Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

July 24, 2006

Mr. William P. Hanes, Esq.
Executive Director
Kentucky Retirement Systems
1260 Louisville Road
Perimeter Park West
Frankfort, KY 40601-6124

Dear Mr. Hanes:

At your request, we are writing to provide some preliminary input regarding the impact on the Kentucky Retirement Systems' (KRS) financial condition should a defined contribution (DC) plan be established for KRS members.

BACKGROUND

As you know, the KRS plans are all Internal Revenue Code (IRC) qualified defined benefit (DB) plans. A DB plan provides a guaranteed lifetime benefit at retirement based on a formula that reflects salary history and service with a covered employer. In contrast, a DC plan does not provide for a guaranteed benefit. A DC plan is funded by employer (and possibly employee) contributions. These contributions accumulate with actual investment earnings, and the participant's annual retirement income is whatever the accumulated assets can provide over the retiree's lifetime.

DB plans do a better job of providing retirement income whereas DC plans are better at creating retirement savings. Although the current approach in the public sector is to consider *replacing* a DB plan with a DC plan, they really are complimentary vehicles and should be offered together. In fact, through the current IRC Section 457 plan (which is a DC plan funded entirely by employee contributions), the Commonwealth is doing just that.

The ultimate goal of any retirement program is to provide adequate retirement benefits to career employees when they reach normal retirement age. It is an undisputed fact that for a given employer commitment (i.e., contribution level) DB plans are the superior vehicle for achieving this goal. This is demonstrated below.

For all pension plans, whether defined benefit or defined contribution, the basic retirement funding equation is:

665 Molly Lane, Suite 150, Woodstock, GA 30189
Phone (678) 388-1700 • Fax (678) 388-1730
www.CavMacConsulting.com

$$C + I = B + E$$

Where:

- C = employer and member contributions
- I = investment income
- B = benefits paid
- E = expenses paid from the fund, if any.

The underlying message is that dollars in have to equal dollars out. When comparing a DB plan and a DC plan with identical employer contributions ("C"), if investment income ("I") and expenses ("E") are the same, then the *total* benefits ("B") paid from the plans must be equal. However, DC plans are designed to allow members terminating prior to retirement to withdraw their account balances which include employer contributions. By contrast when a member terminates prior to retirement under a DB plan with no right to a vested benefit, the employer contributions remain in the system. Therefore under a DC plan the benefits paid to those who terminate prior to retirement are higher than under a DB plan. As a result under a DC plan, there are fewer benefit dollars available for members who retire when compared to a DB plan.

If the DB/DC discussion is going to revolve around an "either/or" choice, then the Commonwealth has a key decision to make. Is the goal of the pension program to provide adequate retirement income to employees who serve the citizens of Kentucky for a career, or to provide higher benefits for those employees who terminate after a short period of service in Kentucky?

CURRENT DB/DC ENVIRONMENT

The DB/DC debate has been going on in the public sector for more than a decade. In that time, a number of states have created DC plans for some or all of their employees, including Alaska, Florida, Michigan, Montana and South Carolina. Others, such as Indiana, Oregon and Washington created combined DB/DC plans. Ohio established both a standalone DC plan and a DB/DC combination plan.

A few states, such as Michigan and Washington, offered a choice between the current DB plan and the new DC plan to only existing members. However, the most common approach taken by these states was to offer a choice to both existing members and new hires. Some, like Florida and Ohio, went so far as to allow members to change their elections at specified times in the future.

The experience of the States that offered a choice between a DB plan and a DC plan indicates employees much prefer the DB plan. In Michigan, only 6% of eligible members elected the DC plan. In Florida it was 5%, and in Montana only 3%.

Some states with DC plans have studied the benefits being provided to their members and the employer contribution level, and have concluded that the DC plans are not meeting their retirement goals and are too costly to the employer. Nebraska switched members of the State Employees Retirement System and the County Employees Retirement System from a DC plan to a DB plan. West Virginia recently did the same for participants in the Teachers Retirement System.

ISSUES AFFECTING KRS

In considering whether to establish a DC plan in Kentucky, there are a number of issues to keep in mind. Foremost is that the current pension and retiree healthcare benefits are contractual obligations of the Commonwealth and are protected by statute as well as the state constitution. As a result, benefits cannot be cut back or eliminated for existing members. Changes would only apply to new hires, unless a choice was offered to current members. Given the experience of other states, noted above, it would be anticipated that very few current members would elect to move to the DC plan. Regardless of whether a choice is offered to existing members, the current unfunded liabilities for the pension and retiree healthcare benefits will remain substantially unchanged.

Whether new hires are given a choice or not, the payroll base under the current DB plans would begin to decline immediately. Since that base is used to fund the systems' unfunded accrued liabilities (UAL), the financial burden as a percent of payroll will increase. This will be compounded by Governmental Accounting Standards Board requirements under Statements 25 and 27 to reduce the payroll growth assumption in financing the UAL or move to a level dollar approach from the level percent of payroll currently used.

Although the cost to employees will eventually decline, so will the benefits received by retirees. This reduction will have a significant negative impact on the Commonwealth's economy. There have been studies conducted that show that benefits paid to retirees, the vast majority of whom remain in Kentucky after retirement, have a multiplier effect on the local economy. This manifests itself in increased expenditures, increased state gross product and increased personal income. One recent study conducted for the Teachers Retirement System of Texas by an independent consultant concluded that every dollar of state funds contributed to the system lead to nearly eight dollars in total spending in the economy.

Finally, the administrative burden on KRS will increase substantially if a DC plan is created. Staffing will have to increase significantly to handle the additional duties of managing the DC plans along with the existing DB plans. DB and DC plans are fundamentally different, so the skill sets that are needed to administer the plans are not the same. In addition, there will be greater communication needs, not only for educational purposes, but also for participant access to the DC plan's account information.

COST IMPACT ON KRS

Since we have just recently been retained by KRS for actuarial services, we do not have the historical information needed to provide detailed cost projections for KRS at this time. We will be developing those costs as soon as the 2006 actuarial valuations are completed. There are a number of observations we can make, however.

For the reasons noted above, the employee population covered by the DC plan will be very slow in developing. As a result, even without the added cost factors noted below, it will take many years before the Commonwealth may begin to realize any cost savings anticipated by creating a DC plan with lower employer contribution rates.

In fact, initially employer costs will increase. As noted in a recent National Conference on Public Employee Retirement Systems (NCPERS) white paper:

> "A DB plan must be designed, vendors must be selected, and its operation must be monitored. In addition, employees must be informed about plan features and available investments. Staff time is spent throughout the process, and the sponsoring government must pay additional legal and consulting fees. If a third-party administrator is not hired to administer the plan, the government must do this as well. Even if a third-party administrator is hired, the government will still have operating costs related to the DC plan, possibly ranging in the millions of dollars. For example, the budget for the State of Florida's DC plan, established in 2000, totaled $89 million from FY 2001 through FY 2004. This includes $55 million to educate Florida's 650,000 government employees about the new plan."

In addition, as previously stated, closing the DB plan to new entrants will require a change in the method used to finance the UAL. Since the UAL does not change when the DB plan is closed, and does not decrease significantly even if existing members are given the option of moving to the DC plan, changing the method will increase the contribution required, at least in the near term. The table below provides an estimate of the impact on KRS of moving from level percent of payroll financing of the UAL to level dollar financing. The figures are based on the June 30, 2005 valuation prepared by the previous actuary for KRS.

Plan	UAL Financing (% of Payroll)		Contribution Increase	
	Level %	Level $	% of Pay	$
KERS Non-Hazardous				
Retirement	5.87%	10.15%	4.28%	$70,953,224
Insurance	7.33	11.28	3.95	65,411,108
Total				$136,364,332
KERS Hazardous				
Retirement	0.91	2.15	1.24	$1,628,219
Insurance	8.58	13.41	4.83	6,359,526
Total				$7,987,745
CERS Non-Hazardous				
Retirement	0.25	1.45	1.20	$22,580,287
Insurance	6.61	10.16	3.55	66,989,345
Total				$89,569,632
CERS Hazardous				
Retirement	4.32	7.11	2.79	$11,454,498
Insurance	12.94	20.09	7.15	29,374,706
Total				$40,829,204
SPRS				
Retirement	11.21	20.19	8.98	$3,924,115
Insurance	18.09	27.72	9.63	4,210,301
Total				$8,134,416
Grand Total				$282,885,329

A final note on transition costs must be made regarding anti-selection. If existing and/or new members are given a choice between the DB and DC plan, many will be able to choose the plan that is in their financial best interest. Younger employees will opt for the DC plan, and these are the people who are cheaper to fund in the DB plan. By contrast older employees, who are more costly to fund in a DB plan, will opt for that plan.

As a simple example, assume the following: a new DB plan has two participants who earn the same salary. One is age 25 and the other age 55. To finance the promised benefits, the employer must contribute 4% of the 25 year-old's pay and 14% of the 55 year-old's pay, or 9% of total payroll. The employer introduces a DC plan with a 6% employer contribution, and gives the two

employees a choice between the DB and the DC plan. When anti-selection occurs, the 25-year old will opt for the DC plan and the 55-year old will stay in the DB plan. The resulting employer contribution rate will be 10% of total payroll (the average of 6% and 14%), or 1% more than before the DC plan was introduced.

On an ongoing basis, there are additional costs that must be paid for either by the employer or the employee. Administrative expenses are greater for the reasons noted above. Investment expenses are much greater in a DC plan. This is due to the higher cost structure of mutual funds, the typical DC investment vehicle, compared to investment management firms used by DB plans. The NCPERS white paper mentioned earlier noted "According to the Investment Management Institute, the operating expense ratio for DB plans averages 31 basis points (31 cents per $100 of assets) compared with 96 to 175 basis points for DC plans."

CONCLUSION

DC plans are not a panacea. They do provide features not usually found in DB plans, such as portability, investment choice, personal responsibility and lump sum payouts. However, DC plans do not offer the many advantages of a DB plan such as pre-retirement death and disability benefits, post-retirement inflation protection, lower expense ratios and higher average investment returns.

Establishing a DC plan in Kentucky will increase total KRS employer costs for decades in the future, until the employee population is predominantly covered by the DC plan. In order to possibly create these future cost savings, the Commonwealth will have to lower retirement benefits for Kentucky employees in the DC plan. This in turn will lead to a degradation in retirement security for KRS members and will negatively effect the overall Kentucky economy.

Sincerely yours,

Thomas J. Cavanaugh

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

Edward A. Macdonald, ASA, FCA, MAAA
President

TJC/EAM:sh

S:\Kentucky Retirement Systems\DB-DC Issue\DC Plan Final.doc