MEMORANDUM

TO: Legislative Commission on Pensions and Retirement

FROM: Robert E. Perkins Robert E. Perkins

DATE: March 18, 1987

SUBJ: Recommendations of Commission Actuary

As a result of our work in 1986, we are recommending changes in four areas:

I. Increase Statutory contributions for certain plans.

II. Eliminate separate contribution calculations for Basic and Coordinated First Class City Teachers Plans.

III. Allocate assets between MSRS General and MSRS Correctional Plans.

IV. Perform annual experience study.

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

I. Increase Statutory Contributions for Certain Plans

A. Current Situation

The 1986 actuarial valuations show that the contributions required by actuarial standards exceed the statutory contributions for TRA and all three First Class City Teachers plans. The extent of deficiency, ranked by size, is shown below:

	Statutory	Required	(Deficiency)
Minneapolis Teachers	19.64%	32.02%	(12.38)%
St. Paul Teachers	17.18	20.77	(3.59)
Duluth Teachers	10.29	11.02	(.73)
TRA	13.77	13.82	(.05)

The 1986 deficiencies, translated into dollars and projected to the upcoming biennium, are:

Deficiency During the 1987-89 Biennium

Minneapolis Teachers	$26.6	million
St. Paul Teachers	6.7	
Duluth Teachers	.5	
TRA	1.6	

B. Recommendation

The Statutory contributions made to the Minneapolis Teachers Plan represent only 61% of the required contribution. This is a serious deficiency that deserves immediate attention.

The Statutory contributions to the St. Paul Teachers Plan represent 82% of the required contribution level. An increase in the Statutory contribution should be considered in order to reduce this deficiency.

The deficiency level for the Duluth Teachers Plan and TRA should be monitored closely. These deficiencies are small enough that favorable annual fluctuations could eliminate the existing deficiencies.

C. Discussion

1. Minneapolis Teachers Plan

   a. The deficiency, expressed as a percentage of payroll, has increased from 11.79% in 1985 to 12.38% in 1986.

   b. The deficiency, expressed in dollar terms, has increased from $10.3 million in 1985 to $12.1 million in 1986.

   c. A cash flow projection shows that the fund will continue to grow until the year 2004. After that date, the fund will begin to decline fairly rapidly.

   d. This unfavorable trend of the past two years has occurred during a time of favorable investment results. More rapid deterioration can be expected during a period of average or below average investment performance. The recent favorable investment performance did help the funding ratio increase from 49% to 51%.

2. St. Paul Teachers Plan

   a. The margin of deficit decreased, as a percentage of payroll, from 4.24% in 1985 to 3.59% in 1986.

   b. In dollar terms the deficiency in annual contribution decreased from $3.2 million to $3.0 million from 1985 to 1986.

   c. The assets of the fund continue to increase during the projection period to the year 2011.

   d. Favorable investment results over the past year have helped increase the funding ratio from 52% to 57%.

3. Reasons for making this change are:

   a. Minnesota Statutes require that the retirement plan should be funded as a level percentage of pay. These deficiencies will produce a larger unfunded actuarial accrued liability which is scheduled to be amortized by the year 2009. Insufficient payments at this time will require much higher contributions as a percentage of pay before 2009 assuming that investments are not sufficient to make up the difference. An investment return of 12% would be required to cover the deficiency for the Minneapolis Teachers Plan.

b. The funding ratio for pension plans is sometimes referred to as a benefits security ratio. While that ratio increased during the past year due to very favorable investment results, it is more likely that the ratio will decrease unless the Statutory contributions are raised. A reducing benefit security ratio is especially likely in the case of the Minneapolis Teachers Plan.

3. Reasons for not changing are:

a. Given the magnitude of the deficiency there may be an economic problem in making an immediate adjustment, but from solely an actuarial standpoint, there is no reason to delay the increase in the Statutory contributions.

II. Eliminate Separate Contribution Calculations for Basic and Coordinated First Class Teachers Plans

A. Current Situation

Section 354A.41 of Minnesota Statutes requires separate calculations for the Basic and Coordinated programs of the three First Class City Teachers Plans. This requirement means that assets must be allocated to the Basic and Coordinated (or Old and New in the case of Duluth) portions of the program in order to measure unfunded liabilities and calculate the recommended contributions.

B. Recommendation

The valuation reports should not split assets between the Basic and Coordinated programs. However, the reports should continue to show the normal cost for the Basic and Coordinated programs.

C. Discussion

1. Reasons for adopting this recommendation are:

a. The entire assets stand behind the pension promise regardless of whether the member is receiving a Basic or Coordinated benefit.

b. The split of assets by the actuary is based on a number of assumptions and over time the accounting accuracy of the split diminishes.

c. As the assets split becomes less accurate over time, so will the contributions based on these assets. If these contributions are used in making benefit design decisions, they could lead to inequitable results.

d. The value of splitting the assets is highly debatable for the Duluth Teachers since members of the Old Plan can elect New Plan benefits if they are higher.

e. Statutes require that the Supplemental contribution to fund the unfunded liability be determined as a level percentage of payroll by assuming future payrolls increase 6-1/2% annually. It is not appropriate to apply this assumption to other than the combined Basic and Coordinated programs since the Basic programs are diminishing in size and the Coordinated programs are growing much faster than 6-1/2%.

f. Up to 1% of the total assets may be paid as a 13th month check to retirees. The amounts paid to Basic and Coordinated retirees is completely independent of any assets allocated to those two programs. This means that assets labeled as Basic assets may be used to pay benefits to Coordinated members and vice versa.

2. Reasons for not adopting the recomemndation are:

a. There may be a desire to know the contribution level of Basic and Coordinated members. However, the reports will contain a calculation of the normal cost by Basic and Coordinated members in order to evaluate the relative value of the two plans and to make comparisons to the level of employee contributions. The PERA and TRA reports that show only the split by normal cost have proven sufficient.

D. Statute Affected: 354A.41 Subdivision 2

III. Allocate Assets Between MSRS General and MSRS Correctional Plans.

A. Current Practice

In 1985, the MSRS General Plan and Correctional Plan were reported as two subdivisions of one plan. In 1986, two separate formal actuarial valuation reports were provided. However, for both years, assets were allocated by the Commission Actuary.

B. Recommendation

Assuming the MSRS General Plan and Correctional Plan are viewed as two separate and distinct plans, the assets should be split into two funds as is the case for the other retirement plans.

C. Discussion

1. If the Commission views the MSRS General and Correctional Plans as two separate plans, than the assets should be separated into two funds and accounted for in the same manner that MSRS separately accounts for the State Patrol Plan or the Judges Plan. This formal accounting will permit the proper accuracy to assure Members of each Plan that the assets available to pay their benefits are properly accounted for, and are no more nor no less than they are entitled to.

2. If the Commission views the MSRS General and Correctional Plans as the same plan, then there is no need to split the assets. There should be one unfunded liability amortized by a single Supplemental Contribution. Normal costs, however, may be allocated separately for purposes of measuring the relative values of the two plans and for determining if the employee contributions are adequate.

D. Statute Affected - Chapter 352

IV. Perform Annual Experience Study

A. Current Situation

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. The first annual study would be the 1985 - 1986 period. Each following year information would be accumulated and trends would 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.

The rules for experience studies should also permit combining experience in similar plans. For example, one mortality study might cover all four teacher plans or all public safety plans.

C. Discussion

1. Reasons for making the change:

a. Annual experience studies are more efficient than a four year study which requires retaining or collecting four years of data.

b. An annual experience analysis provides an early warning system for detecting changing trends. Of course, a significant deviation over a reasonable period of time must exist before assumptions based on previous experience are altered.

2. Reasons for not changing to an annual study are:

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

b. Some funds may be concerned that the 1983 - 1985 experience will be omitted due to this lack of continuity in changing from a four year study to an annual study. Since this period incorporated the initial phase of the Rule of 85, it is quite likely that the experience involving terminations and retirements are distorted. Of course, the same comments may be applicable to the 1985 - 1987 period.

D. Statutes Affected - 3.85 and 356.215