



# MPERS

## A COMPREHENSIVE REFORM OF THE **KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**

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He is the author of numerous books and articles on a variety of economic topics and his "Taxpayer's Bill of Rights" model legislation has been considered by many different state legislative bodies.

## **Executive Summary**

The extent of Kansas' public employee retirement system funding crisis is likely to be considerably worse than commonly understood. KPERS uses actuarial asset values to estimate unfunded liabilities in the plan at \$7.6 billion, which puts the funded ratio at 64% (actuarial asset value divided by actuarial liabilities). However, the (permitted) method used to calculate the actuarial value of assets does not fully account for market activity, allowing for market losses to be recognized over a period of years rather than as they occur. The actuarial asset values do not include \$1.7 billion in real losses that have already occurred. Using the current market value of assets as disclosed by KPERS, unfunded liabilities are \$9.3 billion and the funding ratio falls to 56%.

Unfortunately, the true nature of the unfunded liability is likely much worse. KPERS assumes an 8 percent rate of return on assets, which even they now acknowledge is unlikely and are considering lowering the assumed rate of return on assets. Their actuaries estimate that lowering the assumed rate of return from 8 percent to 7.5 percent would increase unfunded liabilities by another \$1.3 billion.

Given the magnitude of unfunded liabilities in KPERS, the employer contribution rates that would be required to meet these pension obligations and the economic consequences of meeting the future cost of the existing defined benefit plan would be severe. Employers in the state/school plan currently contribute 9.37 percent of payroll. To fully fund that part of the plan at the market value of assets employers would have to contribute 15.26 percent of payroll. Employer contributions into the state/school plan would have to increase from \$393 million to \$640 million annually, a 63 percent increase. Kansas legislators are not likely to find an additional \$247 million in the current budget to fully fund the KPERS pension plan; and they are even less likely to find the money to fully fund the plan in future years as unfunded liabilities accumulate, especially if the plan fails to generate the projected 8 percent rate of return on assets.

Kansas must enact pension reform quickly to ensure the future viability of the system and to prevent catastrophic funding shortfalls in the near future. This study proposes a menu of comprehensive reform of the KPERS plan based on successful pension reforms enacted in other states.

- **Freezing participation in the existing defined benefit pension plan and requiring new employees to enroll in a defined contribution plan, or in a hybrid plan offering a defined contribution and defined benefit plan.**
- **Increasing Employee Contribution Rates**
- **Decreasing Cost of Living (COLA) Adjustments**
- **Increasing the Retirement Age and Years of Service Required to Qualify for Retirement Benefits**
- **Increasing Vesting requirements**
- **Modifying the Salary Base and Multiplier Used to Calculate Final Average Salary (FAS)**

## Introduction

The Kansas Public Employees Retirement System (KPERs) is experiencing a funding crisis. The recent collapse of financial markets has resulted in a significant decrease in the value of the KPERs portfolio. But, the funding crisis in KPERs is not just the result of problems in financial markets. The problems in this defined-benefit pension plan have emerged over several decades, and are symptomatic of the poor incentive structure guiding the governance of many defined-benefit public pension plans. The financial market turmoil has exacerbated these problems, but KPERs is facing a long-run deterioration in its funding status.<sup>1</sup>

The Kansas legislature has enacted several reforms over the past decade to address the KPERs funding problems. These reforms have included changes in benefits, increased contribution rates, and administrative changes. Unfortunately, these reforms have failed to address the fundamentally flawed incentive structure built into the KPERs defined benefit plan.

This year Governor Brownback and the leadership in the Kansas Legislature have set a high priority on reforming KPERs. It is clear that reducing and eliminating the unfunded liabilities in the pension plan are essential to solving the structural deficit in the Kansas budget.

This study proposes a comprehensive reform of the KPERs plan. Kansas can learn from the successful pension reforms enacted in other states. The most important of these reforms is to freeze participation in the existing defined benefit pension plan and require that new employees enroll in a defined contribution plan, or in a hybrid plan offering a defined contribution and defined benefit plan. Kansas should also follow the lead of other states by reducing the retirement benefits for current and future employees, and also for retirees to the extent legally permitted, including Cost of Living modifications.

The first part of the study examines the funding crises facing KPERs. The second part of the study analyzes pension reforms enacted in other states, focusing on Utah which recently froze participation in the defined benefit plan and requires new employees to enroll in a hybrid plan. This includes analysis of reforms in other states reducing pension benefits for current employees and retirees as well as new employees. The study concludes with a discussion of the need for comprehensive pension reform in Kansas.

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<sup>1</sup> Barry W. Poulson and Arthur P. Hall, 'The Funding Crises in the Kansas Public Employees Retirement System', Technical Report 09-0904, Center for Applied Economics, University of Kansas, September, 2009.

## KPERS, A Retirement System in Crisis

The Government Accounting Standards Board (GASB) sets standards for reporting pension plans offered by state and local governments. Unfunded liabilities in pension plans must be reported as debt in financial statements of state and local jurisdictions. Further, these standards require that state and local governments show progress toward eliminating unfunded liabilities over a 30-year amortization period. If pension plans fail to meet these standards, actuaries must report that the plans are not in actuarial balance. Bond rating agencies, such as Standard and Poor's, take this information into account in rating the bonds issued by state and local government.

GASB standards require that pension funds report two schedules of information regarding the funding status of the plans: (1) The Schedule of Funding Progress and (2) The Actuarial Contribution Rate.

### The Schedule of Funding Progress

KPERS assumes that it will earn an eight percent return on assets in the long run. This estimated return on assets is used to determine the actuarial value of assets. KPERS sets a range around the actual market value of assets. The estimated actuarial value of assets can be no less than 80 percent and no more than 120 percent of the actual market value of assets.<sup>2</sup>

The asset smoothing methodology determines the timing when actual market experience is recognized in the financial statements. Unfunded liabilities not recognized in the current accounting period will be recognized in financial statements in future years. Since employer contribution rates are set based on the actuarial value of assets in the current accounting period, some of the losses in the current accounting period are deferred to future years.

Table 1 shows that on December 31, 2009 KPERS reported an actuarial value of assets \$1.7 billion greater than the market value of the same assets. The funding ratio of KPERS was 55.9% based on the market value of assets, compared to 64.0% based on the actuarial value of assets.

Table 2 shows the funded ratio and the unfunded actuarial liability using both the market value of assets and the actuarial value of assets over the past 6 years. The unfunded actuarial liabilities about doubled from \$4.7 billion to \$9.4 billion in the past six years using the market value of assets. The funding ratio fell to 56 percent based on the market value of assets.

The unfunded liability in the KPERS system is equal to about 8 percent of state gross domestic product. To put this in perspective, the total state debt in Kansas is equal to about 5 percent of gross state product.

**Table 1. KPERS Unfunded Liabilities and Funding Ratio Using Market and Actuarial Value of Assets, December 31, 2009.**

	Market Value of Assets	Actuarial Value of Assets
Actuarial accrued liability	\$21.1 billion	\$21.1 billion
Assets held to pay those liabilities	11.8 billion	13.5 billion
Unfunded actuarial accrued liability	9.3 billion	7.6 billion
Funding Ratio	55.9%	64.0%

*Source: Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010 pp. 72-74*

<sup>2</sup> Comprehensive Annual Financial Report for the Fiscal Year Ended June 30 2010, pp.72-74.

**Table 2. Unfunded Liabilities and Funding Ratio  
Using Market and Actuarial Value of Assets**

	2004	2005	2006	2007	2008	2009
Using Market Value of Assets						
Funded Ratio	71%	72%	76%	75%	49%	56%
Unfunded Actuarial Liability	\$4,742	\$4,543	\$4,184	\$4,817	\$10,250	\$9384
Using Actuarial Value of Assets						
Funded Ratio	70%	69%	69%	71%	59%	64%
Unfunded Actuarial Liability	\$4,743	\$5,152	\$5,364	\$5,552	\$8,279	\$7677

Using the actuarial value of assets rather than the market value of assets shows less deterioration in the funded status of the system over the past year. However, asset smoothing impacts only

*Source: Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010 p73.*

the timing of when the actual market experience of assets is recognized. The actuarial value of assets exceeds the market value of assets by 14 percent. This means that \$1.7 billion in unfunded liabilities is not recognized in these financial statements and will only be recognized in financial statements in future years.

### The Actuarial Contribution Rate

The actuarial process is the basis for determining employer and employee contributions into the pension plan. To meet GASB standards, the pension plan must calculate an actuarial contribution rate that will eliminate unfunded liabilities in the system within a 30-year amortization period. The actuarial contribution rate is a schedule of employer contributions required to meet this standard. The actuarial contribution rate includes two components:

- A ‘normal cost’ for that portion of projected liabilities allocated by the actuarial cost method for service of members during the year following the valuation date.
- An ‘unfunded actuarial contribution’ to cover the excess of projected liabilities over the actuarial value of assets.

The Annual Required Contribution Rate (ARC) is the employer contribution rate required to meet the maximum 30-year amortization standard.

The Kansas pension system is unique in that a statutory cap is placed on the annual increase in employer contribution rate. As a result of legislation enacted in 1993, the KPERS system calculates a statutory contribution rate. The purpose was to set statutory payments as a level percentage of payroll to pay off unfunded liabilities in the system over a 40-year amortization period. The legislation set a cap on the amount by which the statutory contribution rate could increase each year. The statutory cap has been increased in recent years, from .20 to .40 percent in FY 2006, .50 percent in FY 2007, and .60 percent in FY 2008 and beyond. As a result the actuarial contribution rate exceeds the statutory rate in the state, school, and local plans.<sup>3</sup>

Due to these statutory caps, the statutory contribution rates for State, School, and Local employers have fallen well below the actuarial contribution rates. As reported in Table 3, the

<sup>3</sup> Kansas Public Employees Retirement System, Valuation Report as of December 31, 2008, pp.6-7.



shortfall between these rates is 0.18 percent, 5.32 percent, and 2.10 percent, respectively, for the State, School and Local Systems.<sup>4</sup>

The investment losses in 2008 have caused a serious deterioration in the funded status of the KPERS system. As previously noted, \$1.7 billion of these losses are not accounted for in estimating the above actuarial contribution rates due to the smoothing of asset values. To underscore the impact of these market losses, contribution rates are calculated based on the market value of assets. Table 4 compares the actuarial contribution rates with these contribution rates based on market values of assets. Using market valuation of assets, the employer contribution rate for the State/ School System would have to increase to 15.3 percent. The employer contribution rate for the Police and Fire System would have to increase to 19.8 percent.<sup>5</sup>

Given the magnitude of unfunded liabilities in KPERS, the employer contribution rates that would be required to meet these pension obligations and the economic

consequences of meeting the future cost of the existing defined benefit plan would be severe. Currently employers in the state/school plan contribute 9.37 percent of payroll. To fully fund that part of the plan at the market value of assets, employers would have to increase from from \$393 million to \$640 million, a 63 percent increase.<sup>6</sup> (Data required to calculate

**Table 3. KPERS Actuarial and Statutory Contribution Rates, December 31, 2009 Valuation**

System	Annual Required Contribution	Statutory	Difference
State	9.55%	9.37%	0.18%
School	14.69%	9.37%	5.32%
Local	9.44%	7.34%	2.10%
Police and Fire	16.54%	16.54%	0%
Judges	23.75%	23.75%	0%

*Source: Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010 p74. For KP&F, the statutory contribution rate is equal to the "uniform" rate. The rate shown is for local employers. The rate for State employers is 16.43 percent this year, which includes a payment of 0.51 percent for the debt service payment on the bonds issued for the 13th check. The uniform rate does not include the payment required to amortize the unfunded past service liability or any 15 percent excess benefit liability determined separately for each employer.*

**Table 4. Contribution Rates Using Actuarial and Market Valuations, December 31, 2009 (Dollars in Millions)**

	State/School		KP&F	
	Actuarial	Market	Actuarial	Market
Actuarial Liability	\$15,141	\$15,141	\$2,232	\$2,232
Asset Value	9,329	8,130	1,701	1,485
Unfunded Actuarial Liability	5,812	7,011	530	747
Funded Ratio	62%	54%	76%	67%
Contribution Rate				
Normal Cost Rate	8.54%	8.54%	14.71%	14.71%
Unfunded Actuarial Liability Pymt.	9.00%	10.79%	8.17%	11.61%
Total	17.54%	19.33%	22.8%	26.32%
Employee Rate	4.07%	4.07%	6.52%	6.52%
Employer Rate	13.47%	15.26%	16.36%	19.80%

*Source: Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010 p78.*

4 Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010 p74.

5 Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010 p78. Note that Table 4 does not include the local and judges' pension plans so the unfunded liabilities reported in Table 4 differ from that in Table 2 that includes all plans.

6 The current statutory employer contribution rate for the state/school system is 9.37 percent of covered payroll. Page 38 of the KPERS CAFR says covered payroll for FY 2010 was \$4,190,789,000. Based on FY 2010 covered payroll, state/school employers would contribute \$393 million at the statutory rate of 9.37 percent. To fully fund the state/school plan at the market value actuarially required contribution (ARC) rate of 15.26 percent of covered salary, employers in the state/school plan would have to increase their contribution to \$640 million annually, which is a \$247 million increase.

required funding increases in the local, KP&F and Judges plans are not available.) Kansas legislators are not likely to find an additional \$247 million in the current budget to fully fund the KPERS pension plan; and they are even less likely to find the money to fully fund the plan in future years as unfunded liabilities accumulate, especially if the plan fails to generate the projected 8 percent rate of return on assets.

Actuaries have provided projections of the actuarial and statutory rates for each of these plans. It should be emphasized that these projections are based on the actuarial assumptions in these plans, including the assumption of an 8 percent return on the value of assets in the plans.

The actuaries assume that the statutory contribution rates will increase over the amortization period at the rate imposed by the statutory cap. The statutory rates for the state and local plan increase and converge with the actuarial rate in 2018 and 2019 respectively. However, the statutory rate for the school plan is not projected to converge with the actuarial rate within the amortization period. Over the amortization period the statutory rate for the school plan increases from 8 percent to 20 percent, while the actuarial rate increases from 12 percent to 24 percent. Unfunded liabilities in the school plan increase over the amortization period.<sup>7</sup>

As the KPERS actuaries conclude, the plan continues to face significant funding challenges, even if the actuarial assumptions are met. If the plan does not generate the assumed 8 percent rate of return on assets it is highly likely that the Kansas pension fund will face a funding crisis. Although the investment return was strong in 2009, the plan has not recovered from the loss on assets incurred in 2008. As these deferred losses are recognized over the next few years the gap between the actuarial and statutory rates will increase, unfunded liabilities will accumulate, and the funding ratio will deteriorate.<sup>8</sup>

KPERS directors are well aware of the potential for a funding crisis in the plan. They are considering lowering the assumed rate of return on assets from 8 percent to something between 7 and 8 percent. Their actuaries estimate that lowering the assumed rate of return from 8 percent to 7.5 percent would increase unfunded liabilities \$1.3 billion. As KPERS Executive Director Glenn Deck told legislators when explaining their rationale, “just as in 2008 and 2009, the pension fund’s unfunded liabilities could increase dramatically if markets suffer another downturn”.<sup>9</sup>

Actuaries in Utah have provided projections of unfunded liabilities in the Utah retirement system under different assumptions regarding the assumed rate of return on assets. These projections reveal how sensitive the funding status of the plan is to the assumed rate of return on assets. They also reveal the potential for a funding crisis when the actual rate of return falls below the assumed rate of return. Given the current funding status of the Kansas plan there is a high probability that the plan will face a funding crisis over the next decade.

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<sup>7</sup> Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010 p74-78.

<sup>8</sup> Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010 p77-78.

<sup>9</sup> Gene Meyer, ‘KPERS Directors Mull Major Investment Changes’, KansasReporter.org <http://kansasreporter.org/70281.aspx>

## What Can Kansas Learn from Pension Reform in Other States?

A funding crisis in the state pension plan is not unique to Kansas. The most recent estimates are that unfunded liabilities in state pension plans are in excess of \$2 trillion.<sup>10</sup> Like Kansas, most states are not meeting required contributions in their pension plans so unfunded liabilities continue to accumulate and funding ratios in these plans deteriorate.

However, a number of states have successfully addressed the funding crises in their pension plans. Just as in the private sector, the most effective of these reforms is to freeze participation in defined benefit plans. Two states, Alaska and Michigan require new employees to enroll in a defined contribution plan. Eight states have replaced their defined benefit plan with a defined contribution plan, allowing new employees to enroll in a defined contribution plan, or in a hybrid plan including both defined contributions and defined benefits. These states include Florida, Georgia, Indiana, Nebraska, Ohio, Oregon, West Virginia, and Washington. Further, a number of states have enacted reforms to reduce the cost of existing defined benefit plans. Last year fifteen states enacted reforms to reduce the cost of their defined benefit pension plan.<sup>11</sup>

The next section of this study will survey these reforms. The focus is on pension reforms enacted in Utah because thorough actuarial analysis provided a strong empirical basis for evaluating the need for reform and the potential impact of alternative reforms on their retirement system.

### The Baseline Scenario

Actuaries in Utah projected unfunded liabilities in the Utah Retirement System for different scenarios. The baseline scenario assumes a 7.75 percent rate of return on assets in the plan.<sup>12</sup> This scenario also assumes that the state of Utah contributes the actuarial rate set by the Board of Trustees each

**Table 5. Baseline Scenario for Utah Defined Benefit Plan  
(Assumed 7.75% Investment Returns)**

Fiscal Year	Contribution Rates		Actuarial Information		
	Employer Contribution Rate (Percent)	Actuarial Rate ARC (Percent)	Year	Unfunded Actuarial Liability UAAL (\$ Millions)	Funded Ratio (Percent)
			2008	511.2	96.5
FY2010	13.3	13.3	2010	2,326.1	85.8
FY2015	22.8	22.8	2013	5,687.2	70.5
FY2020	23.1	22.0	2018	5,969.7	75.3
FY2025	23.1	19.9	2023	5,679.9	80.6
FY2030	23.1	17.4	2028	4,679.7	86.6
FY2035	23.1	14.2	2033	2,494.3	93.9
FY2040	23.1	10.4	2038	-1,584.2	103.3
FY2045	11.7	5.9	2043	-8,609.2	115.0
FY2050	11.7	4.3	2048	-13,325.5	119.5

*Source: Gabriel Roeder Smith & Company (2009), 'Information Requested by Committee for November 12th Meeting, Exhibit 2', Retirement and Independent Entities Committee, Utah Legislature, November 10.*

<sup>10</sup> Barry W. Poulson and Arthur P. Hall, 'State Pension Funds Fall Off a Cliff', The American Legislative Exchange Council, January 2010, pp.26-28

<sup>11</sup> National Conference of State Legislatures, 'Pension and Retirement Plan Enactments in 2010 Legislatures,' Nov. 17, 2010, pp2-21.

<sup>12</sup> Utah actuaries made a number of simplifying assumptions in these projections which are detailed in the study, Gabriel Roeder Smith % Co., Consultants & Actuaries, 'Actuarial Analysis: SB 63 (3rdsb.) – New Public Employee Tier II Contributory Retirement Act and New Public Safety and Firefighter Tier II Contributory Retirement Act, February 26, 2010.

**Table 6. Scenario with a 6% Rate of Return on Assets**

Fiscal Year	Contribution Rates		Actuarial Information		
	Employer Contribution Rate (Percent)	Actuarial Rate ARC (Percent)	Year	Unfunded Actuarial Accrued Liability UAAL (\$ Millions)	Funded Ratio (Percent)
			2008	511.2	96.5
FY2010	13.3	13.3	2010	2,363.9	85.6
FY2015	23.7	23.7	2013	6,167.6	68.0
FY2020	25.3	25.3	2018	7,904.8	67.3
FY2025	25.8	25.8	2023	9,736.5	66.8
FY2030	26.1	26.1	2028	11,913.8	65.8
FY2035	26.1	26.1	2033	14,450.5	64.8
FY2040	26.1	26.1	2038	17,385.6	64.1
FY2045	26.1	26.0	2043	20,761.8	63.8
FY2050	26.1	25.4	2048	24,593.8	64.0

*Source: Gabriel Roeder Smith & Company (2009), 'Information Requested by Committee for November 12th Meeting, Exhibit 2', Retirement and Independent Entities Committee, Utah Legislature, November 10.*

year over the forecast periods. As long as the plan is less than 110 percent funded, the contribution rate is the larger of (a) the annual required contribution rate (ARC) for the year, or (b) the prior year's contribution rate.

In the baseline scenario the contribution rate increases beginning in FY 2011, and continues to increase reaching a peak of 23.1 percent in FY 2016, after which the rate remains constant until the plan becomes 110 percent funded.

As in many states the Utah retirement plan incurred significant losses in 2008 which are spread over a five year period. Unfunded liabilities in the plan increase from about a half billion dollars in FY 2010 to about 6 billion dollars in FY 2020 and then decrease. The funded ratio decreases from 96.5 percent in FY2010 to 70.5 percent in FY 2013 and then increases.

### The Impact of a Lower Rate of Return on Assets.

Utah actuaries project unfunded liabilities for different assumptions regarding the rate of return on assets.<sup>13</sup> As you would expect, the funding status of the plan improves when assuming a higher rate of return. What proved to be surprising is how sensitive these projections are to lower rates of return on assets.

Table 6 shows projections based on a 6 percent rate of return on assets. In this scenario the employer contribution rate increases to a peak of 26.12 percent in FY 2035 and remains at that level. Despite this increase in the employer contribution rate the unfunded liabilities increase to 25 billion dollars in 2050. The funded ratio falls to about 64 percent.

The projections provided by actuaries were an impetus for reform of the pension plan in Utah. They revealed how sensitive the funding status of the plan is to assumed rates of return on assets. Many economists argue that the 8 percent rate of return on assets assumed in most state pension plans is highly unrealistic, and that a 6 percent rate of return or less is a more realistic assumption (see Appendix 1). As the Utah study reveals, the assumption of a lower rate of return means that these plans are likely to experience a major funding crisis over the amortization period.

<sup>13</sup> Gabriel Roeder Smith & Co., Consultants & Actuaries, 'Information Requested by Committee for Nov. 12th Meeting, November 10, 2009.

## A Hybrid Plan

As a result of this analysis Utah enacted a comprehensive reform of their pension plan.

The Utah reform has generated a great deal of interest because the state froze the existing defined benefit pension plan and replaced it with a hybrid plan that allows new hires to choose between a defined contribution plan and a hybrid plan.

### • The Defined Contribution Component

The defined contribution component provided individual employee accounts into which employers contribute 10% of employee compensation for public employees, legislators, and the governor, and 12% for public safety and firefighter members. Employee contributions into the defined contribution component are voluntary. Employee contributions are immediately vested while employer contributions are vested after four years of employment. Once vested, employees can direct the investment of their contributions. These employer contribution rates are more generous than employer contribution rates in defined contribution plans in the private sector.<sup>14</sup>

### • The Hybrid Component

The hybrid component includes a new defined benefit and defined contribution plan. The new hybrid defined benefit plan requires employer contributions up to 10% of employee compensation. Employees contribute any additional amount required to make the plan actuarially sound. Employee contributions are immediately vested. If an employee in this plan terminates employment prior to retirement, their contribution is held in an individual account for them or their beneficiary. Benefits in the defined benefit plan may not be increased until all the plans created by this legislation reach 100% of their actuarial funding requirement. Employers are required to make additional contributions needed to amortize liabilities in the existing defined benefit plan.

The new defined benefit plan provides reduced benefits for new hires compared to the existing defined benefit plan. The benefit formula for employees who retire at age 65 with 35 years of service is 1.5% of the final average salary (FAS) times years of service. FAS is the average of the highest five years of compensation. Reduced benefits are provided for early retirement or fewer years of service. The cost of living adjustment is the Consumer Price Index (CPI) up to a maximum of 2.5%. When the CPI exceeds 2.5% the excess is accumulated and applied to the cost of living adjustment in years when the CPI is less than 2.5%.

The hybrid plan includes a new defined contribution plan into which employers contribute 10% of employee compensation less the amount the employer contributes to the new defined benefit plan. This employer contribution is deposited into individual employee accounts. Employee contributions into these individual accounts are voluntary. Employee contributions vest immediately, and employer contributions vest after four years of employment. Employees direct the investment of their contributions immediately, and direct the investment of employer contributions once they are vested.

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<sup>14</sup> For a comparison of pension benefits in the public and private sector see Barry W. Poulson and Arthur P. Hall, 'Public Employee Other Post Employment Benefit Plans, A Case for Shifting to a Defined Contribution Approach,' American Legislative Exchange Council, 2011, pp 7-9.

Separate hybrid plans are created for public safety officers and firefighters, with higher employer contribution rates and earlier retirement ages for their defined benefit plans.

Actuaries estimate the cost of the defined benefit part of the hybrid plan at 7.62% of payroll. Since employers must contribute 10% to the plan that leaves 2.38% to go to the defined contribution part of the plan (a smaller amount is left for the separate hybrid plan for public safety officers and firefighters).

• **Actuarial Analysis of the Hybrid Plan<sup>15</sup>**

As new employees are enrolled in the hybrid plan employers begin to see savings compared to the existing defined benefit plan. Actuaries estimate that employers will contribute \$3.9 million less in FY 2012 and \$10.2 million less in FY 2013 into the hybrid plan compared to what they would have contributed to the existing defined benefit plan. Over time as employ-

ees in the hybrid plan increase relative to those enrolled in the existing defined benefit plan the relative savings will increase.

Table 7 projects contribution rates with the hybrid plan. There are significant savings with the hybrid plan compared to the baseline scenario for the existing defined benefit plan. Contribution rates into the defined benefit plan are lower and eventually decrease as the number of employees enrolled in the hybrid plan increase.

Employer contribution rates

are earmarked for amortization payments until unfunded liabilities are paid off within the amortization period. The total average employer contribution rates with the hybrid plan are lower than that for the existing defined benefit plan.

The employer contribution rate listed in Table 7 and Table 8 for the hybrid plan is set in Utah SB 63 (3rd Sub.). The third column of both tables shows the portion of that contribution allocated to paying off unfunded liabilities in the current DB plan. The average total employer contribution rate in the final column of Table 7 and Table 8 is the weighted average of employer contribution rates into the current DB plan and the hybrid plan. Toward the end of the time period relatively few employees are enrolled in the current defined benefit plan, decreasing the weight of that plan in the total average employer contribution rate.

Fiscal Year	Current DB Plan	Hybrid Plan for Future Hires		Average Total
	Employer Contribution Rate	Employer Contribution Rate	Amortization Payment Rate	Employer Contribution Rate
FY2010	13.3	na	na	13.3
FY2015	22.7	10.0	11.0	22.4
FY2020	23.1	10.0	11.4	22.3
FY2025	23.1	10.0	11.4	22.0
FY2030	23.1	10.0	11.4	21.8
FY2035	23.1	10.0	11.4	21.6
FY2040	23.1	10.0	11.4	21.4
FY2045	11.7	10.0	0.0	10.0
FY2050	11.7	10.0	0.0	10.0

*Source: Gabriel Roeder Smith & Company (2010), 'Actuarial Analysis SB 63 (3rd) Sub., Exhibit 3, Utah Legislature, November 10.*

<sup>15</sup> Gabriel Roeder Smith % Co., Consultants & Actuaries, 'Actuarial Analysis: SB 63 (3rdsub.) – New Public Employee Tier II Contributory Retirement Act and New Public Safety and Firefighter Tier II Contributory Retirement Act, February 26, 2010.

## A Defined Contribution Plan

As noted earlier two states, Alaska and Michigan have closed their defined benefit plan. New hires in those states are required to enroll in the new defined contribution plan. Much controversy has centered on the impact of this reform on the funding status of the retirement plans. It is important to note that in both Alaska and Michigan the funded ratio of their new retirement plan has increased since these reforms were introduced.

At the time that Utah introduced their hybrid plan they also considered replacing their defined contribution plan with a defined contribution plan for new hires. They asked actuaries to project the impact of such a reform on the funded status of the retirement system. While Utah chose not to enact this reform, their actuarial analysis reveals that this was a viable option to address the problem of unfunded liabilities in their retirement system.

### • Actuarial Analysis of the Defined Contribution Plan<sup>16</sup>

In these projections the assumption is that the employer cost of the new defined contribution plan is capped at 8% of employee compensation. Employers are also required to contribute 8% of employee compensation for new hires earmarked for amortization payments. Thus, the employer contribution rate for new hires is 16% of employee compensation, with half going to the new defined contribution plan and half earmarked to pay off unfunded liabilities in the existing defined benefit plan.

**Table 8. Defined Contribution Plan  
(Assumes 7.75% Investment Returns)**

Fiscal Year	Current DB Plan	DC Plan for Future Hires		Average Total
	Employer Contribution Rate	Employer Contribution Rate	Amortization Payment Rate	Employer Contribution Rate
FY2010	13.3	na	na	13.3
FY2015	26.7	8.0	8.0	24.4
FY2020	27.5	8.0	8.0	22.3
FY2025	26.9	8.0	8.0	20.0
FY2030	25.6	8.0	8.0	18.1
FY2035	45.5	8.0	8.0	19.5
FY2040	11.7	8.0	0.0	8.2
FY2045	11.7	8.0	0.0	8.0
FY2050	11.7	8.0	0.0	8.0

*Source: Gabriel Roeder Smith & Company (2009), 'Information Requested by Committee for November 12th Meeting, Exhibit 14a', Retirement and Independent Entities Committee, Utah Legislature, November 10.*

Table 8 projects the costs of this defined contribution plan.

During the initial years a relatively small share of the work force is represented by new hires in the defined contribution plan. For the first few year assets do not increase as fast as liabilities, and unfunded liabilities increase. However, by 2018 the growth of assets more than offsets the increase in liabilities and the funded ratio improves. The actuarial projections for the defined contribution plan in Utah are important to resolve a controversy regarding this reform. It is sometimes argued that replacing a defined benefit plan with a defined contribution plan for new hires is not viable because unfunded liabilities cannot not be paid off within the amorti-

<sup>16</sup> Gabriel Roeder Smith % Co., Consultants & Actuaries, 'Information Requested by Committee for Nov. 12th Meeting, November 10, 2009.

**Table 9. Unfunded Liabilities in the Defined Contribution Plan**

Actuarial Information DC Plan

Year	Unfunded Actuarial Accrued Liability UAAL (\$ Millions)	Funded Ratio (Percent)
2008	511.2	96.5
2010	2326.1	85.8
2013	5485.6	71.5
2018	5205.5	77.8
2023	4369.4	83.7
2028	3053	89.4
2033	918.1	96.9
2038	-1377.48	104.9
2043	-2000.7	107.9
2048	-2905.7	113.5

Source: Gabriel Roeder Smith & Company (2009), 'Information Requested by Committee for November 12th Meeting, Exhibit 14b', Retirement and Independent Entities Committee, Utah Legislature, November 10.

zation period. These actuarial projections show that the unfunded liabilities are paid off at about the same pace within the amortization period with either the defined contribution plan or the hybrid plan.

A comparison of the Total Average employer contribution rates reveals that the hybrid plan is less costly than the current defined benefit plan over the amortization period. A similar comparison for the defined contribution plan reveals that this plan is more costly than the current defined benefit plan for the first five years, but is significantly lower in cost over the remaining amortization period.

It is clear from these actuarial projections that the most important reform states can enact to avoid a funding crisis is to freeze participation in defined benefit plans and create new plans with reduced benefits for new hires. The new plans can offer defined contribution plans or hybrid plans for new hires. As employees in the new plans replace the employees in the closed defined benefit plans unfunded liabilities can be reduced and eliminated.

**Table 10. A Comparison of the Total Average Contribution Rates**

Average Total Employer Contribution Rate

Fiscal Year	Baseline Scenario	Hybrid Plan	DC Plan
FY2010	13.3	13.3	13.3
FY2015	22.8	22.4	24.4
FY2020	23.1	22.3	22.3
FY2025	23.1	22.0	20.0
FY2030	23.1	21.8	18.1
FY2035	23.1	21.6	19.5
FY2040	23.1	21.4	8.2
FY2045	11.7	10.0	8.0
FY2050	11.7	10.0	8.0

Source: Tables 5-9.

## Reforming Defined Benefit Plans

As the Utah study demonstrates, pension reform is needed even in states with relatively high funded ratios. Actuarial analysis in Utah revealed that the defined benefit plan was not viable. Employer contribution rates were projected to increase to 24% of employee compensation. If assets in the plan returned less than the 7.75% assumed rate of return the defined benefit plan would face a funding crisis that could potentially bankrupt the state.

Utah's unfunded liability situation was not unique to that state. The only real difference in Utah is that they conducted actuarial studies to understand what the future would hold if nothing was done today.

Utah chose to enact reforms that did not modify benefits for employees currently enrolled in the defined benefit plan. New hires are required to enroll in either the new

defined contribution plan or hybrid plan, with reduced benefits. It is important to emphasize that Utah enacted these reforms freezing participation in a defined benefit plan with a relatively high funding ratio compare to that in most other state defined benefit plans.

Most states, including Kansas, have defined benefit plans with much lower funding ratios, and some of these states already face a funding crisis in their plans. Reducing and eliminating unfunded liabilities in these defined benefit plans in these states will impose a heavier burden.



Some states have increased taxes and issued debt to pay off unfunded liabilities, but there is growing taxpayer resistance to these policies. Taxpayers are challenging the increased taxes used to fund pension plans, and the increased share of budgets allocated to pension plans at the expense of government services. States such as Kansas with relatively high tax rates can ill afford additional tax burdens to fund their pension plans.

There is increased pressure for government employees to have benefit plans more in line with those of private sector taxpayers and to bear a greater share of the cost of pension plans, including current employees as well as new hires. A National Conference of State Legislatures survey reveals that many states have enacted reforms designed to increase cost sharing in pension plans by current employees and retirees as well as new hires.<sup>17</sup>

- **Increasing Employee Contribution Rates**

One reform is to require increased employee contributions into the defined benefit plan, with a portion of those contributions earmarked for amortization of unfunded liabilities. Some economists advocate matching contributions from employees and employers. This form of cost sharing means that current employees as well as new hires share in the cost of amortization payments used to pay off unfunded liabilities in the plan. Since benefits of the defined benefit plan accrue to current employees this cost sharing is viewed by some economists as a more equitable way to pay off unfunded liabilities in the plan.

Over the past year a number of states have required increased contributions from current employees enrolled in defined benefit plans, including: Colorado, Iowa, Minnesota, Mississippi, Vermont, and Wyoming. Colorado, for example, increased employee contribution rates into the defined benefit plan by 2.5% and decreased employer contribution rates by the same amount for FY 2011. As a result the state employee contribution rate increased from 8% to 10.5% of salary, while employer contribution rates decreased from 10.15% to 7.65%. Contribution rates were shifted from employers to employees for other government employees as well. This one time change in the defined benefit plan was estimated to save the state \$37 million.

Kansas has kept the contribution rate for current employees at 4 percent, but now requires new hires to contribute 6 percent.

A number of states increased employer and employee contribution rates into their defined benefit plans. In some states, such as Wyoming, these changes were designed to equalize the cost of defined benefit plans between employers and employees.

- **Decreasing Cost of Living (COLA) Adjustments**

Many states provide generous cost of living (COLA) adjustments for benefits in their defined benefit plans. In recent years a number of states have reduced or eliminated COLA adjustments to reduce the cost of their plans.

Michigan froze participation in their defined benefit plan and requires new hires to enroll in a new defined contribution plan or hybrid plan. The new hybrid plan eliminates COLA adjustments to benefits from the defined benefit portion of the plan.

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<sup>17</sup> National Conference of State Legislatures, 'Pension and Retirement Plan Enactments in 2010 Legislatures,' Nov. 17, 2010, pp2-21.

Some states have reduced the COLA adjustment for benefits received by retirees and well as current employees in the defined benefit plan. Colorado, for example, reduced the COLA to the lesser of 2% or inflation for 2010. For future years the COLA is limited to 2% unless the plan experiences a negative investment return, in which case the COLA is calculated as the lesser of inflation for the preceding 3 years or 2%. The new rules adjust the COLA based on the funded ratio in the plan.

Kansas has set the COLA rate for new hires at 2 percent.

- **Increasing Retirement Age and Years of Service Required to Qualify for Retirement Benefits**

Last year eight states increased the retirement age and years of service required to qualify for benefits in the defined benefit plan. In Missouri, for example, to be eligible for normal retirement benefits in their defined benefit plan employees must now reach age 67 and have at least 10 years of service, or reach age 55 with the sum of the employee's age and service equaling at least 90. The previous requirement was 62 years of age with 5 years of service, or the rule of 80 with a minimum age of 48. Many states have also imposed more restrictive rules for early retirement, and for rehired employees to qualify for benefits.

To be eligible for unreduced benefits KPERs uses an 85 Point Rule (age plus years of service must be equal to 85). To qualify for unreduced benefits employees hired prior to July 1, 2009 must meet one of the following criteria: age 65 with 1 year of service, or age 62 with 10 years of service. To qualify for unreduced benefits employees hired after that date must meet one of the following criteria: age 65 with 5 years of service, or age 60 with 30 years of service. All KPERs employees qualify for reduced benefits at age 55 with 10 years of service.

- **Increasing Vesting requirements**

Last year four states imposed more stringent requirements for employees to be vested in their defined benefit plans. In some states these new vesting requirements apply only to new hires, but in others they apply to all employees. Missouri and Pennsylvania have increased the vesting requirement from 5 years to 10 years for all employees.

KPERs has kept the vesting period for current employees at ten years, and reduced it for new hires to five years.

- **Modifying the Salary Base and Multiplier Used to Calculate Final Average Salary (FAS)**

A policy that increases pension costs in many defined benefit plans is the spiking of salaries in the years prior to retirement used to calculate final average salary (FAS). States have addressed this problem in several ways.

Some states have increased the number of years used to calculate FAS. In New Jersey, Louisiana, Iowa, and Arizona the FAS is now calculated over 5 years rather than 3 years, and in Illinois it is calculated over 8 years.

Some states have reduced the multiplier used to calculate benefits based on years of service. Louisiana, for example, reduced the multiplier for all non-hazardous employees to 2.5%, and to 3.33% for hazardous duty employees.

The actuarial benefit formula for KPERS members is FAS x Years of Service x Statutory Multiplier.<sup>18</sup> There are separate statutory multipliers for different groups of retirees and other multipliers applicable to certain service credits. The calculation of FAS varies based upon each member's hire date. See Appendix 2 for the methodology of calculating FAS and for sample benefit calculations.

A few states have imposed caps on the maximum amount of benefits that retirees can receive in defined benefit plans. Illinois, for example, decreased the maximum benefit for members of the General Assembly and judges from 85% of FAS to 60% of FAS.

Some states have also restricted or eliminated the ability of employees to purchase years of service toward their retirement benefit. This policy adds to pension costs to the extent that the service credits are subsidized by the state.

Kansas continues to allow KPERS members to purchase service credit.

Modifying benefits for new hires in recent years has passed judicial muster. However, modifying benefits for current employees and retirees has been challenged in the courts. In Colorado a group of retirees has filed a lawsuit challenging the reduction in the cost of living adjustment for benefits received by retirees. Their lawsuit maintains that pension benefits for current employees and retirees is protected by the U.S. and Colorado Constitutions. An earlier opinion by the Attorney General in Colorado stated that reforms of the Colorado pension plan are justified if they are necessary for the solvency of the retirement system. It remains to be seen how the courts will rule on the recent lawsuits.<sup>19</sup>

## **Conclusion**

The actuarial analysis conducted for Utah was an important impetus for reform of the pension plan in that state. Legislators concluded that even if the assumed 7.75 percent rate of return on assets was met, the cost of their defined benefit plan was prohibitive. More importantly they were not willing to expose the state to the risk associated with unfunded liabilities in the defined benefit plan. As state Senator Dan Liljenquist, who sponsored the Utah legislation reforming the pension plan, stated after the Senate vote, "there is only one thing that could bankrupt this state, and that is an unfunded liability that comes from our pension program".<sup>20</sup>

Solving the problem of unfunded liabilities in the state pension plan will be a more formidable task in Kansas, and one that is therefore more urgent. Kansas' public employee retirement system is already in a funding crisis and the funded status of the Kansas plan is much worse than that in Utah and most states. Based on the market value of plan assets, unfunded liabilities in the KPERS plan are estimated at \$9.3 billion compared to \$6.5 billion in Utah. The funded ratio in KPERS is 56% compared to 97% in the Utah pension plan. The school portion of the KPERS plan is not projected to pay off unfunded liabilities within the amortization period. Kansas must enact pension reform quickly to ensure the future viability of the system and to prevent catastrophic funding shortfalls in the near future.

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<sup>18</sup> KPERS Power Point presentation to Senate Select Committee on KPERS, February 3, 2011.

<sup>19</sup> Barry W. Poulson, 'What Now for PERA: Déjà vu All Over Again,' Independence Institute IP-2, March, 2009.

<sup>20</sup> Dan Liljenquist, State Senator Utah, 'Remarks to the States and Nation Policy Summit,' American Legislative Exchange Council, Washington D.C., December 2010.

Actuaries have not estimated the contribution rates that would be required to eliminate the unfunded liabilities in the Kansas pension plan. However, given the magnitude of unfunded liabilities in KPERS, the employer contribution rates that would be required to meet these pension obligations is certainly higher than that estimated for Utah. Such an increase in employer contributions into the pension plan are far beyond that provided for in current law which limits such increases to .6% per year. The economic consequences of meeting the future cost of the existing defined benefit plan would be severe, as the state would have to significantly raise taxes or cut other government programs.

Solving the KPERS funding crisis will be challenging and not without controversy, but it must be done. Fortunately, there is a considerable menu of proven options from which legislators and taxpayers can choose to create the Kansas Plan.

## Appendix 1 — Why the Funding Crisis in State Pension Plans May Be Worse When Evaluated by Private Pension Plan Requirements

A recent study by the National Bureau of Economic Research (NBER) suggests that the funding status in public pension funds is worse than reported.<sup>21</sup> These pension systems are likely to experience significant funding shortfalls in future years, even if the economy recovers and financial markets stabilize. These funding shortfalls will impose a heavy burden on future generations.

The potential for future funding shortfalls in pension plans can be estimated from future assets and future liabilities. Future liabilities are estimated based on the current actuarial value of liabilities, the discount rate employed by the plan, and the amortization period. Future assets are estimated based on the expected growth rate and volatility of the plan's assets.

The NBER study of a sample of state pension plans finds that future under-funding in these plans is actually greater than that reported in their financial statements because of the accounting rules used to estimate future assets and future liabilities in the system.

The NBER study, and other studies as well, point out that the eight percent average discount rate used by these state pension systems is almost certainly too high. This discount rate assumption is based on Government Accounting Standards Board (GASB) ruling 25 and Actuarial Standards of Practice (ASOP) item 27. These standards require a discount rate determined by the accrued return on pension plan assets. Critics argue that the discount rate should be based on the market risk inherent in the system liabilities.<sup>22</sup>

Support for the critics' position comes from the discount rate used in private pension plans. In contrast to government pension plans, private pension plans use a discount rate applied to liabilities that is a blend of corporate bond yields and Treasury bond yields. The NBER study uses a lower discount rate to estimate the present value of future liabilities in their sample of state pension systems. In 2005, the present value of liabilities in these state plans—based on an eight percent discount rate—is estimated at \$2.5 trillion. Using the Municipal bond rate to determine the discount rate results in an estimated present value of liabilities equal to \$3.1 trillion; using the Treasury rate as the discount rate, the present value of the liabilities is estimated at \$4.0 trillion.<sup>23</sup>

The use of lower discount rates to estimate the present value of future liabilities results in much higher estimates of unfunded liabilities in these state pension plans. In their financial statements, these public pension plans estimate unfunded liabilities at \$312 billion. The NBER study estimates unfunded liabilities at \$901 billion using the Municipal bond discount rate

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<sup>21</sup> Robert Novy-Marx and Joshua D. Rauh, 'The Intergenerational Transfer of Public Pension Promises,' Working Paper 14343, National Bureau of Economic Research, Cambridge, MA, September, 2008.

<sup>22</sup> Novy-Marx, Robert, and Joshua D. Rauh 'The Intergenerational Transfer of Public Pension Promises,' Working Paper 14343, National Bureau of Economic Research, Cambridge, MA, September, 2008; Barclays Global Investors, 'The Retirement Benefit Crises: A Survival Guide,' Barclays Global Investors Investments Insights 7(5), 2004; Jeremy Gold, 'Risk Transfer in Public Pension Plans,' Wharton Pension Research Council Working Paper 2002-18, 2002; Lawrence N. Bader and Jeremy Gold 'The Case Against Stock in Public Pension Funds,' Pension Research Council Working Paper, 2004.

<sup>23</sup> Robert Novy-Marx and Joshua D. Rauh, 'The Intergenerational Transfer of Public Pension Promises,' Working Paper 14343, National Bureau of Economic Research, Cambridge, MA, September, 2008.

and \$1.9 trillion using the U.S. Treasury discount rate. Unfunded liabilities as a ratio of assets in the plans is estimated at 41 percent and 86 percent, respectively, for these lower discount rates.<sup>24</sup>

One way to assess the magnitude of the funding crises in state pension plans is to use the same government standards as those applied to private defined benefit pension plans. Private defined benefit pension plans are considered 'safe' by government standards if they have enough assets to support at least 80 percent of pension benefit obligations. In 2008, only nine percent of a sample of state and local government pension plans met this standard.<sup>25</sup>

Private defined benefit pension plans are considered 'critical' if the value of assets in the plan is 65 percent or less of pension benefit obligations. This year more than half of state and local government pension plans are likely to fall in this 'critical' category.<sup>26</sup> Using market values for portfolio assets, the KPERS systems falls into this critical category.

The most important finding in the NBER study is the prospect of future under-funding in state pension plans based on more realistic discount rates. Using a 15-year amortization period, the NBER study estimates, conservatively, that there is a 50 percent chance of under funding greater than \$750 billion; a 25 percent chance of under-funding greater than \$1.75 trillion; and a 10 percent chance that under-funding will exceed \$2.48 trillion. These estimates do not include any under-funding in other post employment benefit (OPEB) plans in these state pension systems.<sup>27</sup>

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<sup>24</sup> Robert Novy-Marx and Joshua D. Rauh, 'The Intergenerational Transfer of Public Pension Promises,' Working Paper 14343, National Bureau of Economic Research, Cambridge, MA, September, 2008.

<sup>25</sup> A.H. Munnell, J. Aubrey, and D. Muldoon, 'The Financial Crises and State/Local Defined Benefit Plans', Center for Retirement Research, Number 8-19, November, 2008.

<sup>26</sup> A.H. Munnell, J. Aubrey, and D. Muldoon, 'The Financial Crises and State/Local Defined Benefit Plans', Center for Retirement Research, Number 8-19, November, 2008.

<sup>27</sup> Robert Novy-Marx and Joshua D. Rauh, 'The Intergenerational Transfer of Public Pension Promises,' Working Paper 14343, National Bureau of Economic Research, Cambridge, MA, September, 2008.

## Appendix 2 — Sample KPERS Benefit Calculations

The following estimates are shown by way of example only and should not be used to calculate actual retirement benefits. There are many nuances applicable to the three defined benefit plans operated by KPERS (Kansas Public Employees Retirement System, Kansas Police & Firemen’s Retirement System and Kansas Retirement System for Judges) regarding hire dates, length of service and other factors. Benefits are calculated differently for Tier 1 members (hired prior to July 1, 2009) and Tier 2 members (those hired after July 1, 2009). These sample benefit calculations only pertain to Tier 1 members. Members must also meet certain minimum age requirements and minimum service requirements to qualify for unreduced benefits; these sample benefit calculations also assume that retirees meet these requirements and retire at age 65. Generally speaking, the formula for calculating KPERS benefits is Final Average Salary (FAS) x Years of Service x Statutory Multiplier. For Tier 1 members hired on or after July 1, 1993, FAS is the average of their three highest years, excluding additional compensation, such as sick and annual leave. For Tier 1 members who were hired before July 1, 1993, FAS is the greater of either (a) four-year FAS including additional compensation, such as sick and annual leave; or (b) three-year FAS excluding additional compensation, such as sick and annual leave.<sup>28</sup>

Retirees can elect to have a portion of their pension continue to a surviving spouse and/or take a one-time partial lump sum distribution, both of which result in reduced regular benefits. These sample calculations assume that neither option is elected.

	KPERS Tier 1		KP&F		Judge	
	Ex. 1	Ex. 2	Ex. 1	Ex. 2	Ex. 1	Ex. 2
FAS	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Years of Service	30	35	25	32	15	20
Multiplier	1.75%	1.75%	2.50%	2.50%	3.50%	3.50%
Annual Pension	\$26,250	\$30,625	\$31,250	\$40,000	\$26,250	\$35,000
Pension % of FAS	53%	61%	63%	80%	53%	70%

*Note: The maximum service credit for KP&F retirees is 32 years. Judges with service prior to July 1, 1987 can receive up to ten years' service credit at a 5% multiplier; the calculation in Example 2 is based on 20 years' service at 3.5% and no years' service at 5%. Judges receive a maximum service credit of 20 years at the 3.5% multiplier; regardless, the maximum pension allowed is 70% of FAS. There is no maximum years of service or maximum pension % of FAS for other KPERS retirees.*

<sup>28</sup> KPERS Comprehensive Annual Financial Report, fiscal year ended June 30, 2010, page 93.

**Table 12. Retirement Benefit Estimates for 2010***(millions of dollars)*

Total KPERS distributions - Calendar 2010	\$1,108.6
Estimated portion from Employers	75%
Estimated Employer funds distributed	\$831.5
Assumed state income tax rate (middle bracket)	6.25%
Estimated state income tax benefit to KPERS retirees	\$52.0

Source: KPERS 2010 distributions as listed at [www.KansasOpenGov.org](http://www.KansasOpenGov.org) in the Retiree section; Kansas Dept. of Revenue

**KPERS Retirement Benefit Estimates<sup>29</sup>**

KPERS retirement benefits are considerably more generous than those received by most private sector employees. Not all private sector employees receive retirement benefits from their employers and most of those who do are enrolled in 401(k) plans, where the employer contribution generally is between 1% and 10% of employee earnings.

Employer contributions required to fully fund the plans based on the market value of assets for KPERS members is currently between 15% and 20%, and those rates are predicted to rise even higher if major reforms are not enacted soon.

KPERS retirees also receive preferential tax treatment. Unlike private sector retirement plans, KPERS benefits are not taxable for state income tax purposes. Employee contributions to the plan are after tax, so it's appropriate that distributions from employee contributions would be not be taxable to avoid double taxation. However, KPERS members never have to pay state income tax on the majority of their pension benefits, which come from employer contributions and earnings on employer contributions.

The cost to taxpayers of providing government retirees with these tax-free benefits is substantial. The exact amount of pension distributions from employer contributions and the applicable tax rate for each recipient would have to be identified to accurately calculate the benefit, but we can make a reasonable estimate. As noted in Table 4, in order to fully fund the state/school plan based on the market value of plan assets, the employer contribution rate would be 15.26% and the total employer and employee contribution rate would be 19.33%; the employer rate is therefore 78.9% of the total. For the KP&F plan, the employer rate would be 75% of the total (19.8% for the employer, 26.32% in total). The following estimate of a \$52 million income tax benefit to KPERS retirees is based on the lower employer rate of 75%.

Most KPERS retirees are also eligible for Social Security benefits. According to KPERS Executive Director Glenn Deck:

"All KPERS and Judges plan members are eligible for Social Security and they and their employers contribute to Social Security coverage. Because Social Security has different eligibility ages and taxation incentives, a KPERS retiree might be drawing KPERS benefits and has not yet applied to draw Social Security benefits. A large number of KP&F members are not eligible for Social Security by virtue of their law enforcement or firefighter employment. Their employers opted out of Social Security coverage for those positions years ago. Those employees and their employers do not contribute to Social Security for their law enforcement or firefighter position. Those individuals could potentially gain Social Security coverage on any outside employment, but it would not be based on their governmental compensation and there are some Social Security limitations to these benefits called the Governmental Pension Offset (GPO)."<sup>30</sup>

<sup>29</sup> Calculations prepared using benefits estimator on KPERS web site at <http://www.kpers.org/benefitestimate.htm>, accessed February 26, 2011.

<sup>30</sup> E-mail received from Glenn Deck on February 27, 2011.



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