State of Minnesota \ LEGISLATIVE COMMISSION ON PENSIONS AND RETIREMENT

TO: Members of the Legislative Commission on Pensions and Retirement

FROM: Ed Burek, Deputy Director EB

RE: Review of Current Minnesota Defined Benefit Public Employee Retirement Plan Post-Retirement Adjustment Mechanisms, First Consideration

DATE: August 21, 2013

Introduction

The Legislative Commission on Pensions and Retirement has chosen to study the topic of post-retirement adjustments. This first consideration memo will:

1. Summarize the purpose of post-retirement adjustments as stated in the Commission's Principles of Pension Policy;
2. Provide a history of post-retirement adjustments in Minnesota's public pension statutes and laws;
3. Provide an element-by-element comparison and summary of current post-retirement adjustment procedures in the various plans; and
4. Discuss the various post-retirement adjustment procedures.

Purpose of Post-Retirement Adjustments

In the early years of the Commission, the 1950s and early 1960s, the Commission's Principles of Pension Policy lacked a coherent post-retirement adjustment policy statement. These early principles statements recognized the need to occasionally adjust retiree benefits to alleviate harm, but principles statements reflected fear of creating any systematic post-retirement adjustment provisions due to concern about the accompanying liabilities and their impact on plan financing. According to these early documents, post-retirement benefit adjustments ought to be ad hoc, should be considered as a gratuity or as assistance rather than a pension right, and should be financed outside of the pension funds. For example, the 1961 version of the Principles of Pension Policy reads *"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."*

This statement remained unchanged in substance through the 1973 version of the Commission's Principles of Pension Policy statement, and possibly later. But by 1977, the post-retirement policy stated in the principles document had been fully transformed. Instead of calling for occasional ad hoc adjustments, without prefunding and financed outside of the pension funds, the 1977-78 version of the policy document states that the retirement benefit of a long term employee should be adequate at the time of retirement and those benefits should be kept adequate during retirement by systematic increases necessary to maintain purchasing power. Specifically, the document states *"The retirement benefit should be adequate during the period of retirement. There should be a system of prefunded periodic post-retirement increases. Where possible, post-retirement adjustments should follow some valid recognized economic indicators."*

More recent versions of the policy document reflect the same policy, but are more specific in the necessary requirements. For example, the Commission's most recent Principles of Pension Policy document (in Principle II.C.8.) regarding post-retirement increases states *"Retirement benefits should be increased during the period of retirement to offset the impact of economic inflation over time in order to maintain a retirement benefit that was adequate at the time of retirement. The system of periodic post-retirement increases should be funded on an actuarial basis."*

From the late 1970s through the most recent document, the Commission's policy document reflects a mindset that 1) post-retirement adjustments are an integral component of the pension earned by the employee over his or her working career in public service, rather than an added gratuity or a form of charity; 2) adjustments ought to match inflation; and 3) adjustments should be funded on an actuarial basis.

If a benefit is adequate at the time of retirement but adjustments exceed inflation, the adjustments are excessive. Similarly, if the adjustments are insufficient to offset inflation, the value of the benefit in real terms erodes over time, causing a benefit that was adequate at retirement to become inadequate in later years. Furthermore, since post-retirement adjustments are an integral component of the pension, rather than a gratuity, and these adjustments are funded on an actuarial basis, it is reasonable and appropriate to finance them through the pension funds. That financing practice has become the norm.

History of Minnesota Post-Retirement Adjustments

This section provides an historical overview of the primary procedures used to adjust pensions during the period of benefit receipt. These are generally referred to as "post-retirement" adjustments, but some individuals receiving adjustments may not be retired. At least in more recent times, any adjustments after benefits commence are provided not only to retired public employees, but also to plan disabilitants and survivors. Unless otherwise stated, in this memo references to benefit adjustments for retirees apply to retired employees, disabled employees, and survivors who receive annuities under the applicable plan or plans.

First reviewed are procedures used by the two remaining first class city teacher retirement fund associations, the Duluth Teachers Retirement Fund Association (DTRFA) and the St. Paul Teachers Retirement Fund Association (SPTRFA), followed by a review of the plans invested through the State Board of Investment (SBI), which are the Minnesota State Retirement System (MSRS), the Public Employees Retirement Association (PERA), and the Teachers Retirement Association (TRA).

Before beginning that review, a listing of the types of adjustments which have been used in the Minnesota public plans covered by this memo may be helpful. These are:

- Ad hoc adjustments. In the distant past, the only post-retirement adjustments provided were occasional ad hoc adjustments.
- Thirteenth check. The 13th check, used for several years by the DTRFA and SPTRFA, is an additional check paid to benefit recipients, financed by the liquation of some small portion of a plan's pension assets. Depending on specific requirements in law, a distribution could occur every year, or some specified level of investment return or investment income could be used to trigger a distribution. The total amount available for distribution could be distributed in equal amounts to eligible recipients, or weighted toward those with the most service credit, or weighted by years in retirement, or by a combination of years of service credit and years in retirement. These amounts were not added to the pension base for purposes of computing subsequent benefit amounts.
- Fixed percentage adjustment plus an excess investment return related percentage adjustment. This approach has been used by first class city teacher plans.
- Percentage adjustments which escalate with the plan's funding ratio.
- Inflation match adjustments up to a cap, plus possible percentage adjustments based on excess reserves. The former Minnesota Post Retirement Investment Fund is an example.
- Inflation match or a capped inflation match.

1. Duluth Teachers Retirement Fund Association (DTRFA) Adjustments.

   a. Ad Hoc Adjustments. In the 1960s through 1981, DTRFA granted seven ad hoc post-retirement adjustments (in 1966, 1968, 1969, 1971, 1975, 1976, and 1981). These adjustments ranged from 3% to 10%, and averaged 7.0%.

   b. Thirteenth Check. In 1985 (Laws 1985, Ch. 259) the prior approach of occasional ad hoc percentage increases ended, replaced by a 13th check post-retirement adjustment mechanism. The DTRFA board could provide a 13th check distribution if investment income was equal to at least 6% of the fund's asset value as of the end of the last fiscal year. The distribution could not exceed 1% of the fund's asset value. To allocate the available amount, the plan administration first added the years of service for all recipients plus the years in retirement status for all recipients. The result was the total units of the covered retirees and other benefit recipients. Dividing the total available excess assets by the total units resulted in the unit value. The unit values over time were:

Year	Unit Value	Year	Unit Value	Year	Unit Value
1985	$34	1989	$46	1993	$55
1986	$44	1990	$50	1994	$52
1987	$48	1991	$52	1995	$55
1988	--	1992	$50		

   The amount any individual would receive was determined by multiplying the unit value for the given year by that person's years of service plus years in retirement. For example, in 1985, a DTRFA retiree retired for 10 years who had 30 years of service would have received a 13th check of $1,360, which equals $34 x 40. In 1990 (Laws 1990, Ch. 570, Art. 7, Sec. 4), DTRFA and SPTRFA were permitted to allow benefit recipients to annuitize the 13th check amount rather than receive the payment in a lump sum. The annuitized amount was based on the age of the annuitant or survivor, the plan's mortality table, and the interest rate assumption governing the Minnesota Post Retirement Investment Fund (Post Fund).

   c. Automatic Percentage Increases plus Increases Based on Rate of Return in Excess of Assumption. In 1995 (Laws 1995, Ch. 262, Art. 2) the DTRFA 13th check provision was replaced by the same

system which had been passed a few years earlier for the Minneapolis Teachers Retirement Fund Association (MTRFA), an association which has since consolidated into TRA. Under this approach, annuity payments were increased by 2% annually plus benefit recipients could receive an additional investment-related post-retirement adjustment based on the five-year annualized return above 8.5%, if any, with a minor adjustment for the contribution deficiency.

d. 2010 Financial Sustainability Provisions and Related Revisions. In 2010, as part of the Financial Sustainability legislation addressing the weak condition of Minnesota public pension plans following the collapse of the markets in 2008, the DTRFA post-retirement adjustment procedures were again revised (Laws 2010, Ch. 359, Art. 1, Sec. 60-62). The new procedure consisted of a transitional system followed by a move to an inflation match not to exceed 5%, after funding ratios improved considerably. Under the transition method, DTRFA would provide no increase if the funding ratio based on market value (market value of assets divided by accrued liability) was less than 80%. A 1% increase would be paid if the funding ratio was at least 80% but less than 90%, and a 2% increase was to be paid if the ratio is at least 90%. When the funding ratio was at least 90%, the transition method ended and a new system put in place to match inflation up to 5%. However, no DTRFA post-retirement increase was every paid under the 2010 provisions, because in following years the funding ratio remained well under 80%. In 2013 (Laws 2013, Ch. 111, Art. 13, Sec. 10-11, 24) the approach created in 2010 was revised to pay a 1% increase to benefit recipients regardless of the funding ratio. Upon achieving a funding ratio of 90% or more, the 1% increase provision expires and an inflation match, not to exceed 5%, will be paid.

2. SPTRFA Adjustments.

a. Ad Hoc Increases. Before 1979, any SPTRFA post-retirement adjustments were on an ad hoc basis.

b. Thirteenth Check. The SPTRFA shifted to a 13th check approach in 1979, several years before the DTRFA. The SPTRFA special law authorized using 0.5% of the fund's asset value at the end of the prior fiscal year for the adjustment, if the SPTRFA investment income during the preceding fiscal year was in excess of 5.5% of the plan's asset value. To be eligible to share in the distribution, the annuitant had to be receiving an annuity for at least three years. The available amount was allocated based on each eligible recipient's credited years of service relative to the total years of service credit of all eligible recipients. With this allocation approach, the more service credit the teacher had at the time of retirement, the larger the 13th check that person would receive. The amount of the person's monthly benefit and the length of time in retirement did not factor at all into the calculation. In 1985, under Laws 1985, Ch. 259, the same legislation which created the DTRFA 13th check, the SPTRFA 13th check mechanism was significantly revised and made identical to the newly enacted DTRFA 13th check procedure. Thus, the allocation of the adjustment was based on units that combined both years of service credit and years of annuity receipt. In 1990 (Laws 1990, Ch. 570, Art. 7, Sec. 4), the DTRFA and SPTRFA were permitted to allow benefit recipients to annuitize the 13th check amount rather than receive the payment in a lump sum. The annuitized amount was based on the age of the annuitant or survivor, the plan's mortality table, and the interest rate assumption governing the Minnesota Post-Retirement Investment Fund (Post Fund).

c. Automatic Percentage Increases plus Increases Based on Rate of Return in Excess of Assumption. In 1997 (Laws 1997, Ch. 233, Art. 3, Sec. 7), the prior SPTRFA 13th check post-retirement adjustment mechanism was eliminated and was replaced with the same system that had been in place for the MTRFA for several years, and which had been authorized for the DTRFA in 1995. As described previously, the new system provided an automatic 2% annual increase plus a possible additional increase based on the five-year annualized return above 8.5%, if any, with a minor adjustment for the contribution deficiency. In 2006 (Laws 2006, Ch. 277, Art. 1, Sec. 2) a 5% cap was placed on SPTRFA post-retirement increases, although the cap was not to become effective until 2010.

d. Inflation Match. In 2007 (Laws 2007, Ch. 134, Art. 7, Sec. 1-2) under a temporary provision to be applicable for two years, the SPTRFA would provide post-retirement increases matching inflation up to 2.5%, or up to 5.0% if both the annual and the five-year average investment returns are at least 8.5%. In 2009 (Laws 2009, Ch. 169, Art. 7), notwithstanding prior law, the SPTRFA post-retirement mechanism was temporarily revised to provide post-retirement adjustments matching inflation up to 5%, without the need to meet any investment performance requirements. The revision was supposed to expire in 2011.

e. 2010 Financial Sustainability Provisions and Related Revisions. Due to 2010 legislation (Laws 2010, Ch. 359, Art. 1, Sec. 88), part of the Financial Sustainability Provisions, SPTRFA was prohibited from providing any post-retirement adjustment in 2011. In 2011 (1st Spec. Sess. Laws 2011, Ch. 8, Art. 2, Sec. 3-5, 22), the SPTRFA post-retirement adjustment authority was again

revised. Under a transitional method beginning with the 2012 adjustment, SPTRFA would provide a 1% increase until the SPTRFA funding ratio is at least 80%, and a 2% increase when the funding ratio is at least 80% but less than 90%. When a 90% ratio is achieved, the transitional method expires and the SPTRFA will provide post-retirement adjustments matching inflation up to 5%.

3. MSRS, PERA, TRA Adjustments.

   a. Ad Hoc Increases. MSRS, PERA, and TRA plans provided a few ad hoc post-retirement adjustments during the 1953-1969 period, with MSRS and PERA benefit recipients receiving three post-retirement adjustments. TRA benefit recipients received seven post-retirement adjustments, but four of these were directed to TRA retirees who were members of a prior TRA plan, to adjust their benefits to levels deemed more reasonable.

   b. Automatic Post-Retirement Adjustments: Minnesota Adjustable Fixed Benefit Fund (MAFB). During the 1950s and much of the 1960s, considerable progress was made in increasing assets in Minnesota state public pension funds. When the pension funds amassed assets greater than the required reserves for retirees, this made it possible to consider a limited goal of providing periodic increases to retirees to help meet the increased cost of living. To do this without "raiding" the pension funds or the public treasury, the Legislature turned its attention to a mechanism providing increases funded from the yield or returns on investment assets in excess of the statutory assumptions.

   The Minnesota Adjustable Fixed Benefit Fund (MAFB), created in 1969 (Laws 1969, Ch. 485, Sec. 32, and Ch. 914, Sec. 10), was the initial automatic post-retirement adjustment mechanism. Functionally, the MAFB was a variable annuity mechanism with an original benefit amount benefit floor. MAFB adjustments were to be wholly funded from investment gains in excess of the post-retirement interest rate actuarial assumption on the fully funded reserves for the retirement annuities covered by the mechanism. As originally enacted, if investment losses occurred previous post-retirement increases could be rolled back, but the retirement annuity amount originally payable at retirement was guaranteed.

   To create the MAFB, the MSRS, PERA, and TRA plans transferred sufficient reserves to the MAFB to permit level annuities to be paid to retirees, providing the fund continued to earn at least the actuarial interest requirement. Annuity amounts were to be modified through an adjustment mechanism relying on a two-year average total rate of return measure, with the averaging intended to add some stability. The total rate of return included dividends, interest, and realized and unrealized gains or losses. Annually, a "benefit adjustment factor" was computed. This was calculated by dividing the result of one plus a two-year average total rate of return by one plus the actuarial return. If the fund was not meeting the actuarial investment earnings requirement, the ratio was less than one. If the return equaled the actuarial return, the ratio was equal to one. If the returns exceeded the actuarial return, the ratio would be greater than one. The MAFB law provided that benefits could be increased if the benefit adjustment factor was greater than 1.02, providing that certain additional requirements were met. If the benefit adjustment factor was less than 0.98, a benefit decrease was required, but at no time could the retirement benefits drop below the benefit level received on the date of retirement.

   The benefit increases actually granted through the Minnesota Adjustable Fixed Benefit Fund were minimal. The MAFB only paid one set of increases operating as designed, in 1972 (MSRS-General: 2.0%; PERA-General: 4.0%; and TRA: 2.5%) differing among plans because mortality gains and losses were not isolated out of the formula until 1973. The unsatisfactory performance of the MAFB was due to an initial failure to isolate out mortality gains and losses in the first version of the adjustment formula, to the poor investment climate during the early 1970s, and to an annuity stabilization reserve requirement that was part of the MAFB adjustment process. Benefit increases above 4% could not be paid unless the annuity stabilization reserve contained enough assets to cover 15% of the past year's benefit payments. If the reserve was insufficient, part of the new investment earnings were added to the reserve rather than paid out as benefits. Benefit increases above 4% required correspondingly higher annuity reserves in the MAFB.

   Through the remainder of the 1970s, the MAFB played no direct role in revising retiree benefit amounts. In 1973 (Laws 1973, Ch. 653, Sec. 28, 29, and Chapter 753, Sec. 39-41, 71) the Legislature passed a major restructuring of the way benefits in our plans are computed at the time of retirement. The 1973 legislation increased the interest rate actuarial assumption from 3.5% to 5.0%, but more importantly, it replaced the career average salary base with the highest five years average salary base for benefit calculations. This led to much higher benefits at the time of retirement. To address the much lower benefits being paid to pre-1973 retirees, the Legislature granted a two-part 25% post-retirement increase. The Legislature intervened again in 1978, allowing a 4.0% adjustment and overriding the MAFB formula, which would not have permitted payment of an increase.

c. Post Fund, 1980-1992. The MAFB was substantially revised in 1980 (Laws 1980, Ch. 607, Art. 15, Sec. 16) and renamed the Minnesota Post Retirement Investment Fund (Post Fund). The 1980 Post Fund retained the MAFB's pooling of fully funded retirement annuity reserves, and increases were based on investment performance in excess of the post-retirement interest rate actuarial assumption akin to the MAFB, but the investment performance was determined on a yield basis (i.e., dividends on equities, interest on debt equities, and realized gains on the sale of investments) rather than the total rate of return used by the MAFB. A second difference was that the Post Fund contained no provisions for reducing benefit levels when investment returns were low. Third, the original Post Fund based adjustments on a single year's realized investment return, rather than using a multi-year period average.

   To compute benefit adjustments, at the end of each fiscal year (June 30) the required reserves were calculated. The required reserves were the assets needed to meet the current stream of annuity payments to be paid to retirees over time. The total reserves were multiplied by .05, the Post Fund interest assumption at that time, to determine the amount of investment income needed to sustain the current benefit level for the coming year. By subtracting this amount from actual total realized investment earnings, excess investment earnings were determined and were used to create a permanent increase in the annuities of retirees. The fiscal year information was used to determine the amount of increase, if any, payable on the next January 1, the effective date of any benefit increase. To determine benefit increases payable as of January 1, the excess investment income and the required reserves were projected forward to that date by increasing the excess investment income by 2.5%, the return which those funds must earn for the six month period in order to meet the actuarial assumption, and by estimating the total required reserves on January 1 for those eligible for a post-retirement adjustment.

   The 1980-1992 Post Fund paid increases in each of the 12 years that it was in effect. The average increase during the 12-year period was 6.5%.

d. Combined Cost-of-Living Component/Investment-Performance Component Post Fund. Significant changes in the Post Fund occurred in 1992 (Laws 1992, Ch. 530). The mechanism was revised to include two components rather than the prior single component. The combined components were:

   i. Inflation Match Component. An annual post-retirement increase matching inflation, but not to exceed 3.5%, was created; and
   ii. Additional Asset Value-Based Component. An additional asset value-based increase was permitted if investment returns generated assets in excess of the asset values needed to fully fund the existing pensions plus cover the inflation match.

   The addition of an inflation match component to the Post Fund, measured by the annual increase in the Consumer Price Index (CPI), changed the effective post-retirement interest rate actuarial assumption from the previous understated 5% assumption to an 8.5% assumption (the official 5% rate plus 3.5% to account for the inflation component, equals 8.5%), if retiree reserves are fully funded. The additional asset value-based component of the adjustment was triggered by asset values, if any, in excess of full required reserves. If there was an excess, one-fifth of that excess was credited to the current year, one fifth credited to the second year, another fifth to the third year, a fifth to the fourth year, and a fifth to the fifth year. In a given year, if assets were less than the amounts needed to fully fund retiree benefits, then a negative amount was added to the five-year accounts. As this process operated over time, the accumulated amounts allocated to the current year (if the net total were positive) became the reserves used to fund further percentage increases in pensions, in addition to the inflation match.

   To understand how this system operated, let's assume that inflation is a consistent 3.5% per year. When individuals retire, reserves needed to fully fund their benefits were transferred to the Post Fund. These reserves would remain fully adequate if assets in the Post Fund earned a consistent 8.5% return. (This would keep the Post Fund funding ratio based on market (market value divided by liabilities) equal to 100%.) An 8.5% return would be sufficient to cover the 5% Post Fund interest assumption plus cover an annual 3.5% inflation adjustment. If returns exceeded 8.5%, this would permit payment of adjustments in addition to the inflation adjustment. If however, returns were less than 8.5%, particularly for several years, a few things would happen. The reserves needed to cover the pensions, which had been fully adequate when the individuals retired, would no longer be adequate. These reserves are invested, but the asset value of these reserves would be growing at less than 8.5% per year. If returns are negative, these assets would actually lose value. There would not be sufficient asset growth to cover the inflation adjustment, and negative values would be added to the five-year accounts. With several years of returns below the 8.5% assumption, possibly even negative returns, nothing beyond the inflation match would be paid. If,

when the annual post-retirement adjustment calculation is made, this year's account has a negative balance, that negative balance is rolled forward to the next year. Thus, if there were prolonged period of returns below 8.5% there would be no adjustment beyond the mandatory inflation match, because there would be no reserves to finance further adjustments. There would be negative reserves, a hole that would need to be filled by a prolonged period of strong returns, or a few years of very high returns, before any adjustments beyond the inflation adjustment could be paid. Luckily, investment returns during the 1990s were strong. The 1992 revisions in the Post Fund resulted in the payment of post-retirement adjustments in each of the five years that this version of the mechanism was in effect. The average increase during the five-year period was 5.80%.

In 1997 (Laws 1997, Ch. 233, Art. 1, Sec. 5), the inflation match component was revised downward to 2.5% rather than 3.5%, and at the same time the Post Fund investment return assumption was revised from 5% to 6%, retaining the effective post-retirement interest rate actuarial assumption governing the mechanism at 8.5%. The revised Post Fund investment return assumption was part of a package of benefit changes intended to increase the benefit level payable at the time of retirement, at the expense of lower adjustments during retirement. The benefit accrual rates for all of the defined benefit plans participating in the Post Fund were increased. This change was in part financed by the revised Post Fund inflation-match component and investment component actuarial assumption. Fewer reserves are needed to support any given annuity if the assets are assumed to earn 6% prior to payout rather than 5%. The released reserves were used to cover higher benefits at the time of retirement. But the 1997 6% return requirement, rather than the prior 5%, leaves less of a margin between the Post Fund investment return assumption and the true long-term expected annual rate of return, which is 8.5%. The inflation match component was reduced from 3.5% to 2.5% to compensate. In effect, in 1997 a higher benefit at the time of retirement was traded for approximately 1.0% per year lower Post Fund inflation-related adjustments. The 1997 revisions in the Post Fund resulted in the payment of a post-retirement adjustment in each of the next nine years, generally in excess of the rate of inflation. The average increase during that period was 5.88%.

e. Post Fund Dissolved. During the late 1990s and early 2000s, SBI and plan administrators became concerned that the Post Fund was generating increases in excess of inflation, sometimes considerably in excess, and that these increases would jeopardize plan financing if serious market downturns occurred (the annuity reserves would no longer be fully funded and the Post Fund funding ratio would be less than 100%). In 2006 (Laws 2006, Ch. 277, Art. 1, Sec. 1, 3) a 5% cap on Post Fund total annual increases was passed, but the cap was not to become effective until July1, 2010, to permit the applicable retirement plans to seek approval from the federal Internal Revenue Service for the change. The 2008 Legislature (Laws 2008, Ch. 349, Art. 1, Sec. 2-3) made this cap effective June 30, 2008. The 2008 Legislature also enacted more fundamental change (Laws 2008, Ch. 349, Art. 1, Sec. 1, and Article 2, Sec. 1-2). The funding ratio of the Post Fund was to be computed annually. If that funding ratio fell below 85% in two consecutive years or below 80% in one year, the Post Fund was to be dissolved. If that occurred, MSRS, PERA, and TRA benefit recipients would receive an annual 2.5% increase in lieu of any other adjustment. June 30, 2008 actuarial work revealed that the Post Fund funding ratio was less than 80%, and the Post Fund was dissolved.

f. 2010 Financial Sustainability Provisions and Related Revisions. The Great Recession which began in 2008 and the accompanying severe hit to pension fund asset value considerably harmed the pension funds. In 2010, the MSRS, PERA, and TRA plan administrators proposed a numerous revisions in plan benefits and funding to address the situation. The proposal was approved by the Commission and Legislature and was enacted as Laws 2010, Chapter 359, Article 1, Financial Sustainability Provisions, and included many revisions to post-retirement adjustment provisions.

Summary of Current Post-Retirement Provisions

Table 1 provides details about the post-retirement adjustment provisions in current law for Minnesota paid government employee defined benefit plans. These are the MSRS General State Employees Retirement Plan (MSRS-General), the MSRS Correctional State Employees Retirement Plan (MSRS-Correctional), the Legislators and Elected State Officers Plans, the Judges Plan, the State Patrol Plan, the PERA General Employees Retirement Plan (PERA-General), the Local Government Correctional Service Retirement Plan (PERA-Correctional), the Public Employees Police and Fire Retirement Plan (PERA-P&F), the Teachers Retirement Association (TRA), the Duluth Teachers Retirement Fund Association (DTRFA), and the St. Paul Teachers Retirement Fund Association (SPTRFA).

Table 1: Current Post-Retirement Adjustment Mechanisms for Retirees, Disabilitants, and Survivors

	MSRS-General, MSRS-Correctional, Legislators/Elected State Officers	Judges Plan	State Patrol Plan	PERA-General PERA-Correctional	PERA-P&F	TRA	SPTRFA	DTRFA
Definition of Funding Stability	One trigger: 90% funded MVA* *(Note: Legislators/ESO will use MSRS-General funding ratio)*	Two triggers: a) up to 70% funded MVA* b) 70% up to 90% funded Full adjustment upon 90% funding	Two triggers: a) up to 85% funded MVA* b) 85% up to 90% funded Full adjustment upon 90% funding	Permanent requirement: 90% funded on MVA* in 2 consecutive valuations Reduced adjustments recur if MVA funding ratio falls below 85% in two consecutive valuations or below 80% in one	Permanent requirement: 90% funded on MVA* in 2 consecutive valuations Reduced adjustments recur if MVA funding ratio falls below 85% in two consecutive valuations or below 80% in one	One trigger: At least 90% funded MVA*	Two standards until 90% funding ratio achieved: a) up to 80% funded AVA^ b) 80% up to 90% funded Upon 90% funding, repealed and replaced by inflation match up to 5%	One trigger followed by blink-off inflation match: a) 1% adjustment paid until 90% funded AVA^ Upon 90% funding, replaced by inflation match up to 5% but no adjustment paid if funding ratio falls below 80%
If funding stability is not achieved:								
Minimum period in benefit receipt for full adjustment	18 months	18 months	18 months	12 months	In benefit receipt: Before 6/2/14: 12 mo. After 6/1/14: 36 mo.	18 months	12 months	12 months
Full adjustment	2.0%	a) up to 70% MVA 1.5% b) 70% up to 90% 2.0%	a) up to 70% MVA 1.5% b) 70% up to 90% 2.0%	1.0%	1.0%	2.0%	a) up to 80% AVA: 1.0% b) 80-89% AVA: 2.0%	1.0%
Minimum period in benefit receipt for prorated adjustment	6 months	6 months	6 months	1 month	In benefit receipt: Before 6/2/14: 1 mo. After 6/1/14: 25 mo.	6 months	3 months	N/A
Prorated adjustment	For months 6-18: 1/12th of full adjustment for each month	For months 6-18: 1/12th of applicable full adjustment rate for each month	For months 6-18: 1/12th of applicable full adjustment rate for each month	For months 1-12: 1/12th of full adjustment for each month	For months 1-12/25-36 as applicable: 1/12th of full adjustment for each mo.	For months 6-18: 1/12th of full adjustment for each month	Applicable rate prorated by whole calendar year quarters in benefit receipt	N/A
If funding stability is achieved:								
Minimum period in benefit receipt for full adjustment	12 months	12 months	12 months	12 months	36 months	12 months	12 months	12 months
Full adjustment	2.5%	2.5%	2.5%	2.5%	Inflation match not to exceed 2.5%	2.5%	Inflation match not to exceed 5%	Inflation match not to exceed 5% unless annual funding rate is under 80%
Minimum period in benefit receipt for prorated adjustment	1 month	1 month	1 month	1 month	25 months	1 month	3 months	3 months
Prorated adjustment	For months 1-12: 1/12th of full adjustment for each month	For months 1-12: 1/12th of full adjustment for each month	For months 1-12: 1/12th of full adjustment for each month	For months 1-12: 1/12th of full adjustment for each month	For months 25-36: 1/12th of full adjustment for each month	For months 1-12: 1/12th of full adjustment for each month	Full adjustment prorated by whole calendar year quarters in benefit receipt	Full adjustment prorated by whole calendar year quarters in benefit receipt

The provisions in current law are largely as requested by plan administrators following the considerable loss in market value that occurred in 2008, during what has become called the "Great Recession." The provisions reflect MSRS, PERA, TRA, and first class city teacher plan proposals enacted as the Financial Sustainability Provisions (Laws 2010, Ch. 359, Art. 1). Some post-retirement provisions were further revised during 2011, 2012, and/or 2013.

Leading into 2010, MSRS, PERA, and TRA post-retirement adjustment provisions were generally uniform. Plan law provided retirees with 2.5% annual post-retirement adjustments, with prorating for those retired less than one year. In 2010, these plan administrators proposed a considerable scaling back of adjustments until financial stability was regained. Lesser adjustments will be provided until financial stability is regained, with a return to "normal" adjustments when the plan is financially stable. While some adjustment may have been necessary to address the situation, the provisions reflect an abandonment of certain Commission principles. The currently permitted adjustments vary among plans, which is inconsistent with Principle II.C.6. , which can be interpreted as calling for comparable retirement benefits across comparable plans, and Principle II.C.8, which states that post-retirement adjustments ought to match inflation.

In designing the provisions, the plan administrators chose to measure pension plan financial stability using a plan funding ratio, assets divided by accrued liabilities. A funding ratio measure is not ideal, although any measure has some drawback. The funding ratio is a snapshot of current condition, but says nothing about the adequacy of the underlying plan financing. A plan could have a funding ratio of 100% (its assets are equal to its accrued liabilities), but if the plan has a contribution deficiency (actual contributions less than the actuarially required contributions), the funding ratio will erode over time. On the other hand, a plan could have a low funding ratio, but if the contributions to the plan are equal to the actuarially determined required contributions, the plan's funding ratio will increase over time and the plan will become fully funded by the full funding date. If nothing else, a reasonably high funding ratio indicates that at least in the short term, the plan has sufficient assets to pay a post-retirement adjustment without noticeably depleting the asset base. In any event, the system in place for each plan uses a funding ratio or ratios.

Reviewing the first row in the table indicates that while all plans use a target funding ratio or ratios to define funding stability, different plans use different ratios and in different ways. MSRS, PERA, and TRA plans all use a funding ratio or ratios based on market value rather than actuarial value. In a rising market the actuarial value will lag behind the current market value. Thus, using a funding ratio based on market value rather than actuarial value may allow the plan to hit the necessary funding ratio target sooner.

The MSRS-General, MSRS-Correctional, Elected State Officers, and Legislators plans measure financial stability using a 90% funding ratio based on market, and they use it as a trigger. When the plan achieves a 90% funding ratio based on market, the provision specifying reduced adjustments expires and full adjustments are to be paid thereafter. The Judges Plan is similar, but two triggers are used. An adjustment of 1.5% will be made until the plan's market value funding ratio hits 70%. The provision providing that adjustment then expires and a 2% adjustment is permitted (the same rate as the reduced adjustments being paid by MSRS-General). When the Judges Plan is 90% funded, the 2% adjustment will expire and 2.5% adjustments will occur thereafter. MSRS-State Patrol also uses two triggers, but they are 85% and 90%, rather than the 70% and 90% used by the Judges Plan.

PERA plans use a 90% ratio, like MSRS-General, but PERA uses it in a different way. Rather than being used as a trigger, the PERA 90% ratio is a permanent requirement. Reduced adjustments are made until the applicable plan is at least 90% funded, and PERA adds a requirement that this must occur in two consecutive valuations. Furthermore, if the funding ratio falls below 85% in two consecutive valuations or below 80% in one, reduced adjustments again apply.

TRA uses the same approach as MSRS-General, a single 90% ratio used as a trigger rather than as a permanent requirement.

The SPTRFA and DTRFA differ from each other and from all the other plans. The SPTRFA has two standards rather than triggers, but these expire when a final target ratio is first attained. Specifically, the SPTRA uses funding ratios based on actuarial value rather than market value. If that ratio is less than 80% in a given year a 1% adjustment will be paid. If in a given year the ratio is at least 80% but less than 90%, a 2% adjustment will be paid. So if the SPTRFA had an 85% ratio in a given year, it would provide a 2% increase, and if the next year the ratio was 78%, it would revert back to a 1% increase. But once the plan's ratio met or exceeded 90%, the 1% and 2% adjustment provisions would expire, and for this plan an inflation match not to exceed 5% would apply thereafter. In contrast, the DTRFA uses a single trigger followed by a blink-off inflation match. DTRFA currently provides a 1% adjustment. When the plan

achieves a funding ratio based on actuarial value of at least 90%, the 1% adjustment provision expires and the plan will begin paying an inflation match not to exceed 5%. However, after the inflation match provision becomes effective, if the funding ratio based on actuarial value drops below 80% in a given year, no adjustment will be paid in that year.

The table also provides information on the level of adjustments when the plans have not attained or are not in a "funding stability" situation, for those individuals who are new to retirement and for those retired longer. Again, consistency across plans is lacking. The minimum period that a person has to be in benefit receipt status to qualify for an adjustment that is not prorated varies from 12 months (SPTRFA, DTRFA, and PERA plans including PERA-P&F benefit recipients who retired before June 2, 2014) to as long as 36 months (three years) for PERA-P&F retirees who retire after June 1, 2014. MSRS plans and TRA require an 18 month period in retirement for a non-prorated adjustment.

The minimum period that a person must be retired to receive a prorated adjustment varies from one month (PERA-General and PERA-Correctional) to 25 months in PERA-P&F for those retiring after June 1, 2014. DTRFA does not provide any prorated benefit. DTRFA retirees retired at least one year get a full 1% adjustment, while those retired less than one year receive nothing.

Those who qualify for the full adjustment when the plan is not in funding stability status receive between 1% and 2%, depending upon the plan and the situation. TRA will provide a 2% adjustment. Most MSRS plans will also provide a 2% adjustment, but the Judges plan will provide a 1.5% adjustment before the funding ratio is at least 70% and a 2% adjustment thereafter until the funding ratio hits 90%. The State Patrol Plan will pay 1% until an 85% ratio is achieved, and 1.5% thereafter until a 90% ratio is achieved. PERA plans and the DTRFA will pay 1%. The SPTRFA will pay 1% if the funding ratio is less than 80%, and 2% if the ratio is at least 80% but less than 90%.

Inconsistencies across plans will continue to exist when plans reach funding stability. The full adjustment will be a fixed 2.5% per year in MSRS plans, TRA, and PERA plans other than PERA-P&F. The PERA-P&F will provide an inflation match not to exceed 2.5%. The SPTRFA and DTRFA will provide an inflation match not to exceed 5%, but the DTRFA inflation match provision will blink-off whenever the plan's funding ratio based on actuarial value is less than 80%.

The minimum period in benefit receipt for a full adjustment when funding stability is achieved is 12 months in nearly all plans, but it will be 36 months (three years) in PERA-P&F. The minimum period in benefit receipt to qualify for a prorated adjustment will be one month in MSRS plans, TRA, and most PERA plans. PERA-P&F will require 25 months to qualify for a prorated adjustment. SPTRFA and DTRFA will require three months. The DTRFA will provide a prorated adjustment when funding stability is attained, but no prorated adjustments prior to funding stability. It is the only plan that has such an arrangement.

Discussion and Analysis of the Various Post-Retirement Adjustment Procedures

Principle II.C.8. of the Commission's Principles of Pension Policy states that post-retirement adjustments should be provided and ought to match inflation to retain retiree purchasing power. Despite that statement, Minnesota public pension plans have never had post-retirement adjustment procedures which are fully consistent with this statement. Every attempted approach has diverged from the standard.

The initial post-retirement adjustments were ad hoc. These helped, but adjustments were sporadic and were never specifically intended to match inflation.

Thirteenth check procedures provided adjustments with no relation to inflation. Individuals with the same amount of service (or service plus years in retirement) received the same dollar amount as an adjustment, regardless of the amount of the person's benefit. The lowest paid retired teacher and the highest paid retired school administrator would receive the same dollar adjustment if they had the same years of service. Also, these adjustments were not built into the base.

The Post Fund, in its various formulations prior to being dissolved, provided a fixed annual percentage adjustment plus a possible additional adjustment based excess reserves, if any. The adjustments this system provided depended on investment market returns, because investment returns would determine whether there was asset value in the Post Fund in excess of necessary reserves to cover the existing pensions. The annual benefit adjustments this system provided did not track inflation because investment returns over time are not well correlated with inflation. Periods of high returns might occur in low inflation periods, while returns might be modest in high inflation periods. Depending on the returns generated in the investment market after given cohorts of individuals retired, some received adjustments in excess of inflation, sometimes greatly in excess, while others lost purchasing power.

After the Post Fund had been in operation in one form or another for many years, a system was put in place for the Minneapolis Teachers Retirement Fund Association (MTRFA) that had a superficial resemblance to the Post Fund. The MTRFA would provide an automatic 2.0% annual increase plus an additional investment performance based increase equal to the plan's five year annualized investment return above 8.5%. Thus if the annualized return was 12.5%, the excess return is 4% (12.5%-8.5% = 4%). This procedure was passed into law at the urging of the MTRFA. For years retirees from all the first class teacher plans were complaining to the administrators of their pension plan, and to legislators, that first class city retired teachers were receiving post-retirement adjustments inferior to those TRA retirees were receiving from the Post Fund. In response the MTRFA tried to come up with a procedure which it hoped would operate similar to the Post Fund and provide comparable adjustments. The best way to ensure comparable treatment would have been to create a mini-Post Fund for the MTRFA. The MTRFA rejected this idea, probably because it would have quickly led to an argument to merge the MTRFA into TRA. The MTRFA coordinated program was very similar to TRA's, and if MTRFAA retirees were to be treated identically to those of TRA, the best thing to do would have been to simply merge the MTRFA into TRA. The MTRFA also may not have had sufficient assets to create a mini-Post Fund. In any event, the MTRFA remained separate and the MTRFA procedure was enacted. A few years later, the MTRFA procedure was duplicated for use in the SPTRFA and DTRFA.

Despite the superficial similarities between the Post Fund and the first class city teacher plan procedure, there was a very important difference. Any increase for Post Fund retirees, beyond the automatic portion, had to be supported by assets. If the Post Fund lacked the assets to provide increases, no increase beyond the automatic portion was provided. In contrast, the first class city teacher plan procedure ignored the asset base. It did not shout off if the asset base was depleted. Increases beyond the automatic portion were based on "excess" investment rates of return. If the MTRFA, for example, had only $1,000 in assets, but had a 12.5% rate of return on those assets, the MTRFA procedure would indicate that a 6% increase should be paid to retirees (the automatic 2% plus the 4% excess return). This would have been impossible to support given the limited assets.

The MTRFA procedure, later also put in law for the DTRFA and SPTRFA, created perverse results and perverse incentives when plan assets became depleted. Under that procedure, if the plan had reached a point where the total plan assets were equal to the necessary reserves for retirees, strong investment returns would no longer play any role in helping to finance the plan. Any returns in excess of the rate of return assumption (8.5% at that time), simply went to support the existing retirees and their benefits. Nothing was left to help grow assets for active members, because there were no active member assets. If plan assets dropped below the assets needed to fully fund retire benefits, which did happen in the MTRFA, the fund was on a course to quickly consume itself. Strong investment returns would not help, and might actually cause harm by further increasing retiree benefit levels.

The MTRFA procedure did major harm to that plan. The MTRFA was eventually merged into TRA. The adoption by DTRFA and SPTRFA of that same procedure also harmed those pension funds. The DTRFA and SPTRFA remain freestanding for now, but might be merged into TRA during the coming session.

The plans that had been part of the Post Fund, MSRS, PERA, and TRA, moved to flat 2.5% annual adjustments following the dissolution of that fund. MSRS, PERA, and TRA administrators contended that 2.5% was a good approximation of long term inflation levels. Perhaps it is a good estimate, but in any given year inflation will vary. An approach that would be fully consistent with the Commission's policy document would be to simply provide an adjustment matching inflation.

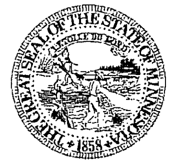
The fixed 2.5% adjustments MSRS, PERA, and TRA plans were providing, and whatever adjustments the DTRFA and SPTRA provided at that time, were set aside in the wake of the Great Recession. Procedures put in place for all the plans in the Financial Sustainability Provisions of 2010 and later legislation stressed stemming the bleeding at the expense of adherence to Commission principles. Consistent treatment across plans and serious efforts to keep retirees whole were set aside until financial stability was regained. Any notion of a best policy to be followed by all plans was abandoned. Some of the differences may be due to necessity. But much of it stems from plan administrators, often bending to particular constituencies, playing the principle role in designing these procedures, rather than the Commission. The proposals, particularly those in 2010, were adopted without much Commission input or crafting; thus the results do not reflect the desire for consistency and fairness that had generally guided past Commissions.

While the provisions for each plan can be grouped into procedures followed before financial stability and those to be followed if and when financial stability is achieved, there is no consistency in how financial stability is measured, even among plans in the same system. All are based on a measured funding ratio or ratios, but some use ratios based on market value, some based on actuarial value, some use one ratio as a trigger, and some use two. Some use the ratio or ratios as permanent standards or requirements rather

than one-time triggers. TRA and most MSRS plans use a single trigger, a 90% funding ratio based on market, but MSRS Judges uses two, a 70% and 90% ratio. MSRS State Patrol also uses two, but it uses 85% and 90%. PERA plans use a 90% ratio, but as an ongoing standard rather than a trigger. If the given PERA plan exceeds a 90% ratio (in two consecutive actuarial valuations), higher benefit adjustments can commence, but the earlier provisions do not expire. Lower adjustments are again applicable if the plan retreats below 90% funding. The SPTRFA and DTRFA use ratios based on actuarial value rather than market. SPTRFA uses two ratios, as ongoing standards; at least until a 90% ratio is achieved. Then an inflation match not to exceed 5% will be paid thereafter. The DTRFA uses one ratio, and uses it as a trigger.

The lower the adjustment provided by a plan and the longer that a retiree must wait to qualify for an adjustment, the more vulnerable that individual is to the eroding effect of inflation. While retirees from all the plans are impacted by the same inflation rate, the adjustments to offset some or all of the impact vary. Prior to achieving financial stability, some plans are providing 1% adjustments, others 2%, and a few are in between, with the Judges Plan and the State Patrol Plan paying 1.5%. Prior to financial stability, some of the plans provide a full adjustment after one year of retirement (12 months) while TRA and MSRS require a year and one-half (18 months). Certain PERA-P&F retirees will need to be retired three years before receiving their first full adjustment. This will make these retirees particularly vulnerable if inflation is high. Similarly, for very recent retirees, the minimum eligibility period for a prorated adjustment varies considerably. Prior to financial stability, the DTRFA will not provide any form of prorated adjustment. PERA plans will provide a prorated adjustment with as little as one month in retirement, except for post-June 1, 2014 PERA-P&F retirees, who must wait 25 months to qualify for a prorated benefit.

When financial stability status is reached, MSRS, TRA, and most PERA plans will pay a 2.5% increase, hopefully a reasonable approximation of inflation, but PERA-P&F will match inflation not to exceed 2.5%. Even if on average inflation is 2.5%, PERA-P&F retirees will lose purchasing power. These retirees will receive less than 2.5% in any year when inflation is less than 2.5%, and will never get more than 2.5% when inflation exceeds 2.5%. Thus, their average increase will be less than 2.5%. In contrast to all the other plans, the SPTRFA and DTRFA will match inflation not to exceed 5%. These two first class city teacher plans will be closer to the Commission's stated preferred post-retirement adjustment policy than any other plans.



Minnesota Public Pension Plans

Post-Retirement Annual Percent Increase[1] and Increase in the Consumer Price Index[2]

Effective	CPI [2]	MSRS Plans		PERA Plans						
		All but SP [3]	State Patrol [4]	All but P&F [5]	P&F [6]	MERF [7]	TRA [8]	MTRFA [9]	DTRFA [10]	SPTRFA [11]
Jan 1:	%	%	%	%	%	%	%	%	%	%
2013	2.1	2.00	1.50	1.00	1.50	--	2.00	--	0.00	1.00
2012	3.6	2.00	1.50	1.00	1.00	--	0.00	--	0.00	1.00
2011	2.1	2.00	1.50	1.00	1.00	--	0.00	--	0.00	0.00
2010	-0.7	2.50		2.50		0.00	2.50	--	2.00	0.00
2009	4.1	2.500 [12]		2.500 [12]		3.50	2.500 [12]	--	2.24	2.50
2008	2.9	2.500		2.500		2.66868	2.500	--	5.30	2.30
2007	3.2	2.500		2.500		3.50	2.500	--	2.00	2.00
2006	3.5	2.500		2.500		2.59039	2.500	2.00	2.00	2.00
2005	2.6	2.500		2.500		3.17372	2.500	2.00	2.00	2.00
2004	2.2	2.103		2.103		2.10347	2.103	2.00	2.00	2.00
2003	1.4	0.7450		0.7450		0.74456	0.7450	2.00	2.00	2.00
2002	2.7	4.4935		4.4935		5.34299	4.4935	2.31	5.25	3.70
2001	3.5	9.5342		9.5342		10.50999	9.5342	8.81	10.2391	7.6723
2000	2.2	11.1436		11.1436		10.2275	11.1436	9.67	9.0275	9.2619
1999	1.3	9.8254		9.8254		8.0432	9.8254	7.33	7.0125	7.2145
1998	2.3	10.0876		10.0876		6.6680	10.0876	7.28	6.3407	7.00
1997	2.9	8.0395		8.0395		3.9500	8.0395	6.23	5.6315	--
1996	2.9	6.3954		6.3954		3.5950	6.3954	3.85	4.6424	--
1995	2.5	3.9850		3.9850		3.1440	3.9850	2.13	--	--
1994	2.8	6.0170		6.0170		3.8240	6.0170	4.50	--	--
1993	2.9	4.5530		4.5530		5.9840	4.5530	--	--	--
1992	4.1	4.2950		4.2950		0.0000	4.2950	--	--	--
1991	5.2	5.1000		5.1000		5.0790	5.1000	--	--	--
1990	4.8	4.0400		4.0400		6.9180	4.0400	--	--	--
1989	4.0	6.9180		6.9180		5.93591	6.9180	--	--	--
1988	3.6	8.0540		8.0540		9.37158	8.0540	--	--	--
1987	1.6	9.7920		9.7920		7.5890	9.7920	--	--	--
1986	3.5	7.9000		7.9000		8.7160	7.9000	--	--	--
1985	3.5	6.9050		6.9050		7.3370	6.9050	--	--	--
1984	3.0	7.4990		7.4990		10.77	7.4990	--	--	--
1983	6.0	6.8530		6.8530		9.17	6.8530	--	--	--
1982	10.3	7.4360		7.4360		--	7.4360	--	--	--
1981	13.4	3.2090		3.2090		--	3.2090	--	--	--
1980	11.4	0.00		0.00		--	0.00	--	--	--
1979	7.7	0.00		0.00		--	0.00	--	--	--
1978	6.5	4.00		4.00		--	4.00	--	--	--

1 *Note: These increases are permanent increases to retiree annuities.*

2 *Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) annual average percent change, December to December.*

3 *2010 MSRS-General, Correctional, Judges, Legislators, and Elective State Officers plans provisions: reduced from 2.5% to 2.0%, restored when 90% funded on Market Value of Assets.*

4 *2010 State Patrol Plan provisions: reduced from 2.5% to 1.5%, restored when 90% funded on Market Value of Assets.*

5 *2010 PERA-General and PERA-Correctional provisions: reduced from 2.5% to 1.0%, restored when 90% funded on Market Value of Assets; rate reduced if fund later declines from 90% funded.*

6 *2010 PERA-P&F provisions: reduced from 2.5% to 1.0% for 2011-2012, then equal to previous fiscal year CPI, not to exceed 1.5%, until 90% funded on Market Value of Assets, then not to exceed 2.5%; rate reduced if fund later declines from 90% funded.*

7 *MERF was merged into PERA in 2010; MERF Division members receive the same post-retirement adjustment as PERA-General members.*

8 *2010 TRA provisions: suspended for 2011-2012; in 2013 reduced from 2.5% to 2.0%, restored when 90% funded on Market Value of Assets.*

9 *MTRFA was merged into TRA in 2006; former MTRFA members receive the TRA post-retirement adjustment. MTRFA first paid a post retirement adjustment under the new system on 1/1/94.*

10 *2010 DTRFA provisions: 0% when under 80% funded on Market Value of Assets, 1% if 80-90% funded on Market Value, 2% when 90%+ funded on Market Value; when 90% funded on Actuarial Value of Assets moves to inflation match up to 5%. DTRFA first paid a post retirement adjustment under the new system on 1/1/96.*

11 *2011 SPTRFA provisions: transitional 1% until 80% funded and 2% until 90% funded; when 90+% funded moves to inflation match up to 5%. Suspended for 2011. SPTRFA first paid a post retirement adjustment under the new system on 1/1/98.*

12 *The Minnesota Post Retirement Investment Fund (MPRIF) was abolished and merged with the respective active member funds on 6/30/09.*