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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 54 (TFFR Bill with No Appropriation)

Dear Rep. Grande:

As requested, we have reviewed Bill 54 (Bill 10054.0100). This bill would modify benefits for most current and future members of the Teachers' Fund for Retirement (TFFR), principally by increasing the eligibility requirements for unreduced (normal) retirement. It would also increase required contributions for both employers and members. This bill is identical to Bill 55, except that Bill 55 requires a $75 million appropriation to TFFR from the General Fund.

Provisions of Bill

Contribution Rates: The current employer contribution rate for TFFR members is 8.75% of salary, and members pay 7.75% of salary. Section 2 of this bill increases both of these rates a total of 4.00 percentage points in two steps of 2.00 percentage points each, as shown below:

Period	Employer	Member	Total
Current rates (FY 2011 – FY 2012)	8.75%	7.75%	16.50%
Effective July 1, 2012 (FY 2013, FY 2014)	10.75%	9.75%	20.50%
Effective July 1, 2014 (FY 2015 & later)	12.75%	11.75%	24.50%

As under present law, these higher contributions are not intended to be permanent. Both the member and employer rates would revert to 7.75% once the plan reaches a 90% funded ratio, i.e., once the actuarial value of assets ÷ the actuarial accrued liability is at least 0.90.

Unreduced Retirement Eligibility: Section 3 of the bill make changes to the eligibility requirements for normal (unreduced) retirement. These changes are applied to current as well as future members of TFFR. However, these changes would not apply to certain "grandfathered" members. Section 1 adds a new definition for a Tier One Grandfathered Member. A Tier One Grandfathered Member is a Tier 1 member who, on June 30, 2013, is vested (has three years of service) and meets either of these conditions:

- Is at least age 55; or
- The sum of the member's age and years of service is at least 65

Therefore, all Tier 1 members who are eligible for retirement are grandfathered, as are all active Tier 1 members who are within ten years of eligibility for an unreduced retirement benefit. Tier One Grandfathered Members are exempt from the changes made by Section 3. They retain the current retirement eligibility provisions.

As a reminder, Tier 1 members are those who joined TFFR on or before June 30, 2008, and Tier 2 members are those who joined after that date.

Note, of the 9,907 active members as of July 1, 2010, 4,747 of those would satisfy the grandfathering requirements described above if they continued working to June 30, 2013. However, we know that many of these members will decide to quit or retire before that date. Based on current turnover and retirement assumptions, we expect the number of members that will actually be grandfathered at June 30, 2013 will be about 3,450 to 3,500. This is approximately 35% of the projected active population at the effective date of the plan change.

For all other members—both nongrandfathered Tier 1 members and all Tier 2 members, including all future members—Section 3 of the bill increases the eligibility requirements for unreduced retirement. Currently, members in Tier 1 are eligible for an unreduced benefit if they meet the Rule of 85 (the sum of age plus years of service is at least 85), while Tier 2 members must meet the Rule of 90. Members of both tiers who do not meet the appropriate Rule of 85 or 90 can still retire at age 65 if they are vested. Vesting requires three years of service for members in Tier 1 and five years of service for Tier 2 members. Under the bill, nongrandfathered members would have to be at least age 60 and would have to meet the Rule of 90 to be eligible to retire with an unreduced benefit. Members who did not meet the Rule of 90 would still be permitted to retire at age 65 if they were vested.

For example, a Tier 1 member who is age 45 with 20 years of service on June 30, 2013 would be grandfathered, because she is vested and the sum of her age and service is at least 65. Therefore, she would see no change to the age at which she could retire with an unreduced benefit. If she continues in full-time service, she would be eligible to retire at age 55, when she would have 30 years of service and would meet the Rule of 85.

If she had been age 44 with 19 years of service on June 30, 2013, she would not be grandfathered, since she would be less than 55 and the sum of her age and service would be less than 65. In her case, rather than being able to retire at age 55, she would have to wait until age 60.

A Tier 2 member who is age 30 with 4 years of service would see her earliest unreduced retirement age increased from age 58, when she would have 32 years of service and meet the Rule of 90, to age 60, since this would be the earliest unreduced retirement age for any nongrandfathered member.

Early Retirement: Section 4 of the bill modifies the reduced (early) retirement benefits. At present, a member who is not eligible for unreduced retirement but who is vested and at least age 55 can retire with an early retirement benefit. The benefit is reduced 6% per year that the member is

retiring early. The reduction is applied from age 65, or if earlier, from the age at which the member would qualify under the applicable Rule of 85 or 90, using just the member's current service.

One change made by the bill just conforms the computation of the early retirement reduction to the new requirements for unreduced retirement. That is, the reduction is applied from the age 65, or if earlier, from the point the member would both reach age 60 and satisfy the Rule of 90 based on current service. The other change made by this section increases the reduction per year from 6% to 8%. Neither of these changes would affect a Tier One Grandfathered Member.

So, for example, a nongrandfathered member who wishes to take early retirement at age 60 with 15 years of service would have her formula benefit reduced 30% under current law (5 years early x 6%/year), but this reduction would be increased to 40% under the bill (5 years early x 8%/year).

Disability: Section 5 of the bill makes two changes to the disability benefit. The first change is to the eligibility requirements. Currently, members are eligible for this benefit if they have at least one year of service. The bill would change this to require five years of service. Members who become disabled prior to earning five years of service would only be entitled to a refund (or in the case of vested members, a deferred retirement benefit payable at 65). Second, the current benefit is based on the regular retirement benefit with no reduction for age—2.00% x Final Average Salary x Service—but there is a minimum of 20 years of service for the disability calculation. Therefore, the minimum benefit at present is 40% (2.00% x 20 years) of the member's Final Average Salary. The bill would eliminate this minimum, and the disability benefit would reflect the member's actual service. These changes would apply to all members, including Tier One Grandfathered Members.

Member Contributions for Reemployed Retirees: Sections 6 and 7of the bill require that reemployed retired teachers pay the member contribution to TFFR. Currently reemployed retirees do not contribute to the Fund, although their employers make the employer contribution. This change would apply to all retirees, regardless of when they retired or when they returned to work, if they perform TFFR covered services after July 1, 2012. Therefore, even retirees who returned to teach before this date would be required to contribute if they continued working after this date.

Effective Dates: Section 8 of the bill sets the effective dates for the changes described above. As already noted, the provision requiring reemployed retirees to make the member contributions would be effective July 1, 2012. The contribution rate changes would be effective on July 1, 2012 and July 1, 2014, as shown above. All of the other provisions—the changes to the retirement and disability provisions—would become effective July 1, 2013.

Actuarial Analysis

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

Item	Current Law	Bill 54	Difference
Normal cost rate	10.57%	10.30%	-0.27%
UAAL	$795.2 Million	$773.3 Million	-$21.9 Million
Funded ratio	69.8%	70.4%	1.6%
Funding period	Infinite	Infinite	NA
GASB ARC	12.79%	12.25%	-0.54%

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).

Funding Period: This is the theoretical period required to amortize the UAAL, based on the statutory contribution being received. A result of Infinite indicates the statutory contribution rate is not sufficient to ever amortize the UAAL.

The table above shows the effect of the changes in the benefit provisions, but does not illustrate the effect of the contribution increases. To show the overall effect of the Bill 54, we have attached Exhibits 1 and 2. These exhibits illustrate the projected funded ratios and funding periods under the current provisions and under Bill 54. While assets are projected to be exhausted before the year 2040 under the current provisions, the plan's funded status is projected to increase to 80% by 2040 under Bill 54.

The increase in the employee and employer contributions to the plan has the most significant effect on the projected improvement in the plan's funded status, adding 4.00% each to the contributions. Most of the savings from the revised benefit provisions, a 0.49% reduction in the ARC, is due to the changes in retirement eligibility and the early retirement reduction factor. The disability changes (eligibility and benefit) reduced the ARC by an additional 0.05%. The additional member contributions that will be required of retired members who are reemployed is equivalent to adding 0.12% of total pay in contributions to the system (based on the current 7.75% member rate).

Therefore, the combination of all these items—the additional contributions and the savings from benefit reductions—when fully phased in is equivalent to a total of 8.66% of payroll:

Item	Effect
Require member contributions from reemployed retirees	0.12%
Increase member contribution rate	4.00%
Increase employer contribution rate	4.00%
Change retirement eligibility and early retirement reduction	0.49%
Change disability provisions (eligibility and benefit)	0.05%
Total	8.66%

We have also attached Exhibit 3, which shows the expected dollar amount of member and employer contributions for the next few years as the higher rates are phased in.

Technical Comments

It is possible that this bill, if enacted, would face a court challenge, since it changes the benefit provisions applicable to members already in the plan. There is a legal theory under which it would be impermissible, because it would be a violation of the State's contract clause, to reduce benefits for current members, unless an offsetting improvement were made at the same time.

We are not attorneys, and we cannot provide a legal opinion about this. We can provide a bit of history about this issue. Several years ago, Scott Miller, who was the Assistant Attorney General assigned to assist and advise the TFFR Board, provided his opinion that, if a bill like this were proposed, the bill would likely be found unconstitutional. Last year, the TFFR Board asked Aaron Webb, the Assistant Attorney General who is now assigned as their advisor, to re-review Mr. Miller's opinion and the relevant law. In Mr. Webb's view, the outcome of a court challenge was more uncertain.

We recommend that the committee hear from Mr. Webb about this issue.

Before endorsing a bill that made changes to retirement eligibility for current vested Tier 1 members, the TFFR Board looked at several other alternatives. These included: (a) changing benefits only for future members, and (b) changing benefits for future members and current nonvested members. However, these produced very small savings.

This legislation, by grandfathering members eligible for or near eligibility for retirement attempts to minimize the impact on members who are making active plans for their retirement, while still producing meaningful savings. (The TFFR Board also looked at other possible ways to determine the group of grandfathered members before settling on the approach in the bill.)

It should be noted that this bill would reduce the differences between the nongrandfathered Tier 1 members and Tier 2 members. They will generally be subject to the same provisions, except that (a) the Final Average Salary for Tier 1 members is a three-year average, while it is a five-year average

for Tier 2 members, and (b) vesting requires five years for Tier 2 members but just three years for Tier 1 members.

The provision requiring reemployed retirees to contribute has been criticized because it requires members who are no longer earning benefit service to continue contributing. Contributions would be required although the rehired retiree would not receive a larger benefit due to those contributions. On the other hand, some school districts pick up the member contribution, and as a result, the district may favor hiring a retiree over a brand new teacher. This may make it more attractive for members to retire immediately upon becoming eligible for an unreduced retirement benefit, which has a cost for the fund.

The proposed changes to the disability benefit will reduce the disability benefits paid by the fund, and will mean that some shorter-service teachers will not be eligible for this benefit. However, it is difficult to determine the actual impact on the members, since some school districts also provide a separate long-term disability benefit.

The provision requiring an 8.00%/year reduction for early retirement will approximate a full actuarial reduction while retaining a simplified formula which is easy to communicate to members. The following chart compares an actuarially calculated factor for a member with an age 65 normal retirement age with the 6% factors used currently and the proposed factors based on an 8%/year reduction.

Comparison of Early Retirement Factors (NRA = 65)			
Age	Actuarial	Current Plan (6%/Year)	Proposed (8%/Year)
65	100%	100%	100%
64	91%	94%	92%
63	83%	88%	84%
62	75%	82%	76%
61	69%	76%	68%
60	63%	70%	60%
59	57%	64%	52%
58	52%	58%	44%
57	48%	52%	36%
56	44%	46%	28%
55	40%	40%	20%

As you can see, the 8%/year reduction more closely approximates a true actuarial reduction for the first five years of reduction. Keep in mind, though, that not all employees under the current plan or under this bill will have an age 65 normal retirement age, because of the Rules. A member retiring

at age 55 with 30 years of service would be eligible for normal retirement at age 60 under the bill. For this person, the reduction would be applied from age 60, not age 65, and the factor would be 60% (40% reduction), compared to an actuarial factor of 64%.

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

Administration and Timing

The bill will require the Retirement and Investment Office to revise member communications materials and to have some programming redone. Members and employers will need to be notified of the changes, and the grandfathered members will need to be identified. While there will be some implementation costs associated with enactment of the bill, it is unlikely that these would require additional permanent staffing.

We believe the bill's delayed effective dates give the Retirement and Investment Office sufficient time to make and communicate these changes prior to implementation.

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 54 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%.

The projections were made assuming an 8.00% market return, net of investment and administrative expenses, for FY 2011 and each subsequent year. The projections assume no actuarial gains or losses will occur in the future, and that members will terminate, retire, become disabled, or die as predicted by the actuarial assumptions. The size of the active member population is assumed to remain at 9,907, with each member who leaves the active population being replaced by a new member. New members are assumed to resemble the population of hypothetical new members used to determine the normal cost.

General Comments

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.

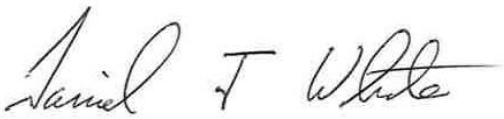
In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a

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.

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
Senior Consultant

cc: Ms. Fay Kopp, Deputy Executive Director, ND Retirement and Investment Office

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North Dakota Teacher's Fund for Retirement

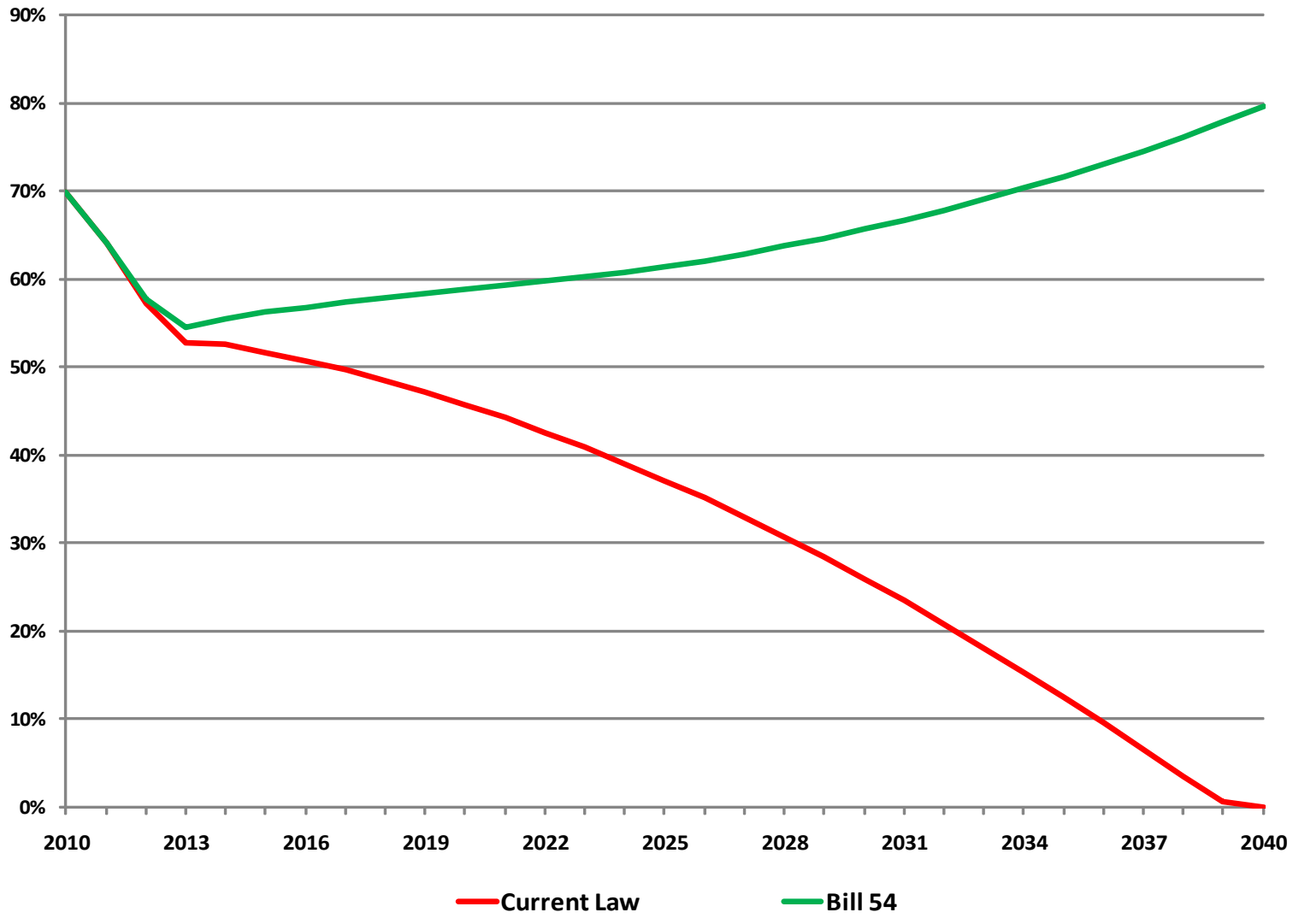
Exhibit 1 – Compare Projected Information under Current Law and Bill 54

Valuation as of July 1:	Current Plan Provisions				Bill 54			
	Employer Contribution Rate	Employee Contribution Rate	Funded Ratio	Funding Period (in years)	Employer Contribution Rate	Employee Contribution Rate	Funded Ratio	Funding Period (in years)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2010	8.75%	7.75%	70%	Infinite	8.75%	7.75%	70%	Infinite
2011	8.75%	7.75%	64%	Infinite	8.75%	7.75%	64%	Infinite
2012	8.75%	7.75%	57%	Infinite	10.75%	9.75%	58%	Infinite
2013	8.75%	7.75%	53%	Infinite	10.75%	9.75%	54%	Infinite
2014	8.75%	7.75%	53%	Infinite	12.75%	11.75%	56%	44
2015	8.75%	7.75%	52%	Infinite	12.75%	11.75%	56%	43
2020	8.75%	7.75%	46%	Infinite	12.75%	11.75%	59%	37
2025	8.75%	7.75%	37%	Infinite	12.75%	11.75%	61%	29
2030	8.75%	7.75%	26%	Infinite	12.75%	11.75%	66%	22
2035	8.75%	7.75%	12%	Infinite	12.75%	11.75%	72%	16
2040	8.75%	7.75%	0%	Infinite	12.75%	11.75%	80%	10

Projections are based on July 1, 2010 actuarial valuation
Projections assume 8.00% net investment return in FY 2011 and all future years
Funded ratios are based upon actuarial values

North Dakota Teacher's Fund for Retirement

Exhibit 2 - Comparison of the Projected Funded Status under Current Law and Bill 54



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North Dakota Teacher's Fund for Retirement

Exhibit 3 – Comparison of Projected Contributions under Current Law and Bill 54

Fiscal Year Beginning July 1,	Projected Payroll	Current Law Provisions			Bill 54			Total Increase
		Employer Contributions	Employee Contributions	Total Contributions (3) + (4)	Employer Contributions	Employee Contributions	Total Contributions (6) + (7)	(8)-(5)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2010	$ 493.5	$ 43.9	$ 38.2	$ 82.1	$ 43.9	$ 38.2	$ 82.1	$ 0.0
2011	505.5	44.9	39.2	84.1	44.9	39.2	84.1	0.0
2012	519.2	46.1	40.2	86.3	56.7	51.4	108.1	21.8
2013	533.9	47.4	41.4	88.8	58.3	52.9	111.2	22.4
2014	549.9	48.9	42.6	91.5	71.2	65.6	136.8	45.3
2015	566.7	50.4	43.9	94.3	73.4	67.6	141.0	46.7

Amounts shown in millions
Projections are based on July 1, 2010 actuarial valuation
Projections assume 8.00% net investment return in FY 2011 and all future years
Contribution rates under current law for all years: employee 7.75%, employer 8.75%
Contribution rates under bill 54:

- Fiscal years beginning July 1, 2012 and July 1, 2013: employee 9.75%, employer 10.75%
- Fiscal years beginning July 1, 2014 and thereafter: employee 11.75%, employer 12.75%