TO: Members of the Legislative Commission on Pensions and Retirement

FROM: Lawrence A. Martin, Executive Director

RE: Statewide Retirement Plan Administrators Request for Actuarial Standards Amendment Relating to the Recognition of Future Post-Retirement Adjustments

DATE: November 4, 2013

Introduction

On October 16, 2013, the executive directors of the Minnesota State Retirement System (MSRS), the Public Employees Retirement Association (PERA), and the Teachers Retirement Association (TRA), sent a letter (**Attachment A**) to Commission Chair Senator Sandra Pappas, requesting that the Commission take action before early December 2013 on an amendment to its Standards For Actuarial Work relating to the calculation of actuarial accrued liability, normal cost, amortization contribution, and full actuarial funding cost for their retirement plan(s) for varying post-retirement adjustment rates in future years.

This memorandum summarizes the current actuarial reporting law and Standards For Actuarial Work provisions governing the actuarial liabilities and costs for future post-retirement adjustments, the MSRS/PERA/TRA request, and the options available to the Commission in response.

Current Actuarial Reporting Law and Standards Provisions on Post-Retirement Adjustments

Minnesota Statutes, Section 356.215, is the basic Minnesota law governing actuarial reporting on defined benefit retirement plans.

Minnesota Statutes, Section 356.215, Subdivision 6, requires that the actuarial accrued liability for each Minnesota defined benefit retirement plan be calculated under the Entry Age Actuarial Cost Method by calculating the present value of future benefits payable from the retirement fund and subtracting from that figure the present value of future normal cost contributions to the retirement fund. Under Minnesota Statutes, Section 356.215, Subdivision 5, normal cost under the Entry Age Actuarial cost method is calculated as the present value of future benefits of the active membership of the retirement plan expressed as a level percentage of the present value of the future expected payrolls of the active membership of the retirement plan as of the valuation date. The present value calculations are made using a combination of statutory (under Minn. Stat. Sec. 356.215, Subd. 8) actuarial assumptions (pre-retirement interest, post-retirement interest, and salary scale (increase)) and Commission-approved non-statutory actuarial assumptions (mortality, retirement age, turnover/withdrawal, disablement, family composition, and optional annuity form utilization).

A pension plan's unfunded actuarial accrued liability is calculated under Minnesota Statutes, Section 356.215, Subdivision 1, Paragraphs (f) and (g), and Subdivision 11, as the actuarial accrued liability of the retirement plan after subtracting the actuarial value of assets. The actuarial value of assets is a smoothing technique over five years.

The amortization requirement for most Minnesota defined benefit retirement plans under Minnesota Statutes, Section 356.215, Subdivision 11, is the level percentage rate for the covered payroll of the active membership of the retirement plan increasing at a specified rate, under Minnesota Statutes, Section 356.215, Subdivision 8, (generally 3.5% per year) necessary to fully pay off the current unfunded actuarial accrued liability of the retirement plan by the specified amortization target date (ranging from 2031 to 2040 or, for the St. Paul Teachers Retirement Fund Association (SPTRFA), as a date reset annually 25 years hence. The full actuarial requirements of the retirement plan is a combination of the normal cost of the retirement plan, the current year's administrative expenses expressed as a percentage of the current year's covered payroll, and the amortization requirement.

Minnesota Statutes, Section 356.215, does not include an express actuarial assumption as to future post-retirement adjustments, but instead includes expected future post-retirement adjustments by utilizing a reduced interest rate assumption rate for post-retirement than is used for pre-retirement, with the differential set at the generally applicable annual post-retirement adjustment rate of 2.5% under Minnesota Statutes, Section 356.415, Subdivision 1.

To recognize the actuarial liability and total actuarial financial requirements reductions arising from the 2010 Financial Sustainability Legislation (Laws 2010, Ch. 359, Art. 1), Minnesota Statutes, Section 356.415, Subdivision 3, provides that the differential between the pre-retirement interest rate and the post-retirement interest rate will be adjusted by the difference between the post-retirement adjustment rate under the 2010 legislation and the full 2.5% post-retirement adjustment rate for the period until the retirement plan achieves a 90% funded ratio (assets expressed as a percentage of actuarial accrued liability) on a market value of assets is achieved.

Since 2010 and the enactment of Minnesota Statutes, Section 356.415, Subdivision 3, the trigger for the return to the pre-2010 post-retirement adjustment rate has been modified for the St. Paul Teachers Retirement Fund Association (SPTRFA) to an 80% funded ratio for a 2% annual post-retirement adjustment and to a 90% funded ratio for a return to the pre-2010 post-retirement adjustment rate (1st Spec. Laws 2011, Ch. 8, Art. 2, Sec. 3-5, 22), for the State Patrol Retirement Plan, where the 90% funded ratio was changed to an 85% funded ratio (Laws 2013, Ch. 111, Art. 9, Sec. 10), for the General Employees Retirement Plan of the Public Employees Retirement Association (PERA-General), the Public Employees Police and Fire Retirement Plan (PERA-P&F), and the Local Government Correctional Service Retirement Plan (PERA-Correctional), where the 90% funded trigger must be maintained for two consecutive years before a resumption and the reduced rate if in a subsequent year after the trigger was attained the funded ration falls to 85% for two consecutive years or to 80% in one year (Laws 2013, Ch. 111, Art. 11, Sec. 13-14), for the Duluth Teachers Retirement Fund Association (DTRFA), where a two-trigger (80% funded ratio and 90% funded ratio) provision was scrapped in favor of a 90% funded ratio trigger, and for the Judges Retirement Plan, where the 90% funded ratio trigger and a 2% annual reduced post-retirement adjustment rate was modified with the addition of a 1.5% annual post retirement adjustment rate until the retirement plan is at least 70% funded on a market value basis (Laws 2013, Ch. 111, Art. 14, Sec. 2-3).

The Commission's Standards For Actuarial Work, last amended by the Commission on August 11, 2010, generally parallels the requirements of Minnesota Statutes, Section 356.215, provides specific detailed requirements for various actuarial calculations, and requires a projection of the actuarial condition of the retirement plan over time assuming that future experience matches the applicable actuarial assumption. The Standards do not reflect the provisions of Minnesota Statutes, Section 356.415, and do not specify how the annual actuarial valuations are to handle the uncertainty of when the annual post-retirement adjustment rate returns to 2.5% because the retirement fund became at least 90% funded on a market value of assets basis.

Retirement Plan Administrators Actuarial Standards Amendment Request

The executive directors of MSRS, PERA, and TRA are requesting Commission guidance, through an amendment to the Commission's Standards For Actuarial Work by early December 2013 on determining when the various Minnesota defined benefit retirement plans will attain the funded ratio trigger figure or figures. The requested amendment, although not reduced to the required amendatory language, would capture the procedure used by the various consulting actuaries in past actuarial valuations.

The following is an example of the future post-retirement adjustment rate valuation procedure that the executive directors forwarded, drawn from the July 1, 2010, actuarial valuation of the retirement plan:

Actuarial Valuation Report Local Government Correctional Service Retirement Plan

Effects of Changes *(continued)*

Valuation of Future Post-Retirement Benefit Increases

A very important assumption affecting the valuation results is the expectation of future post-retirement benefit increases. The plan's accrued liability funding ratio (on a market value of assets basis and assuming 1. 0% benefit increases for the first four years and 2.5% thereafter) is currently 84.9%. If the plan reaches a funding ratio of 90% (on a market value of assets basis) in the future, post-retirement increases will revert to 2.5%.

We performed a projection of liabilities and assets, using the 2010 valuation results as a baseline and assuming future experience follows the valuation assumptions (including future investment returns of 8.5%). In addition, the projection utilized the following methods and assumptions:

- Liabilities and normal cost assume future COLAs at 2.5% level payable for all years
- Cash flow assuming future COLAs at current 1% level
- Level normal cost as a percent of pay (assuming total payroll increases as assumed in the valuation for purposes of amortizing the unfunded liability)
- Current statutory contribution levels (i.e. not including potential contribution increases under the contribution stabilizer statutes)

Based on these assumptions and methods, the projection indicates that the funded status of this plan is expected to reach 90% in four years.

The liabilities in this report are based on the assumption that the post-retirement benefit increase will be 1.0% for the first four years and 2.5% thereafter. We relied on direction from PERA, including PERA's interpretation of applicable Minnesota Statutes, on this issue. If we assumed future post-retirement benefit increases of2.5% for all years, the actuarial accrued liability would be approximately $252 million instead of approximately $249 million, resulting in an actuarial accrued liability funded ratio of 83.9% (on a market value basis).

The following is the comparable exhibit from the most recent (July 1, 2012) actuarial valuation of the PERA-Correctional plan, for comparison:

Actuarial Valuation Report | Local Government Correctional Service Retirement Plan

Summary of Valuation Results

Valuation of Future Post-Retirement Benefit Increases

A very important assumption affecting the valuation results is the expectation of future post-retirement benefit increases. The post-retirement benefit increases changed from 2.5% to 1.0% per year beginning January 1, 2011, and from 1.0% to 2.5% per year beginning January 1, 2012, after the Plan attained an accrued liability funding ratio of 90% on a market value of assets basis. The statutes provide for a post- retirement benefit increase of 2.5% per year as long as the funding ratio referenced above remains above 90%.

As of July 1, 2012, the Plan's accrued liability funding ratio on a market value of assets basis, assuming future post-retirement increases of 2.5% per year, is 88.99%. If PERA needs additional information from GRS in order to administer the Plan's post-retirement benefit increases, please let us know. We recommend that the process for determining the Plan's post-retirement benefit increases, including the actuarial process, be reviewed before next year's valuation.

Options for Further Commission Consideration or Action

As the Commission staff appraises the situation, the Commission has both substantive options in responding to this request and timing options in undertaking that response.

The substantive options that the Commission staff has identified are:

1. Standards Amendment Based on PERA-Correctional Example. The Commission could consider and act on an amendment to the Standards For Actuarial Work that would replicate the substance of the procedure outlined in the July 1, 2010, PERA-Correctional actuarial valuation (see **Attachment B**);

2. Derive Comprehensive Standards Amendment on Post-Retirement Adjustments. The Commission could direct the Commission staff to prepare, circulate to interested parties, and present to the Commission for consideration and action an amendment to the Standards For Actuarial Work that would guide the consulting actuaries of the various statewide and major local retirement plans in determining annually the period of the duration of a reduction or reductions in their post-retirement adjustment rates, the date of the return to full post-retirement adjustment rates, and the calculation of the consequent increased post-retirement adjustment liability; or

3. Replace Implicit Post-Retirement Actuarial Assumption with Explicit Post-Retirement Adjustment Actuarial Assumption. The Commission could consider and act to recommend or decline to recommend an amendment to Minnesota Statutes, Section 356.215, Subdivision 8, that would replace the current utilization of pre-retirement and post-retirement interest rate actuarial assumptions as a mechanism for setting an implicit post-retirement adjustment actuarial assumption with an explicit set of post-retirement adjustment actuarial assumptions for applicable future periods (see LCPR13-042R, **Attachment C**).

The substantive options have timing considerations. Option #1 could be pursued by the Commission at this meeting or at a subsequent meeting. Because the issue was not presented to the Commission until October 2013, although having existed since May 2010, and because the Standards amendment was given no notice to potentially interested parties if the Commission acted at this meeting, there is an argument that Commission action should be postponed to the next Commission meeting, or if that is too late, to an earlier special Commission meeting held for that purpose. Option #2, because the requested substance of the amendment likely is applicable cleanly to only a portion of the affected retirement plans, would require some delay because the amendment to the Standards For Actuarial Work would likely be somewhat complex to cover all of the post-retirement adjustment mechanisms accurately and completely and would benefit from Commission consideration only after the language of the potential amendment can be fully vetted. Option #3, as a legislative response, could be considered by the Commission at any time for a recommendation, but would not be effective until sometime in 2014.

__________________________ moves that the Legislative Commission on Pensions and Retirement approve the following amendment to the Standards For Actuarial Work, effective for the actuarial valuations prepared as of July 1, 2013:

To Part II. Actuarial Assumptions, Subpart B. Economic Assumptions, is added:

"<u>(4) As a transitional provision, until the funded condition of the retirement plan is 90 percent or greater, the funded status of the plan must be projected assuming</u>

<u>(a) The actuarial accrued liabilities and normal cost are calculated with annual post-retirement adjustments at 2.5 percent per year are payable for all years;</u>

<u>(b) the cash flow of the retirement plan is calculated assuming post-retirement adjustments at the post-2-1- reduced rate;</u>

<u>(c) the level normal cost is calculated as a percent of pay assuming the total payroll increases at the applicable rate under Minnesota Statutes, Section 356.215, Subdivision 8, Paragraph (c);</u>

<u>(d) the contributions to the retirement plan are calculated under the current statutory contribution levels without considering contribution increases under the contribution stabilizer provisions.</u>

<u>Until the July 1 in which the retirement plan is projected to be at least 90 percent funded, the post retirement interest rate assumption must be the pre-retirement interest rate assumption reduced by the reduced post-retirement adjustment rate and 2.5 percent thereafter.</u>

A bill for an act

relating to retirement; interest rate and postretirement adjustment rate actuarial assumptions; replacing an implicit postretirement adjustment rate actuarial assumption with an explicit actuarial assumption; amending Minnesota Statutes 2013 Supplement, section 356.215, subdivision 8; repealing Minnesota Statutes 2012, section 356.415, subdivision 3.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. Minnesota Statutes 2013 Supplement, section 356.215, subdivision 8, is amended to read:

Subd. 8. **Interest and salary assumptions.** (a) The actuarial valuation must use the applicable following ~~preretirement~~ interest assumption ~~and the applicable following postretirement interest assumption~~:

(1) select and ultimate interest rate assumption

plan	ultimate ~~preretirement~~ interest rate assumption	~~ultimate postretirement interest rate assumption~~
general state employees retirement plan	8.5%	~~6.0%~~
correctional state employees retirement plan	8.5	~~6.0~~
State Patrol retirement plan	8.5	~~6.0~~
legislators retirement plan, and for the constitutional officers calculation of total plan liabilities	0.0	~~0.0~~
judges retirement plan	8.5	~~6.0~~
general public employees retirement plan	8.5	~~6.0~~
public employees police and fire retirement plan	8.5	~~6.0~~
local government correctional service retirement plan	8.5	~~6.0~~
teachers retirement plan	8.5	~~6.0~~

Duluth teachers retirement plan	8.5	~~8.5~~
St. Paul teachers retirement plan	8.5	~~8.5~~

Except for the legislators retirement plan and the constitutional officers calculation of total plan liabilities, the select preretirement interest rate assumption for the period after June 30, 2012, through June 30, 2017, is 8.0 percent. ~~Except for the legislators retirement plan and the constitutional officers calculation of total plan liabilities, the select postretirement interest rate assumption for the period after June 30, 2012, through June 30, 2017, is 5.5 percent, except for the Duluth teachers retirement plan and the St. Paul teachers retirement plan, each with a select postretirement interest rate assumption for the period after June 30, 2012, through June 30, 2017, of 8.0 percent.~~

(2) single rate ~~preretirement and postretirement~~ interest rate assumption

plan	interest rate assumption
Bloomington Fire Department Relief Association	6.0
local monthly benefit volunteer firefighters relief associations	5.0

(b) The actuarial valuation must use the applicable postretirement adjustment rate actuarial assumption for the applicable period or periods:

plan	rate and duration
general state employees retirement plan	2.0% until December 31, 2040, 2.5% thereafter
correctional state employees retirement plan	2.0% until December 31, 2038, 2.5% thereafter
State Patrol retirement plan	1.0% until December 31, 2037, 2.5% thereafter
legislators retirement plan, including constitutional officers	2.0% until December 31, 2040, 2.5% thereafter
judges retirement plan	1.75% until December 31, 2039, 2.5% thereafter
general public employees retirement plan	1.0% until December 31, 2031, 2.5% thereafter
public employees police and fire retirement plan	1.0% until December 31, 2039, 2.5% thereafter
local government correctional service retirement plan	1.0% until December 31, 2015, 2.5% thereafter
MERF division of the Public Employees Retirement Association	1.0% until December 31, 2031, 2.5% thereafter
teachers retirement plan	2.0% until December 31, 37, 2.5% thereafter
Duluth teachers retirement plan	1.0% until December 31, 2039, 2.5% thereafter
St. Paul teachers retirement plan	1.0% until December 31, 2038, 2.5% thereafter

~~(b)~~ (c) The actuarial valuation must use the applicable following single rate future salary increase assumption, the applicable following modified single rate future salary increase assumption, or the applicable following graded rate future salary increase assumption:

(1) single rate future salary increase assumption

plan	future salary increase assumption
legislators retirement plan	5.0%
judges retirement plan	3.0
Bloomington Fire Department Relief Association	4.0

(2) age-related future salary increase age-related select and ultimate future salary increase assumption or graded rate future salary increase assumption

plan	future salary increase assumption
local government correctional service retirement plan	assumption C
Duluth teachers retirement plan	assumption A
St. Paul teachers retirement plan	assumption B

For plans other than the Duluth teachers retirement plan, the select calculation is: during the designated select period, a designated percentage rate is multiplied by the result of the designated integer minus T, where T is the number of completed years of service, and is added to the applicable future salary increase assumption. The designated select period is ten years and the designated integer is ten for the Duluth Teachers Retirement Fund Association and for the local government correctional service retirement plan and 15 for the St. Paul Teachers Retirement Fund Association. The designated percentage rate is 0.2 percent for the St. Paul Teachers Retirement Fund Association. The select calculation for the Duluth Teachers Retirement Fund Association is 8.00 percent per year for service years one through seven, 7.25 percent per year for service years seven and eight, and 6.50 percent per year for service years eight and nine.

The ultimate future salary increase assumption is:

age	A	B	C
16	6.00%	5.90%	9.00%
17	6.00	5.90	9.00
18	6.00	5.90	9.00
19	6.00	5.90	9.00
20	6.00	5.90	9.00
21	6.00	5.90	8.75
22	6.00	5.90	8.50
23	6.00	5.85	8.25
24	6.00	5.80	8.00
25	6.00	5.75	7.75
26	6.00	5.70	7.50
27	6.00	5.65	7.25
28	6.00	5.60	7.00
29	6.00	5.55	6.75
30	6.00	5.50	6.75
31	6.00	5.45	6.50
32	6.00	5.40	6.50
33	6.00	5.35	6.50
34	6.00	5.30	6.25
35	6.00	5.25	6.25
36	5.86	5.20	6.00
37	5.73	5.15	6.00
38	5.59	5.10	6.00
39	5.45	5.05	5.75
40	5.31	5.00	5.75
41	5.18	4.95	5.75
42	5.04	4.90	5.50
43	4.90	4.85	5.25
44	4.76	4.80	5.25
45	4.63	4.75	5.00
46	4.49	4.70	5.00
47	4.35	4.65	5.00
48	4.21	4.60	5.00
49	4.08	4.55	5.00
50	3.94	4.50	5.00
51	3.80	4.45	5.00
52	3.66	4.40	5.00
53	3.53	4.35	5.00
54	3.39	4.30	5.00

55	3.25	4.25	4.75
56	3.25	4.20	4.75
57	3.25	4.15	4.50
58	3.25	4.10	4.25
59	3.25	4.05	4.25
60	3.25	4.00	4.25
61	3.25	4.00	4.25
62	3.25	4.00	4.25
63	3.25	4.00	4.25
64	3.25	4.00	4.25
65	3.25	4.00	4.00
66	3.25	4.00	4.00
67	3.25	4.00	4.00
68	3.25	4.00	4.00
69	3.25	4.00	4.00
70	3.25	4.00	4.00

(3) service-related ultimate future salary increase assumption

general state employees retirement plan of the Minnesota State Retirement System	assumption A
general employees retirement plan of the Public Employees Retirement Association	assumption B
Teachers Retirement Association	assumption C
public employees police and fire retirement plan	assumption D
State Patrol retirement plan	assumption E
correctional state employees retirement plan of the Minnesota State Retirement System	assumption F

service length	A	B	C	D	E	F
1	10.50%	12.03%	12.00%	13.00%	8.00%	6.00%
2	8.10	8.90	9.00	11.00	7.50	5.85
3	6.90	7.46	8.00	9.00	7.00	5.70
4	6.20	6.58	7.50	8.00	6.75	5.55
5	5.70	5.97	7.25	6.50	6.50	5.40
6	5.30	5.52	7.00	6.10	6.25	5.25
7	5.00	5.16	6.85	5.80	6.00	5.10
8	4.70	4.87	6.70	5.60	5.85	4.95
9	4.50	4.63	6.55	5.40	5.70	4.80
10	4.40	4.42	6.40	5.30	5.55	4.65
11	4.20	4.24	6.25	5.20	5.40	4.55
12	4.10	4.08	6.00	5.10	5.25	4.45
13	4.00	3.94	5.75	5.00	5.10	4.35
14	3.80	3.82	5.50	4.90	4.95	4.25
15	3.70	3.70	5.25	4.80	4.80	4.15

16	3.60	3.60	5.00	4.80	4.65	4.05
17	3.50	3.51	4.75	4.80	4.50	3.95
18	3.50	3.50	4.50	4.80	4.35	3.85
19	3.50	3.50	4.25	4.80	4.20	3.75
20	3.50	3.50	4.00	4.80	4.05	3.75
21	3.50	3.50	3.90	4.70	4.00	3.75
22	3.50	3.50	3.80	4.60	4.00	3.75
23	3.50	3.50	3.70	4.50	4.00	3.75
24	3.50	3.50	3.60	4.50	4.00	3.75
25	3.50	3.50	3.50	4.50	4.00	3.75
26	3.50	3.50	3.50	4.50	4.00	3.75
27	3.50	3.50	3.50	4.50	4.00	3.75
28	3.50	3.50	3.50	4.50	4.00	3.75
29	3.50	3.50	3.50	4.50	4.00	3.75
30 or more	3.50	3.50	3.50	4.50	4.00	3.75

~~(c)~~ (d) The actuarial valuation must use the applicable following payroll growth assumption for calculating the amortization requirement for the unfunded actuarial accrued liability where the amortization retirement is calculated as a level percentage of an increasing payroll:

plan	payroll growth assumption
general state employees retirement plan of the Minnesota State Retirement System	3.75%
correctional state employees retirement plan	3.75
State Patrol retirement plan	3.75
judges retirement plan	3.00
general employees retirement plan of the Public Employees Retirement Association	3.75
public employees police and fire retirement plan	3.75
local government correctional service retirement plan	3.75
teachers retirement plan	3.75
Duluth teachers retirement plan	3.50
St. Paul teachers retirement plan	4.00

~~(d)~~ (e) The assumptions set forth in paragraphs (b) and (c) continue to apply, unless a different salary assumption or a different payroll increase assumption:

(1) has been proposed by the governing board of the applicable retirement plan;

(2) is accompanied by the concurring recommendation of the actuary retained under section 356.214, subdivision 1, if applicable, or by the approved actuary preparing the most recent actuarial valuation report if section 356.214 does not apply; and

(3) has been approved or deemed approved under subdivision 18.

EFFECTIVE DATE. This section is effective June 30, 2014, and applies to actuarial valuation reports prepared on or after that date.

Sec. 2. **REPEALER.**

Minnesota Statutes 2012, section 356.415, subdivision 3, is repealed.

EFFECTIVE DATE. This section is effective June 30, 2014, and applies to actuarial valuation reports prepared on or after that date.