#### MINUTES OF THE HOUSE COMMITTEE ON APPROPRIATIONS.

The meeting was called to order by Chairman Kenny Wilk at 9:00 a.m. on January 18, 2001 in Room 514-S of the Capitol.

All members were present except:

Committee staff present:

Alan Conroy, Legislative Research Rae Anne Davis, Legislative Research Jim Wilson, Revisor of Statutes Mike Corrigan, Revisor of Statutes Nikki Feuerborn, Committee Secretary

Conferees appearing before the committee: Glenn Deck, Executive Secretary, KPERS Patrice A. Beckham, F.S.A., KPERS Consulting Actuary, Milliman and Robertson, Inc.

Others attending:

See Attached

Glenn Deck, Executive Secretary, KPERS, emphasized that the system was in a very sound financial condition and the proposed actuarial procedural change will in no way jeopardize any current benefits to members. He emphasized that it was important to note that this system has made excellent funding progress in the past six years with a funded ratio increase from 77% to 89% since 1994. This steady progress has been achieved through a partnership with the Legislature in developing an enhanced funding plan and benefit package in the 1993 Session. The state and the 1,400 other employers involved have gradually increased their contributions and in furtherance of that funding plan during this time period as well as 150,000 active members making steady contributions into the system. The Board of Trustees and the staff have prudently invested these assets and have a strong record of investment performance. The partnership of all these parties has helped achieve this increase in our funding progress.

In addressing some of the recent criticisms, Mr. Deck acknowledged that the changes they were presenting today should have been communicated earlier to the Legislature by the KPERS Board and staff. He stated that also should have been more discussion with the Joint Committee on Pensions, Investments, and Benefits last year. Mr. Deck pledged to do a better job of keeping all parties informed and discussing significant issues in advance of decisions. The state statutes require an independent actuarial audit of actuarial services every six years; this audit is due in FY 2002. Mr. Deck noted there has been some discussion by the Legislative leadership of accelerating the funding of this audit. Mr. Deck said they supported the proposed audit acceleration given the concerns regarding the proposed actuarial change. He acknowledged the importance of the equilibrium date and welcomed policy discussions of future benefits. The KPERS staff is currently working with their actuary to develop options which will be presented to the Board and the Legislature to help alleviate the impact of the actuarial change.

Pat Beckham, F.S.A., KPERS Consulting Actuary, Milliman and Robertson, Inc., Omaha, Nebraska, made an overhead presentation on the definition of terms, the valuation process currently used by KPERS and the June 30, 2000 valuation results (Attachment 1). Mrs. Beckham explained that an actuarial cost method is a mathematical technique that allocates retirement benefits to the different years that a member is working. This cost method allocates the portion of the ultimate projected benefit to each year of service. The impact of the projected equilibrium date of FYB 2015 versus the originally projected date of FYB 2005 was also addressed. Mrs. Beckham explained the unfunded actuarial liability was a result of a problem they inherited from the fund's previous actuaries of 30 years. Though the new actuaries suspected the process they inherited in 1994 of projecting state salaries was resulting in an actuarial loss of \$40 million a year, they wanted to make sure, so they left the process in place for several years to test their assumptions. They have completed two experience studies and have developed a change in procedures which will eliminate this actuarial loss after a six year period. The procedures in question are the result of estimating a population through projection techniques.

In response to questions, Mrs. Beckham said she would definitely prefer using the entry age normal process rather than the currently used projected unit credit system. However, such a change would require legislative action to amend the Kansas statutes. When people leave covered employment or are promoted, there is a definite negative impact on the liability. The earlier people retire, the more expensive it is for a retirement system. If an early retirement incentive was in place and everyone who was eligible for retirement were to leave, there would be a "big hit" in the unfunded actuarial liability for that and several following years. Mrs. Beckham said they would continue to work closely with KPERS to help mitigate the impact of this change in actuarial procedures on the state's budget.

The Committee discussed the projected unit credit procedure which is currently in the Kansas statutes. In response to questions regarding alternatives to moving from reaching equilibrium in 2005 to 2015, Mrs. Beckham suggested that changing actuarial methods is an option; but the long term cost is set by the benefit structure. Most retirement systems use the entry age normal actuarial cost method. It develops cost at the level percent of pay during that person's entire working career. If the system has a population of mainly aging employees as far as salary goes, it does not have a direct impact because their costs are based on entry age. It tends to be much more stable than the projected unit credit actuarial cost method. But because that cost method allocates contributions from the entire working career, it allocates more of the ultimate cost of benefits for earlier years of service than the projected unit credit. If KPERS was to switch to entry age normal, normal costs will come down but the unfunded liability is going to go way up. Presently the unfunded liability in part can be paid down with favorable investment experience. It would change equilibrium, but it doesn't change it significantly. The bottom line is that additional state money needs to be contributed by the employer.

Mrs. Beckham listed the following reasons for recommending the entry age normal actuarial cost method:

- The entry age normal actuarial cost method develops cost at the level percent payroll over a person's working career. That means that if the assumptions are true then the level percent of pay is 8% whether you are 35 or 55, which is definitely not the case in the projected unit credit.
- This provides more stability in the contribution rate.
- It is also a good and effective way to measure the value of any benefit structure or any change in the benefit structure because the current benefit structure is currently worth 8% of pay. A change that's worth 10% of pay would be evaluated as a level percent over the entire working career of a person, whereas with projected unit credit it is starting lower and going higher in later years.
- About 80 to 85% of the public systems use entry age normal as it tends to develop very stable normal cost rates. It calculates the unfunded actuarial liability which allows one to measure from year to year the impact of experience which is helpful for the system and for the actuaries. It is by far the most commonly used system of cost methods.

In discussion of the projected unit credit, the Committee was reminded this method is very sensitive to the attained age of the membership. It was pointed out that during the presentation by Director of Personnel Services Mariani, Department of Administration, the number of 20-29-year olds in the state work force has gone down in the past 5 years, the number of 30-39-year olds has remained stable or gone down, the number of 40-49-year olds has gone up as well as the 50-59-year olds has gone up. Kansas has an aging work force. Entry age normal will be sensitive to the change in entry age which may have changed in the last 20 years as well. The changes are somewhat mitigated because it is spread out with a level percent of pay over a longer period of time. Mrs. Beckham recommended that if there is serious consideration for change to entry age normal, the model seems to be somewhat enhanced to handle this population projection so they can accurately compare projected unit credit not just this year but over the next 15 to 20 years to the entry age normal.

The Committee discussed that with the projected unit credit used by the state's current system, and noted that the unfunded actuarial liability is going to increase over the first 20 years at the very least. This liability will increase and it is only at some later point that decreases in the unfunded actuarial liability will occur. The unfunded actuarial liability is to be paid off in 2033. Mrs. Beckham explained that if all the assumptions were met, KPERS could expect the present liability to increase under the current method for another 20 to 25 years; then it comes down rather rapidly at the end.

The Committee expressed concern that there are some Legislators who have not quite understood the unfunded actuarial liability process. As KPERS unfunded actuarial liability has increased they have used that as a reason not to enter into discussions of benefits such as cost of living increases. The Committee discussed how it is critical this be explained in detail to members of the Legislature and that the unfunded actuarial liability process not be used as an excuse.

Mrs. Beckham explained the reasoning behind her firm's continuing the actuarial procedures adopted by the former firm who held the contract for 30 years. Though they "were not crazy about them" they continued the procedures. They were skeptical but decided they needed a certain period of years in order to reach a comfort level with the system. Mrs. Beckham explained that with a multiple employer system with 150,000 active members like KPERS, one cannot know in one year everything there is to know. There was a need to build experience before they were comfortable to come to the Board and Legislature. Also during that period certain assumptions were changed. Investments can be carved out very easily but it is not possible to carve out the rest of that experience short of going through an experience study. The last experience study in 1998 provided the basis for some significant changes, but they continued to see experience losses after that. Mrs. Beckham said they have run two valuations in the last several years with one the Segal methodology and the other with what they considered their preferred approach to be sure they could measure what the gain or loss was if they were using their methods and procedures. It has reached the point this year they were insistent that the change in actuarial assumptions had to be made. The actuarial firm needs a plan in place that needs to move forward.

Mrs. Beckham said they were meeting with KPERS staff to review the quality and quantity of information submitted by KPERS to the actuary. They are going to spend the time with KPERS to review each piece of information—what it is, where it comes from, what the date is, etc. Currently KPERS is running this tape in May and July to provide data as of December 31 and June 30. Potentially there could be some changes but Mrs. Beckham did think the programming and assumptions are realistic. Milliman and Roberts are working on an internal audit and will share the results of that when it is available, probably in 4-6 weeks. Mrs. Beckham reminded the Committee they have come before the Board and the Legislature three times in six years with bad news. She felt this had strengthened the system and they were necessary changes. She did not feel there would be any future surprises but any notable changes would be reported to the Legislature immediately. If there is something on the data side that would impact KPERS, it would be shared.

It was explained that the newspaper article citing \$865 million was actually based upon comparing the projected contribution stream through FY 2016 using the new model and last year's results which had projected an equilibrium date of FY 2005. The article summed up the contributions under that scenario and compared those with what is showing in the new model for this year those additional future contributions, as a total of \$865 million. Obviously that is not an increase in unfunded actuarial liability. There are some changes that would have occurred even if the actuarial firm had not changed the procedures. In the years 2005, 2010, 2015 through 2033, they factored in the change in the demographics and the experience from 1999 to 2000 as well as the recurring losses that they knew would occur and compared that scenario. The impact is \$450 million of increased contributions using corrected procedures.

The Chair and other Committee members chastised the actuarial firm for not keeping them informed in a timely fashion regarding their suspicions regarding the actuarial contributions. The responsibility for such notice lies with the firm. Mrs. Beckham reminded the Committee that their concerns were disclosed in 1994 in a valuation report that there were certain procedures that were deferred to their predecessor and that they were going to continue to monitor. She stated that this information was shared with the Board at that time and she is relatively sure that it was shared with the Joint Committee on Pensions and Benefits at that time. There were on-going conversations about the impact, what steps we could be takes to narrow it down to make sure what it was. Mrs. Beckham said this year they were very insistent that a change needed to occur. In response to questions regarding the need for an improvement in communication with the Board and Legislature? She responded, "Absolutely, hindsight is 20-20. I will never make this kind of mistake again. I understand why it is a surprise and why it is difficult to accept it. I wish that there would have been continuing conversation. I think that it was such a huge change and that there is a reason for staff to be reticent about bringing it before you."

The Committee discussed the need for a policy debate if the Legislature is going to hold the actuary responsible or the Board responsible. The need for improved communications between the hired actuary and the Board would improve the relationship with KPERS and the Legislature.

Mrs. Beckham said they had intense communication with KPERS regarding data input when they first took over. She acknowledged it is one of those things that should be revisited every five years to make sure that there aren't any things changing in the data base or in the system, or in the processing that inadvertently affects what is being received.

Mrs. Beckham explained the favorable investment experience of almost \$2 billion over the last 6 years has lowered the unfunded actuarial liability. There have been other things that have netted against that, it is still the net income that is used to lower the unfunded liability by \$272 million. She acknowledged that this was

difficult news for the Legislature to accept but certainly in retrospect with what is happened in the last six years it is extremely positive.

In response to questions about the impact of the baby boomers on the system under the project unit credit cost method, Mrs. Beckham said that as they age and go through the period from age 50 to 65, the normal cost rate will go up. After they go through, it may come down. That is the part of the asset liability study which will be enhancing the model and providing some valuable information on what the real impact that will be.

Mrs. Beckham suggested that if a policy change to normal entry age level were to be made, the actuaries would probably appreciate a little bit of lead time to make that change. Their valuations are made in June. If a change were enacted in this year, it would be best to have it effective a year from now. She also informed the Committee there will be a need for analysis at the modeling. It also may take a legislative session or two to become comfortable with the model as the unfunded actuarial number will take a big jump. This must be viewed in terms of total contribution rates, not just the unfunded liability.

The meeting was adjourned at 10:45 a.m.

#### **COMMITTEE GUEST LIST**

DATE: 1-18-01

NAME	REPRESENTING
Melinda Gaul	Budget
ShelleyKing	Cache, Braden, Barbel A. S.S.O.C.
Marilyn Peters	KPERS
Vem Chubros	KPERS
ALIAN EMEIN	PCH
Kohert Woodard	KPERS
LOVINA FREEMAN	JOHNSON County Gov.
Don Cawby	DOB
GENE MEYER	KAnsos City Star
Beguly Frydrych	KPERS (State Retiree)
Ja Frydrych	
Ellen Brentine	KPERS - USD #345 retired teacher
FRANK BRENTINE	Spouse OF A KPERS
ores N. Wart	Emposia State
pristen Brandt	Emporia State
Gary Wyott	Emporastak Clarversity Faculty
Pat LEhmAN	KS Fin Servin allance
Van Rezac	S. E. A. K.
Loger Francis	KGC
Karen Watney	DyA/DPS
MARTY VINES	KAPE
Andy Sanchez	KAPE



# **Presentation on KPERS** to the **Kansas Legislative Committees** January 18, 2001

Presented By:

Patrice A. Beckham, F.S.A.

Milliman & Robertson, Inc.



# Goals for Today

- Address information previously disseminated
- Define key terms
- Explain Valuation process
- Review 6/30/00 Valuation results
- Key discussion points

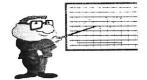


**HOUSE APPROPRIATIONS** 



#### June 30, 2000 Actuarial Valuation

- Determine actuarial contribution rates
- Disclose asset/liability measures
- Analyze experience
- Report on trends



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## Valuation Process - June 30



- Current benefit structure
- Current membership
- Actuarial assumptions
- Actuarial methods/procedures





#### **Basic Equation**

C+I=B+E

**C** = Contributions

I = Investment Income

B = Benefits Paid

**E** = **E**xpenses

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#### **Actuarial Cost Method**

Mathematical technique which assigns costs to specific years.

Different methods allocate costs differently.



#### Actuarial Cost Method

Normal Cost: Cost assigned to current year of service by actuarial cost method.

Actuarial Liability (AL): Portion of actuarial present value of future benefits attributable to prior service under the actuarial cost method.

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### **Actuarial Balance Sheet**

#### Assets:

- Current AVA
- Future Payments on UAL
- Future Normal Costs

#### Liabilities:

- PV of Benefits
  - Current Retirees
  - Current Actives
  - **©** Current Inactives



#### **Projected Unit Credit**

Allocates a portion of the projected benefit to each year of service.

NC = PV of piece of projected benefit allocated to current YOS

AL = PV of projected benefit allocated to prior service

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#### **Projected Unit Credit - Example**

- Member attained age 45
- © Current Service 10 (entry age 35)
- © Projected Benefit at Age 62: \$27,000
- Benefit Assigned to Current Year:
   27,000/(62-35) = 1,000
- Benefit Allocated to Prior Service:27,000 x 10/27 = 10,000



### **Projected Unit Credit**

NC and AL heavily dependent on age

o If member is 35:

NC = 1,040

If member is 55:

NC = 5,100

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#### **Actuarial Value of Assets**

Methodology used to assign a value to the current assets in the Fund for valuation purposes.

KPERS: Expected Value + 33% (Market Value - Expected Value)



#### June 30, 2000 **Actuarial Value of Assets**

AVA = \$9,568 M

MV = \$10,527 M

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## **Unfunded Actuarial Liability (UAL)**

UAL = Difference between Actuarial Liability and **Actuarial Value of Assets** 

#### Impacted by:

- Experience Gains/Losses
- Change in Assumptions/Methods
- Changes in Benefit Structure
- Actual Contributions Made





#### **Amortization of UAL**

- Pay off current present value amount with periodic payments of interest & principal.
- KPERS payment calculated as level % payroll so dollar amount of payment increases 4% each year.
- Payment recalculated each year.
- © KPERS amortization period set statutorily at 40 years, measured from 1993.

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# Total Retirement System as of June 30, 2000

UAL (\$M)	AL	AVA	<u>UAL</u>
<ul> <li>State/School</li> </ul>	\$7,690	\$6,830	\$860
<ul> <li>Local</li> </ul>	1,480	1,443	36
O TIAA	38	15	23
○ KP&F	1,509	1,202	307
o Judges	86	<u>77</u>	8
TOTAL	10,801	9,568	1,233



# **Total Retirement System**

#### **Funded Ratio**

1994	77.7%
1995	78.8%
1996	81.0%
1997	83.3%
1998	83.0%
1999	86.0%
2000	88.6%

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# Summary of Changes in Total System UAL

Year Ended	1995	<u>1996</u>	1997	1998	<u>1999</u>	2000	Total
Effect of Contribution Cap/Lag	(95)	(70)	(63)	(54)	(78)	(66)	(426)
Amortization Method	(47)	(38)	(35)	(32)	(30)	(22)	(204)
Actual Experience vs Assumed							
<ul> <li>Investment</li> </ul>	143	280	323	413	369	441	1.969
All Other	(72)	(136)	(157)	(104)	(46)	(99)	(614)
Assumption Changes	96	.0	0	(350)	0	0	(254)
Change in Benefit Provisions	0	0	0	(88)	0	(19)	(107)
Changes in Data/Procedures	_0	_0	_0	_0	(21)	(71)-	(92)
Total	25	36	68	(215)	194	164	272

Unfunded Actuarial Liability 6/30/94 : (1,505)
Net Change 1994 – 2000 : 272
Unfunded Actuarial Liability 6/30/00 : (1,233)\*

<sup>\*</sup>Projected UAL at 6/30/00 Based on 6/30/94 UAL: (1,767)



# **Changes in Valuation Procedures**

#### Background:

- M & R became actuary in 1994
- Significant problems reconciling with prior actuary
- Both prior consultant and actuary were unavailable
- Valuation changes were made where cause was known
- Certain procedures not as obvious as to development/usage - decision was made to wait + further evaluate
- Statutory cap resulted in no impact on short term funding

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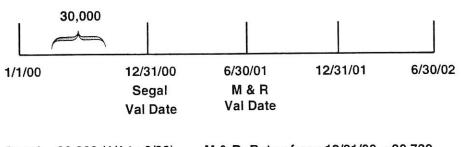
## **Changes in Valuation Procedures**

#### **Procedures in Question:**

- Result of estimation techniques
  - Valuation date: June 30
  - Membership data: December 31
- Valuation Salaries
- Development of Normal Cost
  - Dollar Amount
  - Effective Rate of Pay
  - Most Significant Impact



#### **Changes in Valuation Procedures**



Segal: 30,000 (1/1 to 6/30)

31,500 (7/1 to 12/31) 30,750 (1/1 to 12/31) M & R: Rate of pay 12/31/00 : 30,732

Rate of pay 6/30/01: 31,347 Rate of pay 12/31/01: 32,914

Pay 6/30/01 to 6/30/02: 32,130



#### **Changes in Valuation Procedures**

#### Why Now?

- M & R has developed their own experience/knowledge of System
  - Six years of experience
  - Completion of 2 experience studies
- Procedures isolated as cause of recurring experience losses
- More realistic actuarial position for System



# **Impact of Procedure Changes**

#### **UAL Impact:**

As of June 30, 2000: \$373 M Total over 6 years: 450 M

#### **Normal Cost Impact:**

State/School: .26% per year Local: .08% per year

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## **Impact of Procedure Changes**

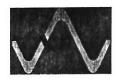
	Additional	Present
	<b>Contributions</b>	<u>Value</u>
5 Years	\$ 0	\$ 0
10 Years	119	64
15 Years	434	183
Through Amortization Period (2033)	\$(259)	\$173



# State School Analysis of Changes in Actuarial Procedures

(millions)

2002 \$ 3,178.28 4.78% \$ 151.92 4.78% \$ 151.92	Additional Contribution			
2002 \$ 3,170.20		<u>ns</u> <u>I</u>	Present	t Value
AND	\$	-	\$	-
2003 \$ 3,305.41 4.98% \$ 164.61 4.98% \$ 164.61	\$	-	\$	7
2004 \$ 3,437.62 5.18% \$ 178.07 5.18% \$ 178.07	\$	-	\$	-
2005 \$ 3,575.13 5.38% \$ 192.34 5.38% \$ 192.34	\$	-	\$	-
2006 \$ 3,718.13 5.58% \$ 207.47 5.58% \$ 207.47	\$	-	\$	-
Five Year Impact	\$	-	\$	-
2007 \$ 3,866.86 5.78% \$ 223.50 5.60% \$ 216.66	\$ 6	.85	\$	4.48
2008 \$ 4,021.53 5.98% \$ 240.49 5.59% \$ 224.90	\$ 15	.59	\$	9.45
2009 \$ 4,182.39 6.18% \$ 258.47 5.60% \$ 234.32	\$ 24	.15	\$	13.56
2010 \$ 4,349.69 6.38% \$ 277.51 5.64% \$ 245.15	\$ 32	.36	\$	16.82
2011 \$ 4,523.68 6.58% \$ 297.66 5.69% \$ 257.41	\$ 40	.25	\$	19.37
Ten Year Impact	\$ 119	.19	\$	63.69
2012 \$ 4,704.62 6.78% \$ 318.97 5.76% \$ 271.01	\$ 47	.96	\$	21.38
2013 \$ 4,892.81 6.98% \$ 341.52 5.84% \$ 285.92	\$ 55	.59	\$	22.94
2014 \$ 5,088.52 7.18% \$ 365.36 5.94% \$ 302.13	\$ 63	.23	\$	24.16
2015 \$ 5,292.06 7.38% \$ 390.55 6.04% \$ 319.64	\$ 70	.92	\$	25 ()9
2016 \$ 5,503.75 7.35% \$ 404.66 5.95% \$ 327.64	\$ 77	.02	\$	25.23
Fifteen Year Impact	\$ 433	.91	\$	182 50



# State School Analysis of Changes in Actuarial Procedures (cont.) (millions)

		New Pro	cedures	Old Pro	ocedures			
Fiscal <u>Year</u>	Projected <u>Salaries</u>	Projected Cont. Rate	Projected Contributions	Projected <u>Cont. Rate</u>	Projected Contributions	ditional ributions	Prese	nt Value
2017	\$ 5,723.89	7.36%	\$ 421.39	6.06%	\$ 346.64	\$ 74.75	\$	22.67
2018	\$ 5,952.85	7.36%	\$ 438.04	6.16%	\$ 366.97	\$ 71.08	\$	19.96
2019	\$ 6,190.96	7.36%	\$ 455.54	6.29%	\$ 389.70	\$ 65.84	\$	17.12
2020	\$ 6,438.60	7.36%	\$ 473.74	6.43%	\$ 414.24	\$ 59.50	\$	14.33
2021	\$ 6,696.15	7.36%	\$ 492.73	6.58%	\$ 440.80	\$ 51.93	\$	11.58
2022	\$ 6,963.99	7.36%	\$ 512.51	6.74%	\$ 469.53	\$ 42.98	\$	8.87
2023	\$ 7,242.55	7.36%	\$ 533.12	6.91%	\$ 500.69	\$ 32.44	\$	6.20
2024	\$ 7,532.26	7.36%	\$ 554.60	7.10%	\$ 534.62	\$ 19.99	\$	3.54
2025	\$ 7,833.55	7.37%	\$ 576.98	7.30%	\$ 571.73	\$ 5.25	\$	0.86
2026	\$ 8,146.89	7.37%	\$ 600.29	7.52%	\$ 612.58	\$ (12.29)	\$	(1.87)
2027	\$ 8,472.76	7.37%	\$ 624.58	7.77%	\$ 657.92	\$ (33.34)	\$	(4.68)
2028	\$ 8,811.67	7.38%	\$ 649.90	8.04%	\$ 708.77	\$ (58.86)	\$	(7.66)
2029	\$ 9,164.14	7.38%	\$ 676.31	8.37%	\$ 766.63	\$ (90.32)	\$	(10.88)
2030	\$ 9,530.71	7.39%	\$ 703.86	8.75%	\$ 833.82	\$ (129.96)	\$	(14.50)
2031	\$ 9,911.93	7.39%	\$ 732.67	9.22%	\$ 914.27	\$ (181.60)	\$	(18.75)
2032	\$10,308.41	7.40%	\$ 762.84	9.85%	\$ 1,015.25	\$ (252.41)	\$	(24.14)
2033	\$10,720.75	7.41%	\$ 794.65	10.75%	\$ 1,152.48	\$ (357.83)	\$	(31.68)
	the first residence and the large contract of the ST ST state of the ST			Impact throug	h Amortization Period	\$ (258.94)	\$	173.48



# Change in Unfunded Actuarial Liability of Total System

(Unfunded) Actuarial Liability 6/30/99	(1,397)	
<ul> <li>Effect contribution cap         <ul> <li>and time lag</li> <li>Expected increase due to</li> </ul> </li> </ul>	(66)	
amortization method  Change in benefit provisions	(22) (19)	
Investment gain	441	
<ul><li>Liability loss from actual experience</li><li>Refinement in data/procedures</li></ul>	(99) (71)	
(Unfunded) Actuarial Liability 6/30/00	(1,233)	27



# State/School Unfunded Actuarial Liability

(Unfunded) Actuarial Liability 6/30/99	(973)	
© Effect contribution cap and time lag	(55)	
<ul> <li>Expected increase due to amortization method</li> </ul>	(21)	
<ul> <li>Change in benefit provisions</li> </ul>	(14)	
<ul> <li>Investment gain</li> </ul>	349	
<ul> <li>Liability loss from actual experience</li> </ul>	(89)	
Refinement in data/procedures	(57)	
(Unfunded) Actuarial Liability 6/30/00	(860)	28



# Change in State /School Rate

Actuarial Contribution Rate, 6/30/99	6.00%	
Change in amortization of UAL:		
<ul> <li>Effect of contribution cap/time lag</li> </ul>	0.10%	
Amortization method	0.00%	
<ul> <li>Investment gain</li> </ul>	(0.62)%	
Experience other than investment return	0.16%	
<ul> <li>Refinement in data/procedures</li> </ul>	0.10%	
<ul> <li>Benefit changes (13th check)</li> </ul>	0.02%	
Change in normal cost rate:		
Member Demographics	0.15%	
<ul> <li>Refinement in procedures</li> </ul>	0.26%	
Actuarial Contribution Rate, 6/30/00	6.17%	29



### **Actuarial Contribution Rates**

System	1999	2000
State/School	6.00%	6.17%
Local	3.88%	4.07%
TIAA	2.03%	2.27%
KP & F	6.89%	6.79%
Judges	15.68%	15.46%
Combined	5.33%	5.50%



# Recommended Contribution Rates

System	<u>1999</u>	2000
State/School	4.78%	4.98%
Local	3.37%	3.52%
TIAA	2.03%	2.27%
KP & F	6.89%	6.79%
Judges	15.68%	15.46%
Combined	4.42%	4.60%

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#### Shortfall Between Statutory and **Actuarial Rate**

System	1999	2000
State/School	1.22%	1.19%
Local	0.51%	.55%
TIAA	0%	0%
KP & F	0%	0%
Judges	0%	0%
Combined	.91%	.90%



#### **Projected Equilibrium Date**

#### What is it?

The date statutory contribution rate = actuarial contribution rate

#### What it is not:

- Date at which UAL = 0
- Date at which contribution is fixed % of pay

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#### **Projected Equilibrium Date**

#### STATE:

- Projected Date is FYB 2015
- Projected Rate is 7.35%

#### LOCAL:

- © Projected Date is FYB 2005
- Projected Rate is 3.88%



#### **Projected Equilibrium Date**

#### **Limitations/Assumptions**

- No change in age/service demographics of active members
- Each actuarial assumption is met each year
- No growth in active member population
- No change in statutory contribution cap of 0.20%

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#### **Projected Equilibrium Date**

#### Considerations

- Impact of baby boomers on demographics
- Experience study this year
- Actual vs expected experience in future years



## **Summary/Conclusions**

- Methodical & responsible approach
- Internal audit
- Working with KPERS to explore options to mitigate impact