



Retirement Benefit Study Committee

November 29, 2021

- SEBC Status Update
- Review 2021 Actuarial Valuation
- Updated Funding and Benefit Options
- Guest Speaker: Wayne Emsley



SEBC Update



2021 Actuarial Valuation

Cheiron

OPEB Changes Since 2020 Valuation



- 2021 participant data
 - Active counts decreased by 0.8%
 - Inactive counts increased by 1.8%
- 2021 claim curves
 - Rolled forward claims from 2020 valuation at assumed trends for 2020
- 2021 demographic assumptions
 - Updated mortality tables, retirement rates, disability rates and termination rates as well as salary scale
 - Updates increased the liability by \$340 million, or 3.3%
- Discount rate for determining actuarial liability
 - Down from 2.21% to 2.16%

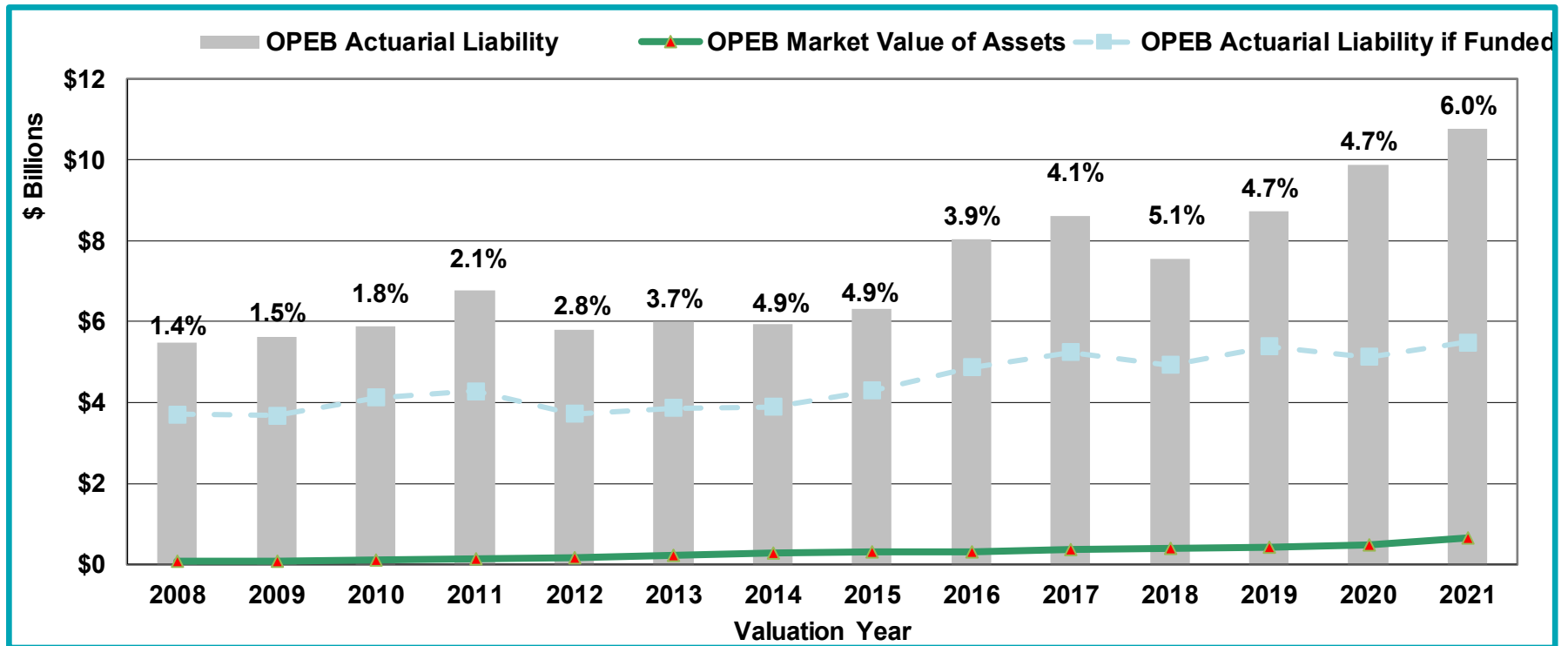
Key Results – State OPEB



(Dollar amounts in millions)	2020	2021
Actives Actuarial Liability (AL)	\$ 5,179	\$ 5,693
Inactive AL	<u>4,698</u>	<u>5,080</u>
Total AL	\$ 9,877	\$10,773
Market Value of Assets (MVA)	<u>464</u>	<u>650</u>
UAL (Total AL – MVA)	\$ 9,413	\$10,123
MVA Funded Ratio (MVA/AL)	4.7%	6.0%
Eligible Participant Counts*		
Active	39,308	38,986
Terminated Vested	3,959	3,931
Inactive	<u>32,352</u>	<u>32,936</u>
Total	75,619	75,853

Eligible Participants are those active employees or terminated vested in the State, Judges, or State Police Retirement Plans. Inactive participants are retirees, disableds, spouses, and surviving spouses with medical coverage.

OPEB Historical Review – Assets & Liabilities



Discount Rate	5.00%	5.00%	5.00%	4.25%	4.25%	4.25%	4.25%	4.25%	3.75%	3.58%	3.87%	3.50%	2.21%	2.16%
Funding Rate	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.20%	7.20%	7.00%	7.00%	7.00%	7.00%

Baseline Projection – Funding Valuation



H-scan

Stress Testing



0.00%

Health Trends

	Initial Trend	First Year	Second Year	Ultimate Trend	Years to Ultimate
Med Pre-Medicare	5.28%	5.17%	5.07%	3.50%	17
Med Post-Medicare	4.00%	3.97%	3.94%	3.50%	17
Rx - Pre-Medicare	6.55%	6.37%	6.19%	3.50%	17
Rx - Post-Medicare	6.55%	6.37%	6.19%	3.50%	17

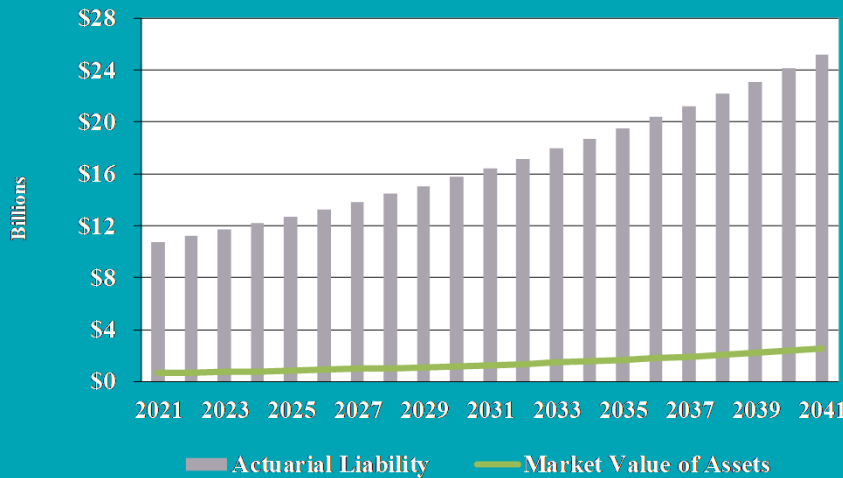
Active Population Growth **0.00%**

Investment Return **7.00%**

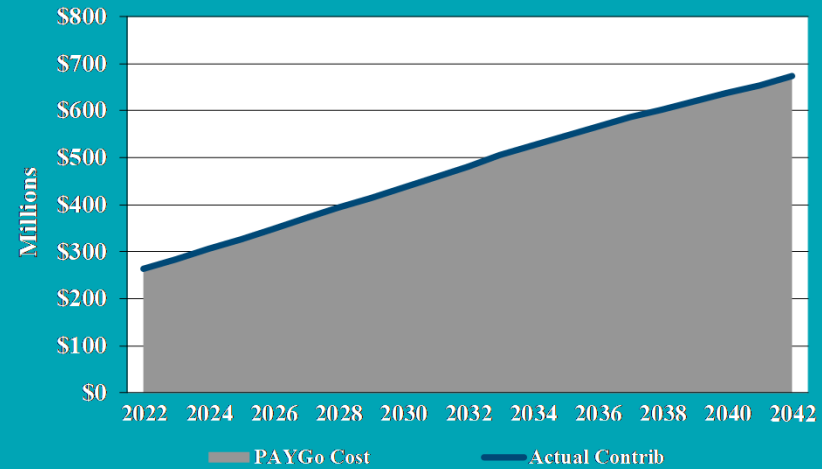
Discount Rate **2.16%**

Group To Show: **Total**

Assets and Liabilities



Plan Funding



Classic Values, Innovative Advice

October 29, 2021

GASB 74 FY 2021/GASB 75 FY 2022



GASB 74/75 liabilities are based on the prior year's valuation census and assumptions with exception for the discount rate. The discount rate for the GASB 74/75 is based on the Bond Buyer 20 GO rate as of the measurement date. As of 6/30/2021, that rate was 2.16%

	GASB 74 Disclosure			GASB 75 Disclosure		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (c)=(a)-(b)	Deferred Outflow of Resources (d)	Deferred Inflow of Resources (e)	OPEB Expense (c)-(d)-(e)
Balances at 6/30/2020	\$ 10,876	\$ 464	\$ 10,412	\$ 2,063	\$ (1,319)	NA
Changes for the year:						
Service cost	466		466			466
Interest	243		243			243
Changes of benefits	0		0			0
Liability (Gain)/Loss	(1,021)		(1,021)	(60)	(672)	(289)
Changes of assumptions	425		425	(13)	262	176
Contributions - employer		267	(267)			
On behalf contributions		0	0			
Contributions - member		-	0			0
Net investment income		172	(172)	0	(106)	(66)
Benefit payments	(252)	(252)	0			
Administrative expense		-	-			-
Net changes	<u>(139)</u>	<u>187</u>	<u>(326)</u>	<u>(73)</u>	<u>(516)</u>	<u>530</u>
Balances at 6/30/2021	<u>\$ 10,737</u>	<u>\$ 651</u>	<u>\$ 10,086</u>	<u>\$ 1,990</u>	<u>\$ (1,835)</u>	<u>NA</u>

OPEB expense:	267	+	(326)	-	(73)	-	(516)	=	530
	ER Contr		change in NOL		Def Out		Def In		OPEB Exp

(in millions)



Required Disclosures



The purpose of this presentation is to present the annual actuarial valuations of the Delaware State Employees' Retirement System. This presentation is for the use of the Delaware State Employees' Retirement Board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

In preparing our presentation, we relied on information, some oral and some written, supplied by the Delaware State Employees' Retirement System. This information includes, but is not limited to, the plan provisions, membership data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

We hereby certify that this presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This presentation was prepared exclusively for the Delaware State Employees' Retirement Board for the purpose described herein. Other users of this presentation are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

The actuarial assumptions, data, and methods are those used in the preparation of the latest actuarial valuation reports prepared for these plans as of June 30, 2021.

The assumptions reflect our understanding of the likely future experience of the Plans, and the assumptions as a whole represent our best estimate for the future experience of the Plans. The results of this presentation are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the Plan could vary from our results.



Fiona E. Liston, FSA
Principal Consulting Actuary



Elizabeth Wiley, FSA
Consulting Actuary



Margaret Tempkin, FSA
Principal Consulting Actuary



Historical Review - Definitions



- Present Value Accrued Benefits (PVAB)
 - Liability measure based on only those benefits accrued through the valuation date
- Actuarial Liability (AL)
 - Liability amount that is the funding target
 - Liability measure taking into account benefits accrued to date plus recognition of expected future salary increases
- Present Value Future Benefits (PVFB)
 - Liability measure reflecting both expected future service accrual and salary increases
- Market Value of Assets (MVA)
 - Value shown on financial statements - “fair value”
- Actuarial Value of Assets (AVA)
 - Smoothed market value, based on increasing the expected AVA by 20% of the difference between MVA and expected AVA for DPERS
- Funded Ratios
 - AVA Funded Ratio: Ratio of AVA to AL
 - MVA Funded Ratio: Ratio of MVA to AL



Updated Funding and Benefit Options

Funding and Benefit Options with Updated Valuation

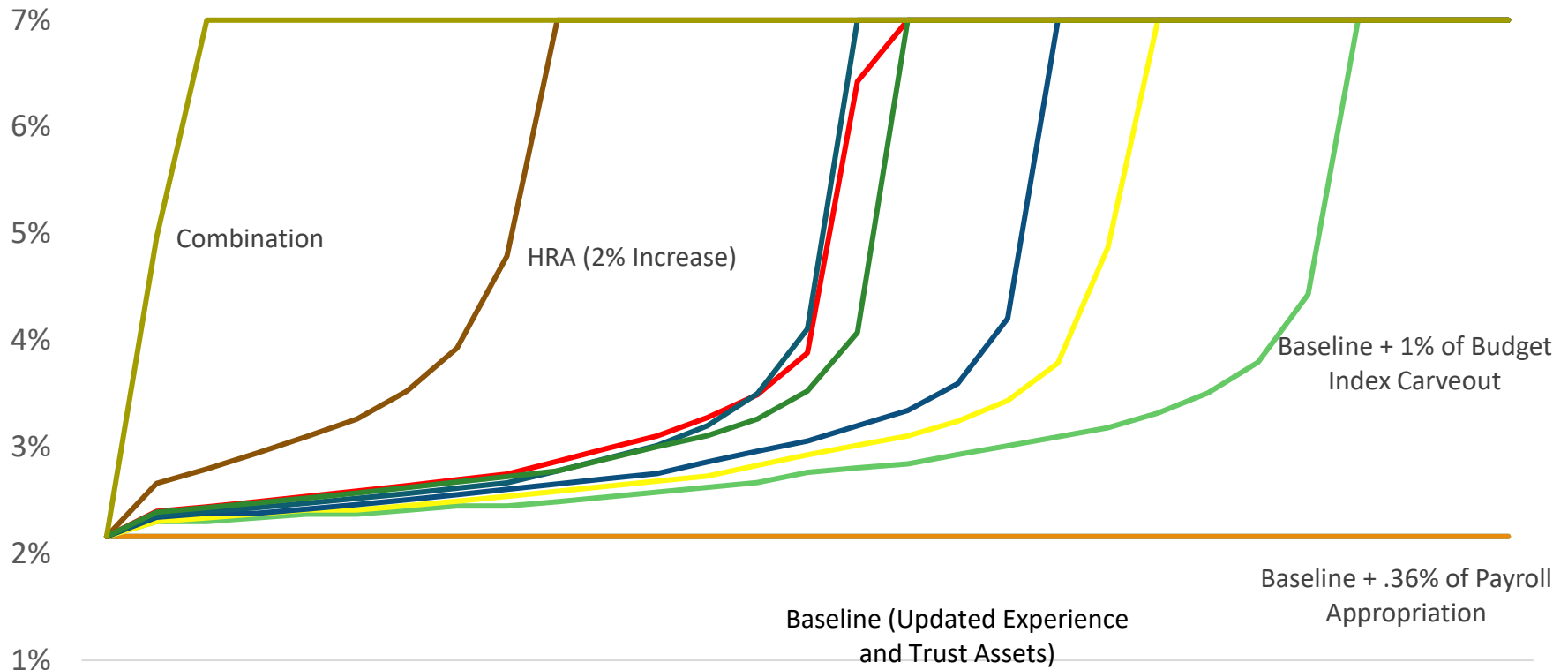


		2050 Projection					
		Total Benefits	ADC	Accrued Liabilities	Trust Assets	Funded Ratio	Discount Rate
Additional Funding, <u>2020</u> Valuation	Baseline	\$787	\$2,486	\$36,876	\$3,535	9.60%	2.21%
	Baseline + 1% of Budget Index Carveout	\$787	\$2,024	\$33,424	\$9,917	29.70%	3.00%
	Eliminate Future Terminated Vesteds	\$743	\$1,880	\$31,451	\$9,917	31.50%	3.10%
	Graduated State Share Based on YOS	\$787	\$788	\$17,185	\$9,917	57.70%	7.00%
	Minimum Required Age 60/ 55	\$690	\$746	\$16,831	\$9,917	58.90%	7.00%
	HRA (2% Increase)	\$566	\$337	\$11,055	\$9,917	89.70%	7.00%
	Reduce Spousal Subsidy for Future Retirees	\$681	\$773	\$16,882	\$9,917	58.70%	7.00%
	Combination	\$379	\$142	\$5,859	\$5,670	96.80%	7.00%
Additional Funding, <u>2021</u> Valuation	Baseline (Updated Experience and Trust Assets)	\$842	\$2,466	\$37,022	\$4,626	12.50%	2.16%
	Baseline + .36% of Payroll Appropriation	\$842	\$2,439	\$37,022	\$5,682	15.80%	2.16%
	Baseline + 1% of Budget Index Carveout	\$842	\$964	\$19,088	\$9,818	51.40%	7.00%
	Baseline + Appropriation + Carveout	\$842	\$910	\$19,094	\$10,874	56.90%	7.00%
	Eliminate Future Terminated Vesteds	\$798	\$837	\$18,153	\$10,874	59.90%	7.00%
	Graduated State Share Based on YOS	\$842	\$659	\$15,874	\$10,874	68.50%	7.00%
	Minimum Required Age 60/ 55	\$727	\$601	\$15,444	\$10,874	70.40%	7.00%
	HRA (2% Increase)	\$602	\$338	\$11,339	\$10,874	95.90%	7.00%
	Reduce Spousal Subsidy for Future Retirees	\$730	\$675	\$15,979	\$10,874	68.10%	7.00%
	Combination	\$424	(\$92)	\$6,189	\$10,874	175.70%	7.00%

Note: All benefit options reflect the lowest funding row in gray immediately above

Estimated Effective Discount Rate by Year

Discount Rate Estimated by Cheiron by Year for the Funding and Benefit Option Scenarios



2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050

- Baseline (Updated Experience and Trust Assets)
- Baseline + .36% of Payroll Appropriation
- Baseline + 1% of Budget Index Carveout
- Baseline + Appropriation + Carveout
- Eliminate Future Terminated Vesteds
- Graduated State Share Based on YOS
- Minimum Required Age 60/ 55
- HRA (2% Increase)
- Reduce Spousal Subsidy for Future Retirees
- Combination