AN APPLICATION OF THE PROPOSED TEACHER RETIREMENT LAW TO RILEY COUNTY

by

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THE TEACHER RETIREMENT PROBLEM

For many years the great corporations of this country have been retiring aged workers on part pay. Many of them provide disability benefits and hospitalization for their workers. The United States Government has an old age program covering some 400,000 government employees (12, p.1, 7-9). In 1935 the federal government adopted the Social Security Act which provides old age annuities for most wage earners on a business basis. This covers practically all wage earners except three minor groups who are not otherwise protected and who have been declared ineligible to participate like other wage earners. These three groups are farm hands, hired girls in the homes, and the teachers and other employees of the states and their subdivisions (11, p.1).

Teacher retirement in the United States began with the Assurance and Mutual Aid Association organized by the New York City teachers in 1869. All of the early protective associations were of the mutual aid type; the funds were given voluntarily by the teachers for the assistance of their coworkers, and with an assurance of like aid in their own time of need. Funds were collected when there was a particular need. Not until 1885 were regular annual dues collected.

The early protective associations organized were local, then the systems expanded until in 1896 New Jersey was the first state to establish a voluntary state-wide plan. While small groups were fairly easily administered, the enlarged group brought with it problems of administration. The small contributions were not adequate to take care of the demand of the larger organization. However, the failure of the mutual aid associations was probably due to lack of governmental assistance and the fact that no attention was given to the actuarial soundness (9, p.93).

Since 1896 both local and state systems have been established with the greater attention being given to the state systems. Expansion has continued until the present time when 27 states have a retirement plan of some form or another for their teachers.

Why should Kansas establish a state teacher retirement system? Kansas employs about 20,000 teachers; of these 20,000 teachers only 1081 are protected by retirement insurance (5, p.11, 57). These teachers are employed by the schools of Salina, Topeka, Parsons, Leavenworth, Pittsburg, Fort Scott, and Atchison which have local retirement systems permitted by law in Kansas (6, p.46). The other 19,000 teachers, especially those in the small cities and rural schools, are the ones who need protection most because their

salaries are much lower and their tenure shorter and much more uncertain, yet there is no provision made for their security. Kansas children deserve the best, most capable, and most efficient teachers. Security of tenure, decent salaries, and an adequate retirement system are indispensable if the schools are to attract and hold the service of the best men and women of the state. A sound retirement system makes it unnecessary for a teacher to teach beyond the period of efficiency. The security offered by a sound retirement system offsets the low salaries and attracts capable men and women to the profession who would otherwise go to fields that offer higher immediate returns.

The National Education Association has long been a leader in the movement for teacher retirement. In 1900 the National Education Association adopted the following resolution (9, p.95):

> Proper standards, both general and professional, for the entrance upon the work of instruction, security of tenure, decent salaries, and an adequate pension system are indispensable if the schools are to attract and hold the service of the best men and women of the United States, and the nation can afford to place its children in the care of none but the best.

The important position of a retirement system in a total program for financial security is well expressed in the following quotation from the National Education Association,

Sixth Yearbook 1931 (9, p.115):

> The movement to establish a sound teacher retirement in every state deserves the active support of every member of the teaching profession. Such systems constitute one of the surest and best means of protecting teachers against economic distress in old age and in the event of permanent disability at any age. There are, to be sure, other meritorious methods of obtaining such protection. Personal savings, commercial insurance, relief funds, and homes for aged or disabled teachers all have important parts to play in meeting this need. Each of these measures, however, is either more uncertain, more expensive, or less adequate to meet the needs of the teaching body as a whole than is a sound state-wide retirement system.

Certain fundamental principles of teacher retirement must be observed in order to maintain a sound retirement system. The National Education Association committee adopted 15 fundamental principles of a teacher retirement system (10, p.226-229):

1. Membership required of new teachers; optional for those in service.

   Membership should be compulsory for teachers entering the service after the enactment of the retirement law; optional for teachers already in service.

2. Guaranties to both teacher and public.

   Retirement ages and rules should be defined and administered so as to retain teachers during efficient service and provide for their retirement when old age or disability makes satisfactory service no longer possible. The retirement allowance should be sufficient to enable the retiring teacher to live in reasonable comfort, so as to remove the temptation to remain in the classroom beyond the period of efficient service.

3. Costs shared by teachers and public.

The sums deposited by the teachers and by the public during the period of service should be approximately equal.

4. Amount of deposits and payments stated definitely.

The amount of deposit by the teacher and of payment by the public should be stated by the organic act creating a retirement system, subject to adjustment in accordance with future actuarial investigation.

5. Deposits of teacher and payments by state concurrent with service.

The teacher's contributions and the state's payments to the retirement fund should be made regularly and concurrently during the teacher's period of service.

6. Individual accounts kept.

The retirement board should open an account with each individual teacher. Sums deposited in that account by the teacher should be held in trust for that teacher.

7. Retirement system on a reserve basis.

An adequate and actuarially sound reserve fund should be created to guarantee that the necessary money to pay the benefits promised will be on hand at the time of retirement.

8. Periodic actuarial investigations.

Periodic actuarial investigations should be made of every retirement system to insure its financial soundness.

9. Disability provided for.

A retirement allowance should be provided for disabled teachers after a reasonable period of service.

10. Teachers' accumulated deposits returnable in case of withdrawal from service, or death prior to retirement.

Teachers leaving the service before the regular retirement age should retain rights to all monies accumulated in their accounts. Teachers' accumulated deposits should be returnable upon withdrawal from teaching service, or at death prior to retirement.

11. Choice of options offered upon retirement.

The teacher should have the opportunity to elect the manner in which he will receive the benefits represented by the accumulated value of his deposits and the state's payments.

12. Credit should be allowed for past service.

Upon the adoption of a retirement plan, teachers should be given credit for their service prior to the establishment of the system. Funds for this purpose should be provided by the public.

13. Rights under previous retirement systems safeguarded.

The public should guarantee active teachers in service all the benefits which they had a reasonable right to expect under the old system. It should guarantee teachers retired under a previous system the allowance promised at the time of their retirement.

14. Reciprocal relations between states.

Provision should be made for cooperative or reciprocal relations between the retirement systems of the different states.

15. Retirement board in control.

The administration of the retirement system should be in the hands of a retirement board whose make-up

is carefully prescribed in the retirement law, and which represents both the public and the teachers.

There are three different plans of teacher retirement. One is the "Pay as you go" plan in which the active teachers are assessed to raise funds to provide retirement allowances for the retired teachers. The second is the "Reserve" plan, whereby each teacher pays a certain per cent of his salary to the state, allowing the state to invest the money to build up a reserve for that teacher. The reserve thus built up will be matched by the state at the time of retirement, and the total sum will be used to purchase an annuity. The third plan is the "Straight pension" whereby the state collects nothing from the teachers but grants each teacher a certain pension after a specified number of years of teaching, or upon reaching a certain age.

Certain features of the state-wide teacher's retirement systems in operation at the present time are shown in the following table.

Table 1. The present status of teacher retirement in the United States.

States	Date established	Sources of funds	Teachers' deposit	State's payment: Fund receiving payment	State's payment: Amount paid	State's payment: When paid	Superannuation or service retirement: Conditions of retirement: Years of service: Total	Years of service: In state: Total	Years of service: In state: Immediately preceding retirement	Minimum age for optional retirement	Age for compulsory retirement	Retirement allowance: Flat benefit	Retirement allowance: Annuity (not including benefits from prior service credits)
1. Arizona	1912	State only		No special fund created	Payments made from the general fund	Annual pension granted--paid in monthly installments	30	15	.....	60	.....	$600	.....
2. Arkansas	1937	State teacher	4% of salary	Teacher retirement fund	4% of total pay roll	Not specified by law	25	10	5	60	After 60 at discretion of board	.....	Annuity from teachers' deposits--pension from state equal to annuity
3. California	1913	State teacher	Flat amount	Public school teachers' permanent fund	5% of taxes collected under inheritance or transfer tax laws of the state	Annually	30	15	10	.....	.....	$500	.....
4. Connecticut	1917	State teacher	5% of salary, minimum $25, maximum $100	Pension fund	Amounts appropriated by the general assembly	From time to time--usually annually	20 35	20 20	5	60	70	.....	Annuity from teachers' deposits--pension from state payments equal to annuity
5. Hawaii	1926	State teacher	Per cent of salary determined by benefits promised	Pension accumulation fund	Uniform, constant per cent of earnable compensation of average new entrant	Annually	.....	.....	.....	60	70	.....	Annuity from teachers' deposits
6. Illinois	1915	State teacher	Flat amount graded according to service	Ill. state teachers' pension and retirement fund	Amount set aside from common school fund	Annually	25	15	.....	50	.....	.....	Annuity from teachers' deposits--state provides 4/7 of $700 annuity

Table 1 continued.

7. Indiana	1931	State teacher	Flat amount graded according to age when entering service	Pension reserve account	Proceeds from tax levy	Biennially	40	30	.....	60		$400 ($16 for each year of service)	.....
8. Louisiana	1936	State teacher	Per cent of salary	Pension accumulation fund	Uniform and constant per cent of earnable compensation of the average new entrant	Annually	.....	.....	.....	60	70	.....	Annuity from teachers' deposits--pension from state's payments equal to annuity
9. Maine	1924	State teacher	5% of salary, minimum $20, maximum $100	Annuity fund	Amount deducted from state school fund equal to members' deposits--not to exceed $35,000 in any one year	Annually	30	20	7	60	.....	.....	Annuity purchased by teachers' deposits and state's payments with interest
10. Maryland	1927	State teacher	Per cent of salary determined by benefits promised	School pension fund Pension accumulation fund	Appropriation from school and mill funds--uniform, constant per cent of earnable compensation of average new entrant	Annually	.....	.....	.....	60	70	.....	Annuity from teachers' deposits
11. Massachusetts	1914	State teacher	Per cent of salary, minimum 3% or $35, maximum 7% or $100	Pension fund	Amounts appropriated by the general court	From time to time; usually annually	.....	.....	.....	60	70	.....	Annuity from teachers' deposits--maximum at 60 years of age equals $650--equal pension from state payments--maximum equals 1/3 average salary for last 5 years preceding retirement
12. Michigan	1915	teacher only	Per cent of salary graded according to service	.....	.....	.....	30 25	15 15	5 5	60 60	.....	.....	30 years' service, annuity equals $\frac{1}{2}$ average salary last 5 years; maximum $500, minimum $300; 25 years' service, proportionate annuity
13. Minnesota	1931	State teacher	5% of salary, maximum $100	Teachers' insurance and retirement fund	Proceeds from tax of 1/20 of one mill on all taxable property	Annually	20	15	5	.....	.....	.....	.....

Table 1 continued.

14. Montana	1937 (1915)	State teacher	5% of salary	Pension accumulation fund	Per cent of earnable compensation of each member--further per cent for deficiency contribution	Annually	15	10	.....	60	70	Proportionate to years of service	Annuity from teachers' deposits
15. Nevada	1937 (1915)	State teacher	5% of salary	Public school teachers' permanent fund	Proceeds from an ad valorem tax of 5 mills on the hundred dollars of all taxable property in the state	Annually	30	15	10	60	.....	.....	Annuity from teachers' deposits--pension equal if not exceeding 25% average salary over 10 years during greatest salary earnings
16. New Jersey	1919	State teacher	Per cent of salary determined by benefits promised	Pension accumulation fund	Amount paid from school apportionment fund represents constant ratio of earnable salary of new entrants	Annually	35 ..	25 ..	.....	.. 62	70	.....	Annuity from teachers' deposits
17. New Mexico	1937	State only	.....	No special fund	.....	.....	25	25	10	60	.....	$\frac{1}{2}$ average annual salary during last 5 years	.....
18. New York	1921	State teacher	4$ of salary	Pension accumulation fund	Uniform, constant per cent of earnable compensation of average new entrant	Annually	25	25	.....	60	70	.....	Annuity from teachers' deposits
19. North Dakota	1913	State teacher	Per cent of salary graded according to service	Teachers' insurance and retirement fund	Sum set aside from county tuition fund equal to 10% for each child of school age	Annually	25	18	5	.....	.....	.....	Annuity equals 1/50 annual salary during last 5 years multiplied by years of service; maximum $750, minimum $350
20. Ohio	1920	State teacher	4% of salary up to $2,000	Employer's accumulation fund	Uniform, constant per cent of earnable compensation of average new entrant	Annually	36	.....	.....	60	70	.....	Annuity from teachers' deposits

Table 1 continued.

21. Pennsylvania	1919	State teacher	Per cent of salary to be determined by benefits promised--minimum $16, maximum $100	Contingent reserve fund--state annuity reserve fund number two	Per cent of payment based on age and sex of employee--amount equal per cent of total compensation paid all contributors during preceding year	Semiannually Semiannually	10	.....	.....	62	70	.....	Annuity from teachers' deposits
22. Rhode Island	1908	State only	.....	No special fund created	State makes appropriations	Not specified by law	35	25	15	.....	.....	.....	Pension equals $\frac{1}{25}$ average salary during last 5 years preceding retirement
23. Utah	1937	State teacher	Per cent of salary ($2,100 maximum salary)	Utah state teachers' retirement fund	6% of total compensation paid to members during preceding month	Monthly	15 30	15 30	.....	60 55	70 ..	.....	Annuity from teachers' deposits--pension from state equal to annuity
24. Vermont	1919	State teacher	Per cent of salary, minimum $16, maximum $100	Annuity fund	Amounts appropriated by the general assembly	From time to time	30	20	5	60 women 65 men	.....	.....	Annuity from teachers' deposits plus state payments
25. Virginia	1908	State teacher	1% of salary	Retired teachers' fund	Sums appropriated for the benefit of the retired teachers' fund	Not specified by law	30	30	.....	50 women 58 men	.....	.....	Sum equaling $\frac{1}{2}$ average salary during last 5 years
26. Washington	1937 (1923)	State teacher	Per cent of salary graded according to age at entering service	Pension fund	4% of current school fund	Annually	5	.....	.....	60	.....	.....	Annuity from teachers' deposits plus pension from state funds to provide $40 a month, or if funds are insufficient, available funds are to be prorated by board of trustees
27. Wisconsin	1921	State teacher	5% of salary	General fund of state treasury, set apart for retirement deposit fund	Proceeds from surtax on incomes over $3,000	Annually	.....	.....	.....	50	.....	.....	Annuity from teachers' deposits--pension from state payments

PLAN TO BE APPLIED TO RILEY COUNTY

The purpose of this section of the study is to show how the "Pay as you go" plan and the "Reserve" plan would apply to the teachers, janitors, and the clerks of the Riley County schools, and to aid in the establishment of some form of teacher retirement for the teachers in the state of Kansas.

The retirement incomes are determined by using four per cent of the present salaries of the employees as the annual premium, and annuity tables used by commercial insurance companies. The annuity earned by the teacher's deposit is matched by the state in determining the total income for the retired employee. The reason annuities for females are slightly lower than those for males of the same age is that their life expectancy is greater.

Through the offices of Miss Agnes Engstrand, County Superintendent of Riley County, and Mr. W. E. Sheffer, Superintendent of Manhattan City Schools, questionnaires were received from all the teachers, janitors, and clerks in the schools of Riley County. From these the age, experience, and salaries of all the school employees were determined.

Table 2, in which the employees are listed according to age, shows how the Ohio Reserve Plan would apply to Riley County.

Teachers, during their active service, accumulate as a savings account four per cent of their salaries each year (not to exceed $2,000 a year) at four per cent interest compounded annually. Teachers who die or withdraw from service prior to retirement have their total deposits and interest earnings refunded. The state accumulates a fund (the normal contribution) with which to match, at the time of retirement, the savings of the teacher who is retiring. This fund is made up of payments by all boards of education in the state. These payments are a uniform percentage of the teacher's payroll of each board of education not regarding any salary in excess of $2,000.

The amount of the retiring allowance for superannuation retirement (36 years of service or 60 years of age) is determined as follows:

The allowance for future service (date system was established) is double the annuity value of the teacher's accumulated deposits at the time of retirement, and a prior service pension of one and one-third per cent of the final average salary (not exceeding $2,000) for each year of credit.

In computing the final average salary, the total earned compensation as an employed teacher during the ten calendar years preceding retirement should be divided by the number of years in which such compensation as a teacher was earned and received.

Where a teacher was on leave of absence or out of active service as a teacher for two years during the period of the last ten calendar years, prior to the date of retirement, the total of the compensation received as a teacher during such ten calendar years should be divided by eight, the number of years in which such compensation as a teacher was actually earned and received.

The amount of the prior service pension is determined by multiplying one and one-third per cent of the final average salary by the number of years of prior service.

The retirement allowance is the sum of the prior service pension and the allowance for future service (double the annuity purchased by his own deposits). The retirement allowance is paid in twelve equal monthly payments.

Table 2. Four per cent annuities for teachers of Riley County.

Teacher	Age	Experience	Salary	4% of Salary	Monthly income from annuity	Matched by state	Total	Prior service pension
No.1	71	25	1530.00	61.20				
No.2	63	37	1840.00	70.00	1.61	1.61	3.25	yes
No.3	63	37	1250.00	50.00	1.36	1.36	2.72	yes
No.4	62	36	1366.00	54.64	1.14	1.14	2.29	yes
No.5	62	40	1275.00	51.00	1.38	1.38	2.77	yes
No.6	62	33	1275.00	51.00	1.71	1.71	3.42	yes
No.7	60	39	1366.70	54.66	1.83	1.83	3.67	yes
No.8	60	34	1275.00	51.00	1.71	1.71	3.42	yes
No.9	59	33	1275.00	51.00	2.05	2.05	4.10	yes
No.10	56	38	1472.00	58.88	3.19	3.19	6.38	yes
No.11	55	37	620.00	28.80	1.77	1.77	3.54	yes
No.12	54	21	1060.00	42.40	2.93	2.93	5.87	yes
No.13	53	17	1472.00	58.88	4.55	4.55	9.11	yes

Table 2 continued.

No.14	52	25	1525.00	61.00	5.22	5.22	10.45	yes
No.15	51	29	2934.00	117.36	8.29	8.29	16.59	yes
No.16	50	20	1375.00	55.00	5.68	5.68	12.64	yes
No.17	50	26	1530.00	61.20	6.32	6.32	12.64	yes
No.18	50	29	4130.00	165.20	9.08	9.08	18.16	yes
No.19	50	13	1305.00	52.20	5.92	5.92	11.84	yes
No.20	49	22	810.00	32.40	4.01	4.01	8.02	yes
No.21	49	22	1485.00	59.40	6.68	6.68	13.36	yes
No.22	49	23	1530.00	61.20	6.88	6.88	13.77	yes
No.23	49	28	1466.00	58.64	6.59	6.59	13.19	yes
No.24	48	27	1198.00	47.92	5.85	5.85	11.70	yes
No.25	48	25	900.00	36.00	4.39	4.39	8.79	yes
No.26	47	25	1400.00	56.00	7.39	7.39	14.78	yes
No.27	46	29	765.00	30.60	4.35	4.35	8.70	yes
No.28	45	19	1366.00	54.64	8.35	8.35	16.70	yes
No.29	45	22	1734.00	69.36	11.66	11.66	23.33	yes

Table 2 continued.

No.30	44	23	1440.00	57.60	9.44	9.44	18.88	yes
No.31	44	20	1366.00	54.64	8.95	8.95	17.91	yes
No.32	43	21	1365.00	54.60	9.57	9.57	19.14	yes
No.33	43	14	1779.00	71.16	10.52	10.52	21.05	yes
No.34	43	19	520.00	20.80	3.64	3.64	7.29	yes
No.35	43	14	640.00	25.60	4.48	4.48	8.97	yes
No.36	43	7	520.00	20.80	3.64	3.64	7.29	
No.37	43	24	990.00	39.60	6.94	6.94	13.88	yes
No.38	41	20	1511.00	60.44	12.03	12.03	24.07	yes
No.39	41	19	1366.00	54.64	10.88	10.88	21.76	yes
No.40	41	22	1530.00	61.20	12.19	12.19	24.38	yes
No.41	41	16	1820.00	72.80	14.50	14.50	29.00	yes
No.42	41	12	480.00	19.20	3.82	3.82	7.64	yes
No.43	39	15	1225.00	49.00	11.02	11.02	22.04	yes
No.44	38	17	1515.00	60.60	14.44	14.44	28.89	yes
No.45	38	18	1591.00	63.64	15.17	15.17	30.34	yes

Table 2 continued.

No.46	38	14	1625.00	65.00	15.49	15.49	30.99	yes
No.47	38	17	600.00	24.00	5.72	5.72	11.44	yes
No.48	38	17	765.00	30.60	7.29	7.29	14.59	yes
No.49	38	12	1395.00	55.80	13.30	13.30	26.60	yes
No.50	37	15	810.00	32.40	8.17	8.17	16.35	yes
No.51	37	13	765.00	30.60	7.72	7.72	15.44	yes
No.52	37	17	765.00	30.60	7.72	7.72	15.44	yes
No.53	37	15	1412.00	56.48	14.25	14.25	28.51	yes
No.54	37	14	1152.00	46.08	11.63	11.63	23.26	yes
No.55	36	12	2300.00	92.00	24.55	24.55	49.10	yes
No.56	36	18	1275.00	51.00	13.61	13.61	27.22	yes
No.57	36	12	560.00	22.40	5.97	5.97	11.95	yes
No.58	36	14	1440.00	57.60	16.90	16.90	33.81	yes
No.59	35	14	1215.00	48.60	15.06	15.06	30.13	yes
No.60	35	7	1215.00	48.60	15.06	15.06	30.13	
No.61	35	14	1466.00	58.64	16.53	16.53	33.06	yes

Table 2 continued.

No.62	35	16	1229.00	49.16	13.85	13.85	27.71	yes
No.63	35	10	1110.00	44.40	12.51	12.51	25.03	yes
No.64	35	13	1445.00	57.80	17.91	17.91	35.83	yes
No.65	34	12	1678.50	67.14	21.95	21.95	43.90	yes
No.66	34	12	1726.00	69.04	22.57	22.57	45.15	yes
No.67	34	12	1823.00	76.92	25.15	25.15	50.30	yes
No.68	34	13	1416.00	56.64	16.84	16.84	33.68	yes
No.69	34	14	1250.00	50.00	14.87	14.87	29.74	yes
No.70	33	9	1215.00	48.60	16.75	16.75	33.50	
No.71	33	8	855.00	34.20	11.78	11.78	23.57	
No.72	33	14	765.00	30.60	9.59	9.59	19.18	yes
No.73	33	16	480.00	19.20	3.49	3.49	6.99	yes
No.74	33	10	1738.00	69.52	23.96	23.96	47.92	yes
No.75	33	11	1300.00	52.00	16.29	16.29	32.59	yes
No.76	32	9	1578.00	63.12	22.90	22.90	45.81	
No.77	32	11	1155.00	46.20	15.24	15.24	30.48	yes

Table 2 continued.

No.78	32	11	1152.00	46.08	15.20	15.20	36.41	yes
No.79	32	13	1250.00	50.00	16.50	16.50	33.00	yes
No.80	32	11	1321.00	52.84	17.43	17.43	34.87	yes
No.81	32	10	1500.00	60.00	19.80	19.80	39.60	yes
No.82	32	7	520.00	20.80	6.86	6.86	13.72	
No.83	32	6	675.00	27.00	8.91	8.91	17.83	
No.84	31	9	900.00	36.00	12.49	12.49	24.99	
No.85	31	6	1102.50	44.10	16.83	16.83	33.67	
No.86	31	9	1125.00	45.00	17.18	17.18	34.36	
No.87	31	14	520.00	20.80	7.22	7.22	14.44	yes
No.88	31	11	720.00	28.80	9.99	9.99	19.99	yes
No.89	31	10	1260.00	50.40	17.49	17.49	34.99	yes
No.90	31	12	1000.00	40.00	13.88	13.88	27.77	yes
No.91	31	11	1060.00	42.40	14.72	14.72	29.44	yes
No.92	31	8	1092.00	43.68	15.16	15.16	30.33	
No.93	30	9	652.00	26.10	9.52	9.52	19.05	

Table 2 continued.

No.94	30	4	1000.00	40.00	14.60	14.60	29.20	
No.95	30	7	1002.00	40.08	14.62	14.62	29.25	
No.96	30	8	2200.00	88.00	32.12	32.12	64.22	
No.97	30	10	1060.00	42.40	15.47	15.47	30.95	yes
No.98	30	11	1150.00	46.00	16.79	16.79	33.58	yes
No.99	30	8	1195.00	47.80	17.44	17.44	34.89	
No.100	30	5	945.00	37.80	13.70	13.70	27.41	
No.101	29	9	480.00	19.20	7.36	7.36	14.72	
No.102	29	11	480.00	19.20	7.36	7.36	14.72	yes
No.103	29	7	1195.00	47.80	18.32	18.32	36.65	
No.104	29	7	1350.00	54.00	20.70	20.70	41.40	
No.105	29	6	1475.00	59.00	24.87	24.87	49.74	
No.106	29	3	795.00	31.80	9.95	9.95	19.90	
No.107	28	6	1850.00	74.00	32.75	32.75	65.50	
No.108	28	7	1550.00	62.00	27.44	27.44	54.88	
No.109	28	9	560.00	22.40	9.01	9.01	18.03	

Table 2 continued.

No.110	28	10	560.00	22.40	9.01	9.01	18.03	yes
No.111	28	7	945.00	37.80	15.21	15.21	30.42	
No.112	27	7	1125.00	45.00	20.78	20.78	41.57	
No.113	27	7	680.00	27.20	12.62	12.62	25.25	
No.114	27	7	945.00	37.80	15.95	15.95	31.91	
No.115	27	6	1200.00	48.00	22.26	22.26	44.53	
No.116	27	7	1050.00	42.00	17.73	17.73	35.46	
No.117	26	5	2200.00	88.00	38.93	38.93	67.87	
No.118	26	7	1050.00	42.00	18.48	18.48	36.97	
No.119	26	7	520.00	20.80	9.12	9.12	18.25	
No.120	26	10	520.00	20.80	9.12	9.12	18.25	yes
No.121	26	8	600.00	24.00	11.70	11.70	23.40	
No.122	26	7	520.00	20.80	9.12	9.12	18.25	
No.123	26	6	520.00	20.80	9.12	9.12	18.25	
No.124	26	10	1080.00	43.20	21.02	21.02	42.05	yes
No.125	26	9	720.00	28.80	12.74	12.74	25.49	

Table 2 continued.

No.126	26	9	630.00	25.20	11.15	11.15	22.30
No.127	26	5	900.00	36.00	15.93	15.93	31.86
No.128	25	5	990.00	39.60	18.36	18.36	36.72
No.129	25	7	585.00	23.40	11.93	11.93	23.86
No.130	25	6	765.00	30.60	14.18	14.18	28.37
No.131	25	7	560.00	22.40	9.38	9.38	18.77
No.132	25	6	520.00	20.80	9.64	9.64	19.28
No.133	25	5	765.00	30.60	14.18	14.18	28.37
No.134	25	8	480.00	19.20	8.90	8.90	17.80
No.135	25	4	440.00	17.60	8.16	8.16	16.32
No.136	25	3	1000.00	40.00	18.54	18.54	37.09
No.137	25	3	1375.00	55.00	28.04	28.04	56.08
No.138	25	6	1000.00	40.00	18.54	18.54	37.09
No.139	25	3	1200.00	48.00	22.34	22.34	44.69
No.140	24	2	520.00	20.80	10.10	10.10	20.20
No.141	24	3	480.00	19.20	10.25	10.25	20.50

Table 2 continued.

No.142	24	5	990.00	39.60	11.14	11.14	22.29
No.143	24	3	1080.00	43.20	20.97	20.97	41.95
No.144	24	2	540.00	21.60	10.48	10.48	20.97
No.145	24	6	697.50	27.90	13.64	13.64	27.29
No.146	24	2	990.00	39.60	11.14	11.14	22.29
No.147	23	2	1300.00	52.00	29.05	29.05	58.10
No.148	23	3	1200.00	48.00	24.39	24.39	48.78
No.149	23	1	400.00	16.00	8.13	8.13	16.26
No.150	23	3	480.00	19.20	10.73	10.73	21.46
No.151	23	5	810.00	32.40	18.10	18.10	36.21
No.152	23	1	945.00	37.80	19.20	19.20	38.51
No.153	23	3	630.00	25.20	12.80	12.80	25.61
No.154	23	4	675.00	27.00	13.72	13.72	27.44
No.155	23	2	1125.00	45.00	25.15	25.15	50.30
No.156	22	3	652.50	26.10	13.87	13.87	27.74
No.157	22	1	1650.00	66.00	36.60	36.60	73.20

Table 2 continued.

No.158	22	3	1125.00	45.00	24.28	24.28	48.57
No.159	22	2	990.00	39.60	21.05	21.05	42.10
No.160	22	4	630.00	25.20	13.49	13.49	26.99
No.161	22	5	810.00	32.40	17.22	17.22	34.44
No.162	22	3	480.00	19.20	10.20	10.20	20.41
No.163	22	2	560.00	22.40	13.10	13.10	26.20
No.164	22	6	560.00	22.40	13.49	13.49	26.99
No.165	21	1	900.00	36.00	22.00	22.00	44.01
No.166	21	3	520.00	20.80	11.56	11.56	23.12
No.167	21	2	520.00	20.80	11.56	11.56	23.12
No.168	21	2	400.00	16.00	8.89	8.89	17.78
No.169	21	3	520.00	20.80	11.56	11.56	23.12
No.170	21	1	990.00	39.60	24.20	24.20	48.41
No.171	21	1	925.00	37.00	20.56	20.56	41.13
No.172	20	2	520.00	20.80	12.08	12.08	24.16
No.173	20	1	480.00	19.20	11.15	11.15	22.31

Table 2 continued.

No.174	20	3	520.00	20.80	12.08	12.08	24.16
No.175	20	2	500.00	25.00	14.52	14.52	29.05
No.176	20	2	400.00	16.00	9.29	9.29	18.59
No.177	20	2	480.00	19.20	11.15	11.15	22.31
No.178	20	1	440.00	17.60	11.24	11.24	22.48
No.179	20	1	400.00	16.00	9.29	9.29	18.59
No.180	20	2	440.00	17.60	10.22	10.22	20.45
No.181	20	1	400.00	16.00	9.29	9.29	
No.182	20	1	540.00	21.60	12.54	12.54	25.09
No.183	19	2	440.00	17.60	10.22	10.22	20.45
No.184	19	2	440.00	17.60	10.22	10.22	20.45
No.185	19	2	440.00	17.60	10.22	10.22	20.45
No.186	19	2	400.00	16.00	9.29	9.29	18.59
No.187	19	2	440.00	17.60	10.22	10.22	20.45
No.188	19	2	652.50	26.10	16.67	16.67	33.35
No.189	18	2	480.00	19.20	11.15	11.15	22.31

Table 2 continued.

No.190	18	2	440.00	17.60	10.22	10.22	20.45
No.191	18	1	400.00	16.00	9.29	9.29	18.59
No.192	18	1	400.00	16.00	9.29	9.29	18.59
No.193	17	1	400.00	16.00	9.29	9.29	18.59
No.194	17	1	440.00	17.60	10.22	10.22	20.45

PRIOR SERVICE ALLOWANCE FOR TEACHERS

AGE SIXTY OR MORE

Teacher number 1, age 71, has taught 25 years. Since teacher number 1 is past the compulsory retirement age, he would have no future service. His prior service pension would be determined as follows:

15626.23 ÷ 10 = 1562.62, final average salary.

1562.62 x .01 1/3 x 25 = 520.875, annual prior service pension.

520.875 ÷ 12 = 43.406, monthly payments.

Teacher number 2, age 63, has taught 37 years. If teacher number 2 retired at the age of 63, the prior service pension would be determined as follows:

17629.94, total earnings during the ten calendar years immediately preceding retirement.

17629.94 ÷ 10 = 1762.99, final average salary.

1762.99 x .01 1/3 x 37 = annual prior service pension.

869.72 ÷ 12 = 72.47, monthly payments.

If teacher number 2 continued to teach until the age of 70, he would have seven years of future service plus the prior service pension.

Teacher number 3, age 63, has taught 37 years. He would have the option of retiring or continuing to teach until he reached the age of 70. If he continued to teach, he would have seven years of future service. The annuity that could be purchased by seven years of future service is shown in Table 2. The retirement allowance then would be double the annuity purchased plus prior service pension.

The prior service pension of teacher number 3, if he retired at the age of 63, would be as follows:

16746.00, total earnings during the ten calendar years preceding retirement.

16746 ÷ 10 = 1674.60, final average salary.

1674.60 x .01 1/3 x 37 = 826.136, annual prior service pension.

826.136 ÷ 12 = 68.84, monthly payments.

Teacher number 4, age 62, has 36 years of prior service. He could retire on the following prior service pension:

14960.46, total earning during the ten calendar years immediately preceding retirement.

14960.46 ÷ 10 = 1496.04, final average salary.

1496.04 x .01 1/3 x 36 = 718.10, annual prior service pension.

718.10 ÷ 12 = 59.84, monthly payments.

Teacher number 4 could continue to teach until 70 and have 8 years future service plus the retirement pension to determine his retirement allowance.

Teacher number 5, age 62, has 40 years of prior service. His prior service pension would be as follows:

12717.36 ÷ 10 = 1271.73, final average salary.

1271.73 x .01 1/3 x 40 = 678.259, annual prior service pension.

678.25 ÷ 12 = 56.52, monthly payments.

Teacher number 5 may teach until the age of 70 and have 8 years future service plus the prior service pension.

Teacher number 6, age 61, has 33 years prior service. His prior service pension would be as follows:

12717.36, total earnings during ten calendar years preceding retirement.

12717.36 ÷ 10 = 1271.73, final average salary.

1271.36 x .01 1/3 x 33 = 559.56, annual prior service pension.

559.56 ÷ 12 = 46.63, monthly payments.

Teacher number 6 may teach nine more years. The retirement allowance would then be the future service annuity plus the prior service pension.

Teacher number 7, age 60, has 39 years of prior service. His prior service pension would be computed as follows:

13625.60, total earnings during the ten calendar years preceding retirement.

13625.60 ÷ 10 = 1362.56, final average salary.

1362.56 x .01 1/3 x 39 = 708.52, annual prior service pension.

708.52 ÷ 12 = 59.04, monthly payments.

Teacher number 7 would have 10 years future service if he elected to teach until 70.

Teacher number 8, age 60, has 34 years prior service. His prior service pension would be as follows:

12717.36, total earnings during the ten calendar years preceding retirement.

12717.36 ÷ 10 = 1271.73, final average salary.

1271.73 x .01 1/3 x 34 = 576.52, annual prior service pension.

576.52 ÷ 12 = 48.04, monthly payments.

Teacher number 8 would have 10 years future service if he elected to teach until the age of 70.

Table 3. Four per cent annuities for janitors of Riley County.

Janitor	Age	Experience	Salary	4% of Salary	Monthly income from annuity at 65	Matched by state	Total	Prior service pension
No.1	73	14	1035.00	To retire				yes
No.2	73	8	400.00	To retire				yes
No.3	69	15	1000.00	To retire				yes
No.4	68	16	1035.00	To retire				yes
No.5	63	17	480.00	19.20	.19	.19	.38	yes
No.6	62	24	1032.00	41.28	.68	.68	1.36	yes
No.7	60	7	495.00	19.80	.59	.59	1.18	
No.8	56	12	585.00	23.40	1.39	1.39	2.78	yes
No.9	52	5	1200.00	48.00	4.52	4.52	9.05	
No.10	48	2	1100.00	44.00	5.90	5.90	11.81	
No.11	46	8	780.00	31.20	4.88	4.88	9.76	
No.12	43	4	450.00	18.00	3.47	3.47	6.94	

Table 3 continued.

No.13	43	3	1560.00	62.40	12.03	12.03	24.06
No.14	41	1	450.00	18.00	3.94	3.94	7.88
No.15	37	3	180.00	7.20	1.81	1.81	3.63
No.16	35	2	855.00	34.20	10.60	10.60	21.20
No.17	32	1	270.00	10.80	3.56	3.56	7.12
No.18	31	3	270.00	10.80	4.12	4.12	8.24
No.19	31	3	450.00	18.00	6.87	6.87	13.74
No.20	30	3		No data			
No.21	28	2	540.00	21.60	9.56	9.56	19.12

PRIOR SERVICE PENSION FOR JANITORS

AGE SIXTY OR MORE

Janitor number 1, age 73, has 14 years of prior service. His prior service pension would be:

11550.00, total earnings during the ten calendar years preceding retirement.

11550.00 ÷ 10 = 1155.00, final average salary.

1155 x .01 1/3 x 14 = 215.60, annual prior service pension.

215.60 ÷ 12 = 17.97, monthly payments.

Janitor number 2, age 73, no data available.

Janitor number 3, age 69, has 15 years of prior service. His prior service pension would be:

9630.00, total earnings during the ten calendar years preceding retirement.

9630 ÷ 10 = 963.00, final average salary.

963.00 x .01 1/3 x 15 = 192.60, annual prior service pension.

192.60 ÷ 12 = 16.05, monthly payments.

Janitor number 4, age 68, no data available.

Janitor number 5, age 63, has 17 years of prior service. His pension for prior service would be as follows:

4195.00, total earnings during the ten calendar years preceding retirement.

4195.00 ÷ 10 = 419.50, final average salary.

419.50 x .01 1/3 x 17 = 95.0161, annual prior service pension.

95.0861 ÷ 12 = 7.92, monthly payments.

Janitor number 5 could continue to work until the age of 70 and accumulate a future service annuity in addition to the prior service pension.

Janitor number 6, age 62, has 24 years of prior service.

9887.15, total earnings during the ten calendar years preceding retirement.

9887.15 ÷ 10 = 988.715, final average salary.

988.715 x .01 1/3 x 24 = 316.43, annual prior service pension.

316.43 ÷ 12 = 26.37, monthly payments.

Janitor number 6 could work until the age of 70 and have a future service annuity in addition to the prior service pension.

Janitor number 7, age 60, no data available.

Table 4. Clerks in Riley County Schools and annuities from four per cent of their salaries.

Clerks*	Age	Experience	Salary	4% of Salary	Monthly income from annuity at 65	Matched by state	Total	Prior service pension
No.1	58	29	1779.00	71.16	2.86	2.86	5.72	
No.2	42	7	960.00	38.40	7.18	7.18	14.36	
No.3	25	4	700.00	28.00	12.98	12.98	25.96	
No.4	22		895.00	35.80	19.03	19.03	38.06	
No.5	19	1	564.00	22.56	13.10	13.10	26.21	

*No. clerks now eligible to retire.

PAY AS YOU GO PLAN APPLIED TO RILEY COUNTY

Riley County has one teacher and four janitors past the age of 65, which is the age at which teachers may retire according to the proposed teacher retirement plan for the State of Kansas. Two of the janitors could furnish no data other than that for the present year. The retirement allowance for each individual is determined by taking one per cent of their total life earnings in school employ, therefore those for whom no data was available are not eligible for retirement.

The following formula is worked out for one teacher and two janitors as being retired:

Teacher's total salary.....	$27861.23	
One per cent of salary.....	278.61	
Janitor's total salary.....	15330.00 and	$13810.00
One per cent of salary.....	153.30 and	138.10
Total needed for pensions.....	278.61	
	153.30	
	138.10	
	570.01	
One-half paid by state.....	285.00	

Total payroll of Riley County:

Teachers.....	$195,350.20
Janitors.....	10,697.00
Clerks.....	4,898.00
Total.....	210,945.20

$$\frac{285 \text{ (amount needed)}}{210{,}945.20 \text{ (total salaries}} \quad .135 \text{ per cent.}$$

Therefore .135 per cent of each teacher's salary would be the amount each teacher would pay for retirements for next year.

The following year the same amount would be needed for pensions since there are no teachers that would be 65 before the end of next year. However, the next year it would increase, as there would be two teachers and one janitor eligible to retire. The end of the third year then would find ten persons receiving retirement allowances. The number would increase until it would reach a point where it would be nearly uniform yearly, that is, there would be about the same number dying as there would be retiring on a pension. The committee that adopted the proposed plan estimated the amount needed each year would be from five-tenths per cent to one per cent of the total annual salaries.

Assuming that the teachers of Riley County would retire when they reached the age of 65, the amounts needed for

retirement for each of the first four years would be.

In the "Pay as you go Plan", each teacher's retirement allowance would be one per cent of his total earnings from school service. One-half of the allowance is paid by the state and one-half from assessments on the active teachers salaries.

1st year 1 retiring

total salary.....	$ 27,861.23
one per cent of salary.....	278.61
states payment $278.61 ÷ 2.....	139.31

2nd year 0 retiring

states payment.....	139.31

3rd year 2 retiring

total salaries.....	72,860.94
one per cent of salaries.....	728.61
states payment $728.61 ÷ 2.....	364.31
total for 3rd year $139.31 + 364.31 =	503.62

4th year 3 retiring

total salaries.....	100,345.18
one per cent of salaries.....	1,003.45
states payment $1,003.45 ÷ 2.....	501.23
total for 4th year $139.31 + 364.31 + 501.73 = ...	1,005.35

Assuming that the salary total will change very little from year to year, teacher assessments would be:

$\frac{139.31}{195,350.20}$ .071 per cent for 1st year.

$\frac{139.31}{195,350.20}$ .071 per cent for 2nd year.

$\frac{503.62}{195,350.20}$ .251 per cent for 3rd year.

$\frac{1,005.35}{195,350.20}$ .5146 per cent for 4th year.

SUMMARY

1. The teacher retirement systems that have been established in the various states have come about after a long and hard struggle by the educators within the states.

2. If Kansas is to fall in line and establish a retirement plan for its teachers, the teachers must use every effort and cooperate with the leaders in the movement.

3. The benefits of a retirement plan are definite and tangible to the teacher, but very intangible to the general public. Therefore, any movement for a plan will have to be initiated by the teachers themselves.

4. The Reserve plan costs more to the teacher and the public, but the benefits to the teacher are greater.

5. The Pay as you go plan costs less to start and the benefits are not as large. No reserve fund is built up in the Pay as you go plan.

6. The Ohio plan used in this study was selected as an example of a Reserve plan in operation on a sound financial basis.

7. There are 8 teachers and 7 janitors in Riley County that are eligible to retire under the Ohio plan, aged 60 or more.

8. There are 1 teacher and 3 janitors in Riley County that are eligible to retire under the Pay as you go plan, aged 65 or more.

9. The cost to retire 1 teacher and 3 janitors in Riley County, the first year, using the Ohio plan would be $929.07.

10. The cost to retire 1 teacher and 3 janitors in Riley County, the first year, using the proposed Pay as you go plan would be one-half the amount needed for pensions or $285.

11. Using the Ohio plan in Riley County, the state would have to match the teachers' payments (4 per cent of salary) 4 per cent of the annual pay roll would be $8,437.81.

12. On the basis of 6 teachers being on the retired list at the end of four years the cost for Riley County to the state would be $1,005.35. The assessment on each teacher's salary would be .514 per cent.

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