

REPORT TO THE JOINT COMMITTEE ON PENSIONS, INVESTMENTS AND BENEFITS

KPERS LONG-TERM FUNDING STATUS

Introduction

The Joint Committee on Pensions, Investments and Benefits spent the 2009 Interim Session studying the Kansas Public Employees Retirement System's long-term funding challenges. At its September 2, 2009, meeting, the Joint Committee reviewed the December 31, 2008, Actuarial Valuation, which is the foundation for evaluating the System's status, and the Committee received a presentation by the System's consulting actuary, Milliman, Inc. (See Appendices 1 and 2.) KPERS' Executive Director made three presentations to the Joint Committee during the 2009 Interim, describing KPERS' long-term funding challenges and a variety of potential funding options to address them. (See Appendices 3 through 5.)

At the Joint Committee's December 14, 2009, meeting, the Committee requested this overview of KPERS' long-term funding status and funding alternatives, as well as historical information on KPERS' plan design, funding history, and steps previously taken by the Legislature to address KPERS' long-term funding concerns. Highlights of KPERS' historical record are included in this overview, and a full history of the KPERS plan is provided separately. (See Appendix 6.)

A Historical Perspective on Long-Term Funding

KPERS is a defined benefit plan, which means that, upon retirement, members receive a specified retirement benefit determined according to a predetermined formula and related criteria. The plan's provisions are established in statutes passed by the Legislature. Since KPERS' inception in 1962, the Legislature has passed laws providing various benefit enhancements to KPERS members. As a result, most of the basic plan design elements have been the subject of one or more enhancements at some point in KPERS' history. Those elements include:

- Retirement eligibility criteria for both full and early retirement
- Changes to each of the elements in the benefit formula –
$$\text{Final Average Salary} \times \text{Statutory Multiplier} \times \text{Years of Service} = \text{Annual Benefit}$$
- The vesting period
- Death benefits
- Post-retirement benefit increases
- Crediting of prior service
- Service purchase options.

The Legislature has adopted a range of approaches to valuing and funding these enhancements, including increases in employer contribution rates and changes in actuarial methods. However, these approaches did not always fully fund the enhancements. Moreover, prior to introduction of

a 6% contribution rate for members of the new KPERS Tier 2, employee contributions remained at the original rate of 4%, even when benefit enhancements were applied to past service.

A package of benefit enhancements enacted in 1993 is of particular significance in understanding the development of the current KPERS' long-term funding shortfall. Working from recommendations of the Kansas Public Employees Retirement Study Commission, the Legislature passed a benefit enhancement package that was effective July 1, 1993. The benefit enhancements package consisted of these plan design changes:

- **Retirement eligibility requirements.** Members became eligible for full retirement benefits based on a new "85-point rule" (when age plus years of service equal 85) and at age 62 with 10 years of service.
- **Benefits formula multiplier.** The multiplier was increased from 1.4% to 1.75% for both previous and future service.
- **Final average salary (FAS) calculations.** The number of years used in FAS calculations was lowered to three years (without additions for payouts of sick and vacation leave) for new members. For existing members, it is based on the higher of three years without leave add-ons or four years with add-ons included.
- **Death benefit.** The death benefit for retirees increased from \$2,500 to \$4,000.
- **One-time ad hoc COLA.** An ad-hoc cost-of-living adjustment was granted in the amount of 15% for retirees with 15 or more years of service and 5% for those with less. (Included minimum and maximum limits.)

The key components of the funding plan associated with the package included an extension of the amortization period for KPERS' unfunded actuarial liability (UAL), changes in the actuarial funding method and the basis for computing amortization payments, plus a statutory cap on employer contribution rate increases of 0.1%. In general, the funding plan lowered initial annual employer contributions and shifted the cost of the benefit enhancements many years into the future. The effect of the funding plan changes made in 1993 was to significantly increase the UAL and to build in higher costs over the course of the amortization period.

Thus the funding plan for the benefit enhancement package, along with subsequent experience losses and other factors that adversely affected liabilities, contributed to the development of a long-term funding shortfall. However, during most of the 1990s, double-digit positive investment returns produced substantial gains in the actuarial value of KPERS' assets, which largely offset and masked the effects of experience losses, actuarial changes, and other factors that increased KPERS' actuarial liabilities during this period. Therefore, the long-term funding shortfall did not become fully apparent for several years, but emerged with investment losses during the market declines in 2001 and 2002. Actuarial projections from that period indicated that the KPERS retirement plan was not in actuarial balance, which means the statutory rate would not converge with the actuarially required contribution (ARC) rate before the end of the amortization period for the UAL.

Previous Legislative Actions to Address Long-Term Funding Problem

Following the 2001 actuarial valuation results, KPERS worked with the Legislature and the Governor to develop a comprehensive, long-term funding plan to address the shortfall and bring KPERS into actuarial balance. Key steps in the plan included:

Increased Statutory Employer Contribution Caps. The 2003 Legislature passed HB 2014 which increased the statutory cap on the State/School employer contribution rate from 0.2% to 0.4% in FY 2006, 0.5% in FY 2007, and 0.6% in FY 2008 and thereafter. In 2004, the Legislature passed SB 520, which similarly increased the statutory caps for KPERS local employers from 0.15% to 0.4% in CY 2006, 0.5% in CY 2007 and 0.6% in CY 2008 and thereafter. The estimated annual cost increase to the State in FY 2011 under the .6% cap on employer contribution rates is approximately \$35 to \$40 million and approximately \$15 million for local employers.

Issued Pension Obligation Bonds. In 2003, HB 2014 authorized the issuance of \$500 million in pension obligation bonds. In March 2004, the Kansas Development Finance Authority (KDFA) issued \$500 million of bonds, and the KPERS Fund received net proceeds of \$440.2 million as an employer contribution for the State and School Groups. Of the remaining bond proceeds, \$55 million was used for capitalized interest to lower the debt service in the first three years of the amortization period. Debt service on the bonds is paid by the State General Fund. The current annual debt service payment is \$36.1 million through FY 2034.

Authorized Actuarial Changes. SB 520, which was enacted in 2004, gave the KPERS Board of Trustees the authority to establish the actuarial cost method and amortization method and period. These had previously been established by the Legislature as part of the 1993 benefit enhancement legislation. With this authority, the KPERS Board changed the actuarial cost method to the “entry age normal” method beginning with the December 31, 2003, Valuation. Entry age normal is the most common cost method used by public retirement systems.

Adopted a New Plan Design. Following in-depth examinations of funding and demographic projections, cost estimates and plan design options during the 2006 Interim, the Joint Committee on Pensions, Investments and Benefits introduced legislation during the 2007 Session to implement an alternative retirement plan for future employees. In the 2007 Session, the Legislature passed SB 362, which established a new plan design for KPERS members first employed on or after July 1, 2009. Key provisions of the new plan design included: lowering vesting to five years; raising normal retirement age; increasing the benefit reductions for early retirement; increasing the final average salary period to 5 years; providing an automatic 2% COLA beginning at age 65; and increasing the employee contribution rate to 6%. (*See Appendix 7 for a comparison of Tier 1 and Tier 2 benefits.*) At the time these changes were adopted, they were projected to reduce the State’s costs for State and School members by \$2.6 billion and local employer costs by \$1 billion through the end of the amortization period in 2033.

These actions, along with strong investment returns in the FY 2004-2007 period, brought KPERS into actuarial balance and significantly improved the projected funding status through the December 31, 2007, Actuarial Valuation.

Assessment of Current Long-Term Funding Status

The extraordinary financial crisis of 2008 and early 2009 and its unprecedented investment market declines profoundly affected investors globally. The investment return for the S&P 500 was -26.2% during FY 2009, which is reflected in the System's return of -19.6% for the same period.

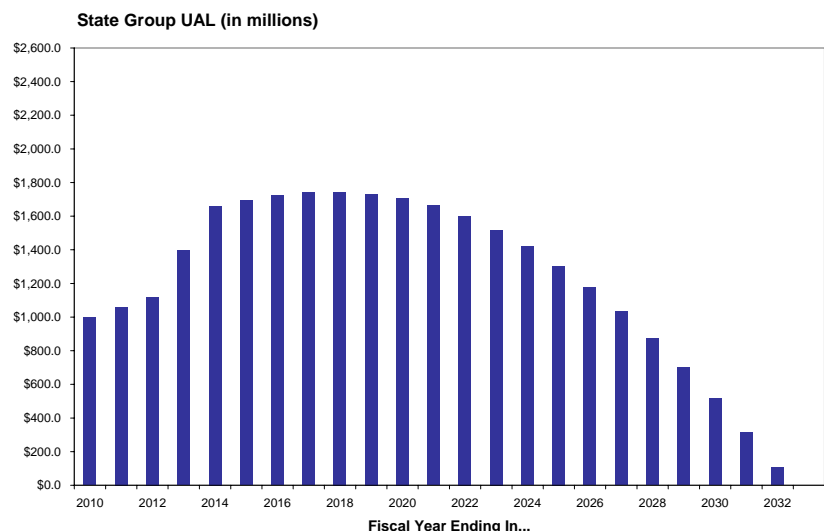
The extraordinary investment losses had a substantial negative impact on the funding status of the System as a whole and reversed previous forward progress on long-term funding. As a result, KPERS' current funding structure is not projected to generate enough contributions to pay off the UAL in the amortization period ending in FY 2033. The System has more than \$10 billion in assets. In FY 2009, \$728 million in contributions from employees and employers were paid into the KPERS Trust Fund, and benefit payments in FY 2009 totaled just over \$1.0 billion. Therefore, KPERS has sufficient assets and contributions to continue paying benefits for decades. Moreover, not all benefits are due at once. Most members are still working and contributing and will not retire for years. Those in retirement are paid over a lifetime. As a result, the funding problem facing KPERS does not constitute a crisis threatening its short-term viability. Instead, it is KPERS' ability to pay benefits over the long-term that is in jeopardy.

The three presentations previously provided to the Joint Committee illustrated the nature and depth of the System's long-term funding challenges using projections of three key measures of the System's long-term viability: (1) the growth of the unfunded actuarial liability (UAL), (2) future actuarially required contribution (ARC) rates, and (3) future funded ratios. Highlights of those measures using a "baseline" projection follow, as well as an assessment of their implications for KPERS' health. The baseline's assumptions include an average annual return of 8% and no change in the current contribution or benefit structure.

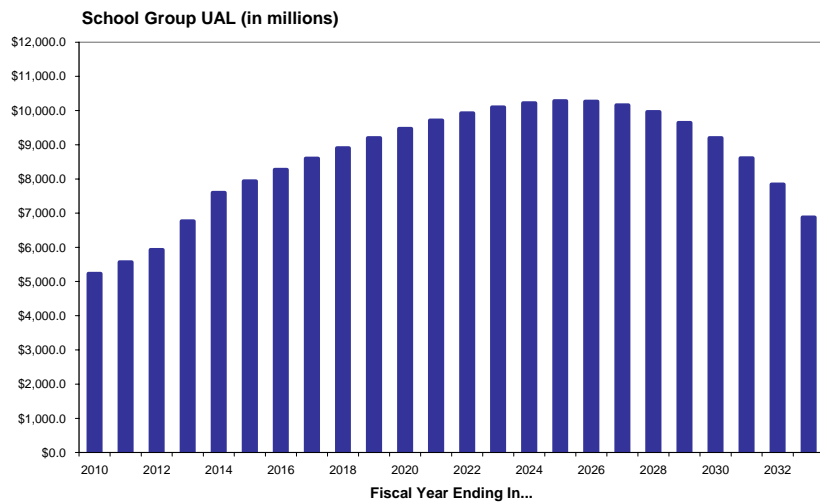
UAL. The unfunded actuarial liability represents the difference between the System's actuarial accrued liabilities for retirement benefits and the actuarial value of the System's assets. Looking at the System as a whole, the December 31, 2008, Actuarial Valuation reported a \$2.7 billion or 49% increase in the System's UAL to \$8.3 billion. On a current market value basis, the System's UAL is \$10.3 billion, due to the \$2.0 billion in investment losses from 2008 that will be averaged in over the next four years. Actual investment returns will determine how much of these deferred losses are offset in subsequent valuations.

The same effects are evident in the three KPERS groups.

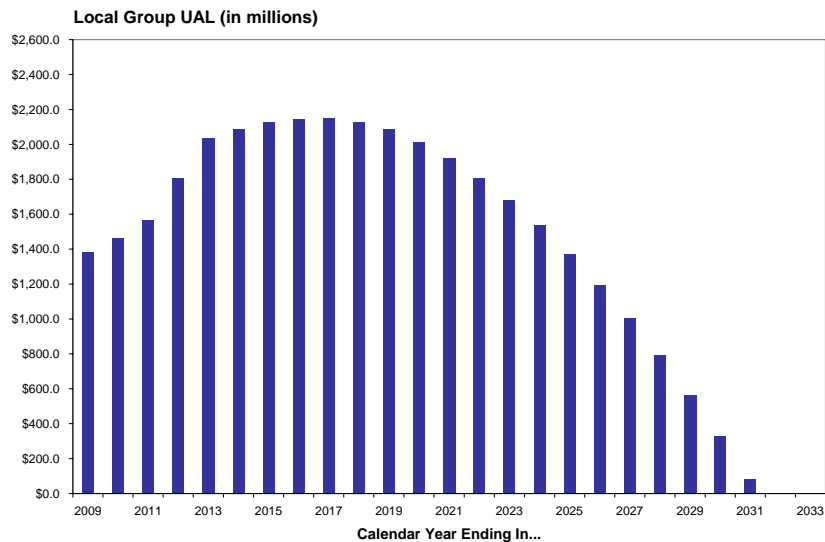
- As of the December 31, 2008, Actuarial Valuation, the State Group's UAL more than doubled from the prior year's valuation – rising from \$.45 billion to \$1.0 billion. Under the baseline projection, the State Group's UAL continues rising another 74% before peaking at \$1.743 billion in FY 2018.



- The School Group's UAL grew from \$3.86 billion at the end of 2007 to \$5.24 billion at the close of 2008. The UAL is projected to almost double by FY 2025 to \$10.282 billion.



- The Local Group's UAL was \$1.38 billion, which was an increase of 47% over the 2007 valuation. It is projected to grow another 55% to \$2.15 billion by CY 2017.



The measure of a healthy defined benefit plan is not whether there is a UAL. Nor is a UAL a debt that must be paid in full over the short term. Instead, the UAL should be evaluated based on the trend of the UAL amount and whether it can be amortized over a period consistent with accepted actuarial standards, at reasonably sustainable contribution rates. By its nature, the level percent of pay amortization method adopted in 1993 results in increases in the UAL during a significant portion of the amortization period before the UAL levels off and then declines steadily in the final years of the period. Therefore, some upward trend in the UAL at this point in the amortization period is expected. However, prolonged UAL increases of the magnitude now projected for KPERS are of concern, particularly given their impact on sustainable ARC rates and on KPERS' funded ratios.

ARC Rates. The ARC rate for each KPERS group is recalculated annually and consists of two elements. The first is the rate required to pay the normal costs, *i.e.*, the actuarial present value of benefits allocated to the current year. The normal cost component changes over time as actuarial assumptions, benefits, and plan design are modified. The second is the rate required to amortize the UAL over the remainder of the amortization period. Due to the large rise in the UAL, the December 31, 2008, Actuarial Valuation substantially increased the UAL amortization element of the ARC for each KPERS group.

Valuation	State Group		School Group*		Local Group	
	12/31/07	12/31/08	12/31/07	12/31/08	12/31/07	12/31/08
Normal Cost Component	4.13%	4.17%	4.50%	4.53%	4.14%	4.15%
Amortization of UAL and Debt Service**	3.26%	6.96%	6.80%	9.56%	4.38%	6.27%
Total ARC	7.39%	11.13%	11.30%	14.09%	8.52%	10.42%
UAL Element as a Percent of ARC	44.1%	62.5%	60.2%	67.8%	51.4%	60.2%

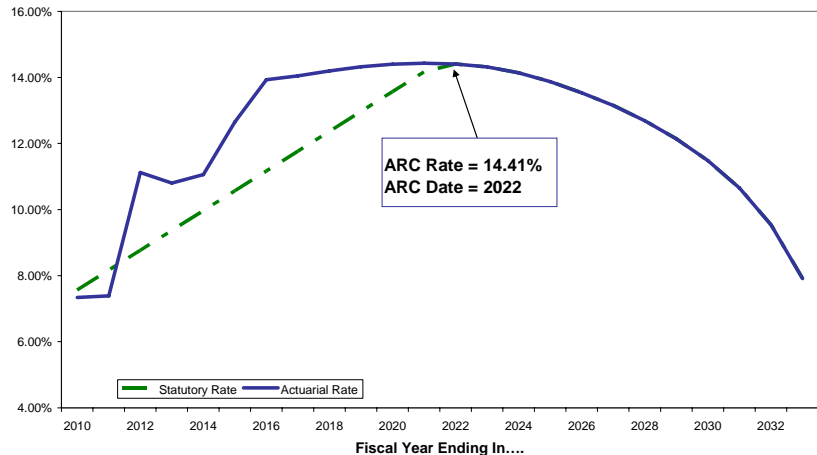
*Reflects State/School Group Rates.

**Payments on bonds issued in 2004.

As the remainder of the 2008 loss is averaged in over the next four years, the UAL component and the total ARC rate will continue to grow, except to the extent they are moderated by future investment gains. However, as a result of the statutory cap on annual employer rate increases, the statutory rate paid by employers lags the ARC rate. Until the point at which statutory rates catch up (the ARC date), that lag will contribute to the growth of both the UAL and ARC rate. ARC rates and ARC date projections for each group under the baseline scenario follow:

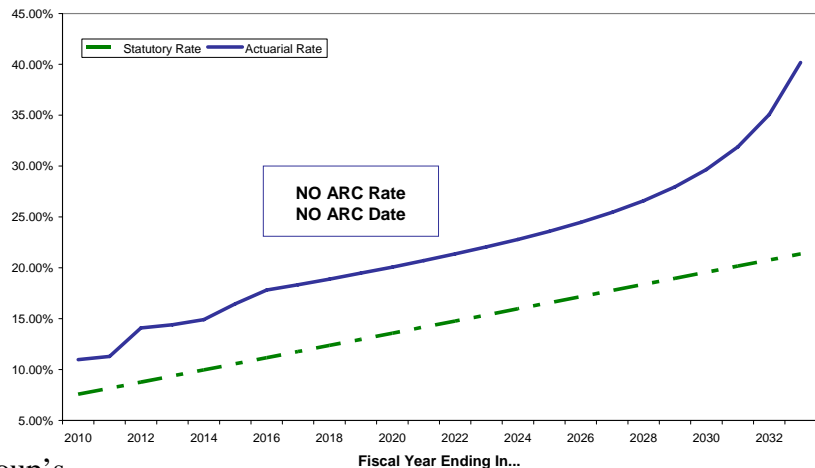
- The State Group’s projected ARC rate of 14.41% at its ARC date (FY 2022) will be nearly double the statutory state/school rate paid by state agencies in FY 2010 (7.57%).

State Group ARC Rate & Date

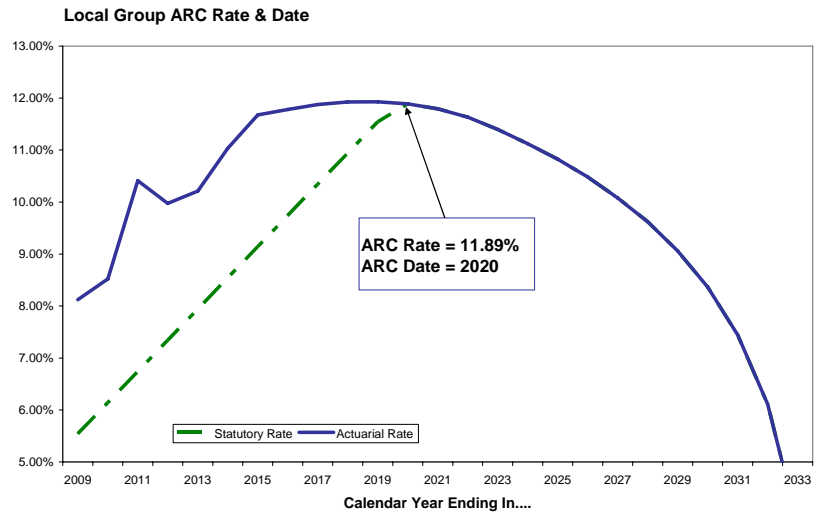


- The School Group is out of actuarial balance, which means that the statutory rate does not match the ARC rate before the end of the amortization period in FY 2033. Projected ARC rates rise to potentially unsustainable levels, with State/School ARC rates reaching 40.18% by FY 2033. Although the 21.37% statutory rate for FY 2033 is almost three times as high as the FY 2010 statutory rate, it is still only about half of the projected ARC rate for that year. Even with substantial increases in funding, the School Group’s UAL is not fully amortized by FY 2033.

School Group ARC Rate & Date



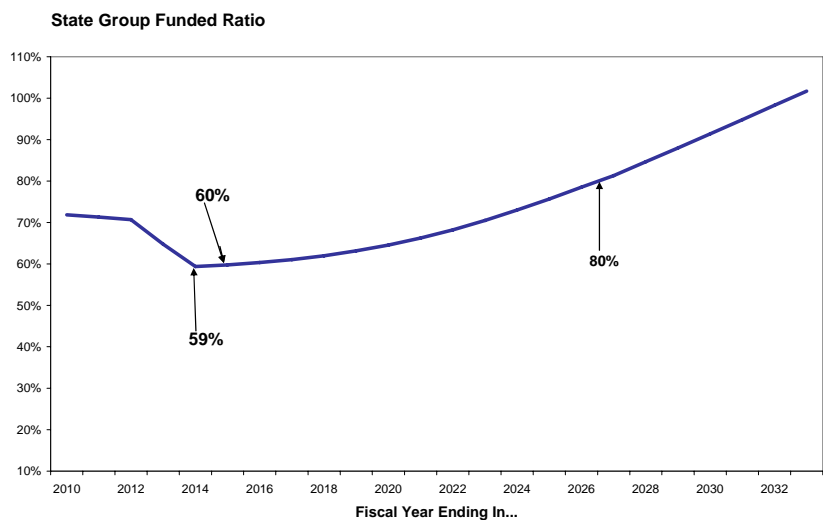
- The projected Local Group ARC rate of 11.89% in CY 2020 (its ARC date) is nearly double the statutory rate paid by local employers in CY 2010 (6.14%).



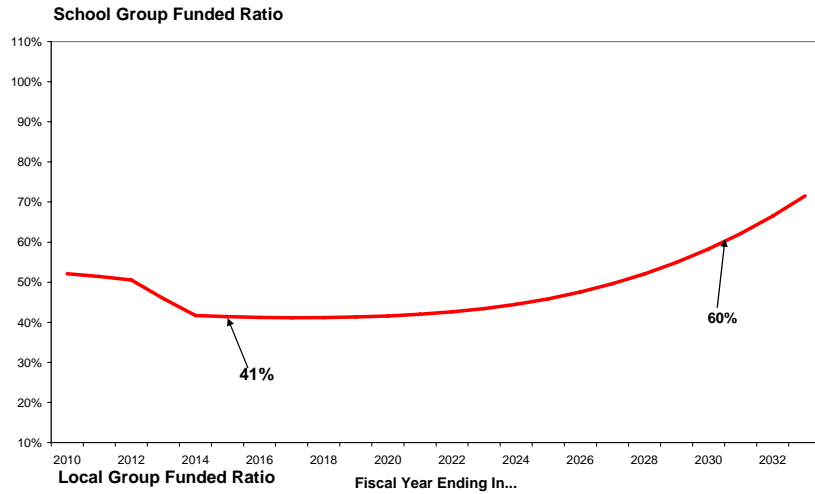
Funded Ratio. The funded ratio represents the proportion of actuarial liability currently funded by the actuarial value of a plan’s assets. This key measure illustrates the depth and severity of KPERS’ long-term funding problem, and the potential consequences of its protracted vulnerability to future market downturns. Funded ratio benchmarks applicable to private sector defined benefit plans under federal law also illustrate the far-reaching actions necessary to address such large funding deficits.

For public plans, a funded ratio of 80% and rising is considered to indicate adequate funding. Due to previous steps taken to improve KPERS’ long-term funding, the State Group met that criterion for several years prior to the 2008 financial crisis, reaching a funded ratio of 86.8% as of the December 31, 2007, Actuarial Valuation. The School Group’s more severe underfunding was reflected in much lower funded ratios of 61% to 63% in the last four valuations. The Local Group was similar, with funded ratios rising slightly from 67% to 70% from 2004 through 2007. However, the immediate and dramatic impact of investment losses on a vulnerable plan is illustrated by the funded ratio for each KPERS group as of the December 31, 2008, Actuarial Valuation and by projections of their future funded ratios using the baseline scenario:

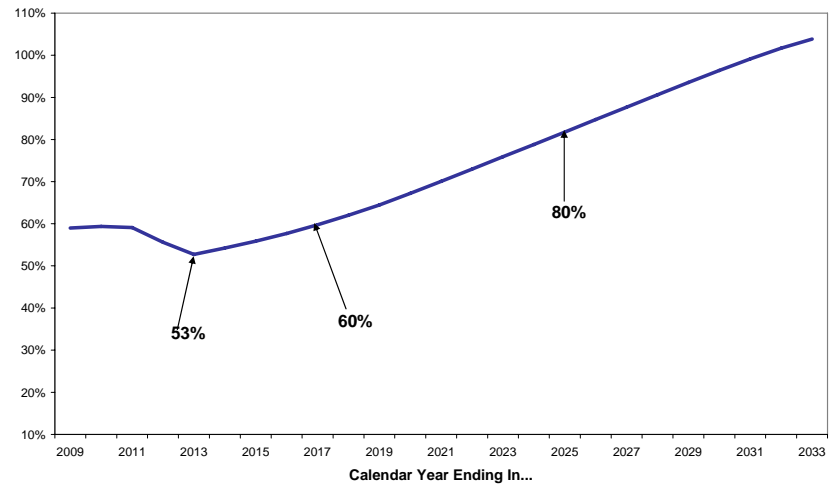
- The State’s funded ratio dropped in the December 31, 2008, Actuarial Valuation to 72% and is projected to reach a low of 59% in FY 2014. It is projected to remain near 60% for an additional five years, only reaching 80% in FY 2027.



- The School Group’s funded ratio immediately fell to 52%. It is projected to reach 41% in FY 2015 and remain at 41 to 43% for 9 years. The funded ratio is not projected to reach 60% until FY 2031 and only reaches 80% in FY 2035.



- The Local Group’s 2008 funded ratio dropped to 59%. It is projected to continue falling to 53% by CY 2013, regaining 60% by CY 2017. The funded ratio is not projected to reach 80% until CY 2025.



With two or more decades of funded ratios at levels that are three-quarters to one half of the 80% benchmark for a healthy plan, it is almost inevitable that KPERS will experience one or more periods of investment losses before reaching the 80% funded ratio. If another downturn occurs before significant recovery in the funded ratio occurs, KPERS’ viability over the short term, as well as the long term, could be in jeopardy – particularly with respect to the decade during which the School Group is projected to be funded below 45%.

At very low funding levels such as these, preservation of sufficient cash flow to fund current benefits may become paramount, particularly for a maturing plan such as KPERS with an increasing proportion of its members receiving benefits. As a plan is forced to hold more of its assets in cash or very short-term investments, the potential range of the plan’s investment strategy may be constrained and, as a result, the plan’s ability to achieve its assumed investment return may be increasingly impaired.

As a public plan, KPERS is not subject to ERISA or some of the other federal laws covering private sector defined benefit plans. However, the depth of KPERS’ underfunding is illustrated by the extent of the responses required of private sector plans at funded ratio benchmarks well above KPERS’ projected funded ratios. While the actuarial methodology used in the calculation of the funded ratio is different in public versus private plans, the funding requirements in private plans make it clear that the Federal Government considers the funded ratio as a key measurement of a pension system’s financial health and viability.

- Plans that are less than **80% funded** generally are considered to be “at risk plans,” and are prohibited from making plan amendments that would increase benefits, unless they qualify for one of a limited number of exceptions.
- Plans that are less than **60% funded** must freeze all future benefit accruals until they satisfy the 60% funding level or provide additional security. These plans are also subject to restrictions on benefit payments.

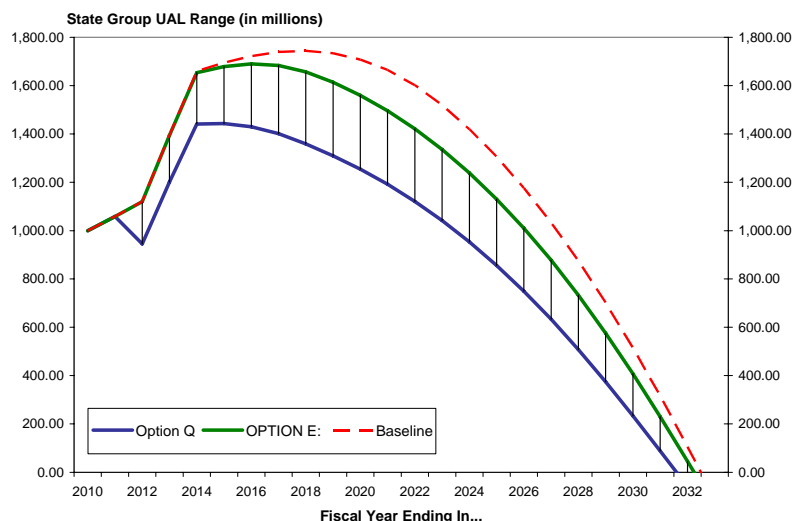
By all of these measures, the KPERS plan and, in particular, the School Group are “at risk” and potentially face further deterioration, which at some point could threaten benefit payments. These benchmarks also reinforce the need for substantive measures to lessen that potential.

Options to Address the Funding Shortfall

The Joint Committee has received projections related to a number of basic funding solution options and multiple variations that involve combinations of raising the statutory cap on employer rate increases, increases in employee contribution rates, changes to the benefit formula multiplier, issuing bonds, and creating a new, mandatory defined contribution plan for future members.* (See Appendix 8 for a listing of the options, and Appendices 4 and 5 for more detailed information about each one.) The range of options presented to the Joint Committee illustrates the various trade-offs and limitations that will need to be weighed, as seen in the following summary of their projected impact on the three measures of KPERS’ health – UAL, ARC rates and dates, and funded ratios.

Unfunded Actuarial Liability. As the remaining investment losses from 2008 are smoothed in over the next four years, the UAL is expected to rise more steeply under all options. It is projected to continue to rise for up to eight more years. However, all options provided to the Committee reduce the projected maximum UAL.

- The projected reduction in the State Group’s maximum UAL ranges from 3% (Option E[†]) to 17% (Option Q[‡]).

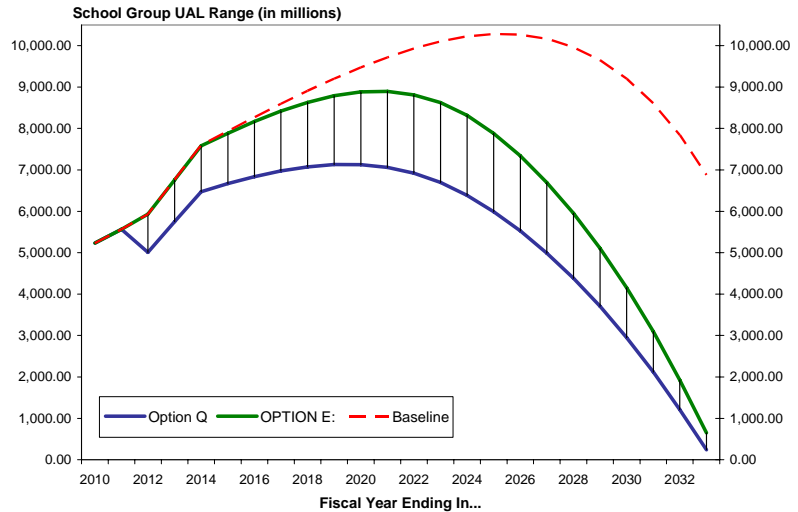


* Projections were presented to the Joint Committee for the State and School Groups. Projections for the Local Group have not yet been developed, but are expected to fall within similar ranges as the other two groups. All projections assumed an 8% investment return.

[†] Option E: Phase in a 1% cap on employer contribution rate increases. No employee rate increases.

[‡] Option Q: \$1.055 billion bond issue with a 2% increase in member contributions phased in over four years.

- The projected reduction in the School Group's maximum UAL ranges from 14% (Option E) to 31% (Option Q).

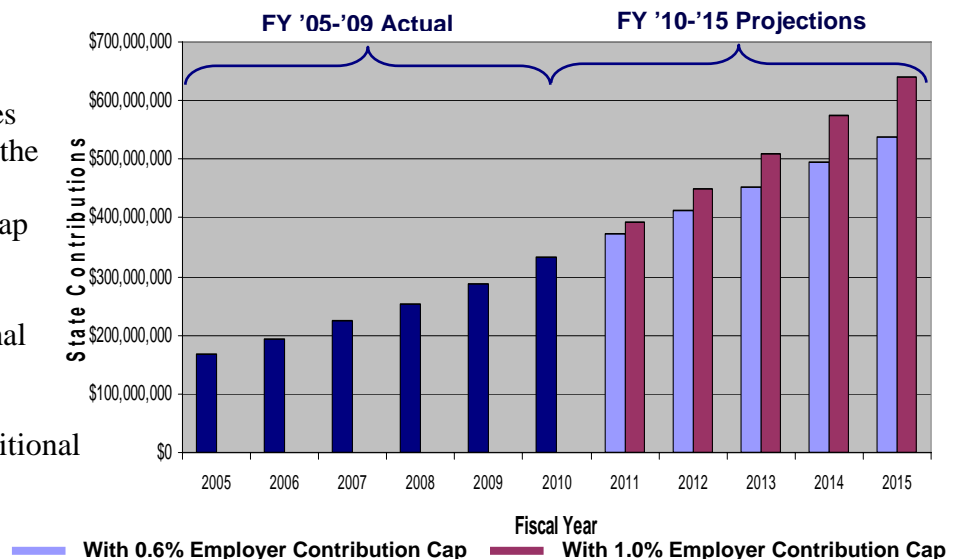


ARC Rates and Dates. Projected ARC rates will rise over a period of years under all options presented to the Committee – for 6 to 8 years for the State Group and 7 to 21 years for the School Group.

- The State Group's maximum ARC rate ranges from 11.26% to 14.00%.
- While all options bring the School Group into actuarial balance, many are at very high ARC rates after 10 to 15 years of annual increases.
- The School Group's maximum ARC rate varies from 15.24% to 20.68%.
- For both Groups, Option Q results in the lowest maximum ARC rate and Option E the highest.

Substantial increases in state funding for KPERS retirement benefits will occur even with the current .6% per year statutory cap on employer rate increases. Because the employer contribution rate is a percent of payroll, contributions automatically increase as the payroll base grows. State funding in FY 2011 is projected to rise by \$39.35 million over FY 2010 to \$373.57 million. From FY 2011 to FY 2015, State funding is expected to increase by 44% to \$538.96 million.

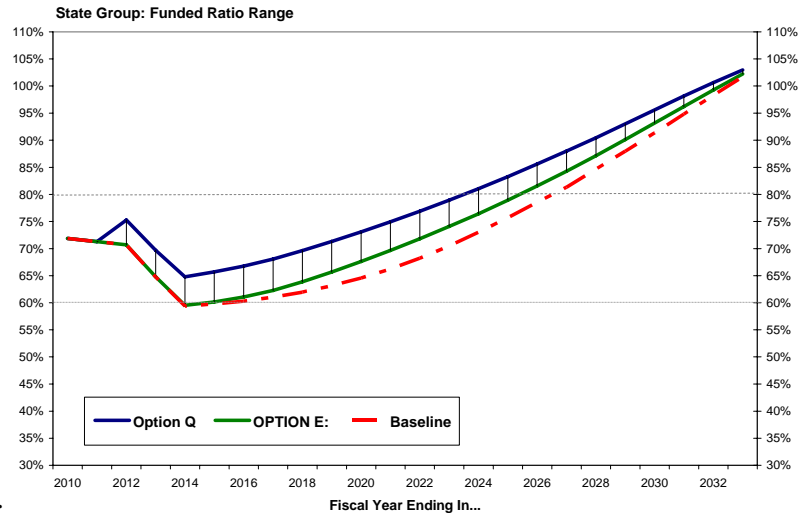
Therefore, raising the cap on employer contribution increases would substantially accelerate the pace of growth in State contributions. Under a 1.0% cap on employer contribution rate increases, State funding in FY 2011 would rise by an additional \$18.29 million to \$391.86 million. By FY 2015, State funding would increase an additional \$101.99 to \$640.95 million.



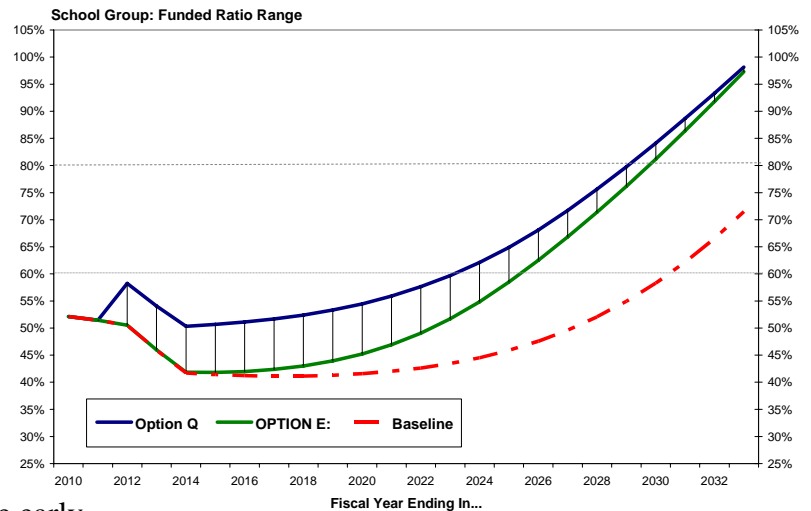
Funded Ratios. Increases in employer contributions, while necessary, will not substantially affect the funded ratio for a number of years until compounding of investment earnings has the opportunity to grow the new assets relative to liabilities. Under all options presented to the Committee, projected funded ratios continue falling through FY 2014. The State Group’s lowest funded ratios are clustered around 60% beginning in FY 2014, while the School Group’s low point primarily falls between 41% to 45%.

Under the options presented to the Committee, both the State Group and School Group are projected to remain below 80% funded for much of the remainder of the amortization period ending in FY 2033.

- The State Group’s funded ratio is projected to hover around 60% at its low point in FY 2014.
- The State Group is projected to reach 80% funded around FY 2025.
- The School Group is projected to reach 80% funded around FY 2028 to FY 2030.



- Under all options provided to the Committee, the School Group’s funded ratio is projected to stay below 60% for 10 to 15 years, and it remains below 50% for 7 to 9 years under many of the options. As a result, the School Group will be particularly vulnerable to further market downturns that result in investment performance below 8%.



- A major injection of money in the early years (such as through the pension obligation bonds in Option Q) or large, sustained investment returns in the near term would improve funded ratios somewhat faster than increases in employer and/or employee contributions alone.

The timing, size and combination of additional funding sources – higher caps on employer rate increases, employee rate increases, or pension obligation bonds – affect all of the measures of the System’s long-term funding status. Taken as a group, these projections illustrate the difficulties associated with developing viable options that produce substantial progress in the short to mid-

term. KPERS' funding status will remain tenuous for an extended period of time with any of the options, due to their modest short-term impact and the critical problems that are likely to result from any future downturn in the next 10 to 15 years. Nonetheless, providing additional funding quickly and in larger amounts does appear to result in the greatest reductions in the projected ARC rates and UAL; a smaller decline in projected funded ratios through FY 2014; and lower total employer contributions through the end of the amortization period.

KPERS' has faced challenges with respect to long-term funding for a number of years. Due to a number of actions taken by the Legislature beginning in the 2003 Session, measures of KPERS' funding status began to improve through 2007. However, the investment losses of 2008 had a substantial adverse impact on KPERS' long-term funding outlook and reversed its forward progress. KPERS' ability to withstand future economic downturns has been compromised. All basic measures of KPERS' funding status clearly reflect this deterioration and indicate that the Retirement System is at risk over the long-term. New steps to reduce the funding shortfall – including options for additional funding or plan design changes – are essential, but are likely to require a number of years to effect positive changes in measures of KPERS' health. As a result, KPERS will remain vulnerable to future market downturns for an extended period of time.

Therefore, efforts to address the long-term funding shortfall will need to be part of an ongoing process for a number of years. Legislative action is needed to begin that process, with additional employer contributions as a basic element of any funding option. Further steps, such as employee contribution increases and plan design changes also need to be considered in order to begin establishing a more sound foundation for KPERS' long-term financial health.

