October 22, 2010

Rep. Bette Grande, Chairman Employee Benefits Programs Committee c/o Jeff Nelson ND Legislative Council State Capitol 600 East Boulevard Bismarck, ND 58505-0360

Re: Bill 39 (Tier 3 with Modified Retirement Eligibility)

Dear Rep. Grande:

As requested, we have reviewed Bill 39 (Bill 10039.0100). This bill would create a third membership tier for the Teachers' Fund for Retirement (TFFR) with modified retirement eligibility rules.

Provisions of Bill

Members hired on or after July 1, 2011 would belong to this third tier. Tier 3 members would be eligible to retire with an unreduced retirement benefit only if they are vested and at least age 65. The provision allowing unreduced retirement upon meeting the Rule of 85 (Tier 1) or Rule of 90 (Tier 2) would not apply to Tier 3 members.

Reduced (early) retirement benefits would be available to vested members after age 62. The reduction from the age 65 benefit would be based on a special schedule which results in a reduction of approximately 15% plus 5% for each year younger than 65. In other words, a member retiring just a month earlier than his/her 65th birthday would forfeit over 15% of the age 65 benefit. Members retiring at 64, 63, or 62 would have their age 65 benefit reduced by approximately 20%, 25% or 30%, respectively.

As a reminder, Tier 1 members are those members who joined TFFR before July 1, 2008, and Tier 2 members are those who joined TFFR on or after that date. Both Tier 1 and Tier 2 members who are eligible for retirement receive a benefit equal to 2.00% of their final average salary for each year of service. For Tier 1 members, the final average salary is a three-year average, while for Tier 2 members it is a five-year average. Tier 1 members are eligible for unreduced retirement after reaching the Rule of 85 (age in years plus years of service equals 85), while Tier 2 members are eligible upon reaching the Rule of 90. Both Tier 1 and Tier 2 members are eligible for unreduced retirement at age 65 if they are vested. Tier 1 and Tier 2 members who are not eligible for an unreduced retirement benefit may take an early (reduced) retirement benefit if they are age 55 and vested. The current reduction is 6% for each year the retirement precedes the earlier of age 65 or

attainment of the Rule of 85 (Tier 1) or Rule of 90 (Tier 2). Vesting requires three years of service for a Tier 1 member; five years of service for a Tier 2 member.

Except for the retirement eligibility conditions and the early retirement reductions, Tier 3 members would have the same benefit provisions as Tier 2 members: a 2.00% multiplier, a five-year Final Average Salary, and five-year vesting.

Member and employer contributions are not changed by the bill.

Under the bill, a Tier 1 or Tier 2 member who terminated service, took a refund, and later rejoined TFFR on or after July 1, 2011 would become a Tier 3 member upon reemployment.

Actuarial Analysis

Here is a comparison of some key actuarial measurements as of July 1, 2010:

| Item | Current Law | Bill 39 | Difference |
|--------------------|-----------------|-----------------|----------------|
| Normal cost rate | 10.57% | 9.34% | -1.23% |
| UAAL | \$795.2 Million | \$850.6 Million | \$55.4 Million |
| Funded ratio | 69.8% | 68.4% | -1.4% |
| Funding period | Infinite | Infinite | NA |
| GASB ARC | 12.79% | 12.26% | -0.53% |
| GASB ARC (dollars) | \$63.1 Million | \$60.5 Million | -\$2.6 Million |

In summary, the total normal cost rate would decrease from 10.57% to 9.34%, the Actuarial Required Contribution (ARC) would decrease from 12.79% to 12.26%, and the funded status would decrease by 1.4% to 68.4%. However, even with the changes proposed in this legislation, the statutory contribution rate of 8.75%, for FY 2011, is still projected to be insufficient to ever fully fund the retirement system.

The measurements shown in the above table and the attached exhibits include:

Normal cost rate: The average cost for a new member, expressed as a level contribution over the member's career, based on the provisions applicable to future hires.

UAAL: The unfunded actuarial accrued liability, which is the result of subtracting the actuarial value of assets from the actuarial accrued liability.

Funded Ratio: The ratio of the actuarial value of assets to the actuarial accrued liability.

ARC: The Annual Required Contribution determined in accordance with Government Accounting Standards Board Statement No. 25 (GASB 25).

It should be noted that the UAAL increases under this bill, even though benefits are being reduced. This anomaly is a byproduct of the actuarial cost method used for TFFR (the Ultimate Entry Age Normal method). The normal cost can be thought of as the cost for a new member. It is determined using the benefit provisions that apply to future Tier 3 members. Since the normal cost is reduced by the legislation, and since the present value of future benefits for current members is unchanged, the actuarial accrued liability increases, by definition. (The actuarial accrued liability is defined as the actuarial present value of future benefits for current members, less the present value of future normal costs. When the normal cost decreases, but the present value of future benefits is unchanged, the actuarial accrued liability must increase.) However, the decrease in the plan's funded status is less important than the decrease in the plan's future normal cost. This is why, despite the decrease in the plan's funded status, the ARC is reduced by 0.53% due to the legislation. By reducing the normal cost, more of the employer contribution rate is available to amortize the unfunded actuarial accrued liability.

Technical Comments

We have not identified any legal, regulatory or compliance issues raised by the bill. We are not aware of any conflicts between federal pension law and the bill.

As an observation, under the bill a career teacher who begins teaching at age 24 would have to teach for 41 years, until age 65, before becoming eligible for an unreduced retirement benefit. On the other hand, Social Security will not pay an unreduced benefit to members born in 1960 or later until age 67.

Eliminating unreduced retirement prior to age 65 will reduce the cost of the plan, but it may also result in teachers continuing in service to older ages, when some may no longer be as effective. The committee may wish to hear from representatives of the employers on this point.

The reduction schedule for early retirement (retirement between age 62 and before age 65) is unusual. There is an immediate and significant penalty for anyone retiring early. This penalty is much larger than an actuarial reduction. For example, at age 64, the actuarially determined reduction is 9%, compared to a reduction of 20.04% under the bill at age 64.

That is, if a Tier 3 teacher has earned a benefit at age 64 of \$2,000/month (2.00% x Final Average Salary x service), she could terminate at age 64, wait until she reached age 65, and start her benefit then. Alternatively, she could take a reduced benefit at 64. The reduction to the benefit needed to keep these alternatives equal in value is 9%, compared with the 20.04% reduction in the schedule in the bill.

Similarly, at age 63, the bill's reduction is 25.02%, while an actuarial reduction would be 17%, and at age 62, the bill applies a 30.00% reduction, while an actuarial reduction would be 25%. Reducing benefits by 8% per year between 65 and 62 approximates an actuarial reduction.

It's not clear why the bill calls for charging a greater than actuarial reduction. Most sponsors have no objection to members being able to retire early as long as their benefits are reduced by a factor that approximates an actuarial reduction, since this does not increase the trust's liabilities. By restricting the availability of reduced retirement and by imposing a stiff penalty for choosing to

retire early, the bill makes early retirement very unattractive, and this may hamper the employers' ability to manage their workforce.

Adding a third tier does add to the costs and complications of administration and makes communications with members more cumbersome. Schools could have members under four different sets of benefits:

- Tier 1 TFFR members (members joining before July 1, 2008)
- Tier 2 TFFR members (members joining on or after July 1, 2008)
- Tier 3 TFFR members (proposed: members joining on or after July 1, 2011)
- Noncertified support personnel covered under some other plan, in most cases the Public Employees Retirement System

This could make negotiations between the districts and member groups more involved.

Basis of Calculations

All analyses and projections in this letter are based on the member and financial data used to prepare the July 1, 2010 actuarial valuation and, except as noted, on the actuarial assumptions and methods recommended in the last experience study and adopted by the Board of Trustees at its January 21, 2010 meeting. Members who would have been eligible for normal (unreduced) retirement under the current provisions but who would not be eligible under Bill 39 were assumed to retire immediately upon becoming eligible for normal retirement.

The actuarial reductions for early retirement discussed above were based on the actuarial assumptions we use for the TFFR actuarial valuation. In particular, they are based on (a) an 8.00% interest rate, and (b) a unisex mortality table composed by weighting the male valuation table for post-retirement mortality by 35% and weighting the female table by 65%.

General Comments

In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Our calculations are based upon assumptions regarding future events, which may or may not materialize. Please bear in mind that actual results could deviate significantly from our projections, depending on actual plan experience.

Nothing in this letter should be construed as providing legal, investment or tax advice. We certify that the undersigned are members of the American Academy of Actuaries and that we meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion

contained herein. No statement in this letter is intended to be interpreted as a recommendation in favor of the change or in opposition to it.

If you have any questions, or require any additional or clarifying information, please do not hesitate to contact either one of the undersigned.

Sincerely,

Daniel J. White, FSA, MAAA, EA

Senior Consultant

J. Christian Conradi, ASA, MAAA, EA

Senior Consultant

Enclosure

cc: Ms. Fay Kopp, Deputy Executive Director, ND Retirement and Investment Office *J:\2039\2010\Leg\Study Bill 39 (Tier 3 NRA)\Bill 39 Impact Analysis.docx*