

January 25, 2017

Ms. Robyn M. Smith
Executive Secretary
Arkansas State Highway
Employees Retirement System
PO Box 2261
Little Rock, AR 72203

## Re: Actuarial Impact of Proposed Legislation JNL005

# Dear Robyn:

You have requested that Gabriel Roeder Smith & Company (GRS) determine the actuarial impact on the Arkansas State Highway Employees Retirement System (ASHERS) of proposed legislation, which we will refer to as JNL005. This bill amends sections § 24-5-119, of the Arkansas Code.

The purpose of the bill is to modify the section of the Arkansas Code that contains the redetermination of benefits for retired members of ASHERS. Current law prescribes on July 1<sup>st</sup> of each year a member whose benefit has been effective for at least 12 months shall have their benefits redetermined by increasing their benefits by 3%. These types of increases are often referred to as a cost of living adjustment or COLA. The bill would change the fixed 3.0% COLA to the lesser of 3% or the change in the Consumer price Index for Urban Wage Workers and Clerical Workers for the December immediately preceding the July 1<sup>st</sup>. However, in no event would the COLA be negative.

### **Actuarial Impact**

We have determined the actuarial impact, as of June 30, 2016 (as if the legislation had been in place at that time), of the proposed legislation using the same assumptions and method as used for the June 30, 2016 actuarial valuation of ASHERS. The table below shows key valuation metrics of the June 30, 2016 valuation along with the additional disclosure required by the proposed legislation.

Cost Itam	June 30, 2016 Actuarial	SB JNL005 – COLA is Lesser of 3.0% or
Cost Item	Valuation	change in CPI
Normal Cost	12.50%	11.80%
Unfunded Actuarial Accrued Liability	\$242 million	\$172 million
Funding Period	Infinite	27 years

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### **Other Comments**

The legislation refers to the change in the consumer price index for the December that immediately precedes the July 1<sup>st</sup> at which the COLA will be paid. However, there is no reference to what the change is from. We would suggest that the legislation be clarified that this is the annual change in the consumer price index from the preceding December to the current December in question.

#### **Basis of Calculations**

Our calculations are based on the June 30, 2016 actuarial valuation, including member and financial data used for that valuation. Except as noted below, all assumptions and methods used to calculate the liability and employer costs in this analysis are identical to those used in the actuarial valuation.

The current COLA assumption used in the valuation is 3.0% because the statute currently fixes the COLA at 3.0% every year. However, the legislation would tie the COLA to changes in the Consumer Price Index (inflation). Therefore, it is necessary to modify the COLA assumption to reflect our inflation assumption. As part of our group of economic assumptions, we assume that inflation will average 2.50% over the long term. However, we do not expect inflation to be 2.50% every year. We expect some years to be less than 2.50% and some years to exceed the 3.0% cap contained in the legislation. Therefore, if inflation averages 2.50% but the COLA granted in years where inflation is greater than 3.0% is capped at 3.0%, it is necessarily true that the COLAs will average less than 2.50%.

Therefore, we modeled the expected COLAs to be granted assuming average inflation of 2.50% and reflecting historical volatility to determine the appropriate COLA assumption. Based on this modeling we have selected a COLA assumption of 2.25% to reflect both our long term inflation assumption of 2.50% and the 3.0% cap on COLAs when inflation exceeds 3.0%.

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.

Joe Newton is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

If you have any questions regarding this estimated impact statement, please don't hesitate to contact us.

Sincerely, Lewis Ward

Lewis Ward Consultant Joseph P. Newton, FSA, MAAA, EA Senior Consultant

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