GRS

Gabriel Roeder Smith & Company
Consultants & Actuaries

One Towne Square
Suite 800
Southfield, MI 48076-3723

248.799.9000 phone
248.799.9020 fax
www.gabrielroeder.com

March 5, 2013

Mr. George Hopkins
Executive Director
Arkansas Teacher Retirement System
1400 West Third Street
Little Rock, Arkansas 72201

**Re: House Bill 1200 – *Post-Retirement Increases***

Dear Mr. Hopkins:

You have asked us for our analysis of House Bill (HB) 1200 as it relates to the Arkansas Teacher Retirement System (ATRS).

HB 1200 modifies Arkansas Code Section 24-7-727(b) related to compounding cost of living adjustments (COLA).

HB 1200 adds new subsections (3) through (6) which provide the Board of Trustees of the Arkansas Teacher Retirement System authority to reverse a compounding of the cost of living adjustment for all retirants and participants in the Teacher Deferred Retirement Option Plan (TDROP) who benefit from the compounding. Subsection (3)(A) states that once the compound COLA is reversed a simple COLA will be used for the year in which it was reversed and future benefits will be paid based on a simple COLA. Subsection (3)(b) states that future benefits of a member shall not be reduced to recover any additional benefits paid from the date the Board uses a compounding cost of living adjustment to the date the Board uses a simple cost of living adjustment. Subsection (3)(c) states that if the compound COLA is reversed, the reversal shall be effective at the beginning of the fiscal year. We assume this means the next fiscal year.

Subsections (4), (5) and (6) allow the compounding to be changed by resolution and require that the adjustment set by the Board remain in effect until adjusted or reversed by the Board. However, the Board shall not reverse a compounding cost of living adjustment unless

*…the system's actuary certifies to the board that the amortization period exceeds 30 years and that in order to address an amortization period in excess of thirty (30) years to pay the unfunded liabilities of the system, the board determines that the compounding cost of living adjustment be reversed.*

HB 1200 is permissive legislation and it does not target a specific compound COLA to reverse. In order to estimate the impact on the System of reversing a COLA, we have assumed that the compound COLA provided on July 1, 2009 would be reversed and the base benefit for purposes of the calculation of future COLAs would revert to the June 30, 2008 benefit amount effective with the July 1, 2013 COLA. This reversion is estimated to reduce plan liabilities by about $207 million, as of June 30, 2012. Based upon a 30 year amortization of unfunded liabilities, the annual savings of the reversion would be approximately 0.47% of payroll. As of June 30, 2012, the amortization period exceeded 100 years. In the absence of other changes in plan benefits or contribution rate levels the amortization period would be just over 73 years as of June 30, 2012, if HB 1200 becomes law and the 2009 compound COLA is reversed. Please see our comments on the last page of the enclosed analysis.

Please review this information carefully to ensure that we have understood the bill properly. The analysis in this letter and report should not be relied upon if there is doubt about our understanding of the bill. Our analysis relates only to the plan changes described in this correspondence. In the event that other plan changes are being considered, it is very important to remember that the results of separate actuarial analyses cannot generally be added together to produce a total. 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.

We did not review this bill for compliance with Federal, State, or local law or regulations, and internal revenue code provisions. Such a review was not within the scope of our assignment.

The undersigned 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.

Circular 230 Notice: Pursuant to regulations issued by the IRS, to the extent this communication (or any attachment) concerns tax matters, it is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code or (ii) marketing or recommending to another party any tax-related matter addressed within. Each taxpayer should seek advice based on the individual's circumstances from an independent tax advisor.

Please call if you have any questions regarding the calculations enclosed.

Sincerely,

Judith A. Kermans

Judith A. Kermans, EA, MAAA, FCA

JAK:rmn
Enclosures

cc: Gail Bolden, ATRS
Brian Murphy, GRS
Heidi Barry, GRS

# ARKANSAS TEACHER RETIREMENT SYSTEM
# SUPPLEMENTAL ACTUARIAL VALUATION AS OF JUNE 30, 2012
# HOUSE BILL 1200

**Requested By**: Mr. George Hopkins, Executive Director

**Date:** March 5, 2013

**Submitted By**: Brian B. Murphy, FSA, EA, MAAA, FCA and
Judith A. Kermans, EA, MAAA, FCA Actuaries
Gabriel, Roeder, Smith & Company

This report contains actuarial valuations of proposed changes in benefits for members of the Arkansas Teacher Retirement System. The actuaries issuing this report 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.

The supplemental valuations were based on the census data and actuarial methods and assumptions used in the June 30, 2012 actuarial valuation. The results of the supplemental valuations indicate what the June 30, 2012 valuation would have shown if the proposed benefit changes had been in effect on that date. Supplemental valuations do not predict the result of future actuarial valuations. (Future activities can affect future valuation results in an unpredictable manner.) Rather, supplemental valuations give an indication of the probable effect of **only the benefit changes** on future valuations without comment on the complete end result of the future valuations.

These calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon present and proposed plan provisions that are outlined in the valuation report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important and relevant plan provisions are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision. Also, 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 total. 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.

No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

This report is intended to describe the financial effect of the proposed plan changes on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered.

A review of the proposed provisions for compliance with Federal, State or local laws or regulations, specifically IRC §415 and rules related to the diminishment of benefits, was outside the scope of this assignment.

Actuarial assumptions and methods were consistent with those used in the regular actuarial valuation of the Retirement System on the valuation date, unless otherwise noted. Actuarial assumptions are adopted by the Retirement Board of Trustees. The assumptions used for this valuation include:

- An assumed rate of investment return of 8.0%.
- An entry-age normal cost valuation method.
- For purposes of amortizing unfunded accrued liabilities, payroll was assumed to increase 3.25% per year.

The amortization period as of the June 30, 2012 valuation is over 100 years, based upon a 14% employer contribution rate.

A brief summary of the data, as of June 30, 2012, used in this valuation is presented below.

| **Retired Members** | |
|---|---|
| **Number** | **Annual Benefits** |
| 34,160 | $709,171,554 |

| | **T-DROP Members** | | |
|---|---|---|---|
| **Group** | **Number** | **Account Balance** | **Covered Payroll** |
| Total | 4,432 | $510,753,765 | $267,948,212 |

**CURRENT:**

***Post-Retirement Increases.***

Each July 1, annuities are adjusted to be equal to the base annuity times 100% plus 3% for each full year in the period from the effective date of the base annuity to the current July 1. The base annuity is the amount of the member's annuity on the later of July 1, 2001 or the effective date of retirement, as re-determined by Acts 396 of 1999 and 992 of 1997. The July 1, 2009 cost of living adjustment for retirees was compounded. The annuity was adjusted by multiplying 3% times the June 30, 2009 retirement benefit amount. After it was calculated on July 1, 2009, the base amount was reset to be the July 1, 2009 benefit amount. Future cost of living raises will be established by the new updated base amount. Future cost of living adjustments will be evaluated on an annual basis to determine if a simple or compound cost of living increase will be given, depending on the financial condition of the System.

**PROPOSED:**

***Post-Retirement Increases.***

The Board may reverse a compound cost of living adjustment. If a compounding cost of living adjustment is reversed, the reversal shall be effective at the beginning of the fiscal year. **This analysis estimates the financial impact of reversing the 2009 compound COLA.**

## Actuarial Statement of Reversing the 2009 Compound COLA

| | | $ Millions | | |
|---|---|---|---|---|
| | **Valuation Date June 30, 2012** | **Valuation Results** | **Proposal Results** | **Effect** |
| 1) | Accrued Liabilities | $16,139.4 | $15,932.4 | |
| 2) | Funding Value of Assets | 11,483.9 | 11,483.9 | |
| 3) | UAAL $: (1) - (2) | $ 4,655.5 | $ 4,448.5 | $ (207.0) |
| 4) | - % Funded: (2) / (1) | 71% | 72% | |
| 5) | Member Contribution Rate | 4.80% | 4.80% | |
| 6) | Employer Contribution Rate | 14.00% | 14.00% | |
| 7) | Normal Cost | 6.93% | 6.93% | |
| 8) | UAAL %: (6) - (7) | 7.07% | 7.07% | |
| 9) | Amortization Years | **Over 100** | **73.64** | |

The stand-alone effect of this proposal based upon a 30-year amortization of the change in the UAAL is (0.47%) of payroll.

# ARKANSAS TEACHER RETIREMENT SYSTEM
# SUPPLEMENTAL ACTUARIAL VALUATION AS OF JUNE 30, 2012
# HOUSE BILL 1200
# COMMENTS

1. The actuarial calculations are based on the June 30, 2012 actuarial valuation. Please remember that these changes, if adopted, would likely impact the June 30, 2013 valuation. That valuation will be completed in the fall of 2013 and will be based on member data and financial results as of June 30, 2013, neither of which is available to us at this time.

2. Probabilities of retirement were not adjusted in connection with these proposals. If members retire at different ages or with different benefit amounts than expected, as a result of these changes, then the cost of the changes will be different than shown on the previous pages.

3. In order to estimate the impact on the System, we have assumed that the compound COLA provided on July 1, 2009 would be reversed and the base benefit for purposes of the calculation of future COLAs would revert to the June 30, 2008 benefit amount effective with the July 1, 2013 COLA. Our estimate of reversing the 2009 COLA will not match the estimate of the original cost analysis performed in 2008 specifically for three reasons 1) the implementation of the 2009 COLA and base update were not exactly as anticipated when the study was originally done, 2) in the interim period, plan assumptions were updated to reflect the results of a 5 year experience analysis starting with the June 30, 2011 actuarial valuation and, 3) the original study was based upon 2007 data. When the COLA was compounded, two additional years of retirees were affected, which were not included in the original study.