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February 14, 2012

Ms. Laurie Hacking  
Executive Director  
Teacher Retirement Association of Minnesota  
60 Empire Drive, Suite 400  
St. Paul, MN 55103

### **Re: Salary Related Assumptions in HF 2168**

Dear Laurie:

As you requested, we are providing our comments on the changes HF 2168 proposes to make to the salary related assumptions used in valuing the liabilities for the Teacher Retirement Association (TRA). HF 2168 changes the interest rate assumption to a select and ultimate approach where the interest rate for the nine years beginning July 1, 2012 is 8.0% and then moves to 8.5% thereafter. Similar changes in the post-retirement interest assumption are also included in HF 2168. For TRA, the proposed changes to the salary increase assumption reduce the assumed annual individual salary increases between 0.75% and 1.00% depending on the member's years of service. The proposed changes result in an ultimate salary increase assumption of 2.75% for years of service 24 or greater. HF 2168 also reduces the payroll growth assumption by 0.50% from 3.75% to 3.25%. Unlike the proposed change to the interest rate assumption, the proposed changes for the salary related assumptions are for all future years and not just the select period during which a lower interest rate assumption is used.

Our understanding of the reasons for the proposed change in the interest rate assumption is that there is concern that in the near term, market returns will be lower than they have been historically. Lowering the assumption for the next ten years is a way to anticipate these lower earnings in advance rather than having actuarial losses occur each year when actual returns are less than the expected return. However, the select and ultimate approach is being utilized because it is anticipated that eventually the markets will return to their historical performance levels. The net effect of this approach is to create some conservatism in the valuation assumptions and thereby in determining the funded status and the actuarial contribution rate for TRA.

While the select and ultimate interest rate assumption is more conservative than the current 8.5% assumption, and it is temporary, the proposed changes for the salary related assumptions are neither. Rather than increasing liabilities and costs, the proposed salary related assumptions will result in lower liabilities and costs than using the current salary increase and payroll growth assumptions. Further, since there is no select period in their application, these lower assumptions will be applied indefinitely. While a case may be made that economic conditions leading to lower market returns in the short term might also

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result in lower salary growth during that same period, we do not believe there is evidence to conclude that there will instead be a permanent change in salary increases over the long term. Since the proposed salary assumption changes are neither conservative nor temporary, we believe that changing them is counter to the general intent of the proposed interest rate assumption changes and the overall funding of TRA.

We also note that TRA performs an experience study every four years on a regular basis. The current set of assumptions, which is based on the last experience study, was just implemented with the July 1, 2011 actuarial valuation. While we were not involved with the development of these assumptions, it is our understanding that they were selected with the intent of reflecting expected future results, partially based on recently observed experience and partially reflecting overall macroeconomic expectations such as inflation. The new assumptions included a reduction of the projected payroll growth assumption from 4.50% to 3.75%. This represents a significant change in that assumption and we are hesitant to have another change adopted until there has been time to assess how well the current assumption anticipates future experience.

The Association will be conducting another experience study following completion of the July 1, 2012 actuarial valuation. If there have been significant changes to salary increases in the last four years (the period since the last experience study was performed), the experience study will reveal that. However, given the overall economic turmoil in the 2008 to 2012 study period, it may be that actual experience during that period will not be considered as representative of long term experience in the future. If so, no further data may be available in the next experience study. However, even if that is the case, another experience study will be completed four years later so it will not be long before any significant change in salary experience is detected and quantified.

In conclusion, we recommend that the changes in the salary related assumptions made by HF 2168 not be made. We believe such changes are inconsistent with the proposed legislation's changes to the interest rate assumption. Furthermore, we do not believe there is compelling evidence available at this time to indicate a permanent change in the salary increase and payroll growth assumptions is necessary and appropriate. If such changes occur, it will become evident with the regular experience studies performed by the Association and changes can be made at that time.

We, Patrice A. Beckham and Brent A. Banister, are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. We also meet the requirements of "approved actuary" under Minnesota Statutes, Section 356.215, Subdivision 1, Paragraph (c).

Sincerely,

Patrice A. Beckham, FSA, EA, FCA, MAAA  
Principal and Consulting Actuary

Brent A. Banister, PhD, FSA, EA, FCA, MAAA  
Chief Pension Actuary

# TRA salary growth analysis

