TO: Members of the Legislative Commission on Pensions and Retirement

FROM: Ed Burek, Deputy Director

RE: S.F. 264 (Betzold, by request); H.F. 1757 (Smith): MSRS-General; Employee and Employer Contribution Rate Increases

DATE: March 15, 2005

Summary of S.F. 264 (Betzold, by request); H.F. 1757 (Smith)

S.F. 264 (Betzold, by request); H.F. 1757 (Smith) revises the General State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-General) matching employee and employer contribution rates, as follows:

- from 4.0 percent to 4.25 percent of pay on July 1, 2007; to
- 4.5 percent of pay on July 1, 2008; to
- 4.75 percent of pay on July 1, 2009; and to
- 5.0 percent of pay on July 1, 2010.

Background Information on MSRS-General

MSRS-General is governed by Minnesota Statutes, Chapter 352, and various other provisions of law. It is a defined benefit retirement plan that provides disability coverage, survivor benefits, and retirement coverage to over 46,900 active state public employees mostly in the executive branch. MSRS-General currently has over 18,600 retirees and 13,800 deferred retirees. MSRS-General assets are $7.884 billion and liabilities are $7.878 billion, creating a funding ratio of 100.08 percent. Currently under law, the employee contribution rate for MSRS-General is 4.0 percent of pay, with a matching employer contribution, for total contributions of 8.0 percent of pay. All MSRS-General members are coordinated members (coordinated with Social Security).

In defined benefit plans, the retirement benefit and other annuities are specified by a formula in law. Under these formulas for retirement annuities, the average of salary close to retirement (the average of the five consecutive years that provides the highest average salary) is multiplied by a factor or factors referred to as accrual rates. An accrual rate is the percentage of the high-five salary that the individual receives per year of service. This result is then multiplied by the number of years of service to determine the benefit. For an MSRS-General member who started covered service in one of the larger Minnesota public plans before 1989, the normal retirement age is 65. That is the age at which an individual, following termination of covered service, can receive an annuity without any penalty due to early retirement. If an MSRS-General member starts drawing an annuity at the normal retirement age, the accrual rate in law is 1.7 percent. If the high-five average salary happened to be $40,000 and the individual had 30 years of service, the annual benefit would be $40,000 x 1.7 percent x 30 years = $20,400. A terminated employee may begin drawing an annuity as early as age 55, but with a reduction due to early retirement.

Since MSRS-General is a defined benefit plan, it relies upon pooled funding to meet the retirement liabilities of the group. Every year the retained actuary reviews the plan assets and contribution rates, and determines whether the assets and future contribution stream will be adequate to cover the plan's liabilities, given the salaries of the covered group, the demographics of the group, and the package of benefits offered under the plan. While there is an effort to keep the assets for the group in line with group liabilities, that is not true for any specific individual within the group. In other words, there is no reason to believe that the employee and employer contributions for a specific employee, plus investment earnings on those contributions over time, will equal the liability determined by the formula used to compute the individual's annuity at retirement; that is rarely, if ever, the case. There are considerable subsidies and cross-funding within the pension fund of any defined benefit plan. Some individuals receive a benefit that is less than the accumulated value of the contributions made on their behalf. Others receive considerably more. This contrasts with the nature of a defined contribution plan. In a defined contribution plan, each individual has a separate account to which the applicable employee's contributions are added. The value of the account at retirement (the sum of accumulated contributions plus all investment earnings on the account) determines the value of the annuity.

Background Information on the MSRS-General Contribution Deficiency

S.F. 264 (Betzold, by request); H.F. 1757 (Smith) is an effort to address MSRS-General's contribution deficiency. The deficiencies in this fund as indicated in the actuarial reports are not severe and have occurred only recently, beginning in 2002, after several years of contribution surpluses.

1. <u>Overview of Recent MSRS-General Contribution Sufficiencies/Deficiencies</u>. Attached to this memo is a chart summarizing the MSRS-General actuarial reports from 1991 through 2004. The reports indicate slight deficiencies in 1993 and 1994, followed by surpluses in 1995 through 2001. A modest deficiency again appeared in 2002, 0.34 percent of payroll, while the 2003 deficiency is 1.43 percent of payroll, and the 2004 deficiency is 1.33 percent of payroll. The funding ratio has been healthy from the late 1990s to the current date, reflecting a continued benefit from the very high investment returns of the late 1990s. The fund reached full funding in 1997, and as of the July 1, 2004, valuation, the fund is 100.08 percent funded, based on the actuarial value of assets.

2. <u>Actions Taken in 1997</u>. To understand some of the changes that have occurred in the last several years, it is helpful to begin with a few comments about the 1996 actuarial valuation. The plan funding ratio had been rising in prior years, beginning with a 79.91 percent funding ratio in 19991 and reaching 97.27 percent funded in 1996. The contribution surplus in 1996 was 1.06 percent of payroll. The funding ratio indicated that the plan was already well funded, and the contribution sufficiency indicated that the plan would reach full funding well before the full funding date, 2020. By 1997, the plan was already more than fully funded, in large part due to favorable investment returns which pre-paid the unfunded liability.

   Several changes occurred in 1997, due to actions by the Legislature, which began to impact the plan's funding. The first is that a significant benefit improvement/benefit revision bill was enacted, and part of that bill cut the contribution rates to MSRS-General (Laws 1997, Chapter 233, Article 1, Section 18). In 1997 the MSRS and PERA plans, including the public safety plans in those organizations, TRA, and the first class city teacher plans, sought and received benefit increases. Under these law changes (Laws 1997, Chapter 233), higher accrual rates are used to compute retirement benefits. At least for the MSRS, PERA, and TRA plans, these increases were financed in part by a change in the State Board of Investment Post Fund interest rate, which was revised from five percent to six percent. Fewer actuarial reserves are needed to finance any given level of benefits if the reserves are assumed to earn six percent prior to retirement rather than five percent. The impact of that change on the Post Fund is that post-retirement increases will be one percent per year less on average than would be the case under the old Post Fund. In part, higher benefits at the time of retirement were traded for lower increases during retirement.

   These benefit changes had some cost impact on the pension funds, and the General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General) along with first class city teacher fund associations were expected to be harmed financially by these changes. For PERA, this was partially addressed in 1997 by increasing contribution rates and creating state aid to help the employers cover the additional cost. The state aid amounted to 0.35 percent of PERA-covered payroll in fiscal 1998, and 0.70 percent thereafter, but amounts in dollar terms are capped at the fiscal year 1999 aid amount. The financing for this aid was created by shifting resources from MSRS-General and TRA. Contribution rates in those plans were reduced (the MSRS-General employee and employer contribution rates were reduced from a 4.07 percent employee contribution rate and a 4.2 percent employer contribution to 4.0 percent each). Appropriation reductions to MSRS and TRA employers in the amount of employer contribution reductions were used in part to shift funding to PERA employers.

   Also in 1997, a revised payroll growth assumption was enacted for MSRS-General and for other plans.

   Some impacts began to show in the July 1, 1997, actuarial valuation. The plan normal cost increased from 6.67 percent a year earlier to 7.46 percent, raising the total contribution requirements. The reduced contribution rates lowered the total contributions, resulting in a lower contribution sufficiency, 0.39 percent of payroll, compared to 1.06 percent of payroll a year earlier.

3. <u>Revisions in 2000</u>. Numerous changes in actuarial assumptions and actuarial procedures occurred in 2000. Revisions were adopted in the male and female pre-retirement and post-retirement mortality tables, the male and female post-disability mortality table, retirement age, separation (termination) assumptions, disability assumptions, female optional annuity assumptions, and a combined service annuity load factor was added. Statutory revisions included a select-and-ultimate salary increase assumption and revision in the age-related salary increase assumption.

   The Legislature also revised the way the actuarial value of assets is computed, moving to a system based on market value and weighted past deviations between the expected value of assets assuming 8.5 percent investment returns, and the actual value of assets given the investment return that actually occurred (Laws 2000, Chapter 461, Article 1, Section 3). The final statutory change was to establish negative amortization, under which a portion of any assets in excess of full funding would be used to lower the contribution requirement, using rolling 30-year amortization (Laws 2000, Chapter 461, Article 1, Section 6). This pushed the fund's amortization date from 2020 to 2030.

The impact of all of these changes is evident in the 2000 actuarial valuation. There was a large increase in the plan normal cost compared to a year before, from 7.52 percent of pay to 8.72 percent of pay. This was a significant change; the normal cost alone was now greater than the total contributions. The normal cost plus expenses were 8.93 percent, which exceeds the total contributions (8.0 percent of pay), by 0.93 percent of pay. The plan shows a contribution sufficiency of 0.88 percent of pay, but only because of the negative amortization factor. The plan was 110 percent funded, and some of the assets above the 100 percent funding level are used to offset the contributions that would otherwise be required. The negative amortization factor was 1.81 percent of payroll.

4. <u>Impacts on Later Valuations</u>. For fiscal year 2001, the negative amortization factor was enough to again create the appearance of a contribution sufficiency. The negative amortization factor was 2.17 percent, creating a contribution sufficiency of 1.21 percent of payroll. By 2002, however, the impact of weak investment markets and a slight continued upward movement in normal costs were beginning to show. The funding ratio fell from 112.07 percent of assets to 104.53 percent, due largely to the impact of weak investment markets and the use of some of the surplus assets to cover part of the normal cost and expenses. By 2003 and 2004, as the weak investment markets of a few years early continued to filter into the actuarial value of assets, the surplus assets have disappeared. In 2003, the funding ratio dips marginally below full funding, with a 99.06 percent funding ratio. There is a marginal amount of unfunded liability, and a positive amortization factor rather than a negative one. By 2004, the fund had moved back to full funding, but the essential result is that there are no surplus assets of any significance, and the fund is therefore deficient by the full amount of the difference between the normal cost plus expenses and the contributions. The official figure is a 1.33 percent contribution deficiency.

5. <u>Current Situation</u>. The current situation is that all surplus assets have dissipated due to the markets and the use of previous surplus assets to cover all or part of the past contribution rate shortfalls. If all actuarial assumptions were to hold in the future, including the assumed annual 8.5 percent investment return, the contribution deficiencies will begin to create an unfunded liability, leading to a positive amortization requirement. Without an increase in the contribution rate to cover the portion of normal cost plus expenses that is now uncovered, and a further increase to cover the amortization requirement, the funding ratio will begin to fall and the total contribution requirement will grow, due to an increase in the amortization requirement.

   In a realistic setting, the outcome is less certain. Plan experience will depart from the assumptions, and investment markets are rarely average, tending to go through periods of above average returns followed by periods of below average returns. Good investment markets could create funding ratios in MSRS above 100 percent funding, creating negative amortization to cover the inability of current contributions to cover the full normal cost plus expenses. Weak investment markets would have the opposite effect, harming the MSRS-General funding ratio, adding to the amortization requirement, and creating further deficiencies in contribution requirements. Normal cost is a function of age, with older workers having a higher normal cost than younger workers. Part of the upward drift in normal cost in MSRS-General and some other plans is due to an aging of the work force. Retirements by older workers and an influx of younger employees might lower the plan normal cost, reducing the contribution requirements.

<u>Discussion and Analysis</u>

S.F. 264 (Betzold, by request); H.F. 1757 (Smith) raises the MSRS-General Plan matching employee and employer contribution rates in steps over several years, from 4.0 percent currently to a final level of 5.0 percent in 2010. The bill raises various pension and related public policy issues, as follows:

1. <u>Current Need to Address</u>. The issue is whether there is sufficient need and sufficient resources to address the MSRS-General contribution deficiency at this time. The problem is fairly new and modest as a percentage of pay. The first contribution rate increase under the bill would not take effect until July 1, 2007, so there is no need for immediate consideration or action. It is possible that improvements in investment markets may solve the immediate problem without a need for legislative action. The Commission may conclude that other matters, such as the funding problem of the Minneapolis Teachers Retirement Fund Association (MTRFA) and the St. Paul Teachers Retirement Fund Association (SPTRFA) are more urgent. The Commission may also wish to be aware that several other pension funds have bills requesting increased contributions, including the State Patrol Retirement Plan, PERA-General, and the Public Employees Police and Fire Retirement Plan (PERA-P&F).

2. <u>Cost</u>. The issue is the added cost on the state employing units. The employer contribution increase will increase employer cost by $6 million in 2007, by 12.6 million in 2008, by $19.8 million in 2009, and by $27.7 million in 2010. Thereafter, the $27.7 million amount for 2010 will increase over time by the rate of increase in covered payroll.

3. Negative Amortization Issues. As part of long-term solutions to the MSRS-General, the State Patrol Retirement Plan, and the PERA-P&F funding issues, the Commission may wish to revisit the use of negative amortization. Use of negative amortization masks the problem of contribution rates that are not sufficient to cover normal costs and expenses. When a pension fund has considerable surplus assets (assets in excess of full funding), negative amortization occurs and can hide the implications of having employee and employer contribution rates below levels needed to cover normal cost plan expenses. With negative amortization, the fund may continue to run contribution surpluses for a few years, as occurred in MSRS-General. Unfortunately, in reality, the surplus assets are not slowly worked off over very long time periods, as assumed in the law and in the negative amortization calculation, but rather in a very brief period of time when there is a severe turn in the investment markets. Suddenly, the plan can find itself in a situation where there are no surplus assets, the plan is less than fully funded, and the contributions are severely deficient.

4. Phase-In Issues. The issue is the phase-in of increases over a multi-year period, with the first increase scheduled to occur on July 1, 2007, and the last to occur on July 1, 2010. The Commission may wish to shorten or length that phase-in period. The phase-in period may help the state to budget for the change, but a phase-in period will delay fully addressing the problem (assuming a problem remains) and results in additional unfunded liability, which increases the total cost of eliminating the deficiency. A shorter phase-in period will lower the total cost; a longer phase-in period will increase the total cost.

5. Increase Amount. The issue is the amount of the increase. The total increase after the final step in 2010 is more than is needed if the total required contributions remain at the level indicated in the 2004 valuation. The Commission may wish to have the MSRS Executive Director justify the amount of the proposed increase.

6. Employee/Employer Burden for Retiring Unfunded Liability. The issue is how the employees and employers should share in retiring the unfunded liability. Presumably, the contribution increases proposed in this bill are intended to cover all of the contribution needs of the plan, including retiring any unfunded liability that may occur in the near future. The Commission's Principles of Pension Policy state that for general employee plans, the employees and employers should share equally in covering the normal cost and expenses, and both may be required to share some financial responsibility for the amortization requirement. The Commission may wish to consider whether it supports the sharing that would occur under this bill. The employee and employer contributions will result in an equal sharing of all normal costs, expenses, and amortization to retire any unfunded liability.

7. Aid/Appropriation Issues. Any increase in employer contributions may result in requests for increased aid or appropriations. For example, many University of Minnesota employees other than the faculty are covered by MSRS-General.

8. Position of Employee Groups. The Commission may wish to have testimony by state public employee unions or other groups impacted by this legislation to hear their concerns and to determine the level of their support for this bill.

9. Uniformity Issues. The bill could add to uniformity problems. Plans are truly uniform when similar employees have the same benefit provisions and pay the same percentage of pay for that pension plan coverage. MSRS-General provides benefits comparable to PERA-General, TRA, and the first class city teacher plans. Contribution rates between these plans, however, are not uniform. It is not clear, if the Commission and Legislature chooses to consider the various contribution rate increase bills that have been introduced this session, whether rates will become more uniform for similar plans. In the longer term, the Commission may wish to consider other options, such as merging comparable plans to create a system where similar individuals are paying the same percentage of pay for their pension coverage.

Potential Amendments for Commission Consideration

Amendment LCPR05-114 could be used to revise the amount of the increases, to remove the phasing-in period, and, if desired, to also change the date that the contribution increase will occur. Under the amendment there will be a single increase in the employee and employer contribution rates, at a level to be specified, rather than a phase-in period. The proposal contained in the bill is to increase both rates over several years from four percent to five percent. The Commission could insert the same rate in each blank, or could insert different rates if the Commission wished to have the employer pay a larger share of the unfunded liability. The final blank in the amendment to be filled is the effective date. The bill proposes a 2007 effective date. The Commission could keep that date by inserting "2007" in the blank (or by striking the applicable line from the amendment), or could insert another date.

Amendment LCPR05-115, an alternative to LCPR05-114, could be used if the Commission chose to retain the phase-in period, but feels that the final increase is unnecessary given the expected contribution requirements. If the deficiency stays at the level indicated in the 2004 valuation, that increase might be more than is needed. The amendment removes the final July 1, 2010, contribution increase from the bill.

Amendment LCPR05-116, an alternative to either of the above two amendments, keeps the phase-in period as stated in the bill, but moves it up one year with the first increase occurring on July 1, 2006, rather than 2007, and the final increase occurring on July 1, 2009, instead of in 2010.

Amendment LCPR05-117, an alternative to any of the earlier amendments, is comparable to LCPR05-116, but it also removes the final contribution rate adjustment, so that the final rate is 4.75 percent rather than 5.0 percent.