



June 30, 2023 Annual Actuarial Valuation Results

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October 19, 2023

Agenda

- Big Picture – Pension & OPEB
- Highlights of 2023 Pension Valuations
- Highlights of 2023 OPEB Valuations
- Looking Ahead
- Appendix





BIG PICTURE

BIG PICTURE – PENSION/OPEB

Big Picture: October Meeting Content

Pension Valuations	Other Post-Employment Benefits (OPEB) Valuations
Virginia Retirement System <ul style="list-style-type: none"> • State Employees • Teachers 	Health Insurance Credit (HIC) <ul style="list-style-type: none"> • State Employees • Teachers
Virginia Law Officers (VaLORS)	Group Life Insurance
State Police Officers (SPORS)	Virginia Sickness and Disability Program
Judicial (JRS)	

November Meeting Content: Political Sub. Pension and OPEB; VLDP Results
 HIC – Constitutional Officers, Social Service Employees, Registrars;
 Line of Duty Act Fund



Big Picture: Actuarial Valuation Results

- Purposes of Actuarial Valuations of VRS Pension and OPEB plans
 - Measure funding progress as of June 30, 2023
 - Develop contribution rates for FYE 2025 and 2026

Odd year valuations determine contribution rates for 2 years



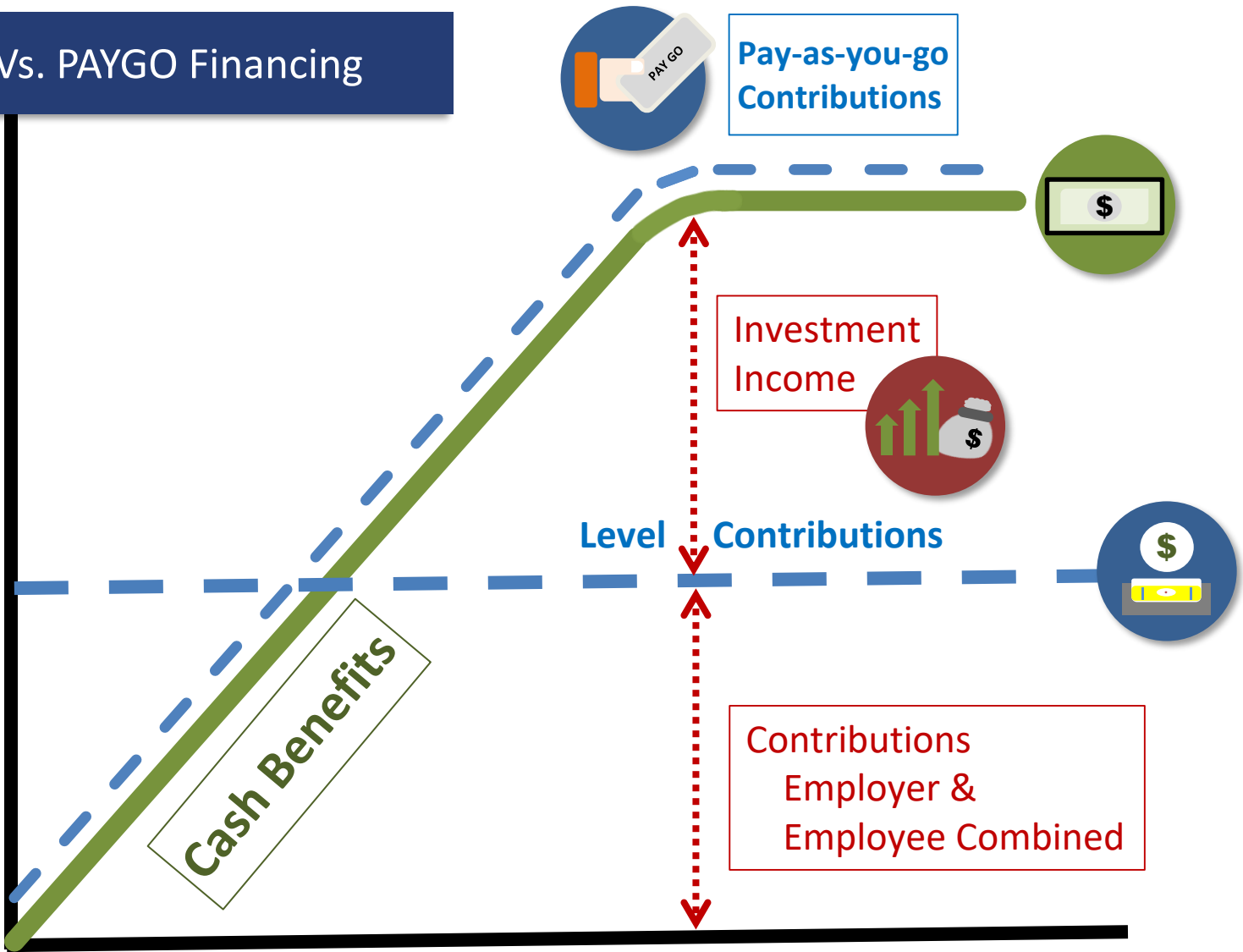
Big Picture: General Funding Objectives

- Intergenerational equity with respect to plan costs
- Stable or increasing ratio of assets to liabilities
- Stable pattern of contribution rates



Pre-funding Vs. PAYGO Financing

% of Active Employee Pays

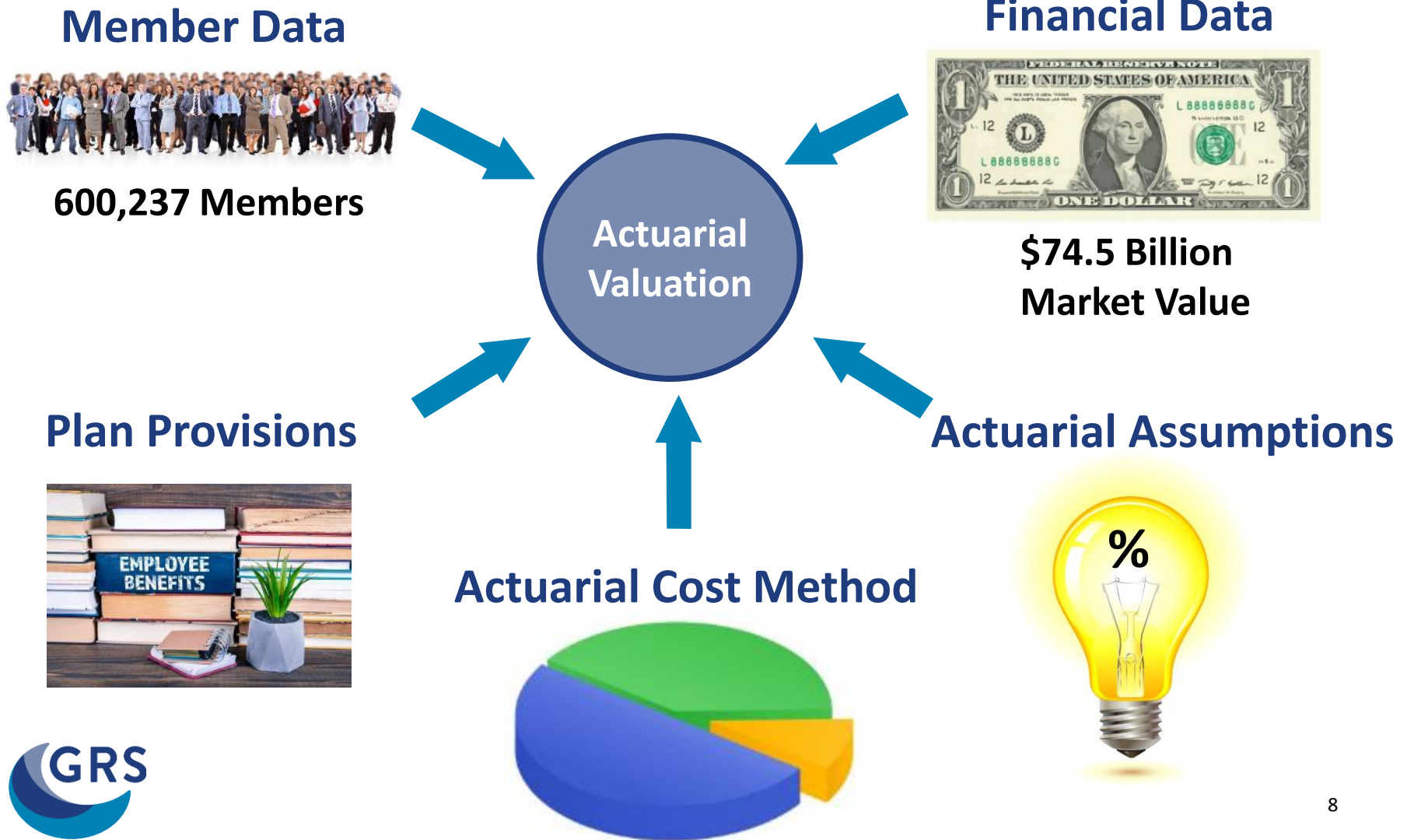



Start

50 Years of Time



Big Picture: Actuarial Valuation Process – (Statewide Pension Excluding Political Subdivisions)



The background of the slide features three spotlights at the top, each casting a beam of light onto a white podium on a stage. The stage and background are a light blue color.

JUNE 30, 2023

VALUATION RESULTS HIGHLIGHTS

Active Participants at June 30, 2023

System	Plan 1	Plan 2	Hybrid	Total 2023	Total 2022	Percent Change
State	24,764	12,620	39,492	76,876	74,048	3.8%
Teachers	54,810	26,797	71,500	153,107	153,356	-0.2%
SPORS	922	960	-	1,882	1,885	-0.2%
VaLORS	1,843	5,635	-	7,478	7,289	2.6%
JRS	136	42	280	458	461	-0.7%
Pol. Sub.	TBD	TBD	TBD	TBD	109,906	TBD
Total	TBD	TBD	TBD	TBD	346,945	TBD



Actives: Changes in Average Salary

System	2022	2023	Percent Change
State	\$ 66,799	\$ 70,880	6.1%
Teachers	60,405	63,137	4.5%
SPORS	84,463	89,591	6.1%
VaLORS	51,103	53,238	4.2%
JRS	175,152	192,994	10.2%

Note: Return to Work Payroll for 39 School Security Officers and Teachers = \$2 million

Actuarial Value Assets 2023: 6.1% MVA Return

State Employees Pension – \$ Millions

	2023	2024	2025	2026	2027
Actual Investment Return	1438				
Assumed Investment Return	1502				
Gain/(Loss) to be Phased-in	(64)				
Phased-in Recognition					
-Current year	(13)	?	?	?	?
-1 st prior year	(313)	(13)	?	?	?
-2 nd prior year	762	(313)	(13)	?	?
-3 rd prior year	(181)	762	(313)	(13)	?
-4 th prior year	(13)	(181)	762	(313)	(13)
Total Recognized Gain/(Loss)	242	255	436	(326)	(13)

2024-2027: Expect \$352 million in deferred asset GAINS
Other VRS Plans had similar asset experience

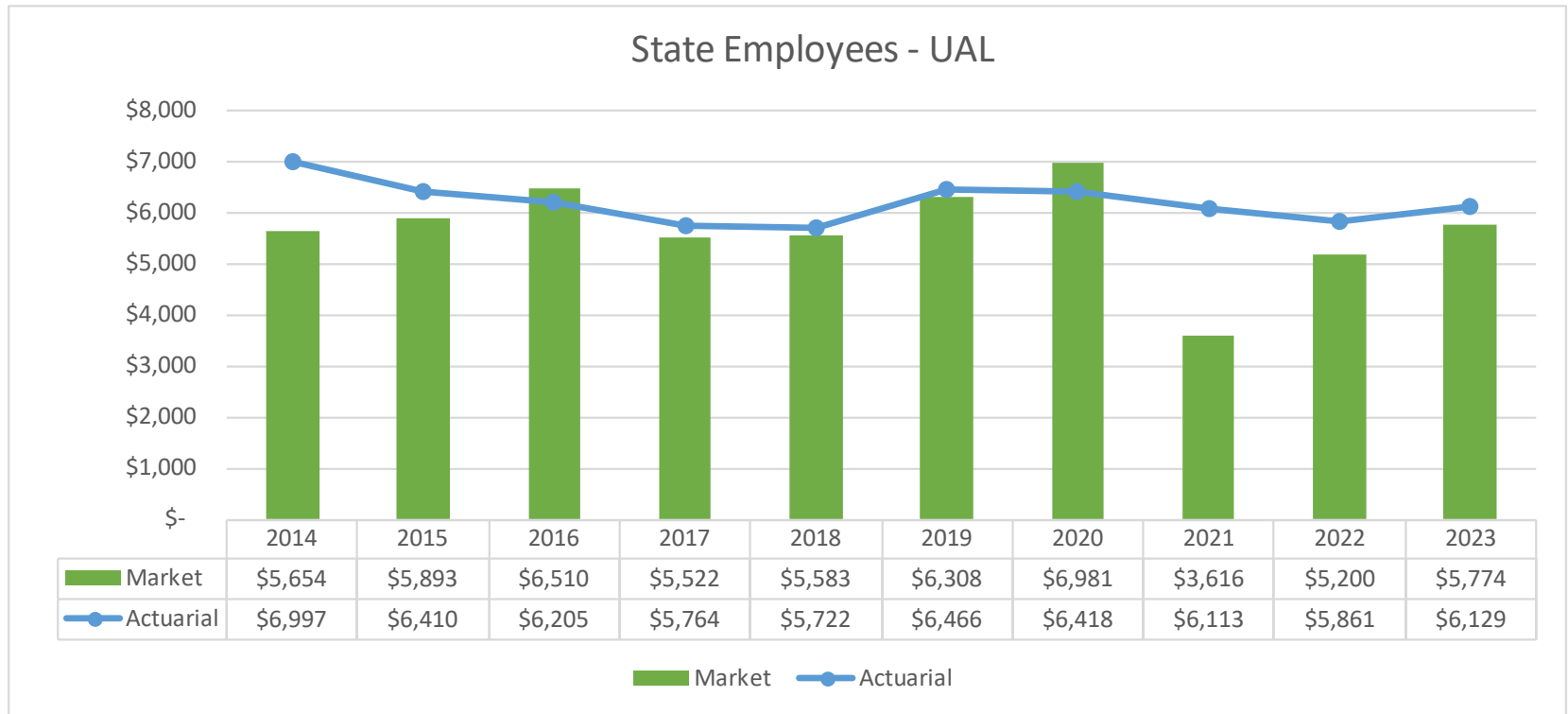


Why We Smooth Asset Returns

VRS Code Section 51.1-145:

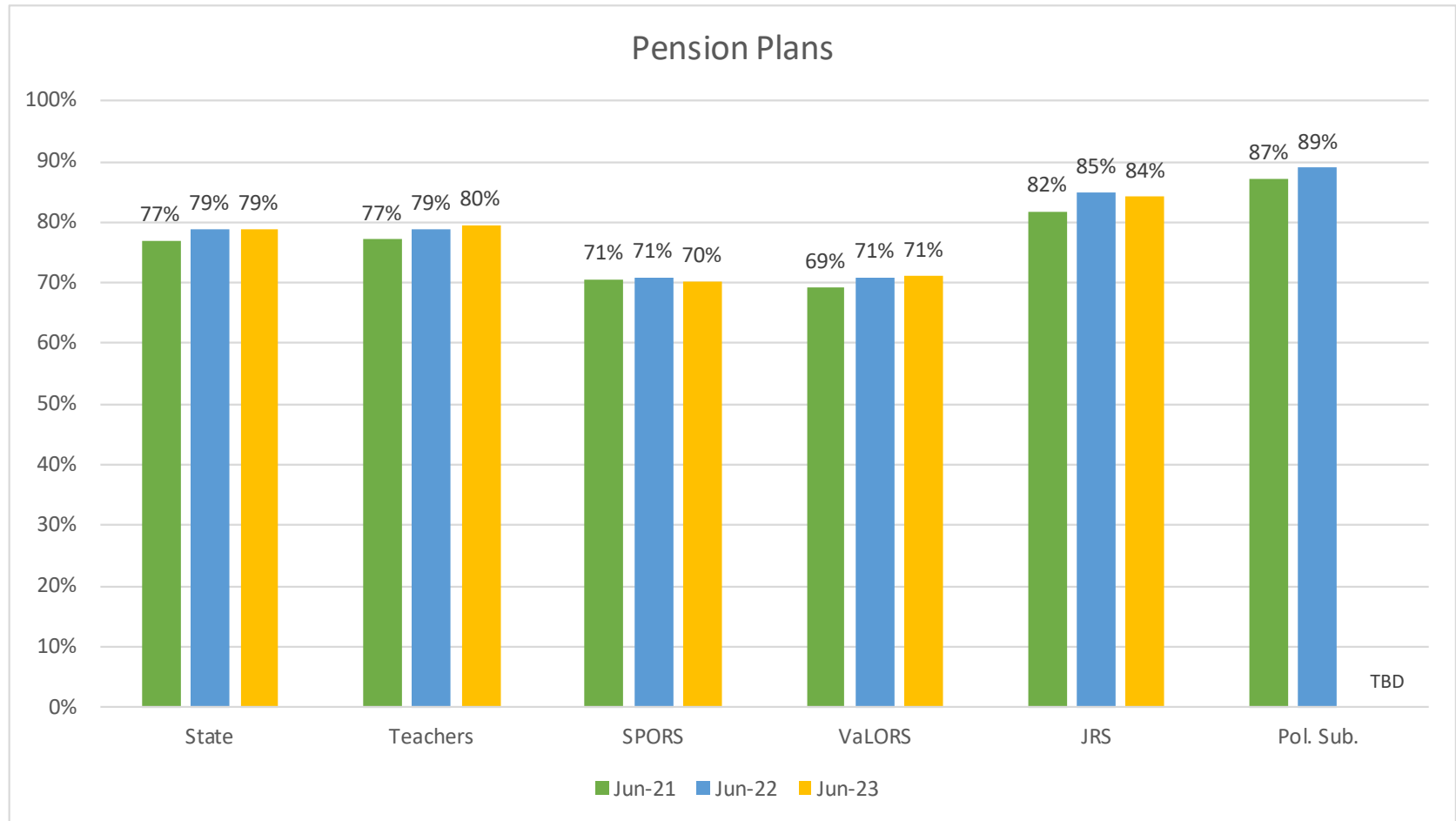
- *The total annual defined benefit employer contribution for each employer, expressed as a percentage of the annual membership payroll, shall be determined in a manner so as to remain relatively level from year to year.*

Why We Smooth Asset Returns



Unfunded liabilities will trend to Market Value basis over time. Other VRS Retirement Plans have similar patterns.

Funded Status (AVA) – Pension Plans



Calculated Employer Contributions

- Will vary significantly for System, Plan, and Employer based on:

Benefit Features

Demographics

Funded Status



- Two Main Components:

Normal Cost – this represents the cost of the current year benefit earned by each active member

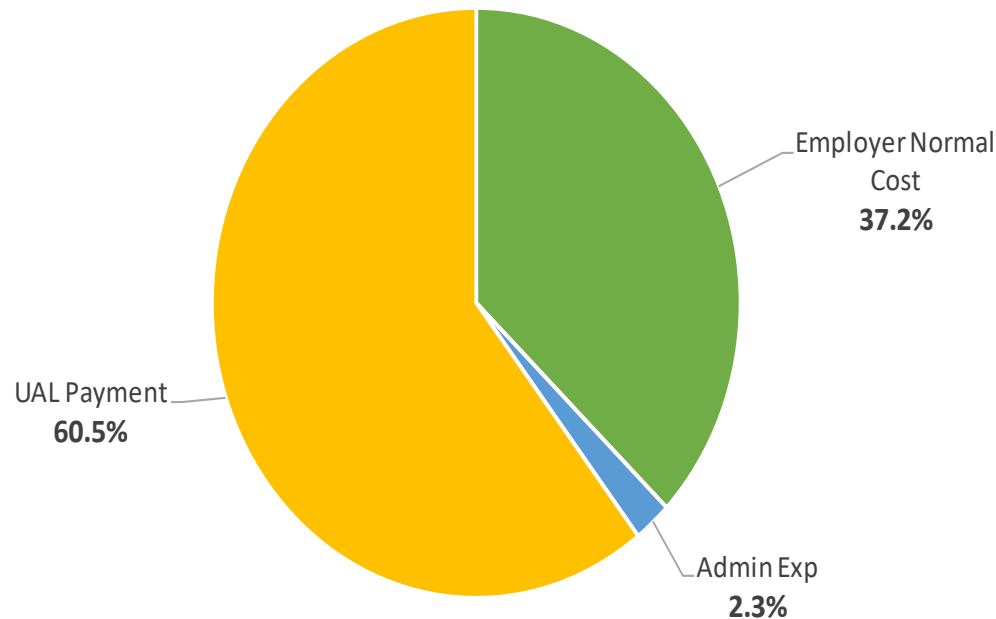
Amortization of Unfunded Liability – uses a systematic method (funding policy) to pay off the unfunded liability for each employer

Legislative Updates

- HB 473 and SB 70 separate the employer contribution into Defined Benefit and Defined Contribution components effective for contribution rates beginning July 1, 2024
- HB 1630, SB 1289, SB 1479: Return to work
 - Required break in service reduced from 12 to 6 months for certain teacher groups
 - Specifies that the employer shall include such employees' compensation in membership payroll for purposes of the employer contributions to VRS

Calculated Defined Benefit Employer Pension Contributions –State Employees

State Employer Rate



Normal Cost ultimately decreases to Plan 2/Hybrid level

Component	% of Pay
Employer NC	4.38%
Admin Exp	0.27%
UAL Payment	7.13%
Total	11.78%

UAL amortization payment = majority of the contribution for pension plans (other than JRS)



Contribution Alternative

Managing unfunded accrued liabilities =
Actuarial Value of Assets – Accrued Liability

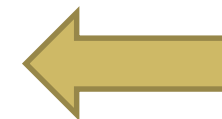
- VRS uses “Layered amortization”
 - Amortized initial June 30, 2013 unfunded liability over a 30-year closed amortization period, but
 - 2014-2022 annual gains and losses, assumption changes amortized over separate closed 20-year periods
 - This methodology maintains steady progress toward eliminating the unfunded liability

Contribution Alternative

State EEs Pension Amortization Bases (2023)

Description	Original Amount	Outstanding Balance as of June 30, 2023	Years Remaining June 30, 2023
2013 Original Unfunded	\$ 7,117,727,223	\$ 7,463,278,416	20 years
2014 Experience (Gain)/Loss	(414,716,278)	(346,031,947)	11 years
2015 Experience (Gain)/Loss	(637,505,432)	(553,545,959)	12 years
2016 Experience (Gain)/Loss	(87,589,562)	(78,605,380)	13 years
2017 Assumption Change	62,300,692	57,450,959	14 years
2017 Experience (Gain)/Loss	(570,456,389)	(526,049,801)	14 years
2018 Experience (Gain)/Loss	(104,169,714)	(98,215,632)	15 years
2019 Experience (Gain)/Loss	15,231,288	14,619,334	16 years
2019 Assumption Change	671,335,725	644,363,164	16 years
2020 Experience (Gain)/Loss	(90,660,484)	(88,327,231)	17 years
2021 Experience (Gain)/Loss	(740,623,129)	(729,960,879)	18 years
2021 Assumption Change	401,835,129	396,050,180	18 years
2022 Experience (Gain)/Loss	(277,443,138)	(275,806,743)	19 years
2023 Experience (Gain)/Loss	249,375,746	249,375,746	20 years
Total		\$ 6,128,594,227	

What if VRS
“resets” all
bases to 20
years?

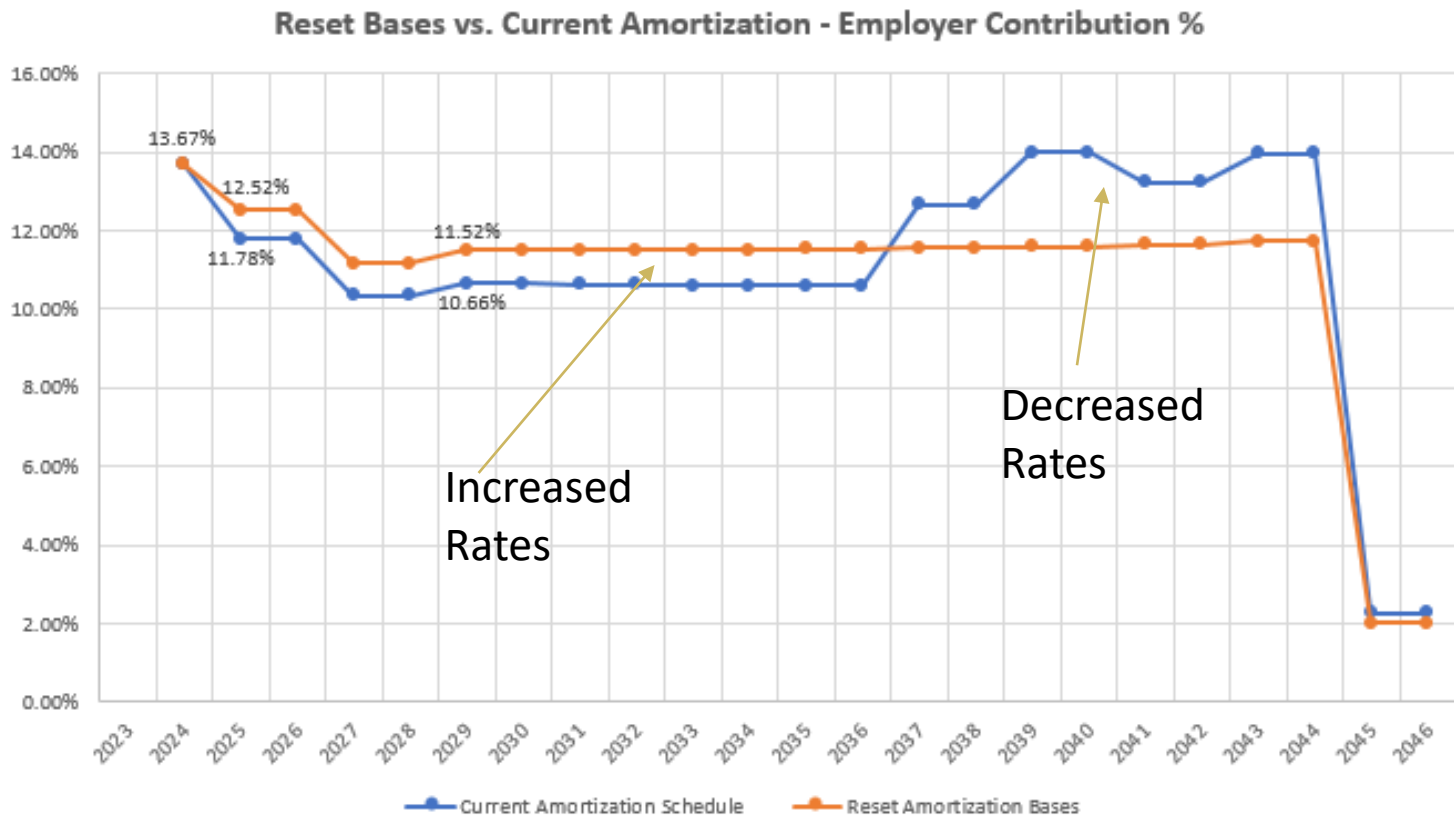


Contribution Alternative

- If all assumptions are met
 - Projected contribution rates increase initially
 - But remain below current rates for State Employees and Teachers
 - Remain level, and well below out years projected rates
 - Projected contribution dollar savings of >~\$1 billion over 20 years for State Employees and Teachers Systems

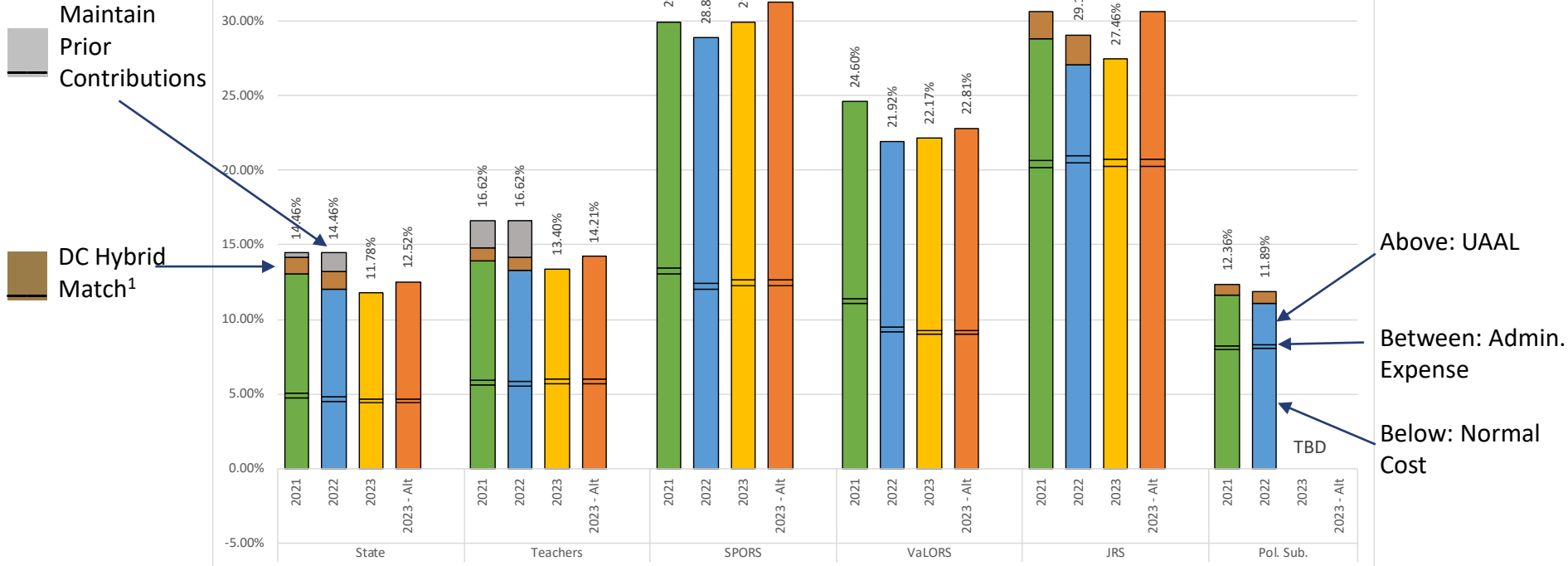
Current and Alternate Projected Employer Contribution Rates (Fiscal Year)

State Employees



Actuarially Determined Employer Contribution Rates – Pension Plans

Pension Plans - Contribution Composition



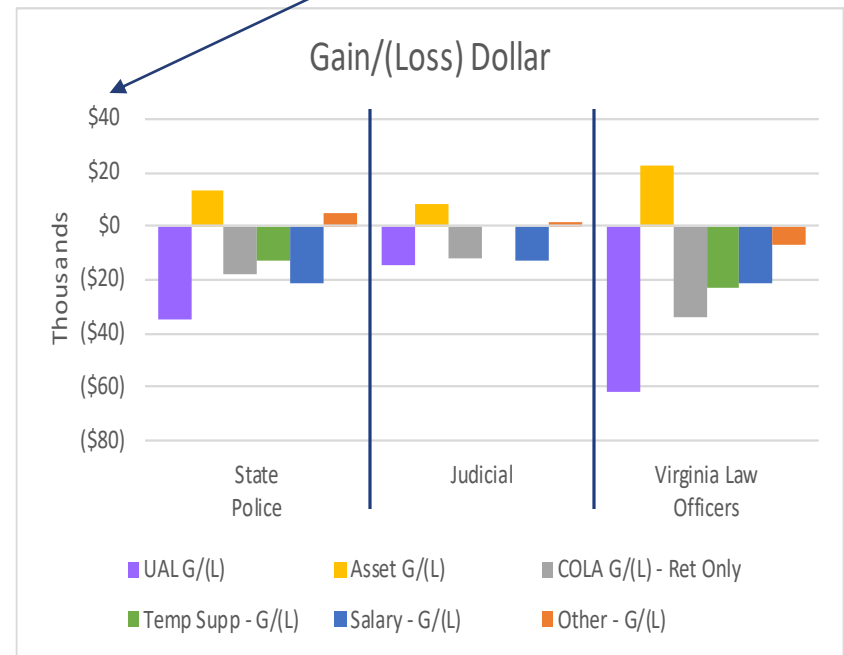
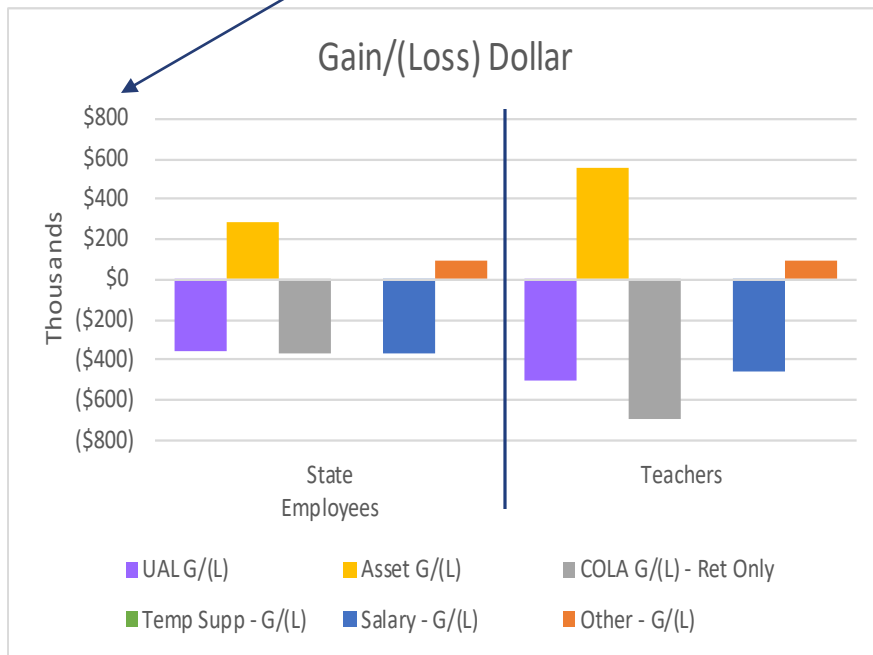
	State				Teachers				SPORS				VaLORS				JRS				Pol. Sub.			
	2021	2022	2023	2023 - Alt	2021	2022	2023	2023 - Alt	2021	2022	2023	2023 - Alt	2021	2022	2023	2023 - Alt	2021	2022	2023	2023 - Alt	2021	2022	2023	2023 - Alt
Normal Cost*	5.05%	4.77%	4.65%	4.65%	5.91%	5.82%	5.96%	5.96%	13.43%	12.45%	12.64%	12.64%	11.38%	9.49%	9.27%	9.27%	20.67%	20.98%	20.74%	20.74%	8.23%	8.30%		
Accrued Liability	8.02%	7.28%	7.13%	7.87%	8.04%	7.45%	7.44%	8.25%	16.55%	16.43%	17.33%	18.68%	13.22%	12.43%	12.90%	13.54%	8.14%	6.13%	6.72%	9.92%	3.39%	2.77%		
Total DB Portion	13.07%	12.05%	11.78%	12.52%	13.95%	13.27%	13.40%	14.21%	29.98%	28.88%	29.97%	31.32%	24.60%	21.92%	22.17%	22.81%	28.81%	27.11%	27.46%	30.66%	11.62%	11.07%	TBD	TBD

GRS * Includes Administrative Expense

¹ Hybrid DC Match decoupled beginning 2023

Pension Gain/Loss Commentary (\$000)

Scale for large plans is 5X-10X scale for small plans



Actual COLA/Assumption: Plan 1 = 5.0%/2.5%
 Plan 2/Hybrid = 3.0%/2.25%
 Actual Temp Supp/Assumption: 15.11%/5.1%



VRS Additional Funding Provisions – Pension

- Additional \$931+ million contributed from the General Fund to the Trust in June 2022 & 2023

System	Add'l Contrib. 2022	Add'l Contrib. 2023	Total Additional 2022-2023	Funded Status Impact	Contrib. Rate Impact
State	\$219,156,316	\$73,052,105	\$292,208,421	+1.08%	-0.4%
Teachers	\$442,371,087	\$147,457,029	\$589,828,116	+1.08%	-0.4%
SPORS	\$10,957,816	\$3,652,605	\$14,610,421	+1.10%	-0.7%
VaLORS	\$19,886,407	\$6,628,802	\$26,515,209	+1.03%	-0.5%
JRS	<u>\$6,250,014</u>	<u>\$2,083,338</u>	<u>\$8,333,352</u>	+1.13%	-0.7%
TOTAL	\$698,621,640	\$232,873,879	\$931,495,519	+1.08%	-0.4%

Important to get additional funds into Retirement System when possible

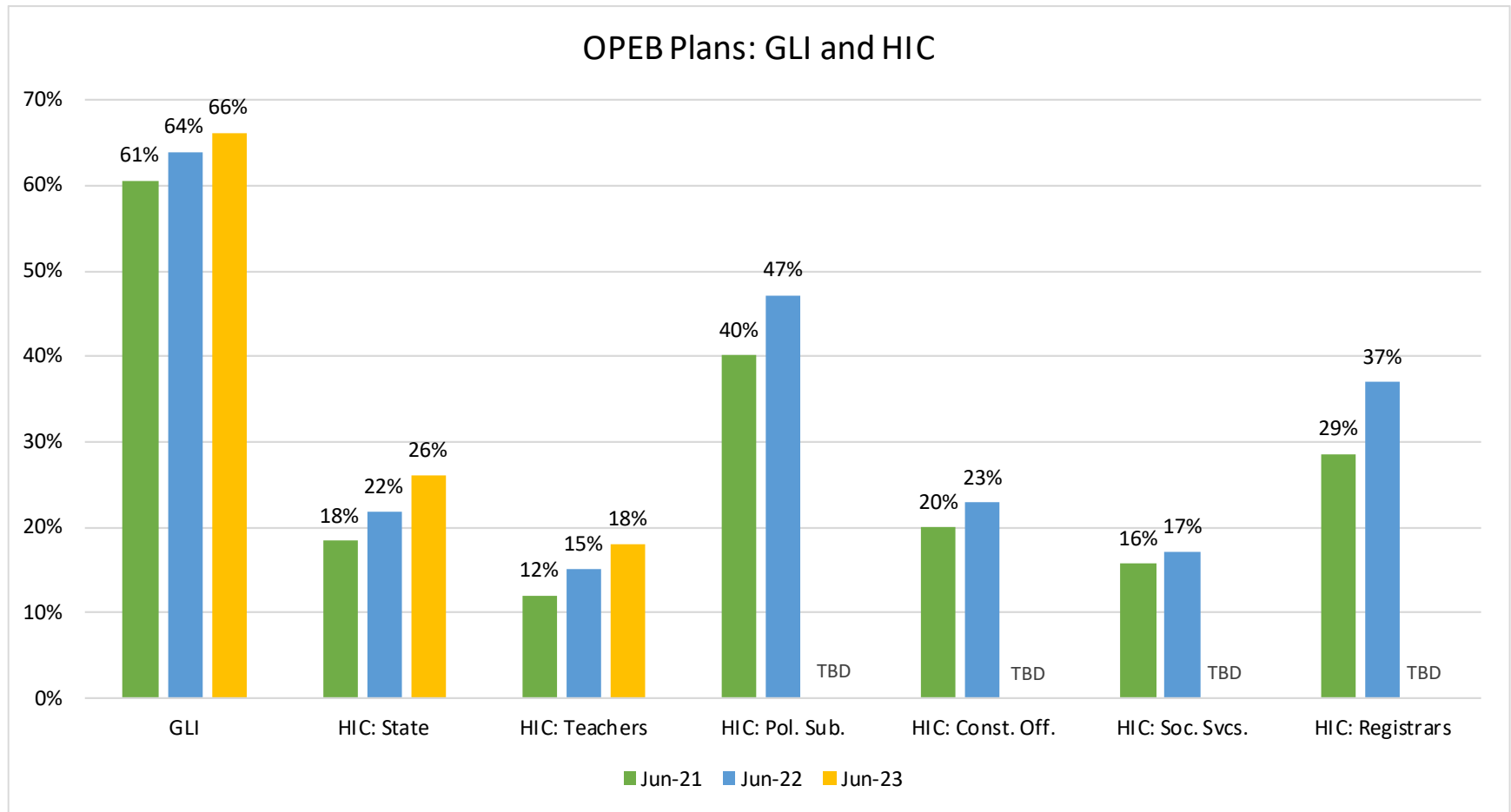


OPEB: HIC Legislative Changes

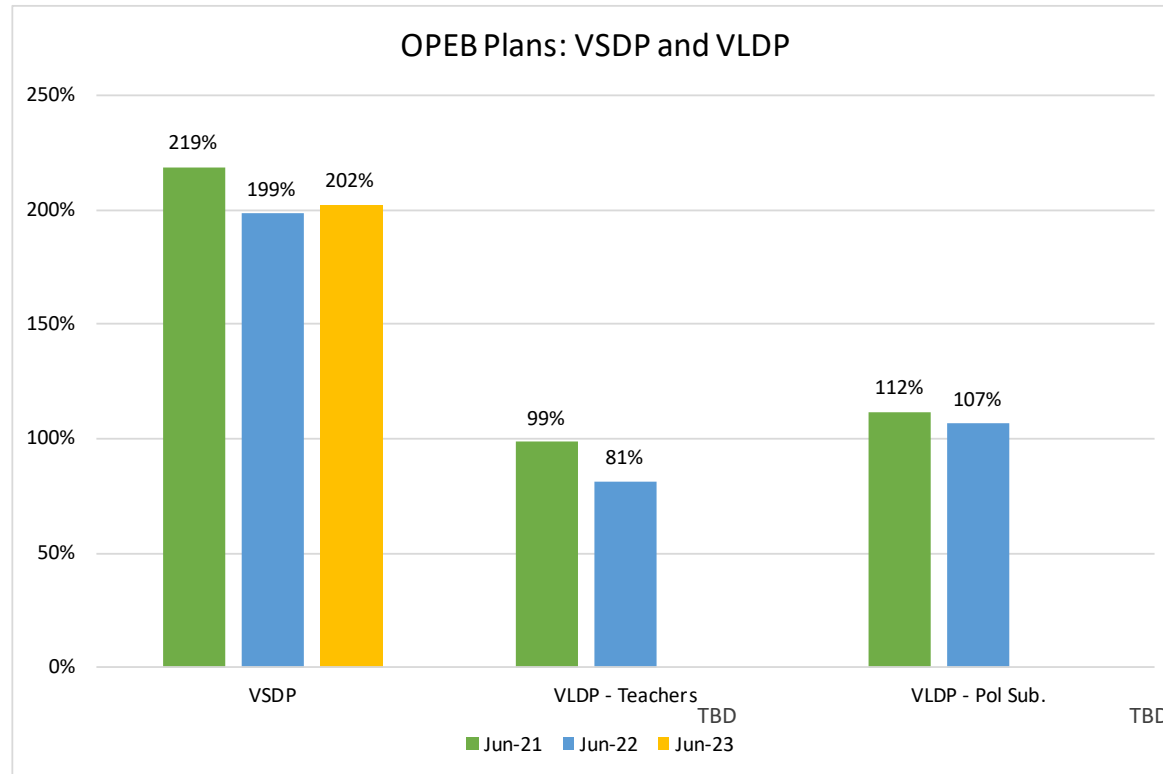
- Increases the amount of monthly health insurance credits for certain retirees beginning July 1, 2024

Retired Group	Monthly Credit Increase	Maximum
Constitutional Officers	\$1.50 to \$1.75	\$52.50
State Employees	\$4.00 to \$4.25	No change

Funded Status (AVA) – OPEB Plans

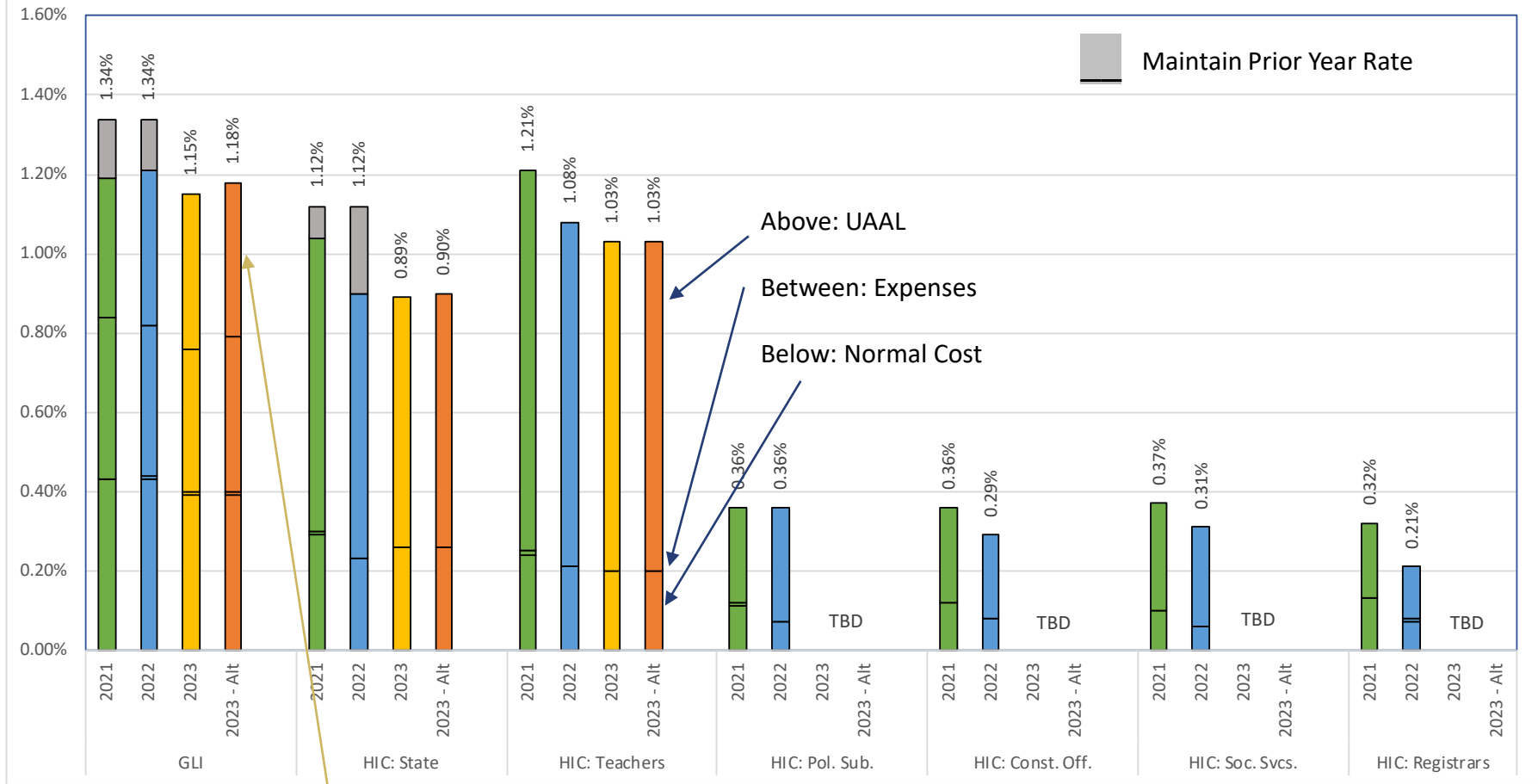


Funded Status (AVA) – OPEB Plans



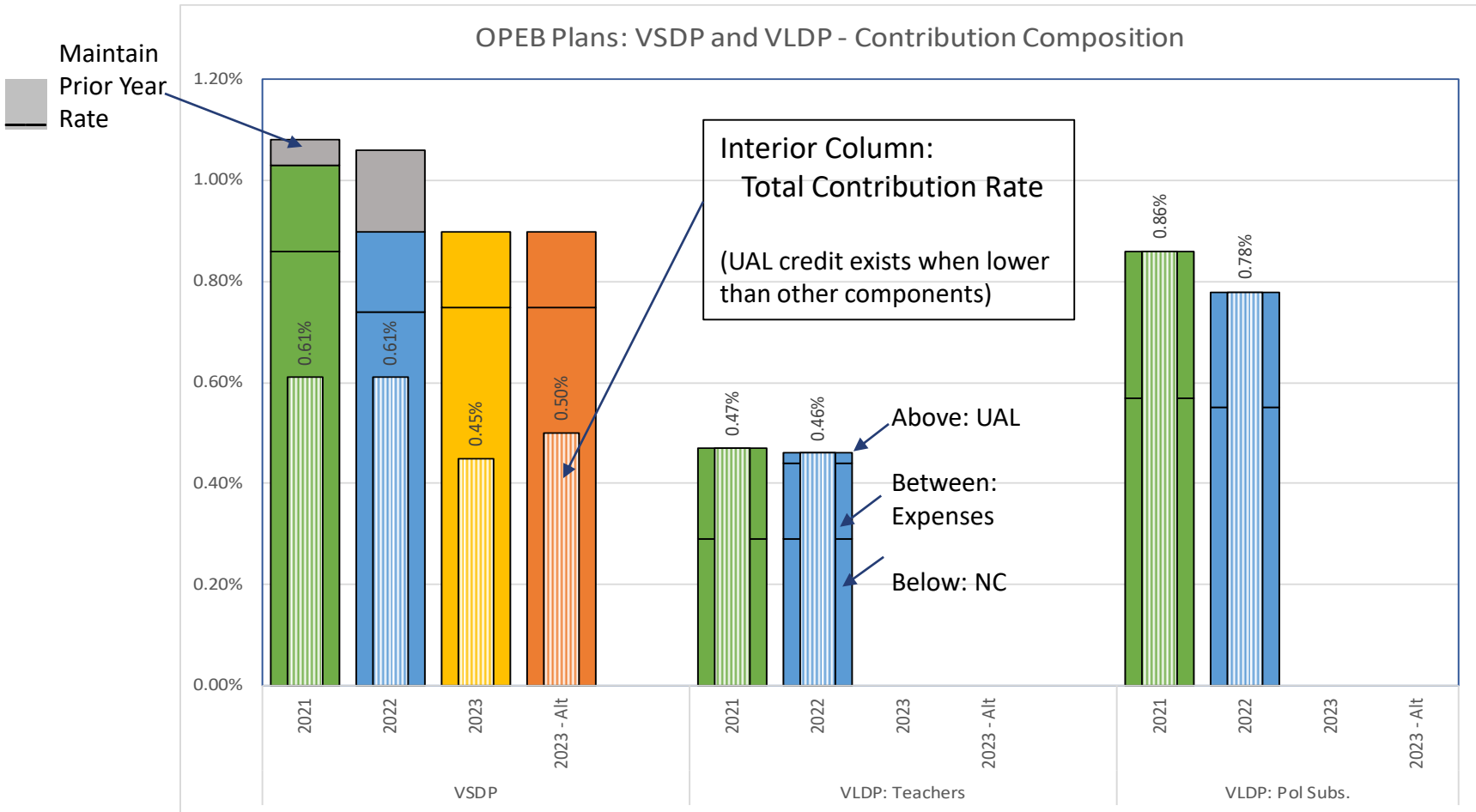
Actuarially Determined Employer Contribution Rates – OPEB Plans

OPEB Plans: GLI and HIC - Contribution Composition



Note top 1/3 of GLI rate reflects active Life Insurance contribution

Actuarially Determined Employer Contribution Rates – OPEB Plans



VRS Additional Funding Provisions – OPEB

- Additional \$93+ million contributed from the General Fund to the Trust in June 2022 & 2023

OPEB Group	Add'l Contrib. 2022	Add'l Contrib. 2023	Total Additional 2022-2023	Funded Status Impact	Contrib. Rate Impact
HIC: State	\$8,522,746	\$27,159,085	\$35,681,831	+3.60%	-0.04%
HIC: Teachers	\$12,013,013	\$4,004,338	\$16,017,351	+1.14%	-0.01%
GLI	\$30,438,378	\$10,146,126	\$40,584,504	+1.13%	-0.01%
HIC: C. Off.	\$275,975	\$91,992	\$367,967	TBD	TBD
HIC: S. Svcs.	\$121,754	\$1,031,416	\$1,153,170	TBD	TBD
HIC: Regis.	\$6,494	\$2,165	\$8,659	TBD	TBD
TOTAL	\$51,378,360	\$42,435,122	\$93,813,482	TBD	TBD



Important to get additional funds into OPEB Plans when possible

Pension Projections

State Employees and Teachers

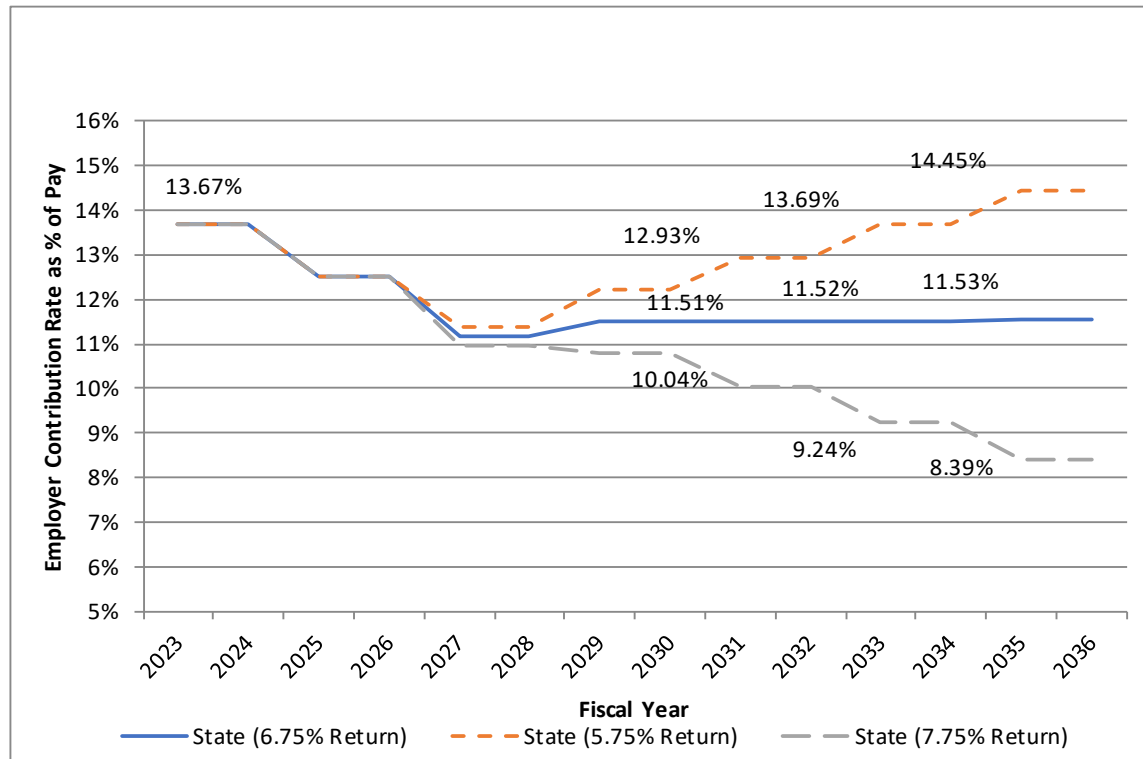
The following pages show projected pension contributions & funded status

- Liabilities are calculated at 6.75%
- Investment returns shown at assumed 6.75% rate, and 5.75%/7.75% for sensitivity
- Alternate Contribution rates (resets amortization bases) include Defined Benefit only
 - Defined Contribution decoupled from Employer Rate for 2023 valuation and going forward



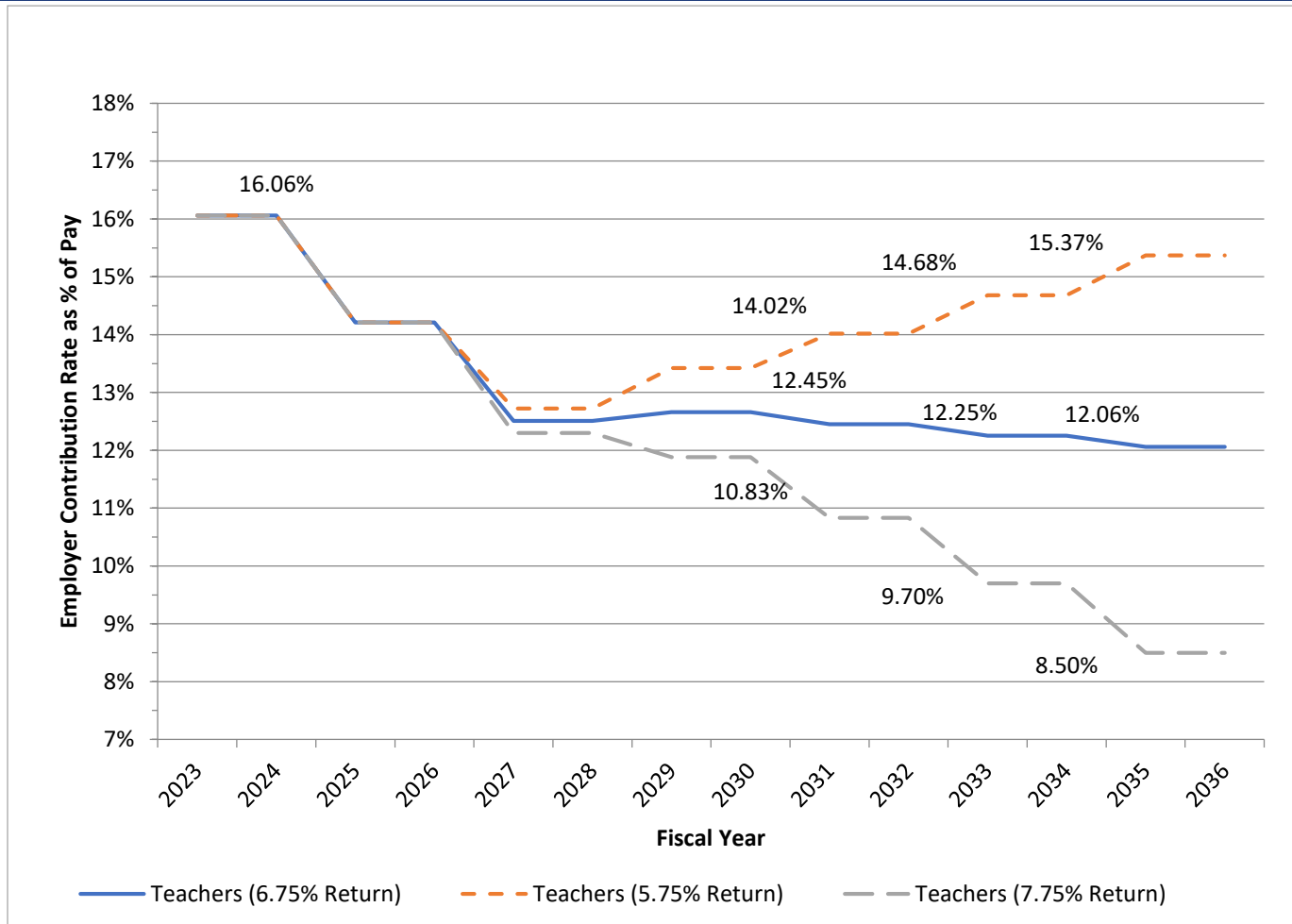
Projected Employer Contribution Rates (Fiscal Year) – Defined Benefit Portion Only

State Employees



Projected Employer Contribution Rates (Fiscal Year) – Defined Benefit Portion Only

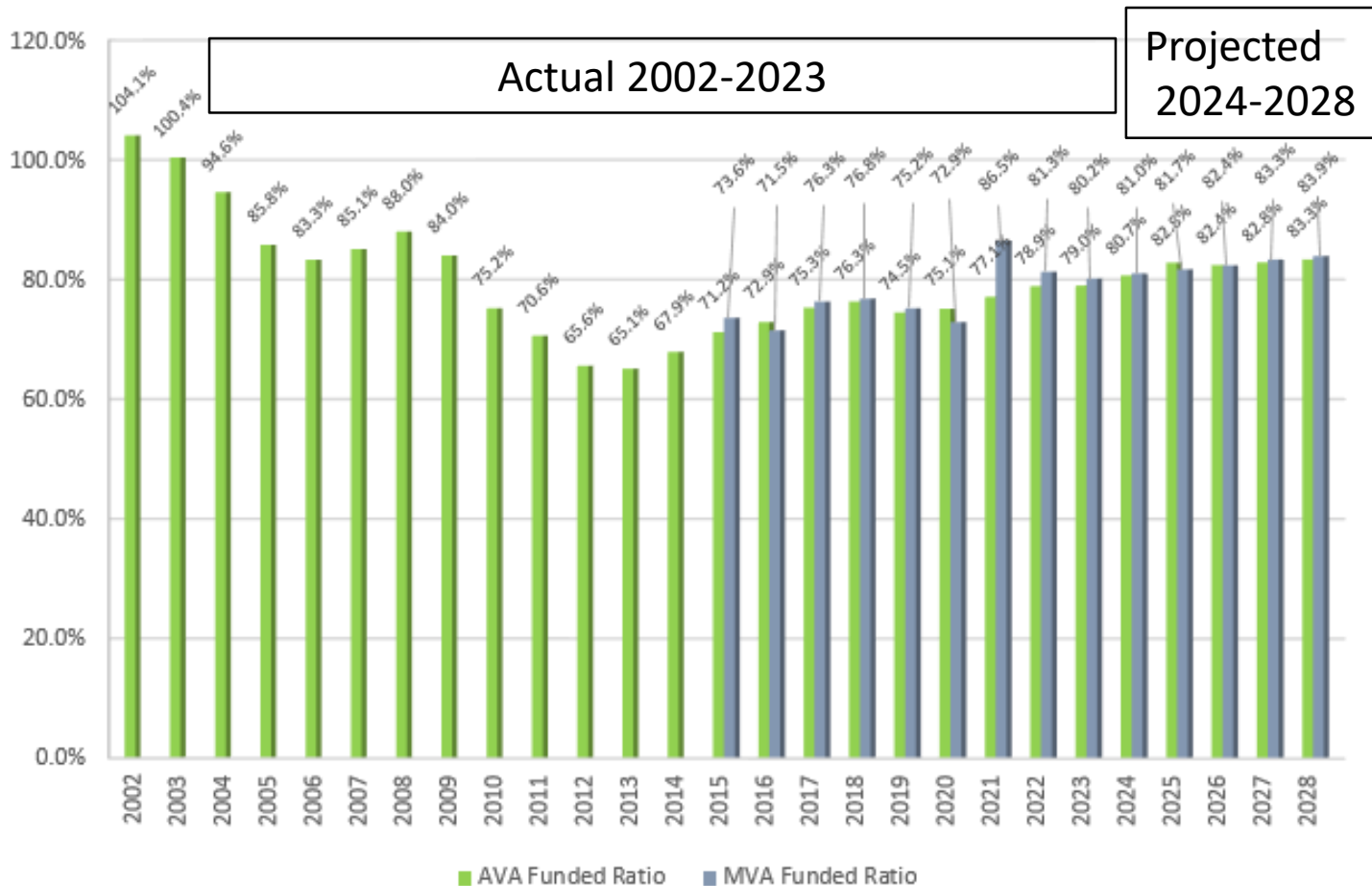
Teachers



Projected Pension Funded Status

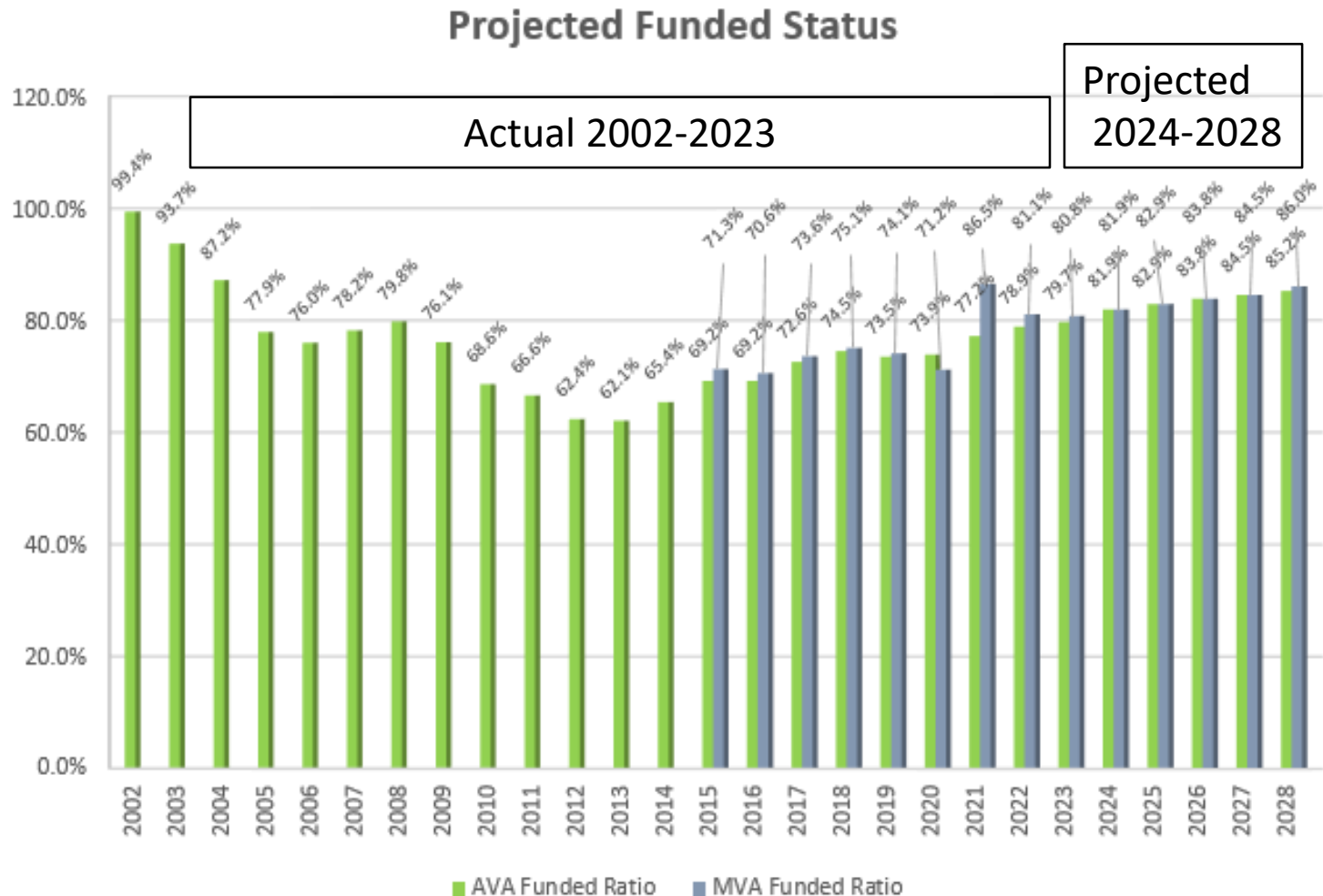
State Employees

Projected Funded Status



Projected Pension Funded Status

Teachers



Conclusion



1. Maintained Funded Status on Actuarial Asset Basis

- Despite lower than expected returns for fiscal years 2021-2022, recognition of prior asset gains resulted in small gains

2. Contributions

- Pension & OPEB rates are mostly consistent with last year's informational valuation
- Generally, slightly lower rates than those currently being paid
- DC Hybrid estimates have been decoupled from the DB rates for State, Teachers, and JRS
- Alternative amortization schedule slightly increases rates in the short term but moderates rates in the long term and saves money over time



THANK YOU

QUESTIONS

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- This presentation expresses the views of the authors and does not necessarily express the views of Gabriel, Roeder, Smith & Company.
- Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

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