

Eighteenth Annual Report
of the
TEACHERS' RETIREMENT SYSTEM
OF THE
STATE OF KENTUCKY

1957-58



DECEMBER, 1958

TEACHERS' RETIREMENT SYSTEM

of the
STATE OF KENTUCKY

December 23, 1958

Honorable A. B. Chandler
Governor of Kentucky
Frankfort, Kentucky

Dear Governor Chandler:

We are pleased to submit to you, in accordance with provisions of KRS 161.320, the Eighteenth Annual Report of the Board of Trustees of the Teachers' Retirement System. The System closed the year in excellent condition as is attested to by the Actuary's evaluation. The Auditor's Report covering the last two fiscal years also indicates that the System is being operated in a satisfactory manner.

Respectfully yours,
W. S. Milburn
Chairman, Board of Trustees

James L. Sublett
Executive Secretary
Teachers' Retirement System
of the State of Kentucky

CONTENTS

	Page
BOARD OF TRUSTEES	1
PART I. GENERAL INFORMATION	3
PART II. FINANCIAL	5
PART III. ACTUARIAL VALUATION	14
PART IV. STATISTICAL	19
PART V. AUDITOR'S REPORT	22
PART VI. LEGISLATIVE RESEARCH COMMISSION STUDY	26

TEACHERS' RETIREMENT SYSTEM

STATE OF KENTUCKY

BOARD OF TRUSTEES

Elected by members:

L. C. Curry, ChairmanBowling Green

W. S. Milburn, Vice ChairmanLouisville

John Fred WilliamsAshland

Mrs. Edna LindleHenderson

Ex-officio:

Robert R. Martin, Superintendent of Public Instruction.....Frankfort

Henry H. Carter, State TreasurerFrankfort

Jo M. Ferguson, Attorney GeneralFrankfort

PART I. GENERAL INFORMATION

Eighteen years have passed since the Teachers' Retirement System of the State of Kentucky first became operative on July 1, 1940, following a legislative appropriation of \$1,000,000 during the 1940 session of the General Assembly. In 1940-41 members first made contributions and members were first retired effective July 1, 1942.

From these meager beginnings the Retirement System has grown until at the close of the fiscal year assets were in excess of \$50,000,000. Because of increased salaries and larger contributions, we may expect these assets to increase to about \$100,000,000 over a five-year period. These rapidly growing assets will greatly increase the administrative activities necessary to operate the Retirement System effectively.

The Teachers' Retirement System is an actuarial reserve system. In simple language this means that contributions from the members and the State and the interest earnings of investments will be sufficient to pay future benefits. In an actuarial reserve system contributions of a member are never obligated to pay benefits to another member, nor are the annuities of retired teachers dependent upon the contributions of future members.

Over the years the Retirement System has been strengthened and improved. Four times since its inception, in 1946, 1950, 1954, and in 1958 annuities to retired teachers have been increased. In addition, in 1954 the Retirement Law was amended to permit payment of contributions on gross annual salary. This amendment was implemented in 1955 and makes possible future annuities commensurate with earnings.

Perhaps during no single period has the Retirement System been more improved than in 1957-58. During the 1958 session of the General Assembly, in addition to the increase in annuities to retired teachers, much important legislation was adopted.

Legislation was enacted providing survivors benefits, in lieu of refund, to a surviving spouse, children under eighteen, and dependent parents. A flat death benefit of \$500 payable to the estate or beneficiary of retired or active teachers was provided, and the membership qualification for disability retirement was reduced from twenty to ten years.

In addition, the portion of the Retirement Law concerning investment of funds was modified to permit greater participation in municipal and corporate bond issues. This will have the effect of increasing the earnings of the System, further strengthening its already sound financial position.

These were the highlights of 1957-58 in the Retirement System. The financial and actuarial reports of the System are included in other sections of this report along with certain pertinent statistics. The staff of

the Retirement System carries on many other activities which, while little known, are worthy of mention. For example, during 1957-58, thirty-nine teachers made voluntary contributions amounting to \$10,215.08. These contributions will provide additional income at retirement. Many members should be taking advantage of the 3 per cent compound interest feature of this plan, materially increasing their retirement incomes.

During 1957-58, there were 664 personal checks received from 471 teachers, amounting to \$53,535.21. These checks were in payment of contributions while on leave of absence, for military service, on deferred retirement, for out-of-state service, and the like.

In 1957-58 sixty active members died. Twenty-four were men and thirty-six women. Refunds totaling \$63,409.34 were made to the beneficiaries in amounts ranging from \$19.17 to \$2,733.13.

As indicated in another section of this report, there were 2,254 refunds made during the fiscal year. Records on 2,176 active members indicate that 1,692 had less than five years of service while twenty-eight had twenty or more years of service.

In the fiscal year the investments of the Retirement System increased \$7,330,000. This increase involved 99 purchases. Actually since a number of low yield Treasury Bonds were switched to higher yielding bonds, the amount of money involved was considerably greater than the net increase in investments.

These are but a few examples of the many and varied activities necessary in the operation of the Teachers' Retirement System. More important than any of these is the day to day contact with members by letter, telephone and in person, answering questions and helping to solve individual problems. Providing service to members is the most important function of the staff of the Teachers' Retirement System. It is our hope that many more members will bring their problems to us.

PART II. FINANCIAL

The funds of the Teachers' Retirement System derive from three sources: member contributions, state matching funds, and interest earned on investments. The State makes contributions in two sums; one for matching current member contributions and a smaller amount to discharge its obligation, on an amortization basis, for service credit earned prior to 1940-41.

In addition, the Board of Trustees establishes an administrative expense fund which may not exceed 4 per cent of the State matching fund. Actually in recent years the administrative fund has been considerably less than the statutory maximum.

BALANCE SHEET
Teachers' Retirement System
June 30, 1958

ASSETS		
Cash, Unencumbered,		
All Funds	\$ 186,765.71	
Cash, Encumbered	5,275.51	\$ 192,041.22
Investments		49,921,000.00
Deferred Charges:		
Unamortized Premium on		
Investments	\$ 515,284.26	
Accrued Interest Purchased..	26,325.87	
Subtotal	541,610.13	
Unamortized Discount on		
Investments	138,658.39	402,951.74
TOTAL ASSETS		<u><u>\$50,515,992.96</u></u>
 LIABILITIES AND		
FUND BALANCES		
Expense Fund Encumbrances..		\$ 5,275.51
Fund Balances:		
Expense Fund	\$ 13,549.76	
Teachers' Savings Fund	22,814,471.74	
State Accumulation Fund	22,814,471.74	
Guarantee Fund	2,478,362.08	
Voluntary Contributions,		
Active Members	50,370.51	
Allowance Reserve Fund:		
Teachers' Contributions	\$ 189,981.38	
State "Permanent" Con-		
tributions	627,782.14	
State "Temporary" Con-		
tributions	1,521,728.10	2,339,491.62
Total Fund Balances		\$50,510,717.45
TOTAL LIABILITIES AND		
FUND BALANCES		<u><u>\$50,515,992.96</u></u>

STATEMENT OF RECEIPTS AND DISBURSEMENTS

Teachers' Retirement System

for the Period July 1, 1957 — June 30, 1958

CASH BALANCE, ALL FUNDS, JULY 1, 1957 \$ 131,976.09

Receipts:

Teachers' Savings	\$3,523,727.93	
Reinstatements	4,583.72	
Voluntary Unmatched Contributions	9,780.28	
Total from Members		\$ 3,538,091.93

State Contributions:

"Permanent"—to match Teachers' Savings	3,523,551.57	
"Temporary"—to reduce Prior Service Obligation ..	612,278.43	
Administrative Expense	125,225.00	4,261,055.00
Interest Collected, Bonds Redeemed or Sold		9,217,077.53
Annuity Checks Returned, Benefit Adjustments		8,798.43
Total Receipts		17,025,022.89

TOTAL CASH AVAILABLE .. \$17,156,998.89

Disbursements:

Administrative Expenses		
Current Year	\$ 106,399.73	
Liquidation of Prior Year Encumbrances	4,668.43	\$ 111,068.16
Refunds for Withdrawal from Membership		485,884.68
Retirement Allowance Payments:		
Superannuation	1,040,610.26	
Disability	103,836.33	
Voluntary	2,616.92	1,147,063.51
Purchases of Investments		15,220,941.41
Total Disbursements		16,964,957.76

CASH BALANCE, ALL FUNDS—June 30, 1958 \$ 192,041.22

ANALYSIS OF RECEIPTS

Teachers' Retirement System

Fiscal Years 1940-41 through 1957-58

Date	Teachers' Savings*	Rein- statements	State Matching Contribution	State Prior Service Contribution	State Contribution for Expenses	Interest and Profit	Total Receipts
7/1/40-6/30/48	\$ 5,247,894.16	\$ 8,814.02	\$ 5,102,654.36	\$ 510,740.77	\$220,604.87	\$ 841,978.43	\$11,932,686.61
1948-49	1,105,134.40	537.41	1,247,642.85	2,626,438.79	41,500.00	318,688.22	5,339,941.67
1949-50	1,181,924.12	1,049.89	1,181,632.98	252,242.02	44,000.00	429,361.89	3,090,210.90
1950-51	1,251,317.46	4,002.05	1,250,896.04	326,488.96	52,615.00	399,979.09	3,285,298.60
1951-52	1,413,081.57	4,290.75	1,410,675.96	169,104.04	60,220.00	528,127.92	3,585,500.24
1952-53	1,470,569.81*	3,887.05	1,460,497.62	640,267.38	59,039.00	610,139.97	4,244,400.83
1953-54	1,509,971.81*	6,262.44	1,503,190.97	144,949.03	62,860.00	688,046.72	3,915,280.97
1954-55	1,606,795.76*	5,240.32	1,600,512.20	151,231.80	70,000.00	776,485.87	4,210,265.95
1955-56	2,706,333.97*	5,730.97	1,929,901.00	.....	70,355.00	908,548.21	5,620,869.15
1956-57	3,409,800.55*	6,946.98	3,396,749.24	611,125.76	89,000.00	1,082,779.34	8,596,401.87
1957-58	3,533,508.21*	4,583.72	3,523,551.57	612,278.43	125,225.00	1,557,061.91	9,356,208.84
Totals	\$24,436,331.82	\$51,345.60	\$23,607,904.79	\$6,044,866.98	\$895,418.87	\$8,141,197.57	\$63,177,065.63

*Includes Voluntary Unmatched Contributions.

**COMPARISON OF BUDGET REQUESTS
WITH APPROPRIATIONS RECEIVED
July 1, 1940, through June 30, 1958**

Biennium	Budget Request	Appropriations	Not Appropriated
1940-42	\$ 1,500,000.00	\$ 1,000,000.00	\$ 500,000.00
1942-44	1,719,600.00	1,300,000.00	419,600.00
1944-46	1,945,250.00	1,622,000.00	323,250.00
1946-48	2,340,000.00	1,912,000.00	428,000.00
1948-50	5,393,456.64	5,393,456.64	.....
1950-52	3,258,540.00	3,270,000.00	(11,460.00)
1952-54	4,254,340.00	3,870,804.00	383,536.00
1954-56	4,439,605.00	3,822,000.00	617,605.00
1956-58	8,356,705.00	8,356,705.00	.....
Totals	\$33,207,496.64	\$30,546,965.64	\$2,660,531.00

Note: The total Budget Request for 1956-58 of \$8,356,705 included \$6,923,335 to match estimated contributions by members, \$1,281,370 for prior service, and \$152,000 for administrative expense.

INVESTMENTS

Investments of funds of the Teachers' Retirement System are made by the Board of Trustees as provided by law. To facilitate the investment procedure the Board has appointed two of its members to serve as an Investment Committee. This Committee works with the staff in making purchases subject always to the approval of the full Board. As the assets of the System grow, the investment function becomes increasingly important and complex.

The State Treasurer is the custodian of all funds of the Retirement System and all securities purchased are deposited with the State Treasurer.

Analysis of Investments

June 30, 1958

	Par Value	Percentage of Total
Bonds:		
United States Treasury	31,310,000	62.71%
Obligations of Commonwealth	1,601,000	3.21
Municipal and School	7,670,000	15.36
Corporate, mortgage, or debentures	9,340,000	18.71
	<hr/>	
Total June 30, 1958	\$49,921,000	
Total June 30, 1957	42,591,000	
	<hr/>	
Net increase during fiscal year ending		
June 30, 1958	\$ 7,330,000	

COST OF ADMINISTRATION
Teachers' Retirement System
July 1, 1940, through June 30, 1958

Year	Receipts of State Accumulation Fund (for Matching & Prior Service)	Administrative Expenses	Percentage of Receipts
1940-41	\$ 476,089.49	\$ 23,669.88	4.97%
1941-42	481,713.03	18,232.93	3.79
1942-43	627,680.61	22,317.03	3.56
1943-44	625,300.00	24,633.20	3.94
1944-45	772,866.80	25,908.68	3.35
1945-46	791,641.32	31,390.43	3.97
1946-47	919,490.57	36,039.67	3.92
1947-48	919,960.33	36,409.41	3.96
1948-49	1,434,834.59	41,059.78	2.90
	2,439,606.64*		
1949-50	1,434,315.22	43,396.76	3.03
1950-51	1,577,988.24	52,324.68	3.32
1951-52	1,580,070.32	58,303.98	3.69
1952-53	2,102,681.02	57,490.72	2.73
1953-54	1,649,688.28	61,165.65	3.71
1954-55	1,753,438.35	68,889.71	3.93
1955-56	2,693,326.38	69,548.14	2.58
1956-57	4,008,681.86	88,407.80	2.21
1957-58	4,261,055.00	111,868.14**	2.62

*Special appropriation for prior service is not reflected in administrative expense computations.

**Net amount of administrative expenses after liquidation of outstanding encumbrances.

RETIREMENT ALLOWANCES PAID
Teachers' Retirement System
July 1, 1942, through June 30, 1958

Year	Cause of Retirement		Funds from which Paid			Total	Percentage Paid from State "Temporary" Funds
	Age	Disability	TC	SC(Perm.)	SC(Temp.)		
1942-43	\$ 62,439.36	\$ 1,426.56	\$ 15,791.10	\$ 15,215.22	\$ 32,859.60	\$ 63,865.92	51.5%
1943-44	80,761.09	2,316.70	9,491.37	8,345.75	65,240.67	83,077.79	78.5
1944-45	101,589.73	2,862.12	14,258.05	11,527.58	78,666.22	104,451.85	75.3
1945-46	130,057.95	3,803.48	24,692.91	13,686.44	95,482.08	133,861.43	71.3
1946-47	201,523.60	13,866.57	40,215.35	28,118.59	147,056.23	215,390.17(a)	68.3
1947-48	234,395.83	17,978.71	38,185.99	31,348.35	182,840.20	252,374.54	72.4
1948-49	268,804.55	20,763.60	46,017.03	29,902.32	213,648.80	289,568.15	73.8
1949-50	306,449.13	24,918.44	57,683.56	36,823.79	236,860.22	331,367.57	71.5
1950-51	466,318.45	51,224.27	90,904.36	66,228.19	360,410.17	517,542.72(b)	69.6
1951-52	516,131.59	58,080.73	86,685.31	68,091.54	419,435.47	574,212.32	73.0
1952-53	580,791.54	66,293.72	120,169.70	67,935.42	458,980.14	647,085.26	70.9
1953-54	651,556.68	73,639.60	137,788.76	93,637.63	493,769.89	725,196.28	68.1
1954-55	818,463.88	90,559.54	155,608.13	123,280.98	630,134.31	909,023.42(c)	69.3
1955-56	883,855.94	98,740.62	164,026.16	130,416.71	688,153.69	982,596.56	70.0
1956-57	948,785.49	100,641.52	184,815.47	119,989.90	744,621.64	1,049,427.01	71.0
1957-58	1,034,759.95	103,637.13	235,990.95	126,817.43	775,588.70	1,138,397.08	68.1
Totals	\$7,286,684.76	\$ 730,753.31	\$1,422,324.20	\$ 971,365.84	\$5,623,748.03	\$8,017,438.07(d)	70.1

(a) Minimum allowance raised to \$10.00 per service credit year not to exceed 30 years.

(b) Minimum allowance raised to \$16.00 per service credit year.

(c) Minimum allowance raised to \$18.00 per year of service credit for maximum of 35 years.

(d) 17.7% of benefit payments from funds paid by teachers, 82.3% of payments from State matching fund and "temporary" contributions.

REFUNDS

Teachers' Retirement System

July 1, 1940, to June 30, 1958

Date	Withdrawals		Deceased		Special		Total	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
1940-44.....	2,654	\$ 106,474.07	148	\$ 11,447.66	21	\$ 231.76	2,823	\$ 118,153.49
1944-45.....	914	48,760.45	52	6,567.58	8	168.27	974	55,496.30
1945-46.....	1,621	103,926.44	61	8,654.01	7	71.37	1,689	112,651.82
1946-47.....	2,161	135,006.00	37	6,298.25	19	467.06	2,217	141,771.31
1947-48.....	1,759	128,236.67	55	12,866.81	18	478.03	1,832	141,581.51
1948-49.....	2,048	152,409.50	68	18,104.35	13	137.90	2,129	170,651.75
1949-50.....	1,938	176,872.29	48	14,917.02	23	286.43	2,009	192,075.74
1950-51.....	2,709	243,534.94	84	28,475.11	19	466.51	2,812	272,476.56
1951-52.....	2,384	243,689.14	67	28,461.17	16	552.63	2,467	272,702.94
1952-53.....	2,954	288,013.06	72	24,405.01	4	53.51	3,030	312,471.58
1953-54.....	2,268	278,483.49	51	32,243.80	9	155.22	2,328	310,882.51
1954-55.....	2,164	313,019.33	47	37,659.91	13	292.38	2,224	350,971.62
1955-56.....	2,102	324,571.79	67	53,222.51	13	226.68	2,182	378,020.98
1956-57*.....	1,832	381,015.98	67	63,100.03	10	502.87	1,909	444,618.88
1957-58*.....	2,183	422,166.84	60	63,459.52	11	176.36	2,254	485,802.72
Totals.....	31,691	\$3,346,179.99	984	\$409,882.74	204	\$4,266.98	32,879	\$3,760,329.71

* Does not include Refunds of Voluntary Unmatched Contributions.

PART III. ACTUARIAL VALUATION

December 1, 1958

Members of the Board of Trustees
Teachers' Retirement System
of the State of Kentucky
Frankfort, Kentucky

Gentlemen:

I have the honor of presenting herewith a report on a valuation of the Teachers' Retirement System of the State of Kentucky, together with a descriptive narrative and comments pertaining thereto. The accompanying Valuation Balance Sheet shows the financial condition of the System as of July 1, 1958, from a technical standpoint.

The courteous and considerate cooperation of James L. Sublett and the able staff of the System in supplying, with promptness, statistical data required for the preparation of this Valuation Balance Sheet is hereby acknowledged with appreciation.

Respectfully submitted,

(signed) L. C. Cortright
L. C. Cortright, M.C.A.
Actuary

ACTUARY'S REPORT ON A VALUATION
of the
TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
as of July 1, 1958

The results of an Actuarial Valuation of the Teachers' Retirement System of the State of Kentucky are presented herewith. The Valuation, required annually, is made to determine whether contributions, from both the State and the membership, are proving sufficient to meet the liabilities for benefits under the statutes. The Valuation Balance Sheet provides an actuarial determination of current and future Assets and Liabilities of the System and indicates its financial condition, from a technical standpoint. It points up the trends, and thus serves as a basis for any change in the Teachers' Retirement Law which may be necessary to maintain the System in a sound fiscal condition.

VALUATION BALANCE SHEET—JULY 1, 1958

(On basis of assumed retirement at age 65)

A S S E T S

Current Assets

Cash, 7-1-58	\$ 832,726.22	
Accounts Receivable		
Investments	49,921,000.00	
Unamortized Premiums,		
less discount	376,625.87	
Accrued Interest on Bonds		
Purchased	26,325.87	
		51,156,677.96
Total Current Assets		<u>\$ 51,156,677.96</u>

Deferred Assets

Deferred Assets, S.S.:¹

(Deferred Obligation, Teachers' and Commonwealth of Ky.)

(1) Present Value Teachers' Contributions, mandatory by reason of Subsequent Service, 7-1-58 (A')	\$38,345,071.50	
(2) Present Value State's Contributions, mandatory by reason of Subsequent Service, 7-1-58 (A'')	38,345,071.50	
(3) Excess of S.S. Deferred Liabilities over S.S. Deferred Assets	7,816,119.21	

Deferred Assets mandatory by reason of Subsequent Service

84,506,262.21

Deferred Assets, P.S.: Amortization Requirement:¹

(Deferred Obligation of the Commonwealth of Ky.)

(4) Present Value Accrued Obligation mandatory by reason of Prior Service, 7-1-58		
Active Members	\$ 5,838,628.36	
Active Members, age 65 or over.....	1,569,105.68	

Deferred Assets, P.S.: Accrued Amortization Requirements:¹

(Accrued obligation of the Commonwealth of Ky.)

7,407,734.04

(5) Present Value of Accrued Prior Service obligation due retired teachers, 7-1-58	16,751,042.33	
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Less: State's Prior Service

Contributions*	2,162,413.10	14,588,629.23
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Deferred Assets mandatory by reason of Prior Service

21,996,363.27

Total Deferred Assets

\$106,502,625.48

TOTAL ASSETS

\$157,659,303.44

* See discussion of Allowance Reserve Fund.

¹ Present Values on 3% interest assumption, etc.

VALUATION BALANCE SHEET—JULY 1, 1958

(On basis of assumed retirement at age 65)

LIABILITIES

Current Liabilities

Outstanding Items		\$	5,275.51
(1) Expense Fund, 7-1-58			13,549.76
(2) Teachers' Savings Fund—			
Accumulated Contributions by reason of Subsequent Service,			
7-1-58	\$22,525,202.60		
Voluntary Contributions, Active Members, 7-1-58	50,370.51		22,575,573.11
(3) State Accumulation Fund—			
Accumulated Contributions (State) by reason of Subsequent Service,			
7-1-58			22,525,202.60
(4) Allowance Reserve Fund:			
Retired Teachers' S.S. Contributions with accumulated interest,			
7-1-58	479,250.52		
State S.S. Contributions, Retired Teachers with accumulated interest, 7-1-58	917,051.28		
Voluntary Contributions, Retired members, 7-1-58			
State P.S. Contributions, Retired teachers, 7-1-58*	2,162,413.10		3,558,714.90
(5) Guarantee Fund, 7-1-58			2,478,362.08
Total Current Liabilities		\$	<u>51,156,677.96</u>

Deferred Liabilities

Deferred Liabilities, S.S.:¹

(6) Present Value Benefits mandatory by reason of Subsequent Service			
Active Members, 7-1-58 (B')	\$84,056,505.68		
(7) Present Value Benefits mandatory by reason of S.S., Active Members, Age 65 and over, 7-1-58 (B''')	449,756.53		

Deferred Liabilities mandatory by reason of S.S. (B' plus B''') 84,506,262.21

Deferred Liabilities, P.S.:¹

(8) Present Value Benefits mandatory by reason of Prior Service, 7-1-58			
Active Members (B)	\$ 5,838,628.36		
Active Members, age 65 and over (B'')	1,569,105.68		7,407,734.04

(9) Present Value Benefits mandatory by reason of Prior Service—			
Retired Teachers (B''''), 7-1-58	16,751,042.33		

Less: State's Prior Service Contributions* 2,162,413.10 14,588,629.23

Deferred Liabilities mandatory by reason of Prior Service (8) plus (9) 21,996,363.27

Total Deferred Liabilities 106,502,625.48

TOTAL LIABILITIES \$157,659,303.44

* See discussion of Allowance Reserve Fund.

¹ Present Values on 3% interest assumption, etc.

Conclusions

In the foregoing Report, based upon the Valuation Balance Sheet prepared as of July 1, 1958, the condition of the Teachers' Retirement System of the State of Kentucky has been factually presented from a technical standpoint. An eminently satisfactory financial outlook is disclosed.

The changes that have occurred during the last year in the characteristics of the membership and the statistical data have materially increased the totals reflected in the Valuation Balance Sheet.

For practical purposes, it can be assumed that the accumulated pension credits (Subsequent Service Credit) from July 1, 1941, to July 1, 1958, are in substantial equality with the accumulated amounts in the "Teachers Savings Fund", the "State Accumulation Fund", and the "Guarantee Fund" accounts, thus indicating the adequacy of the funds in hand to discharge the accrued Subsequent Service Liability as of July 1, 1958.

The implications of the Retirement System law can now virtually guarantee the ultimate actuarial funding of the obligations of the System resulting from future service of member teachers by the application of either of the two suggestions discussed in this Report.

The faith and integrity of the Commonwealth of Kentucky guarantees the Prior Service obligation of the System and makes their future liquidations certain.

The provisions of the law with respect to the control over the investment portfolio of the System have opened the way for a further substantial improvement in the investment earnings of the System.

The new amendments to the Retirement System law passed by the 1958 General Assembly have materially augmented and improved the benefit structure of the System.

The Retirement System law, as amended July 1, 1958, does, of course, pose new problems upon those responsible for the administration of the System. However, the conscientious concern for the financial welfare of the System that is manifest by the Board of Trustees and the Executive Secretary will resolve these problems as similar issues have been met in the past. Both active and retired members, and their beneficiaries, whose future interests are so dependent upon the financial stability of the System, can take pride in the present showing, as disclosed by the Valuation Balance Sheet, and can look forward, with confidence, to continued improvement therein.

The plan of operation underlying the System is under constant scrutiny, not only by the System's technical advisers, but also by the Board of Trustees and the able staff of the System, in order that current trends and new developments in the pension field can be appraised for the benefit of the Teachers' Retirement System.

Respectfully submitted,
(signed) L. C. Cortright
L. C. Cortright, M.C.A.
Actuary

PART IV. STATISTICAL

The first obligation of the Teachers' Retirement System is to protect and invest the funds of its members. Secondly, it is necessary to know that the funds of the System plus anticipated receipts will be sufficient to pay annuities. There is the further responsibility for constantly examining the System in order that additional improvements may be made.

To accomplish these objectives it is necessary to gather a great many statistics concerning the membership of the System. Raw statistics usually are not meaningful, and, therefore, we have tried in this section to present statistics in a meaningful form, giving some indication of the characteristics of the System and its membership.

Contributors, 1957-58

Number of contributors	23,488
Annual salary	\$76,904,982.00
Average salary	\$3,274.22
Median age*	42.3
Number with prior service credit	9,727
Total years of prior service credit	93,065.0
Average years of prior service credit	10.31
Total member contributions**	\$3,533,508.21
Average contribution	\$150.44

* Based on attained age as of July 1, 1958.

** Includes voluntary unmatched contributions amounting to \$10,215.08.

New Contributors, 1957-58*

	Male	Female	Total
Number of contributors	895	1,902	2,797
Per cent of total	31.99	68.01	100.00
Number with prior service credit	13	92	105
Total years of prior service credit.....	71.4	474.6	546.0
Average years of prior service credit.....	5.50	5.20	5.35
Median attained age	50.5	49.6	50.1
Number without prior service credit.....	882	1,810	2,692
Per cent of total	32.76	67.24	100.00
Median attained age	26.4	26.3	26.35

* Does not include contributors who did not file service records.

Withdrawal of Membership

	Number Withdrawn
Withdrawals July 1, 1957, to June 30, 1958.....	2,183
Reasons given for withdrawals:	
Lost service credit because of absence of six years....	628
Homemaking and family duties	323
Teaching in other states	319
Women whose husbands' work was transferred to other states	209
Changed profession	171
Other work; work not indicated	141
Moved to another state—(men)	80
Emergency teachers	72
Members deceased	60
Illness, not eligible for disability annuity.....	53
Unmarried women left the state; work not indicated	50
Teaching in Kentucky schools not covered by T.R.S..	30
Insufficient salary	30
Business of own	25
Not re-employed	17
Military service	14
Disliked teaching	7
Reduction of teaching staff	7
Withdrawals July 1, 1940, through June 30, 1958.....	31,691
Average annual withdrawals for 10-year period to June 30, 1958	2,258

Members Deceased Before Retirement

	Male	Female	Total
Deaths, July 1, 1957, through June 30, 1958.....	24	36	60
Per cent of total number	40.00	60.00	100.00
Number with prior service credit	10	25	35
Total years of prior service credit .....	....	....	501.4
Average years of prior service credit .....	....	....	14.33
Median age at death	47.25	51.20	49.0

LIVING RETIRED MEMBERS Trend in Annuity Payments*

Year Ending June 30	Number Receiving Annuities at end of year	Percentage Increase Over Preceding Year	Total Annuity Payments During Year	Percentage Increase Over Preceding Year	Average Annual Annuity	Percentage Increase Over Preceding Year
1943	229	.....	\$ 63,865.92	.....	\$278.89	.....
1944	314	37.12%	83,077.79	30.08%	264.58	(5.13) %
1945	377	20.06	104,451.85	25.73	277.06	4.72
1946	461	22.28	133,861.43	28.17	290.37	4.80
1947	595	29.07	215,390.17	60.91	362.00	24.67
1948	689	15.80	252,374.54	17.17	366.29	1.19
1949	796	15.53	289,568.15	15.74	363.78	(0.69)
1950	896	12.56	331,367.57	14.44	369.83	1.66
1951	1,056	17.86	517,542.72	56.18	490.10	32.52
1952	1,152	9.09	574,212.32	10.95	498.45	1.70
1953	1,284	11.46	647,085.26	12.69	503.96	1.11
1954	1,410	9.81	725,196.28	12.07	514.32	2.06
1955	1,531	8.58	909,023.42	25.35	593.74	15.44
1956	1,618	5.68	982,596.56	8.09	607.29	2.28
1957	1,704	5.32	1,049,427.01	6.80	615.86	1.41
1958	1,822	6.92	1,138,397.08	8.47	624.80	1.45

* Computations are based upon the number of members receiving annuity benefits on June 30, of each fiscal year, and the total annuity payments during each fiscal year.

PART V. AUDITOR'S REPORT

The State Treasurer is the custodian of the funds and securities of the Teachers' Retirement System and the Attorney General is its legal adviser. The Auditor of Public Accounts audits the financial records of the system.

No audit was made at the close of the 1956-57 fiscal year, and, therefore, this report covers two years, the 1956-57 and 1957-58 years. All accounts and records including investments, have been thoroughly audited and the Auditor's statement and Comparative Balance Sheet for the two-year period are herein presented.

November 28, 1958

Mr. James L. Sublett, Executive Secretary
Teachers' Retirement System of Kentucky
Frankfort, Kentucky

Dear Mr. Sublett:

We have examined the financial records of the Teachers' Retirement System of Kentucky for the fiscal years ended June 30, 1957, and June 30, 1958, and submit herewith our report.

Our examination was conducted in accordance with generally accepted auditing standards and included such tests and auditing procedures as we considered necessary under the circumstances.

The internal control and handling of cash receipts appear adequate. However, we recommend the use of pre-numbered receipts in duplicate for all cash items.

The agency had instituted in November, 1956, an examination of each personal history card to determine if the individual has contributed the correct amount per year since the beginning of the system. Any underpayment is being billed to the individual and all overpayments are being refunded.

The agency endeavoring to improve its service to the teachers expects to install equipment that will provide each participant with an annual statement of account.

Respectfully submitted,
(signed) Mary Louise Foust
Auditor of Public Accounts

TEACHERS' RETIREMENT SYSTEM
COMPARATIVE BALANCE SHEET

June 30, 1957

Assets

Cash, Unencumbered, All Funds	\$ 127,771.09	
Cash, Encumbered	4,205.00	\$ 131,976.09
Investments		42,591,000.00

Deferred Charges

Unamortized Premium on Investments	\$ 363,300.38	
Accrued Interest Purchased....	7,803.33	371,103.71
Less: Unamortized Discount on Invest.	(192,077.48)	179,026.23

Total Assets		\$42,902,002.32
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Liabilities and Fund Balances

Expense Fund Encumbrances..		\$ 4,205.00
Overpayment Adjustment Due to School Dist.		1.40

Fund Balances

Expense Fund	\$ 1,055.63	
Teachers' Savings Fund	19,489,912.71	
State Accumulation Fund	19,489,914.11	
Guarantee Fund	1,696,481.35	
Voluntary Contributions, Active Members	42,114.50	
Allowance Reserve Fund:		
Teachers' Contributions	\$ 118,408.91	
State "Permanent" Con- tributions	449,923.22	
State "Temporary" Con- tributions	1,609,985.49	2,178,317.62

Total Fund Balances		42,897,795.92
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Total Liabilities and Fund Balances.....		\$42,902,002.32
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TEACHERS' RETIREMENT SYSTEM
COMPARATIVE BALANCE SHEET

June 30, 1958

Assets

Cash, Unencumbered, All Funds	\$ 186,765.71	
Cash, Encumbered	5,275.51	\$ 192,041.22
Investments		49,921,000.00

Deferred Charges

Unamortized Premium on		
Investments	\$ 515,284.26	
Accrued Interest Purchased.....	26,325.87	541,610.13
Less: Unamortized Discount		
on Invest.	(138,658.39)	402,951.74

Total Assets		<u>\$50,515,992.96</u>
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Liabilities and Fund Balances

Expense Fund Encumbrances..		\$ 5,275.51
Overpayment Adjustment Due		
to School Dist. ....		.....

Fund Balances

Expense Fund	\$ 13,549.76	
Teachers' Savings Fund	22,814,471.74	
State Accumulation Fund	22,814,471.74	
Guarantee Fund	2,478,362.08	
Voluntary Contributions,		
Active Members	50,370.51	
Allowance Reserve Fund:		
Teachers' Contributions	\$ 189,981.38	
State "Permanent" Con-		
tributions	627,782.14	
State "Temporary" Con-		
tributions	1,521,728.10	2,339,491.62
Total Fund Balances		<u>50,510,717.45</u>

Total Liabilities and Fund Balances.....		<u>\$50,515,992.96</u>
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PART VI. LEGISLATIVE RESEARCH COMMISSION STUDY

In 1956 the General Assembly of the Commonwealth of Kentucky directed the Legislative Research Commission to make a study of the Teachers' Retirement System and the Employees Retirement System. More particularly the study was to be concerned with costs of coverage under separate and merged systems. The mandate to the Legislative Research Commission was as follows:

Section 1. The Legislative Research Commission is directed to look into and ascertain the costs and benefits of the present Kentucky Teachers' Retirement System compared with coverage of the public school teachers of Kentucky by the Retirement System for State Employees. The latter combines a state retirement system with Social Security. Said study is to be made for the purpose of securing information essential to future legislation to secure coverage of teachers by the Federal Old Age and Survivors Insurance (Social Security) without loss or impairment of their state retirement.

Section 2. The Legislative Research Commission shall, for purposes of estimating the cost of teacher coverage by the Retirement System for State Employees, assume that the accumulated reserve fund of the present Kentucky Teachers' Retirement System would be set aside and put in a special fund for the payment of retirement benefits to teachers; further they shall assume that said fund would be turned over to administrators of the Retirement System for State Employees to be used only for the payment of retirement benefits to teachers.

A report of the pending study was made in the Seventeenth Annual Report. The study was duly made and reported to the General Assembly in 1958. Reproduced below, with the permission of the Legislative Research Commission, are the Findings and Recommendations as reported in Legislative Research Commission Research Publication No. 56, January, 1958.

FINDINGS AND RECOMMENDATIONS

The Legislative Research Commission was directed by Senate Resolution No. 58 to investigate and study several aspects of the existing Teachers' Retirement System and the State Employees Retirement System. The consulting actuary firms of L. C. Cortright and Bowles, Andrews and Towne collaborated on an analysis of these systems.

Four major areas of possible alteration of the Teachers' Retirement System were considered. These areas and the findings resulting from the study were:

AREA I. Merger of the Kentucky Teachers' Retirement System into the Kentucky Employees Retirement System. This would entail identical benefits for both groups including Federal Social Security. The approximate cost of this to the State would be \$14,950,332 for the biennium to maintain this plan. This figure includes the present cost of the Retirement System to the State.

AREA II. Preservation of existing Kentucky Teachers' Retirement System with contributions being equated for the teachers on same basis as in the Kentucky Employees Retirement System. The State would provide benefits similar to those granted other employees under Federal Social Security. Similar deductions would be made from teachers' salaries, but the State would retain the teachers contributions and institute its own survivor benefits program for the teachers. This area of development would cost approximately \$24,387,066 for the biennium and includes the existing rate of State contributions.

AREA III. Maintain present Teachers' Retirement System with addition of Federal Social Security, and this could cost approximately \$16,540,792 for the biennium including the State's existing rate of contributions.

AREA IV. Continuance of present Teachers' Retirement System, which plan would cost the State approximately \$9,348,576, and to augment this plan with the survivor benefits would cost the State additionally approximately \$900,000 a biennium.

The figures offered are an estimate of the cost to the State only for the first biennium, and it would grow increasingly more each biennium.

The Actuary report demonstrates the tremendous financial burdens that would be assumed by the State if the Teachers' Retirement System and Employees Retirement System were merged or equated. Placing the entire teaching profession under Old Age Survivors and Dependents Insurance would also place greater financial burdens on the teachers and the State.

Area IV of the Actuary report assumes the retention of the present Teachers' Retirement System with the addition of OASI type benefits provided by the State. This will cost the State and/or teachers $\frac{1}{2}$ per cent more than the present contribution rate. These benefits are more in reason with costs of financing and seems the logical area to adopt.

The Actuary report points out that if Area I or II were adopted, they would involve the refunding of over \$16,000,000 to the teachers on the basis of fairness to the teachers or because of possible litigation involving this amount. This would be a heavy burden to the State. Adoption of Social Security as presently administered by the Federal government would cost more than a State operated plan that would grant similar benefits for the teachers.

Therefore, based upon the findings of the actuaries the only feasible plan examined is the extension of survivor benefits to the teachers and financed by the State and the teachers. This will involve increasing both the teachers and State contributions by one-half per cent and will cost each group approximately \$400,000 to \$500,000 annually. The other three suggested areas would cost the State millions annually. In view of the facts and circumstances set forth above the Commission recommends that the Teachers' Retirement System and the Kentucky Employees Retirement System not be merged.