



**S.F. 2641**  
(Pappas)

**H.F. xxxx**

### **Executive Summary of Commission Staff Materials**

*Affected Pension Plan(s):* Actuarial reporting; public employee defined benefit plans  
*Relevant Provisions of Law:* Minnesota Statutes, 356.215, Subdivision 8  
*General Nature of Proposal:* Specifies explicit post-retirement adjustment rate assumptions.  
*Date of Summary:* March 20, 2014

### **Specific Proposed Changes**

- Replaces the current implicit post-retirement adjustment rate actuarial assumption with an explicit post-retirement adjustment rate actuarial assumption for each Minnesota public employee defined benefit retirement plan and repeals the temporary reduced post-retirement adjustment rate interest rate adjustment provision enacted in 2010.

### **Policy Issues Raised by the Proposed Legislation**

1. Appropriateness of using explicit post-retirement adjustment rate actuarial assumptions.
2. Appropriate duration in assuming the reduced post-retirement adjustment rate.
3. Likely actuarial impact of the proposed explicit post-retirement adjustment rate assumption.

### **Potential Amendment**

S2641-1A, requested by PERA, re-includes PERA in the actuarial reporting law that makes a proportional extension in the amortization target date based on the size of any new unfunded actuarial accrued liability from a benefit increase, actuarial assumption change, or actuarial method change bears to the prior amortization period.

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TO: Members of the Legislative Commission on Pensions and Retirement  
FROM: Lawrence A. Martin, Executive Director *JAM*  
RE: S.F. 2641 (Pappas); H.F. xxxx: Actuarial Reporting; Specifying Explicit Post-Retirement Adjustment Rate Actuarial Assumptions  
DATE: March 20, 2014

Summary of S.F. 2641 (Pappas); H.F. xxxx

S.F. 2641 (Pappas); H.F. xxxx amends Minnesota Statutes, Section 356.215, Subdivision 8, the interest and salary rate assumption portion of the actuarial valuation reporting law, by replacing the current implicit post-retirement adjustment rate actuarial assumption with an explicit post-retirement adjustment rate actuarial assumption for each Minnesota public employee defined benefit retirement plan, and by repealing the temporary reduced post-retirement adjustment rate interest rate adjustment provision of Minnesota Statutes, Section 356.415, Subdivision 3, enacted in 2010.

Background Information on Relevant Topics

The following attachments provide background information on topics relevant to the proposed legislation:

- **Attachment A:** Background information on the role and function of interest rate actuarial assumptions.
- **Attachment B:** Background information comparing the current post-retirement adjustment mechanisms for retirees, disabilitants, and survivors.
- **Attachment C:** Background information on the development of implicit post-retirement adjustment rate actuarial assumptions.

Discussion and Analysis

S.F. 2641 (Pappas); H.F. xxxx modifies the Minnesota public pension actuarial reporting law by disentangling the explicit interest rate actuarial assumption used to discount future benefit payments and actuarial accrued liabilities and the implicit post-retirement adjustment rate actuarial assumption, first employed by Minnesota public employee defined benefit retirement plans in 1984 and retained since then, by reverting to a single interest rate assumption, the current pre-retirement interest rate assumption, and by setting a specific explicit set of post-retirement adjustment rate assumptions of the Minnesota public employee defined benefit retirement plans based on the current reduced post-retirement adjustment rate for the period up to the particular retirement plan's current amortization target date unless the conversion to the full post-retirement adjustment rate funded ratio threshold occurs before then, and the specific full rate current law post-retirement adjustment rate actuarial assumption set thereafter.

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

1. Appropriateness of Using Explicit Post-Retirement Adjustment Rate Actuarial Assumptions. The policy issue is whether or not it is appropriate to utilize explicit post-retirement adjustment rate actuarial assumptions as proposed in the proposed legislation. In Minnesota defined benefit public pension plans, implicit actuarial assumptions have been rare, limited to an inflation assumption and a post-retirement adjustment assumption. The implicit post-retirement adjustment assumption in Minnesota for most statewide and major local retirement plans is a function of the difference between the pre-retirement interest rate and post-retirement interest rate assumptions and further adjusted, under Minnesota Statutes, Section 356.415, Subdivision 3, based on the post-retirement adjustment downsizing under the 2010 financial sustainability legislation (Laws 2010, Ch. 359, Art. 1, Sec. 76-82).

Since 2010, all of the statewide and major local Minnesota public employee defined benefit retirement plans have downsized their post-retirement adjustment rates until their funding ratios, generally on a market value of assets basis, improve to a designated level, meaning that the actuaries preparing the annual actuarial valuation must project future funding ratios in order to determine how long an adjusted margin or differential between the pre-retirement interest rate actuarial assumption and the post-retirement interest rate actuarial assumption would continue.

If transparency in the actuarial work for Minnesota public employee defined benefit retirement plans is a valuable attribute, the implicit post-retirement adjustment actuarial assumption underlying the differential interest rate actuarial assumptions used in those actuarial valuations and the additional interest rate differential adjustment introduced in 2010 mask any transparency and are beyond the likely understanding of many plan members and all but the most actuarially sophisticated outside readers of Minnesota actuarial work.

If accuracy in the actuarial work for Minnesota public employee defined benefit retirement plans is important, the current differential interest actuarial assumption rates fail. In the June 30, 2013, actuarial valuations for seven of the Minnesota public employee defined benefit retirement plans, the preparing actuary disclosed that the mathematical impact of the differential in pre- and post-retirement interest assumption rates was less than the applicable downsized post-retirement adjustment rate, as follows:

Retirement Plan	Mathematical Effect of Differential Rates	Current Post-Retirement Adjustment Rate
MSRS-General	1.9%	2.0%
PERA-General	0.9%	1.0%
MSRS-Correctional	1.9%	2.0%
State Patrol	0.9%	1.0%
PERA-P&F	0.9%	1.0%
PERA-Correctional	2.4%	2.5%
Judges Retirement Plan	1.64%	1.75 %

2. Appropriate Duration in Assuming the Reduced Post-Retirement Adjustment Rate. The policy issue is the appropriate duration for assuming the current reduced post-retirement adjustment rates will continue. Under the current implicit post-retirement adjustment rate assumption under Minnesota Statutes, Section 356.215, Subdivision 8, as modified by the transitional provision of Minnesota Statutes, Section 356.415, Subdivision 3, except for the Local Government Correctional Service Retirement Plan (PERA-Correctional), the current reduced post-retirement adjustment rate implicit actuarial assumption, in addition to understating the actual adjustment rate, assumes that the reduced post-retirement adjustment rates will continue at the downsized amount for the duration, without end. The proposed legislation limits the duration of assuming a continuation of the downsized post-retirement adjustment rate to the target date for amortization for the particular retirement plan. All statewide and major local Minnesota public plans return to their full post-retirement adjustment rate upon becoming 90% funded, generally on a market value of assets, and generally upon attaining that funded ratio for a single plan year. For these plans, with amortization target dates for full funding on an actuarial value of assets, if that target models future contribution rate and related decisions, they will be at least 90% funded on a market value basis as of that amortization target date. If there is no commitment to meet those funding target dates, the proposed duration period for the reduced post-retirement adjustment rate will be incorrect, but that lack of commitment also could be viewed as perpetrating a fraud on public pension plan members.
  
3. Likely Actuarial Impact of the Proposed Explicit Post-Retirement Adjustment Rate Assumption. The policy issue is the likelihood that additional actuarial liabilities and actuarial cost will be recognized by the affected retirement plans as a result of the proposed legislation, if enacted. The current implicit post-retirement adjustment rate actuarial assumption understates the amount of the reduced rate of the post-retirement adjustment and overstates the duration expected for that reduced post-retirement adjustment rate, both of which result in an under-recognition of post-retirement adjustment liabilities and costs. By setting the post-retirement adjustment rate to equal the actual reduced post-retirement rate in effect and by recognizing a duration of that reduced rate within the context of the current amortization period, the proposed legislation arguable recognizes liabilities and costs that are real and which are being inappropriately understated currently. If the reduced post-retirement adjustment rate and period are under-recognizing liabilities and costs that are known or generally predictable, beginning to recognize those liabilities and costs earlier and more fully will reduce the shock to the funding process that would otherwise occur if the current transitional implicit actuarial assumption were allowed to continue.

The General Employees Retirement Plan of the Public Employees Retirement Association (PERA-General) excepted itself from a procedure in the Minnesota actuarial reporting law since 1975 that makes a proportional extension in the amortization target date based on the size of any new unfunded actuarial accrued liability from a benefit increase, actuarial assumption change, or actuarial method change bears to the prior amortization period. To better accommodate any unfunded actuarial accrued liability recognized under the proposed legislation, PERA has requested its re-inclusion in the procedure. **Amendment S2641-1A** contains the PERA request.

## Background Information on the Role and Function of Interest Rate Actuarial Assumptions

1. Actuarial Funding for Defined Benefit Retirement Plans. Because defined benefit plans specify eventual retirement benefits through the use of a formula or some manner other than the magnitude of the dollar value of the trust fund amassed for the payment of retirement annuities and benefits, defined benefit plans require the preparation of actuarial valuations to set their financial needs and costs and to assess the extent that the pension plan is complying with that funding budget.

Those actuarial valuations depend on an actuarial valuation method, which implements a view of how to allocate the burden of amassing assets to equal those future retirement annuities and benefits over the working lifetime of the active pension plan membership, and actuarial assumptions, including the interest rate assumption, investment performance assumption, or the discount rate assumption.

2. Interest Rate Actuarial Assumption. Actuarial cost or valuation methods begin with the present value of retirement annuities and benefits and allocate portions of that present value figure over time. The present value of benefits adjusts the total dollar amount of retirement annuities and benefits for the time value of money, since the outlays of annuities and benefits from a retirement plan extend over a prolonged period of time, reducing the dollar amount of each future outlay by the amount of investment earnings that could be earned on a pool of assets underlying those annuities and benefits. Thus, the \$100 of benefits that will be payable when a retiring active member reaches age 78 would not be valued as a full \$100 when the active member retires at age 65, because of the investment return earnable over the 13-year period. The following are the present values of \$100 that becomes payable 13 years after the valuation date at various interest rates:

<u>Interest Rate</u>	<u>Amount</u>	<u>Interest Rate</u>	<u>Amount</u>	<u>Interest Rate</u>	<u>Amount</u>
2.0%	\$77.30	4.5%	\$56.43	7.0%	\$41.50
2.5%	\$72.54	5.0%	\$53.03	7.5%	\$39.06
3.0%	\$68.10	5.5%	\$49.86	8.0%	\$36.77
3.5%	\$63.94	6.0%	\$46.88	8.5%	\$34.57
4.0%	\$60.05	6.5%	\$44.10	9.0%	\$32.62

Under the example, almost twice as much money would have to be deposited in a pension trust for \$100 retirement benefit payable 13 years later if the compounded investment earnings would be assumed to be 2.5% rather than 8.0%.

Two desirable characteristics of a rate of return actuarial assumption are accuracy and consistency. The actuarial assumption ought to be the best estimate of the long-term return expected to be earned by the pension fund. Frequent changes in the investment return actuarial assumption are not desirable. Frequent changes in the actuarial assumption could cause similar individuals to be treated quite differently, depending upon the assumption in place in the year the individual retires. Frequent actuarial assumption changes will also undermine the usefulness of the annual actuarial reports. These reports are intended as a budgeting tool, permitting the employers and the Legislature to determine whether contributions to the fund are adequate to keep the fund on track for full funding by the required full funding date. Frequent changes in the investment return actuarial assumption can produce radical differences in the actuarial report results from one year to the next, undermining their usefulness.

Unfortunately, estimating the long-term investment return is not an easy task. It is an attempt to perceive the future, but that future is always unknowable. In practice, estimates of future long-term returns generally are based on past results, with consideration given to how those results may change in the future.

3. Setting the Interest Rate Assumption. Actuarial valuations are approximations or projections of future benefit accruals and payments with the goal of recognizing the annual funding requirements for the retirement plan in order to set contribution rates that would be adequate to ensure the financial solvency of the plan. As a projection dependent on various assumptions, the process depends on the accuracy of those assumptions as predictions of the future.

For a number of retirement plans, the actuary performing the actuarial valuation has the authority implicitly or explicitly to choose the actuarial valuation method, to select the asset valuation method, to select the economic assumptions, and to select the demographic and other non-economic assumptions. Where the actuary has this authority, guidance is provided to the actuary by the Actuarial Standards Board, a nine-member board serving three-year staggered terms. Members of the

Actuarial Standards Board are appointed by the Council of U.S. Presidents, which is composed of the presidents and presidents-elect of the American Academy of Actuaries, the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries.

The Actuarial Standards Board has issued four Actuarial Standards of Practice to provide general guidance for pension plan actuarial valuations, which are:

- 1) ASOP No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or contributions* (adopted 2007, updated 2011; revision pending);
- 2) ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations* (adopted 2007, updated 2011; revision pending);
- 3) ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations* (adopted 2010, updated 2011); and
- 4) ASOP No. 44, *Selection and Use of Asset Valuation Methods for Pension Valuations* (adopted 2007, clarified 2009, updated 2011).

For situations such as Minnesota, where statute or other binding regulation specifies economic actuarial assumptions, ASOP No. 27 indicates that it does not apply, but requires the actuary to use the standard principles to assess the reasonableness of the prescribed assumption.

Although ASOP No. 27 does not apply to the process of the Commission initially and the Legislature ultimately in determining the interest rate actuarial assumption, the Commission should have a sense of the assumption-setting process that an actuary is required to use and that would be the basis for any valuation statement by an actuary about the reasonableness of the statutory interest rate assumption. The second exposure draft of the proposed revision of ASOP No. 27, issued in January 2012 with a comment deadline of May 31, 2012, requires the actuary to identify the component parts of the assumption, if any, to evaluate the relevant data, to consider the factors specific to the measurement, to consider other general factors, and then to select a reasonable assumption. In considering the relevant data, the actuary is required to review recent and long-term historical economic data without giving undue weight to recent experience. The general factors for consideration includes allowance for adverse deviations, the balance between the refinement of an assumption and its materiality, the balance between a refined economic assumption and the cost of that refinement, the need for rounding using an unbiased rounding technique, the need to recognize a change in circumstances that occurred after the valuation date, and input of views from relevant experts. Reasonableness is to be determined by both historical data and the actuary's estimate of future experience or estimates of future experience inherent in financial market data. In determining the interest rate actuarial assumption, the second exposure draft of ASOP No. 27 provides little specific guidance, but indicates that the actuary should consider a broad range of data and other informational inputs. The second exposure draft of ASOP No. 27 dropped the examples of acceptable methods to construct an investment return range, which were the building block method, where inflation and the real rate of return for each investment portfolio class were combined, or the cash flow matching method based on bond portfolio returns.

The second exposure draft of ASOP No. 27 does not specifically address the time horizon for the interest rate actuarial assumption. The interest rate actuarial assumption is a long-term assumption. For the three largest Minnesota defined benefit retirement plans, the General State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-General), the General Employees Retirement Plan of the Public Employees Retirement Association (PERA-General), and the Teachers Retirement Association (TRA), the period between the average entry age and the expected average age at death during which pension plan assets can be amassed and invested is 50-55 years (2012 active member average age of 34.7 years for MSRS-General, 36.2 years for PERA-General, and 31.5 years for TRA, compared to the average life expectancy at birth for Minnesota of 81.1 years or to the average life expectancy at age 65 for Minnesota of 85.1 years).

Over the extended time period that public employee defined benefit retirement plans are financed, the goal is to ensure that the generation of public jurisdiction taxpayers that were served by the public employees appropriately fund the public employee retirement benefits accrued by those employees during that period without shifting costs to a future generation of taxpayers.

Comparison of the Current Post-Retirement Adjustment Mechanisms for Retirees, Disabiltants, and Survivors

Attachment B

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

\*MVA = Market value of assets basis ^AVA = Actuarial value of assets basis

## Background Information on the Development of Implicit Post-Retirement Adjustment Rate Actuarial Assumptions

1. Comparison of Interest Rate/Investment Performance Rate Assumptions for Minnesota Defined Benefit Public Employee Retirement Plans. Minnesota Statutes, Section 356.215, Subdivision 8, specifies the interest rate assumptions for the various defined benefit public employee retirement plans in Minnesota, as follows:

Retirement Plan	Pre-Retirement			Post-Retirement		
	Select *	Ultimate	Single Rate Equiv.	Select *	Ultimate	Single Rate Equiv.
MSRS General State Employees Retirement Plan	8.00%	8.50%	8.37%	5.50%	6.00%	N/R
PERA General Employees Retirement Plan	8.00	8.50	8.37	5.50	6.00	N/R
Teachers Retirement Association	8.00	8.50	8.38	5.50	6.00	6.38%
MSRS Correctional State Employees Retirement Plan	8.00	8.50	8.39	5.50	6.00	N/R
State Patrol Retirement Plan	8.00	8.50	8.37	5.50	6.00	N/R
Public Employees Police and Fire Retirement Plan	8.00	8.50	8.38	5.50	6.00	N/R
Local Government Correctional Service Retirement Plan	8.00	8.50	8.41	5.50	6.00	N/R
PERA-MERF Division	8.00	8.5	8.29	5.50	6.00	N/R
Duluth Teachers Retirement Fund Association	8.00	8.50	N/R	8.00	8.50	N/R
St. Paul Teachers Retirement Fund Association	8.00	8.50	8.37	8.00	8.50	N/R
Legislators/Elected State Officers Retirement Plan	0.00	0.00	0.00	0.00	0.00	0.00
Judges Retirement Plan	8.00	8.50	8.35	5.50	6.00	N/R
Bloomington Fire Department Relief Association	6.00	6.00	N/R	6.00	6.00	N/R
Monthly benefit volunteer firefighter relief associations	5.00	5.00	N/R	5.00	5.00	N/R

\* Where the select assumption differs from the ultimate assumption, the select period is 6/30/2012-6/30/2017.

2. Creation of Differential Pre-Retirement and Post-Retirement Interest Rate Actuarial Assumptions. For Minnesota defined benefit public employee retirement plans other than local police, local paid fire, or volunteer fire plans, from 1957 until 1984, there was a single interest rate actuarial assumption for both active members (pre-retirement) and retired members (post-retirement), set at 3.0% from 1957 until 1969, set at 3.5% from 1969 until 1973, and set at 5.0% from 1973 until 1984.

Although a statewide retirement plan post-retirement adjustment mechanism, the Minnesota Adjustable Fixed Benefit Fund, was established in 1969 (Laws 1969, Ch. 485, Sec. 32, and Ch. 914, Sec. 10), the adjustment mechanism was funded solely from investment gains on the actuarial required reserves for retiree benefits (i.e., investment returns in excess of the interest rate actuarial assumption) without any promise that future adjustments would be paid. The 5.0% interest rate assumption was the threshold for investment actuarial gains and the payment of post-retirement adjustments.

In 1984, after a controversy over both actuarial reporting practices and over public employee defined benefit retirement plan funding adequacy and after a study by an outside pension consultant initiated by the Department of Finance, there was a desire by the executive branch to reset the interest rate actuarial assumption from 5.0%. Because a change in the interest rate actuarial assumption applicable to retired life retirement fund assets would reduce their future post-retirement adjustments, still funded from investment actuarial gains, and would impose an undeserved benefit reduction, when the interest rate actuarial assumption was increased to 8.0%, it was increased only for the actuarial reserves for active members, leaving the interest rate actuarial assumption for the assets in the Minnesota Post Retirement Investment Fund (the 1980 renaming of the Minnesota Adjustable Fixed Benefit Fund) at 5.0%. This 1984 legislation (Laws 1984, Ch. 564, Sec. 43) was the creation of the practice of a pre-retirement interest rate actuarial assumption and a post-retirement interest rate actuarial assumption. Because the post-retirement adjustment mechanism still was a "defined contribution" styled mechanism, triggered solely by an actuarial gain related to the interest rate actuarial assumption, there was no actuarial or policy need for an explicit post-retirement adjustment rate assumption.

In 1989 (Laws 1989, Ch. 319, Art. 13, Sec. 90-91), the pre-retirement interest rate actuarial assumption was increased from 8.0% to 8.5%, with the post-retirement interest rate left at 5.0%.

In 1992 (Laws 1992, Ch. 350), the Minnesota Post Retirement Investment Fund shifted from a "defined contribution" type of post-retirement adjustment mechanism to a hybrid type of post-retirement adjustment with the addition of a "defined benefit" cost-of-living-based component of annual post-retirement adjustments, replacing inflation annually up to 3.5%, and, if investment performance on invested retired life actuarial reserves were in excess of 8.5%, an investment-



performance-related component with a five-year smoothing period. However, for whatever reason, the designers of the post-retirement adjustment change, the statewide retirement plan administrators, did not propose creating a post-retirement adjustment rate actuarial assumption and returning to a single interest rate actuarial assumption, but retained the 5.0% post-retirement interest rate actuarial assumption with the differential representing an implicit actuarial assumption for the inflation component of the post-retirement adjustment.

In 1997 (Laws 1997, Ch. 233, Art. 1, Sec. 5), as part of an active member benefit increase proposal, the inflation component of the post-retirement adjustment was reduced by 1.0%, to 2.5% annually, to fund a benefit accrual rate increase used in calculating the initial retirement annuity, and the post-retirement interest rate actuarial assumption was increased from 5.0% to 6.0%, retaining the differential between the pre-retirement interest rate actuarial assumption and the post-retirement interest rate actuarial assumption as the post-retirement adjustment implicit actuarial assumption.

In 2008 (Laws 2008, Ch. 349, Art. 1-2), provision was made for the dissolution of the Minnesota Post Retirement Investment Fund if its funded condition dropped too low, with a replacement 2.5% annual flat rate unconditional post-retirement adjustment payable if there was a dissolution. The funded ratio of the Minnesota Post Retirement Investment Fund met the dissolution trigger as of June 30, 2008.

In 2010 (Laws 2010, Ch. 359, Art. 1, Sec. 75-82), the 2.5% annual post-retirement adjustment rate enacted in 2008 was reduced or suspended for a period of time based on the financial difficulties of the various statewide defined benefit public employees retirement plans following the Great Recession of 2008, with the return to the full 2.5% post-retirement adjustment rate dependent upon a future achievement of a certain percentage funded ratio based on the market value of pension fund assets. The "financial sustainability" legislation included a provision requiring an adjustment to the post-retirement interest rates based on the amount of the downsizing in the post-retirement adjustment rate applicable to each retirement plan.

### 3. 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 ratio 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.

1.1 ..... moves to amend S.F. No. 2641; H.F. No. ...., as follows:

1.2 Page 7, after line 9, insert:

1.3 "Sec. 2. Minnesota Statutes 2012, section 356.215, subdivision 11, is amended to read:

1.4 Subd. 11. **Amortization contributions.** (a) In addition to the exhibit indicating  
1.5 the level normal cost, the actuarial valuation of the retirement plan must contain an  
1.6 exhibit for financial reporting purposes indicating the additional annual contribution  
1.7 sufficient to amortize the unfunded actuarial accrued liability and must contain an exhibit  
1.8 for contribution determination purposes indicating the additional contribution sufficient  
1.9 to amortize the unfunded actuarial accrued liability. For the retirement plans listed in  
1.10 subdivision 8, paragraph (c), but excluding the MERF division of the Public Employees  
1.11 Retirement Association and the legislators retirement plan, the additional contribution  
1.12 must be calculated on a level percentage of covered payroll basis by the established date  
1.13 for full funding in effect when the valuation is prepared, assuming annual payroll growth  
1.14 at the applicable percentage rate set forth in subdivision 8, paragraph ~~(e)~~ (d). For all  
1.15 other retirement plans and for the MERF division of the Public Employees Retirement  
1.16 Association and the legislators retirement plan, the additional annual contribution must be  
1.17 calculated on a level annual dollar amount basis.

1.18 (b) For any retirement plan other than ~~the general state employees retirement plan of~~  
1.19 ~~the Minnesota State Retirement System~~ or a retirement plan governed by paragraph (d),  
1.20 (e), (f), (g), (h), (i), ~~or~~ (j), or (k), if there has not been a change in the actuarial assumptions  
1.21 used for calculating the actuarial accrued liability of the fund, a change in the benefit  
1.22 plan governing annuities and benefits payable from the fund, a change in the actuarial  
1.23 cost method used in calculating the actuarial accrued liability of all or a portion of the  
1.24 fund, or a combination of the three, which change or changes by itself or by themselves  
1.25 without inclusion of any other items of increase or decrease produce a net increase in the  
1.26 unfunded actuarial accrued liability of the fund, the established date for full funding is the  
1.27 first actuarial valuation date occurring after June 1, 2020.

1.28 (c) For any retirement plan ~~other than the general employees retirement plan of the~~  
1.29 ~~Public Employees Retirement Association~~, if there has been a change in any or all of the  
1.30 actuarial assumptions used for calculating the actuarial accrued liability of the fund, a  
1.31 change in the benefit plan governing annuities and benefits payable from the fund, a  
1.32 change in the actuarial cost method used in calculating the actuarial accrued liability of all  
1.33 or a portion of the fund, or a combination of the three, and the change or changes, by itself  
1.34 or by themselves and without inclusion of any other items of increase or decrease, produce  
1.35 a net increase in the unfunded actuarial accrued liability in the fund, the established date  
1.36 for full funding must be determined using the following procedure:

2.1 (i) the unfunded actuarial accrued liability of the fund must be determined in  
2.2 accordance with the plan provisions governing annuities and retirement benefits and the  
2.3 actuarial assumptions in effect before an applicable change;

2.4 (ii) the level annual dollar contribution or level percentage, whichever is applicable,  
2.5 needed to amortize the unfunded actuarial accrued liability amount determined under item  
2.6 (i) by the established date for full funding in effect before the change must be calculated  
2.7 using the interest assumption specified in subdivision 8 in effect before the change;

2.8 (iii) the unfunded actuarial accrued liability of the fund must be determined in  
2.9 accordance with any new plan provisions governing annuities and benefits payable from  
2.10 the fund and any new actuarial assumptions and the remaining plan provisions governing  
2.11 annuities and benefits payable from the fund and actuarial assumptions in effect before  
2.12 the change;

2.13 (iv) the level annual dollar contribution or level percentage, whichever is applicable,  
2.14 needed to amortize the difference between the unfunded actuarial accrued liability amount  
2.15 calculated under item (i) and the unfunded actuarial accrued liability amount calculated  
2.16 under item (iii) over a period of 30 years from the end of the plan year in which the  
2.17 applicable change is effective must be calculated using the applicable interest assumption  
2.18 specified in subdivision 8 in effect after any applicable change;

2.19 (v) the level annual dollar or level percentage amortization contribution under item  
2.20 (iv) must be added to the level annual dollar amortization contribution or level percentage  
2.21 calculated under item (ii);

2.22 (vi) the period in which the unfunded actuarial accrued liability amount determined  
2.23 in item (iii) is amortized by the total level annual dollar or level percentage amortization  
2.24 contribution computed under item (v) must be calculated using the interest assumption  
2.25 specified in subdivision 8 in effect after any applicable change, rounded to the nearest  
2.26 integral number of years, but not to exceed 30 years from the end of the plan year in which  
2.27 the determination of the established date for full funding using the procedure set forth in this  
2.28 clause is made and not to be less than the period of years beginning in the plan year in which  
2.29 the determination of the established date for full funding using the procedure set forth in  
2.30 this clause is made and ending by the date for full funding in effect before the change; and

2.31 (vii) the period determined under item (vi) must be added to the date as of which  
2.32 the actuarial valuation was prepared and the date obtained is the new established date  
2.33 for full funding.

2.34 (d) For the MERF division of the Public Employees Retirement Association, the  
2.35 established date for full funding is June 30, 2031.

3.1 (e) For the general employees retirement plan of the Public Employees Retirement  
3.2 Association, the established date for full funding is June 30, 2031.

3.3 (f) For the Teachers Retirement Association, the established date for full funding is  
3.4 June 30, 2037.

3.5 (g) For the correctional state employees retirement plan of the Minnesota State  
3.6 Retirement System, the established date for full funding is June 30, 2038.

3.7 (h) For the judges retirement plan, the established date for full funding is June  
3.8 30, 2038.

3.9 (i) For the public employees police and fire retirement plan, the established date  
3.10 for full funding is June 30, 2038.

3.11 (j) For the St. Paul Teachers Retirement Fund Association, the established date for  
3.12 full funding is June 30 of the 25th year from the valuation date. In addition to other  
3.13 requirements of this chapter, the annual actuarial valuation must contain an exhibit  
3.14 indicating the funded ratio and the deficiency or sufficiency in annual contributions when  
3.15 comparing liabilities to the market value of the assets of the fund as of the close of the  
3.16 most recent fiscal year.

3.17 (k) For the general state employees retirement plan of the Minnesota State  
3.18 Retirement System, the established date for full funding is June 30, 2040.

3.19 (l) For the retirement plans for which the annual actuarial valuation indicates an  
3.20 excess of valuation assets over the actuarial accrued liability, the valuation assets in  
3.21 excess of the actuarial accrued liability must be recognized as a reduction in the current  
3.22 contribution requirements by an amount equal to the amortization of the excess expressed  
3.23 as a level percentage of pay over a 30-year period beginning anew with each annual  
3.24 actuarial valuation of the plan.

3.25 **EFFECTIVE DATE.** This section is effective July 1, 2014, and applies to actuarial  
3.26 valuation results prepared on or after that date."

3.27 Renumber the sections in sequence and correct the internal references

3.28 Amend the title accordingly

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SENATE  
STATE OF MINNESOTA  
EIGHTY-EIGHTH SESSION

S.F. No. 2641

(SENATE AUTHORS: PAPPAS)

DATE	D-PG	OFFICIAL STATUS
03/13/2014	6212	Introduction and first reading Referred to State and Local Government

1.1 A bill for an act  
 1.2 relating to retirement; modifying interest rate and postretirement adjustment  
 1.3 rate actuarial assumptions; replacing an implicit postretirement adjustment rate  
 1.4 actuarial assumption with an explicit actuarial assumption; amending Minnesota  
 1.5 Statutes 2013 Supplement, section 356.215, subdivision 8; repealing Minnesota  
 1.6 Statutes 2012, section 356.415, subdivision 3.

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

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

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

1.13 (1) select and ultimate interest rate assumption

	ultimate preretirement interest rate assumption	ultimate postretirement interest rate assumption
1.14 plan		
1.15 general state employees retirement plan	8.5%	6.0%
1.16 correctional state employees retirement plan	8.5	6.0
1.17 State Patrol retirement plan	8.5	6.0
1.18 legislators retirement plan, and for the	0.0	0.0
1.19 constitutional officers calculation of total plan		
1.20 liabilities		
1.21 judges retirement plan	8.5	6.0
1.22 general public employees retirement plan	8.5	6.0
1.23 public employees police and fire retirement plan	8.5	6.0
1.24 local government correctional service	8.5	6.0
1.25 retirement plan		
1.26 teachers retirement plan	8.5	6.0

2.1	Duluth teachers retirement plan	8.5	8.5
2.2	St. Paul teachers retirement plan	8.5	8.5

2.3 Except for the legislators retirement plan and the constitutional officers calculation  
 2.4 of total plan liabilities, the select preretirement interest rate assumption for the period  
 2.5 after June 30, 2012, through June 30, 2017, is 8.0 percent. ~~Except for the legislators  
 2.6 retirement plan and the constitutional officers calculation of total plan liabilities, the select  
 2.7 postretirement interest rate assumption for the period after June 30, 2012, through June  
 2.8 30, 2017, is 5.5 percent, except for the Duluth teachers retirement plan and the St. Paul  
 2.9 teachers retirement plan, each with a select postretirement interest rate assumption for the  
 2.10 period after June 30, 2012, through June 30, 2017, of 8.0 percent.~~

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

2.12	plan	interest rate
2.13		assumption
2.14	Bloomington Fire Department Relief Association	6.0
2.15	local monthly benefit volunteer firefighters relief	5.0
2.16	associations	

2.17 (b)(1) If the retirement plan has met the applicable minimum funded percentage for  
 2.18 the full percentage postretirement adjustment rate under section 354A.27, subdivision  
 2.19 6a; 354A.29, subdivision 8; or 356.415, subdivision 1a, 1b, 1c, 1d, 1e, or 1f, as of the  
 2.20 valuation date, and the applicable percentage postretirement adjustment rate specified in  
 2.21 section 354A.27, subdivision 7; 354A.29, subdivision 9; or 356.415, subdivision 1, is in  
 2.22 effect, the actuarial valuation must use the applicable full postretirement adjustment rate  
 2.23 as the postretirement adjustment rate actuarial assumption.

2.24 (2) If clause (1) does not apply, the actuarial valuation must use the applicable  
 2.25 postretirement adjustment rate actuarial assumption for the applicable period or periods:

2.26	<u>plan</u>	<u>rate and duration</u>
2.27	<u>general state employees retirement plan</u>	<u>2.0% until December 31,</u>
2.28		<u>2040, 2.5% thereafter</u>
2.29	<u>correctional state employees retirement plan</u>	<u>2.0% until December 31,</u>
2.30		<u>2038, 2.5% thereafter</u>
2.31	<u>State Patrol retirement plan</u>	<u>1.0% until December 31,</u>
2.32		<u>2037, 2.5% thereafter</u>
2.33	<u>legislators retirement plan, including constitutional officers</u>	<u>2.0% until December 31,</u>
2.34		<u>2040, 2.5% thereafter</u>
2.35	<u>judges retirement plan</u>	<u>1.75% until December 31,</u>
2.36		<u>2039, 2.5% thereafter</u>
2.37	<u>general public employees retirement plan</u>	<u>1.0% until December 31,</u>
2.38		<u>2031, 2.5% thereafter</u>
2.39	<u>public employees police and fire retirement plan</u>	<u>1.0% until December 31,</u>
2.40		<u>2039, 2.5% thereafter</u>



3.1	<u>local government correctional service retirement plan</u>	<u>1.0% until December 31,</u>
3.2		<u>2015, 2.5% thereafter</u>
3.3	<u>MERF division of the Public Employees Retirement</u>	<u>1.0% until December 31,</u>
3.4	<u>Association</u>	<u>2031, 2.5% thereafter</u>
3.5	<u>teachers retirement plan</u>	<u>2.0% until December 31,</u>
3.6		<u>2037, 2.5% thereafter</u>
3.7	<u>Duluth teachers retirement plan</u>	<u>1.0% until December 31,</u>
3.8		<u>2039, 2.5% thereafter</u>
3.9	<u>St. Paul teachers retirement plan</u>	<u>1.0% until December 31,</u>
3.10		<u>2038, 2.5% thereafter</u>

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

3.15 (1) single rate future salary increase assumption

3.16	plan	future salary increase assumption
3.17	legislators retirement plan	5.0%
3.18	judges retirement plan	3.0
3.19	Bloomington Fire Department Relief	4.0
3.20	Association	

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

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

3.27 For plans other than the Duluth teachers  
 3.28 retirement plan, the select calculation  
 3.29 is: during the designated select period, a  
 3.30 designated percentage rate is multiplied by  
 3.31 the result of the designated integer minus T,  
 3.32 where T is the number of completed years  
 3.33 of service, and is added to the applicable  
 3.34 future salary increase assumption. The  
 3.35 designated select period is ten years and  
 3.36 the designated integer is ten for the Duluth  
 3.37 Teachers Retirement Fund Association  
 3.38 and for the local government correctional  
 3.39 service retirement plan and 15 for the St.

4.1 Paul Teachers Retirement Fund Association.  
 4.2 The designated percentage rate is 0.2  
 4.3 percent for the St. Paul Teachers Retirement  
 4.4 Fund Association. The select calculation  
 4.5 for the Duluth Teachers Retirement Fund  
 4.6 Association is 8.00 percent per year for  
 4.7 service years one through seven, 7.25 percent  
 4.8 per year for service years seven and eight,  
 4.9 and 6.50 percent per year for service years  
 4.10 eight and nine.

4.11 The ultimate future salary increase assumption is:

4.12	age	A	B	C
4.13	16	6.00%	5.90%	9.00%
4.14	17	6.00	5.90	9.00
4.15	18	6.00	5.90	9.00
4.16	19	6.00	5.90	9.00
4.17	20	6.00	5.90	9.00
4.18	21	6.00	5.90	8.75
4.19	22	6.00	5.90	8.50
4.20	23	6.00	5.85	8.25
4.21	24	6.00	5.80	8.00
4.22	25	6.00	5.75	7.75
4.23	26	6.00	5.70	7.50
4.24	27	6.00	5.65	7.25
4.25	28	6.00	5.60	7.00
4.26	29	6.00	5.55	6.75
4.27	30	6.00	5.50	6.75
4.28	31	6.00	5.45	6.50
4.29	32	6.00	5.40	6.50
4.30	33	6.00	5.35	6.50
4.31	34	6.00	5.30	6.25
4.32	35	6.00	5.25	6.25
4.33	36	5.86	5.20	6.00
4.34	37	5.73	5.15	6.00
4.35	38	5.59	5.10	6.00
4.36	39	5.45	5.05	5.75
4.37	40	5.31	5.00	5.75
4.38	41	5.18	4.95	5.75
4.39	42	5.04	4.90	5.50
4.40	43	4.90	4.85	5.25
4.41	44	4.76	4.80	5.25

5.1	45	4.63	4.75	5.00
5.2	46	4.49	4.70	5.00
5.3	47	4.35	4.65	5.00
5.4	48	4.21	4.60	5.00
5.5	49	4.08	4.55	5.00
5.6	50	3.94	4.50	5.00
5.7	51	3.80	4.45	5.00
5.8	52	3.66	4.40	5.00
5.9	53	3.53	4.35	5.00
5.10	54	3.39	4.30	5.00
5.11	55	3.25	4.25	4.75
5.12	56	3.25	4.20	4.75
5.13	57	3.25	4.15	4.50
5.14	58	3.25	4.10	4.25
5.15	59	3.25	4.05	4.25
5.16	60	3.25	4.00	4.25
5.17	61	3.25	4.00	4.25
5.18	62	3.25	4.00	4.25
5.19	63	3.25	4.00	4.25
5.20	64	3.25	4.00	4.25
5.21	65	3.25	4.00	4.00
5.22	66	3.25	4.00	4.00
5.23	67	3.25	4.00	4.00
5.24	68	3.25	4.00	4.00
5.25	69	3.25	4.00	4.00
5.26	70	3.25	4.00	4.00

5.27 (3) service-related ultimate future salary increase assumption

5.28	general state employees retirement plan of the						assumption A
5.29	Minnesota State Retirement System						
5.30	general employees retirement plan of the Public						assumption B
5.31	Employees Retirement Association						
5.32	Teachers Retirement Association						assumption C
5.33	public employees police and fire retirement plan						assumption D
5.34	State Patrol retirement plan						assumption E
5.35	correctional state employees retirement plan of the						assumption F
5.36	Minnesota State Retirement System						

5.37	service						
5.38	length	A	B	C	D	E	F
5.39	1	10.50%	12.03%	12.00%	13.00%	8.00%	6.00%
5.40	2	8.10	8.90	9.00	11.00	7.50	5.85
5.41	3	6.90	7.46	8.00	9.00	7.00	5.70
5.42	4	6.20	6.58	7.50	8.00	6.75	5.55
5.43	5	5.70	5.97	7.25	6.50	6.50	5.40

6.1	6	5.30	5.52	7.00	6.10	6.25	5.25
6.2	7	5.00	5.16	6.85	5.80	6.00	5.10
6.3	8	4.70	4.87	6.70	5.60	5.85	4.95
6.4	9	4.50	4.63	6.55	5.40	5.70	4.80
6.5	10	4.40	4.42	6.40	5.30	5.55	4.65
6.6	11	4.20	4.24	6.25	5.20	5.40	4.55
6.7	12	4.10	4.08	6.00	5.10	5.25	4.45
6.8	13	4.00	3.94	5.75	5.00	5.10	4.35
6.9	14	3.80	3.82	5.50	4.90	4.95	4.25
6.10	15	3.70	3.70	5.25	4.80	4.80	4.15
6.11	16	3.60	3.60	5.00	4.80	4.65	4.05
6.12	17	3.50	3.51	4.75	4.80	4.50	3.95
6.13	18	3.50	3.50	4.50	4.80	4.35	3.85
6.14	19	3.50	3.50	4.25	4.80	4.20	3.75
6.15	20	3.50	3.50	4.00	4.80	4.05	3.75
6.16	21	3.50	3.50	3.90	4.70	4.00	3.75
6.17	22	3.50	3.50	3.80	4.60	4.00	3.75
6.18	23	3.50	3.50	3.70	4.50	4.00	3.75
6.19	24	3.50	3.50	3.60	4.50	4.00	3.75
6.20	25	3.50	3.50	3.50	4.50	4.00	3.75
6.21	26	3.50	3.50	3.50	4.50	4.00	3.75
6.22	27	3.50	3.50	3.50	4.50	4.00	3.75
6.23	28	3.50	3.50	3.50	4.50	4.00	3.75
6.24	29	3.50	3.50	3.50	4.50	4.00	3.75
6.25	30 or more	3.50	3.50	3.50	4.50	4.00	3.75

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

6.30	plan	payroll growth assumption
6.31	general state employees retirement plan of the	3.75%
6.32	Minnesota State Retirement System	
6.33	correctional state employees retirement plan	3.75
6.34	State Patrol retirement plan	3.75
6.35	judges retirement plan	3.00
6.36	general employees retirement plan of the Public	3.75
6.37	Employees Retirement Association	
6.38	public employees police and fire retirement plan	3.75
6.39	local government correctional service retirement plan	3.75
6.40	teachers retirement plan	3.75
6.41	Duluth teachers retirement plan	3.50
6.42	St. Paul teachers retirement plan	4.00

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

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

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

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

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

7.10          Sec. 2. **REPEALER.**

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

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

**356.415 POSTRETIREMENT ADJUSTMENTS; STATEWIDE RETIREMENT PLANS.**

Subd. 3. **Actuarial valuation reports until funding is stabilized.** Notwithstanding any provision of section 356.215, subdivision 8, to the contrary, until the actuarial valuations, prepared annually by the approved actuary under sections 356.214 and 356.215 and the standards for actuarial work promulgated by the Legislative Commission on Pensions and Retirement, indicate that the market value of assets of the applicable covered plans equals or exceeds 90 percent of the actuarial accrued liabilities, the actuarial valuation reports must utilize a postretirement interest rate assumption that is equal to the difference between the preretirement interest rate assumption provided in section 356.215, subdivision 8, and the stated annual postretirement adjustment rate provided under this section, as applicable to each covered plan.