



S.F. 529
(Pappas)

H.F. 650
(Nelson)

Executive Summary of Commission Staff Materials

Affected Pension Plan(s): TRA
Relevant Provisions of Law: Minnesota Statutes, Section 354.44, Subdivision 6
General Nature of Proposal: Phase-in of actuarial equivalent early retirement reduction factors
Date of Summary: March 4, 2013

Specific Proposed Changes

- S.F. 529 (Pappas); H.F. 650 (Nelson) relates to the level benefit tier of the Teachers Retirement Plan (TRA) formula retirement annuity program and modifies the requirement that the early retirement reduction factors for this tier be the actuarial equivalent of a normal retirement annuity by delaying any modification in the early retirement reduction factor until July 1, 2015, by substituting set amount early retirement reduction factors for the actuarial equivalent early retirement reduction factors, and by phasing in the imposition of the new early retirement reduction factors over a four-year period, with the full implementation of an actuarial equivalent early normal retirement reduction factor until July 1, 2020.

Policy Issues Raised by the Proposed Legislation

1. Appropriateness of early retirement reduction factor change delay until 2015.
2. Appropriateness of substituting set rate early retirement reduction factors for the currently required actuarial equivalent early retirement reduction factors.
3. Appropriateness of the actuarial equivalent early retirement reduction factor phase-in.
4. Appropriateness of the retention of the deferred annuity augmentation early retirement annuity subsidy in current and proposed factors.
5. Actuarial cost impact of the proposed legislation.
6. Unclear actions of other retirement plans; consistency and uniformity among the various retirement plans.
7. Need to address the current TRA funding deficiency.

Potential Amendments

S0529-1A would require TRA to implement the full actuarial equivalent early retirement reduction rates on July 1, 2013, without a delay or phase-in.

S0529-2A would require all of the statewide and major local Minnesota defined benefit retirement plans to implement their revised actuarial equivalent optional annuity form factors and actuarial equivalent early retirement reduction rates on July 1, 2013.



TO: Members of the Legislative Commission on Pensions and Retirement
FROM: Lawrence A. Martin, Executive Director *LAM*
RE: S.F. 529 (Pappas); H.F. 650 (Nelson): TRA; Phase-in of Actuarial Equivalent Early Retirement Reduction Factors 2015-2019
DATE: March 4, 2013

Summary of S.F. 529 (Pappas); H.F. 650 (Nelson)

S.F. 529 (Pappas); H.F. 650 (Nelson) amends Minnesota Statutes, Section 354.44, Subdivision 6, the formula program retirement annuity computation provision of the Teachers Retirement Plan (TRA), by making the following modifications with respect to the Level Benefit Tier early retirement annuity reduction factors:

1. Authorization of a Delay in Implementing a Modified Early Retirement Reduction Factor. The early retirement reduction factors for the level benefit tier of the TRA formula annuity program currently in force are extended unchanged for the 2010 change in the plan's mortality table and for the 2012 interest rate actuarial assumption until June 30, 2015.
2. Shift to Non-Actuarial Equivalent Early Retirement Reduction Factors for the "Level Benefit" Benefit Tier. The proposed set rate early retirement reduction rates to replace the required actuarial equivalent reduction factors for the "Level Benefit" benefit tier would be 0.5% per month (6% per year) under normal retirement age if the retiree was age 62 and had 30 years of service credit, or would be 0.333% per month (4% per year) under age 50 that the retiree is at retirement and 0.583% per month (7% per year) that the retiree is over age 58 but under the normal retirement age at retirement, and retaining an early retirement subsidy of deferred annuity augmentation for the period between the early retirement age and the normal retirement age.
3. Phase-In of Early Retirement Reduction Factor Changes. The change in early retirement reduction factors for the TRA level benefit formula retirement annuity tier relating to the 2010 TRA mortality table change and 2012 interest rate actuarial assumption recommended by the TRA-retained actuary are phased in over the period July 1, 2015, to June 30, 2020.

Background Information

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

- **Attachment A:** Background information on the practice of imposing reductions on retirement annuities for members retiring at an early age.
- **Attachment B:** Background information on the definition of actuarial equivalence for the various Minnesota statewide and major local retirement plans.
- **Attachment C:** Comparison of Impact of Current, New, and S.F. 529/H.F. 650 Factors (from TRA)

Discussion and Analysis

S.F. 529 (Pappas); H.F. 650 (Nelson) relates to the level benefit tier of the Teachers Retirement Plan (TRA) formula retirement annuity program and modifies the requirement that the early retirement reduction factors for this tier be the actuarial equivalent of a normal retirement annuity by delaying any modification in the early retirement reduction factor until July 1, 2015, by substituting set amount early retirement reduction factors for the actuarial equivalent early retirement reduction factors, and by phasing in the imposition of the new early retirement reduction factors over a four-year period, with the full implementation of an actuarial equivalent early normal retirement reduction factor until July 1, 2020.

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

1. Appropriateness of Early Retirement Reduction Factor Change Delay until 2015. The policy issue is whether or not it is appropriate for TRA to propose and for the Legislature to concur in a delay of the change in the TRA early retirement reductions factors. Minnesota Statutes 2012, Section 354.44,

Subdivision 6, Paragraph (e), requires that the early retirement reduction factor be that amount that makes the early retirement annuity the actuarial equivalent of the annuity payable at the normal retirement annuity, and Minnesota Statutes 2012, Section 354.05, Subdivision 7, added to TRA law in 1957 and updated in 1987, defines actuarial equivalency as having identical actuarial present values between two annuities. TRA sought changes in its mortality tables in 2010, but never adjusted its early retirement reduction factors (or optional annuity tables either) as a consequence and never sought statutory permission to not comply with the statutory mandate. Now, with the additional assumption change in the interest rate assumption, TRA is postponing any early retirement reduction modification until after June 30, 2015. The consequence of this delay is the continued payment of retirement annuities to many early retirees (and even more optional annuitants) that are larger than they are legally permitted to be, at a time when TRA has financial difficulties.

2. Appropriateness of Substituting Set Rate Early Retirement Reduction Factors for the Currently Required Actuarial Equivalent Early Retirement Reduction Factors. The policy issue is whether or not it is appropriate for the TRA Board to recommend a set of specific rate early retirement reduction factors that depart from the required actuarial equivalent early retirement reduction factors. Apparently the decision by the TRA board to create a set of early retirement reduction factors is prompted by discomfort with the magnitude of reductions required by the implementation of the actuarial equivalent early retirement reduction factors and a desire to implement reduction factors that are more favorable to future early retirees.

Table 1 (age 55 early retirement) and Table 2 (age 60 early retirement) present the TRA actuary's comparison of the computed retirement annuity for a hypothetical annuitant under the current reduction factors and under a fully implemented set of reduction factors:

Table 1: Impact of Table Changes on Monthly Benefits, Cliff Implementation, Age 55-66

Note: Table 1 uses level formula calculations and assumes a member started teaching in the fall of 1989 and worked full time to 6/30/2014 with a high-five of \$55,000. A full year of service is assumed with each full year of age with the high five remaining constant at \$55,000.

Age	Years of Service Credit	Current Benefit	Benefit w/ Mortality/Interest Change	\$ Impact Mortality/Interest Change	Benefit w/ Mortality/Interest + Early Ret. Change	\$ Impact Mortality/Interest + Early Ret. Change	% Change from Current
55	25	\$1184	\$1148	-\$36	\$936	-\$248	-21%
56	26	1289	1255	-34	1042	-247	-19
57	27	1403	1369	-34	1158	-245	-17
58	28	1526	1494	-32	1287	-239	-16
59	29	1659	1628	-31	1429	-230	-14
60	30	1803	1774	-29	1587	-216	-12
61	31	1959	1934	-25	1762	-197	-10
62	32	2129	2107	-22	1956	-173	-8
63	33	2314	2296	-18	2171	-143	-6
64	34	2516	2503	-13	2411	-105	-4
65	35	2737	2730	-7	2680	-57	-2
66	36	2979	2979	0	2979	0	0

Table 2: Impact of Table Changes on Monthly Benefits, Cliff Implementation, Age 60-66

Note: Table 2 uses level formula calculations and assumes a member started teaching in the fall of 1989 and worked full time to 6/30/2014 with a high-five of \$55,000. A full year of service is assumed with each full year of age with the high five remaining constant at \$55,000.

Age	Years of Service Credit	Current Benefit	Benefit w/ Mortality/Interest Change	\$ Impact Mortality/Interest Change	Benefit w/ Mortality/Interest + Early Ret. Change	\$ Impact Mortality/Interest + Early Ret. Change	% Change from Current
60	25	\$1483	\$1460	-\$23	\$1306	-\$177	-12%
61	26	1624	1603	-21	1460	-164	-10
62	27	1777	1758	-19	1632	-145	-8
63	28	1943	1928	-15	1824	-119	-6
64	29	2125	2114	-11	2037	-88	-4
65	30	2325	2319	-6	2276	-49	-2
66	31	2544	2544	0	2544	0	0

The creation of the level benefit tier of retirement annuities, proposed by TRA, recommended by the Legislative Commission on Pensions and Retirement, and enacted by the Legislature in 1989, included the requirement that level benefit tier retirement annuities paid at an early age be reduced to a level that has the same actuarial value as the normal retirement age annuity with the same level of service credit. The 1989 legislation was proposed, recommended, and enacted with the understanding that the actuarial equivalent early retirement factors would change whenever the retirement plan interest rate assumption or mortality assumption changed. Now, the TRA board wants to depart from

that arrangement because it wants to provide a greater subsidy to early retirees than what would occur with actuarial equivalent factors.

3. Appropriateness of the Actuarial Equivalent Early Retirement Reduction Factor Phase-In. The policy issue is whether or not it is appropriate to delay its proposed subsidized change in the early retirement reduction rate so that it would not be fully implemented until 2020. The TRA board did not even begin the consideration of early retirement reduction rate change from the 2010 mortality table revision, arising out of the 2008 experience study issued in 2009, until August 2011. Because it became aware of the potential for an interest rate assumption change before the 2012 Legislative Session, TRA indicates that its board delayed the decision to implement any revised early retirement reduction rates. The TRA board has decided to phase in the change in the early retirement reduction factors over an extended period.
4. Appropriateness of the Retention of the Deferred Annuity Augmentation Early Retirement Annuity Subsidy in Current and Proposed Factors. The policy issue is the appropriateness of the continued inclusion of a subsidy for early retirement in the proposed actuarial equivalent early reduction factors. The current actuarial equivalent retirement reduction factors are specified to be the equivalent of a larger computed retirement than the early retiree's retirement annuity would have been computed as the normal retirement annuity without any reduction by factoring in the deferred annuity augmentation that could be earned by the early retiree if the person had deferred retirement until the normal retirement age. The introduction of that subsidy was first incorporated into Minnesota law in 1978 (Laws 1978, Ch. 781, Sec. 1, 4, 10) as the result of conference committee deliberations where the chief disagreement between the House of Representatives and the Senate was over the size of early retirement reductions. The compromise was to utilize the full actuarial equivalent reduction factor rather than a specific designated rate, but to set equivalence against the annuity that would have been payable if the employee deferred retirement annuity receipt after termination instead of retiring early. That subsidy has been incorporated into every actuarial equivalent early retirement reduction factor provision specified in Minnesota Statutes since 1978. While it is unclear how much of a subsidy is provided by the deferred retirement annuity augmentation language, but it does represent a subsidy. The 1978 conference committee that agreed to the subsidy represented a majority of the Commission, not the entire Commission, and the entire Commission has never reviewed the practice in the memory of the Commission staff.
5. Actuarial Cost Impact of the Proposed Legislation. The policy issue is the uncertain actuarial cost impact of the proposed legislation. The consulting actuary retained by TRA has estimated the actuarial impact of an immediate implementation of the revised early retirement reduction factors on the retirement plan, but no information on the actuarial cost impact of the proposed legislation and its implementation delay and phase-in has been provided by TRA. According to the actuarial firm of Cavanaugh McDonald, the immediate implementation of the full actuarial equivalent early retirement reduction rate would reduce the TRA actuarial accrued liability by \$247 million, would reduce the normal cost percentage of covered payroll by 0.41% of covered pay, and reduce the amortization requirement by 0.39%, for a total actuarial funding requirement reduction of 0.80% of covered pay (see November 2, 2012, Cavanaugh McDonald actuarial cost estimate). In a December 4, 2012, actuarial cost analysis, Cavanaugh McDonald reduced (without any explanation of the change provided) the estimated reduction in the unfunded actuarial accrued liability to \$101.8 million, reduced the normal cost reduction to 0.15% of covered pay, reduced the amortization contribution requirement reduction to 0.11% of covered pay, and reduced the total actuarial requirement reduction to 0.31% of covered pay. The proposed legislation, because of the substitution of a more modest set of reduction factors, because of the time delay in implementation and because of the payment of greater than otherwise payable annuity amounts for 6.5 years due to the phase-in affecting as many as 5,850 retirees, would actually increase the TRA unfunded actuarial accrued liability by \$35 million, would increase the TRA normal cost by 0.04% of covered pay, would increase the TRA amortization requirement by 0.06% of covered pay, and would increase the TRA total actuarial funding requirement by 0.10% of covered pay (see December 12, 2012, Cavanaugh McDonald actuarial cost estimate).
6. Unclear Actions of Other Retirement Plans; Consistency and Uniformity among the Various Retirement Plans. The policy issue is whether or not the proposed delay and phase-in for the early retirement reduction factors proposed by TRA are appropriate when none of the other four retirement systems (MSRS, PERA, DTRFA, and SPTRFA) are requesting legislative approval of either a delay or a phase-in of the full actuarial equivalent early retirement reduction factors and the consequent lack of consistency and uniformity in the practices in an identical situation between the plans. Based on correspondence of which the Commission has received copies, both MSRS and PERA appear to have been developing actuarial equivalent early retirement reduction factors and optional annuity adjustment factors, but it is unclear what steps DTRFA and STPRFA are taking.

7. Need to Address the Current TRA Funding Deficiency. The policy issue is whether or not there is an immediate need to address the current funding deficiency of the Teachers Retirement Plan (TRA). Based on the two most recent actuarial valuation results (7/1/2012 and 7/1/2011), TRA has a significant funding deficiency and that deficiency is growing, as follows:

	FY2012		FY2011	
<u>Membership</u>				
Active Members		76,649		76,755
Service Retirees		50,780		49,079
Disabilitants		591		602
Survivors		4,054		3,856
Deferred Retirees		12,201		13,237
Nonvested Former Members		<u>27,591</u>		<u>25,196</u>
Total Membership		171,866		168,725
<u>Funded Status</u>				
Accrued Liability		\$23,024,505,000		\$22,171,493,000
Current Assets		<u>\$16,805,077,000</u>		<u>\$17,132,383,000</u>
Unfunded Accrued Liability		\$6,219,428,000		\$5,039,110,000
Funding Ratio	72.99%		77.27%	
<u>Financing Requirements</u>				
Covered Payroll		\$4,146,325,000		\$4,106,922,000
Benefits Payable		\$1,485,527,000		\$1,459,550,000
Normal Cost	8.53%	\$353,796,000	8.17%	\$335,649,000
Administrative Expenses	0.24%	\$9,951,000	0.24%	\$9,857,000
Amortization	<u>9.98%</u>	<u>\$413,803,000</u>	<u>8.16%</u>	<u>\$335,125,000</u>
Total Requirements	18.75%	\$777,550,000	16.57%	\$680,631,000
Employee Contributions	6.50%	\$269,572,000	6.00%	\$246,490,000
Employer Contributions	6.69%	\$277,520,000	6.16%	\$252,854,000
Direct State Funding	<u>0.52%</u>	<u>\$21,727,000</u>	<u>0.53%</u>	<u>\$21,510,000</u>
Total Contributions	13.71%	\$568,819,000	12.69%	\$520,854,000
Total Requirements	18.75%	\$777,550,000	16.57%	\$680,631,000
Total Contributions	<u>13.71%</u>	<u>\$568,819,000</u>	<u>12.69%</u>	<u>\$520,854,000</u>
Deficiency (Surplus)	5.04%	\$208,731,000	3.88%	\$159,777,000

From its 2010 financial sustainability legislation, TRA is scheduled for two more member and employer contribution increase increments, which, by July 1, 2015, would increase the plan's total support and reduce its contribution deficiency by 2%. After June 30, 2015, if TRA has a deficiency for two successive years, member and employer contributions would increase unless the Commission disapproves the contribution increase. If the current TRA contribution deficiency, reduced by the 2% contribution rate increases currently required by law, remains on July 1, 2015, the TRA member and employer contribution rates would increase by 0.5% of covered pay on July 1, 2016. This proposed legislation is the only proposed legislation sponsored by TRA this session, but the proposed legislation actually increases TRA's financial difficulties.

Amendment S0529-1A would require TRA to implement the full actuarial equivalent early retirement reduction rates on July 1, 2013, without a delay or phase-in.

Amendment S0529-2A would require all of the statewide and major local Minnesota defined benefit retirement plans to implement their revised actuarial equivalent optional annuity form factors and actuarial equivalent early retirement reduction rates on July 1, 2013.

Background Information on Early Retirement Reductions

Early Retirement Reductions

1. Definition. An “early retirement reduction” is the factor or calculation procedure that governs the determination of the amount of a retirement annuity that commences at an age younger than the normal retirement age.
2. Commission Principles of Pension Policy Provision. Principle II.C.5 of the Principles of Pension Policy of the Legislative Commission on Pensions and Retirement indicates that Minnesota public pension plans should not subsidize early retirement benefits and that, unless it is a part of an appropriately designed early retirement incentive, the early retirement reduction should be calculated on an actuarial equivalent basis.

Specifically, the applicable principle states:

II.C.5. Appropriate Early Retirement Reductions

Public employee pension plans should not subsidize early retirement benefits and, except for appropriately designed early retirement incentive programs, retirement benefits should be actuarially reduced for retirement before any applicable normal retirement age.

The current set of principles, last revisited by the Commission in 1996-1996, in this particular principle, indicates that early retirement should not be subsidized by the public pension plan other than as part of an appropriately designed early retirement incentive and that early retirement benefits should be actuarially reduced. The 1995-1996 principle was a slight modification of the 1980 principles, which indicated that retirement benefits should be reduced on an actuarially equivalent basis for retirement at an age earlier than the normal retirement age, except for retirement by long service employees at age 62 with 30 years of service credit. That long service early retirement eligibility was first authorized by the Legislature in 1973.

Legislative changes since 1996 have been potentially at variance with the principle to some degree with respect to the State Patrol Retirement Plan, the Correctional State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-Correctional), and the Public Employees Police and Fire Retirement Plan (PERA-P&F).

- In 1997, the actuarial equivalent early (pre-age 55) retirement reduction for the State Patrol Retirement Plan was replaced by a subsidized reduction factor (Laws 1997, Ch. 233, Art. 1, Sec. 32).
 - In 1999, for the State Patrol Retirement Plan, MSRS-Correctional, and PERA-P&F, the early (pre-age 55) retirement reduction was subsidized, with the MSRS-Correctional reduction factor changed from an actuarial equivalency reduction and with the State Patrol Retirement Plan and PERA-P&F reduction factor both further subsidized (Laws 1999, Ch. 222, Art. 13, Sec. 5, and Art. 14, Sec. 1, 3). The State Patrol Plan and PERA-P&F reduction factors are very slight after the 1997 and 1999 changes, making the early retirement annuity amount almost identical to the normal retirement annuity amount.
3. Policy Considerations Respecting Early Retirement Reductions. A defined benefit retirement plan is intended to provide the greatest benefit value to its members (and to incur its greatest actuarial accrued liability) at the normal retirement age. The use of actuarial equivalent early retirement reduction factors is intended to provide access to a benefit at an earlier age and, presumably, for a corresponding longer period of time of receipt without increasing that pension value for the retiree and the corresponding actuarial accrued liability for the retirement plan.

Minnesota public pension plans currently do not uniformly and rigorously require actuarial equivalent early retirement reduction factors, thereby generally subsidizing early retirement by actually providing the governmental employee retiring before the normal retirement age with a somewhat greater pension value (and imposing on the pension plan a greater actuarial accrued liability) than would occur at the normal retirement age. The 1997 and 1999 public safety employee retirement plan early retirement reduction factor legislation furthers that subsidization for those plans. The following identifies the various Minnesota public retirement plan early retirement reduction rates currently imposed:

- Reduction Method: Actuarial equivalent value of annuity deferred to the normal retirement age and augmented at three percent per year of imputed deferral.

Plans Involved:

- MSRS General State Employees Retirement Plan (MSRS-General) level benefit tier
- PERA General Employees Retirement Plan (PERA-General) level benefit tier
- Teachers Retirement Association (TRA) level benefit tier
- Duluth Teachers Retirement Fund Association (DTRFA) Old Law or New Law Plan level benefit tier
- St. Paul Teachers Retirement Fund Association (SPTRFA) Basic or Coordinated Program level benefit tier
- Legislators Retirement Plan

- Reduction Method: One-half of one percent per month (six percent per year) that the retiree is under the normal retirement age.

Plans Involved:

- Elective State Officers Retirement Plan
- Judges Retirement Plan

- Reduction Method: One-quarter of one percent per month (three percent per year) that the retiree is under the normal retirement age.

Plans Involved:

- MSRS-General Rule of 90 tier
- PERA-General Rule of 90 tier
- TRA Rule of 90 tier
- DTRFA Old Law or New Law Plan Rule of 90 tier
- MTRFA Basic or Coordinated Program Rule of 90 tier
- SPTRFA Basic or Coordinated Program Rule of 90 tier

- Reduction Method: Two-tenths of one percent per month (2.4 percent per year) that the retiree is under age 55.

Plan Involved:

- Correctional State Employees Retirement Plan (MSRS-Correctional)

- Reduction Method: One-tenth of one percent per month (1.2 percent per year) that the retiree is under age 55.

Plans Involved:

- State Patrol Retirement Plan
- Public Employees Police and Fire Retirement Plan (PERA-P&F)

- Reduction Method: Defined contribution plan (two dollar bill and annuity) benefit for early retirement.

Plan Involved:

- Minneapolis Employees Retirement Fund (MERF)

The wide variety of the reductions imposed by the various retirement plans and the extent of the subsidizations provided calls adherence to the current Commission policy principle into question.

Background information on the Definition of Actuarial Equivalence

Actuarial Equivalence in Minnesota Retirement Plans

Minnesota retirement plans allow retirees to take an optional annuity form as an alternative to the single-life annuity calculated under the applicable state law provision, allow a conversion of defined contribution account accumulations into monthly retirement annuities for life, and impose a reduction for some early retirements where the result is required to be equivalent actuarially.

Summary of the Current Actuarial Equivalence Definition Provisions

Legislators Plan	MSRS-General	MSRS-Correctional
<p>The condition of one allowance or benefit having an equal actuarial present value up to another allowance or benefit, determined by the actuary retained under Section 356.214 as of a given date at a specified age with each actuarial present value based on the mortality table applicable for the plan and approved under Section 356.215, Subdivision 18, and using the applicable pre-retirement or post-retirement interest rate assumption specified in Section 356.215, Subdivision 8. [3A.01, Subd. 1a]</p>	<p>The condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date at a specified age with each actuarial present value based on the appropriate mortality table adopted by the board of directors based on the experience of the fund as recommended by the actuary retained under Section 356.214, and approved under Section 356.215, Subdivision 18, and using the applicable pre-retirement or post-retirement interest rate assumption specified in Section 356.215, Subdivision 8. [352.01, Subd. 12]</p>	<p>Same as MSRS-General.</p>
State Patrol Plan	PERA-General	PERA-P&F
<p>Each optional annuity form shall have the same present value as a regular single-life annuity using the mortality table adopted by the board and the interest assumption specified in Section 356.215, Subdivision 8, and the board shall obtain the written recommendation of the actuary retained under Section 356.214. These recommendations shall be a part of the permanent records of the board. [352B.08, Subd. 3]</p>	<p>The condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date with each actuarial present value based on the appropriate mortality table adopted by the board of trustees based on the experience of the fund as recommended by the actuary retained under Section 356.214, and approved under Section 356.215, Subdivision 18, and using the applicable pre-retirement or post-retirement interest rate assumption specified in Section 356.215, Subdivision 8. [353.01, Subd. 14]</p>	<p>Same as PERA-General.</p>
PERA-Correctional	TRA	First Class City Teachers Coordinated
<p>Same as PERA-General.</p>	<p>The condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date with each actuarial present value based on the appropriate mortality table adopted by the board of trustees based on the experience of the association as recommended by the actuary retained under Section 356.214, and approved under Section 356.215, Subdivision 18, and using the applicable pre-retirement or post-retirement interest rate assumption specified in Section 356.215, Subdivision 8. [354.05, Subd. 7]</p>	<p>The condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date with each actuarial present value based on the appropriate mortality table adopted by the appropriate board of trustees based on the experience of that retirement fund association as recommended by the actuary retained under Section 356.214, and approved under Section 356.215, Subdivision 18, and using the applicable pre-retirement or post-retirement interest rate assumption specified in Section 356.215, Subdivision 8. [354A.011, Subd. 3a]</p>
Judges Plan		
<p>The condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date with each actuarial present value based on the appropriate mortality table adopted by the board of directors of the Minnesota State Retirement System based on the experience of the fund as recommended by the actuary retained under Section 356.214 and approved under Section 356.215, Subdivision 18, and using the applicable pre-retirement or post-retirement interest rate assumption specified in Section 356.215, Subdivision 8. [490.121, Subd. 2a]</p>		

Summary of the Development of the Current Actuarial Equivalence Provisions

1. Legislators Plan

- When the retirement plan was created in 1965, there were no optional annuity forms as part of the retirement plan and no need for the definition.
- In 2006 (Laws 2006, Ch. 271, Art. 10, Sec. 2), after the addition of optional annuity forms in 1993, the current definition was added.

2. MSRS-General

- In 1957 (Laws 1957, Ch. 928, Sec. 4), “actuarial equivalence” was defined as the annual amount determined by calculations based on mortality tables, purchasable with a given amount at a stated age. Optional annuities newly authorized under Minnesota Statutes 1957, Section 352.116, Subdivision 3, were required to be an actuarial equivalent in 1957.
- In 1987 (Laws 1987, Ch. 259, Sec. 12), the 1957 definition was replaced, with the term given the meaning that it is the condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date at a specified age with each actuarial present value based on the appropriate mortality table adopted by the board of directors based on the experience of the fund as recommended by the actuary retained by the Legislative Commission on Pensions and Retirement and using the applicable pre-retirement or post-retirement interest rate assumption specified in Section 356.215, Subdivision 4d.
- In 2002 (Laws 2002, Ch. 392, Art. 11, Sec. 52), the statutory cross-reference to the interest rate actuarial assumptions was revised.
- In 2005 (1st Spec. Sess. 2005, Ch. 8, Art. 3, Sec. 1), a conforming change was made to the situation of the consulting actuary preparing the official actuarial valuations and a cross-reference to the demographic actuarial assumption approval process was added relating to the mortality table.

3. State Patrol Plan

- In 1965 (Laws 1965, Ch. 889, Sec. 2), joint-and-survivor optional annuities, payable to the surviving spouse of a deceased plan member, adjusted to be the actuarial equivalent value of a life annuity, were authorized to be elected, but actuarial equivalency was not defined.
- In 1987 (Laws 1987, Ch. 259, Sec. 23), authority for the Minnesota State Retirement System (MSRS) board of directors to establish actuarial equivalent optional annuity forms generally was granted and an actuarial equivalent value was defined as having the same present value as a regular single-life annuity using the mortality table adopted by the MSRS board and the applicable statutory interest rate assumption and with the written recommendation of the consulting actuary retained by the Legislative Commission on Pensions and Retirement to be retained in the permanent records of the board.
- In 2002 (Laws 2002, Ch. 392, Art. 11, Sec. 52), the statutory cross-reference to the interest rate assumptions was revised.
- In 2006 (Laws 2006, Ch. 271, Art. 3, Sec. 47), a conforming change was made to the statutory provision governing the retention of the consulting actuary preparing the official retirement plan actuarial valuations.

4. PERA-General

- In 1957 (Laws 1957, Ch. 935, Sec. 2 and Sec. 10, Subd. 3), actuarial equivalent optional annuity forms were authorized to be established by the Public Employees Retirement Association (PERA) board and actuarial equivalency was defined as the annual amount determined by calculations based on mortality tables, purchasable with a given amount at a stated age.
- In 1987 (Laws 1987, Ch. 259, Sec. 25), the 1957 definition was replaced, with its meaning set as the condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date with each actuarial present value based on the experience of the fund as recommended by the actuary retained by the Legislative Commission on Pensions and Retirement and using the applicable pre-retirement or post-retirement interest rate assumption specified in Section 356.215, Subdivision 4d.
- In 2002 (Laws 2002, Ch. 392, Art. 11, Sec. 52), the statutory cross-reference to the interest rate assumptions was revised.
- In 2005 (1st Spec. Sess. 2005, Ch. 8, Art. 3, Sec. 2), a conforming change was made to the retention of the consulting actuary preparing the official actuarial valuations, and a cross-reference to the demographic actuarial assumptions approval process was added relating to the mortality table.

5. TRA

- In 1957 (Ex. Sess. Laws 1957, Ch. 16, Sec. 2), an actuarial equivalent definition was added as the annual amount determined by calculations based on mortality tables, purchasable with a given amount at a stated age, accompanying the authorization of optional retirement annuity forms in Extra Session Laws 1957, Chapter 16, Section 7.
- In 1987 (Laws 1987, Ch. 259, Sec. 30), the 1957 definition was replaced with a new definition, as the condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date, with each actuarial present value based on the appropriate mortality table adopted by the board of trustees based on the experience of the fund as recommended by the actuary retained by the Legislative Commission on Pensions and Retirement and using the applicable pre-retirement or post-retirement interest rate assumption specified in section 356.215, subdivision 4d.
- In 2002 (Laws 2002, Ch. 392, Art. 11, Sec. 52), the statutory cross-reference to the interest rate assumptions was revised.
- In 2005 (1st Spec. Sess. Laws 2005, Ch. 8, Art. 3, Sec. 3), a conforming change was made to the retention of the consulting actuary preparing the official actuarial valuations, and a cross-reference to the demographic actuarial assumption approval process was added relating to the mortality table.

6. First Class City Teachers Coordinated Programs

- In 1979 (Laws 1979, Ch. 217, Sec. 17 and 18), as part of the codification of the coordinated program benefit plan provisions intended to replicate the applicable provisions of TRA law, optional annuity forms were authorized and were required to be the actuarial equivalent of a single-life annuity, but actuarial equivalency was not defined.
- In 1987 (Laws 1987, Ch. 259, Sec. 46), a definition of “actuarial equivalent” was added to Minnesota Statutes, Chapter 354A, as the condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date, with each actuarial present value based on the appropriate mortality table adopted by the appropriate board of trustees based on the experience of that retirement fund association as recommended by the actuary retained by the Legislative Commission on Pensions and Retirement and using the applicable pre-retirement or post-retirement interest rate assumption specified in section 356.215, subdivision 4d.
- In 2002 (Laws 2002, Ch. 392, Art. 11, Sec. 52), the statutory cross-reference to the interest rate assumption was revised.
- In 2005 (1st Spec. Session Laws 2005, Ch. 8, Art. 3, Sec. 5), a conforming change was made to the retention of the consulting actuary preparing the official actuarial valuations, and a cross-reference to the demographic actuarial assumption approval process was added relating to the mortality table.

7. Judges Plan

- In 1973 (Laws 1973, Ch. 744, Sec. 1, Subd. 20), as part of the creation of the Uniform Judicial Retirement Plan, an actuarial equivalent definition was added, to mean the annual amount determined by calculations based on mortality tables, purchasable with a given amount at a stated age.
- In 1987 (Laws 1987, Ch. 259, Sec. 79), the definition was revised, as the condition of one annuity or benefit having an equal actuarial present value as another annuity or benefit, determined as of a given date with each actuarial present value based on the appropriate mortality table adopted by the board of trustees based on the experience of the fund as recommended by the commission-retained actuary and using the applicable pre-retirement or post-retirement interest rate assumption specified in section 356.215, subdivision 4d.
- In 2002 (Laws 2002), Ch. 392, Art. 11, Sec. 52), the statutory cross-reference to the interest rate assumptions was revised.
- In 2005 (1st Spec. Sess. Laws 2005, Ch. 8, Art. 3, Sec. 9), a conforming change was made to the retention of the consulting actuary preparing the official actuarial valuations, and a cross-reference to the demographic actuarial assumption approval process was added relating to the mortality table.

Comparison of Impact of Current, New and HF 650/SF 529 Factors

Current Factors (effective until 7/1/14)			New Factors (effective 7/1/14; phased-in over 5 yrs)				HF 650/SF 529 Factors (effective 7/1/15; phased-in over 5-yrs)			
Member's Retirement Age	Member's Years of Service	Monthly Benefit under Current Factors	Monthly Benefit under New Factors	Dollar Reduction compared to Current Factors	% Reduction compared to Current Factors	Monthly Benefit under SF529/HF650 if <u>not</u> eligible for age 62/30	% Reduction compared to Current Factors	Monthly Benefit under SF529/HF650 if eligible for age 62/30	% Reduction compared to Current Factors	
55	25	\$ 1184	\$ 936	\$ - 248	- 21 %	\$ 979	- 17 %	\$ 979	- 17 %	
56	26	\$ 1289	\$ 1042	\$ - 247	- 19 %	\$ 1,105	- 14 %	\$ 1,105	- 14 %	
57	27	\$ 1403	\$ 1158	\$ - 245	- 17 %	\$ 1,232	- 12 %	\$ 1,232	- 12 %	
58	28	\$ 1526	\$ 1287	\$ - 239	- 16 %	\$ 1,359	- 11 %	\$ 1,359	- 11 %	
59	29	\$ 1659	\$ 1429	\$ - 230	- 14 %	\$ 1,486	- 10 %	\$ 1,486	- 10 %	
60	30	\$ 1803	\$ 1587	\$ - 216	- 12 %	\$ 1,701	- 6 %	\$ 1,701	- 6 %	
61	31	\$ 1959	\$ 1762	\$ - 197	- 10 %	\$ 1,917	- 2 %	\$ 1,917	- 2 %	
62	32	\$ 2129	\$ 1956	\$ - 173	- 8 %	\$ 2,132	0 %	\$ 2,250	+ 6 %	
63	33	\$ 2314	\$ 2171	\$ - 143	- 6 %	\$ 2,346	+ 1 %	\$ 2,435	+ 5 %	
64	34	\$ 2516	\$ 2411	\$ - 105	- 4 %	\$ 2,559	+ 2 %	\$ 2,619	+ 4 %	
65	35	\$ 2737	\$ 2680	\$ - 57	- 2 %	\$ 2,770	+ 1 %	\$ 2,800	+ 2 %	
66	36	\$ 2979	\$ 2979	0	0	\$ 2,979	0 %	\$ 2,979	0 %	

*Benefit calculations shown in the table above assume members were first hired July 1, 1989 or later and have high-five salaries of \$55,000 (which is the current high-five average salary for members nearing retirement).

HF 650/SF 529 - TRA Alternative Actuarial Reduction Factor Bill

Background

- TRA is implementing a significant change in the actuarial method used to calculate early retirement actuarial reduction factors. This change is recommended by TRA and Pension Commission actuaries.
- The old actuarial method relied upon the interest rate used for the former Minnesota Post Retirement Investment Fund (Post Fund). The Post Fund was dissolved in 2009, so that methodology is no longer appropriate.
- The early retirement factors produced by the new actuarial method significantly reduce benefits for members retiring before the normal retirement age of 66.

HF 650/SF 529 - Legislative proposal to mitigate impact of new factors

- The TRA Board is concerned about the negative impact of the new factors, especially on longer service members who retire before age 66. For this reason, the board supports a legislative proposal (SF 529/HF 650) to provide alternative early retirement reduction factors.
- Under SF 529/HF 650, the early retirement penalties for longer-service teachers would be lessened for persons at least age 62 with 30 years of service. For all other members who do not meet the age 62/30 years of service eligibility, the early retirement penalties would also be lessened, but not as significantly as for longer-service teachers.
- The bill would encourage delayed retirement, to age 62 or later, especially for longer-service members.
- SF 529/HF 650 de-links any future interest rate changes from benefit calculations, avoiding the de-stabilizing effect that can have on future benefits.
- The bill is designed to be relatively cost neutral when compared to current TRA benefit costs. Relative to current costs, the actuaries estimate the legislative proposal could save as much as 0.31 percent of pay or cost 0.10 percent of pay, depending upon retirement patterns and usage of the age 62/30 special provisions.
- The table on the next page shows sample benefit calculations under the current tables compared to the new tables and those proposed in SF 529/HF 650.

1.1 moves to amend S.F. No. 529; H.F. No. 650, as follows:

1.2 Delete everything after the enacting clause and insert:

1.3 "Section 1. **TEMPORARY PROVISION; REVISION OF ANNUITY RESERVE,**
1.4 **OPTIONAL ANNUITY FORM, AND EARLY RETIREMENT FACTORS.**

1.5 On or before July 1, 2013, the governing board of the Teachers Retirement
1.6 Association shall revise, for the retirement plan it administers, the annuity reserve factors,
1.7 optional annuity form factors, and early retirement annuity factors consistent with any
1.8 applicable actuarial assumption changes made since the last prior factor revision, if
1.9 the annuity is required to be the actuarial equivalent of the normal retirement annuity
1.10 form. The revision must be undertaken with the recommendation of the approved
1.11 actuary retained by the retirement system, which recommendation must be retained in the
1.12 permanent records of the governing board.

1.13 **EFFECTIVE DATE.** This section is effective the day following final enactment."

1.14 Amend the title accordingly

1.1 moves to amend S.F. No. 529; H.F. No. 650, as follows:

1.2 Delete everything after the enacting clause and insert:

1.3 "Section 1. **TEMPORARY PROVISION; REVISION OF ANNUITY RESERVE,**
1.4 **OPTIONAL ANNUITY FORM, AND EARLY RETIREMENT FACTORS.**

1.5 On or before July 1, 2013, the governing boards of the Minnesota State Retirement
1.6 System, the Public Employees Retirement Association, the Teachers Retirement
1.7 Association, the Duluth Teachers Retirement Fund Association, and the St. Paul Teachers
1.8 Retirement Fund Association shall revise, for the retirement plan or plans administered,
1.9 the annuity reserve factors, optional annuity form factors, and early retirement annuity
1.10 factors consistent with any applicable actuarial assumption changes made since the last
1.11 prior factor revision, if the annuity is required to be the actuarial equivalent of the normal
1.12 retirement annuity form. The revision must be undertaken with the recommendation of
1.13 the approved actuary retained by the retirement system, which recommendation must be
1.14 retained in the permanent records of the governing board.

1.15 **EFFECTIVE DATE.** This section is effective the day following final enactment."

1.16 Amend the title accordingly

SENATE
STATE OF MINNESOTA
EIGHTY-EIGHTH LEGISLATURE

S.F. No. 529

(SENATE AUTHORS: PAPPAS)

DATE	D-PG	OFFICIAL STATUS
02/18/2013	275	Introduction and first reading Referred to State and Local Government

1.1 A bill for an act
 1.2 relating to retirement; Teachers Retirement Association; modifying certain early
 1.3 retirement adjustment factors; phasing in actuarial equivalent early retirement
 1.4 adjustment factors over a five-year period beginning in 2015; amending
 1.5 Minnesota Statutes 2012, section 354.44, subdivision 6.

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

1.7 Section 1. Minnesota Statutes 2012, section 354.44, subdivision 6, is amended to read:

1.8 Subd. 6. **Computation of formula program retirement annuity.** (a) The formula
 1.9 retirement annuity must be computed in accordance with the applicable provisions of the
 1.10 formulas stated in paragraph (b) or (d) on the basis of each member's average salary under
 1.11 section 354.05, subdivision 13a, for the period of the member's formula service credit.

1.12 (b) This paragraph, in conjunction with paragraph (c), applies to a person who first
 1.13 became a member of the association or a member of a pension fund listed in section
 1.14 356.30, subdivision 3, before July 1, 1989, unless paragraph (d), in conjunction with
 1.15 paragraph (e), produces a higher annuity amount, in which case paragraph (d) applies. The
 1.16 average salary as defined in section 354.05, subdivision 13a, multiplied by the following
 1.17 percentages per year of formula service credit shall determine the amount of the annuity to
 1.18 which the member qualifying therefor is entitled for service rendered before July 1, 2006:

	Coordinated Member	Basic Member
1.19 Each year of service during	the percent specified	the percent specified
1.20 first ten	in section 356.315,	in section 356.315,
1.21	subdivision 1, per year	subdivision 3, per year
1.22		
1.23 Each year of service	the percent specified	the percent specified
1.24 thereafter	in section 356.315,	in section 356.315,
1.25	subdivision 2, per year	subdivision 4, per year

2.1 For service rendered on or after July 1, 2006, the average salary as defined in section
 2.2 354.05, subdivision 13a, multiplied by the following percentages per year of service credit,
 2.3 determines the amount the annuity to which the member qualifying therefor is entitled:

	Coordinated Member	Basic Member
2.4 Each year of service during 2.5 first ten	2.5 the percent specified 2.6 in section 356.315, 2.7 subdivision 1a, per year	2.5 the percent specified 2.6 in section 356.315, 2.7 subdivision 3, per year
2.8 Each year of service after 2.9 ten years of service	2.8 the percent specified 2.9 in section 356.315, 2.10 subdivision 2b, per year	2.8 the percent specified 2.9 in section 356.315, 2.10 subdivision 4, per year

2.11 (c)(i) This paragraph applies only to a person who first became a member of the
 2.12 association or a member of a pension fund listed in section 356.30, subdivision 3, before
 2.13 July 1, 1989, and whose annuity is higher when calculated under paragraph (b), in
 2.14 conjunction with this paragraph than when calculated under paragraph (d), in conjunction
 2.15 with paragraph (e).

2.16 (ii) Where any member retires prior to normal retirement age under a formula
 2.17 annuity, the member shall be paid a retirement annuity in an amount equal to the normal
 2.18 annuity provided in paragraph (b) reduced by one-quarter of one percent for each month
 2.19 that the member is under normal retirement age at the time of retirement except that for
 2.20 any member who has 30 or more years of allowable service credit, the reduction shall be
 2.21 applied only for each month that the member is under age 62.

2.22 (iii) Any member whose attained age plus credited allowable service totals 90 years
 2.23 is entitled, upon application, to a retirement annuity in an amount equal to the normal
 2.24 annuity provided in paragraph (b), without any reduction by reason of early retirement.

2.25 (d) This paragraph applies to a member who has become at least 55 years old and
 2.26 first became a member of the association after June 30, 1989, and to any other member
 2.27 who has become at least 55 years old and whose annuity amount when calculated under
 2.28 this paragraph and in conjunction with paragraph (e), is higher than it is when calculated
 2.29 under paragraph (b), in conjunction with paragraph (c). For a basic member, the average
 2.30 salary, as defined in section 354.05, subdivision 13a, multiplied by the percent specified
 2.31 by section 356.315, subdivision 4, for each year of service for a basic member shall
 2.32 determine the amount of the retirement annuity to which the basic member is entitled.
 2.33 The annuity of a basic member who was a member of the former Minneapolis Teachers
 2.34 Retirement Fund Association as of June 30, 2006, must be determined according to the
 2.35 annuity formula under the articles of incorporation of the former Minneapolis Teachers
 2.36 Retirement Fund Association in effect as of that date. For a coordinated member, the
 2.37 average salary, as defined in section 354.05, subdivision 13a, multiplied by the percent
 2.38 specified in section 356.315, subdivision 2, for each year of service rendered before July

3.1 1, 2006, and by the percent specified in section 356.315, subdivision 2b, for each year of
3.2 service rendered on or after July 1, 2006, determines the amount of the retirement annuity
3.3 to which the coordinated member is entitled.

3.4 (e) This paragraph applies to a person who has become at least 55 years old and first
3.5 becomes a member of the association after June 30, 1989, and to any other member who
3.6 has become at least 55 years old and whose annuity is higher when calculated under
3.7 paragraph (d) in conjunction with this paragraph than when calculated under paragraph
3.8 (b), in conjunction with paragraph (c). An employee who retires under the formula annuity
3.9 before the normal retirement age shall be paid the normal annuity provided in paragraph
3.10 (d) reduced so that the reduced annuity is the actuarial equivalent of the annuity that
3.11 would be payable to the employee if the employee deferred receipt of the annuity and the
3.12 annuity amount were augmented at an annual rate of three percent compounded annually
3.13 from the day the annuity begins to accrue until the normal retirement age if the employee
3.14 became an employee before July 1, 2006, and at 2.5 percent compounded annually if the
3.15 employee becomes an employee after June 30, 2006. Except in regards to section 354.46,
3.16 this paragraph remains in effect until June 30, 2015.

3.17 (f) After June 30, 2020, this paragraph applies to a person who has become at least
3.18 55 years old and first becomes a member of the association after June 30, 1989, and to any
3.19 other member who has become at least 55 years old and whose annuity is higher when
3.20 calculated under paragraph (d) in conjunction with this paragraph than when calculated
3.21 under paragraph (b), in conjunction with paragraph (c). An employee who retires under
3.22 the formula annuity before the normal retirement age is entitled to receive the normal
3.23 annuity provided in paragraph (d). For a person who is at least age 62 or older and has at
3.24 least 30 years of service, the annuity must be reduced by an early reduction factor of six
3.25 percent per year of the annuity that would be payable to the employee if the employee
3.26 deferred receipt of the annuity and the annuity amount were augmented at an annual rate
3.27 of three percent compounded annually from the day the annuity begins to accrue until the
3.28 normal retirement age if the employee became an employee before July 1, 2006, and at 2.5
3.29 percent compounded annually if the employee became an employee after June 30, 2006.
3.30 For a person who is not at least age 62 or older and does not have at least 30 years of
3.31 service, the annuity would be reduced by an early reduction factor of four percent per year
3.32 for ages 55 through 59 and seven percent per year of the annuity that would be payable
3.33 to the employee if the employee deferred receipt of the annuity and the annuity amount
3.34 were augmented at an annual rate of three percent compounded annually from the day
3.35 the annuity begins to accrue until the normal retirement age if the employee became an

4.1 employee before July 1, 2006, and at 2.5 percent compounded annually if the employee
4.2 became an employee after June 30, 2006.

4.3 (g) After June 30, 2015, and before July 1, 2020, for a person who would have
4.4 a reduced retirement annuity under either paragraph (e) or (f) if they were applicable,
4.5 the employee is entitled to receive a reduced annuity which must be calculated using
4.6 a blended reduction factor augmented monthly by 1/60 of the difference between the
4.7 reduction required under paragraph (e) and the reduction required under paragraph (f).

4.8 (f) (h) No retirement annuity is payable to a former employee with a salary that
4.9 exceeds 95 percent of the governor's salary unless and until the salary figures used in
4.10 computing the highest five successive years average salary under paragraph (a) have been
4.11 audited by the Teachers Retirement Association and determined by the executive director
4.12 to comply with the requirements and limitations of section 354.05, subdivisions 35 and 35a.

4.13 **EFFECTIVE DATE.** This section is effective July 1, 2013.