MEMORANDUM

TO: Legislative Commission on Pensions and Retirement

FROM: Robert E. Perkins

DATE: January 24, 1986

SUBJ: Recommendations of Commission Actuary

As a result of our work in 1985, we are recommending changes in four areas:

I. Rules for performing actuarial valuations.

II. Frequency of experience study.

III. Contributions for basic and coordinated plans.

IV. Actuarial certification in financial reports.

The purpose of this memorandum is to describe current practice and provide reasons for adopting the recommendations.

I. Rules for Performing Actuarial Valuations

A. Current Practice

Section 356.215 of Minnesota Statutes contains rules for actuaries to follow. These rules have recently been supplemented by Standards written and adopted in 1985.

B. Recommendation

The Statutes should be revised to contain only general policy guidelines. The Standards should spell out details regarding the calculation procedures and the format for disclosure in accordance with these general guidelines.

C. Discussion

1. The Statutes would provide general policy guidelines which would explain how required contributions are to be determined. These guidelines would cover:

   a. Actuarial method.
   b. Asset valuation.
   c. Interest rates.
   d. Individual salary increases.
   e. Future payroll increases.
   f. Guidance for selecting other assumptions.
   g. Amortization technique and funding period.
   h. Expenses to be recognized in the required contribution.

2. Reasons for Making This Change Are:

a. Official cost calculation will be those performed by the Commission Actuary and not those performed by a Fund's actuary.

b. The Commission Actuary reports directly to the Commission and is under your control.

c. The Standards can be more easily revised as opposed to revising State's Statutes and can therefore be more flexible in responding to changes in the pension field such as those currently proposed by the Government Accounting Standards Board.

d. Some existing Statutes, such as those on membership tabulation, require information that is difficult, if not impossible, for some of the Funds to produce.

3. Reasons for Not Changing Are:

a. The State has traditionally provided detailed direction in the Statutes (of course, this was before the Standards were available).

b. Statutes should not be changed because they relate to more than just the funds valued by the Commission Actuary (care should be taken that rules are not deleted which would affect local police and fire funds and the University of Minnesota Faculty Plan).

D. Statute Affected - 356.215

II. Frequency of Experience Study

A. Current Practice

Every fourth year since 1975, experience studies have been conducted. The purpose of these experience studies has been to review experience over a meaningful period in order to determine if changes should be made in actuarial assumptions. The last study covered the years 1980-1983. The next study is scheduled to cover the years 1984 to 1987.

B. Recommendation

These four-year experience studies should be replaced by annual studies beginning in 1986. Information would be accumulated and trends could be tracked. A complete, formal review would be presented every five years, beginning in 1990. Interim changes could be made in assumptions if significant trends are observed.

C. Discussion

1. Reasons for making the change:

a. The results of an experience study are only as good as the data used for that study, so the best data available should be utilized.

b. Ideally, the data used for the valuations have been retained over the past four years, however, we believe this ideal situation may not exist in many cases.

c. Data retention problems arise when a Fund adopts a new computer system, has to rely on an outside agency for data collection, sends only summary information to the actuary rather than individual data, or changes actuaries during the four-year period.

d. Recreating data over a four-year period requires considerable time and effort on the part of an individual Fund and the results will not necessarily match the data used for valuation purposes during that period.

e. The use of annual analysis permits an early warning system for detecting changing trends. As in the past, a significant deviation over a reasonable period of time must exist before assumptions based on previous experience should be altered.

f. It is more cost effective to perform the experience analysis each year when data is being handled, rather than making it a special project every four years.

g. If the first annual period is July 1, 1985 to July 1, 1986, this means that the two previous years will not be covered by an experience study. We believe the experience during this period will prove to be unusual because of the Rule of 85. Under this benefit provision, a number of employees are retiring early. Their early retirement increases the likelihood that more personnel have been hired. Typically, new hires exhibit high turnover and thus more instability has probably occurred during this period. Although the Rule of 85 is still in place, the pent up demand for taking early retirement should be almost dissipated.

h. Statutes require that the Commission perform an experience study in Fiscal 1988 for the four year period ending June 30, 1987. We believe valuable information can be derived from an annual study beginning in Fiscal 1987 for about $25,000 to $30,000.

2. Reasons for Not Changing to an Annual Study Are:

a. The State has traditionally operated with four-year experience studies.

b. Some Funds may be concerned about the lack of continuity since two years will be passed over. In those cases, a Fund could underwrite its own study through July 1, 1985.

D. Statutes Affected - 3.85 and 356.215

III. Contributions for Basic and Coordinated Plans

A. Current Practice

In the 1984 actuarial valuations, the actuaries split the fund's assets between basic and coordinated members for four of the plans. Splitting the assets permits a separate calculation of unfunded liabilities and therefore, a separate contribution for basic and coordinated members. This practice was continued in 1985. Of the four plans, the three city teacher plans must make that split according to Statute 354A. The allocation between basic and coordinated PERA members appears to be based only on tradition.

B. Recommendation

The valuation reports should not split assets between basic and coordinated members. The required contribution would be shown only for the total plan and not separately by basic and coordinated.

C. Discussion

1. Reasons for adopting this recommendation are:

a. A number of assumptions must be used by the actuary in splitting the assets and over time the accuracy of the split becomes questionable.

b. An inaccurate asset split will produce inaccurate contributions and these contributions may be used in making benefit design decisions and could therefore produce inequitable results.

c. The value of a split of assets is debatable in a situation like Duluth Teachers where members of the Old Plan can select New Plan benefits if they are higher.

d. Statutes require funding the unfunded liabilities as a level percentage of payroll by assuming that future payrolls increase 6½% annually. It is not reasonable to apply this approach in determining separate contributions. In the case of the basic plan, there are no new members coming into the group. Instead, all new employees are joining the coordinated plan and therefore, the payroll of the coordinated is growing faster than 6½%.

e. A potential 1% bonus under the city teacher plans will also distort the assets split in future years because neither the basic plan annuitants nor the coordinated annuitants will be receiving bonuses strictly on the assets allocated to their plan by the actuary.

f. The city teacher's bonus also produces problems in projecting cash flow since it is difficult, if not impossible, to determine cross-overs from one group to the other for both past bonus payments and bonus payments to be made in the future.

g. The benefits promised basic and coordinated members are backed up by the total assets of the fund. Therefore, a negative fund balance such as the one projected for PERA basic members in a couple of years is not reasonable.

2. Reasons for Not Adopting the Recommendation Are:

a. There is a need to know the contribution level for basic and coordinated members (a solution is to show the calculation of normal cost by basic and coordinated members in order to evaluate the relative value of the two plans and to compare against contributions by the employees).

D. Statute Affected: 354A.41 Subdivision 2.

IV. Actuarial Certification in Financial Reports

A. Current Practice

The actuary is to certify that the required reserves for any benefits provided under a benefit formula are computed in accordance with the entry age normal cost actuarial method and rules adopted by the Legislative Commission on Pensions and Retirement.

B. Recommendation

Certification should be based on complying with requirements of State Statutes and Standards adopted by the Commission.

C. Discussion

This is more of a technical change in Statute. The problem arises because Section 356.20 has been recently amended to require that three liabilities should be disclosed by a Fund. Since only one of these liabilities represents the entry age normal cost actuarial method, it is not appropriate that the actuary certify that the required reserves are calculated on that basis.

We believe that it is better if the three types of unfunded liabilities are explained and described so that readers of the report will be able to understand the purpose of the three liabilities.

In addition, these liabilities can be used to produce funding ratios which are contained in the highlights section of each actuarial report. We believe the names of these ratios and liabilities should be consistent between the reports and the Statutes.

D. Statute Affected: 356.20

MEMORANDUM

TO: Legislative Commission on Pensions and Retirement

FROM: Robert E. Perkins

DATE: January 24, 1986

SUBJ: Three Year Plan for Performing Actuarial Valuations

The following summary describes a three-year plan which provides for a transition of valuation work from multiple actuaries to a single actuary.

1985 ACCOMPLISHMENTS

- Established standards for performing actuarial valuations.
- Learned plan benefits and accounting procedures for the 12 plans.
- Set up calculation procedures on Wyatt software.
- Adopted 1984 assumptions and techniques used by a Fund's Actuary, if acceptable.
- Compared our results with those calculated by Fund Actuary.
- Prepared draft of report for review by executive director.

1986 OBJECTIVES

- Make revisions in standards with special emphasis on experience study procedures.
- Work with Funds to produce better data collection and more accurate reconciliation with prior year.
- Perform experience study for 1985-86 (subject to Commission approval).
- Retain same assumptions and techniques unless inappropriate.

1987 OBJECTIVES

- Revise standards as necessary.
- Conduct second year experience analysis (subject to Commission approval).
- Review all assumptions in detail.
- Recommend changes in assumptions and techniques as appropriate.

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