Kansas Public Employees Retirement System

Preliminary Review of Cash Balance Plan Proposal

Overview

- A cash balance plan proposal was presented to the House Committee on Pensions and Benefits on March 2, 2012.
- KPERS has begun reviewing the proposal in order to identify potential legal, administrative and policy issues for consideration by the Committee.
- Given the short timeframe available, the comments and observations in this presentation are preliminary.
- KPERS will continue reviewing the proposal and any changes to it and will work with the Committee as it further refines the plan or other alternatives.
- KPERS comments today will consist of
 - An overview of suggested criteria for evaluating any proposed plan design.
 - Cash balance plan basic concepts.
 - Comments regarding the cash balance plan design.
 - Preliminary observations regarding its administrative impact.

Plan Design Criteria

KPERS' Fiduciary Benchmarks

- Plan design is the responsibility of the Legislature.
- As part of its fiduciary duty to members and benefit recipients, KPERS supports plan design and funding policies that
 - Are consistent with legal limitations and actuarial standards.
 - Help to ensure that member benefits are paid in full and in a timely manner.
- To that end, KPERS supports legislation that results in substantial improvement to KPERS' long-term retirement funding status.
- The following guidelines or benchmarks are consistent with that position.

KPERS' Fiduciary Benchmarks (Continued)

Funded Status

- Contribution rates. Employer contributions reach actuarially required rates at a level that is sustainable over the long term.
- Funded ratio. All KPERS groups are funded at a minimum funded ratio of 80% and rising within a reasonable time frame that does not leave KPERS exposed to market downturns for an extended period.
- Funding period. Benefits are pre-funded in a manner consistent with timely amortization of KPERS' unfunded actuarial liability. (The amortization period established by the Board is currently just over 20 years.)

Plan Design

- Impact of plan design on member behavior. The short-term and long-term incentives of plan design changes do not motivate member behavior and decisions that adversely affect the Plan and its sustainability.
- Complexity of administration and education. The plan design can be effectively administered and communicated in a cost-effective manner.

Plan Design Policy Issues

Beyond these basic benchmarks, there are a number of philosophical and policy design issues that may guide the Legislature in its role of establishing KPERS' plan design.

Funding Policy

- Does the plan provide a cooperative, comprehensive solution that is sustainable and establishes shared responsibility among stakeholders?
- Does the plan establish an actuarial funding plan with an affordable mix of employer and employee contribution rates that ensures the financial soundness of the plan over the long term?

Workforce Incentives

- Attraction and retention of employees
- Benefit equity & portability

Retirement Readiness

 Sufficient benefits to sustain the retiree's standard of living in retirement, in combination with Social Security and personal savings?

Plan Design Policy Issues (Continued)

Allocation of Risk

- How should the responsibility for bearing risk be allocated between employers (taxpayers) and members with respect to –
 - Pre-and post retirement investment return (rate of return on assets)?
 - Longevity?
 - Pre-retirement or wage inflation (how salaries increase while working)?
 - Post-retirement inflation?
 - Contribution rate ?
- Does the plan address short term risks in a way that neglects or adversely impacts long-term risk (i.e., does it create a long-term problem in its attempts to solve a short-term problem)?

Cash Balance Plan Basics

Cash Balance Plan Basics

- A "cash balance" plan is a type of defined benefit plan that includes some elements of a defined contribution plan.
- Cash balance plans tend to share risks between employer and employee to a greater degree than either traditional defined benefit plans or defined contribution plans.
 - Each participant has a hypothetical account.
 - Each account receives credits employee contributions and employer "pay credits."
 - Each account receives a guaranteed interest crediting rate.
 - During the employee's working years, the value of the benefit is expressed as an account value the total accumulated employee contributions and employer pay credits, plus interest credits.

Cash Balance Plan Basics (Continued)

- At retirement, the ending account balance is annuitized to create a guaranteed monthly income.
 - This requires an investment return assumption and a mortality assumption.
- Employer contributions are established based on an actuarial valuation.
 - Contributions vary, depending on the actual experience compared to actuarial assumptions.
 - Employer contributions do not necessarily equal the employer "pay credit."
 - Positive experience, such as investment returns higher than the guaranteed interest credit rate, acts to reduce the actuarial employer contribution rate.
 - Conservatism may be built into the plan design.
- See Attachments 1 and 2 for tables comparing the plan elements and risksharing characteristics of –
 - Traditional defined benefit (final average pay) plans.
 - Cash balance plans.
 - Defined contribution plans.

Preliminary Comments on Cash Balance Plan Proposal

Impact on Unfunded Actuarial Liability

- In comparing various plan design options, one concern is their impact on KPERS' unfunded actuarial liability.
- The current unfunded actuarial liability is a legacy cost that must be paid off under any plan design.
- Remembering the funding formula (Contributions + Interest = Benefits + Expenses), the only sources for additional funding to pay off the unfunded actuarial liability are –
 - Increases in investment earnings (above the 8.0% investment return assumption).
 - Additional contributions.
 - Reductions in the normal cost for future or current members that reduce the growth of future actuarial liability. However –
 - Ability to reduce benefits for existing members is subject to legal constraints and can only address future service – not benefits already earned.
 - The alternate plan design would need to have normal costs lower than HB 2194. Normal costs under HB 2194 fall to less than 1.0% with an 8.0% investment return assumption.

Unfunded Actuarial Liability (Continued)

- Reductions in the normal cost due to a new Tier do not automatically translate into reductions in KPERS' unfunded actuarial liability.
 - The legacy actuarial liability for Tiers 1 and 2 will be a major driver of KPERS' funded ratio, unfunded actuarial liability, and employer contribution rates for decades.
 - With a fixed amortization period through 2033, reductions in the normal cost do not pay down the unfunded actuarial liability over a shorter period of time.
- For these reasons, new plan designs, including the cash balance proposal, do not typically have an immediate, dramatic impact on the existing unfunded actuarial liability. Their impact on the unfunded actuarial liability primarily result over time from –
 - Managing increases in employer contribution rates, making it more likely that employers are able to sustain actuarial required contribution rates necessary to amortize the unfunded actuarial liability.
 - Sharing risks with members to a greater degree so that the potential for future growth of the unfunded actuarial liability is reduced.

Interest Credits and Dividends

- The cash balance proposal assumes a 5.0% fixed interest credit (applied quarterly) and interest dividends determined by the KPERS Board under guidelines established by the Legislature.
 - If the Legislature decides to grant the authority to the KPERS Board to provide dividends, then the Board should be given flexibility to make the determination, within the statutory guidelines established by the Legislature.
- The structure of a cash balance plan's interest credit and dividends determines the way in which pre-retirement investment risk is shared between employer and employee.
- KPERS' actuary, Cavanaugh MacDonald, recommends careful evaluation of these two elements so that the plan design reduces future risks to the System's funding.
 - Suggested approach
 - Assume an effective interest credit rate for purposes of actuarial modeling.
 - The goal is an effective interest credit rate resulting in a Tier 3 normal cost comparable to the cost under HB 2194.

Interest Credits and Dividends

- Identify interest credit and dividend criteria that produce the assumed effective return. These criteria could include –
 - A minimum, fixed interest credit rate.
 - The degree to which KPERS' 8.0% interest return assumption must be exceeded before a dividend is offered.
 - The proportion of the excess return that is directed to dividends either as a fixed per cent or a phased-in amount depending on the size of the excess return.
 - A maximum interest dividend rate.
 - Criteria relating to the funded status of KPERS whether based on the funded ratio or the unfunded actuarial liability.
- The most effective way to understand preretirement investment risks associated with the interest credit and dividend is to model alternatives using sensitivity analyses.
 - Prior to passing a cash balance plan, it is recommended that the interest rate credit and interest dividend guidelines be stress-tested using stochastic modeling (estimating the possibility of outcomes under different situations).
 - This type of sensitivity analysis can provide a greater degree of confidence that the plan design would, in practice, protect the System under a range of market conditions.

Proposed KPERS Public Safety Group

- The proposal would permit employers to elect a new "KPERS public safety group" for its public safety employees.
 - The KPERS public safety group would mirror the plan provisions currently applicable to Corrections A and B groups within KPERS.
- Eligibility requirements should mirror Corrections A & B groups only applies to members who actively serve in an eligible position for a period of not less than three consecutive years immediately preceding retirement.
- An administrative "affiliation" process would be needed for employers choosing to provide the KPERS public safety plan to their employees.
 - Is the public safety officer group election to be irrevocable?
 - Is the new public safety group intended to be available for future members only or for existing members?
 - Assuming it is made available for existing members as well, provisions are needed for –
 - Determining the associated unfunded actuarial liability.
 - Establishing a fixed amortization schedule for the employer to pay off the unfunded actuarial liability.

Additional Considerations

Death Prior to Retirement

- If a vested member dies before reaching retirement eligibility, the cash balance proposal provides for a spouse named as sole beneficiary to receive an annuity based on 100% of the account balance (no lump sum option).
 - Will need to clarify whether the annuity begins immediately or at the point the member would have become eligible for retirement. If at retirement, clarify whether the account balance will be annuitized at early retirement or normal retirement date.
 - The Committee discussed expanding eligibility for a survivor benefit to beneficiaries other than a spouse, including the member's estate.
 - It would not be possible to annuitize an account balance on behalf of an estate.
 - Recommend paying benefit as a lump sum if paid to other beneficiaries.
 - Could provide an annuity option for beneficiaries who are older.

Normal Retirement Age.

 Consider coordinating vesting and the normal retirement age standard – i.e., age 65 with seven years of service.

Additional Considerations (Continued)

Distribution of Minimum Account Balance

 Consider addition of a lump sum minimum distribution requirement for account balances of \$1,000 or less at retirement.

Benefit Options

- Will need to evaluate which life certain benefit options are most appropriate to offer if the maximum retirement benefit is based on a 15-year life certain annuity.
- Recommend limiting partial lump sum option benefits to increments no smaller than 1.0% or \$1.00.
- Recommend providing no more than three cost of living adjustment options e.g. 1.0%, 2.0%, or 3.0% annually.
- Cost of living options must be irrevocable.

Administrative Impact on KPERS and Employers

Factors Decreasing Complexity

- KPERS previously testified about a number of factors that would make HB 2545 (Study Commission bill) more complex to implement and administer.
- In general, implementing and administering the cash balance plan should be simpler for KPERS and employers.
 - No elections (other than HB 2194 election, if approved by the IRS).
 - No need to contract for third-party record keeper or defined contribution investment managers.
 - No need to oversee and coordinate with record keepers and investment managers.
 - No need to create or manage a KPERS defined benefit investment option or to coordinate transfer of assets into and out the option with one or more record keepers.
 - Simpler to explain to members since there is only one account per member, and members are not responsible for managing investments and distributions for a selfdirected account.
 - Only one plan and one trust to administer.
 - Both employer and employee contributions are remitted to KPERS, rather than splitting between KPERS and a third-party record keeper.

Factors Adding Complexity

- Although a cash balance plan should be less complex than HB 2545, a Tier 3 cash balance plan would add complexity when compared to the existing Tiers.
 - Broadening Corrections A and B Groups to a new KPERS public safety group
 - Requires establishing an "affiliation process," including prior service cost studies if employers are allowed to affiliate for prior service.
 - May require new member type and group in KPERS' information system.
 - May need to allocate experience and any unfunded actuarial liability to the public safety group and reflect it in the group's actuarial contribution rate.
 - A complete set of communication materials specific to Tier 3 would be needed, as well as additional communication pieces for the public safety group.
 - "Annual statements" would become "quarterly statements" with associated information technology costs.
 - Partial lump sum options in increments of any percent or dollar amount are somewhat more complex, but can be done.
 - The potential for members to select up to three benefit options (partial lump sum option, joint survivor, and cost-of-living) makes programming more complex.
 - The greater the frequency of account updates, the more frequently employers will need to report member pay and contributions.

Employer Reporting

- KPERS' existing systems provide for employers to report individual member contribution amounts on an annual basis only.
 - KPERS attributes annual member compensation based on contribution amounts.
- Cash balance plans can be designed to record employer pay credits annually, quarterly, or each pay period.
 - The proposed cash balance plan would record them on a quarterly basis, along with quarterly interest credits.
- KPERS and all 1,500 employers would need to modify their information technology and payroll reporting systems to provide for –
 - Employer reporting of actual compensation, as well as contribution amounts.
 - Reporting on either a quarterly or payroll period basis.
- KPERS staff is continuing to evaluate the costs, challenges, and benefits of quarterly versus payroll period reporting.
- The costs to modify KPERS' information technology system are considerable with either quarterly or payroll period reporting.
- The change in reporting scope and frequency also is likely to entail significant information system and other operations costs for each of the 1,500 employers.

Effective Date

- Although a cash balance plan is likely to be less complex than HB 2545, concerns about the January 1, 2014, effective date remain.
 - There was a two-year implementation period for Tier 2, which involved variations on the same basic plan design in place for Tier 1 members.
 - KPERS assumes that HB 2194 implementation would coincide with implementation of the new plan.
 - The changes to employer reporting processes for KPERS and employers need to be carefully planned and tested prior to implementation.
 - Additional KPERS staff will need to be hired and trained before they are prepared to assist with implementation or to manage ongoing operations during the implementation.
- KPERS will continue evaluating alternatives for expediting implementation of this or any other plan design enacted by the Legislature.
 - One option that could be explored further is retaining the January 1, 2014, effective date, but providing for annual employer pay credits and interest credits until the Board certifies that systems for more frequent employer reporting are ready for implementation.

Miscellaneous Implementation Issues

- Resolution of some issues could be deferred to trailer legislation or delegated to KPERS to address through plan documents or other guidance documents.
 - Interest Credits. KPERS' tentative assumption is that interest credits would be recorded quarterly and applied to the ending balance for the prior quarter.
 - Interest Dividends. KPERS assumes the determination to provide a dividend would be made annually following receipt of the December 31 valuation.
 - Recommend basing interest dividends on member account balances as of the valuation date.
 - Recommend granting dividends only to members who were active both on the valuation date and on the date the interest dividend is approved and credited.
 - Other "second tier" issues.
 - How would the unfunded actuarial liability for employers affiliating with KPERS for prior service be determined as there is no starting account balance?
 - For what purposes, if any, would service credit purchases be available?

Attachments 1 and 2

Summary of Plan Design Characteristics

Туре	Description	Example	Variations	Pros	Cons
1. Final Average Pay DB Plan	Benefit based on a percentage of participant's average earnings during specified period.	1.75% x Final 5-year Average Earning x Years of Service	Multiplier can vary with years of service. May limit service or salary. Can limit overall dollar amount	Benefit linked to salary growth; keeps pace with pre-retirement wages. Provides benefit security.	Back-loaded accrual/cost pattern. Highest value in last years. Much of risk lands on employer.
2. Cash Balance Plan	Benefit based on account balance that may be converted to annuity at retirement. Account balance is hypothetical and determined similar to DC Plan.	10% of pay credited to account (employee & employer); account balance grows 5.0% per year for interest credit.	Contributions may vary by service. Additional dividends can be granted when affordable.	Benefit partially linked to salary growth. Easier for participants to understand. Benefit defined in terms of account balance	Not common in public sector. Potential increased administration. Still risks that need to be managed.
3. Defined Contribution Plan	Individual account is maintained for each employee with actual investment earnings credited to the account.	10% of pay contributed to the account (employee & employer). Actual investment earnings credited to the account.	Contributions may vary by service	Easier for participants to understand and grasp the value of the account.	Much of risk lands on employee. Requires ongoing education of employees.

Risk Features of Plan Designs

	Final Average Pay		Defined Contribution*		Cash Balance				
Economic Risk	Employer	Employee	Employer	Employee	Employer	Employee			
Investment Risk	High	Low	None	High	Medium	Low			
Inflation Risk – wage (pre-retirement)	High	None	None	High	None	High			
Inflation Risk – price (post-retirement)	None	High	None	High	None	High			
Contribution Risk	High	Low	None	High	Medium	Low			
Longevity Risk	Medium	None	None	High	Medium	None			
Features									
Rewards older/longer service employees	High		Low		Medium				
Provides retirement security	High		Low		Medium				
Attract employees	Medium		High		High				
Retain employees	High		Low		Medium				
Provides systematic retirement of employees	High		Low		Medium				