1,923	42,288,903	2,045	36,977,454
19	1,679	37,429,655	1,802	33,757,946
20	1,598	36,125,522	1,472	28,389,894
21	1,509	34,597,032	1,449	27,412,043
22	1,494	35,030,181	1,219	23,760,956
23	1,404	32,852,204	1,103	21,477,658
24	1,302	30,972,631	994	20,067,298
25	1,203	28,583,966	850	17,526,388
26	1,096	26,558,350	726	14,835,087
27	912	23,020,982	574	12,406,054
28	872	21,823,013	538	11,766,951
29	725	18,478,485	428	9,410,748
30	695	17,608,326	405	8,956,855
31	668	17,400,323	332	7,318,785
32	623	16,418,849	315	6,991,861
33	557	14,728,925	251	5,591,424
34	479	12,602,228	210	4,626,265
35	374	10,165,376	195	4,322,621
36	240	6,545,646	147	3,338,332
37	179	4,935,513	127	2,806,968
38	129	3,594,126	108	2,402,927
39	91	2,521,639	111	2,347,360
40	51	1,495,240	82	1,843,630
41	22	654,731	59	1,360,707
42	15	472,123	36	815,825
43	13	364,177	22	463,437
44	11	331,249	13	269,851
45	7	216,034	17	333,939
46	1	39,709	10	216,160
4 7	6	180,531	2	48,236

Table 2—Continued

The Number and Annual Salaries of Members in Active Service Distributed by Years of Credited Service As of June 30, 1981

₹.

	1 2.2	As of June $30, 1$	901	Women
		Men		Amount
Years of Service	Number	Amount	Number 6 1	113,956 26,318 19,219
48 49 50	75,758	\$1,373,383,141	130,665	\$1,623,276,796
Total	• • • • • • • • • • • • • • • • • • • •			

Table 3 The Number and Annual Annuities of Annuitants on the Retired List as of June 30, 1981 Classified by Age

Retired on Account of Superannuation and Those in Receipt of Withdrawal Annuities

	Retired on Rece	eipt of Withdrawa	d Annulues Women	
	I nose in reco	~- <u>1</u>	., 0.,	Total
	Men	Total	. 1	Annuities
		Annuities	Number	\$610
. Nu	nber		the second secon	1.612
ASC	citarentiare in the relation of the contract of the same	Q1 950		2.636.
	3	Marie Company of the	territorio de la companya de la comp Companya de la companya de la compa	
30		A CONTRACTOR OF THE PARTY OF TH	51	11.592
31 Charles Marie	Section of the sectio	Service Company	25 miles of the second	26.984
324			51	46,461
334454	66	28,344	84	45,079
34	77	37,500	74	40,826
35	77	41,160	68	37,849
36		40,111	54	31,040
37	79	52,205	60	27/0103
90	75	52,406	できていまった。 といれば、これが、これは、これに、これには、これには、これには、これには、これには、これには、こ	in a construction of the second second
20 - American		-31,803	20	32539
40	AND THE PARTY OF T	41.312	THE PROPERTY OF THE PARTY OF TH	38.704
THE PARTY OF THE P	Alleria estado	35 084	93	22,509
A CHARLES	365	41.273	30	33,977
10.00	37: 1	40,975		40,875
Mile Mile Comment of the Comment of	34	55,329	32	48,496
44	42	47,556	35	26,881
45	30	61,523	30	59,885
46	39		43	65,347
47	22	52,758	34	•
48	28	49,313		
49				

Table 3—Continued

The Number and Annual Annuities of Annuitants on the Retired List as of June 30, 1981 Classified by Age

Retired on Account of Superannuation and Those in Receipt of Withdrawal Annuities

		len	Wo	omen
	•	Total		Total
Age	Number	Annuities	Number	Annuities
50	29	70,489	60	102,801
51	25 25	73,495	78	99,436
52	$\frac{26}{34}$	92,095	72	120,026
53	37	128,358	73	129,649
54	43	131,644	81	223,959
55	40	189,723	108	282,659
56	80	645,546	125	440,412
57	93	853,328	169	869,968
58	108	949,638	234	1,255,760
59	147	1,389,086	293	1,577,685
60	169	1,797,054	382	2,456,312
6l	234	2,468,605	474	3,078,476
62	220	2,004,344	580	3,690,120
63	555	4,216,271	1,222	7,188,151
64	671	4,771,162	1,437	8,352,490
65	778	5,225,895	1,567	9,067,428
66	955	5,806,302	1,861	10,832,014
67	1,062	6,291,346	2,160	12,937,459
68	1,117	6,999,481	2,242	13,897,106
69	1,088	6,331,926	2,430	15,888,338
70	1,033	6,231,432	2,404	16,252,495
71	961	6,372,176	2,550	17,601,388
72	965	6,338,743	2,506	17,970,456
73	933	6,255,854	2,671	19,704,104
74	829	5,837,073	2,480	18,088,465
75	730	4,961,332	2,246	16,242,917
76	659	4,526,556	1,990	14,120,187
77	592	4,091,719	1,672	11,815,938
78	471	3,069,497	1,476	10,280,060
79	402	2,855,625	1,271	8,792,101
80	311	1,947,284	1,002	6,711,565
81	250	1,538,778	922	6,225,523
82	245	1,639,135	72 4	4,916,475
83	189	1,176,715	670	4,398,797
03 84	162	1,027,554	605	4,018,748
85	117	788,603	557	3,719,031
	128	849,994	439	2,827,201
86	120	047,774	407	2,021,201

Table 3—Continued

The Number and Annual Annuities of Annuitants on the Retired List as of June 30, 1981 Classified by Age

¥€

Retired on Account of Superannuation and Those in Receipt of Withdrawal Annuities

	N	len	Wo	men
		Total		Total
Age	Number	Annuities	Number	Annuities
87 # 88 89	$\begin{array}{c} 93 \\ 68 \\ 47 \end{array}$	617,050 475,066 340,814	$\begin{array}{c} 385 \\ 287 \\ 222 \end{array}$	2.525.778 11.832.857 1.451.807
90	50	315,732	188	1,198,734
91	44	284,283	152	941,185
92	25	122,501	88	556,252
93 -94 -95	$\begin{array}{c} 24\\11\\ 9\end{array}$	1/44/355 68.54ll 56.086	86 51 37	560,422 311,908 239,043
96	7	33,973	33	213,456
97	4	20,764	21	133,048
98	3	13,828	25	168,135
100 101			18 5	1037893 314307 36970
103	l	7,987		
104			2	15,372
105			1	7,084
Total	17,666	\$113,164,698	44,223	\$287,176,816

Summary				
No Option	9,229	\$48,451,298	37,168	\$241,702,213
Option 1	2,297	14,702,400	4,069	24,655,246
Option 2	1,931	9,722,407	1,098	6,060,866
Option 3	3,942	36,950,152	1,771	13,756,294
Option 4	267	3,338,441	117	1,002,197

Table 4
The Number and Annual Annuities of Survivor Annuitants as of June 30, 1981
Classified by Age

Men			Women		
			Total		Total
	Age	Number	Annuities	Number	Annuities
			- · · ·	1	\$1, 593
ļ	9			2	1,629
ì	11			ī	1,311
	13			1	600
1	15			1	208
	22			Ì	2,405
	29	1	\$4,876		,
	31	•	+ 1, 0 1 0	1	733
	33	1 .	4,776	$\overline{2}$	4,257
	36	ī	600	2	3,758
i —	38	· · · · · · · · · · · · · · · · · · ·	791	1	1,841
1	39	$\frac{1}{2}$	6,103	ì	537
!	40	_ 	517	_	
;	41	ī	1,090	3	3,274
:	42	1	2,089		13,430
	43		2,865	2	2,304
	44	_	2,000	$\frac{1}{2}$	7,021
	45	2	3,511	3	10,951
	46•	1	2,423	3	7,559
	47	3	4.560	$\frac{3}{2}$	5,742
	48			i i i v izī i i i i i i i i i i i i i i i i i i	396
1	49	2	1,332	5	10,382
1	50	ī	585	6	9,462
,	51	•	300	3	11,129
ì	52_	2	1,503	5	24,035
•-	53		1,995	11	35,312
	54	Ī	361	5	24,637
	55	$\overline{2}$	7,564	11	42,678
	56	$\frac{1}{2}$	1,492	8	25,236
	57	${\overset{-}{4}}$	10,814	12	44,870
; -	58	$\frac{1}{2}$	8,637	12	35,335
1	59		3,598	20	74,997
	60	$\frac{2}{5}$	17,622	20	93,495
	61	6	14,944	27	96,919
i	62	1	2,587	25	65,755
•	63	2	3,159	43	194,197
	64	4	13,835	40	127,968
	65	4	7,355	44	150,372
	66	7	24,456	59	208,371
	67	9	39,046	69	212,901
	68	14	33,391	68	258,290
					• -

Table 4—Continued

The Number and Annual Annuities of Survivor Annuitants as of June 30, 1981 Classified by Age

¥

		М	en		men
			Total		Total
	Age	Number	Annuities	Number	Annuities
	69	14	64,428	83	281,369
1	70	14	51,524	94	300,939
;	71	15	42,117	86	264,043
	72	15	58,421	92	311,032
,	73	15	53,382	111	341,608
	74	17	60,009	96	321,490
	75	15	40,703	83	228,684
	76	13	31,739	113	296,341
	77	10	33,220	92	235,450
	78	24	54,989	79	201,553
į	79	9	17,054	91	229,368
•	80	12	20,199	83	184,827
	81	6	12,766	67	135,834
·	82	11	28,362	74	140,318
	83	9	8,010	53	102,010
_	84	8	29,399	60	115,200
	85	9	15,744	40	65,709
	86	12	12,676	39	67,119
	87	5	22,975	36	42,762
	88	4	5,609	31	44,381
	89	$\overline{6}$	9,685	24	32,269
1	90	6	8,161	19	25,150
+	91	5	5,588	15	20,441
	92	1	3,208	8	7,790
>	93	3	2,497	24	36,880
	94	3 Î	1,124	10	14,236
	95	1	881	6	5,385
	96	4	2,499	5	10,459
	97			1	359
	98	3	4,577	6	4,569
	99 * .	- 1989		2	2,037
,	100	2	1,326	1	2,317
ı	102		•	3	1,929
	103	l	625	2	5,264
	104			1	1,200
	105		60		
To	otal	360	\$932,034	2,154	\$ 5,896,212

Table 5 The Number and Annual Annuities of Survivor Annuitants as of June 30, 1981 Classified by Years of Unexpired Period

]	Men	Women	Women	
		Total		Total	
Years	Number	Annuities	Number	Annuities	
6			2	\$3,261	
7	1	\$6,107	. 2	3,258	
9	l	5,382	4	8,602	
10	, 3	6,960	4	12,689	
ľľ	1 "	5.75	7	13,608	
12	3	13,817	10, 40	*25 ;381	
2 13	5	25,804	The second secon	36,883	
14	2_{c}	₃ 3 ;52्य _ः	9 garage	37,723	
15	4	14,420	,	79,069	
16	6	18,629	. 1 1	42,688	
17	5	17,683	8	48,807	
18	5	20,080	12	64,499	
19	7	27,730	8	59,733	
20	2	11,972	1	3,834	
Total	45	\$172,686	105	\$44 0,035	

Table 6 The Number and Annual Annuities

of Annuitants on the Retired List as of June 30, 1981 Classified by Age

Retired on Account of Disability Men

	Men	1	Women	1
		Total		Total
Age	Number	Annuities	Number	Annuities
29	1	\$ 4,286		
30	1	3,662	2	\$8,580
31			1	3,993
32	1	4,293	2	7,359
33			A Section of	20,336
34		3,646	4	17,198
35	2	6,561	6	26,802
**************************************	2:	13,289	9"	42,791
37	2	11,414	5	30,651
38	5	25,896	5	23,102
39	5	23,839	7	35,113
40	2	10,040	7	35,808

Table 6—Continued

The Number and Annual Annuities of Annuitants on the Retired List as of June 30, 1981 Classified by Age

1

Retired on Account of Disability

	M	en	Women		
	141	Total	***************************************	Total	
Age	Number	Annuities	Number	Annuities	
			5		
41	4	21,792		26,665	
42	5	22,329	6	23,190	
43	2	15,536	6	31,682	
44	9	44,186	9	45,861	
45	12	65,860	8	33,454	
46	13	56,559	12	51,235	
47	14	89,694	13	59,881	
48	14	80,789	10	52,990	
4 9	16	90,838	14	86,616	
50	13	87,825	27	128,189	
51	19	108,702	21	89,141	
52	28	202,395	27	124,589	
53	36	212,212	39	163,118	
54	32	209,905	26	125,574	
55	29	153,730	42	240,508	
56	53	276,317	50	252,826	
57	49	264,608	61	275,494	
58	32	185,735	63	291,075	
59	60	331,994	92	403,652	
60	51	290,062	84	363,190	
61	63	293,171	97	447,447	
62	79	372,932	97	386,663	
63	62	230,945	95	427,938	
64	62	267,625	91	382,953	
65	52	206,350	77	318,181	
66	37	143,477	92	390,122	
67	38	180,416	74	286,916	
68	26	99,093	83	398,745	
69	14	47,758	40	201,478	
70	24	83,472	42	196,442	
71	18	71,189	51	221,154	
72	12	45,477	38	159,539	
73	9	29,357	51	200,430	
74	8	30,339	47	198,398	
75	3	8,826	29	117,054	
76	5	14,516	24	98,695	
77	v	**,0*0	16	56,723	
78	5	15,758	24	80,964	
10	J	10,100	- •	00,201	

Table 6—Continued

The Number and Annual Annuities of Annuitants on the Retired List as of June 30, 1981 Classified by Age

Retired on Account of Disability

	M	len	Wor	Women	
,		Total		Total	
$\mathbf{A}\mathbf{g}\mathbf{e}$	Number	Annuities	Number	Annuities	
79		2015	2	80308	
480	2-2	7.881	12	39,870	
81-	-2	8.475	8	24,643	
82	3 - 3	310.324	-10	33 892	
83	XXX and XXXXIII Y YXX "		7	24,056	
84	3	10,870	4	11,461	
85			7	32,250	
86			8	31,767	
87	1	4,683	6	26,345	
88		3.207	4	14,078	
289	And the second		4	14,697	
Works 90		4,598	A CONTRACTOR OF THE PROPERTY O	213,557.	
			3 He	13,522	
92			4	15,387	
93			1	6,109	
94			1	4,837	
95	1	2,724	2	6,017	
96		_	1	6,301	
7.307				5.075	
×*************************************	Transaction of the Contract of			4,257	
**************************************	A PART OF THE PROPERTY OF THE PART OF THE			6;244	
100	To a Paris Military on	The state of the s		5,109	
Total	1,046	\$5,118,340	1,847	\$8,110,287	

Summary						
No Option	809	\$3,895,157	1,749	\$7,597,614		
Option 1	33	164,504	38	179,889		
Option 2	140	682,667	40	212,010		
Option 3	64	376,012	20	120,774		

Table 7

The Number and Annual Annuities of Annuitants on the Retired List as of June 30, 1981 Classified by Age

I.

Receiving Annuities at Withdrawal

	M	en	Wo	men
		Total		Total
Age	Number	Annuities	Number	Annuities
71			1	\$ 39
83			1	95
88			1	75
94			1	298
Total			4	\$507

Development of the Unfunded Accrued Liability Using the Net Reserves of the System

	In Billions
Financial Reserves Available for:	
The first obligation against the net assets to be considered is the active contributing members' accumulated contributions with 4 percent interest added. The next obligation against the net assets is future annuities payable to the present	\$ 1.718
retirees developed by using actuarial projections based on life expectancies of the re-	0.70(
tirees, earnings of the fund, and what would be owed to their beneficiaries.	2.726
Balance of the net assets available for current contributing members retiring in the future.	.885
A. Total Money in Reserves	\$ 5.329
Liabilities on account of:	
Present value of past contributions by members.	\$ 1.718
Present value of future contributions by members.	2.092
Present value of annuities payable to present retirees, beneficiaries and their sur-	
vivors.	3.876
Present value of annuities that will be required from the State and school districts to	
pay annuities to active contributing members when they retire.	8.594
B. Total Liabilities	\$16.280
Uncovered Liabilities (A-B):	\$10.951
Less: Money planned to be received for service rendered after June 30, 1981	
By contributing members	2.092
By State and school districts.	3.552
C. Total to be received from members, State and school districts.	\$ 5.644
D. Net Uncovered Liabilities (B-C)	\$ 5.307
Less: Interest on Commonwealth deficit not counted in the financial reserves.	.070
Unfunded Accrued Liabilities	\$ 5.237

Statistical Section

REVENUES BY SOURCE

Ten Years

Fiscal Year	Members Contributions	Employers Contributions	Investment Income	Other Income	Total Revenue
	(000)	(000)	(000)	(000)	(000)
1982	\$180,562	\$501,025	\$435,888	_	\$1,117,475
1981	175,306	478,859	351,220	_	1,005,385
1980	161,330	396,839	307,216		865,385
1979	148,644	379,056	255,636	-	783,336
1978	143,089	345,205	224,246	\$ 4,588	717,128
1977	147,760	328,984	216,265	1,519	694,528
1976	130,962	257,671	192,509	1,299	582,441
1975	109,876	285,355	179,738	1,417	576,386
1974	102,990	201,951	158,725	1,131	464,797
1973	95,482	178,834	170,354		444,670

EXPENSES BY TYPE Ten Years

Fiscal	Benefits	Refunds	Disabilities	Lump Sum	Administrative	Other	Total
Year	Paid	Paid	Paid	Payments	Expense	Payments	Expense
	(000)	(000)	(000)	(000)	(000)	(000)	(000)
1982	\$450,863	\$19,206	\$18,795	\$53,199	\$ 5,892	\$ 5,052	\$553,007
1981	435,498	18,216	13,817	43,021	5,130	7,000	522,682
1980	417,782	18,503	13,891	27,865	3,504	5,886	487,431
1979	333,989	18,957	9,663	28,026	3,441	5,920	399,996
1978	309,474	17,845	8,770	15,934	3,259	11,370	366,652
1977	299,499	15,322	7,832	10,713	2,850	9,059	345,275
1976	316,462	12,212	6,395	190	2,708	18,385	356,352
1975	229,333	13,990	5,253	_	1,942	1,118	251,636
1974	210,635	14,450	5,988	_	1,642	2,245	234,960
1973	194,505	12,819	3,667	_	1,229	1,939	214,159

AVERAGE BENEFIT PAYMENT

Last Five Years

		Lust				
	Superannuations		Disability		Withdrawals	
Fiscal Year		Average		Average		Average
Ending	Members	Payment	Members	Payment	Members	Payment
1982	58,273	\$ 6,631.36	3,153	\$5,960.99	7,801	\$4,484.43
1981	56,523	6,666.30	2,893	4,631.91	8,034	4,060.24
1980	54,876	6,724.60	2,770	5,014.80	6,526	4,030.19
1979	53,353	5,467.79	2,534	3,813.34	5,174	3,910.32
1978	51,247	5,456.52	2,383	3,680.24	4,048	4,059.04

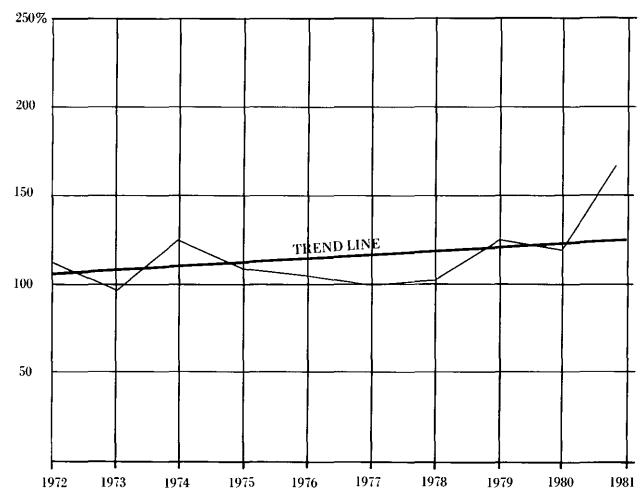
FUNDING RATIO

Ten Years

	A	В	C	D
Fiscal	Net	Actuarial	Reserve	Funding
Year	Assets	Liability	Requirements	Ratio
		•	(A+B)	$(\mathbf{A} \div \mathbf{C})$
80/81	\$ 5,329,191,040	\$5,237,200,000	\$10,566,391,040	50.44%
79/80	4,846,487,728	3,762,533,000	8,609,020,728	56.30
78/79	4,468,533,935	3,518,955,000	7,987,488,935	55.94
77/78	4,085,193,326	2,786,981,000	6,872,174,326	59.45
76/77	3,734,717,447	2,556,078,157	6,290,795,604	59.37
75/76	3,385,464,774	2,394,463,697	5,779,928,471	58.57
74/75	3,159,376,063	2,280,016,562	5,439,392,625	58.08
73/74	2,834,625,640	2,331,662,102	5,166,287,742	54.87
72/73	2,604,788,656	1,656,635,207	4,261,423,863	61.12
71/72	2,374,277,884	1,720,329,116	4,094,607,000	57.99

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RATIO OF UNFUNDED ACCRUED LIABILITIES TO ACTIVE MEMBERS' PAYROLL



The above method tracks the unfunded accrued liability in relationship to the total wages paid annually to the active members of this System. The ratio will increase for every increase in benefits to be paid at some future time when the active members retire, or, for benefit increases accruing to the retired members in the future; and, the wages do not increase proportionately in support of the benefits accruing.

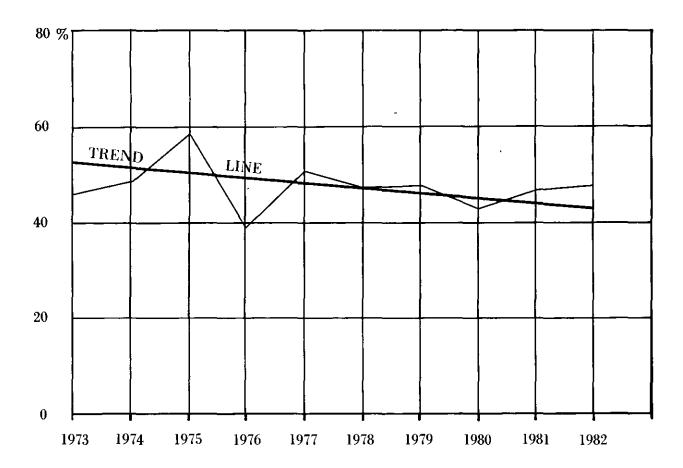
Using 1972 as a base, the annual payroll has increased 2.0 times, 1981 over 1973, whereas, the unfunded accrued liability has increased 3.0 times, 1981 over 1973. The unfunded accrued liability is increasing at a faster rate than the annual payroll, the common denominator upon which contributions to the System are based for funding this liability.

The unfunded accrued liability index peaked in 1981 as the result of the unfavorable five-year experience, 1975 to 1980, under a set of actuarial assumptions that had to be adjusted for separations due to withdrawals, death, disability, and service retirement. The actual rates of salary increases during the five year period covered were in excess of the expected increases to be granted. The actuarial assumptions for the ensuing five-year period were also adjusted to reflect the 1975 to 1980 experience. The anticipated funding plan projects increases in the employer rate to bring funding to a level to meet these obligations over approximately five years.

The 25-year projection has the unfunded accrued liability increasing until the year 1993 in a 7 percent inflation environment with benefits at current levels. After 1993, the unfunded liability is projected to decrease to a minor amount in the year 2001.

RATIO OF NET RECEIPTS RETAINED TO TOTAL RECEIPTS

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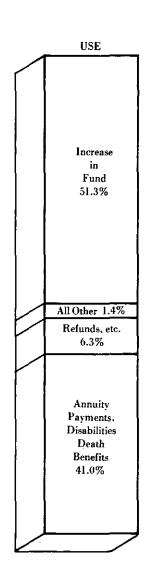


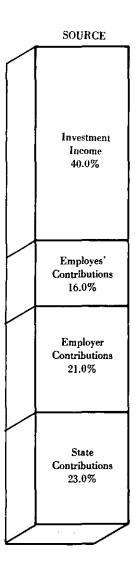
It is important that a net receipt position be held in order to fund the unfunded accrued liabilities of this System. If disbursements continue to increase at a rate commensurate with the ten-year period used in this chart, through liberalization of benefits with increases in the unfunded accrued liabilities,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

It is contemplated, however, that the recently passed legislation permitting investments in areas of opportunity heretofore denied the System will assist in keeping the employer rate reasonable.

CASH FLOW FISCAL YEAR 1981-82

Receipts	Millions
State Contributions	\$ 265.0
Reporting Unit Contributions	242.2
Employees' Contributions	171.5
Installment Purchase of	
Service, etc.	13.0
Investment Income	459.1
Total	\$1,150.8
Disbursements	
Annuity Payments,	
Disabilities, Death	
Benefits	\$ 472.2
Refunds and Option 4	72.0
Transfers	7.0
Administrative Expenses	6.1
Service Fees, Investment	
Expenses Paid	2.9
Total	\$ 560.2
Increase in Fund (Cash basis)	\$ 590.6

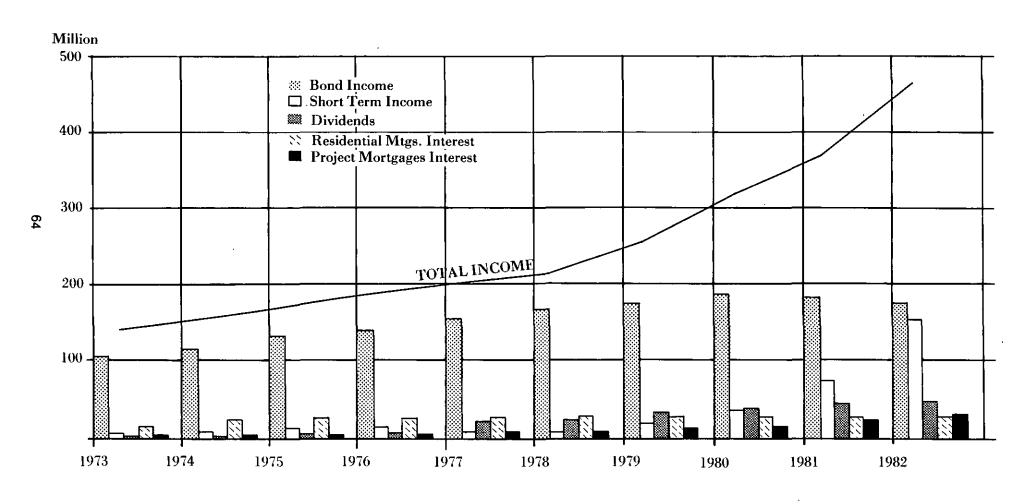




Investment Portfolio Section

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INCOME BY SOURCE Ten Years



	DESCRIPTION	NO. OF SHARES	BOOK VALUE	MARKET VALUE
		tions along cours could could cold cold cold cold to the land cold cold cold cold cold cold cold col	net anne 1900 1900 1900 1900 1900 1900 1900 190	
	COMMON STOCK			
	ABBOTT LABORATORIES	500,000.00	9,108,425.00	14,312,500.0
	AIR PRODUCTS & CHEMICALS	625,000.00	18,373,594.14	18,984,375.0
	ALUMINUM CO OF AMERICA	675,000.00	18,435,236.50	15,356,250.0
	AMERICAN HOME PRODUCTS	628,100.00	19,125,638,62	23,789,287.5
	AMERICAN HOSPITAL SUPPLY	350,000.00	11,803,116.50	15,487,500.0
	AMERICAN INTL GROUP	100,000.00	5,440,600.00	6,262,500.0
	AMERICAN TEL & TEL CO	550,000.00	31,050,861.32	28,050,000.0
	ATLANTIC RICHFIELD CO.	605,000.00	14,911,494.39	22,309,375.0
	BAKER INTERNATIONAL CORP	372,900.00	12,852,998.50	8,856,375.0
	BANDAG INC	45,000.00	1,098,600.00	1,125,000.0
	BEATRICE FOODS CO	452,900.00	11,249,030.00	8,774,937.5
	BLACK AND DECKER	400,000.00	8,883,830.20	5,350,000.0
_	H & R BLOCK	45,000.00	1,629,837.50	1,260,000.0
9	BROWN-FORMAN "B"	50,000.00	1,501,020.00	1,743,750.0
	BRUSH WELLMAN	40,000.00	1,457,375.00	1,620,000.0
	BURNDY CORFORATION	55,000.00	1,003,100.00	1,024,375.0
	CIGNA (CONN GEN INS)	200,000.00	6,620,184.00	7,675,000.0
	CARPENTER TECHNOLOGY	10,000.00	346,400.00	352,500.0
	CATERPILLAR TRACTOR CO	318,150.00	15,607,499.60	11,811,318,7
	CHESEBROUGH-PONDS INC	684,100.00	17,029,808.43	22,233,250.0
	COCA COLA CO	200,000.00	8,955,699.18	6,750,000.0
	COOPER LABS	40,000.00	1,183,262.50	1,170,000.0
	CROWN CORK	35,000.00	946,075.00	831,250.0
	DEERE AND CO.	515,000.00	14,302,513.62	12,875,000.0
	DIGITAL EQUIPMENT CORP	60,000.00	5,173,725.00	4,192,500.0
	DR PEPPER CO	65,000.00	808,450.00	804,375.0
	DOW CHEMICAL CO	264,500.00	10,313,176.34	5,488,375.0
	DRESSER INDUSTRIES INC	771,600.00	15,452,269.93	13,792,350.0
	DUPONT DE NEMOURS (E I)	291,200.00	11,949,451.95	9,689,600.0
	DUN AND BRADSTREET CORPORATION	60,000.00	4,118,975.00	4,035,000.0
	EASTMAN KODAK CO	500,000.00	34,349,116.21	36,875,000.0
	EMERSON ELECTRIC CO	250,000.00	8,477,477.50	11,187,500.0
	EXXON CORP CAP - STD OIL	701,600.00	15,867,732.86	19,469,400.0
	FIRST BANK SYS INC CAP	110,600.00	4,741,687.50	3,276,525.0
	INTER-FIRST CORP	500,000.00	10,525,438.25	11,625,000.0
	FIRST INTERSTATE BANCORP	350,000.00	9,655,177.00	8,575,000.0

	DESCRIPTION	NO. OF SHARES	BOOK VALUE	MARKET VALUE
	COMMON STOCK			
	GANNETT CO	500,000.00	12,450,962.50	16,250,000.0
	GENERAL ELECTRIC CO	386,000.00	19,946,547,60	24,559,250.0
	GENERAL MOTORS CORP	248,400.00	12,994,476.40	11,084,850.0
	GEORGIA PACIFIC CORP	75,000.00	2,108,973.00	1,050,000.0
	GEOSOURCE INC	20,000.00	721,041.60	867,500.0
	GETTY OIL CO	150,000.00	7,739,712.50	7,462,500.0
	GIDDINGS & LEWIS	40,000.00	853,800.00	650,000.0
	GREAT LAKES CHEMICAL	20,000.00	699,175.00	617,500.0
	HALLIBURTON CO	250,000.00	7,696,414.96	7,031,250.0
	H J HEINZ CO	60,000.00	1,864,200.00	1,950,000.0
	HEWLETT PACKARD CO	645,200.00	13,178,616,48	27,421,000.0
	HILLENBRAND INDUSTRIES	70,000.00	1,641,350.00	1,767,500.0
	HOSPITAL CORP OF AMERICA	247,000.00	7,283,577.50	7,163,000.0
66	HUGHES TOOL CO	400,000.00	15,104,066.50	7,550,000.0
-	INGERSOLL RAND CO	57,300.00	4,100,258.50	2,578,500.0
	INTL BUS MACH CORP	475,000.00	31,149,856.10	28,796,875.0
	INTL FLAVORS & FRAG INC	555,212.00	12,915,330.44	11,520,649.0
	INTERNATIONAL MIN & CHEM CORP	275,000.00	9,335,112.50	7,287,500.0
	NOSNHOL & NOSNHOL	600,000.00	16,163,370.00	23,700,000.0
	KENNAMETAL INC	22,000.00	730,002.50	629,750.0
	KIMBERLY CLARK CO	375,000.00	16,525,362.50	22,546,875.0
	LEE ENTERPRISES	30,000.00	850,525.00	768,750.0
	LIBERTY NAT. INS. HOLDING CO.	50,033.00	1,592,793.55	1,138,250.7
	LILLY (ELI) & CO	100,000.00	5,078,555.00	5,725,000.0
	LONGS DRUG	55,000.00	1,547,262.50	1,608,750.0
	LORAL CORPORATION	15,000.00	402,900.00	491,250.0
	LUBRIZOL	450,000.00	14,103,187,50	8,887,500.0
	R H MACY & CO 'MERCK & CO	51,500.00	1,894,072.50	1,957,000.0
	MILTON BRADLEY	89,000.00	5,803,408.76	6,007,500.0
	MINNESOTA MINING AND MFG	55,000.00	1,094,662.50	1,017,500.0
	MONSANTO CO	410,000.00	22,134,554.13	21,832,500.0
		141,600.00	8,958,659.59	8,336,700.0
	FARKER-HANNIFIN CORP FENNY (J C) CO	35,000.00	658,350.00	595,000.0
		275,000.00	11,496,287,89	10,312,500.0
	PHIBRO (ENGELHARD MIN & CHEM)	275,000.00	9,890,979.04	6,393,750.0

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DESCRIPTION	NO. OF SHARES	BOOK VALUE	MARKET VALUE
COMMON STOCK	·		
PHILIP MORRIS INC	200,000.00	10,204,075.00	10,250,000.0
PHILLIPS PETROLEUM CO	491,800.00	15,044,112.50	14,631,050.0
PRENTICE-HALL INC	40,000.00	971,500.00	1,080,000.0
PROCTOR & GAMBLE & CO	350,000.00	28,343,267,11	29,050,000.0
RAYTHEON	400,000.00	16,223,497.50	14,350,000.0
ROLLINS INC	100,000.00	1,551,387.50	1,412,500.0
RUBBERMAID	15,000.00	544,300.00	592,500.0
SCOTTY\S INC	50,000.00	967,475.00	900,000.0
SMITHKLINE BECKMAN CORP	309,900.00	15,602,832.80	19,872,337.5
SNAP-ON TOOLS CORPORATION	50,000.00	954,887,50	1,206,250.0
SOUTHDOWN	15,000.00	562,637,50	592,500.0
SQUARE D CO	230,000.00	6,173,220,70	5,778,750.0
STANDARD OIL CO CALIFORNIA	375,000.00	7,420,284,00	11,343,750.0
STANDARD DIL CO IND	300,000.00	13,398,199.02	12,562,500.0
TENTRUNIX INC	200,000.00	10,002,038.00	10,975,000.0
TEXAS EASTERN CORP	140,000.00	6,692,850,00	6,755,000.0
TEXTRON INC	335,000.00	9,129,396,55	6,239,375.0
TIMES MIRROR CO	300,000.00	9,071,334,00	12,000,000.0
UNION CAMP CORP	356,600.00	19,336,000,00	15,422,950.0
UNION PACIFIC CORP	558,000.00	14,358,080.00	19,599,750.0
UNITED TECHNOLOGIES	59,000.00	2,108,220.00	2,315,750.0
UNITED TELECOMMUNICATIONS	411,700.00	7,520,258,00	6,998,900.0
WACHOVIA CORP	157,600.00	3,861,310.05	3,900,600.0 8,845,725.0
WEYERHAEUSER CO	348,600.00	11,433,530.82	8,845,725.0
WOODS PETROLEUM	15,000.00	314,262.50	300,000.0
TOTAL COMMON STOCK	24,732,095.00	856,846,238,14	871,466,805.9
PREFERRED STOCK			्रा । विद्वार ।
COOPER IND INC \$2.90 CON	120,000.00	4,749,812.50	4,020,000.0
WYRHS 2.80 CUM CON 1.2121	46,000.00	2,246,825.00	1,587,000.0
TOTAL PREFERRED STOCK	166,000.00	6,996,637.50	5,607,000.0

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DESCRIPTION	MATURITY DATE	INTRST RATE	PAR VALUE	BOOK Value	MARKET Value
MUNICIPALS					
CASS TWP SCHUYLKILL CO	2/01/83	2.000	5,000.00	5,000.00	4 • 6 8 1 • 2 0
CASS TWP SCHUYLKILL CO	2/01/84	2.000	5 • 0 0 0 • 0 0	5 • 000 • 00	4 • 2 4 6 • 0 0
CASS TWP SCHUYLKILL CO	2/01/85	2.000	5,000.00	5,000.00	3,859,70
CASS TWP SCHUYLKILL CO	2/01/86	2.000	5,000.00	5,000.00	3,516,90
CASS TWP SCHUYLKILL CO	2/01/87	2.000	5,000.00	5,000.00	3,212,65
CASS TWP SCHUYLKILL CO	2/01/88	2.000	5,000.00	5,000.00	2,928.10
CASS TWP SCHUYLKILL CO	2/01/89	2.000	5,000.00	5,000.00	2•672•25
CASS TWP SCHUYLKILL CO	2/01/90	2.000	5 + 0 9 0 + 0 0	5,000.00	2,442.70
CASS TWP SCHUYLKILL CO	2/01/91	2.000	8,000.00	8.000.00	3,579.36
MT CARMEL TWP NTHUMBERLAND	12/01/82	3.000	11.000.00	11.000.00	11,000.00
MT CARMEL TWP NTHUMBERLAND	12/01/83	3.000	10.000.00	10.000.00	8 • 8 9 4 • 0 0
TOTAL HUNICIPALS			69.000.00	69,000.00	51,032.86
CORPORATE - BANK					
INTER-AM DEV BANK	10/01/95	8 • 625	6.500.000.00	4.746.824.23	3,937,505.00
INTER-AM DEV BANK	7/15/01	8.750	7,500,000.00	5,325,943.96	4,343,625.00
INTER-AM DEV BANK	6/01/02	8.375	7,750,000.00	7,392,511.84	4,972,090.00
INTL BANK FOR R & D	2/01/90	4.500	19,234,000.00	17,165,751.72	10,496,763.16
INTL BANK FOR R & D	7/01/91	5.375	12,652,000.00	11,191,190.96	6,926,843,48
INTL BANK FOR R & D	4/01/92	5.375	11,400,000.00	9•756•907•54	6.019.314.00
INTL BANK FOR R & D	9/01/93	5.875	5,000,000.00	4,446,307.30	2.648.650.00
INTL BANK FOR R & D	3/15/94	6.500	5,000,000.00	4,988,816.98	2,749,800.00
INTL BANK FOR R & D	10/01/94	6.375	30.388.000.00	27,290,539.53	16,260,314.92
TOTAL CORPORATE - BANKS			105,424,000.00	92,304,794.06	58,354,905.56
CORPORATE - FINANCIAL					
AVCO FINANCIAL SERVICES INC	5/01/92	7.875	3.500.000.00	3, 253, 878, 65	2,108,750.00
AVCO FINANCIAL SERVICES INC	12/01/97	7.625	1.879.000.00	1.649.409.67	979.428.75
AVCO FINANCIAL SERVICES INC	10/01/98	9.375	3,500,000.00	3,493,629.42	2.086.875.00
AVCO FINANCIAL SERVICES INC	8/01/99	9.750	5 • 1 0 8 • 0 0 0 • 0 0	4,171,274.99	3.888.465.00
BANKERS TRUST NEW YORK CORP	1/15/99	8.125	13,050,000.00	11,802,797.58	7,438,500.00
BANKERS TRUST NEW YORK CORP	11/01/02	8.625	5,100,000.00	4,029,868.90	2,996,250.00
BENEFICIAL CORP	11/01/96	7.500	4 • 104 • 000 • 00	2,683,615.77	2.123.820.00
BENEFICIAL CORP	2/01/00	7.450	18,956,000.00	13,309,652.52	9.004.100.00
BENEFICIAL CORP	5/15/98	7.500	3,000,000.00	1,954,830.88	1,530,000.00
BENEFICIAL CORP	2/15/88	8.350	4,727,000.00	3,529,779.51	3,403,440.00

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	MATURITY	INTRST	PAR	B00K	MARKET
DESCRIPTION	DATE	RATE	VALUE	VALUE	MARKET Value
CORPORATE - FINANCIAL					
BENEFICIAL CORP	11/01/90	5.000	27 • 189 • 000 • 00	23,736,901.81	13,968,348.75
BENEFICIAL CORP	5/15/93	4.750	15,905,000.00	12,809,787.84	8,310,362.50
BORG WARNER ACCEP CORP	6/01/01	6.000	12,650,000.00	6,054,511.78	4,870,250.00
C I T FIN CORP	6/01/95	9.500	6.000.000.00	4,571,733.09	3,900,000.00
C I T FINANCIAL CORP	6/15/05	11.500	19,750,000.00	14,036,168.11	14,170,625.00
CHARTER N Y CO (IRVING BANK)	8/01/91	5.750	7,783,000.00	6,556,991.18	5,681,590.00
CHEMICAL BANK N Y TRUST CO	1/01/92	5.875	3,000,000.00	2,996,198.98	1.713.600.00
CITICORP	3/15/07	8.450	19,400,000.00	16,942,528.65	10,985,250.00
COMMERCIAL CREDIT CO	4/01/93	7.750	7,750,000.00	7,348,231.38	4,795,312.50
DEERE (JOHN) CREDIT CO	4/30/98	7.500	8,522,000.00	6,829,416.47	4,740,362.50
FIDELITY BANK CAP NOTES	9/01/92	6.125	5,578,000.00	5,195,760.34	3,883,682.50
FORD MOTOR CREDIT CO	11/15/91	7.500	4 • 600 • 000 • 00	4,204,695.30	2 • 484 • 000 • 00
FORD MOTOR CREDIT CO	4/01/99	8.700	8.000.000.00	7,892,021.93	4,060,000.00
FORD MOTOR CREDIT CO	7/15/93	7.875	13,832,000.00	13,448,960.29	7,175,350.00
FORD MOTOR CREDIT CO	1/15/01	9.750	12.750.000.00	12,695,751,43	7,203,750.00
FORD MOTOR CREDIT CO	6/01/01	9.125	25.100.000.00	24,698,087.57	13,334,375.00
FORD MOTOR CREDIT CO	3/15/87	9.750	2,625,000.00	2,230,561.63	1.873.593.75
FORD MOTOR CREDIT CO	3/15/04	9.850	15,500,000.00	15,500,000.00	8,350,625.00
FORD MOTOR CREDIT CO	6/15/89	9.450	7.000.000.00	5,223,780.66	4,830,000.00
GENERAL ELECTRIC CREDIT CORP	8/01/87	9.750	3 + 800 + 000 + 00	3,285,805.62	3,249,000.00
GENERAL ELECTRIC CREDIT CORP	9/15/91	13.625	5,000,000.00	4,520,765.00	4,750,000.00
GENERAL ELECTRIC CREDIT CORP	11/01/01	5.500	68,418,000.00	28,622,366.21	29,077,650.00
GENERAL MOTORS ACC CORP MED TERM	10/15/84	13.500	5,500,000.00	5,536,883.31	5,241,060.00
GENERAL MOTORS ACC CORP MED TERM	4/16/84	13.500	20,000,000.00	20,107,956.28	19,307,000.00
GENERAL MOTORS ACCEPTANCE CORP	8/01/88	6.250	2.000.000.00	1,459,695.07	1.327.500.00
GENERAL MOTORS ACCEPTANCE CORP	9/01/92	7.125	24,350,000.00	16,984,004.11	14,640,437.50
GENERAL MOTORS ACCEPTANCE CORP	11/01/98	7.850	4.500.000.00	2,596,498.71	2,475,000.00
GENERAL MOTORS ACCEPTANCE CORP	6/01/99	8.875	9,900,000.00	6,311,187.01	5,841,000.00
GENERAL MOTORS ACCEPTANCE CORP	10/15/96	8.125	9+125+000.00	6,119,793.49	5,589,062.50
GENERAL MOTORS ACCEPTANCE CORP	7/15/87	10.875	2,000,000.00	1,779,298.24	1.690.000.00
GENERAL MOTORS ACCEPTANCE CORP	10/15/82	14.250	8,500,000.00	8,481,687.28	8•459•370•00
GENERAL MOTORS ACCEPTANCE CORP	4/19/83	14.250	7,750,000.00	7,719,903.32	7,660,410.00
HOUSEHOLD FINANCE CORP	1/01/89	4.750	2,500,000.00	2,500,000.00	1,458,500.00
HOUSEHOLD FINANCE CORP	7/01/91	4.500	16.212.000.00	13,568,090.15	7,619,640.00
HOUSEHOLD FINANCE CORP	9/15/93	4.875	26,909,000.00	20,555,352.89	11,839,960.00

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	DESCRIPTION	MATURITY DATE	INTRST RATE	PAR Value	BOOK Value	MARKET VALUE
	CORPORATE - FINANCIAL					
	HOUSEHOLD FINANCE CORP	10/01/97	7.500	6.300.000.00	4,339,225.96	3,583,125.0
	HOUSEHOLD FINANCE CORP	10/01/86	7.850	4,440,000.00	3,558,731.12	3,352,200.0
	I T T FINANCIAL CORP	6/15/03	8.875	14.200.000.00	10,288,411.00	10,827,500.0
	MFGRS & TRADERS TRUST CO	6/01/90	4.750	1 • 1 0 0 • 0 0 0 • 0 0	900.824.66	706.750.0
	MARINE MIDLAND BANKS INC	4/01/94	8.125	1.000.000.00	997,669.47	510,000.0
	MARINE MIDLAND BANKS INC	3/01/03	7.625	900.000.00	803 • 250 • 71	432,000.0
	MARINE MIDLAND CORP	7/15/89	5.000	12,500,000.00	10,405,623.31	6,625,000.0
	J P MORGAN & CO CONV.	11/01/98	4.750	2,000,000.00	1,474,643.31	1.260.000.0
	NORTHWEST BANCORP	10/15/90	5.125	5.000.000.00	4,626,521.98	2,650,000.0
•	J C PENNEY FINANCIAL CORP	9/15/91	7.875	3.093.000.00	2,209,710.01	1,987,252.5
	J C PENNEY FINANCIAL CORP	10/15/94	10.200	2,300,000.00	1,730,304.39	1,569,750.0
	THE PHILA NATIONAL BANK	3/01/92	5.500	4.000.000.00	3,347,131.83	2,720,000.0
	TENNESSEE VALLEY BANCORP INC	1/01/99	8.500	2,000,000.00	1,993,399.15	1,880,000.0
	TRANSAMERICA FINANCIAL CORP	3/01/99	9.875	6.000.000.00	4.488.121.66	4,020,000.0
	UNITED CALIF BANK CAP NOTES	1/15/90	4.500	3,000,000.00	2.875.012.34	2,006,250.0
	UNITED VA BANKSHARES	9/15/97	7.750	500,000.00	436,407.06	272.500.0
	WELLS FARGO & CO	1/15/83	11.550	15,000,000.00	15,000,000.00	14,718,750.0
	TOTAL CORPORATE - FINANCIAL			585.655.000.00	462.475.100.98	351,237,373.7
	CCRPORATE - INDUSTRIAL					
	ALLIED CHEMICAL CORP	11/01/91	5.200	17,500,000.00	15,469,372.84	11,637,500.0
	ALUMINUM CO OF AMERICA	5/15/00	9.450	6,000,000.00	4.353.832.57	3 +840 +000 +0
	ALUMINUM CO OF AMERICA	11/15/96	7.000	46,924,000.00	26,144,494.42	25,808,200.0
	AMERICAN CAN CO	7/15/97	6.000	4,000,000.00	3,543,648.05	1,865,000.0
	AMERICAN CYANAMID	4/15/01	7.375	5,251,000.00	3,430,370.81	2,678,010.0
	* M = D = 0 4 4	11/15/01	9.500	7.000.000.00	6.852.314.73	6 • 1 25 • 0 0 0 • 0
	AMERICAN MEDICAL INTL CONV				E E01 077 10	A 0A0 000 0
	ANHEUSER BUSCH INC	2/01/99	7.950	8,000,000.00	5,521,836.19	49240900000
	ANHEUSER BUSCH INC ANHEUSER~BUSCH INC	2/01/99 4/01/05	7•950 9•200	8 • 0 0 0 • 0 0 0 0 • 0 0 5 • 0 0 0 • 0 0 0 • 0 0	3, 221, 836, 19	
	ANHEUSER BUSCH INC ANHEUSER-BUSCH INC ARMCO STEEL CORP	2/01/99 4/01/05 7/15/92	9•200 5•900	5,000,000.00 10,375,000.00		3 • 1 5 0 • 0 0 0 • 0
	ANHEUSER BUSCH INC ANHEUSER-BUSCH INC ARMCO STEEL CORP ARMCO STEEL CORP	2/01/99 4/01/05 7/15/92 9/01/01	9•200 5•900 8•500	5,000,000.00 10,375,000.00 5,750,000.00	3.221.095.47	3 • 1 5 0 • 0 0 0 • 0 6 • 6 9 1 • 8 7 5 • 0
	ANHEUSER BUSCH INC ANHEUSER-BUSCH INC ARMCO STEEL CORP ARMCO STEEL CORP ATLANTIC RICHFIELD CO	2/01/99 4/01/05 7/15/92 9/01/01 5/15/97	9.200 5.900 8.500 5.625	5,000,000.00 10,375,000.00	3,221,095,47 9,719,963,29	4,240,000.0 3,150,000.0 6,691,875.0 3,392,500.0 7,974,020.0
	ANHEUSER BUSCH INC ANHEUSER-BUSCH INC ARMCO STEEL CORP ARMCO STEEL CORP ATLANTIC RICHFIELD CO ATLANTIC RICHFIELD CO	2/01/99 4/01/05 7/15/92 9/01/01 5/15/97 12/01/91	9.200 5.900 8.500 5.625 7.000	5.000.000.00 10.375.000.00 5.750.000.00 16.966.000.00	3,221,095.47 9,719,963.29 5,659,632.56 15,039,642.26 11,798,913.63	3+150+000+0 6+691+875+0 3+392+500+0
	ANHEUSER BUSCH INC ANHEUSER-BUSCH INC ARMCO STEEL CORP ARMCO STEEL CORP ATLANTIC RICHFIELD CO	2/01/99 4/01/05 7/15/92 9/01/01 5/15/97	9.200 5.900 8.500 5.625	5+000+000+00 10+375+000+00 5+750+000+00 16+966+000+00	3,221,095.47 9,719,963.29 5,659,632.56 15,039,642.26	3+150+000+0 6+691+875+0 3+392+500+0 7+974+020+0

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DESCRIPTION	MATURITY DATE	INTRST RATE	PAR Value	BOOK Value	MARKET Value
CCRPORATE - INDUSTRIAL					
BIG THREE INDUSTRIES CONV	4/15/06	8.500	5,500,000.00	4,207,842.06	3,740,000.00
BROWN GROUP INC	1/15/98	7.375	4.150.000.00	4,110,786.43	2.080.187.50
CATERPILLAR TRACTOR CO CONV	6/30/00	5.500	1,500,000.00	1,500,000.00	1.102.500.00
CITIES SERVICE CO	11/01/97	6.125	6.741.000.00	6,120,230.34	3,648,566.25
CITIES SERVICE CO	8/01/99	6.625	24,418,000.00	18,300,190.70	12,941,540.00
CYPRUS MINES CORP	4/15/01	8.500	14.100.000.00	14.113.162.39	8,601,000.00
DAYTON HUDSON CORP	11/15/91	15.250	17,100,000.00	17,706,332.34	17,335,125.00
DEERE & CO	3/01/00	8.450	12,400,000.00	8,881,760.13	6,789,000.00
DEERE & CO	11/15/02	8.000	25,190,000.00	16.877.471.55	13,728,550.00
DIAHOND SHAMR OCK	12/15/01	7.700	11,310,000.00	7,014,803.34	5,768,100.00
DOW CHEMICAL CO	11/01/00	8.900	13.800.000.00	11.020.619.27	8,711,250.00
DOW CHEMICAL	7/15/02	7.400	6,000,000.00	3,924,729.54	3.067.500.00
E I DUPONT DENEMOURS & CO	12/01/01	6.000	89,771,000.00	43,005,209,11	40,172,522.50
EATCN CORP	12/01/03	7.875	13,700,000.00	12,956,665.57	6,593,125.00
PHIERO (ENGELHARD MIN & CHEM)	8/01/05	11.750	16.634.000.00	13.372.590.80	12,392,330.00
EXXON PIPELINE CO	10/15/00	8.875	6,000,000.00	3.864.700.32	3,780,000.00
EXXON PIPELINE CO	3/01/01	8.250	17,180,000.00	12.395.758.93	10,136,200.00
FORD MOTOR CO	1/15/94	7.850	7,000,000.00	4.310.089.07	3,613,750.00
FORD MOTOR CO	8/01/04	9.150	20,000,000.00	19,955,830,42	11,000,000.00
FORD MOTOR CO	4/01/90	14.250	4,000,000.00	3,650,271.06	3,360,000.00
GENERAL FOODS CORP	6/15/01	6.000	24,800,000.00	12,186,321.46	11,253,000.00
GOODYEAR TIRE & RUBBER CO	9/15/97	7.350	6.260.000.00	6,167,427.66	3,192,600.00
GULF OIL CORP	11/15/95	8.500	8,000,000.00	5,263,764,21	5,170,000.00
HANNA MINING CO	12/15/90	4.750	2,000,000.00	1,707,920.01	1,300,000.00
HARSCO CORP	4/01/92	5.500	6.360.000.00	6.027.918.94	4,332,750.00
HUGHES TOOL CO CONV	12/15/06	9.500	3.000.000.00	2,520,645.24	2,317,500.00
INLAND STEEL CO	4/15/99	8.875	3.500.000.00	3.344.441.93	2,012,500.00
INLAND STEEL CO	9/01/00	9.500	10,000,000.00	9,957,583,64	5,950,000.00
INTL TEL & TEL CORP	7/01/01	6.500	42,824,000.00	20,625,529,17	19,270,800.00
K-MART CORP (S S KRESGE CO) CONV	7/15/99	6.000	1.600.000.00	1,572,389,50	1.020.000.00
KENNECOTT COPPER CORP	5/01/01	7.875	24,500,000.00	23,753,882,35	12,740,000.00
KEYSTONE INTOL INC-CONV.	10/01/05	8.500	700.000.00	707.618.66	647.500.00
LIGGETT GROUP INC	5/01/97	7.600	20,822,000.00	12,425,575.30	12,076,760.00
J R MCDERMOTT & CO INC	3/15/04	9.625	10,000,000.00	9,978,328,62	6.125.000.00

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DESCRIPTION	MATURITY DATE	INTRST Rate	PAR Value	BOOK Value	MARKET Value
DESCRIPTION	UAIC	RAIL	VALUE	VALUE	**************************************
CORPORATE - INDUSTRIAL					
MOBIL CORP	6/15/01	8.500	30,897,000.00	22,620,733.00	18+615+442.5
MONSANTO CO	7/01/00	9.125	5.000.000.00	3,353,976.92	3 • 1 3 1 • 250 • 0
MONSANTO CO	6/15/00	8.500	20,000,000.00	14,402,257.08	12,250,000.0
G C MURPHY CO	1/01/97	7.375	7,700,000.00	7,334,245.99	3.465.000.0
N C R CORP	6/15/91	5.600	2 + 500 + 000 + 00	2,276,245.56	1 • 3 9 3 • 7 5 0 • 6
OAK INDUSTRIES INC CONV	2/01/02	10.500	500,000.00	500.000.00	441.875.0
OWERS-ILL INOIS INC	6/01/90	10.375	5,000,000.00	3,799,622.28	3.868.750.0
J C PENNEY CO	6/15/90	10.750	11,000,000.00	9,528,562.11	8,552,500.0
J C PENNEY CO	5/01/06	6.000	37,450,000.00	16,765,692,72	16.103.500.
PHILIP MORRIS INC	6/01/04	8.875	10.000.000.00	5.897.055.88	5 + 850 + 000 + 0
PHILIP MORRIS INC	7/15/01	6.000	41 • 142 • 000 • 00	19,169,322.01	17,536,777.
PHILIP MORRIS INC	11/15/99	6.000	29.505.000.00	14,439,574.66	13.867.350.
RICHARDSON-MERRILL INC	12/15/99	8.850	2,500,000.00	1,612,288.29	1.503.125.
JOSEPH SCHLITZ BREWING CO	12/01/99	9.500	12,726,000.00	12,488,839.31	7.858.305.
SEARS ROEBUCK & CO	11/15/89	14.125	13.020.000.00	13.020.000.00	12.303.900.
SEARS ROEBUCK & CO	11/15/01	7.000	46,150,000.00	24,201,275.06	23,998,000.
SOCONY MOBIL OIL CO	4/01/93	4.250	39,358,000.00	34,067,163.57	18,104,680.
A E STALEY MFG CO	6/01/01	8.875	6,400,000.00	4,183,562.53	3,848,000.
STANDARD OIL CO OF CALIF	4/01/96	7.000	14,546,000.00	8,438,567.50	8.145.760.
STÁNDARD OIL CO INDIANA	1/15/98	6.000	2,000,000.00	1,084,954.48	1.010.000.
STANDARD OIL CO OF OHIO	7/01/99	7.600	4.000.000.00	2,530,508.78	2.250.000.
SUN OIL CO CONV	4/01/06	10.750	5,000,000.00	5.000.000.00	4,525,000.
SUN OIL CORP	11/15/90	4.625	10.671.000.00	9,823,874.63	6,029,115.
SUN OIL CORP	11/15/00	8.500	8,708,000.00	6,283,748,56	5.409.845.
GTE PRODUCTS (SYLVANIA ELEC)	9/01/92	6.250	3,000,000.00	2,993,797.37	1.786.860.
TENNECO INC	4/15/03	8.875	20+968+000+00	12,641,664.46	11,977,970.
TENNECO INC	1/15/91	13.375	7.242.000.00	6,856,870.58	6,300,540.
TENNECO INC	6/01/91	14.500	2,500,000.00	2,505,871.53	2,325,000.
TEXACO INC	7/15/97	5.750	61.801.000.00	48,028,391.80	30.977.751.
TEXASGULF INC	12/15/00	9.375	18.000.000.00	15.269.840.16	11,340,000.
TEXASGULF INC	11/01/02	8.500	24,150,000.00	24,024,791.75	13,342,875.
TRANSAMERICA CORP	12/15/01	8.625	5,000,000.00	4,701,812,79	3,100,000.
UNION CARBIDE CORP	3/01/97	5.300	26.088.000.00	22,306,026.23	12,000,480.
U S STEEL CORP	1/01/96	4.625	65 • 248 • 000 • 00	51+395+184.33	25 • 772 • 960 •
U S STEEL CORP	3/01/01	7.750	28,750,000.00	27.648.745.21	15,093,750.

CESCRIPTION	MATURITY DATE	INTRST RATE	PAR VALUE	BOOK Value	MARKET Value
CORPORATE - INDUSTRIAL					
U S STEEL CORP CONV	7/01/01	5.750	3.000.000.00	3,000,000.00	1,492,500.00
UNITED TECHNOLOGY CORP	4/15/00	9.875	9,000,000.00	7,009,068.72	5,951,250.00
UPJOHN CO	6/01/91	14.000	8,500,000.00	8,479,368.18	8,030,205.00
VW MFG CORP OF AMER	9/15/91	8.500	2 • 718 • 532 • 26	2,718,532.26	2,026,122.09
F W WOOLWORTH CO	6/01/99	9.000	10,000,000.00	9,605,484.90	5,700,000.00
TOTAL CORPORATE - INDUSTRIAL	-	1 •	338.776.532.26	986,906,592.38	735,311,734.59
CORPORATE - UTILITIES					
ALABAMA POWER COMPANY	5/01/87	4.625	1,000,000.00	999•598•78	633•750•00
ARIZONA PUBLIC SERVICE CO	12/01/92	4.400	4,000,000.00	4,000,000.00	1.769.200.00
ARIZONA PUBLIC SERVICE CO	9/01/93	4.500	2,500,000.00	2,500,000.00	1,078,500.00
BALTIMORE GAS & ELECTRIC CO	8/01/90	4 • 625	2,000,000.00	2,002,442.21	1,042,500.00
BROOKLYN UNION GAS CO	4/01/90	4 • 625	1,500,000.00	1,504,716.77	798,750.00
CENTRAL MAINE POWER CO	5/01/87	4.875	490,000.00	488,402.40	317.275.00
CENTRAL TELEPHONE COMPANY	10/01/97	7.600	3,000,000.00	3,000,000.00	1,597,500.00
CENTRAL TELEPHONE CO OF ILL	4/01/93	6.750	2.150.000.00	2,150,000.00	1.197.765.00
CENTRAL VERMONT PUBLIC SERVICE	5/01/87	4.875	1.105.000.00	1.105.000.00	694,603.00
CENTRAL VERMONT PUBLIC SERVICE	5/01/93	7.000	2,000,000.00	2,000,000.00	1,070,400.00
CENTRAL VERMONT PUBLIC SERVICE	4/01/95	10.625	2,940,000.00	2,940,000.00	2,059,470.00
CENTRAL VERMONT PUBLIC SERVICE	7/01/99	8.500	3,000,000.00	3,000,000.00	1.696.500.00
COLUMBIA GAS SYSTEM INC	5/01/89	4.625	12,538,000.00	11,300,713,27	7,460,110.00
COLUMBIA GAS SYSTEM INC	10/01/89	4.625	5.180.000.00	4,615,917.91	3,010,875.00
COLUMBIA GAS SYSTEM INC	5/01/90	4.625	7,979,000.00	7,257,263.41	4 • 4 1 8 • 3 7 1 • 2 5
COLUMBIA GAS SYSTEM INC	10/01/90	4.875	6,062,000.00	5,538,674.69	3,402,297.50
COLUMBIA GAS SYSTEM INC	10/01/93	7.000	4 • 0 0 0 • 0 0 0 • 0 0	3,717,104.19	2,330,000.00
COLUMBIA GAS SYSTEM INC	3/01/97	7.500	7 • 6 0 0 • 0 0 0 • 0 0	7,519,826.16	4.085.000.00
COLUMBIA GAS SYSTEM INC	6/01/97	7.500	10,800,000.00	10,556,946.14	5,886,000.00
COLUMBIA GAS SYSTEM INC	10/01/97	7.500	14,091,000.00	11,474,690.49	7,732,436.25
COMMONWEALTH EDISON CO	11/01/96	5.750	3,000,000.00	3,000,000.00	1,357,500.00
CONSOLIDATED EDISON CO N Y	6/01/93	4 • 4 0 0	7 • 0 0 0 • 0 0 0 • 0 0	7.000.000.00	2•94瀛•500•00
CONSOLIDATED EDISON CO N Y	10/01/92	4.375	1,310,000.00	1,316,308.89	612.425.00
CONSOLIDATED EDISON CO N Y	10/01/98	6.850	3,000,000.00	3,000,000.00	1.548.750.00
CONSOLIDATED NAT GAS CO	5/01/97	7.625	10,250,000.00	9,814,947.49	5.816.875.00
CONSUMERS POWER CO	6/01/02	7.500	3,500,000.00	3,504,161.61	1,750,000.00
CONSUMERS POWER CO 1ST MTG	10/01/02	7.500	1.000.000.00	769,460.94	505.000.00
DAYTON POWER & LIGHT CO	6/01/93	4 • 450	4.000.000.00	4,000,000.00	1.746.400.00

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DESCRIPTION	MATURITY Date	INTRST RATE	PAR VALUE	BOOK Value	MARKET Value
CORPORATE - UTILITIES					
DELMARVA POWER AND LIGHT CO	8/01/02	7.500	2,500,000.00	2,508,391.81	1.193.750.00
DETROIT EDISON CO	8/15/87	4.875	4+000+000.00	4,000,000.00	2•469•200•00
DETROIT EDISON CO	10/01/98	6.400	5,000,000.00	4,993,275.32	2.175.000.00
DETROIT ED CO GEN & REF MTG BD	1/15/03	7.500	10.000.000.00	10,024,403.99	4 • 6 5 0 • 0 0 0 • 0 0
DUKE POWER COMPANY	8/01/92	4.250	3,000,000.00	2,996,530.29	1,398,750.00
EQUITABLE GAS CO	3/01/86	4.625	2 • 244 • 000 • 00	2,244,000.00	1.591.893.60
EQUITABLE GAS CO	9/01/92	6.250	2,012,000.00	2,012,000.00	1.090.504.00
FLCRIDA POWER & LIGHT CO	8/01/92	4.500	2.250.000.00	2,259,651.64	1.071.562.50
GENERAL TEL & ELEC CORP	12/01/91	6.250	7.000.000.00	6,733,443.43	4.138.750.00
GEN TEL CO CALIF 1ST MTG BDS	12/01/91	4 • 625	2 • 000 • 000 • 00	1,563,811.17	985.000.00
GEN TEL CO CALIF 1ST MTG BDS	6/01/94	4.500	2,260,000.00	1,791,817.27	997,225.00
GEN TEL CO CALIF 1ST MTG BDS	3/01/95	4.500	5,435,000.00	4.636.229.11	2,343,843.75
GEN TEL CO CALIF 1ST MTG BDS	12/01/95	5.000	2.000.000.00	1,603,539.68	885.000.00
GEN TEL CO CALIF 1ST MTG BDS	12/01/97	6.750	4 • 750 • 000 • 00	4,033,615.64	2,404,687.50
GEN TEL CO CALIF 1ST MTG BDS	12/01/01	7.625	2 • 200 • 000 • 00	1,854,380.63	1,100,000.00
GENERAL TELEPHONE KENTUCKY	10/01/89	5.250	1,600,000.00	1,600,000.00	917.760.00
GENERAL TELEPHONE CO MICHIGAN	3/01/88	4.250	1,000,000.00	1,000,000.00	592,000.00
GENERAL TELEPHONE CO MICHIGAN	11/01/95	4.875	2.000.000.00	2.000.000.00	830.600.00
GENERAL TELEPHONE CO MICHIGAN	12/01/89	5.375	1,500,000.00	1,500,000.00	854.850.00
GENERAL TELEPHONE CO MICHIGAN	12/01/90	5.125	1.720.000.00	1,720,000.00	909.192.00
GENERAL TELEPHONE CO MICHIGAN	3/01/97	5.500	2.000.000.00	1,992,566.93	869,000.00
GENERAL TEL OF THE NORTHWEST	9/01/98	6.250	3,000,000.00	2,989,224.06	1,393,200.00
GENERAL TEL CO OF OHIO	10/01/89	5.250	1.550.000.00	1.550.000.00	883.190.00
GENERAL TEL CO OF OHIO	10/01/93	4.750	2.000.000.00	1,987,704.45	1.003.000.00
GENERAL TELEPHONE CO OF PA	7/01/96	5.625	1.100.000.00	1,100,000.00	494,450.00
GEN TEL CO OF THE SOUTHWEST	3/01/92	4.875	2,250,000.00	2,250,044.88	1.088.325.00
GEN TEL CO OF THE SOUTHWEST	1/01/91	5.125	2.250.000.00	2,250,037.49	1,184,400.00
GEORGIA POWER COMPANY	7/01/02	7.500	3.500.000.00	3,473,745.44	1.723.750.00
GEORGIA POWER COMPANY	12/01/02	7.500	5.000.000.00	4.928.295.80	2.318.750.00
HARTFORD ELECTRIC LIGHT CO	6/01/02	7.500	2.500.000.00	2,487,721.05	1,259,375.00
INDIANA GAS CO	10/01/86	5.125	1.500.000.00	1,500,000.00	1,075,800.00
IOWA ELEC LIGHT & POWER	1/01/91	5.125	2.000.000.00	2,000,000.00	1,052,800.00
LONG ISLAND LIGHTING CO	4/01/93	4.400	3,000,000.00	3.000.000.00	1,282,500.00
LONG ISLAND LIGHTING CO	9/01/02	7.625	3,000,000.00	3,006,655.52	1.522.500.00
MASS ELECTRIC CO (WORCHESTER)	9/01/92	4.375	3,000,000.00	3,007,763.64	1,410,000.00
THE CENTIFIC OF THOROUGHERS	7,01,76	1,50,5	0 4 0 0 0 4 0 0 0 8 0 0	3, 33, 7, 00 00 1	14:104000000

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	MATURITY	INTRST	PAR	BOOK	MARKET
DESCRIPTION	DATE	RATE	VALUE	VALUE	VALUE
CCRPORATE - UTILITIES					
MICH CNSLD GAS CO	3/15/88	4.500	6.082.000.00	5,313,747.35	3.846.865.00
MICH CNSLD GAS CO	7/15/98	8.125	4,500,000.00	4.364.327.90	2 • 4 75 • 0 0 0 • 0 0
MISSOURI PUBLIC SERVICE CO	3/15/97	6.000	3,000,000.00	3,000,000.00	1,341,600.00
MISSOURI PUBLIC SERVICE CO	4/15/84	8.000	4,000,000.00	4,000,000.00	3,491,200.00
PACIFIC POWER & LIGHT CO	9/01/90	5.125	2.500.000.00	2,504,776.61	1,371,875.00
PACIFIC TEL & TEL CO DEB	11/01/90	4.625	1,576,000.00	1,305,424.44	831.340.00
PACIFIC TEL & TEL CO	8/15/91	3.625	1.000.000.00	1.006.573.70	470+000+00
PACIFIC TEL & TEL CO	4/01/99	4.625	1,700,000.00	1.126.040.20	697,000.00
PACIFIC TEL & TEL CO	5/01/00	4.625	26,652,000.00	19,255,116.14	10,860,690.00
PENNSYLVANIA ELECTRIC CO	9/01/90	5.000	1,999,000.00	2,013,360.73	1.046.976.25
PENNA POWER AND LIGHT CO	3/01/94	4.625	4 + 0 0 0 + 0 0 0 + 0 0	4.015.796.76	1 • 7 1 4 • 0 0 0 • 0 0
PHILA ELECTRIC CO	10/01/96	8.000	4,885,450.00	4 • 885 • 450 • 00	3.092.489.85
PHILA ELECTRIC CO	1/15/99	7.500	7,000,000.00	7.000.000.00	3,316,250.00
PHILA SUBURBAN WATER CO	9/01/89	5.000	1,700,000.00	1,700,000.00	968,150.00
PORTLAND GENERAL ELECTRIC CO	2/01/93	4.625	823,000.00	823,000.00	352,490.90
PORTLAND GENERAL ELECTRIC CO	6/01/93	4.750	1,649,000.00	1,649,000.00	705•277•30
PORTLAND GENERAL ELECTRIC CO	4/01/94	4.750	1,253,000.00	1,253,000.00	515,985.40
PORTLAND GENERAL ELECTRIC CO	11/01/91	5.125	2,434,000.00	2,426,365.28	1.172.214.40
PORTLAND GENERAL ELECTRIC CO	6/01/90	5.250	1,320,000.00	1,320,000.00	695,112.00
POTOMAC ELECT POWER CO	6/01/91	3.625	1,000,000.00	1,002,800.10	470,000.00
PUBLIC SERVICE CO OF COLORADO	3/01/92	4.625	2,250,000.00	2,250,000.00	1.068.975.00
PUBLIC SERVICE ELEC & GAS CO	6/01/93	4.375	1.250.000.00	1.042.754.75	579,687.50
PUBLIC SERVICE ELEC & GAS CO	8/15/96	7.750	6•409•000•00	6.220.102.28	3,605,062.50
SAN JOSE WATER WORKS	11/01/90	5.000	1,500,000.00	1,500,000.00	759,750.00
SOUTH CAROLINA ELEC & GAS CO	6/01/91	5.000	2.250.000.00	2,250,000.00	1.145.025.00
SOUTHERN CALIFORNIA GAS CO	5/01/96	8.750	3,293,000.00	3.225.796.03	2,161,031.25
SOUTHWESTERN BELL TEL CO	8/01/97	4.500	3•750•000•00	3•764•492•99	1,551,562,50
TUCSON GAS AND ELEC CO	2/01/95	4.550	2,000,000.00	2,000,000.00	802.600.00
UNITED GAS IMPROVEMENT CO	7/01/88	4.500	2,749,000.00	2,749,000.00	1,613,113.20
UNITED GAS IMPROVEMENT CO	5/15/90	4.750	1.000.000.00	1,007,011.35	567 ₀ •500•00
UNITED TEL CO FLORIDA	11/01/99	9.250	3,520,000.00	3,520,000.00	2 • 2 0 5 • 9 8 4 • 0 0
UNITED TEL CO INDIANA	9/01/90	5.000	790,000.00	790+000-00	418,700.00
UNITED TEL CO PENNA	12/01/85	3.600	518.000.00	518,000.00	361,667.60
UNITED TEL CO PENNA,	6/01/89	5.000	770,000.00	770.000.00	439.593.00
UNITED TEL CO PENNA	11/01/98	6.625	3 • 0 4 5 • 0 0 0 • 0 0	3,045,000.00	1 • 4 7 8 • 0 4 3 • 0 0

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CESCRIPTION	MATURITY DATE	INTRST RATE	PAR VALUE	BOOK Value	MARKET Value
CORPORATE - UTILITIES					
WESTERN PA WATER CO - SO PGH WORCESTER CO ELEC - MASS ELEC	5/01/93 10/01/85	4.375 3.375		2,989,078.64 80,044.30	1.251.900.00 57.600.00
TOTAL CORPORATE - UTILITIES			346+363+450.00	326+361+084+14	179,224,672.00
RAILROADS					
PACIFIC FRUIT EXPRESS EQUIP TR	3/01/83	7.250	25 • 220 • 38	25 • 22 0 • 38	24.388.11
PENN CENTRAL CO - EQUIP TR	8/15/88	7.500		1,866,666.63	1,412,693.31
PENN CENTRAL CO - EQUIP TR	8/01/84	9.000	799,999.96	799,999.96	731,519,96
SOUTHERN RAILWAY CO	6/01/88	4.625	2 • 958 • 000 • 00	2.958.000.00	1,778,497.50
TEXAS & NEW ORLEANS RR	4/01/90	3.375	500.000.00	500 + 818 + 99	230+000+00
TOTAL RAILROADS			6,149,886,97	6,150,705.96	4 • 1 7 7 • 0 9 8 • 8 8
PHILADELPHIA NATIONAL BANK					
PHILA NAT BANK BLDG	10/01/00	9.875	15 • 187 • 958 • 14	15,187,958,14	10.250.656.71
UNIVERSITY OF PITTSBURGH					
UNIVERSITY OF PITTSBURGH	6/01/86	4.000	446 • 000 • 00	446,000.00	356 • 800 • 00
U. S. TREASURY NOTES & BONDS	•				
J S TREASURY BONDS	8/15/93	8.625	5+950+000+00	4,489,245.34	4.120.375.00
J S TREASURY BONDS	11/15/93	8.625	33,950,000.00	26,612,103,63	23,425,500.00
U S TREASURY BONDS	2/15/94	9.000	5 • 130 • 000 • 00	4,000,744.63	3,635,887.50
U S TREASURY NOTES	8/15/86	8.000		8,252,037.70	7.806.093.75
U S TREASURY NOTES	5/15/88	8.250		3,795,246.71	3,716,413.79
J S TREASURY NOTES	5/15/85	14.375	4 • 6 0 0 • 0 0 0 • 0 0	4+600+000+00	4,559,750.01
J S TREASURY NOTES	11/15/85	11.750	44+285+000.00	44.135.940.44	40,769,878.13
A A TAME A LABOR AND TO -		11 076	0 660 000 00	0-633 437 63	0 5 0 4 0 0 7 0 6
U S TREASURY NO TES	9/30/82	11.875	8,550,000.00	8.533.436.83	8.501.906.25
U S TREASURY NOTES U S TREASURY NOTES U S TREASURY NOTES	9/30/82 9/30/84 10/31/82	12.125 12.125	15.000.000.00 10.000.000.00	15,005,273.42 9,996,474.31	14,231,250.0

DESCRIPTION	MATURITY DATE	INTRST RATE	PAR Value	BOOK Value	MARKET Value
U. S. TREASURY NOTES & BONDS					
U S TREASURY NOTES	5/15/84	13.250	6 • 295 • 000 • 00	6,283,217.21	6,121,887.50
U S TREASURY NOTES	11/15/90	13.000	2,850,000.00	2,850,000.00	2,634,468.75
U S TREASURY NOTES	2/15/86	13.500	3,700,000.00	3,784,259.22	3,565,875.00
U S TREASURY NOTES	1/15/88	12.375	19,245,000.00	18,891,253.15	17,537,006.25
U S TREASURY NOTES	8/15/84	13.250	50,000,000.00	50,169,798.94	48,468,750.00
U S TREASURY NOTES	3/31/85	13.375	50,000,000.00	49+997+369+66	48,328,100.00
U S TREASURY NOTES	4/15/88	13.250	11.198.000.00	10,907,966.18	10,526,120.00
U S TREASURY NOTES	11/15/86	13.875	9,940,000.00	9,569,413.11	9,604,525.00
U S TREASURY NOTES	11/30/83	12.125	100000000.00	99,704,279.14	96,718,700.00
U S TREASURY NO TES	12/31/85	14.125	50,000,000.00	49,874,058,88	50,421,850.00
TOTAL U S TREASURY NOTES &	BONDS		445,329,000.00	431,452,118.50	414,619,336.88

FACE SECURITY RATE DESCRIPTION	MATURITY DATE	PAR VALUE	PRINCIPAL COST	MARKET VALUE	ACCRUED INTEREST
: TREASURY BILLS					
12.4600 U S TREASURY BILLS	07/01/82	6,825,000.00	6,654,921.00	6,653,017.59	167,716.79
13.3000 U S TREASURY BILLS	07/01/82	80,000.00	77,310,44	77,290.00	2,660.00
12.7600 U S TREASURY BILLS	07/15/82	2,860,000.00	2,767,752,29	2,769,551,71	77,042.04
12.7700 U S TREASURY BILLS	07/15/82	5,000,000.00	4,838,601.39	4,841,768.06	134,794.44
11.8000 U S TREASURY BILLS	07/15/82	5,000,000.00	4,944,277,78	4,945,423.61	31,138.89
12.1400 U 5 TREASURY BILLS	08/05/82	18,280,000.00	18,002,601.00	18,010,301.45	55,479.80
12.6800 U S TREASURY BILLS	08/05/82	5,000,000.00	4,839,700.00	4,844,521.63	96,884.62
11.4900 U S TREASURY BILLS	08/26/82	10,000,000.00	9,709,558.34	9,700,858.34	108,516.66
12.5800 U S TREASURY BILLS	09/02/82	10,000,000.00	9,758,883,33	9,765,340,28	17,472.22
12.1400 U S TREASURY BILLS	09/09/82	5,000,000.00	4,846,563.89	4,844,402,78	33,722,22
12.3100 U S TREASURY BILLS	09/15/82	5,000,000.00	4,844,415.28	4,863,032,64	23,936.11
13.0400 U S TREASURY BILLS	09/16/82	10,275,000.00	9,980,975,16	9,993,532.08	3,721.83
12.7800 U S TREASURY BILLS	09/23/82	10,000,000.00	9,676,950.00	9,678,700.00	21,300.00
TOTAL	•	93,320,000.0	0		774,385.62
			90,942,509.90	90,987,740.17	
: TERM REPO'S					
13.7500 REPURCHASE AGREEMENT	07/01/82	5,000,000.00	5,000,000,00	5,000,000,00*	110,763,89
13.7500 REPURCHASE AGREEMENT	07/01/82	5,870,000.00	5,870,000.00	5,870,000.00*	136,762.85
12.6500 REPURCHASE AGREEMENT	07/02/82	11,000,000.00	11,000,000.00	11,000,000.00*	127,554.17
12.0000 REPO OPEN END	07/06/82	3,038,000.00	3,038,000.00	3,038,000,00*	
	V// VQ/ UL	0,000,000,00	3,030,000,00	3103010004	
14.1250 REPURCHASE AGREEMENT	07/06/82	4,900,000.00	4,900,000.00	4,900,000.00*	107,663.89
13.7500 REPURCHASE AGREEMENT	07/06/82 07/07/82	4,900,000.00	4,900,000.00 6,460,000.00	4,900,000.00* 6,460,000.00*	152,976.39
13.7500 REPURCHASE AGREEMENT 14.1000 REPURCHASE AGREEMENT	07/06/82 07/07/82 07/07/82	4,900,000.00 6,460,000.00 5,000,000.00	4,900,000.00 6,460,000.00 5,000,000.00	4,900,000.00* 6,460,000.00* 5,000,000.00*	152,976.39 162,541.67
13.7500 REPURCHASE AGREEMENT 14.1000 REPURCHASE AGREEMENT 14.0000 REPURCHASE AGREEMENT	07/06/82 07/07/82 07/07/82 07/07/82	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00	4,900,000,00 6,460,000,00 5,000,000,00 4,935,000,00	4,900,000.00* 6,460,000.00* 5,000,000.00* 4,935,000.00*	152,976.39 162,541.67 103,635.00
13.7500 REPURCHASE AGREEMENT 14.1000 REPURCHASE AGREEMENT 14.0000 REPURCHASE AGREEMENT 12.5700 REPURCHASE AGREEMENT	07/06/82 07/07/82 07/07/82 07/07/82 07/08/82	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00	4,900,000.00* 6,460,000.00* 5,000,000.00* 4,935,000.00* 11,000,000.00*	152,976.39 162,541.67 103,635.00 126,747.50
13.7500 REPURCHASE AGREEMENT 14.1000 REPURCHASE AGREEMENT 14.0000 REPURCHASE AGREEMENT 12.5700 REPURCHASE AGREEMENT 14.0500 REPURCHASE AGREEMENT	07/06/82 07/07/82 07/07/82 07/07/82 07/08/82 07/08/82	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00 9,850,000.00	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00 9,850,000.00	4,900,000.00* 6,460,000.00* 5,000,000.00* 4,935,000.00* 11,000,000.00* 9,850,000.00*	152,976.39 162,541.67 103,635.00 126,747.50 215,277.22
13.7500 REPURCHASE AGREEMENT 14.1000 REPURCHASE AGREEMENT 14.0000 REPURCHASE AGREEMENT 12.5700 REPURCHASE AGREEMENT 14.0500 REPURCHASE AGREEMENT 14.0000 REPURCHASE AGREEMENT	07/06/82 07/07/82 07/07/82 07/07/82 07/08/82 07/08/82 07/12/82	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00 9,850,000.00 4,850,000.00	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00 9,850,000.00	4,900,000.00* 6,460,000.00* 5,000,000.00* 4,935,000.00* 11,000,000.00* 9,850,000.00*	152,976.39 162,541.67 103,635.00 126,747.50 215,277.22 143,344.44
13.7500 REPURCHASE AGREEMENT 14.1000 REPURCHASE AGREEMENT 14.0000 REPURCHASE AGREEMENT 12.5700 REPURCHASE AGREEMENT 14.0500 REPURCHASE AGREEMENT 14.0000 REPURCHASE AGREEMENT 13.6250 REPURCHASE AGREEMENT	07/06/82 07/07/82 07/07/82 07/07/82 07/08/82 07/08/82 07/12/82 07/12/82	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00 9,850,000.00 4,850,000.00 4,887,500.00	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00 9,850,000.00 4,850,000.00 4,887,500.00	4,900,000.00* 6,460,000.00* 5,000,000.00* 4,935,000.00* 11,000,000.00* 9,850,000.00* 4,850,000.00* 4,850,000.00*	152,976.39 162,541.67 103,635.00 126,747.50 215,277.22
13.7500 REPURCHASE AGREEMENT 14.1000 REPURCHASE AGREEMENT 14.0000 REPURCHASE AGREEMENT 12.5700 REPURCHASE AGREEMENT 14.0500 REPURCHASE AGREEMENT 14.0000 REPURCHASE AGREEMENT	07/06/82 07/07/82 07/07/82 07/07/82 07/08/82 07/08/82 07/12/82	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00 9,850,000.00 4,850,000.00	4,900,000.00 6,460,000.00 5,000,000.00 4,935,000.00 11,000,000.00 9,850,000.00	4,900,000.00* 6,460,000.00* 5,000,000.00* 4,935,000.00* 11,000,000.00* 9,850,000.00*	152,976.39 162,541.67 103,635.00 126,747.50 215,277.22 143,344.44

^{*} INDICATES NO MARKET VALUE AVAILABLE. ISSUE PRICED AT COST.

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12.6000 RE 14.0500 RE 13.8500 RE 14.1250 RE 14.0000 RE 13.4000 RE	: TERM REPO'S					
14.0500 RE 13.8500 RE 14.1250 RE 14.0000 RE 13.4000 RE						
14.0500 RE 13.8500 RE 14.1250 RE 14.0000 RE 13.4000 RE		07/14/82	11,450,000.00	11,450,000.00	11,450,000.00*	132,247.50
14.1250 RE 14.0000 RE 13.4000 RE	PUKLHASE AGKEEMENI	07/14/82	5,025,000.00	5,025,000.00	5,025,000.00*	151,008.23
14.0000 RE 13.4000 RE	PURCHASE AGREEMENT	07/15/82	3,993,750.00	3,993,750,00	3,993,750,00*	98,335,00
13.4000 RE	PURCHASE AGREEMENT	07/15/82	4,912,500.00	4,912,500,00	4,912,500.00*	138,778,13
	PURCHASE AGREEMENT	07/15/82	5,850,000.00	5,850,000.00	5,850,000,00*	175,175.00
40 0550 00	FURCHASE AGREEMENT	07/16/82	10,000,000.00	10,000,000.00	10,000,000.00*	
12.8000 RE	PURCHASE AGREEMENT	07/19/82	7,000,000.00	7,000,000.00	7,000,000,00*	87,111,11
	PURCHASE AGREEMENT	07/20/82	9,775,000.00	9,775,000.00	9,775,000,00*	92,129.38
	PURCHASE AGREEMENT	07/20/82	11,850,000.00	11,850,000.00	11,850,000.00*	113,760,00
	PURCHASE AGREEMENT	07/20/82	12,000,000.00	12,000,000.00	12,000,000.00*	119,000.00
	PURCHASE AGREEMENT	07/21/82	10,000,000.00	10,000,000.00	10,000,000.00*	96,000.00
	PURCHASE AGREEMENT	07/22/82	11,000,000.00	11,000,000.00	11,000,000.00*	127,352,50
	PURCHASE AGREEMENT	07/23/82	10,000,000.00	10,000,000.00	10,000,000.00*	7,944,44
	FURCHASE AGREEMENT	07/26/82	10,000,000.00	10,000,000.00	10,000,000.00*	77,000.00
13.0700 RE	PURCHASE AGREEMENT	07/27/82	14,450,000.00	14,450,000.00	14,450,000.00*	99,676.90
14.0700 RE	PURCHASE AGREEMENT	07/27/82	10,000,000.00	10,000,000.00	10,000,000.00*	7 • 816 • 67
13,1500 RE	PURCHASE AGREEMENT	07/29/82	13,800,000.00	13,800,000.00	13,800,000.00*	100,816.67
13.6250 RE	PURCHASE AGREEMENT	07/30/82	17,000,000.00	17,000,000.00	17,000,000.00*	77,208,33
13.0700 RE	PURCHASE AGREEMENT	08/03/82	5,000,000.00	5,000,000.00	5,000,000,00*	34,490,28
13.1500 RE	PURCHASE AGREEMENT	08/06/82	13,950,000.00	13,950,000.00	13,950,000.00*	112,103.75
13,4200 RE	PURCHASE AGREEMENT	08/10/82	20,000,000.00	20,000,000.00	20,000,000.00*	104,377.78
13,2000 RE	PURCHASE AGREEMENT	08/11/82	12,775,000.00	12,775,000.00	12,775,000,00*	65,578,33
14.0600 RE	PURCHASE AGREEMENT	08/17/82	10,000,000.00	10,000,000.00	10,000,000.00*	3,905.56
	PURCHASE AGREEMENT	08/19/82	10,000,000.00	10,000,000.00	10,000,000.00*	97,500.00
13.3000 RE	PURCHASE AGREEMENT	08/20/82	9,000,000.00	9,000,000.00	9,000,000.00*	43,225.00
	TOTAL		353,981,750.	00		3,798,756.45
	•			353,981,750.00	353,981,750.00	
					•	
	: COMMERICAL PAPER					
14.3000 CF		R 07/01/82	5,000,000,00	4,827,208.33	4,827,180.55	170,805.56
14.0000 CP	- ALLEGHENY PWR	07/01/82	5,000,000.00	4,873,611.11	4,873,541,66	124,444.45

^{*} INDICATES NO MARKET VALUE AVAILABLE. ISSUE PRICED AT COST.

FACE RATE		URI	TY PTION	MATURITY DATE	PAR VALUE	PRINCIPAL COST	MARKET VALUE	ACCRUED INTEREST
	:	CO	MMERICAL PAPER					
14.0000	CF	_	BANKERS TRUST	07/01/82	7,000,000.00	6,812,166,67	6,812,069,45	185,111.11
13.9500	CP	_	BANKERS TRUST	07/01/82	3,000,000.00	2,918,625.00	2,918,579,17	80,212.50
14.1500	CP	***	CROCKER NATIONAL	07/01/82	5,000,000.00	4,878,152.78	4,878,104.17	119,881.94
14.0000	CP	-	PHH	07/02/82	5,000,000.00	4,885,277.78	4,885,138,89	110,833,33
14.0000		-	MANUILLE	07/02/82	10,000,000.00	9,770,555,56	9,770,277,78	221,666,66
14.0000	CP	_	CHEMICAL	07/06/82	2,000,000.00	1,953,333.33	1,953,166,67	42,000.00
13.9000	CF		MARYLAND	07/06/82	5,000,000,00	4,878,375.00	4,877,875.00	110,041.67
14.2500	CP	_	CONT ILLINOIS COR	07/06/82	4,900,000.00	4,721,558.33	4,721,354,16	166,804.17
13.9000		-	MARSH	07/06/82	4,880,000.00	4,761,294.00	4,760,806.00	107,400.67
13.3000	CP	_	PRUD FUND	07/07/82	10,127,209.00	10,000,000.00	9,997,636,99	101,018.91
14.2500	CP		CONT ILLINOIS COR	07/08/82	5,000,000.00	4,817,916.67	4,817,638.89	166,250.00
14.0000	CP	-	DEERE	07/08/82	4,440,000.00	4,331,220.00	4,330,726.66	94,966,67
14.0000	CP	****	MANUFAC HANOVER	07/09/82	8,000,000.00	7,779,111.11	7,778,111.11	192,888.89
14.0500	CP	-	ST LUCIE	07/09/82	4,000,000.00	3,901,650.00	3,901,200,00	84,300.00
13.6250	CP		FS CHICAGO	07/09/82	5,000,000.00	4,888,350.69	4,887,256,94	94,618,06
14.2500	CP	-	MUT BEN LIFE	07/09/82	1,000,000.00	974+666-67	974,604.17	21,770.83
13.9000	CP	-	PHIBRO	07/09/82	3,000,000.00	2,927,025.00	2,926,575.00	62,550.00
13.7500	CP	_	MD NAT CORP	07/12/82	3,000,000.00	2,927,812,50	2,927,062.50	58,437.50
13.7500	CP	-	MARYLAND	07/12/82	2,000,000.00	1,951,875.00	1,951,375.00	38,958.33
13.7500	C۳	_	NAT CITY CREDIT	07/12/82	5,000,000.00	4,883,506.95	4,882,256.95	93,576.38
13.7500	CP	_	РНН	07/12/82	200,000.00	194,958.33	194,908.33	4,125,00
13.7500	CP	-	BURROUGH	07/13/82	10,000,000.00	9,755,555.56	9,752,847,23	194,791.66
14.8750	CP	-	AVED	07/14/82	5,234,606,57	5,200,000.00	5,200,763,39	4,325.82
13.2700	CP	~	MT STATES	07/16/82	13,000,000.00	12,817,906.11	12,810,799.44	105,422.78
15.1900	CP		CITICORP VARIABLE	07/19/82	20,253,166.67	20,000,000.00	20,005,345,91	92,827,78
14.3500	CP	_	WELLS FARGO & CO	07/20/82	6,000,000.00	5,827,800.00	5,817,733,34	133,933.33
14.7500	CP	_	REP OF TEXAS	07/21/82	10,075,000.00	9,988,313.02	9,989,782,29	
13.4000	CP	-	WELLS FARGO	07/21/82	9,350,000.00	9,196,867.78	9,190,868,19	80,046,39
13.5500	CP		SUPERIOR OIL	07/22/82	5,133,000.00	4,999,691.71	4,996,711,72	90,804.20
13.3750	CP	-	BANK OF AMERICA	07/23/82	11,525,000.00	11,525,000.00	11,418,233.68	
13.7500	CP	~	CHASE MAN	07/26/82	4,000,000.00	3,885,416.67	3,883,250.00	74,861.11
14.5500	CP	-	EMHART	07/26/82	10,100,000.00	9,993,865.83	9,994,230.56	
13.3750	CP		GEN ELEC OF CORF	07/28/82	14,232,664.53	14,000,000.00	13,987,546.42	84,605.28
14.5500	CP	-	WESTINGHOUSE	07/30/B2	10,000,000.00	9,870,666.67	9,871,083.34	8,083,33

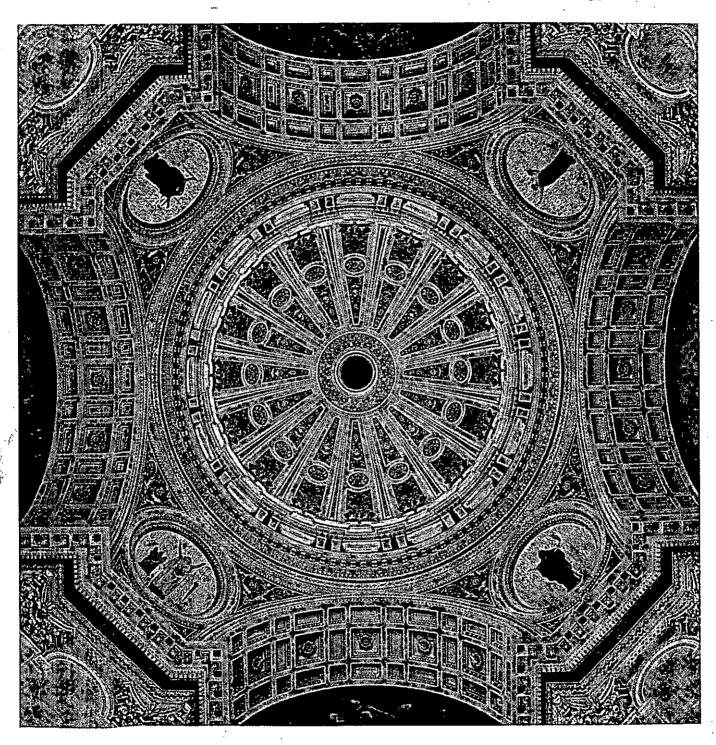
^{*} INDICATES NO MARKET VALUE AVAILABLE. ISSUE PRICED AT COST.

FACE SECURITY RATE DESCRIPTION		MATURITY DATE	PAR VALUE	PRINCIPAL COST	MARKET VALUE	ACCRUED INTEREST	
	:	COMMERICAL PAPER					
14.7000	CP	- JP MORGAN	07/30/82	10,000,000.00	9,857,083,33	9,858,750,00	20,416,67
13.7500	CP	- GEN ELECT CREDIT	07/30/82	17,257,058,26	17,000,000.00	16,989,214.33	59,321.14
13.2500	CP	- SEARS ROEBUCK	08/02/82	14,740,847.08	14,475,000.00	14,458,109.44	86,807,21
14.7500	CP	- PNB	08/03/82	10,150,000.00	10,004,446.18	10,006,842.71	4,158.68
13.3750	CP	- TIMES MIRROR	08/03/82	5,100,000.00	4,999,576.04	4,994,157.29	36,001.04
14.0000	CP	- PRUDENTIAL FUNDIN	08/04/82	15,731,955.27	15,475,000.00	15,467,352.52	42,825.88
13.3750	CP	- AMERICAN BRANDS	08/04/82	10,204,000.00	9,999,282,25	9,988,121.63	72,030.32
14,3750	CP	- ITT	08/05/82	10,000,000.00	10,000,000.00	9,855,000.00	
13.4000	CP	- GANNETT	08/09/82	22,900,000.00	22,431,186.11	22,403,197,23	127,858.33
14.5500	CP	- LEVI STRAUSS	08/11/82	8,300,000.00	8,159,107,50	8,159,591,67	
14.2000	CP	- WESTINGHOUSE	08/12/82	12,770,000.00	12,523,184.28	12,518,608.36	30,222.33
13.5500	CP	- BANK OF AMERICA	08/12/82	5,000,000.00	4,830,625.00	4,824,951.39	88,451,39
14.0000	CP	- PACIFIC GAS	08/12/82	9,700,000.00	9,488,755.56	9,482,962,50	49,038.89
13,9000	CP	- WESTINGHOUSE	08/13/82	14,695,043.82	14,400,000.00	14,389,223.63	45,391.36
14.1250	CP	- BANKERS LIFE	08/16/82	10,216,000.00	9,999,548.50	9,994,546.92	28,058.53
14,5000	CP	- BANKAMERICA CORP	08/20/82	7,161,532.31	7,000,000.00	6,999,999.97	14,422.53
13.4500	CP	- FLUOR	09/07/82	5,000,000.00	4,831,875.00	4,821,812.50	39,229.17
14.3500	CP	- CONT GROUP	09/08/82	10,316,000.00	9,999,370.44	9,996,361.60	28,784.51
15.0000	CP	- PNB	09/09/82	3,092,783.51	3,000,000.00	3,003,049.83	1,288.66
15.0000	CP	- PNB	09/09/82	10,721,649.49	10,400,000.00	10,410,572.75	4,467,35
14,6000	CP	- DUPONT	09/10/82	12,392,000.00	11,999,999.73	12,002,478.13	30,153.87
13.8100	CP	- FLUOR	09/13/82	12,425,000.00	12,000,793.24	11,982,932.31	66,729,15
14.6500	CP	- MERRILL LYNCH	09/17/B2	10,362,664.39	10,000,000.00	10,003,410.98	29,519.19
14.7000	CP	- BANKERS TRUST	09/20/82	3,900,000.00	3,756,675.00	3,758,451.67	12,740,00
	Ţ	DTAL	488,587,180,90				4,240,280,51
					478,550,842.32	478,136,340,91	
	:	NEGOTIABLE CERT OF D	EP05IT				
14.1000		- PHILA NAT BANK	07/02/82	4,835,000.00	4,835,000.00	4+834+666+98	109,835.08
14.6500	CD	- GIRARD BANK	07/07/82	5,000,000.00	5,000,000.00	4,999,169.56	168,881.94
14.0000	CD	- CONT BANK	07/13/82	175,000.00	175,000.00	174,919.91	3,198.61
13.9500	CD	- PNB	07/16/82	5,000,000.00	5,000,000.00	4,997,079.05	91,062.50

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FACE RATE	SECURITY DESCRIPTION	MATURITY DATE	FAR VALUE	PRINCIPAL COST	MARKET VALUE	ACCRUED INTEREST
	: NEGOTIABLE CERT C	OF DEPOSIT				
13.6000	CD - PNB	08/05/82	9,000,000.00	9,000,000.00	8,986,430.53	78,200.00
13.6500	CD MELLON BANK	08/06/82	13,800,000.00	13,800,000.00	13,779,554.29	104,650.00
	TOTAL		37,810,000,	00		555,828.13
				37,810,000.00	37,771,820.32	
GRAND TOTAL -	SHORT TERM	•	973,698,930,90			9,369,250.71
				961,285,102.22	960,877,651,40	

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View of the State Capitol Rotunda Dome Harrisburg, Pennsylvania