Kansas Public Employees Retirement System

KPERS Long-Term Funding

Joint Committee on Pensions, Investments and Benefits ▪ September 2, 2009

Defined Benefit Basics

Kansas Legislature enacts KPERS' retirement plan design in State statutes, providing for:

- membership eligibility
- employee and employer contributions
- service credit
- vesting
- benefit formula
- retirement eligibility

Defined Benefit Formula

- Final Average Salary X Years of Service X Statutory Multiplier = Annual Benefit

Example: $40,000 x 30 years x 1.75% = $21,000

Retirement Funding

- Contributions + Investments - Expenses = Benefits

Assumed actuarial rate = 8%

Employees = Statutory rate of 4% (Tier I) or 6% (Tier II)

Employers = Changes annually based on actuarial calculations

FY 2009 Retirement Funding

Contributions* (in millions)		Investments (in millions)		Expenses (in millions)		Benefits (in millions)	
Employer	$449.24	Net Change in Fair Value	$(2,828.01)	Investment	$(23.38)	Pension Benefit	$(999.94)
Employee	$271.60	Dividends & Interest	$283.02	Administrative	$(11.54)	Death Benefits	$(9.24)
						Withdrawals	$(43.93)
Total	$720.84	**Total**	(2,544.99)	**Total**	$(34.92)	**Total**	$(1,053.11)

*Retirement benefit contributions only; excludes employer contributions for death and disability Benefits.

Retirement Funding Background

- In 2001 and 2002, actuarial projections indicated the KPERS retirement plan was not in actuarial balance.
- Following the 2001 actuarial valuation results, KPERS worked with the Legislature to develop a comprehensive, long-term funding plan to address the shortfall and bring the Plan into actuarial balance.
  - 2003 legislation raised statutory caps on employer contribution rate increases from 0.2% annually to 0.4% in FY 2006; 0.5% in FY 2007; and 0.6% in FY 2008 and subsequent years.
  - State issued $500 million in pension obligation bonds in 2004.
  - 2007 legislation established a new plan design for employees hired on or after July 1, 2009, which increased retirement eligibility ages and employee contributions.
- These actions, along with strong investment returns in the 2004-2007 period, significantly improved the projected funding status of the system.

Key 2008 Valuation Results

The unprecedented investment market declines in 2008 have had a substantial negative impact on the funding status of the System, reversing forward progress on long-term funding.

- The 12/31/08 actuarial valuation report shows:
  - A 12% decline in the System's funded ratio to 59%.
  - A $2.7 billion increase in the unfunded actuarial liability (UAL) to $8.3 billion. .
- The actuarial value of assets is now significantly greater than their market value.
  - There are about $2 billion in deferred losses to be averaged in over the next four years.
  - Actual investment returns will determine how much of the deferred losses are offset in subsequent valuations.
  - On a current market value basis, the funded ratio is 49% and the UAL is $10.3 billion.
- The School Group is out of actuarial balance. The actuarially required contribution (ARC) rates for State and local groups are projected to nearly double their current contribution rates.
- Given the current funding structure, the System does not have enough assets to provide all the benefits already earned by members and to pay off the UAL in the adopted amortization period ending in 2033.

Impact on Funded Status by Group

Even assuming an 8% investment return over the next five years:

- The funded ratio of each group will continue to fall.
- Each group's UAL and ARC rate will rise significantly.

	12/31/2007 Valuation		12/31/2008 Valuation	
	Unfunded Actuarial Liability (millions)	**Funded Ratio**	**Unfunded Actuarial Liability (millions)**	**Funded Ratio**
Kansas Public Employees Retirement System (KPERS)				
• *State Group*	$451	87%	$1,002	72%
• *School Group*	3,862	63%	5,239	52%
• *Local Group*	941	70%	1,385	59%
Kansas Police and Firemen's Retirement System (KP&F)	284	86%	619	71%
Kansas Retirement System for Judges	15	89%	36	75%
Retirement System Totals	**$5,552**	**71%**	**$8,279**	**59%**

Employer Contribution Rates

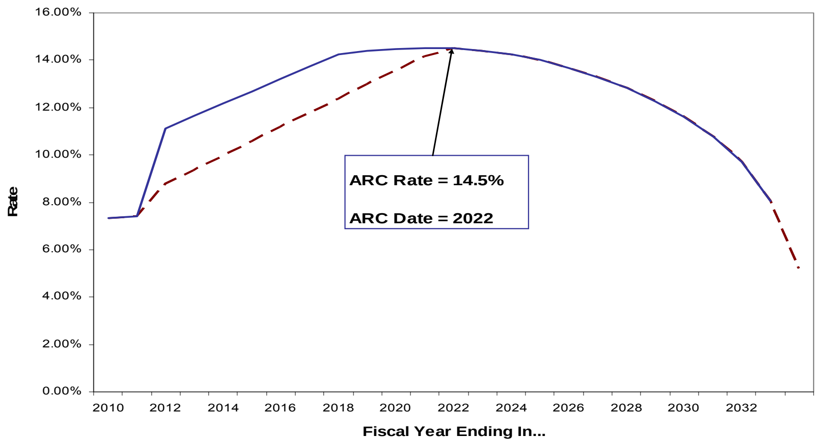
- The ARC rate increased for all groups, and the year in which the ARC rate is reached (ARC date) increased for KPERS groups.
- Some groups have not reached their ARC rate, and the maximum employer rate increase for KPERS remains capped by statute at 0.6% per year.

	Actuarial		Statutory
System	12/31/07	12/31/08	12/31/08
State	7.39%	11.13%	8.77%
School	12.48%	14.96%	8.77%
Local	8.52%	10.42%	6.74%
KP&F	12.86%	17.88%	17.88%
Judges	19.49%	26.38%	26.38%

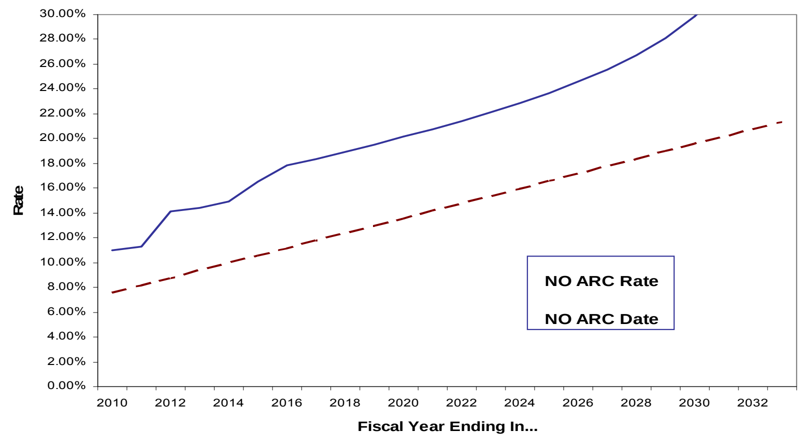
Note: The rates shown above will be effective for FY 2012 (State and School Groups, State KP&F, and Judges) and CY 2011 (Local Group and Local KP&F). The chart assumes the current 0.6% cap on KPERS employer rate increases remains in place.

ARC Projections: Current Rate Increase Cap

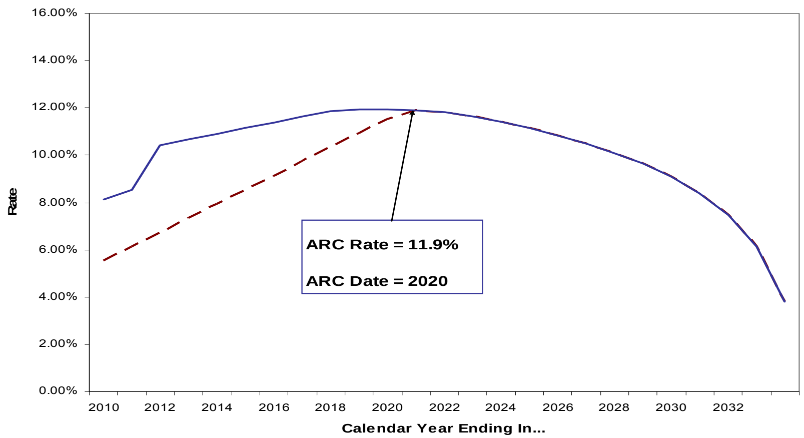
State Group with Current Cap



School Group with Current Cap



Local Group with Current Cap



Projections based on:

- ***Level 8% annual return***
- ***No cap increase***

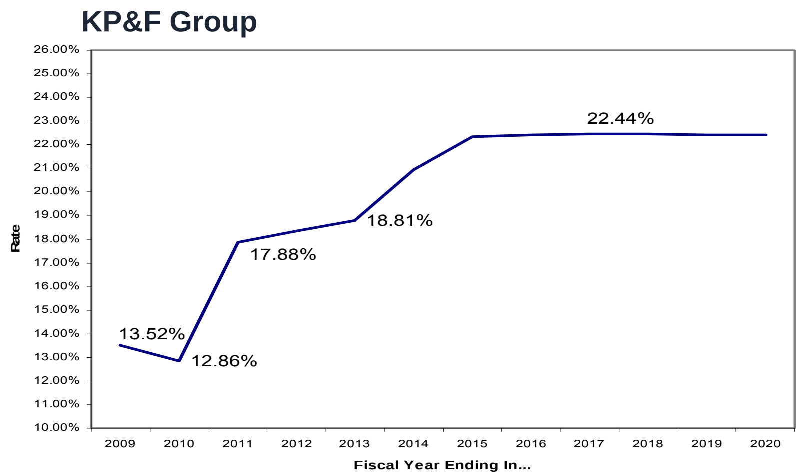
	FY 2010 Rate	ARC Rate	ARC Date
State	7.57%*	14.50%	2022
School	7.57%*	N/A	N/A
Local	5.54%	11.90%	2020

Actuarial Employer Rates — — — Statutory Employer Rates Based on Preliminary Estimates. * State/School Combined Rate

KP&F and Judges Employer Contribution Rates

- There is no statutory cap on increases to KP&F or Judges employer contribution rates. Therefore, the contribution rate is adjusted each year to the ARC rate.
- The effect of market fluctuations is smoothed by spreading market value gains/losses evenly over five years.
- Due to recent investment losses, the ARC rate for employer contributions is expected to significantly increase over a five-year period while the remaining investment losses are averaged in.
- The 2008 losses will be reflected in employer contribution rates beginning in CY 2011 for local KP&F employers and FY 2012 for the Judges System.
    - The KP&F employer contribution rate will increase by 5.02% to 17.88%.
    - The Judges employer contribution rate will increase by 6.89% to 26.38%.
    - Additional increases are projected based on an 8% annual return in future years.

Projected KP&F and Judges Rates

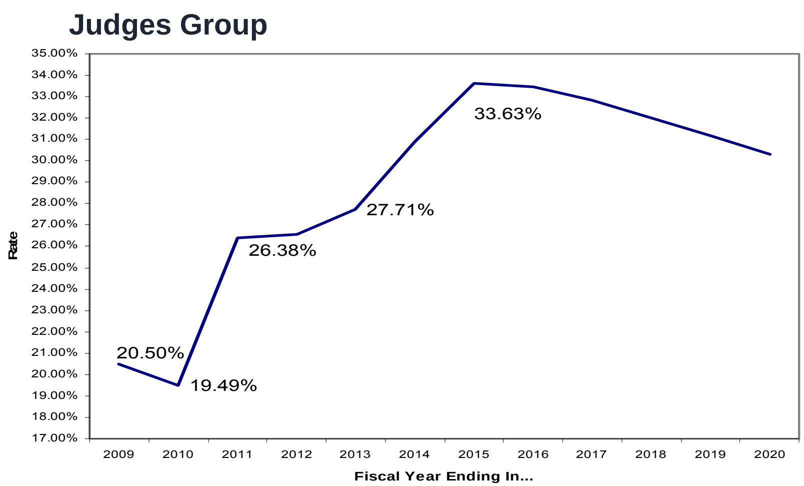


Projections based on:

- ***Level 8% annual return***

CY 2009	13.52%
CY 2010*	12.86%
CY 2011	17.88%

*The rate decreases in CY 2010 due to favorable investment experience in 2004-2007.



Projections based on:

- ***Level 8% annual return***

FY 2010	20.50%
FY 2011*	19.49%
FY 2012	26.38%

*The rate decreases in FY 2011 due to favorable investment experience in 2004-2007.

Actuarial Employer Rates

Based on Preliminary Estimates.

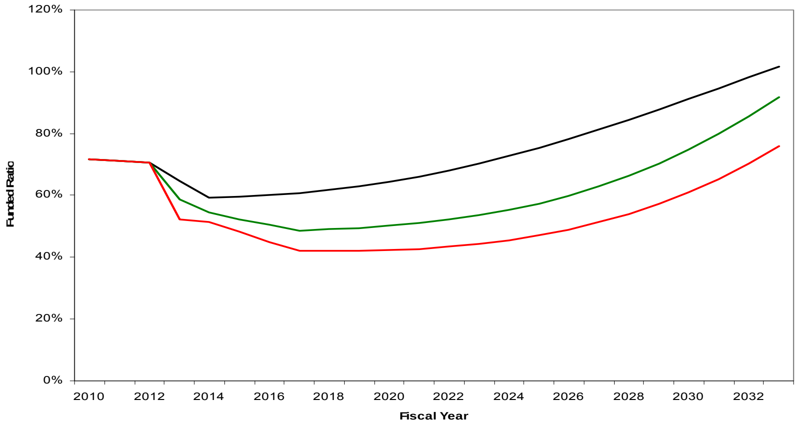
KPERS Future Funding Status

The investment losses stemming from the extraordinary market declines in 2008 have adversely affected KPERS' future funded status and impaired its ability to weather additional market volatility.

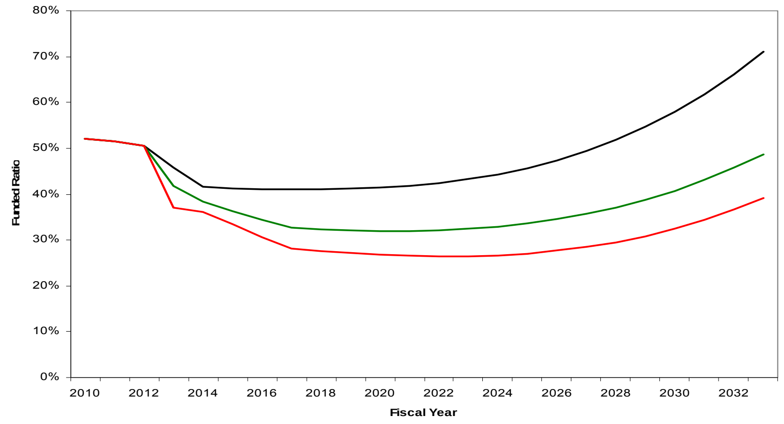
- Even with a consistent 8% return during the remainder of the amortization period, KPERS' funded status will drop to new, prolonged lows.
- These funding levels will leave KPERS highly vulnerable to further market volatility.
  - Charts on the following page show the adverse impact of one more year of investment losses, even with an 8% return in all other years.
    - Scenario 1: -10% return in 2011.
    - Scenario 2: -20% return in 2011.
- With KPERS' funding levels at such low levels for extended periods of time:
  - KPERS' long-term solvency is in jeopardy.
  - Investment returns alone cannot fix KPERS' funding shortfall or return KPERS to a more stable funding status.
- For these reasons, a thorough analysis of KPERS' long-term funding is essential.

Impact of Future Investment Volatility

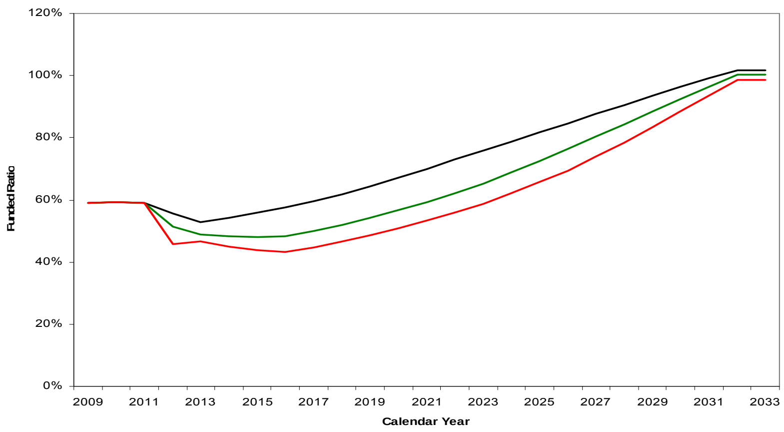
Projected State Funded Ratios



Projected School Funded Ratios



Projected Local Funded Ratios



- ***Projections based on 12/31/08 valuation***
- ***No cap increase***

Baseline: Assumes 8% return in all years

Scenario 1: Assumes -10% return in 2011 and 8% in all other years

Scenario 2: Assumes -20% return in 2011 and 8% in all other years

Baseline — Scenario 1 — Scenario 2

A Comprehensive Funding Solution

Over the next few months, KPERS will complete a new, comprehensive funding analysis on how to restore the System to financial health.

Since contributions and investment returns minus expenses must equal benefits, all of these elements will be considered.

The comprehensive funding analysis will include the following steps.

- Identify factors for evaluating a balanced funding solution. Such considerations may include whether the funding solution:
  - Is consistent with legal limitations and actuarial standards.
  - Provides a cooperative, comprehensive solution that is sustainable.
  - Establishes shared responsibility among stakeholders for the funding solution.
  - Provides more stability in employer rates.
  - Supports retirement benefit adequacy.
- Work with actuary to understand and project critical turning points in the System's funding status.
  - Model the System's short to mid-term cash flow and solvency.
  - Model the System's longer-term sustainability.

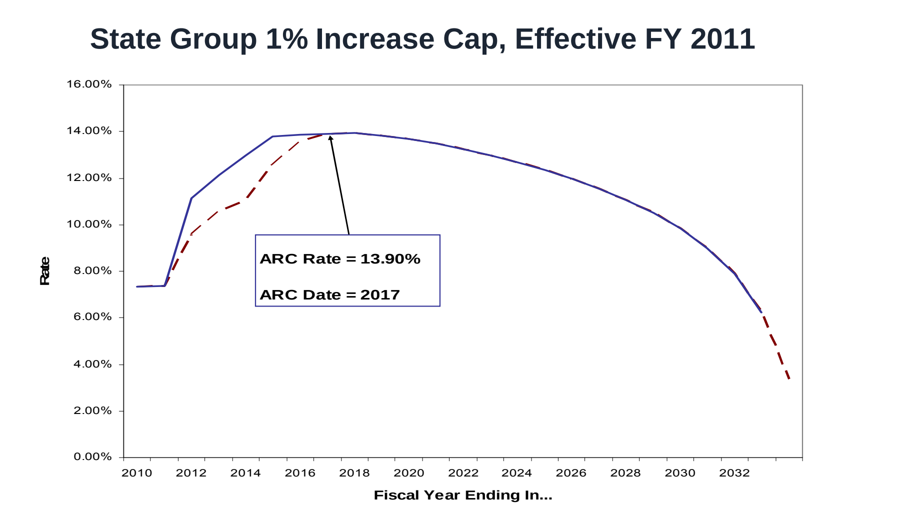
A Comprehensive Funding Solution (Continued)

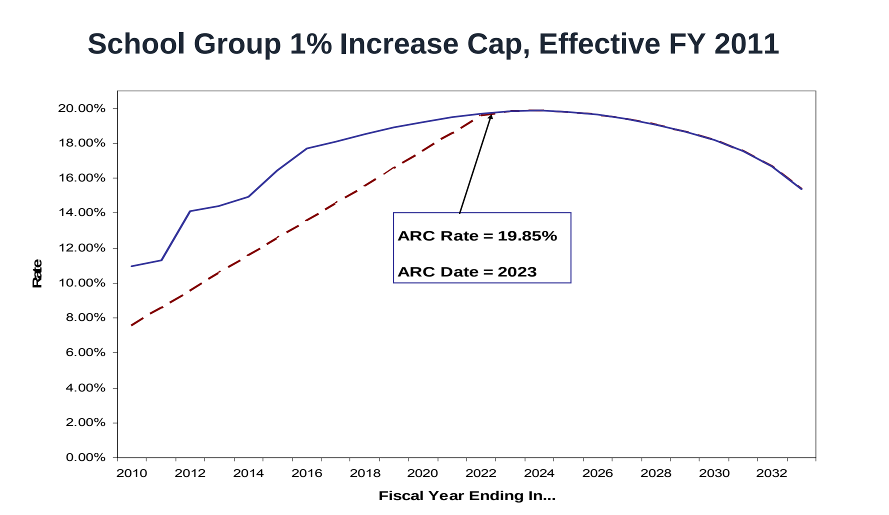
- Analyze legal limitations associated with plan changes affecting employee contribution rates and benefits.
- Use model to project the effect of funding solution options. Options may include:
    - Employer rate increases.
    - Future benefit changes and contribution increases for employees.
        - Member contribution rates
        - Retirement eligibility criteria
        - Participating service multiplier
    - Actuarial changes, including the smoothing corridor, smoothing period, and amortization period. Options will be considered for mitigating steep increases in KP&F and Judges employer contribution rates due to application of the smoothing corridor in the 12/31/08 valuation.
- As an initial step in analyzing funding solution options, KPERS has begun preliminary modeling of employer rate increases.

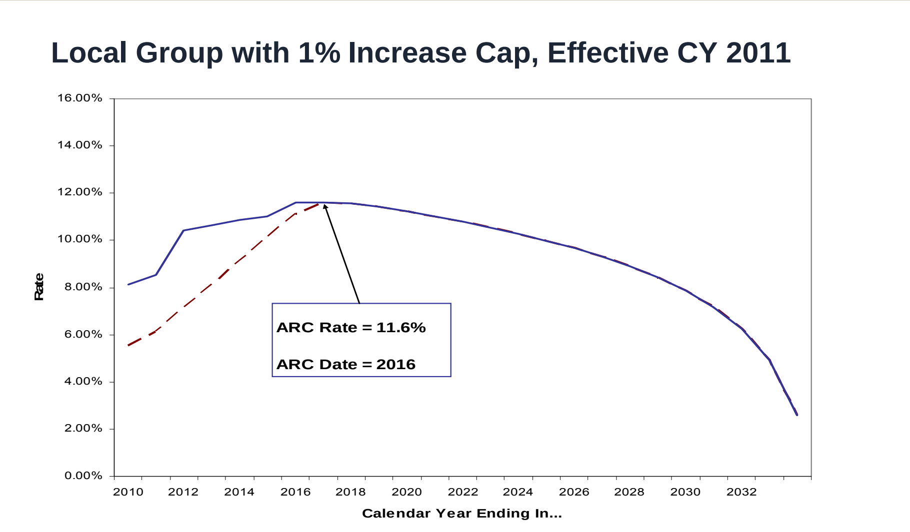
Future Employer Contribution Rate Changes

- Options for increasing KPERS' statutory employer contribution cap in future years need to be considered as one step to bring the System back into actuarial balance over the long term.
- The Joint Committee on Pensions, Investments and Benefits considered long-term funding issues during the 2008 Interim. The Committee recommended that the Legislature raise the cap on employer contribution rate increases from 0.6% annually to at least 1.0% annually, effective no later than FY 2012.
- 2009 HB 2400, which was passed by House Select Committee on KPERS, would raise the maximum increase in employer contributions for the State and School groups to 1.0% per year, effective FY 2011.
- The following pages show the impact of a 1.0% cap and a 2.0% cap on:
  - State, School and Local ARC rates and dates.
  - State and School contribution amounts.

ARC Projections: 1% Rate Increase Cap







Projections based on:

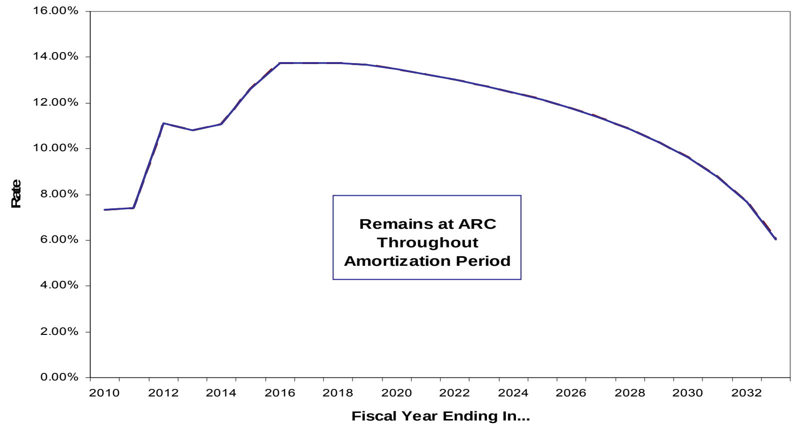
- ***Level 8% annual return***
- ***1% cap increase***

	FY 2010 Rate	ARC Rate	ARC Date
State	7.57%*	13.90%	2017
School	7.57%*	19.85%	2023
Local	5.54%	11.60%	2016

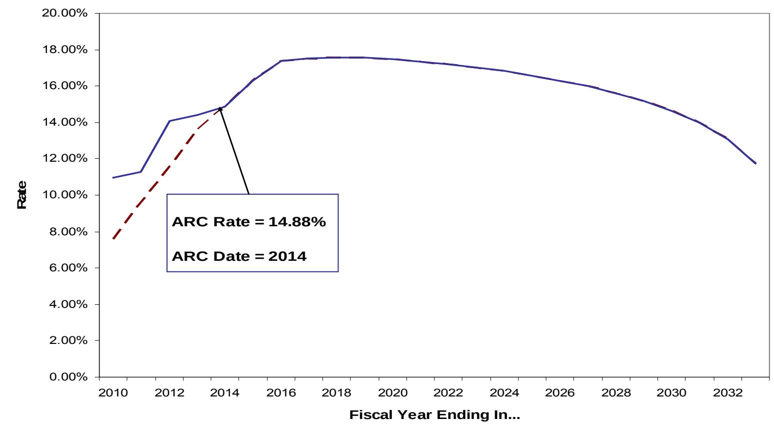
Actuarial Employer Rates — Statutory Employer Rates — Based on Preliminary Estimates. * State/School Combined Rate

ARC Projections: 2% Rate Increase Cap

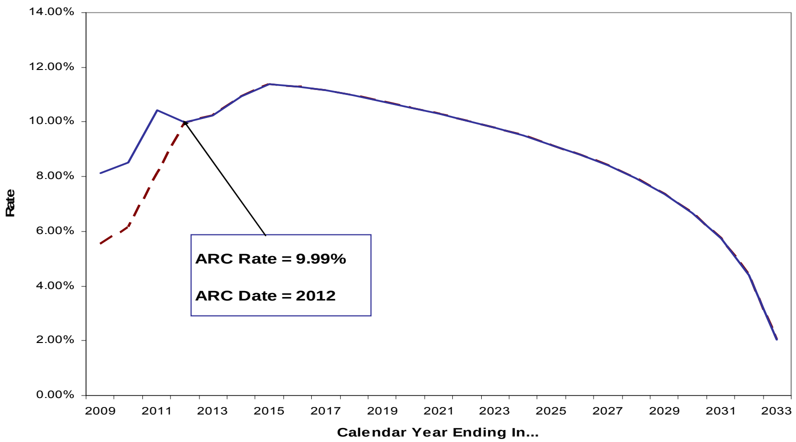
State Group 2% Increase Cap, Effective FY 2011



School Group 2% Increase Cap, Effective FY 2011



Local Group with 2% Increase Cap, Effective CY 2011



Projections based on:

- ***Level 8% annual return***
- ***2% cap increase***

	FY 2010 Rate	ARC Rate	ARC Date
State	7.57%*	N/A	N/A
School	7.57%*	14.88%	2014
Local	5.54%	9.99%	2012

Actuarial Employer Rates — Statutory Employer Rates — Based on Preliminary Estimates. * State/School Combined Rate

Effects of Raising Contribution Cap

Estimated Effect of Raising the State and School Employer Contribution Cap to 1% in FY 2011 (in millions)

	0.6% Cap	1% Cap	Additional Contributions
FY 2011 Increase in Employer Contributions	$39.35	$57.64	$18.29
FY 2011 Total Employer Contributions	$373.57	$391.86	$18.29
FY 2015 Increase in Employer Contributions	$44.80	$67.48	$22.68
FY 2015 Total Employer Contributions	$538.96	$640.95	$101.99

Estimated Effect of Raising the State and School Employer Contribution Cap to 2% in FY 2011 (in millions)

	0.6% Cap	2% Cap	Additional Contributions
FY 2011 Increase in Employer Contributions	$39.35	$103.37	$64.02
FY 2011 Total Employer Contributions	$373.57	$437.59	$64.02
FY 2015 Increase in Employer Contributions	$44.80	$92.88	$48.08
FY 2015 Total Employer Contributions	$538.96	$830.61	$291.65

Conclusions

KPERS will build on this preliminary modeling by:

- Identifying factors for evaluating funding solution options
- Modeling funding solution options and analyzing their legal implications
- Projecting critical turning points in KPERS' funding status.

As this analysis progresses, it will be shared with the Board and Joint Committee to obtain feedback regarding potential funding solution options.

- Employer rate increases
- Future benefit changes and contribution increases for employees
- Actuarial and other changes

Based on the analysis and feedback, a package of options will be developed for consideration by the Board and presentation to the Legislature and the Governor later this fall.