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October 26, 2010

Representative Better Grande, Chair  
 Legislative Employee Benefits Committee  
 State Capital  
 600 East Boulevard  
 Bismarck, ND 58505-0360

Re: **Technical Comments – Bill Draft No. 10052.0100**

Dear Representative Grande:

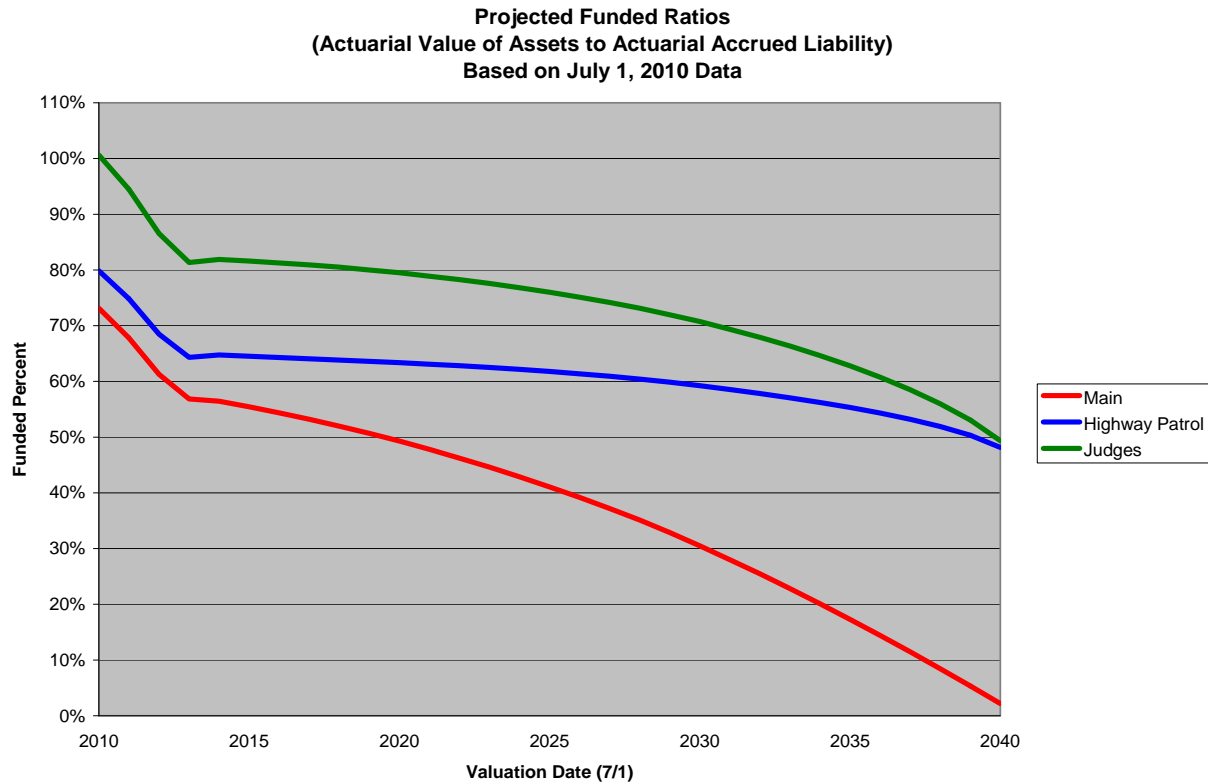
The following presents our analysis of the proposed changes found in Bill Draft No. 10052.0100:

**Systems Affected:** North Dakota Public Employees Retirement System (PERS) Hybrid Plan, Defined Contribution Plan and Highway Patrolmen's Retirement System (HPRS)

**Summary:** The proposed legislation would increase the employer contribution rate mandated by statute in the HPRS, Hybrid Plan (Main and Judges only) and Defined Contribution Plan by 2% of the member's monthly salary beginning January 2012, plus an additional 2% increase in employer contribution rates each calendar year thereafter through January 2015. The board sets the rate for the law enforcement plans and has indicated that it would increase those rates in a manner consistent with the statutory rate changes.

In addition, the proposed legislation would increase the member contribution rate mandated by statute only for temporary employees in the Hybrid Plan and Defined Contribution Plan by 2% of the member's monthly salary beginning January 2012, plus an additional 2% increase in member contribution rates each calendar year thereafter through January 2015. The challenges facing the PERS system are shown in the following graph:





**Actuarial Cost Analysis:** This bill would not have an actuarial impact on the liabilities of either the Hybrid Plan and Highway Patrolmen's Retirement System. Exhibits I and II show the current funding level and how the current funding levels would be positively affected by this increased contribution rate

As of July 1, 2010, the Main plan had a funding deficit of 6.64% of covered payroll based upon a 20-year open amortization method. This means the statutory contributions are less than the actuarially required contributions by that amount. This deficit is projected to increase over the next few years as investment losses experienced in 2008 are recognized in the calculation of the Actuarial Value of Assets. Projections of future funded status have indicated that unless this gap is addressed, the Main plan will become insolvent in approximately 2040. Increasing the member contributions by 8% over the period from January 2012 to January 2015 is projected to close this funding deficit. Furthermore, projections indicate that the Main plan would no longer be expected to become insolvent in the next 30 years under the assumed 8.0% investment return scenarios.

As of July 1, 2010, the HPRS plan had a funding deficit of 5.84% of covered payroll based upon a 20-year open amortization method. This means that the amount of statutory contributions is less than the actuarially required contributions by that amount. This deficit is projected to increase over the next few years as investment losses experienced in 2008 are recognized in the calculation of the Actuarial Value of Assets. Projections of future funded status have indicated that unless this gap is addressed, the HPRS plan will not become insolvent in the next 30 years but the funding ratio will drop from 80% to 48%. Increasing the member contributions by 8% over the period from January 2012 to January 2015 is projected to close this funding deficit. Furthermore, projections indicate that the HPRS plan would have an increase in the funded ratio from 80% to 94% over the next 30 years under the assumed 8.0% investment return scenarios.

This bill would also increase the employer contributions for the judges retirement plan. The employer contributions for the law enforcement plans and national guard plans are set by the PERS Board and they have indicated that those contributions will rise as well based upon the legislative action for the other systems.

Exhibits I, II, and the following charts illustrate the results of these projections.

***Technical Comments:*** Our comments on the bill are as follows:

### **General**

The bill would significantly increase funding to the Systems in the form of additional employer contributions and member contributions by temporary employees.

### **Benefits Policy Issues**

#### ➤ Adequacy of Retirement Benefits

No impact on the defined benefit plans. The additional contributions to the DC plan will provide additional retirement income.

#### ➤ Benefits Equity and Group Integrity

No impact.

#### ➤ Competitiveness

No impact.

#### ➤ Purchasing Power Retention

No impact.

➤ Preservation of Benefits

Increased funding to the Systems in the form of additional employer and member contributions by temporary employees provides additional funds to pay down the unfunded actuarial accrued liability of the Systems at a faster rate. This in turn will free up additional funds that may be used to increase retirement and/or post-retirement benefits in future years. By setting up this additional funding mechanism it will help preserve the value of benefits from the Systems for several years.

➤ Portability

No impact.

➤ Ancillary Benefits

- ◆ No impact.
- ◆ Social Security: No impact.

**Funding Policy Issues**

➤ Actuarial Impacts

As previously noted, the bill will have an actuarial impact on the Hybrid Plan and the HPRS.

➤ Investment Impacts

- ◆ *Cash Flow*: The bill would have a substantial, positive impact on cash flow.
- ◆ *Asset Allocation*: The bill does not create new investment asset allocation issues.

**Administration Issues**

➤ Implementation Issues

While this bill would have minimal impact on administrative costs of the PERS, it would have an effect on the participating employers and temporary employees, since their required contributions would increase substantially.

➤ Administrative Costs

No impact.

➤ Needed Authority

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

➤ Integration

No impact.

➤ Employee Communications

Communications to temporary employees will be necessary to describe the impact of increased member contributions on their pay.

➤ Miscellaneous and Drafting Issues

This bill does not present any drafting issues.

The projections were made using generally accepted actuarial practices and are based on the July 1, 2010 actuarial valuation results, including the asset information, participant data and actuarial assumptions on which that valuation was based. In addition, the active member population has been assumed to remain constant in all future years. Calculations were completed under the supervision of Kurt Schneider, ASA, MAAA, Enrolled Actuary.

Projections, by their nature, are not a guarantee of future results. The modeling projections are intended to serve as illustrations of future financial outcomes that are based on the information available to us at the time the modeling 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.

Please call if you have any questions or comments.

Sincerely,

A handwritten signature in blue ink, appearing to read 'BR Ramirez', with a stylized flourish at the end.

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

/cz

Attachments

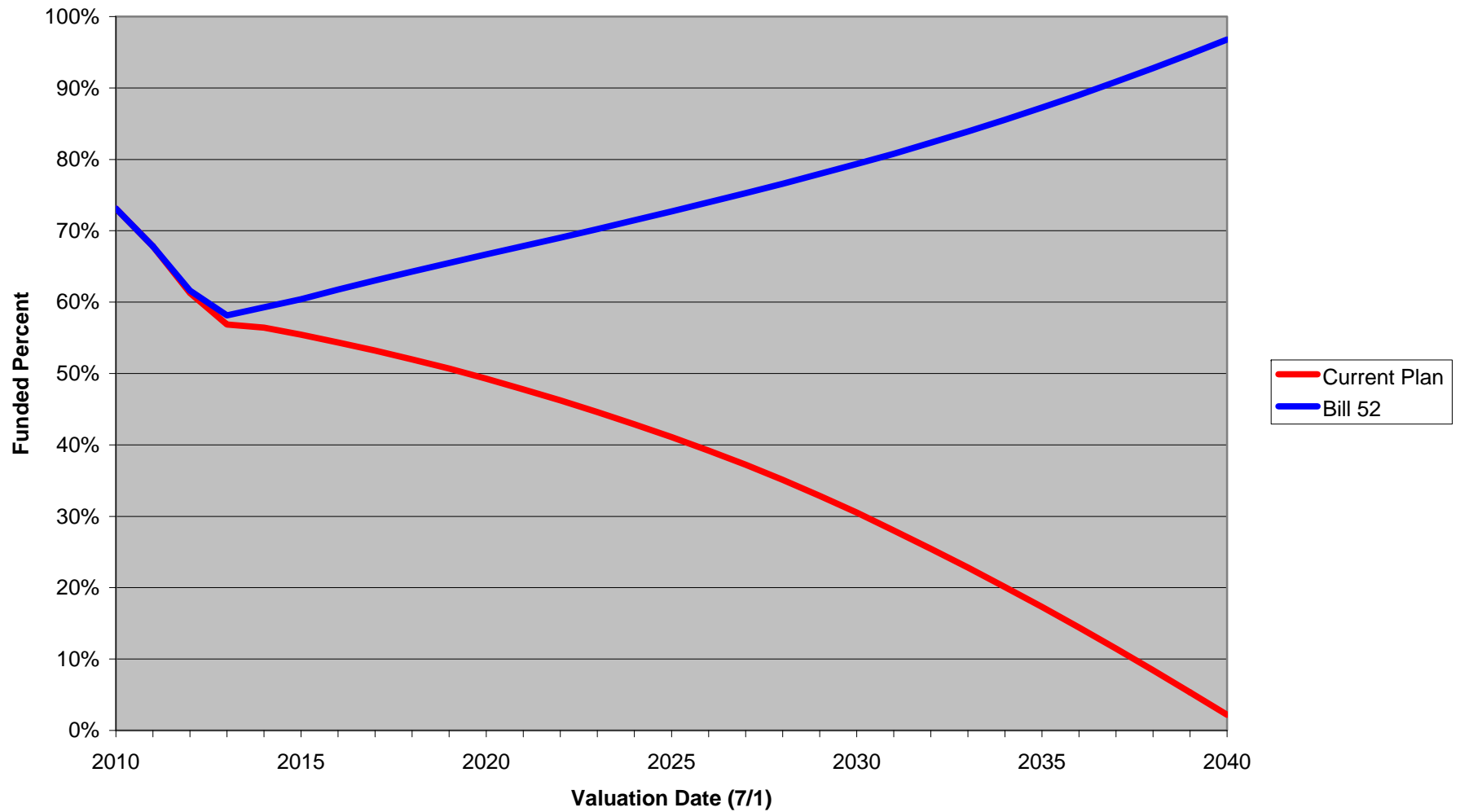
Exhibit I  
Current Contribution Levels  
Projection of funding ratios by plan  
(Actuarial Value of Assets to Actuarial Accrued Liability)  
Based on 7/1/2010 Valuation data and assumptions

	<u>Main</u>	<u>Highway Patrol</u>	<u>Judges</u>
07/01/2010	73%	80%	101%
07/01/2011	68%	75%	94%
07/01/2012	61%	68%	87%
07/01/2013	57%	64%	81%
07/01/2014	56%	65%	82%
07/01/2015	55%	65%	82%
07/01/2016	54%	64%	81%
07/01/2017	53%	64%	81%
07/01/2018	52%	64%	80%
07/01/2019	51%	64%	80%
07/01/2020	49%	63%	79%
07/01/2021	48%	63%	79%
07/01/2022	46%	63%	78%
07/01/2023	45%	63%	78%
07/01/2024	43%	62%	77%
07/01/2025	41%	62%	76%
07/01/2026	39%	61%	75%
07/01/2027	37%	61%	74%
07/01/2028	35%	60%	73%
07/01/2029	33%	60%	72%
07/01/2030	31%	59%	71%
07/01/2031	28%	59%	69%
07/01/2032	25%	58%	68%
07/01/2033	23%	57%	66%
07/01/2034	20%	56%	65%
07/01/2035	17%	55%	63%
07/01/2036	14%	54%	61%
07/01/2037	11%	53%	59%
07/01/2038	8%	52%	56%
07/01/2039	5%	50%	53%
07/01/2040	2%	48%	49%

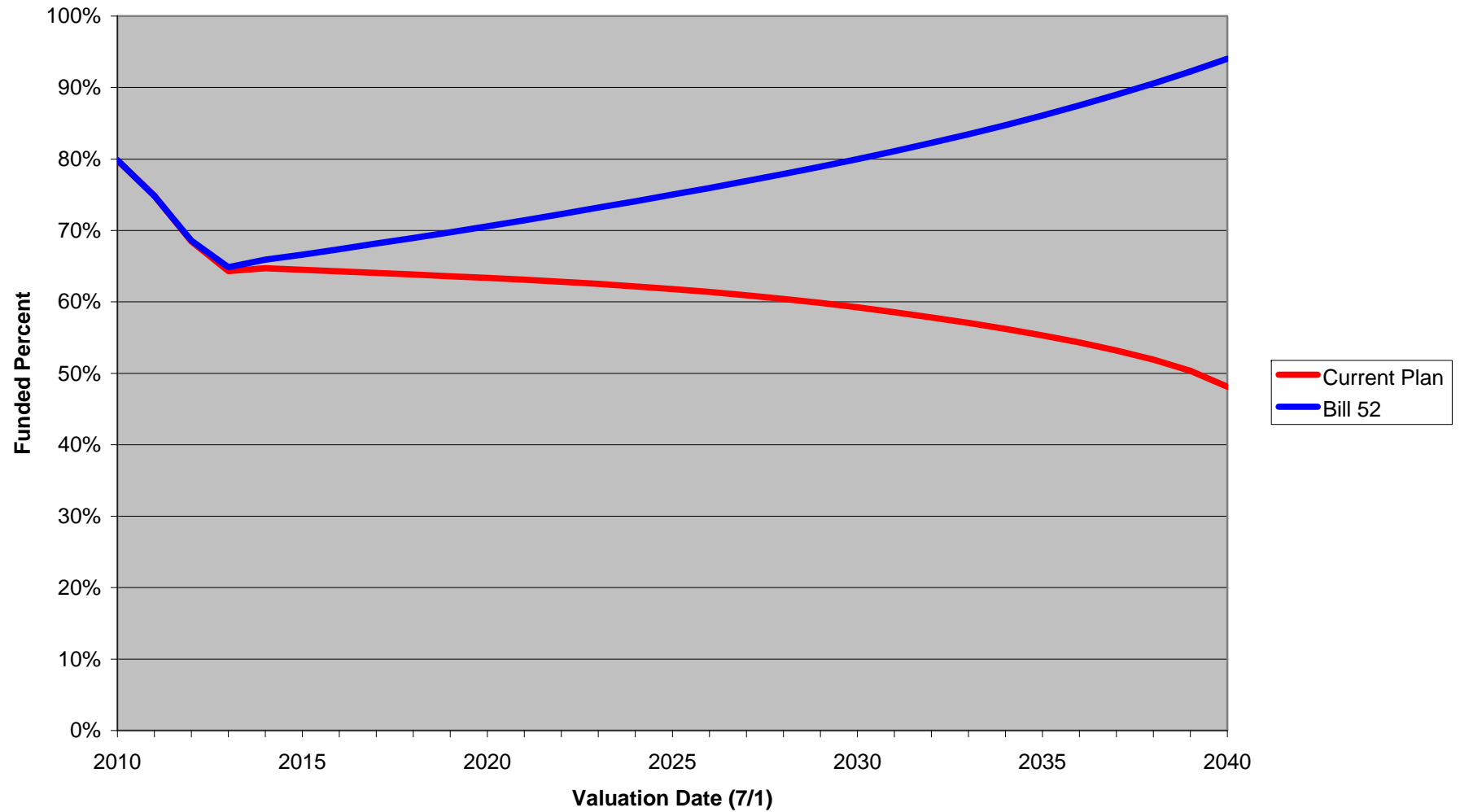
**Exhibit II**  
**Bill 52 – 2% additional employer contributions**  
**per year from 1/1/2012 to 1/1/2015**  
**Projection of funding ratios by plan**  
**(Actuarial Value of Assets to Actuarial Accrued Liability)**  
**Based on 7/1/2010 Valuation data and assumptions**

	<u><b>Main</b></u>	<u><b>Highway Patrol</b></u>	<u><b>Judges</b></u>
07/01/2010	73%	80%	101%
07/01/2011	68%	75%	94%
07/01/2012	62%	69%	87%
07/01/2013	58%	65%	82%
07/01/2014	59%	66%	84%
07/01/2015	60%	67%	85%
07/01/2016	62%	67%	86%
07/01/2017	63%	68%	87%
07/01/2018	64%	69%	88%
07/01/2019	65%	70%	89%
07/01/2020	67%	71%	89%
07/01/2021	68%	71%	90%
07/01/2022	69%	72%	91%
07/01/2023	70%	73%	92%
07/01/2024	71%	74%	93%
07/01/2025	73%	75%	94%
07/01/2026	74%	76%	95%
07/01/2027	75%	77%	96%
07/01/2028	77%	78%	97%
07/01/2029	78%	79%	98%
07/01/2030	79%	80%	99%
07/01/2031	81%	81%	100%
07/01/2032	82%	82%	102%
07/01/2033	84%	83%	103%
07/01/2034	86%	85%	104%
07/01/2035	87%	86%	105%
07/01/2036	89%	87%	107%
07/01/2037	91%	89%	108%
07/01/2038	93%	91%	110%
07/01/2039	95%	92%	111%
07/01/2040	97%	94%	113%

**PERS (Main System)  
Comparison of Funded Ratio  
(Actuarial Value of Assets to Actuarial Accrued Liability)  
Based on July 1, 2010 Data**



**Highway Patrol  
Comparison of Funded Ratio  
(Actuarial Value of Assets to Actuarial Accrued Liability)  
Based on July 1, 2010 Data**



**Judges**  
**Comparison of Funded Ratio**  
**(Actuarial Value of Assets to Actuarial Accrued Liability)**  
**Based on July 1, 2010 Data**

