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IN THE MOUNTAIN PLAINS REGION.

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THE OKLAHOMA TEACHER RETIREMENT SYSTEM:

A Comparative Study of Retirement Systems in the Mountain Plains Region

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COLENE BORING MAXWELL

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THE OKLAHOMA TEACHER RETIREMENT SYSTEM:

A Comparative Study of Retirement Systems
in the Mountain Plains Region

APPROVED BY

DISSERTATION COMMITTEE

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THE OKLAHOMA TEACHER RETIREMENT SYSTEM:

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CHAPTER I

THE PROBLEM

Introduction

During July, 1942, the Constitution of the State of Oklahoma was amended by ballot in order to permit the establishment of a teacher retirement system. The next step was passage by the Nineteenth Legislature of an act establishing the Teachers' Retirement System of Oklahoma.

> Governor Robert S. Kerr, who had long been a strong advocate of retirement and who had encouraged the Legislature to pass the act establishing the retirement system, issued a proclamation making the law effective on July 1, 1943.[1]

The law created a nine-member Board of Trustees to administer the retirement system. Five members were appointed by the governor for terms of five years each but so arranged that the term of only one board member should expire each year.

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[1] C. S. Dowler, "Teacher Retirement Comes of Age," The Oklahoma Teacher, XLV (March, 1964), 30.

The four ex-officio members of the board were the State Superintendent of Public Instruction, the State Treasurer, the State Insurance Commissioner, and a member of the State Tax Commission.

Membership was optional with teachers who were regularly employed at any time during the period, July 1, 1938 to June 30, 1943. After July 1, 1943, all teachers who are regularly employed must become members of the Retirement System as a condition of their employment.

The 1943 plan of operation was joint-contributory on an actuarial basis with each member contributing 4 per cent of his annual salary through a process of withholding. The member's contributions drew a minimum of 2 per cent interest with a maximum of 4 per cent compounded annually. The State of Oklahoma was to match the sum of the contributions and interest at the retirement of the member. The state was to provide and pay also for prior service equal to .8 of one per cent of average annual salary times years of service not to exceed 36 years.

Under the original law, the benefits a member received upon retirement consisted of:

> An annuity which shall be the actuarial equivalent of his accumulated contributions plus earned interest; a membership pension which shall be equal to the annuity paid by the State; and an annual prior service pension.[1]

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[1]"A Review of the Teachers Retirement System," The Oklahoma Teacher, LI (January, 1970), 14.

The first retirement began January 1, 1947, for those 70 or older. At the end of the first full year of retirement payments--1947-1948, there were 183 individuals on retirement--65 men and 118 women.

> Of necessity, monthly allowances to these first members to retire were very modest (average $33.04) because the amounts were based almost entirely on prior service instead of on contributions. Prior service is years of teaching in Oklahoma between 1907 and 1943.[1]

Major changes made in the Retirement System since 1943 include:

1. Retirement age with full benefits has been lowered from age 65 to age 62.

2. Disability retirement is granted regardless of age for members with ten years of service.

3. Teachers in Oklahoma may belong to the Social Security System and at the same time continue their membership in the Retirement System.

4. The Legislature dedicated revenue in the sum of 78% of the gross production tax on natural gas as a part of the state's matching of teachers' contributions.

5. Interest earnings on members' contributions are not credited to the member's individual account but to the retirement system.

6. Tax sheltered annuities are available for members.

7. Members contribute 5% of annual salary up to $7,800.

8. Retired classified members have the option of having benefits based on a flat $6.50 per month payment for each year of service. Or benefits could be based on a percentage of their highest five years' average salary times the number of years of service. The base figure for 1970 is 1.25%. This will increase

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[1] C. S. Dowler, "Teacher Retirement Comes of Age," _The Oklahoma Teacher_, XLV (April, 1964), 44.

annually to 1.30, 1.35, 1.40, 1.45 and 1.50% in 1975.[1]

9. Retired nonclassified members have the option of having benefits based on a flat $5.50 per month payment for each year of service. Or benefits could be based on a percentage of their highest five years' average salary times the number of years of service. The base figure for 1970 is 1.25%. This will increase annually to 1.30, 1.35, 1.40, 1.45 and 1.50% in 1975.[2]

10. All retirants who do not receive a monthly retirement benefit greater under the percentage formula will receive a monthly cost of living increase during the fiscal year 1971-72 in an amount of 2½% and an additional monthly cost of living increase in the same amount each fiscal year thereafter including 1975-76.[3]

Membership on the Board of Trustees has also been changed. The two ex-officio members are the State Superintendent of Public Instruction and the State Treasurer. The seven other members, appointed by the Governor of Oklahoma and approved by the Senate, are a stockbroker, a representative of the insurance industry who is a specialist in mortgage investments, an investment counselor active in the trust division of a banking institution, a representative of a school of higher education in Oklahoma, an administrator within the school system of the State of Oklahoma, an active classroom teacher, and a retired classroom teacher.[4]

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[1]Oklahoma, _Teachers Retirement Act, Engrossed House Bill No. 1157_, (1971), 3-4.

[2]_Ibid_., 6. [3]_Ibid_., 4-6.

[4]Oklahoma, _Teachers Retirement Act, Conference Committee Substitute for Engrossed House Bill No. 1136_, (1969), 10.

Statement of Problem

The problem of this study was to ascertain the nature of the Teachers' Retirement Systems in the Mountain Plains Region--Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. What similarities and differences exist among the Teachers' Retirement System of Oklahoma and the Teachers' Retirement Systems of the Mountain Plains Region?

This study was also an attempt to ascertain the degree to which the members of the Teachers' Retirement System of Oklahoma accept the present plan. What are the opinions of the members of the Teachers' Retirement System of Oklahoma concerning their satisfaction with the present retirement plan?

Specifically, this investigation sought to answer the following questions: Is the current Oklahoma Teacher Retirement Law designed to meet the needs of its members? If not, what additions, deletions or other modifications are needed to make the retirement plan acceptable to: (1) members who are still teaching, (2) members who retired with Social Security benefits, and (3) members who retired without Social Security benefits?

Delimitations

This study was limited to the teachers' retirement systems of the Mountain Plains Region--Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. The recommendations are applicable only to the Teachers' Retirement System of Oklahoma.

Assumptions

1. The better the Teachers' Retirement System of Oklahoma is, the more likely the State of Oklahoma is to attract and hold qualified teachers.

2. Recommendations for the Teachers' Retirement System of Oklahoma should aid the State Legislature in making future changes.

Significance and Need for Study

An urgent need exists for the State of Oklahoma to inaugurate a sound retirement program for the members of the Teachers' Retirement System of Oklahoma. This study was done because Oklahoma must attract and hold skilled teachers and administrators and recognize the humanitarian aspect of a sound retirement program.

To obtain teachers and administrators, the schools at all levels compete with governmental agencies, private business, and industry for skilled personnel. An article in *The Oklahoma Teacher* states

> Other things being equal, the occupation which offers the best income, opportunity for advancement, and welfare benefits, (such as retirement, sick leave, social security, and group insurance) will attract and hold the highest type of personnel. For this reason it is becoming imperative that the public schools have a program of benefits comparable to those offered by other states, by

> governmental agencies and private corporations and businesses, at a comparable cost to the person involved.[1]

From both an economical and educational standpoint, Oklahoma needs to offer the teachers and administrators occupational security that will attract and hold skilled personnel. Dan Stewart Hobbs found that

> . . . Oklahoma is poorly utilizing its trained manpower in teacher education. Only about half of those trained in Oklahoma colleges and universities begin teaching in Oklahoma. Of those who teach, about 20 per cent are lost after one year, 30 per cent are lost after four years, and approximately 50 per cent are lost after ten years. Thus only about 250 per 1,000 teachers trained in Oklahoma colleges and universities are still teaching in Oklahoma after ten years.[2]

The Teachers' Retirement System of Oklahoma is financed on a joint-contributory plan. James Byrne Miller determined that

> The basic difference between retirement programs in public and private employment is in the nature of their financing. While the public retirement plans were financed on a joint-contributory basis, the majority of the private plans were non-contributory in which the employer paid the complete premium.[3]

The Teachers' Retirement System of Oklahoma has always had an actuarial deficit. The Oklahoma Education Association has repeatedly asked the Legislature to appropriate enough funds to make the System actuarially sound. An article in The Oklahoma Teacher states

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[1]"O.E.A. Legislative Goals 1963," The Oklahoma Teacher, XLIV (September, 1962), 42-43.

[2]Dan Stewart Hobbs, "A Study of Teacher Supply and Demand in Oklahoma" (unpublished Ph.D. dissertation, University of Oklahoma, 1969), p. 151.

[3]James Byrne Miller, "A Comparison of the Fringe Benefits Provided Teachers, Business, Industrial, and Civil Service Employees In Colorado" (unpublished Ed.D. dissertation, Colorado State College, 1967), p. 100.

When the retirement law was written and the retirement system set up, the teachers understood that the state would match the teachers' contribution each biennium. The Legislature has never, in any year, appropriated enough money to do this.[1]

Beginning with the 1964-65 fiscal year, the State of Oklahoma has contributed funds in excess of the teachers' contributions with the exception of the fiscal year 1967-68. (Appendix B, Exhibit 7.)

Because of advancements in medical technology and the Medicare and Medicaid Programs offered by the United States Government, life expectancy has been increased. Predictions indicate that retirement ages will be lowered due to the increase in population. People will live longer and work fewer years. Therefore, a large segment of the society will be the pension population.

During the past twenty years, the consumer price index has risen an average rate of 5 per cent a year. Consequently, a retirement income designed in part on the basis of earlier earnings tends to become increasingly inadequate through time, a problem that would necessarily be accentuated if people lived longer.[2] The retirement income needs to be adjusted according to the fluctuations in the cost of living.

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[1]"O.E.A. Legislative Goals 1963," 43.

[2]U.S., Congress, Senate, Economics of Aging: Toward A Full Share in Abundance, A working paper prepared by a Task Force for the Special Committee on Aging (Washington, D.C.: Government Printing Office, 1969), pp. 155-56.

The point is further emphasized by John Powers Mackin, who stated

> Historically, a majority of retired persons have been the recipients of fixed incomes. At the point of retirement, most retirees still face a period of continuous retrenchment in living standards brought about by changes in the economy.[1]

A retired teacher should not be reduced to a socio-economic status not commensurate with his professional status. "Old age must be made tolerable, not because we are sorry for the old, but because it is morally right and necessary that people at all stages of life have a fair deal."[2]

Procedures

The procedural steps required to determine the degree to which the members of the Teachers' Retirement System of Oklahoma accept the present plan and to determine the nature of the Teachers' Retirement Systems in the Mountain Plains Region included making decisions about the nature and the sources of data and the collecting and the analyzing of the data.

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[1]John Powers Mackin, "Adjusting Public Employees' Retirement Benefits for Economic Changes" (unpublished Ph.D. dissertation, The University of Wisconsin, 1968), p. 340.

[2]Donald P. Kent, "Aging--Fact and Fancy," The Gerontologist, V (June, 1965), 56.

Nature and Sources of Data

This study of the Teachers' Retirement Systems in the Mountain Plains Region focused attention on two bodies of data. These two bodies of data are (1) opinions of active and retired members of the Teachers' Retirement System of Oklahoma and (2) comparison of retirement systems in the Mountain Plains Region.

Opinions of Active and Retired Members of the Teachers' Retirement System of Oklahoma

The researcher ascertained the nature of the Teachers' Retirement System of Oklahoma by examining the current law and studying reports of the Teachers' Retirement System of Oklahoma.

An attempt was made to ascertain the degree to which members of the Teachers' Retirement System of Oklahoma accept the present plan. More specifically, this study attempted to determine the members' degree of satisfaction concerning retirement benefits, funding, vesting, retirement age, withdrawals, and retirement options.

The mailed opinionnaire was believed to be the most feasible method for collecting the data because the mailed opinionnaire permits wide coverage, considered answers, and uniform answers. Because of the impersonality of the mailed opinionnaire, more candid and more objective replies may be elicited.[1]

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[1]George J. Mouley, The Science of Educational Research (New York: American Book Company, 1963), pp. 239-40.

A search of the available literature failed to yield an opinionnaire that was appropriate for this study. Therefore the researcher, with the doctoral committee's approval, developed the opinionnaire that is presented in Appendix A, Exhibit 1.

During the time the opinionnaire was being developed, the researcher held a conference with an official of the Oklahome Education Association who traced the history and the progress of the Teachers' Retirement System of Oklahoma. The researcher found that the two current goals were (1) to improve the cost-of-living increase and (2) to secure a more definite, systematic funding procedure.

In a telephone conversation with Mrs. Gladys Nunn,[1] President of the Oklahoma Retired Teachers' Association, the researcher explained the nature of the problem being investigated. Mrs. Nunn wrote the researcher a letter in which the goals of the organization were stated. The goals of the organization included (1) securing improved insurance programs and (2) securing legislation that would help the retiree to cope with inflation.

The researcher was given permission by the Executive Secretary of the Teachers' Retirement System of Oklahoma and the Director of Statistical Services Department of the State Department of Education to use departmental records from which to select the participants of this study.

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[1]Gladys Nunn, telephone conversation, Muskogee, Oklahome, March 5, 1971.

Two hundred names and addresses of active members were selected from the total population by the method of stratified random sampling which is an element of control to increase precision and representativeness.[1] One hundred and ten names and addresses of retired members were randomly selected from the total population.

The proportional stratification for the active members was based on the following subsamples: Higher education--16%; administration--8%; secondary education--21%; junior high education--13%; elementary education--37%; and others--5%. The proportional stratification percentages were obtained from the statistical records of the State Department of Education.

By the use of a table of random numbers and the RCA Spectra 70-35E computer, the Director of the Statistical Services of the State Department of Education selected the names and addresses of the active members in the following subsamples: administration, secondary education, junior high education, elementary education, and others.

By the use of a table of random numbers and the records in the office of the Teachers' Retirement System of Oklahoma, the researcher randomly selected the names and addresses of the active members in the higher education subsample.

By the use of a table of random numbers and the RCA Spectra 70-35E computer, the Director of the Statistical

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[1]Mouley, p. 183.

Services of the State Department of Education randomly selected one hundred and ten names and addresses of retired members from the total population.

Each of the three hundred and ten randomly selected participants was mailed an opinionnaire, an addressed, stamped envelope, and a letter (Appendix A, Exhibits 1 and 3) explaining the purpose of the study. In addition, the letter encouraged the cooperation of the recipient and offered an abstract of the completed study results.

As suggested by Kerlinger,[1] two weeks after the opinionnaire was mailed, a follow-up letter (Appendix A, Exhibit 4) was mailed to participants as a means of securing larger returns.

Data from the Teachers' Retirement Systems in the Mountain Plains Region

This study ascertained the nature of the teachers' retirement systems in the Mountain Plains Region. The similarities and differences among the retirement systems were determined for the year of 1970.

The researcher sent letters to the Directors of the retirement systems in the Mountain Plains Region which explained the purpose of the study and requested their participation. (Appendix A, Exhibit 5.) All of the directors indicated willingness to participate with the exception of North Dakota.

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[1]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), p. 397.

A search of the available literature failed to yield a questionnaire that was appropriate for this study. Therefore a questionnaire was developed to obtain data from the directors of the retirement systems. The following elements were included in the questionnaire: membership, creditable service, withdrawals, social security coverage, vesting, funding, retirement age, financing, funding, benefits, and options.

The questionnaire was believed to be the most feasible method because each director could not be contacted personally and factual information was desired.[1]

Each director of the retirement systems included in this study was mailed a questionnaire, an addressed, stamped envelope, and a letter (Appendix A, Exhibits 2 and 6) expressing appreciation. In addition, the letter offered an abstract of the completed study.

Analysis of the Data

One hundred and sixty-four of the 310 opinionnaires that were sent to the active and retired members of the Teachers' Retirement System of Oklahoma were returned for a total of 53%. The alternative choices of (1) strongly dissatisfied, (2) mildly dissatisifed, (3) neutral, (4) mildly satisifed, (5) strongly satisfied, and (6) no response were tabulated

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[1]John W. Best, Research in Education (2nd ed.; Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970), p. 161.

and the percentages for each choice were determined. The tabulations were then summarized.

Eight of the questionnaires that were sent to the Directors of the retirement systems in the Mountain Plains Region were returned for a total of 100%. The data obtained from the responses were tabulated and summarized.

Definitions

Terminology used in this study was defined as follows:

Membership: Educational employees who are members of the retirement system.

Classified Personnel: Professional employees who are members of the retirement system.

Nonclassified Personnel: Nonprofessional employees who are members of the retirement system.

Member Contribution: The amount contributed by each member to the retirement fund.

Employer Contribution: The amount contributed by the employer to the retirement fund.

Service: Service as a classified or nonclassified employee in the public school system.

Prior-Service: Service rendered prior to the date of the establishment of the retirement system for which credit is allowable.

Creditable Service: The sum of the prior service plus the membership service.

Military Service: Years of membership service credited to member for military service.

Beneficiary: The person(s) to whom the member's contributions or other selected benefits will be paid upon member's death.

Options: The various plans from which a member may choose his retirement benefits.

Disability Retirement: Retirement benefits paid to a member who is either mentally or physically incapacitated for further performance of duty.

Normal Retirement Age: The age a member must attain to receive maximum benefits.

Vesting Period: Years of creditable service required for a member to acquire the right to a retirement benefit.

Organization of Report

Chapter I includes the Introduction, Statement of Problem, Delimitations, Assumptions, Significance and Need for Study, Procedures, Definitions, and Organization of Report. Chapter II provides a review of related literature. Chapter III explains the analysis and interpretation of data. Chapter IV consists of the summary and recommendations.

CHAPTER II

REVIEW OF LITERATURE

In the area of teachers' retirement systems, an extensive volume of literature exists. These writings include numerous research studies, surveys, articles, and textual materials pertaining to the evolution, fundamentals, effects, and characteristics of public employees' retirement systems. In recent years, several research studies have been completed pertaining to the public retirement systems to which teachers belong. However, no research was found that dealt specifically with the Teachers' Retirement System of Oklahoma.

To present only the material that was relevant, the literature was divided into these three major categories: (1) the evolution of teachers' retirement systems, (2) published literature, and (3) research directly related to the present study.

The Evolution of Teachers' Retirement Systems

Evolution toward universal systematic retirement benefits for public-school teachers in the United States began in New York in 1869. A young and active teacher decided that instead of soliciting voluntary contributions to defray funeral expenses each time a death occurred, a better plan would be to organize an association in which each member would pledge himself to contribute one dollar whenever called upon and would also be assured that a similar benefit would be paid upon his death by a similar assessment upon all other members.[1]

This young teacher called a meeting of teachers and the New York City Teachers' Mutual Life Assurance Association was established.

> The significance of the establishment of this association was the fact that besides mere philanthropy it introduced an element of self-protection--the contributor not only helped to defray the expenses of funeral to a fellow teacher but also secured a right to a like benefit for himself.[2]

The establishment of this modest organization is the first recorded instance of a teachers' mutual-aid society in this country and is the forerunner of the present-day teacher retirement systems.

Similar organizations were slowly established--Brooklyn, 1871; Jersey City, 1880; and Camden, 1885. These associations required no regular annual assessment but assessed members whenever necessary. Capital was considered unnecessary. The members did not understand that insurance could be sound only if based on mortality tables and that the number of

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[1]Paul Studensky, Teachers' Pension Systems in the United States (New York: D. Appleton and Company, 1920), p. 4.

[2]Ibid.

deaths among members would increase in the future and would make the assessments on the younger members too burdensome.[1]

The attention of the mutual-aid societies was next focused on sick benefits for members. Subsequent to 1885, nearly all associations had sick benefits payable for limited periods. Inasmuch as payments of these benefits could not be met without capital on hand, regular annual dues were, therefore, introduced and the attempt made to build up permanent capital funds. The regular annual dues ranged from $0.50 to $7.20. However, the sick benefit associations were also financially unsound.[2]

The next objective of the mutual-aid societies was the establishment of old age and disability-annuity associations. Voluntary-annuity associations were established by the teachers in New York City and Brooklyn in 1887.[3]

The voluntary-annuity association movement spread rapidly to other cities and states. The provisions of most of these associations were patterned after the New York Fund.[4]

A majority of the associations set the annuity at $600. Members would qualify upon meeting either of these conditions:

1. Completion of a certain length of service, which varied from 30 to 40 years in different systems,

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[1]*Ibid.*, p. 5. [2]*Ibid.*, p. 6.

[3]*Ibid.*, pp. 6, 8. [4]*Ibid.*, p. 8.

frequently with a lower requirement by five years for women than for men;

2. A proof of disability, irrespective of the length of service.[1]

Annual dues from members were set at the rate of one per cent of salary and were to be supplemented by donations and voluntary contributions from the public.

These annuity associations soon failed for the following four main reasons: (1) voluntary membership--the young teachers were reluctant to join; (2) the private character was objectionable; (3) the income from public contributions was irregular and inadequate; and (4) actuarial unsoundness.

The first association to collapse was that of Brooklyn. The New York City association was next and other associations soon followed.

Legislative action establishing retirement plans was the second phase in the evolution of retirement systems for teachers. As early as 1879, New York City and Brooklyn Public school teachers attempted to acquire retirement legislation.

These early attempts encountered much opposition. The Board of Education in New York was initially opposed to the whole idea, thus indicating the complete absence of public interest in the establishment of a retirement plan for teachers.[2]

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[1]*Ibid*., p. 8.

[2]Rainard B. Robbins, *Pension Planning in the United States*, ed. by William C. Greenough (New York: Teachers Insurance and Annuity Association of America, 1952), p. 14.

After fifteen years of repeated failure, the efforts to establish teacher retirement systems was mildly successful. The first state-wide teacher retirement system was established in New Jersey in 1896, and the first local retirement system for teachers was probably that of New York City, established in 1894.[1]

The benefits of the New York City Fund were supported not by teacher contributions and not by direct legislative appropriation but indirectly through absence deductions from teachers' salaries.

> It is notable that this pioneer legislation should have adopted no definite principle in the matter of whether teachers or the government, or both sides, should support the system. The form of revenue was such as to obscure its real derivation. It was generally accepted that the revenue from absence deductions was derived from the teachers, although as a matter of fact it really came from the public treasury.[2]

This method of financing made the acceptance of the teachers' proposal easier than it would have been had direct appropriation been sought. The omission of teacher contributions avoided the opposition of unenthusiastic younger teachers.[3]

Benefits were made available only after 30 years' service for women and 35 for men. Half-pay pensions were

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[1]William G. Carr, "The Teacher-Retirement Movement in the United States," American School Board Journal, LXXIII (December, 1931), 37-38.

[2]Studensky, p. 16.

[3]Robbins, p. 15.

possible, and grants were to be made only with a two-thirds vote of the board of education. As a precaution against insufficient funds, this board was empowered to reduce pensions if necessary.[1]

Within two years, eight other funds were created which copied the New York City law almost verbatim. Membership was voluntary in three funds--San Francisco, St. Louis and New Jersey; membership was compulsory in Brooklyn, Detroit, Chicago, Buffalo, and Cincinnati.[2]

During the years 1894 to 1896, some voluntary and some compulsory funds were created which required a one per cent deduction from the teacher's salary. The government did not contribute at all; however, the governmental unit was the custodian of the funds.

The benefits in the Brooklyn fund were set at one-half the salary--the principle of a retirement benefit proportionate to salary. This benefit principle soon became almost universal.

The several pioneer funds varied in matters of detail, but were all alike in the unsoundness of the provision made for their financial stability. These unsound plans were explained as follows by Studensky:

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[1]Robbins, p. 15.

[2]Studensky, p. 17.

> They followed the unsound method which had been used by the mutual aid associations; pensions were paid from the annual income of the fund, and the balance of the income set aside as capital. No mortality rates were adopted and no attempts were made to determine the cost of retirement benefits, the liabilities of the fund to all its members, or the amount of income and reserve which the fund should possess if it was in the future to meet its obligations. In most of the systems a provision was adopted that in case of insufficiency of fund the benefits might be prorated, but it was optimistically thought that this would never happen.[1]

The third phase in the evolution of retirement systems for teachers began in the early 1900's when actuarial principles were incorporated in re-structuring retirement plans on a joint-contributory basis.

As the disbursements increased and insufficiencies of income threatened the funds, the teachers faced the problem of either increasing their own contributions or else securing contributions from the government.

As a result, less emphasis was placed on the old idea that the teacher benefits by contributing to a retirement fund and more emphasis on the newer idea that the school system received the chief benefit.[2]

Under the joint-contributory system, the tendency in virtually all the funds was for the governmental contribution to rise steadily while the teachers' contribution either remained the same or decreased. The Chicago system illustrated this tendency:

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[1] *Ibid.*, p. 22. [2] *Ibid.*, p. 24.

1. Prior to 1907, the teachers were the only contributors.
2. In 1907 and 1909, the fund received a city contribution in the form of interest on school funds.
3. In 1911, the teachers secured a city contribution equal to that of the teachers.
4. In 1914, the city contribution was twice that of the teachers.[1]

The increase in the number of retirement funds was phenomenal in the 1910-1920 decade. At the beginning of that period, there were four state and twenty-eight local systems in the country. By 1917 there were twenty-two state and seventy-two local systems in operation affecting approximately 331,554 teachers. Membership in the twenty-two state-wide systems was approximately 250,000, four-fifths of all teachers covered in the nation.[2]

In 1946, state-wide systems existed in all states except one[3] and are now found in all fifty states. A number of local systems also exist.

By 1964 Delaware was the only state that was not operating on a joint-contributory basis. The retirement system of Delaware was financed entirely by the State.[4] In January of 1966, the retirement system of Delaware began operating on a partial joint-contributory basis. Members make no contribution on salary up to $6,000.[5]

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[1] Ibid., p. 25. [2] Ibid., p. 30. [3] Robbins, p. 40.

[4] "Retirement Statistics, 1964," NEA Research Bulletin, XLII (December, 1964), 100.

[5] 1969 Teacher Retirement System Summaries, State of Delaware Retirement System (Washington, D. C.: Office of Teacher Retirement and NEA Research Division in Cooperation with the National Council on Teacher Retirement, 1969), p. 2.

Recent trends pertaining to teacher retirement include the following:

1. Liberalization of investment powers of the retirement boards. More boards are being allowed to place a part of their funds in certain types of corporate stocks and bonds for higher yields on their investment dollar.[1]
2. Increased creditable service allowance. More states are allowing credit for teaching in state-approved or accredited nonpublic schools; service under the Manpower Development and Training Act of 1962 and the Economic Opportunity Act of 1966, and other special education and training programs; and military service.
3. Adoption of a fixed benefit formula approaching 2 per cent times a final average salary times years of credited service.
4. Increase in contribution rates--both teachers' and employers'.
5. Provisions for automatic post-retirement adjustments in the form of fixed and cost-of-living increases to retirement benefits.
6. Extended coverage of public-school employees to include maintenance, custodial, and lunchroom employees.[2]

Published Literature

The published literature reviewed in this section included textual materials, articles, and reports. Many of the writers are authorities in the area of public retirement systems. The specific sources used for the review were selected on the basis of their relevancy to the problem being investigated. In particular, these three topics were

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[1] "Retirement Statistics, 1964," 99.

[2] "What's New in Teacher Retirement Systems," NEA Research Bulletin, XLVIII (December, 1970), 108-113.

discussed: (1) characteristics of public retirement systems, (2) social security as a base, and (3) funding of public retirement plans.

Characteristics of Public Retirement Systems

In November of 1930 the NEA Research Bulletin described a teachers' retirement system as a business-like plan whereby the schools are enabled to retire teachers who can no longer render their best service because of either advanced age or physical disability and to provide them with an income for life.[1]

The Research Bulletin also discussed fifteen fundamental principles of a teacher retirement system:

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, thereby removing 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. The deposit by the teacher and the payment by the public should be stated by the organic act creating a retirement

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[1] "The General Nature of a Retirement System and How It Works," NEA Research Bulletin, VIII (November, 1930), 225.

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 moneys accumulated in their accounts. Teachers' accumulated deposits should be returnable upon withdrawal from teaching service, or 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 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.[1]

Even though these fundamental principles were adopted by the National Education Association approximately forty years ago, they remain applicable today.

Many of the early plans failed in the 1900's because they did not adhere to these fundamental principles. Poor planning and lack of adequate funds caused most of the failures.

> As a matter of experience, the disbursements of the New York City system, which was established in 1894, began to be larger than the receipts in 1910.[2]

The New York City system completely collapsed in 1914. Others that collapsed during the same period were Massachusetts, New Jersey, Puerto Rico, Boston, Indianapolis, Maryland, Virginia, Cincinnati, and Illinois.[3]

Robbins noted two basic peculiarities of pension plans for public employees:

1. that the employees are the dominant group pressing for their inauguration and modification, and
2. that there is no individual or small group deeply interested in watching the purse strings.[4]

Robbins indicated that some governors and other elected officials in high public offices look forward to only

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[1] *Ibid.*, 226-29.

[2] Robbins., p. 29.

[3] *Ibid.*

[4] *Ibid.*, p. 180.

short periods of service and have only superficial interest in any high degree of efficiency in public service.[1]

In contrast, industrial management looks forward to a long period of tenure and has a strong interest in the high degree of employee efficiency. Therefore, industrial management is more likely to inaugurate a pension plan that will remove inefficient employees.[2]

Social Security as a Base

In 1950 Frederick N. MacMillan[3] of Wisconsin testified before the U. S. Senate Finance Committee on proposed amendments to the Social Security Act to include public employees. He stated that it would be grossly discriminatory to deny social security coverage to public employees, that it would benefit each participant to have two sources of retirement income, and that it would be particularly valuable for the protection of dependents and spouses. He also stated

> It should be common knowledge by this time that the existence of social security has not operated to reduce the coverage of private systems, but rather the trend is exactly the opposite. There is no logical reason to assume that the experience would be any different with respect to public employees.[4]

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[1] _Ibid._ [2] _Ibid._

[3] Frederick N. MacMillan, "Integration of Public Retirement with Social Security," _Personnel Administration_, XII (July, 1950), 2-3.

[4] _Ibid._, p. 2.

The 1950 amendment provided social security coverage for employees of state and local governments that did not have a public retirement system.[1]

By 1952, seven states had repealed its state retirement system so that its public employees would be eligible for social security. After the public employees were taken into social security coverage, the legislatures enacted new retirement systems to supplement the social security benefits.[2]

In 1954, the Social Security Act was amended to include members of a state or local retirement system provided two-thirds of all the members favored social security coverage.[3]

Prior to the passage of the 1954 amendment, there was concern that social security might either replace or weaken the teacher retirement systems. Clifford stated, "The impact that social security may have on our school retirement systems is probably the No. 1 question today when we consider retirement."[4]

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[1]National Education Association, "Social Security Coverage for Public Employees," The Oklahoma Teacher, XXXV (March, 1954), 10.

[2]Ibid.

[3]Ibid., 11.

[4]John M. Clifford, "Critical Years Ahead for Retirement Systems," The Nation's Schools, LII (October, 1953), 43.

After the passage of the amendment in 1954, interest focused on coordinating existing teacher retirement systems with social security. One of the main reasons for interest in coordinating retirement systems with social security is the lack of reciprocity between teacher-retirement systems.

A teacher ordinarily suffers a loss of retirement benefits if he either moves from one state to another or leaves the teaching profession and enters private employment. Clifford indicated how social security would help with the problem of reciprocity:

> The solution of reciprocity problem is complex. The application of social security to school employees would afford a partial answer. Everyone would have basic coverage regardless of where he served.[1]

Most retired teachers can count on a basic income from social security. Approximately eighty per cent of the state-wide retirement systems to which teachers belong provide social security coverage.[2]

> Nonetheless, however comforting the benefits from Social Security may be, few of us could achieve financial independence in retirement by living on this income alone. The average senior citizen derives an important part of his income from personal savings, pension funds and investments.[3]

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[1]John M. Clifford, "Some Proposed Changes in Retirement Systems," The Nation's Schools, LII (November, 1953), 79.

[2]1969 Teacher Retirement System Summaries, General Information, pp. 3-4.

[3]The Retirement Council, Inc., ed., Retirement Money Guidebook (Stanford, Connecticut: The Retirement Council, Inc., 1963), p. 5.

Dan M. McGill also reported that there seems to be general agreement that social security coverage provides the foundation on which all other programs of old-age income maintenance can be erected.[1]

Funding of Public Retirement Plans

Most of the authorities use the term pension plan instead of retirement plan. Hamilton and Bronson[2] defined a pension plan as a program for providing regular payments to retired employees for life. The pension plan involves accumulation of funds in a systematic manner during the employees' working years and subsequent distribution of those funds during the period when the employees can no longer be carried on the payroll because of either old age or serious disability.

Hamilton and Bronson pointed out that in the past a pension was considered as charity. This connotation, however is an obsolete viewpoint today. The employee often contributes substantially toward the cost of a pension. Even if the employer pays the entire cost, the pension is not considered a gift, but as a convenient means of fulfilling the employer's responsibilities toward his old and loyal employees--whether

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[1]Dan M. McGill, ed., Pensions: Problems and Trends (Homewood, Illinois: Richard D. Irwin, Inc., 1955), p. 8.

[2]James A. Hamilton and Dorrance C. Bronson, Pensions (New York: McGraw-Hill Book Company, Inc., 1958), p. 1.

the resulting pension is viewed as a reward, continued payroll, a charge for human depreciation, a distribution of deferred pay, organized savings, a social service, a business economy, a union commitment, or a payment under any other philosophy of pensions that the employer may profess.[1]

The conventional approach to the financing of pension benefits is for the employer (and employees, if the plan is joint-contributory) to set aside funds for the payment of benefits. This practice is known as funding.[2]

The ultimate true cost of a pension plan is not affected by the choice of the funding method. However, the funding method determines how much of the ultimate cost of a plan is to be met at any particular period of time.[3]

McGill defined several funding concepts as follows:

1. Normal Cost: The cost for all benefits credited for service during a particular year is arrived at by summing the separate costs of benefits credited to the individual participants at the various attained ages. The normal cost under any actuarial cost method is the cost that would be attributable to the current year of a plan's operations if, from the earliest date of credited service, the plan had been in effect and costs had been accrued in accordance with the particular actuarial cost method-- and all actuarial assumptions had been exactly realized.[4]

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[1]*Ibid.*, pp. 1-2.

[2]Dan M. McGill, *Fundamentals of Private Pensions* (2nd ed.; Homewood, Illinois: Richard D. Irwin, Inc., 1964), p. 246.

[3]McGill, 1955 ed., p. 126.

[4]McGill, 1964 ed., pp. 222-23.

2. Accrued Liability: The accrued liability of a pension plan, as of any given time, represents the difference between the present value of future benefits and the present value of future normal cost. (Accrued liability may be viewed retrospectively as the accumulation of all past normal costs incurred under the plan.) It reflects not only the present value of benefits credited for service prior to the effective date of the plan but also the present value of all benefits credited for service subsequent to the effective date of the plan, up to the date of valuation. . . . the accrued liability grows with the passage of time, attaining its ultimate level only when the plan has matured and benefits to retired employees have reached their peak.[1]

3. Initial Accrued Liability: The accrued liability on the effective date of a pension plan is commonly referred to as the initial accrued liability and originates from credited past service.[2]

   (Other terms used to identify initial accrued liability include: supplemental liability, initial past service liability, past service liability, initial actuarial liability.)[3]

4. Unfunded Accrued Liability: That portion of the accrued liability of a pension plan which is not offset by assets is termed the unfunded accrued liability.[4]

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[1]McGill, 1955 ed., pp. 126-27.

[2]*Ibid.*, p. 127.

[3]McGill, 1964 ed., p. 223.

[4]McGill, 1955 ed., p. 127.

The various approaches to meeting financial obligations of a pension plan were discussed by McGill,[1] Hamilton and Bronson,[2] George B. Buck, Jr.,[3] and Charles L. Trowbridge.[4] The approaches relevant to this study include disbursement funding, terminal funding, and advance funding.

The disbursement approach to funding is sometimes referred to as the pay-as-you go approach. The retirement benefits are treated as payroll costs and are paid directly to the pensioner by the employer. No distinction is made between past service and future service benefits because, under this arrangement, such a distinction would be meaningless.

The cost of pension benefits would naturally rise as the employee group matures and an increasing number of persons are added to the retired rolls.

The ultimate true cost of this plan exceeds that of the other plans because no money is invested to provide any part of the cost.

George B. Buck, Jr. made the following comments concerning the disbursement approach:

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[1]McGill, 1964 ed., pp. 244-47.

[2]Hamilton and Bronson, pp. 105-7.

[3]George B. Buck, Jr., "Actuarial Solvency of a Pension Plan," in Pensions: Problems and Trends, ed., by Dan M. McGill (Homewood, Illinois: Richard D. Irwin, Inc., 1955), pp. 123-130.

[4]Charles L. Trowbridge, "ABC'S of Pension Funding," Harvard Business Review XLIV (April, 1966), 115-126.

> The method has been followed by certain governmental employers on the ground that the power of taxation guarantees the payment of benefits without the need of proper financing. . . . . Apart from considerations of actuarial solvency, the method has the further disadvantage in that the pension cost accruing during one generation must be met by succeeding generations.[1]

Under terminal funding, the lump sum value of the pension is paid into the plan upon each member's retirement. Under some terminal funding plans, an attempt at leveling such payments is made by projecting the amount required under this method over some specific future period, such as five years, and then computing the level payment which, if paid over the five years, will equal the total required.

The cost of providing the full reserves for those retiring in the first few years may not be very onerous, but the cash sums required rise very markedly as soon as any substantial number of members become eligible for retirement.[2] The ultimate true cost of this plan is less than that of the disbursement method in that it includes the investment aspect of present value of the pension at the time the employee retires.

"From a solvency point of view this method cannot be regarded as adequate and its adoption for any plan is probably conditioned by considerations outside those of orderly financing."[3]

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[1]Buck, p. 129.

[2]*Ibid.*, p. 128. [3]*Ibid.*, p. 129.

Advance funding describes any arrangement under which sums intended for the payment of retirement benefits are set aside under proper legal safeguards in advance of the date of actual retirement. Advance funding does not necessarily imply full funding, because it is usually many years after a plan has been established before the accrued liability is fully funded.[1]

The ultimate true cost of a pension plan that employs advance funding is less than that of the other two methods. The governing board or agency is usually allowed to invest assets in revenue-producing securities. The advanced funding approach is the conventional financing technique used in pension plans today.

The advantages of advance funding also include:

1. Higher degree of security for participants,
2. Facilitation of vesting of employer contributions, and
3. Forces each generation to pay for its own pensions.[2]

In essence, there is no funding in the proper sense connected with the disbursement approach. Terminal funding is a compromise between no funding and advance funding.

Even though a pension plan operates under the advance funding method, the initial accrued liability is usually funded over a period of years.

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[1] McGill, 1955 ed., p. 130.

[2] Ibid., 132.

Griffin and Trowbridge use a measure termed the "Benefit Security Ratio"--a concept developed by Griffin as follows:

> The Benefit Security Ratio (BSR) is the ratio of the value of assets accumulated under a pension plan, to the value of all accrued pension benefits. . . . a BSR of 100 percent (or more) indicates that in event of current plan termination the accrued benefits are fully provided for; a BSR of less than 100 percent indicates that accrued benefits have not yet been fully secured.[1]

Griffin and Trowbridge also use the measure termed the "Vested Benefit Security Ratio" (VBSR) which is the value of the assets of the pension plan to the value of only those benefits accrued to date that are vested.[2]

Griffin and Trowbridge pointed out that the significance of these ratios is relative to time. Naturally at the inception of the pension plan each ratio is zero. ". . . the funding status as of any given moment in time, while significant, is not nearly as important as the direction in which the fund is moving."[3]

The BSR and VBSR ratios can be used to measure the security ratios of public pension plans as well as private pension plans.

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[1]Frank L. Griffin, Jr. and Charles L. Trowbridge, Status of Funding Under Private Pension Plans (Homewood, Illinois: Richard D. Irwin, Inc., 1969), pp. 4-5.

[2]*Ibid.*, p. 5.

[3]*Ibid.*, p. xv.

In compliance with the Seventh and Eighth Principles set forth by the NEA in 1930, most retirement systems to which teachers belong employ an actuary to make periodic valuations and cost calculations of the plan. The actuary bases his assumptions on data such as the following:

1. Employee data: The age distribution, average earnings and average length of service are based upon the data for the actual group of employees.
2. Mortality: The mortality assumptions both before and after retirement are based upon an accepted mortality table.
3. Employee withdrawals: The withdrawals may be estimated according to past experience in relation to age groups.
4. Salary increases: Salary increases may or may not be taken into consideration depending upon whether or not the actuary considers them relevant.
5. Age of retirement: These estimates may be based upon the normal retirement age for active participants, a later retirement age for those working past the normal retirement age, and another retirement age for those not participating but who have vested benefits.
6. Investment returns: Net investment returns--after expenses--may be calculated.
7. Funding method: The funding method is determined by the employing agency.[1]

The benefits to be paid in the future to members who have already retired and to those who will retire in the future are based on the principle of present value.

"Advance funding and actuarial soundness are not synonmous."[2] Some degree of advance funding is achieved as soon as any contributions are made in excess of current pension requirements; a fund, however small, to carry over to the ensuing year constitutes some degree of advance funding.

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[1]McGill, 1964 ed., pp. 265-66.

[2]Hamilton and Bronson, p. 107.

Hamilton and Bronson reported that:

> Actuarial soundness is achieved only by measuring the advance funding--the assets on hand and the intended contributions--by certain scientific criteria involving mortality, employee turnover, interest, and other elements depending on the provisions of the pension plan, this measurement yielding the conclusion that the scheme of advance contributions for the benefits of the plan will pay out over the long future or at earlier termination of plan.[1]

For a pension plan to be actuarially sound, the employer must be well informed concerning the future cost potential and must arrange to fund the cost on a scientific, orderly program. Should the plan terminate, the funding method would assure the retirees their pensions, and the active employees would have an equity in the fund's assets commensurate with their accrued pensions from the plan's inception. This definition admits to a long period of time before the initial accrued liability is funded.[2]

As a minimum for actuarial soundness, the pension benefits accruing each year should be currently funded; and by retirement age, all past service liabilities should be funded for the then retiring employees.[3]

Research Directly Related to the Present Study

The five doctoral research studies reviewed in this section are pertinent to the present study and support the

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[1]*Ibid.* [2]*Ibid.*, pp. 107-8.

[3]*Ibid.*, p. 108.

literature reviewed in the preceding sections of this chapter. The doctoral research studies are presented in chronological order.

The Hayman Study - 1963

Hayman's[1] study describes the thirty-nine State and local retirement systems active in North Carolina in 1952. Hayman found that

> . . . over 70,000 public employees in North Carolina were covered by one of the four state-wide retirement systems: the Law Enforcement Officers' Benefit and Retirement Fund, the Teachers' and State Employees' Retirement System, and the Local Governmental Retirement System. Each of the three programs provided comprehensive retirement benefits on a joint-contributory basis and had the advantage of State sponsorship.[2]

Some public employees also belong to supplementary retirement systems such as Social Security and the Teachers' Insurance and Annuity Association.

Membership in the Teachers' and State Employees' Retirement System is so broad that it includes nearly every employee of the State of North Carolina. Three exceptions are listed:

1. Does not apply to those who are employed after age 60.
2. Members of State Highway Patrol have option of joining Law Enforcement Officers' Benefit Retirement Fund.
3. No provisions made for temporary or part-time employees.[3]

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[1]Donald Bales Hayman, "Social Security and State and Local Retirement in North Carolina (unpublished Ph.D. dissertation, University of North Carolina at Chapel Hill, 1963).

[2]*Ibid.*, p. 102. [3]*Ibid.*, pp. 108-9.

In 1952, a member was entitled to retire at age sixty, or after thirty years of service and receive an annuity which was the actuarial equivalent of his accumulated contributions. "Retirement was optional at age 60 and automatic at age sixty-five unless the employer requested that the employee remain in service, and compulsory at age seventy . . ."[1] Benefits vest after twenty years, but retirement allowance was not granted until age sixty. The retirement system also provided for disability retirement after ten years service, leaves of absence, and an eight member Board of Trustees.[2]

Hayman stated that

> The principal objective of a public retirement system is to increase the efficiency and effectiveness with which governmental policy is carried out. A retirement system helps achieve this end in numerous ways.
>
> First, it is an important aid in the recruitment of new employees. . . .
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> . . . .
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> Second, a retirement plan helps develop a career system. . . .
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> . . . .
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> Economy of operation is a third way in which a retirement program contributes to administrative efficiency. . . .
>
> The benefits of a sound retirement system flow both to the employer and to the employee. . . .[3]

Hayman enumerated the characteristics of a successful retirement system and used these as a model for examining the strengths and weaknesses of existing retirement systems and as a long-term goal for the revision of these systems.

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[1]*Ibid*., p. 110. [2]*Ibid*. [3]*Ibid*., pp. 59-61.

The thirty selected characteristics are listed under four general headings: Membership, Benefits, Finances, and Administration.[1]

Hayman included the following under the heading, Membership: (1) Inclusive Coverage, (2) Large Membership, (3) Wide Occupational Coverage, (4) No Age Restrictions of New Members, and (5) Compulsory Membership. Under Benefits, Hayman included: (6) Four Types of Benefit Payments--old age, disability, death, and survivor's benefits, (7) Retirement Age--voluntary at minimum age limit and compulsory at maximum age limit, (8) Full Credit for Service, (9) Pension Based on Service and Average Salary, (10) Formula System, (11) Benefits Paid on Total Salary, (2) Continuous Service Requirements Undesirable, (13) Occupational Differences in Age of Retirement, (14) Occupational Disability, (15) Non-Occupational Disability, and (16) Optional Allowance. Hayman included the following under the heading, Financing the Retirement System: (17) Actuarially Sound, (18) Joint Contributions, (19) Disability Benefits, (20) The Rate of Contribution--same for all, (21) Prior Service Credit, (22) Actuarial Reserves, (23) Interest--investments of only superior governmental bonds yielding high rate of interest, (24) Refunds, and (25) Vesting. Under Administration, Hayman included the following: (26) Separate Fund, (27) Governing Board, (28) Standardization of Rules and Policies, (29) Administrative Costs--financed by

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[1]Ibid., p. 61.

by appropriations of the governmental unit, and (3) Technical Investment and Actuarial Assistance.[1]

Hayman also traced the developments of North Carolina State and local retirement systems and Old Age and Survivor's Insurance from 1952 to 1962. He found unprecedented progress had been made in the improvement of retirement benefits and the strengthening of the financial condition of some of the unsound funds.

Hayman found Social Security to be a desirable supplement to existing retirement systems by the members of all but a few local retirement systems. North Carolina, in 1962, led the nation in the percentage of State and local employees covered by Social Security and also belonging to a public retirement system, due to the wide adoption of Social Security as a supplement to existing retirement systems.

The Hammack Study - 1967

Hammack[2] made an in-depth study of the Teachers' and State Employees' Retirement System of North Carolina. Hammack's study included the history, enactment, and development of the retirement system; the statutory development of the retirement system; opinions of the attorney general; and the provisions of the retirement system.

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[1] Ibid., pp. 63-98.

[2] Benjamin Paul Hammack, Sr., "A study of the Teachers' and State Employees' Retirement System of North Carolina" (unpublished Ed.D. dissertation, Duke University, 1967). (Used by permission of Benjamin Paul Hammack, Sr. and Duke University.)

Hammack stated that pensions for governmental employees originated in Europe in the nineteenth century. Pensions were adopted for army and navy personnel of the United States Government. Large cities followed by extending the coverage to policemen, firemen, and teachers.[1]

Hammack explained that the National Education Association gave leadership to the teacher retirement movement and that the United States Government, through the Social Security Act, had aided the development of teacher retirement.[2]

Hammack listed the current trends as follows:

1. Strengthening state and local retirement systems to insure more adequate benefits for both retired teachers and survivors.
2. Constitutional safeguards of vested rights by establishment of contractual relationships for accrued rights, benefits, and expectancies,
3. Recognition of social security as a minimum benefit to be used in sound combination with retirement benefits, and
4. Adequate tax exemptions for retirement benefits.[3]

The two types of provisions that exist for the benefit of aged and incapacitated teachers are (1) pension plans and (2) joint-contributory systems. These plans are different in principle. In a pension plan, either the state or the local government pays the entire cost. In a joint-contributory retirement plan, both the members and the government contribute.[4]

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[1]Ibid., pp. 2-3. [2]Ibid., p. 25.

[3]Ibid. p. 29. [4]Ibid.

The two main types of public financing of joint-contributory retirement plans may be classified as (1) pay-as-you-go or cash disbursement plans and (2) reserve system.

Hammack pointed out that the retirement bill presented to the General Assembly in 1939 was written by the actuary employed by the North Carolina Education Association.

> The Retirement Act embodied most of the provisions of the bill presented in 1939; therefore, the Teachers' and State Employees' Retirement System of North Carolina began on an actuarially sound basis. . . .
> . . . .
> The representative of the actuarial firm meets regularly with the Director and the Board of Trustees. In order for a retirement system to remain actuarially sound, all legislation must be carefully studied. North Carolina is fortunate in that retirement legislation is carefully studied by the actuary and the Board of Directors before it is presented to the General Assembly.[1]

Hammack listed some areas of interest that may be presented by the Board of Trustees to the General Assembly for its concern:

1. The matter of the repayment of withdrawn contributions is now being studied by the actuary at the request of the Board of Trustees. Considerable interest has developed in this matter since the Retirement System changed to the average final compensation type of benefit formula.
2. The maximum pension for retirants with more than twenty years creditable service who are not eligible for social security benefits as a result of the coordination with social security should have, and most likely will have, the maximum pension increased to $100.00 or more per month. These retirants now receive $85.00 per month.

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[1] *Ibid.*, pp. 68-69.

3. Because of the problem of "creeping" inflation, increasing interest will be shown in a cost-of-living factor being used to increase the retirement benefit, in an effort to offset the loss of purchasing power of the dollar caused by inflation. . . .

. . . .

4. Since the maximum salary covered by social security has changed several times in the past, since it will probably change in the future, and since the salary breakpoint under the present statute is $5,600 even though the social security contribution is on the first $6,600 of salary, there will probably be an adjustment in the average final compensation formula and contribution rates. . . .

. . . .

5. There is interest in a member with forty years of creditable service being eligible for full retirement benefits at age sixty-two. . . .

   . . . .

   In addition, it is believed that the member with less than forty years creditable service retiring at age sixty-two should have his retirement benefit computed with a reduction of three per cent instead of five per cent for each year that he retires prior to his sixty-fifth birthday.
6. There is considerable interest in early option privileges. There is sentiment that anyone with twenty years creditable service and fifty years of age should be permitted to select an early option. Under the present statute, any member may select an option when he reaches age sixty.
7. It is believed by some members that if a member could be out of service for ten consecutive years, instead of five consecutive years, before he is forced to forfeit his membership, there would be less of a problem of withdrawn contributions.
8. There is interest in the liberalization of disability benefits, especially for those members whose membership commenced after July 1, 1963.
9. It has been proposed that the period of membership required for vesting be reduced.
10. Even though it is a type of insurance, there is sentiment for a death benefit equal to one year's salary.[1]

Hammack concluded that teacher retirement is one of the important aspects of school administration. He also found that the chief purposes of teacher retirement are:

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[1]*Ibid.*, pp. 89-91.

1. to attract and to hold in service well-qualified teachers
2. to remove the aged and infirm teachers from the classroom
3. to improve teacher morale
4. to affect the attitude of the community toward teachers and education
5. to improve the professional status of the teacher.[1]

Other conclusions were:

1. The Retirement System has legal foundation and constitutional protection for the funds of the Retirement System.
2. The Retirement System is an integral part of the state school system.
3. The Retirement System is serving the teachers and general employees of the State--thereby serving the State.
4. The Retirement System has proved to be a dynamic system.
5. The Retirement System has shown progress in keeping with the indicated trends of teacher retirement throughout the nation.
6. It is reasonable to assume that the Retirement System is actuarially sound.[2]

The Miller Study - 1967

Miller's[3] study analyzed and compared the fringe benefits provided teachers in the State of Colorado with those of salaried employees of selected businesses, industries, and state and federal government in the State of Colorado. All school districts in the State of Colorado, all State and Federal Civil Service employees except those specifically excluded by law or regulation, and salaried employees of

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[1]*Ibid.*, pp. 272-73. [2]*Ibid.*, pp. 274-76.

[3]Miller, "Teachers, Business, Industrial, and Civil Service Employees in Colorado," p. 1.

selected businesses and industries within the State of Colorado were involved in Miller's study.[1] The businesses and industries selected were representative of the following categories of corporations as set forth in the Fortune Directory: manufacturing, banking and finance, insurance, utilities, retailing, petroleum and chemical, and transportation.[2]

Miller used a questionnaire consisting of questions that represented the following areas of fringe benefits: (1) insurance, (2) medical services, (3) leaves of absence, (4) veterans' benefits, (5) vacations and holidays, (6) expenses, (7) tuition refund, (8) retirement, and (9) miscellaneous. The miscellaneous area requested information about the respondents' opinions regarding the future efforts of salary and welfare committees directing their efforts toward the inclusion of various fringe benefits in the total compensation package, and about the use of fringe benefits as a recruitment and retention incentive.[3] The following questions were included in Miller's questionnaire:

1. How do fringe benefits provided to teachers in the State of Colorado compare with those of salaried employees of business, industry, and government?
2. Are fringe benefits used as a recruitment and retention incentive? If so, to what extent?
3. How do the contributory practices of school districts compare with those of business, industry, and government in benefits requiring payments?
4. What are the legal aspects of fringe benefits?[4]

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[1] Ibid., p. 45. [2] Ibid.

[3] Ibid., p. 20. [4] Ibid., p. 96.

The area of Miller's study that pertains specifically to this research study is the retirement plan for educators. As a result of the data collected, Miller reported the following findings pertinent to the retirement plan for educators:

> Education.--All teachers in the public schools of the State of Colorado with the exception of District Number One, the City and County of Denver are members of the Public Employees' Retirement Association.
>
> The P.E.R.A. is a joint-contributory retirement plan, operating on an actuarial reserve basis. Contributions of 6 per cent of salary are made by both employee and employer. The employer's payments go into the retirement annuity reserve fund to be used only for the payment of annuities to those members who stay in service long enough to retire for superannuation, disability, or for payment of survivors' benefits in case of death before retirement. A person who leaves service before being eligible for retirement may withdraw his contributions without interest. Employers' matching payments are not refundable when the member leaves service, but may only be used toward the payment of annuities. Members leaving the service before retirement but having five years or more P.E.R.A. coverage are entitled to leave their retirement deposits in the system until age sixty-five and receive a deferred annuity at that time.
>
> Retirement benefits are computed on the basis of an average of the highest five consecutive years within the last ten years of service immediately preceding retirement. A full annuity may be acquired after twenty or more years of covered service at age sixty or older, or at age fifty-five with thirty-five years of covered service (thirty years for state and municipal employees), or at any age with thirty-five years of service for state employees. The full annuity is an amount equal to 50 per cent of final average salary.
>
> Fractional annuities are available for employees with less than twenty years of service. A minimum of at least five years covered service is required to establish any annuity under P.E.R.A. To qualify for a retirement benefit with the minimum service (five to twenty years), a member must be sixty years of age or older. The formula is 2½ per cent of final average salary multiplied by number of years of service, not to exceed twenty years, and without further payment into the retirement plan in the meantime.
>
> An employee with at least fifteen years of consecutive service as a member of the P.E.R.A. who becomes permanently

disabled from carrying on his regular employment duties may be eligible for a disability annuity, provided he is under age sixty-five. Service incurred disability annuities are also available to P.E.R.A. members of five years who become permanently disabled from injuries received while on the job. Payments derived from disability benefits do not terminate after a given number of years, but are paid throughout the period of disability, or for life, depending upon the option chosen by the annuitant.

In case of the death of a member who is eligible for retirement, the law provides for an annuity payable according to specifications if the deceased member leaves a widow. In the case of a female member who leaves a husband who is permanently disabled and dependent upon said member for at least 50 per cent of his support, the same benefit is available.

In case of death prior to eligibility for retirement the law provides that at least three years of service must be rendered immediately preceding death to qualify for survivors benefits, except that these benefits become payable immediately without regard to length of service in case of service incurred death. In case of death before being eligible for retirement and when no survivor's benefits are payable, cash refund of the account is made in a lump sum to the beneficiary.

Retiring members of the P.E.R.A may elect to receive retirement annuities in any one of four optional forms of payment.

The Denver Public School Employees' Pension and Benefit Association provides almost identical coverage for the teachers of School District One.

Four districts maintain a local retirement plan in addition to P.E.R.A. to assist those teachers unable to receive full benefits under P.E.R.A.

Eight-seven (59.5 per cent) of the participating districts made tax sheltered annuities available to their teachers through payroll deductions as a means of supplementing their retirement income.[1]

Miller concluded that (1) the school districts of Colorado are generally far behind other employer groups in providing fringe benefit programs; (2) there is no directed effort being made toward the use of fringe benefits as recruitment and retention incentives as indicated by the responses

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[1]*Ibid*. pp. 67-69.

received from school administrators; (3) the employees of business, industry, and government are not only exposed to more fringe benefit coverage than are the teachers of Colorado, but they are also subsidized to a greater extent; and (4) no legal barriers appear to be for the school districts of Colorado to provide a program of the fringe benefits under study.[1]

The Anderson Study - 1968

Anderson[2] attempted to note the present status of supperannuation benefits from the Minnesota State Teacher retirement Program when compared with similar programs in other states, to determine the significance of relationship between contributions and benefits in the state teacher retirement programs, to examine multivariate relationships among selected economic and staffing variables and superannuation benefits from state teacher retirement programs, and to determine the amount of variance in superannuation benefits which is associated with the selected economic and staffing variables.

For statistical treatment of the data, Anderson included rank ordering, rank order correlation, and multiple regression.[3] The comparative position of the Minnesota program in relation to programs of other states was determined

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[1]Ibid., pp. 102-103.

[2]Gayle H. Anderson, "The Effects of Selected Economic and Staffing Factors on the Status of the Minnesota State Teachers Retirement Program" (unpublished Ph.D. dissertation, University of Minnesota, 1968), pp. 5-6.

[3]Ibid., p. 109.

by rank analysis.[1] Anderson employed multiple regression to evaluate the significance of relationships between economic and staffing variables and benefits from the state retirement programs.[2]

Anderson ranked the teacher retirement programs on the basis of superannuation benefits and on the basis of teachers' contributions. Anderson's findings were summarized as follows:

> . . . The comparisons revealed that the Minnesota basic program ranked above the median of states in the study in one instance and was below the median in three instances. The Minnesota coordinated program ranked below the median of all states in the four cases tested and was the lowest ranking program in one specific instance.
>
> Ranks were determined for each state on the basis of benefits and also for contributions. Spearman rank order correlations were calculated to evaluate the relationship between these values. T-tests were computed to determine the significance of the correlations. In all four cases, the relationships between benefits and contributions were significant below the .05 level and in three cases, these were below the .01 level.
>
> Eight economic variables were examined for possible significance of relationship to superannuation benefits. The multiple regression treatment yielded b-weights for each variable to determine direction and magnitude of relationship to benefits. F-tests were calculated to determine the significance of each relationship. Teacher contributions were found to be significantly related to benefits in all examined cases. Three economic variables (per cent of the total population enrolled in public schools, per capita income, and average teacher salary) were each found to be significant in two of four cases. One such variable (population density) was significant in one of four cases.
>
> A similar analysis of the relationship between selected staffing variables and superannuation benefits

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[1] *Ibid.*, pp. 109-10. *Ibid.*, p. 110.

was also performed. The per cent of teachers who are men was found to be significant in three of four cases. The number of pupils per teacher was significant in two of four cases. No significant relationship was found to exist between membership in teacher organizations and retirement benefits.

The capability of the selected economic and staffing factors as predictors of future trends is dependent upon b-weights, levels of significance, and the iteration sequence. However, the iteration sequence revealed that less than half the variance in superannuation benefits results from these variables in two cases and just over half the variance is accounted for in two other cases. This low level precludes extensive use of the sleected variables as predictors of future changes in retirement benefits.[1]

The Cheatham Study - 1969

Cheatham[2] attempted to describe events leading to the adoption and institution of the Teachers' Retirement System of Georgia, to analyze the retirement law, to present investment and actuarial aspects of the system, to present growth factors of the system over its lifetime, to compare key features of the Georgia retirement law with those of retirement laws of states adjoining Georgia, and to make a limited evaluation of the Georgia system.

Cheatham's project was an effort to combine in a single source information that would enable Georgia educators and other interested persons to have a better understanding and appreciation of the teachers' retirement system and to

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[1] *Ibid.*, pp. 167-69.

[2] Clarence Donald Cheatham, "The Teachers' Retirement System of Georgia" (unpublished Ed.D. dissertation, University of Georgia, 1969), p. 1.

have a basis for evaluating the retirement system, with a view toward working for changes which would improve the system.[1]

Cheatham found that the Georgia system had made it possible for more and more personnel, including salaried employees in state education, to become members; had adopted a fixed-benefit formula for computing retirement pay; had liberalized the law with respect to creditable service; and had liberalized investment policies.[2]

The conclusions drawn by Cheatham were as follows:

> (1) The Teachers' Retirement System of Georgia has been a progressive system. Attesting to this claim are the numerous liberalizing amendments to the retirement law and other revisionary action over the years. Conformity with liberalizing national trends is one indication of the progressiveness of a retirement system, and Georgia's system has been in basic conformity with the principal national trends.
> (2) The benefits level provided under the current law entitling a member at least 63 with 40 years service to receive 70 per cent of his best five-years-average salary is adequate, especially in view of recent legislation which provides for maintaining the purchasing power of the retirement allowance by increasing the allowance to make up for any losses in real value due to inflation. When Social Security benefits are added to the teachers' retirement benefit, as is the case for most Georgia teachers, it seems justifiable to characterize total retirement benefits for Georgia teachers as "liberal." However, in view of the probably economic infeasibility of all local employers' assuming responsibility for the employer's Social Security contribution, consideration should be given to the state's assuming the responsibility of paying the employer's share for all state teachers, to remove inequities in respect to total retirement incomes.

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[1] *Ibid.*, p. 2.

[2] *Ibid.*, p. 132.

(3) The legal protection given the system is adequate.
(4) Investment and actuarial policies are sound, and the rate of yield on investments, according to the latest comparative figures and financial studies, is above the majority of teacher retirement systems in the country. No loss of any appreciable size has ever been suffered by the system in respect to investments.
(5) The over-all financial condition of the system is sound, and the growth in assets and investment earnings over the years has been healthy.
(6) There is little likelihood that the state will do away with the retirement system or change it in any significant degree unfavorable to members. The state legislature's attitude in respect to liberalization of the law and public opinion regarding education can be cited as sources of optimism for teachers regarding the future of their retirement system.
(7) Information adequate for keeping teachers abreast of developments respecting teacher retirement and for forming opinions on the soundness of the retirement system is presented in convenient form in the *Georgia Education Journal*.[1]

Summary

Chapter II reviewed the literature relevant to the present study. Although the available literature concerning retirement systems was extensive, no research was found that dealt specifically with the Teachers' Retirement System of Oklahoma.

The review of the literature was classified into three major categories: (1) the evolution of teachers' retirement systems, (2) published literature, and (3) research directly related to the present study.

The evolution of teachers' retirement systems began with the mutual-aid societies late in the nineteenth century. By 1917, twenty-two state teachers' retirement systems were

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[1] *Ibid.*, pp. 132-34.

in operation; today all fifty states have teachers' retirement systems.

The published literature was classified into three sections: (1) characteristics of public retirement systems, (2) social security as a base, and (3) funding of public retirement plans.

The research directly related to the present study reviewed five unpublished doctoral dissertations concerning state retirement systems to which teachers belong.

CHAPTER III

ANALYSIS AND INTERPRETATION OF DATA

This chapter of the report contains the analysis and the interpretation of data from (1) the 310 opinionnaires that were mailed to active and retired members of The Teachers' Retirement System of Oklahoma and (2) the eight questionnaires mailed to the directors of the retirement systems in the Mountain Plains Region.

Two hundred opinionnaires were mailed to active members who were selected by the method of stratified random sampling. Of the two hundred opinionnaires mailed to active members, 99 were returned for a total of 50 per cent. One hundred and ten opinionnaires were mailed to retired members who were selected at random. Of the one hundred and ten opinionnaires mailed to retired members, 65 were returned for a total of 59 per cent. Of the three hundred and ten opinionnaires mailed to active and retired members, one hundred and sixty-four opinionnaires were returned for a total of 53 per cent.

The opinionnaire contained 24 items concerning retirement benefits, funding, vesting, retirement age, withdrawals, and retirement options provided by the Teachers' Retirement System of Oklahoma. (Appendix A, Exhibit 1.)

Opinions of Active and Retired Members of The Teachers' Retirement System of Oklahoma

The results from the opinionnaires sent to active and retired members of The Teachers' Retirement System of Oklahoma were tabulated and the findings are presented in this section of the report.

Retirement Benefits

The opinionnaire contained six items pertaining to retirement benefits. The items are presented in the same order as they appeared on the opinionnaire.

> Item Number 1.--A classified member who has retired or who retired at 62 years of age or older or whose retirement is because of disability shall receive a monthly retirement allowance for life which shall be a minimum of $6.50 multiplied by the years of creditable service or the percentage formula, whichever is greater.

Table 1 summarizes the responses to item number 1 as follows: Strongly Dissatisfied--12.8%; Mildly Dissatisfied--12.8%; Neutral--6.7%; Mildly Satisfied--32.31%; Strongly Satisfied--29.26%; and No Response--.06%. Sixty-six per cent of the respondents indicated satisfaction with item number 1.

> Item Number 2.--A nonclassified member who has retired or who retires at 62 years of age or older or whose retirement is because of disability shall receive a monthly retirement allowance for life which shall be a minimum of $5.50 multiplied by the years creditable service or the percentage formula, whichever is greater.

TABLE 1

RETIREMENT BENEFITS: CLASSIFIED MEMBERS
$6.50 RATE OR PERCENTAGE FORMULA
(Item Number 1)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	19	19.19	16	16.16	5	05.09	35	35.35	20	20.20	4	04.04	99
Retired with Social Security	2	03.77	5	09.43	3	05.66	16	30.18	23	43.39	4	00.08	53
Retired without Social Security	0	--	0	--	3	25.00	2	16.66	5	41.66	2	16.66	12
Totals	21		21		11		53		48		10		164
Percentage of Totals		12.80		12.80		06.70		32.31		29.26		00.06	

The following responses to item number 2 are tabulated in Table 2: Strongly Dissatisfied--9.14%; Mildly Dissatisfied--11.58%; Neutral--15.24%; Mildly Satisfied--29.26%; Strongly Satisfied--16.46%; and No Response--18.29%. Forty-five per cent of the respondents indicated satisfaction with item number 2.

> Item Number 3.--Effective August 2, 1971, a classified or nonclassified member who will not receive a monthly retirement benefit greater under the percentage formula shall receive a monthly cost of living increase during the fiscal year 1971-72 in an amount of 2-1/2% multiplied by the minimum of $6.50 for classified and $5.50 for nonclassified members multiplied by the years of creditable service and an additional monthly cost of living increase in the same amount each fiscal year thereafter including 1975-76.

Table 3 summarizes the responses to item number 3 as follows: Strongly Dissatisfied--9.75%; Mildly Dissatisfied--7.31%; Neutral--13.41%; Mildly Satisfied--34.14%; Strongly Satisfied--26.82%; and No Response--8.53%. The majority (61 per cent) of all three classifications of respondents were satisfied.

> Item Number 4.--A member who has 30 or more years of teaching service but who has not attained the age of 62 at the time of retirement will receive the minimum monthly retirement allowance for life which is the actuarial equivalent of the amount he would have received if he had retired at age 62 with the same number of years of creditable service.

Table 4 summarizes the responses to item number 4 as follows: Strongly Dissatisfied--11.58; Mildly Dissatisfied--12.8%; Neutral--12.8%; Mildly Satisfied--28.04%; Strongly Satisfied--25%; and No Response--9.75%. The majority (53 per cent) of the respondents were satisfied.

TABLE 2

RETIREMENT BENEFITS: NONCLASSIFIED MEMBERS
$5.50 RATE OR PERCENTAGE FORMULA
(Item Number 2)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	13	13.13	16	16.16	15	15.15	31	31.31	10	10.10	14	14.14	99
Retired with Social Security	2	03.77	3	05.66	7	13.20	16	30.18	14	26.41	11	20.75	53
Retired without Social Security	0	--	0	--	3	25.00	1	08.33	3	25.00	5	41.66	12
Totals	15		19		25		48		27		30		164
Percentage of Total		09.14		11.58		15.24		29.26		16.46		18.29	

TABLE 3

RETIREMENT BENEFITS: COST OF LIVING
INCREASE PROVISION
(Item Number 3)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	13	13.13	10	10.10	17	17.17	36	36.36	19	19.19	4	04.04	99
Retired with Social Security	3	05.66	2	03.77	4	07.54	18	33.96	20	37.73	6	11.32	53
Retired without Social Security	0	--	0	--	1	08.33	2	16.66	5	41.66	4	33.33	12
Totals	16		12		22		56		44		14		164
Percentage of Total		09.75		07.31		13.41		34.14		26.82		08.53	

TABLE 4

RETIREMENT BENEFITS: AFTER 30 OR MORE
YEARS' SERVICE
(Item Number 4)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	15	15.15	15	15.15	8	08.08	31	31.31	27	27.27	3	03.03	99
Retired with Social Security	4	07.54	5	09.43	10	18.86	15	28.30	11	20.75	8	15.09	53
Retired without Social Security	0	--	1	08.33	3	25.00	0	--	3	25.00	5	41.66	12
Totals	19		21		21		46		41		16		164
Percentage of Total		11.58		12.80		12.80		28.04		25.00		09.75	

Item Number 5.--A member who becomes a contributing member after July 1, 1967, for a period of 10 years shall qualify for monthly retirement. The monthly retirement benefit will be computed at age of retirement and will be the actuarial equivalent of the retirement benefit to be paid for life if retirement occurs before age 62.

Table 5 summarizes the responses to item number 5 as follows: Strongly Dissatisfied--9.75%; Mildly Dissatisfied--11.58%; Neutral--20.12%; Mildly Satisfied--23.17%; Strongly Satisfied--18.29%; and No Response--17.07%. Forty-one per cent of the respondents indicated satisfaction; whereas 22 per cent of the respondents indicated dissatisfaction.

Item Number 6.--Any member of the classified personnel eligible for retirement who has taught in Oklahoma for at least 20 years and who retired before August 2, 1969, shall be paid not less than $125 per month.

The following responses to item number 6 are tabulated in Table 6: Strongly Dissatisfied--10.36%; Mildly Dissatisfied--10.36%; Neutral--10.97%; Mildly Satisfied--28.04%; Strongly Satisfied--31.7%; and No Response--8.53%. Sixty per cent of the respondents indicated satisfaction with item number 6.

The comments and the suggestions concerning retirement benefits that were registered by respondents are listed in the order of their frequency.

(1) All retired teachers should be paid the same rate times the number of years of creditable service--plus the additional cost-of-living increase regardless of their previous income. All should be paid on the same basis.

(2) The fact that a lot of the older retired teachers do not have social security should be recognized and adjustments made on this basis.

TABLE 5

RETIREMENT BENEFITS: RETIREMENT AFTER
10 YEARS' SERVICE
(Item Number 5)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	12	12.12	14	14.14	18	18.18	26	26.26	17	17.17	12	12.12	99
Retired with Social Security	4	07.54	5	09.43	12	22.64	12	22.64	10	18.86	10	18.86	53
Retired without Social Security	0	--	0	--	3	25.00	0	---	3	25.00	6	50.00	12
Totals	16		19		33		38		30		28		164
Percentage of Total		09.75		11.58		20.12		23.17		18.29		17.07	

TABLE 6

RETIREMENT BENEFITS: MINIMUM BENEFIT OF $125
(Item Number 6)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	15	15.15	12	12.12	10	10.10	28	28.28	26	26.26	8	08.08	99
Retired with Social Security	2	03.77	5	09.43	4	07.54	16	30.18	22	41.50	4	07.54	53
Retired without Social Security	0	--	0	--	4	33.33	2	16.66	4	33.33	2	16.66	12
Totals	17		17		18		46		52		14		164
Percentage of Total		10.36		10.36		10.97		28.04		31.70		08.53	

(3) the cost-of-living increase should truly reflect the rise in the cost of living.
(4) After 30 years of service, full retirement should be granted--regardless of age.
(5) After 20 years of service, full retirement should be granted--regardless of age.
(6) Benefits are inadequate and not competitive.
(7) College teachers should not have additional benefits.
(8) Ten years' service is not long enough to draw retirement.
(9) Benefits provided are very satisfactory.

In summary, more comments and suggestions were made by members who were dissatisfied with certain aspects of the retirement benefits than by those who were satisfied. However, the tabulations of responses indicated a higher degree of satisfaction than of dissatisfaction among the respondents. With the addition of the "mildly" and "strongly satisfied" responses, the range of satisfaction on all six items pertaining to retirement benefits was from 41 per cent on item number 6 to 61 per cent on item number 3.

Funding

The opinionnaire contained three items concerning funding. The items are presented in the same order as they appeared on the opinionnaire.

Item Number 7.--The amount contributed by each member to the retirement system is 5 per cent of the regular annual salary up to $7,800.
(a) Please indicate your degree of satisfaction concerning the percentage (5%).
(b) Please indicate your degree of satisfaction concerning the base ($7,800).

Table 7 summarizes the responses to item number 7a as follows: Strongly Dissatisfied--9.75%; Mildly Dissatisfied--

TABLE 7

FUNDING: MEMBER CONTRIBUTION RATE OF 5%
(Item Number 7a)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	11	11.11	11	11.11	14	14.14	37	37.37	23	23.23	3	03.03	99
Retired with Social Security	3	05.66	2	03.77	6	11.32	15	28.30	21	39.62	6	11.32	53
Retired without Social Security	2	16.66	0	--	3	25.00	2	16.66	3	25.00	2	16.66	12
Totals	16		13		23		54		47		11		164
Percentage of Total		09.75		07.92		14.02		32.09		28.65		06.70	

7.92%; Neutral--14.02%; Mildly Satisfied--32.09%; Strongly Satisfied--28.65%; and No Response--6.7%. Sixty-one per cent of the respondents indicated satisfaction with the percentage of 5%.

Table 8 summarizes the responses to item number 7b as follows: Strongly Dissatisfied--10.36%; Mildly Dissatisfied--12.19%; Neutral--15.85%; Mildly Satisfied--28.04%; Strongly Satisfied--23.78%; and No Response--9.75%. Fifty-two per cent of the respondents indicated satisfaction with the base of $7,800.

> Item Number 8.--Each local school district, or state college or university, or State Board of Education or State Board of Vocational Education, or other state agencies whose employees are members of the Teachers' Retirement System matches the contributions of members whose salaries are paid by Federal Funds.

Table 9 summarizes the responses to item number 8 as follows: Strongly Dissatisfied--9.75%; Mildly Dissatisfied--7.92%; Neutral--14.02%; Mildly Satisfied--18.9%; Strongly Satisfied--29.87%; and No Response--19.51%. Thirty-four per cent of the respondents registered "neutral" and "no response"; however, 49 per cent registered satisfaction.

> Item Number 9.--In 1957, the Oklahoma Legislature dedicated 78% of the natural and casinghead gas tax to the Oklahoma Teachers' Retirement System.

The following responses to item number 9 are tabulated in Table 10: Strongly Dissatisfied--7.92%; Mildly Dissatisfied--7.92%; Neutral--10.97%; Mildly Satisfied--26.82%; Strongly Satisfied--40.85%; and No Response--5.48%. The majority (68 per cent) of the respondents were satisfied.

TABLE 8

FUNDING: MEMBER CONTRIBUTION BASE OF $7,800
(Item Number 7b)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	14	14.14	13	13.13	17	17.17	32	32.32	17	17.17	6	06.06	99
Retired with Social Security	2	03.77	6	11.32	7	13.20	13	24.52	19	35.84	6	11.32	53
Retired without Social Security	1	08.33	1	08.33	2	16.66	1	08.33	3	25.00	4	33.33	12
Totals	17		20		26		46		39		16		164
Percentage of Total		10.36		12.19		15.85		28.04		23.78		09.75	

TABLE 9

FUNDING: CONTRIBUTIONS OF FEDERALLY PAID EMPLOYEES
MATCHED BY EMPLOYER
(Item Number 8)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	11	11.11	9	09.09	16	16.16	18	18.18	30	30.30	15	15.15	99
Retired with Social Security	5	09.43	4	07.54	4	07.54	12	22.64	17	32.07	11	20.75	53
Retired without Social Security	0	--	0	--	3	25.00	1	08.33	2	16.66	6	50.00	12
Totals	16		13		23		31		49		32		164
Percentage of Total		09.75		07.92		14.02		18.90		29.87		19.51	

TABLE 10

FUNDING: DEDICATED REVENUE OF 78% OF
NATURAL AND CASINGHEAD GAS TAX
(Item Number 9)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	9	09.09	8	08.08	13	13.13	28	28.28	37	37.37	4	04.04	99
Retired with Social Security	3	05.66	4	07.54	3	05.66	15	28.30	24	45.28	4	07.54	53
Retired without Social Security	1	08.33	1	08.33	2	16.66	1	08.33	6	50.00	1	08.33	12
Totals	13		13		18		44		67		9		164
Percentage of Totals		07.92		07.92		10.97		26.82		40.85		05.48	

Item Number 10.--In addition to the gax tax, subsequent appropriations by the Oklahoma Legislature constitutes the State of Oklahoma's contributions to the Oklahoma Teachers' Retirement System.

Table 11 summarizes the responses to item number 10 as follows: Strongly Dissatisfied--13.41%; Mildly Dissatisfied--17.07%; Neutral--9.75%; Mildly Satisfied--27.43%; Strongly Satisfied--22.56%; and No Response--9.75%. The majority (51 per cent) of the respondents were satisfied with item number 10.

The majority of comments and suggestions concerned the State of Oklahoma's contributions to the Retirement System. The respondents' comments are summarized in order of their frequency.

(1) The State should provide enough money on a regular, systematic basis to make the system sound in order that: (a) New taxes will not be needed to provide the active teachers' benefits in the future; (b) The State's part of funds would draw interest at the same time the members' contributions draw interest; and (c) Teachers would not have to fight for appropriations every year.

(2) The Legislature's appropriations are inadequate for good business.

(3) Teachers' contributions should be matched every month.

(4) More definite funding is needed because the gas tax may decrease.

(5) The State should support the Teachers' Retirement System of Oklahoma and stop the dual system (Social Security). Costs of the two systems--for State and members--are too high for benefits received.

(6) Federal money should match federally paid employees' contributions.

(7) Contributions should be on total salary--not $7,800 in order that those who receive a greater salary may receive more benefits.

(8) Membership should not be compulsory.

(9) Members should have the option to belong to either the State Retirement System or another system.

TABLE 11

FUNDING: APPROPRIATED REVENUE BY LEGISLATURE
(Item Number 10)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	19	19.19	17	17.17	11	11.11	29	29.29	15	15.15	8	08.08	99
Retired with Social Security	3	05.66	10	18.86	3	05.66	13	24.52	18	33.96	6	11.32	53
Retired without Social Security	0	--	1	08.33	2	16.66	3	25.00	4	33.33	2	16.66	12
Totals	22		28		16		45		37		16		164
Percentage of Total		13.41		17.07		09.75		27.43		22.56		09.75	

The tabulations of responses concerning funding indicated a higher degree of satisfaction than dissatisfaction. With the addition of the "mildly" and "strongly satisfied" responses, the range of satisfaction on the four items concerning funding was from 50 per cent on item number 10 to 68 per cent on item number 9.

Vesting Period

The opinionnaire contained one item concerning the vesting period.

> Item Number 11.--A member with 20 or more years of creditable service and whose accumulated contributions during such period have not been withdrawn shall be given an indefinite extension of membership beginning with the sixth year following his last contributing membership and shall become eligible to retire upon attaining the age 60.

Table 12 summarizes the responses to item number 11 as follows: Strongly Dissatisfied--5.48%; Mildly Dissatisfied--7.92%; Neutral--12.07%; Mildly Satisfied--28.04%; Strongly Satisfied--32.31%; and No Response--9.14%.

The comments and the suggestions concerning vesting that were registered by respondents are listed in the order of their frequency.

> (1) A member with twenty years' service should be allowed to receive benefits at any age.
> (2) Less service time should be required for vesting.
> (3) Twenty years are too few for vesting--twenty-five or thirty should be required.
> (4) Twenty years for vesting are satisfactory and fair.
> (5) A few members indicated they did not understand the term vesting. Therefore, those responses were either "neutral" or "no response."

TABLE 12

VESTING PERIOD: TWENTY YEARS
(Item Number 11)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	8	08.08	6	06.06	16	16.16	28	28.28	35	35.35	6	06.06	99
Retired with Social Security	1	01.88	7	13.20	9	16.98	16	30.18	15	28.30	5	09.43	53
Retired without Social Security	0	--	0	--	3	25.00	2	16.66	3	25.00	4	33.33	12
Totals	9		13		28		46		53		15		164
Percentage of Total		05.48		07.92		12.07		28.04		32.31		09.14	

In summary, 60 per cent of the respondents indicated satisfaction with the twenty-year vesting period.

Retirement Age

The opinionnaire contained three items concerning retirement age. The items are presented in the same order as they appeared on the opinionnaire.

> Item Number 12.--There is no compulsory retirement age under the Oklahoma Teachers' Retirement Act.

Table 13 summarizes the responses to item number 12 as follows: Strongly Dissatisfied--20.12%; Mildly Dissatisfied--18.9%; Neutral--11.58%; Mildly Satisfied--18.29%; Strongly Satisfied--23.17%; and No Response--7.92%. Forty-one per cent of the respondents indicated satisfaction with item number 12.

> Item Number 13.--Any member who has attained the age 60 or who has completed 30 or more years of teaching service in Oklahoma is eligible for retirement.
> (a) Please indicate your degree of satisfaction concerning the attainment of age 60.
> (b) Please indicate your degree of satisfaction concerning the completion of 30 or more years of teaching service in Oklahoma.

Table 14 summarizes the responses to item number 13a as follows: Strongly Dissatisfied--8.53%; Mildly Dissatisfied--10.97%; Neutral--7.92%; Mildly Satisfied--26.21%; Strongly Satisfied--43.29%; and No Response--3.04%. Sixty-nine per cent of the respondents indicated satisfaction concerning the attainment of age 60.

TABLE 13

RETIREMENT AGE: NO COMPULSORY RETIREMENT AGE
(Item Number 12)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	23	23.23	24	24.24	9	09.09	16	16.16	23	23.23	4	04.04	99
Retired with Social Security	8	15.09	7	13.20	8	15.09	12	22.64	11	20.75	7	13.20	53
Retired without Social Security	2	16.66	0	--	2	16.66	2	16.66	4	33.33	2	16.66	12
Totals	33		31		19		30		38		13		164
Percentage of Total		20.12		18.90		11.58		18.29		23.17		07.92	

TABLE 14

RETIREMENT AGE: ATTAINMENT OF AGE 60
(Item Number 13a)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	11	11.11	12	12.12	6	06.06	26	26.26	43	43.43	1	01.01	99
Retired with Social Security	3	05.66	6	11.32	4	07.54	16	30.18	22	41.50	2	03.77	53
Retired without Social Security	0	--	0	--	3	25.00	1	08.33	6	50.00	2	16.66	12
Totals	14		18		13		43		71		5		164
Percentage of Total		08.53		10.97		07.92		26.21		43.29		03.04	

The following responses to item number 13b are tabulated in Table 15: Strongly Dissatisfied--13.41%; Mildly Dissatisfied--10.36%; Neutral--11.58%; Mildly Satisfied--23.17%; Strongly Satisfied--34.75%; and No Response--6.7%. Fifty-eight per cent of the respondents registered satisfaction concerning the completion of 30 or more years of teaching service in Oklahoma.

> Item Number 14.--Any member who retires at an age earlier than 62 shall receive a retirement allowance which is reduced to the actuarial equivalent of the retirement allowance the member would have received at age 62.

Table 16 summarizes the responses to item number 14 as follows: Strongly Dissatisfied--17.07%; Mildly Dissatisfied--12.8%; Neutral--9.75%; Mildly Satisfied--24.39%; Strongly Satisfied--25%; and No Response--10.97%. Forty-nine per cent of the respondents registered satisfaction and 30 per cent of the respondents registered dissatisfaction concerning reduced benefits for retirement before age 62.

The respondents' comments concerning retirement age are summarized in the order of their frequency.

(1) A member with 30 years' service should receive full benefits at any age.
(2) Compulsory retirement should be required at age 65.
(3) Compulsory retirement should be required at age 60.
(4) Compulsory retirement should be required at age 70.
(5) Age 62 is a reasonable retirement age.
(6) A member should have the option to retire after 20 years of service with reduced benefits.
(7) Several respondents indicated that they believed retirement was compulsory at age 65.

TABLE 15

RETIREMENT AGE: COMPLETION OF
30 OR MORE YEARS
(Item Number 13b)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	18	18.18	13	13.13	11	11.11	23	23.23	32	32.32	2	02.02	99
Retired with Social Security	4	07.54	4	07.54	7	13.20	14	26.41	19	35.84	5	09.43	53
Retired without Social Security	0	--	0	--	1	08.33	1	08.33	6	50.00	4	33.33	12
Totals	22		17		19		38		57		11		164
Percentage of Total		13.41		10.36		11.58		23.17		34.75		06.70	

TABLE 16

RETIREMENT AGE: REDUCED BENEFITS
FOR RETIREMENT BEFORE AGE 62
(Item Number 14)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	24	24.24	15	15.15	7	07.07	25	25.25	20	20.20	8	08.08	99
Retired with Social Security	3	05.66	6	11.32	7	13.20	14	26.41	17	32.07	6	11.32	53
Retired without Social Security	1	08.33	0	--	2	16.66	1	8.33	4	33.33	4	33.33	12
Totals	28		21		16		40		41		18		164
Percentage of Total		17.07		12.80		09.75		24.39		25.00		10.97	

With the addition of the "mildly" and "strongly satisfied" responses, the range of satisfaction on the items concerning retirement age was from 41 per cent on item number 12 to 69 per cent on item number 13a.

Withdrawals

The opinionnaire contained four items pertaining to withdrawals. The items are presented in the same order as they appeared on the opinionnaire.

> Item Number 15.--After July 1, 1968, no further interest will be credited (posted) to the members' account.

The following responses to item number 15 are tabulated in Table 17: Strongly Dissatisfied--54.87%; Mildly Dissatisfied--10.97%; Neutral--7.92%; Mildly Satisfied--6.09%; Strongly Satisifed--6.7%; and No Response--13.41%. The majority (66 per cent) of the respondents were dissatisfied with item number 15.

> Item Number 16.--Interest will be paid on withdrawals at the rate of interest determined by the Board of Trustees in accordance with the following schedule:
> If termination occurs within 7 years from the date membership began, no interest shall be paid;
> With as many as 7 years but less than 16 years of membership, 50% of the interest shall be paid;
> With as many as 16 years but less than 21 years of membership, 60% of the interest shall be paid;
> With as many as 21 years but less than 26 years of membership, 75% of the interest shall be paid;
> With as many as 26 years of membership, 90% of the interest shall be paid.

The following responses to item number 16 are tabulated on Table 18: Strongly Dissatisfied--29.87%; Mildly

TABLE 17

WITHDRAWALS: AFTER JULY 1, 1968, NO INTEREST
POSTED TO MEMBER'S INDIVIDUAL ACCOUNT
(Item Number 15)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	70	70.70	11	11.11	5	05.05	4	04.04	3	03.03	6	06.06	99
Retired with Social Security	19	35.84	7	13.20	7	13.20	5	09.43	6	11.32	9	16.98	53
Retired without Social Security	1	08.33	0	--	1	08.33	1	08.33	2	16.66	7	58.33	12
Totals	90		18		13		10		11		22		164
Percentage of Total		54.87		10.97		07.92		06.09		06.70		13.41	

TABLE 18

WITHDRAWALS: INTEREST PAID ON WITHDRAWALS
(Item Number 16)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	42	42.42	19	19.19	7	07.07	14	14.14	11	11.11	6	06.06	99
Retired with Social Security	6	11.32	3	05.66	8	15.09	14	26.41	11	20.75	11	20.75	53
Retired without Social Security	1	08.33	0	--	1	08.33	2	16.66	4	33.33	4	33.33	12
Totals	49		22		16		30		26		21		164
Percentage of Total		29.87		13.41		09.75		18.29		15.85		12.80	

Dissatisfied--13.41%; Neutral--9.75%; Mildly Satisfied--18.29%; Strongly Satisfied--15.85%; and No Response--12.8%.

Although 34 per cent reported satisfaction with item number 16, forty-three per cent of the respondents reported dissatisfaction.

> Item Number 17.--At the death of the member before retirement, 100% of the interest will be restored and paid to the beneficiary. (Present rate is 4-1/2% compounded annually.)

Table 19 summarizes the responses to item number 17 as follows: Strongly Dissatisfied--8.53%; Mildly Dissatisfied--4.87%; Neutral--6.09%; Mildly Satisfied--17.07%; Strongly Satisfied--55.48%; and No Response--7.92%. Seventy-three per cent of the respondents indicated satisfaction with item number 17.

> Item Number 18.--Oklahoma Statutes provide that all monies to the credit of a member of the Teachers' Retirement System is exempt from levy and sale, garnishment, attachment or any other process whatsoever, and shall be unassignable.

The following responses to item number 18 are tabulated in Table 20: Strongly Dissatisfied--4.87%; Mildly Dissatisfied--3.04%; Neutral--7.31%; Mildly Satisfied--14.02%; Strongly Satisfied--63.41%; and No Response--7.31%.

The respondents' comments and suggestions concerning withdrawals are summarized in the order of their frequency.

> (1) All interest should be restored at the end of any period of service.
> (2) The 4-1/2% interest is too low--should be at least 5% or 6%.
> (3) All interest should be posted (credited) to the member's individual account.

TABLE 19

WITHDRAWALS: 100% INTEREST RESTORED
AND PAID TO BENEFICIARY
(Item Number 17)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	11	11.11	5	05.05	5	05.05	20	20.20	55	55.55	3	03.03	99
Retired with Social Security	3	05.66	3	05.66	4	07.54	7	13.20	31	58.49	5	09.43	53
Retired without Social Security	0	--	0	--	1	08.33	1	08.33	5	41.66	5	41.66	12
Totals	14		8		10		28		91		13		164
Percentage of Total		08.53		04.87		06.09		17.07		55.48		07.92	

TABLE 20

WITHDRAWALS: LEGAL PROTECTION OF
MEMBERS' CONTRIBUTIONS
(Item Number 18)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	6	06.06	3	03.03	9	09.09	18	18.18	60	60.60	3	03.03	99
Retired with Social Security	2	03.77	2	03.77	2	03.77	4	07.54	37	69.81	6	11.32	53
Retired without Social Security	0	--	0	--	1	08.33	1	08.33	7	58.33	3	25.00	12
Totals	8		5		12		23		104		12		164
Percentage of Total		04.87		03.04		07.31		14.02		63.41		07.31	

(4) How can we change system to get interest restored?

(5) Since membership is compulsory, it is unfair to receive a reduced rate of interest if a member withdraws.

(6) One hundred per cent of interest should be restored after 10 years service.

(7) One hundred per cent of interest should be restored after 26 years service.

(8) All monies donated to the retirement fund by any member should accumulate interest just as an investment does and should be reported to the depositor periodically.

(9) One hundred per cent interest restored and paid to the beneficiary is good.

In summary, a majority (66 per cent) of the respondents reported dissatisfaction with item number 15 which stated that no further interest would be credited to the individual's account. Forty-three per cent of the respondents were dissatisfied with item number 16 which stated the schedule of interest rates restored when a member withdraws.

Seventy-two per cent of the respondents were satisfied with item number 17 which stated that 100 per cent of interest was restored and paid to the beneficiary at the death of a member before retirement.

Seventy-seven per cent of the respondents were satisfied with item number 18 concerning the legal protection provided on members' contributions.

Retirement Options

The opinionnaire contained six items pertaining to retirement options. The items are presented in the same order as they appeared on the opinionnaire.

Item Number 19.--Maximum Retirement for Life: This plan provides the greatest possible monthly benefit with all payments ceasing at the death of the member. There is no provision for payments to a beneficiary or an estate under this plan.

Table 21 presents the responses to item number 19 as follows: Strongly Dissatisfied--25.6%; Mildly Dissatisfied--12.8%; Neutral--10.36%; Mildly Satisfied--12.8%; Strongly Satisfied--29.26%; and No Response--9.14%. Fifty-four per cent of the active members were dissatisfied; whereas nineteen per cent of the retired teachers were dissatisfied. Total responses indicated 39 per cent were dissatisfied; 19 per cent gave "no response" or "neutral"; 42 per cent were satisfied.

Item Number 20.--Option 1: Option 1 provides for the payment of a monthly benefit to the member for life. If the retired member should die before receiving in the annuity portion of his monthly payments an amount equal to his accumulated deposits at the date of retirement, the remaining unpaid balance will be paid in a lump sum to his beneficiary. There is a slight reduction in Option 1 monthly payment as compared with the Maximum Retirement for Life payment since the unused portion of the member's deposits together with any interest credited is being protected for the beneficiary. The beneficiary does not have to be a spouse or a dependent.

Table 22 lists the responses to item number 20 as follows: Strongly Dissatisfied--5.48%; Mildly Dissatisfied--3.65%; Neutral--12.18%; Mildly Satisfied--30.46%; Strongly Satisfied--37.78%; and No Response--10.35%. Sixty-eight per cent of the respondents registered satisfaction with Option 1.

Item Number 21.--Option 2: Option 2 plan of retirement is termed a "Joint and Last Survivor" benefit since it provides for the payment of a monthly benefit to the member for life, and at the death of

TABLE 21

RETIREMENT OPTIONS: MAXIMUM RETIREMENT FOR LIFE
(Item Number 19)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	36	36.36	17	17.17	10	10.10	15	15.15	15	15.15	6	06.06	99
Retired with Social Security	6	11.32	4	07.54	5	09.43	6	11.32	25	47.16	7	13.20	53
Retired without Social Security	0	--	0	--	2	16.66	0	--	8	66.66	2	16.66	12
Totals	42		21		17		21		48		15		164
Percentage of Total		25.60		12.80		10.36		12.80		29.26		09.14	

TABLE 22

RETIREMENT OPTIONS: OPTION 1
(Item Number 20)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	7	07.07	4	04.04	12	12.12	41	41.41	30	30.30	5	05.05	99
Retired with Social Security	2	03.77	2	03.77	4	07.54	9	16.98	28	52.83	8	15.09	53
Retired without Social Security	0	--	0	--	4	33.33	0	--	4	33.33	4	33.33	12
Totals	9		6		20		50		62		17		
Percentage of Total		05.48		03.65		12.18		30.46		37.78		10.35	

> the member the same amount will continue to his spouse who was designated at the time of his retirement. The member must designate his spouse as beneficiary; and if the spouse is living at the death of the member, he or she will continue to receive the same monthly payment for life.

The responses to item number 21 are tabulated in Table 23 as follows: Strongly Dissatisfied--8.53%; Mildly Dissatisfied--4.26%; Neutral--14.63%; Mildly Satisfied--25.6%; Strongly Satisfied--33.53%; and No Response--13.41%. Sixty per cent of the respondents indicated satisfaction with Option 2.

> Item Number 22.--Option 3: Option 3 is the same as Option 2 except it is a "Joint and One-Half Survivorship to the Spouse." The benefit to the spouse, if surviving at the member's death, will be only one-half of the benefit the member was receiving prior to his death and will continue until the death of the spouse. Should the spouse predecease the member, no substitution of a beneficiary can be made.

Table 24 presents the responses to item number 22 as follows: Strongly Dissatisfied--25%; Mildly Dissatisfied--14.63%; Neutral--19.51%; Mildly Satisfied--13.41%; Strongly Satisfied--10.36%; and No Response--17.07%. Forty-five per cent of the active members were dissatisfied; whereas 19 per cent of the retired members were dissatisfied. In summary, 40 per cent indicated dissatisfaction; 37 per cent indicated "no response" and "neutral"; and 23 per cent indicated satisfaction.

> Item Number 23.--Option 4: Option 4 provides a monthly payment to the member for life, but in the event he dies before he has received 120 payments, the payments shall be continued to the beneficiary until a total of 120 such payments in all shall have been made.

TABLE 23

RETIREMENT OPTIONS: OPTION 2
(Item Number 21)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	9	09.09	6	06.06	12	12.12	30	30.30	34	34.34	8	08.08	99
Retired with Social Security	5	09.43	1	01.88	9	16.98	11	20.75	18	33.96	9	16.98	53
Retired without Social Security	0	--	0	--	3	25.00	1	08.33	3	25.00	5	41.66	12
Totals	14		7		24		42		55		22		164
Percentage of Total		08.53		04.26		14.63		25.60		33.53		13.41	

TABLE 24

RETIREMENT OPTIONS: OPTION 3
(Item Number 22)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	37	37.37	18	18.18	15	15.15	13	13.13	6	06.06	10	10.10	99
Retired with Social Security	4	07.54	6	11.32	15	28.30	8	15.09	9	16.98	11	20.75	53
Retired without Social Security	0	--	0	--	2	16.66	1	08.33	2	16.66	7	58.33	12
Totals	41		24		32		22		17		28		164
Percentage of Totals		25.00		14.63		19.51		13.41		10.36		17.07	

> If the beneficiary should predecease the member or die before the total number of payments certain has been paid, those remaining unpaid shall be commuted (lump sum payment) and paid to the administrators, executors, or assigns of the last surviving payee.

The responses to item number 23 are tabulated in Table 25 as follows: Strongly Dissatisfied--8.53%; Mildly Dissatisfied--7.31%; Neutral--17.68%; Mildly Satisfied--29.26%; Strongly Satisfied--21.34%; and No Response--15.85%. Sixteen per cent of the respondents were dissatisfied; 34 per cent of the respondents registered "neutral" or "no response"; and 50 per cent of the respondents were satisfied.

> Item Number 24.--Option 5: If a member elects to receive his retirement allowance under Option 5, he may direct at the time of such election or subsequently, or his surviving spouse may elect upon the member's death, that any amount becoming due at the time of death shall be paid the spouse in the form of a monthly income payable for life, subject to the following conditions:
> (a) The beneficiary of the member must be a surviving spouse.
> (b) The amount of such payment be the actuarial equivalent of the amount becoming due at the member's death based on the sex of the spouse and the age the spouse had attained at the last birthday preceding the member's death.
> (c) The amount payable upon the member's death be sufficient to provide a monthly annuity of at least $25 per month.
> (d) The spouse shall not have the right to select settlement other than in monthly payments.
> (e) The unused portion of the money due at the death of the spouse will be paid in one sum to a surviving beneficiary or beneficiaries designated by the member or by the spouse.

The responses to item number 24 are tabulated in Table 26 as follows: Strongly Dissatisfied--9.14%; Mildly Dissatisfied--8.53%; Neutral--5.48%; Mildly Satisfied--9.75%; Strongly Satisfied--9.14%; No Response--57.92%.

TABLE 25

RETIREMENT OPTIONS: OPTION 4
(Item Number 23)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	9	09.09	10	10.10	15	15.15	34	34.34	19	19.19	12	12.12	99
Retired with Social Security	5	09.43	2	03.77	11	20.75	13	24.52	11	20.75	11	20.75	53
Retired without Social Security	0	--	0	--	3	25.00	1	08.33	5	41.66	3	25.00	12
Totals	14		12		29		48		35		26		164
Percentage of Total		08.53		07.31		17.68		29.26		21.34		15.85	

TABLE 26

RETIREMENT OPTIONS: OPTION 5
(Item Number 24)

Classification of Respondents	Strongly Dissatisfied		Mildly Dissatisfied		Neutral		Mildly Satisfied		Strongly Satisfied		No Response		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Active	13	13.13	11	11.11	5	05.05	8	08.08	10	10.10	52	52.52	99
Retired with Social Security	2	03.77	2	03.77	2	03.77	6	11.32	5	09.43	36	67.92	53
Retired without Social Security	0	--	1	08.33	2	16.66	2	16.66	0	--	7	58.33	12
Totals	15		14		9		16		15		95		164
Percentage of Total		09.14		08.53		05.48		09.75		09.14		57.92	

The respondents' comments concerning the retirement options are summarized in the order of their frequency:

1. The Maximum Retirement for Life benefit should allow a member to name a beneficiary.
2. The options favor married people.
3. The options are fair and good.
4. The options provide enough variety for members.

In addition to the above responses, many of the members indicated they did not understand the options. The range of satisfaction on all options was from 19 per cent on Option 5 to 68 per cent on Option 1.

Summary

The cumulative responses to each item are tabulated on Table 27. The percentage of satisfaction indicated by the one hundred and sixty-four respondents for all items are as follows: Strongly Dissatisfied--13.83%; Mildly Dissatisfied--10.15%; Neutral--12.03%; Mildly Satisfied--23.31%; Strongly Satisfied--28.26%; and No Response--12.41%.

Fifty-two per cent of the respondents indicated satisfaction to the total items; whereas, 25 per cent of the respondents indicated dissatisfaction to the total items.

The respondents indicated the highest degree of dissatisfaction to item number 15 which stated that after July 1, 1968, no further interest would be posted (credited) to the members' individual accounts. Sixty-six per cent of the respondents were dissatisfied with this item.

Sixty-two per cent of the active respondents were dissatisfied with item number 16 which stated the sliding scale of interest paid on withdrawals.

TABLE 27

OPINIONNAIRE RESPONSE SUMMARY

Item No.	Strongly Dissatisfied Number	Mildly Dissatisfied Number	Neutral Number	Mildly Satisfied Number	Strongly Satisfied Number	No Answer Number
1	21	21	11	53	48	10
2	15	19	25	48	27	30
3	16	12	22	56	44	14
4	19	21	21	46	41	16
5	16	19	33	38	30	28
6	17	17	18	46	52	14
7A	16	13	23	54	47	11
7B	17	20	26	46	39	16
8	16	13	23	31	49	32
9	13	13	18	44	67	9
10	22	28	16	45	37	16
11	9	13	28	46	53	15
12	33	31	19	30	38	13
13A	14	18	13	43	71	5
13B	22	17	19	38	57	11
14	28	21	16	40	41	18
15	90	18	13	10	11	22
16	49	22	16	30	26	21
17	14	8	10	28	91	13
18	8	5	12	23	104	12
19	42	21	17	21	48	15
20	9	6	20	50	62	17

TABLE 27--Continued

	Strongly Dissatisfied Number	Mildly Dissatisfied Number	Neutral Number	Mildly Satisfied Number	Strongly Satisfied Number	No Answer Number
21	14	7	24	42	55	22
22	41	24	32	22	17	28
23	14	12	29	48	35	26
24	15	14	9	16	15	95
Total	590	433	513	994	1205	529
Percentage of Total	13.83%	10.15%	12.03%	23.31%	28.26%	12.41%

In general, all three classifications of members--active, retired with social security, and retired without social security--were in agreement. However, 82 per cent of the active members were dissatisfied concerning no interest being credited to individual accounts; forty-nine per cent of the retired members with social security were dissatisfied; and eight per cent of the retired members without social security were dissatisfied.

The active members who responded also registered a higher percentage of dissatisfaction with the Maximum Retirement for Life benefit than did the retired members. (Item number 19.) Fifty-four per cent of the active members were dissatisfied; nineteen per cent of the retired members were dissatisfied.

Comparison of Retirement Systems

The Teachers' Retirement Systems of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming were compared. The comparative instrument used to gather the data was a questionnaire relative to specific aspects of retirement systems. A sample questionnaire is attached to this study as Exhibit 2.

The findings of this report which resulted from the analysis and interpretation of data are presented in this section of the report.

Membership

Teachers may be included in a state-wide retirement system; teachers may have a separate retirement system; or teachers may have an option to belong to another retirement system. Membership may be compulsory or voluntary. The number of members of a retirement system may indicate the degree to which the law of large numbers may apply according to actuarial principles.

Colorado.--The retirement system to which teachers belonged was a state-wide public employees' retirement system. Membership included all professional and nonprofessional employees of state-supported public schools, colleges, and universities, except the school district of Denver which had a separate public-school retirement plan and the University of Colorado which provided Social Security coverage and membership in the Teachers' Insurance and Annuity Association.

Membership was compulsory for all personnel employed one-half time or more.

In 1970, the Public Employees' Retirement System of Colorado had approximately 72,310 active members.

Kansas.--The retirement system to which teachers belonged in Kansas was a separate educational employees' retirement system. Membership included all professional and nonprofessional employees of state-supported public schools, vocational-technical schools, and junior and community colleges.

State college and university employees were members of the Teachers' Insurance and Annuity Association. The state contributed five per cent of each employee's salary to the optional plan.

In 1970, the Kansas School Retirement System had approximately 40,000 active members.

Nebraska.--The retirement system to which teachers belonged in Nebraska was a separate educational employees' retirement system. Membership included all professional and nonprofessional employees employed one-half time or more in state-supported public schools and colleges. Employees of state-supported universities were not included.

Membership was compulsory for professional employees and optional for nonprofessional employees.

In 1970, the Nebraska School Employees' Retirement System had approximately 17,461 active members.

New Mexico.--The retirement system to which teachers belonged was a separate educational employees' retirement system. Membership included all professional and nonprofessional employees of state-supported public schools, colleges, and universities.

Membership was compulsory for professional employees and optional for nonprofessional employees.

In 1970, the State of New Mexico Educational Board had approximately 21,000 active members.

Oklahoma.--The retirement system to which teachers belonged was a separate educational employees' retirement system. Membership included all professional and nonprofessional employees of state-supported public schools, colleges, and universities.

Membership was compulsory for professional employees and optional for nonprofessional employees. Provisional, appointive, elective, weekly, and hourly employees could be included.

In 1970, The Teachers' Retirement System of Oklahoma had approximately 38,500 active members.

South Dakota.--The retirement system to which teachers belonged was a separate educational employees' retirement system. Membership included all professional employees of public schools who were employees one-hundred or more days per school year.

Membership was compulsory for all professional employees who entered or re-entered teaching after July 1, 1968.

In 1970, the South Dakota State Teachers' Retirement System had approximately 10,000 active members.

Texas.--The retirement system to which teachers belonged was a separate educational employees' retirement system. Membership included all professional and nonprofessional employees of public schools, colleges, and universities. Membership included all part-time, temporary, probational, provisional appointive, elective, weekly, and hourly personnel.

Membership was compulsory except full-time faculty members of institutions of higher learning had the option of choosing another retirement plan in lieu of the state plan.

The state contributed six per cent of the employees' annual salary, up to $25,000, to the optional plan.

In 1970, the Teacher Retirement System of Texas had approximately 290,000 active members.

Wyoming.--The retirement system to which teachers belonged was a state-wide public employees' retirement system. Membership included all professional and nonprofessional employees of state-supported public schools, colleges, and universities. All part-time, temporary, probational, provisional appointive, elective, weekly, hourly, and seasonal personnel are included.

Membership was compulsory for all employees.

In 1970, the Wyoming Retirement System had appro-sixmately 18,500 active members.

In summary, all of the teachers' retirement systems examined with the exception of South Dakota met the criteria of inclusive coverage, large membership, wide occupational coverage, and compulsory membership developed by Hayman.[1] South Dakota was the only state that limited membership to professional employees of state-supported public schools, the administrative officers, and professional employees of the retirement system. All of the retirement systems examined required membership for new teachers in state-supported public schools as recommended by the N.E.A.[2]

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[1]Hayman, "Retirement in North Carolina," pp. 63-68.

[2]"The General Nature of a Retirement System," 225.

State Retirement Systems' Statistics

Table 28 presents the statistics concerning the state teachers' retirement systems compared in this study. The earliest establishment of a retirement system for teachers was that of Texas in 1937; the latest was that of South Dakota which was established in 1959. The state with the largest membership and number of retirants was Texas: the state with the smallest membership and number of retirants was South Dakota.

All of the retirement systems included in this study complied with Hayman's criterion of large membership.[1]

Creditable Service

In addition to service rendered within a state, creditable service may be granted for prior service, military service, out-of-state service, or overseas dependents' schools service. Table 29 presents a summary of creditable service in addition to state service for the states includes in this study.

Colorado.--All military service was creditable if the member was drafted or joined the reserves, if the member did not withdraw his contributions, and if the member returned to teaching within one year from date of discharge.

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[1]Hayman, "Retirement in North Carolina," p. 64.

TABLE 28

STATE RETIREMENT SYSTEMS' STATISTICS

States	Year Present System Was Established	Total Active Members in 1970	Total Retirants in 1970	Number of 1970 Retirants
Colorado	1943	42,310	2,911	405
Kansas	1941	40,000	6,712	904
Nebraska	1945	17,461	2,445	250
New Mexico	1937	25,000	3,400	NA[a]
Oklahoma	1943	38,500	7,688	969
South Dakota	1959	10,000	906	143
Texas	1937	290,000	33,000	3,750
Wyoming	1943	18,500	1,800	200

[a]Information Not Available

TABLE 29

CREDITABLE SERVICE IN ADDITION TO STATE SERVICE

States	Prior Service	Military Service	Out-of-State	Overseas Dependents Schools
Colorado	No	Yes No Limit	No	No
Kansas	Yes No Limit	Yes No Limit	No	No
Nebraska	Yes No Limit	Yes No Limit	Yes 10 years	No
New Mexico	Yes No Limit	Yes 5 years	Yes 5 years	No
Oklahoma	Yes No Limit	Yes 5 years	Yes 5 years	No
South Dakota	Yes No Limit	Yes 5 years	No	No
Texas	Yes No Limit	Yes No Limit	Yes 10 years	Yes 10 years
Wyoming	No	Yes No Limit	No	No

To receive the military credit, the member's contribution to the retirement plan was based on the amount his state salary would have been or the amount of his military salary--whichever was greater.

The number of creditable years required for retirement benefits depended upon the age of the member. Early retirement was allowed at age 55 with twenty years' creditable service. Five years were required at age 65.

Kansas.--All prior service and military service were creditable without cost to the member.

Ten years of creditable service were required to receive retirement benefits; however, members who reach the age of 65 could retire with fewer than ten years.

Nebraska.--All prior service and military service were creditable without cost to the member.

Ten years of out-of-state service were creditable, but not in excess of Nebraska service. To receive out-of-state credit, the member had to pay for the credit on the same basis he would have paid had the service been in Nebraska. Five years of creditable service were required to receive retirement benefits.

New Mexico.--All prior service was creditable. Five years of military service were creditable if the member terminated New Mexico school service to enter military service.

Five years out-of-state service were creditable provided the member purchased it.

Fifteen years' New Mexico service credit were required to receive retirement benefits at age 60. Ten years' New Mexico service credit were required to receive retirement benefits at age 65.

Oklahoma.--All prior service was creditable. Five years of military service were creditable if the member made contributions based on the first year's salary after military discharge.

Five years out-of-state service were creditable provided the member paid for the service at the rate of 5 per cent of his Oklahoma salary.

Ten years of creditable service were required to receive retirement benefits at age 62.

South Dakota.--All prior service was creditable for service rendered before July 1, 1959, at no cost to the member. Five years of military service were creditable if the member interrupted his South Dakota teaching service for military duty and returned to teaching within one year after discharge from military service. To receive the military credit, the member was required to contribute the amount he would have paid had he continued in the employ of the public school.

Fifteen years of creditable service were required to receive retirement benefits at age 65. Twenty years of creditable service were required to receive retirement benefits at age 55.

Texas.--All prior service was creditable. All military service was creditable under the following terms: (a) If the member had no school service prior to military, the limit was five years during World War II. The member's contribution for military service was based on the salary received for the first year of school service. (b) If the member had school service before military, all military service from December 7, 1941, through April 30, 1955, was creditable. The member's contribution was based on the last year's salary before military.

Ten years of out-of-state service were creditable. Out-of-state credit could not exceed one-half of creditable years' service in Texas. To receive credit for out-of-state service, the member was required to contribute 12 per cent of the annual salary rate for 1956-57 or first year of Texas service after 1956-57 after out-of-state service.

The ten years of service credit for teaching in overseas dependents' schools were allowable under the same conditions as out-of-state credit. Creditable service in overseas dependents' schools was granted to professional personnel only.

Ten years creditable service in Texas schools were required to receive retirement benefits at age 65.

Wyoming.--All military service was creditable at the regular contribution rate had the member remained in public service.

Four years of creditable service were required to receive retirement benefits at age 60.

In summary, all of the teachers' retirement systems examined granted prior service credit without cost to the member with the exception of Colorado.

New Mexico, Oklahoma, and South Dakota limited military service credit to five years. Colorado, Kansas, Nebraska, and Wyoming allowed full military credit at no cost to the member.

Five years out-of-state service were creditable by Oklahoma and New Mexico; ten years by Nebraska and Texas. The out-of-state creditable service had to be purchased by the member.

Texas allowed credit for teaching in overseas dependents' schools on the same basis as out-of-state service.

Credit for prior service, military service, and out-of-state service allowed by the states reviewed was granted to all classifications of members. Texas limited overseas dependents' schools credit to that of professional personnel.

All of the states reviewed except Colorado complied with Hayman's[1] criterion and the N.E.A.'s Fundamental Principle[2] of granting full credit for prior service at no cost to the member.

Nebraska, New Mexico, Oklahoma, and Texas complied with the N.E.A. principle of reciprocity of service.[3]

Withdrawals and Refunds

Tables 30 and 31 summarize the policies of the states included in this study concerning withdrawals after a member terminates service and repayment of withdrawals after a member returns to service.

Nebraska, New Mexico, and South Dakota kept the member's account open indefinitely. Kansas, Oklahoma, and Texas had a five-year limit; Colorado had a two-year limit.

All states refunded contributions after periods varying from actual processing time to six months.

Colorado and New Mexico did not refund any interest on member contributions. Wyoming refunded the actual amount of interest accrued to date; the rate had gone from

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[1]Hayman, "Retirement in North Carolina," p. 87.

[2]"The General Nature of a Retirement System," p. 229.

[3]*Ibid.*

TABLE 30

WITHDRAWALS AFTER BREAK IN SERVICE

States	Time Before Account is Closed	Contributions Refunded	Amount of Interest Paid on Refunds	Waiting Period to Withdraw
Colorado	2 Years	Yes	None	90 Days
Kansas	5 Years	Yes	4%	120 Days
Nebraska	Unlimited	Yes	Current Rate Paid on Accounts	6 Months
New Mexico	Unlimited	Yes	None	NA[a]
Oklahoma	5 Years	Yes	Sliding Scale	4 Months
South Dakota	Unlimited	Yes	4% after 5 Yrs. Service	None
Texas	5 Years	Yes	2-1/2%	90 Days
Wyoming	Unlimited	Yes	Amount Accrued To Date	None

[a]Information Not Available

TABLE 31

RETURNING TO ACTIVE SERVICE AFTER BREAK

States	Repayment of Withdrawals Allowed	Time Limit To Repay Withdrawals	Interest Charged On Repaid Withdrawals
Colorado	Yes	5 Years	4%
Kansas	No	--	--
Nebraska	Yes	3 Years	3%
New Mexico	Yes	NA[a]	NA[a]
Oklahoma	Yes	Before Retirement	5%
South Dakota	Yes	NA[a]	4%
Texas	Yes	5 Years	2-1/2%
Wyoming	Yes	None	Amount Which Would Have Accrued

[a]Information Not Available

2½ per cent to the present rate of 5½ per cent. Kansas and South Dakota refunded interest at 4 per cent. Texas refunded interest at the rate of 2½ per cent. Oklahoma refunded interest on a sliding scale after a member had been in service for seven years.

All states with the exception of Kansas allowed contributions to be repaid whenever a member returned to active service. Colorado allowed repayment of withdrawals within a five-year period after the member had returned to active service. Texas allowed a member to repay withdrawn contributions after the member had returned to active service for five years.

All states complied with the N.E.A. principle that teachers leaving service before regular retirement age should retain rights to the accumulated money in their accounts and the money should be returnable upon withdrawal from service.[1]

Disability Retirement Benefits

Table 32 indicates all states included in this study provided regular and in-service disability benefits. To qualify for regular disability benefits, Colorado, Nebraska, and Wyoming required fifteen years' service;

[1] "The General Nature of a Retirement System," P. 228.

TABLE 32

DISABILITY RETIREMENT

State	Regular Disability		In-Service Disability	
	Minimum Service To Qualify	Retirement Benefit	Minimum Service To Quality	Retirement Benefit
Colorado	15 Consecutive Years	50% Final Average Salary	5 Years	50% Final Average Salary
Kansas	None	42% Current Annual Salary	None	50% Last 5 Years' Annual Salary
Nebraska	15 Years[a]	Normal Retirement Allowance[b]	15 Years[a]	Normal Retirement Allowance[b]
New Mexico	10 Years	Normal Retirement Allowance	10 Years	Normal Retirement Allowance
Oklahoma	10 Years	Normal Retirement Allowance	10 Years	Normal Retirement Allowance[c]
South Dakota	10 Years	Normal Retirement Allowance	10 Years	Normal Retirement Allowance
Texas	None	Special[d]	None	Special[d]
Wyoming	15 Years	Special[e]	15 Years	Special[e]

[a]Two or more years service must be just prior to disability
[b]The formula type of annuity not available
[c]Same as normal retirement, except normal age of 62 is used
[d]Assumes salary average for best 10 years at $6,000--early age not a factor
[e]Same as regular retirement, except normal age of 50 years is used

New Mexico, Oklahoma, and South Dakota required ten years' service; Kansas and Texas had no required service time.

Nebraska's formula type annuity yielded a higher benefit than the normal retirement allowance, and the disabled member did not have the option to choose the formula type annuity. The disability benefits of Kansas were provided by group insurance at no cost to the members.

Kansas, Nebraska, New Mexico, and Oklahoma had provisions for temporary disability benefits. In Oklahoma, temporary disability was granted on a one-year basis.

None of the states surveyed had an age requirement for disability benefits.

All states included in the study complied with Hayman's[1] criteria of regular and in-service disability provisions as well as the N.E.A.[2] Fundamental Principle for disability benefits.

Social Security Coverage

As presented in Table 33, Colorado was the only state surveyed that did not provide social security coverage. In Kansas, Nebraska, South Dakota, and Wyoming, social security coverage was compulsory. In New Mexico, Oklahoma, Texas, and Wyoming, social security coverage was voluntary by local option, and the local school district paid the employer's share.

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[1] Hayman, "Retirement in North Carolina," pp. 79-82.

[2] "The General Nature of a Retirement System," 228.

TABLE 33

SOCIAL SECURITY COVERAGE

States	Provided	Year Began	Voluntary	Compulsory	% School Districts Covered
Colorado	No	--	--	--	--
Kansas	Yes	1955	--	Yes	100%
Nebraska	Yes	1955	--	Yes	100%
New Mexico	Yes	NA[a]	Yes	--	NA[a]
Oklahoma	Yes	1955	Yes	--	98%
South Dakota	Yes	1951	--	Yes	NA[a]
Texas	Yes	1956	Yes	--	10%
Wyoming	Yes	1951	--	Yes	100%

[a]Information Not Available

TABLE 34

VESTING

States	Vesting Period	Age Requirement to Receive Benefits	Computation of Allowance
Colorado	5 Years	65	Basic Formula
Kansas	10 Years	None	Basic Formula
Nebraska	5 Years	65	Basic Formula
New Mexico	15 Years	60	Basic Formula
Oklahoma	20 Years	None	Basic Formula
South Dakota	10 Years	None	Basic Formula
Texas	10 Years	65	Basic Formula
Wyoming	4 Years	50	Basic Formula

Vesting

In Table 34, the elements concerning the various vesting periods are presented. The range was from Wyoming's four-year service requirement to Oklahoma's twenty-year service requirement. Colorado and Nebraska had a five-year service requirement; Kansas, South Dakota, and Texas had a ten-year service requirement. New Mexico had a fifteen-year service requirement. All states surveyed used their basic benefit formula to compute the retirement benefits.

Hayman stated that vesting after a reasonable number of years is beneficial to both employee and employer. The employee has a greater sense of security if accumulated benefits are not lost with the loss of a job. The employer benefits because vesting tends to reduce employee turnover.[1]

Financing: Members' Contributions

All of the retirement systems to which teachers belong included in this study were financed jointly by member contributions and public revenue. The contribution rates were the same for professional and nonprofessional members. The board of trustees for the retirement systems set the rate of interest to be paid on members' contributions with the exception of Texas where it was set by law.

Only Oklahoma had provisions for additional contributions for supplemental benefits. Members in Oklahoma could

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[1]Hayman, "Retirement in North Carolina," pp. 91-94.

make additional contributions to the Teachers' Deposit Fund for tax-sheltered purposes. The interest was credited to individual accounts in the Teachers' Deposit Fund.

Colorado, Kansas, Nebraska, and New Mexico required members to contribute a specific percentage of total salary. Oklahoma, South Dakota, Texas, and Wyoming had the following salary limits: Oklahoma--$7,800; South Dakota--$6,000; Texas--$25,000, and Wyoming--$8,600. The ten-year trend for member contributions was up for Colorado, Kansas, Nebraska, Oklahoma, and Wyoming. All states surveyed posted interest to individual accounts with the exception of Oklahoma and Colorado. (Table 35.)

All the states surveyed complied with the N.E.A. principle of keeping individual accounts.[1]

Hayman stated that no arbitrary limit upon the amount of salary from which retirement deductions are made should be set because employees receiving different salaries have different standards of living and different opinions as to what constitutes an adequate retirement allowance.[2] Colorado, Kansas, Nebraska, and New Mexico complied with this criterion.

Financing: Employers' Contributions

Table 36 presents the data obtained from the states included in this study pertaining to the employers' contributions to the retirement systems.

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[1]"The General Nature of a Retirement System," p. 227.

[2]"Hayman, "Retirement in North Carolina," p. 77.

TABLE 35

FINANCING: MEMBERS' CONTRIBUTIONS

States	Members' Contributions: Rate	Members' Contributions: 10-Year Trend	Members' Contributions: Credited To Individual's Account	Total Member Contributions in 1970	Interest Credited To Individual's Account	
Colorado	7% Total Salary	Up	Yes	$19,416,000	No	--
Kansas	4% Total Salary	Up	Yes	4,221,722	Yes	4%
Nebraska	3½% Total Salary	Up[a]	Yes	4,259,203	Yes	5%
New Mexico	4% Total Salary	Level	Yes	NA[b]	Yes	Special[c]
Oklahoma	5% Salary to $7,800	Up	Yes	12,708,747	No	--
South Dakota	3½% Salary to $6,000	NA[b]	Yes	NA[b]	Yes	4%
Texas	6% Salary to $25,000	Level Percentage	Yes	58,000,000	Yes	2½%
Wyoming	5% Salary to $8,600	Up	Yes	NA[b]	Yes	5½%

[a] Prior to 1967, 5% of $2,400; after 1967, 3½% of total salary
[b] Information Not Available
[c] 75% of amount earned by the fund during preceding five years

TABLE 36

FINANCING: EMPLOYERS' CONTRIBUTIONS

States	Public Unit Contributing	Rate	10-Year Trend	Credited To Individual's Account	Total Employer Contributions in 1970
Colorado	Local School District	8½% of Payroll	Up	No	$23,448,000
Kansas	State	5.2% of Payroll	Fluc-tuated	No	5,488,239
Nebraska	Special[a]	Special[a]	Up	No	3,430,919[b]
New Mexico	School District	6½% of Payroll	Level	NA[c]	NA[c]
Oklahoma	State	Deter-mined[d]	Up	No	14,500,000
South Dakota	School District	3½% of Payroll	NA[c]	NA[c]	NA[c]
Texas	State	6% of Payroll	Level	No	58,000,000
Wyoming	Local School District & State	5% of Payroll	Up	No	NA[c]

[a]Rate contributed by local school district and amount contributed by State are determined by actuary
[b]School districts contributed $850,191 and State contributed $2,580,728
[c]Information Not Available
[d]Dedicated revenue and State appropriations

Colorado, New Mexico, and South Dakota reported that the local school districts made the employers' contributions. Wyoming and Nebraska reported that the local school district as well as the state contributed. Kansas, Oklahoma, and Texas reported that the states made the contributions.

Colorado, Kansas, and Oklahoma reported that the employers' contributions were made annually; Nebraska reported that the school districts made contributions quarterly and the state made the contribution annually. Texas and Wyoming reported that the contributions by the state and local school districts were made monthly.

Colorado, Nebraska, Oklahoma, and Wyoming reported that the ten-year trend for employer contributions to the retirement system was up. Kansas reported that the rate of employer contributions had fluctuated. New Mexico and Texas reported that the employer rate of contributions had remained level.

None of the states surveyed reported that employer contributions were posted to individual accounts.

South Dakota, Texas, and Wyoming reported the employer matched the members' contributions. Colorado, Kansas, and New Mexico--as employers--contributed more than the members. Nebraska reported that the rate contributed by the local school district and the amount contributed by the State were determined each year by the actuary.

Oklahoma did not have a set amount that was contributed by the State each year. The State's contribution was 78 per cent of the natural and casinghead gas tax and appropriations by the Legislature.

The N.E.A. principle number 4 indicates the amount contributed by the public should be stated by the organic act creating a retirement system, subject to adjustment in accordance with future actuarial investigation.[1]

The N.E.A. principle number 3 states that the sums deposited by the teachers and the public during the period of service should be approximately equal.[2]

Hayman states that because both public employees and the employing government share the benefits of a retirement program, it is reasonable that both should share the cost of the program.[3] Hayman also says the joint-contributory plan provides economy to employer and employee; provides opportunity for cooperation in developing adequate benefits; and provides opportunity for vigilance in preserving the financial soundness and stability of the retirement system.[4]

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[1] "The General Nature of a Retirement System," p. 227.

[2] Ibid.

[3] Hayman, "Retirement in North Carolina," p. 84.

[4] Ibid.

Funding

Colorado, Nebraska, New Mexico, Oklahoma, and Texas reported the total assets and total liabilities of the retirement systems to which teachers belonged. From these figures, the writer determined the per cent of funding for each retirement system. Table 37 presents a tabulation of the comparative figures.

Colorado reported the unfunded liability to active members was being funded over a forty-one year period, and the present value of benefits to retired members was 100 per cent funded.

Kansas reported that the system was 100 per cent funded with the exception of the past service liability which was being funded on a regular schedule as part of the employer's rate over a forty-year period.

Wyoming did not report the total assets or total liabilities, but reported the retirement system was 100 per cent funded.

South Dakota reported total assets of $22,000,000, but did not report total liabilities.

TABLE 37

COMPARISON OF FUNDING

State	Total Assets	Total Liabilities	Per Cent Funded
Colorado	$ 225,000,000	$ 333,000,000	68%
Kansas	NA[a]	NA[a]	NA[a]
Nebraska	51,550,000	107,000,000	49%
New Mexico	248,041,000	267,800,000	93%
Oklahoma	150,000,000	459,000,000	33%
South Dakota	22,000,000	NA[a]	NA[a]
Texas	1,750,000,000	3,960,000,000	44%
Wyoming	NA[a]	NA[a]	100%

[a]Information Not Available

Investments

Table 38 indicates the types of investments included in the portfolios of the retirement systems included in this study. The average yield on investments in 1970 is also tabulated. New Mexico reported a yield of 12.2 per cent which was the highest reported. South Dakota did not report the investments included in the portfolio, but reported that the yield on investments was 4.8 per cent which was the lowest yield reported.

Colorado reported that no restrictions were on the board of trustees' investment powers except that the maximum amount that could be invested in common or preferred stock was 30 per cent of the portfolio.

Kansas reported that the board of trustees must abide by the prudent man rule in making investments. The investments of members' contributions were limited by law to assets in which the legal reserve life insurance companies invest, and only 25 per cent of the retirement portfolio may be invested in common stocks.

New Mexico reported that the maximum amount that could be invested in corporate bonds was 75 per cent of the portfolio and the minimum amount in government or government insured securities was 25 per cent of the portfolio.

Oklahoma reported that the investments allowed in the portfolio were set by law. The law sets upper limits as

TABLE 38

INVESTMENTS AND YIELD ON INVESTMENTS

State	U. S. Bonds and Bills	Federally Guaranteed Securities	Common Stock	Preferred Stock	Real Estate Mortgages	Corporate Bonds	Corporate Securities	Telephone Bonds & Debentures	Public Utilities	Other	Yield on Investments
Colorado	1.7%	40.9%	5.9%	--	--	50.0%	--	--	--	1.4%	6.0%
Kansas	16.0%	--	30.0%	1%	--	--	30%	9.0%	11%	3.0%	5.0%
New Mexico	--	--	29.0%	--	2.9%	38.6%	--	--	--	3.6%	12.2%
Oklahoma	11.3%	--	3.8%	.2%	--	2.0%	--	29.6%	53%	--	5.4%
Texas	22.5%	--	21.0%	--	--	54.5%	--	--	--	2.0%	5.2%
Wyoming	23.5%	--	--	--	29.5%	--	47%	--	--	--	6.5%

follows: 25 per cent in common stocks not exceeding two per cent of the net retirement funds in any one corporation; twenty-five per cent in first mortgages which are guaranteed by the United States; fifty per cent in the highest three classifications of corporate bonds, debentures and preferred stocks; seventy-five per cent in general indebtedness of the United States Government; ninety per cent in savings accounts, under certificates of deposit, or in any other form in banks which are insured by the Federal Deposit Insurance Corporation.

Texas reported that retirement funds could be invested in U. S. Government or Agency securities and guaranteed loans, state and municipal bonds, corporate debt obligations, and common stocks.

Wyoming reported that investments were limited to governmental obligations of the United States and the State of Wyoming. The Constitution of Wyoming prohibited investments in stocks.

South Dakota and Nebraska did not report any restrictions on the investment of retirement funds.

Benefits

With the exception of Wyoming, all the retirement systems included in this study used the formula system to calculate retirement benefits.

Colorado.--The benefit formula was 2½ per cent of final average salary (average of the highest five consecutive years within the last 10 years of service) multiplied by the number of years of service not to exceed 20 years. Additionally for any service rendered after July 1, 1969, a benefit of 1 per cent of final average salary was given for service beyond 20 years up to 40 years which provided a maximum benefit of 70 per cent of final average salary.

Kansas.--The benefit formula was 1.25 per cent of final average salary (average of the highest five consecutive years within the last 10 years of service) multiplied by the number of years of service.

Nebraska.--The benefit formula was 1 per cent of final average salary multiplied by the number of years of service.

New Mexico.--The benefit formula was 1½ per cent times the last five years, or best consecutive five years average salary multiplied by the number of years of service.

Oklahoma.--The benefit formula was $6.50 ($5.50 for nonclassified members) times years of service or 1.25 per cent times the average of the highest five years' salary multiplied by the years of service, whichever is greater.

South Dakota.--The benefit formula was 1 per cent of final average salary (average of the highest five consecutive years within the last 10 years of service) up to a maximum of $4,800, times number of years of membership from July 1, 1959, through June 30, 1967, plus 0.002 per cent of final average salary times years of credited prior service, plus 1 per cent of final average salary to a maximum of $6,000 for service after July 1, 1967.

Texas.--The benefit formula was 1.75% times the average salary of the highest five years multiplied by the years of service.

Wyoming.--The retirement benefit consisted of an annuity based upon the member's contributions, plus a matching pension. The matching pension was 25 per cent of the annuity.

In 1970, Colorado had provisions for cost-of-living increases. Colorado provided a 1½ per cent cumulative increase for each year of retirement during which time the cost-of-living had risen. The calculations were made for each retirant on an individual basis.

Benefits Paid To Members Retiring in 1970.--The average monthly salary (annual divided by 12) was used for comparison. The monthly retirement benefit received by retirants in 1970 for members at age 65 with forty years of service was reported as follows: Colorado--$364; Nebraska--$114; New Mexico--$390; Oklahoma $325; and Texas--$462.

South Dakota had a maximum of $500 average monthly salary on which benefits were based. The maximum retirement benefit paid to retirants in 1970 with forty years' service and age 65 was $200.

Kansas and Wyoming did not report the retirement benefits paid in 1970.

<u>Other Benefits</u>.--Table 39 presents a tabulation of the median monthly benefit reported for all retirants and for 1970 retirants. Colorado reported the highest--Wyoming reported the lowest.

Kansas, South Dakota, Texas, and Wyoming reported a lump-sum death benefit was provided. Kansas reported the death benefit was 50 per cent of current annual salary up to age 61. The death benefit reduced to 40 per cent at age 61; 30 per cent at age 63; 20 per cent at age 64; 10 per cent at age 65; and none after age 65.

<u>Options</u>

In addition to the maximum retirement benefit for life, the retirement systems reported other options were available.

Colorado, Kansas, South Dakota, Texas, Nebraska, and Oklahoma all had the option that would provide a monthly benefit for life to the retirant; and in the event that the retirant should die before receiving in the annuity portion an amount equal to his accumulated deposits and interest at the date of retirement, the balance would be paid to the beneficiary.

Kansas, Oklahoma, and Wyoming reported the "joint and last survivor" option. Wyoming and Kansas reported that the beneficiary did not have to be a spouse. Oklahoma reported the

TABLE 39

BENEFITS PROVIDED

States	Lump-Sum Death Benefit	Median Monthly Benefit For All Retirants	Median Monthly Benefit For All 1970 Retirants
Colorado	No	$158.65	$205.49
Kansas	Yes	80.00	104.00
Nebraska	No	53.33[a]	63.09[a]
New Mexico	No	NA[b]	NA[b]
Oklahoma	No	178.77	180.00
South Dakota	$1,000[c]	32.22[a]	42.28[a]
Texas	Yes (Annual Salary)	207.00	240.00
Wyoming	Yes[d]	55.00	60.00

[a]Average
[b]Information Not Available
[c]Paid only if member's contributions plus interest do not exceed $1,000
[d]Matching contributions and interest

beneficiary must be a spouse.

Kansas, Colorado, Texas, Wyoming, and Oklahoma reported the "joint and one-half survivor" option. Oklahoma's option stated the beneficiary had to be a spouse.

Kansas, Colorado, Nebraska, Texas, Wyoming and Oklahoma reported the "life or 10-year certain" option. In the event the retirant died before he had received 120 payments, the payments were continued to the beneficiary until a total of 120 such payments were made. Colorado and Nebraska reported "life or 5-year certain" option. The beneficiary could be any designated person.

South Dakota reported a dependent of a retirant could receive one-half of the reduced annuity in the event the retirant died. The dependent had to receive at least one-half of his support from the retirant.

Summary

All of the teachers' retirement systems examined with the exception of South Dakota met the criteria of inclusive coverage, large membership, wide occupational coverage, and compulsory membership. South Dakota limited membership to professional employees of state-supported public schools, administrative officers, and professional employees of the retirement system.

All of the retirement systems reviewed in this study except Colorado complied with the criterion of granting full credit for prior service at no cost to the member. Nebraska, New Mexico, Oklahoma, and Texas complied with the principle of reciprocity of service.

All of the retirement systems examined allowed members leaving service before regular retirement age to retain rights to the accumulated money in their accounts and to have the money returned upon withdrawal from service. Colorado and New Mexico did not pay any interest on refunds. All of the retirement systems kept individual accounts for each member.

All of the teacher-retirement systems included in this study provided social security coverage with the exception of Colorado. Social security coverage was compulsory in Kansas, Nebraska, South Dakota, and Wyoming; social security coverage was voluntary in New Mexico, Oklahoma, and Texas.

All of the retirement systems surveyed in this study were financed jointly by member contributions and public revenue. Members contributed a percentage of total salary in Colorado, Kansas, Nebraska, and New Mexico. Members in Oklahoma, South Dakota, Texas, and Wyoming contributed a percentage of salary not to exceed a set maximum. Six states reported the public revenue contributed was a percentage of the total payroll.

With the exception of Wyoming, all of the retirement systems included in this study allowed a certain percentage of the portfolio to be invested in corporate stocks.

The yield on investments ranged from Kansas' 5 per cent to New Mexico's 12.2 per cent. The percentage of funding of retirement systems ranged from 33 per cent for Oklahoma to 100 per cent for Wyoming.

All of the retirement systems included in this study allowed members to acquire vested rights. The number of years required for vesting ranged from Wyoming's four-year service requirement to Oklahoma's twenty-year service requirement.

Regular and in-service disability benefits were provided by all of the retirement systems included in this study. The disability retirement benefits granted ranged from 42 per cent of the member's current annual salary to the normal retirement allowance.

With the exception of Wyoming, all of the retirement systems included in this study used the formula system to calculate retirement benefits. Wyoming's retirement benefit consisted of an annuity based upon the member's contributions, plus a matching pension of 25 per cent of the annuity.

In addition to the maximum retirement benefit for life, the retirement systems reported other options were available. Kansas, Oklahoma, and Wyoming reported the "joint and last survivor" option. Kansas, Colorado, Texas, Wyoming, and Oklahoma reported the "joint and one-half survivor" option. Kansas, Colorado, Nebraska, Texas, Wyoming, and Oklahoma reported the "life or 10-year certain" option. Colorado and Nebraska reported the "life or 5-year certain" option.

CHAPTER IV

SUMMARY AND RECOMMENDATIONS

Summary

Purpose

The primary purpose of this study was to ascertain the nature of the Teachers' Retirement Systems in the Mountain Plains Region--Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. A questionnaire was used to determine the similarities and differences that exist among the Teachers' Retirement Systems of Oklahoma and the Teachers' Retirement Systems of the Mountain Plains States.

This study also attempted to ascertain the degree to which the members of the Teachers' Retirement System of Oklahoma accept the present plan. An opinionnaire was used to determine the members' degree of satisfaction with the present plan.

Specifically, the investigation sought to answer the following questions: Is the current Oklahoma Teacher Retirement Law designed to meet the needs of its members? If not, what additions, deletions or other modifications are needed to make the retirement plan acceptable to: (1) members who are still teaching, (2) members who retired with Social Security benefits, and (3) members who retired without Social Security benefits?

Procedures

Based on a review of literature concerning teachers' retirement plans, other public employees' retirement plans, and unpublished doctoral research studies in addition to conferences with the Executive Secretary and the Actuary of the Teachers' Retirement System of Oklahoma, officials of the Oklahoma Education Association, and the Oklahoma Retired Teachers' Association, the opinionnaire and questionnaire were developed.

Two hundred names and addresses of active members. were selected by the method of stratified random sampling. One hundred and ten names and addresses of retired members were randomly selected.

The proportional stratification for the active members was based on the following subsamples: higher education--16%; administration--8%; secondary education--21%; junior high education--13%; elementary education--37%; and others--5%. The proportional stratification percentages were obtained from the statistical records of the State Department of Education.

By the use of a table of random numbers and the RCA Spectra 70-35E computer, the Director of the Statistical Services of the State Department of Education selected the names and addresses of the active members in the following subsamples: administration, secondary education, junior high education, elementary education, and others.

By the use of a table of random numbers, the researcher used the records in the office of the Teachers' Retirement System of Oklahoma and randomly selected the names and addresses of the active members in the higher education subsample.

By the use of a table of random numbers and the RCA Spectra 70-35E computer, the Director of the Statistical Services of the State Department of Education randomly selected one hundred and ten names and addresses of retired members.

The opinionnaires were mailed to 200 active members and 110 retired members who were randomly selected from the total population of the Teachers' Retirement System of Oklahoma. One hundred and sixty-four of the 310 opinionnaires were returned for a 53 per cent return.

Tabulations of the data obtained from each item on the opinionnaire were recorded and percentages of satisfaction and dissatisfaction were obtained.

The researcher sent letters to the Directors of the retirement systems in the Mountain Plains Region which explained the purpose of the study and requested their participation. All of the directors indicated willingness to participate with the exception of North Dakota.

The questionnaires were mailed to eight Directors of retirement systems in the Mountain Plains Region. Eight of the questionnaires were returned for a 100 per cent return. The data obtained from the responses were tabulated and summarized.

Results

Following the format of the study, the results were divided into two parts. One part concerns the members' responses and the other part concerns the responses of the Directors of the teachers' retirement systems in the Mountain Plains Region.

Opinionnaires

The cumulative responses to each item were tabulated. The percentage of satisfaction indicated by the one hundred and sixty-four respondents for all items were as follows: Strongly Dissatisfied--13.83%; Mildly Dissatisfied--10.15%; Neutral--12.03%; Mildly Satisfied--23.13%; Strongly Satisfied--28.26%; and No Response--12.41%.

With the addition of the "mildly" and "strongly Satisfied" responses, 52 per cent of the respondents indicated satisfaction to the total items; whereas with the addition of the "mildly" and "strongly dissatisfied" responses, 25 per cent of the respondents indicated dissatisfaction to the total items on the opinionnaire.

Sixty-six per cent of the respondents indicated dissatisfaction to item number 15 which stated that after July 1, 1968, no further interest would be posted (credited) to the members' individual accounts.

Eighty-two per cent of the active members were dissatisfied concerning no interest being credited to individual accounts; forty-nine per cent of the retired members with social security were dissatisfied; and eight per cent of the retired members without social security were dissatisfied.

Sixty-two per cent of the active respondents were dissatisfied with item number 16 which stated the sliding scale of interest paid on withdrawals; seventeen per cent of the retired members with social security were dissatisfied; and eight per cent of the retired members without social security were dissatisfied.

The active members who responded also registered a higher percentage of dissatisfaction with the Maximum Retirement for Life benefit than did the retired members. (Item number 19.) Fifty-four per cent of the active members were dissatisfied; nineteen per cent of the retired members were dissatisfied.

In general, all three classifications of respondents--active, retired with social security, and retired without social security--were in agreement.

Questionnaires

The Teachers' Retirement System of Oklahoma was compared with the other retirement systems to which teachers belong in the Mountain Plains Region. Oklahoma's ranking on each item on the questionnaire was tabulated for comparative purposes. Specifically the results were as follows:

(1) Oklahoma provided large membership and included nonprofessional members in the system.

(2) Oklahoma ranked favorably by granting creditable service for prior service, military service, and out-of-state service.

(3) Oklahoma was the only state in the comparison that granted interest on refunds on a sliding scale. Two states returned no interest. Five states refunded interest credited to the account of the member.

(4) Oklahoma had the most liberal policy on allowing a member to repay withdrawn contributions for credit. Oklahoma did not have an arbitrary time limit--just any time before retirement of the member.

(5) Oklahoma ranked favorably with the other states with the disability retirement allowance.

(6) Oklahoma provided social security coverage in addition to the regular retirement. All states in the study had social security coverage except Colorado.

(7) Oklahoma had the longest vesting period of any of the states included in the study. The range was from four years to Oklahoma's twenty years.

(8) Oklahoma ranked favorably on the member contribution scale.

(9) Oklahoma's employer's contribution to the retirement system was not a set amount or a set percentage of payroll; therefore, no comparison could be made in terms of money. However, the other state systems in the comparison had a set percentage or a set pattern as determined by an actuary.

(10) Oklahoma's percentage of funding (33 per cent) was the lowest of those in the study.

(11) Oklahoma's yield on investments (5.4%) was in line with the yield of Colorado, Kansas, Texas, and Wyoming. However, New Mexico reported a 12.2 per cent yield.

(12) Oklahoma's percentage formula compared favorably with the other states operating on the benefit formula. The percentages ranged from 1 per cent to 2½ per cent.

(13) Oklahoma's selection of benefit options compared favorably with those of the other states included in this study.

Recommendations

On the basis of the opinions registered by the members of the Teachers' Retirement System of Oklahoma and the responses of the Directors of the retirement systems in the Mountain Plains Region, the researcher makes the following recommendations:

(1) Consideration should be given to posting interest annually to a member's individual account and to restoring full interest on withdrawals.

(2) Consideration should be given to reducing the number of years of creditable service required for vesting.

(3) The State of Oklahoma should provide the necessary funds to make the Teachers' Retirement System actuarially sound by making regular, systematic contributions to the fund as recommended by the actuary.

(4) Members of the Teachers' Retirement System of Oklahoma should be better informed as to the nature of the Retirement System.

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APPENDIX A

DATA COLLECTION MATERIALS

EXHIBIT 1

TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA

Opinionnaire

PURPOSE OF STUDY:

To determine the basis for possible changes in the present Teachers' Retirement System of Oklahoma.

EXPLANATION OF BENEFIT FORMULAS:

In calculating the retirement benefits under the provisions of the Act, the Board of Trustees will use the formula which provides the greater benefit to the retiree.

FORMULA I

A. *Classified Personnel:* (In general, the certified personnel--teachers, administrators, etc.)
Multiply $6.50 by the member's years of creditable service

B. *Nonclassified Personnel:*
Multiply $5.50 by the member's years of creditable service

FORMULA II

For All Personnel:
Multiply the average of the member's five highest salary years by the percentage applicable (shown below at the year of retirement) and divide this result by twelve to show the *income per month value*. Then, multiply this product by the member's years of creditable service.

APPLICATION OF BENEFIT FORMULAS

Example: A member retired in 1970 with 40 years of experience and an average salary for five highest years of $6,500.

Formula I-A	$6.50 x 40 years = $260.00 monthly benefit
Formula I-B	$5.50 x 40 years = $220.00 monthly benefit
Formula II	$6,500 x 1.25% (1970-71 percentage) ÷ 12 months = $6.77
	$6.77 x 40 years = $270.80 monthly benefit

PERCENTAGES BY YEARS:

1970-71 - - - 1.25%	1972-73 - - - 1.35%	1974-75 - - - 1.45%
1971-72 - - - 1.30%	1973-74 - - - 1.40%	1975-76 - - - 1.50% (& thereafter)

INSTRUCTIONS: Please indicate your degree of satisfaction concerning each item by circling the appropriate number on the scale placed below each item. Space is provided for your comments and/or suggestions. YOUR RESPONSES WILL BE KEPT CONFIDENTIAL.

RETIREMENT BENEFITS

1. A classified member who has retired or who retires at 62 years of age or older or whose retirement is because of disability shall receive a monthly retirement allowance for life which shall be a minimum of $6.50 multiplied by the years of creditable service or the percentage formula, whichever is greater.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

2. A nonclassified member who has retired or who retires at 62 years of age or older or whose retirement is because of disability shall receive a monthly retirement allowance for life which shall be a minimum of $5.50 multiplied by the years of creditable service or the percentage formula, whichever is greater.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

3. Effective August 2, 1971, a classified or nonclassified member who will not receive a monthly retirement benefit greater under the percentage formula shall receive a monthly cost of living indrease during the fiscal year 1971-72 in an amount of 2½% multiplied by the minimum of $6.50 for classified and $5.50 for nonclassified members multiplied by the years of creditable service and an additional monthly cost of living increase in the same amount each fiscal year thereafter including 1975-76.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Statisfied	6	No Answer

4. A member who has 30 or more years of teaching service but who has not attained the age of 62 at the time of retirement will receive the minimum monthly retirement allowance for life which is the actuarial equivalent of the amount he would have received if he had retired at age 62 with the same number of years of creditable service.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

5. A member who becomes a contributing member after July 1, 1967, for a period of 10 years shall qualify for monthly retirement. The monthly retirement benefit will be computed at age of retirement and will be the actuarial equivalent of the retirement benefit to be paid for life if retirement occurs before age 62

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

6. Any member of the classified personnel eligible for retirement who has taught in Oklahoma schools for at least 20 years and who retired before August 2, 1969, shall be paid not less than $125 per month.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

Comments and/or suggestions please:

FUNDING

7. The amount contributed by each member to the retirement system is 5% of the regular annual salary up to $7,800.

(a) Please indicate your degree of satisfaction concerning the percentage (5%).

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

(b) Please indicate your degree of satisfaction concerning the base ($7,800).

6	No Answer	5	Strongly Satisfied	4	Midlly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

8. Each local school district, or state college or university, or State Board of Education or State Board of Vocational Education, or other state agencies whose employees are members of the Teachers' Retirement System matches the contributions of members whose salaries are paid by Federal funds.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

9. In 1957, the Oklahoma Legislature dedicated 78% of the natural and casinghead gas tax to the Oklahoma Teachers' Retirement System.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

10. In addition to the gas tax, subsequent appropriations by the Oklahoma Legislature constitutes the State of Oklahoma's contributions to the Oklahoma Teachers' Retirement System.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

Comments and/or suggestions please:

VESTING PERIOD

11. A member with 20 or more years of creditable service and whose accumulated contributions during such period have not been withdrawn shall be given an indefinite extension of membership beginning with the sixth year following his last contributing membership and shall become eligible to retire upon attaining the age 60.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

Comments and/or suggestions please:

RETIREMENT AGE

12. There is no compulsory retirement age under the Oklahoma Teachers' Retirement Act.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

13. Any member who has attained the age 60 or who has completed 30 or more years of teaching service in Oklahoma is eligible for retirement.
(a) Please indicate your degree of satisfaction concering the attainment of age 60.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

(b) Please indicate your degree of satisfaction concerning the completion of 30 or more years of teaching service in Oklahoma.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

14. Any member who retires at an age earlier than 62 shall receive a retirement allowance which is reduced to the actuarial equivalent of the retirement allowance the member would have received at age 62.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

Comments and/or suggestions please:

WITHDRAWALS

15. After July 1, 1968, no further interest will be credited (posted) to the member's account.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

16. Interest will be paid on withdrawals at the rate of interest determined by the Board of Trustees in accordance with the following schedule:

If termination occurs within 7 years from the date of membership began, no interest shall be paid;

With as many as 7 years but less than 16 years of membership, 50% of the interest shall be paid;

With as many as 16 years but less than 21 years of membership, 60% of the interest shall be paid;

With as many as 21 years but less than 26 years of membership, 75% of the interest shall be paid;

With as many as 26 years of membership, 90% of the interest shall be paid.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

17. At the death of the member before retirement, 100% of the interest will be restored and paid to the beneficiary. (Present rate is 4½%, compounded annually.)

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

18. Oklahoma Statutes provide that all monies to the credit of a member of the Teachers' Retirement System is exempt from levy and sale, garnishment, attachment or any other process whatsoever, and shall be unassignable.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

Comments and/or suggestions please:

RETIREMENT OPTIONS

A member may elect to receive his retirement payments under the Maximum Retirement Allowance for Life or one of five options, which are actuarial equivalents of the Maximum Retirement Allowance.

19. *MAXIMUM RETIREMENT FOR LIFE:* This plan provides the greatest possible monthly benefit with all payments ceasing at the death of the member. There is no provision for payments to a beneficiary or an estate under this plan.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

20. *OPTION 1:* Option 1 provides for the payment of a monthly benefit to the member for life. If the retired member should die before receiving in the annuity portion of his monthly payments an amount equal to his accumulated deposits at the date of retirement, the remaining unpaid balance will be paid in a lump sum to his beneficiary. There is a slight reduction in Option 1 monthly payment as compared with the Maximum Retirement for Life payment since the unused portion of the member's deposits together with any interest credited is being protected for the beneficiary. The beneficiary does not have to be a spouse or a dependent.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

21. *OPTION 2:* Option 2 plan of retirement is termed a "Joint and Last Survivor" benefit since it provides for the payment of a monthly benefit to the member for life, and at the death of the member the same amount will continue to his spouse who was designated at the time of his retirement. The member must designate his spouse as beneficiary; and if the spouse is living at the death of the member, he or she will continue to receive the same monthly payment for life.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

22. *OPTION 3:* Option 3 is the same as Option 2 except it is a "Joint and One-Half Survivorship to the Spouse." The benefit to the spouse, if surviving at the member's death, will be only one-half of the benefit the member was receiving prior to his death and will continue until the death of the spouse. Should the spouse predecease the member, no substitution of a beneficiary can be made.

6	No Answer	5	Strongly Satisfied	4	Mildly Satisfied	3	Neutral	2	Mildly Dissatisfied	1	Strongly Dissatisfied

23. *OPTION 4:* Option 4 provides a monthly payment to the member for life, but in the event he dies before he has received 120 payments, the payments shall be continued to the beneficiary until a total of 120 such payments in all shall have been made.

If the beneficiary should predecease the member or die before the total number of payments certain has been paid, those remaining unpaid shall be commuted (lump sum payment) and paid to the administrators, executors, or assigns of the last surviving payee.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

24. *OPTION 5:* If a member elects to receive his retirement allowance under Option 5, he may direct at the time of such election or subsequently, or his surviving spouse may elect upon the member's death, that any amount becoming due at the time of death shall be paid the spouse in the form of a monthly income payable for life, subject to the following conditions:

(a) The beneficiary of the member must be a surviving spouse.

(b) The amount of such payment be the actuarial equivalent of the amount becoming due at the member's death based on the sex of the spouse and the age the spouse had attained at the last birthday preceding the member's death.

(c) The amount payable upon the member's death be sufficient to provide a monthly annuity of at least $25 per month.

(d) The spouse shall not have the right to select settlement other than in monthly payments.

(e) The unused portion of the money due at the death of the spouse will be paid in one sum to a surviving beneficiary or beneficiaries designated by the member or by the spouse.

1	Strongly Dissatisfied	2	Mildly Dissatisfied	3	Neutral	4	Mildly Satisfied	5	Strongly Satisfied	6	No Answer

Comments and/or suggestions please:

Please indicate your status:
Retired member with Social Security Benefits ____________
Retired member without Social Security Benefits ____________
Active member, (not retired) ____________

Number of years of creditable service with the Oklahoma Teachers' Retirement System ________________

I would like an abstract of the completed study. Yes ____________ No ____________

NAME ______________________________ Title ____________________ Teaching Field(s) ________________

School ____

EXHIBIT 2

THE OKLAHOMA TEACHER RETIREMENT SYSTEM:

A Comparative Study of Retirement Systems
In The Mountain Plains Region

Questionnaire

Administrators of Retirement Systems

PURPOSE OF STUDY:

To compare the Teachers' Retirement System of Oklahoma with the Teachers' Retirement Systems in the Mountain Plains Region in an attempt to determine the basis for possible changes in the present Teachers' Retirement System of Oklahoma.

INSTRUCTIONS:

If your state has two or more State-Wide Retirement Systems, please respond for the System to which teachers belong.

Membership

1. Is the retirement system in your state a public employees' retirement system or a separate educational employees' retirement system?

____

2. Does membership include professional employees of:
   (a) state-supported public schools? ______________
   (b) state-supported public colleges? ______________
   (c) state-supported public universities? ______________
   (d) any others? ______________

   ____

   ____

3. Does membership include nonprofessional employees of:
   (a) state-supported public schools? ______________
   (b) state-supported public colleges? ______________
   (c) state-supported public universities? ______________
   (d) any others? ______________

   ____

   ____

4. Indicate classifications of employees that are included in your retirement plan by placing a check mark in the space at the right.

part-time _____	provisional_____	weekly ______
temporary _____	appointive _____	hourly ______
probational_____	elective _____	seasonal_____

5. Is membership compulsory for professional employees?_______________

6. Is membership compulsory for nonprofessional employees?_____________

7. Do any members have the option to choose another retirement plan?____
   If so:
   (a) Which members have the option?______________________________

   ____

   (b) Is the other retirement plan <u>in addition to</u> or <u>in lieu of</u> the state plan?____

   (c) What (if any) public revenue is contributed to the optional plan?

   ____

8. How many active members were there in 1970?_______________________

<u>Creditable Service</u>

1. Is <u>prior service</u> creditable for service rendered in your state before the retirement system was established?_________________________

2. If your system grants <u>prior service</u> credit, how many years are creditable?____

3. If prior service is creditable, what (if any) is the cost to the member?____

   ____

   ____

4. If <u>prior service</u> is creditable, is it creditable to all members or to professional members only?________________________________

5. Is <u>military service</u> creditable?________________________________

6. If <u>military service</u> is creditable, how many years are creditable?____

7. If military service is creditable, what (if any) is the cost to the member?____________________

8. If military service is creditable, is it creditable to all members or to professional members only?____________________

9. Is out-of-state service creditable?____________________

10. If out-of-state service is creditable, how many years are creditable?

11. If out-of-state service is creditable, what (if any) is the cost to the member?____________________

12. If out-of-state service is creditable, is it creditable to all members or to professional members only?____________________

13. Is teaching in overseas dependents schools creditable?____________________

14. If teaching in overseas dependents schools is creditable, how many years are creditable?____________________

15. If teaching in overseas dependents schools is creditable, what (if any) is the cost to the member?____________________

16. If teaching in overseas dependents schools is creditable, is it creditable to all members or to professional members only?____________________

17. In addition to any service creditable for prior service, military, out-of-state, and/or teaching in overseas dependents schools, how many years of service rendered in your system are required for members to become eligible for retirement benefits?____________________

Withdrawals and Refunds

1. When a member leaves service, how many years is the account kept open?__________

2. Are contributions refunded in full when a member leaves service?_____

   If not, please explain.__________

   ____

   ____

3. What is the waiting period (if any) before a member can withdraw his contributions?__________

4. Is interest on contributions refunded when a member withdraws his contributions?__________

   If YES, how much interest is paid on refunds?__________

   ____

   ____

5. If a member who has withdrawn his contributions returns to active service, may withdrawn contributions be repaid?__________

   If YES:
   (a) Is there a time limit (years)?__________

   (b) How much interest does the member pay?__________

   ____

Number of Retirants and Benefits Paid

1. How many retirants and survivor beneficiaries were receiving benefits at the end of the 1970 fiscal year?__________

2. What was the median annual retirement allowance?__________

3. How many members retired during the 1970 fiscal year?__________

4. What is the median annual retirement allowance for the group that retired in the 1970 fiscal year?__________

Social Security

1. Is Social Security coverage available to members?________________

2. In what year was Social Security adopted?________________

3. Is Social Security coverage compulsory or voluntary?________________

4. If Social Security coverage is voluntary, what per cent of school districts are covered by Social Security?________________

Vesting and Deferred Allowances

1. After how many years of service do benefits vest?________________

2. What is the age requirement (if any) for a member to be eligible for a deferred allowance?________________

3. How is the deferred allowance computed?________________

Financing

1. Are benefits financed jointly by member contributions and public revenue?________________

IF BENEFITS ARE FINANCED JOINTLY BY MEMBER CONTRIBUTIONS AND PUBLIC REVENUE, PLEASE ANSWER THE FOLLOWING QUESTIONS.

Member Contributions

Professional Members

1. What is the current rate (percentage) of contributions by professional members?________________

2. What is the maximum salary on which professional members contribute?________________

Nonprofessional Members

1. What is the current rate (percentage) of contributions by nonprofessional members?________________

2. What is the maximum salary on which nonprofessional members contribute?________________

Individual Member's Accounts

1. Are member contributions credited to the individual member's account? ______

2. Is interest credited to the individual member's account? ______

   If YES:
   (a) What is the current rate? ______

   (b) Who determines the rate of interest? ______

Other Items

1. Has the member contribution rate gone up, gone down, or remained level in the past ten years? ______

2. How much did members contribute in 1970? ______

3. What (if any) are the provisions for additional voluntary contributions for supplemental benefits? ______

4. Does the state match the additional voluntary contributions for supplemental benefits? ______

Public Revenue Contributions

1. Which public unit contributes the employer's share of benefits?

   Local school district ______ State ______

   Other ______

2. What constitutes the employer's rate (and/or amount) of contribution to the retirement system? ______

3. Is the employer's share contributed annually or at the time the member retires? ______

4. Are employers' contributions credited to individual member's accounts?
____

5. Has the public revenue contribution rate gone up, gone down, or remained level in the past ten years?__________

6. What was the amount of public revenue contributed in 1970?__________
____

Funding

1. Is the retirement system 100% funded?__________

   IF NOT 100% FUNDED, PLEASE ANSWER THE FOLLOWING ITEMS ASSUMING BENEFITS AT THEIR CURRENT LEVEL:

   (a) What is the present value of benefits to retired members?__________

   (b) What is the present value of future retirement benefits to active members?__________

   (c) What is the present value of future normal cost contributions on active members?__________

   (d) What is the present value of benefits to inactive members who have:

      (1) vested benefits?__________

      (2) refundable contributions?__________

2. What are the total assets that could be used to liquidate the liabilities?__________

3. If the figures are not available to answer questions 1 and 2 above, what is the percentage of funding?__________

4. What are the total liabilities of the retirement system?__________

5. What are the total assets that could be used to liquidate these liabilities?__________

Investments

1. Indicate the percentage of each type of investment in your portfolio:

   U. S. Bonds__________ Municipal Bonds__________
   U. S. Bills__________ Real Estate Mortgages__________
   Common Stocks__________ Telephone Bonds and Debentures__________
   Preferred Stocks__________ Public Utilities__________
   State Bonds__________

   Other:__________

2. What was the average per cent return on investments in 1970?__________

3. Indicate any restrictions on the type of investments that can be made.

   ____

   ____

   ____

Disability

1. What is the minimum creditable service (years) for a member to qualify for disability benefit?__________

2. How is the disability allowance computed?__________

   ____

   ____

3. Is there a provision for temporary disability?__________

4. Is there an age requirement for disability benefits?__________Age: ______

5. Please give an example of disability benefits for a member 50 years of age with 20 years of creditable service who was disabled in 1970.
   Male:__________ Female:__________

In-Service Incurred Disability

1. If disability is incurred in service, what is the minimum creditable service (years) to qualify for disability benefit?__________

2. How is the disability allowance computed?________________

Tax-Sheltered Annuities

1. Are tax-sheltered annuities from the retirement system available to members?________________

Lump-Sum Death Benefit

1. In addition to any return of contributions plus interest when a member dies in service, is a lump-sum death benefit provided to the beneficiary?________________

   If YES:

   (a) What is the amount?________________

   (b) Explain any requirements for length of service of age of member.

Retirement Benefits

1. Are benefits based on:
   (a) age of retirant?________________
   (b) sex of retirant?________________
   (c) years of creditable service?________________

2. Are automatic increased for retired members provided:

	Yes	Rate	No
(a) When the cost of living increases?			
(b) When there is a general salary increase for active members?			
(c) Any other basis?			

3. What is the normal age for retirement?________________

4. What is the minimum number of years required for retirement?________

5. Are retirement benefits calculated by an annuity system or a formula system?________

   If formula system, please indicate formula:

   ____

   ____

   ____

6. Please give examples of benefits paid to professional members retiring in 1970. Do not include Social Security benefits.

	Monthly Retirement Allowance			
Monthly salary (annual ÷ 12)	Age 55, 30 yrs.' Credit	Age 60, 20 yrs.' Credit	Age 62, 37 yrs.' Credit	Age 65, 40 yrs.' Credit
$700.......Men	____	____	____	____
$700.....Women	____	____	____	____
$600.......Men	____	____	____	____
$600.....Women	____	____	____	____
$500.......Men	____	____	____	____
$500.....Women	____	____	____	____
$400.......Men	____	____	____	____
$400.....Women	____	____	____	____
$300.......Men	____	____	____	____
$300.....Women	____	____	____	____
$200.......Men	____	____	____	____
$200.....Women	____	____	____	____

Options

In addition to the Maximum Retirement for Life benefits, please indicate other retirement options (if any) that are available for retirants.

I would like an abstract of the completed study.

Yes__________ No__________

Name____

State____

EXHIBIT 3

COVER LETTER ACCOMPANYING OPINIONNAIRE TO MEMBERS OF THE TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA

May I have your assistance with a research project sponsored by the College of Education, The University of Oklahoma?

The purpose of the study is to determine the basis for possible changes in the Teachers' Retirement System of Oklahoma.

Your responses to the various items on the opinionnaire will indicate your degree of acceptance of the present plan and will also indicate a basis for possible changes.

Your response to the enclosed opinionnaire will be kept confidential--no person will be identified in the study. A stamped, addressed envelope is enclosed for your convenience. If you want an abstract of the completed study, indicate your preference on the opinionnaire.

Your immediate cooperation in the collection of data is essential to the success of this project. Inasmuch as a 100 per cent return is needed, will you please complete and return the opinionnaire as soon as possible.

Sincerely,

(Mrs.) Colene Maxwell
Research Assistant

Enclosures: opinionnaire
envelope

EXHIBIT 4

FOLLOW-UP LETTER ACCOMPANYING OPINIONNAIRE TO MEMBERS OF THE TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA

Your assistance is needed to complete a research study sponsored by the College of Education at The University of Oklahoma.

The purpose of the study is to determine the basis for possible changes in the Teachers' Retirement System of Oklahoma.

Will you please take a few minutes and complete the enclosed opinionnaire, if you have not already done so. Your responses will be kept confidential--no person will be identified in the study. A stamped, addressed envelope is enclosed for your convenience.

Your immediate response is essential to the success of this research project. Please complete and return the opinionnaire as soon as possible.

Sincerely,

(Mrs.) Colene Maxwell
Research Assistant

Enclosures: opinionnaire
envelope

EXHIBIT 5

LETTER SENT TO DIRECTORS OF THE TEACHERS' RETIREMENT SYSTEMS IN THE MOUNTAIN PLAINS REGION REQUESTING PARTICIPATION IN THE STUDY

Your assistance is needed in a research project entitled "The Oklahoma Teacher Retirement System: A Comparative Study of Retirement Systems in the Mountain Plains Region." This project is sponsored by the College of Education, The University of Oklahoma. The purpose of the project is to compare the Teachers' Retirement System of Oklahoma with the Teachers' Retirement Systems in the Mountain Plains Region in an attempt to determine the basis for possible changes in the present Teachers' Retirement System of Oklahoma.

Should you desire to participate in this study, a questionnaire will be mailed to you. The major portion of the questionnaire is designed in short answer or checklist form.

Your cooperation in this study will be greatly appreciated. If you wish, a copy of the compiled data and an abstract of the completed study will be sent to you.

Please indicate below your desire to participate in the study and return this letter in the stamped, addressed envelope.

Sincerely,

(Mrs.) Colene Maxwell
Research Assistant

Enclosure

/___/ The Teachers' Retirement System of (State) will participate in the study.

/___/ The Teachers' Retirement System of (State) will not participate in the study.

Name____________________________

Title___________________________

EXHIBIT 6

COVER LETTER ACCOMPANYING QUESTIONNAIRE TO DIRECTORS OF THE TEACHERS' RETIREMENT SYSTEMS IN THE MOUNTAIN PLAINS REGION

Thank you for your willingness to assist in securing data for a research project sponsored by the College of Education, The University of Oklahoma. The purpose of the project is to compare the Teachers' Retirement System of Oklahoma with the Teachers' Retirement Systems in the Mountain Plains Region in an attempt to determine the basis for possible changes in the present Teachers' Retirement System of Oklahoma.

Your immediate response to the enclosed questionnaire will be most helpful. A stamped, addressed envelope is enclosed for your convenience. If you wish an abstract of the completed study, please indicate your preference on the questionnaire.

Inasmuch as your cooperation in the collection of data is essential to the success of this project, will you please complete and return the questionnaire as soon as possible.

Sincerely,

(Mrs.) Colene Maxwell
Research Assistant

Enclosures: questionnaire
envelope

APPENDIX B

OKLAHOMA TEACHERS' RETIREMENT SYSTEM
STATISTICS SINCE 1943

Exhibit 7

OKLAHOMA TEACHERS' RETIREMENT SYSTEM
STATISTICS SINCE 1943

Year	Teacher Contributions	Appropriations or Dedicated Tax	No. on Retirement	Amount Paid
1943-44	$ 441,546.32	$ 100,000.00*	0	$ 0
1944-45	732,186.53	100,000.00*	0	0
1945-46	955,518.06	250,000.00*	0	0
1946-47	1,158,312.89	550,000.00*	[illegible]	18,818.55
1947-48	1,628,272.41	794,689.45*	176	57,777.29
1948-49	1,828,444.19	334,334.64*	198	72,882.31
1949-50	2,347,578.52	1,000,000.00*	532	186,022.14
1950-51	2,472,223.81	1,000,000.00*	800	407,821.95
1951-52	2,680,167.91	800,000.00*	965	503,389.68
1952-53	2,825,540.82	1,800,000.00*	1176	594,724.09
1953-54	3,260,728.43	1,750,000.00*	1386	1,172,467.68
1954-55	3,389,867.43	1,750,000.00*	1553	1,331,754.67
1955-56	3,663,127.34	2,100,000.00*	1772	1,524,435.83
1956-57	3,801,185.83	1,100,000.00*	1976	1,736,893.06
1957-58	4,101,802.48	2,447,701.46**	2222	1,936,517.47
1958-59	4,406,351.14	2,823,414.69**	2487	2,160,897.71
1959-60	4,875,899.90	3,345,086.66**	2791	2,863,653.93
1960-61	4,955,399.85	4,060,754.54**	3094	3,215,656.67
1961-62	5,260,930.57	4,445,424.33**	3404	3,574,336.19
1962-63	5,742,438.12	5,245,103.60**	3733	4,307,520.98
1963-64	6,145,252.75	5,531,896.62**	4123	5,465,041.17
1964-65	6,482,270.85	6,631,765.93**	4492	6,033,836.64
1965-66	7,215,154.84	7,364,387.39**	5118	7,267,594.13
1966-67	8,037,930.16	8,227,597.63**	5697	8,197,739.64
1967-68	9,146,425.79	8,535,452.68** 150,000.00*	6216	9,057,182.24
1968-69	10,130,913.91	8,993,274.45** 2,646,000.00*	6896	11,249,830.01
1969-70	12,708,746.51	9,826,226.23** 4,500,000.00*	7688	15,115,422.83

*Appropriated
**Dedicated

Source: Teachers' Retirement System of Oklahoma, Oklahoma City, Oklahoma. (Typewritten.)

APPENDIX C

REPORT OF ACTUARY

EXHIBIT 8

TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA
REPORT OF ACTUARY
AS OF
SEPTEMBER 1, 1970

Board of Trustees
Teachers' Retirement System
State of Oklahoma
503 Will Rogers Memorial Office Building
Oklahoma City, Oklahoma 73105

Gentlemen:

The following pages comprise the report of the valuation made as of September 1, 1970 of the liabilities attendant to the retirement benefits provided under the Teachers' Retirement Act of the State of Oklahoma as amended by the several enactments of the legislature to such date.

Included in the report are a resume of the retirement benefits presently provided, a statement of the actuarial assumptions, basis and methods of calculation employed in this current valuation, together with the modifications tentatively proposed to be made therein for future valuations, and a summary of the results of the valuation as compared with assets of the teacher's Retirement System on hand as of the date of the valuation.

Respectfully submitted,

G. Y. Keetch, FCA
Actuary, Teachers' Retirement System

GYK/rh

RETIREMENT BENEFITS

The provisions and definitions of the Teachers' Retirement Act relating to the retirement benefits provided and their determination are summarised:

Participants. All employees, classified and non-classified, of the Teachers' Retirement System as defined by Section 3 of the Teachers' Retirement Act.

Creditable Service. Period of employment after July 1, 1943 to date of retirement or to the 30th day of June following the participant's 65th birthdate, if earlier, plus such additional periods for service prior to such date for teaching service in the State of Oklahoma, and to the extent granted by Section 4 of the Teachers' Retirement Act, for certain military service and for teaching service outside the State of Oklahoma.

Credited Compensation. The average of the salaries received by a participant for the 5 highest annual salaries on which the participant made the contributions requisite to his participating prior to retirement.

Retirement Date. At the participants' option, on any date after attainment of age 60 or completion of 30 years of service, subject to the requirement that participants becoming employed after July 1, 1967 shall be employed for a minimum of ten years before qualifying for retirement and provided that participants with twenty or more years of creditable service become eligible for retirement at any time after attainment of age 60.

Retirement Benefits. Subject to adjustment upon retirement prior to age 62, a participant is granted an annual retirement benefit for life, payable 1/12th monthly, equal during the periods stated below to the product of his creditable service multiplied by the respective indicated percentages of his credited compensation, as above defined but not exceeding $7,800:

Period	Percentage
9-1-70 to 8-30-71	1.25%
9-1-71 to 8-30-72	1.30%
9-1-72 to 8-30-73	1.35%
9-1-73 to 8-30-74	1.40%
9-1-74 to 8-30-75	1.45%
9-1-75 and thereafter	1.50%

Provided that in event of retirement on or after attainment of age 62, a classified employee shall receive a minimum retirement benefit during any month of $6.50 per month per year of creditable service and a non-classified employee participant shall receive a minimum retirement benefit during any month of $5.50 per month per year of creditable service.

Participants' Contributions. Participants' contributions are a requisite 5% of the first $7,800 of annual salaries received during periods of employment prior to the 30th day of June following their 65th birthdate.

Stated generally, a participant upon retirement becomes entitled to an annual retirement benefit in an amount determined from the product of (a) times (b) times (c), where:

a = the years of service credited to the date of retirement
b = the accelerating percentage factor, and
c = the average annual salary of the five highest received during the period of contributory service,

with factor (c) subject to the $7,800 maximum and the final product subject to prescribed maximum and minimum limitations and to reductions in event of retirement prior to 62nd birthdates. Factor (b) accelerates from 1.25% for the fiscal period commencing September 1, 1970 to 1.30%, 1.35%, 1.40%, 1.45% and 1.50% for the respective subsequent fiscal periods commencing on September 1 of 1971, 1972, 1973, 1974 and 1975 and after. The factor effective in any of the indicated fiscal periods is that applicable to any participant then retired, irrespective of the date when having become retired.

The retirement benefit provided in event of a participant's becoming retired by reason of disability is that amount determined by the same method as above stated for normal retirement for service credited to the date of disability provided the participant is then credited with at least ten years of contributory service, except that no reduction applies because of age at date of disability.

Upon the death of a participant prior to retirement, the sum of his contributions made plus the interest credited thereto is paid to his designated beneficiary, if then living, otherwise to his estate.

In the event of a participant's withdrawal from service for reasons other than of death, or of disability if occurring after less than ten years of contributory service, the sum of his contributions plus, under some conditions, a part of such interest credited thereto, as set forth in Section 3 of the Teachers' Retirement Act, is refunded to him.

ACTUARIAL ASSUMPTIONS, BASIS AND METHODS OF VALUATION

Benefits provided by a retirement plan or system are long term obligations, and their ultimate costs will evolve as the composit result of a plurality of cost factors. These include, principally, the rates at which future deaths of the participants will occur, the rates at which participants will become terminated or otherwise continue in service until retirement, the levels of their future salaries, and the rates of interest which will be earned on accumulated assets funded in operation of the system.

As is apparent, each of the cost determinants cited can be exactly known only in retrospect. Their present measurement can, then, be only prediction, and their prediction is referred to in retirement plan valuations as the actuarial assumptions. The predictions or assumptions used in this valuation are below enumerated, with any comments pertaining later given:

1) Mortality: According to the 1951 Group Annuity Table, Projected by Scale C to 1970, with death rates stepped forward one year and death rates for female lives equal to the rates for male lives stepped back five years. Death rates according to 1964 Commissioners Disability Table for participants retired by reason of disability.

2) Withdrawals: 10.8% at age 20, graded to 9.8%, 7.5%, 6.2%, 4.8%, 3.3%, 1.7% and none at ages 25, 30, 35, 40, 45, 50, 55 and 60, respectively.

3) Disablement: No specific costs included and no disability decrements used, except as may be included in withdrawals.

4) Salary Improvement Scales: None

5) Retirement Age: Assumed retirement at age 65 for active lives aged 64 and under as of 9-1-71 for active lives 65 and over. Age 62 for inactive lives with vested benefits.

6) Investment Returns: 4 1/2% per annum (net after expenses), compounded annually.

7) Funding Method: Entry-Age-Normal, with net deficiency of 1970 valuation amortized over a 40 year period. Net deficiency of 1971 and each subsequent valuation to be amortized over a period of one year less than that used in the prior year.

This initial valuation of the System following the enactment of House Bill 1586 did not, by the valuation process, rigidly evaluate the exact benefits provided by the Teachers' Retirement Act. Some liberties were taken, explanation and reason for are hereafter given.

Retirement benefits provided by the Act, as before related, become increased on September 1, 1971 and annually thereafter through September 1, 1975. As respects those lives who were in retired status as of September 1, 1970, the retirement benefits then effective were valued as though of uniform amount for the current and all future years, i.e., the future increments in such benefits to which such lives will become entitled were for the present disregarded. It is proposed to value the same benefits, at the increased level then reached, in the same way as in the 1971 valuation. Thus, the successive net deficiencies attributable to the benefits for retired lives are expected to increase until the ultimate benefit level has been reached. Accordingly, the costs of amortizing such deficiencies are likewise expected to increase, but not greatly in view of the length of the amortization period.

The valuation of benefits to retired lives was purposely made in the manner described so as to produce the gradual year to year increases expected, over the interval to 1975, in amortization costs of the resultant net deficiencies. It is believed the concensus opinion that in deliberation of the accelerated benefits provided in House Bill 1586, the legislature anticipated increasing funding costs, concomitant with the increases in benefits. On this premise it was reasoned that the legislative intent was to defer for a period the full costs of the benefit increases granted; otherwise, the question arises why else was the ultimate benefit level itself deferred: Long term costs of the benefit increases will not in the aggregate be significantly less because of the short deferment of their ultimate level.

For the valuation of future retirement benefits, the ultimate level of such benefits was assumed with respect to all participants not yet retired.

The following are specific comments in regard to the primary actuarial assumptions:

<u>Mortality</u>. Mortality rates assumed in the valuation are substantially lower than current actual mortality experience of the System. Providing adequate safety margins for future improvement in mortality, such assumed rates are likely to be suitable for use for at least the next ten years. Studies made of death rates among retired lives over the two year period ending June 30, 1970 show the assumed rates to be slightly less than 75% of actual. Similar studies made of death rates among

active lives were less conclusive, as death rates did not conform to usual patters (sic). Measurement of active life mortality with exactitude among pension groups is generally difficult because of the frequent terminations and changes of status. Nonetheless, the studies made indicated that expected deaths on the basis of the assumed rates will compare with actual deaths in roughly the same ratio as observed for retired lives, at least as regards lives at the higher ages. Mortality rates assumed in valuations for the younger attained ages have little effect on present values of future retirement benefit liabilities, the termination rates and investment yield rates assumed being of much greater moment.

The mortality table selected for the valuation, conveniently referred to as the 1970 Group Annuity Table, was modified such that mortality rates assumed are those shown in such Table for ages one year greater than attained ages of the participants. Disparity between the assumed rates and current actual rates would have otherwise been somewhat greater. In effect, however, the step down in tabular age mortality rates is only 1/2 year on the average, since rackoned ages of participants in the valuation were those attained on last birthdates.

Death rates assumed with respect to participants retired by reason of disability were those of the 1964 Commissioners Disability Table for Disabled Lives, the rates most recently compiled for this class of retirants. Studies made of death rates experienced by the System under disabled lives were inconclusive and the assumed rates are of experimental nature. Retirement benefits currently being paid to disabled life retirants, however, are relatively low, less than 2% total retirement benefit payments.

Withdrawals. Actual termination rates reflected in studies of the System's current experience were found unusually erratic when arrayed in attained age order. The computed average rates for quinquennial age groups, however, displayed normal tendencies. The average rates observed for such age groups are shown comparatively with the termination rates used in the valuation at the central age for each.

Age Group	Average Withdrawal Rate, %	Central Age of Group	Assumed Withdrawal Rate, %
26-30	17.8%	28	9.152
31-35	11.4	32	7.992
36-40	7.6	38	6.732
41-45	5.9	43	5.372
46-50	4.0	48	3.912
51-55	3.1	53	2.352
56-60	1.5	58	0.692

It is seen that the assumed rates follow the current actual rather closely at attained ages 36 and over. The divergencies allow for margins of safety. The rates assumed at the younger attained ages were purposely deviated from actual more widely so as to avoid the unrealistically low normal cost factors that would otherwise have obtained at entry ages corresponding.

Disablement. Retirement benefits granted in event of a participant's becoming disabled before retirement are, at most, only such benefits as have been earned to date of disability, and it is believed that the additional costs, if any, for disability retirements can be disregarded. Since present values of retirement benefits to impaired lives are appreciably lower, the probable effect of disability retirements is to lower the aggregate costs of all retirements.

Salary Improvement Scales. From review of the data relating to participants' current salary levels, a considered inclusion of salary improvement factors in the valuation was deemed impractical. Such an inclusion may indeed have resulted in an overstatement of liabilities of some magnitude.

The use of current salaries as the base for projected retirement benefits was in any case believed the best alternate to assuming that all participants will become retired at the $7,800 maximum credited compensation level. It is noted that current average salaries, even when excluding in any instance compensation in excess of $7,800, are already some $7,420 annually for male participants and some $7,000 for female participants. The salaries of 67% of male participants, and 32% of female participants, are, in fact, $7,800 or more at present.

Some 5000 active lives under the age of 65 will become eligible to retire in 5 years or less. To have assumed the ultimate creditable compensation level for these lives would have been manifestly inaccurate, since their salary levels are actually lower than those of the less elderly participants. Salary levels shown by the census data, arrayed by attained ages, do not display ascendant tendencies, as would normally be expected.

Such salaries as may become gradually increased with length of service will insure predominantly to participants of the younger attained ages. The resultant increases in retirement benefits to these lives will not greatly affect future costs, if some funding program be hereafter adhered to, since costs applicable at such ages, as shown by the valuation, are modest.

All future salary increases, however, will to greater or lesser extent result in increased funding costs, even though total costs are partially offset by the attendant increased contributions from participants. The more immediate and the more general salary increases be the greater and more precipitate the increases in funding costs.

Changes in procedures, so as to make provision for future increases in salary, may become necessitated in subsequent valuations. The current census data relating to salary levels, however, is not indicative of any basis for their projections.

Retirement Age. The average age attained by participants at retirement is at present about 63½ years. For the valuation as at September 1, 1970, a uniform retirement age of 65 years was assumed. An earlier retirement age assumption is contemplated in future valuations, though the age 65 assumption did not result in an understatement of any magnitude in the current valuation. The effect of such assumption is, in fact, partially compensatory, since maximum retirement benefits become earned upon retirement at age 65, with lesser benefits earned under retirements prior to such age. Costs are somewhat greater, however, for earlier retirements, and an earlier retirement age assumption will be more realistic. It appears that age 63 will be suitable for such assumption, unless future experience of the System should indicate otherwise, and it is intended that the assumption be modified as warranted over a three to five year period. The planning in this regard supplements the purposes intended in the method, as previously related, applied to the valuation of retired life benefits.

With respect to active lives past their 65th birthdates, it was assumed that election to retire will be made as of September 1, 1971. For those participants, presently inactive, with vested retirement benefits, it was assumed that elections to retire will be made as of the September 1 dates following 62nd birthdates after continuance in inactive status until such dates.

Investment Return. Accumulated assets of the System currently yield about 5.3% per annum, after all administrative expenses. For purposes of the valuation, a uniform rate of 4½% was assumed for all future years. In any year that such assumed rate is exceeded by the actual yield rate, excess earnings will, of course, obtain, resulting in cost reductions to the extent of the excess.

Funding Method. Net deficiencies obtained by procedures applied in each valuation will be the excess of (1) over the sum of (2) plus (3), where items (1), (2) and (3) are the following aggregate amounts:

(1) = the present value of statutory retirement benefits provided participants, active, inactive or retired,

(2) = the present value of the future annual normal cost contributions for active lives, and

(3) = The value of assets held by the System which have been expressly contributed and accumulated for such benefits.

with (1) and (2) calculated in accordance with the actuarial assumptions heretofore stated.

The annual normal cost contribution for each active life participant is calculated as that amount which if contributed during each year of the participant's service, from the date of service commencement, will have accumulated at the date of his retirement to the then present value of his accrued retirement benefits or otherwise provide the benefits payable in the event of his prior death or withdrawal from service. Such normal cost is referred to as that computed by the entry-age-normal method and is comprised of any and all contributions made in any year in behalf of the participant, whether by his own payment or from other sources.

The net deficiency was thus derived with normal costs computed by the entry-age-normal method. One of numberous (sic) other methods could have been used. The subject in general easily leads to lengthy comments, but let it suffice for the present to state that the entry-age-normal method is probably as good as any and more suitable than most for this System's retirement plan in its present circumstances.

More important than the method of its derivation is the priod (sic) of time in which the resultant deficiency is to be amortized. The 40 year period used was established by past precedent.

The successive net deficiencies derived in this and future valuations will be amortized over such periods as planned or as may be directed, without modification of the amounts so derived. Certain modifications in derived deficiencies are commonly used in pension funding, but such modifications are those prescribed by rulings of the Internal Revenue Service. In the present instance no consideration of this aspect applies.

To summarize with respect to assumptions and procedures applied in the valuation, expected results consequent thereupon will in some instances occasion increases in future costs, in others provide a source of gains to meet such increases. The former will or likely be the treatments, as described, of benefits to lives now retired, to the age assumed for some future retirements and to the salary component of future retirement benefits. Future gains are expected to result from the rates assumed for mortality and withdrawals, at least a time from the rate assumed for investment returne, and to some extent from the use of the ultimate 1975 annual retirement credit level for active lives. End results as regards the successive future annual valuations through that for the fiscal period commencing September 1, 1975 are expected to show increasing total funding costs. As explained, such expected results were planned, the procedures employed having been selected for the purpose.

Closing comments regarding the valuation procedures are made in regard to the September 1 valuation date selected. Such date is that most frequent on which retirement benefits to new retirants first become payable or, in the case of the exceptions, is the date generally nearest such first payment dates. Moreover, the status and salary levels of active participants become known or annually established as of that date. Foremostly, however, it is the very date on which future increases in retirement benefits become annually effective. If the valuations were made as of any alternate day of the year, the calculations would involve benefits of varying amounts during future fiscal periods. The process would be needlessly laborious and burdensome.

TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA

Summary of Actuarial Valuation
as of September 1, 1970

Present Deficiency

Present value of benefits to retired lives (with benefits assumed fixed at their current levels)		$184,014,950
Present value of future retirement benefits to active lives (with benefits projected on the basis of annual service credits equal to 1½% of current salaries or to the prescribed minima, if greater)	$308,732,128	
LESS		
Present value of future normal cost contributions on active lives	-74,505,027	$234,227,101
Present value of benefits to inactive lives:		
Vested benefits	$ 30,437,570	
Refundable contributions	6,041,906	$ 36,479,476
Subtotal, gross liabilities		$454,721,527
Accumulated assets on hand:		
Gross assets	$152,515,949	
Less escrow and suspense account balance	- 2,792,477	$149,723,472
Present Net Deficiency		$304,998,055

State Costs for Current Year

Amortization costs of present net deficiency (assuming 40 year funding period)	$ 15,860,817
Normal cost for current year	12,799,514
Less participants' contributions for current year	- 11,217,204
State funding cost for current year	$ 17,443,127

Following is a summary of the data included in the valuation as of September 1, 1970:

Classification	No. Participants	Monthly Income Benefits
Retired Lives	7,673	$1,540,357
Disability Annuitants	182	30,038
Active Lives:		
65 and under	31,161	9,356,099
Over 65	98	1,580
Inactive Lives:		
With vested benefits	1,565	268,374
Without vested benefits	7,525	-----

The valuation made, as herein described, was a summary of the liabilities determined for each individual life, and is thus the first seriatim valuation made for the System. Except to the extent that certain averages were reviewed as basis for the assumptions, no averages were used in the valuation itself. The liability applicable to each individual participant was precisely determined in accordance with the valuation assumptions.

Retired lives included in the valuation are receiving benefits under all forms of payment which may be elected by retirants.

Income payments to the disability annuitants are of the form commonly referred to as the "cash refund" basis. (At the death of the disability annuitant, the excess of his accumulated contributions to the date of disability over benefits received prior to death, if any, is paid in one sum to his beneficiary.)

The monthly income benefits above shown for active lives 65 and under are the aggregate benefits projected in the manner herein described to anticipated retirement dates. Those to active lives over the age of 65 are the amounts actually earned during periods of contributory service.

In no previous valuations or actuarial estimates of liabilities, or of funding costs, have liabilities been included for such benefits as have become accrued to inactive lives. Presumably it has been assumed that any such liabilities have not been appreciable. To the contrary, however, the reckoned liabilities thereunder, as shown in the valuation summary, amounted to nearly $36,500,000. This finding added significantly to funding costs and explains the disparity in their prior estimates.

The income benefits shown for inactive lives with vested benefits are the actual amounts which had become vested to them as of the valuation date. At this time, no assessment can be made of the liability included for the inactive lives, since the whereabouts or status of these lives is largely unknown. It may be presumed that a number of the lives will either not be located or are now deceased. The liability included, however, assumes that all benefits earned or contributions credited will be paid.

The total State cost shown for the current year is that required if the present deficiency of the System is funded over a forty-year period. Since the deficiency has become a sizeable sum, some definite funding program should be adopted and adhered to as inflexibly as possible.

The forty-year funding period was selected because it is the period that various members of the legislature have stipulated in requests made from time to time for funding cost estimates. The funding costs shown for the current year, as determined by the valuation and on the basis of the forty-year period, amounted to $17,443,217. This sum is approximately 7.75% of the aggregate salaries of those active participants currently contributing toward their retirement.

Source: Teachers' Retirement System of Oklahoma, Oklahoma City, Oklahoma. (Typewritten.)