

PUBLIC RETIREMENT SYSTEMS
INTERIM COMMISSION

Report to
The 1967 Legislative Session
of the State of Minnesota

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February 15, 1967

The Honorable Harold LeVander, Governor,
and Members of the Legislature of the
State of Minnesota:

The work of the Interim Commission on Employee
Retirement Systems has been conducted as authorized
under Chapter 888, Minnesota Session Laws of 1965.

A summary of the Commission's report and recom-
mendations is hereby respectfully transmitted.

EMPLOYEE RETIREMENT SYSTEMS
INTERIM COMMISSION

By *Harmon T. Ogdahl*

Harmon T. Ogdahl
Chairman

HO:ed

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TO STUDY
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GLOSSARY

ACTUARIAL ASSUMPTIONS—The assumptions concerning rates of mortality, rates of terminations, rates of disablement, levels of compensation, retirement ages and investment earnings upon which the estimates of the cost of a plan are prepared.

ACTUARIAL BALANCE—A plan is in actuarial balance when the contribution rate is at least as large as the amount required by the funding program which has been established.

ACTUARIAL SURVEY—An actuarial valuation accompanied by examination of the assumptions used as to correlation with the experience of the fund.

ACTUARIAL VALUATION—An actuarial measurement of the liabilities and costs of a fund according to previously determined assumptions as to experience—see actuarial assumptions.

AMORTIZATION—The gradual liquidation of a deficit by the payment of periodic installments.

ANNUITY—Annuity = Retirement benefit = Pension.

CAREER AVERAGE SALARY—Average for entire term of employment stated either yearly or monthly.

COORDINATION—Where the retirement program includes both Social Security and the pension fund.

COVERED SALARY—The amount of salary used to determine pension credit.

COVERED PAYROLL—That part of a total payroll that consisted of covered salary of the employees.

DEDUCTION—Used interchangeably to describe an employee's regular contribution to a pension fund.

DEFICIT—Deficit = Unfunded Accrued Liability. Either term means the excess of the presently accumulated liability over the assets of the fund.

EMPLOYER CONTRIBUTION—Systematic employer remittance to a pension fund.

FINAL SALARY FORMULA OR PLAN—Where benefits are determined by the final salary before retirement or an average of the last few years (often 5) instead of on contributions or actual average salary.

FORMULA PLAN—Where benefits are computed by a "formula" instead of relating directly to the amount contributed by each participant. Formulas usually but not always relate to pay and often provide different rates of benefit according to duration of service.

FROZEN DEFICIT RATE—The rate of financial support needed to keep the deficit from increasing, i.e. normal cost plus the assumed rate of interest on the deficit.

FULLY FUNDED—A plan is fully funded when the assets of the fund are at least as large as the accrued liability.

MONEY PURCHASE PLAN—Where the benefits are computed starting from a base of the accumulated contributions including interest rather than by reference to other factors as in a formula plan.

NORMAL COST—Normal Cost = Normal level cost. Under the entry age normal cost method of funding, the normal cost is the level amount required each year from the participant's entry date to his normal retirement date to accumulate the entire cost of his benefits by the time the normal retirement date is reached.

PENSION—Pension = Annuity = Retirement Benefit.

SALARY CEILING—Salary Ceiling = Salary Limit—The maximum amount of annual salary from which contributions will be deducted and pension credit determined.

TURNOVER GAIN—When an employee dies or withdraws from a fund, this relieves the fund of pension obligation to him. The value of that obligation not used for payment of a death or withdrawal settlement becomes the property of the fund. This is called turnover gain. Turnover gain sometimes includes interest on employee contributions, but comes principally from employer contributions.

INTRODUCTION

Retirement programs for public employees in Minnesota, as in other states, have become complex operations of considerable proportions.

The Public Retirement Systems Interim Commission scheduled for itself a very extensive program of activity. Following the organizational meeting on September 2, 1965, and through December 31, 1966, the Commission conducted 22 full day meetings with at least one meeting in every month. In addition, the Executive Committee met on 17 occasions.

The 1965 Session specifically charged this Commission to study the question of establishing a Permanent Commission and also to study the local fire and police pension funds. Accordingly, the Commission set up a Subcommittee on a Permanent Commission under the chairmanship of Representative Thor Anderson and a Subcommittee on Fire and Police Pensions with Senator William Dosland as chairman.

The Subcommittee on a Permanent Commission met on 10 occasions and heard a considerable number of interested persons. It submitted recommendations to the Commission which were adopted and included in this report.

The Subcommittee on Fire and Police Pensions met on 12 occasions. Representatives of police and fire pension funds, the Minnesota Police & Peace Officers Association, the Fire Fighters of Minnesota as well as other organizations, participated in most of the meetings.

The League of Minnesota Municipalities established a subcommittee on the subject of local police and fire pensions. Consequently, the staff of the League participated in some of the meetings of the Commission Subcommittee.

Whenever needed, the Commission and its Subcommittees had the assistance of the Com-

mission actuaries.

The Subcommittee on Fire and Police Pensions developed a series of recommendations and proposals which were with only minor changes adopted by the Commission for recommendation to the Legislature.

During the entire interim, the Commission enjoyed excellent cooperation from the staff of all of the pension funds.

The level of performance and of cooperation with the Commission by the actuaries of all of the funds was extremely gratifying. This was particularly true in view of some unsatisfactory instances in this regard experienced by previous Commissions.

A number of individual persons as well as representatives from numerous organizations appeared before the Commission and were most helpful. On several occasions, Mr. Robert E. Blixt, Executive Secretary of the State Board of Investment, submitted valuable information to the Commission. Mr. Frederick N. MacMillan, just retired as Executive Director of the Wisconsin Retirement Fund, met with members of the Commission and contributed valuable background information from his long years of experience in his State.

The Commission received valuable assistance from Mr. Jerry McAllister, from the actuarial staff of the Minnesota Mutual Life Insurance Company, and from Mr. Allan Lund, from the Northwestern National Life Insurance Company. As in all previous interim commissions, the assistance of the Commission actuaries, George V. Stennes and Associates, represented by Mr. Gerald G. Toy and Dr. Franklin C. Smith, was invaluable and essential to the Commission.

This Commission is grateful and appreciative of the assistance of many other persons, unnamed, who have been helpful and cooperative.

PRINCIPLES OF PENSION POLICY

Had all pension plans been required to conform with a sound set of basic principles a considerable number of the problems that have confronted the Legislature would not have arisen. A considerable proportion of the problems involve a feeling of discrimination by groups of employees or by the membership of one fund as contrasted to another. These problems would not have arisen had there been more uniformity of treatment.

This Commission recommends to the Legislature as a constructive guide in all pension legislation the following set of principles, most of which were also adopted by each of the preceding Public Retirement Study Commissions:

- There should be uniformity as to pension treatment of the various groups of public employees.

Historically, extra public-financed benefits added to one fund have led to discontent and demands for similar extra treatment for members of other funds. This compounds inequities, disrupts financing, and leads to demands on the legislature for "equivalent benefits."

- Equity should be established and maintained within each Pension Fund.

The benefit "formula" and provisions should not be such that some members receive "considerably more for their money" than others with resultant extra deficits to the fund.

- Age 65 should be considered the normal age for retirement.

Besides being the OASDHI age, the "employability" of the average person plus the considerably higher costs of providing a reasonable level of pensions at a lower age all indicate 65 as the best age around which to build retirement goals for general employees.

- In all cases of optional retirement at ages less than 65, benefits should be on a basis of full actuarial discount.

No employee should receive a "bargain" at the expense of other employees and the fund because of early retirement, except insofar as it may be desirable to modify this principle with respect to safety employees and their fund. This has been a material cause of additional deficits to many pension funds.

- Thirty years should be considered the minimum period of service necessary for a pension plan to provide the "normal level" of pension benefits.

The government has no obligation to provide a "normal level" of retirement benefit to an employee for only a few years of public service.

- Fifty percent of covered average salary is a fair "normal level" of benefits for a pension fund to provide for an employee of 30 years' service, except that it should require fewer years of service for certain law enforcement and safety employees to reach this level.

Pension plans were not intended to provide by government subsidy the level of retirement an employee might desire. Some area of private responsibility should remain.

- Governmental employer support of normal level pension costs should not exceed equal matching of the employee's contribution to his pension, except as to certain law enforcement and safety employees.

To provide a greater share of the benefits at governmental expense tempts employees to strive for extra benefits and marginal benefits because the cost to the employee is small. Pensions should not become "hidden extra salary."

- Future pension obligations of all retirement funds in the state should be financed on a basis of Entry Age Normal Level costs during the working lifetime of covered members.

If this is done:

Labor costs of current services will not be postponed to a future generation of taxpayers.

Retired former employees would have, as security for their pension, assets accumulated during their employment rather than an unfunded promise.

A funded method will quickly reflect actual costs of further "liberalization" on pension benefits. Deferred financing masks costs of unsound liberalizations.

Considerably smaller long-range dollar costs are required because current funds for future pensions are invested. The actual dollar outlay may be cut by as much as 50% if funds are regularly set aside in advance and invested to meet pension obligations before they fall due.

If this is not done:

Taxpayers and legislators a generation hence may not feel obligated to keep the unfunded promises of a previous generation.

- Complementary to the previous recommendation that pension plans in the future be currently funded, the Commission further recommends that the laws heretofore enacted be continued or, if necessary, be amended, so as to amortize the unfunded accrued liability not later than by the year 1997. This is 40 years after the 1957 session ascertained the extent of deficits and started a program of amortization.

An extended period of amortization will, in time, accomplish the necessary objectives and will facilitate financing of unfunded liability within acceptable level of annual cost.

A period of greater than 40 years approaches the level of perpetual interest on the deficit.

- Raises in pension benefits to retired persons should be recognized as a form of assistance and not disguised as pensions. Such grants should in all instances be separately financed and never charged to the pension funds.

Benefits of this type are purely a form of assistance, neither foreseen nor financed by employees or employers in the normal operation of a pension plan.

Unless additional adequate financing accompanies any grants of such assistance benefits, they would constitute a raid on the pension fund by causing extra deficits and would be to the detriment of the fund.

Unless the merit of such grants is sufficient to warrant separate financing, the tendency of "something for nothing now and someone pay later" would invite financial chaos in all the pension funds.

- Alleviation of the damage to the purposes of a pension program caused by inflation should be specifically planned as to both operation and systematic financing.

There should be consideration of both the working and retired lifetime of the employees.

Makeshift measures are often inequitable and often cause new problems.

Policy as to Proposed Pension Changes

- No increase in pension benefits in regard to any public employee pension fund should be granted until:

- (a) There is established adequate financing to cover the normal level cost of the present level of benefits plus at least enough financing to amortize by 1997 any deficit that existed in the fund in 1957.

- (b) Adequate measures to finance any proposed increase in normal level costs and increased deficits, if any, are enacted concurrently with any increase in benefits.

- Adherence to sound pension policy cannot be accomplished unless each contemplated change in pension benefits or financing can be measured against fundamental principles.

Each contemplated change in benefits or financing should be analyzed as to its direct result and, in addition, its effect on the pen-

sion plan generally. This would be impossible except by the use of actuarial and legal analysis and consideration of the human elements involved. Many of the inequities in present laws have resulted from the Legislature having to rely on superficial, inaccurate estimates as to the significance of contemplated amendments to the pension laws. *Partial information in many instances is more misleading than out-and-out misinformation.*

Among the most difficult problems of the Public Retirement Study Commission, and ultimately the Legislature, is the fact that increases in benefits of one pension fund invariably result in similar requests from the other funds, thus compounding the costs and the problem.

● **The Commission submits the following**

recommendations as furthering a constructive approach to pension changes:

Every proposed change in any pension plan for public employees should be submitted to the Commission for study and analysis at a sufficiently early date to allow the Commission ample time for study, analysis, and report to the Legislature. Local bills should be channeled through the Commission so that an analysis could be made available to the governing body of the subdivision of government and the Legislature.

Any proposed change involving or affecting the cost of any of the various pensions systems should be accompanied with an estimate of the financial effect of such proposed change prepared by an approved actuary as defined by statute.

THE IMPORTANCE OF A PERMANENT COMMISSION DEALING WITH RETIREMENT FOR PUBLIC EMPLOYEES

Employees' pensions have become a very important problem throughout private industry as well as throughout the field of governmental employment. Pension funds, public and private, are increasing at a more rapid rate than any of the other general sources of funds for the investment market.

Minnesota pension funds for public employees now have accrued liabilities of approximately one billion dollars for services rendered to date. These accrued liabilities will increase not only from additional employee service but to whatever extent the level of pension benefits may be increased. The rate of increase in pension liability is demonstrated by the fact that total accrued liabilities were only slightly over six hundred million dollars in 1958. For the foreseeable future, pension problems will confront government policy makers.

The Minnesota Legislature has provided for study, research and analyses of public employees' retirement plans through a series of five interim commissions, which have functioned during each interim since 1955, except the period from 1961 to 1963. The findings and recommendations of these commissions have been a basis for considerable constructive legislation that has placed financing on a more businesslike basis, and above that, has improved benefit provisions.

Pension plans are extremely complex. With the addition of amendments dealing with savings clauses, retroactive benefits and involved formulas with multiple alternatives, it is easy to understand that the situation becomes even more complicated.

Problems of the pension funds are so many and varied that whatever steps a single legislative session may take, changing conditions will cause new problems to continually arise which require scrutiny and attention.

The five interim commissions have devoted most of their attention to the five major statewide pension funds and toward determination of sound principles and policies for

public pension programs. For the first time, the current commission has devoted a significant part of its attention to fifty-one pension funds for firemen and policemen.

Maintenance of sound pension policies is a continuous problem requiring continuing analysis and adaptation to each change in pension programs or experience within each pension fund. Consistency and fairness in treatment as to the membership of the various funds is not easy to maintain and can be seriously damaged by a few ill-advised amendments.

Sound pension programs can be maintained only by constant study and analysis of:

1. Changing conditions of the national economy
2. Changing trends in both public and private employment
3. Changing earnings on invested funds
4. Mortality trends among the membership
5. Change in rates of personnel turnover which can fluctuate considerably with both general employment conditions and governmental policies
6. Other significant factors, including administrative costs and operational policies.

To maintain sound programs, it is essential that improvements and increases in benefits occur only after adequate analysis so that such changes do not destroy either financial soundness or justice in treatment among the members of each fund and between the various funds.

This Commission, like the four preceding commissions, is convinced that a continuing commission will make possible increased service to the Legislature, the public and the pension funds.

The continuity and cumulative development of records, files and research material, would, by themselves, be an improvement. The development and retention of a professional staff is only possible through the mech-

anism of a permanent commission. The Legislature would gain more and better service during the sessions.

Intervals following past sessions, before the newly reconstituted interim commissions became operative, have resulted in a gap in continuity of research and staff operations, especially as to early follow-up of the enactments and the unfinished business of each session.

Many problems of public employee pensions as to the five statewide funds still await attention because of these limitations. In addition, needed attention to problems of local funds have been hampered.

An examination of the experience in other states only serves to substantiate the experience of this Commission. In such states as Wisconsin, Illinois, California, New York and Washington, a series of interim commissions demonstrated the need for a permanent commission. In each of these states there is now a permanent commission.

THIS COMMISSION, THEREFORE, RECOMMENDS as follows:

1. There should be established a permanent commission which should be known as the Public Retirement Commission.
2. The Commission should consist of 5 members of the Senate and 5 members of the House of Representatives, selected by the respective bodies as provided in the rules of that body.
3. The full term of each member should be for a period of two years, commencing on January 15 of each odd numbered year, extending to January 15 of the succeeding odd number year. Each member should serve until his successor is appointed and qualified except that should any member cease to be member of the body from which he was appointed, he would serve only to the expiration of his term.
4. The powers and duties of such permanent commission should be:

- a. Study retirement benefit plans applicable to non-federal government employees in the State of Minnesota, including federal plans available to such employees.
 - b. Make recommendations within the scope of the study. This includes attention to financing of the various pension funds and financing of accrued liabilities.
 - c. Consider all aspects of pension planning and operation, and make recommendations designed to establish and maintain sound pension policy as to all funds.
 - d. Report at least biennially to each session of the Legislature.
 - e. Analyze and report to the Legislature on each item of proposed pension and retirement legislation, including amendments thereon with particular reference to analysis as to cost, actuarial soundness and adherence to sound pension policy.
 - f. Create and maintain a library of reference concerning pension retirement matters, including information as to laws and systems in other states.
5. The Commission should have the authority to procure its own staff and consultants, and should be provided with permanent office space in the Capitol Building or some other location readily accessible to members of the Legislature.
 6. The Commission recommends that the statute establishing the Commission provide that the Commission must receive on introduction a copy of each proposed bill concerning retirement and pensions.
 7. This Commission further recommends that amendment of the rules of the Senate and House be sought to implement adequate functioning of the Commission in its service to the Legislature; such rules should provide:

- a. Each member of the Commission should serve on any committee or subcommittee to which is assigned the consideration of any pension bill or amendment.
- b. All pension bills and amendments in either body should be referred to a single committee or subcommittee of that body, preferably initially on introduction, but at least ultimately before action by the body.
- c. No bill or amendment should be favorably reported by any committee or subcommittee of the House or Senate until the report of the Commission thereon is before such committee.
- d. The Commission should not be required to report on any pension bill or amendment introduced later than March 1 during any session of the Legislature.
- e. If a bill is introduced prior to March 2, it shall be the duty of the Commission to submit its report on that bill by April 15. If such report is not forthcoming, it shall not be necessary to suspend any rule of the House or Senate to pass the bill out of committee or from the floor.

ACTUARIAL SURVEYS AND FINANCIAL REPORTING

The statutory requirements as to financial reporting and actuarial surveys by SERA, PERA, TRA, the Highway Patrolman's Fund and The State Police Officers' Retirement Fund, enacted as Chapter 359, was one of the most significant items of pension legislation by the 1965 Session of the Legislature.

This law, a major recommendation of the Employees' Retirement Systems Interim Commission reporting to the 1965 Session, is the result of the cumulative studies and experience of all four of the pension study commissions. The purposes of Chapter 359 can well be summarized by two quotations from the 1965 Report:

(Page 7) "An adequate actuarial survey is the only method by which the liabilities of a pension fund can be measured and actual long range costs can be determined."

(Page 12) "The wisdom of requiring each government-supported pension fund to prepare an annual report for the information of public officials the public and its members is virtually self-evident."

Unless the report of each fund each year complies with identical and adequate specifications as to content and manner of presentation, much of the value of such reports will be lost."

The high level of performance by the actuaries of the five state-wide pension funds who followed the guideline provisions of Chapter 359 afforded this Commission a considerable degree of satisfaction as well as valuable assistance. Better study and analysis of these pension funds than heretofore possible has resulted.

Experience under this law not only amply demonstrates its value, but points up several important constructive additions to the law.

The Commission has carefully considered suggestions as to betterment of Chapter 359. In addition to considerable advice from the

Commission's actuaries and the actuaries of the various funds, the Commission received valuable assistance on this subject from Mr. Jerry McAllister of the Minnesota Mutual Life Insurance Company, and Mr. Allen Lund of the Northwestern National Life Insurance Company. This volunteer actuarial assistance is appreciated by the Commission.

Improvements recommended will be valuable to the public and members of the funds, but the greatest value will be to those responsible for operation and financing of the pension programs and for determination as to modifications in those programs. Such organizations are the governing boards of the funds, the Legislature and its Commissions assigned to pensions. Additional costs would occur only in instances where actuarial assumptions or pension benefits were changed. In such instances, the additional costs would be a nearly nominal fraction of administrative expense.

The improvements recommended are designed toward better evaluation of the various separate factors that combine to make a pension program, and to the early detection and analysis of trends and variations from experience as they occur.

The Commission recommends additions to Chapter 359, Laws of 1965, so that:

Each valuation will include an analysis of the increase or decrease in the unfunded accrued liability, and separately as to each change in benefit, change in actuarial assumption or other specific factor. In addition, actuarial gains or losses resulting when actual experience varies from the assumptions used in the calculations.

More detailed statistical data should be required.

In addition, the actuarial survey only required each fourth year should include more detailed data as to examination of the actuarial assumptions as related to the actual experience.

PENSION MEASURES CONCERNED WITH INFLATION

Erosion of the purchasing power of the dollar is the underlying reason for some of the most baffling pension problems in both public and private employment fields. The hardship caused by inflation motivates much of the intensity behind some of the pension proposals that are advanced.

Adoption by some jurisdictions of some of the types of counter inflation proposals has disarranged previously soundly financed pension funds or has further complicated already troubled funds. Still, the problems are both real and persistent. Certainly measures resulting from careful study can be expected to at least cause fewer and less severe consequences.

An adequate inflation-countering pension program that accurately forecasts its costs and derives its funds from sources which in justice should supply them has not as yet been conceived.

A number of measures with some inflation offsetting merit have been adopted in connection with one or more public employee pension programs. All such measures have deficiencies or faults of various kinds. At best, it is a matter of judgment as to whether merits or faults are the greater. Various types of such measures are briefly outlined as subjects for early further study:

VARIATIONS OF FINAL SALARY FORMULAS

Instead of basing an employee's pension on the average salary from which he had paid deductions to the fund, his pension is determined on such bases as final salary or final average salary for the five highest years, etc.

Final salary formulas are operative only up to the time of retirement. Up to that time they not only counter inflation, they keep pace with increases in the general standard of living.

Once retirement has occurred, final salary plans make no provision to offset future erosion of purchasing power to the dollar.

Final salary plans are costly to the employer since he must supply all of the deficiency of financing between contributions made on actual salary over the years of employment and what those contributions (both employer and employee) would have been if the employee had always earned and contributed at the level of his terminal salary.

INCREASES IN PENSIONS OF RETIRED PERSONS

Increases in pensions for retired former employees can not be considered part of a pension plan or pension program. Such measures have in several instances been taken in Minnesota as well as in a number of other states. They must be considered an "on occasion" helping hand type of response to former employees who are encountering the hardships due to eroded purchasing power of their pensions.

Since such measures were never a part of the pension program and no provision, financial or otherwise, had ever been made for such measures, previous Commissions in Minnesota and similar Commissions in other states have emphasized that such measures must be considered a form of assistance and should be provided from sources other than pension funds.

VARIABLE ANNUITY PLANS

Variable annuity plans, nearly always subject to voluntary selection by each pension fund member, are based on two fundamental characteristics. They seek to meet the problems caused by inflation both during employment and after retirement.

1. A specified part of the pension money attributable to the employee is invested in common stock or other equities to participate in earnings and changes in market value.
2. At retirement, the variable part of the

total pension is determined by accumulated value of the employee's equity investment; and after retirement, the variable pension continues to increase or decrease with the value of these investments.

Usually, at least one-half of an employee's pension contributions must remain on the guaranteed pension basis.

FINANCING CHARACTERISTICS

Variable annuities require no additional financing, but rely on increased pensions through increased earnings on those invested funds that are diverted from guaranteed pension plans.

Wisconsin, New Jersey, CREF (for teachers) and the University of Minnesota Retirement System are some of the jurisdictions offering variable annuities.

If, in the long run, these variable annuities prove to be successful, they will benefit only those who voluntarily select them.

CAUTION POINTS:

Variations as to market value and earning rate of stocks and other equities do not always coincide with inflation. Stocks sometimes increase when inflation is stationary or even receding. Stocks sometimes decline in value when inflation is increasing. Top level expert investment council is essential for variable annuity funds to succeed.

ADDITIONAL ANNUITY OPTIONS

Such plans are usually voluntary and provide that an employee may make additional contributions to increase his own retirement income. No voluntary additional annuity plans so far encountered provide for employer contributions. They are sometimes called supplementary annuity options.

Where such options include the use of a variable annuity, the inflation combatting qualities described under "variable annuities" applies.

COST OF LIVING PLANS

Plans described by this title all have a benefit formula providing for revisions in pensions according to changes in some designated index or other standard pertaining to the cost of living or wage patterns. The Federal Civil Service employees' system now has such provisions. Proposals of this nature are frequently urged in many state and local jurisdictions.

The purpose of such plans is to provide a cost of living hedge for the employees involved, both during employment and after retirement, against erosion of the purchasing power of the dollar.

The major troubles of such plans are financial and in all instances so far noted, entirely confront the employer.

It is extremely difficult for the employer to make sound advance financing for such plans.

The degree of inflation at any series of future dates is impossible to determine.

Costs—considerable in case of moderate inflation; can be almost astronomical in case of a major inflation.

Such plans usually shift the employee's share of the cost of countering purchasing power erosion from the members of the pension fund to those who provide the employer financing.

INCREASING ANNUITIES

The pension program is so planned and financed that after retirement each pension increases by a fixed percent per year thereafter. Several such plans provide for a 1½ % per year rate of appreciation based on the initial pension at retirement.

Costs of such fixed scheduled increases can be as effectively determined in advance as can the pensions themselves. Financing can, therefore, be scheduled to be entirely pre-retirement in the same manner as regular financing.

In the plans observed, costs of financing the increasing annuities are shared on a matching basis by the employer and the employee.

Increasing annuities are intended to combat post retirement inflation. They are designed as an orderly pre-financed method of eliminating across the board or other types of increases in the pensions of retired persons.

The most frequently cited defect is that the scheduled rate of pension increase may or may not coincide with the degree of inflation. It may sometimes exceed the rate of inflation as the pension increases each year regardless of the cost of living or wage scales. On the other hand, if inflation progresses rapidly the yearly rate of appreciation of pensions may provide only a partial hedge.

ESCALATOR PROVISIONS

In Minnesota the term "escalator provisions" has by usage come to mean the most extensive inflation countering measures found anywhere in the country. Not only is each pension at retirement based on the final salary but after retirement the pension is raised each time and in the same ratio as the salaries of active employees are raised.

This is the most costly of all inflation countering measures and one of the most difficult to anticipate financially.

Because the only pension funds in Minnesota with such provisions are some of the fire and police funds, this plan is discussed at some length in the section of the report dealing with Pension Funds for Firemen and Policemen.

MINNESOTA MEASURES TO DATE

The Legislature by a series of investment

law amendments beginning in 1959 has sought to improve the yield on invested assets of the pension funds as well as to increase the growth possibilities.

The State Board of Investment was provided with more professional staff. The types of securities eligible for investment of funds was broadened considerably.

Up to 30% of the assets of each pension fund may now be invested in equities such as high grade common stocks.

The Pension Study Commissions preceding this Commission supported and assisted in bringing about enactment of these measures.

The net yield on the invested assets of the five statewide pension funds is now approximately 1/3 larger than in 1959.

This increased interest yield is of material assistance in financing the pension funds.

COMMISSION CONCLUSIONS

Each type of inflation compensation measure has serious faults. They have varying degrees of effectiveness as to compensating for inflation.

No such measure should be adopted until the best possible analysis has been made as to all resulting effects and consequences.

It is important that this entire subject matter be given thorough study by the Public Retirement Commission, if created; if not, the next interim commission assigned to pension study.

SALARY LIMIT FOR PENSION PURPOSES

Each of the three large statewide funds, SERA, TRA and PERA, are requesting that salary limits for pension purposes be abolished so that both contributions and pension credit would be based on the actual salary of each employee. From the 1955 Session when the TRA salary limit was raised to \$4800 a year, all three of these large funds were under a salary ceiling of \$4800 per year until the 1965 Session raised the salary ceilings to \$7200 per year in the case of TRA and SERA, and to \$6000 per year as to PERA.

The philosophy of salary ceilings is primarily that publicly subsidized pensions are for the purpose of providing at least a reasonable minimum level of retirement for the lower paid strata of public employees. Presumably, such persons would have difficulty in the majority of cases in providing their own retirement out of their own savings. At the time the \$4800 ceilings were adopted a substantial portion of the membership of the several funds did not earn much, if any, in excess of \$4800 per year. The 1965 increase in salary ceiling to \$7200 per year did little more than restore the relationship of salary ceiling to average employee pay that existed with \$4800 per year ceilings in 1955.

A number of pension jurisdictions throughout the United States have never had, or years ago abolished, salary ceilings in their employees' pension funds. Such jurisdictions accepted the philosophy that pensions should relate to actual salary regardless of the level of salary. This means that standards of living of each employee after retirement should have a relationship to living standards during active employment. Experience in Minnesota demonstrates that a salary ceiling fixed to represent a desired ratio to the pay of employees at a given time commences to depart from that ratio with each pay raise.

There are some practical adverse effects of salary ceilings that should be noted:

The coordinated plans will no doubt from time to time experience increases in Social Security salary ceilings, sometimes requir-

ing adjustments in terms of the pension fund law. It is conceivable that Social Security ceilings could be raised beyond the ceilings of the pension funds as happened in 1965 in the case of the hospital employees coordinated under PERA where the PERA ceiling is \$6000 per year and Social Security is \$6600 per year.

This Commission, reviewing the experience of previous Commissions and foreseeing that if salary ceilings are continued, they will inevitably be increased from time to time as pay scales tend to make a given ceiling obsolete, has come to the conclusion that the wiser course would be to abolish the salary ceilings. This would provide that pension credits would accrue for each public employee in accordance with his rate of pay. In addition, such a course would eliminate requests to allow buy-backs to now higher ceilings such as are now experienced following the 1965 raise in salary ceilings. Buy-backs of this nature subject the employer to pension costs for periods of service that have passed, budget-wise charging to the present expenses attributable to the past.

At the present time, SERA, TRA, PERA and the State Police Officers' Fund determine pensions according to "average covered salary." Under this procedure increases in salary ceilings or removal of such limits can be entirely, or at least nearly, financed by applying the previous per cent of pay financing to the larger covered payroll.

Removal of salary ceilings becomes considerably more costly if benefit formulas base pensions on "final salary" or "average salary for the five highest years." Under such formulas a raise in ceiling or a removal of salary ceilings has two distinct financially adverse effects:

1. The removal of the limit inevitably creates an immediate sizeable deficit.
2. Each subsequent pay raise to employees creates additional deficits.

Under such formulas an assumption of increasing pay with attendant higher normal

cost is necessary to avoid perpetual deficit financing.

THEREFORE, THE COMMISSION RECOMMENDS that the statutes governing

SERA, TRA, PERA, the Highway Patrolmen's Fund and the State Police Officers' Fund be amended to remove the salary ceilings now in such statutes.

PENSION PROGRAMS FOR PAID FIREMEN AND POLICEMEN

Each local pension fund for paid firemen or for policemen is a non profit corporation to provide pension and related benefits to either the firemen or the policemen of a municipality. These local funds include approximately two-thirds of the paid firemen and

policemen in the state. The remaining one-third of such safety employees, including deputy sheriffs, are required to be covered in the Fire and Police fund of the Public Employees Retirement Association (PERA).

Local Pension Funds for Policemen and Paid Firemen

The financial condition of the local funds:

"Promise now and pay later" describes the financing practices that have been followed for a majority of the pension funds for paid firemen and policemen.

The pay later problems are here for most of the older funds and are well on the way for most of the younger funds. As of January 1, 1965, active and retired members of the 29 policemen's and 22 paid firemen's local pension funds have collectively accumulated pension credit (accrued liabilities) to the amount of \$124,289,099. The combined assets of these 51 funds are \$8,831,142.

Seven years earlier, as of January 1, 1958, 26 of these policemen's funds plus 21 of the firemen's funds had combined accrued liabilities of \$84,081,656 and assets of \$5,740,415. Thus, in seven years, liabilities have increased by \$40,207,443 and assets by \$3,090,727.

The tabulation of the key results of the actuarial surveys shows the condition of each firemen's and policemen's fund. By consolidating the two surveys in one tabulation, it becomes possible to not only see the current conditions of each fund, but through comparison, learn the change in condition that has occurred in seven years.

Each set of surveys was the result of specific order of the Legislature at the 1957 and 1965 Sessions.

In the case of most of the firemen's or policemen's funds these two surveys which were ordered by the Legislature are the only actuarial measurements that have ever been made. The change in the financial condition of many of the funds between 1958 and 1965 is not always due to underfinancing. In many cases it is at least partly due to an increase in the benefit program.

POLICEMEN'S FUNDS

Name of Fund		A	B	C	D	G	
		Payroll	Deficit	Assets	Accrued Liability	Support Prev. Year Dollars	Support Prev. Year Per Cent
Albert Lea	1965	\$ 109,000	\$ 466,358	\$ 69,178	\$ 535,536	\$ 20,292	18.6%
	1958	68,856	225,654	58,900	284,554	8,872	12.9
Anoka *	1965	98,615	104,140	79,129	183,269	6,252	6.3
	1958	58,080	36,268	26,053	62,321	5,443	9.4
Austin	1965	207,366	693,143	117,500	810,643	30,558	14.7
	1958	158,172	467,715	62,632	530,347	16,120	10.2
Bloomington * D	1966	279,396	331,841	168,980	500,821	54,902	19.6
	1958						
Brainerd	1965	83,746	284,479	66,356	350,835	10,975	13.1
	1958	60,448	173,535	25,203	198,738	5,380	8.9
Buhl	1965	18,000	19,200	23,625	42,825	4,119	22.9
	1958						
Chisholm	1965	58,758	197,016	40,251	237,267	14,173	24.1
	1958	33,276	185,171	43,994	229,165	7,260	21.8
Columbia Heights	1965	116,073	243,737	68,215	311,952	10,967	9.4
	1958	49,336	111,508	11,794	123,302	636	1.3
Crookston	1965	54,547	97,949	39,691	137,640	7,236	13.3
	1958	20,220	16,661	14,221	30,882	3,772	18.7
Crystal *	1965	141,156	203,456	44,215	247,671	19,527	13.8
	1958						
Duluth *	1965	821,418	4,561,161	507,616	5,068,777	236,837	28.8
	1958	592,476	3,631,834	343,157	3,974,991	189,103	31.9
Eveleth	1965	41,258	275,640	66,864	342,504	7,709	18.7
	1958	57,852	154,029	50,080	204,109	7,157	12.4
Fairmont *	1965	64,956	213,590	90,413	304,003	11,924	18.4
	1958	50,880	102,735	30,904	133,639	7,683	15.1
Faribault	1965	89,410	353,038	73,381	426,419	12,145	13.6
	1958	69,240	195,802	6,428	202,230	6,428	9.3
Hibbing	1965	115,097	398,346	97,815	496,161	32,493	28.2
	1958	78,540	510,908	53,091	563,999	28,604	36.4
Mankato *	1965	168,901	884,641	151,509	1,036,150	30,958	18.3
	1958	117,624	346,666	82,967	429,633	15,858	13.5
Minneapolis *	1965	5,389,656	27,515,727	1,175,474	28,691,201	1,089,280	20.2
	1958	3,598,524	18,405,322	728,360	19,133,682	712,549	19.8
Moorhead *	1965	125,811	306,829	130,335	437,164	20,538	16.3
	1958	61,248	182,198	47,560	229,758	8,297	13.5

Actuarial Surveys as of January 1, 1958 and 1965

H Normal Cost Dollars	Normal Cost Per Cent	K Normal Cost Plus Amortization	Normal Cost Plus Frozen Deficit	O		P Current Annuities Payable	
				Membership Actives	Membership Total		
\$ 24,289 14,867	22.3% 21.6	42.9% 35.8	35.1% 31.4	21	30 22	\$ 19,506 9,018	Albert Lea
15,208 11,831	15.4 20.4	20.5 23.1	18.6 22.2	10	11 12	900 0	Anoka *
31,377 27,368	15.1 17.3	31.2 30.1	25.2 26.2	35	53 45	26,757 10,242	Austin
52,058	18.8	23.8	22.2	39	41	3,375	Bloomington * D
15,635 11,543	18.7 19.1	35.0 31.5	28.9 27.7	14	21 15	7,566 1,404	Brainerd
4,103	22.8	27.9	26.0	4	4	0	Buhl
7,108 5,827	12.1 17.5	28.4 41.6	22.2 34.2	12	21 16	14,715 6,668	Chisholm
18,488 9,026	15.9 18.3	26.6 28.1	22.2 25.1	15	17 9	7,107 0	Columbia Heights
10,126 1,578	18.6 7.8	27.2 11.4	23.9 10.3	11	12 8	1,274 1,656	Crookston
28,370	20.1	27.0	24.4	20	24	4,455	Crystal *
106,763 89,085	13.0 15.0	39.7 41.6	29.7 33.4	121	224 227	191,229 173,048	Duluth *
7,340 3,841	17.8 6.6	50.0 18.2	37.8 14.6	11	13 21	2,460 6,105	Eveleth
13,062 8,470	20.1 16.6	35.9 25.4	30.0 22.7	13	16 14	2,940 2,760	Fairmont *
17,546 14,969	19.6 21.6	38.6 33.0	31.5 30.1	19	27 20	16,020 4,560	Faribault
12,259 13,659	10.7 17.4	27.3 45.5	21.0 36.9	20	42 44	29,887 28,978	Hibbing
40,226 17,502	23.8 14.9	49.0 27.6	39.5 23.7	31	45 35	32,118 12,990	Mankato *
885,112 606,353	16.4 16.9	41.0 39.0	31.7 32.2	775	1,296 1,122	1,181,330 836,491	Minneapolis *
20,084 13,081	16.0 21.4	27.7 34.2	23.3 30.3	22	28 19	9,306 3,060	Moorhead *

POLICEMEN'S FUNDS

Name of Fund		A	B	C	D	G	
		Payroll	Deficit	Assets	Accrued Liability	Support Prev. Year Dollars	Support Prev. Year Per Cent
New Ulm E	1965	73,302	292,748	50,013	342,761	12,134	16.6
	1958	46,913	150,188	46,984	197,172	7,145	15.2
Red Wing	1965	89,378	195,092	118,855	313,947	13,355	14.9
	1958	55,620	106,791	69,249	176,040	6,995	12.6
Richfield F *	1966	256,200	366,413	68,328	434,291		
	1958						
Rochester *	1965	461,445	1,550,120	108,622	1,658,742	47,279	10.2
	1958	243,056	703,986	128,831	832,817	12,891	5.3
St. Cloud *	1965	209,746	688,654	70,957	759,611	23,051	11.0
	1958	123,353	394,848	81,166	476,014	13,651	11.1
St. Louis Park *	1965	272,800	417,708	234,323	652,031	37,392	13.7
	1958	148,657	159,379	50,547	209,926	33,209	22.3
St. Paul *	1965	3,211,281	16,355,313	971,214	17,326,527	569,068	17.7
	1958	2,509,678	9,840,627	882,373	10,723,000	412,259	16.4
So. St. Paul *	1965	178,178	996,922	152,172	1,149,094	33,478	18.8
	1958	116,611	513,156	94,768	607,924	27,127	23.3
Thief River Falls	1965	65,737	151,686	41,616	193,302	5,744	8.7
	1958	36,120	44,071	11,137	55,208	3,750	10.4
Virginia	1965	123,162	533,810	48,160	581,970	27,232	22.1
	1958	100,380	455,447	68,771	524,218	18,118	18.0
Winona *	1965	203,782	787,598	145,443	933,041	35,180	17.3
	1958	140,880	456,189	91,178	547,367	15,664	11.1
	1965	13,108,225	59,486,355	5,018,300	64,506,655	2,424,298	18.4
	1958	8,609,600	37,605,646	3,128,230	40,733,876	1,576,048	18.3%

NOTES:

ALL FUNDS

1958 Tabulations did not show a break-down between active and retired persons in the various funds.

1958 Surveys for most funds were the first actuarial surveys ever made; hence the 1965 surveys had somewhat more data available as to experience of the individual funds, particularly relative to incidence of retirement.

FIREMEN'S FUNDS

A. The valuation date as to Moorhead firemen's fund was Sept. 30, 1964, rather than Dec. 31, 1964.

B. The Richfield firemen's fund 1965 survey was prepared by a different actuary than the other surveys, and is based on an assumption of 3% average annual increase in rate of pay in recognition of the escalator provisions in this fund.

Actuarial Surveys as of January 1, 1958 and 1965

H Normal Cost Dollars	Normal Cost Per Cent	K Normal Cost Plus Amortization	Normal Cost Plus Frozen Deficit	O		P Current Annuities Payable	
				Membership Actives	Membership Total		
17,692	24.1	43.0	36.1	15	21	11,279	New Ulm E
8,625	18.4	32.2	28.0		16	3,480	
12,812	14.3	24.8	20.9	15	21	12,570	Red Wing
9,594	17.2	25.6	23.0		15	4,140	
45,882	17.9	24.7	22.2	35	35	0	Richfield F *
74,218	16.1	32.3	26.2	71	89	49,064	Rochester *
37,010	15.2	27.8	23.9		60	15,411	
35,911	17.1	32.9	27.0	41	55	20,107	St. Cloud *
20,628	16.7	30.6	26.3		48	19,862	
56,891	20.9	28.2	25.4	39	43	13,662	St. Louis Park *
29,338	19.7	24.4	23.0		29	0	
454,313	14.1	38.7	29.4	448	739	617,386	St. Paul *
482,000	19.2	37.2	31.0		713	428,697	
33,532	18.8	45.8	35.6	26	39	37,026	So. St. Paul *
23,805	20.4	39.5	33.6		30	14,789	
12,259	18.6	29.8	25.6	13	18	2,700	Thief River Falls
7,286	20.2	25.5	23.8		11	600	
17,823	14.5	35.3	27.5	22	47	34,835	Virginia
11,338	11.3	30.9	14.9		44	24,450	
31,777	15.6	34.2	27.2	37	53	27,342	Winona *
22,639	16.1	30.1	25.8		49	17,257	
2,114,414	16.1	38.0	29.7	1,955	3,085	2,368,916	
1,502,874	17.5%	36.7	30.5		2,647	1,625,666	

FIREMEN'S FUNDS (Continued)

This and the fact that substantial benefits are provided for volunteer firemen accounts for the unusually high normal cost.

C. The West St. Paul Fund has increased benefits considerably since the valuation date. A valuation at this time will show considerably different results.

POLICEMEN'S FUNDS

D. The Bloomington valuation date was January 1, 1966.

E. The New Ulm valuation date was Jan. 1, 1964, instead of Dec. 31, 1964.

F. The Richfield Valuation date is January 1, 1966. The special law governing operation of this fund was enacted in 1965.

FIREMEN'S FUNDS

Name of Fund		A	B	C	D	G	
		Payroll	Deficit	Assets	Accrued Liability	Support Prev. Year Dollars	Support Prev. Year Per Cent
Albert Lea *	1965	\$ 115,847	\$ 195,441	\$ 215,740	\$ 411,181	\$ 20,534	17.7%
	1958	66,840	25,139	91,045	116,184	11,607	17.4
Austin *	1965	194,454	759,539	291,165	1,050,704	28,989	14.9
	1958	152,286	474,551	149,767	624,318	21,943	14.4
Chisholm	1965	83,274	303,170	88,930	392,100	20,540	24.7
	1958	66,672	282,318	74,641	356,959	18,238	27.4
Cloquet	1965	86,685	88,568	148,964	237,532	15,797	18.2
	1958	69,900	138,563	84,629	223,192	11,584	16.6
Crookston	1965	30,500	45,619	89,317	134,936	9,183	30.1
	1958	16,320	52,839	52,038	104,877	8,845	54.0
Duluth *	1965	916,908	6,001,113	339,362	6,340,475	342,411	37.3
	1958	736,488	4,553,991	360,728	4,914,719	195,055	26.5
Eveleth	1965	57,252	301,365	60,977	362,342	17,533	30.6
	1958	70,973	200,323	50,792	251,115	21,259	30.0
Faribault *	1965	55,500	239,850	150,637	390,487	14,517	26.2
	1958	45,000	215,065	72,338	287,403	8,662	19.2
Hibbing	1965	168,515	670,501	230,079	900,580	46,040	27.3
	1958	182,550	819,184	171,023	990,207	37,274	20.4
Mankato *	1965	198,713	978,576	98,571	1,077,147	12,341	6.2
	1958	121,716	538,483	111,242	649,725	20,089	16.5
Minneapolis *	1965	4,185,617	25,327,592	477,284	25,804,876	1,149,917	27.5
	1958	3,155,136	19,245,008	347,569	19,592,577	667,886	21.2
Moorhead A	1965	77,537	94,227	150,583	244,810	17,490	22.6
	1958						
Red Wing	1965	73,920	314,864	118,013	432,877	12,780	17.3
	1958	54,600	140,802	91,481	232,283	10,290	18.8
Richfield * B	1965	162,084	471,400	206,100	677,500	31,009	19.1
	1958	55,128	212,367	85,965	298,332	12,417	22.5
Rochester *	1965	480,887	1,889,152	185,992	2,075,144	45,998	9.6
	1958	335,664	751,815	108,514	860,329	40,995	12.2
St. Cloud *	1965	190,176	629,252	112,749	742,001	26,792	14.1
	1958	126,528	301,168	81,445	382,613	19,109	15.1
St. Louis Park *	1965	134,540	449,212	219,637	668,849	20,733	15.4
	1958	98,498	309,522	83,012	392,534	27,210	27.6
St. Paul *	1965	3,380,203	16,068,882	262,312	16,331,194	778,615	23.0
	1958	2,335,428	10,877,856	342,979	11,220,835	491,566	21.0

Actuarial Surveys as of January 1, 1958 and 1965

H Normal Cost Dollars	Normal Cost Per Cent	K Normal Cost Plus Amortization	P Normal Cost Plus Frozen Deficit	O		S Current Annuities Payable	
				Membership Actives	Membership Total		
\$ 22,934 6,884	20.0% 10.3	27.9% 11.9	24.9% 11.4	21	29 27	\$ 2,280 3,660	Albert Lea *
33,378 27,258	17.2 17.9	36.0 31.4	28.9 27.2	34	52 52	17,508 11,464	Austin *
9,786 8,442	11.8 12.7	29.3 31.0	22.7 25.4	17	32 28	23,100 12,060	Chisholm
8,200 7,911	9.5 11.3	14.4 19.9	12.5 17.3	14	23 24	9,168 8,040	Cloquet
4,530 3,896	14.9 23.8	22.1 37.8	19.3 33.6	28	38 33	3,300 3,060	Crookston
124,168 128,132	13.5 17.4	45.1 44.1	33.2 35.9	149	302 286	315,259 222,568	Duluth *
6,598 5,969	11.5 8.4	36.9 20.6	27.3 16.9	11	27 31	17,880 15,540	Eveleth
10,085 6,278	18.2 14.0	39.0 34.6	31.1 28.3	11	18 16	15,150 5,640	Faribault *
18,472 19,520	11.0 10.7	30.1 30.1	22.9 24.2	31	65 70	42,311 29,941	Hibbing
33,600 20,213	16.9 16.6	40.6 35.7	31.7 29.9	38	60 50	24,691 3,760	Mankato *
532,682 446,161	12.7 14.1	41.9 40.5	30.9 32.4	569	1,039 974	1,118,215 790,128	Minneapolis *
10,233	13.2	18.5	16.8	17	32	5,760	Moorhead A
12,776 5,619	17.3 10.3	37.8 21.4	30.1 18.0	42	64 25	19,200 4,090	Red Wing
76,560 23,500	47.2 42.6	61.2 59.3	56.0 54.2	22	37 30	15,689 5,063	Richfield * B
88,765 42,809	18.5 12.8	37.4 22.4	30.2 19.5	75	104 97	52,550 29,340	Rochester *
29,790 11,298	15.7 8.9	31.6 19.2	25.6 16.1	36	50 46	23,224 19,500	St. Cloud *
27,417 31,594	20.4 32.1	36.5 45.7	30.4 41.5	18	21 39	9,464 0	St. Louis Park *
443,051 278,071	13.1 11.9	36.0 32.1	27.4 25.9	464	802 764	804,247 612,882	St. Paul *

FIREMEN'S FUNDS

Name of Fund		A	B	C	D	G	
		Payroll	Deficit	Assets	Accrued Liability	Support Prev. Year Dollars	Support Prev. Year Per Cent
So. St. Paul *	1965	125,102	361,998	156,540	518,538	10,206	8.2
	1958	87,034	167,157	121,467	288,624	8,588	9.9
Virginia	1965	160,650	768,122	59,580	827,702	46,310	28.8
	1958	134,880	749,415	68,464	817,879	21,350	15.8
West St. Paul C	1965	85,524	157	44,467	44,624	4,839	5.7
	1958	51,000	1,578	14,153	15,731	2,186	4.3
Winona *	1965	241,531	1,018,248	106,011	1,124,259	44,985	18.6
	1958	173,040	678,451	48,893	727,344	22,207	12.8
	1965	11,205,414	\$56,976,848	\$3,812,842	\$59,782,444	\$2,717,560	24.3
	1958	8,135,681	40,735,595	2,612,185	43,347,780	1,678,360	20.6%

To facilitate use of the accompanying tabulation the following explanation of the column headings and later comments should be kept in mind:

Column A—This is that part of the total payroll of the department from which payroll deductions are made.

Column B—The deficit, also often described as unfunded accrued liabilities, is that part of the accrued pension liabilities not covered by assets of the fund. The amount is determined by subtracting the assets from the total accrued liability.

Column C—The assets of the fund on hand or invested.

Column D—The accrued liability is the present value of the pension credits due to service up to the date of the survey. This is less than the total amount that will ultimately be paid out since the total amount to be paid

has been discounted by 3% interest per year until the probable date of payment to each recipient of benefits, and in addition, ultimate total liability has been discounted by probable reduction in amounts to be paid out through deaths or withdrawals from service. This is net accrued liability as of the date of the survey.

Column G—"Support—Previous Year—Dollars" represents total support of the fund usually consisting of members' contributions plus tax or other public funds.

The second column under "G" is the total amount in the first column expressed as a as a percent of covered payroll (Column A).

Column H—Normal cost in "H" shows the annual amount of money that would have been necessary for the fund to have received each year to pay benefits and provide for the assets to equal the accrued liabilities. This

Actuarial Surveys as of January 1, 1958 and 1965

H		K	P	O		S	
Normal Cost Dollars	Normal Cost Per Cent	Normal Cost Plus Amortization	Normal Cost Plus Frozen Deficit	Membership Actives	Membership Total	Current Annuities Payable	
29,434	23.5	37.5	32.2	18	23	15,091	So. St. Paul *
11,570	13.3	21.6	19.1		19	3,796	
21,152	13.2	36.2	27.5	29	64	37,380	Virginia
20,783	15.4	39.4	32.1		57	25,452	
3,470	4.1	4.1	4.1	12	12	0	West St. Paul C
2,692	5.3	5.4	5.4		11	0	
31,663	13.1	33.4	25.8	43	74	44,020	Winona *
19,114	11.0	28.0	22.8		69	33,180	
\$1,578,724	14.1	38.6	29.3	1,699	2,968	\$2,615,489	
1,127,714	13.9%	35.5%	28.9%		2,748	1,839,164	

amount is based on the present level of benefits and would become inadequate should benefits be increased.

The column headed "Normal Cost—Percent" is the amount in Column "H" expressed as a percent of covered payroll (Column A).

Column K—This column gives the per cent per year of the covered payroll (Column A) that will have to be received by the fund to pay all benefits and build the assets of the fund by the year 1997 to equal the expected accrued liabilities as of that date. This figure does not provide for any change in the level of benefits.

Column P—This is the percent of covered payroll (Column A) that the fund would have to receive each year in order to keep up with benefit payments and prevent the deficit from increasing. This percent of payroll does not provide for any change in benefits.

Column O—Membership—Actives—equals current active firemen or policemen.

Membership—Total—is the active membership plus the number of persons on the benefit rolls.

Column S—This is the amount of benefits actually paid during the year ending on the date of the survey.

(*) Escalator Clause—The pension funds indicated by the (*) after the name of the fund have in their program of benefits an "Escalator Clause" which provides for changes in benefit levels each time there is a change in the salary of active members. **Thus, a pay raise would increase all costs, liabilities and benefits.** A pay decrease would have the opposite effect.

"Escalator Clauses" are discussed later in this chapter.

Retirement Qualification Requirements and Benefit Levels

Policemen's Benefit Program: All the policemen's funds provide for minimum retirement qualifications of 20 years service. All allow retirement as of age 50 except Chisholm, Hibbing and Richfield which do not permit retirement until age 55.

The benefit schedules of the various funds vary appreciably:

Funds that pay a pension of 50% of final salary as both a maximum and minimum pension are: Albert Lea, Anoka, Austin, Columbia Heights, Crookston, Fairmont, Faribault, Moorhead, New Ulm, Red Wing, South St. Paul and Virginia. Buhl and Mankato pay 50% of final salary as a minimum pension but also provide for an increase in benefits for additional years of service. Mankato paying 50% of final salary minimum and 55% maximum is the only police fund with escalator provisions that does not limit salary for pension purposes to the pay scale of a first class patrolman.

Instead of paying on final salary, Brainerd pays 50% of career average salary; Thief River Falls pays 50% of the average of the last five years salary; Chisholm and Hibbing pay 50% of average salary for the last three years. Eveleth pays \$100 per month minimum plus up to \$100 per month additional for service beyond 20 years.

Funds that pay a minimum pension but require more than 20 years service for a maximum pension are Bloomington, Crystal, Duluth, Minneapolis, Richfield, Rochester, St.

Cloud, St. Louis Park, St. Paul and Winona. Minimum pensions average close to 40% of pay; maximum pensions, 50% of pay.

Benefit Program for Paid Firemen: All local funds for paid firemen provide for retirement pensions after 20 years service. All allow retirement as of age 50 except Chisholm, Crookston, Eveleth and Hibbing. Chisholm, Eveleth and Hibbing do not permit retirement until age 55, and Crookston not until age 60.

Funds that pay a pension of 50% of final salary as both a maximum and minimum pension are: Austin, Faribault, Richfield, St. Louis Park and So. St. Paul.

Funds that pay pensions in a stipulated dollar amount not related to salary are: Chisholm, Cloquet, Eveleth, Moorhead, Red Wing and Virginia. West St. Paul likewise paid a dollar pension not related to salary at the time of the survey, but has since revised their benefit program to relate pensions to salaries.

Funds that pay a minimum pension of 50% of final salary but provide further increase for more than 20 years service are: Albert Lea, Crookston, Hibbing and Mankato.

Funds that pay a minimum pension of approximately 40% of final salary but provide for an increase over that proportion according to years of service over 20 years with a maximum pension of 50% of salary are: Duluth, Minneapolis, Rochester, St. Cloud, St. Paul and Winona; except Rochester where the maximum pension somewhat exceeds 50% of salary.

All Fire and Police Funds provide for widows' and children's benefits.

FINANCIAL PROBLEMS OF FIRE AND POLICE FUNDS

The tabulations of the actuarial surveys show that the condition and financial problems of the fire and police funds are substantially so similar that they can be discussed together and in total. The fact that several of the funds have taken some steps toward improved financing should be noted for future reference.

Present fire and police pension promises cannot be fulfilled under the present programs of benefits and financing. The actuarial surveys make this absolutely clear.

The fact that the 51 funds have accumulated \$124,289,099 of accrued liabilities (present value of pension credit earned to date) and \$8,831,142 of assets indicating combined deficit of \$115,457,957 is only part of the problem.

Accrued liabilities increased \$40,207,443 in seven years from 1958 to 1965 while assets increased \$3,090,727. Thus, liabilities increased an average of \$5,302,388 more per year than the assets increased. Just to have held the line over those seven years the firemen and policemen plus the municipalities would have had to pay into these funds \$5,302,727 each year in addition to the amount that was paid in. In 1964 the total paid into these funds from all sources was \$5,142,358 while it should have been \$10,445,085.

Another indication from the tabulation is that if benefit programs and financing had been kept in balance since the first actuarial surveys, the present financial problem would be \$37,116,716 less acute. The problems will not go away; if postponed, they just become considerably worse.

The total 1964 covered payroll of the 51 funds was \$24,313,639. The \$5,302,724 average yearly increase in the deficit represents 21.8% of the 1964 covered payroll. Thus, just to hold the line in 1964, an additional 21.8% of covered payroll should have been contributed to the funds. Shown another way, to have just held the line on fire and police pensions over the seven year period would have required financial support of at least

43% of the combined covered payroll of the 51 funds, while only 21.2% of covered pay was actually paid in.

Some of the individual funds with high cost benefit programs would have required considerably more than the 43% per year, and some with more moderate cost programs would have required less.

To reduce the deficit will require a rate of support higher than the hold the line or "frozen deficit" level just discussed.

Causes of the Financial Problems

Before considering specific causes of the accumulated problems of the fire and police pension funds a general discussion is perhaps in order.

All too many people in and out of the funds have been willing to hope that when promised pensions become payable pensions, the money needed will be easier to raise than it was at the time the legislation making the promise was passed. In other words, many have assumed that it will be easier to pay a man's pension after he has retired even though you are also paying his successor's salary, than it would have been to systematically accumulate the financing of the man's pension before he retired.

All too often pension benefits have been raised by law or legislation without the persons involved being in possession of reliable information as to the financial consequences. This is demonstrated by the fact that only a few of the 51 funds have had even one actuarial survey except for the 1958 and 1965 surveys required by the legislature.

Laws and Special Laws

The 22 fire funds operate under two general laws and at least 78 special laws or general laws of special application. Eleven of the special laws were enacted in 1965.

The 29 police funds operate under a general law and at least 46 special laws or gen-

eral laws of special application. Six of the special laws were enacted in 1965.

The general laws themselves are complicated and contribute to the confusion. They set up somewhat different standards and programs for municipalities of the various classes. In some instances they provide exceptions allowing cities of one class to operate under the provisions of another class. In one instance a general law provides a special application as to the benefit schedules based on the county of the municipality.

The special laws and general laws of special application in most cases amend a general law or an earlier special law or both. These special laws require concurrence of the local governing body to become effective.

In a number of instances the general laws and the special laws permit the pension funds to change benefits within broad limits by amendment of the articles of incorporation or the by-laws of the association.

The general laws themselves contribute to the confusion in the fire and police pension field. By setting up different benefit schedules for municipalities of the various classes, they have, to some extent, become general laws of special application complicated further by variations set forth. The lack of a systematic purpose in the general laws is indicated by the fact they sometimes provide higher and more costly benefits for some smaller municipalities than for larger ones.

Considering Fire and Police Funds as Local Matters

In Minnesota, fire and police pension funds have more and more been considered as local matters. This is just the opposite of the trend in a number of states. A number of states, including New York, New Jersey and Ohio (in 1965) provide for fire and police pensions to be provided by a single state operated fund. A number of other states, including Illinois, have a single law governing the operation of all of the local funds. Benefits relate to salary and the same formula applies

to all funds.

As already noted, Minnesota long ago departed from standardization as to police and fire funds. This difference of program was increased by general laws of special application. With the advent of special local laws applying to a single local non-profit firemen's or policemen's relief association, the confusion has been accentuated and at a more rapid rate each session of the legislature.

Experience conclusively demonstrates that in fact fire and police pensions are not purely local matters even if they are so designated by statute. Each new or increased level of benefit enacted for a single fund is certain to trigger efforts by the membership of other funds for similar legislation applying to them.

The variations between the funds and the confusion as to how far they are purely local and how far a state responsibility has militated against attempts by local officials or legislators to learn authoritatively how the local fund compares to other funds as to both benefits and costs. In only a very few instances have laws been enacted to constructively improve the condition of one of the funds.

Statutory Limits on Fire and Police Pension Fund Reserves

All of the fire and police funds, except several that have been "rescued" by special laws, are in effect prevented by statute from attaining even the grossly inadequate level of financing that present millage tax limitations would permit. The statutes put "reserve" (asset) limits on each fund according to class of municipality. It is then provided that there must be a reduction in the maximum mill rate of tax levy if the (assets) "reserve" reaches the limit. Fire funds in cities of the first and second class also lose the fire insurance surcharge on premiums. These reserve limits are so low they do not permit more than nominal funding before cutting the income of the fund.

As the result of these "reserve" limits after a new fund has been started it has been vir-

tually deprived of income to prepare for retirements. By the time the fund becomes old enough to have a number of people on retirement there is no material amount on hand and the maximum tax levy is not adequate to pay benefits. At every session of the legislature some of the funds must be given higher "reserve" limits and higher tax millage to just tide them over for a few years when the process has to be repeated to allow still higher tax rates.

The "reserve" limits doubtless have at least been partially responsible for the fact that as of the date of the actuarial surveys no fire funds and only two police funds required employee contributions as high as 6% of pay. All other public employee pension programs in the state cost the employee members 6% of pay or more. The fact is that should contributions of firemen or policemen raise the "reserves" of a fund to the statutory limit, the result would be a reduction in tax income to the fund and hence no improvement in the financial condition of the fund.

The unrealistic "reserve" limits are accompanied by equally unrealistic tax provisions for the support of the fire and police funds. The general statutes stipulate maximum millage rates. Some funds have obtained special laws providing higher mill rates. This is a completely unrealistic approach. The assets and liabilities of a pension fund are in dollars. The amount of dollars depends on the benefit provisions of the funds and the number of members and beneficiaries. The tax should be to provide the costs of meeting the obligations of the fund. If such costs are deemed too high, the costs of the fund should be accordingly reduced. In any event there is little relationship in the various communities between the assessed value of property and the costs of a fire or police pension fund.

Additional Problems of Police and Fire Funds

Investment of the assets of the fire and police funds would constitute a much larger problem than it has been to date if the assets

of the funds had not been relatively limited in amount. The absence of adequate statutory guidelines has pretty much left each fund to its own devices. Many of the funds have been relatively cautious in selecting investments, but there have been at least some instances of investments of dubious quality. Many of the funds rate of interest earned is less than the State Board of Investment obtains for the five Minnesota statewide funds.

Proper and remunerative investment of assets will become very important if the assets of the fire and police funds build up.

The Public Examiner audits the fire and police funds at the same time as his office audits the municipality involved. This means that in the smaller municipalities an audit, if any is had, is purely at the option of either the local fund or the local municipality.

At best an audit only accounts for receipts, disbursements and balances on hand and the legality of the transactions that have occurred.

Importance of Actuarial Surveys

Only an adequate actuarial survey will reveal the pension liabilities of a fund, the costs of the benefit program and the possible measures to remedy deficiencies, if any. If information as to the condition of the various police and fire funds similar to that found in the actuarial surveys of 1958 and 1965 had been periodically available to the Legislature, local officials, the public and members of the funds, it is not unreasonable to assume the problems of these funds would today be much smaller and far more progress toward solutions would have occurred.

The importance of periodic actuarial surveys of police and fire funds cannot be overstated as an essential requirement from this time on.

Escalator Provisions in Fire and Police Funds

Escalator provisions, more than any other factor, account for the high degree of finan-

cial complications in the composite picture of the fire and police funds.

The thirteen fire funds and the fifteen police funds in the tabulation indicated by an asterisk following the name of the fund have escalator provisions in their benefit program. When the 1958 actuarial surveys were made only five fire funds and twelve police funds had escalator provisions. However, the impact of escalator provisions is not indicated by the proportion of funds having escalation provisions. The thirteen fire funds with escalation comprise 86+ % of the total active firemen in the 22 funds.

The fifteen police funds with escalation comprise 86— % of the total active policemen in the 29 funds.

How Escalator Provisions Operate

Escalator provisions in a Minnesota fire or police fund means that the benefits paid to any beneficiary of the fund will be a proportion of the then current pay of a first class fireman or policeman as appropriate to the fund. Thus each time the active members of the fund receive a pay raise, the benefits of every beneficiary—retired or disabled members, widows and minor children—are raised by the same percent. A policeman or fireman thus retires on the basis of his final salary—not his average salary during employment. He participates in all pay raises during his retirement years, then if a widow survives him, she participates in each pay raise of his former department.

How Escalator Provisions Affect a Fund's Finances

Escalator provisions have been almost devastating to the financial condition of the funds involved both because of the nature of the provisions themselves and because none of the funds accompanied the adoption of escalator provisions with an appropriate increase in the level of financing.

To illustrate, if there is a 3% pay increase for policemen in a police fund, all of the

liabilities of the fund will increase by 3%.

The active policemen will be slated for a 3% higher pension on retirement.

The present recipients of benefits will immediately start getting 3% higher benefits.

During the last ten years pay increases for policemen and firemen have averaged more than 3% per year. The deficits due to escalator clauses are the largest factor in the \$37 million increase in the total deficit of the fire and police funds during the seven year period shown in the tabulation.

Unless the deficit causing affect of escalator clauses are anticipated and financed, the financing of the 25 fire and police escalated funds covering 86% of the firemen and policemen in the 51 funds will continue to be on a precarious hand to mouth basis. The inevitable result will be that hand to mouth costs will reach a much higher final level than if the funds are funded beginning even now, or the eventual high level of financing required may cause a future generation to cut the pension benefits.

The 1965 Report of the Employee Retirement Systems Interim Commission, on page 16, said of escalator provisions:

"The Commission recommends that escalation provisions should be avoided in all publicly financed pension plans. To liberalize pension plans from time to time and provide orderly financing each time is sounder practice than to resort to a 'masked liberalization' leading to periodic 'after fact' financing problems."

The Costs of Financing Escalator Provisions

The cost of financing a fund with escalator provisions will depend on the average yearly increase in the rate of covered pay of the active members. It will also be somewhat affected by average age at employment and at retirement. Because the pay scale of the policemen and firemen in the 25 escalated funds have over the last ten years increased by an average of a little over 3% per year, the Commission asked its actuaries to estimate the cost of escalator provisions to the average fund. If pay increases in the future aver-

age 3% per year, the normal level cost as a percent of covered payroll will be approximately double the percent of payroll of the same fund without escalator provisions.

The actuarial surveys in the tabulation, except for the survey of the Richfield fire fund, are all measurements of the condition of each fund at the date of the survey. The fact that the Richfield survey assumes a 3% annual pay increase not only accounts for the high normal cost as a percent of payroll, but

also substantiates the Commission actuaries' estimate of approximately double cost to finance escalator provisions.

As to other states, none of the states with firemen and policemen in a statewide pension fund have escalator provisions. In states permitting local fire and police funds, the best data obtained indicates far less than half of the local funds have escalator provisions. Several states are now seeking remedies for the financial troubles of their local funds.

COST PROBLEMS OF EACH LOCAL POLICE AND FIREMEN'S FUND

The staggering costs of escalator provisions to those local pension funds for policemen and firemen with such provisions have never been available until the preparation of the Supplemental Reports tabulated herewith. This Commission ordered its actuaries to calculate these costs so that for the first time legislators, local officials, the members of the funds and the public can find out the financing burdens that must be faced if these pension funds are in the future to be able to pay what their benefit provisions now call for.

Costs are less, but substantial, for final salary plans that base each retirant's pension on his last rate of salary rather than an average of the salary on which contributions were made but do not increase all benefits each time the pay of active members is raised.

Supplemental Reports Essential

The actuarial surveys of firemen's and policemen's funds ordered by the 1957 and 1965 sessions of the Legislature show the condition of the various funds as they stood at the date of the survey if wages and benefits did not change. These surveys did, however, include a warning from the actuaries that funds with escalator provisions would in the future experience increases in costs to the same degree as salaries were increased. The

surveys did not however include an actuarial determination of the costs of the escalator provisions either as to normal cost or accumulated deficits. Comparison of the latest survey with the supplemental report will reveal the cost of the escalator provisions. The Commission obtained from the Minnesota League of Municipalities data as to police and fire salaries. Pay increases over the last ten years ranged from a total of 29% to 74%, an average increase well over 3% per year.

The Commission therefore directed its actuaries to prepare Supplemental Reports based on an average 3% yearly increase in policemen's and firemen's pay. Even the startling results in connection with "escalator clause" funds will be **understatements** if pay increases exceed an average of 3% per year.

Local police and fire funds are the only Minnesota pension funds with escalator provisions. This is the first interim Commission charged by the Legislature to give high priority to a study of police and fire funds. A considerable portion of available time and expenditure has been devoted to the study of these local funds.

The Supplemental Reports tabulated here show:

- The costs of financing the tabulated funds if pay increases average 3% per year.

- More than the necessary costs if pay increases average less than 3% per year.

- Less than the necessary costs if pay increases average more than 3% per year.

MINNESOTA FIRE AND POLICE FUNDS

SUPPLEMENTAL REPORTS BASED UPON AN ASSUMED AVERAGE ANNUAL INCREASE OF 3% IN COVERED SALARY SCALE

Firemen's Funds

Name	Type of Benefit	Present Covered Payroll	Normal Cost Dollars	Cost % (1)	Deficit	Amortization by 2007 (2)	Normal Cost plus Amortization (3)
Albert Lea	Full Esc.	\$ 115,847	\$ 51,722	44.65%	\$ 551,381	\$ 22,322	63.92%
Austin	Full Esc.	194,454	68,034	34.99	1,275,925	51,654	61.55
Chisholm	Full Amt.	83,274	10,079	12.10	268,973	10,889	25.18
Cloquet	Full Amt.	86,685	8,443	9.74	63,749	2,581	12.72
Crookston	Full Amt.	30,500	6,342	20.79	40,552	1,642	26.18
Duluth	Full Esc.	916,908	281,794	30.73	9,038,191	365,899	70.64
Eveleth	Flat Amt.	57,252	8,377	14.63	274,726	11,122	34.06
Faribault	Full Esc.	55,500	20,375	36.71	395,724	16,020	65.58
Hibbing	Final Sal	168,515	29,735	17.65	777,942	31,494	36.33
Mankato	Full Esc.	198,713	75,991	38.24	1,648,497	66,737	71.83
Minneapolis	Full Esc.	4,185,617	1,192,192	28.48	38,148,200	1,544,376	65.38
Moorhead	Flat Amt.	77,537	8,811	11.36	72,893	2,951	15.17
Red Wing	Flat Amt.	73,920	13,919	18.83	280,054	11,338	34.17
Richfield	Full Esc.	162,084	76,560	47.23	471,400	19,084	59.01
Rochester	Full Esc.	480,887	198,566	41.29	3,326,426	134,666	69.30
St. Cloud	Full Esc.	190,176	68,925	36.24	1,130,811	45,779	60.31
St. Louis Park	Full Esc.	134,540	59,838	44.48	906,602	36,703	71.76
St. Paul	Full Esc.	3,380,203	1,000,008	29.58	24,652,420	998,019	59.11
So. St. Paul	Full Esc.	125,102	61,443	49.11	687,533	27,834	71.36
Virginia	Flat Amt.	160,650	23,043	49.11	700,591	28,362	32.00
West St. Paul	Flat Amt.	85,524	3,470	4.06	(8,273)	—	4.06
Winona	Full Esc.	241,531	69,255	28.67	1,604,374	64,951	55.56

(1) Level percentage of increasing payroll.

(2) Level annual contribution in dollars.

(3) Normal cost level percentage plus amortization as percentage of current payroll.

Policemen's Funds

Name	Type of Benefit	Present Covered Payroll	Normal Cost Dollars	Cost % (1)	Deficit	Amortization by 2007 (2)	Normal Cost plus Amortization (3)
Albert Lea	Final Sal.	\$ 109,000	\$ 34,318	31.48%	\$ 539,397	\$ 21,837	51.52%
Anoka	Full Esc.	98,615	29,483	29.89	220,779	8,938	38.96
Austin	Final Sal.	207,366	49,183	23.60	117,500	4,757	26.01
Bloomington	Full Esc.	279,396	116,247	41.61	784,793	31,771	52.98
Brainerd	Ave. Sal.	83,746	16,518	19.72	245,950	9,957	31.61
Buhl	Final Sal.	18,000	3,899	21.66	10,670	432	24.06
Chisholm	Final Sal.	58,758	10,839	18.45	227,945	9,228	34.15
Columbia Heights	Final Sal.	116,073	27,315	23.53	317,329	12,847	34.60
Crookston	Final Sal.	54,547	13,509	24.77	119,831	4,851	33.66
Crystal	Full Esc.	141,156	59,825	42.38	400,018	16,194	53.85
Duluth	Full Esc.	821,418	237,562	28.92	7,215,820	292,122	64.48
Eveleth	Flat Amt.	41,258	11,230	27.22	266,445	10,787	53.36
Fairmont	Full Esc.	64,956	27,363	42.13	415,274	16,812	68.01
Faribault	Final Sal.	89,410	25,075	28.04	416,388	16,857	46.90
Hibbing	Final Sal.	115,097	18,639	16.19	464,011	18,785	32.52
Mankato	Full Esc.	168,901	72,746	43.07	1,295,168	52,433	74.11
Minneapolis	Full Esc.	5,389,656	1,938,184	35.96	44,782,515	1,812,957	69.60
Moorhead	Full Esc.	125,811	38,529	30.62	541,972	21,941	48.06
New Ulm	Final Sal.	73,302	26,499	36.15	342,947	13,884	55.09
Red Wing	Final Sal.	89,378	18,901	21.15	234,081	9,476	31.75
Richfield	Full Esc.	256,200	92,570	36.13	722,854	29,264	47.55
Rochester	Full Esc.	461,445	168,651	36.55	2,715,704	109,941	60.37
St. Cloud	Full Esc.	209,746	81,015	38.63	1,229,784	49,786	62.36
St. Louis Park	Full Esc.	272,800	123,961	45.44	926,341	37,502	59.19
St. Paul	Full Esc.	3,211,281	1,011,048	31.48	26,122,317	1,057,525	64.42
So. St. Paul	Full Esc.	178,178	70,798	39.73	1,635,431	66,208	76.89
Thief River Falls	Final Sal.	65,737	17,718	26.95	184,504	7,469	38.31
Virginia	Final Sal.	123,162	27,189	22.08	611,222	24,744	42.17
Winona	Full Esc.	203,782	70,408	34.55	1,362,399	55,155	61.62

(1) Level percentage of increasing payroll.

(2) Level annual contribution in dollars.

(3) Normal cost level percentage plus amortization as percentage of current payroll.

Notes from the Tabulation

The significance of notes (1), (2) and (3) is very important to all persons concerned with long range future operations of the fund.

Note (1) means that this normal cost percent of the then covered pay of each active member must be contributed to cover his accrual of benefit value for the year. If a reduction in the number of active members of a fund should decrease the total covered payroll faster than the assumed 3% pay raises increased total covered payroll, the constant percent of such payroll would result in fewer dollars in such years.

Note (2) means that the level annual payments to amortize the deficit must be paid into the fund each year until the year 2007 not only whether the covered payroll is larger or smaller than now but even if all active members have retired.

Note (3) in addition to showing the ratio of required financing to current payroll it also illustrates how required financing in future years would be determined. The normal cost percent would be applied to the covered payroll for the year to find the then normal cost dollars needed. To this amount would be added the dollar amount from the amortization by 2007

column (the same amount each year). The sum of these two dollar amounts would be the required financing for the year in question.

If total covered payroll is larger than the

current year the flat dollar amount under Note (2) would be a smaller percent of covered payroll than it was in the year of the tabulation.

SOME INDICATIONS FROM THE SUPPLEMENTAL REPORTS

By comparing these reports with the tabulations of the regular actuarial surveys early in this Chapter we find:

- Those police and fire funds that base benefits on average salary do not have to materially change their required percent of payroll financial support to the increases in benefits resulting from pay raises. Covered payroll increases and dollar receipts increase but the required percent of covered payroll remains substantially the same.
- Final salary plan funds require a substantially increased percent of payroll support as a result of pay raises.
- Full escalator clause funds require a much greater increase in the percent of payroll support as a result of pay

raises than is the case with final salary plans.

TO SUMMARIZE

Because the escalator clauses have been comparatively recent additions to many of the local fire and police pension funds the costs entailed have until now been suspected but not measured.

Because both the costs of amortizing deficits and the normal support due to escalator clauses must now be added to those deficits not due to escalation the present severe financial condition confronts the escalated funds.

These costs must be met or present pension programs can not be fulfilled.

Further postponement by makeshift minor additions to financing will only make the future problems worse than they are now.

MEASURES DESIGNED TO IMPROVE CONDITION OF PRESENT FIRE AND POLICE PENSION FUNDS

Any standardization of pension benefit programs that might be applied to present members of existing pension funds would cause some revisions in benefits and doubtless would lead to apprehension and confusion on the part of many members of police and fire pension funds. On the other hand, if the 51 local pension funds were to be administered in a single agency there would be a number of practical difficulties.

The recommendations outlined below are prepared on the principle that except as provided each present fund would continue under its present benefit schedule and method of operation as to the present membership of each fund. The following proposals apply to the future operation of the present funds:

1. After June 30, 1967, the membership of the present relief associations would be frozen, but the fund would continue to function for all who are members as of that date.

2. As to membership of such funds, the benefit provisions in effect on or before July 1, 1966, will continue.

3. Future changes in benefits should not be accomplished through change in by-laws or articles of incorporation, but should require specific legislative enactment.

4. Employee contribution rates to the pension fund after July 1, 1967, should be at the rate of 6% of covered pay. This means the amount of pay on which pension credit is determined.

5. Financial support from taxes and other public sources should be determined in accordance with the latest actuarial survey of the fund, conforming with the provisions of Chapter 751, Laws of 1965, as modified by supplementary calculations made by the actuary performing the latest survey.

6. The level of financial support each year must be adequate to cover the ac-

crual of liabilities for that year plus the level amount necessary each year to completely amortize the deficit of the fund by December 31, 2007, assuming 3% interest.

7. "Reserve" limits and millage limits in the present statutes should be superseded to permit accumulation of assets up to the full amount of accrued liabilities of the fund without limitation on any tax, surcharge or premium refund permitted.

8. Any millage limit that prevents the financing provided in 6 and 7 above should be superseded so as to permit the rate of financing required.

9. The governing board of each police or fire fund should have the right, if proper investment counsel is procured, to invest in securities that would be eligible for investment of the funds of the State Employees Retirement Association through the State Board of Investment; or in lieu thereof, the board of any such fire or police fund should have the privilege of investing such part of its funds as it desires in a mutual fund which may be created in the State Board of Investment for such purpose.

10. Chapter 751, Laws of 1965, should be amended to require an actuarial survey of each firemen's or policemen's fund to which its terms apply and in addition any municipal fund for firemen and policemen that may be established. Each such fund should have a survey as of December 31, 1968, and every four years thereafter. Each survey shall include an assumption that each year in the future the salary on which retirement benefits are based will be 3% larger than the preceding year.

11. In the manner set forth in the following paragraphs any municipality employing one or more police officers should be eligible to receive an allocation of state aid equal in amount to the state aid such

municipality receives from the 2% tax on the premiums for fire and related insurance coverage to the extent such aid is

needed to pay employers' costs for policemen's pensions.

ALLOCATION OF INSURANCE PREMIUM TAXES TO PENSION FINANCING

The State of Minnesota for half a century or more has allocated to towns and municipalities most of the proceeds of the 2% tax on the premiums for insurance covering fire and related risks. In 1965, these allocations provided \$1,020,000 of state aid apportioned to nearly 700 communities. Practically all of this amount was used toward financing pensions and related benefits for both paid and volunteer firemen.

The 22 funds for paid firemen listed in the tabulation accompanying this chapter in 1965 received \$441,000 from the state aid allocations. This amounted to approximately 16% of the total financial support of the 22 funds. Local property taxes would necessarily have been larger if these state aid allocations had not been made.

State aid to assist local taxpayers toward financing pensions for policemen would be as justifiable for the same reasons as state allocations for firemen's pensions.

Police pensions like paid firemen's pensions are more costly than pensions for general employees whether they are provided through the local pension funds or the Police and Fire Fund of PERA.

Those municipalities providing pensions to their policemen through the 29 police funds listed in the tabulation and likewise those providing such pensions through PERA would receive valuable assistance in meeting their increasing pension costs if a system of state aid toward the cost of policemen's pensions similar in amount to the allocations for firemen's pensions should be adopted.

THE COMMISSION RECOMMENDS

Each municipality employing policemen

should receive the same amount of state aid toward financing pensions for its policemen as it now receives toward financing pensions for firemen.

To accomplish this purpose the Commission further recommends legislation along the following lines:

The Commissioner of Insurance shall prepare certificate forms calling for necessary information appropriate to the purpose of determining, as herein provided, the entitlement of a municipality to receive state aid apportionment to be applied toward the obligation of the municipality as to financing of pensions for its policemen.

Any municipality authorized by law to levy taxes for the support of a policemen's relief association which was in existence on July 1, 1966, or of a municipal pension fund which includes policemen, or to pay employer contributions to the Police and Fire Fund of PERA, may receive state aid apportionment upon compliance with the conditions set forth in this Act.

To obtain state aid apportionment a municipality must certify in duplicate on forms supplied by the Commissioner of Insurance as to its obligation to participate in financing pensions for policemen in its employ.

A municipality with policemen belonging to a local policemen's relief association or similar local pension fund for policemen in existence before July 1, 1966, or a municipal fund if any, which includes policemen must certify that in the tax levy payable during that year for financing such pensions for policemen is in the amount required by statute, includ-

ing an itemized account of the current year financing of the pension fund. Each such certificate must be accompanied by an audit as of the end of the last fiscal year of the local pension fund prepared by the office of the Public Examiner or a public accountant.

Any municipality seeking state aid apportionment to assist in paying its employer's contributions and additional contributions toward amortization of the deficit to the PERA Police and Fire Fund relative to policemen in its employ, must certify in duplicate a list of such policemen, including the compensation of each policeman subject to pension credit, and the employer contributions and contributions to amortize the deficit the municipality anticipates paying thereon during the ensuing year.

One copy of each such certificate received by the Commissioner of Insurance should be forwarded to PERA requesting verification as to the membership of the policemen listed and the approximate accuracy of the employer's estimates of anticipated contributions relative to each such policeman employee during the ensuing year. In the instance of each such certificate verified by PERA and returned to the Commissioner of Insurance, he shall approve apportionment of state aid to the municipality.

The Commissioner of Insurance shall keep one copy of the certificate of each municipality that is approved for payment of state aid and forward the other copy to such commission, if any, of the Legislature that may be assigned to the study of pensions.

The total amount of state aid for police pensions apportioned to any municipality upon approval of the appropriate certificate by the Commissioner of Insurance

shall be equal to the allocation for the year to that municipality or its firemen's relief association from the tax on premiums received for insurance on property within the corporate limits of the municipality, except that in no case shall the allocation towards financing policemen's pensions exceed the anticipated employer costs relative to pension provisions for all of the municipality's policemen as such costs are shown in the certificate from the municipality as approved by the Commissioner of Insurance.

It is intended that if in any year the total allocations of state aid toward the costs of pensions for policemen should exceed the receipts of the State during the previous year from the 2% tax on premiums for insurance covering auto liability as to bodily injuries and property damage, and auto physical damage, then all allocations for the year shall be reduced on a pro-rata basis so that the total shall not exceed the total receipts from the taxes on premiums.

Certificates described herein should be submitted each year to the Commissioner of Insurance not later than July 1, except that in 1967 the last date for submitting such certificates should be September 1.

THE COMMISSION FURTHER RECOMMENDS that:

Hereafter each certificate required to be filed with the Commissioner of Insurance relative to apportionment of state aid from the proceeds of the tax on premiums for fire and related insurance must be accompanied by an audit as of the end of the last fiscal year of the local firemen's pension fund, if any, prepared by the office of the Public Examiner or a public accountant.

PLANS FOR NEW FIREMEN AND POLICEMEN

Most of the present local fire and police pension programs have developed without a complete and clear understanding by anyone concerned as to costs and problems involved.

In those instances where benefits have been changed through by-laws of the local association only the members of the fund have been aware that benefits were being changed.

While proposing local government determination as to pension provisions for those new firemen and policemen who would previously have been required to join a local policemen's or firemen's pension fund, the Commission has kept in mind several important factors.

It is important that the opportunity for local decision does not carry with it the probability of postponed or unrecognized financing. It is equally important that the availability of standardized plans make it unnecessary to resort to home conceived local laws in order to provide any reasonable level of benefits that might be desired. The present confusion due to the multiplicity of local laws as to fire and police pensions is a liability to both the municipalities and the members of the funds.

Standardization of plans will make it considerably more economical and practical to have periodical actuarial examinations of the local pension funds and thus make such adjustments in financing as may be indicated before small financial problems would grow into big problems.

The proposed series of three basic plans and two possible options are so designed that each municipal governing body involved will be able by selection of a plan and in some cases also an option to adopt for its future firemen or policemen a standardized program of pension benefits at or close to any level desired. The proposed range for selection will as a minimum provide somewhat higher benefits than two of the present fire funds and as a maximum will allow a level of benefits equal to the highest level of benefits provided by any of the present local funds.

THE COMMISSION RECOMMENDS that legislation be adopted including provisions to the following effect.

The governing body of any municipality whose employed firemen or policemen have prior to June 30, 1967, been required to become members of a Firemen's Relief Association or a Policemen's Relief Association or similar local association providing pension benefits shall prior to July 1, 1968, have the right to establish in the municipal government a pension fund for those firemen or policemen or both as the case may be who enter the municipality's employ as a fireman or policeman on or after July 1, 1967.

Any such pension fund so established shall be operated as a function of the government of the municipality except that the funds thereof must be kept separate from other municipal funds both as to accounting and investment. Each such pension fund shall be audited each year either by the Public Examiner or a public accountant and shall be subject to the same requirements for actuarial surveys as the statutes provide for relief associations for paid firemen or policemen.

The governing body of any municipality desiring to establish a local pension fund as herein provided must adopt as the benefit schedule for such fund, Plan A, Plan B or Plan C as hereinafter set forth. Said governing body if it so desires may at the same time adopt Option 1 or Option 2 to apply to the plan adopted.

Any local pension fund established as herein provided may not thereafter change its selection of plan or option or otherwise amend its schedule of benefits except as may expressly be provided by statute.

PLAN A

In Plan A, the normal retirement age is 58. The retirement benefit is based upon the average salary. The benefit credit is 2% of

average salary for each of the first 30 years and 1% for each year of service in excess of 30. The pre-retirement widows' benefit is \$65 per month until the member has 20 years of service. After 20 years of service, the widows' benefit is 75% of the pension the husband would have received if he had retired at the time of death with the pension to commence at age 62 of the widow. The children's benefit is \$20 per month per family plus \$45 per month for each child with the benefit payable to age 18. For disablement in line of duty, the benefit is 40% of average salary; for disablement not in the line of duty, 10 years of service or 5 years of service and the attainment of age 50 is required.

PLAN B

In this Plan, 20 years of service and the attainment of age 50 qualifies the member for a retirement benefit. The benefit is based upon average salary, and the formula is 40% of average salary plus 1% for each year of service in excess of 20 but with a maximum of 50%. The pre-retirement widow's benefit is 25% of average salary, and the post-retirement widow's benefit is 50% of the husband's retirement benefit. The children's benefit is 8% of average salary per child. For disablement from any cause, the benefit is 45% of average salary.

PLAN C

In this Plan, 20 years of service and the attainment of age 50 qualifies the member for a retirement benefit of 50% of average salary. The other benefits are the same as in Plan B.

OPTION 1

If Option 1 is elected in combination with one of the above basic plans, then the retirement benefit is based upon salary at the time of retirement instead of the average salary.

Option 1 in combination with Plan B or Plan C would also involve increases in the other benefits since these benefits are related to salary in those two plans.

OPTION 2

Under Option 2, retirement benefits are again based upon final salary rather than average salary. In addition, every time the active members receive an increase in salary, the pension benefits of retired member are increased by the same percentage. As under Option 1, the other benefits which are related to salary under Plan B and Plan C increase along with the salary paid to active members and in addition the post-retirement widows' benefit is subject to increases.

The governing body of any municipality which establishes a pension fund for its new firemen or policemen or both as herein provided must include as a part of such action a specification as to whether in such fund covered salary for contributions and pension credit purposes is limited to the salary of a first grade policeman or fireman as the case may be or whether contributions and pension credit shall be based on the actual salary received by each person as contributions become due.

Employee contributions of not less than 6% of covered salary must be deducted and paid into the fund by proper authorities of the municipality. Any employer rates of contribution related to normal cost and amortization of the deficit shall be adjusted in accordance with the findings of each actuarial survey herein required.

The following table expressing costs as a percent of covered payroll shall be the basis on which financing required is determined for each pension fund herein enabled until such time as an actuarial survey of any such fund complying with the requirements of this statute provide a different basis for such determination.

Normal Cost as a Level Percentage of Increasing Payroll Assuming a Pay Increase of 3% Per Year Per Person

	No Option	Total Rate Including Option 1	Total Rate Including Option 2
Plan A	13.3%	20.1%	26.6%
Plan B	18.9%	27.9%	39.6%
Plan C	19.4%	28.6%	40.6%

Each municipality establishing a pension fund as herein provided shall be required to pay into such fund each year whatever amount will when added to the sum of employees' contributions plus any distribution of state collected taxes allocated to the fund provide a total amount of receipts by the fund equal to the normal cost for the year. The amount of the normal cost for the year will be determined by applying to the total covered payroll for the year the percent shown in the foregoing table according to the plan and option if any selected upon the establishment of the fund.

Any municipality eligible to establish a pension fund as herein provided may do so by a resolution concurred in by a majority of the members of the governing body which resolution must set forth the plan benefits selected and the option selected, if any. It must also designate the municipal official who will be responsible for the administration of the fund and the custodian of the assets of the fund. Such resolution shall not become effective until it is filed with the Secretary of State of the State of Minnesota.

Every full time police officer or paid fireman within the meaning of MS353.64, Subdivision 1 to 5, commencing such service for any municipality on or after July 1, 1967, shall become a member of the Police and Fire Fund of PERA unless the employing municipality has established a

local municipal fund as herein provided. Any municipality establishing such municipal fund on or after July 1, 1967 but before July 1, 1968, shall have the right to withdraw any policeman or fireman employed after June 30, 1967 from PERA for placement in the new fund. PERA shall thereupon pay to the new municipal fund any amount including both employer and employee contributions that PERA had received on account of each withdrawn policeman or fireman.

Under all plans withdrawal provisions should be a refund of employee contributions without interest.

PAINFUL CURE OR FATAL ILLNESS?

A majority of the local police and fire pension funds are financially sick.

Palliative measures to temporarily deaden the pain would only allow more sickness to accumulate.

The recommended measures are designed to spread the treatment over 40 years and complete the cure by the year 2007.

The Minnesota League of Municipalities has for a number of years recognized the existence of serious problems as to fire and police funds. The League has emphasized the importance of taking whatever remedial steps prove to be necessary.

Officers of the Minnesota Police and Peace Officers Association and Fire Fighters of Minnesota have in statements before the Commission pointed out immediate financial crises as to some of the funds and have recognized the need for much more than temporary palliative measures.

For new firemen and policemen the municipality can select a pension program with full knowledge of the significance of its decisions.

New funds thus established will not be allowed to accumulate deficits.

PUBLIC EMPLOYEES POLICE AND FIRE FUND

The Public Employees Police and Fire Fund was established as a division of PERA by the 1959 Session of the Legislature on the recommendation of the Public Retirement Study Commission.

Until this fund was created, the only way that policemen, including deputy sheriffs, or paid firemen could have a pension program with characteristics similar to fire and police pension plans in this and most states was to form a local firemen's or policemen's association. Provision for earlier retirement and more liberal disability benefits are the most important difference of fire and police plans from those for general employees. No doubt some of the smaller local fire and police funds in Minnesota would not have been formed if the PERA Police and Fire Fund had been available earlier.

Benefit Provisions

In the Police and Fire Fund, age 58 is the normal retirement age. Retirement benefit is computed as 2% of average covered salary times number of years of service. After 30 years of service, the additional retirement benefit per year of service is 1% of average covered pay.

Non duty caused disability is available after 10 years of service or if the policeman or fireman is age 50 or over, only 5 years of service is required.

Disability in line of duty regardless of age or period of service is 40% of average covered salary.

Widows and surviving children's benefits are the same as for other members of PERA.

Members of this fund leaving service after ten or more years and who do not withdraw their accumulated deductions without interest may receive a pension commencing at age 58.

Initially, this fund consisted of policemen and firemen who were already members of PERA and who up to then had the same retirement and other benefits as the general membership. This fund as was expected started with a very substantial deficit due to

the facts that PERA itself had a large deficit; and in addition changing the policemen and firemen to police-fire type of benefits, materially increased the deficit as to these members.

Administratively, it took PERA several years to adjust records and accounts so as to permit a separate actuarial valuation of the Police and Fire Fund. The valuations as of June 30, 1965 and June 30, 1966 are the first such separate valuations. The 1965 valuation by the PERA actuary raised some questions as to policy and assumptions concerning expected retirement age. These questions were settled by conference of the PERA management, the PERA actuary, representatives of the Commission and the Commission actuary. The decisions are reflected in the Actuarial Valuation of the Police and Fire Fund as of June 30, 1966.

The following summary by the Commission actuary of the 1966 valuation by the PERA actuary shows that the PERA Police and Fire Fund now has more policemen and more firemen than the largest policemen's or firemen's fund in Minnesota.

Results of the valuation report are shown below. Figures are rounded where necessary for simplicity of presentation.

Membership	As of June 30, 1966
Active Members	1,918
Retired Members	83
Disabled Members	1
Survivors of Deceased Members	46
Deferred Annuitants	0
<i>Pay Roll and Annuities Payable</i>	
Covered Payroll	\$ 9,584,075
Annuities Payable (annual)	182,000
<i>Valuation Balance Sheet</i>	
<i>(Assumed Retirement Age—64)</i>	
Accrued Liability	\$14.2 Million
Assets	9.0 Million
Unfunded Accrued Liability	
(Deficit)	\$ 5.2 Million
Funding Ratio	63%
<i>Normal Cost and Funding Costs</i>	
<i>(Assumed Retirement Age—64)</i>	
Normal Cost	14.90% of Covered Payroll

Amortization by	
1997	2.72% of Covered Payroll
Required	
Contribution	17.62% of Covered Payroll
<i>Statutory Contributions</i>	
Employee	6.0% of Covered Payroll
Employer Regular	9.0% of Covered Payroll
Employer Additional	2.5% of Covered Payroll
Total Contributions	17.5% of Covered Payroll
Investment Yield (a)	3.28%

(a) Ratio of reported investment income to mean report assets.

The Statement "assumed retirement age—64" means the assumed average age of retirement used in valuating this fund.

Thus, while some members retire at the minimum age of 58, others continue in service. At this time, age 66 is the actual average age at retirement, but both the PERA actuary and the Commission actuary are of the opinion that retirements in the future will be at a somewhat lower average age. Most of

the local police and fire funds experience an average age for actual retirement from 6 to 7 years above the minimum age for retirement.

The data under "Normal Cost and Funding Costs" shows that the Police and Fire Fund should each year receive 17.62% of covered pay roll to maintain the fund and amortize the deficit by 1997.

The total rate of contributions required by statutes amounting to 17.5% of covered pay roll is so close to the needed 17.62% that there is no practical need at this time to increase the statutory level of financing.

This Commission's recommendations for improvement and acceleration of collection of the employers' contributions to PERA will, if enacted, benefit the financial condition and interest earnings of the Police and Fire Fund in exactly the same manner as it will benefit PERA as a whole.

PUBLIC EMPLOYEES RETIREMENT ASSOCIATION

PERA with \$275 million of accrued liabilities and 44,460 members is by a substantial margin the largest of the statewide funds for public employees.

Due to a deficit (unfunded accrued liabilities) of \$134 million PERA still shows the results of the fact that prior to 1957 it was the most underfinanced of the large pension funds.

The 1957 and 1959 Sessions insisted on reconciling future benefit programs with the financing which these two sessions insisted on establishing. The 1957 Session raised the employee rate of contribution to 6% of covered pay, the same level as SERA and TRA.

PERA still suffers financially from the fact that prior to 1957 it had promised a higher level of benefits to employees contributing 4% of pay than SERA or TRA promised on the basis of employee contributions of 6% of pay. Because of "savings clauses" and benefit options these high cost pre-1957 benefits to members of record in 1957 are preserved not only as to pre-1957 service, but as to all service after that date. This condition causes a material portion of the deficit of the fund and together with the deficit due to earlier

years of underfinancing, explains the considerable size of the deficit.

Unlike SERA, TRA, The Highway Patrolmen's Fund and the State Police Officers' Fund, where the state acts as the sole employer at least as to providing finances, PERA must deal through and receive its employer financing from nearly 1500 different governmental subdivisions. Beside the administrative problem inevitably associated with this number of employing units, the variations between employing units as to employment and retirement policies have considerable affect on the fund. Policies as to such things as average age of initial employment and policies as to enforced or voluntary retirement have considerable impact on a pension fund. These problems look formidable until the question is asked, how bad would the problems be if the 44,000 PERA members were divided among a number of smaller funds.

The present and future sessions of the legislature would be justified in commending the wisdom of their predecessors over the fact that employees of all subdivisions are in a single pension fund—PERA.

THE FINANCIAL CONDITION OF PERA

The financial history of PERA since 1957 demonstrates how difficult it is to catch up on the financing of a previously underfinanced pension fund. It also illustrates some of the results of the Legislature's persistent efforts toward sound financing of

the pension programs for all public employees. These efforts have been virtually continuous since the 1955 Session ordered a study of pension funds and created the first of the five interim commissions that have been assigned to that subject.

RESULTS OF ACTUARIAL VALUATIONS OF PERA

	PERA Actuary's Valuations		Valuations Submitted to Previous Commissions	
	I As of 1-1-58 \$4800 Limit	II As of 6-30-63 \$4800 Limit	III As of 6-30-65 \$6000 Limit	IV As of 6-30-66 \$6000 Limit
No. Active Employees	37,896	40,413	42,025	44,460
Covered Payroll	\$114.055 M	\$139.0 M	\$155.0 M	\$170.0 M
Normal Cost as Per Cent of Cov. Payroll	12.2%	9.4%	10.1%	10.75% *
Accrued Liability	\$161.6 M	\$205 M	\$274 M	\$276 M
Total Assets	\$ 26.1 M	\$100.2 M	\$126 M	\$142 M
Unfund. Accr. Liab.	\$135.5 M	\$104.3 M	\$148 M	\$134 M
Min. Contrib. (% of Cov. Payroll)	15.8%	11.7%	13.0%	13.11% *
Amort. Contrib. (% of Cov. Pay.)	17.4%	12.9%	14.8%	14.68% *
Funding ratio	16 %	49 %	46 %	52 %

M = Million

*In 1966 the cost of administering the fund amounted to .22% of covered payroll. This should be added to each support percentage.

NOTE: Unfunded accrued liability is commonly called the "deficit."

The actuarial valuation of PERA as of January 1, 1958—the first one ordered by the Legislature—was in accordance with the "entry age normal cost" method which was also used for the three later valuations tabulated in this report. Actuarial valuations were made as of several other dates but their use for comparison would not be valid since different actuarial methods were used.

The four actuarial valuations tabulated here span the last nine and one-half years of operations—the period since a policy aimed at sound financing was initiated.

The PERA unfunded accrued liability (deficit) as of June 30, 1966, was only slightly over 1% smaller than it was on January 1, 1958. Increases in pension benefits constitute the principal reason the deficit has not been materially reduced in the 9½ years. This deficit was expected by the 1965 Legislature in passing the present law. This means that PERA has actually realized only nominal progress toward eliminating the deficit by 1997.

The 1965 extension of the "savings clause" increasing the benefits of those employees who as of June 30, 1957, had less than ten years of service is estimated by the PERA

actuary to have added \$8 million to the deficit.

The 1965 increase in the salary limit of each employer for pension purposes (covered salary) from \$4800 per year to \$6,000 per year added substantially to the deficit.

There was also a material increase in the deficit because the PERA actuary was convinced that the life expectancy of retired persons in PERA would be longer than previously assumed.

The PERA actuary did not specifically analyze the cost results due to each benefit increase and change in assumptions. If the amendments to the actuarial survey law recommended by this Commission are enacted, this deficiency as to analysis will not occur in the future.

In 1967 PERA is due to have the first complete actuarial survey required by law where in all assumptions are examined and adjusted if at variance with experience and reasonable expectations.

Funding ratios which are frequently cited by pension funds are legitimate indications of the proportion of liabilities covered by assets. The limitation on such a guide to the progress of a pension fund should be kept in mind.

The increase in funding ratio from 16% in 1958 to 52% in 1966 does not indicate a rate of financial progress that if continued would lead in time to 100% funding. Over the 9½ years liabilities increased \$114.4 million and assets \$115.9 million. Therefore, under present rates of financing the increase in assets barely exceeded the increase in liabilities and \$134 million of deficit still remains. The funding ratios do show the precarious finances of PERA in 1958 and the fact that additional liabilities accruing since then have been covered by financing. Thus as of June 30, 1966, the fund had assets covering 52% of the liabilities. Stated another way, the \$134 million deficit amounted to 84% of total liabilities in 1958, but only 48% of the liabilities in 1966.

The item in the tabulation, "Amort. Contrib." shows the percentage of covered payroll that will be necessary to amortize the deficit of PERA by 1997 in accordance with the policy of amortization first adopted in 1957 and since then reaffirmed by each Commission. The 1966 actuarial valuation of PERA shows that 14.68% of covered payroll will be needed to so amortize the deficit; and in addition, .22% of payroll will be needed to cover the present annual cost of administration of the fund or a total of 14.90% of payroll is needed.

Present financing of PERA is as follows:

Employee contribution	6.0
Employer regular contributions	6.0
Employer contributions to amortize the deficit	2.5

14.5% of covered pay

PERA is on the record thus underfinanced to an annual degree of .4% of covered payroll.

The PERA actuary shows that if it can be assumed that the fund can earn 3½ % interest on its assets instead of the 3% rate assumed in the actuarial valuation, then the present rate of financing will be approximately 1% of pay more than adequate to finance the fund and amortize the deficit by 1997. The net

interest on all assets earned by PERA was 3.39% in 1965 and 3.58% in 1966. This was the first time that the net interest on all assets has exceeded 3½ %. The section of this report on PERA Collections explains the principal reason for this low interest yield and recommends remedial measures.

To summarize as to PERA financing:

Increases in pension benefits have offset the reduction in deficit anticipated when the present rate of financing was established.

PERA financing will probably be adequate only if additional benefits are accompanied by additional financing.

PERA LEGISLATIVE PROPOSALS

The three major PERA legislative proposals are so intertwined that it is misleading if each proposal is only considered by itself. The adoption of any one proposal would change the effect of adopting either of the others.

PROPOSAL NO. 1

Remove the \$6,000 per year salary ceiling for deduction and benefit purposes.

As of June 14, when this proposal was submitted to the Commission, the PERA actuary estimated that this proposal would cause an increase in total employer contributions of approximately \$1,215,500 per year. He estimates therefore that the total pay of all PERA members is \$14,300,000 per year more than the total covered payroll under the present \$6,000 ceiling and applies the present combined employer rate of 8½ %. He stated that adoption of this proposal would not effect the actuarial balance of the program.

At the request of the Commission actuary, PERA on August 12, delivered to the Commission further data from the PERA actuary showing that adoption of Proposal 1 would increase the deficit of the fund by \$3,537,993. It was also shown that applying the present 8½ % employer contribution rate to

the \$14,300,000 increased payroll would enable amortization of the increased deficit by 1997 and still slightly lessen the underfinancing of PERA.

Caution: The above cost estimates would be understatement of the effects of Proposal 1 if either Proposal 2 or Proposal 3 or both should be adopted.

THE COMMISSION RECOMMENDS elsewhere in this report that the salary ceiling be removed as to all of the statewide pension funds.

PROPOSAL NO. 2

Submitted to the Commission as Proposal 2 but published as Proposal 3 in the printed "Report of the Legislative Committee" of PERA:

"Amendment to the savings clause to provide that the old law annuity formula shall be available upon retirement to all persons who were members as of June 30, 1957, regardless of the length of service as of that date and regardless of whether membership is continuous thereafter."

The PERA actuary estimates that this amendment would increase the deficit by \$8,800,000 "if the old law remains frozen at a maximum benefit of \$200 a month."

BACKGROUND

The pre-1957 PERA law was cut off for PERA members who then had less than ten years of service by the 1957 Session of the Legislature because the benefits were so costly that financing would have had to exceed 6% member plus 6% employer contributions.

For instance, under the old law a member at age 65 after 20 years of service receives a pension of 50% of the highest ten years average of 'covered salary' up to \$4800 per year.

The present law under the same conditions pays 30% of 'career average' salary except that for those years before 1957 average salary for the five highest pre-1957 years will be used. However, the new law includes disability and survivor benefits not found in the old law.

PERA members eligible for the savings clause are also covered for disability and survivors' benefits under the new law. They can also invoke the savings clause and retire under the old law.

The 1957 Session consented to the savings clause with its bargain for those with 10 or more years service in 1957 as a compromise and to avoid the shock of taking away from those half way or more to retirement the benefits they were anticipating.

The 1965 Session considerably liberalized the 1957 savings clause. It amended the savings clause so that a PERA member with less than ten years of service before July 1, 1957, can have his benefits under the present law increased by that proportion of the difference between the old and new law which his years of service before July 1, 1957 bears to ten years.

If Proposal 2 is enacted, such contrasts in benefits as follows will occur:

In 1977, two PERA members both age 65 and both hired in 1957 retire. Member A was hired before June 30, 1957, and member B hired after July 1, 1957. Assume that each had an average salary of \$400 per month.

A's pension would be \$200 per month.

B's pension would be \$120 per month.

To receive \$200 per month pension, B would have had to contribute on an average covered salary of \$667 per month. A in the meantime, would have had the disability and survivors protection of the new law as well.

In fact, if A was 5 years older than B and age 65 in 1972, he could retire then under the savings clause with \$150 per month.

The above illustrates why extension of the savings clause will add approximately \$8,800,000 to the PERA deficit even if the \$200 per month ceiling on pension amount is kept in the old law.

Proposal 3 (b) would eliminate this limit of \$200 per month and further accentuate the

advantage of member A over member B.

If Proposal 2 is adopted, the costs and deficit of raising or eliminating the 'salary ceiling' as per Proposal 1 will be increased. Proposal 2 would allow retirements in 1967 with 10 years service at pensions over 2½ times the present law and would far exceed even that increase if Proposal 3(a) or 3(b) were also adopted.

No actuarial estimates of the combinations of proposals have so far been provided.

The Commission reminds that the 1965 liberalization was intended to constitute final disposition of the question of the savings clause.

THE COMMISSION RECOMMENDS:
There should be no further changes in the savings clause.

PROPOSAL NO. 3

(a) "Amendment to provide optional buy-back retroactive to July 1, 1952 based on full compensation received in excess of any previous limitation imposed by statute, at the rate of 6% of such excess with 4% interest thereon compounded annually plus a matching payment with permissive payment of said matching amount by the member or by the governmental subdivision."

(b) "To provide for removal of the basic maximum old law annuity now limited to \$200 per month, to reflect the increase in 'average salary' for the purpose of computing such annuity over the current \$4,800 annually."

Discussion of Proposal 3(a)

PERA has not provided estimates of the increase in deficit that would follow adoption of Proposal 3(a). The only estimates provided are that it could cost employers in outlay between \$8,500,000 and \$13,500,000 if 3(a) was adopted and 3(b) was not adopted. Whether such amounts doubled due to the employee's contributions would finance the added benefits so that there would be no increase in deficit is open to conjecture. Also

the proposal refers to buy-back on full compensation implying that the estimates of employer outlay assume Proposal 1 will be adopted.

An important question arises as to the proposed buy-back:

Can PERA, even the new law, be financed at 6% employee contributions plus 6% employer contributions plus 4% interest when;

1. There will be no turnover gain to speak of

and

2. Mainly only the healthy will use the privilege?

Proposal 3(a) doesn't say whether or not it will provide that a member can buy back for a period of public service when he was not a member in order to qualify for the savings clause or if he can buy back to a later date than 1952, such as to 1957, if Proposal 2 should be adopted.

NOTE: Present buy-back provisions specify that benefits bought must be made under the new law.

If Proposal 1 were adopted, then Proposal 3(a) would be of considerable loss to the fund and extra value to the member in cases of a high salaried person with a long period of service in order to establish a high average salary for more years than they would have to pay for.

For instance, under the present (post-1957) law benefit program such a person with **30 years of service** in 1967 could buy back 15 years to 1952 and get credit for 30 years.

With 40 years service, he could likewise buy back 15 years and get credit for 40 years.

The reason is that under the new law all service prior to 1952 would be credited with the average salary for the five years, 1952 to 1957.

If Proposal 1 and 2 and 3(b) were adopted then Proposal 3(a) would become considerably more costly and would **certainly substantially increase the deficit** since it would allow buy-backs to bring more members un-

der the savings clause so as to apply old law pension ratios to full salaries.

For instance, a member now 65 with a \$16,000 average salary the last 10 years could buy back just the difference between \$4800 per year and \$16,000 per year for 10 years and then after 20 years of total service receive an \$8,000 per year pension.

Discussion of Proposal 3(b)

Proposal 3(b) would provide that whereas those who now invoke the savings clause are limited by the old law to not more than \$200 per month pension; Proposal 3(b) would allow the savings clause to be invoked to provide considerably higher pensions.

The attractiveness of this Proposal to many PERA members is indicated by the PERA actuary's estimate that sufficiently more members would buy back on higher salaries so that the employer matching contribution would be from \$2,500,000 to \$10,000,000 more than if only 3(a) was adopted. No estimate as to the resulting increase in the deficit is provided.

Since the old law cannot be financed by 6% employer plus 6% employee contributions, it is impossible to escape the fact that there would be a considerable increase in both the deficit and in normal cost.

If Proposal 3(b) alone were enacted and all of the other proposals rejected then people retiring in 1967 under the savings clause would receive larger pensions due to the 1965 increase in "salary ceiling" to \$6,000 per year.

When the savings clause was enacted, no PERA member anticipated over \$200 per month pension.

If only proposals 3(a) and (b) are enacted and Proposals 1 and 2 are rejected, every person with even partial savings clause eli-

gibility and a salary over \$400 per month will get an additional "bargain" at the expense of the fund through buying back up to the \$6,000 salary ceiling.

If proposals 1 (removing the salary ceiling) plus 3(a) and 3(b) are adopted, the bargains will be increased considerably and the \$3,537,993 deficit increase attributed to Proposal 1 alone will be far short of the combined deficit due to the combination.

If Proposals 1, 2, 3(a) and 3(b) are adopted the combined deficit caused will be substantially larger than the sum of the deficits attributable to each proposal alone.

Proposal 1 is the only proposal that will be of any considerable value to employees entering public service after July 1, 1957 and then mainly to those whose salary has exceeded \$400 per month. For such employees the buy-back Proposal 3(a) would be of some value especially if the employer paid his share.

If Proposal 3(a) is enacted PERA will be where it was before the 1957 Session of the Legislature as to all present members employed before June 30, 1957.

Proposal 3(b) would, as to employees who were members of PERA by June 30, 1957, result in a financial situation considerably worse for the fund than were the benefit provisions of the pre-1957 law.

If Proposals 2 plus 3(a) and 3(b) should be enacted there would be as already noted a decided difference in the level of benefits between pre-1957 employees and post-1957 employees.

THE COMMISSION RECOMMENDS:

Neither Proposal 3(a) or 3(b) should be adopted.

PERA COLLECTIONS

On July 1, 1966, the PERA balance sheet listed as an asset \$21,388,691.64 "receivable" employer contributions. During the entire preceding year contributions received from employers totaled only \$13,595,502.95. These figures effectively demonstrate the deficiencies of the present statutes as to PERA receipt of employer contributions. The PERA administration has collected virtually all of the employer contributions which would be classed as delinquent in the meaning of the present law under which only approximately two-thirds of these outstanding employer contributions receivable will be paid into PERA during this entire year. By the end of this year an additional year of employer contributions will be receivable so that on July 1, 1967, the total employer contributions receivable will equal or exceed the \$21,388,691.64 employee contributions receivable July 1, 1966. Until the law is amended employer contributions will not reach PERA until a year and a half or more after the employee service from which they arise.

This large "receivable asset" makes no interest earning contribution to the fund. The total liabilities of the fund are determined on the assumption that all of the total liabilities will earn 3% per year interest. Invested assets produce interest, but deficits must be increased each year by the amount of interest assumed but not earned. Interest-wise this continuous item of over \$21 million employer contributions receivable has the same effect as a deficit of that amount.

To illustrate, in 1965 PERA earned 4.17% interest on invested assets, but because of this large receivable unproductive asset, the earnings on total assets were only 3.58% interest. Another way of stating this problem is that under the present law governing PERA the fund receives a large portion of its employer contributions from 17 to 28 months after the employee contributions for the same period of service have been received.

If employer contributions were paid monthly at the same time as employee contributions,

PERA would have over \$21 million more invested assets instead of receivable assets. \$21 million invested at 4% would earn \$840,000 interest each year. This increased interest earned each year would materially assist in financing the fund.

In the long run, the employer subdivisions will gain if employer contributions are stepped up until they are paid to PERA at the end of each month of service. The 2½% of pay, additional employer contributions, to finance the deficit of PERA will presumably be discontinued when the deficit is paid. The approximately \$840,000 interest per year would therefore assist in reducing the employer liability.

The largest single cause of the PERA deficit which on July 1, 1966 was \$133,646,435.89, is the fact that prior to July 1, 1957, there were no regular employer contributions to PERA. As already pointed out, the deficit must be charged with interest since it represents an amount of money that is expected to be invested at interest.

The Public Retirement Study Commission reporting to the 1961 Session of the Legislature, and again the Employee Retirement Systems Interim Commission reporting to the 1965 Session of the Legislature (pp. 27 to 30) proposed that there should be a revision in PERA law to the effect that employer contributions would be paid to PERA at the same time as employee contributions and for the same period of service. These two Commissions recommended that accounting-wise there be "forgiveness" of one and a half year's contributions plus a speeding-up of remittance to PERA to bring about a condition of current contributions without extra outlay on the part of the employing subdivisions. This would have been similar to the "forgiveness" of state income taxes at the time current withholding was adopted. This proposal did not prevail with the result that the problem as of present date remains unsolved. The principle objection to the "forgiveness" approach is

that removal of the large receivable "asset" would be reflected in an equal increase in the deficit of PERA, and perhaps would disquiet the membership. In addition, it would have the effect of reducing the amount ultimately receivable should future change in the law terminate or reduce PERA rates of financial support. The additional fact was brought out that transferring the receivable to the deficit account would not relieve subdivisions of any long range liability if it is assumed that the increased deficit caused thereby was an obligation of the employing subdivisions. This Commission, after considerable discussion and study, came to two fundamental conclusions as to the employer contributions under the PERA law:

1. The condition where employers' contributions lag from 17 to 28 months after employees' contributions, and are creating an unproductive receivable item, is unbusinesslike, causes considerable confusion; and, in the long run, will work to the disadvantage of the employing subdivision as much or more than it will work to the disadvantage of the membership of PERA.
2. In view of the many years with no employer contributions to PERA it is to the advantage of all concerned to speed up the employer contributions to a condition of being current with the employee contributions without forgiveness and the resulting increase in deficit.

The present procedure by which the last part of the proceeds of a tax levy payable in a given year is not actually received by a subdivision until December of that year (following payment of the last half of the real property taxes) has been used as the explanation of why proceeds of levies for PERA purposes have not in practice been considered due until the end of the year the tax is receivable.

In considering this reasoning it should be noted that salaries themselves which are covered by tax receipts are paid from month to month and not deferred until the end of the year. Since PERA employer contributions

arise concurrently with each month of service it would not seem unreasonable to budget PERA contributions just as salaries are budgeted.

In recognition of the fact that many subdivisions will need time to catch up to a condition of currently remitting contributions, a reasonable number of years should be allowed; and, therefore **THE COMMISSION RECOMMENDS:**

The PERA law should be amended so that as soon as possible employer contributions become due and payable following each month of employee service at the same time as employee contributions are due and payable.

Balances overdue after July 1, 1969, should be increased at a rate of 6% interest per year.

Appropriate changes should be made in the PERA machinery for tax levy so that any subdivision may if it so desires catch up before June 30, 1969, if it chooses to levy more than the required minimum.

Employing subdivisions should be required to step up employer contributions to PERA so as to catch up from the present time lag of 17 to 28 months after the month of service by no later than December 31, 1971, by a provision that each year the required levy for employers' support of PERA should be for the lesser amount, either:

140% of estimated employers' contributions for the ensuing year

or

100% of such estimated employer contributions plus the PERA certification, if any.

Such provisions would:

- a) Never require more than a 140% of a normal levy in any year.
- b) Allow an earlier catch up for subdivisions now operating on less than the longest possible delay in payment.
- c) Allow a lower minimum levy for subdivisions now partly caught up.

- d) This would cause each subdivision to catch up with its employer contributions not later than December 31, 1971.

TRANSITION TO THE PROPOSED COLLECTION SYSTEM—AN ILLUSTRATION

Those subdivisions that are now voluntarily remitting employers' contributions to PERA immediately following each month of employee service will have no adjustment to make.

Each subdivision that in practice has been remitting employers contributions later than current with service but earlier than required will have financial adjustments to make corresponding to the present degree of delay.

The following illustration shows how the transition to the proposed collection system will operate in the case of a subdivision that must make the maximum degree of adjustment. This would be a subdivision that:

The following illustration shows how the transition to the proposed collection system will operate in the case of a subdivision that must make the maximum degree of adjustment. This would be a subdivision that:

- 1) Up to now has remitted its employer contributions to PERA just short of the time of legal delinquency (from 17 months to 28 months after the employees' contributions)
- 2) Continues to remit as little and as late as the terms of the proposed transition machinery would allow.

The following example is based on an employer now incurring and levying \$10,000 per year for employer contribution to PERA. Unpaid balances would not be charged interest until after July 1, 1969.

The proposed transition procedure would require that until the transition to a fully current basis of employer contribution remittance is reached the levy (unless other funds are available) would have to be 140% of the amount required for a single year.

1967 levy payable in 1968	\$14,000
Less amounts due to PERA	15,000
Balance owed PERA on 12-31-68	(\$1,000)
1968 levy payable in 1969	\$14,000
Less total amount due to PERA	21,000
Balance owed PERA on 12-31-69	(\$7,000)
Interest at 6% per year is charged after July 1, 1969.	
1969 levy payable in 1970	\$14,000
Less total balance due PERA	17,000
Balance owed PERA on 12-31-70	(\$3,000 plus interest)
1970 levy payable in 1971	\$14,000
Less total balance due PERA	13,000
Surplus on hand 12-31-71	\$1,000

The transition would become complete in 1971, therefore the tax levy would decrease to \$10,000 per year.

Any payments to PERA over the above illustrated minimums would accordingly shorten the time for completion and hasten the time when the tax levy could revert to the level of \$10,000 per year.

PERA AND COORDINATION WITH SOCIAL SECURITY

The advent of Medicare strongly indicates that there should be a reappraisal as to coordination of PERA and Social Security. Previously held opinions should be carefully examined.

Present Federal Law provides that persons becoming 65 years of age on or before January 1, 1968, will not be eligible for Medicare unless they have the required number of quarters of coverage under Social Security. The minimum number of quarters required for Medicare eligibility increases with each passing year. As of January 1, 1968, at least six quarters of Social Security coverage will be required. By 1969, nine quarters and by 1970, twelve quarters will be required. By 1972 for women and by 1974 for men, eligibility for Medicare will require as many quarters of Social Security coverage as are needed for retirement benefits.

If the 1967 Session of the Legislature should provide for PERA Social Security coordination, members becoming 65 years of age in 1968 and 1969 would not be eligible for Medicare unless at least one year of Social Security retroactivity was specified.

PERA in the past has repeatedly sought legislation to provide for members with short tenure higher minimum pensions than provided by the normal benefit program. These proposals have in many instances entailed extra expense to the employing subdivisions. If such proposals can be taken as an indication that in the future PERA if not coordinated will seek to be competitive with Social Security, it would appear likely that after 1968 there might be attempts to add Medicare type benefits to the PERA benefit program. This will tend to be confusing since some PERA members will already be eligible for Medicare due to employment elsewhere than under PERA. There is some question whether a separate pension fund can economically or satisfactorily provide Medicare type benefits only for selected members who do not have Social Security from other sources. The Com-

mission has been appraised of the fact that at least some members of Congress propose that a limited type of coordination applying only to Medicare should be created. Perhaps, if enacted, such a measure would create more problems than it would solve.

Costs of Social Security have increased considerably in recent years. As of the present Social Security Law, the cost to each employer and employee under Social Security will be the following percent of covered earnings in the years indicated:

1967-68	4.4 %	1969-72	4.9 %
1973-75	5.4 %	1976-79	5.45 %
1980-86	5.55 %	1987 and after	5.65 %

Such rising costs may be disquieting and the fact that the Congress may further increase costs may be still more disquieting. If PERA should seek to add to its program Medicare type benefits including optional medical benefits, thought should be given to the administrative difficulties resulting as well as the increased costs to PERA that would be inevitable.

The "split system" of coordination, allowing each present PERA member to remain on the present "basic" system or to choose as an individual option to coordinate, is the only basis acceptable. This is identical with the TRA coordination option extended to teachers in 1959.

The coordination option should be extended to all of the PERA membership eligible for Social Security. Various proposals that local subdivisions be allowed to decide whether or not their employees be extended the privilege of selecting coordination would cause such administrative confusion and controversy that this procedure should not be considered. This is accented by the fact that such confusion would continue many years into the future. The Commission unanimously rejected subdivision autonomy.

One thing appears especially clear; the question of coordination should be settled at the 1967 Session. The proportion of PERA members who would benefit by selecting co-

ordination will diminish with the passage of time. The Medicare question makes an early decision considerably more imperative.

Social Security limits retroactive coverage so as not to exceed six years, yet average earnings are in effect determined on covered earnings back to January 1, 1956. Hence, average Social Security benefits will diminish for each additional year that coordination is delayed.

In spite of the fact coordination would have been more favorable to large numbers of PERA employees if consummated some years ago than at the present time, a majority of the members will still benefit by the Social Security option if six years retroactivity is provided.

- a. Employees with less than ten years service at retirement age will receive OASDHI benefits even though not eligible to PERA benefits.
- b. The coordinated total income of OASDHI plus PERA reduced benefits will at any period of service exceed the PERA basic level of benefits.
- c. Many employees whose PERA basic benefits equal or exceed the coordinated total as to themselves alone will find that the family total of OASDHI benefits will make coordination advantageous.

The very considerable number of PERA members who enter public employment relatively late in their employed life and those who move back and forth between public and private employment will with very few exceptions be benefited by coordination. Such persons will maintain their Social Security credit as to level of benefits rather than have their level of benefits reduced by periods of non-coverage under Social Security as is the present case with PERA members. The actuarial valuation of PERA found a very considerable turnover rate of membership illustrating the sizeable proportion of short term employees under that fund.

Individual option coordination would preserve for each PERA member his right to continue on the present basis without coordination. Such persons in most instances

will be persons covered by the "Savings Clause" who in many instances will receive benefits in excess of the present "basic" PERA formula. New employees, all of whom have to be under coordination, are not eligible to the savings clause and could not suffer.

PERA and the governmental subdivisions who are financing the deficit of PERA would benefit financially, at least for many years, from coordination which would reduce the deficit of the fund as to each member selecting coordination. The presently scheduled employer taxes for OASDHI are higher than the proposed 3% of pay reduction in employer contributions to PERA, but the lessening of the deficit will reduce either the amount of or the duration of the present extra employer contributions toward financing of the deficit.

The fact that Social Security now covers most of the employed people in the United States is not the least important reason that coordination should be adopted for PERA. Over seventy-five million employed persons, including self-employed people, are now under Social Security. With SERA and TRA coordinated, PERA is the only statewide governmental pension fund that is eligible but has not been coordinated. Nearly every new public employee now and in the future will already have Social Security credit. The trend in recent years has been to extend Social Security to more and more groups. We have been unable to learn of any reversals of this trend.

During the last year Social Security benefits paid to each eligible retired person were raised 7%. Probably from time to time in the future there will be further upward revisions.

THE COMMISSION RECOMMENDS there should be coordination of PERA and Social Security in conformance with the specifications of previous interim commissions as to specific provisions, and in addition, the individual option to coordinate should be extended to each eligible member. The period of retroactivity as to coordination should provide at least the six quarters of coverage before January 1, 1968 necessary to qualify members for

Medicare. If the maximum retroactivity of six years is not provided, appropriate transition period provision as to disability coverage should be made.

If coordination is enacted, provision should be made for PERA current income to be kept liquid by investment in short term securities until the amount necessary for OASDHI retroactive taxes is deter-

mined to be adequately covered.

The following members of the Commission do not concur in the recommendation as to coordination of PERA and Social Security:

Sen. Karl F. Grittner
Rep. Thor Anderson
Rep. Joseph Prifrel, Jr.
Rep. Edward J. Tomczyk

THE STATE EMPLOYEES' RETIREMENT ASSOCIATION

The state employees' pension program consists of Social Security plus SERA. In 1957, by employee referendum and on an all or none basis, SERA became entirely coordinated with Social Security. There is a minor exception as to thirty-eight employees who are still acquiring pension credit under the 1957 pre-coordinated basis because they were not eligible for Social Security.

Before Coordination, the pension at age 65 after 30 years of service was 55% of "average covered salary."

"Covered salary" refers to salary up to the salary ceiling and is the amount of salary from which deductions are made and pension credit earned. SERA salary ceiling and therefore the upper limit on pension credit was \$4800 salary per year until 1965 and is \$7200 per year since 1965.

Coordination was effected by cutting the SERA normal support rate from 6% employee plus 6% employer to 3% employee plus 3% employer, all subject to the then \$4800 per year salary ceiling for pension purposes. Social Security was then added to the reduced SERA schedule of benefits.

—After coordination, the SERA portion of the total benefit was 31.60% of "average covered salary" after 30 years service at age 65.

—Social Security in 1957, in most cases, provided a primary benefit of at least 27% of a salary of \$4800. (At that time the Social Security "salary ceiling" was \$4200 per year.)

- At lower salary levels, Social Security represents a higher percentage of pay. Short tenure employees received the same Social Security benefits as long tenure employees and thus gained rela-

tively much more because of coordination.

- Social Security in effect applied to "covered" salary after January 1, 1956, rather than "average covered salary" throughout employment.

As of 1957, coordination considerably increased total retirement benefits for most employees so that for a 30 year employee at age 65, retirement income exceeded 58.6% of average covered salary. Spouse and widows' benefits were an additional benefit.

The 1963 Session of the Legislature raised SERA benefits so that after 20 years or more of service, pension rates would be an additional 5% of average pay. Social Security had also been increased by the Congress. As of 1967, the coordinated retirement benefit at age 65 after 30 years of service will exceed 70% of average pay from which pension deductions have been made.

In 1967, on the basis of the former \$400 per month "salary ceiling:"

—Social Security primary benefit is approximately 34% of average covered salary since 1956.

—SERA—36.6% of average covered salary.

Social Security spouse or widows' benefits, if any, are additional. In 1965, the Legislature raised the salary ceiling for pension purposes from \$4800 to \$7200 per year, and Social Security raised its ceiling from \$4800 to \$6600 per year. This had no effect on employees under the \$400 per month level, but it does provide increased pensions and financing as to employees earning more than \$400 per month.

To summarize as to an employee, age 65 with 30 years service:

1957 Session set retirement rates at	55% of average covered salary
Coordination in 1957 set retirement rate at more than	58.6% of average covered salary
1963 Session plus Social Security changes	
increased retirement rates to over	70.6% of average covered salary
1965 Session increased the salary ceiling to	\$7200 per year
Social Security increased its ceiling to	\$6600 per year

FINANCIAL SUPPORT OF STATE EMPLOYEES' PROGRAM:

Continuously since July 1, 1957, the State has provided an employer's "additional contribution" of 2% of covered pay in addition to normal employer contributions equal to the contributions by employees. Prior to 1957, the State's contributions were less than those of the employees.

In 1957, before coordination, employees' contributions and normal state contributions were each 6% of covered pay.

1957—Before coordination	
1957—After coordination	
1967—Rates	

Subject to further changes by Congress, Social Security rates are scheduled to increase

Years	Soc. Sec. Rate
1969-72	4.9%
1973-75	5.4%
1976-79	5.45%
1980-86	5.55%
1987-after	5.65%

All rates quoted are applied to the salary ceilings for SERA and Social Security. Substantial increases in total dollar costs are caused by changes in salary ceilings. SERA ceiling to July 1, 1965—\$4800 pay per year;

After coordination, late in 1957, normal support rates became; SERA, 3% plus Social Security—2¼%; for a combined rate of 5.25% of covered pay from employees and from the State.

Social Security rates have increased several times. As of January 1, 1967, they become 4.4% of pay, bringing the combined SERA plus Social Security rate to 7.4% of pay per employee and employer.

Including the state 2% additional contribution, changes in financing rates of SERA plus Social Security can be illustrated:

Combined Employee Rates	Total State Rates	Total Rate of Financing
6%	8%	14%
5.25%	7.25%	12.5%
7.4%	9.4%	16.8%

with the following results to be expected:

7.9%	9.9%	17.8%
8.4%	10.4%	18.8%
8.45%	10.45%	18.9%
8.55%	10.55%	19.1%
8.65%	10.65%	19.3%

since that date, \$7200 salary per year.

Social Security ceiling:

1956 thru 1958	\$4200 per year
1959 thru 1965	\$4800 per year
1966	\$6600 per year

ACTUARIAL VALUATIONS OF SERA

There are now available four actuarial valuations of SERA, all prepared in accordance with the entry age normal cost method.

These valuations are validly comparable and deal with the fund as it was:

- (1) Before application of the 1963 amendments to its benefit provisions,
- (2) As it was after application of the 1963 amendments,
- (3) As it was at the end of 1964,
- (4) As it was at the end of 1965 following the 1965 amendments.

RESULTS OF ACTUARIAL VALUATIONS OF SERA

	Valuations by Actuaries of the		SERA Actuary's Valuations	
	Previous Commission			
	(1) As of 12-31-63 Previous Law; \$4800 Lim.	(2) As of 12-31-63 1963 Law; \$4800 Lim.	(3) As of 12-31-64 1963 Law; \$4800 Lim.	(4) As of 12-31-65 1965 Law; \$7200 Lim.*
No. Active Employees	28,171	28,171	29,517	31,396
Covered Payroll	\$103.965 Mill	\$103.965 Mill	\$103.2 Mill	\$129.000 Mill
Normal Cost	\$ 4,850 Mill	\$ 5.538 Mill	\$ 5.58 Mill	\$ 6.59 Mill
Normal Cost as Percent of Cov. Payroll	4.66%	5.33%	5.12%	5.11%
Reserves				
Active Employees	\$ 70.542 Mill	\$ 80,606 Mill	\$ 66.678 Mill	\$ 82.717 Mill
All Other	30.667	30.667	31.278	33.794
Total Reserves	\$101.209 Mill	\$111.273 Mill	\$ 97.957 Mill	\$116.511 Mill
Current Liabilities	.039	.039	.047	.031
Total Liab. & Reserv.	\$101.248 Mill	\$111.312 Mill	\$ 98.004 Mill	\$116.543 Mill
Total Assets	70.652	70.652	77.232	85.5
Unfund. Accr. Liab.	\$ 30.596 Mill	\$ 40.660 Mill	\$20.772 Mill	\$ 31.0 Mill
Min. Contrib. (% of Cov. Payroll)	5.54%	6.50%	5.72%	5.83%
Amort. Contrib. (% of Cov. Pay.)	6.05%	7.18%	6.09%	6.27%

M = Million

*Normal Cost and Reserves found on basis of \$4,800 salary limit for service to 7-1-65 and \$7,200 salary limit thereafter.

NOTE: Unfunded accrued liability is commonly called the "deficit."

Significant information concerning SERA is obtainable, not only from a study of each valuation, but also from an analysis of the questions raised by comparing the valuations:

Generally, it demonstrates not only the value of annual valuations, but especially the importance of the requirement that all valuations must be by the same actuarial method and hence comparable.

The first two valuations, both as of December 31, 1963, show the effect of the 1963 increase in SERA benefits. This not only increased the normal cost by .67% of pay, but increased the deficit (unfunded liability) by \$10.064 million to a total of \$40.660 million.

Reduction of the deficit by \$20.8 million in the third valuation as of one year later (12-31-64) demands analysis and provides valuable information.

Between \$2 and \$3 million reduction in the previous year's \$40.660 million deficit was expected due to the present level of financing for SERA.

The remaining approximate \$17 million re-

duction in deficit was due to the SERA actuaries' use of a new retirement table assuming average retirement at age 67 instead of age 65 as previously assumed. Assumption of the higher retirement age was within the allowable discretion of the SERA Board of Trustees since it was based on actual experience from 1957 to 1962.

The fourth valuation as of December 31, 1965, shows a deficit (unfunded accrued liability) of \$31.0 million. This \$10.2 million increase over the 1964 valuation is a net increase after absorbing decreases due to an additional year of financing and to changes in assumptions based on experience of SERA during the years of 1961 thru 1964 which will be discussed later.

The 1965 increase in "salary ceiling" for pension coverage from \$4800 per year to \$7200 per year is the principle cause of this net increase in deficit.

The 1965 increase in salaries subject to pension coverage reflects the increase in salary ceiling plus increases in pay scale plus a 1,879 increase in the number of employees covered.

IMPORTANT POINTS FOR CONSIDERATION INDICATED BY THE ACTUARIAL VALUATIONS

- The deficit at the end of 1965 is practically the same as before the 1963 and 1965 benefit increases.
- Extension of benefits in 1963 and in 1965 added considerably more than \$20 million of deficit to SERA.
- These increases in deficit were offset **not by financing provided** but by adoption of actuarial assumptions based on recent experience indicating older average retirement age and much higher turnover among state employees than had previously been assumed. These assumptions are financially favorable to the operation of the fund.

If there had been no benefit increases and no changes in assumptions, financing provided would have reduced the deficit by a moderate amount.

POINTS OF CAUTION

- Actual pension costs in the long range will be determined by actual experience.
Actuarial assumptions, which are forecasts of expected long range experience, if too optimistic or too pessimistic, must from time to time be modified toward conformance with experience.
- The deficit eliminated by new assumptions will be re-established if extended experience shows these new assumptions to be too optimistic.

- Examples of possible future developments that would require financially adverse modification in present assumptions should be considered as to whether or not they are likely to occur.

Will average age at retirement, now 67, drop to a younger average age?

Will employee turnover, now much larger than in stable private industries, become materially less than at present?

Will the life expectancy of active or retired employees or both increase?

The assumption that a 3% interest rate must be used in all calculations is the principal cautious or "pessimistic" assumption still used in the last two SERA valuations. This assumption is required by law. A discussion of the "Interest Rate Assumption" by Mr. Gerald Toy, commission actuary, is included on pages 11 and 12 of the report by the previous Commission to the 1965 Session of the Legislature. On page 12 that Commission recommended:

"It must be recognized that interest rates less than 3% in the past caused increased deficits in the funds and, therefore, interest rates in excess of 3% must be used to offset those prior losses until such time as long term higher rate can be established."

Unless or until this cautious assumption is changed it serves to balance, at least to some extent, the optimistic new assumptions. It has been considered in that light by the present commission.

SPECIFIC SERA PROPOSALS

Each of the three major SERA proposals for increase in the pension program is affected by each of the other two proposals. The costs attributable to each proposal by itself, if added to the separate costs of the other two proposals, will not add up to the total cost if all three should be adopted.

Proposal No. 1 would "remove the \$7200 limit of salary on which contributions and benefits are based."

This would increase the dollar cost of the SERA program because of application to the entire pay roll, but, the SERA actuary finds the rate of normal cost would remain the same at 5.11% of pay. If this proposal were enacted and the other two proposals were not enacted, the SERA actuary estimates that the increase in deficit would be \$1,117,000. Stating it another way, the 5.11% of pay normal cost would cover future accrual of

pension benefits, but there would be sufficient retroactive effect to cause \$1,117,000 deficit.

Proposal No. 2 This proposal would compute the benefits for services prior to July 1, 1957 by ascribing to those years an "average salary" equal to the "average salary" on which pension deductions were made for services after July 1, 1957 to the date of retirement.

To demonstrate the various facets of this proposal it is necessary to start with the application of the present law to determine "average salaries" used in computation of benefits.

- a. For the 20 pre-1957 years the average salary is determined by adding the salary subject to deductions for the five highest consecutive years prior to July 1, 1957 and dividing by 60 months (the amount became fixed on July 1, 1957).
- b. The average salary for post-1957 service is determined by adding the annual salary subject to deductions limited to \$4800 in a calendar year to July 1, 1965 and \$7200 a year thereafter and dividing by the number of elapsed months.

Proposal 2 would drop the computation as per a. above and ascribe to the pre-1957 service the average salary for post-1957 service computed under b.

The First Consequence therefore would be:

Every employee with pre-1957 service would immediately gain pension credit as if he had from the time of his initial em-

ployment before June 30, 1957, paid contributions on the same level of salary as he actually did pay after June 30, 1957.

The Second Consequence stems from the 1965 increase in the salary ceiling from \$4800 to \$7200 per year. Only those employees who have since 1965, or in the future will earn more than \$4800 per year would gain through this second consequence.

The increased salary ceiling would cause such employees to develop an increase in **post-1957 average covered salary** to more than \$4800 per year. Thus without a buy back or other contribution, such persons would be given additional pension credit for **pre-1957 service** above the salary ceiling in force until 1965. This in effect constitutes a gratuity rather than an earned benefit.

The manner in which Proposal 2 would compound the effect of the 1965 increase to \$7200 per year in the salary ceiling can best be illustrated by showing how it would apply to an employee whose salary exceeded the \$4800 salary ceiling since 1957 and also the \$7200 ceiling since 1965. Such an employee who started State service in 1937 would have 20 years of service prior to 1957. When he then retires at age 65 in the years shown he will experience the following results under the present law and would experience the indicated additional results if Proposal 2 is adopted.

Years of service assuming retirement at indicated date		Present Law total increase career average covered salary due to \$7200 Limit	Proposal 2 total increase in career average salary	Extra career av. salary due to Proposal 2	Excess of Proposal 2 Annual Annuity over present law annuity
Yrs. Serv.	Date				
29	July 1966	\$ 82.75 yr.	\$267 yr.	\$184.25 yr.	\$ 61.53 yr.
30	July 1967	160.00 yr.	480 yr.	320.00 yr.	112.00 yr.
31	July 1968	232.00 yr.	654 yr.	422.00 yr.	161.83 yr.
32	July 1969	300.00 yr.	800 yr.	500.00 yr.	200.50 yr.
33	July 1970	363.00 yr.	923 yr.	563.00 yr.	234.36 yr.

Under the present law the employee contributes on the \$2400 per year higher ceiling and receives a pension increased equivalently. Proposal 2 does not call for any additional employee contributions.

The above illustration shows the additional

impact of Proposal 2 due to a \$2400 per year increase in the salary ceiling. If the ceiling is removed, the gratuity for the higher paid employees will be proportionally increased from 1967 on.

**Cost estimates by the SERA actuary
as to Proposals 1 and 2**

	Increase in Deficit
Proposal No. 1 alone	\$1,117,000
Proposal No. 2 alone	\$7,541,000
TOTAL	\$8,658,000
Estimated increase in deficit if Proposals No. 1 and 2 are both enacted	\$9,388,000
Sum of Proposal No. 1 alone and Proposal No. 2 alone	\$8,658,000
Extra increase in deficit due to effects of each proposal on the other is	\$ 730,000 or .730 million

The \$9,388,000 deficit shown, primarily the larger portion, due to Proposal 2, does not show all of the probable deficit that will result in the future since as long as there are any State employees with pre-1957 service each pay increase would cause an additional deficit.

**SOME GENERAL INDICATIONS OF THE
EFFECTS OF PROPOSAL NO. 2**

1. The proposal is of no value to employees entering State service after July 1, 1957.
2. As to employees with pre-1957 service:
 - a. Proposal No. 2 benefits constitute a gratuity and deficit to SERA.
 - b. The gratuity and deficit both increase with each year of post-1957 service that raises average salary.
 - c. Subject to the \$7200 salary ceiling, each pay increase will automatically create an additional bonus in pension value and additional deficit to SERA.
 - d. Proposal No. 2 is of maximum value to employees paid \$7200 or more a year since July 1, 1965.

- e. If the \$7200 salary ceiling is removed or raised, the extra deficits to SERA will increase still further.

Proposal No. 3 would increase retirement and disability benefits by 15%. This proposes an across the board increase through increasing the pension formula for both past and future service by 15%

Unlike Proposal No. 1 & 2, this request would increase the normal level cost by .55% of pay roll to a level of 5.66%. In addition, this request would add \$11,171,000 to the deficit provided that salary ceilings were not increased above the \$7200 limit and that Proposal No. 2 was not enacted. Proposal 3 would not change employee contributions.

The interaction of Proposals 1 & 2 has been shown by the fact that the deficit would increase \$730,000 more if they were both adopted than the sum of the deficit increase for each proposal separately.

This is further shown by the fact that if Proposals 1 & 2 are rejected, adoption of Proposal No. 3 would add \$11,171,000 to the deficit; but if No. 1 and No. 2 are adopted, then the adoption of No. 3 would add \$12,575,000 to the deficit.

The sum of the deficit increase of each proposal separately is\$19,848,000
BUT

The total deficit increase if all three are adopted would be\$21,963,000
The 3 proposals accentuate the value of each other to the extent of \$ 2,114,000

THE COMMISSION RECOMMENDS elsewhere in this report that the salary ceiling be removed as to all statewide pension funds.

As to Proposals 2 & 3 as presented to this Commission, the Commission does not recommend their approval.

TEACHERS RETIREMENT ASSOCIATION

Teachers in the public schools and the State colleges, except teachers in Minneapolis, St. Paul and Duluth, are required to be members of the Teachers' Retirement Association (TRA). Each teacher acquires retirement benefits under either the Basic Program or the Coordinated Program.

The Basic plan applies only to teachers who were in service during 1959, who chose to remain on this plan when given the option to adopt the Coordinated plan and who have also passed up opportunities since 1959 to transfer to the Coordinated plan. Members under the Basic plan acquire all retirement and related benefits due to teaching service through TRA.

The Coordinated plan applies to all teachers in the State colleges, all teachers in service during 1959 who chose to transfer from the Basic plan, all teachers returning to service since 1959 and all teachers entering teaching service since 1959. Teachers under the Coordinated plan acquire their total retirement and related benefits partly under TRA at half of the Basic plan rate plus Social Security.

As of June 30, 1966, of the 36,746 active members of TRA, 8,786 were under the Basic plan and 27,960 were under the Coordinated plan. During December, 1966, the teachers under the Basic plan were again extended an option to transfer to the Coordinated plan. Under present federal law, persons becoming 65 years of age after January 1, 1968, will not be eligible for Medicare unless they have sufficient Social Security coverage. There may well have been additional transfers from the Basic to the Coordinated plan.

BENEFIT PROGRAMS

The TRA benefit provisions now considerably exceed the "money purchase" principle on which the fund was founded. Money purchase means that each member's pension benefit is determined by applying specified factors to the member's own contributions accumulated at interest instead of by a formula relating to salary, years of service, etc.

For a number of years after its start in 1931, TRA operated on the principle that upon retirement the State would equally match the annuity which the teachers' contributions plus interest would buy.

TRA adopted an annuity table that gave the teacher 30% larger annuity than the money involved would actually buy so that the State had to make up this 30% deficiency, then match both the teacher's contribution plus the 30% deficiency with the result the teacher received a total retirement annuity worth the teacher's dollar plus \$1.60 of State money. The 1957 Session of the Legislature required that for future service an accurate annuity table be used but allowed the inaccurate table to continue to apply to pre-1957 service.

Since the 1959 Session authorized the division of TRA into the Basic and the Coordinated plans, the benefit provisions have differed.

Under the Basic plan for the teacher's contributions plus interest thereon the State adds to the teacher's dollar:

\$2.10 for service before June 30, 1957 or total value to the teacher \$3.10 per teacher's dollar

\$1.20 for service after June 30, 1957 or total value to the teacher \$2.20 per teacher's dollar

The current teacher's contribution rate under the Basic plan is 6% of pay up to \$7200 per year. Under the Coordinated plan the TRA portion of the teacher's retirement program provides that for the teacher's contributions plus interest thereon the State adds to the teacher's dollar

\$1.25 for service before June 30, 1957 or total value to the teacher \$2.25 per teacher's dollar

\$1.20 for service after June 30, 1957 or total value to the teacher \$2.20 per teacher's dollar

The current teacher's contribution rate under the Coordinated plan is 3% of pay up to \$7200 per year.

Total coordinated plan benefits; that is TRA plus Social Security (OASDHI) will at this time exceed the retirement benefits of the Basic plan after most lengths of service. This is particularly the case since Social Security benefits were raised over a year ago and it is practically always the case when a teacher has a dependent spouse not eligible to Social Security benefits in his or her own right.

BENEFIT PROGRAM HISTORY

The fact that some teachers with many years of service have relatively small pensions is due to small total contributions in the past and not, as is sometimes alleged, because the fund operates on a "money purchase" rather than a formula basis.

Teachers who did not join TRA when the membership was optional would not have received credit under either basis.

From its start in 1931 until 1951, TRA contributions were limited to 5% of pay subject to a "salary ceiling" for pension purposes of \$2000 per year.

From 1951 to 1953 the salary ceiling was raised to \$3500 per year.

From 1953 to 1955 the contribution rate was raised to 6% and the salary ceiling to \$3600 per year.

The salary ceiling of \$4800 per year has been in effect only from 1955 to 1965.

The present \$7200 per year salary ceiling was adopted in 1965.

The Legislature has provided that for teaching service prior to June 30, 1957, the State will exceed equal matching of the teach-

ers' contributions by over \$20 million. The teacher with pre-1957 service who receives \$3.10 worth of pension for each dollar of contribution gets a bargain. If the total pension is small it means that the bargain was applied on too few dollars of contributions.

1965 BENEFIT INCREASES

The 1965 Session of the Legislature made three major increases in teacher's retirement benefits.

1. Raising the "salary ceiling" for pension contributions from \$4800 per year to \$7200 per year will cause considerably larger annual accrual of pension value for all teachers earning over \$4800 per year.
2. Allowing teachers the "buy-back" credit for service since 1957 on any yearly salary between \$4800 and \$7200 accentuates the value of the higher ceiling to teachers with service in the last nine years.
3. Provision that under both the Basic and the Coordinated plan as to service since 1957 beside matching the teacher's accumulated contributions, additional pension credit equal to 20% of the teacher's accumulated contribution will be given. Since July 1, 1965, this measure has increased the retirement annuity of each retiring teacher.

These three measures taken together have already increased the average annuity of retiring teachers and will steadily cause further increases in the future.

SIGNIFICANCE OF INTEREST ON TRA INVESTMENTS

TRA being a money purchase pension plan, and unlike the formula plans, automatically reflects in member benefits an increase in interest earned on investments of the fund. The annuity at retirement is calculated from the base of the teacher's accumulated deductions instead of by a formula. The more the accumulated deductions are increased by

interest, the larger the retirement annuity will be.

The interest rates which TRA has credited to teachers' accumulated deductions are closely correlated with the interest the fund has earned on its investments.

Interest Credited to Teachers' accounts in Selected years:

1935-3% 1945-2% 1955-2½ % 1965-4%
 1940-2% 1950-2¼ % 1960-3¼ % 1966-4%

Each pension study interim commission since 1957 has helped initiate and has actively supported the series of improvements in the laws governing pension fund investments that have been an important factor in enabling the pension funds to earn increased interest on investments. The effect of these laws can be expected to further improve interest earnings.

TRA's interest earned on total assets was 3.58% in 1965 and 3.53% in 1966, but in both years the interest earned on *actual investments* was slightly over 4%. The two principal reasons for this fact are:

First—There is a time lag after employer's contributions become payable to TRA and the actual receipt of the proceeds of the tax levy by which they are paid. This is a receivable asset which is unproductive as to interest earning until the funds are actually received and invested.

Second—TRA is required to pay to the Federal government the employer Social Security tax for all teachers on the coordinated

plan. TRA then later on recovers this advance to the State by adding this amount to the next tax levy. Thus funds that otherwise could be invested to earn interest are paid out and the interest earning thereon is lost for the interval between payment to the Federal government and subsequent repayment from the tax levy. This situation will continue to become progressively worse since the proportion of the TRA membership on the coordinated plan increases each year and the Social Security tax is scheduled to increase every few years.

These receivable, but unproductive assets are all made up of employer, i.e. State obligations. With minor exceptions, all teachers' deductions are represented by invested funds. Therefore, TRA is justified in crediting to teachers' deductions the rate of interest earned on actual investments rather than the average rate earned on all assets of the fund.

Actuarial Valuations

The actuarial valuations of TRA indicate the condition of the fund and by comparison the financial impact of benefit changes that have from time to time been made.

RESULTS OF ACTUARIAL VALUATIONS OF TRA

	Valuations Submitted to Previous Commissions		Valuations Submitted to This Commission	
	1 As of 1-1-58 \$4800 Limit	2 As of 1-1-64 \$4800 Limit	3 As of 6-30-65 \$7200 Limit	4 As of 6-30-66 \$7200 Limit
No. Active Employees	22,015	33,386	34,604	36,746
Covered Pay Roll	\$ 94.30M	\$145M	\$184M	\$220M
Accrued Liability	\$111.1M	\$139M	\$188.4M	\$205M
Total Assets	\$ 38.7M	\$103M	\$123.1M	\$142.5M
Unfund. Accr. Liab.	\$ 72.4M	\$ 36M	\$ 65.3M	\$ 62.5M
Min. Contrib. (% of				
Cov. Pay Roll)	14.3%	NC+\$1.1M	NC+\$2M	NC+\$1.9M
Amort. Contrib. to 1997				
(% of Cov. Pay.)	15.3%	NC+\$1.654M	NC+\$3.2M	NC+\$3M
Funding Ratio	35%	74%	66%	69.5%

M = Million NC = Normal Cost which is 12% on the Basic Plan and 6% on the Coordinated Plan.

NOTE: Unfunded accrued liability is commonly called the "deficit."

This differs from the tabulations of the valuations for those funds that use a benefit formula. TRA being a money purchase fund, normal cost is an established rate of contri-

butions while in the formula plans, normal cost is the assessment of the cost of the benefit formula.

TRA being a split system, part Basic Plan

and part Coordinated Plan, the normal cost is as shown in the note under the tabulation.

The significance of some of the items in the tabulation of valuation totals deserves comment.

From January 1, 1958 to January 1, 1964, the membership increased over 50% but total liability (value of pension credits) increased 25%. During the interval between the survey in Column 1 and Column 2 coordination of TRA and Social Security became available and was selected by 28% of the members on the first referendum in 1959. Subsequently in additional referendums many more teachers transferred from the basic to the coordinated plan and all teachers entering service after 1959 were automatically on the coordinated plan so that by 1964 TRA membership was 68% in the coordinated plan. Each teacher who transferred to the coordinated plan substantially reduced the liability of TRA.

The high level of State financing of TRA plus the advent of the coordinated plan accounts for the fact that between January 1, 1958 and January 1, 1964, the assets of the fund increased \$64.3 million while liability was increasing \$27.9 million. This reduced the deficit by \$36.4 million to \$36 million.

1965 Increases in Benefits

Increased benefits provided by the 1965

Plan	Present Rate of State Additional Contribution
Basic	1% of Pay
Coordinated	1.5% of Pay
Total State financing of the deficit per year	

Thus the present rate of financial support is adequate to support the TRA benefit program and retire the deficit by 1997.

Session account for the major portion of the \$29 million increase in the deficit between January 1, 1964, and June 30, 1965. The TRA actuary ascribes \$7.6 million of the increase to the \$1.20 matching (20% augmentation) benefit added in 1965 and \$11.9 million of the increase to the "buy-back" privilege granted in 1965. The actuary also lists \$4 million liability to cover payment of arrears by teachers. He also reduces the previously expected turnover gain to cover the liability that will annually accrue because of the \$1.20 matching provision.

At the present rate of financing TRA is scheduled to eliminate its present deficit by 1997, the target date recommended by the 1957 Session of the Legislature. This assumes continuation of the present program of benefits. The tabulation shows that the annual contribution required to amortize the deficit by 1997 is the normal cost plus \$3 million per year. The State matches the teachers' contributions to provide the normal cost support of 12% of pay on the basic plan and 6% of pay on the coordinated plan. In addition, the present rate of State financing of the deficit is estimated by the Commission actuary as sufficient to provide the following financing of the deficit.

Estimated Pay Roll	Amortization Amount in Dollars
\$ 56 Million	\$ 560,000
\$164 Million	\$2,460,000
	\$3,020,000

This can be expected to continue to be the case if any increases in benefits are accompanied by suitable increases in financing.

TRA LEGISLATIVE PROPOSALS

The legislative proposals of TRA if taken in total constitute a sweeping change in both the nature of benefits and financing required. Some of the proposals can be considered separately with reasonably accurate estimates of financial consequences. Others are so inter-

related that the consequences of one proposal are affected by whether or not another proposal were to be granted.

Proposal No. 1

Remove the \$7200 limit on salaries for

contributions and pension credit.

The TRA actuary has estimated the employer contributions on the increased payroll that would thus be covered will amount to \$1,150,000 annually, if TRA remains on its present money purchase plan. This is doubtlessly based on current pay-scales, hence will obviously be an understatement to the extent that teachers' pay will no doubt be increased.

Many additional millions of dollars will be the cost of raising or eliminating the present salary ceiling if a final salary, or average of the last five years salary, formula should be adopted. Proposal 5 requests such a formula.

RECOMMENDATION: Elsewhere in this report the Commission recommends removing the salary ceiling of all statewide funds.

Proposal No. 2

Increase the annuities of retired teachers by 10% with a minimum increase of \$25 per month for those who were in the basic plan and of \$12.50 for those in the coordinated plan.

The TRA actuary estimates this Proposal would cause an increase in the deficit by \$3,200,00.

The minimum increases proposed will exceed 10% of the present annuities of most of the retired teachers.

This would be for practical purposes an across the board increase in pension of \$25 per month for basic plan and \$12.50 per month for retired coordinated plan teachers regardless of:

1. The amount of their present pension.
2. Whether they had a little or a long period of service.

Nearly all teachers who have retired under the coordinated plan and who had full time teaching service from 1955 to retirement receive near or over \$100 per month from Social Security. In 1965 Social Security benefits for retired persons were increased 7%.

The following principle of pension policy of this and previous Commissions applies to this request:

"Raises in pension benefits to retired persons should be recognized as a form of as-

sistance and not disguised as pensions. Such grants should in all instances be separately financed and never charged to the pension funds."

Accordingly if this proposal or a modification thereof is adopted, separate financing should be provided which meets the additional annuity costs each year so that the deficit of TRA would not be increased.

Proposal No. 3

Extend the buy-back privilege granted to active teachers to those who retired between July 1, 1957 and July 1, 1965. This allows buy-back as to actual salary over \$4800 per year and up to \$7200 per year.

The TRA actuary estimated this would increase the deficit by \$300,000. This at best has to be a guess since it is difficult to foresee how many of the eligible retired teachers would exercise such a privilege.

If retirement annuities are still to be computed according to the provisions of TRA at the time the teacher retired then the buy-back will not only cost the State the full equal matching, but in addition some deficit since the retired teachers availing themselves of this option would in most cases be those who consider themselves to be in good health.

A question also arises. In case Proposal 2 is adopted, should the 10% increase in annuities for retired teachers be computed before or after the buy-back requested in Proposal 3?

Proposal No. 4

- a) Increase survivor benefits in the basic plan as follows:

	Present	Proposed
Spouse Only	\$ 65	\$100
Spouse & One Child . . .	130	225
Spouse & 2 Children . . .	175	300
Spouse & 3 Children . . .	220	300
Spouse & 4 Children . . .	250	300

- b) For those members over age 55 with 10 or more years of service or with 30 years of service regardless of age, the surviving spouse would receive an annuity equal in value to the annuity the member would

have received if he had retired on the date of death; however, for a member in the basic plan, the minimum benefit for the spouse is to be \$100.

The TRA actuary estimates (a) would cost \$60,000 per year and (b) would cost \$140,000 per year. This estimate is based on three years of TRA experience as to survivors benefits. The Commission actuary questions this estimate since the deaths of TRA basic members the last three years appears to have been unusually small.

In TRA disability benefits, survivors benefits and the cost of administration of the fund are all financed out of the turnover gain. To these benefits financed by turnover gain the 1965 Session added the "20% augmentation benefit" provided in the \$1.20 matching procedure adopted by the 1965 Session. By either name, this means that each retiring teacher is given a bonus equal to 20% of accumulated deductions arising from service since July 1, 1957. This 20% bonus benefit was recommended by the Employee Retirement Systems Interim Commission for the purpose of giving teachers the benefit of the turnover gain that is in excess of the cost of disability and survivor benefits plus administrative costs. The intention was to, in the future, increase or decrease the 20% bonus if experience over a number of years should indicate the increase or decrease was needed to balance turnover gain.

This is important since Proposal 4 contemplates financing its proposed increase in benefits by use of turnover gain. This raises some important questions.

1. If experience proves that the benefits of Proposal 4 and the 20% bonus cannot both be financed by turnover gain, which benefit should be reduced or eliminated if necessary? The alternative would be to increase the deficit as a standard procedure of financing unless the regular employer matching contributions should be increased.

2. As to Proposal 4 (a) This benefit is entirely for teachers on the basic plan. Will the cost require diverting some of the turnover gain from the coordinated plan?

3. Proposal 4 (b) proposes to give to the surviving spouse of a teacher with 10 or more years of service and who dies after age 55 what amounts to the full value of the State's contributions including the 20% bonus.

Proposal No. 5

Without question, this proposal, if adopted would constitute the most far reaching single retirement action ever enacted by the Legislature.

The TRA proposal

Formula:

- "a) Provide that a teacher who was a member of the fund on June 30, 1967, shall, upon qualifying for a retirement annuity, have the option to receive an annuity based on either the money purchase plan or the formula plan; a teacher who becomes a member of the fund on July 1, 1967 and thereafter, shall have the annuity computed on the formula plan.
- b) Provide that the formula benefit shall be based on 30 years of allowable service at age 65, and 50% of average annual salary received by the member for the highest 5 years of the last 10 years of teaching service; for earlier retirement, the annuity shall be actuarially equivalent to this formula basis.
- c) Provide for the reduction of the formula benefit by the retirement value of any unpaid "buy-backs" or "arrearages."

The Commission actuaries' report to the Commission summarizes Proposal 5 as follows:

"Provide formula retirement benefits at age 65 of the following percentages of final average salary for each year of service where final average salary is defined to be the average of the five highest consecutive years out of the last ten years of service:

Basic Plan—1 2/3%;

Coordinated Plan—5/6% of the first \$550 plus 1 2/3% of any salary in excess of \$550

"This proposal involves a momentous change in the system as it moves the system from a money purchase approach to a formula plan." (emphasis supplied)

On the basic plan the teachers' contribution rate would remain 6% but on full salary.

On the coordinated plan the teachers' contribution rate would remain at 3% of salary up to the Social Security salary ceiling of \$6600 per year, then 6% of all salary over that ceiling.

The State would pay the entire balance of normal level costs and in addition would finance the deficit.

Costs to the State as estimated by the TRA actuary:

Basic Plan Normal Cost to the State Present Basis

6% of salary up to \$7200 per year for each teacher.

1966 covered payroll \$56 million.

Proposal

10.6% of total salary of each teacher.
Estimated 1966 total payroll \$63 million.

Coordinated Plan Normal Cost to the State

Present Basis

3% on salary up to \$7200 per year for each teacher.

1966 covered payroll \$164 million.

Proposal

5.75% on salary up to \$6600 per year for each teacher plus 10.6% on any teacher's salary in excess of \$6600 per year. Estimated 1966 total payroll \$181 million.

The TRA actuary estimates that Proposal 5 would increase the deficit of the fund by \$115.9 million divided as follows:

Increase for the Basic group—\$57.2 million

Increase for the Coordinated group—\$58.7 million

Thus Proposal No. 5 would increase the present \$62.5 million deficit of TRA to \$178.4 million. This large increase in the deficit would raise the amount the State would

have to contribute each year to retire the deficit by 1997 from the present amount of \$3.2 million to \$9.2 million per year.

TRA has estimated for the next two years the necessary State Contribution to the fund under the present law and under Proposal 5:

Year	Present Law	Proposal 5
1967	\$21.5 million	\$36.95 million
1968	\$23.3 million	\$39.34 million

NOTE: The estimate for 1967 and 1968 is that each \$1.8 million raised from the property tax will require 1 mill of tax levy.

Effects of the Proposed Benefit Formula

The effect of the proposed formula by itself is considerable. This effect is greatly magnified by applying the formula to all past years of service. These two effects in turn are further magnified by applying the formula to full salary by removal of the salary ceiling.

The formula itself would base the benefits after a lifetime of service on the average salary for the five highest years of service. This is in distinct contrast to basing benefits on the average salary from which contributions had been deducted. Under the formula, the teacher would from year to year contribute on actual salary but retire on the five highest years of salary. Under this type of formula the employee whose salary reaches a high level before retirement gets more pension value per dollar of employee contribution than the employee of equal tenure who did not reach so high a level of salary.

This is the principal reason why under Proposal 5 the future normal level cost of the basic plan will increase from the present level of 12% of pay to 16.6% of pay. Under the coordinated plan, the present normal level cost of 6% of pay will in the future increase to 11.5% of pay.

The 1957 Legislature changed the SERA and PERA formulas from highest salary formulas to average salary from which contributions had been made. This was to keep normal costs at a level where the employees

were willing to pay approximately half of the current costs.

Applying the formula to all past years of service will greatly magnify the effect of the formula. During all past years, the teachers under either the basic or the coordinated plan have accumulated pension credit at the normal cost rate. That is, 12% (6% teacher—6% State) of actual pay subject to the salary ceilings under basic and 6% (3% teacher—3% State) under coordinated. Adoption of the formula would immediately provide a plan that during all past years should have been financed at a level cost of 16.6% for basic and 11.5% for coordinated as explained above. Thus for past service pension benefits would be received for which neither the teacher or the State had contributed. This accounts for a substantial part of the \$115.9 million deficit Proposal 5 would add to TRA.

Removal of the salary ceiling would still further magnify the effect of the proposed formula. Teachers who have had actual salaries in excess of the past salary ceilings have contributed and earned pension credit within those ceilings. Proposal 5 would cause each future year of actual higher salary to be counted, in determining the average salary for the five highest years. Thus after five years the entire basis of determining the pension for the whole career would be established from the actual salary. The teacher with an above-the-old-ceiling level of salary would thus contribute for five years on actual salary and receive the same pension credit as if he or she had contributed the same amount above the old ceilings for all of the years of teaching. Such teachers would, in addition to being part of the cause of the deficit described in the paragraph above, cause most of that portion of the total \$115.9 million deficit not attributable to the preceding paragraph.

The cumulative effect of the proposed formula applied to past service plus removal of the salary ceiling is demonstrated by the following illustration.

Assume teacher A and teacher B both retire in 1972 with 30 years of service at

age 65, under the basic plan. Until 1967, both have contributed on salary at the salary ceiling in force during each year of service; hence up to 1967, contributions and pension credit of A and B are identical.

The difference: From 1967 to 1972 teacher A's actual salary will for the 5 years average \$7200 per year—the same amount as the pre-1967 salary ceiling. Teacher B's actual salary will for the 5 years average \$14,400 per year.

Thus A's average salary for the 5 highest years will be \$7200, B's average salary for the 5 highest years will be \$14,400 per year.

For the last 5 years before retirement
A will contribute \$432 per year for a total of \$2,160.

B will contribute \$864 per year for a total of \$4,320.

On retirement in 1972

A's pension will be \$3600 per year

B's pension will be \$7200 per year

In the first seven months after retirement, B's pension will return to him the excess of his total lifetime contributions over A's total lifetime contributions.

NOTE: A similar illustration under the coordinated plan would show similar results.

The illustration shows why removal of the salary ceiling coupled with the formula accounts for a material part of the \$115.9 million increase in deficit that would be due to Proposal 5.

No teacher beginning service now can anticipate so considerable a windfall since he or she would always pay contributions on full actual salary.

To summarize, Proposal No. 5 would:

Constitute a substantial gratuity for past service.

Provide that the higher the teacher's salary the greater the gratuity would be.

Increase State costs more than 75% as to future service.

Increase the deficit as to past service by at least \$115.9 million.

NOTE: All actuarial estimates of the costs of Proposal 5 are from the TRA actuary since Proposal 5 is so all inclusive in the extent of changes that a complete actuarial survey of TRA applying the conditions of Proposal 5 would have been necessary to examine the accuracy of the TRA estimates.

In addition, Proposal 5, by providing that all increased costs be borne by the State,

would depart from the present State policy and the Principal of Pension Policy reproduced in the first chapter of this report that:

"Governmental employer support of normal level pension costs should not exceed equal matching of the employee's contribution to his pension, except as to certain law enforcement and safety employees."

STATE COLLEGE BOARD AND JUNIOR COLLEGE BOARD SUPPLEMENTAL RETIREMENT

Laws of 1965, Chapter 809, dealing with State College matters includes Section 36, which establishes a supplemental retirement plan for unclassified personnel having tenure (teachers), including administrative officers, college presidents and deans.

Commencing July 1, 1965, in the case of all such personnel, 5% per year has been deducted from all salary over \$6,000 up to \$15,000 per year. The State matches these deductions from general revenue.

These funds are invested in short term securities by the State Board of Investment.

To provide the State matching funds, Section 36 appropriated:

\$180,000 for the year ending June, 30, 1966;
\$205,000 for the year ending June 30, 1967.

The State College Board and the Junior College Board are to propose a supplemental retirement plan to the 1967 Session.

The Proposed Plan

A joint committee selected by the State College Board and the Junior College Board submitted to the Commission "Committee Proposals" which set forth "desired characteristics" of a supplementary retirement program. These "characteristics" are more in the nature of specifications than a specific plan. A summary outline of these "desired characteristics" numbered as submitted, with Commission comments where it appears advisable follows:

1. "Tax Sheltered Annuity." This includes a request that employer contributions be tax sheltered as well as the employee contributions.

Comment. Tax Sheltered Annuities under the Internal Revenue code are only available to teachers in educational institutions. They are obtained by having the employee accept a reduction in pay or forego a pay raise with the employer thereupon paying the premium on the annuity up to the amount of pay-cut or raise foregone. The employee then does

not currently pay income tax on the amount paid for the annuity. He does pay income tax on all of the annuity received after retirement or on funds withdrawn should the annuity contract be terminated before retirement.

Employer contributions in all public pension funds are not currently taxable to the employee, but the retirement income arising therefrom is taxable when received.

2. "Money Purchase." Type of benefit program.
3. "Fixed and Variable Annuities. The annuitant is to have the option of selecting from:
 - a. 100% invested in a fixed annuity.
 - b. 100% invested in a variable annuity.
 - c. A combination of (a) & (b) such as 50% fixed and 50% variable."
4. "Vesting—Complete and immediate vesting of both the individual's and the State's contribution to include principal, interest, and dividends. Vesting to be retroactive to July 1, 1965."
5. "Survivors' Benefits"—The specific requests enumerated are on the principle that both employer and employee funds would be used to provide benefits for the beneficiary in case the teacher died before retiring.
6. "Eligibility for Enrollment." It is proposed that participation by those eligible be voluntary.

Comment: First, we can find no record in any state of a Voluntary Supplemental Retirement Plan for public employees that calls for employer contributions. Second, if the State matches the voluntary contributions of the teacher this would amount to a pay raise for those who volunteer. The tax sheltered requirement as already noted would require the volunteer to take a pay reduction as a means of providing that his own contributions would be tax sheltered.

7. This item of specification proposes conditions as to Sabbatical leave and other leave and requests optional increase in amount of equity to be purchased and "buy-back" provisions.
8. "Retirement." The characteristics listed are those typical of the settlement options in most insurance and other private carrier insurance and annuity funds.
9. "Separation."—If the annuitant resigns is no longer employed by either system, for reasons other than death or retirement, he may elect one of the following options. The State, under these conditions ceases to pay any part of the premiums.

Comment. The options requested are all based on the separated teacher's ownership of the entire contract, including employer's contributions, if any.

Two points should be noted:

1. If there are employer contributions in the contract, a separated teacher by surrendering his contract for cash would in effect receive a delayed pay raise which would not have been received by teachers who did not voluntarily participate in the program.
2. The request is so worded that a teacher would be separated who left the State or Junior College System for any of the public schools or the University of Minnesota as well as those who left for out-of-state or private

school employment.

GENERAL COMMISSION COMMENT: All of the teachers in the Junior College System and the State College System are members of TRA. All State College teachers in the coordinated plan contribute 3% of TRA plus Social Security.

Teachers in the Junior College System are subject to the "split system" of TRA, i.e. some are under the coordinated plan and some the basic plan. The basic plan requires 6% employee contributions. Elsewhere in this report the Commission recommends lifting the salary ceiling in TRA. If this is true, the teachers' contributions will be on full salary instead of only up to the present \$7200 ceiling.

The Commission has no objection to including in any pension plan the tax sheltered and variable features, provided the variable features are optional. The Commission suggests that, as noted elsewhere in this report under "Pension Measures Concerned with Inflation," that among other things, the subject of variable annuities and tax sheltered annuities should be carefully studied in the next interim.

On the basis of the foregoing comments, the **COMMISSION RECOMMENDS** that should any supplementary annuity program be adopted in connection with any fund, there should be no employer contributions in any case where participation is voluntary.

STATE POLICE OFFICERS' RETIREMENT FUND

The Minnesota State Police Officers' Retirement Association is made up of the Game Wardens of the State who were separated from SERA in 1955 and the officers of the Bureau of Criminal Apprehension separated from SERA in 1961, when the two groups were merged into the pension fund as now named.

Employee contributions for past service were transferred from SERA but no employer funds accompanied the transfer. This, plus the fact that the benefit program of this fund requires relatively more financial support than SERA, caused the fund to start its existence with a sizeable deficit.

Police officers in Minnesota are not eligible

for Social Security coverage. If the members of this fund had remained in SERA they would necessarily have to be under a different benefit program than the SERA coordinated type of benefits.

With some variations the benefit formula of this fund is similar to that of the Police and Fire Fund in PERA. Age 58 is the normal retirement age and benefits accrue at the rate of 2% of average covered pay times years of service.

The financial history of the fund as now constituted is indicated by the actuarial valuations made since that time.

RESULTS OF ACTUARIAL VALUATIONS OF MINNESOTA STATE POLICE OFFICERS RETIREMENT ASSOCIATION

	1 As of 1-1-64 \$4800 Limit	2 As of 6-30-65 \$7200 Limit	3 As of 6-30-66 \$7200 Limit
No. Active Employees	164	165	171
Covered Payroll	\$ 787 T	\$1,042 T	\$1,108 T
Normal Cost as Per Cent of Cov. Payroll	13.6%	12.3%	11.9%
Accrued Liability	\$2,618 T	\$3,294 T	\$3,249 T
Total Assets	\$ 963 T	\$1,070 T	\$1,203 T
Unfund. Accr. Liab.	\$1,654 T	\$2,224 T	\$2,046 T
Min. Contrib. (% of Cov. Payroll)	19.9%	18.7%	17.4%
Amort. Contrib. (% of Cov. Pay.)	23.6%	22.6%	20.8%
Funding Ratio	37 %	33 %	37 %

T = Thousand Limits = Salary Ceiling for Pension Purposes

NOTE: Unfunded accrued liability is commonly called the "deficit."

The principal reasons for the increase in the deficit between the 1964 and 1965 valuations were that the salary ceiling for pension purposes was increased from \$4800 per year to \$7200 per year with resultant increase in retirement and disability benefits and there was a small increase in widows' benefits.

The decrease in deficit from 1965 to 1966 is primarily due to 4 deaths among the 33 beneficiaries during the year. This is four times the mortality to be expected and illustrates the fact that in such a relatively small fund temporary fluctuations from a stable experience pattern can be expected.

The low funding ratios of this fund further

indicate the inadequacy of the early financing of the fund.

The present rate of financing provided by statute is:

Employee contributions	6% of covered pay
Employer regular contributions	9% of covered pay
Employer additional contributions	3.5% of covered pay
Total financing rate	18.5% of covered pay

Reference to the tabulation above shows that the employee contributions plus the employer regular contributions total 15% of covered pay. This considerably exceeds the normal cost of 11.9% of pay and shows that regular support is at least financing the new

deficits due to improvement in pension benefits.

It is therefore apparent that the 3.5% additional contributions are totally inadequate to amortize the amount of deficit due to earlier deficiencies in employer support.

THEREFORE THE COMMISSION RECOMMENDS: The rate of additional employer contributions should be increased from the present rate of 3.5% of covered pay to a new rate of 6.5% of covered pay in order that the deficit of the fund can be amortized not later than 1997.

The present law governing the State Police Officers' Retirement Fund includes by refer-

ence a number of provisions in the SERA law. In 1961 when this fund was established the proposed legislation was drafted in contemplation that routine administration of the fund would be performed by the staff of SERA. Provisions to this effect were deleted before enactment of the present law but the references to SERA law remain. Since the State Police Officers' Fund now has no connection with SERA, **THIS COMMISSION RECOMMENDS** that if a recodification of the State Police Officers' Fund law is confined to elimination of references to the SERA law, such a bill should be recommended to pass.

HIGHWAY PATROLMAN'S ASSOCIATION

The 1943 Session of the Legislature established this pension fund and removed the members of the Highway Patrol from SERA. Employee contributions were withdrawn from SERA, but since up to that time the State had provided very meager employer support of SERA, there were no employer contributions in SERA that could have been appropriately transferred to the new fund. There were major increases in the level of benefits in 1953 and 1957. Prior to 1961, the deficits of the fund have increased markedly with each major raise in benefits since the benefit increases were made retroactive to apply to all retired persons, widows and other beneficiaries, and even to former members who had deferred pension rates.

This amounted in practice to the same type of escalation benefits found in some of the local funds for firemen and policemen. The 1961 Session prohibited automatic escalation so that since that date pensions will remain at the same level as they were at retirement unless specifically increased by legislative action.

1965 Changes

The 1965 Legislature made some significant changes in this plan:

- ☆ Salary ceiling was increased from \$4800 per year to \$6,000 per year;
- ☆ Retirement benefits were increased from from \$200 basic benefit a month to \$250 per month;
- ☆ Disability benefits increased in the same proportion as retirement;
- ☆ Widows' and orphans' benefits increased by increasing benefits per child from \$20 to \$45 per month.

COMMENT:

Widows' annuity following death of a retired former patrolman were eliminated as to future widows, but it was provided that at retirement the patrolman could select a joint and survivor annuity equivalent to his regular pension in value but reduced so as to provide a life income for his widow should she survive him.

RESULTS OF ACTUARIAL VALUATIONS of HIGHWAY PATROLMEN'S RETIREMENT ASSOCIATION

	Valuations submitted to Previous Commissions		Actuary's Valuations to This Commission	
	1 As of 1-1-58 \$4800 Limit	2 As of 1-1-64 \$4800 Limit	3 As of 6-30-65 \$6000 Limit	4 As of 6-30-66 \$6000 Limit
No. Active Employees	329	378	376	377
Covered Payroll	\$1.582M	\$1.814M	\$2.240M	\$2.258M
Normal Cost as Per Cent of Covered Payroll	17.3%	19.5%	16.1%	17.1%
Accrued Liability	\$4.014M	\$6.875M	\$7.496M	\$7.874M
Total Assets	\$1.227M	\$2.718M	\$3.137M	\$3.730M
Unfund. Accr. Liab.	\$2.787 M	\$4.152M	\$4.359M	\$4.144 M
Min. Contribution (% of Cov. Payroll)	22.6%	26.4%	21.9%	22.6%
Amort. Contrib. (% of Cov. Payroll)	25.3%	30.3%	25.5%	25.8%
Funding Ratio	30.0%	40.0%	42.0%	47.0%

M = Million

NOTE: Unfunded accrued liability is commonly called the "deficit."

Since there is one less active member in 1966 than in 1964, the increase in covered pay roll reflects somewhat the increase in pay

scale, but primarily the increase in the salary ceiling from \$4800 per year to \$6000 per year. This is important in that wherever per-

centages are shown in the tabulation, they refer to the covered pay roll on the particular year covered by the valuation. Thus, when the covered pay roll is larger, a smaller per cent of that larger pay roll might mean an increase in the number of dollars. The increase in unfunded accrued liability reflects the fact that underfinancing prior to 1958 was continued sufficiently to cause the larger deficit in 1964. By the same token, the fact that the 1966 deficit is slightly less than the 1964 deficit indicates a more adequate recent level of financing. As a further indication of financial progress, the increase in the benefit program enacted in 1965 caused the deficit to increase \$206,000 over the deficit as of January 1, 1964. The reduction in deficit between 1965 and 1966, as may be noted, exceeds the increase due to the 1965 increase in benefits. This is the basis for the actuary's finding that if benefit schedules remain at the present level and financing continues at the present level, the deficit in the Highway Patrolmen's Retirement Association will be completely retired by 1990.

The present rate of financing, subject to the salary ceiling of \$6000 is as follows:

Employee contributions	7.4%
Employer regular contributions	11.2%
Employer add'l contribution	9.0%
Total contributions	27.6%

The employee contributions and the employer regular contributions are based on the principle that because pension funds for safety services provide for earlier retirement than general pension funds, the employees' contributions should be 40% and the employers' regular contribution should be 60% of the total regular rate of contribution.

Proposed Legislative Changes

Widows' benefit changes in the Highway Patrol law enacted at the 1965 Session created some problems and left some room for adjustment. The widows' benefit provisions were changed so that upon the death of a retired patrolman, the widow would not receive a widow's pension in the same manner as if

her husband had died in service. Instead, upon his retirement, the 1965 law provides that the patrolman should have the option to select a joint and survivor's annuity, which would on his subsequent death, pay to his widow if she survived him, the proportion of his annuity provided in the option selected. The widow's level of benefit in some joint and survivor options exceeds widow's benefits if the husband died in active service. Where a patrolman qualifies for retirement as to age and service, but chooses to continue on active duty and then dies before retirement, the widow's benefit could be less than if he had retired when he first qualified to do so.

THEREFORE, THE COMMISSION RECOMMENDS amendment to the Highway Patrol Retirement Law to provide that for any patrolman to remain on active duty after becoming eligible for retirement, he must select in writing the form of pension settlement he will receive upon actual retirement. If he so selects a joint and survivor annuity, then upon his death thereafter, whether before or after retirement, his wife will be entitled to the survivor's benefits provided in the joint and survivor option. If such patrolman selects a single life annuity as his basis for retirement and thereafter dies while still on active duty status, then his wife shall receive widow's benefits in the same manner as if he had died before becoming eligible for retirement. Such properly executed selection in writing shall be retained by the retirement fund as part of the records of the fund. In default of such selection said patrolman shall be deemed to have selected a straight life annuity settlement.

Any Highway Patrolman who separated from service before July 1, 1965, and is or becomes eligible for retirement benefits, is not eligible to select a joint and survivor annuity in lieu of his straight life annuity as is provided for retirement subsequent to July 1, 1965.

Therefore, the COMMISSION RECOMMENDS that upon his death his wife, if surviving, shall be eligible to receive the

same widow's benefits she would have received had he died before becoming eligible for retirement. The widow of such a deceased retired patrolman should receive widow's benefits retroactive to the date of death of her husband.

Employee Contributions

The pension formula of the Highway Patrolmen's Retirement Association calls for pension benefits of a stipulated dollar amount per month in all cases without reference to the salary from which contributions were made or the salary at the time of retirement. For this reason, the salary ceiling on which contributions were based has no direct bearing on the amount of pension. No request has been received from this fund for removal of the salary ceiling. On the other hand, the 7.4% rate of employer contributions on salary after the present \$6,000 per year salary ceiling, represents a higher rate of employee contribution than required in other funds for State Employees. Regular employee plus regular employer contributions exceed the 1966 normal level cost of the fund by 1½% of

covered pay.

This Commission, as is explained elsewhere in this report, is recommending removal of the salary ceilings from all of the state-wide pension funds.

THEREFORE, THE COMMISSION RECOMMENDS that the salary ceiling in the Highway Patrolmen's Retirement Association be removed and that the rate of employee contributions be reduced from 7.4% to 7% of full pay.

The Commission is of the opinion that the salary ceiling for pension purposes should be increased or removed, but an appropriate actuarially determined increase in pension should be made. This has not been studied by the Commission.

Employer Additional Contributions

The 1965 Session provided that employer additional contribution for the purpose of amortizing the deficit should be set at the rate of 9% of covered payroll. The appropriations made at the same Session failed to take note of this provision with the following result:

From July 1, 1965 to January 3, 1967, the Highway Patrolmen's Retirement Fund should have received additional contributions of	\$300,214.57
January 3, 1967 to June 30, 1967, estimated additional contributions will be	98,732.22
Total additional contributions for the full 2 years	<u>\$398,946.79</u>
Allocated by Highway Department from funds available	80,000.00
Deficiency as of June 30, 1967	<u>\$318,946.79</u>

THEREFORE, THE COMMISSION RECOMMENDS there should be a deficiency appropriation to the Highway Patrolmen's Retirement Fund of \$318,946.79. Particular care should be taken to appropriate the employer additional contributions for

the next biennium due to the fact that during the last two years the fund will have lost the interest it would have earned if these funds had been paid in and invested.