

Eleventh Annual Report

of the

TEACHERS' RETIREMENT SYSTEM

of the

State of Kentucky

1950-51



December, 1951

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FOREWORD

The Key to further improvement in the Teachers' Retirement Act and the resultant Retirement System is the understanding of the Law, its purposes and effectiveness, on the part of the teacher.

Discussions and comparisons with reference to the Retirement System cannot be made intelligently on the bases of rumors and inadequate information. If the member does not understand and appreciate the Retirement System, no one else will do so.

All the present career members of the Retirement System who are now under age 34 and all future members who are career teachers may qualify for the maximum retirement allowance of \$1200 by age 64. Many others will also qualify, even many of those past middle age. What are the cost and value of such an annuity? How does it compare with retirement allowances available in other organizations? Many such questions should be answered by the teacher.

A great responsibility rests upon the local leaders of the profession to see that every faculty of teachers is fully informed on the value and service of the Retirement System.

The aggregate salaries of members (teachers) in the Retirement System are \$50,000,000 at this time. The teachers' contributions for retirement on this amount aggregate \$1,450,000 per year.

The contribution for Social Security, for example, ranges from 1½ per cent at this time to 3½ per cent. Would this percentage paid as Social Security produce more benefits to the teacher than if paid into the Teachers' Retirement System? It is obvious that it would produce more benefits to the teacher if paid into the Retirement System, but the individual teacher must reach her own conclusion and know the reason why this is so.

I offer more than a suggestion; it is a warning that unless the local leadership of the teachers read everything available on the Retirement System and discuss it much with those who do understand it, we may lose our Retirement System or have it stalemated by the integration or super-imposition of a nation-wide welfare plan, the purposes of which are foreign to the purposes for which the Teachers' Retirement System was created.

/s/ Boswell B. Hodgkin
BOSWELL B. HODGKIN
Superintendent of Public Instruction
and Member of the Retirement Board

LETTER OF TRANSMITTAL

COMMONWEALTH OF KENTUCKY

TEACHERS' RETIREMENT SYSTEM

FRANKFORT

Honorable Lawrence Wetherby
Governor of Kentucky
Frankfort, Kentucky
Dear Governor Wetherby:

We have the honor to respectfully submit to you this the Eleventh Annual Report of the Board of Trustees of the Teachers' Retirement System of the State of Kentucky prepared in accordance with KRS 161.320, and covering the period July 1, 1950, to June 30, 1951, the last fiscal year.

The last actuarial valuation of the assets and liabilities, the last balance sheet, accumulated cash and securities of the System, membership, service, withdrawals, deaths, and other pertinent information are all included in this Report in proper form.

The Retirement System is actuarially sound and in excellent financial condition due to your budget recommendations and favorable action by the General Assembly.

Record of the proceedings of the Board of Trustees is maintained in good order, the funds of the System safely invested, and the Law faithfully carried out.

Respectfully yours,
(Signed) Mary J. Maguire
MARY J. MAGUIRE
Chairman, Board of Trustees
(Signed) N. O. Kimbler
N. O. KIMBLER
Secretary, Teachers' Retirement System

INTRODUCTION

Your Teachers' Retirement System, still a young organization as measured by the standards of an annuity system, is meeting its obligations, fulfilling its functions, maintaining its reserves in a satisfactory manner. The Board of Trustees is making the Retirement Office a service organization. It is much more than a banking and investing agency.

In comparison with the State Retirement System of the other 47 states, based upon 1949-50 **Statistics of Teacher Retirement Systems**, published February, 1951, by the National Council on Teacher Retirement of the NEA, Kentucky on twelve significant points rates average on two, below average on two, and above average on eight points.

More particularly the points and ratings selected and calculated in the Retirement Office are (1) Ledger Assets per member, 24th from highest. This is average, but Kentucky includes in membership all who have not been absent more than six years, if their accounts have not been withdrawn. (2) Total Ledger Assets, 20th from highest. This shows the effect of including teachers who are not in service. No. 1 should be 20th from the greatest if such teachers were not included in membership. (3) Per cent of Income from Interest, 9th from greatest. This reflects the policy of the Board to keep all funds available invested and represents a substantial savings to the teacher and taxpayer. The time will come when the interest on a member's account will pay for approximately half of the Retirement Allowance or Annuity. This will keep the burden on the taxpayer in reasonable bounds. (4) Per cent of Assets Contributed by Members, 4th from lowest. The Retirement System is the least expensive of the joint-contributory systems; the average member contribution is 3.3 per cent on \$2400 or less if salary is less, or 2.9 per cent of gross salary. (5) Per cent of Assets Contributed by State, 5th from greatest. Naturally, if the members contribute a low amount, the state would have to contribute a high amount expressed in either per cent or dollars. Because of the prior service obligation being liquidated at this time, the State's contribution is very great. For all retirees at this time, the State is paying more than 90 per cent of the allowance and the member less than 10 per cent. (6) Total Income Received, 25th. This is average for the forty-eight State systems. (7) Total Dollar Disbursements to Teachers, 28th from highest. This includes retirement allowances, death benefits, and refunds upon permanent withdrawal. (8) Rate of Net Interest Return on Investments, 2.58 per cent, 17th. This is slightly more than $2\frac{1}{2}$ per cent, the nominal rate on Series "G", and the long term U. S. Treasury Bonds. The System holds \$10 million worth par value of $2\frac{3}{4}$ per cent non-negotiable U. S. Treasury Bonds. This rate of interest, which is from U. S. Treasury Bonds exclusively, compares favorably with the rate other systems are receiving from diversified investments. Seventeenth from the highest, is well above the median.

(9) Number Retired for Disability, 16th from greatest. Our disability rate is very high. It is due to the liberality of the Retirement Act and health conditions. The number retiring for disability should decrease until the rating is about 24th. (10) Amount of Individual Retirement Allowance Paid, 29th. This is the lowest rating on the twelve points. It will increase as teachers accumulate more years of subsequent service credit. Nineteen states pay lower individual retirement allowances: twenty-eight states higher. (11) Per cent of Turnover in Members, 10th from lowest. We are surprised that Kentucky rates so well on loss of members; we had supposed that losses from the profession, especially at this time, would be comparatively high. (12) Administrative Costs per Member, 8th. The State pays the administrative costs which are comparatively low. On the basis of our trial balance, that is, funds handled, administrative costs are a very small fraction of 1 per cent.

On the basis of these ratings, Kentucky Teachers' Retirement System rates average on two points, below average on two points, and above average on eight points. The Retirement System has made greater upward progress than any other phase of the general education program in the last decade. The progress, however, is not sufficient to permit resting on laurels. By comparison, the average teacher salary in 1940-41 was about \$895, whereas, for 1950-51, it was approximately \$2,000, indicating an advancement of about 225 per cent in salaries.

Standards for Comparisons

Teachers everywhere are trying to evaluate the various retirement plans in existence in order to be able to give intelligent advice leading to the further refinement or perfection of their own coverage. Evaluation of not only Teachers' Retirement plans, but those of various industries, Civil Service, and Social Security. There is a tendency to "grab" at certain plans, to hold them up as excellent, and then to find later that there are defects at first not noticed.

Present benefits is not always a good measure of a retirement plan. For example, the coal miners of Kentucky were receiving pensions of approximately \$100 per month, but it became necessary to suspend payment for lack of funds. Payment has now been resumed, but the previous suspension weakens the confidence of the recipients in the security provided.

The most important characteristic of an annuity system is its dependability; the amount of the annuity of next highest importance.

The fiscal structure of the Retirement System is highly important on the basis of permanency and cost to members. This is well illustrated by the following Table A.

***Table A. COMPARATIVE CONTRIBUTIONS OF MEMBERS AND STATE TO PRESENT RESERVE FUNDS (7-1-50)**

STATE	Age YEARS	MEMBERS	PER CENT	STATE	PER CENT	OTHER RESERVES	PER CENT
California	37	\$63,250,491	59.7	\$42,663,185	40.3	\$.....	0.0
Indiana	35	26,747,931	44.6	.....	0.0	33,219,849	55.4
Ohio	30	73,870,190	47.6	55,353,195	35.6	26,081,710	16.8
Florida	11	18,628,899	99.9	6,371	0.1	.....	0.0
KENTUCKY ..	10	7,177,331	40.6	7,177,331	40.6	3,325,284	18.8
W. Virginia.....	9	11,034,731	47.7	12,103,343	52.3	.....	0.0
Oklahoma	7	8,542,619	74.3	929,087	8.1	2,026,002	17.6

* Statistics from 1949-50 Statistics of Teachers' Retirement Systems, National Council on Teacher Retirement.

The significant points are (1) What per cent of the reserve are the members paying? (2) Is the State making a normal contribution and a sufficient prior service contribution?

To illustrate, (1) compare Florida with Ohio or Kentucky; (2) compare Oklahoma with Indiana or Kentucky. The differences should be apparent. While Florida pays larger retirement allowances than Kentucky, the State appears to be providing little in the way of reserves, and the cost to the member is great.

In this cross section of states represented, Ohio and Kentucky present the best fiscal structure.

Permanent Civil Service employees, for a contribution of 6 per cent on total salary, are eligible to receive an annuity of \$2,419 on the basis of a final average salary of \$3,400. The average contribution of the members of the Kentucky Retirement System is 3.3 per cent on not more than \$2,400 and 2.9 per cent on total salary. If the final average salary is \$2,400, the retiring member would receive \$1,200 at age 65; provided the career member has seventeen or more years of subsequent service credit. The Civil Service recognizes retirement for disability and is liberal in retirement for service and for age.

The Federal Social Security program has attracted wide attention. The non-certificated or non-professional employees of Boards of Education and College Boards are covered by Social Security. This is an excellent provision of the Kentucky Statutes. Teachers' positions and other professional positions are not covered by Social Security.

The retirement age under Social Security is 65. There are no provisions for retirement for disability. The contribution is on total salary up to a maximum of \$3,600. The contribution to January 1, 1955, will be 1½ per cent, after which it will increase by five year periods to 3¼ per cent in 1970.

Social Security is not an actuarial system and while it has a temporary reserve, no effort is made to make the system actuarially sound. The amount contributed is a tax.

On a comparative basis, the Teachers' Retirement System can pay an annuity of \$1,200 at age 64, provided it is for a career teacher and the

average final salary is \$2,400 or more. On the same salary base, Social Security can pay an annuity of \$780 at age 65, provided the worker has lost no time by illness, strikes, or unemployment. On the basis of a salary of \$3,600 for his whole employable life after January 1, 1951, or age 23 thereafter, to age 65, the Social Security can pay a maximum of \$960.

For people nearing retirement age, Social Security provides a "wind-fall" of comparatively good benefits after retirement; for the career worker beginning at an early age, the retirement allowance is comparatively low.

The "fringe" benefits under Social Security are usually much overvalued. A Retirement System like Kentucky Teachers' or Ohio Teachers' can provide comparable or better "fringe" benefits for 3/10 of 1 per cent added to present contributions. The Ohio Teachers' Retirement System began such a program in 1951-52.

The degree to which the Kentucky Teachers' Retirement System will prosper and avoid complications with Social Security and other plans for benefits and retirement allowances will depend upon the degree to which the teachers understand their own Retirement System and the others which present themselves. The Secretary of the Retirement System is available to explain any of these retirement plans to teaching groups upon invitation.

Administration

During the eleven-year period, the Retirement Board has shown great interest in the functions for which it was created and has provided advance thinking and leadership in improving the Retirement Act and the service and benefits to teachers. The ex-officio and elected members of the Board have apparently held a sole and primary interest in the building up of the Retirement System in all of its phases.

At the Regular Session of the General Assembly 1950, three excellent amendments were passed. One eliminated the age requirement for retirement for disability and forthwith, several teachers were qualified for retirement for disability. The age requirement for retirement for superannuation was also eliminated under a separate amendment. During 1950-51, 167 retired for age. At this time, the requirements for regular retirement are very low as compared with the original Law or with Systems of other states.

Another important amendment increased the minimum retirement benefit from \$10 to \$16 per service credit year, up to 30 years and \$480. This amendment carried an appropriation of \$250,000 for the biennium and it was made retroactive to include all living retired teachers. This increased the State's obligation for prior service approximately \$2,000,000. The minimum was previously increased to \$300. The increases are reflected in the early retirements about as follows: A member (teacher) retiring in 1943, with three years of membership, contributions of \$150 more or less, and 28 years or more of prior service, was receiving \$200 in 1944; in 1946 this was increased to \$300 and in 1950, to \$480. Three-

fourths of all retired teachers have received increases in their retirement allowances under these amendments and appropriations.

It is the policy of the Retirement Board to make the Retirement Office a service office to help and advise the teachers on all questions pertaining to the Retirement System.

The elected members of the Board must always include a classroom teacher and a layman. Nominations are made in April of each year by a committee set up by the Retirement Act, and consisting of one member chosen by each of the eleven Educational Associations at their Fall meetings, and two members from the Negro Educational Association. Usually two persons are nominated for each vacancy. By means of a mail ballot, the active members of the Retirement System elect to fill the vacancy. Terms of service are four years, so expiring as to make one vacancy each year. The number voting is about 25 per cent of those eligible, rather too low.

The Board of Trustees meets quarterly at the State Capitol.

Please refer to previous Reports for further details, and, also, information on other phases of Administration. Due to cost of printing, this Report must be shorter than usual.

STATISTICAL

For two years the Retirement Office has had one or two workers transferring statistical information from records to key-sort cards. This work is not complete since there are approximately 50,000 individuals' records to handle. For this reason, there will be some delay in the actuarial calculations of rate of death, rate of retirement, rate of withdrawal, and related fundamental tables. This will not hinder the work of the Retirement System since it will continue to operate on the present tables of mortality and interest as usual. It is not required that new tables be made. The requirement is that the present fundamental tables be checked against experience of the System periodically. The work is progressing substantially and will be accomplished in adequate time.

The volume of work in the Retirement Office is very great and much of the details, however important, cannot be encompassed in an Annual Report.

To July 1, 1951, prior service certificates were issued to 24,528 members, of which number 13,442 representing 145,532 years of prior service are still valid. The remaining 11,086 have retired, withdrawn, or deceased. The aggregate years of prior service cancelled by death and withdrawal approximate 50,000 or 20 per cent of the grand total.

Since July 1, 1941, membership certificates issued to members with no prior service total 18,517. Total number of retirement certificates issued is 43,045. The Retirement Office maintains a cross-index file of name and number of each member.

An account is maintained for each member and her contributions added when received each month; if she is absent from teaching, interest is added each month during the first three years of absence. During 1950-51, 23,145 members paid monthly dues and an additional 2,854 were absent. As of July 1, 1951, there were 25,999 active accounts.

After three years of absence, the member is notified that interest has ceased. On July 1, 1951, there were 8,087 members in this status and their inactive accounts aggregated \$345,575.44. The Retirement System invests this but retains the earned interest. During 1950-51, 1,780 such notices were mailed out and they elicited 1,011 replies.

If a member is absent from teaching more than six full scholastic years and does not begin teaching at the opening of the seventh year, her service credit is lost under Section 161.520, KRS. The Retirement Office sends notice to such former members with a view of refunding the account. During 1950-51, 1,580 such notices were sent and a large per cent responded.

During 1950-51, five hundred sixty personal checks were received and properly credited. Sixteen of these were in payment for months on leave for military duty; sixty-five additional members paid regularly under leave granted by the local employer; twenty-three members re-instated withdrawn accounts and service credit.

Thirty-three members paid contributions on Deferred Retirement, Section 161.610 KRS; thirteen paid contributions as arrearages on out-of-state service validated in Kentucky. Eight substitute teachers paid contributions direct to this office. Three teachers paid contributions by authority of Section 161.516, KRS.

Sixty-six paid for the remainder of the year, having quit teaching for illness. Two hundred eighty-four paid contributions direct in order to correct errors in contributions, mostly of the nature of too small per cent after going into a higher age bracket.

These 560 special cases involved contributions totaling \$26,314.43 and an unmeasured amount of work. Detailed service of this kind adds to the popularity of the Retirement System and magnifies its usefulness to the teacher.

Study Table B. ready to help
TABLE I. MEMBERSHIP 1940-51

	SERVICE RECORDS			Members Without Records Filed	Totals
	With Prior Service	Without Prior Service	Total With Records Filed		
Active Membership	11,968	11,146	23,114	2,885	25,999
Inactive accounts in Membership	1,464	1,565	3,029	4,156	7,185
Inactive accounts— Membership lost	499	209	708		708
Professional Service Records in force	13,432	12,711	26,143		
Deceased before Retirement	451	40	491	60	551
Withdrawn	7,957	4,440	12,397	3,230	15,627
Retired	1,456	5	1,461		1,461
Records pending..	43	23	66		66
Certificates is- sued—Refunds made within year	647	243	890		890
	13,432	12,711	26,143	7,041	33,184
	11,053	4,960	16,013	3,290	19,303
Total Accounts Handled 1940-51	24,485	17,671	42,156	10,331	52,487

Table III. Distribution by Ages of 2,008 New Entrants without Prior Service Who Became Members as of July 1, 1950 (Includes Delinquents)

Entrance Age	Number	SALARIES	
		Total	Average
17	16	\$ 19,698.60	\$1,231.16
18	96	118,911.24	1,238.67
19	126	157,128.24	1,247.05
20	146	213,429.47	1,461.85
21	210	375,355.44	1,787.41
22	189	349,218.75	1,847.71
23	156	290,355.82	1,861.26
24	144	275,782.76	1,915.15
25	120	224,500.48	1,870.83
26	98	183,794.13	1,875.45
27	80	150,588.23	1,882.35
28	60	119,801.15	1,996.68
29	56	106,326.15	1,898.68
30	54	102,509.83	1,898.33
31	54	96,338.89	1,784.05
32	36	67,154.84	1,865.41
33	31	57,206.42	1,845.36
34	31	55,501.87	1,790.38
35	31	54,099.70	1,745.15
36	25	45,610.90	1,824.43
37	24	39,859.30	1,660.80
38	31	51,619.25	1,665.13
39	29	47,188.09	1,627.17
40	17	34,721.25	2,042.42
41	18	33,761.95	1,875.66
42	12	19,083.44	1,590.28
43	10	19,742.80	1,974.28
44	19	36,916.50	1,942.97
45	12	20,555.60	1,712.97
46	11	19,604.35	1,782.21
47	10	15,762.56	1,576.26
48	6	11,580.00	1,930.00
49	9	15,321.70	1,702.97
50	2	2,604.12	1,302.06
51	4	9,300.00	2,325.00
52	3	5,184.00	1,728.00
53	5	7,722.62	1,544.52
54	4	6,664.16	1,666.04
55	2	3,900.00	1,950.00
56	4	6,944.40	1,736.10
57	3	4,500.00	1,500.00
58	4	5,125.60	1,281.40
59	0	0.00	0.00
60	5	8,496.80	1,699.36
61	2	4,740.63	2,370.31
62	0	0.00	0.00
63	1	2,400.00	2,400.00
64	1	1,683.90	1,683.90
65	0	0.00	0.00
66	1	2,400.00	2,400.00
67-69	0	0.00	0.00
Totals	2,008	\$3,500,695.93	\$1,743.38

Table VIII. Revised Distribution of 13,432 Members Who Have Prior Service Credit Into One-Year Intervals According to Attained Age July 1, 1951

Attained Age	Number of Members	PRIOR SERVICE YEARS		PRIOR SERVICE SALARY	
		Total	Average	Total	Average
29	11	10.3	.93	\$ 5,349.50	\$ 486.31
30	46	54.4	1.18	24,713.45	537.24
31	106	146.2	1.37	58,042.12	547.56
32	190	324.9	1.71	107,751.81	567.11
33	255	544.9	2.13	159,813.71	626.72
34	297	822.4	2.76	194,127.25	653.62
35	333	1,193.2	3.58	218,331.28	655.64
36	436	1,835.8	4.21	284,126.22	651.66
37	487	2,408.1	4.94	337,899.58	693.83
38	554	3,073.9	5.54	383,186.87	691.67
39	607	3,837.1	6.32	431,133.52	710.26
40	663	4,644.2	7.00	486,479.03	733.75
41	636	4,775.8	7.50	476,309.37	748.91
42	659	5,689.9	8.63	527,152.34	799.92
43	676	6,242.5	9.23	544,530.12	805.51
44	641	6,106.9	9.52	542,791.17	846.78
45	686	7,072.5	10.30	592,189.93	863.25
46	614	6,692.1	10.89	564,786.97	919.84
47	568	6,558.8	11.54	525,078.30	924.43
48	538	6,622.8	12.31	495,829.41	921.61
49	504	6,487.5	12.87	495,339.59	982.81
50	337	4,865.3	14.43	346,531.18	1,028.28
51	380	5,507.7	14.49	392,459.34	1,032.78
52	328	4,768.9	14.53	337,995.14	1,030.47
53	315	4,743.5	15.05	316,345.67	1,004.27
54	237	3,948.9	16.66	234,508.78	989.48
55	252	4,141.8	16.43	263,302.19	1,044.84
56	264	4,587.5	17.37	275,100.59	1,042.04
57	217	3,886.0	17.90	223,093.94	845.05
58	211	4,319.3	20.47	240,456.48	1,139.60
59	211	3,980.0	18.86	223,288.38	1,058.23
60	179	3,622.1	20.23	195,551.28	1,092.46
61	148	3,060.5	20.67	166,059.09	1,122.02
62	160	3,312.1	20.70	160,785.01	1,004.90
63	115	2,290.8	19.92	116,482.98	1,012.89
64	98	2,214.4	22.59	107,277.56	1,094.66
65	114	2,510.4	22.02	130,945.75	1,148.64
66	91	2,069.6	22.74	99,182.26	1,089.91
67	81	1,958.4	24.15	88,290.84	1,090.01
68	78	1,930.3	24.74	92,589.84	1,187.04
69	74	1,808.02	24.43	91,236.75	1,232.92
70	35	864.1	24.68	41,615.69	1,189.01
Totals & Averages	13,432	145,532.0	10.83	\$11,598,060.28	\$ 863.46

As the years pass, and teachers and school officials become better acquainted with the forms and procedures necessary to the operation of the Retirement System, there will be fewer members who have not filed enrollment Forms A-1 or A-2. During the life of the System, we have had contributions from approximately 10,000 such members. After the withdrawal of 3,290 of such accounts, we estimate there are 7,041 still remaining, most of which are represented by inactive accounts or by teachers who are no longer in service. If any of these begin again to teach, the Superintendent of Schools secures the proper enrollment form.

A considerable number of young teachers teach a month or two and pay the contribution for time taught and quit, without having filed the enrollment form. All school officials are alert to have the form filed early and much progress is being made.

In the eleven-year period, accounts have been set up for 52,487 members. It can occur that refund is made and the teacher leaves the service by the time her Retirement Certificate is issued. This confuses the statistical tables even though it does not adversely affect the Retirement System. The matter of eliminating from the basic statistical tables all teachers with one year or less of service credit is under consideration.

The Table 1 indicates that 15,627 individuals have withdrawn their accounts. Very few such former members return to teaching. However, the member may retain her service credit during an absence of six full scholastic years, provided the account is not withdrawn. This prevents loss by absence for illness, change of plans, child rearing, and is favorable to public policy in many ways.

The active membership on July 1, 1951, was 25,999. During 1950-51, 2,108 new members were received; 100 with some prior service.

A new member entering the Retirement System upon completion of college at age 23, may by age 64 become eligible for an annuity of \$1,200. A present member age 33 or younger, if teaching is a career, can qualify for a like annuity. Many others may do so by teaching to a greater age. A new member not over age 36 may qualify for an annuity of \$1,200 by age 70. Any present member age 53 or younger, when she became a member, may qualify for the maximum retirement allowance by age 70 or earlier, provided she has prior service credit from age 23 or younger. These statements are based upon average final salary, represented by the maximums defined in the Retirement Act.

The task of handling the statistics of your Retirement System is important, continuous, and arduous. It requires a great deal of time. Individual service credit must be available at any time in the same manner as the individual money account of the member.

In some state retirement systems, individual service credit is handled for retiring members only, but in your Retirement System this has always been handled currently. Likewise interest is calculated and added each month and not at the end of the year. These points and many others should be known and appreciated by the teachers concerned.

All statistical tables cannot be included in any one Annual Report. Reference is made to previous Reports.

Table III, Distribution by ages of 2,008 new entrants presents useful information to all policy forming officials. The modal age is twenty-one years; the average salary, \$1,743.38. No member under the age of twenty-nine years has any prior service credit. Only 100 new members with prior service credit came back into the profession in 1949-50. They were admitted under a special war-time rule of the Retirement Board. They have an average of 6.5 years of prior service; their average prior service salaries are \$707.75.

This adds slightly to the obligation for prior service. The highest amount of prior service credit in effect at any given date was 212,000 years. This has been reduced by death, withdrawal, and retirement to 145,532 years. Approximately 38,000 years are not included in the 212,000 years, the highest amount reached. Some years have been added and some lost each fiscal year. In other words, when the Retirement Act went into effect July 1, 1940, the teachers of Kentucky had approximately 251,630.7 years of experience.

Withdrawals have accounted for the loss of **65,285.5 years** of prior service credit. This is approximately 20 per cent of the whole. This represents the years of prior service credit the State will not be required to pay for at \$16 or more per service credit year and for each year after retirement.

The loss of subsequent service credit is somewhat less than 20 per cent since each withdrawing member has about two years of such service credit on the average. The average of subsequent service now held by members is 4.3 years. This is low because of the young members.

The Retirement Office is constantly advising members not to withdraw their accounts until after they have been absent for more than six years. One has thirteen years in which to make the withdrawal. Loss by withdrawal may be illustrated as follows:

A member taught in Tennessee from 1929 to 1937 and came to Kentucky, teaching until 1945. She then withdrew her account, stating that she had permanently left Kentucky to teach in Indiana. After four years in Indiana she is teaching in Kentucky. The Law requires her to come into membership as a new member in Kentucky. She has no service credit. If she had left her account in the Kentucky Retirement System, she would have been a member with the privilege of receiving credit for eight years from Tennessee without arrearages; eight years served in Kentucky and by paying arrearages on Indiana service, four years from that state. She could have withdrawn her account from Indiana and used it to pay arrearages for that service. Her twenty-two years would have a value of \$6,500 or more. She therefore gained nothing from the higher salary in Indiana; suffered an avoidable loss of \$6,500 or more, and must begin at age forty-two to accumulate credit for a retirement allowance.

If she had left her account in the Kentucky Retirement System, it would have received 3 per cent compound interest for each of three years of absence. Withdrawal was legally made, but on her part it was ill advised and done against the advice of the Retirement Office. Such teachers are inclined to blame the Retirement Law for their loss. It should be noted that Kentucky has the most liberal law for a case of this kind; however, it cannot think for the teacher.

We dwell upon this because of the unnecessary losses some members are suffering. No member should withdraw her account until she has been absent more than six years. After an absence of six years, the member has lost her service credit unless she is under contract to teach a full year on the seventh year.

Unless the profession decreases voluntarily the number of ill advised withdrawals, it will be necessary for the Retirement Board to defer the date of withdrawals for the protection of those teachers who may suffer such losses.

The privilege of retiring after thirty years of service credit should be exercised with care and discretion. After a member retires voluntarily for age, she cannot teach again in the public schools of Kentucky. Such a member is not required to retire in order to protect her privilege of doing so. A teacher may acquire thirty years of service credit by age forty-eight or fifty. To retire at that time and begin to receive an annuity is in most cases foolish. Life expectancy is approximately thirty years. Home conditions may so change that such an annuitant finds it imperative that she work. She has, by retiring, cut herself off from the employment for which she is best trained and at which she could likely receive the highest salary.

Early retirements are unfavorable to the Retirement System. An annuity at age 50 costs the Retirement System \$17.85 per dollar; at age 65, \$12.39. Early retirement always means a smaller annuity because there is less service credit and a smaller age factor; a longer life expectancy.

The Retirement System can pay an annuity of \$1,200 at age 70 with less drain on its reserves than \$600 at age 60. These early retirements, if not held in check, may cause the Act to be amended to require 35 years of service credit for retirement at any age, as now required by almost every state system providing for retirement without age requirements. As the teachers become more professional in their attitude and work, these problems will become less severe.

**Table Xa. Living Retired Teachers Attained Ages One-year Intervals,
September 1, 1951**

Attained Age	Living Retired Teachers			Average Annuity	Needed to Pay Annuity of \$1.00	Cost for Life Expectancy
	Men	Women	Total			
40	1	0	1	\$346.24	\$21.08503	\$ 7,300.00
43	2	0	1	360.48	20.16272	14,537.00
47	4	3	7	377.14	18.86680	49,808.00
48	0	4	4	364.40	18.53179	27,012.00
49	0	2	2	480.00	18.19268	17,465.00
50	0	2	2	414.20	17.84964	14,787.00
51	0	5	5	480.45	17.50283	42,046.00
52	1	7	8	427.00	17.15249	58,593.00
53	3	3	6	423.20	16.79884	42,656.00
54	6	7	13	433.35	16.44204	92,627.00
55	4	10	14	401.89	16.08243	90,487.00
56	6	9	15	442.90	15.72020	104,437.00
57	9	14	23	437.29	15.35566	154,442.00
58	6	6	12	467.73	14.98909	84,131.00
59	9	8	17	482.90	14.62080	120,027.00
60	12	11	23	463.52	14.25107	151,930.00
61	13	18	31	479.85	13.88028	206,474.00
62	15	20	35	460.26	13.50872	217,613.00
63	18	24	42	459.23	13.13677	253,378.00
64	17	13	30	470.98	12.76477	180,359.00
65	12	13	25	463.35	12.39309	143,558.00
66	17	25	42	464.66	12.02211	234,620.00
67	14	29	43	487.54	11.65224	244,280.00
68	15	22	37	496.60	11.28381	207,331.00
69	16	28	44	500.98	10.91726	240,650.00
70	26	61	87	525.69	10.55296	482,640.00
71	22	69	91	535.82	10.19131	496,924.00
72	24	58	82	512.86	9.83271	413,510.00
73	28	47	75	493.85	9.47754	351,036.00
74	25	43	68	509.78	9.12620	316,360.00
75	22	31	53	501.53	8.77094	233,141.00
76	24	42	66	489.26	8.43646	272,423.00
77	13	25	38	516.16	8.09883	158,851.00
78	13	24	37	488.53	7.76647	140,384.00
79	5	21	26	488.93	7.43975	94,575.00
80	4	12	16	486.08	7.11896	55,366.00
81	4	7	11	502.05	6.80441	37,578.00
82	4	6	10	510.00	6.49642	33,132.00
83	7	1	8	483.88	6.19521	23,982.00
84	1	2	3	457.12	5.90105	8,092.00
85	1	3	4	480.00	5.61416	10,779.00
86	0	4	4	480.00	5.33473	10,243.00
88	2	0	2	480.00	4.79888	4,607.00
89	1	0	1	480.00	4.54273	2,181.00
91	0	1	1	480.00	4.04635	1,942.00
Totals & Average	426	740	1,166	\$490.19		\$6,148,294.00

The matter of retired teachers teaching is receiving considerable notice at this time. If teachers are permitted by the Law to retire and later return to teaching, many more will retire. If a teacher who is eligible to retire is not employed, she may apply for her annuity. If employment opens a few months or years later, she will return to teaching.

It would be, under such conditions, impossible for the Actuary to calculate the obligations of the Retirement System. The balance sheet of evaluation could not be made to reflect the true condition.

Under the present Law, if a retired teacher returns to teaching, any taxpayer or the Retirement Board could maintain a suit for the recovery of all retirement allowances paid to her from date of retirement to date on which she returned to teaching. This is because she represented herself as being retired when she was merely unemployed. Collusion and misrepresentation might be alleged.

There is no reason why a teacher should rush into the retired status. Retirement for disability provides for the return to service in case of recovery before age 60. Periodical examinations may be made, until retirant is 60 years old, for the purpose of determining whether the retired member has recovered. At this time the proportion retiring for disability is too great and far above the national average.

The proportion of men retiring is far greater than the proportion of men in membership. Since this Table Xa shows "Attained Age" and the total cost is based upon the present life expectancy, the indicated total cost is high. This data is presented to show number of annuitants and the scope of ages covered. The spread in age from the youngest retirant to the oldest is about fifty years.

Later in this Report is a listing of the 117 members retired at the end of 1950-51. A study of age, service credit, and contributions is revealing. A better understanding of the effect and cost of the minimum annuity may be gained by reference to this listing. For example, a member 59 years old is in membership nine years and pays in \$347.35 but is provided by the minimum Law, \$480 per year for life. The reserve for her must be \$7,018 and when it is exhausted if annuitant is still living, more funds provided by the Retirement System. Life expectancy at 59 is 21.75 years, and \$480 per year aggregates \$11,440, all for \$347.35. If the minimum is increased, the disproportion will also be increased. This member in a normal length of life will receive more in retirement checks than she received in salary as a member for nine years. This is true of many of the members retiring now, or retiring at early ages. The entire 117 retirants paid in \$65,800.37 but the 3 per cent reserve required for them is \$767,051; near \$12 for every dollar contributed by the member.

The cure for this seeming unfair proportion of cost of retirement allowances paid by the taxpayer is in later retirement and a higher per cent of contributions. It is hard to justify a contribution so small that it pays for the retirement allowance for approximately one year only.

LEGISLATIVE

The Social Security Act (House Bill 6000), Public Law 734, went into effect in Kentucky as of January 1, 1951, after passage by the General Assembly of Senate Bill No. 1 in Special Session. Section 1 extends coverage to employees of the Commonwealth and its political sub-

divisions "not now members of a public retirement system." This is in conformity with Title II of the Social Security Act, Section 218, (d) which reads as follows:

"Exclusion of Positions Covered by Retirement Systems:

"No agreement with any State may be made applicable (either in the original agreement or by any modification thereof) to any service performed by employees as members of any coverage group in positions covered by a retirement system on the date such agreement is made applicable to such coverage groups."

Subsequent to the enactment of Senate Bill No. 1 the State of Kentucky entered into an agreement with the Federal Government Agency providing coverage for State employees, excluding teachers by reason of their coverage in the State Teachers' Retirement System.

Subparagraph (d) has not been fully interpreted, but it is assumed to fully protect every retirement system in operation when the "agreement" is signed. The "agreement" is applicable to the Kentucky Teachers' Retirement System in that it does not include it.

The Social Security Act, however, is constantly subject to amendment by Congress. It is the policy of the Social Security Administration and Federal Government to extend coverage as far as possible, and we may expect recurring efforts to amend the Social Security Act. In fact, at this time two separate bills, either of which if passed, would raise serious questions and difficulties for all state retirement systems.

The membership and especially the leadership must be alert. The irony of it is that many of our friends believe they would be doing teachers a service to place them under coverage of Old Age and Survivors Benefits. The matter cannot be discussed in detail in this Report. All we can do is urge a thorough and realistic study of the two retirement plans in the light of (1) substituting Social Security for the Teachers' Retirement System, (2) superimposing Social Security upon the Retirement System, and, (3) some form of integration of the two plans.

COMPARATIVE PRIMARY BENEFITS, SAME SALARY, ASSUMING CAREER UNDER EACH, AND RETIREMENT AT AGE 65

Salary Base	Social Security Primary Benefits	Teachers' Retirement Allowance
\$ 900.00	\$37.50	\$ 40.00
1,200.00	50.00	50.00
1,500.00	53.75	62.50
1,800.00	57.50	75.00
2,000.00	60.00	83.33
2,400.00	65.00	100.00
2,800.00	70.00	100.00
3,400.00	77.50	100.00
3,600.00	80.00	100.00

Your Secretary and the Retirement Board made a thorough study of each of the foregoing propositions as the House Bill 6000 was being studied by the Senate Finance Committee under the chairmanship of Senator Walter George. The hearings in Washington, D. C., were very thorough and resulted in the inclusion of Section 218, (d), which was proposed by teachers, firemen, policemen, and employees under Civil Service.

Many taxpayers erroneously believe that "matching" under Social Security would cost the State less. This would be true for about eight years, after which the cost of Social Security on the Taxpayer and teacher would equal or exceed the present cost of the Teachers' Retirement System. Teachers are now contributing in the aggregate 2.9 per cent of gross salaries and it will not require many years for the tax under Social Security to equal this amount according to the scale in the present Act.

A brief comparison of the basic provision of Social Security and your Retirement System follows:

The Social Security Law as amended August 28, 1950, extends coverage very greatly and increases the benefits in the lower income and service brackets. The 1 per cent increment for each year of service and disability benefits were eliminated.

The maximum benefits were also reduced to \$960.00; however, no one was receiving maximum benefits because the Social Security Program did not begin until 1937. The minimum benefit was increased from \$120.00 to \$240.00 per year, and a new formula was set up for calculating the benefits.

This is the first major amendment in thirteen years; the Kentucky Retirement Act has been amended several times during the ten years of its existence.

It is not very practical to compare a welfare program with an annuity system such as the joint-contributory reserve system provided by the Kentucky Teachers' Retirement Act, but the following points are presented:

	Social Security	Teachers' Retirement System
1. Coverage	Population basis	Specific professional group
2. Management	Federal Bureau	Members elect Board
3. Security	Reserve for three years more or less	Actuarially sound—Reserve System
4. Contributions	Same all ages; non-accumulative tax	2%, 3%, 4%, according to age. Held in trust funds
5. Personal equity	Contributions are a tax	Individual account and interest
6. Refunds	No contributions refunded	100% contributions and interest refunded
7. Prior Service	None	Up to 30 years
8. Minimum	\$240.00	\$480.00
9. Maximum	\$960.00 on \$3,600.00	\$1,200.00 on \$2,400.00
10. Approximate average Benefit 1950	\$336.00	\$500.00

11. Death Benefit	\$60.00 to \$240.00	Member's account—average \$360.00; maximum now \$1,050.00
12. Dependents benefit children	50% of Primary Benefits to age 18	None as such (See 11)
13. Options	None	Actuarial—equivalent options can be provided by Board action
14. Salary base	Average all years. Total salary from date of membership to age 65, divided by number of calendar months—Maximum \$3,600.00	Average last five years Maximum \$2,400.00
15. Retirement Age	Age 65	Age 60 to 70 for 20 years; any age after 30 years
16. Age Disability Retirement	None	Any age after 20 years
17. Reciprocity	Full reciprocity	Conditional up to 16 years
18. Earnings after Retirement for age	Not over \$50.00 per month	No restrictions

"Fully insured" status is easily acquired under Social Security. It is in effect after 40 quarters of contributions for workers age 45 and under; and the requirement graduated downward to 6 (six) quarters at age 62 or older. "Fully insured" status does not mean that the insured will receive maximum benefits of \$80.00 per month. The salary base is found by totaling all salary (up to \$3,600.00 per year) on which contributions are paid and dividing total by the number of calendar months from date of membership to age 65. For example, one has 40 quarters of coverage at age 35 and does not work in a covered position any more until age 65. If his salary was \$250.00 per month while working the ten years, his salary base would be \$63.00 at age 65 and he would receive \$31.50 per month instead of \$72.50 which he would have received had he worked to age 65.

There is little relationship under Social Security between years of service and benefit. A worker, age 63, should be able to acquire fully insured status by age 65 and receive as large a benefit as another worker who has been a contributor for 40 quarters or forty years.

Under the Retirement Act there is a definite relationship between age at retirement and number of years of service, and the annuity provided by the Law.

A comparison may be made of cash and accrual of benefits to each of two persons age 23, one under the Teachers' Retirement System and the other under Social Security, beginning salary \$1,500.00 with annual increments of \$100.00 to \$2,400.00. Including interest the amount in the teacher's account at age 45 is \$2,062.88; the cost to the Social Security member is \$1,593.00 paid in as a tax.

The teacher is eligible to retire if disabled with a benefit of \$586.08 per year for life. She will be and remain eligible from age 43; with a vested interest after 30 years of service, age 53.

The Social Security worker has no protection for himself until age 65, but his dependents have protection in case of his death. For example, if at this age both have a child 15 years old, Social Security would pay its child beneficiary \$35.50 for three years and his mother \$53.25 for three years, that is, a total of \$3,195.00 until benefits stop at age 18. In lieu of this the beneficiary of the teacher would receive her account which would have in it \$2,062.88 at that age; more if death is at a later age.

When the widow of the Social Security worker reaches age 65, if not remarried, she would begin receiving \$53.25 per month.

For those children deprived of parents by death this is a valuable provision of the Social Security Act. Parents can, of course, provide such protection by means of life insurance contracts. The estimated cost for all children under 18 whose parent or parents teach is approximately \$5.00 per teacher per year assuming 21,000 teachers.

The greater probability is that the child will die before age 18 or that the parent will die after the child reaches 18. The actuarial value of this protection is therefore low.

The teacher considered above will be eligible to receive \$1,200.00 per year for life at age 65. The amount in her account is \$6,343.99 of which \$2,884.99 is interest credited to her. In case of her death before she has received as an annuity \$6,343.99, the balance is payable to her beneficiary.

The Social Security member will be eligible to receive \$852.00 per year for life and at his death his beneficiary will receive \$213.00. He will have paid in Social Security Taxes \$2,733.00, none of which is returnable.

If he has a wife age 65 or older, she is also entitled to receive \$35.50 during his lifetime and \$53.75 if she survives him, provided she does not qualify for a greater amount in her own right.

Any case selected for comparison is subject to the criticism that a different case would be more favorable in certain instances.

The National Council on Teacher Retirement has had this matter under study for years and counsels that a complete separation of the two systems is for the best interest of teachers in every state. Careful study will make the reasons obvious.

Many questions have been raised by teachers and other members and a few are presented here. Many more could be added if space permitted.

1. Q. How many teachers have an equity (money) in the Retirement System?
 - A. Exactly 35,143 have rights to assets of \$20,100,000 and prospective benefits for those who will retire of about \$58,000,000.
2. Q. What is the principal difference between Social Security and Teachers' Retirement?
 - A. Social Security is a welfare plan; it is designed for the general public; it is not a reserve or actuarial plan. Teachers'

Retirement is a business proposition; it is designed for a professional group; it is a reserve plan actuarially sound. The funds for paying the annuity are accumulated during the service of the teacher.

3. Q. Are teachers under Social Security?

A. No. The Civil Service Retirement System and all other public retirement systems are not under Social Security.

4. Q. Why were teachers left out of Social Security? Were any other groups left out?

A. (1) None of the States felt able to support two retirement plans for teachers or state employees; therefore all teachers, state employees, and civil service people were omitted from coverage by Social Security if they had their own retirement systems.

(2) There were no good reasons why teachers, state employees, and civil service employees should have coverage in two retirement systems.

(3) A vast majority of people already covered in their own retirement system did not desire coverage under Social Security. The cost of Social Security applied to their own retirement system would provide better benefits.

(4) Most teachers want to retire before age 65. Our teachers retire from age 40 to 70. This privilege serves them better than Social Security under which people retire at age 65. Of the 202 teachers retiring 1950-51, only 97 could have retired under Social Security. What would the 105 have done under Social Security? Wait to age 65.

(5) Social Security does not have retirement for disability. Last year 35 teachers retired for disability under their Retirement System. Under Social Security they could not have retired.

(6) All public retirement systems were excluded by Congress in the passage of H.B. 6000.

5. Q. If the teachers were under Social Security, who would provide the employers' (matching) contribution?

A. The local Board of Education. Since school funds are seldom adequate, this would mean that in most cases it would be paid from local school tax funds which could be, or have been, allocated to teachers' salaries.

6. Q. Does Social Security give credit for prior service?

A. No. The person employed for a comparatively few years gets more accordingly than the career person. A person age 63 with a final salary of \$2,400.00 would receive more at age 65 than a person who will be in Social Security from age 23 to age 65 with a final salary of \$2,400.00.

Under the Retirement System there is a more fair consideration of length of service.

7. Q. Will everyone who pays Social Security tax participate in its benefits?
 - A. Not necessarily. For example, a young lady works under Social Security six years, more or less, and quits working as many do. She would receive no refund. She would have death benefit rights for twelve years more and then nothing for her contributions.
8. Q. Do teachers who work Saturdays and during the summer pay Social Security tax and accumulate rights?
 - A. They pay Social Security tax, but unless they can accumulate one quarter of coverage for each two quarters of noncoverage, they would never be fully insured under Social Security.
9. Q. Will all people fully insured under Social Security get \$80 a month at 65 and \$150 family benefits?
 - A. No. The benefit is 50% of the first \$100 of monthly salary base (not final salary) plus 15% of the remainder up to \$30. If the salary base is \$300 per month, the benefit would be \$80. Few people can have a salary base of \$300. The total salary on which Social Security tax is paid is divided by all the calendar months from January 1, 1951, to age 65 to find the salary base. A person not working every quarter is reducing his salary base below his nominal salary. A person getting \$200 per month for nine months **every year** would have a salary base of \$150. If one is out five or ten years, it reduces the salary base to such an extent that he may receive a minimum benefit at age 65.

To get a family benefit of \$150, one would have to have an average salary for life (or from January 1, 1951, to age 65) of \$3,600 and his wife be age 65 and have one child under age 18. Not many women age 65 have children under age 18. When the child reaches 18, that part of the benefit (\$40) would cease.
10. Q. Why does the Social Security Law provide a scale of minimum benefits?
 - A. To make calculations easier. A majority of people will receive one of these minimum benefits.
11. Q. What is the average Social Security benefit under the H.B. 6000 for Kentucky?
 - A. After the increases provided under the new Law were added, it was \$30.72 for a recent month.
12. Q. To the individual, would Social Security cost more or less than Teachers' Retirement?
 - A. The Social Security tax is 1½% to 1954; 2% to 1960; 2½% to 1965; 3% to 1970; and 3¼% thereafter on salary up to \$3,600. The Teachers' Retirement contribution is 2% to age 30, 3% from 30 to 40; and 4% thereafter on salary up to \$2,400.

If one person age 23 goes under Social Security July 1, 1951, and works regularly to age 65, beginning salary \$2,000 with increments of \$100 a year to \$4,000, he would pay \$4,127; another person under Teachers' Retirement would pay \$3,532. The Social Security worker would receive \$912.60; the teacher \$1,200 at age 65.

13. Q. Are refund privileges equal to survivors' benefits?

A. Not always, but at age 65 the teacher described above, under the Retirement Law, would have an accumulated account of \$6,312.82. If she dies before retirement, her account is payable to her beneficiary; if she dies after retirement, but before she has received back in annuity checks \$6,312.82, the balance is payable to her beneficiary. For example, if she dies after one year of retirement, her beneficiary would receive \$5,112.82.

The person under Social Security would have a death benefit of \$228.15.

In the long run the Teachers' Retirement Law provides more benefits for less cost to the teacher and taxpayer.

14. Q. Can the Retirement Law provide options under which a teacher may retire and by drawing a small annuity leave a survivor's annuity?

A. Yes. Options can be provided without further legislation. The most usual option in other systems provides an annuity equal to one-half that received by the retired teacher.

15. Q. What will his wife receive if John Doe age 70 and due \$1,200 per year takes only \$900, leaving the balance for his wife if she survives him?

A. The Retirement System does not now provide for such an option, but it will likely do so soon. His wife would receive approximately \$680 per year for life if she survives him. (Kent's Interest Tables).

For a few years now members about age sixty and having little service credit or low salaries, might be able to receive more if under Social Security. This condition will pass as retirement date advances from January 1, 1951. In finding the monthly salary base under Social Security, all calendar months from January 1, 1951, must be divided into the aggregate salary. This tends to reduce the monthly average for all who are over age 23 on January 1, 1951, and who have not paid Social Security tax from that date.

No state has felt able to maintain both for its teachers. In only one state has Social Security been substituted for the retirement system, and that particular state had the poorest retirement system of any of the forty-eight states.

In every state, including Kentucky, an equal or less amount of money put into the retirement system will provide better security for

its teachers than the same or greater amount put into Social Security. When our officials and taxpayers become aware of this, we will have less difficulty in protecting what we now have.

Experience indicates that no less than fifteen bills dealing with retirement will be introduced at the next Regular Session of the General Assembly. These bills will be motivated by good intentions and a desire to help teachers. We can also say they will be written without regard to their fitting into the present Act; that they will be based upon the need of one or two cases, rather than a cross-section of the needs of the profession, and that they will have no appropriation section to cover the cost if enacted.

In our judgment, only one bill for expansion should be introduced. It should be similar to Senate Bill 265 which was introduced by Senator Wendell P. Butler at the last Regular Session, but failed of passage.

This bill provided for (1) an increase in contributions of 1 per cent in each age bracket and to be matched by the State, (2) contributions to be made on a maximum of \$3,000, (3) a maximum retirement allowance of \$1,500, and, (4) the assigning of greater value to each year of subsequent service credit, and, (5) an appropriation to match the increase in members' contributions.

In view of recent increases in the salaries of members, and the rise in average salaries, it is believed that \$3,600 and a maximum allowance of \$1,800 would serve better.

In one more year, some retirants will have enough subsequent service credit to be eligible to receive approximately \$1,000, the maximum in effect until July 1, 1946. In 1959 some will reach the present maximum of \$1,200 under the present law. If the foregoing proposed change is made, the \$1,200 allowance will be reached earlier, probably by 1956. The maximum of \$1,800 would be approached gradually in order that the increased contributions of members and State could provide the necessary reserve.

ACTUARIAL

" . . . The Teachers' Retirement System of the State of Kentucky began operations as of July 1, 1940. The law stipulates benefits for superannuation and disability retirement measured in terms of service as a teacher prior to July 1, 1941 as well as subsequent thereto (the fiscal year July 1, 1940 to June 30, 1941 was construed as a Prior Service year). The System is supported by the joint contributions of the members and the State of Kentucky. With respect to the obligations created by service as a teacher after the date of establishment of the System (defined in the Act as "Subsequent Service"), the contributions from member teachers, as required by the law, are matched dollar for dollar by contributions from the State. With respect to the obligation created by service as a teacher prior to July 1, 1941 (defined in the Act as "Prior Service"), temporary contributions from the State only, as provided by the governing law, are required. Periodically, an actuarial valuation of the Assets and Liabilities of the System is made to determine whether the con-

tributions are proving sufficient to meet its established liabilities and to show what adjustments, if any, are necessary on the basis of the actual experience of the System to maintain it in a solvent condition.

"The following Valuation Balance Sheet, therefore, shows both the Current and Deferred Assets and Liabilities of the Retirement System as of June 30, 1951. The Assets in hand (Current Assets) were taken from statements prepared by the Secretary of the System after the close of the fiscal year ending June 30, 1951 (as of September 30, 1951) and submitted to me in the form required for this report.

"RESULTS OF VALUATION

"Description and Comments

"ASSETS

"The Assets of the System are divided into two general categories, Current Assets and Deferred Assets. The Current Assets, i. e., assets in hand, consist of the balances in the several fund accounts of the System (itemized among the Current Liabilities) and are represented by cash, securities, receivables and other items. They reflect the current asset position of the System as of June 30, 1951 and it is significant to note that the Current Assets, amounting to \$20,263,200.87, bear a ratio to the Total Assets of the System, in the amount of \$70,112,499.39, of 28.9 per cent. The Deferred Assets, i.e., prospective assets, aggregating \$49,849,-298.52, reflect the effect of future operations on the financial condition of

"VALUATION BALANCE SHEET—July 1, 1951

(On basis of assumed retirement at age 65)

ASSETS

Current Assets

Cash, 9-30-51	\$ 133,718.90	\$
Accounts Receivable, 9-30-51	14.97	
Bond Investments, 9-30-51	19,950,000.00	
Unamortized Premiums, less discount, 9-30-51	158,123.62	
Accrued Interest on Bonds Purchased, 9-30-51	2,280.97	
Furniture and Fixtures, 9-30-51	19,062.41	

20,263,200.87

Net Current Assets	\$20,263,200.87
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Deferred Assets: (Present Value on 3% interest assumption, etc.)

(1) Present Value Teachers' Contributions mandatory by reason of Subsequent Service, 6-30-51 (A')	\$17,696,981.63
(2) Present Value State's contributions mandatory by reason of Subsequent Service, 6-30-51 (A")	17,696,981.63

(3) Indicated deficiency from members' future contributions (no covering provision in Act)	4,798,845.83
Deferred Assets mandatory by reason of Subsequent Service	<u>\$40,192,809.09</u>
(4) Actuarial Reserve Deficiency: Deferred obligations of the Commonwealth of Kentucky. Present Value Accrued obligation mandatory by reason of Prior Service, 6-30-51 Active Members \$ 5,244,425.68 Members eligible to retire 1,405,304.12	\$ 6,649,729.80
(5) Current Assets Deficiency: Present Value of Accrued Prior Service obligation due retired teachers, 6-30-51 \$ 5,548,763.16 Less: State's Prior Service Contributions 2,542,003.53*	
Net Allowance Reserve Fund Deficit....	3,006,759.63
Deferred Assets mandatory by reason of Prior Service	<u>\$ 9,656,489.43</u>
TOTAL ASSETS	<u>\$70,112,499.39</u>
*See discussion of Allowance Reserve Fund.	

"VALUATION BALANCE SHEET—July 1, 1951
(On basis of assumed retirement at age 65)

LIABILITIES

Current Liabilities

Outstanding Items	\$ 1,401.39
(1) Expense Fund, 9-30-51	20,632.15
(2) Teachers' Savings Fund— Accumulated contributions by reason of Subsequent Service, 9-30-51	8,237,911.44
(3) State Accumulation Fund— Accumulated contributions (State) by reason of Subsequent Service, 9-30-51	8,237,912.55
(4) Allowance Reserve Fund: Retired teachers' S.S. contributions with accumulated interest, 9-30-51....\$ 72,674.05 State S.S. contribution, Retired Teachers' with accumulated interest, 9-30-51 176,981.66 State P.S. contributions, Retired Teachers, 9-30-51* 2,542,003.53*	2,791,659.24
(5) Guarantee Fund, 9-30-51	973,684.10
Current Liabilities	<u>\$20,263,200.87</u>

Deferred Liabilities: (Present Value on 3% interest assumption, etc.)

(6) Present Value Benefits mandatory by reason of Subsequent Service active members, 6-30-51 (B')	\$39,993,496.00
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(7) Present Value Benefits mandatory by reason of S.S., members eligible to retire 6-30-51 (B'')	199,313.09
Deferred Liabilities mandatory by reason of S.S. (B' plus B'')	<u>\$40,192,809.09</u>
(8) Present Value Benefits mandatory by reason of prior service, 6-30-51	
Active Members (B)	\$ 5,244,425.68
Members Eligible to Retire (B'')	1,405,304.12
(9) Present Value Benefits mandatory by reason of Prior Service—Retired Teachers (B''')	\$ 5,548,763.16
Less: State's Prior Service Contributions	2,542,003.53*
	<u>3,006,759.63</u>
Deferred Liabilities mandatory by reason of Prior Service	<u>\$ 9,656,489.43</u>
TOTAL LIABILITIES	<u>\$70,112,499.39</u>

*See discussion of Allowance Reserve Fund.

the System in light of the law as amended July 1, 1950. The Deferred Assets are represented by several items, as follows:

"(1) Present value of teachers' contributions mandatory by reason of Subsequent Service, June 30, 1951 (A'), i.e., the value at Balance Sheet date of future contributions to be made by the teachers who eventually will qualify for retirement benefits.

"This item amounts to \$17,696,981.63. The increase in the Subsequent Service salary scale that has come about in recent years made its manifestation in the calculation of this item. It may be expected that future trends in salaries will tend to influence, materially, both the Contributions and Benefit provisions of the Act. The rather substantial increase in the contributing membership of the System has had its favorable effect on this item.

"(2) Present value of State contributions mandatory by reason of Subsequent Service, June 30, 1951, (A''), i.e., the value at the Balance Sheet date of future matching contributions to be made by the State.

"This item, likewise, amounts to \$17,696,981.63. The same interactive elements were considered in the calculation of this item as were mentioned in the preceding paragraph. With respect to this item, however, it is significant to note that deaths and withdrawals in the future will create a small margin of safety in the matching funds which is not reflected in the calculation of the present value of State contributions mandatory by reason of Subsequent Service.

"(3) Indicated deficiency from members' future Subsequent Service contributions (no covering provisions in Act), i.e., the amount at the Balance Sheet date by which the present value of teachers' future contributions, matched by the State, falls short of the present value of benefits mandatory by reason of Subsequent Service as provided in the Act.

"This item, amounting to \$4,798,845.83, decreased slightly as compared with the corresponding item appearing in the Valuation Balance Sheet dated July 1, 1950. From a careful analysis of the 1951 statistics backing this item, it appears that the slight decrease comes about because the average Subsequent Service salary (as defined in the governing law as applicable at retirement) has not yet reflected fully the overall increase or improvement in the Subsequent Service salary scale that has occurred within the last few years, rather than the implication that the previously increasing trend with respect to this 'Indicated Deficiency' has reversed. The previously expressed conclusion should not be tempered since the evidence persists indicating definitely the advisability of an upward adjustment in the contribution rates of the teachers, matched by the State, for Subsequent Service. Amendments to the law in this regard should continue to receive careful consideration, since the present provisions of the law specifically fix the contributions of member teachers for Subsequent Service as well as the State's matching contributions.

"(4) Actuarial Reserve Deficiency, consisting of the present value of the accrued obligation mandatory by reason of Prior Service, June 30, 1951, on account of both active members and members eligible to retire who eventually will qualify for retirement benefits, i.e., the value at the Balance Sheet date of future contributions (temporary) to be made by the State on account of Prior Service of the existing active membership who eventually will retire.

"This item, amounting to \$6,649,729.80, reflects an increase of only \$45,730.86 over the corresponding item appearing in the last previous Balance Sheet as of July 1, 1950. From the statistics forming the basis of the calculation of this item, it was noted that a considerable amount of this obligation was transferred, by reason of retirements, to the 'Current Assets Deficiency' item and that there has been a significant reduction in the number of active members with Prior Service credits, due to the telling effect of both the death rate and the withdrawal rate. However, the average prior service per member remains fairly constant—10.37 years as of July 1, 1951 as compared with 10.27 years as reflected in the last previous study. The indicated change in the trend of this 'Actuarial Reserve Deficiency' item is a favorable manifestation.

"(5) Current Assets Deficiency, the present value of the accrued Prior Service obligation due retired teachers, June 30, 1951, i.e., the value at the Balance Sheet date of the future contributions yet to be made by the State to liquidate the existing obligation to teachers currently receiving retirement benefits.

"This item amounts to \$3,006,759.63—up approximately \$388,000.00 as compared with the corresponding item appearing in the last previous Balance Sheet as of July 1, 1950. It should be emphasized again that this 'Current Assets Deficiency' item absorbs the entire impact of the new minimum pension amendment which became effective July 1, 1950, with respect to its application to teachers who have already retired.

Item (4) 'Actuarial Reserve Deficiency' and Item (5), 'Current Assets Deficiency,' now aggregate \$9,656,489.43 and represent the Deferred Assets mandatory by reason of Prior Service. This aggregate is a deferred obligation of the Commonwealth of Kentucky which is now being liquidated by an amortization plan calling for 'temporary' contributions by the State at the rate of approximately \$300,000.00 per year. As of the date of this report, some \$230,000.00 remains from the appropriation for the last fiscal year of the current biennium for transfer into the Allowance Reserve Fund as a 'temporary' contribution by the State to be applied against this 'Current Assets Deficiency' item. However, serious consideration should continue to be given to a revision of the present amortization plan in order to make it adequate during the remainder of the 25-year amortization period to make secure the Assets mandatory by reason of Prior Service.

"LIABILITIES

"The liabilities of the System were likewise divided into two general categories, Current Liabilities and Deferred Liabilities. The liabilities in these two categories, in the aggregate, represent all of the obligations of the System. The Current Liabilities reflect the current operating position of the System as of June 30, 1951. They consist of the balances in the several Fund accounts of the System together with minor outstanding items, as follows:

"(1) Expense Fund—its name indicates its character.

"(2) Teachers' Savings Fund, i.e., the accumulated contributions of member teachers since coming into membership in the System, subject either to refund in the event of withdrawal from service or in the event of death prior to retirement, or to use by the System to provide, in part, for the retirement benefits for those teachers who will eventually qualify for them.

"The balance in this Fund Account as of June 30, 1951 amounted to \$8,237,911.44.

"(3) State Accumulation Fund, i.e., the accumulated matching contributions of the State which, eventually will be used by the System to provide for the balance of the retirement benefits, as provided in the Act on account of Subsequent Service, that is not provided by the teachers' own contributions.

"The balance in this Fund as of June 30, 1951 amounted to \$8,237,912.55.

"(4) Allowance Reserve Fund, i.e., the accumulated contributions of retired teachers transferred from the Teachers' Savings Fund at time of retirement; the accumulated matching contributions of the State for retired teachers transferred from the State Accumulation Fund at time of retirement; and the State's Prior Service contribution for retired teachers.

"The balance in this fund as of June 30, 1951 amounted to \$2,791,659.24. Of this amount, \$2,542,003.53 is from the State's Prior Service

contribution for retired teachers, which, you will note, was applied as an offset to the Current Assets Deficiency appearing among the Deferred Assets. As mentioned under the discussion of the 'Current Assets Deficiency' item, there remains to be transferred to the Allowance Reserve Fund from State appropriations for the last fiscal year of the current biennium, approximately \$230,000.00, which will be forthcoming in accordance with the usual plan of transferring the State's 'temporary' contributions at quarterly intervals during a biennium.

"(5) Guarantee Fund, i.e., the fund into which are deposited all income from investments and any other income or moneys the disposition of which is not otherwise provided.

"This fund is in the nature of a contingent reserve. The balance in this fund account as of June 30, 1951 amounted to \$973,684.10.

"Note: For the purposes of this Valuation Balance Sheet, it was assumed that the amount in hand in the Teachers' Savings Fund and the State's Accumulation Fund, together with the balance in the Guarantee Fund, would be, at least, sufficient at this Balance Sheet date to offset the accrued obligations on account of past membership service of the members, i.e., the membership service of all existing active members in connection with which contributions have been made from July 1, 1940 to June 30, 1951.

"The Deferred Liabilities, i.e., prospective liabilities which have been determined in light of the law governing the System as amended July 1, 1950, are represented by various items, as follows:

"(6) The present value of benefits mandatory by reason of Subsequent Service of active members, June 30, 1951, (B'), i.e., the calculated value at the Balance Sheet date of the future Subsequent Service (membership service) of those of the active membership who will eventually qualify for retirement benefits, in accordance with the measure provided in the Act.

"This item amounts to \$39,993,496.00.

"(7) Present value of benefits mandatory by reason of Subsequent Service, members eligible to retire, June 30, 1951, (B''), i.e., the value at the Balance Sheet date of the future Subsequent Service (membership service) of those of the existing membership who are eligible to retire but have not, as yet, retired.

"This item, amounting to \$199,313.09, represents the calculated value of the benefit provisions provided by the Act applicable to members who are now eligible to retire. The sum of the two items appearing in paragraphs (6) and (7) amount to \$40,192,809.09. This amount corresponds to the Deferred Assets mandatory by reason of Subsequent Service after taking into consideration the 'Indicated deficiency from members' future contributions.'

"(8) Present value of benefits mandatory by reason of Prior Service, June 30, 1951, i.e., the calculated value at the Balance Sheet date of the benefits provided by the Act for those of the existing membership who

eventually will qualify for retirement benefits, measured in terms of their accrued Prior Service Credit.

"This item shown in its two component parts, active members (B) and members eligible to retire (B") totals \$6,649,729.80. The corresponding item appearing among the Assets has been discussed earlier in this report.

"(9) Present value of benefits mandatory by reason of Prior Service—retired teachers, June 30, 1951, (B""), i.e., the value at Balance Sheet date of the calculated Prior Service obligation for teachers who already have retired, which has not been completely liquidated by the State's Prior Service contributions.

"This item amounts to \$3,006,759.63 and has been discussed under the treatment of the corresponding item appearing among the Deferred Assets and labeled 'Current Assets Deficiency.'

"CONCLUSIONS

"From the standpoint of actuarial requirements, a sound financial condition exists when the System has current assets equal to the difference between the total liabilities for all pension obligations and the present value of future contributions, by member teachers and the State, on account of service to be rendered by the members subsequent to the date of the Valuation Balance Sheet, and by the State alone on account of the obligation it has assumed for Prior Service.

"The Valuation Balance Sheet, with the accompanying description and comments, clearly illustrates this condition. The over-all financial outlook is very satisfactory, and shows a substantial improvement in the financial soundness of the System as compared with the last preceding Balance Sheet made as of July 1, 1950. While new problems of a fiscal nature continue to confront those responsible for the administration of the System, old trends that have been manifest since the inception of the System continue. That continuity of management has been wise is evidenced by the conscientious concern for the financial welfare of the System both on the part of the Board of Trustees and the Secretary of the System and his staff. Pardonable pride in the present financial showing and outlook can be taken by all those whose future interests are so dependent upon the financial soundness and continued improvement in the plan of operation underlying the System.

"Respectfully submitted,
/s/ L. C. Cortright
L. C. Cortright
Actuary"

FINANCIAL

The members of the Retirement System are virtually stockholders in this great corporation. Their several "equities" are not measured by their individual accounts, but rather by the total assets.

How this equity is appreciated may be judged by the number and extent of withdrawals as shown by Schedule III. At this time the value of a member's service credit is approximately ten times the amount in

her accumulated account. No member should withdraw her account unless she is positive she will not teach in Kentucky again or that her absence will exceed six years. Administrators should hesitate to indorse applications for refund unless it is known that the absence will be permanent or of long duration.

Disbursements to teachers in refunds, death settlements, and annuities approximate \$3,000,000.00.

A continuing study is made of the portfolio. Sale and reinstatement is often indicated. By this means \$49,000.00 in 1949-50 and \$9,000.00 in 1950-51 was realized as a current profit. In March 1951 \$10,000,000.00 worth of long-term negotiable 2½% U. S. Treasury bonds were exchanged par for par for a like amount of non-negotiable 2¾% U. S. Treasury bonds. The annual on this transaction is \$25,000.00. The registered non-negotiable bonds are more desirable than the non-registered fully negotiables for the purposes of the Retirement System. They can be held until maturity.

This is one of the largest transactions in Government bonds ever made in Kentucky. This alert attention to your investments is the reason why your Retirement System ranks eighth from the top in the United States on interest and profit realized on the portfolio. The teachers and taxpayers are saved thousands of dollars.

The State's temporary contributions are for prior service and the permanent contributions are for "matching." See Schedule II. Compare total receipts in contributions with total assets shown in General Balance Sheet.

GENERAL BALANCE SHEET TEACHERS' RETIREMENT SYSTEM

June 30, 1951

ASSETS

Current

Cash	\$ 289,354.59
Deposit—U. S. Post Office	14.72

Total Cash	\$ 289,369.31
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Investments—Schedule I

Investments (Par)	\$19,650,000.00
Unamortized Premium	179,649.17
Unamortized Discount	-14,775.55
Accrued Interest	1,331.52

Total Invested	19,816,205.14
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Fixed

Office Equipment	18,890.79
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Total Assets	<u>\$20,124,465.24</u>
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LIABILITIES AND FUND BALANCES

Current

Encumbrances Outstanding	\$	836.51
Overpayments		6.09

Total	\$	842.60
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Fund Balances

Expense Fund	\$	19,166.47
Teachers Savings Fund		8,275,287.56
State Accumulation Fund		8,275,293.65
Allowance Reserve Fund		
Teachers Contributions..\$	20,667.70	
State Contributions—		
Per.	116,495.43	
State Contributions—		
Tem.	2,541,671.52	

Total ARF Balance	2,678,834.65
Guarantee Fund	875,040.31

Total Fund Balances		20,123,622.64
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Total Liabilities and Fund Balances		\$20,124,465.24
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Schedule IV should be viewed with Table Xa in mind, remembering that Table Xa will continue to increase in number of retirants. Reference is also made to the Applicants For Retirement Allowance, July 1, 1951. A study of these reports will reveal the measure of the contribution of the State to members already retired. The first retirant listed illustrates the whole number. For contributions of \$206.09 she received \$320.00 per year for life and the 3% reserve required for her is \$5,146.00. Her retirement allowance is a little over half her average salary base.

This group of 117 retirants paid into the Retirement System \$65,800.37, but the reserve required for them is \$767,051.00. The State and the Retirement System is putting into their annuities almost \$12.00 for each \$1.00 the retirant has contributed. No other retirement system is doing so much at such little cost to the teacher-member.

This is not to say that annuities are adequate. The present economic inflation has materially reduced the effectiveness of the annuity. With this in mind, the General Assembly provided a 60% increase for hundreds of the retired teachers whose annuities formerly ranged around \$300.00.

Regardless of amount, the annuity is never large enough. Every member should try to provide something to supplement her annuity. The General Assembly in 1950 authorized the setting up of a plan under which members of the Retirement System could make voluntary unmatched contributions for the purpose of buying at retirement a 3% annuity. Many should take advantage of this provision of the Law.

It has come to us that the Kentucky Annual Reports are read with interest in other states; we wish more people in Kentucky would read them.

STATE AUDITOR'S REPORT

No report of the State Auditor will be included in the Eleventh Annual Report. His staff is so small he cannot audit our books at this time. We hope that next year we may include his Report for 1949-50, 1950-51, and 1951-52. All audits have been made to July 1, 1949.

N. O. Kimbler and
Office Staff

November 11, 1951

GENERAL STATEMENT OF RECEIPTS AND DISBURSEMENTS

July 1, 1950 to June 30, 1951

Cash Balance July 1, 1950		\$ 380,860.25
Receipts—Schedule II		
Teachers' Savings	\$1,251,317.46	
Reinstatements	4,002.05	
Net Irregular Payments	-3.10	
Total	\$1,255,316.41	
State Contributions—Per.	\$1,251,314.36	
State Contributions—Temp.	326,472.82	
State Contributions—		
Expenses	52,615.00	
Special Refunds		
Adjustments	-418.32	
Total	1,629,983.86	
Due from Acct. No. 2055.....	16.14	
Expense Fund Balance—1949-50	603.24	
Net Interest Earned	390,260.01	
Investments Sold (Par)	550,000.00	
Profit on Sale of Investments.....	9,719.08	
Bond Premium Amortized	10,315.19	
Accrued Interest Amortized	8,591.96	
Total Receipts		3,854,805.89
Total Cash		\$4,235,666.14
Disbursements		
Administrative Expenses—Sch. V.		
Salaries	\$ 42,328.28	
Other Current Expenses	9,189.25	
Total	\$ 51,517.53	

Refunds—Schedule III

Refunds—Regular	\$ 269,727.24
Refunds—Special	418.32
Refunds—Interest	2,324.97
Refunds of Annuitants	
Dec.	2,224.26
Loss on Excess Refunds	6.03

Total 274,700.82

Retirement Benefits Paid—Sch. IV.

Superannuation	\$ 466,745.76
Disability	51,492.39
Benefit Checks Returned	-2,919.69

Total 515,318.46

Investments Purchased 3,104,774.74

Total Disbursements 3,946,311.55

Cash Balance June 30, 1951.... \$ 289,354.59

CONDENSED ANALYSIS OF CHANGES IN TRUST FUND BALANCES

July 1, 1950 to June 30, 1951

Trust Fund Balances, July 1, 1950

Teachers' Savings Fund.....	\$ 7,177,287.60
State Accumulation Fund—Per.	7,177,296.79
Allowance Reserve Fund	2,591,031.24
Guarantee Fund	716,104.82
Total	\$17,661,720.45

Additions—Schedule II

Teachers' Savings	\$1,251,317.46
Reinstatements	4,002.05
State Contributions—Per... ..	1,251,314.36
State Contributions—Temp. ..	326,472.82
Net Interest Earned.....	390,260.01
Profit on Investments	
Sold	9,719.08
Special Refunds	
Adjustments	-418.32
Total Additions	\$ 3,232,667.46

Deductions

Refunds—Sch. III	\$ 274,700.82
Retirement Benefits Paid	515,318.46
Inter-Fund Adjustments....	-87.54

Total Deductions	789,931.74
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Net Addition	2,442,735.72
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Present Net Worth.....	\$20,104,456.17
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Trust Fund Balances

Teachers' Savings Fund.....	\$ 8,275,287.56
State Accumulation Fund—Per.	8,275,293.65
Allowance Reserve Fund	

Teachers' Con- tributions	\$ 20,667.70
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State Contributions— Per.	116,495.43
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State Contributions— Temp.	2,541,671.52
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Total ARF Balance	2,678,834.65
Guarantee Fund	875,040.31

\$20,104,456.17	\$20,104,456.17
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SCHEDULE I
INVESTMENTS
TEACHERS' RETIREMENT SYSTEM
June 30, 1951

Name and Description	Par Value	Unamort. Premium	Unamort. Discount	Accrued Interest	Average Net Yield
U.S. Savings—Series G	\$ 2,950,000.00				2.500%
U. S. Treasury 2½ %—Series A—1965	250,000.00				2.500%
U. S. Treasury 2½ % 6/15/1964-69	250,000.00				2.500%
U. S. Treasury 2½ % 3/15/1965-70	900,000.00		\$ 5,937.50	\$1,331.52	2.558%
U. S. Treasury 2½ % 3/15/1966-71	450,000.00				2.500%
U. S. Treasury 2½ % 6/15/1967-72	1,450,000.00	\$ 1,432.00	1,827.20		2.502%
U. S. Treasury 2½ % 12/15/1967-72	3,400,000.00	10,738.15	7,010.85		2.422%
U. S. Treasury Invest. Series B—1975-80.....	10,000,000.00	167,479.02			2.657%
 Total Par Value	 \$19,650,000.00				
Total Unamort. Premium	179,649.17	\$179,649.17			
 Total Unamort. Discount	 -14,775.55		\$14,775.55		
 Total Accrued Interest	 1,331.52			\$1,331.52	
 Total Invested	 \$19,816,205.14				
Average Net Yield					2.569%
Average Net Yield one Year Ago was.....					2.432%

SCHEDULE II
RECEIPTS
TEACHERS' RETIREMENT SYSTEM
July 1, 1940 to June 30, 1951

Date	Teachers Savings Regular	Rein- statements	State Cont. Permanent	State Cont. Temporary	State Cont. Expenses	Interest and Profit	Total Receipts
1940-41	\$ 476,136.72	\$	\$ 476,089.49	\$	\$ 23,669.88	\$ 5,091.96	\$ 980,988.05
1941-42	481,635.48	77.55	481,713.03		18,232.93	23,999.54	1,005,658.53
1942-43	559,626.66	105.00	559,672.98	68,007.63	22,317.03	62,976.31	1,272,705.61
1943-44	546,311.99	492.73	546,161.42	79,205.38	24,633.20	79,202.93	1,276,007.65
1944-45	646,738.13	1,532.32	646,559.38	126,531.94	25,908.68	115,572.02	1,562,842.47
1945-46	657,957.16	1,710.26	658,004.24	133,605.33	31,390.43	163,671.56	1,646,338.98
1946-47	867,521.73	2,868.82	867,222.82	52,737.51	36,039.67	180,529.08	2,006,919.63
1947-48	1,010,250.24	2,027.34	867,231.00*	52,359.59	36,409.41	221,023.20	2,189,300.78
1948-49	1,105,134.30	537.41	1,247,770.36	2,626,751.50	41,059.78	318,688.22	5,339,941.57
1949-50	1,181,924.12	1,049.89	1,181,930.62	252,845.26	43,396.76	429,361.89	3,090,503.54
1950-51	1,251,317.46	4,002.05	1,251,314.36	326,472.82	52,615.00	399,979.09	3,285,700.78
	<u>\$8,784,553.99</u>	<u>\$14,403.37</u>	<u>\$8,783,669.70</u>	<u>\$3,718,516.96</u>	<u>\$355,672.77</u>	<u>\$2,000,095.80</u>	<u>\$23,656,912.59</u>

* Appropriation insufficient to match teachers' savings.

SCHEDULE III
REFUNDS
TEACHERS' RETIREMENT SYSTEM
July 1, 1940 to June 30, 1951

Date	WITHDRAWALS		DECEASED		SPECIAL		TOTAL	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
1940-41	151	\$ 2,036.96	12	\$ 235.54		\$	163	\$ 2,272.50
1941-42	738	20,231.70	38	1,878.55	2	29.32	778	22,139.57
1942-43	900	37,563.07	58	4,704.18	4	35.77	962	42,303.02
1943-44	872	46,706.43	40	4,604.58	8	127.39	920	51,438.40
1944-45	914	48,760.45	52	6,567.58	8	168.27	974	55,496.30
1945-46	1,647	103,947.17	62	8,654.01	5	50.64	1,714	112,651.82
1946-47	2,170	135,277.90	37	6,298.25	17	195.16	2,224	141,771.31
1947-48	1,764	128,537.47	53	12,657.50	16	386.54	1,833	141,581.51
1948-49	2,050	152,877.90	68	18,146.31	12	127.63	2,130	171,151.84
1949-50	1,941	176,877.22	48	14,917.02	23	281.50	2,012	192,075.74
1950-51	2,717	243,756.16	81	28,296.05	17	418.32	2,815	272,470.53
	15,864	\$1,096,572.43	549	\$106,959.57	112	\$1,820.54	16,525	\$1,205,352.54

SCHEDULE IV
RETIREMENT ALLOWANCES PAID
TEACHERS' RETIREMENT SYSTEM
July 1, 1942 to June 30, 1951

Year	CAUSE OF RETIREMENT		FUNDS FROM WHICH PAID			Total Paid
	Super-annuation	Disability	TSF	SAF-Perm.	SAF-Temp.	
1942-43	\$ 62,439.36	\$ 1,426.56	\$ 15,791.10	\$ 15,215.22	\$ 32,859.60	\$ 63,865.92
1943-44	80,688.98	2,260.49	9,363.05	8,345.75	65,240.67	82,949.47
1944-45	101,452.30	2,862.12	14,120.62	11,527.58	78,666.22	104,314.42
1945-46	129,761.78	3,703.69	24,296.95	13,686.44	95,482.08	133,465.47
1946-47	200,903.68	13,430.52	39,159.38	28,118.59	147,056.23	214,334.20a
1947-48	234,185.94	17,893.88	37,891.27	31,348.35	182,840.20	252,079.82
1948-49	267,246.96	20,763.60	44,459.44	29,902.32	213,648.80	288,010.56
1949-50	306,232.13	24,918.44	57,466.56	36,823.79	236,860.22	331,150.57
1950-51	464,259.93	50,970.99	88,592.56	66,228.19	360,410.17	515,230.92b
Total	\$1,847,171.06	\$138,230.29	\$331,140.93	\$241,196.23	\$1,413,064.19	\$1,985,401.35c

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

b) Minimum allowance raised from \$10.00 to \$16.00 per year of service credit.

c) \$241,196.23 + \$1,413,064.19 = \$1,654,260.42 (83.32%) paid by State.

SCHEDULE IV-A
TEACHERS RETIRED, WITHDRAWN AND DECEASED
TEACHERS' RETIREMENT SYSTEM
July 1, 1942 to June 30, 1951

Year	SUPERANNUATION			DISABILITY			Living Retired at end of Year
	Retired	Withdrawn	Deceased	Retired	Withdrawn	Deceased	
1942-43	238	5	16	14	1	1	229
1943-44	96	3	14	9	0	3	314
1944-45	72	1	14	6	0	0	377
1945-46	112	3	33	11	2	1	461
1946-47	142	0	26	23	1	4	595
1947-48	111	0	30	16	0	3	689
1948-49	122	0	26	14	1	2	796
1949-50	126	1	42	24	1	6	896
1950-51†	167	0	37	35	2	2	1,057
	1,186*	13	238	152‡	8	22	1,057

† Subject to adjustments for notices of deaths in 1950-51 received after July 1, 1951.

* Eleven teachers have retired for superannuation, withdrawn from retirement to return to teaching, and have been retired the second time.

‡ Three teachers have retired for disability, recovered and returned to teaching and have been retired the second time.

**APPLICATIONS FOR RETIREMENT ALLOWANCE
EFFECTIVE FIRST QUARTER 1951-52**

District or Institution	No.	Age	P.S.	S.S.	P.S. Salary	S.S. Salary	Annuity	¼ Pay	Member's Contribution	Reserve
COUNTY										
Adair County	22325	55	14	6	\$ 506.11	\$ 871.45	\$ 320.00	\$ 80.00	\$ 206.09	\$ 5,146.00
Adair County	22429	60	16.4	5	472.00	923.90	342.40	85.60	184.78	4,862.00
Anderson County	215	59	24	9	528.99	1,044.30	480.00	120.00	347.35	7,018.00
Bell County	24441	62	30	7	798.40	1,560.25	480.00	120.00	388.81	6,484.00
Bell County	705	62	30	10	514.84	2,376.00	480.00	120.00	781.20	6,484.00
Bracken County	1016	68	30	10	1,880.00	2,400.00	864.16	216.04	959.74	9,751.00
Breathitt County	23010	47	13.6	8	590.80	1,270.05	345.60	86.40	309.12	6,520.00
Breckinridge County	1090	60	18	9	429.80	885.60	432.00	108.00	273.16	3,199.00
Calloway County	23475	70	23.7	4	1,662.00	808.50	443.20	110.80	201.30	4,677.00
Carter County	20731	52	17	7	783.00	1,125.90	384.00	96.00	275.67	6,587.00
Christian County	1921	66	30	9.2	589.44	1,128.24	480.00	120.00	359.24	4,213.00
Clay County	22136	58	23	7	464.50	1,100.05	480.00	120.00	287.97	7,195.00
Cumberland County	11788	60	28	10	2,000.00	2,400.00	681.28	170.32	959.92	9,709.00
Cumberland County	2432	70	30	10	359.52	806.40	480.00	120.00	287.98	5,065.00
Edmonson County	1276	70	29	10	478.13	1,196.00	480.00	120.00	512.02	5,065.00
Elliott County	2726	61	28.4	10	433.00	950.45	480.00	120.00	338.01	6,663.00
Estill County	22098	57	19.1	7	681.66	1,131.15	417.60	104.40	284.10	6,413.00
Fleming County	3064	70	28.1	10	430.84	1,035.00	480.00	120.00	327.61	5,065.00
Floyd County	3186	70	30	10	562.80	1,290.60	480.00	120.00	423.60	5,065.00
Floyd County	3305	54	27	5.9	983.00	1,345.90	480.00	120.00	350.32	7,892.00
Garrard County	011640	70	0	2	.....	1,073.75	100.00	25.00	85.90	1,055.00
Graves County	23226	67	22	8	601.19	1,850.85	480.00	120.00	500.41	5,593.00
Grayson County	3929	54	19.7	10	452.92	1,095.50	475.20	118.80	365.73	7,813.00
Harlan County	4372	70	21	10	604.00	1,946.10	480.00	120.00	606.25	5,065.00
Hart County	21882	64	27	9	400.56	833.10	480.00	120.00	262.31	6,127.00
Henderson County	4870	61	30	3	511.34	521.75	480.00	120.00	113.48	6,663.00
Hickman County	5089	63	26.7	3.3	372.35	982.12	480.00	120.00	146.41	6,306.00

**APPLICATIONS FOR RETIREMENT ALLOWANCE
EFFECTIVE FIRST QUARTER 1951-52**

District or Institution	No.	Age	P.S.	S.S.	P.S. Salary	S.S. Salary	Annuity	$\frac{1}{4}$ Pay	Member's Contribution	Reserve
COUNTY—Continued										
Jefferson County	5553	61	24.7	10	1,075.05	2,315.00	480.00	120.00	800.41	6,663.00
Jefferson County	5593	55	20	10	965.50	2,312.80	480.00	120.00	750.75	7,720.00
Jefferson County	5659	69	30	10	2,000.00	2,400.00	927.96	231.99	959.98	10,130.00
Jessamine County	5718	68	21	10	881.98	1,462.50	480.00	120.00	535.23	5,416.00
Laurel County	23263	70	13.1	5.3	488.20	794.35	294.40	73.60	168.40	3,107.00
Laurel County	23714	70	19.7	2.2	494.38	925.23	350.40	87.60	81.42	3,698.00
Leslie County	19776	54	21	10	810.00	2,400.00	480.00	120.00	765.60	7,892.00
Leslie County	6859	52	22.5	10	341.60	875.35	480.00	120.00	284.45	8,233.00
Leslie County	23839	70	25.9	2.9	585.20	880.69	460.80	115.20	102.16	4,863.00
Lincoln County	1834	60	28	9.6	1,104.00	1,000.00	480.00	120.00	442.60	6,841.00
Livingston County	19484	70	30	10	1,608.00	2,213.60	814.44	203.61	741.70	8,595.90
Madison County	7844	49	20	10	656.75	1,185.90	480.00	120.00	371.53	8,732.00
Madison County	2757	70	30	10	608.25	1,192.40	480.00	120.00	414.15	5,065.00
Magoffin County	7866	58	23.3	10	1,135.29	2,161.50	480.00	120.00	717.20	7,195.00
Magoffin County	7953	53	20	10	397.40	823.00	480.00	120.00	286.64	8,063.00
Magoffin County	7963	60	19.1	10	450.26	1,004.00	465.60	116.40	346.17	6,635.00
Mason County	3052	70	8	7	386.47	628.75	240.00	60.00	200.58	2,533.00
McCreary County	8538	70	30	10	625.80	1,253.90	480.00	120.00	462.12	5,065.00
Meade County	017159	70	—	1	—	1,202.00	100.00	25.00	48.08	1,055.00
Metcalfe County	23161	70	6	4.7	293.40	732.34	171.20	42.80	137.78	1,807.00
Monroe County	8990	63	13.1	9.4	472.49	1,058.00	360.00	90.00	366.30	4,729.00
Morgan County	23851	67	16.3	6	323.70	755.05	356.80	89.20	146.90	4,158.00
Owsley County	19470	43	11.3	9.4	562.04	1,228.95	326.40	81.60	323.29	6,581.00
Perry County	6848	60	25.9	9.9	434.10	1,617.85	480.00	120.00	515.84	6,841.00
Perry County	10200	58	25.4	8.2	590.80	1,400.23	480.00	120.00	385.86	7,195.00
Perry County	10204	70	30	10	1,999.60	2,400.00	959.88	239.97	959.52	10,130.00
Perry County	10278	52	15	10	769.71	1,799.10	400.00	100.00	588.92	6,861.00
Pulaski County	22803	65	25.4	5	445.12	1,048.10	480.00	120.00	209.66	5,949.00
Pulaski County	10987	61	25.4	10	670.18	1,458.30	480.00	120.00	515.06	6,663.00

EFFECTIVE FIRST QUARTER

APPLICATIONS FOR RETIREMENT ALLOWANCE EFFECTIVE FIRST QUARTER 1951-52

District or Institution	No.	Age	P.S.	S.S.	P.S. Salary	S.S. Salary	Annuity	¼ Pay	Member's Contribution	Reserve
COUNTY—Continued										
Pulaski County	23982	70	4	8	286.25	1,115.48	192.00	48.00	323.45	2,026.00
Pulaski County	4643	61	27.6	6.6	795.97	1,319.70	480.00	120.00	373.13	6,663.00
Spencer County	24408	68	18	5.5	519.40	1,337.55	376.00	94.00	289.30	4,243.00
Todd County	11703	68	27.5	10	576.00	1,455.80	480.00	120.00	466.86	5,416.00
Todd County	11737	58	25	9.8	819.00	1,570.60	480.00	120.00	566.44	7,195.00
Trigg County	21413	57	22	8	368.40	889.85	480.00	120.00	244.33	7,371.00
Wayne County	23090	70	23	6	384.00	1,341.35	464.00	116.00	305.23	4,897.00
Whitley County	12473	69	26.5	9	745.27	1,560.40	480.00	120.00	506.76	5,240.00
Wolfe County	12632	70	30	9.7	409.28	936.00	480.00	120.00	333.56	5,065.00
Totals	65		1,439.4	522.6	\$44,170.03	\$86,008.53	\$29,825.32	\$ 7,456.33	\$26,175.84	\$388,226.00
Averages		62.75	22.1	8.04	679.54	1,323.21	458.85	114.71	402.71	5,972.71

APPLICATIONS FOR RETIREMENT ALLOWANCE
EFFECTIVE FIRST QUARTER 1951-52

District or Institution	No.	Age	P.S.	S.S.	P.S. Salary	S.S. Salary	Annuity	¼ Pay	Member's Contribution	Reserve
INDEPENDENT										
Ashland	12872	70	30	10	\$ 1,229.25	\$ 2,096.00	\$ 683.20	\$ 170.80	\$ 781.36	\$ 7,210.00
Ashland	917	68	25	10	2,000.00	2,068.50	757.80	189.45	857.76	8,551.00
Bardstown	13399	70	30	10	975.60	2,138.10	613.40	153.35	742.72	6,473.00
Bowling Green	13596	58	12	10	1,080.00	1,864.05	352.00	88.00	680.61	5,276.00
Danville	13943	59	24	10	2,000.00	2,000.00	563.00	140.75	380.00	8,232.00
Fulton	14378	70	15	10	775.08	1,257.75	400.00	100.00	495.11	4,221.00
Georgetown	14420	70	30	10	936.55	1,677.75	532.64	133.16	594.60	5,621.00
Henderson	14726	67	30	10	1,115.50	1,641.00	526.00	131.50	661.74	6,129.00
Henderson	14738	70	30	10	1,050.00	2,247.00	652.04	163.01	807.04	6,881.00
Hopkinsville	14951	63	18	10	827.10	1,541.14	448.00	112.00	557.29	5,885.00
Lexington	15329	70	17	10	1,640.00	2,385.00	635.52	158.88	903.79	6,707.00
Lexington	15418	66	29.1	10	1,480.00	2,365.00	689.44	172.36	892.97	8,289.00
Lexington	15467	70	14.5	10	1,640.00	2,385.00	595.56	148.89	903.97	6,285.00
Lexington	15476	70	30	10	1,645.00	2,400.00	853.52	213.38	919.37	9,007.00
London	22144	63	25	5	1,575.00	2,240.00	480.00	120.00	448.00	6,306.00
Louisville	16176	70	30	10	2,000.00	2,400.00	960.00	240.00	960.00	10,131.00
Louisville	16829	70	20	10	1,990.00	2,400.00	758.00	189.50	960.00	7,999.00
Louisville	15685	67	30	10	2,000.00	2,400.00	869.44	217.36	960.00	10,131.00
Louisville	16209	70	30	10	2,000.00	2,400.00	960.00	240.00	960.00	10,131.00
Louisville	23042	70	6.5	1.8	1,745.00	2,394.44	178.08	44.52	172.40	1,879.00
Louisville	15775	67	21.5	10	1,740.00	2,400.00	664.84	166.21	949.00	7,747.00
Louisville	16219	70	30	10	2,000.00	2,400.00	960.00	240.00	960.00	10,131.00
Louisville	16221	68	26	10	2,000.00	2,400.00	823.00	205.75	960.00	9,287.00
Louisville	16657	62	30	10	1,694.00	2,400.00	678.24	169.56	940.00	9,162.00
Louisville	16120	70	30	10	2,000.00	2,400.00	960.00	240.00	960.00	10,131.00
Louisville	16956	61	22	10	2,000.00	2,400.00	608.24	152.06	960.00	8,443.00

APPLICATIONS FOR RETIREMENT ALLOWANCE
EFFECTIVE FIRST QUARTER 1951-52

District or Institution	No.	Age	P.S.	S.S.	P.S. Salary	S.S. Salary	Annuity	¼ Pay	Member's Contribution	Reserve
INDEPENDENT—Continued										
Louisville	16941	69	30	10	1,891.00	2,400.00	896.36	224.09	958.20	9,786.00
Louisville	15707	70	30	10	2,000.00	2,400.00	960.00	240.00	960.00	10,131.00
Madisonville	17247	59	25	10	2,000.00	2,000.00	577.44	144.36	879.77	8,443.00
Midway	4219	59	26	10	476.00	1,384.20	480.00	120.00	421.62	7,018.00
Newport	17580	70	30	10	1,764.00	2,330.00	878.72	219.68	887.20	9,273.00
Newport	17631	69	21	10	1,468.00	2,350.00	638.72	159.68	869.20	6,973.00
Newport	17637	60	30	10	1,764.00	1,620.00	571.80	142.95	712.80	8,149.00
Owensboro	17736	69	30	10	827.60	1,726.20	490.28	122.57	596.34	5,353.00
Owensboro	17839	70	30	10	1,054.80	2,170.65	642.04	160.51	748.03	6,775.00
Paris	18141	62	13	10	1,200.00	1,990.00	368.00	92.00	715.76	4,971.00
Paris	18146	70	30	10	900.00	1,840.00	546.00	136.50	613.62	5,762.00
Pikeville	18191	53	20.2	10	913.50	1,765.80	480.00	120.00	619.91	8,063.00
Richmond	18410	70	30	10	1,150.00	1,888.00	628.20	157.05	687.72	6,629.00
Richmond	18427	68	30	10	1,100.00	1,888.00	573.48	143.37	675.72	6,471.00
Richmond	18429	70	30	10	815.51	1,840.00	520.64	130.16	616.48	5,494.00
Richmond	18430	68	30	10	1,100.00	1,896.00	574.60	143.65	683.32	6,484.00
Russellville	18509	70	27.6	10	1,078.75	1,862.95	578.36	144.59	685.27	6,103.00
Scottsville	18523	69	27	10	801.92	1,522.45	480.00	120.00	547.45	5,240.00
Shelbyville	24051	70	13.7	3	1,550.00	1,971.00	301.04	75.26	256.52	3,177.00
Stearns	18736	47	18.9	10	740.16	1,837.40	459.20	114.80	584.37	8,664.00
Eastern Ky. State College	19071	55	23	9	2,000.00	2,319.60	507.32	126.83	863.84	8,159.00
Kentucky State College	19257	56	25.4	10	1,012.20	1,440.00	480.00	120.00	583.01	7,546.00
Morehead State College	19112	69	15.4	10	2,000.00	2,180.00	613.80	153.45	915.68	6,701.00

**APPLICATIONS FOR RETIREMENT ALLOWANCE
EFFECTIVE FIRST QUARTER 1951-52**

District or Institution	No.	Age	P.S.	S.S.	P.S. Salary	S.S. Salary	Annuity	¼ Pay	Member's Contribution	Reserve
INDEPENDENT—Continued										
Morehead State College	19134	70	24	10	2,000.00	2,400.00	840.00	210.00	960.00	8,864.00
Murray State College	19194	66	17.6	8.8	1,803.50	2,279.93	542.80	137.50	755.13	6,526.00
Murray State College	19211	60	10	10	1,920.00	2,400.00	408.76	102.19	959.84	5,825.00
Totals		52	1,273.4	497.6	\$76,469.02	\$108,402.91	\$32,239.52	\$ 8,059.88	\$39,624.53	\$378,825.00
Averages		66.1	24.5	9.6	1,470.56	2,084.67	619.99	155.00	762.01	7,285.10

**SUPPLEMENTAL LIST
OF
APPLICATIONS FOR RETIREMENT ALLOWANCE
EFFECTIVE FIRST QUARTER 1951-52**

District or Institution	No.	Age	P.S.	S.S.	P.S. Salary	S.S. Salary	Annuity	¼ Pay	Members' Contri.	Reserve
COUNTY										
Leslie County	6975	58	30	9.6	\$730.32	\$2,242.50	\$480.00	\$120.00	\$770.00	\$7,195.00
Lincoln County	11024	65	29.5	10	484.60	1,098.60	480.00	120.00	365.60	5,949.00
Mercer County	3873	67	20	9	619.23	1,271.65	464.00	116.00	394.12	5,407.00
Morgan County	9169	68	30	3	367.16	629.33	480.00	120.00	91.45	5,416.00
Morgan County	24274	53	15	7	397.60	767.10	352.00	88.00	197.66	5,913.00
INDEPENDENT										
Owensboro	17814	57	28	10	847.18	2,149.20	480.00	120.00	694.00	6,841.00

**COST OF ADMINISTRATION
TEACHERS' RETIREMENT SYSTEM**

July 1, 1940, to June 30, 1951

Year	Receipts of State Accumulation Fund	Administrative Expense	Per Cent 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	36,113.58	3.93%
1947-48	919,490.57	36,409.41	3.96%
1948-49	1,247,770.36	41,059.78	3.29%
1949-50	1,434,612.86	43,348.09	3.02%
1950-51	1,577,787.18	52,324.68	3.32%
1951-52	1,581,696.02	58,303.98	3.69%

NOTE: For 1948-49 the permanent and temporary contributions of the State to the State Accumulation Fund amounted to \$3,874,568.74. The State Auditor based his percentage on the permanent contribution only.

N.O.K.