S.F. 777
(Betzold)

H.F. 1111
(Murphy, M.)

Executive Summary of Commission Staff Materials

Affected Pension Plan(s): All Statewide Retirement Plans

Relevant Provisions of Law: Minnesota Statutes, Chapters 3A, 11A, 352, 352B, 352C, 352D, 353, 354, 356, and 490

General Nature of Proposal: Statutory Changes Needed to Accommodate the Minnesota Post Retirement Investment Fund (MPRIF) Dissolution

Date of Summary: March 4, 2009

Specific Proposed Change(s)

- Makes the statutory changes necessary to conform with the dissolution of the Minnesota Post Retirement Investment Fund (MPRIF);
- Creates a retirement fund for the Legislators Retirement Plan for purposes of handling that plan's MPRIF participation and its drawdown; and
- Revises the definition of the actuarial value of assets for public pension plan actuarial valuation reporting purposes.

Policy Issues Raised by the Proposed Legislation

1. Adequacy of accommodating the 2008-2009 MPRIF dissolution.
2. Appropriateness of creating a Legislators Retirement Fund for its MPRIF participation transfer and drawdown (Sections 3 and 5).
3. Appropriateness of continuing to use an actuarial value of retirement plan assets (Section 69).
4. Appropriateness of the five-year phase-in of the MPRIF asset value decline (Section 69).
5. Appropriateness of the addition of proposed "corridor" limitations on the actuarial value of assets (Section 69).
6. Appropriateness of applying an actuarial value of assets definition using an 8.5 percent interest actuarial assumption on certain local retirement plans (Section 69).

Potential Amendments

Technical Amendment

S0777-1A moves an existing Minnesota State Retirement System (MSRS) provision to a better place within Minnesota Statutes, Chapter 352, specifies that the actuarial value of assets definition governs only those retirement plans which previously participated in the MPRIF, and corrects a crossreference.

Substantive Amendments

S0777-2A replaces the current computed actuarial value of assets with the straight market value of assets.

S0777-3A recognizes the applicable post-retirement interest assumption retirement rates for the Minneapolis Employees Retirement Fund (MERF), the Bloomington Firefighters Relief Association, the Fairmont Police Relief Association, and the Virginia Fire Department Relief Association in the calculation of the actuarial value of assets.

TO: Members of the Legislative Commission on Pensions and Retirement

FROM: Lawrence A. Martin, Executive Director

RE: S.F. 777 (Betzold); H.F. 1111 (Murphy, M.): Statewide Funds; Revising Various Retirement Plan Provisions in Light of the Minnesota Post Retirement Investment Fund Dissolution

DATE: March 2, 2009

General Summary of S.F. 777 (Betzold); H.F. 1111 (Murphy, M.)

S.F. 777 (Betzold); H.F. 1111 (Murphy, M.) amends portions of Minnesota Statutes, Chapters 3A, 11A, 352, 352B, 352C, 352D, 353, 353A, 353E, 354, 356, and 490, the governing statutes of the various statewide retirement plans, by implementing the mandate of Laws 2008, Chapter 349, Article 2, Section 2, for the statutory changes necessary to conform with the dissolution of the Minnesota Post Retirement Investment Fund (MPRIF) by creating a retirement fund for the Legislators Retirement Plan for purposes of handling that plan's MPRIF participation and its drawdown, and by revising the definition of the actuarial value of assets for public pension plan actuarial valuation reporting purposes.

Section-By-Section Summary of S.F. 777 (Betzold); H.F. 1111 (Murphy, M.)

A section-by-section summary of S.F. 777 (Betzold); H.F. 1111 (Murphy, M.) is contained in **Attachment A**.

Background Information

Background information that may be relevant to the Commission on the 1969 creation, the 1980, 1992, 1997, and 2006 alterations, and the 2008-2009 dissolution of the Minnesota Post Retirement Investment Fund (MPRIF) is set forth in **Attachment B**.

Background information that may be relevant to the Commission on the actuarial value of assets in Minnesota Statutes, Section 356.215, is set forth in **Attachment C**.

Technical Amendment

Amendment S0777-1A, a technical amendment, moves a Minnesota State Retirement System (MSRS) provision, previously coded within an otherwise obsolete section related to the MPRIF and is proposed for repeal without being relocated, to a better place within Minnesota Statutes, Chapter 352 (after page 3.32), and specifies that the actuarial value of assets definition related to recognizing the MPRIF dissolution governs only those retirement plans which previously participated in the MPRIF, since the retirement value of assets definition applies to a broader number of retirement plans (page 28.10 and 28.32; page 29.19; and page 30.5). A crossreference is also corrected (page 8.24).

Discussion and Analysis

S.F. 777 (Betzold); H.F. 1111 (Murphy, M.) accommodates in the laws governing the various statewide retirement plans the dissolution of the Minnesota Post Retirement Investment Fund (MPRIF), which was triggered in late 2008 and culminates on June 30, 2009, creates a Legislators Retirement Fund for purposes of depositing and disbursing the Legislators Retirement Plan participation in the MPRIF upon the June 30, 2009, asset transfer, adjusts the actuarial value of assets for the various statewide retirement plans to accommodate the June 30, 2009, asset transfer from the MPRIF, and provides a "corridor" limitation on the actuarial value of assets definition set at no less than 80 percent of market value and no more than 120 percent of market value.

The proposed legislation raises a number of pension and related public policy issues for Commission consideration and potential discussion, as follows:

1. Adequacy of Accommodating the 2008-2009 MPRIF Dissolution. The policy issue is the adequacy of the proposed legislation in meeting the mandate of Laws 2008, Chapter 349, Article 2, Section 2, which required that the executive directors of the retirement systems with retirement plans participating in the MPRIF report to the Legislative Commission on Pensions and Retirement by

November 30 of the year in which the MPRIF dissolution trigger event occurred with a draft of the proposed legislation that would make the necessary statutory changes to accommodate the MPRIF. The accommodating changes could have been included with the 2008 proposed MPRIF dissolution legislation, but were deferred to the year when the trigger event actually occurred. The proposed legislation represents the work of the administrative staffs of the Minnesota State Retirement System (MSRS), the Public Employees Retirement Association (PERA), and the Teachers Retirement Association (TRA), with assistance from the Commission staff, and attempts to make a comprehensive revision in light of the dissolution of the MPRIF, which concludes on June 30, 2009. To gauge whether or not the proposed dissolution accommodations are adequate and appropriate, the Commission staff should consider taking testimony from interested parties.

2. Appropriateness of Creating a Legislators Retirement Fund For its MPRIF Participation Transfer and Drawdown (Sections 3 and 5). The policy issue is the appropriateness of the proposed creation of a retirement fund for the Legislators Retirement Plan as the recipient of the asset transfer of the plan's participation in the MPRIF, with an eventual expenditure of the assets in that fund. The Legislators Retirement Plan never had a separate retirement fund, having been a pay-as-you-go or current disbursements plan from 1965 until 1969, having been terminally funded (i.e., full actuarial value of a retiring legislator's annuity appropriated from the State General Fund to the MPRIF or its predecessor upon retirement) from 1969 until 2003, and having been returned to a current disbursements plan since 2003. The proposal in this proposed legislation would create a Legislators Retirement Fund for the limited purpose of spending down the amount of the MPRIF participation in annuities and benefits due to pre-July 1, 2003, retired legislators. Because the participation amount is not large and the pre-July 1, 2003, retired legislator benefit payroll is relatively modest, alternatively, to avoid the effort of establishing a short-lived additional fund within the State Treasury, the amounts could be deposited in the General State Employees Retirement Fund and expanded to pay Legislators Retirement Plan annuities and benefits until exhausted. Minnesota Management and Budget or the MSRS may be able to provide additional pertinent information or an additional perspective on the optimal manner for accounting for this modest portion of the dissolving MPRIF participation.

3. Appropriateness of Continuing to Use an Actuarial Value of Retirement Plan Assets (Section 69). The policy issue is the appropriateness of continuing to use a calculated "actuarial value" of retirement plan assets rather than using the market value of assets. The proposed legislation suggests revisions to the current definition of the actuarial value of assets. The most recent comprehensive revision of the actuarial valuation of assets was made in 2000, using the market value of assets with delayed recognition of the difference between the market value of assets and the computed value of assets increasing based on the pre-retirement actuarial interest assumption rate. The definition of the actuarial value of assets was recommended by the consulting actuary then retained by the Commission, Milliman & Robertson, and was intended to smooth out intermediate-term (longer than one year and shorter than five years) market value volatility. Since the market value of retirement plan assets is reported in the retirement plan's actuarial valuation as part of the actuarial value of assets computation and is reported in the retirement plan's comprehensive annual financial reporting, the reported actuarial value of assets figure in addition to the market value of assets adds confusion over the actual value of plan assets and the plan's funded status and is unlikely to produce a "truer" asset value because most stock market volatility historically (1929-2000) is either shorter than one year or longer than five years. The lack of reliability of the current actuarial value of assets definition is also indicated by the proposed legislation's suggested revision in the definition to establish a corridor valuation (see issue #5).

   If the Commission wishes to simplify the value of pension plan assets by using a market value of assets, **Amendment S0777-2A** replaces the current actuarial value of assets with the market value of assets.

4. Appropriateness of the Five-Year Phase-In of the MPRIF Asset Value Decline (Section 69). The policy issue is the appropriateness of redefining the actuarial value of assets with a five-year phase-in in recognizing the decline in the market value of assets representing the participation in the MPRIF for the various statewide retirement plans. The recognition issue arises from the dissolution of the MPRIF because of its recent loss in value. The MPRIF previously was valued three ways, at market value, for actuarial valuation purposes, at the present value of future benefits value, calculated using the post-retirement interest actuarial assumption rate and the retirement plan's mortality assumption, and for post-retirement adjustment computation purposes, as market value plus or minus a composite of one-fifth of the difference between that year's market value and that year's required reserve value and one-fifth of the identical difference from each of the prior four years. Since the MPRIF met the prescribed trigger for dissolution as of June 30, 2008, with market value less than 80 percent of the required reserve (actuarial present value) value, the MPRIF participation of each statewide retirement

plan is being transferred to the plan's active member retirement fund on June 30, 2009. The value of those transferred assets is expected to be significantly less than the actuarial required reserves figure. Recognizing 20 percent of the shortfall rather than the full shortfall, as proposed, will phase in the recognition of those recent investment losses.

5. Appropriateness of the Addition of Proposed "Corridor" Limitations on the Actuarial Value of Assets (Section 69). The policy issue is the appropriateness of further revising the actuarial value of assets by imposing a lower limitation of 80 percent of market value and by imposing an upper limitation of 120 percent of market value. In actuarially funded retirement plans that adhere to amortization target dates and do not continually reset those amortization target dates, the retirement plan will vary above or below 100 percent funded, with assets declining or rising based on broad market forces. When market declines or rises occur over a very short period, an actuarial value of assets method that attempts to smooth out liquidity by deferring recognition of some of the liquidity can produce a carrying value significantly greater or lower than the market value of assets. The proposed "corridor" value limits the amount of that deferral of liquidity to 120 percent on the upside and 80 percent on the downside. The corridor limitation proposal apparently is a recommendation of the consulting actuary retained by MSRS, PERA, and TRA, Mercer (US) Inc. The rationale for proposing a corridor limitation of any sort has not been formally set forth by or on behalf of Mercer (US) Inc. nor has the selection of the particular arbitrary upside and downside values. A letter from Mercer (US) Inc. to TRA on the actuarial value of assets corridor is attached. The Commission should consider requesting testimony from Mercer (US) Inc. and other interested parties about the value of this additional actuarial value definition limitation.

6. Appropriateness of Applying an Actuarial Value of Assets Definition Using an 8.5 Percent Interest Actuarial Assumption on Certain Local Retirement Plans (Section 69). The policy issue is the appropriateness of redefining the actuarial value of assets based on an 8.5 percent interest actuarial assumption rate for the Minneapolis Employees Retirement Fund (MERF), the Bloomington Firefighters Relief Association, the Fairmont Police Relief Association, and the Virginia Firefighters Relief Association. While the current definition of the actuarial value of assets utilized the post-retirement interest actuarial assumption rate applicable to the particular retirement plan, the proposed legislation would base the market gain or loss in any year against the prior fiscal year and market value plus an 8.5 percent increase. Four retirement plans that are required to use the actuarial value of assets definition of Minnesota Statutes, Section 356.215, do not use an 8.5 percent post-retirement interest actuarial assumption rate and may be adversely affected by the change. The post-retirement interest rate assumption is six percent for MERF and for the Bloomington Firefighters Relief Association, and five percent for the Fairmont Police Relief Association and for the Virginia Firefighters Relief Association.

   If the Commission is troubled by the potentially adverse impact of the generalized application of an 8.5 percent interest rate assumption for calculating the actuarial value of assets rather than its specific post-retirement interest rate, **Amendment S0777-3A** would reinstate the plan-specific interest rate assumptions for each retirement plan's actuarial value of assets.

Attachment A

Section-By-Section Summary of S.F. 777 (Betzold); H.F. 1111 (Murphy, M.)

Sec.	Pg.Ln	Statutory Provision	Retirement Plan	Summary
1	1.33	3A.02, Subd. 3	Legislators Plan	Clarifies the retirement annuities are payable from the retirement fund created in Section 3 or from the general fund instead of the MPRIF.
2	2.4	3A.02, New Subd. 6	Legislators Plan	Specifies eligibility for retirement allowances for post-retirement adjustments under Section 72.
3	2.8	3A.03, New Subd. 3	Legislators Plan	Creates a legislators retirement fund in the State Treasury, consisting of the reserves for the Legislators Retirement Plan in the former MPRIF.
4	2.16	3A.04, New Subd. 2a	Legislators Plan	Specifies eligibility for survivor benefits for post-retirement adjustments under Section72.
5	2.20	3A.115	Legislators Plan	Provides for the payment of retirement annuities for pre-2003 retired legislators from the Legislators Retirement Fund until its assets are exhausted and then from the State General Fund.
6	3.6	11A.08, Subd. 1	State Board of Investment	Clarifies the qualification of the retiree serving on the Investment Advisory Council of the State Board of Investment and updates the provision under current style and language usage conventions.
7	3.18	11A.23, Subd. 1	State Board of Investment	Eliminates obsolete reference to the former MPRIF.
8	3.27	11A.23, Subd. 2	State Board of Investment	Eliminates obsolete reference to the former MPRIF.
9	4.1	352.04, Subd. 1	MSRS-General	Eliminates provision requiring participation in the former MPRIF.
10	4.9	352.04, Subd. 12	MSRS-General	Eliminates provision referencing the former MPRIF.
11	4.23	352.061	MSRS-General	Eliminates a requirement that the plan participate in the former MPRIF.
12	4.31	352.113, New Subd. 13	MSRS-General	Specifies eligibility for disability benefits for post-retirement adjustments under Section72.
13	5.3	352.115, New Subd. 14	MSRS-General	Specifies eligibility for retirement annuities for post-retirement adjustments under Section 72.
14	5.8	352.12, New Subd. 2c	MSRS-General	Specifies eligibility for survivor benefits for post-retirement adjustments under Section 72.
15	5.12	352.75, Subd. 3	MSRS-General	Eliminates obsolete 1978 MPRIF transfer requirement related to the Metropolitan Transit Commission-Transit Operating Division consolidation into MSRS-General.
16	5.30	352.75, Subd. 4	MSRS-General	Eliminates obsolete MPRIF reserve transfer requirement for Transit Operating Division employees and specifies their eligibility for post-retirement adjustments under Section 72.
17	6.32	352.911, Subd. 3	MSRS-Correctional	Eliminates a requirement that the plan participate in the former MPRIF.
18	7.3	352.911, Subd. 5	MSRS-Correctional	Eliminates references to the former MPRIF participation regarding fund disbursements, transfer, and appropriation.
19	7.18	352,93, New Subd. 7	MSRS-Correctional	Specifies eligibility for retirement annuities for post-retirement adjustments under Section 72.
20	7.22	352.931, New Subd. 6	MSRS-Correctional	Specifies eligibility for survivor benefits for post-retirement adjustments under Section72.
21	7.26	352.95, New Subd. 8	MSRS-Correctional	Specifies eligibility for disability benefits for post-retirement adjustments under 7.30Section72.
22	7.30	352B.02, Subd. 1d	State Patrol	Eliminates a requirement for transfers to and from the former MPRIF.

Sec.	Pg.Ln	Statutory Provision	Retirement Plan	Summary
23	8.7	352B.08, New Subd. 4	State Patrol	Specifies eligibility for retirement annuities for post-retirement adjustments under Section 72.
24	8.11	352B.10, New Subd. 6	State Patrol	Specifies eligibility for disability for post-retirement adjustments under Section 72.
25	8.15	352B.11, New Subd. 2e	State Patrol	Specifies eligibility for survivor for post-retirement adjustments under Section 72.
26	8.19	352C.10	Elected State Officers	Specifies that retirement allowances and surviving spouse benefits are eligible for post-retirement adjustments under Section 72.
27	8.25	352D.06, Subd. 1	MSRS-Unclassified	Requires reserves for annuities paid from the plan transfers to the MSRS-General retirement fund rather than to the MPRIF and specifies the eligibility for those annuities for post-retirement adjustments under Section 72.
28	9.3	352D.065, New Subd. 3a	MSRS-Unclassified	Specifies that disability benefits are eligible for post-retirement adjustments under Section 72.
29	9.7	352D.075, New Subd. 2b	MSRS-Unclassified	Specifies that survivor benefits are eligible for post-retirement adjustments under Section72.
30	9.11	353.06	PERA-General	Eliminates a requirement for transfers to the MPRIF and removes an obsolete reference to the former State Employees Retirement Fund.
31	9.26	353.27, Subd. 1	PERA-General	Eliminates a reference to the former MPRIF.
32	10.3	353.29, New Subd. 9	PERA-General	Specifies that annuities are eligible for post-retirement adjustments under Section 72.
33	10.7	353.31, Subd. 1b	PERA-General	Clarifies references to historic post-retirement adjustments and to the future post-retirement adjustment provision in Section 72.
34	10.24	353.31, New Subd. 12	PERA-General	Specifies that survivor benefits are eligible for post-retirement adjustments under Section 72.
35	10.29	353.33, Subd. 3b	PERA-General	Clarifies references to historic post-retirement adjustments and to the future post-retirement adjustment provision in Section 72.
36	11.30	353.33, Subd. 7	PERA-General	Clarifies references to historic post-retirement adjustments and to the future post-retirement adjustment provision in Section 72.
37	12.13	353.33, New Subd. 13	PERA-General	Specifies that disability benefits are eligible for post-retirement adjustments under Section 72.
38	12.17	353.651, New Subd. 5	PERA-P&F	Specifies that retirement annuities are eligible for post-retirement adjustments under Section 72.
39	12.21	353.656, Subd. 5a	PERA-P&F	Clarifies references to historic post-retirement adjustments and to future post-retirement adjustment provision in section 72.
40	13.27	353.656, New Subd. 14	PERA-P&F	Specifies that disability benefits are eligible for post-retirement adjustments under Section 72.
41	13.31	353.657, Subd. 3a	PERA-P&F	Clarifies references to historic post-retirement adjustments and to future post-retirement adjustment provisions in Section 72.
42	14.17	353.657, New Subd. 5	PERA-P&F	Specifies that survivor benefits are eligible for post-retirement adjustments under Section 72.
43	14.21	353.665, Subd. 3	PERA-P&F	Eliminates obsolete references to the former MPRIF.
44	15.1	353A.02, Subd. 14	PERA Local Relief Assoc. Consolidations	Eliminates crossreferences to the former MPRIF.
45	15.6	353A.02, Subd. 23	PERA Local Relief Assoc. Consolidations	Revises crossreferences to the applicable post-retirement adjustment statute.
46	15.15	353A.05, Subd. 1	PERA Local Relief Assoc. Consolidations	Revises crossreferences to the applicable post-retirement adjustment statute.
47	16.19	353A.05, Subd. 2	PERA Local Relief Assoc. Consolidations	Eliminates crossreferences to the former MPRIF.

Sec.	Pg.Ln	Statutory Provision	Retirement Plan	Summary
48	17.3	353A.08, Subd. 1	PERA Local Relief Assoc. Consolidations	Revises crossreferences to the application post-retirement adjustment statute.
49	18.5	353A.08, Subd. 3	PERA Local Relief Assoc. Consolidations	Revises reference to the applicable post-retirement adjustment.
50	18.26	353A.081, Subd. 2	PERA Local Relief Assoc. Consolidations	Revises reference to the applicable post-retirement adjustment.
51	19.10	353A.09, Subd. 1	PERA Local Relief Assoc. Consolidations	Eliminates obsolete references to the former MPRIF.
52	20.3	353A.10, Subd. 2	PERA Local Relief Assoc. Consolidations	Corrects crossreference citation to conform with a repealer in Section 76.
53	20.16	353A.10, Subd. 3	PERA Local Relief Assoc. Consolidations	Corrects crossreference citation to conform with a repealer in Section 76.
54	20.30	353C.01, Subd. 3	PERA-Correctional	Eliminates references to the former MPRIF.
55	21.4	353E.01, Subd. 5	PERA-Correctional	Eliminates references to the former MPRIF.
56	21.21	353E.04, New Subd. 7	PERA-Correctional	Specifies that annuities are eligible for post-retirement adjustments under Section 72.
57	21.25	353E.06, New Subd. 9	PERA-Correctional	Specifies that disability benefits are eligible for post-retirement adjustments under Section 72.
58	21.29	353E.07, New Subd. 8	PERA-Correctional	Specifies that survivor benefits are eligible for post-retirement adjustments under Section 72.
59	22.1	354.07, Subd. 4	TRA	Eliminates references to the former MPRIF.
60	22.21	354.33, Subd. 5	TRA	Revises crossreferences to the applicable post-retirement adjustment statute.
61	22.32	354.35, New Subd. 3	TRA	Specifies that annuities are eligible for post-retirement adjustments under Section 72.
62	23.3	354.42, Subd. 1a	TRA	Eliminates a reference to the former MPRIF.
63	23.16	354.44, New Subd. 7a	TRA	Specifies that annuities are eligible for post-retirement adjustments under Section 72 and moves originally determined annuity floor provision from Minn. Stat. 2008, Sec. 354.05, Subd. 26, proposed for repeal as generally obsolete in Section 76.
64	23.24	354.46, New Subd. 7	TRA	Specifies that survivor benefits are eligible for post-retirement adjustments under Section 72.
65	23.28	354.48, New Subd. 11	TRA	Specifies that disability benefits are eligible for post-retirement adjustments under Section 72.
66	24.1	354.55, Subd. 13	TRA	Clarifies references to historic post-retirement adjustments and to future post-retirement adjustments under Section 72.
67	24.13	354.70, Subd. 5	TRA	Clarifies a statutory citation to the former MPRIF.
68	26.1	354.70, Subd. 6	TRA	Clarifies references to historic post-retirement adjustments and to future post-retirement adjustments under Section 72.
69	26.23	356.215, Subd. 1	General	Redefines the actuarial value of assets to use a consistently applied 8.5 percent interest rate assumption, to incorporate a five-year phase in of market value asset recognition for the dissolved former MPRIF, and to establish a "corridor actuarial value of assets" set at not less than 80 percent of market value of assets and at not more than 120 percent of market value of assets.
70	31.9	356.215, Subd. 11	General	Eliminates an obsolete provision related to the former MPRIF.
71	34.1	356.351, Subd. 2	General	Adds specific reference to the actuary to determine the appropriate annuity factor for a money purchase annuity and eliminates a reference to the former MPRIF.

Sec.	Pg.Ln	Statutory Provision	Retirement Plan	Summary
72	35.1	New 356.415	General	Replaces the generally applicable post-retirement amount enacted in Laws 2008, Chapter 349, Article 2, Section 1, with a permanent 2.5 percent annual compounding adjustment procedure for all annuities, disability benefits, and survivor benefits from the various statewide retirement plans.
73	36.9	490.123, Subd. 1	Judges	Eliminates a reference to the former MPRIF.
74	36.19	490.123, Subd. 3	Judges	Eliminates a reference to the former MPRIF.
75	36.30	490.124, New Subd. 14	Judges	Specifies that retirement annuities, disability benefits, and survivor benefits are eligible for post-retirement adjustments under Section 72.
76	37.3	Repealer	Repealer	Repeals: • 11A.041, report on MPRIF increases • 11A.18, MPRIF • 11A.181, MPRIF dissolution • 352.119, Subd. 2, MPRIF adjustments • 352.119, Subd. 3, automatic MPRIF increases • 352.119, Subd. 4, determining applicable law • 352B.26, Subd. 1, MPRIF authorization • 352B.26, Subd. 3, MPRIF adjustments • 353.271, MPRIF authorization and adjustments • 353A.02, Subd. 20, MPRIF definition • 353A.09, Subd. 2, initial MPRIF allocation • 353A.09, Subd. 3, subsequent MPRIF transfers • 354.05, Subd. 26, postretirement investment fund annuity definition • 354.55, Subd. 14, 1973 MPRIF adjustments • 354.63, MPRIF authorization • 356.41, non-MPRIF adjustments • 356.431, Subd. 2, lump sum conversion to MPRIF annuity • 422A.01, Subd. 13, postretirement investment fund annuity definition • 422A.06, Subd. 4, MPRIF prohibition • 490.123, Subd. 1c, additional MPRIF employer contribution for transfer deficiencies • 490.123, Subd. 1e, MPRIF authorization
77	37.9		Effective date	Effective July 1, 2009

Attachment B

Background Information on the Development of the Minnesota Post Retirement Investment Fund

A. Development of the Minnesota Adjustable Fixed Benefit Fund. Prior to creation of the Minnesota Post Retirement Investment Fund (MPRIF) in 1980, benefits were adjusted during retirement through the Minnesota Adjustable Fixed Benefit Fund (MAFB), which was created in 1969 (Laws 1969, Chapter 485, Section 32). The plans participating in the Minnesota Adjustable Fixed Benefit Fund include the Minnesota State Retirement System (MSRS) (Laws 1969, Chapter 893, Section 9), the Public Employees Retirement Association (PERA) (Laws 1969, Chapter 999), and Teachers Retirement Association (TRA) (Laws 1969, Chapter 485, Section 31) plans, plus the Minneapolis Employees Retirement Fund (MERF) (Laws 1969, Chapter 914, Section 2). In 1981 (Laws 1981, Chapter 298, Sections 5-10), MERF was permitted to invest and manage the assets of its retirees in a separate investment fund invested by MERF, which was set up to be identical to the MPRIF in structure and operation.

At least in theory, the Minnesota Adjustable Fixed Benefit Fund had a post-retirement adjustment process that allowed retiree benefits to increase or decrease during retirement, depending upon investment results, although the benefit amount was not permitted to go below that received at the time of retirement. In practice, the Minnesota Adjustable Fixed Benefit Fund developed differently. By periodically amending the benefit floor language after 1969 in connection with the general benefit improvements, the Legislature in fact never permitted benefits to fall below the most recent levels during the history of the Minnesota Adjustable Fixed Benefit Fund through 1980.

Each retirement fund taking part in the Minnesota Adjustable Fixed Benefit Fund transferred sufficient reserves to permit level annuities to be paid to retirees, if the post-retirement fund continued to earn at least the actuarial interest requirement. The Minnesota Adjustable Fixed Benefit Fund annuities could be revised through an adjustment mechanism relying on a two-year average total rate of investment return measure compared to the actuarial rate of return. The use of an averaging period presumably was 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 quantity one plus the two-year average total rate of return, by the quantity one plus the actuarial rate of return. If the fund was not meeting the actuarial investment return requirement, the calculated ratio or benefit adjustment factor would be less than one. The calculated ratio would be equal to one if the return equaled the actuarial return, and, if the return exceeded the actuarial return, the calculated ratio would be greater than one. Benefits could be increased if the benefit adjustment factor was greater than 1.02, providing that annuity stabilization reserve requirements, discussed below, were met. If the benefit adjustment factor was less than .98, a benefit decrease was required, but at no time could the retirement payments drop below the level received at the date of retirement.

Sizable post-retirement benefit increases occurred during the 1970s, but most of these were ad hoc changes authorized by the Legislature to address inadequate benefit amounts provided to certain older retirees, or to compensate the retired group for legislated changes in the post-retirement interest rate actuarial assumption, which would have the effect of lowering future increases. This interest rate assumption was revised from 3.0 percent to 3.5 percent in 1969 and from 3.5 percent to 5.0 percent in 1973. The benefit increases actually granted as a result of the operation of the Minnesota Adjustable Fixed Benefit Fund were rare and minimal, due in part to the poor investment climate during the 1970's and to annuity stabilization reserve requirements that were part of the Minnesota Adjustable Fixed Benefit Fund adjustment process. Benefit increases above four percent could not be paid unless the annuity stabilization reserve contained enough assets to cover 15 percent 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 being paid out as benefits. Benefit increases above four percent required correspondingly higher annuity reserves. The poor performance of the Minnesota Adjustable Fixed Benefit Fund during the mid- and late-1970s, in part due to the investment climate during the period and in part due to the design of the adjustment mechanism, led to pressure to revise the system. This undoubtedly led in 1980 to the creation of a revised mechanism in the form of the MPRIF.

B. Minnesota Post Retirement Investment Fund (MPRIF): Creation. The MPRIF was created by Laws 1980, Chapter 607, Article 14, Section 16, to be the successor to the Minnesota Adjustable Fixed Benefit Fund. Similar to the Minnesota Adjustable Fixed Benefit Fund, the MPRIF included a benefit adjustment mechanism intended to offset, to some degree, increases in living costs. One difference was that while the old system based adjustments on total investment return, which includes unrealized gains, the original version of the MPRIF provided adjustments based solely on realized investment income. MPRIF procedures also ignored unrecognized gains and losses in determining

whether the Minnesota Post Retirement Investment Fund's reserves were sufficient to sustain the existing benefit levels for the expected remaining lifetime of the benefit recipients. Another difference was that the MPRIF contained no provision to reduce benefit levels below that most recently received in the event of subsequent poor investment performance. Benefits could go up, but they could not go down. Third, the original MPRIF based adjustments on a single year's realized investment return, rather than using the average investment return for a multi-year period.

To determine adjustments, at the end of each fiscal year (June 30), the required reserves were calculated. The required reserves were the actuarially determined amount of assets needed to pay the present stream of annuity payments to be paid to retirees over time, assuming that the assets earned at least five percent, which was the MPRIF actuarial interest assumption at that time. The total reserves were multiplied by five percent to determine the amount of investment income needed that year to sustain the current benefit level. By subtracting this assumed interest amount from total realized investment earnings, excess investment earnings, if any, were calculated and this were the amount of earnings which could be used to create a permanent increase in retiree benefits. The fiscal year excess earnings were used to determine the amount of increase, if any, payable the next January 1, the effective date of any benefit change. To determine benefit increases payable as of January 1, the excess investment income and the required reserves must be projected forward to that date. This requires increasing the excess investment income by 2.5 percent, the return which those funds must earn for the six month period in order to meet actuarial requirements, and estimating the total required reserves on January 1 for those eligible for a post-retirement adjustment.

If MPRIF assets had a book value that was less than the required reserves, a portion of any increase that would otherwise be paid was retained, to help build up the fund's asset value. Book value was defined in the provision as the cost of equity investments plus the amortized cost of fixed income investments. If book value, after adjustments for mortality gains or losses, was less than the required reserves, then 25 percent of the excess investment income must be retained, with the remaining 75 percent used to increase annuities. The retention of part of the excess reserves if the total required reserves is greater than book value would help address MPRIF unfunded liabilities. However, the fund could have a market value in excess of the required reserves and have a book value that was less than the required reserves. In this case, some of the excess earnings would be retained despite the excess of the fund's market value compared to book value. This system, in determining excess income and the level of existing assets, placed no reliance on unrecognized gain (any increase in the market value of an asset since the asset was purchased, but which has not been captured or recognized by selling the asset).

The original 1980 version of the MPRIF exposed the State Board of Investment to certain potential pressures, a consequence that may not have been foreseen or intended. Because post-retirement increases excluded any unrecognized gains, the size of any post-retirement adjustment was in part determined by the State Board of Investment's willingness to sell appreciated assets. Retirees want post-retirement increases. If the State Board of Investment were influenced by that pressure, it might sell certain appreciated securities although these sales were not in the best long-term interests of the fund and of retirees. If these securities were worth retaining, the State Board of Investment might buy them back, resulting in the same portfolio composition but with higher transaction costs.

C. Minnesota Post Retirement Investment Fund: Post-1980 Modifications

1. 1981 Changes; Laws 1981, Chapter 208, Section 2, and Laws 1981, Chapter 158, Section 1. Laws 1981, Chapter 208, Section 2, provided a clarification providing that when projecting required reserves from June 30 to January 1, the State Board of Investment must assume that all eligible individuals alive on June 30 remain alive on the following January 1. Laws 1981, Chapter 208, Section 2, and Chapter 158, Section 1, both revised excess investment income retention procedures. However, the Revisor of Statutes did not try to blend the two laws into a single provision. The Revisor incorporated the Laws 1981, Chapter 208, Section 2, change into the Minnesota Statutes 1981 Supplement version of Minnesota Statutes, Section 11A.18, Subdivision 9, which stated that rather than retaining 25 percent of excess investment income if book value was less than the required reserves, as specified in the 1980 provision, the retained amount would be 25 percent or any amount sufficient to cause the book value to equal the required reserves, whichever is less. That same provision as it was changed by Laws 1981, Chapter 158, Section 1, appeared in a footnote. In that footnote, if the book value was less than the required reserve, the retained amount would be 5 percent rather than 25 percent, or any amount sufficient to cause the book value to equal the required reserves, whichever is less

2. 1982 Changes; Laws 1982, Chapter 424, Section 1. The 1982 change took the version that had appeared in a footnote in the 1981 Supplement, and placed in the revised statute. If book value was less than the required reserves, the portion of excess income retained amount would be five

percent, rather than 25 percent, or an amount sufficient to cause the book value to equal the required reserves, whichever is less.

3. 1983 Changes; Laws 1983, Chapter 324, Section 4 to 6. The 1983 Legislature made two changes. First, some revision was made to the deferred yield adjustment subdivision. Second, the MPRIF mortality gain and loss subdivision was revised by requiring all reserve adjustments due to mortality gains and losses in a fiscal year to be completed by the following December 31, or interest will be assessed.

4. 1987 Changes; Laws 1987, Chapter 259, Section 3 to 5. Minnesota Statutes, Section 11A.18, Subdivision 6, dealing with the transfer of required reserves to the Minnesota Post Retirement Investment Fund, was revised by specifying that transfers occur no later than the last business day of the month in which the annuity commences, rather than the date the benefit commences, by requiring that the transferred amounts be determined under procedures specified by the Commission-retained actuary, and by allowing "best estimate" transfers if the exact amount has not been determined, with interest required on any required transfer amount that is later determined to be deficient. The interest rate was the applicable pre-retirement interest rate or the average short-term interest rate, whichever is greater. Minnesota Statutes, Section 11A.18, Subdivision 9, the provision specifying the post-retirement adjustment procedure, was revised by specifying that all reserve amounts must be determined by the Commission-retained actuary; and language was added specifying that a Social Security-leveling option annuity must be treated as the sum of a period certain annuity and life retirement annuity for purposes of any post-retirement adjustment. Any post-retirement increases granted on the period certain retirement annuity terminate when the period certain retirement annuity terminates.

5. 1989 Changes; Laws 1989, Chapter 319, Article 14, Section 1 to 3. The 1989 change allowed individuals who were receiving an annuity for less than one year as of June 30 to receive a partial post-retirement adjustment. Previously, individuals had to be receiving an annuity for at least one year to be eligible for any adjustment.

6. 1990 Changes; Laws 1990, Chapter 570, Article 9, Section 1. If the exact amount of a required transfer to the MPRIF was not known at the time of the transfer, the estimated transfer had to continue to be based on the best estimate if made by the Teachers Retirement Association (TRA) or the Public Employees Retirement Association (PERA), but the Minnesota State Retirement System (MSRS) was given more flexibility. Its estimated amount "may" be based on the best estimate. Also, the applicable interest rate on shortfalls would be the pre-retirement interest rate, rather than the pre-retirement interest rate or the actual average short-term rate, whichever is greater.

7. 1992 Changes; Laws 1992, Chapter 530, Sections 1 to 3. This chapter made significant changes, fundamentally changing the MPRIF post-retirement adjustment procedures, as follows:

   a. Nature of Post-Retirement Increases. Post-retirement increases would be based on total investment performance, not just realized gains, and for the most recent five-year period, rather than for a single year;

   b. Inflation Match Component. An annual post-retirement increase matching inflation, as measured by changes in the Consumer Price Index, but not to exceed 3.5 percent, was created; and

   c. Additional Investment-Based Increase. An additional investment-performance based increase was permitted based on investment performance in excess of 8.5 percent total returns over five-year periods.

   The use of five (five-year) accounts for accumulating any excess reserves (the current year plus the next four), creates a form of averaging or smoothing. A very large return in a single year will not immediately impact benefit levels because a majority of it is allocated to future years, helping to provide future increases despite weaker investment returns. However, if there is a string of very good investment years, a prolonged period of very high benefit adjustments could occur. This did occur in the late 1990s. Similarly, if there is a prolonged period of low investment returns, there can be a prolonged period of no investment-performance based increases above the capped inflation match, even for several years after the return of good investment years. Also, the MPRIF is required to be fully funded before any positive asset amounts can be allocated to the yearly accounts. A period of weak investment returns can create a less than fully funded Minnesota Post Retirement Investment Fund, which must be recouped

through investment performance before any positive asset amounts can be allocated to the annual accounts.

8. 1992 Changes; Laws 1992, Chapter 539, Section 8. This section revised the mortality gains and losses subdivision, requiring any delinquent charges or credits to include interest at the pre-retirement interest rate of the applicable fund, rather than at the short-term rate earned by the Minnesota Post Retirement Investment Fund.

9. 1994 Changes; Laws 1994, Chapter 604, Article 1, Section 6. The 1994 change clarified procedures for computing required reserves.

10. 1995 Changes; Laws 1995, Chapter 186, Section 6. In a Revisor's bill, a reference to a repealed provision is removed from the post-retirement payment provision.

11. 1997 Changes; Laws 1997, Chapter 233, Article 1, Sections 5 and 58. The inflation match was revised downward to 2.5 percent rather than 3.5 percent, and at the same time (in Section 58) the MPRIF investment return assumption was revised from five percent to six percent. Raising the MPRIF investment return assumption from five percent to six percent lowered expected future annual increases by approximately one percent. In other law enacted that year, the annuities of existing retirees were revised to offset this effect on average.

12. 2001 Changes; First Special Session, Chapter 10, Article 3, Section 2. In an administrative change, language is added stating that fair market value must be computed consistent with generally accepted accounting principles.

13. 2002 Changes; Laws 2002, Chapter 396, Article 11, Section 52. In an administrative change, some cross-references are revised to be consistent with a Minnesota Statutes, Chapter 356, recodification.

14. 2006 Changes; Laws 2006, Chapter 277, Article 1, Section 1. Post-retirement increases in any year may not exceed five percent, effective July 1, 2010.

D. Minnesota Post Retirement Investment Fund (MPRIF) Final Revisions and Dissolution

1. 2008 Changes; Laws 2008, Chapter 349, Articles 1 and 2. If the MPRIF funding ratio is less than 80 percent in any one year, or less than 85 percent in two consecutive years, the MPRIF must be dissolved, and assets will be transferred back to the applicable plan and be merged with the active member assets for that plan. If the MPRIF is dissolved, not withstanding any other law, the benefit recipients will receive an annual 2.5 percent increase in lieu of any other benefit increase. If the MPRIF is not dissolved, the total benefit increase provided by the MPRIF to benefit recipients cannot exceed the rate of inflation or five percent, whichever is less. However, an additional benefit increase may be provided to any individuals who have lost purchasing power compared to the value of the benefit they initially received when their benefit first commenced. This additional benefit increase can only be paid if the MPRIF funding ratio is at least 90 percent, if the rate return earned on MPRIF assets exceeds 8.5 percent for the year, and if the inflation rate certified for the year is less than 2.5 percent. The amount of this additional increase, when combined with the inflation adjustment authorized for the year, cannot exceed 2.5 percent in total. If the MPRIF funding ratio exceeds 115 percent, the Minnesota State Retirement System (MSRS), the Public Employees Retirement Association (PERA), and the Teachers Retirement Association (TRA) boards must report to the Legislative Commission on Pensions and Retirement by the next January 15 with recommendations regarding benefits and funding of the retirement funds for active employees and benefit recipients. If the MPRIF meets the dissolution trigger by November 30 following the dissolution of the MPRIF, the executive directors of the applicable plans must propose legislation needed to revise statutes to conform to the dissolved MPRIF.

Attachment C

Background Information on the Actuarial Value of Public Pension Plan Assets

Since the actuarial valuation of assets determination procedure was initially codified in 1965, with the initial codification of public pension plan financial and actuarial reporting requirements, Minnesota public pension plans have utilized two different ways to establish the value of assets for determining the existence of and the size of unfunded actuarial accrued liabilities.

From 1965 to 1983, Minnesota Statutes, Sections 356.20 and 356.215, required that pension plan assets at book value be used in making a comparison of plan assets with plan liabilities. Book value is the generally initial purchase price of the investment security or other marketable asset. For bonds (debt instruments), the investment value was at amortized cost. For stocks (equity investments), the investment value was at cost. For equipment, the investment was at cost less any accrued depreciation. For real estate, the statute was unclear.

In 1984, at the initiation of the Department of Finance, among various actuarial assumption and actuarial method changes, the actuarial value of assets determination procedure changed. The method defined the actuarial value of assets as the cost value of investments plus one-third of the difference between the cost value of investments and the market value of investments. The proposal for the actuarial value of assets determination procedure change was generated external to the Commission, and the rationale for the change is not well reflected in Commission staff files for Laws 1984, Chapter 564. The change, however, clearly was an attempt to capture some of the stock and bond market appreciation that had occurred in the late 1970s and early 1980s and to have the actuarial value of assets more closely reflect market value than the prior book value definition of the actuarial value of assets.

In 2000 (Laws 2000, Chapter 461, Article 1, Section 3), at the recommendation of the consulting actuarial firm retained by the Legislative Commission on Pensions and Retirement under Minnesota Statutes, Section 3.85, Milliman & Robertson, Inc., the actuarial value of assets determination procedure changed again. The actuarial value of assets, termed "current assets," is the market value of assets as of the end of the fiscal year reduced by a percentage of the difference between the actuarial net return on the market value of assets and the asset return expected during the fiscal year based on the interest rate assumption determined at the close of each of four preceding fiscal years. The percentage reduction is ten percent for the least recent applicable year, 40 percent for the next least recent applicable year, 60 percent for the year two years previous, and 80 percent for the immediate prior year. The recommendation from the Commission's retained actuary, as represented by testimony from the actuary before the Commission, was intended to bring the value of assets closer to market value while using a smoothing device that would minimize or eliminate short-term market volatility.

The following compares the pre-1984 asset valuation determination procedure, the post-1984/pre-2000 asset valuation determination procedure and the current asset valuation determination procedure for a representative statewide retirement plan, the Teachers Retirement Association (TRA), and a representative local retirement plan, the St. Paul Teachers Retirement Fund Association (SPTRFA), for the fiscal year ending on June 30, 2006:

Teachers Retirement Association (TRA)

	Pre-1984 Method	Post-1984/Pre-2000 Method	Current Method
Summary	Book or cost value of investment securities.	Cost value of investment securities plus one-third of the difference between the cost value and the market value of the investment securities.	Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets at the asset return expected during that fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year).
Result	$19,649,139,143	$19,694,665,406	$19,035,611,839
Calculation	Book Value $19,649,139,143	Market Value $19,785,671,584 Book Value $19,649,139,143 Difference $136,532,441 Difference $136,532,441 One-Third x .3333 Market Adjust. $45,506,263 Book Value $19,649,159,143 Market Adjust $45,506,263 Actuar. Value $19,694,665,406	1. Market value of assets available for benefits $19,785,671,584 Original Amount / % Not Recognized 2. Calculation of unrecognized return (a) Year ended 6/30/06 $653,165,303 80% $522,532,242 (b) Year ended 6/30/05 $179,823,045 60% $107,893,827 (c) Year ended 6/30/04 $499,642,191 40% $199,856,876 (d) Year ended 6/30/03 ($401,116,000) 20% ($80,223,200) (e) Year ended 6/30/02 $750,059,745 3. Actuarial value of assets: (1) - (2e) ("Current Assets") $19,035,611,839
Funding Impact	Act. Liab. $20,679,110,879 Assets $19,649,139,143 UAL $1,029,971,736 Funding Ratio 95.02% Normal Cost $349,678,399 Expenses $12,236,072 Amort. $54,374,990 Act. Req. $416,289,461	Act. Liab. $20,679,110,879 Assets $19,694,658,742 UAL $984,452,137 Funding Ratio 95.23% Normal Cost $349,678,399 Expenses $12,236,072 Amort. $51,971,886 Act. Req. $413,886,357	Act. Liab. $20,679,110,879 Assets $19,035,611,839 UAL $1,643,499,040 Funding Ratio 92.05% Normal Cost $349,678,399 Expenses $12,236,072 Amort. $86,764,874 Act. Req. $448,679,345

St. Paul Teachers Retirement Fund Association (SPTRFA)

	Pre-1984 Method	Post-1984/Pre-2000 Method	Current Method
Summary	Book or cost value of investment securities.	Cost value of investment securities plus one-third of the difference between the cost value and the market value of the investment securities.	Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets at the asset return expected during that fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year).
Result	$740,961,588	$829,213,976	$938,919,005
Calculation	Book Value $740,961,588	Market Value $1,005,745,229 Book Value $740,961,588 Difference $264,783,641 Difference $264,783,641 One-Third x .3333 Market Adjust. $88,252,388 Book Value $740,961,588 Market Adjust $88,252,388 Actuar. Value $829,213,976	1. Market value of assets available for benefits $1,005,745,229 Original Amount / % Not Recognized 2. Calculation of unrecognized return (a) Year ended 6/30/06 $36,135,488 80% $28,908,390 (b) Year ended 6/30/05 $26,860,009 60% $16,116,005 (c) Year ended 6/30/04 $82,512,072 40% $33,004,829 (d) Year ended 6/30/03 ($56,015,000) 20% ($11,203,000) (e) Year ended 6/30/02 $66,826,224 3. Actuarial value of assets: (1) - (2e) ("Current Assets") $938,919,005
Funding Impact	Act. Liab. $1,358,619,906 Assets $740,961,588 UAL $617,658,318 Funding Ratio 54.54% Normal Cost $21,575,645 Expenses $608,955 Amort. $53,598,227 Act. Req. $75,782,827	Act. Liab. $1,358,619,916 Assets $829,252,388 UAL $529,367,528 Funding Ratio 61.04% Normal Cost $21,575,645 Expenses $608,955 Amort. $45,936,661 Act. Req. $68,121,261	Act. Liab. $1,358,619,906 Assets $938,919,005 UAL $419,700,901 Funding Ratio 69.11% Normal Cost $21,575,645 Expenses $608,955 Amort. $36,420,175 Act. Req. $58,604,775

Using an actuarial value of assets rather than the market value of assets for a pension plan apparently is not uncommon among public pension plans and complies with generally accepted accounting principles under Government Accounting Standards Board pronouncements. Using a smoothing method that shaves off short-term market volatility is particularly advantageous from a policy perspective if the pension plan funding procedures immediately translate actuarial results into modified employer contribution amounts in the following year, where short-term value changes would produce highly variable contribution levels year to year. In Minnesota, this is a consideration only for Minneapolis Employees Retirement Fund (MERF) and for the five remaining local police and paid firefighter relief associations. The use of a smoothing mechanism may be sensible policy where the smoothing period reflects the actual pattern of market volatility, which tends to be either less than one year or longer than five years based on long-term stock market return data from Ibbotson Associates. Even if the smoothing period matches market cycles, an actuarial value of pension assets definition does nothing more than delay the recognition of actual market changes.

The following compares the actuarial value of assets and the market value of assets for the various statewide and major local retirement plans as of June 30, 2006:

Plan	Actuarial Value of Assets	Market Value of Assets	Actuarial Value as % of Market Value
MSRS-General	$8,486,756,016	$8,767,249,551	96.8%
MSRS-Correctional	535,356,819	549,986,069	97.3
Judges	151,850,386	154,151,618	98.5
State Patrol	618,990,349	633,419,202	97.7
PERA-General	12,495,207,148	12,828,990,072	97.4
PERA-Correctional	125,775,917	131,696,690	95.5
PERA-P&F	5,017,950,719	5,167,417,402	97.1
TRA	19,035,611,839	19,785,671,584	96.2
DTRFA	270,925,689	281,950,173	96.1
SPTRFA	938,919,005	1,005,745,229	93.4
MERF	1,490,280,063	1,494,046,146	99.7
Total	$49,167,623,950	$50,800,323,736	96.8%

The valuation of both pension liabilities and pension assets is problematic because they are estimates of potential real life occurrences in advance of experiencing the occurrences. In valuing pension liabilities, the time separation from the estimation of the magnitude of the liability and the actual discharge of the liability can be considerable and the only "real" or "accurate" determination of a pension plan's ultimate pension liabilities occurs when all of the pension plan's obligations have been paid and the pension plan is terminated. In valuing pension assets, time is not the primary problem, but the primary problem is an assumption that the final market price of an investment sold by someone else on a given date by a market reporting mechanism could also be obtained by the pension plan if the plan sold all of its investments on that same date, even though an increase in the supply of investments for sale by that action should have a dampening effect on the available price. The problem of valuing pension plan assets is compounded by the considerable variability in market values from day to day, which makes the comparison of asset values on a predetermined date with the low variability of pension plan liabilities on a given date less reliable.

Bonnie Wurst, ASA

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February 18, 2009

Mr. John Wicklund
Assistant Executive Director, Administration
Minnesota Teachers Retirement Association
60 Empire Drive, Suite 400
St. Paul, MN55103-4000

Subject: Proposed Asset Smoothing Method

Dear John:

As you requested, we have calculated the actuarial value of assets for the Teachers Retirement Association Fund under various scenarios, using the proposed asset smoothing method.

As you know, the purpose of an asset smoothing method is to reduce volatility in contribution rates, which are otherwise subject to the significant volatility of the market value of assets. The current asset smoothing method recognizes investment gains and losses in the Active Fund over a five year period, and recognizes investment gains and losses in the Post Fund immediately. Because the Post Fund is being eliminated (i.e. combined into the Active Fund), the proposed asset smoothing method would recognize investment gains and losses in the combined Active Fund and Post Fund over a five year period, and would limit the resulting actuarial asset value to no more than 120% of market value, and no less than 80% of market value. The change, if adopted, will be effective for valuations in 2009 and later.

The Actuarial Standards Board Actuarial Standard of Practice No. 44 describes acceptable smoothing methods for pension valuations. The standard requires that the actuarial asset values "fall within a reasonable range around the corresponding market values. For example, there might be a corridor centered at market value, outside of which the actuarial value of assets may not fall, in order to assure that the difference from market value is not greater than the actuary deems reasonable." The use of a corridor, such as the 80% to 120% of market value corridor in your proposed method, is consistent with this guidance.

MERCER

Retroactive Application of Proposed Smoothing Method
For informational purposes, we have applied the proposed smoothing method to the June 30, 2007 and June 30, 2008 valuations. The results are attached.

The actuarial value of assets as of June 30, 2007 is $18.76 million under the proposed smoothing method, as compared to $18.79 million under the current method. The 80% to 120% corridor does not affect the result. The proposed method produces a slightly smaller number than the current method because 80% of the 2006-2007 Post Fund investment gain is not recognized.

The actuarial value of assets as of June 30, 2008 is $19.41 million under the proposed smoothing method, as compared to $18.23 million under the current method. The 80% to 120% corridor does not affect the result. The proposed method produces a larger actuarial value of assets than the current method, because 80% of the 2007-2008 Post Fund investment loss is not recognized.

Prospective Application of Proposed Smoothing Method
We prepared the attached graphs to illustrate the proposed asset smoothing method and the impact of the 80% to 120% corridor on a forward looking basis. Post Fund investment gains and losses occurring prior to July 1, 2008 are not smoothed. Post Fund investment gains and losses occurring after June 30, 2008 are recognized over a five year period, beginning with the 2009 valuation.

We estimated assets for a five year period, with a variety of investment return scenarios (but in each case we started out with an assumed loss of 25% in 2008-2009). The investment return scenarios were chosen to illustrate the results of the proposed method in cases of volatility. The graphs show that the actuarial asset value under the proposed smoothing method, with the corridor, is consistently between the market value and the actuarial value of assets without the corridor.

The analysis is based on the financial data, assumptions, plan provisions, and methods (except as noted) described in the actuarial valuation report as of June 30, 2008, dated December 9, 2008.

We are available to answer any questions on the material contained in this letter, or to provide explanations or further details, as may be appropriate.

Sincerely,

Bonnie Wurst. ASA

Copy:
Laurie Hacking – MN Teachers Retirement Association
Jim Verlautz, Sheri Wroblewski, Becky Wegleitner – Mercer

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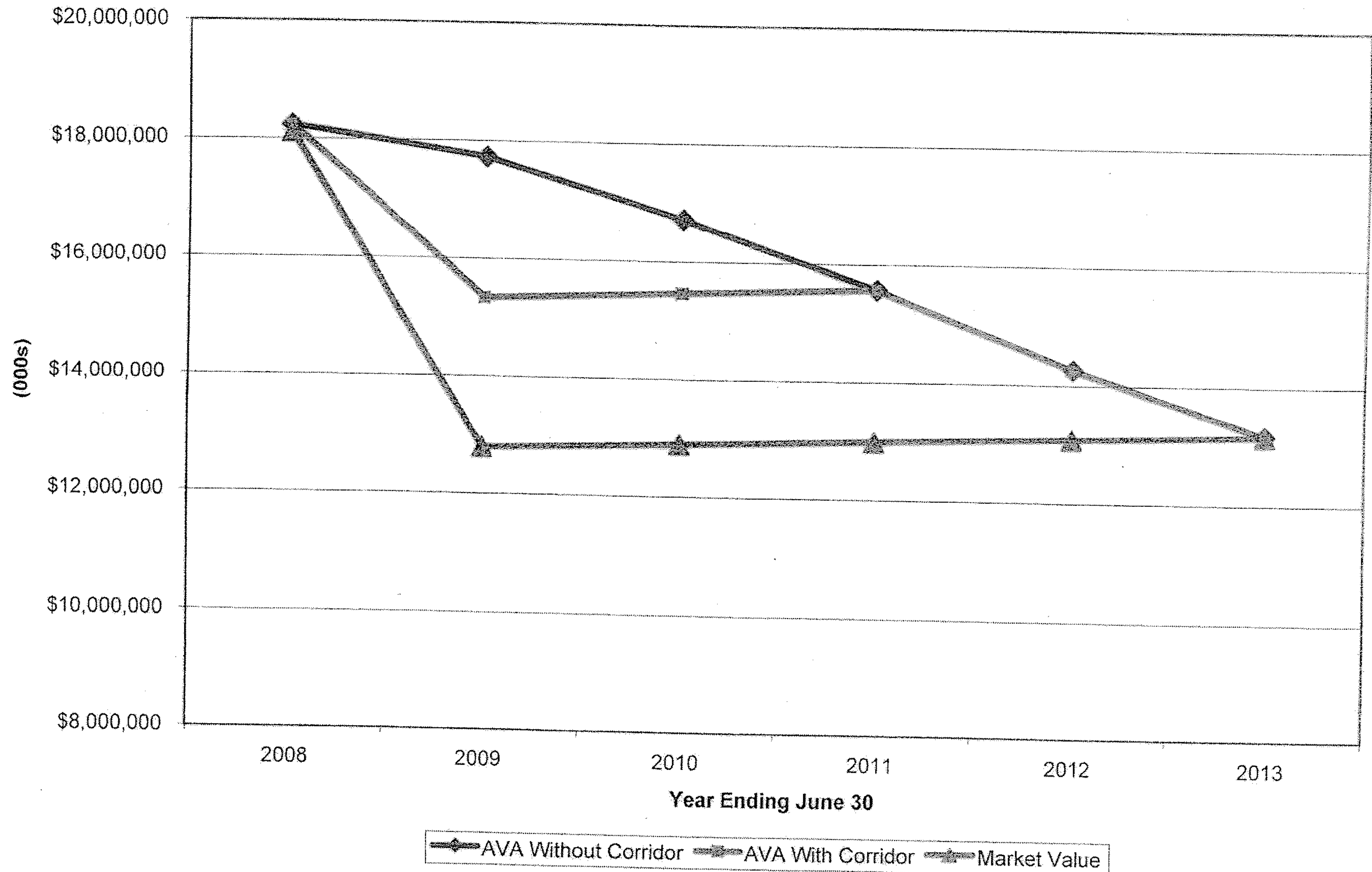
Minnesota Teachers Retirement Association

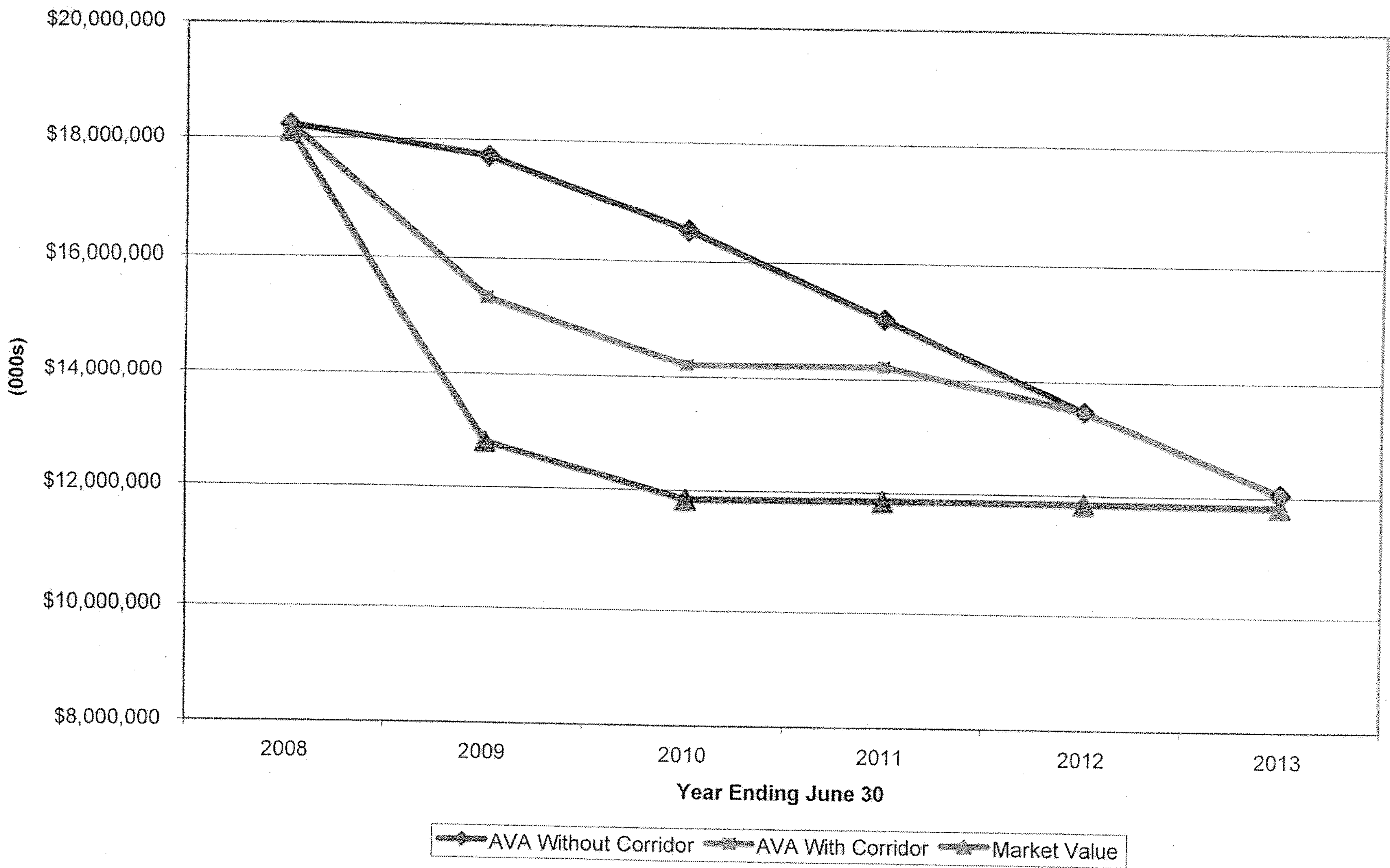
Proposed Asset Smoothing Method - Results with Retroactive Application
(000's)

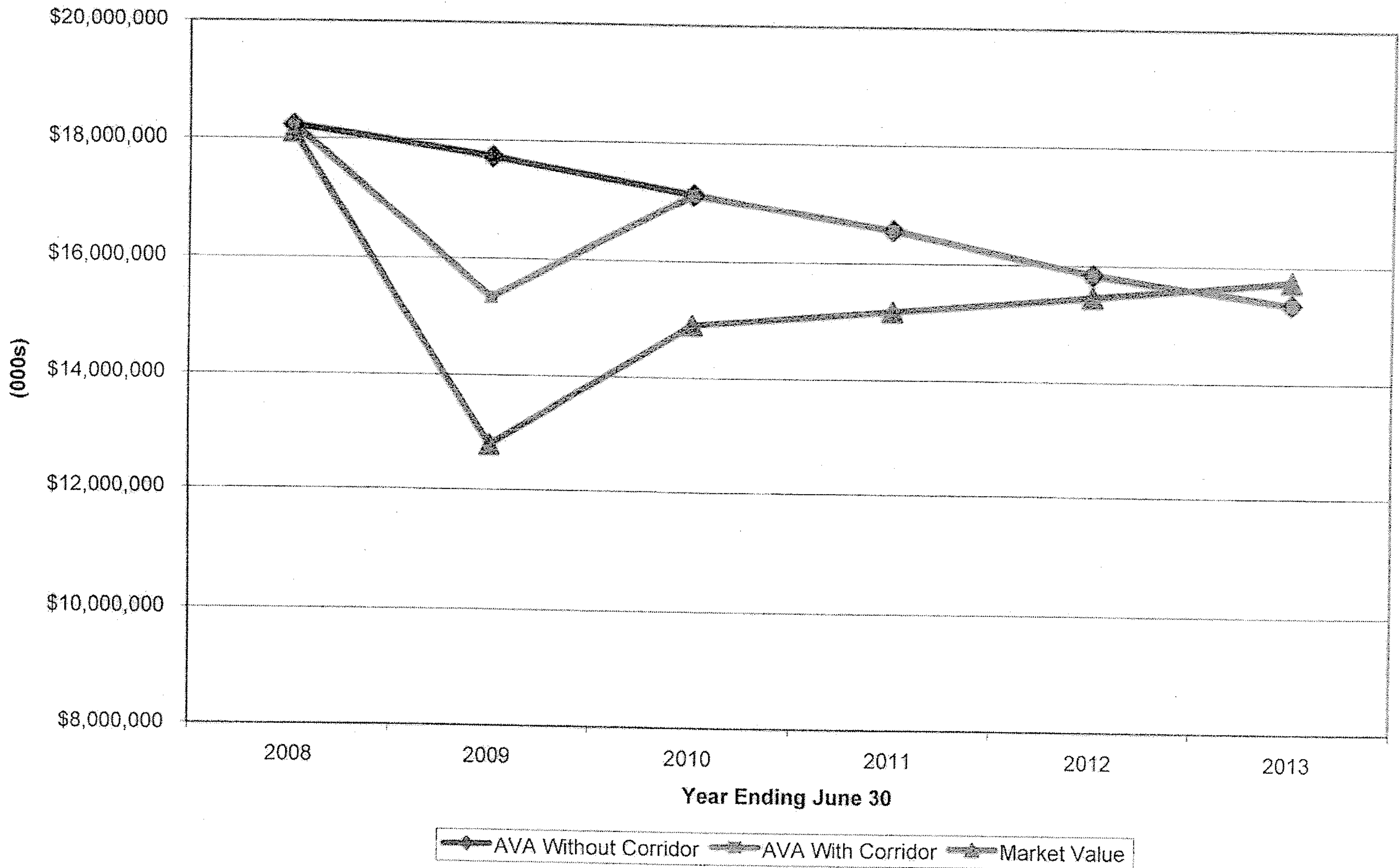
G:\TRA\val08\[TRA post-fund adj 2007.xls]Sheet1

	Year Ending					
	30-Jun-07			30-Jun-08		
	Non-MPRIF Assets	MPRIF Reserve	Market Value of Assets	Non-MPRIF Assets	MPRIF Reserve	Market Value of Assets
1. Fund balance at market value (before MPRIF mortality adjustment)	$ 8,230,852	$ 11,708,030	$ 19,938,882	$ 7,525,066	$ 10,581,900	$ 18,106,966
	Original Amount	% Not Recognized		Original Amount	% Not Recognized	
2. Unrecognized asset returns						
a. Year ended June 30, 2008 - Active Fund				$ (1,066,002)	80%	$ (852,802)
b. Year ended June 30, 2008 - Post Fund				(1,512,203)	80%	(1,209,762)
c. Year ended June 30, 2007 - Active Fund	$ 725,920	80%	$ 580,736	725,920	60%	435,552
d. Year ended June 30, 2007 - Post Fund	43,068	80%	34,454	43,068	60%	25,841
e. Year ended June 30, 2006	653,165	60%	391,899	653,165	40%	261,266
f. Year ended June 30, 2005	179,823	40%	71,929	179,823	20%	35,965
g. Year ended June 30, 2004	499,642	20%	99,928			-
h. Total unrecognized return			1,178,946			(1,303,940)
3. **Preliminary Actuarial Value** *(1 - 2h)*			$ 18,759,936			$ 19,410,906
4. 120% of Market Value *(1 x 120%)*			23,926,658			21,728,359
5. 80% of Market Value *(1 x 80%)*			15,951,106			14,485,573
6. **Actuarial Value of Assets under Proposed Smoothing Method with Retroactive Application** *(3, but not more than 4, nor less than 5)*			18,759,936			19,410,906
7. **Actuarial Value of Assets (Current Methodology)**			18,794,389			18,226,985
8. **Actuarial Accrued Liability**			21,470,314			22,230,841
9. **Official Funded Ratio (Current Method)** *(7 / 8)*			87.54%			81.99%
10. **Alternate Funded Ratio (Proposed Method)** *(6 / 8)*			87.38%			87.32%


Minnesota Teachers Retirement Association
Scenario 1: -25% return FYE 6/30/2009, 8.5% after
$20,000,000
$18,000,000
$16,000,000
$14,000,000
$12,000,000
$10,000,000
$8,000,000
(000s)
2008
2009
2010
2011
2012
2013
Year Ending June 30
AVA Without Corridor
AVA With Corridor
Market Value

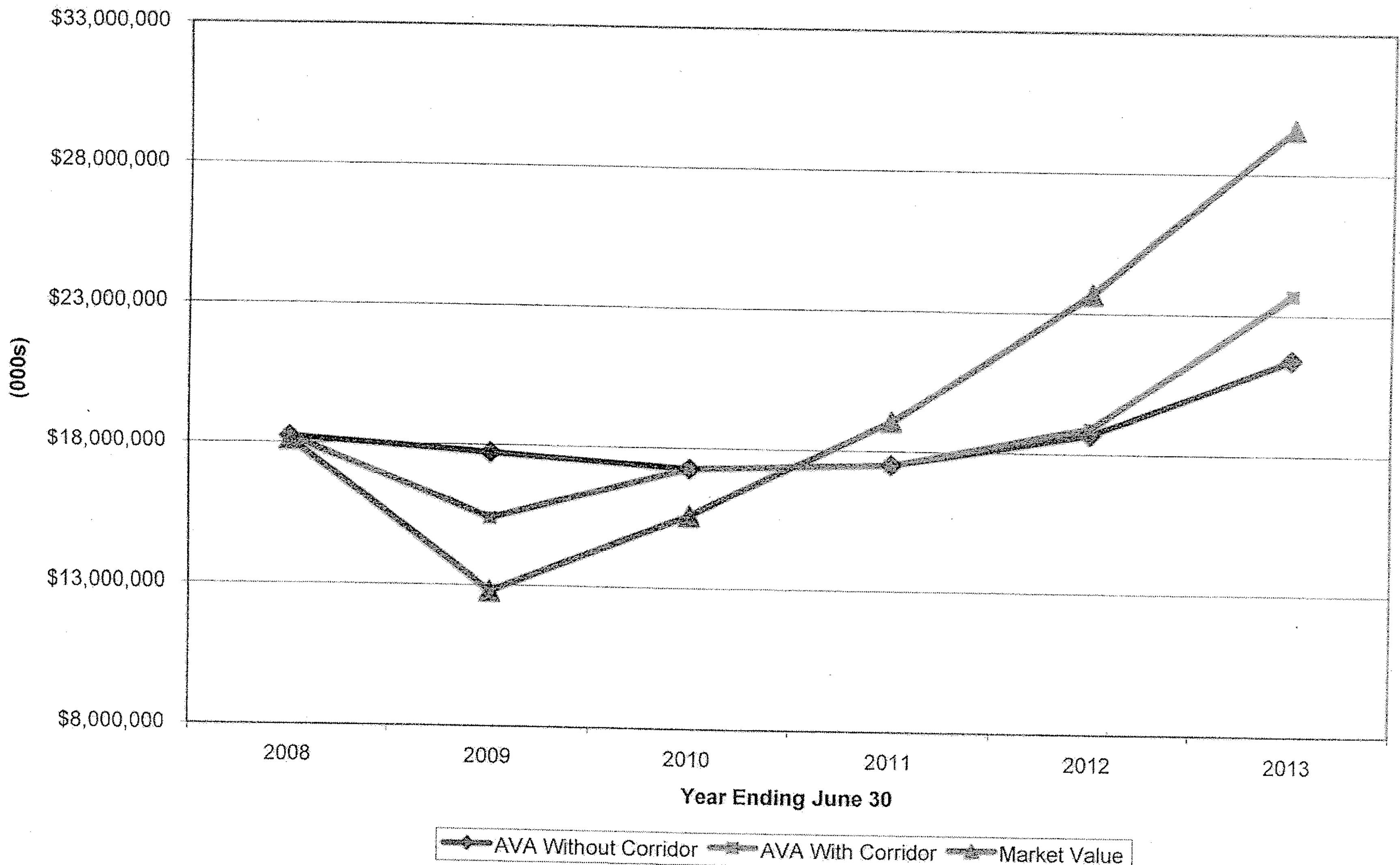
Minnesota Teachers Retirement Association
Scenario 2: -25% return FYE 6/30/2009, 0% return FYE 6/30/2010, 8.5% after





Minnesota Teachers Retirement Association
Scenario 3: -25% return FYE 6/30/2009, 25% return FYE 6/30/2010, 8.5% after
$20,000,000
$18,000,000
$16,000,000
$14,000,000
$12,000,000
$10,000,000
$8,000,000
(000s)
2008
2009
2010
2011
2012
2013
Year Ending June 30
AVA Without Corridor
AVA With Corridor
Market Value

Minnesota Teachers Retirement Association
Scenario 4: -25% return FYE 6/30/2009, 30% return after



1.1 .... moves to amend S.F. No. 777; H.F. No. ....., as follows:

1.2 Page 3, after line 32, insert:

1.3 "Sec. 9. Minnesota Statutes 2008, section 352.021, is amended by adding a subdivision
1.4 to read:

1.5 Subd. 5. **Determining applicable law.** An annuity under this chapter must be
1.6 computed under the law in effect as of the last day for which the employee receives pay,
1.7 or if on medial leave, the day that the leave terminates. However, if the employee has
1.8 returned to covered employment following a termination, the employee must have earned
1.9 at least six months of allowable service following their return in order to qualify for
1.10 improved benefits resulting from any law change enacted subsequent to that termination."

1.11 Page 8, line 24, delete "356.451" and insert "356.415"

1.12 Page 28, lines 10 and 32, after "(v)" insert "if applicable,"

1.13 Page 29, line 19, after "(v)" insert "if applicable,"

1.14 Page 30, line 5, after "(v)" insert "if applicable,"

1.1 .... moves to amend S.F. No. 777; H.F. No. ....., as follows:

1.2 Page 27, line 15, strike "Actuarial" and delete the colon

1.3 Page 27, line 16, delete the new language

1.4 Page 27, line 17, delete the new language and strike ", reduced by:"

1.5 Page 27, lines 18 to 35, delete the new language and strike the old language

1.6 Page 28, lines 1 to 6, delete the new language and strike the old language

1.7 Page 28, line 8, reinstate the stricken period

1.8 Page 28, line 8, to page 30, line 35, delete the new language

1.1 .... moves to amend S.F. No. 777; H.F. No. ....., as follows:

1.2 Page 27, line 24, delete "8.5 percent annually" and insert "the annual percentage
1.3 preretirement interest rate assumption used in the actuarial valuation for July 1, 2005"

1.4 Page 27, line 31, delete "8.5 percent annually" and insert "the annual percentage
1.5 preretirement interest rate assumption used in the actuarial valuation for July 1, 2006"

1.6 Page 28, line 2, delete "8.5 percent annually" and insert "the annual percentage
1.7 preretirement interest rate assumption used in the actuarial valuation for July 1, 2007"

1.8 Page 28, line 8, delete "8.5 percent"

1.9 Page 28, line 9, delete "annually" and insert "the annual percentage preretirement
1.10 interest rate assumption used in the actuarial valuation for July 1, 2008"

1.11 Page 28, line 19, delete "8.5 percent annually" and insert "the annual percentage
1.12 preretirement interest rate assumption used in the actuarial valuation for July 1, 2006"

1.13 Page 28, line 23, delete "8.5 percent annually" and insert "the annual percentage
1.14 preretirement interest rate assumption used in the actuarial valuation for July 1, 2007"

1.15 Page 28, line 27, delete "8.5 percent annually" and insert "the annual percentage
1.16 preretirement interest rate assumption used in the actuarial valuation for July 1, 2008"

1.17 Page 28, line 31, delete "8.5 percent annually" and insert "the annual percentage
1.18 preretirement interest rate assumption used in the actuarial valuation for July 1, 2009"

1.19 Page 29, line 6, delete "8.5 percent annually" and insert "the annual percentage
1.20 preretirement interest rate assumption used in the actuarial valuation for July 1, 2007"

1.21 Page 29, line 10, delete "8.5 percent annually" and insert "the annual percentage
1.22 preretirement interest rate assumption used in the actuarial valuation for July 1, 2008"

1.23 Page 29, line 14, delete "8.5 percent annually" and insert "the annual percentage
1.24 preretirement interest rate assumption used in the actuarial valuation for July 1, 2009"

1.25 Page 29, line 18, delete "8.5 percent annually" and insert "the annual percentage
1.26 preretirement interest rate assumption used in the actuarial valuation for July 1, 2010"

1.27 Page 29, line 28, delete "8.5 percent annually" and insert "the annual percentage
1.28 preretirement interest rate assumption used in the actuarial valuation for July 1, 2008"

1.29 Page 29, line 32, delete "8.5 percent annually" and insert "the annual percentage
1.30 preretirement interest rate assumption used in the actuarial valuation for July 1, 2009"

1.31 Page 29, line 36, delete "8.5 percent annually" and insert "the annual percentage
1.32 preretirement interest rate assumption used in the actuarial valuation for July 1, 2010"

1.33 Page 30, line 4, delete "8.5 percent annually" and insert "the annual percentage
1.34 preretirement interest rate assumption used in the actuarial valuation for July 1, 2011"

2.1 Page 30, line 15, delete "8.5 percent annually" and insert "the annual percentage
2.2 preretirement interest rate assumption used in the actuarial valuation for the July 1 that
2.3 occurred four years earlier"
2.4 Page 30, line 20, delete "8.5 percent annually" and insert "the annual percentage
2.5 preretirement interest rate assumption used in the actuarial valuation for the July 1 that
2.6 occurred three years earlier"
2.7 Page 30, line 25, delete "8.5 percent annually" and insert "the annual percentage
2.8 preretirement interest rate assumption used in the actuarial valuation for the July 1 that
2.9 occurred two years earlier"
2.10 Page 30, line 29, delete "8.5 percent annually" and insert "the annual percentage
2.11 preretirement interest rate assumption used in the actuarial valuation for the July 1 that
2.12 occurred one year earlier"