



Kentucky Teachers' Retirement System Funding Work Group

Summary Information

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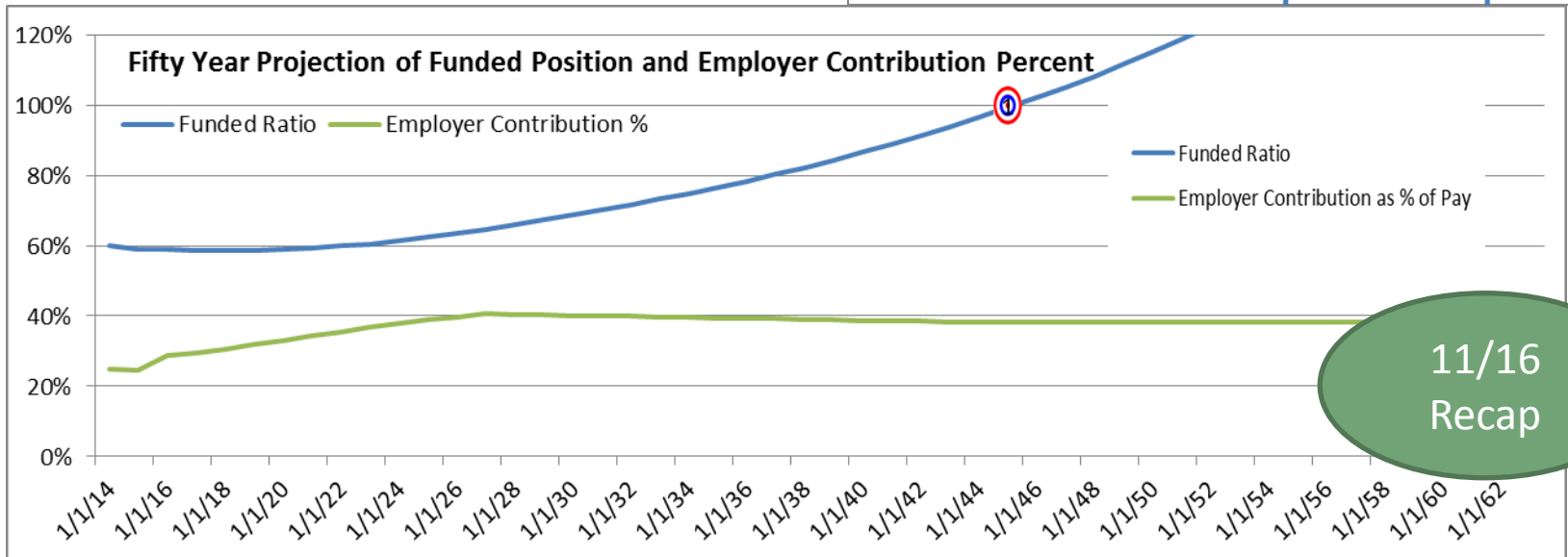
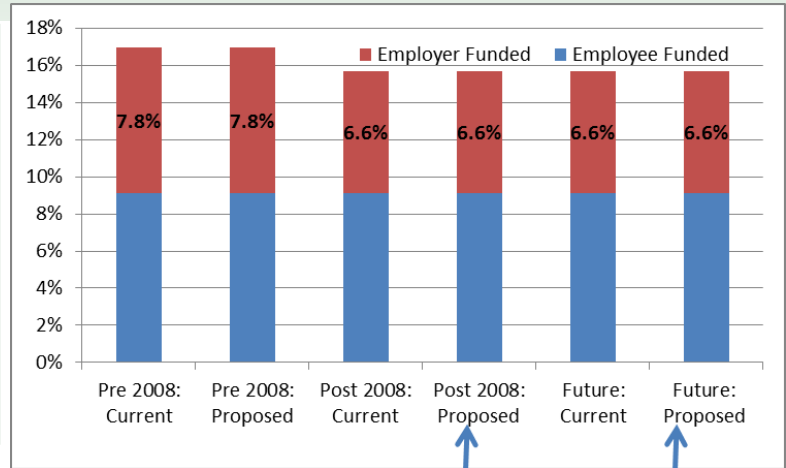
Goal: Make recommendations to strengthen the solvency of the KTRS

PTA Discussion Items

- Provide additional information
 - On 14% ARC versus 12% phase-in
 - On DC transition costs and implications
 - On other state costs
- Finalize Guiding Principles
- Components of a Comprehensive Solution

What if, instead of paying full ARC or reducing any benefits, contribution increases phased in

- ✓ **12%** contribution increase
- ✓ Phase in over **12** years
- Extend 2.7% special assessment
- No benefit reductions
- No POB



How can it be that a 12% increase phased-in meets target, but is less than 14% ARC?

- Phased in 12% scenario is based on:
 - Continuing to fund 2.7% of payroll (current special appropriation cost) even though amounts are expected to decline
 - 1.3% reduction in benefit values for those hired since 2008
 - POB payments now budgeted (\$119 million, or 2.5% of pay) will go to KTRS as they mature
- ARC is calculated based on current benefits structure
 - Can only consider those now employed
 - Cannot reflect extending 2.7% or POBs

How can it be that a 12% increase phased-in meets target, but is less than 14% ARC?

FYE	Current Contribs	Additional to ARC		Special Assessments	Maturing POBs	Additional to ARC	
		Dollars	Percent			Percent	Dollars
15	851	488	14.0%		0		
16	874	506	14.1%	117	0	1.0%	36
17	905	511	13.8%	110	10	2.0%	74
18	941	470	12.3%	113	19	3.0%	114
19	986	475	12.1%	101	38	4.0%	157
20	1,032	433	10.7%	100	56	5.0%	203
21	1,070	419	10.0%	99	65	6.0%	252
22	1,119	417	9.6%	97	83	7.0%	303
23	1,166	423	9.4%	82	99	8.0%	358
24	1,215	430	9.3%	69	116	9.0%	416
25	1,249	456	9.5%	58	116	10.0%	478
26	1,283	482	9.8%	48	116	11.0%	543
27	1,319	421	8.3%	37	116	12.0%	612
28	1,356	444	8.4%	26	116	12.0%	633

Considerations on 1-12% phase-in to ARC

- If we start paying ARC now, additional required contributions drop from about 14% of pay to about 8%
 - As new members with 1.25% lower normal cost replace retirements
 - If State uses monies saved from expiring POB payments
 - If State uses monies saved from expiring special assessments
- 1%-12% phase in will grow to 12% and is projected to remain there through 2045
- But slow phase-in has negative consequences
 - Rating agencies may not take the reform seriously
 - Will not improve KTRS investment liquidity needs

Long Term Consequences of Defined Contribution Plan

- DC is a less efficient retirement vehicle because:
 - Individuals cannot predict their life expectancy, while KTRS can predict group life expectancies well
 - Individuals must invest conservatively as they age
 - Individual investment returns typically lag professional returns by more than 1%
- So, for 6.58% breakeven equivalent employer cost, DC would provide about half the benefits
- Closed KTRS Plan might eventually have reduced investment returns
 - Increasing the cost of paying off legacy liabilities

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Recap

Possible Costs/Savings of Defined Contribution Plan

- Three potential areas for higher costs:
 - Since DC [and Social Security] produces less benefit per dollar, would either need to spend more or provide less benefit
 - If less benefit is provided, some retirees may need to receive public assistance
 - As KTRS becomes more mature and closed plan, KTRS may need to become more conservative in investing, resulting in lower investment returns

Possible Costs/Savings of Defined Contribution Plan (cont.)

- Assumptions for quantification
 - DC baseline alternative would be 6.58% employer contribution plus 9.11% teacher (15.68% total)
 - This is a more efficient approach than 13.4% Social Security plus a 2.28% DC plan
 - DB plans are at least 29% more efficient than DC in providing benefits
 - KTRS may need to reduce long-term investment return assumption by 1% to accommodate liquidity as plan matures
 - If benefits are reduced, 10% of the reduction value would be picked up by other Kentucky public assistance [10% is arbitrary, more rigorous analysis may be appropriate]
 - We also model richer DC plan to provide same benefit level
 - Costs are approximate and highly dependent on specific methods and assumptions

Possible Costs/Savings of Defined Contribution Plan (cont.)

Potential DC Alternative Cost and Benefits	State Cost	Benefit relative to Current
Scenario I – Maintain Contributions at Current Normal Cost		
Basic State Contribution	6.6%	71%
Increased KTRS cost if changed asset allocation	4.9%	
Public Assistance Costs	0.6%	
Total Potential Employer Costs	12.1%	
Increase in Employer Costs	5.5%	
Scenario II – Increase Contributions to Maintain Benefits		
Basic State Contribution	13.0%	100%
Increased KTRS cost if changed asset allocation	4.9%	
Total Potential Employer Costs	17.9%	
Increase in Employer Costs	10.3%	

Comparison of Employer Teacher Pension Costs

State	Social Security	Teacher Contribution	Total Normal Cost	Employer Amortization	Employer ADEC (plus SS)	Employer Payment (with SS)	% ADEC Paid
Kentucky	0%	9%	17%	21%	29%	16%	68%
Ohio	0%	12%	12%	14%	14%	14%	102%
Tennessee	6%	5%	9%	5%	15%	15%	100%
Missouri	0%	14%	19%	10%	14%	15%	104%
Virginia	6%	5%	11%	9%	21%	17%	76%
Indiana	6%	3%	5%	22%	31%	30%	97%
Illinois	0%	9%	18%	36%	45%	39%	88%
West Virginia	6%	6%	10%	27%	36%	40%	113%

Finalizing Report

- Important Responsibility
- Sustainability of KTRS is important to Kentuckians
- You've come a long way since July
 - Understanding of key facts and drivers
 - Appreciation for alternate viewpoints
- We wish you well on this important challenge