House Pensions & Benefits
Date: 1/28/13
Attachment # 4

KPERS OVERVIEW

ACTUARIAL VALUATION

LONG-TERM FUNDING HISTORY

2012 HB 2333

All in a Day's Work

Fiscal year 2012 by the numbers

- 972,000 retirement benefit payments totaling over $1.2 billion
- $9.4 million in active member death benefits
- $24 million in benefits to 3,000 disabled employees
- 6,464 new retirees
- 23,000 member enrollments and transfers
- 41,500 beneficiary designations processed
- 10,000 members withdrew their contributions ($50 million)
- 92,000 incoming calls (average wait time 11 seconds)
- 13,000 e-mail requests

What is an Actuarial Valuation?

- It is a “snapshot” measurement at a point in time (the valuation date), for the purpose of –
  - Calculating a best estimate of ultimate costs
    - Project future benefits using actuarial assumptions, such as mortality rates, investment returns, salary increase rates, and retirement rates
    - Calculate present value of future benefits (what they are worth in today’s dollars)
    - Apply an actuarial cost method to allocate those costs to periods of service
  - Measuring actuarial assets and liabilities
    - Actuarial assets do not equal the market value of assets
    - An asset valuation method is used to “smooth” the effect of market valuations and produce more stability in rates.
    - The difference between the assumed rate of return (8%) and actual returns is spread over five years – “smoothed” or recognized evenly over that period.

What is an Actuarial Valuation?

- Calculating employer contribution rates
  - The 12/31/2011 valuation provides rates that first apply in FY 2015 (July 1, 2014) for State and school employers, and in CY 2014 for local employers
- Preparing disclosures for financial reporting
- Providing a baseline for legislative changes

Long-Term Funding Measurements

- **Actuarially required contribution rate (ARC)** – the contribution rate determined by the valuation to prefund benefits if all the actuarial assumptions are met.
  - KPERS contributions are subject to statutory caps on the annual increase in rates.
  - As a result, the State-School Group and Local Group statutory rates are less than the ARC rate.
  - Employers pay the ARC rate for the KP&F and Judges plans.
- **Unfunded actuarial liability (UAL)** – the difference between the actuarial accrued liability and the actuarial valuation of assets
  - In short, the UAL indicates the extent to which the plan's actuarial liability is not prefunded through accumulated assets.
  - The existence of a UAL is not in itself bad, any more than a mortgage on a house is bad.
  - UAL does not represent a debt that is payable today.
  - What is important is ability to amortize the UAL and trends in its growth.
- **Funded ratio** – actuarial assets divided by the actuarial liability
  - There is no universally accepted standard for what constitutes a "healthy" funded ratio for a public pension system.
  - There is consensus that a funded ratio below 60% is a cause for concern and remedial action.

Key 2011 Valuation Results

- The 12/31/11 actuarial valuation report incorporated a portion of the HB 2333 changes and some relatively minor changes in actuarial assumptions.
  - No Tier 3 members in this valuation since the cash balance plan doesn't take effect until 2015.
  - Therefore, the cash balance plan has no cost impact on this valuation.
  - Changes for Tier 1 and 2 members and the higher employer contribution increase caps had an impact on this valuation.
- The **UAL** for the System as a whole increased $964 million –
  - Asset loss of $852 million and liability gain of $192 million
    - Due to smoothing, the asset loss still largely consists of 2008 losses.
    - $902 million in deferred losses has yet to be recognized, except to the extent offset by favorable returns above 8%.
    - As a result, the actuarial value of assets remains above the market value.
      - The System's unfunded liability on a market value basis is $10.1 billion.
- The System's **funded ratio** declined from 62.2% to 59.2%.

Key 12/31/11 Valuation Measurements

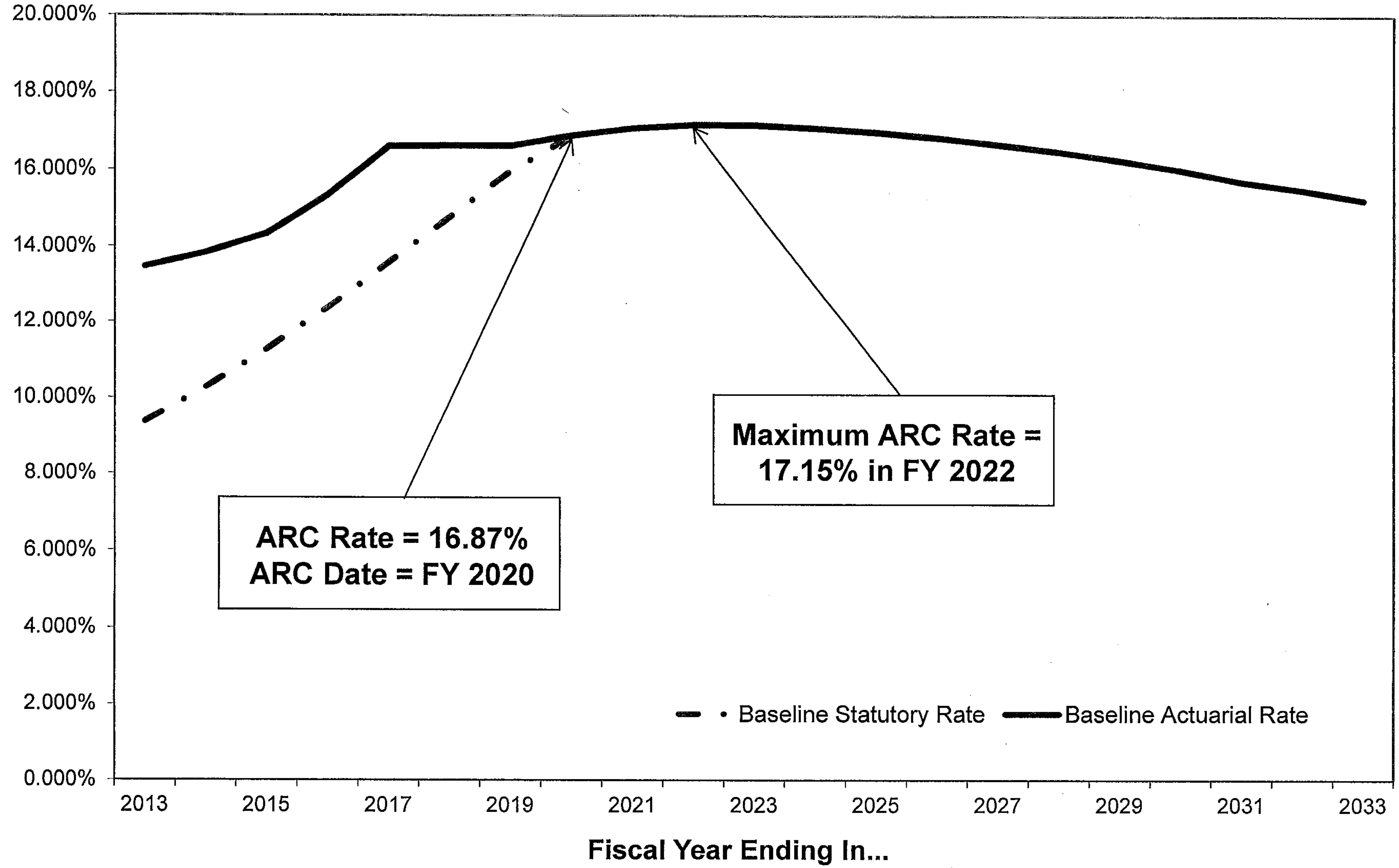
Group	Contribution Rates*		Actuarial Funded Status	
	Actuarial Rate	Statutory Rate	Unfunded Actuarial Liability (in Millions)	Funded Ratio
State	10.80%	11.27%	$1,122.8	71.3%
School	15.41%	11.27%	$5,797.6	52.1%
Local	9.77%	8.84%	$1,542.4	61.2%
KP&F	19.92%	19.92%	$738.6	69.8%
Judges	22.59%	22.59%	$26.8	82.5%
System Totals			$9,228.1	59.2%

*Effective for fiscal year beginning in 2014. (FY 2015 for State and School Groups, State KP&F employers, and Judges. CY 2014 for Local Group and Local KP&F employers.)

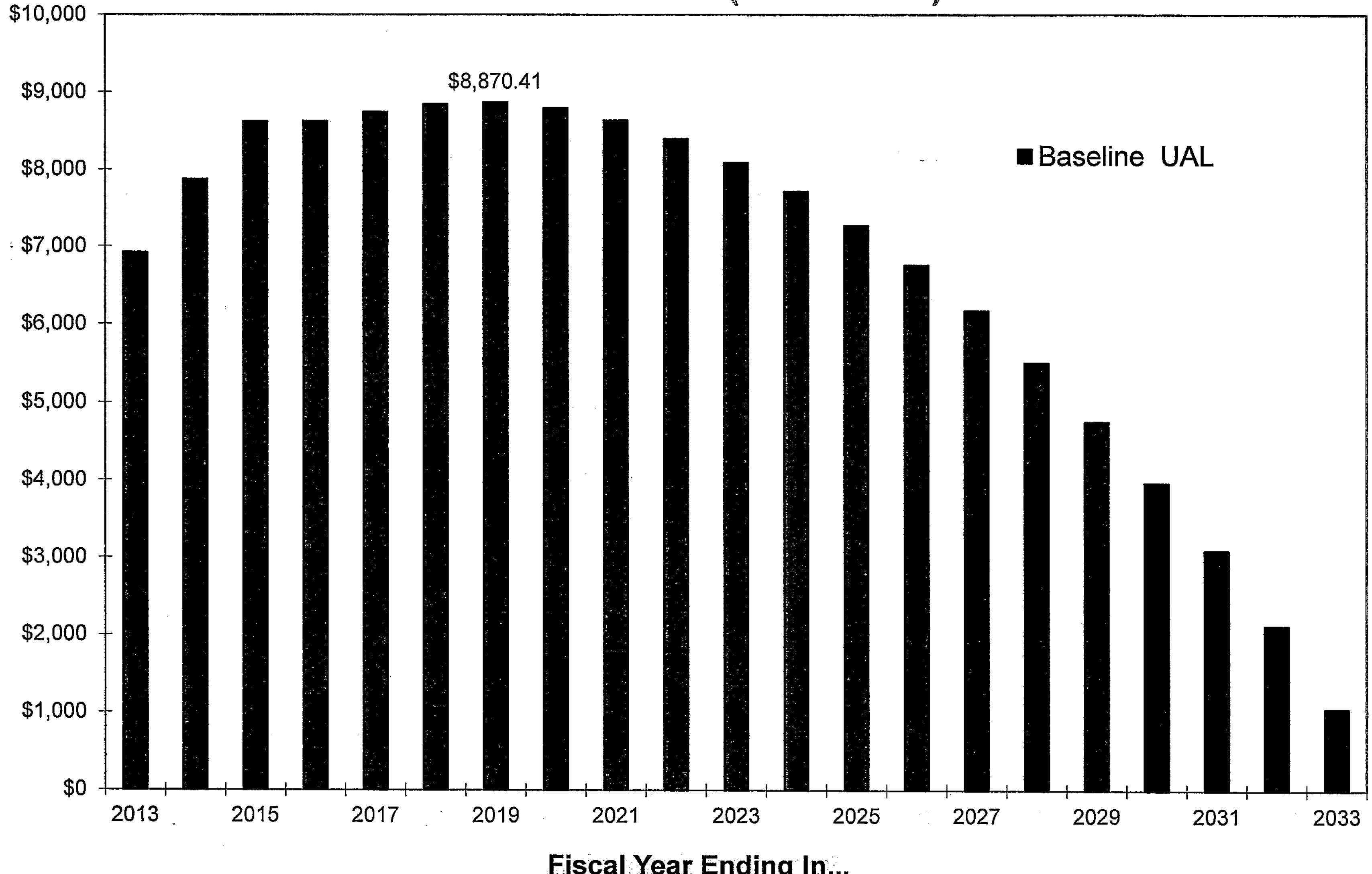
Projections of Long-Term Funded Status

- KPERS' actuary models future trends in the System's long-term funding status, using the "snapshot" data in the valuation.
- Graphs for the KPERS State-School Group and Local Group follow, showing projections of their –
  - ARC rates and statutory rates
  - Unfunded actuarial liability
  - Funded ratios

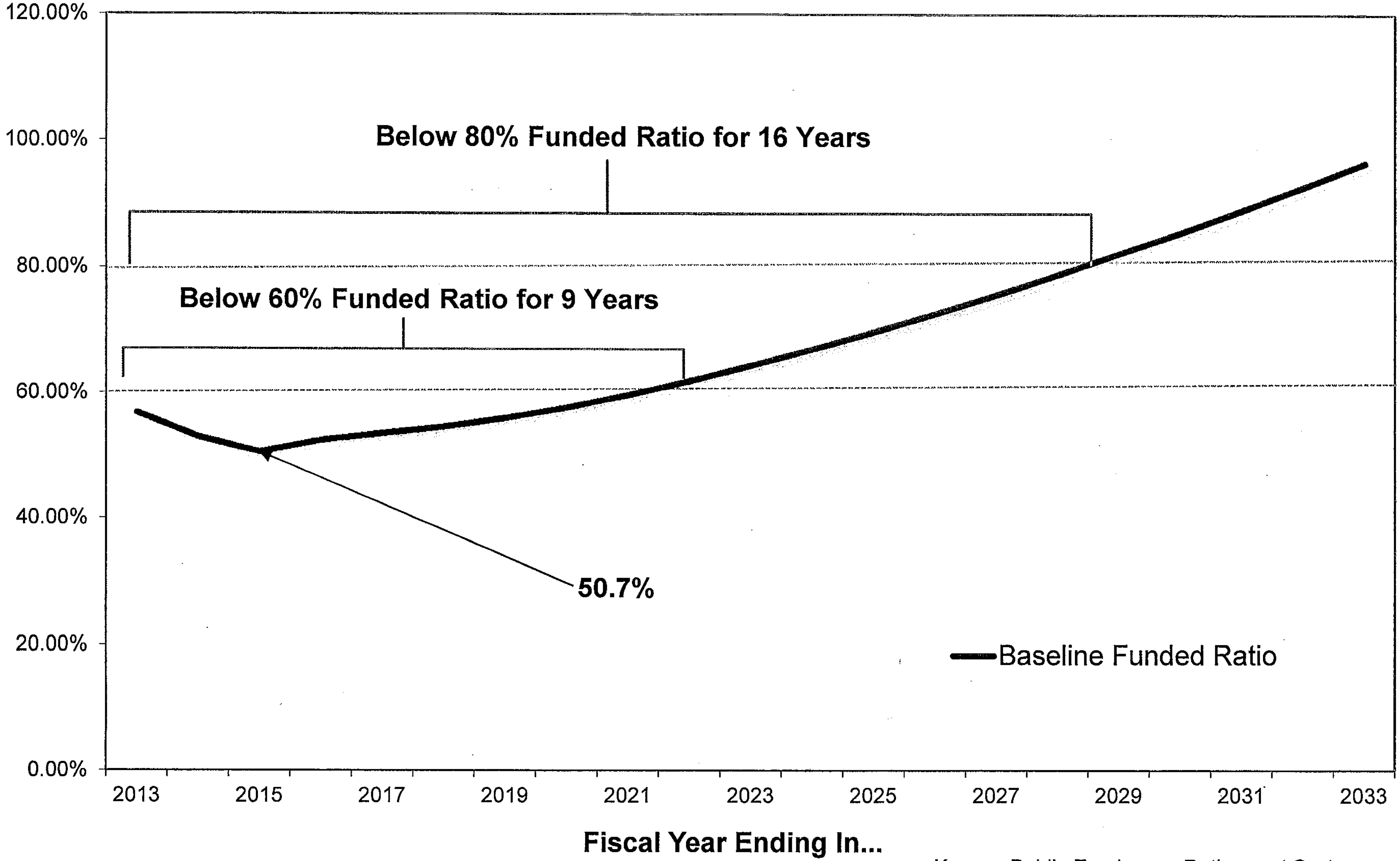
State-School Group
Baseline ARC Date & Rate



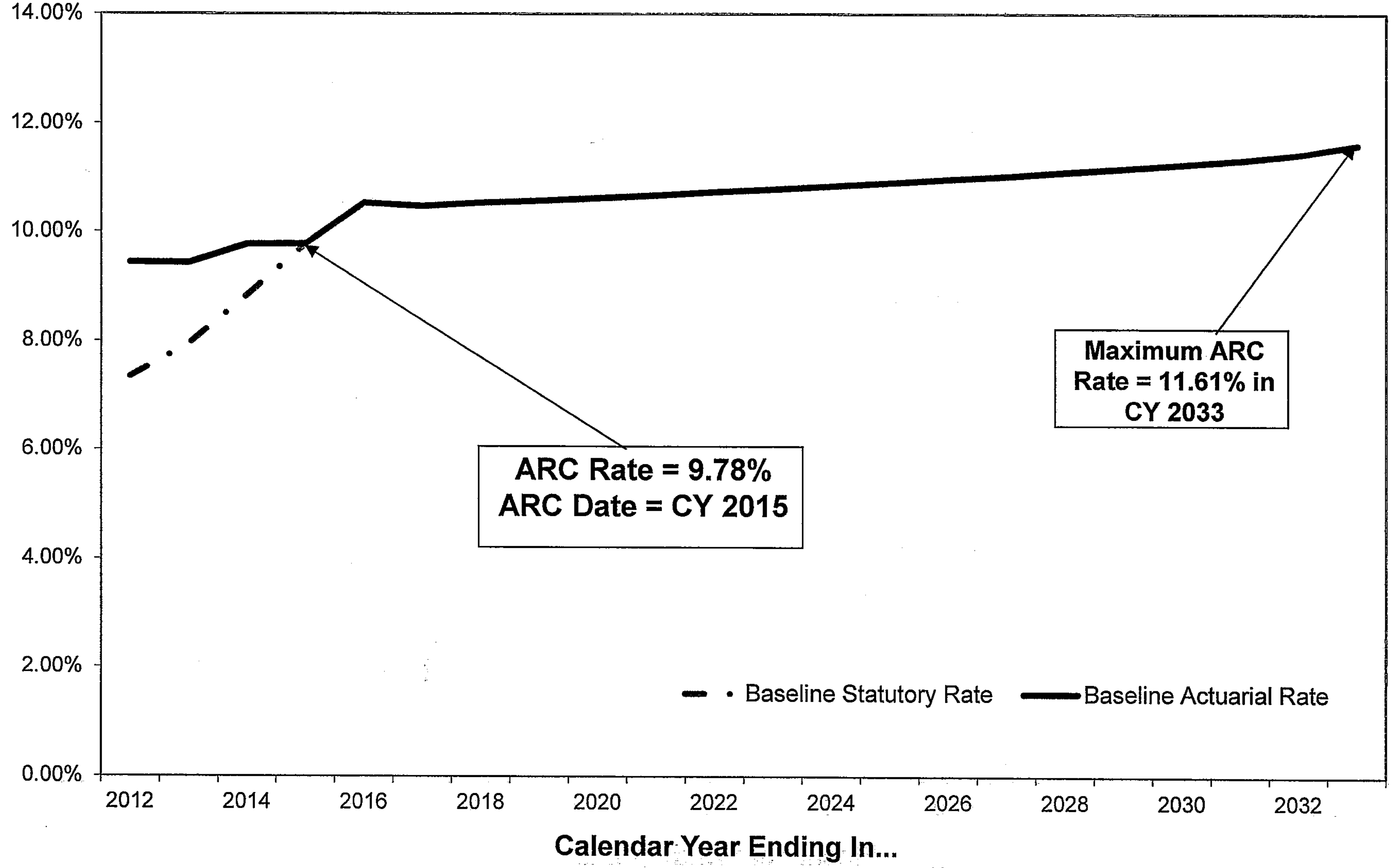
State-School Group
Baseline UAL (in millions)

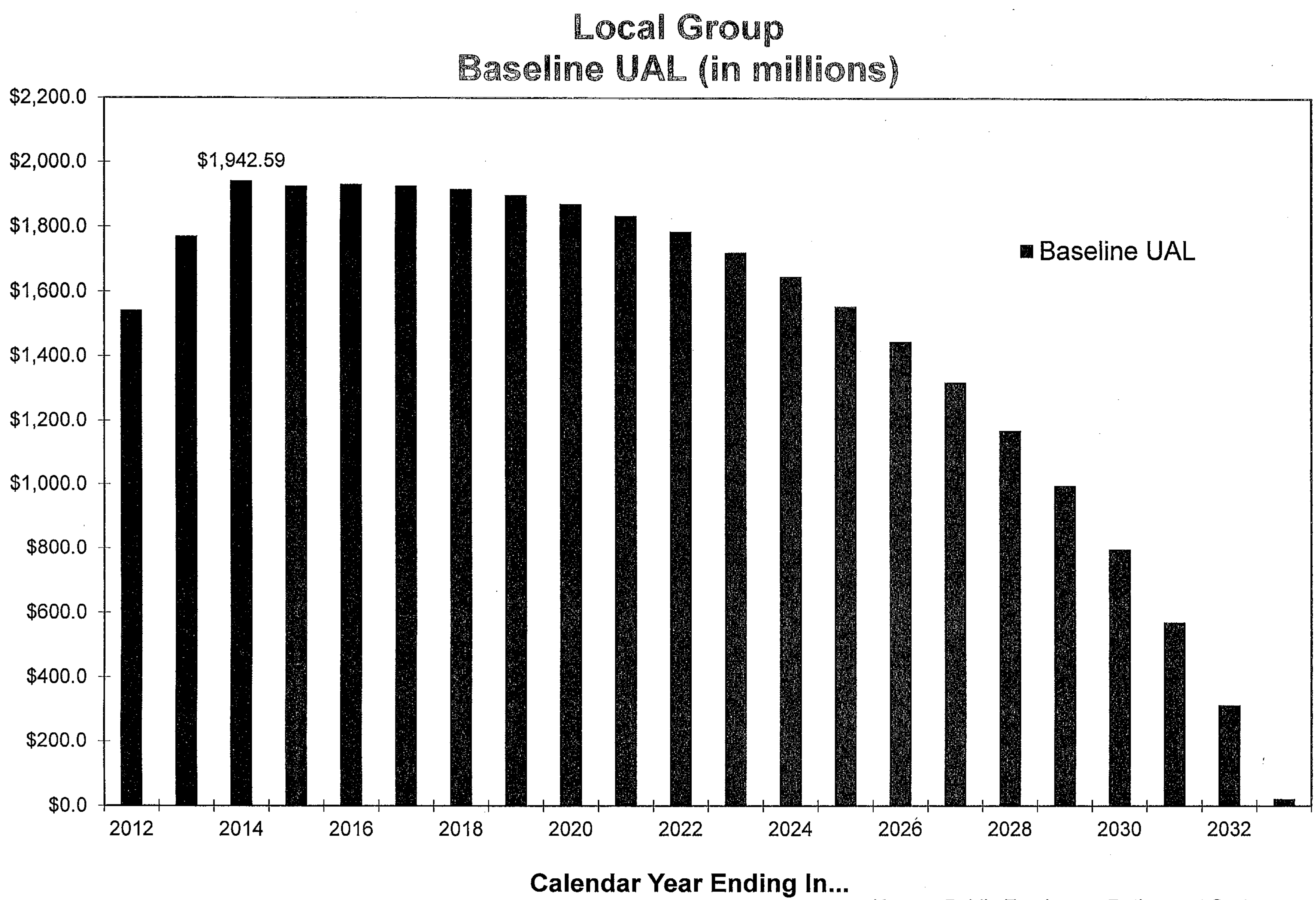


State-School Group
Baseline Funded Ratio

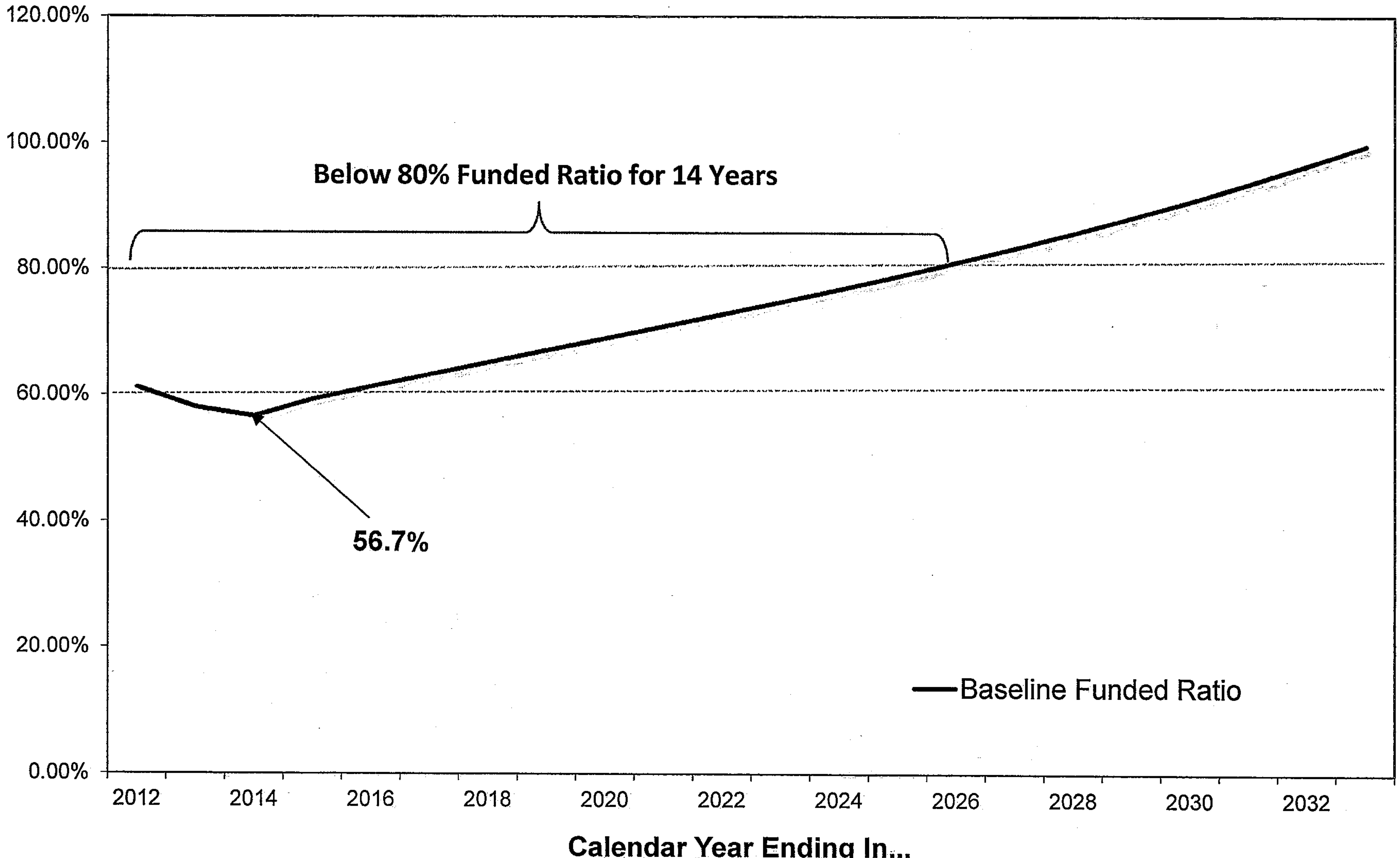


Local Group
Baseline ARC Date & Rate




Local Group
Baseline UAL (in millions)
$2,200.0
$2,000.0
$1,800.0
$1,600.0
$1,400.0
$1,200.0
$1,000.0
$800.0
$600.0
$400.0
$200.0
$0.0
$1,942.59
Baseline UAL
2012
2014
2016
2018
2020
2022
2024
2026
2028
2030
2032
Calendar Year Ending In...

Local Group
Baseline Funded Ratio



Employer Contributions

- A fundamental principle of sound funding for a defined benefit plan is to consistently pay the full ARC rate.
- Due to the 0.6% statutory cap on employer rate increase, there is a significant gap between KPERS' statutory and ARC rates.
  - In the current fiscal year, the statutory employer rate for the State/School Group is 70% of its ARC rate (9.37% statutory rate vs. 13.46% actuarial rate).
  - The Local Group's statutory rate is 84% of the ARC rate in CY 2013 (7.94% statutory rate vs. 9.43% actuarial rate).
- Last session's KPERS bill (2012 HB 2333) raises the cap on employer contribution increases, beginning FY 2014.
- As a result, employer contribution growth will accelerate.
  - State/School Group contributions are projected to increase by $54 million from FY 2013 to FY 2014.
  - Between FY 2016 and FY 2017, the increase would be almost $80 million.
- Accelerating employer contributions in the near term can help reduce contributions paid over the longer term.

State-School Group Employer Contributions

Employer Contributions*	Statutory Cap	Baseline (in Millions)
FY 2013 Total Contributions	0.6%	$411.51
FY 2014 Increase over Prior FY	0.9%	$54.34
FY 2014 Total Contributions		$465.84
FY 2015 Increase over Prior FY	1.0%	$60.32
FY 2015 Total Contributions		$526.16
FY 2016 Increase over Prior FY	1.1%	$69.37
FY 2016 Total Contributions		$595.53
FY 2017 Increase over Prior FY	1.2%	$79.05
FY 2017 Total Contributions		$674.58

*All Funds