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January 28, 2013

Mr. Sparb Collins
Executive Director
State of North Dakota Public Employees' Retirement System
400 East Broadway, Suite 505
P.O. Box 1657
Bismarck, ND 58502

Re: **Technical Comments – HB 1452**

Dear Sparb:

The following presents our analysis of the proposed changes found in draft HB 1452:

Systems Affected: North Dakota Public Employees Retirement System (PERS) Hybrid Plan and Defined Contribution Plan (DC Plan)

Summary: The proposed legislation would provide State employees, including judges, BCI law enforcement officers and National Guard employees, the opportunity to irrevocably elect to participate in the Defined Contribution Plan pursuant to rules adopted by the PERS board. Existing employees who elect to participate in the Defined Contribution Plan will have a lump sum transferred from the Hybrid Plan to an individual account in the Defined Contribution Plan. The lump sum amount shall be the actuarial value of the individual member's accumulated benefit obligation in the Hybrid Plan, based on the assumption that the member will retire at the earliest applicable normal retirement age. Such transfer will not affect the member's health benefits or retiree health benefits.

Actuarial Cost and Technical Analysis: This Bill would have a material actuarial impact on the assets and liabilities of the Hybrid Plan, as follows:

The Bill would allow current participants to elect to transfer the full amount of their Hybrid Plan Actuarial Accrued Liability to the Defined Contribution Plan. Since the Hybrid Plan is currently less than 100% funded, this would result in a transfer of assets greater than the assets that currently support the benefits. As a result, contribution requirements for those who remain in the Hybrid Plan will see an increase in costs, as they would pay for the unfunded portion of the benefits of the transferring participants.

It is difficult to predict which participants would elect to transfer under this Bill. Experience over the last ten years would indicate that 16% of those new hires eligible to choose between the Hybrid Plan and the Defined Contribution Plan at date of hire choose the Defined Contribution Plan. More recent election rates have been lower, around 7.8%. It is also difficult to predict what existing employees may do when offered this election. When offered to nonclassified employees in 1999, about 38% elected to transfer. However, the environment has changed substantially since then, so we expect the rate would be lower.

Our understanding is that the Bill would allow current participants a one-time election to transfer out of the Plan and new employees the option to choose between the Hybrid Plan and the Defined Contribution Plan at date of hire. Because it is difficult to predict the number of participants that would transfer, we have illustrated the effects of three scenarios on the employer cost rate as a percentage of projected payroll. In the first scenario, we have assumed that 10% of existing participants leave and 5% of the new employees elect the Defined Contribution Plan each year thereafter. In the second scenario, we have assumed that 15% of participants leave and 10% of the new employees elect the Defined Contribution Plan each year thereafter. In the third scenario, we have assumed that 20% of participants leave and 15% of the new employees elect the Defined Contribution Plan thereafter. These will increase the costs of funding the ongoing benefits and the unfunded liability as a percent of pay, as follows:

Group	Employer Cost Rate – 2012 Actuarial Valuation	Statutory Employer Cost Rate – 2013	(1) 10%/5% Assumption– Resulting Cost Rate	(2) 15%/10% Assumption– Resulting Cost Rate	(3) 20%/15% Assumption– Resulting Cost Rate
PERS Main*	12.24%	6.12%	13.19%	13.90%	14.66%
Judges	16.33%	16.52%	17.29%	17.97%	18.76%
Law Enforcement w/Prior Service**	10.69%	9.31%	11.10%	11.45%	11.81%
National Guard	7.40%	6.50%	7.67%	7.86%	8.09%

*Only Main State employees would be allowed to transfer under the Bill
**Only BCI employees would be allowed to transfer under the Bill

The Bill specifies that the Actuarial Accrued Liability be calculated assuming that the transferring participant will retire at the earliest unreduced retirement date. This is a slightly more conservative measure than the assumption used for funding the Hybrid Plan, and would result in a larger transfer of funds than if the Plan's valuation assumptions were used. For participants with lower service, the benefits calculated under the Plan formula will likely have a smaller present value than the participant's vested contributions. In this case, we calculated the amount of the transfer to simply be the balance of vested contributions with interest.

As mentioned above, the Bill provides that 100% of the liability be transferred for these participants. If the Bill were altered so that only the funded portion of the participants' Actuarial Accrued Liability is transferred to the Defined Contribution plan (64.7% for the PERS Main Plan as of July 1, 2012), the Resulting Employer Cost Rate for ongoing Hybrid Plan participants would be as follows:

As above, in the first scenario, we have assumed that 10% of participants leave and 5% of the new employees elect the Defined Contribution Plan each year thereafter. In the second scenario, we have assumed that 15% of participants leave and 10% of the new employees elect the Defined Contribution Plan each year thereafter. In the third scenario, we have assumed that 20% of participants leave and 15% of the new employees elect the Defined Contribution Plan thereafter. These will increase the costs of funding the ongoing benefits and the unfunded liability as a percent of pay, as follows:

Group	Funded Percentage	Employer Cost Rate – 2012 Actuarial Valuation	Employer Cost Rate – Ultimate Statutory Rates	(1) 10%/5% Assumption– Resulting Cost Rate	(2) 15%/10% Assumption– Resulting Cost Rate	(3) 20%/15% Assumption– Resulting Cost Rate
PERS Main*	64.7%	12.24%	6.12%	12.82%	13.30%	13.81%
Judges	89.8%	16.33%	16.52%	16.94%	17.40%	17.91%
Law Enforcement w/Prior Service**	64.9%	10.69%	9.31%	10.95%	11.21%	11.48%
National Guard	91.6%	7.40%	6.50%	7.59%	7.74%	7.90%

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If the participants are given a choice of participation in either the current Hybrid Plan or the Defined Contribution Plan, the risk of antiselection will be introduced to the System. Antiselection risk is the tendency of participants to select the choice that benefits them the most. For example, participants who may be less healthy than average may be more likely to elect to transfer to the Defined Contribution Plan, which would allow for a faster payout of benefits than the lifetime payments offered by the Hybrid Plan. This effect could result in more costly benefits for the Hybrid Plan than otherwise would be expected, and will increase the volatility of contribution requirements. That is, if the election rates are higher than expected, it will increase required contributions for the Hybrid Plan. If lower, it could reduce requirements. This same situation would occur even if total election rates are lower, but those electing have higher than expected costs.

Technical Comments: Our comments on the Bill are as follows:

General

The Bill would provide a new opportunity for existing members to make a one-time irrevocable election as to whether they will participate in a defined benefit plan or defined contribution plan, including members who have not previously had an opportunity to participate in the Defined Contribution Plan, such as judges. In addition, the Bill could have an impact on PERS, to the extent a large number of employees elect to transfer into the DC Plan, in the following areas:

- Similarly situated employees would have different levels and forms of retirement benefits;
- The proposed changes could have an impact on the funding status of the defined benefit plans; and
- The role of the PERS in administering retirement benefits for State employees could shift as a result of a large increase in the number of DC Plan participants.

Benefits Policy Issues

➢ Adequacy of Retirement Benefits

- ♦ *Replacement Ratio*: In comparison to members in the current defined benefit plans, the replacement ratios of income by retirement benefits for new members in the DC Plan are expected to decrease from that which is currently provided for several reasons, including the following.

    - In practice, individually-managed accounts can expect lower investment returns than a longer time horizon, professionally-managed defined benefit fund.
    - Defined contribution accounts suffer from "leakage" as funds are used for purposes other than retirement.
    - There is a higher cost of annuitization at market annuity rates, or else members must assume longevity risk on top of investment risk.

In a letter dated December 7, 2011, we provided updated analysis of how benefits under the defined benefit plans compare to benefits under the DC Plan. It showed that the contribution rate for the DC Plan would need to be increased in order to provide a benefit that is comparable to the current defined benefit plans. Specifically the analysis shows the following for individuals who are presently in the DC Plan established in the late 1990's:

1. DC Plan participants are projected to have a retirement benefit that is on average 50% less than what they would have had if they stayed in the applicable defined benefit plan.
2. DC Plan contributions will need to increase to 16.5% to 20% to provide a benefit similar to the current defined benefit plans (under the Hybrid Plan a 25-year employee would receive 50% of their final average salary).

3. The benefit provided in the existing DC Plan is not providing a benefit comparable to the defined benefit plans at the existing contribution levels.

4. The DC Plan does not provide the same level of spouse or disability benefits as the defined benefit plans.

- *Retirement Savings:* The nature of the DC Plan with lump sum benefit payments may decrease the amount of a member's retirement benefit that will be available for retirement to the extent it is used for current consumption. Employee Benefit Research Institute (EBRI) statistics indicate that because of this "leakage" effect, less than 100% of employer contributions will actually be used to provide retirement benefits. Based upon the EBRI study entitled "Reported Uses for Any Portion of Lump-sum Distributions", the average amount of distributed funds retained in retirement vehicles (tax-qualified financial savings) is 41.5%. Seventeen percent is saved, and the remainder (41.5%) is used for debt, education or consumption. Forty-six percent of these individuals rolled over at least some of the money into another retirement plan and 27% put some of the money into other savings investments. Because of this "leakage" effect, less than 100% of the employer contributions will actually be used to provide retirement benefits. Nationally, 58.5% of any lump sum distribution is not used for retirement purposes. The current defined benefit plans have minimal leakage of employer contributions.

  On average, refund payments under the PERS are approximately 24% of the employee contributions. Of these refunds, 58.5% will be used for non-retirement purposes if the national statistics are applied. Thus, the leakage rate on employee contributions is estimated to be about 14% per year.

  If these patterns of refunds and uses of lump sum distributions remain unchanged, the leakage rate on employer contributions under the DC Plan could be presumed to be 14%. For every $1,000,000 of employer contributions accumulated, about $140,000 will not be available for retirement purposes.

- *Personal savings:* Participation in a defined contribution plan may increase interest of members to save for retirement because of the participant directed investment feature and the awareness that it is important to save for their own early retirement or post-employment inflation protection. However, the State's DC Plan does not provide any separate monetary incentive or opportunity to increase personal savings. The PERS Main System added the Portability Enhancement Provision (PEP) in 1999. One aspect of this provision is to create an incentive for members to engage in supplemental retirement savings. Specifically, this feature provides that if a member participates in the State's deferred compensation plan, they will vest in the employer contribution in the Hybrid Plan. This provision has helped to encourage participation in the supplemental savings plan and has been successful at enhancing the overall retirement preparedness for those participants. The proposed DC Plan would not have a similar defined benefit incentive to encourage participation.

> <u>Benefits Equity and Group Integrity</u>

- Since members of the Highway Patrolmen's Retirement System (HPRS) do not have the opportunity to elect between a defined benefit plan and a defined contribution plan, there is an inequity of benefits and choice of plans between HPRS and the PERS Main System.

- Allowing most State employees to elect between a defined benefit plan and a defined contribution plan alleviates the current benefits equity problem whereby two similarly situated State employees who perform similar services, one which must participate in the defined benefit plan and the other which may participate in a defined contribution plan or a defined benefit plan, have very different retirement benefits. However, this Bill does not create benefit equality because two employees with identical positions, age and service who elect different retirement plans may still have unequal retirement benefits.

- The benefits equity issue whereby different retirement plans are elected highlights the importance of the educating State employees on the different aspects of defined benefit versus defined contribution plans, as well as the various risks and rewards of each type of plan, and may lead to increased scrutiny of the PERS decisions with respect to both the investment of the defined benefit plan funds and the investment choices offered under the DC Plan.

- In addition, we note that nonvested defined benefit plan members who transfer to the DC Plan may be immediately increasing their vesting percentage in their pension benefits compared to similar employees who do not transfer.

- This Bill is providing all members who elected not to transfer to the DC plan back in 1999 a second election opportunity. However, those that elected to transfer are not similarly offered a second election opportunity.

- This PERS group is composed of state employees and political subdivision employees. This option is provided to state employees and not to political subdivision employees. This reduces the cost of offering this option, but since the cost is amortized over the entire group, political subdivisions are a prorated part of the cost for this option for State employees.

> <u>Competitiveness</u>

The DC Plan design increases the ability of shorter-term employees to earn and retain a valuable retirement benefit. The PERS Main System Portability Enhancement Provision (PEP) also offers similar benefits, which can be a valuable tool for attracting such employees. The DC Plan, however, may be less competitive for career employee positions compared to other public employee retirement plans. These changes could motivate job mobility and increase turnover. This may or may not be desirable depending on the workforce issues facing the employer.

In another sense, the Bill will be following the trend among smaller private sector employers and some larger private employers to use defined contribution plans instead of defined benefit arrangements as a primary vehicle for retirement benefits. However, other larger private sector employers and most public sector employers have continued to maintain a combination plan structure - a core defined benefit plan with a supplemental set of defined contribution and/or profit sharing arrangements.

- Purchasing Power Retention

A defined contribution plan does not provide guaranteed purchasing power retention after benefits are distributed. The ability to maintain purchasing power will depend solely on the investment performance of the distributed assets. It is not possible under current federal tax laws to directly provide post-retirement increases for defined contribution plan retirees. Similarly, the existing plan does not guarantee purchasing power retention, and in a high inflation economy, may be subject to a significant reduction unless legislative action is taken to adjust the benefits.

- Preservation of Benefits

A defined contribution plan can work well to preserve the value of benefits for former members but actual preservation of such values will depend on the investment performance on the amounts distributed. To the extent benefits are not invested adequately or not saved at all for retirement purposes, then the ability to preserve the value of the retirement benefits is diminished.

In July 2009, the federal Government Accountability Office (GAO) published a report that found workers face a number of risks in both accumulating and preserving pension benefits. The GAO found, in relevant part, that workers that receive lump sum distributions, in particular, face several risks related to how they withdraw their benefits, including:

- *Longevity risk:* Retirees may draw down benefits too quickly and outlive their assets. Conversely, retirees may draw down their benefits too slowly, unnecessarily reduce their consumption, and leave more wealth than intended when they die.

- *Investment risk:* Assets in which retirement savings are invested may decline in value.

- *Inflation risk:* Inflation may diminish the purchasing power of a retiree's pension benefits.

- Portability

The Bill generally provides a high degree of portability of retirement benefits for State employees who participate in the DC Plan, since their entire benefit is available for distribution or rollover after termination of employment. Note that with the PEP the existing defined benefit plan also has a significant level of portability, but not to the same level.

- Transfer Methodology

On page six of the Bill, the transfer calculation is specified. This means the amount to be transferred will be the greater of employee contributions with interest and the lump sum value of the vested benefit calculated at the participant's earliest unreduced retirement age. For younger and lower service employees, this will generally be the contributions with interest.

Calculations will be required for existing participants considering a transfer. Staff will either need to request these calculations from the actuary, or establish an internal system to calculate these amounts.

➢ Ancillary Benefits

- Pre-retirement death benefits and disability benefits provided under a defined contribution plan would generally be less than similar benefits provided under a defined benefit plan structure because defined contribution plan benefits depend on the total amount of contributions made and investment performance of assets, while defined benefit plan benefits are not contingent upon such factors. Specifically:

  1. The Hybrid Plan provides for a disability retirement benefit of 25% of final average salary calculated at the date of disability. A member is eligible for this after six months of participation in the system. The DC Plan would offer no other disability benefits other than the account balance at the date of disability, which in most cases would be much less that the current Hybrid Plan disability benefit. Many employers provide disability insurance benefits to employees, which offsets the need for this in the retirement plan. It is our understanding the State does not currently provide employer paid disability insurance to its employees, meaning that under the Bill disability benefits would be less than State employees currently receive under the Hybrid Plan.

  2. The Hybrid Plan provides benefits for the surviving spouse whereby the spouse has three choices: 1) a lump sum payment of the member contributions with interest, 2) lifetime payment of monthly benefit equally to 50% of the deceased member's accrued single life benefit, or 3) if the member at death was eligible for a normal retirement benefit, the spouse can select a benefit equal to the member's 100% joint and survivor annuity benefit. In the DC Plan, the spouse would be eligible to receive a lump payment of the account balance only. Generally, the DC Plan benefit would be significantly less than the spouse benefits in the Hybrid Plan. Many employers do have employer paid life plans that offset the need for this benefit in the retirement plan. In the DC Plan, a death benefit could be added or the State could provide expanded life insurance coverage to provide for the surviving spouse; otherwise, the Bill would result in lower death benefits for State employees than are provided by the current Hybrid Plan.

- The defined benefit plans have from time to time, provided for retiree increases over time with ad hoc adjustments. This has occurred as a result of favorable plan experience and when the plan's funding situation has allowed. Given the present challenges it is unlikely that the fund will be able to support any ad hoc adjustments until the plan's funding challenges are overcome. If the proposed recovery plan is fully adopted, this will not occur until approximately 2040-2045. However, at some future date it is possible that the plans may reach a funded level that would allow it to again provide ad hoc adjustment to retirees.

  The DC Plan does not provide for sharing of favorable plan experience among members, nor does it specifically provide for ad hoc adjustments to retirees. However, for any members in the DC Plan that realize favorable investment experience, they are able to benefit from what would generally be comparable to an ad hoc adjustment. If the State has a wish to someday provide retiree adjustments, a new process would need to be identified.

- Social Security: No impact.

Funding Policy Issues

- Actuarial Impacts

As previously noted, the Bill will have an actuarial impact on the Hybrid Plan.

- The Bill will have an immediate effect on the actuarial contribution requirement.
- The Bill will not provide for a change in the statutory contribution rate.
- While the resulting Employer Cost Rate will be higher, the total contribution amount will be lower.

- Investment Impacts

- Depending on the performance of the capital markets and the investment choices made by members, new employees participating in the DC Plan may experience greater, or, more likely, lesser benefits than those provided under the current Hybrid Plan. The risk of loss or gain is borne by the member. No significant changes are required in the Hybrid investment practices as a result of this change. However, if a large portion of participants leave the plan, it may force a change in investment decisions.
- *Cash Flow*: In general, the Bill will cause cash flows under the defined benefit plans to be altered as membership decreases in the defined benefit plans as currently anticipated. This will impact cash flow needs for funding and benefit payments under the plan. These changes are projected to impact the overall funding of the plans for the future, as previously described. It may be desirable to conduct asset-liability and cash flow studies to better predict the outcomes for the defined benefit plans.
- *Asset Allocation:* The Bill should not create significant new investment asset allocation issues for the defined benefit plans under the PERS as the amount of new contributions to the plans decreases relative to the amount of benefit payments from the plans.

Administration Issues

- Implementation Issues

In order for this Bill to be implemented, Section 3 of HB 1452 amends NDCC 54-52.6-02 by deleting subsections 1 through 4 and introducing the following language:

"The board shall provide an opportunity for members of the public employees retirement system under chapter 54 - 52 to transfer to the defined contribution retirement plan under this chapter pursuant to rules adopted by the board."

A strict reading of this sentence indicates that the Board is tasked with providing the opportunity to transfer and that such opportunity will be offered by rule. To place this "opportunity" in perspective, please note that subsections 1 through 4 contained very specific language that provided the procedure whereby prior eligible employees and new eligible employees were able to transfer to the DC plan from the Hybrid plan. Specifically, under subsection 1 new eligible employees were allowed to transfer to the DC plan within the first six months of employment. Having deleted the language describing the existing procedure, the new language suggests that this gap be filled by administrative rule. The reference to "an opportunity" is broad enough to apply to employees currently in the Hybrid plan for whom the opportunity to elect the transfer has previously expired and for new employees. Therefore, absent further clarifying language the Board must adopt administrative rules establishing a procedure for this transfer before it can transfer either new or existing employees into the DC plan.

Given the above requirement, PERS will need to go through the administative rule making process, which will take to the spring of 2014. After this process is completed then PERS can begin implementation of the provisions of the proposed bill.

- <u>Administrative Costs</u>

The Bill will have an impact on the administrative resources needed for both the defined benefit plans and DC Plan because it is anticipated the Bill would add a relatively large number of new members to the DC Plan. Administrative costs may need to be reallocated from the defined benefit plans to the DC Plan over time, as membership numbers shift to the DC Plan. Initially, however, the Bill will require maintaining the administrative resources for the defined benefit plans, while increasing the administrative resources available to the DC Plan.

The board is also required to follow a specific method in offering this to new employees. This will require several mailings to members, printing the material, developing the information for the mailing (specific member transfer amounts and other specific member information), processing elections, modifications of the business system, and transferring the funds. Since the board already has a DC plan and many of the business processes in place, the estimated cost for mailings, printing, and system modifications is $105,641. Additional appropriation will be needed for the 2013-15 biennium for these costs, or PERS will have to use its contingency line item to support these efforts.

- <u>Needed Authority</u>

The Bill appears to provide appropriate levels of administrative and governance authority to the PERS board to implement the changes made by the Bill.

- <u>Integration</u>

No impact.

> Employee Communications

The nature of defined contribution plans allowing participant directed investments will require additional employee education effort regarding retirement and investment planning. The need for this effort is supported by information found in a recent retirement portability study conducted by the federal Office of Management and Budget. A survey of employees indicated an overall low level of understanding of the how to invest moneys for retirement. The survey indicated a low level of understanding regarding investment categories and investment risk. Because the DC Plan will be the primary retirement vehicle for its members, it will be critical to provide these education services.

Consideration should be given to participant education, including requiring or allowing members to attend financial planning seminars and meeting with financial advisors in the work place and during working hours. Increasingly, sponsors of defined contribution plans are making available investment advisory services to assist members to invest their retirement assets prudently. There are a variety of methods for providing these education and advisory services that should be examined, including group meetings, individual counseling and technology based approaches. With a defined contribution plan, individual members are responsible for monitoring their own investment performance and making changes as appropriate. Their success or failure is a direct result of how they fulfill this responsibility.

> Miscellaneous and Drafting Issues

- Consideration should be given to examining the fiduciary issues surrounding defined contribution plans, including the nature of the risks associated with participant directed investments, provision of employee investment information and education, self-directed brokerage windows, financial and retirement planning and investment advisory services.

- Please note that determining the actuarial effect of this offering is dependent upon the assumed rate of acceptance. As noted earlier, it is very difficult to estimate election rates with a high level of confidence. Last biennium we estimated the cost of closing the plan when it was clear that new employees would not be joining the plan. Consequently, future participation did not need to be estimated. By contrast, future participation for purposes of this Bill need to be estimated and consequently, it needs to be understood that the actual rates could vary substantially form those estimated herein. Therefore, the actual cost could vary substantially as well. Since participation rates estimated herein are low, based upon the current environment and past experience, there is greater potential for actual costs to be higher than lower since there is more room to move higher than lower. Policy makers need to understand that future costs could be higher and would have to be addressed with additional contribution adjustments.

The projections were made using generally accepted actuarial practices and are based on demographic data as of July 1, 2012 and asset returns through July 1, 2012 and use assumptions adopted by the PERS board for the July 1, 2012 valuation, except the assumed retirement age. Calculations were completed under the supervision of Tammy Dixon, FSA, MAAA, EA.

Projections, by their nature, are not a guarantee of future results. The projections are intended to serve as estimates of future financial outcomes that are based on the information available to us at the time the projection is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used. Actual experience may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.

The information contained in this letter is provided within our role as the plan's actuary and benefits consultant and is not intended to provide tax or legal advice. We recommend that you address all issues described herein with your legal counsel. Please call if you have any questions or comments.

Sincerely,

Brad Ramirez, FSA, MAAA, FCA, EA
Consulting Actuary

cc: Tammy Dixon
Laura Mitchell
Melanie Walker

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