Approved: March 4, 2008
Date

JOINT MEETING
JOINT COMMITTEE ON PENSIONS, INVESTMENTS AND BENEFITS
SENATE WAYS AND MEANS COMMITTEE

The meeting was called to order by Chairman Steve Morris at 10:30 A.M. on January 22, 2008, in Room 123-S of the Capitol.

All members were present except:
Senator Jay Emler - excused
Senator Greta Goodwin - excused
Senator Mark Taddiken - excused

Committee staff present:
Jill Wolters, Senior Assistant, Revisor of Statutes
Alan Conroy, Director, Kansas Legislative Research Department
Kristen Clarke Kellems, Assistant Revisor of Statutes
Gordon Self, Revisor of Statutes Office
Audrey Dunkel, Kansas Legislative Research Department
Julian Efird, Kansas Legislative Research Department
J. G. Scott, Kansas Legislative Research Department
Michael Steiner, Kansas Legislative Research Department
Jarod Waltner, Kansas Legislative Research Department
Melinda Gaul, Chief of Staff, Senate Ways & Means
Shirley Jepson, Committee Assistant
Mary Shaw, Committee Assistant

Conferees appearing before the committee:
David H. Slishinsky, Principal and Consulting Actuary, Buck Consultant
Douglas J. Fiddler, Senior Consultant, Actuary, Buck Consultant

Others attending:
See attached list.

The Senate Ways and Means Committee was invited to this Joint Meeting with the Joint Committee on Pensions, Investments and Benefits. Chairman Steve Morris welcomed David H. Slishinsky, Principal and Consulting Actuary, Buck Consultant and Douglas J. Fiddler, Senior Consultant, Actuary, Buck Consultant, who preented the Preliminary Actuarial Review Findings of the Actuarial Review of the Kansas Public Employees Retirement System (KPERS) (Attachment 1).

The meeting recessed at 11:00 a.m. for House members and reconvened at 11:30 a.m.

The meeting adjourned at 12:00 p.m. The next meeting of Senate Ways and Means was scheduled for January 23, 2008.

Joint Meeting
Joint Committee on Pensions, Investments and Benefits
Senate Ways and Means Committee
January 22, 2008
10:30 A.M.

NAME	REPRESENTING
Duane Goossen	DOB
Julie Thomas	DOB
Doug Fiddler	Buck Consultants
David Slaskiewsky	Buck Consultants
LARRY BERG	KACCT
MARK BORANYAK	CAPITOL STRATEGIES
Pat Lehman	KFSA
TERRY FORSYTH	KNEA
Austin Hayden	Hein Law Firm
RONALD RICHEY	NARFE
Carol Foreman	DOA.
Faith Loretto	KPERS
Glenn Deck	KPERS
Pat Beckham	Milliman, Inc.
ED KLUMPP	KS ASSOC. OF CHIEFS OF POLICE KS PEACE OFFICERS ASSOC
Ed Redmon	Ks State Council of Firefighters
Dennis Phillips	KSCFF

Senate Ways and Means
1-22-08
Attachment 1

Kansas Public Employees Retirement System (KPERS)

Presentation of Preliminary Actuarial Review Findings

January 22, 2008

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Purpose of an Actuarial Review

- Provide another actuary's opinion on the actuarial soundness of KPERS
- Confirm that the actuary's calculations are right
- Get ideas on how to do things differently / better
- Exercise fiduciary obligation
  - Recommend independent review be completed periodically (once every four to five years)
  - Confirm funded status and contribution rates

1-3

Scope of Actuarial Review

- Review the work of the KPERS actuary, Milliman
  - Pension system including State, School, Local, Police & Fire, and Judges
- Limited scope review
  - Review detailed results for sample members
  - Compare valuation benefits to sample benefit calculations
  - Review recent experience analysis
- Assess completeness and validity of
  - Membership data
  - Financial information
- Comment on reasonableness of
  - Actuarial assumptions
  - Actuarial methods and procedures

1-4

Scope of Actuarial Review (cont.)

- Determine whether valuation procedures are technically sound
- Determine if generally accepted actuarial standards are being followed
- Review actuary's reports

1-5

Actuarial Valuation

- What is it?
  - A snapshot of the actuarial position of a pension plan at a given point in time
  - Includes a measurement of the benefit obligation. Also referred to as liability or present value of benefits.
  - Benefit values calculated for each member and summed
  - Compares benefit obligation to financial resources
  - Determines annual contribution or actuarial soundness

1-6

Actuarial Valuation (cont.)

- What does it provide?
  - A basis for the projection of the long term cost of benefit obligations
  - Understanding and confidence in the current financial soundness of a pension system
  - Detects changes from prior year and identifies trends over time
  - Early warning system for potential funding problems

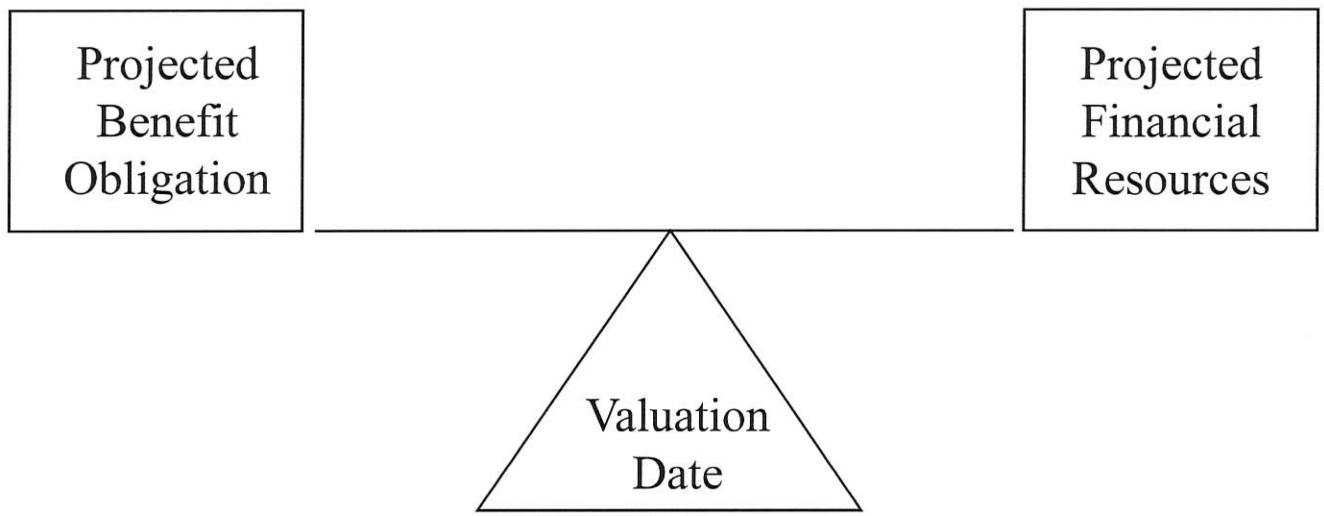
Actuarial Valuation (cont.)

- What does the process include?
  - Member Data
  - Financial Data
  - Benefit Structure
  - Actuarial Assumptions
  - Cost Method
  - Asset Valuation Method

Actuarial Valuation (cont.)

- What it doesn't tell you:
  - Actuarial position on future dates
  - Effect of future new members
  - Impact of future plan changes

Actuarial Balance



Over the life of a pension system,

Benefits + Expenses = Contributions + Investment Return

Benefits = Investment Return + Contributions - Expenses

1-10

Actuarial Review Procedure

- Review of
  - Member data and calculations
  - Actuarial methods
  - Assumptions
  - 2006 Actuarial Valuation Results
  - Actuarial report
  - 2007 Experience Study
- Comment on differences; determine materiality
- Not able to review projections
  - Milliman views projection results as proprietary

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Principal Findings of Actuarial Review

Member Data

- Member data generally clean
- Recommend additional checks if not already doing so
  - Almost 2,000 continuing actives with salary decreases in excess of 20%
  - Approximately 100 active members with unreasonable dates of birth appear in final data as ages 79 or 80
  - Incomplete data on child beneficiaries may result in slight over-valuing of liabilities

1-12

Principal Findings of Actuarial Review (cont.)

Financial Data

- Financial information
  - Actuarial Value of Assets replicated using alternative approach
- Asset valuation method is reasonable and leads to full recognition of gains and losses after five years
- Error in treatment of receivable contribution for KP&F understates Actuarial Value of Assets by $80,000

1-13

Actuarial Cost Method Used for KPERS

- Entry Age Normal Cost Method
  - Benefit based on pay
  - Cost separated between past and future service
  - 78% of public plans use Entry Age Method (2007 Wisconsin survey)
- Normal cost determined as a level percentage of pay
  - Amount increases as member pay increases
  - Represents annual cost of accruing benefits for service worked
- Unfunded Liability develops if past service liability exceeds assets
- Actuarial contribution equals Normal Cost plus amortization payments for Unfunded Liability

Actuarial Cost Method Used for KPERS (cont.)

- Unfunded liability amortized as a level percent of payroll over 40 years from 1993 (26 years remaining at 2006) with exceptions:
  - 1998 COLA: over 15 years from 1998
  - 13th check: stated as 10 years from 2005, appears to be 6 years as of 2006
  - $300 one-time payment (Local only): over 10 years from 2006
  - Judges: level dollar over 40 years from 1993 (more conservative funding)
- Unfunded Liability is 96% of covered payroll
  - Actuarial gains/losses create volatility in actuarial contribution rates

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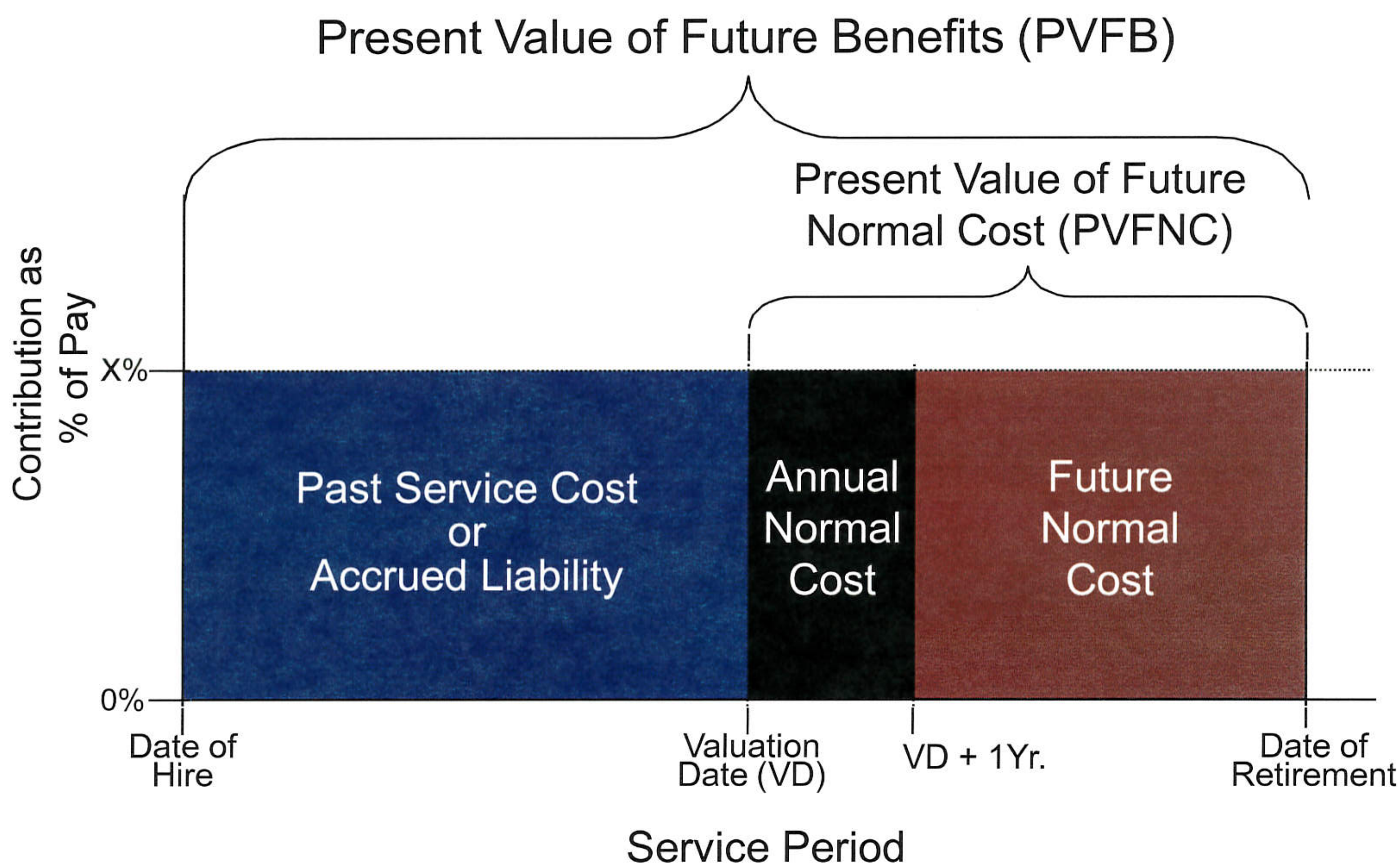
Funding Process



Accrued Liability - Assets = Unfunded/(Surplus)

Asset Valuation Method Used for KPERS

- 5-Year Smoothing of Market Value
- Each year, a base is determined equal to difference between Actual Return on Market Value and Expected Return on Market Value (Gain or Loss)
- 20% of each base over last 5 years is recognized in Actuarial Value
- Gains and losses equally recognized
- Smoothing methods over 3 to 5 years are common in public plans
- Reduces volatility on actuarial contribution
- Asset method reasonable

Employer Contribution Rates for KPERS

- December 31, 2006 Valuation determines contribution rate on a mid-year, 2007 contribution basis
- Rates are applied for fiscal years beginning January 1, 2009 (Local) and July 1, 2009 (State and School)
- Statutory rates for State, Police & Fire, and Judges meet actuarial rate. Contribution shortfall still exists for School and Local.
- Due to the time-lag in the application of the rates, the rates are understated by the difference between the Investment Return assumption (8.00%) and the Payroll Growth assumption (4.00%) or approximately 7.8% for Local and 9.9% for State and School

Review of Other Valuation Issues

- $300 one-time payment to certain retirees was funded in part by a receivable contribution from the State and in part through temporary increases in Local employer contributions. A new 10-year amortization base was added to the Unfunded for the Local employer contributions.
- The increase in the Unfunded due to this new 10-year base is noted as $7 million in the Board Summary and $2 million in the development of the Unfunded
- Milliman informed us $2 million is the correct amount
- Discrepancy impacts results in some exhibits and may impact results in other exhibits
  - Impacts change in Unfunded: pages 6, 11, and 14 of the Valuation and page 36 of the 2007 CAFR
  - May impact changes in contribution rate: page 12

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1-19

Review of Other Valuation Issued (cont.)

- Review of sample lives verified benefits valued correctly
- Minor changes to disability benefit programming for active members could improve accuracy

1-20

Review of Member Data

Data for Active and Inactive Members

	State/School/Local	KPF	Judges	Total
Number in Raw Data	198,032	8,686	282	207,000
Number in Final Data	183,747	8,285	275	192,307
Ratio	92.8%	95.4%	97.5%	92.9%

Data for Members Receiving Benefits

	State/School/Local	KPF	Judges	Total
Number in Raw Data*	107,543	5,003	269	112,815
Number in Final Data	61,808	3,785	172	65,765
Ratio	57.5%	75.7%	63.9%	58.3%

* Per valuation, includes data on 47,052 deaths.

Review of Member Data (cont.)

Missing or Unreasonable Data*

	Missing or Unreasonable	Total	Error Rate
Date of Birth	259	252,403	0.10%
Date of Membership	6	252,403	0.00%
Gender	229	252,403	0.09%

* Excludes beneficiaries

- Comparison of raw and processed data for active and inactive members indicates KPERS providing proper and relatively clean data that is being used for valuation without many changes
- Raw data includes retirees and beneficiaries with deaths before valuation date which results in processed data counts well below raw data
- Missing or unreasonable data rates low. Most corrections made according to stated assumptions in valuation.

2006 Actuarial Valuation Results

- Buck's valuation system was used to replicate results for the Judges group.
  - Results are presented on the following page
  - In addition, a wide variety of individual test cases across all plans and status were provided by Milliman and checked for accuracy with member data, plan provisions and actuarial assumptions
  - Valuation process technically sound and reasonable based on a limited scope review
- Buck's valuation system also used for School group.
  - Total liability results are reasonable
  - Normal cost not replicated. Continuing our review.

1-23

2006 Actuarial Valuation Results (cont.)

Judges

($ in Millions)

	Milliman	Buck	% Difference
Present Value of Future Benefits	$ 158.3	$ 156.7	-1.0%
Normal Cost	$ 4.8	$ 4.8	0.0%
Actuarial Accrued Liability	$ 118.8	$ 117.9	-0.8%

Review of Actuarial Valuation Assumptions & 2007 Experience Study

- Actuarial assumptions are used to quantify expected future payments
  - Should be individually reasonable
  - Should be based on an analysis of experience
  - No one right answer

Review of Actuarial Valuation Assumptions & 2007 Experience Study (cont.)

- Proposed Demographic Assumptions
  - Post-retirement non-disabled mortality based on fully generational RP-2000 Healthy Retirees Tables
  - Adjustments from two years back to two years forward for different groups, genders
  - RP-2000 Mortality was based on corporate plans and fully generational tables may be conservative for public plans
  - A/E Ratio for proposed assumptions is 100-101% for all groups except School Females (Noted as both 97% and 94%)
  - We were unable to match sample mortality rates listed in Appendix B

1-26

Review of Actuarial Valuation Assumptions & 2007 Experience Study (cont.)

- Proposed Demographic Assumptions (cont.)
  - 70% (90% for Local) of fully generational RP-2000 Employees Tables
    - Produces an A/E ratio closer to 100%
    - Rates not unreasonable
  - Withdrawal rates
    - Proposed change to rates based only on service
    - Generally reasonable, but we recommend added conservatism for School females and Police & Fire Tier 2
    - Because the probability of leaving contributions in the System is closely tied to the withdrawal assumption, we recommend that assumption be analyzed on a service-only basis as well, if not already done so

Review of Actuarial Valuation Assumptions & 2007 Experience Study (cont.)

- Proposed Demographic Assumptions (cont.)
  - Retirement rates coincide with eligibility
    - Separate rates set by age and eligibility for unreduced/reduced benefits
    - Rates are reasonable
    - Graphs in Appendix C do not match results in report
  - Disability rates
    - Unisex rates used, typically split by gender
    - Rates are reasonable

1-27

Review of Actuarial Valuation Assumptions & 2007 Experience Study (cont.)

- Proposed Demographic Assumptions (cont.)
  - Salary Scale
    - 4.0% wage inflation consists of 3.25% inflation and 0.75% productivity
    - Rates generally reasonable
    - On advice that 2006 salary increase for School members was abnormally high, that data excluded from analysis
      - Milliman discussed with KPERS to confirm unusual nature
      - If salary pattern is several years with "normal" increases followed by an adjustment year, excluding the adjustment year may result in understating salaries

Review of Actuarial Valuation Assumptions & 2007 Experience Study (cont.)

- Proposed Investment Return
  - Stays at 8.0% for KPERS, KP&F and Judges
  - Current differences in asset allocation for Local/School and State/KP&F/Judges result in different geometric mean returns which should be recognized in different investment return assumptions
  - 8.0% assumption within reasonable range, but data points to different assumptions for Local and School versus State/KP&F/Judges
  - Recommend reconsidering Investment Return assumption when Asset/Liability Study completed
- Proposed Inflation Assumption lowered to 3.25%
  - Buck believes inflation rates between 3% and 4% are reasonable, but lowering inflation is contrary to currently inflationary trend

1-30

Conclusions

- In actuarial report
  - Add actuarial gain/loss analysis, by source
  - Adjust contribution rates for 2 to 2-1/2 year lag
  - Correct roll forward of Unfunded, description of amortization, KP&F Asset development

Conclusions (cont.)

- Data
  - Complete additional checks on data for child beneficiaries if not currently doing so. Review age programming for members provided with unreasonable dates of birth.
  - Include annual rate of pay for active members, if available
- Experience Study
  - Confirm sample mortality rates shown in Appendix B
  - Republish Appendices with correct graphs
  - Revisit Investment Return assumption upon completion of Asset/ Liability Study

1-32

Conclusions (cont.)

- Assumptions are generally reasonable and reflect system experience
- Asset valuation method is appropriate, properly applied and reasonable
- Valuation results fairly represent the financial requirements of the systems
- Funded ratio of 69% well below 85% average for public plans (2007 PEW survey)
- Market value of assets is 10% greater than Actuarial value
- Buck finds Milliman's actuarial results reasonable based on our Limited Scope Review
- Insufficient information was provided to allow a replication of projection of contribution rates

KPERS Actuarial Review

Questions?