Employees' Retirement System of the State of Hawaii

December 2014 Legislative Meetings

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AGENDA

- Key Changes and Issues for 2014 Valuation
- Investment Performance
- Actuarial Valuation Results
- Open Group Projections
- Projection of Funded Status
- Projection of Alternative Returns

ACTUARIAL VALUATION – KEY CHANGES AND ISSUES

- Funding period of 26 based on current assumptions, benefits, and contribution policy
  - 28 last year, gain of 1 year based on experience

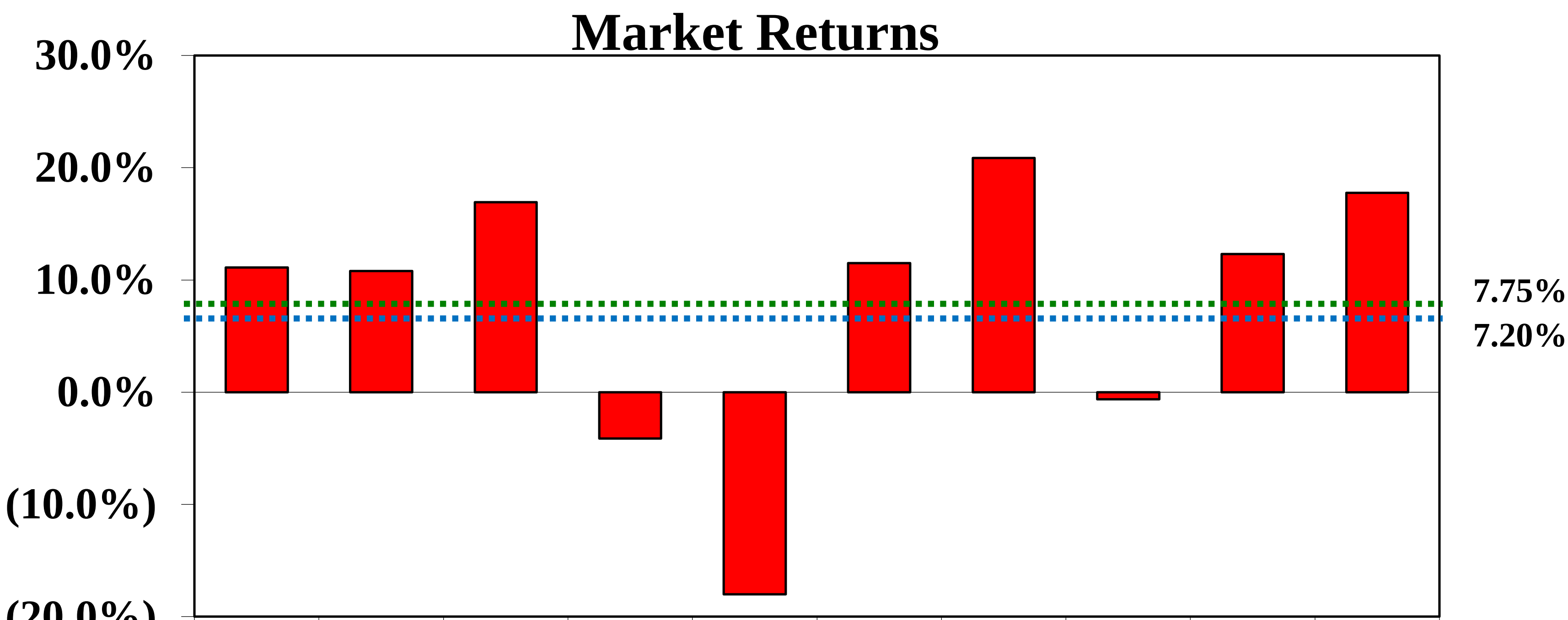
- 2014 investment performance above expectations
  - 17.8% return on market value of assets
    - Following a 12.3% last year
  - Expected 7.75%
  - Enough to not only offset prior deferred losses, but create some deferred gains
- 2011 Legislature created new benefit tier for employees hired after June 30, 2012
  - Very small impact on current liabilities (only 2 years of new members)
  - Significant impact on future liabilities and funding period calculation
- 2011 Legislature created schedule of increasing Employer Contributions over next few years

Fiscal Year	2013	2014	2015	2016 and Later
Police & Fire	22.0%	23.0%	24.0%	25.0%
All Other Employees	15.5%	16.0%	16.5%	17.0%

Sources of Impact

- ***Investments*** outperformed 7.75% assumption (Positive)
- ***Liabilities*** grew mostly in-line
- ***Contributions*** in dollars are expected to be mostly in-line with prior projections
  - Population growth continues to help

Estimated Yields on Market Value of Assets

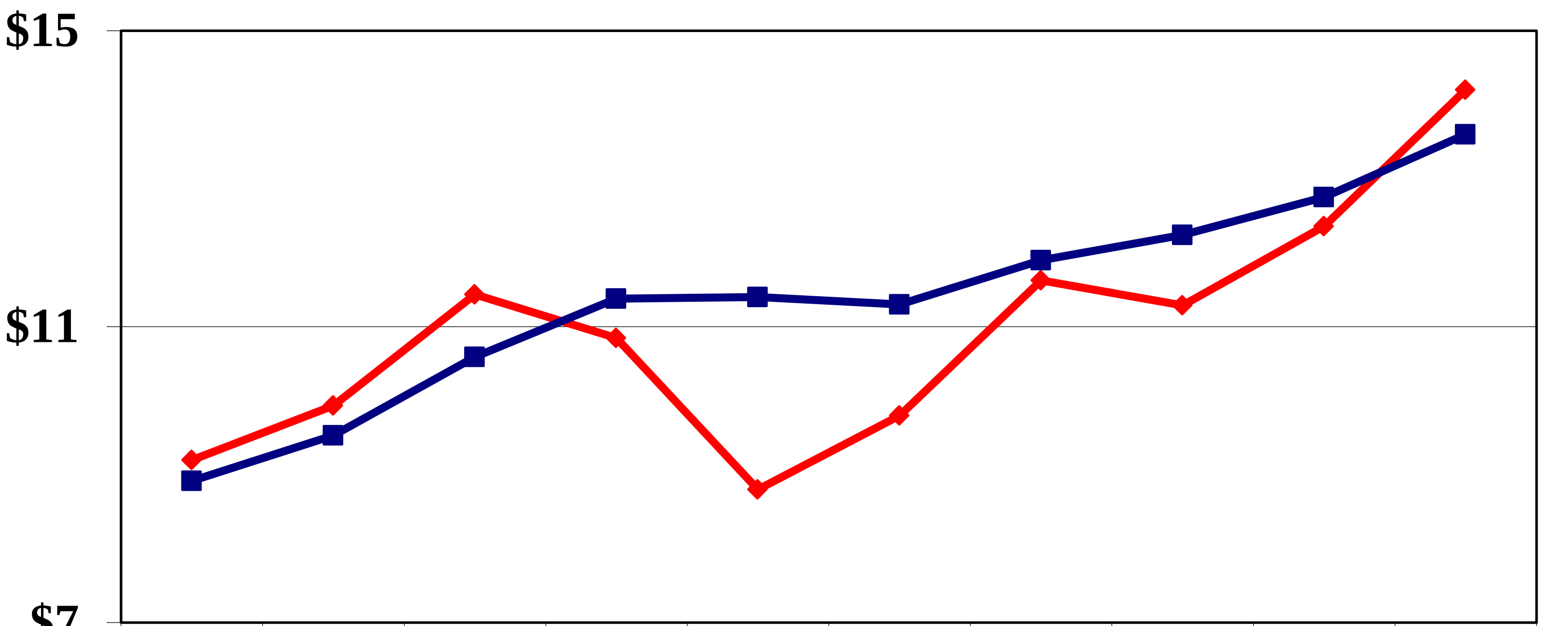


	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Market Return	11.1%	10.8%	16.9%	-4.1%	-18.0%	11.5%	20.9%	-0.6%	12.3%	17.8%

12.11% average return for 5 year period ending June 30, 2014
7.20% average return for 10 year period ending June 30, 2014

Market and Actuarial Values of Assets (Smoothed)

$ Billions



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Market Value	$9.2	$9.9	$11.4	$10.8	$8.8	$9.8	$11.6	$11.3	$12.4	$14.2
Actuarial Value	$8.9	$9.5	$10.6	$11.4	$11.4	$11.3	$11.9	$12.2	$12.7	$13.6

AVA is 96.0% of MVA at 2014, compared to 103.2% at 2013

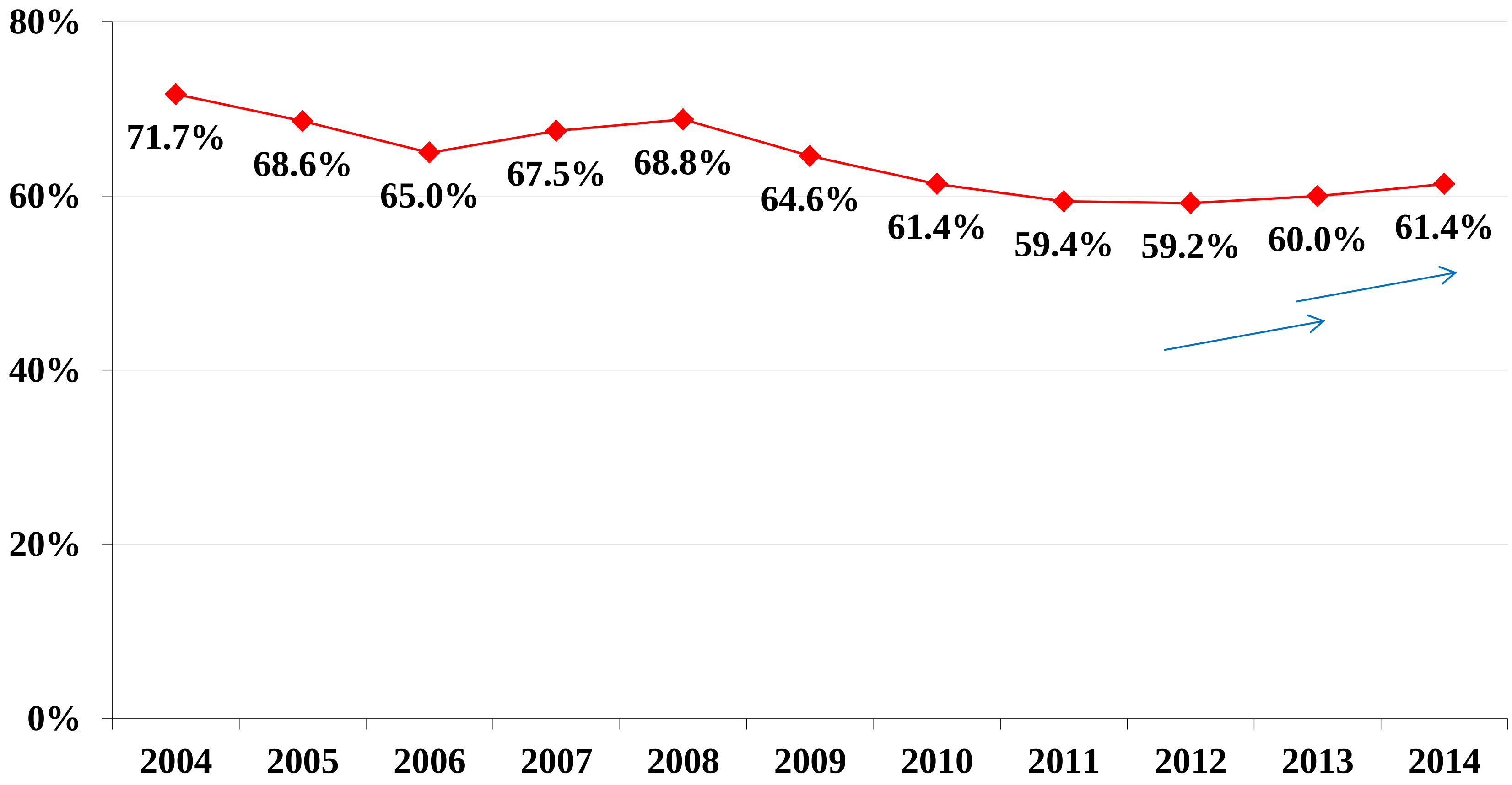
AVA is deferring $561 million is investment gains compared with $391 million in losses last year

2014 Valuation Results

	2012 Valuation	2013 Valuation	2014 Valuation
Based on Smoothed Asset Value			
UAAL ($ Billions)	$8.44	$8.49	$8.58
Actuarial Funded Ratio	59.2%	60.0%	61.4%
Funding Period in years*	30	28	26
Based on Market Value			
Actuarial Funded Ratio	54.6%	58.2%	63.9%
Funding Period in years*	36	29	24

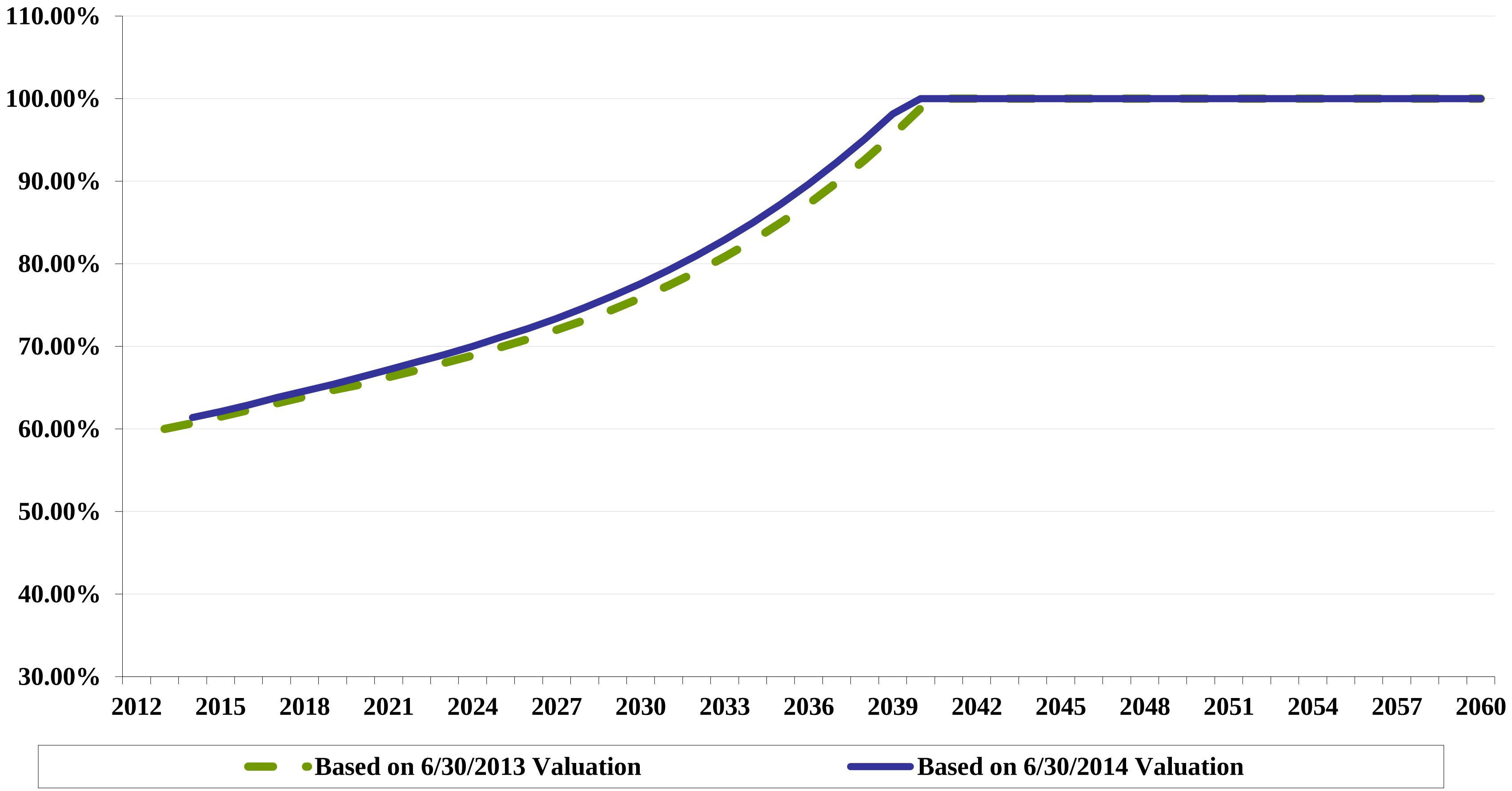
*Based on open group projection, recognizing new benefits for members hired after June 30, 2012 and increasing contribution patterns for future fiscal years

Funded Ratio



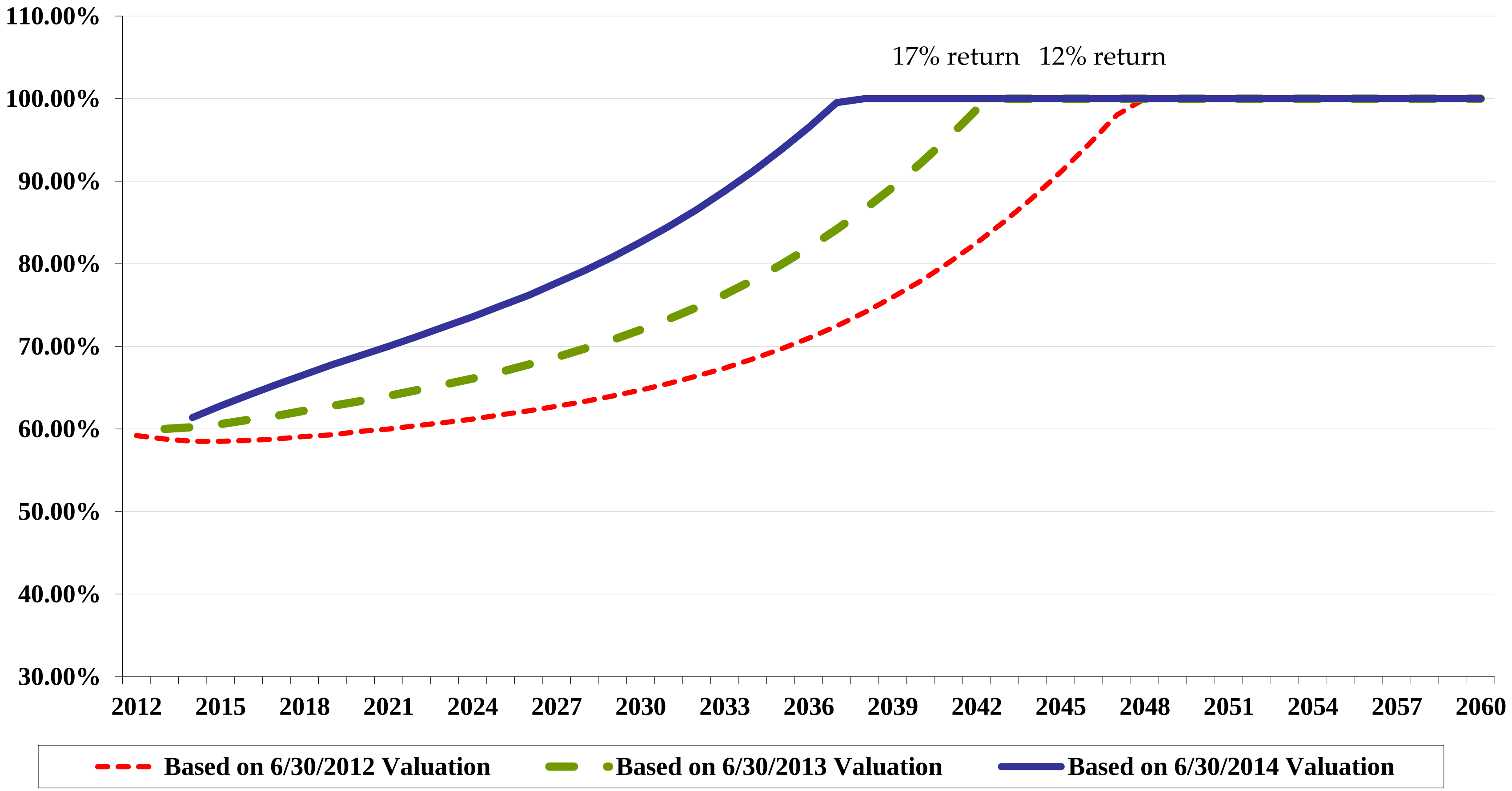
Funded Ratio is Actuarial Value of Assets divided by Actuarial Accrued Liabilities

Projection of Funded Ratio from 6/30/2014 Valuation



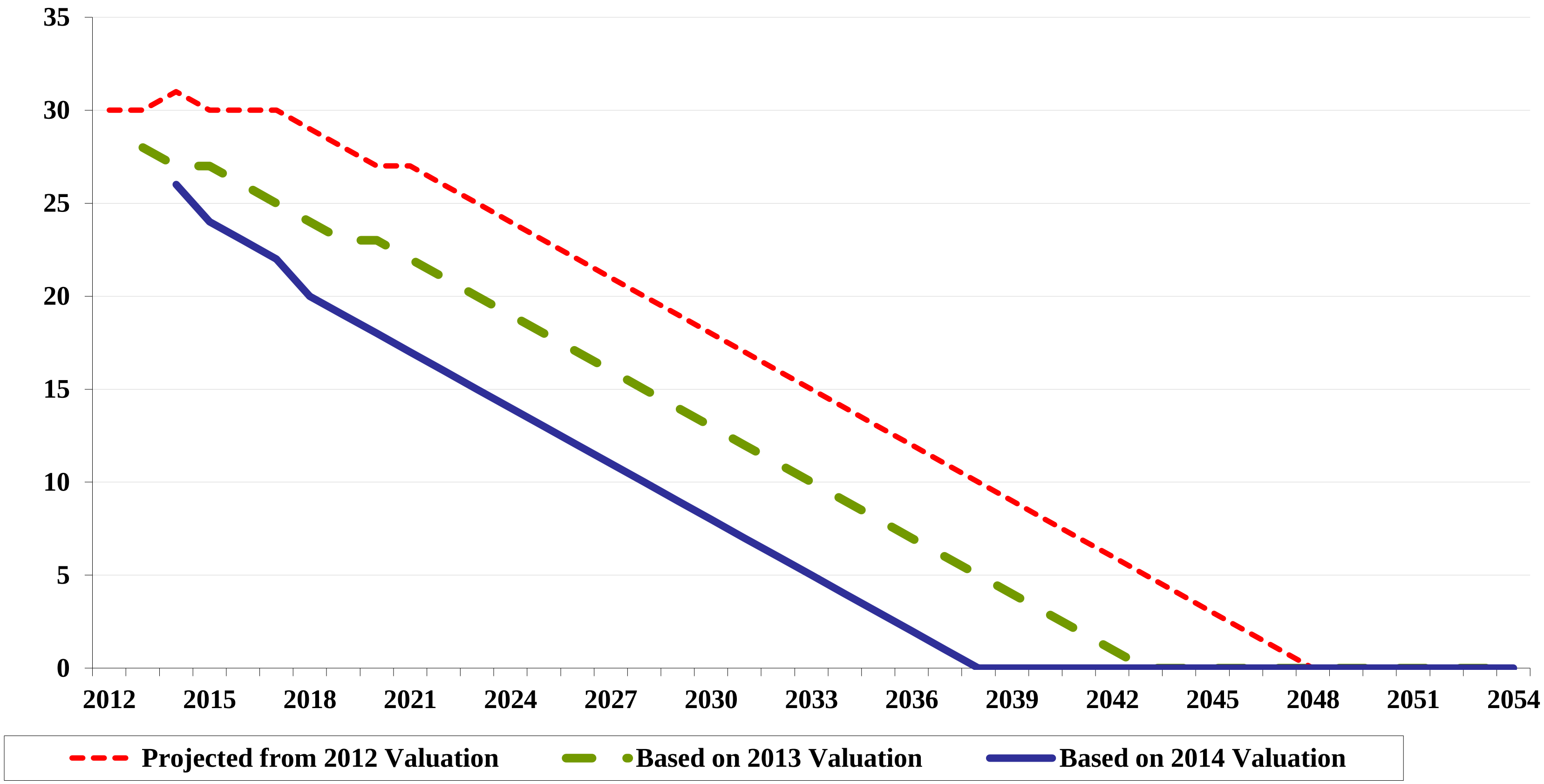
Assumes all assumptions met, including a 7.75% return each year on the current actuarial value of assets

Projection of Funded Ratio reflecting recognition of deferred investment losses (7.75% assumption)



Assumes all assumptions met, including a 7.75% return each year on the current market value of assets
Deferred losses of $957M as of 2012 and $391M as of 2013, deferred gains of $561M as of 2014

Projected Funding Period



Assumes all assumptions are met, including 7.75% return on market value of assets

Investment Return Assumption

- The Board has prospectively adopted a phase-into a lower investment return assumption over the next few valuations
  - Current assumption is 7.75% per annum
  - June 30, 2015 valuation will use 7.65%
  - June 30, 2016 valuation will use 7.55%
  - June 30, 2017 and thereafter will use 7.50%
- The following projections reflect the changing investment return assumption

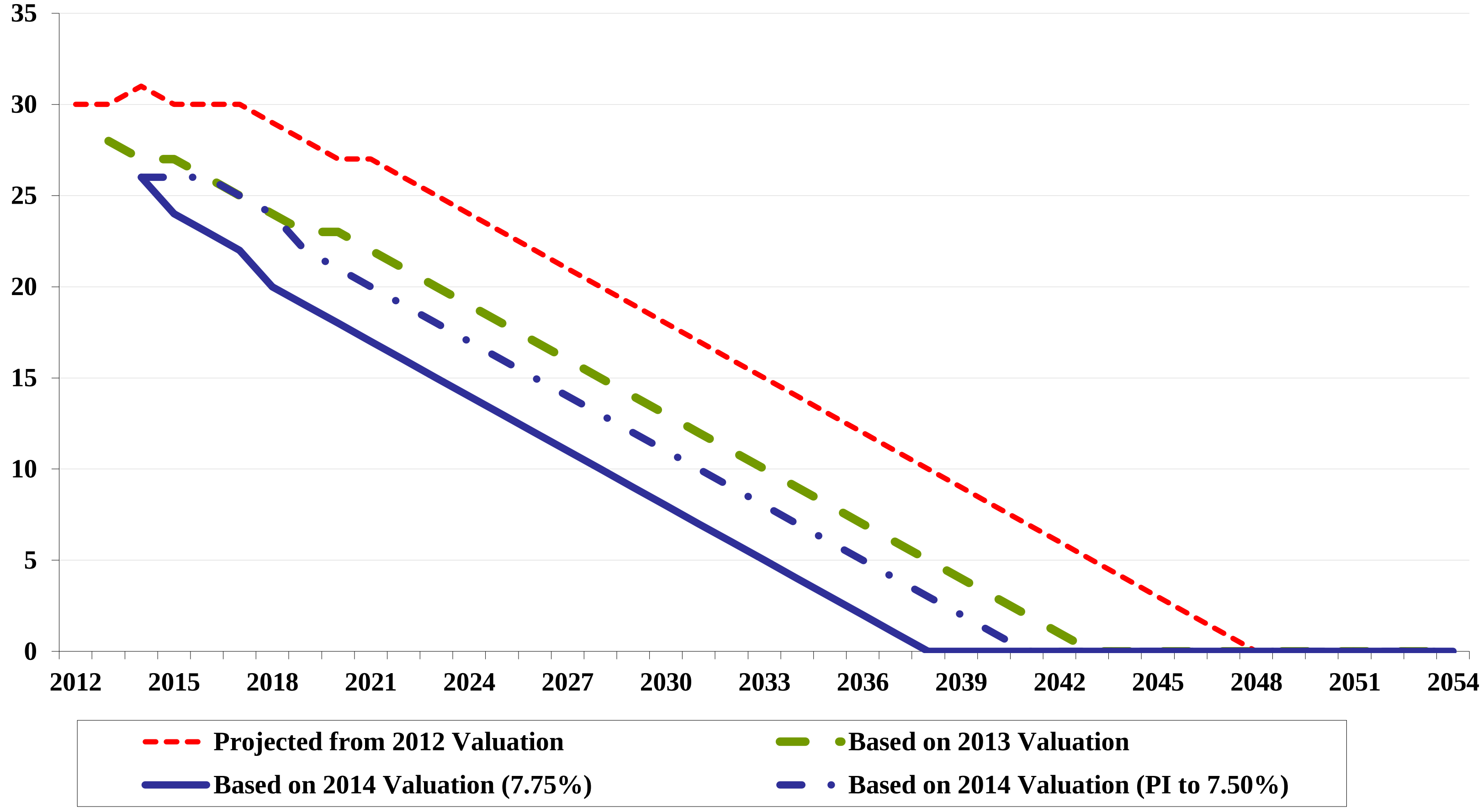
3-Year Phase into lower assumption

Projected Funding Period in Years at Stated Valuation Date

Assumption	6/30/2014	6/30/2015	6/30/2016	6/30/2017
7.75%	26	24	23	22
7.65%	28	26	24	23
7.55%	29	27	26	24
7.50%	30	28	26	25

All scenarios assume the System earns the designated assumption on market value of assets for all years shown.

Projected Funding Period



Phased-in (PI) scenario assumes all assumptions are met, including 7.50% return on market value of assets

Next Year Projections

(Using 7.65% investment return assumption)

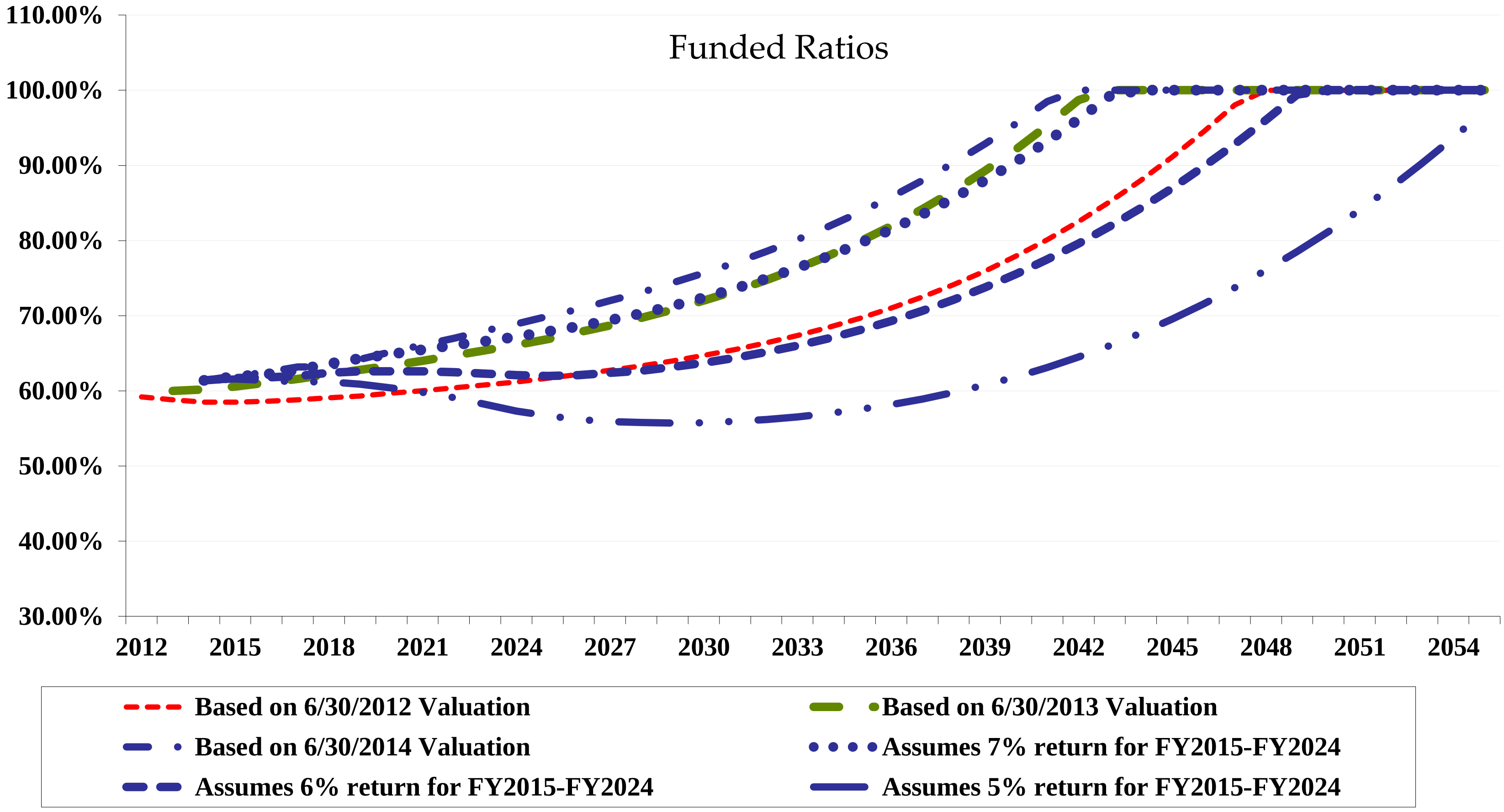
	Market Return for 12 month period ending June 30, 2015						
	16%	12%	7.65%	4%	0%	-4%	-8%
UAAL ($ in billions)	$8.6	$8.7	$8.9	$9.0	$9.2	$9.3	$9.4
Funded Ratio	63.2%	62.6%	62.0%	61.4%	60.8%	60.2%	59.6%
Expected Funding Period as of June 30, 2015							
Smoothed Assets	24	25	26	26	27	29	30
Market Assets	20	22	24	26	29	32	35

Current values: UAAL of $8.6 billion, funded ratio of 61.4%, Funding period of 26 on smoothed assets and 24 on market (based on 7.75% investment return assumptions)

Stress Testing

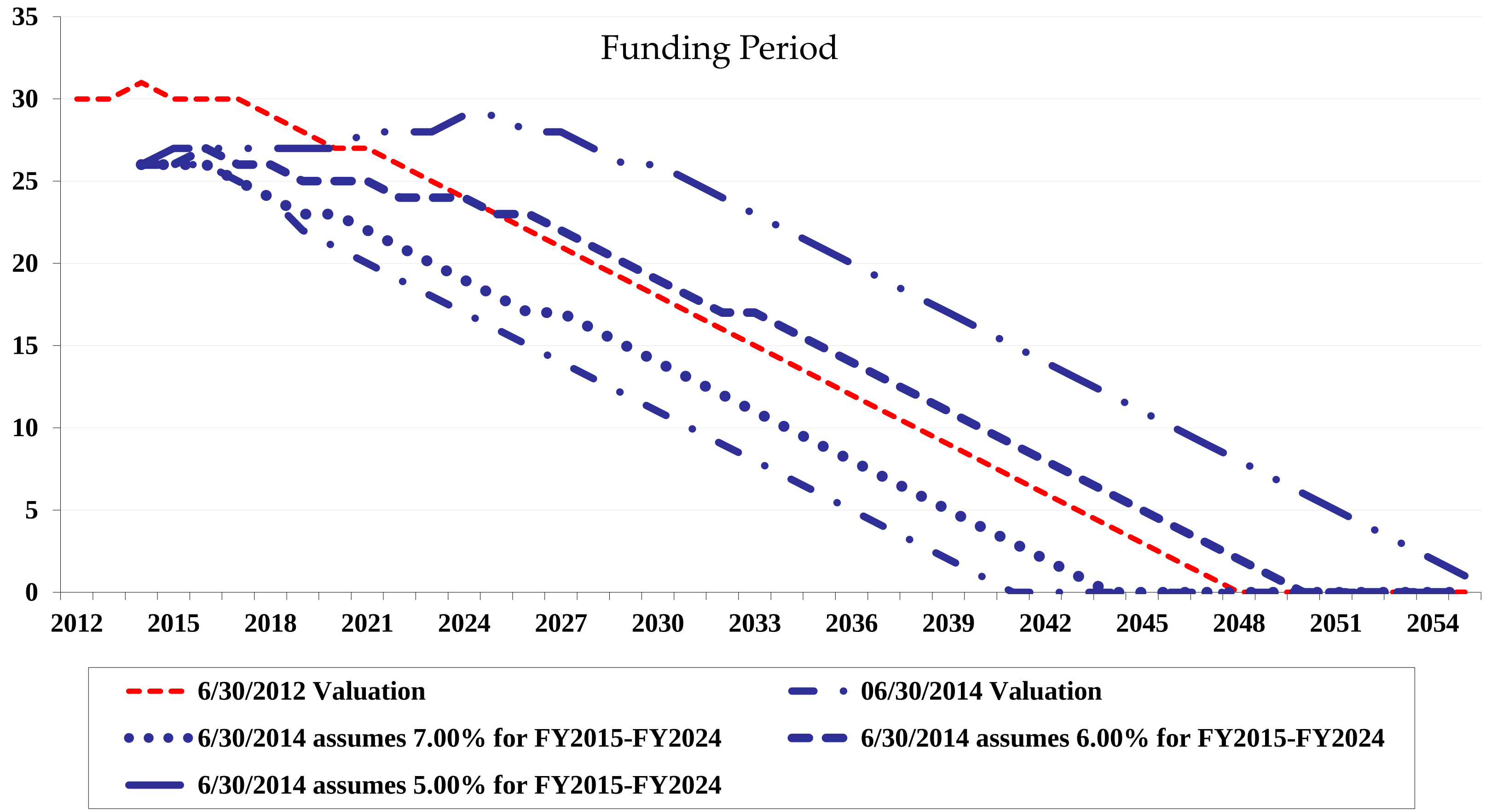
- With the higher contribution policies and the new benefit structure for future employees, the System has been put in a position where a significant amount of adverse experience can be absorbed over the longer term

Sensitivity to Future Investment Returns



2012 and 2013 results assume 7.75% return on market for all years. Reflects phased-in change to return assumptions. 7.50% return after FY2023 in scenarios.

Sensitivity to Future Investment Returns: Funding Period, based on current contribution policy



2012 and 2013 results assume 7.75% return on market for all years. Reflects phased-in change to return assumptions. 7.50% return after FY2023 in scenarios.

Questions

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- This presentation is intended to be used in conjunction with the actuarial valuation report issued in December of 2014. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
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Hawaii EUTF

December 2014

July 1, 2013 GASB 45 Retiree Medical (OPEB) Valuation Results

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Summary of Benefits

- Current Premiums (HMSA medical + Rx + dental + vision)

2014	Self	Two-Party
Non-Medicare	$608	$1,184
Medicare	$382	$745

- Employer's Maximum Contribution

Hire Date	Years of Service	% of BMC
Before 7/1/1996	<10 10+	50% 100%
Post 7/1/1996*	< 10 10-14 15-24 25+	0% 50% 75% 100%

*Employees hired after 6/30/2001 only receive the % of the "Self" BMC

- Part B Premium Reimbursement in addition to the BMC subsidy is $104.90/month (for 2014) each for both member and spouse

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2014 Premiums and Subsidies

- Retiree only coverage (HMSA medical + Rx + dental + vision)

	Premium	100% Cap	75% Cap	50% Cap
Pre-65	$608	$737	$552	$368
Post-65	$382	$525	$394	$262

- Retiree plus spouse coverage (HMSA medical + Rx + dental + vision)

	Premium	100% Cap	75% Cap	50% Cap
Pre-65	$1,184	$1,485	$1,114	$742
Post-65	$745	$1,052	$789	$526

- Employer caps grow at the same rate as Part B premiums

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ERS versus EUTF

- The EUTF is an agent multiple-employer trust, meaning each individual employer's assets, liabilities, contributions, and risks are segregated individually
- The ERS is a cost-sharing multiple-employer trust, meaning all assets, liabilities, contributions, and risks are commingled

Pension Plan versus OPEB Plan

- The biggest difference between the valuation of a pension plan versus the valuation of an OPEB plan is that the underlying benefit in a pension plan is tied to the salary of the member and the underlying benefit of the OPEB plan is not
- The underlying OPEB benefit is not correlated with other economic factors, and thus the contribution pattern can be less predictable
  - Underlying change in the benefits offered
  - Medical inflation versus general economic growth
- Key OPEB assumptions
  - 7.0% rate of investment return
  - Future medical inflation (Part B premiums)
  - Plan provisions remain the same

Actuarial Results – All Employers Combined

		July 1, 2013	July 1, 2011*
1.	Actuarial accrued liability		
	a. Actives & Inactives	$ 5,799,449,000	$ 5,554,000,000
	b. Annuitants	5,678,184,000	5,808,500,000
2.	Total actuarial accrued liability (1a +1b)	$ 11,477,633,000	$ 11,362,500,000
3.	Actuarial value of assets	296,124,000	178,200,000
4.	UAAL (2 - 3)	$ 11,181,509,000	$ 11,184,300,000
5.	Funded ratio (3 / 2)	2.6%	1.6%
6.	UAAL/Payroll	288.1%	298.8%
7.	a. Normal cost	7.5%	6.8%
	b. Amortization Payment	16.3%	17.1%
	c. Full ARC	23.8%	23.9%

Favorable post-65 premium experience.

*For comparison purposes, a 7% discount rate was used for all employers.

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Key Actuarial Measurements July 1, 2013

($ millions)	State of Hawaii	CC of Honolulu w/ HART	County of Hawaii	County of Maui	County of Kauai	Kauai DOW	Honolulu BWS	Hawaii DWS
AAL	$ 8,530	$ 1,799	$410	$386	$192	$ 13	$ 123	$ 25
Assets	0	123	66	27	43	4	26	7
UAAL	8,530	1,676	344	359	149	9	97	18
Funded Ratio	0.0%	6.9%	16.1%	7.0%	22.3%	30.6%	20.9%	29.7%
ARC % Payroll	23.7%	25.5%	22.8%	22.8%	20.3%	18.9%	26.0%	21.5%
Benefits % Payroll	9.6%	11.5%	10.1%	8.4%	8.9%	9.5%	15.9%	9.7%
Additional Prefunding % Payroll	14.1%	14.0%	12.7%	14.4%	11.4%	9.4%	10.1%	11.8%

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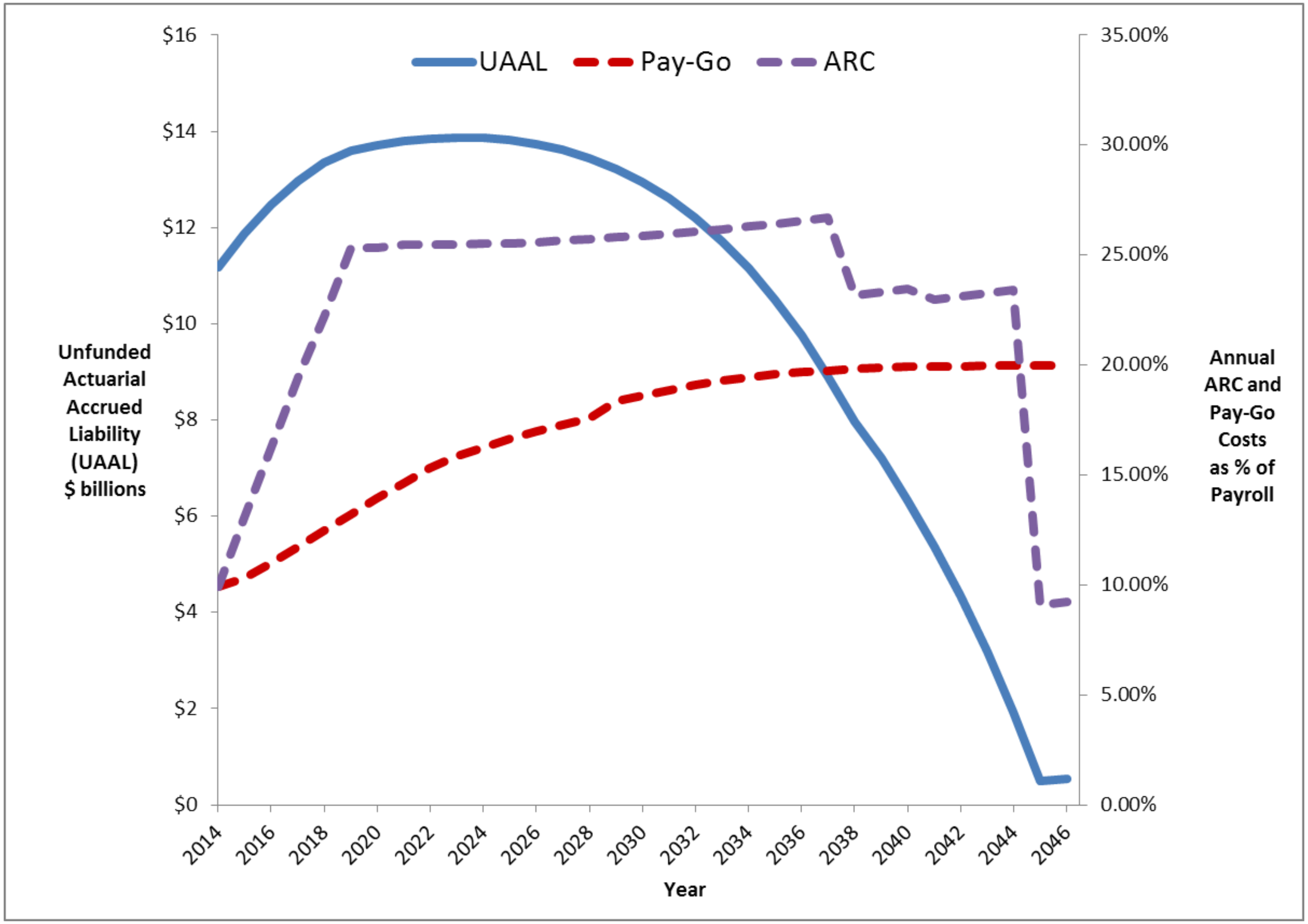
ACT 268, SLH 2013

- Requires full funding of the ARC in FYE19; Phase-in begins in FYE15
- State of Hawaii as an example:

Fiscal Year Ending	June 30, 2015	June 30, 2016
ARC	$ 718 million	$ 743 million
Projected Pay-Go Benefits	$ 303 million	$ 334 million
OPEB Trust to Fully Fund ARC	$ 415 million	$ 409 million
ACT 268 Phase-In	20%	40%
Minimum OPEB Trust Contribution	$ 83 million	$164 million

Projections - Assuming Minimum Contributions per ACT 268



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Summary

- Prefunding will require a significant commitment. ARC will exceed pay-as-you-go benefits until the original funding base is paid off
- ACT 268 requires full funding of the ARC in FYE19; Phase-in begins in FYE15
- Long-term savings will also be significant. For all employers combined:
  - "Over the next 30 years, the additional cost of prefunding is $12.9 billion. However, at the end of the prefunding period, the projected assets are $43.8 billion."
- Favorable accounting impact
- Roughly 90% of the liability is attributable to the post-65 benefits. 80% of current retirees are over the age of 65.