Re: Pension Reform in Kentucky – Senate Bill 1

Pension Trustee Advisors (PTA) has conducted a review of the proposed changes to the pension and retiree healthcare benefits for current and future Kentucky public employees under Senate Bill 1 on behalf of the Kentucky Public Pension Coalition.

While the recommendations include adequate funding of the retirement systems, the changes to the pension benefits proposed are substantial and in many cases result in benefit levels lower than currently provided and lower than proposed in the August 28 PFM report.

This brief report will summarize our findings and provide an overview of areas which may need to be analyzed further.

Summary of Findings

- **Incomplete Analysis of Costs and Benefits** make it challenging to analyze proposal
- **Inadequate Benefit Levels** may result for future workers
- **Reduced Benefit Levels** – in many instances for current workers
- **Suspended COLAs** – equate to a substantial benefit cut
- **Health care contributions** – equate to a significant pay cut
- **Reduced cash balance plan credit and increased insecurity** – are a result of crediting changes
- **Funding reform** while helpful, results substantially on the backs of workers and retirees

Key Finding – Incomplete Analysis

In 2017, Public Financial Management (PFM) conducted a comprehensive analysis of current costs and benefits and proposed costs and benefits. While we had many concerns with the benefits and some concerns with the analysis, the reports provided a thorough and comprehensive roadmap to the rationale and basis for the changes. We see no similar analysis for Senate Bill 1. Consequently, we have endeavored to develop our own costs and benefit illustrations, in absence of information from the sponsors.

While we have extensive experience analyzing other pension changes both in Kentucky and other jurisdictions (Ohio, Missouri, Memphis, Colorado, Alaska, Rhode Island, Puerto Rico, Detroit, Philadelphia, Baltimore, etc.), it is always best to begin with the analysis developed by the proponents

of the proposed changes. We have strong confidence in our calculations, but without a known framework, it is possible that other actuaries will come up with different calculations.

We look forward to reviewing other calculations, once they are disclosed, and may modify our analysis somewhat as a result. We hope that such analysis is conducted and disclosed prior to serious consideration of SB1.

Key Finding – Inadequate Benefits for Future Workers

We have not precisely calculated the benefit levels for each class of Kentucky public workers, but it generally appears that benefit levels will be lower than currently offered and in some cases, lower than proposed in the PFM report. We would expect that a fiscal analysis will perform the same robust benefit calculation illustrations that were provided in August, but have seen no such analysis. While we have some issues with the methodology and assumptions used, the August PFM report provided an excellent comparison of proposed benefits with benchmarks of adequate pension income. Because we have received no analysis based on the provisions of Senate Bill 1, we will illustrate a few of our calculations below. We look forward to reviewing calculations to be released and encourage the Kentucky legislature to be transparent with calculations of benefit levels (as well as cost savings).

Future Teachers

Currently, teachers are covered by a defined benefit (DB) plan. As reported by PFM, the Normal Cost for the current DB plan is 14.94% as of 2016. Non-university teachers contribute 9.105% of pay for this plan (plus 3.75% of pay for retiree health care). This means that the net cost to the employer is 5.835%. The new proposal is that they would be covered by a cash balance (CB) plan comprised of mandatory 9.105% of pay contributions plus 8% employer contributions. This equates to total CB contributions of 17.105%. But while an entire amount of 17.105% is credited to individual teacher CB accounts, only 85% of the investment return is credited to the accounts. The other 15% would presumably be used to pay down the unfunded liability for prior TRS members. See the section on crediting rate below for a discussion of this provision.

In August, PFM cited a target replacement income of 78%. The current TRS DB annuities fall somewhat short of this target. The new CB benefits based on 17.105% contributions may exceed or fall short of this level depending on the returns earned and the returns assumed. If returns earned and returns assumed are 7.5%, as is currently assumed by TRS, then benefits would likely exceed the target. However, if returns earned and returns assumed are 6.1% as recommended by PFM, benefits would not attain the 78% objective. This disparity may put tremendous pressure on the TRS to not reduce the assumed rate or return, as it would decrease annuity benefits for retiring members.

The following table illustrates benefit levels for this group:

Benefit Illustrations for Future Teachers

Retirement Age	65	67	67
Service at Retirement	30	30	32
Target Replacement Income	**78%**	**78%**	**78%**
PTA calculated Income from 17.105% CB – 7.50% earned & assumed	**83%**	**87%**	**96%**
PTA calculated Income from 17.105% CB – 6.10% earned & assumed	**61%**	**64%**	**69%**
Replacement Income from current DB plan	71%	71%	76%

This illustrates that long service teachers may receive stronger benefits from the new CB plan. However, teachers who begin their careers at later ages, such as those starting a second career, would likely receive weaker benefits from the new CB plan than from the current DB plan. As discussed above, no illustrations of costs or benefits have been provided. We believe that there is a good chance that the new CB plan will cost more than the current DB plan for future members.

Future KRS Non-Hazardous Members

Future KERS and CERS Non-Hazardous employees will have the option to participate in a Defined Contribution (DC) plan with 5% employee contributions and 4% employer contributions. These members will remain eligible for the Tier 3 program which uses a CB program with the same contribution levels as DC and as currently (5% employee + 4% employer). Because of the change in crediting rate from 75% with a 4% floor to 85% with no floor, the benefits and the employer costs will be reduced. For members who elect DC, the benefits will be higher or lower than under current provisions (or new CB), but the employer cost for those members is likely to be increased.

Future KERS Hazardous Members

Future KERS Hazardous employees will have the same modest CB plan that they have today. They will have the option to switch to a DC plan, but this is not expected to improve their retirement potential. PFM in their August report calculated that these workers would attain replacement income of 72% if retiring at age 60 with 30 years and 80% if retiring at age 62 with 32 years. PTA calculated these figures on less rosy assumptions as 59% and 62%, respectively.

Future CERS Hazardous Members

Future CERS Hazardous employees will also have the same inadequate CB plan that they have today. They will have the option to switch to a DC plan, but this is not expected to improve their retirement potential. PFM in their August report calculated that these workers would attain replacement income of only 50% if retiring at age 60 with 30 years and 57% if retiring at age 62 with 32 years. PTA calculated these figures on less optimistic assumptions as 32% and 39%, respectively. The PFM report suggested that they would need to invest much of the take-home-pay that they save by not participating in Social Security (up to 6.2%) in personal savings accounts to approach the target replacement income. We find that this can only be met if the optimistic assumptions are achieved, which include:

- investment returns as strong as those attained by professionally managed long-term DB plans,
- ignoring inflation, and
- not living as long as the average retiree.

Reduced Benefits for Current Workers

Current workers have various transition benefits which may result in reductions in benefits. A partial analysis follows:

Current Teachers

The most significant impact to teachers is the COLA suspension which will be discussed below. In addition, several specific reductions will apply.

The most significant change is that many teachers will have benefits based on a five-year average of earnings rather than a three-year average. This has the impact of decreasing pension benefits by about 3%-4% on average.

Certain other benefit changes also apply to current teachers and TRS:

- Sick Leave retirement benefits will phase out
- 3% benefit factor for service after thirty years will be modified
- Reemployment provisions will be changed
- Potential increase in employee retiree health care contributions, based on funded position
- Board governance and conflict-of-interest provisions
- Changes to inviolable contract
- Some changes to definition of creditable compensation
- Elimination of $2,000 and $5,000 death benefits
- Changes to Service Purchase provisions

We have not analyzed the financial impact of these changes on either the employees or the employer. It does seem counterproductive, however, to create any incentive for individuals to retire early.

Current KRS Non-Hazardous Members

Tier III members will have changes to their crediting rates as will be discussed below.

Tier I members will begin to pay 3% of pay (phased in) toward health care.

They also have other changes similar to those for teachers and TRS:

- Sick Leave retirement benefits will phase out
- Reemployment provisions will be changed
- Board governance and conflict-of-interest provisions
- Changes to inviolable contract
- Some changes to definition of creditable compensation
- Elimination of $5,000 death benefit
- Changes to Service Purchase provisions

We have not analyzed the financial impact of these changes on either the employees or the employer.

Current KRS Hazardous Members

The hazardous members will have no major change to their retirement benefit structure. The inadequate CB benefits, particularly for CERS, will continue. Modest changes will also occur, similar to those for Non-Hazardous Members:

- Sick Leave retirement benefits will phase out
- Reemployment provisions will be changed
- Board governance and conflict-of-interest provisions
- Changes to inviolable contract
- Some changes to definition of creditable compensation
- Elimination of $5,000 death benefit
- Changes to Service Purchase provisions

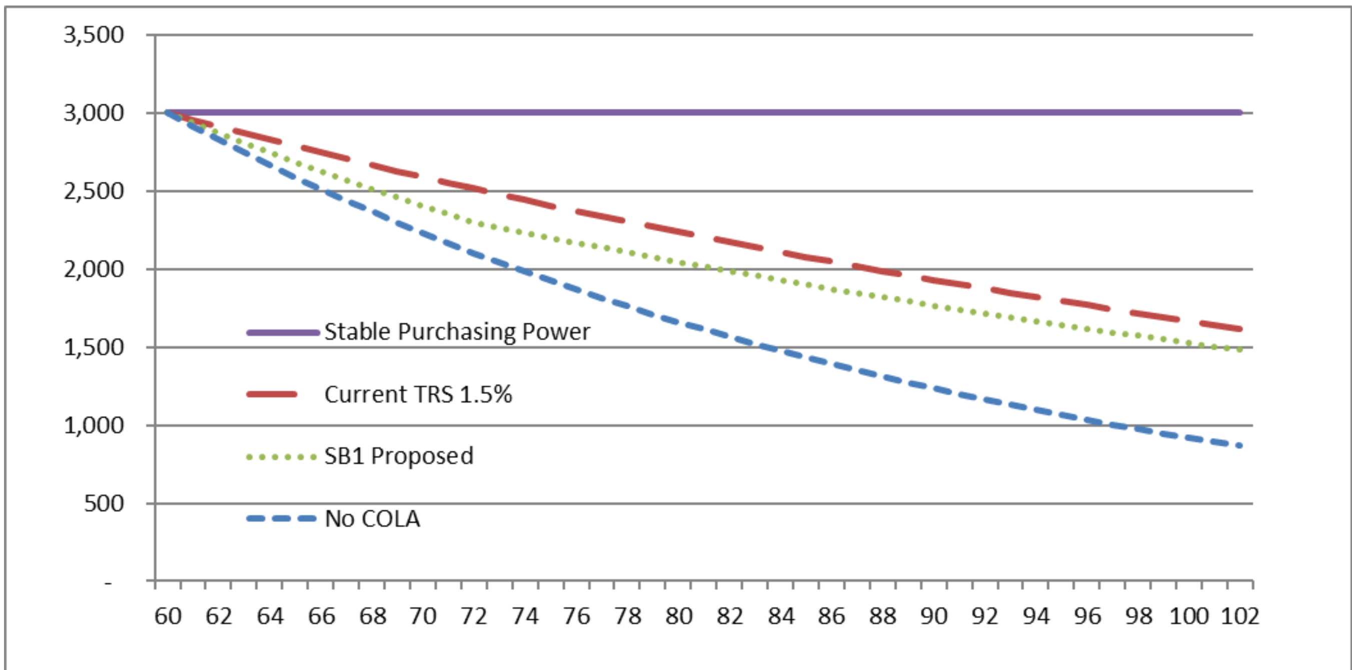
We have not analyzed the financial impact of these changes on either the employees or the employer.

COLA Reduction for Retired Teachers

TRS currently provides a 1.5% cost of living adjustment (COLA) each year. This is prefunded by employees and employers as part of the Normal Cost. The proposed legislation reduces this by half for twelve years for all current members. Over a full lifetime, this equates to an approximately 6% reduction in benefit value, or about $70,000 for a typical teacher. Teachers at or near retirement will not have time to make up for this loss. The reduction in COLA is particularly problematic for Kentucky teachers who do not have access to Social Security, which is protected from inflation.

Pensions which are adequate at retirement can become inadequate years later once the effects of inflation are considered. TRS currently increases benefits for retirees by 1.5% per year. This helps defend somewhat against the impact of inflation, which is projected to be 3.0% per year in the TRS actuarial valuations. The SB1 proposal is to halve TRS cost of living adjustments (COLAs) for the next twelve years. If this is the case, then a benefit which is $3,000 today would be worth only about $2,268 in 2030. This is a 24% reduction in purchasing power. Even under the current TRS COLA approach, benefits would lose 17% of their purchasing power over twelve years. The table below shows the impact of inflation under various COLA scenarios, based on an average TRS benefit of $3,000 per month and assuming age 60 in 2018.

Under current TRS provisions, benefits lose 1.5% per year in real terms
This would increase under SB1 proposal



Health Care Contributions Represent a Significant Pay Cut

Under the new proposal, certain KRS Tier 1 workers will be required to increase their preretirement contributions toward retiree healthcare by up to 3%. This equates to a 3% cut in pay. TRS

TRS has a provision where the teacher contributions may also be increased, depending on funded position. We have not analyzed the likelihood of this to occur.

Reduced Crediting Rate for Cash Balance Plans

The current cash balance program provides one of the lowest levels of benefits in the country for hazardous duty members. But at least the crediting rate provided a floor protection of investment return. For the non-hazardous KRS plans, the SB1 proposal eliminates that floor and results in reduced expected crediting rates. This is illustrated by the following table:

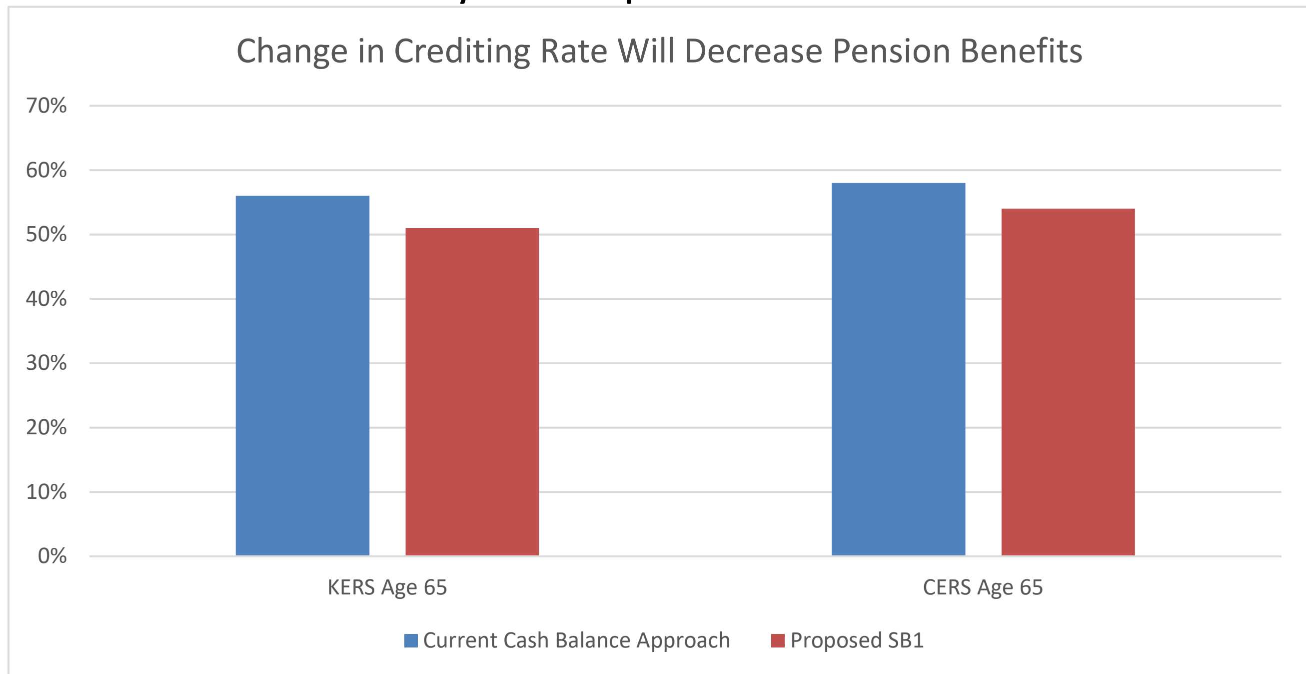
	Current Provisions	SB1 Proposed Provisions
Based on PFM actuarial assumed rate or return of 5.25%		
Fund Rate of Return	5.25%	5.25%
Minimum Guaranteed Return	4.00%	0.00%
Share of Excess Credited to Member	75%	85%
Total Anticipated Return to Member	4.94%	4.46%
Based on KRS actuarial assumed rate or return of 6.75%		
Fund Rate of Return	6.75%	6.75%
Minimum Guaranteed Return	4.00%	0.00%
Share of Excess Credited to Member	75%	85%
Total Anticipated Return to Member	6.06%	5.74%
Based on TRS actuarial assumed rate or return of 7.50%		
Fund Rate of Return	7.50%	7.50%
Minimum Guaranteed Return	4.00%	0.00%
Share of Excess Credited to Member	75%	85%
Total Anticipated Return to Member	6.63%	6.38%

As can be seen from this table, the members will be earning only a fraction of the expected return of the retirement system. While the averaging of returns over five or ten years does provide some stability, the fact that members are not able to get any guarantee or at least the full investment return of a well-managed fund creates a reduction in benefits compared to the status quo. While the idea of a reduction from not crediting the entire return to the members may make sense with a 4% minimum crediting rate, with a minimum crediting rate of 0% and a long period, it is very unlikely that there would be frequent periods where the 0% minimum would be in place. A brief review of KERS and TRS returns over twelve ten-year periods going back to 1997-2006 found no periods where the average return was below 1%. Only if returns average 10% over a ten-year period will the SB1 return proposal be as strong as the current approach.

Based on total returns of 10.00%		
Fund Rate of Return	10.00%	10.00%
Minimum Guaranteed Return	4.00%	0.00%
Share of Excess Credited to Member	75%	85%
Total Anticipated Return to Member	8.50%	8.50%

These reduced returns would have a significant impact over a full career. The chart below compares the replacement income calculated by PFM for Non-Hazardous duty workers under current provisions with what that would be under the reduced crediting rate under the SB1 proposal. As you can see, replacement income is reduced by about 3% of pay.

Non-Hazardous Duty Pension Replacement Based on PFM calculations



Financial Considerations

As an actuary, I am pleased to see that the government will continue to appropriately fund the retirement systems. But because of the substantial reductions in benefits, this appears to be primarily passed on to the workers. For example, the employer TRS normal cost for teachers hired after 2008 is only 5.83% of pay. After reducing COLA and other changes, the normal cost could decrease by at least 1%.

Conclusions

The proposed legislation will result in less than adequate retirement benefits for nearly all future Kentucky workers and result in significant takeaways for most current workers and retirees. We believe that the proposed reform of the currently inadequately funded pension program does not address this significant funding problem in a balanced and cost efficient manner.

As previously, we are available to discuss our findings further with your entities or other decision-makers as appropriate. Actuarial calculations were performed under the direction of or by William B. Fornia, FSA, who meets the qualification requirements of the American Academy of Actuaries to render this actuarial opinion.

Sincerely,

William Fornia, FSA

February, 2018