# State Teachers Retirement System of Ohio



#### Sustainable Benefit Enhancement Plan

March 21, 2024

Presented by
Bonnie Rightnour, FSA
Mike Noble, FSA



- Background
- Sustainable Benefit Enhancement Plan
- Current Year Results
- Benefit Enhancement Option Update



## Fiscal Integrity



The Board may adjust the benefits of the System if the Board's actuary determines that the adjustment does not materially impair the fiscal integrity of the system, or is necessary to preserve the fiscal integrity of the system

#### Fiscal integrity of the system

- Not defined in legislation
- General actuarial principals include:
  - Ability to withstand financial shocks
  - Expected improvement in the Plan's funded ratio
- Board feedback
  - Expectation to be able to pay benefits
  - Be able to withstand outside factors
  - Meet key performance metrics that are simple, clear, measurable



#### Recap of Prior Year Fiscal Integrity Tests



- In 2023, Cheiron developed a Sustainable Benefit Enhancement Plan (SBEP) that consisted of three tests to evaluate whether a change may materially impair the fiscal integrity of the System
  - 1. Do contributions exceed treadwater<sup>(1)</sup> by a 25% margin?
    - Yielded a \$0 budget
  - 2. Will contributions exceed treadwater within 5 years after "shock" investment return?
    - Yielded a \$0 budget
  - 3. Is there an 80% probability that contributions will exceed treadwater in 10 years<sup>(3)</sup>?
    - Yielded a \$300 million budget
- (1) Treadwater = normal cost + interest on unfunded liability
- (2) Shock = 2 standard deviations below the expected return of 7%
- (3) Stochastic testing based on known return for current fiscal year and investment advisors expected return and standard deviation

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# Recap of Prior Year SBEP 2023 Budget



- SBEP Budget is the lowest of all 3 tests
  - Therefore, FYE 2023 SBEP Budget = \$0
- Cheiron acknowledged that an enhancement may not materially impair the fiscal integrity of the system if it is deemed to be a de minimis enhancement
  - Up to 1% of the actuarial value of assets
  - Only available if the Plan is projected to be fully funded within 20 years after the inclusion of the de minimis enhancement
    - This projection will reflect the latest known investment return for the current fiscal year and assumed returns for future years
- 2023 De Minimis Budget = \$0.83 billion



#### Recap of Prior Enhancements



- Given the SBEP Budget of \$0 and the availability of a de minimis enhancement, the Board adopted two plan enhancements during FYE 2023
  - 34-year requirement for unreduced retirement was extended 5 years to July 31, 2028 (SBEP Budget impact of \$369 million)
  - Permanent COLA of 1% provided to eligible retirees beginning in FYE 2024 (SBEP Budget impact of \$456 million)
- Plan changes adopted in FYE 2022 were not based on SBEP budget, but, based on FYE 2021 valuation adjusted for experience study changes, the equivalent at that time would have been:
  - Permanent COLA of 3% provided to eligible retirees beginning in FYE 2023 (Approximate impact of \$1,393 million)
  - Elimination of age 60 requirement for unreduced retirement (Approximate impact of \$792 million)



## Review of Fiscal Integrity Tests for FYE 2024



- What has changed since last year?
  - Actuarial Valuation Metrics:
    - Funded status increased from 80.9% to 81.3%
    - The funding period dropped from 11.5 years to 11.2 years
    - MVA Treadwater rate went from 22.85% to 22.15%
  - Investment Consultant Expectations:
    - Meketa's 2024 10-year mean return expectation is 7.04% with 11.76% standard deviation
    - Callan's 2023 10-year mean return expectation was 7.17% with 12.78% standard deviation



## Review of Fiscal Integrity Tests for FYE 2024



- Why do we focus on treadwater?
  - Because it captures several key concepts:
  - Ensures that new benefits being earned are being funded (normal cost)
  - Captures the expected direction of funding progress
  - Reflects the Plan's funded status As the funded ratio improves treadwater goes down (recognition of good funding progress)
- Test 1 focuses on how the current contributions compare to the treadwater contribution level
- Test 2 focuses on a shock scenario (1 in 40 event)
- Test 3 focuses on the likelihood that Plan contributions exceed treadwater in 10 years, given Plan dynamics and investment risk



#### SBEP Test 1 for FYE 2024



- Current year total contribution exceeds treadwater by 20%
  - Treadwater = Normal Cost + Interest on Unfunded Liability
  - If 120% of treadwater is greater than total contribution rate, then budget would be zero
  - Otherwise, budget amount A will be the level of enhancement such that the treadwater rate = the total contribution rate divided by 1.20

#### Test 1

- Total contribution rate for FYE 2023 is 27.50%
- Treadwater rate is 22.15% (20% of treadwater is 4.43%)
- 120% treadwater is 26.58%, so the maximum budget amount A from Test 1 is \$1.61 billion



#### SBEP Test 2 for FYE 2024



- Following a shock of two standard deviations below expected return, the contribution will exceed treadwater within 5 years
  - Based on Meketa's capital market assumptions, for FYE 2024 this would be a return of -16.48%
  - Deterministic projection assuming future year returns after FYE
     2024 are equal to the discount rate of 7%
- Test 2
  - Baseline time to return following -16.48% is 9 years
  - 9 years exceeds 5 years, so the maximum budget amount B
     from Test 2 is zero



#### SBEP Test 3 for FYE 2024



- System has an 80% probability of contributions exceeding treadwater 10 years in the future
  - Preliminary FY to date 2024 return of 6.6% (through February 29, 2024)
  - Stochastic (Monte Carlo) projections for FYE 2025-2034
  - Based on Meketa's mean 10-year expectation (7.04%) and standard deviation (11.76%)
- Test 3
  - Baseline probability of exceeding treadwater in 10 years is 85.6%
  - The maximum budget amount C from Test 3 is \$3.0 billion



## SBEP Budget for FYE 2024



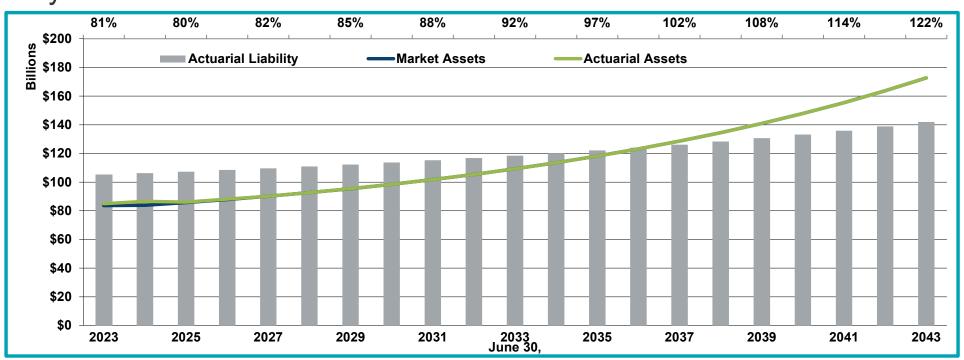
- SBEP Budget for FYE 2024 is the least of the maximum budget amounts A, B and C
  - -A = \$1.61 billion, B = \$0, C = \$3.0 billion
  - Therefore, SBEP Budget is zero



#### 2024 De Minimis Enhancement



- In 2024, the amount of de minimis enhancement that may be considered is:
  - Between 0% and 1% of \$85 billion = \$0 to \$850 million
- With a de minimis enhancement in this range, STRS is projected to become fully funded within 20 years
- Therefore, a de minimis enhancement does not materially impair the fiscal integrity of the system





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#### Conclusions



- In 2024, a de minimis enhancement of up to \$850 million does not materially impair the fiscal integrity of the system
  - Any enhancement will reduce the budget for future enhancements
- While our analysis provides the Board with the ability to make a de minimis enhancement to the Plan, we are not making a recommendation either way
  - As future conditions evolve, we may modify any metrics used to determine budgets for enhancements
- The Sustainable Benefit Enhancement Plan determination and Economic Assumptions will be incorporated into the annual actuarial valuation for FYE 2024, prepared in accordance with Ohio Revised Code Section 3307.51(A).





# **Enhancement Option Analysis**



#### FYE 2024 Plan Enhancements Studied



- Baseline
  - Reflects changes made effective for FYE 2023 valuation
- As requested by the Board, budget impact for the following potential enhancements
  - +1% Employer and -1% Employee contribution changes
  - COLA scenarios
  - Reducing service requirements for retirement eligibility
- As requested by the Board we are showing the additional employer contribution required to fund enhancement



#### FYE 2024 Plan Enhancement Analysis Details



	First	Future			Eligibility	Eligibility		SBEP	Add'l Employer
	Year	Years	ER	EE	Unreduced	Reduced	В	udget	Funding
Enhancement	COLA	COLA	Contrib	Contrib	Retirement	Retirement	Imp	act (\$M)	Required**
Baseline - Actual	-	-	14%	14%	34 yrs to 2028	30 yrs or 60&5			
Contributions									
1.1 - Increase 1%*	-	-	15%	14%	34 yrs to 2028	30 yrs or 60&5	\$	(1,364)	
1.2 - Decrease 1%	-	-	14%	13%	34 yrs to 2028	30 yrs or 60&5	\$	1,313	+0.96%
COLA									
2.1 - 3% ongoing annual repeating simple COLA, FYE 2025+	3%	3%	14%	14%	34 yrs to 2028	30 yrs or 60&5	\$	21,276	+15.60%
2.2 - 2% ongoing annual repeating simple COLA, FYE 2025+	2%	2%	14%	14%	34 yrs to 2028	30 yrs or 60&5	\$	14,184	+10.40%
2.3 - 1% ongoing annual repeating simple COLA, FYE 2025+	1%	1%	14%	14%	34 yrs to 2028	30 yrs or 60&5	\$	7,092	+5.20%
2.4 - Permanent 3% COLA, FYE 2025 only	3%	No	14%	14%	34 yrs to 2028	30 yrs or 60&5	\$	1,358	+1.00%
2.5 - Permanent 2% COLA, FYE 2025 only	2%	No	14%	14%	34 yrs to 2028	30 yrs or 60&5	\$	906	+0.66%
2.6 - Permanent 1% COLA, FYE 2025 only	1%	No	14%	14%	34 yrs to 2028	30 yrs or 60&5	\$	453	+0.33%
Eligibility									
3.1 - Unreduced retirement at 34 yrs	No	No	14%	14%	34 yrs	30 yrs or 60&5	\$	849	+0.62%
3.1A - Unreduced retirement at 34 yrs to July 31, 2036	No	No	14%	14%	34 yrs to 2036	30 yrs or 60&5	\$	390	+0.29%
3.1B - Unreduced retirement at 34 yrs, Reduced at 29 yrs	No	No	14%	14%	34 yrs	29 yrs or 60&5	\$	838	+0.61%
3.2 - Unreduced retirement at 33 yrs	No	No	14%	14%	<b>33 yrs</b>	30 yrs or 60&5	\$	1,986	+1.46%
3.3 - Unreduced retirement at 32 yrs	No	No	14%	14%	<b>32 yrs</b>	30 yrs or 60&5	\$	2,971	+2.18%
3.4 - Unreduced retirement at 31 yrs	No	No	14%	14%	<b>31 yrs</b>	30 yrs or 60&5	\$	3,727	+2.73%
3.5 - Unreduced retirement at 30 yrs	No	No	14%	14%	<b>30 yrs</b>	30 yrs or 60&5	\$	4,222	+3.10%

<sup>\*</sup> Additional legislative, legal, and actuarial analysis may be required for these enhancement

<sup>\*\*</sup> Amount to be added to the current Employer contribution level of 14% to fully offset the cost of the enhancement



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## FYE 2024 Budget Modeling



- Modeling reflects SBEP, de minimis, plan changes, and asset performance
  - For example, we can model the return required in FYE 2024 for a specific budget enhancement in FYE 2025
    - 30-years unreduced retirement = 15%
    - 2% ongoing annual repeating simple COLA = 30.5%
- The model will reflect the present value of any additional employer contributions as being available in the current year



# Projections – Live Modeling



# LIVE MODELING



## FYE 2024 Plan Enhancement Options



	FYE	Future	Eligibility	Eligibility	SBEP
	2025	Years	Unreduced	Reduced	Budget
Enhancement	COLA	COLA	Retirement	Retirement	Impact (\$M)
Baseline - Actual	No	No	34 yrs to 2028	30 yrs or 60&5	
COLA					
Permanent 1.8% COLA, FYE 2025 only	1.8%	No	34 yrs to 2028	30 yrs or 60&5	\$ 815
Permanent 1% COLA, FYE 2025 only	1.0%	No	34 yrs to 2028	30 yrs or 60&5	\$ 453
Eligibility					
Unreduced retirement at 34 yrs	No	No	34 yrs	30 yrs or 60&5	\$ 849
Unreduced retirement at 34 yrs,	N.a	Na	24	20 04 609 5	ć 020
Reduced at 29 yrs	No	No	34 yrs	29 yrs or 60&5	\$ 838
Combinations					
Permanent 1% COLA, FYE 2025 only					
and Unreduced retirement at 34 yrs	1.0%	No	34 yrs to 2036	30 yrs or 60&5	\$ 843
to July 31, 2036					



#### Early Retirement Factor Table



# Eligibility for Unreduced Retirement at 34 Years Eligibility for Reduced Retirement at 30 Years For Retirement August 1, 2024+

	Age													
Service	52	53	54	55	56	57	58	59	60	61	62	63	64	65+
25									35.2	38.5	41.8	45.7	50.1	55.0
26									36.6	40.0	43.5	47.5	52.1	57.2
27									38.0	41.6	45.1	49.3	54.1	59.4
28									39.4	43.1	46.8	51.1	56.1	61.6
29									40.8	44.7	48.5	53.0	58.1	63.8
30	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	50.2	54.8	60.1	66.0
31	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	56.6	62.1	68.2
32	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	64.1	70.4
33	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	72.6
34	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
35		77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
36			79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2
37				81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4
38					83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6
39						85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
40							88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
41								90.2	90.2	90.2	90.2	90.2	90.2	90.2
42									92.4	92.4	92.4	92.4	92.4	92.4
43										94.6	94.6	94.6	94.6	94.6
44											96.8	96.8	96.8	96.8
45												99.0	99.0	99.0
46													100.0	100.0

# Eligibility for Unreduced Retirement at 34 Years Eligibility for Reduced Retirement at 29 Years For Retirement August 1, 2024+

	Age													
Service	52	53	54	55	56	57	58	59	60	61	62	63	64	65+
25									35.2	38.5	41.8	45.7	50.1	55.0
26									36.6	40.0	43.5	47.5	52.1	57.2
27									38.0	41.6	45.1	49.3	54.1	59.4
28									39.4	43.1	46.8	51.1	56.1	61.6
29	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	44.7	48.5	53.0	58.1	63.8
30	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	50.2	54.8	60.1	66.0
31	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	56.6	62.1	68.2
32	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	64.1	70.4
33	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	72.6
34	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
35		77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
36			79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2
37				81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4
38					83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6
39						85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
40							88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
41								90.2	90.2	90.2	90.2	90.2	90.2	90.2
42									92.4	92.4	92.4	92.4	92.4	92.4
43										94.6	94.6	94.6	94.6	94.6
44											96.8	96.8	96.8	96.8
45												99.0	99.0	99.0
46													100.0	100.0



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#### Required Disclosures



The purpose of this presentation is to discuss the viability of benefit enhancements for the State Teachers Retirement System of Ohio. This presentation is for the use of the Board and System staff.

In preparing our presentation, we relied on information, some oral and some written, supplied by the State Teachers Retirement System of Ohio. This information includes, but is not limited to, the plan provisions, employee 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.

Unless otherwise specified, the actuarial assumptions, data, and methods are those used in the preparation of the Actuarial Valuation Report as of June 30, 2023.

The assumptions reflect our understanding of the likely future experience of the System, and the assumptions as a whole represent our best estimate for the future experience of the System. 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 System could vary from our results.

Cheiron utilizes and relies upon ProVal, an actuarial valuation software leased from Winklevoss Technologies for the intended purpose of calculating liabilities and projected benefit payments. Projected results of future valuations in this presentation were developed using P-scan, our proprietary tool for the intended purpose of developing projections. As part of the review process for this presentation, we have performed a number of tests to verify that the results are reasonable and appropriate. We are not aware of any material inconsistencies, unreasonable output resulting from the aggregation of assumptions, material limitations or known weaknesses that would affect this presentation.

We hereby certify that, to the best of our knowledge, 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 State Teachers Retirement System of Ohio 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.

Michael Noble, FSA

Bonnie Rightnour, FSA



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# 2025 Early Indicators & Changing Years of Service Requirements

March 21,2024

## Agenda



- Early 2025 cost indicators
- Impact of changing years of service (YOS) requirements

#### Early 2025 Cost Indicators



- 2025 early indications (year of headwinds i.e., downside risks)
  - Trends
    - Seeing double-digit cost increase trends (pandemic residual; assumption was 4%-8.5%)
    - Compounding the trends are:
      - 2025 Medicare subsidy likely insufficient to match medical trend
      - Inflation Reduction Act (IRA) greatest Part D change since inception
        - $_{\circ}$  Major change in enrollee out-of-pocket limit \$4,000 MOOP/\$8,000 TrOOP<sup>1</sup> to \$2,000<sup>2</sup>
        - Medicare Prescription Payment Plan smoothing enrollee OOP costs over the year
        - Complete overhaul of Part D subsidies

Plan design and premium decisions delayed until August

<sup>&</sup>lt;sup>1</sup>TrOOP includes what an enrollee pays and what pharmaceutical manufacturers reimburse for brand drugs in the coverage gap (70%)

 $<sup>^{2}</sup>$ \$2,000 includes what an enrollee pays plus what STRS Ohio contributes towards the standard deductible and enrollee coinsurance

#### Impact of Changing YOS Requirements —

Scenarios for Consideration (34 and 30 YOS)



- Four options for the board's consideration
- Scenarios 3.1-3.3 incorporate an assumption that the board makes the eligibility for unreduced pension benefits 34 years for all years going forward
- While potential changes apply to Medicare and pre-Medicare, the table to the right only shows the difference between the option's subsidy percentages for pre-Medicare health care plan participants
  - 3.0 − No change
  - 3.1 Max subsidy at 34 YOS permanently
  - 3.2 Max subsidy at 30 YOS permanently
  - 3.3 Max subsidy at 30 YOS for retirements through
     7/31/2032; after that, the max subsidy for pre-Medicare HC plan participants lines up with the eligibility for unreduced pensions (34 YOS if no further changes)

#### Sample Non-Medicare Subsidy Rates

				FY25-32	FY33+
YOS	3.0	3.1	3.2	3.3	3.3
20	37.5%	40.0%	50.0%	37.5%	40.0%
21	40.0%	42.5%	52.5%	40.0%	42.5%
•••					
29	60.0%	62.5%	72.5%	60.0%	62.5%
30	62.5%	65.0%	<b>75.0</b> %	<b>75.0</b> %	65.0%
31	65.0%	67.5%	<b>75.0</b> %	<b>75.0</b> %	67.5%
32	67.5%	70.0%	<b>75.0</b> %	<b>75.0</b> %	70.0%
33	70.0%	72.5%	<b>75.0</b> %	<b>75.0</b> %	72.5%
34	72.5%	<b>75.0</b> %	<b>75.0</b> %	<b>75.0</b> %	<b>75.0</b> %
35	<b>75.0</b> %	<b>75.0</b> %	<b>75.0</b> %	<b>75.0</b> %	75.0%

## Impact of Changing YOS Requirements —



Scenarios for Consideration (34 and 30 YOS)

- The fiscal 2022 funded ratio was nearly 231%
- After significant actuarial assumption changes, extensive coverage improvements and an additional year's experience, the fiscal 2023 funded ratio declined to 169% this is the baseline for evaluating potential changes (scenario 3.0)
- All three scenarios of changes have modest impacts on the liability and funded ratio
- Scenarios 3.1 and 3.3 have similar impacts
  - Cheiron priced scenario 3.1 to increase the liability by about \$95 million, decreasing the funded ratio to approximately 163%
- The initial impact of scenario 3.2, while still modest, is larger than scenarios 3.1 and 3.3 (up to two times as large)
  - Note that if scenario 3.2 were to be adopted, any future decreases to the requirements for unreduced pension eligibility would impose additional costs on the health care plan that will have to be considered at that time
    - If pension moves to 30 YOS unreduced, Cheiron projects an additional 20+ percentage point drop

# Impact of Changing YOS Requirements (34 and 30 YOS)



#### Impacts

- Those who retired August 1, 2023, or later
  - Includes non-Medicare and Medicare retirees
- Only affects future monthly premiums after the programming changes are implemented
  - No retroactive premium adjustments
- The option 3.3 fiscal 2033 adjustment impacts only those who retire on August 1, 2032, or later
  - Those who retired between July 1, 2024, to July 31, 2032, would not be impacted by this
    adjustment

#### Implementation

- Recommended implementation target date is January 1, 2025 assumes no delays
  - Additional programming will be necessary (there will be a cost)
  - Will become part of 2025 open-enrollment documents and communications

#### Appendix: Cheiron's Actuarial Analysis Results



#### STRS -- Impact on OPEB Valuation of Changing Years of Service for Full Pension Eligibility and Retiree Contribution Subsidy

		Table	I-1											
	Summary of Key Valuation Results													
Scenario	Baseline	34 yos subsidy	34 yos subsidy	30 yos subsidy	30 yos subsidy	30 yos revised								
Yos requirement for max subsidy	35 yos '23	34 yos '23	34 yos '23	30	30	30								
YoS requirement for Full Pension Eligibility	34/35 yos '23/'28	34/35 yos '23/'28	34 yos '23	34/35 yos '23/'28	30	30								
			align w/pension		align w/pension	align w/pension								
Other Decrement changes	No	No	No	No	No	Retirement Rates								
Valuation Date	June 30, 2023	June 30, 2023	June 30, 2023	June 30, 2023	June 30, 2023	June 30, 2023								
Discount Rate	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%								
Actuarial Liability														
Current retirees, beneficiaries, and dependents	\$ 1,186,115,669	\$ 1,186,115,669	\$ 1,186,115,669	\$ 1,186,115,669	\$ 1,186,115,669	\$ 1,186,115,669								
Current active members	1,643,818,049	1,688,642,904	1,738,578,498	1,801,938,790	2,086,732,131	2,195,024,267								
Terminated members entitled but not yet eligible	8,608,785	8,608,785	8,608,785	8,608,785	8,608,785	8,608,785								
Total Actuarial Liability	\$ 2,838,542,503	\$ 2,883,367,358	\$ 2,933,302,952	\$ 2,996,663,244	\$ 3,281,456,585	\$ 3,389,748,721								
Health care fund assets	4,783,404,347	4,783,404,347	4,783,404,347	4,783,404,347	4,783,404,347	4,783,404,347								
Unfunded actuarial liability (UAL)	(1,944,861,844)	(1,900,036,989)	(1,850,101,395)	(1,786,741,103)	(1,501,947,762)	(1,393,655,626)								
Funded Ratio	168.52%	165.90%	163.07%	159.62%	145.77%	141.11%								
Delta AL		\$ 44,824,855	\$ 94,760,449	\$ 158,120,741	\$ 442,914,082	\$ 551,206,218								
Score Card Results for 2023	0	-1	-1	-2	-4	-4								

Table 1-2 Calculation of Actuarially Determined Contribution (ADC) (\$ thousands)													
Scenario Baseline 34 yos subsidy 34 yos subsidy 30 yos subsidy 30 yos subsidy 30 yos revi:  Pension Eligibility No no change align w/pension no change align w/pension align w													
For Fiscal Year Ending		June 30, 2024											
Normal cost		\$61,724		\$63,424		\$65,309		\$68,155		\$78,603		\$82,896	
Amortization of UAL		(106,741)		(106,741)		(106,741)		(106,741)		(106,741)		(106,741)	
Interest adjustment		(3,151)		(3,032)		(2,900)		(2,701)		(1,970)		(1,669)	
Total ADC (not less than \$0)		\$0		\$0		\$0		\$0		\$0		\$0	
Projected payroll	\$	13,274,839	\$	13,274,839	\$	13,274,839	\$	13,274,839	\$	13,274,839	\$	13,274,839	
ADC as a percentage of pay		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%	
Expected Net Benefit Payments Projected Net Benefit Paymentf for FYE:	\$	158,862	\$	159,184	\$	159,184	\$	160,441	\$	162,729	\$	163,709	
2025		169,124		169,803		169,803		171,866		177,885		180,291	
2026		174,880		175,916		175,916		178,753		187,981		191,620	
2027		179,846		181,258		181,258		184,898		197,269		202,035	
2028		185,489		187,308		187,308		191,763		207,222		213,118	
2029		191,938		194,150		195,711		199,519		219,478		226,668	





# Questions?

This material may contain "forward-looking" information that is not purely historical in nature. Such information may include, among other things, projections, forecasts, and estimates of yields or returns. No representation is made that the information presented will be achieved by STRS Ohio, or that every assumption made in achieving, calculating or presenting either the forward-looking information or any historical performance information has been considered or stated in preparing this material. Any changes to assumptions that may have been made in preparing this material could have a material impact on the investment returns presented herein. Past performance is no guarantee of future results.