






## Employees' Retirement System

# Employees' Retirement System of Rhode Island -- Retirement Board Meeting












<b>Schedule</b>	Wednesday, May 17, 2023 9:00 AM — 10:30 AM EDT
<b>Venue</b>	2nd Floor Conference Room, 50 Service Avenue, Warwick, RI
<b>Description</b>	ERSRI Retirement Board Meeting.
<b>Notes for Participants</b>	If you are unable to attend the May meeting, please contact Frank at 462-7610 or Roxanne at 462-7608.
<b>Organizer</b>	Frank J. Karpinski

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# Employees' Retirement System of Rhode Island



## Posted Agenda



**RETIREMENT BOARD MEETING AGENDA**

**Wednesday, May 17, 2023**

**9:00 a.m. 2nd Floor Conference Room,**

**50 Service Avenue, Warwick, RI**

***Streamed via Zoom Webinar - Dial-in: +1 929 205 6099 (US)***

**Access Code: 826 2170 9619**

**Link: <https://treasury-ri-gov.zoom.us/j/82621709619>**

- I. Chairperson Call to Order
- II. Approval of the Draft Meeting Minutes of the April 12, 2023 Retirement Board Meeting
- III. Chairperson's Report
- IV. Executive Director's Report
  - Presentation and Approval of the Actuarial Experience Study for the Period Ending June 30, 2022 by Joseph P. Newton F.S.A., E.A., Senior Consultant & Actuary of Gabriel, Roeder, Smith and Company (GRS)
- V. Approval of the April 2023 Pensions as Presented by ERSRI
- VI. Legal Counsel Report
- VII. Committee Reports

*Disability Committee – (See Attachment I)*
- VIII. Adjournment

## **Attachment I**

### **Disability Applications and Hearings on Friday, May 5, 2023**

- \* Mark Gray
- \* Kevin Rubino
- \* Christopher Rossi
- \* Benjamin Maimoni
- \* Iliana Knowles
- \* Meredith Andreozzi
- \* Karen Masse
- \* Christine Caparco
- \*\* Richard Patenaude
- \*\* David Principe
- \*\* Sean O'Connell

\* Votes by the full Board on these applications will be limited to approvals made by the Disability Committee at their May 5, 2023 meeting.

\*\* Votes by the full Board on these denied applications, and on decisions reversing prior denials are subject to approval of the decisions by the Disability Committee.

# Employees' Retirement System of Rhode Island



## 1. Chairperson Call to Order

Roll Call of Members

Presented by Treasurer James A. Diosa

# Employees' Retirement System of Rhode Island



## 2. Approval of the Draft Meeting Minutes of the April 12, 2023 Retirement Board Meeting

For Vote

Presented by Treasurer James A. Diosa

**Employees' Retirement Board of Rhode Island**

**Meeting Minutes**

**Wednesday, April 12, 2023 – 9:00 a.m.**

**50 Service Avenue, Warwick, RI**

***Meeting Streamed via Zoom Webinar***

**Dial-in: +1 929 205 6099 (US) / Access Code: 822 5479 8799**

**Link: <https://treasury-ri-gov.zoom.us/j/82254798799>**

**I. Call to Order**

The Meeting of the Retirement Board was called to order at 9:01 a.m., on Wednesday, April 12, 2023.

The Executive Director was asked to call the roll, and the following members were present: General Treasurer James A. Diossa; Ernest Almonte; Roger P. Boudreau; Mark A. Carruolo; Joseph Codega, Jr.; Matthew K. Howard; Claire M. Newell; Raymond J. Pouliot; Jean Rondeau; Dr. Laura Shawhughes; James E. Thorsen; Michael J. Twohey; and Lisa A. Whiting.

Members absent: John P. Maguire, Vice Chair.

Paul L. Dion, Ph.D. arrived at 9:03 a.m.

Also in attendance: Frank J. Karpinski, ERSRI Executive Director; Attorney Larissa DeLisi, Board Counsel.

A quorum was recognized.

**II. Approval of Minutes**

On a motion duly made by James E. Thorsen and seconded by Matthew K. Howard it was unanimously

**VOTED: To approve the draft meeting minutes and draft executive session minutes of the March 15, 2023 Retirement Board meeting.**

**III. Chairperson's Report**

Treasurer Diossa indicated that he had no formal report at this time.

**IV. Executive Director's Report**

Executive Director Karpinski updated the Board on certain newly passed legislation affecting post-retirement employment for Teachers. The Executive Director provided the Board with an overview of the manner in which R.I.G.L. §16-16-24.2 will be administered, including the standards by which a local educational authority (LEA) can offer post-retirement employment to retirees, limitations on such employment, and the criteria

which must be met for ERSRI to recognize the newly expanded scope of post-retirement employment.

Director Karpinski also advised the Board that the Member Services Committee recently met and received an update from the Board's website and communications consultant. Currently more retirees than active employees are using the website, and efforts continue to be made to improve and enhance access and communication for all potential users. In addition, the Executive Director gave an update on the recent membership newsletter and on efforts to improve membership understanding of system offerings and operations.

## **V. Approval of the March 2023 Pensions as Presented by ERSRI**

On a motion duly made by Roger P. Boudreau and seconded by Paul L. Dion, Ph.D., it was unanimously

**VOTED: To approve the March 2023 pensions as presented by ERSRI.**

## **VI. Legal Counsel Report**

Attorney DeLisi indicated that there was no formal report this month.

## **VII. Committee Reports**

### **Disability Committee**

The Disability Committee recommended the following actions on disability applications as a result of its April 7, 2023 meeting for approval by the full Board:

<b>Name</b>	<b>Membership Group</b>	<b>Type</b>	<b>Action</b>
1. David Principe	State	Accidental	The Disability Committee voted to reverse its original decision and approve Mr. Principe's application for Accidental Disability Retirement at 66 2/3%
2. Christine Camardo	Teacher	Accidental	Approved at 66 2/3%
3. Dawn Blackwell	Teacher	Ordinary	Approved

On a motion duly made by Dr. Laura Shawhughes and seconded by Roger P. Boudreau, it was unanimously:

**VOTED: To approve the Disability Committee's recommendations on item nos. 1-3 from its meeting of April 7, 2023.**

## **VIII. Adjournment**

There being no other business to come before the Board, on a motion by Roger P. Boudreau, and seconded by Raymond J. Pouliot, it was unanimously voted to adjourn the meeting at 9:42 a.m.

Respectfully submitted,

**Frank J. Karpinski**

Executive Director

DRAFT

# Employees' Retirement System of Rhode Island



## 3. Chairperson's Report

For Report

Presented by Treasurer James A. Diosa



# Employees' Retirement System of Rhode Island



## 4. Executive Director's Report

For Report

Presented by Frank J. Karpinski

# Employees' Retirement System of Rhode Island



Presentation and Approval of the Actuarial  
Experience Study for the Period Ending  
June 30, 2022 by Joseph P. Newton  
F.S.A., E.A., Senior Consultant & Actuary  
of Gabriel, Roeder, Smith and Company  
(GRS)

For Vote

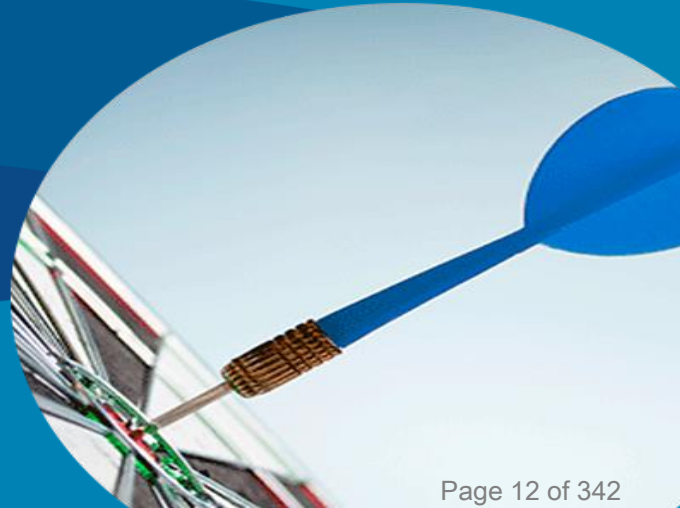
Presented by Joe Newton



# ERS of Rhode Island 2023 Experience Review

May 2023

Joe Newton



# Agenda

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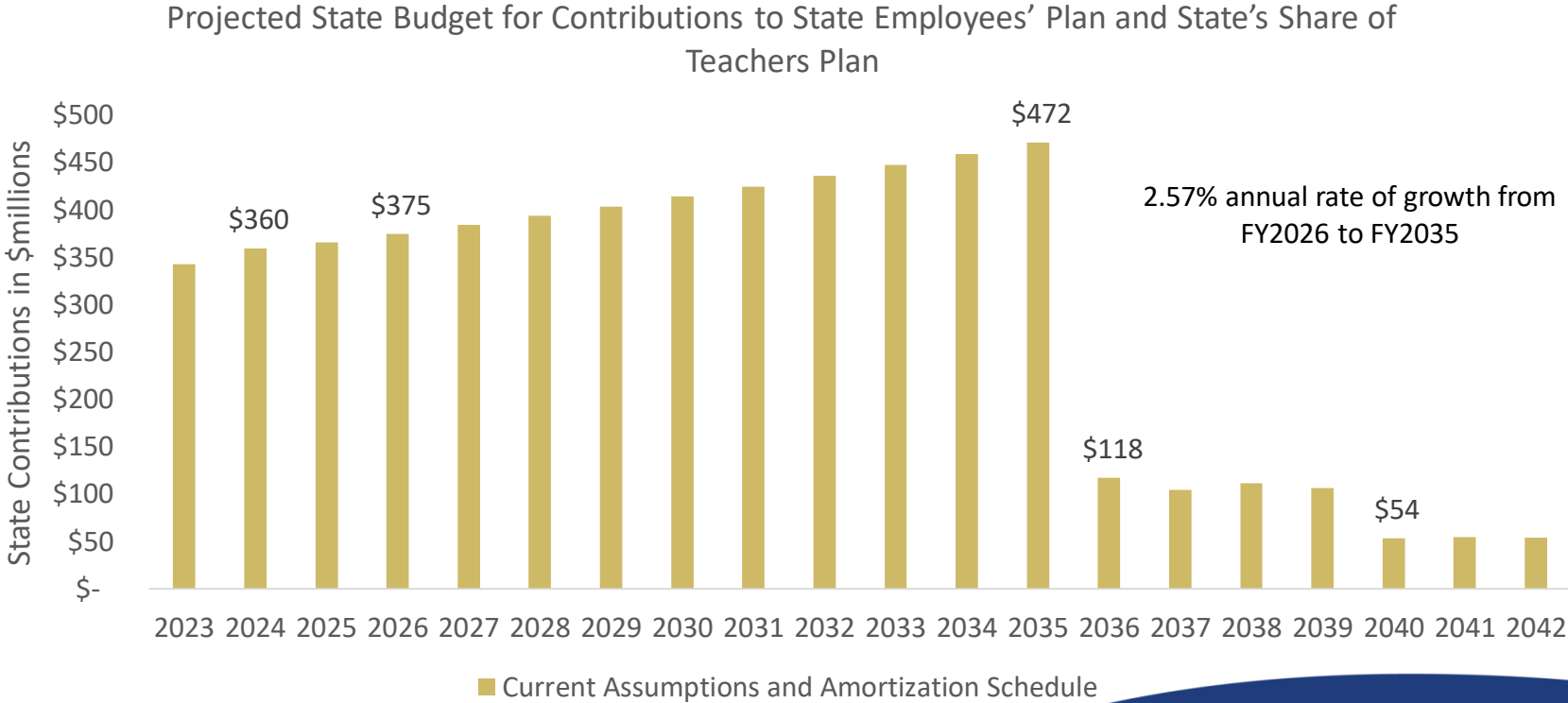
- Purpose of Study
- Preliminary Findings
- Individual Assumptions
  - Investment Return
  - Wage Assumptions
  - Turnover
- Illustrated Impact

# Purpose of the Valuation

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- The primary purpose of the annual actuarial valuation is to set contributions for the period that begins 24 months after the valuation date
- These contributions, or the pattern of contributions over a series of years, should accumulate assets to pay the benefits to the members over time

Current Expectation:  
The current amortization schedule includes the large amortization base from the 2011 pension reform, which will be fully amortized in 2035



# How assumptions factor in...

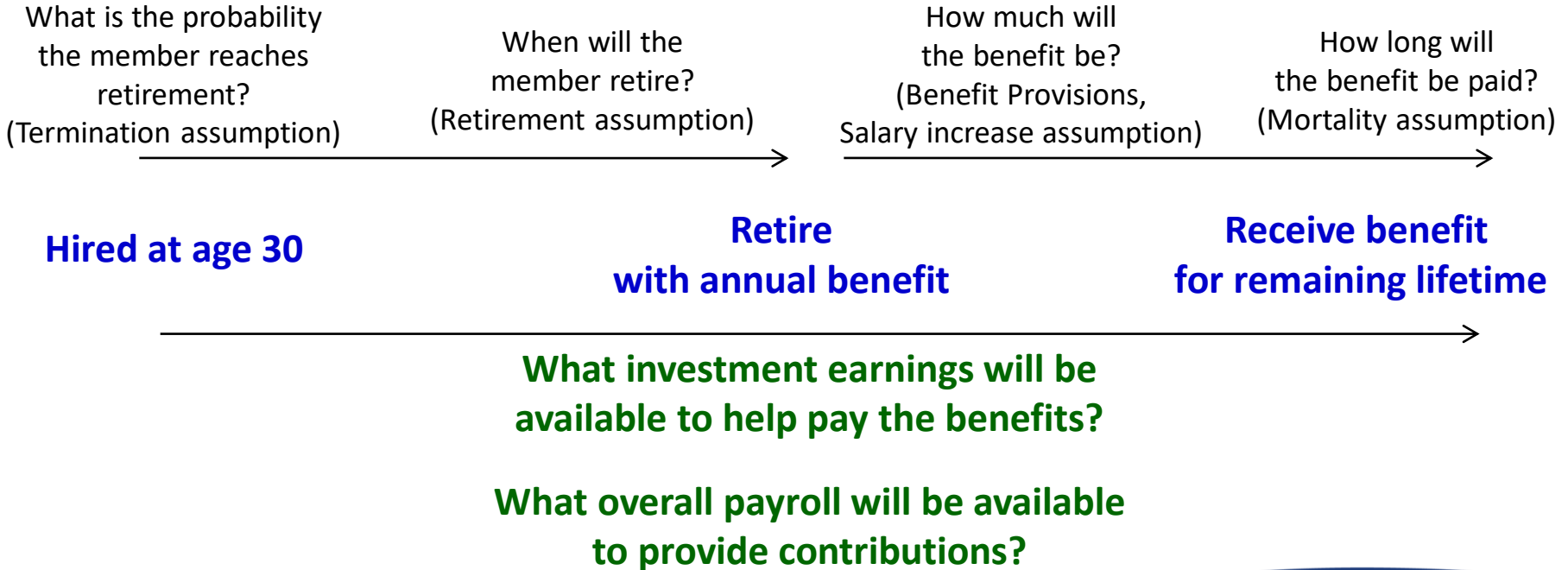
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- Over time, the true cost of benefits will be borne out in actual experience
  - Ultimate benefits paid are NOT affected by actuarial assumptions or methods
  - Determined by actual participant behavior (termination, retirement), plan provisions, and actual investment returns
- Assumptions help us develop a reasonable starting point for decision making and budgeting today
- Methods help us set patterns of contributions and how fast the contributions will react to unfolding experience

*“Predictions are difficult, especially ones about the future”*

# Inside the Actuarial Valuation: Projecting the Liability for Each Member

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# Purpose of Experience Study

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- Assumptions should occasionally change to reflect
  - New information and changing knowledge
  - Changing patterns of retirements, terminations, mortality, etc.
- Experience study is a regularly scheduled review of the assumptions and methods
  - ERSRI practice is to perform the analysis every three years
- General process for setting assumptions and methods
  - Actuary makes recommendations
  - Board considers actuary's recommendation and makes the final decision for the system
- Any changes would be reflected in the upcoming 2023 valuations and the FY2026 contribution rates

# Summary of Preliminary Findings

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- In general, the current assumption set is reasonable.
  - The net impact is minor to the current contribution levels
  - But, the proposed combination of assumptions lower the projected growth in the contributions
- The meaningful recommendations are:
  - Lower projected salary increases for most groups
  - Lower projected overall payroll growth for most groups
  - Increase rates of turnover for most groups
- Full detail is in the report

# Inflation

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- The assumed core inflation rate (currently 2.50% per year) impacts the development of:
  - Investment return assumption
  - Salary increase assumptions
  - Overall payroll growth rate
  - Half of the COLA formula
- Actual core inflation measured by the CPI-U during:
  - Last 10 years: 2.6%
  - Last 20 years: 2.5%
  - Last 30 years: 2.5%

# Current Forward Looking Sources for Inflation

Forward-Looking Price Inflation Forecasts <sup>a</sup>	
<b>Congressional Budget Office<sup>b</sup></b>	
5-Year Annual Average	3.23%
10-Year Annual Average	2.81%
<b>Federal Reserve Bank of Philadelphia<sup>c</sup></b>	
5-Year Annual Average	3.75%
10-Year Annual Average	2.95%
<b>Federal Reserve Bank of Cleveland<sup>d</sup></b>	
10-Year Expectation	2.22%
20-Year Expectation	2.29%
30-Year Expectation	2.37%
<b>Federal Reserve Bank of St. Louis<sup>e</sup></b>	
10-Year Breakeven Inflation	2.26%
20-Year Breakeven Inflation	2.50%
30-Year Breakeven Inflation	2.26%
<b>U.S. Department of the Treasury<sup>f</sup></b>	
10-Year Breakeven Inflation	2.07%
20-Year Breakeven Inflation	2.40%
30-Year Breakeven Inflation	2.21%
50-Year Breakeven Inflation	2.34%
100-Year Breakeven Inflation	2.44%
<b>Social Security Trustees<sup>g</sup></b>	
Ultimate Intermediate Assumption	2.40%

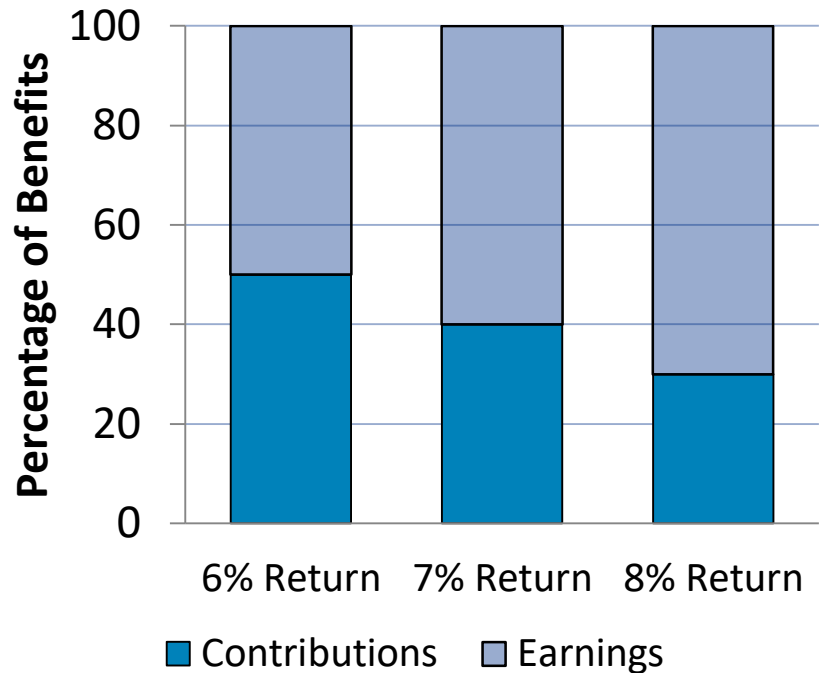
# Preliminary Finding

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- We find the current 2.50% to be reasonable
- The COLA is tied to inflation so a low assumption could understate that cost

# Investment Return Assumption

- This assumption is used to predict what percentage of a future benefit payments will be covered by investment return and what percentage by contributions.
- Lower Returns/Higher Contributions

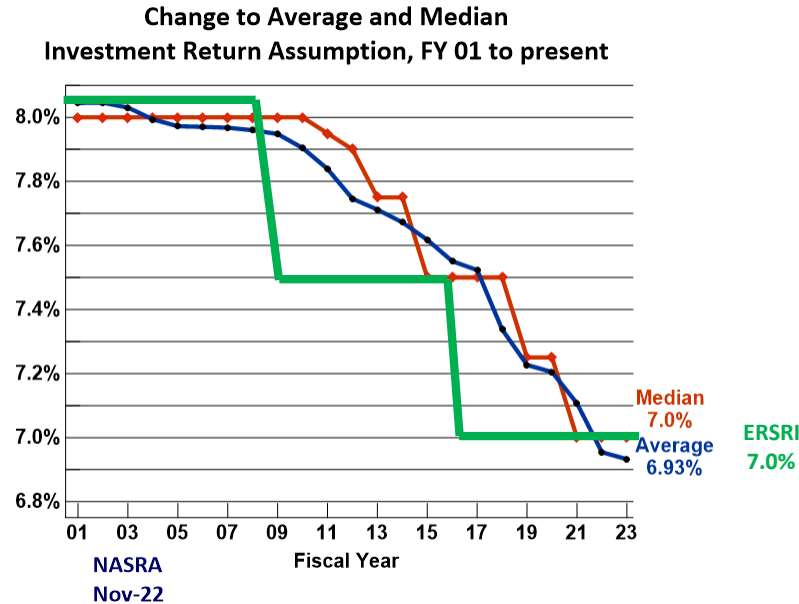


# Investment Return Assumption

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- The assumption selected should be reasonable
  - Not necessarily a single “correct” answer
- Assumption is selected using a process that considers:
  - ERSRI’s target asset allocation
  - Capital market expectations
    - Utilize a building block approach that reflects expected inflation, real rates of return, and plan related expenses
    - Take into account the volatility of the expected returns produced by the investment portfolio
- Other factors to consider
  - Historical investment performance
  - Comparison with peers

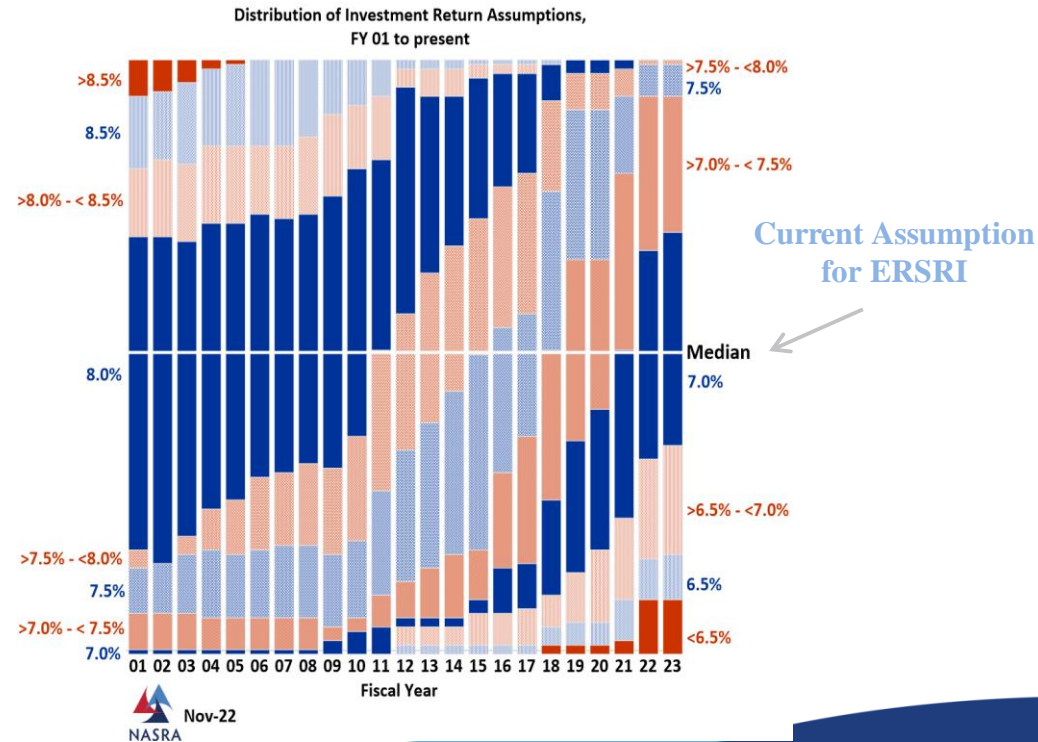
# Investment Return Assumptions have been declining, but with recent changes in interest rates, this could slow down or even stop



Data compiled by the National Association of State Retirement Administrators



# Investment Return Assumption – National Trends



# Range of Expected Returns

- Recent information given from the SIC's investment consultants gave a 7.4% forward looking expected return
- GRS' own survey is very close to this number at 7.36%
- 53% probability of achieving 7.0%

GRS 2023 CMAM				
Capital Market Assumption Set (CMA)	Distribution of 10-Year Average Geometric Net Nominal Return			Probability of exceeding 7.00%
	40th	50th	60th	
(1)	(2)	(3)	(4)	(5)
1	5.20%	6.22%	7.25%	42.41%
2	5.43%	6.57%	7.72%	46.22%
3	6.05%	7.15%	8.27%	51.38%
4	5.97%	7.18%	8.40%	51.50%
5	5.99%	7.21%	8.44%	51.71%
6	6.43%	7.62%	8.83%	55.24%
7	6.55%	7.65%	8.77%	55.93%
8	6.58%	7.68%	8.78%	56.20%
9	6.70%	7.78%	8.88%	57.24%
10	6.92%	7.93%	8.95%	59.24%
11	6.82%	7.97%	9.14%	58.43%
Average	6.24%	7.36%	8.49%	53.23%
Average from last 3 CMAMs		6.61%		

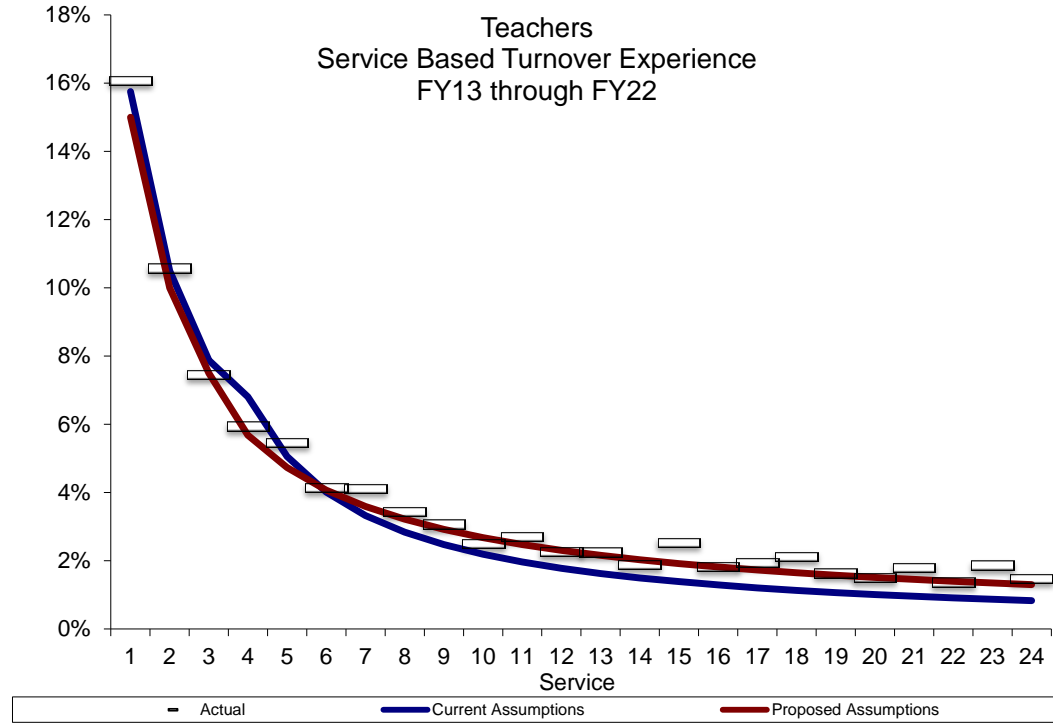
# Volatility in Expectations

- The forward looking expectations are volatile from year to year
- This precision and volatility is appropriate for making current investment decisions
- For funding purposes, stability has more value and is preferred
- We recommend no change to the 7.0% assumption

10-year Expected Return of Current ERSRI Portfolio					
Determined by last 5 GRS Surveys					
2019	2020	2021	2022	2023	Average
(1)	(2)	(3)	(4)	(5)	(6)
7.1%	6.8%	6.3%	6.1%	7.4%	6.7%

# Turnover

## Termination from Service before Retirement



# Turnover

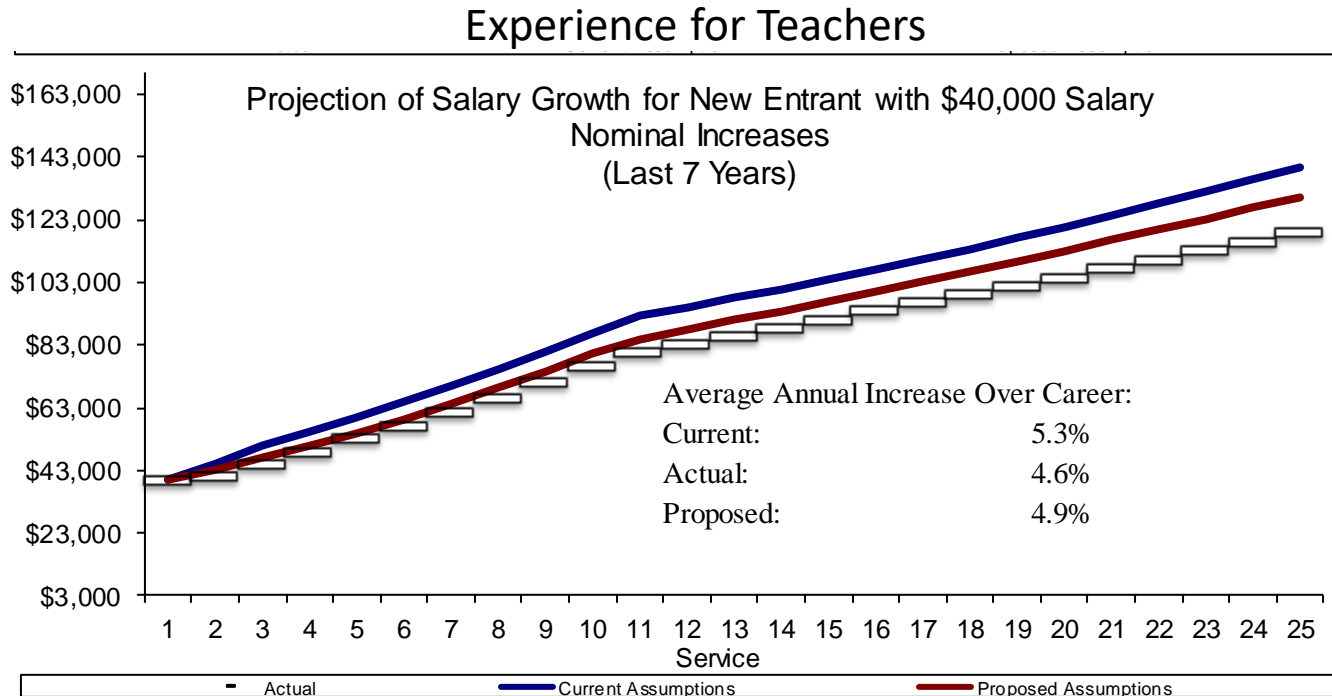
- Turnover was up for all groups
- We are recommending decreasing the probabilities of remaining employed until retirement eligibility for all groups

## Probability of Remaining Employed Until Retirement Eligibility

	New Hires			Member with 10 Years of Service		
	Expected	Actual	Proposed	Expected	Actual	Proposed
State Employees	42%	34%	37%	72%	66%	69%
Corrections	45%	42%	43%	66%	61%	65%
Teachers	53%	47%	49%	82%	74%	76%
MERS General	42%	32%	38%	76%	67%	72%
MERS Police and Fire	68%	49%	61%	89%	75%	86%

# Salary Increases for Individuals:

The assumption is a schedule based on service



# Salary Increases for Individuals

FY 2013-2022 (actual inflation has been 2.60% during this period)

Average Salary Increase Over Full Career							
	State Employees	Corrections	Teachers	MERS General	MERS P&F	State Police	Judges
<b>Current Assumption</b>	4.40%	5.08%	5.26%	4.07%	5.42%	6.09%	2.75%
<b>Actual Experience</b>	3.85%	4.51%	4.37%	3.84%	4.70%	6.11%	2.68%
<b>Proposed Assumption</b>	4.15%	4.83%	4.95%	4.03%	5.21%	6.34%	2.75%
<b>Change</b>	-0.25%	-0.25%	-0.31%	-0.04%	-0.21%	0.25%	0.00%

- Lowering this assumption lowers the projected benefits for current actives when they reach retirement and thus lowers the overall liabilities and normal costs

# Overall Payroll Growth

FY 2013-2022 (actual inflation has been 2.60% during this period)

Average Annual Payroll Growth Last Decade				
	State Employees/ Corrections	Teachers	MERS General	MERS P&F
<b>Current Assumption</b>	3.00%	2.50%	3.00%	3.00%
<b>Actual Experience (Overall)</b>	1.64%	1.67%	1.83%	4.53%
<b>Actual Experience (Adjusted for Headcount)</b>	2.39%	1.58%	2.57%	2.66%
<b>Recommended Assumption</b>	2.50%	2.00%	2.50%	2.50%
<b>Change</b>	-0.50%	-0.50%	-0.50%	-0.50%

- This assumption sets the trajectory of amortization payments in the amortization schedule
- Lowering this assumption lowers the rate of growth in the annual amortization payments, but must also increase the starting point of the pattern
- Thus, this will increase contributions short term but lower them long term



# The funding policy uses “Layered” amortization

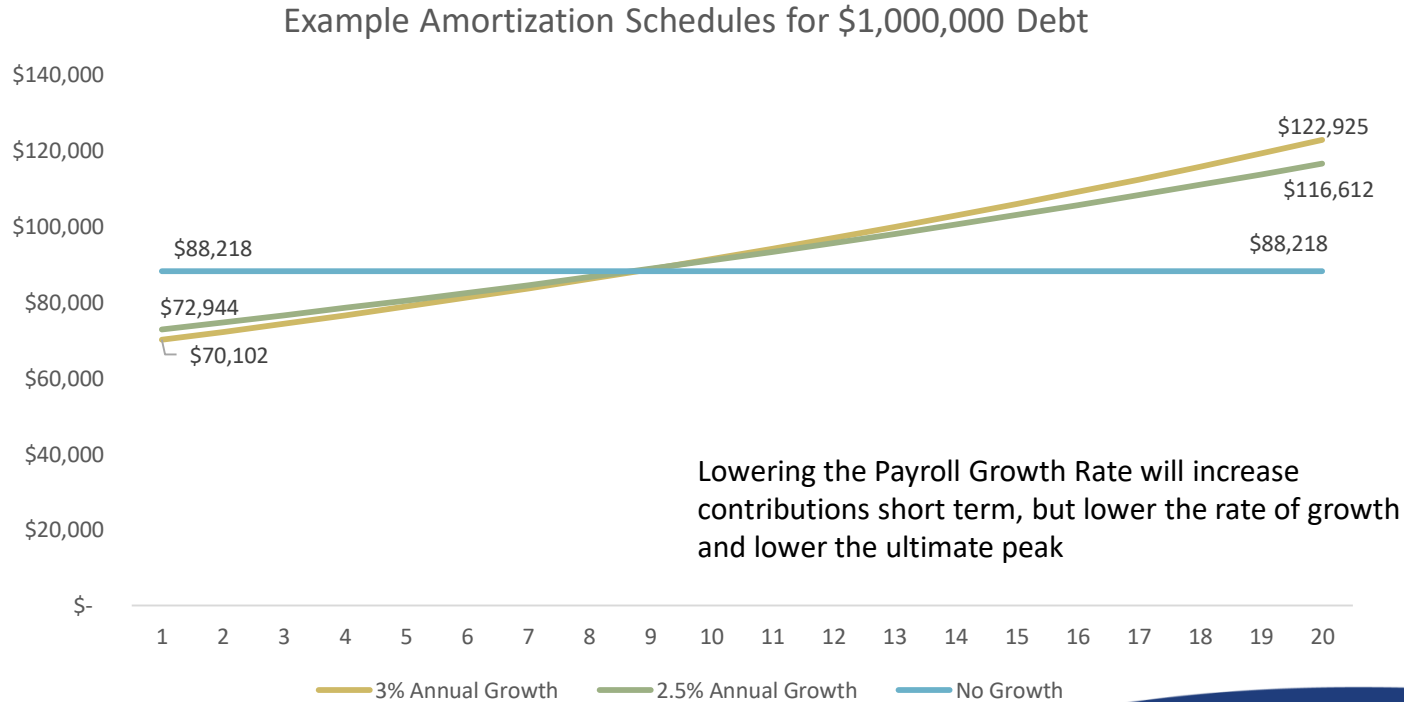
## Each “Layer” has a set amortization schedule that grows at the “payroll growth rate”

Purpose	Remaining Balance as of June 30, 2022	Payment FY2023	Payment FY2024	Payment FY2025	Payment FY2026	Payment FY2027	Payment FY2028	Payment FY2029	Fiscal Year of Final Payment
Original 2011 RIRSA Base	\$ 1,656,026,078	\$ 163,942,336	\$ 168,860,606	\$ 173,926,424	\$ 179,144,217	\$ 184,518,543	\$ 190,054,100	\$ 195,755,723	2035
2014 Experience Base	(45,867,666)	(4,290,551)	(4,419,268)	(4,551,846)	(4,688,401)	(4,829,053)	(4,973,925)	(5,123,143)	2035
2014 Mediation Settlement	109,885,987	10,278,950	10,587,319	10,904,939	11,232,087	11,569,050	11,916,121	12,273,605	2036
2015 Experience Base	(32,962,488)	(2,928,050)	(3,015,893)	(3,106,370)	(3,199,561)	(3,295,548)	(3,394,414)	(3,496,247)	2036
2016 Experience Base	45,510,459	3,855,713	3,971,384	4,090,526	4,213,242	4,339,639	4,469,828	4,603,923	2037
2016 Assumption Change - FY20 Stagger	32,199,898	2,611,748	2,690,100	2,770,803	2,853,927	2,939,545	3,027,731	3,118,563	2038
2016 Assumption Change - FY21 Stagger	74,165,993	6,015,637	6,196,106	6,381,988	6,573,448	6,770,651	6,973,771	7,182,984	2039
2016 Assumption Change - FY22 Stagger	79,969,270	6,486,342	6,680,931	6,881,360	7,087,801	7,300,435	7,519,448	7,745,031	2039
2016 Assumption Change - FY23 Stagger	86,483,371	7,014,703	7,225,144	7,441,898	7,665,155	7,895,110	8,131,963	8,375,922	2039
2016 Assumption Change - FY24 Stagger	86,483,371	-	7,839,889	8,075,086	8,317,339	8,566,859	8,823,864	9,088,580	2039
2017 Experience Base	17,183,516	1,393,762	1,435,575	1,478,642	1,523,001	1,568,691	1,615,752	1,664,225	2039
2018 Experience Base	26,067,887	2,031,046	2,091,977	2,154,735	2,219,377	2,285,958	2,354,537	2,425,173	2039
2019 Experience Base	7,825,627	587,437	605,060	623,212	641,908	661,166	681,001	701,431	2040
2020 New Assumptions - FY23 Stagger *	(31,128,993)	(2,524,886)	(2,600,633)	(2,678,652)	(2,759,012)	(2,841,782)	(2,927,035)	(3,014,846)	2041
2020 New Assumptions - FY24 Stagger *	(31,128,994)	-	(2,821,905)	(2,906,562)	(2,993,759)	(3,083,572)	(3,176,079)	(3,271,361)	2039
2020 Experience Base	20,355,207	1,476,044	1,520,325	1,565,935	1,612,913	1,661,300	1,711,139	1,762,474	2039
2021 Experience Base	(73,176,034)	-	(5,677,752)	(5,848,085)	(6,023,528)	(6,204,233)	(6,390,360)	(6,582,071)	2042
2022 Experience Base	4,015,258	-	-	333,353	343,354	353,654	364,264	375,192	2042
<b>Unfunded Actuarial Accrued Liability</b>	<b>\$ 2,031,907,747</b>	<b>\$ 195,950,231</b>	<b>\$ 201,168,965</b>	<b>\$ 207,537,386</b>	<b>\$ 213,763,508</b>	<b>\$ 220,176,413</b>	<b>\$ 226,781,705</b>	<b>\$ 233,585,156</b>	
<b>Projected Payroll</b>		<b>\$ 786,130,098</b>	<b>\$ 809,714,001</b>	<b>\$ 834,005,421</b>	<b>\$ 859,025,584</b>	<b>\$ 884,796,351</b>	<b>\$ 911,340,242</b>	<b>\$ 938,680,449</b>	
<b>Amortization Payment as a Percent of Payroll</b>			<b>24.84%</b>	<b>24.88%</b>	<b>24.88%</b>	<b>24.88%</b>	<b>24.88%</b>	<b>24.88%</b>	



Current Schedule for State at 3.0%

# The Payroll Growth Rate is as much a Policy as an Assumption



# Illustrated Impact - ERS

State Employees			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	7.87%	7.71%	-0.16%
Unfunded actuarial accrued liability	\$2,032 million	\$2,041 million	\$9 million
Funded ratio	58.8%	58.7%	-0.1%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	28.46%	29.26%	0.80%
b. Estimated dollar amount	\$244.5 million	\$246.5 million	\$2.0 million

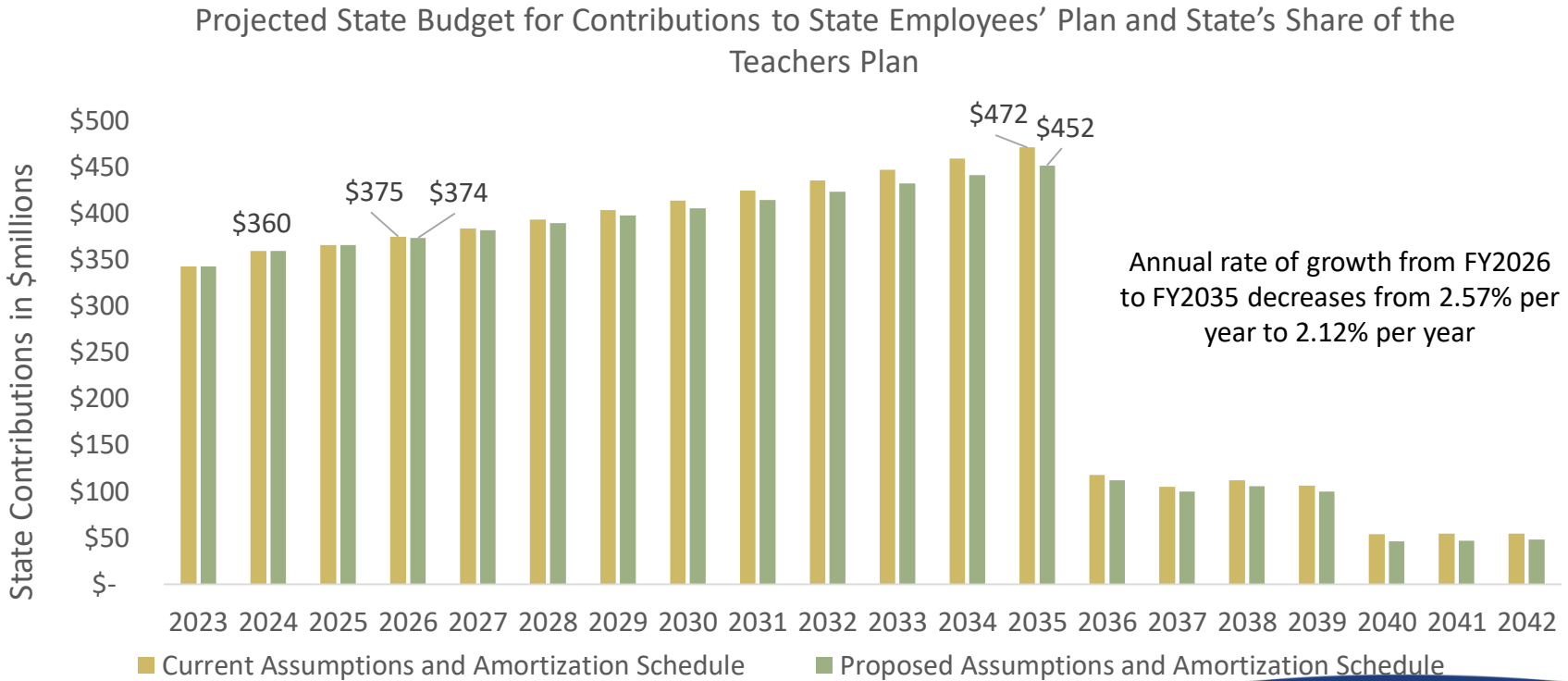
Teachers			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	7.31%	7.17%	-0.14%
Unfunded actuarial accrued liability	\$2,735 million	\$2,662 million	-\$73 million
Funded ratio	61.5%	62.1%	0.6%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	24.99%	25.02%	0.04%
b. Estimated dollar amount	\$308.5 million	\$303.0 million	-\$5.5 million

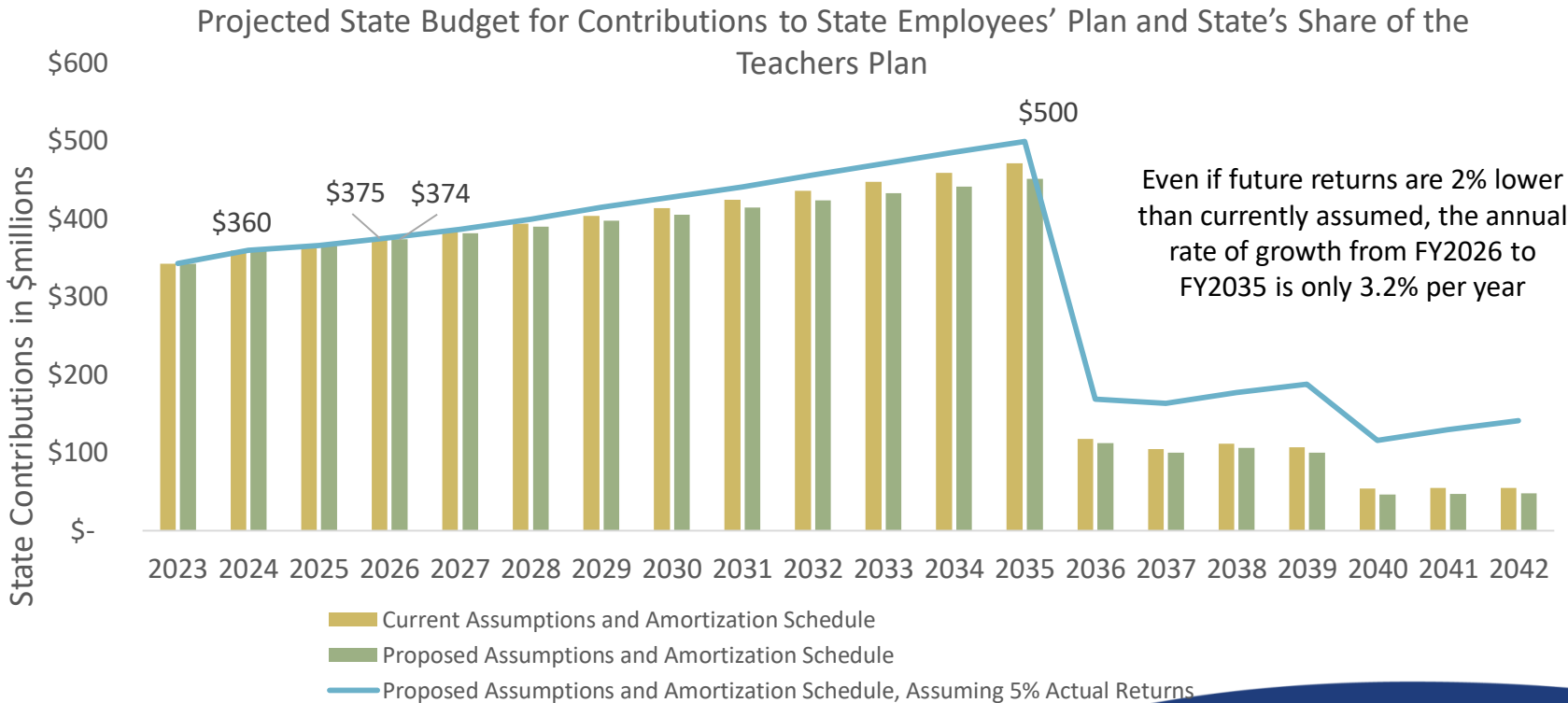
State Budget and Net Pension Liability			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Net Pension Liability	\$3,143 million	\$3,123 million	-\$20 million
FY2026 Pension Budget	\$383.4 million	\$382.7 million	-\$0.8 million

State's portion of ERS, STPL, and JRBT

The proposal would lower the annual rate of growth in the amortization schedule and lower the projected peak



# The plan continues to be expected to perform well under stressed scenarios



# Illustrated Impact - MERS

MERS General			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	9.55%	9.51%	-0.04%
Unfunded actuarial accrued liability	\$174 million	\$171 million	-\$3 million
Funded ratio	87.20%	87.40%	0.2%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	11.24%	11.38%	0.15%
b. Estimated dollar amount	\$34.5 million	\$34.4 million	-\$0.1 million

MERS Police and Fire			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	29.04%	28.75%	-0.29%
Unfunded actuarial accrued liability	\$149 million	\$147 million	-\$2 million
Funded ratio	84.0%	84.2%	0.2%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	18.64%	18.77%	0.13%
b. Estimated dollar amount	\$28.2 million	\$28.0 million	-\$0.2 million

# Summary

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- Minimal impact to current contributions, but lower projected amortization payments will directly lower the annual rate of growth in contributions
- Also, the projected funded ratio as of June 30, 2030 increases slightly, increasing the probability of being 80% funded by that year
- Full Detail, including impact to all groups, in the full report
- We believe the recommended assumptions provide a better reflection of future experience and will provide more stability when compared to the current assumption set

# Actuary's Qualifications

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- We believe the recommended set of actuarial assumptions should present a more accurate portrayal of ERSRI's financial condition and should reduce the magnitude of future experience gains and losses.
- The study was conducted in accordance with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board
- Joe meets the Qualification Standards of the American Academy of Actuaries



# Employees' Retirement System of Rhode Island

Actuarial Experience Investigation  
for the Period Ending June 30, 2022

Draft





May 17, 2023

Retirement Board  
50 Service Avenue, 2nd Floor  
Warwick, RI 02886-1021

**Subject: Results of 2023 Actuarial Experience Study for ERSRI**

Dear Members of the Board:

We are pleased to present our report on the results of the 2023 Actuarial Experience Investigation Study for the Employees' Retirement System of Rhode Island (ERSRI). It includes a discussion of recent experience, it presents our recommendations for new actuarial assumptions and methods, and it provides information about the actuarial impact of these recommendations on the liabilities and other key actuarial measures. This report contains the results of the experience study for all groups covered under ERSRI, including State Employees, Teachers, MERS, State Police, State Judges, and the Teacher Survivor Benefit Plan.

Using the recommended set of actuarial assumptions should present a more accurate portrayal of ERSRI's financial condition and should reduce the magnitude of future experience gains and losses.

This study was conducted in accordance with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. The undersigned meet all of the Qualification Standards of the American Academy of Actuaries. In addition, the undersigned have extensive experience as retained public sector actuaries for several large, statewide public retirement systems.

We wish to thank the ERSRI staff for their assistance in providing data for this study.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "J. Newton".

Joseph P. Newton, FSA, MAAA, EA  
Pension Market Leader and Actuary

A handwritten signature in black ink, appearing to read "Paul T. Wood".

Paul T. Wood, ASA, MAAA, FCA  
Senior Consultant and Actuary

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## SECTION I

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### EXECUTIVE SUMMARY

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## Section I

### Summary of Recommendations

Our recommended changes to the current actuarial assumptions may be summarized as follows:

- I. Decrease individual salary increases and projected payroll growth for most groups. These two items mainly offset each other in calculating the contribution requirements, especially as dollar amounts. But create a much lower projected annual growth rate in the dollar amounts of contributions.
- II. Update the mortality projection scales to the ultimate rates of the most recently published projection scales. This had no material impact to the liabilities or contributions.
- III. Increase probabilities of turnover before retirement for most groups.
- IV. Slight increase probabilities of retirement for MERS units and State Employees.
- V. Slight increase to the probabilities of disability for most groups.
- VI. Reduce the credit given to overfunded units to sustain their current surplus.

The net impact to the valuation process is a slight decrease in liabilities and costs for most groups. The contribution as a rate of pay for the State does increase, but the change in dollar amount is modest, and when combined with the 40% responsibility for Teachers, the budget impact to the State in FY2026 is a slight decrease. More importantly, the projected rates of growth in the dollar amounts will be significantly lower. For example, the projected annual rate of growth in dollar contributions for State will decrease from the currently projected 2.57% to 2.12% per year and lower the likelihood of contribution rate increases in the future. The following is a brief summary of our findings.

### Economic Assumptions

1. We find the current 2.50% general inflation assumption reasonable. We do find that several of the expectations from forward looking sources are lower than the 2.50%, but recent experience has exceeded the 2.50% and most of the sources have increased since the previous study. Also, the formula for post-retirement benefit adjustments is partially based on actual inflation results, thus the risk to liability growth is tilted towards higher inflation versus lower. For this reason, we would recommend having an assumption higher in the range of reasonable assumptions.
2. We find the current 7.00% investment return assumption reasonable and recommend no change. Based on the current target portfolio and capital market expectations used by the SIC in their asset allocation study, based on a blend of three investment consultants for the Rhode Island SIC, the median expected return net of all expenses is 7.4% over a ten-year period. GRS' own survey of capital market expectations produces an expected return of 7.36%, right in line with the SIC's information. This produces a 53% probability of achieving a 7.0% return over the 10-years. These forward-looking expectations have been quite volatile, ranging from 6.1% to 7.4% at various points over the last three years. This type of precision and volatility is appropriate for the use by the SIC in its investment decisions because they are always interacting with current market prices and expectations over a given investment cycle. However, for use in setting the contribution requirements and funding patterns over a number of years, consistency around a single number that is in the middle of the range is more



appropriate. Please note this assumption is net of administrative expenses, which are assumed to be 0.10% of plan assets per annum.

3. The assumed salary increase schedules for individuals include an ultimate component that begins with the general wage inflation assumption of 3.0% and may add (or subtract) on additional increases for individual merit (which would include promotions) and then an additional component for step rates based on service. Generally, we are recommending a decrease of about 0.25% per year to most groups. The actual salary increases over the past decade have been 0.50%-0.75% lower than current assumptions, but much of that is the inclusion of fiscal years 2013 and 2014 which had very low increases coming out of the Great Recession. Increases over the last 8 years have been closer to current expectations, but still consistently lower. That said, salaries in the data gathering processes are slow to react to new inflation and labor market conditions, so it is possible there are higher wage increases coming over the short term.
4. In conjunction with the lower salary increase assumptions and higher turnover patterns discussed below, we are recommending a 0.50% decrease in the payroll growth rate assumptions for all groups. This produces a 2.50% annual expected payroll growth for all groups (equal to the inflation assumption) except for Teachers, which will lower to 2.0%. Changing the payroll growth assumption has no impact on the liabilities, but does assume there is lower growth in the future payroll to amortize the UAAL, which results in an increase in the current contribution requirements.
5. We recommend no change in the assumption for the contingent post-retirement benefit adjustments of 2.15% per year.

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## **Mortality Assumptions**

6. Experience was slightly higher than the current assumptions, mainly due to the last three years of experience during the pandemic. We have chosen to leave the base tables unchanged to wait for more data. In addition, the current assumptions include provisions for further improvement into the future. In 2020 new projection scales used to project this future mortality improvement were issued by the Society of Actuaries with several pages of rationale and disclosure of the process used to generate new long-term rates. The ultimate mortality improvement rates were modified to be higher at some ages and more precise across different age groups based on historical trends. In general, the net change in overall liabilities if a retirement system was using the ultimate rates of the MP-2019 table to the ultimate rates of the MP-2020 version is minimal. Basically, the rates at individual ages were changed but the overall pattern over a lifetime is not much different. We recommend updating to the most recent projection scales.
7. We recommend no change to the post-retirement mortality tables for disabled retirees, except for updating the projection scales as discussed above.
8. We recommend no change to mortality tables for active members, except for updating the projection scales as discussed above.



## Other Demographic Assumptions

9. We recommend increasing the probabilities of retirement by 2% across points of service for MERS Police and Fire units and by 5% for all ages past age 62 for State Employees. We recommend slightly simplifying the patterns for Teachers and General MERS.
10. We recommend increasing the probability of turnover for most groups. The experience was quite higher than the current assumptions, and has been trending higher. This change will decrease liabilities and contribution rates.
11. We recommend slightly increasing the probability of disability for most groups based on the experience of the individual group.
12. We recommend no change to the current marriage assumption and spousal age difference.
13. For the Teacher Survivor Benefit Plan, we recommend no modifications to the current marriage, refund, and number of children assumptions. The current assumptions were developed in the 2017 study based on recent elections for members of the Plan and data from the national census and find them to still be reasonable.

## Actuarial Methods and Policies

14. We recommend no change to the current asset smoothing method.
15. We recommend no change to the current funding method. The individual Entry Age Normal cost method (EAN) is the current funding method being used to allocate the actuarial costs of the System. The Entry Age Normal method will generally produce relatively level contribution amounts as a percentage of payroll from year to year, and allocates costs among various generations of taxpayers in a reasonable manner. It is by far the most commonly used actuarial cost method for large public retirement systems. We continue to believe this is the most appropriate funding method.
16. We are recommending a slight adjustment to still give a credit to units that are overfunded, but only enough so that the proportionate amount of surplus would remain the same from year to year. For example, if a unit is currently 110% funded, the credit would be enough so that the unit would be expected to remain at 110% funded the next year. The current policy would give a credit large enough to actually be expected to decrease their surplus position over time.



*Impact on Liabilities and Contributions*

Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
State Employees			
Unfunded actuarial accrued liability	\$2,032 million	\$2,041 million	\$9 million
Funded ratio	58.8%	58.7%	-0.1%
Illustrated FY 2026 ARC	28.46%	29.26%	0.80%
Teachers			
Unfunded actuarial accrued liability	\$2,735 million	\$2,662 million	-\$73 million
Funded ratio	61.5%	62.1%	0.6%
Illustrated FY 2026 ARC	24.99%	25.02%	0.04%
SPRBT			
Unfunded actuarial accrued liability	\$21 million	\$21 million	\$0 million
Funded ratio	90.0%	90.0%	0.0%
Illustrated FY 2026 ARC	19.65%	20.25%	0.60%
JRBT			
Unfunded actuarial accrued liability	-\$4 million	-\$4 million	\$0 million
Funded ratio	104.0%	104.4%	0.4%
Illustrated FY 2026 ARC	18.20%	17.80%	-0.40%
MERS General			
Unfunded actuarial accrued liability	\$174 million	\$171 million	-\$3 million
Funded ratio	87.2%	87.4%	0.2%
Illustrated FY 2026 ARC	11.24%	11.38%	0.15%
MERS Police and Fire			
Unfunded actuarial accrued liability	\$149 million	\$147 million	-\$2 million
Funded ratio	84.0%	84.2%	0.2%
Illustrated FY 2026 ARC	18.64%	18.77%	0.13%
Teacher Survivor Benefit Plan			
Unfunded actuarial accrued liability	-\$176 million	-\$183 million	-\$6 million
Funded ratio	178.1%	183.3%	5.2%





## SECTION II

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### INTRODUCTION

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## Section II

### Introduction

#### Summary of Process

A periodic review and selection of the actuarial assumptions is one of many important components of understanding and managing the financial aspects of the Employees' Retirement System of Rhode Island (ERSRI). Use of outdated or inappropriate assumptions can result in understated costs which will lead to higher future contribution requirements or perhaps an inability to pay benefits when due; or, on the other hand, produce overstated costs which place an unnecessarily large burden on the current generation of members, employers, and taxpayers.

A single set of assumptions is typically not expected to be suitable forever. As the actual experience unfolds or the future expectations change, the assumptions should be reviewed and adjusted accordingly.

It is important to recognize that the impact from various outcomes and the ability to adjust from experience deviating from the assumption are not symmetric. Due to compounding economic forces, legal limitations, and moral obligations, outcomes from underestimating future liabilities are much more difficult to manage than outcomes of overestimates, and that un-symmetric risk should be considered when the assumption set, investment policy and funding policy are created. As such, the assumption set used in the valuation process needs to represent the best estimate of the future experience of the System and be at least as likely, if not more than likely, to overestimate the future liabilities versus underestimate them.

Using this strategic mindset, each assumption was analyzed compared to the actual experience of ERSRI and general experience of other large public employee retirement systems. Changes in certain assumptions and methods are suggested upon this comparison to remove any bias that may exist and to perhaps add in a slight margin for future adverse experience where appropriate. Next, the assumption set as a whole was analyzed for consistency and to ensure that the projection of liabilities was reasonable and consistent with historical trends.

The following report provides our recommended changes to the current actuarial assumptions.



In determining liabilities and contribution rates for retirement plans, actuaries must make assumptions about the future. Among the assumptions that must be made include:

- Retirement rates
- Mortality rates
- Turnover rates
- Disability rates
- Investment return rate
- Salary increase rates
- Inflation rate

For some of these assumptions, such as the mortality rates, past experience provides important evidence about the future. For others, such as the investment return assumption, the link between past and future results is much weaker. In either case, actuaries should review the plan's assumptions periodically and determine whether these assumptions are consistent with actual past experience and with anticipated future experience.

The last such actuarial experience investigation was performed in conjunction with the June 30, 2019 actuarial valuation. For this experience study, we have analyzed ERSRI's experience for all years through June 30, 2022 as applicable.

For most of the assumptions, the data was weighted by some way to reflect how the liability is changing or expected to change versus how individuals are behaving. The weighted analysis gives a better reflection of how actuarial gains or losses are being generated instead of just demographic reconciliation.

In conducting experience studies, actuaries generally use data over a period of several years. This is necessary in order to gather enough data so that the results are statistically significant. In addition, if the study period is too short, the impact of the current economic conditions may lead to misleading results. It is known, for example, that the health of the general economy can impact salary increase rates and withdrawal rates. Using results gathered during a short-term boom or bust will not be representative of the long-term trends in these assumptions. Also, the adoption of legislation, such as plan improvements or changes in salary schedules, will sometimes cause a short-term distortion in the experience. For example, if an early retirement window was opened during the study period, we would usually see a short-term spike in the number of retirements followed by a dearth of retirements for the following two-to-four years. Using a longer period prevents giving too much weight to such short-term effects. On the other hand, using a much longer period would water down real changes that may be occurring, such as mortality improvement or a change in the ages at which members retire. For this reason, we use different time periods for different assumptions.



The following is a list of the time periods utilized throughout the analysis.

Assumption	Data Used	Comment
Wage Inflation and Payroll Growth	20 Years	Long-term trends are needed, also prospective changes must be considered
Individual Salary Increases	10 Years	Longer period will capture a longer economic cycle
Termination	10 Years	Longer period will capture a longer economic cycle
Post-Retirement Mortality	9 Years	Longer period allows for low volatility in the assumption and more credibility.
All Other	6 Years	The assumptions react quicker to changing trends and are less correlated with the economic cycle

In an experience study, we first determine the number of deaths, retirements, etc. that occurred during the period. Then we determine the number expected to occur, based on the current actuarial assumptions. The number of “expected” decrements is determined by multiplying the probability of the occurrence at the given age, by the “exposures” at that same age. For example, let’s look at a rate of retirement of 15% at age 55. The number of exposures can only be those members who are age 55 and eligible for retirement at that time. Thus they are considered “exposed” to that assumption. Finally, we calculate the A/E ratio, where “A” is the actual number (of retirements, for example) and “E” is the expected number. If the current assumptions were “perfect”, the A/E ratio would be 100%. When it varies much from this figure, it is a sign that new assumptions may be needed. (However, in some cases we prefer to set our assumptions to produce an A/E ratio a little above or below 100%, in order to introduce some conservatism.) Of course we not only look at the assumptions as a whole, but we also review how well they fit the actual results by gender, by age, and by service.

If the data leads the actuary to conclude that new tables are needed, the actuary may “graduate” or smooth the results, since the raw results can be quite uneven from age to age or from service to service.

Please bear in mind that, while the recommended assumption set represents our best estimate, there are other reasonable assumptions sets that could be supported.

## Organization of Report

Section III contains our findings and recommendations for each actuarial assumption. The impact of adopting our recommendations on liabilities and contribution rates is shown in Section IV. Section V summarizes the recommended changes. Section VI presents a summary of all the actuarial assumptions and methods, including the recommended changes. Finally, tables summarizing the analysis of the assumptions are in Section VII.



Section VII Exhibits

The exhibits in Section VII should generally be self-explanatory. For example, on page 52, we show the exhibit analyzing the termination rates for Teachers. The second column shows the total payroll for the Teachers who terminated during the study period. This excludes members who died, became disabled or retired. Column (3), labeled “Total Payroll Exposed” shows the total exposures. This is the amount of payroll that could have terminated during any of the years. On this exhibit, the exposures exclude anyone eligible for retirement. A member is counted in each year he could have terminated, so the total shown is the total exposures for the ten-year period used in the analysis. Column (4) shows the probability of termination based on the raw data. That is, it is the result of dividing the actual number of terminations (col. 2) by the number exposed (col. 3). Column (5) shows the current termination rate and column (6) shows the new recommended termination rate. Columns (7) and (8) show the expected numbers of terminations based on the current and proposed termination assumptions. Columns (9) and (10) show the Actual-to-Expected ratios under the current and proposed termination assumptions.

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## **SECTION III**

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### **ANALYSIS OF EXPERIENCE AND RECOMMENDATIONS**

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## Section III

### Analysis of Experience and Recommendations

We will begin by discussing the economic assumptions: inflation, the investment return rate, the salary increase assumptions, the payroll growth rate, etc. Then we will discuss the demographic assumptions: mortality, disability, termination, retirement, etc. Finally, we will discuss the actuarial methods used.

#### Inflation and Investment Return Assumptions

Actuarial Standards of Practice (ASOP) No. 27, Selection of Economic Assumptions for Measuring Pension Obligations, provides guidance to actuaries on giving advice on selecting economic assumptions for measuring obligations for defined benefit plans.

Generally, the economic assumptions are much more subjective in nature than the demographic assumptions. As no one knows what the future holds, it is necessary for the actuary to estimate possible future economic outcomes. These estimates are based on a mixture of past experience, future expectations, and professional judgment. The actuary should consider a number of factors, including the purpose and nature of the measurement, and appropriate recent and long-term historical economic data. However, the standard explicitly advises the actuary not to give undue weight to recent and/or historical experience.

Although recognizing that there is not one right answer, the current standard calls for the actuary to develop a best-estimate for each economic assumption. Each economic assumption should individually satisfy this standard. Furthermore, with respect to any particular valuation, each economic assumption should be consistent with every other economic assumption over the measurement period.

#### Inflation Assumption

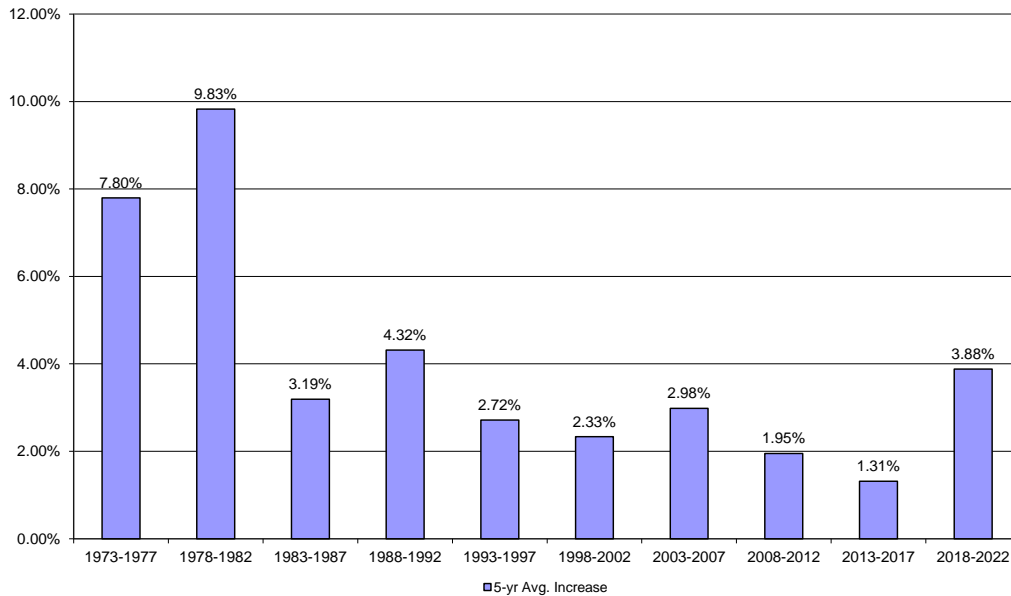
By “inflation,” we mean price inflation, as measured by annual increases in the Consumer Price Index (CPI). This inflation assumption underlies most of the other economic assumptions. It impacts investment return, salary increases, payroll growth, and cost-of-living increases. The current annual inflation assumption is 2.50%.

#### Actual Change in CPI-U

The chart below shows the average annual inflation in each of the ten consecutive five-year periods over the last fifty years:



Average Annual Inflation  
CPI-U, Five Calendar Year Averages



The following table shows the average inflation over various periods, ending June 30, 2022:

Periods Ending June 30, 2022	Average Annual Increase in CPI-U
Last five (5) years	3.88%
Last ten (10) years	2.59%
Last fifteen (15) years	2.38%
Last twenty (20) years	2.53%
Last twenty-five (25) years	2.49%
Last thirty (30) years	2.53%

Source: Bureau of Labor Statistics, CPI-U, all items, not seasonally adjusted

### **Sources of Forward-Looking Forecasts**

As the valuation is a forward-looking exercise, the forward-looking expectations are more relevant than the historical data. The following is a list of several external sources for forward-looking inflation expectations.



<b>Forward-Looking Price Inflation Forecasts<sup>a</sup></b>	
<b>Congressional Budget Office<sup>b</sup></b>	
5-Year Annual Average	3.23%
10-Year Annual Average	2.81%
<b>Federal Reserve Bank of Philadelphia<sup>c</sup></b>	
5-Year Annual Average	3.75%
10-Year Annual Average	2.95%
<b>Federal Reserve Bank of Cleveland<sup>d</sup></b>	
10-Year Expectation	2.22%
20-Year Expectation	2.29%
30-Year Expectation	2.37%
<b>Federal Reserve Bank of St. Louis<sup>e</sup></b>	
10-Year Breakeven Inflation	2.26%
20-Year Breakeven Inflation	2.50%
30-Year Breakeven Inflation	2.26%
<b>U.S. Department of the Treasury<sup>f</sup></b>	
10-Year Breakeven Inflation	2.07%
20-Year Breakeven Inflation	2.40%
30-Year Breakeven Inflation	2.21%
50-Year Breakeven Inflation	2.34%
100-Year Breakeven Inflation	2.44%
<b>Social Security Trustees<sup>g</sup></b>	
Ultimate Intermediate Assumption	2.40%

<sup>a</sup>End of the Fourth Quarter, 2022. Version 2023-02-09 by Gabriel, Roeder, Smith & Company

<sup>b</sup>The Budget and Economic Outlook: 2022 to 2032, Release Date: May 2022, Consumer Price Index (CPI-U), Percentage Change from Year to Year, 5-Year Annual Average (2022 - 2026), 10-Year Annual Average (2022 - 2031).

<sup>c</sup>Fourth Quarter 2022 Survey of Professional Forecasters, Release Date: November 14, 2022, Headline CPI, Annualized Percentage Points, 5-Year Annual Average (2022 - 2026), 10-Year Annual Average (2022 - 2031).

<sup>d</sup>Inflation Expectations, Model output date: December 1, 2022.

<sup>e</sup>The breakeven inflation rate represents a measure of expected inflation derived from X-Year Treasury Constant Maturity Securities and X-Year Treasury Inflation-Indexed Constant Maturity Securities. Observation date: December, 2022.

<sup>f</sup>The Treasury Breakeven Inflation (TBI) Curve, Monthly Average Rates, December, 2022.

<sup>g</sup>The 2022 Annual Report of The Board of Trustees of The Federal Old-Age And Survivors Insurance and Federal Disability Insurance Trust Funds, June 2, 2022, Long-range (75-year) assumptions, Intermediate, Consumer Price Index (CPI-W), for 2026 and later.

As shown, even though recent inflation has exceeded the current 2.50% assumption, all of the sources with a 10+ year time horizon are projecting inflation to be at or less than the currently assumed 2.50%.



### **Comparison of Inflation Expectations from December 2019 to December 2022**

Finally, the table below provides a comparison of the inflation expectations documented in the last experience study report and the current inflation expectations.

Source	Inflation Expectations December,		Change
	2019	2022	
(1)	(2)	(3)	(4)
ERSRI' Investment Consultant	2.30%	2.50%	+0.20%
Implied Inflation 20-Year Treasuries	1.85%	2.40%	+0.55%
SSA Trustees Report	2.60%	2.40%	-0.20%
Survey of Professional Forecasters	2.20%	2.95%	+0.75%

### **Recommendation**

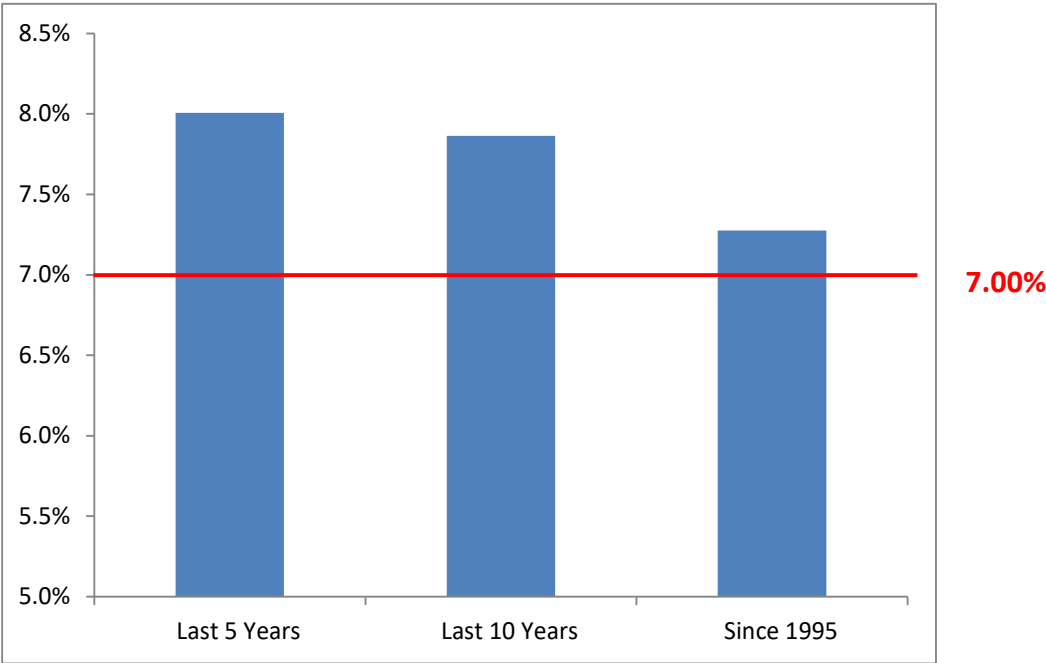
We find the current 2.50% general inflation assumption reasonable. We do find that several of the expectations from forward looking sources are lower than the 2.50%, but recent experience has exceeded the 2.50% and most of the sources have increased since the previous study. Also, the formula for post-retirement benefit adjustments is partially based on actual inflation results, thus the risk to liability growth is tilted towards higher inflation versus lower. For this reason, we would recommend having an assumption higher in the range of reasonable assumptions.



# Investment Return Assumption

The investment return assumption is the principal assumption used in any actuarial valuation of a retirement plan. It is used to discount future expected benefit payments to the valuation date in order to determine the liabilities of the plans. Even a small change to this assumption can produce significant changes to the liabilities and contribution rates. Currently, it is assumed that future investment returns will average 7.00% per year, net of investment and administrative expenses. The current assumption assumes inflation of 2.50% per annum and an annual real rate of return of 4.50%, net of expenses.

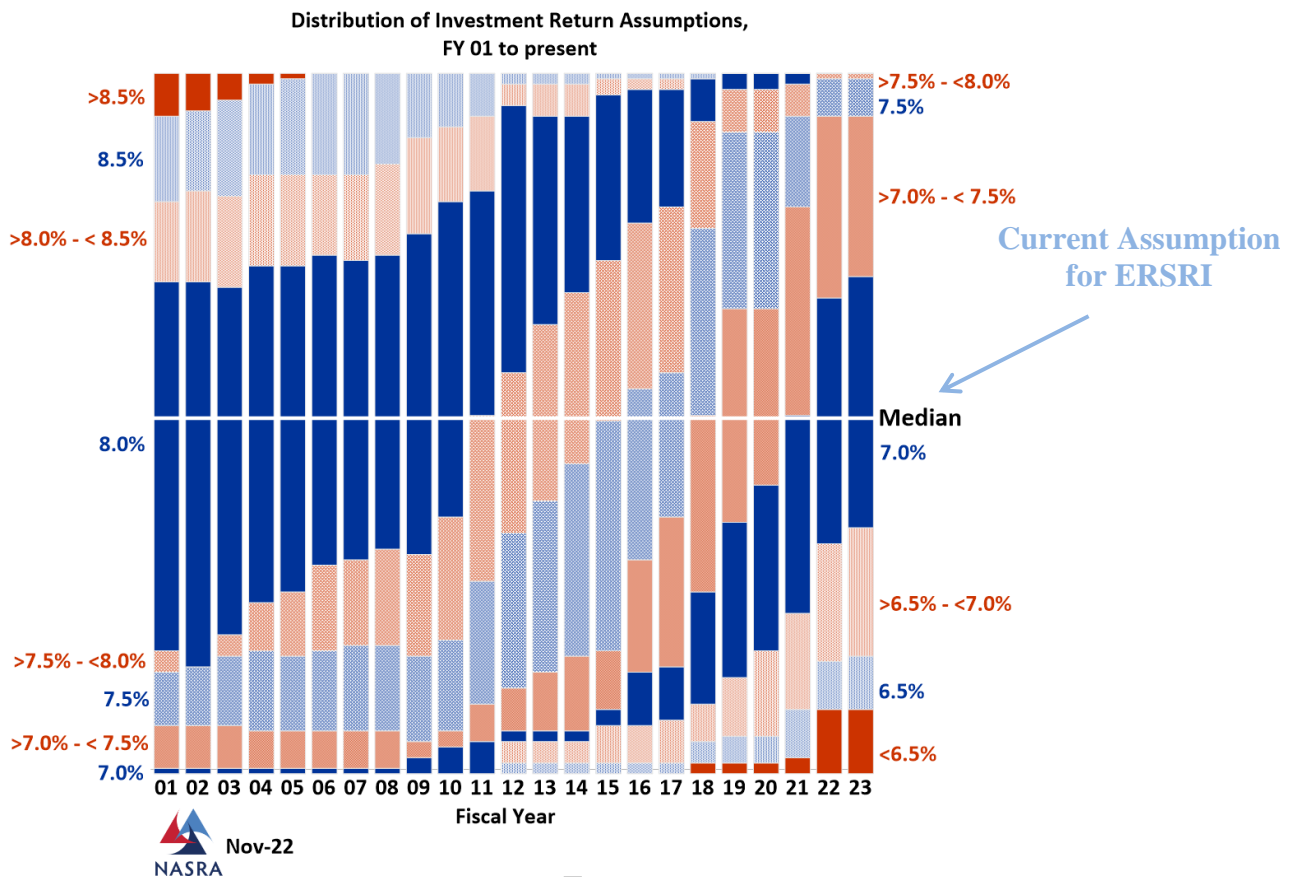
The chart below shows a history of ERSRI’ market returns through FY 2022.



Thus, since 1995, the compound return of the System has achieved the current assumption of 7.0%. Even so, past performance, even averaged over a twenty-five year period, is not a reliable indicator of future performance for this assumption. The actual asset allocation of the trust fund will significantly impact the overall performance, so returns achieved under a different allocation are not meaningful. More importantly, the real rates of return for many asset classes, especially equities, vary so dramatically from year to year that even a twenty-year period is not long enough to provide reasonable guidance. And of course, bond yields are materially different than they were in 1995.

## Comparison to Peers

We do not recommend the selection of an investment return assumption based on prevalence information. However, it is still informative to identify where the investment return assumption for ERSRI is compared to its peers. The chart on the following page shows the distribution of the investment return assumptions in the Public Plans Data as of April of 2023.



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Source: 2023 Public Plans Database. Median investment return assumption: 7.00% nominal return.

The graphic includes the overall national trends in this assumption. The median rate of return is 7.00%, down from 7.25% when reviewed in the 2020 experience study.

## Expenses

Since the trust fund pays expenses in addition to member benefits and refunds, we must make some assumption about these. Almost all actuaries treat investment expenses as an offset to the investment return assumption. That is, the investment return assumption represents expected return after payment of investment expenses.

For investment expenses, investment consulting firms periodically issue reports that describe their capital market assumptions. The estimates for core investments (i.e., fixed income, equities, and real estate) are generally based on anticipated returns produced by passive index funds that are net of investment related fees. The investment return expectations for the alternative asset class such as private equity and hedge funds are also net of investment expenses. Therefore, we did not make any adjustments to account for investment related expenses. Some of the Retirement Systems may also employ active management investment strategies that result in higher investment expenses compared to strategies that invest in passive index funds. We have assumed that active management strategies would result in the same returns, net of investment expenses, as passive management strategies.



On the other hand, there is a divergence of practice on the handling of administrative expenses. Some actuaries make an assumption that administrative expenses will be some fixed or increasing dollar amount. Others assume that the administrative expenses will be some percentage of the plan's actuarial liabilities or normal cost. And others treat administrative expenses like investment expenses, as an offset to the investment return assumption. The historical practice for ERSRI has been to set the investment return assumption as the net return after payment of both investment and administrative expenses. Since this is how the investment related cost of living increase is calculated, it makes sense to keep the same process. The following chart shows the administrative expenses for the last six years expressed as a percentage of the assets, adjusted for cash flow, each year:

Fiscal Year	Administrative
2022	0.098%
2021	0.108%
2020	0.106%
2019	0.104%
2018	0.107%
2017	0.099%
Average	0.105%

Based on this information, we have assumed that 0.11% (11 basis points) of each year's investment return will be used to pay administrative expenses. This assumption is then used in setting the investment return assumption.

## Asset Allocation

We believe the most appropriate approach to selecting an investment return assumption is to identify expected returns given the funds' asset allocation mapped to forward-looking capital market assumptions. Because GRS is a benefits consulting firm and does not provide investment consulting advice, we do not develop or maintain our own forecasts of capital market expectations. Instead, we utilized the forward-looking return expectations developed by nationally recognized investment consulting firms, including the SIC's investment consultant.

The following is an excerpt from ASOP 27 on the topic of using experts:

**Section 3.5.6 Views of Experts** – *Economic data and analyses are available from a variety of sources, including representatives of the plan sponsor and administrator, investment advisors, economists, and other professionals. When the actuary is responsible for selecting or giving advice on selecting economic assumptions within the scope of this standard, the actuary may incorporate the views of experts but the selection or advice should reflect the actuary's professional judgement.*

In our professional judgement, it is appropriate to rely on the SIC's investment consultants' input as part of our consideration in making a recommendation as they are the experts and have specialized knowledge in



this subject matter. This is the same data being used for investment decision making, and thus is a reasonable set of data for use in decisions on funding as well.

As part of an asset allocation study, the SIC provided materials to its Board in April of 2023 that used the average capital market expectations of their three consultants (NEPC, Meketa, and Cliffwater) to estimate the expected forward looking 10-year return of its portfolio to be 7.4%.

Using our own survey of capital market expectations called the CMAM, from 11 investment consultants (that does include the three in the SIC survey), we have estimated the forward looking 10-year return to be 7.36%, right in line with the SIC's information. Here is a distribution of all 11 sources in our survey.

GRS 2023 CMAM				
Capital Market Assumption Set (CMA)	Distribution of 10-Year Average Geometric Net Nominal Return			Probability of exceeding 7.00%
	40th	50th	60th	
(1)	(2)	(3)	(4)	(5)
1	5.20%	6.22%	7.25%	42.41%
2	5.43%	6.57%	7.72%	46.22%
3	6.05%	7.15%	8.27%	51.38%
4	5.97%	7.18%	8.40%	51.50%
5	5.99%	7.21%	8.44%	51.71%
6	6.43%	7.62%	8.83%	55.24%
7	6.55%	7.65%	8.77%	55.93%
8	6.58%	7.68%	8.78%	56.20%
9	6.70%	7.78%	8.88%	57.24%
10	6.92%	7.93%	8.95%	59.24%
11	6.82%	7.97%	9.14%	58.43%
Average	6.24%	7.36%	8.49%	53.23%
Average from last 3 CMAMs	6.61%			

Notice the range of the 50<sup>th</sup> percentile outcome is from 6.22% to 7.97%, which the 7.0% assumption falls in the middle of. Also, while the expected outcome is 7.36%, there is only a 53.23% probability of achieving the 7.0% assumption. Finally, at the bottom, we have provided the average expected return from the last three surveys (2021, 2022, and 2023). To show more detail in the volatility in these expectations, the following exhibit shows the median 10-year outcome from the GRS survey for the past five years for the current ERSRI portfolio.

10-year Expected Return of Current ERSRI Portfolio					
Determined by last 5 GRS Surveys					
2019	2020	2021	2022	2023	Average
(1)	(2)	(3)	(4)	(5)	(6)
7.1%	6.8%	6.3%	6.1%	7.4%	6.7%



Thus the forward looking expectations for the same portfolio have varied from 6.1% to 7.4%. This type of precision and volatility is appropriate for the use by the SIC in its investment decisions because they are always interacting with current market prices and expectations over a given investment cycle. However, for use in setting the contribution requirements and funding patterns over a number of years, consistency around a single number that is in the middle of the range is more appropriate.

Thus, we find the current 7.00% investment return assumption reasonable and recommend no change.

### **Post-Retirement Benefit Increases**

Most members of ERSRI are eligible for post-retirement increases if the individual plan they participate in is over 80% funded (State, Teachers, JRBT, and STPL are all commingled to determine if they meet this requirement).

The increase is calculated as the sum of (1) half of the average compounded investment return during the prior five fiscal years, net of expenses, in excess of a subtrahend equal to the investment return assumption less 2.0%, with the result not less than 0% nor greater than 4% and (2) half of the increase in the September CPI-U for the year prior to the COLA, but not more than 3.0%. The five year average return is represented as the annual rate of return on the actuarial value of assets. We perform one system-wide calculation so all retirees who receive an adjustment will receive the same adjustment.

We will continue to assume the investment related portion is 2.0%. For the CPI related component, we currently assume this will average 2.30% over time.

Thus, the assumption for future post-retirement benefit increases will continue to be 2.15% (the average of 2.00% and 2.30%).

Regarding the 80% funded contingency, during the 2011 pension reform COLAs through 2026 were presumed to be suspended. We have retained that same timeframe since that period, so the valuation currently presumes the COLAs through 2026 will be suspended. We recommend the continued use of this assumption, meaning the 2023 valuations will presume 3 more COLAs will be suspended.

For MERS, most of the MERS units are either already 80% funded or are very close to being so and thus will be 80% funded over a short period of time. As such, we have not reflected any suspension in the increases except for one that may be known to occur the year following the valuation. We recommend continuing this methodology.

### **General Wage Inflation**

The valuation currently assumes that General Wage Inflation (GWI) will be 0.50% above price inflation. The 0.50% represents the real wage growth over time in the general economy, or, is the assumption on how much the pay scales themselves will change year to year, not necessarily how much the pay increases received by individuals are. Another way to look at this assumption is the projected growth rate of the budget of the plan sponsor. This assumption is used primarily to index each cohort of new entrants used in projections, as a building block for the individual salary increase assumption and as a starting point in determining the payroll growth assumption.





Historically, General Wage Inflation almost always exceeds price inflation. This is because wage inflation is in theory the result of (a) price inflation, and (b) productivity gains being passed through to wages. For the national economy as a whole, general wage inflation has exceeded inflation by approximately 1.0% annually over most extended timeframes.

However, for the groups covered by ERSRI specifically, the median average salary had hardly kept up with inflation for the last decade. The following chart provides the change in average salary for each of the covered group. This would be the same as the rate of growth in overall payroll with a stable population. The average annual change in average payroll for most of the groups hovered around 2.5% per year, while inflation was 2.6% during the period. However, that could be State Employees has changed by 2.4% per year over that last decade, while the same value for Teachers has been 1.6%. Netting against the actual inflation of 2.6% produces an actual change about equal to inflation for State Employees and much less than inflation for Teachers. However, there is typically a lag between when inflation occurs and when public sector salaries react to that inflation. It is quite possible as the next round of salary negotiations occur the rate of growth in average salary exceeds inflation.

Change in Average Salary Over Last Decade (Headcount Adjusted Overall Rate of Payroll Growth)					
	State	Corrections	Teachers	MERS General	MERS P&F
All Members	2.39%	2.18%	1.58%	2.57%	2.66%
Members with 2-4 years of service	3.07%	2.94%	2.84%	2.56%	3.08%

Also, there is a spread between the average salaries for new hires and inflation, which have been increasing by 3.1% per year for State Employees and 2.8% for Teachers. As this cohort represents more and more future members, it is possible that the change in average salary overall is closer to the current assumption.

The current assumption is already lower than national trends and we recommend no change to the 0.5% spread above inflation. The lower average increase for Teachers above is due to the demographics of that group as discussed below and very low increases, if not decreases, in salaries coming out of the Great Recession. If only looking at the change in median average salary for the past six years, the growth in average salary has been more consistent with the current assumptions.

### Salary increase rates

In order to project future benefits, the actuary must project future salary increases. Salaries may increase for a variety of reasons:

- Across-the-board increases for all employees;
- Across-the-board increases for a given group of employees;
- Increases to a minimum salary schedule;
- Additional pay for additional duties;
- Step or service-related increases;





- Increases for acquisition of advanced degrees or specialized training;
- Promotions; or
- Merit increases, if available.

Our salary increase assumption is meant to reflect all of these types of increases.

The actuary should not look at the overall increases in payroll in setting this assumption because payroll can grow at a rate different from the average pay increase for individual members. There are two reasons for this. First, when older, longer-service employees terminate, retire or die, they are generally replaced with new employees who have a lower salary. Because of this, in most populations that are not growing in size, the growth in total payroll is smaller than the average pay increase for members. Second, payroll can change due to an increase or decrease in the size of the group. Therefore, to analyze salary increases, we examine the actual increase in salary for each member who is active in two consecutive fiscal years.

Salary increases for governmental employees can vary significantly from year to year. When the employer's tax revenues stall or increase slowly, salary increases often are small or nonexistent. During good times, salary increases can be larger. Our experience across many governmental plans also shows several occasions in which salary increases will be low for a period of several years followed by a significant increase in one year. Therefore, for this assumption in particular, we prefer to use data over a longer period in establishing our assumptions. We used a ten-year period for this analysis.

Most actuaries recommend salary increase assumptions that include an element that depends on the member's age or service, especially for large, public retirement systems. It is typical to assume larger pay increases for younger or shorter-service employees. This is done in order to reflect pay increases that accompany step increases, changes in job responsibility, promotions, demonstrated merit, etc. The experience shows salaries have been more closely correlated to service (rather than age), as promotions and productivity increases tend to be greater in the first few years of a career, even if the new employee is older than the average new hire.

Thus, if we graph the increases by service, we usually get a graph where the increases are larger for shorter service employees and then level out at a lower level after a period that may be ten to twenty-five years. It might look like this, although in practice not this smooth:



Therefore, we divide the task of setting the salary increase into two pieces:

1. Determining the assumption for long-service employees
2. Determining the additional increases to be applied to shorter-service employees

The next two subsections will discuss these components of the salary assumption.

### Salary increase assumptions for long-service employees (ultimate salary scale)

Many of the factors that result in pay increases are largely inapplicable or have diminished importance for longer-service employees. Step or service-related increases have stopped or are minimal. Promotions occur with less frequency. Additional training or acquisition of advanced degrees usually occurs early in the career. In theory, then, salary increases for longer-service employees are heavily driven by wage inflation, with only a small factor for individual merit. We will define the last value in our salary increase assumption as the ultimate component. This will be made up of price inflation plus general productivity plus individual merit. We may also sometimes refer to the sum of the general productivity and the individual merit as the individual productivity component.

For State Employees, our study shows that for members with at least twenty-five years of service, the average annual salary increase during the ten-year period was 2.78%. Inflation during this 10-year period averaged 2.60%. Therefore, long-service employees received an average salary increase of 0.18% above inflation (individual productivity component). So, the average salary increase for long-service members was lower than the current assumption on a nominal basis (2.78% vs 3.25%) and on a real basis (0.18% vs 0.75%). For Teachers, the first three years following the Great Recession were very low and are likely not representative of forward expectations, thus the data is only based on the last seven fiscal years. The following table summarizes this for all of the groups:

Ultimate Salary Scale (10-Year Experience)							
	State	Corrections	Teachers*	MERS General	MERS P&F	State Police	Judges
Long Service Definition (Years)	25	25	25	25	25	10	1
Current Assumption	3.25%	3.25%	3.00%	3.25%	4.00%	3.75%	2.75%
Actual Increase	2.78%	2.34%	2.47%	2.66%	3.57%	6.75%	2.68%
Recommended Ultimate Salary Increase Assumption	3.00%	3.00%	2.75%	3.00%	3.50%	4.00%	2.75%
Change	-0.25%	-0.25%	-0.25%	-0.25%	-0.50%	0.25%	-

- 7 Years

We have lowered the assumption for long service employees across all the groups. Teachers have a pattern of higher increases early in the career and lower late in the career, so the ultimate salary scale is lower than the 3.00% GWI assumption.

While several individual productivity components appear low compared to the assumption, much of that is from fiscal years 2012 and 2013 coming out of the Great Recession. The averages since then have been more in line with the recommended spreads. Also, salaries in the data gathering processes are slow to react to new inflation and labor market conditions, so it is likely there are higher wage increases coming over the short term.

### Salary increase assumptions for shorter-service employees

To analyze the service-related salary assumption, we looked at the excess in the average increases for shorter-service employees over the average for longer-service employees. For example, Teachers with three years of service received an average annual increase of 8.33%, which was 5.86% more than the average increase of 2.47% for Teachers with 25 or more years of service. The patterns were graduated for a reasonable, stable pattern and compared to the current assumptions. We then if necessary determined new service-related assumptions reflecting this data. The following is a similar exhibit as above that shows the average increase a member is expected to receive over a 25 year career by category.

Average Career Salary Increase (Last 10-Years Experience)							
	State	Corrections	Teachers*	MERS General	MERS P&F	State Police	Judges
Current Assumption	4.40%	5.08%	5.26%	4.07%	5.42%	6.09%	2.75%
Actual Increase last 10 Years	3.85%	4.51%	4.37%	3.84%	4.70%	6.11%	2.68%
Recommended Average Salary Increase Assumption	4.15%	4.83%	4.95%	4.03%	5.21%	6.34%	2.75%
Change	-0.25%	-0.25%	-0.31%	-0.04%	-0.21%	0.25%	-

- 7 years

The largest change was to State Police and that was all on the productivity component discussed above. Teachers had the largest decrease of 0.31%, but appears to still have a quite a bit of margin when compared to the last decade. Any of the actuals that are lower than the assumption are easily explained by the same issues as before: very low increases in fiscal years 2012 and 2013 as well as the recent spike in inflation not having time to incorporate into the wages yet.

Details of our analysis are shown in Section VII.

### Payroll growth rate

The salary increase rates discussed above are assumptions applied to individuals and are used in projecting future benefits. We use a separate payroll growth assumption in determining the annual payment needed to amortize the unfunded actuarial accrued liability. The amortization payments are calculated to be a level percentage of payroll. Therefore, as payroll increases over time, these amortization payments will also increase.



In theory, payroll growth in the absence of membership growth should approximate the wage inflation assumption (proposed to be 3.00%). However, we may make adjustments based on the demographics of the individual population. For example, the current Teacher population is disproportioned to older ages based on hiring and staffing patterns over the last decade. Because of this, we anticipate slower growth over the next ten to fifteen years and use an assumption lower than the GWI assumption.

To analyze this, we need to take into account historical trends, future projections, and risk management around demographic patterns and headcount growth (or lack thereof). We projected the payroll for current members based on the assumed salary increases for the individuals and their assumed termination or retirement rates. We then added in enough new employees each year to replace them. Pay for the first group of new members was initialized based on actual average pay for current new members, and thereafter pay was projected based on the salary assumption and expected retirements and terminations for this cohort of new members. For each subsequent cohort of new members needed to replace the retired and terminated members we increased the starting average pay by the general wage inflation assumption of 3.00%.

The time period that is most important is the remaining large original amortization base from the 2011 pension reforms. Those are the largest amortization payments for the current plans and the ones that will drive the amortization schedule over that timeframe, which is about 10-15 more years. Based on this analysis we found that payroll over the next fifteen years was projected reasonably close to the 2.50% price inflation assumption for State Employees and even lower than inflation for Teachers.

For the last decade, total payroll growth has been much lower than the current assumption for both State and Teachers. Many of the factors that led to this may not be as extreme going forward, but there is still very likely to be a headwind for the remaining amortization period of the 2011 RIRSA base.

Therefore, we are recommending lowering this assumption at 2.00% for Teachers and 2.50% for all other groups.

This assumption has no impact on the liabilities of the System, but does impact the contribution rates because it is used to project out future payrolls that will be the basis of future contributions. By assuming there will be less payroll in the future to make contributions on, the contribution rate must increase short term to reproduce the appropriate amount of dollars into the fund, but the annual dollars in future years will be much less.

### **Post-retirement mortality rates (service retirees)**

Perhaps the most critical demographic assumption used in pension valuations is post-retirement mortality. Rates of mortality affect our estimate of how long each individual is expected to live and consequently how long each individual is expected to receive a pension. Life expectancy in turn has a direct impact on pension plan liabilities.

Mortality rates have generally decreased over time in the U.S., meaning that life expectancies have generally increased over time. The assumption for future decreases in mortality is referred to as the mortality improvement assumption. In general, the mortality and mortality improvement assumptions are treated separately.



The current tables are based on adjusted versions of the Pub-2010 Public Retirement Plans Mortality Tables published by the Society of Actuaries (SOA), projected with the 2019 MP projection scales with immediate convergence. Of course, we also use separate tables for males and females. Separate tables discussed in the following section are used for disabled retirees.

We use separate mortality tables for Teachers and All Other Employees. Life expectancy for Teachers is on average longer than for other state and local government employees. We currently include Public Safety employees in the All Other Employee category. While historically, retirees from Public Safety occupations had a lower life expectancy than the general population, most recent data sources do not show a significant statistical difference between Public Safety retirees and the general population. In fact, if recent trends continue, it is likely today's 40-year old Public Safety employee will have a longer life expectancy once they retire than today's general employee. The largest data set to confirm this trend is the recently published Pub-2010 Public Retirement Plans Mortality Tables, which do show a difference, but only marginally so. We would rather have one larger, more credible dataset than two less credible ones, so we will continue to combine the groups.

To analyze the data, we began by determining the expected number of deaths in each year at each age for males and females. The analysis uses only the retirees, not the beneficiaries, joint annuitants, or survivors. We will use a liability-weighted (or benefit weighted) analysis. There are two reasons for using a liability-weighted approach. First, mortality experience across the U.S. has been shown to vary depending on income level. Liability-weighting takes into account differing benefit levels. Second, selecting an assumption based on headcount-weighting is consistent with estimating expected deaths, but selecting an assumption based on liability-weighting is consistent with minimizing gains and losses associated with expected deaths. By weighting the data by annuity amounts, we are giving more weight to members who have larger annuities (and thus have larger liabilities).

We have utilized nine years of experience to increase the credibility of the analysis and minimize any variance created by timing of data collection from year to year. During this time, mortality improvement may have occurred. A general procedure is to adjust the actual experience for mortality improvements during the study period to the central year, in this case 2016. For purposes of this study, proposed mortality rates shown in the tables have been adjusted to the central year 2016 using the proposed projection scales.

### **Impact from Pandemic**

The data from the last three fiscal years was clearly impacted by the pandemic, with much higher rates of mortality than the first 6 years. No one knows for sure how future mortality patterns will be impacted. As such, we have been careful to not add any more risk into the current assumption than currently exists, meaning if the data suggests life expectancies could be shortened based on the data, we will instead hold the same multipliers on the mortality assumptions and wait for more data before making adjustments.

### **Pub-2010 Public Retirement Plans Mortality Tables**

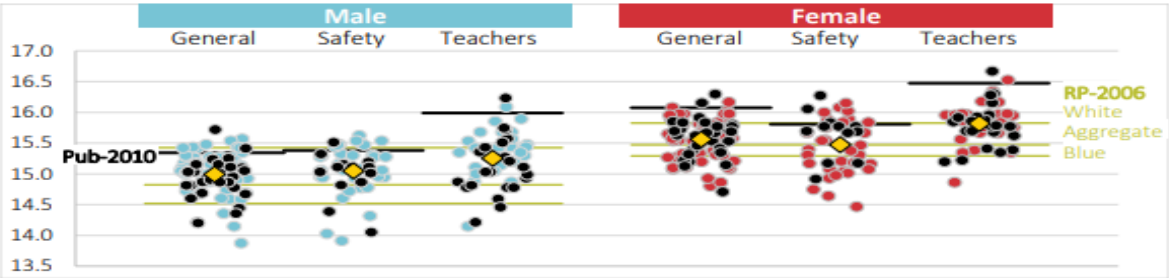
In January 2019, the Society of Actuaries (SOA) issued the final version of Pub-2010 Public Retirement Plans Mortality Tables. This is the first set of mortality rates published based on U.S. public sector experience. In this study, the SOA examined mortality for Teachers, Public Safety, and General employment categories. The SOA also studied mortality rates by gender, income (in total and separated into above and below median), and status (active employees, retirees, disabled retirees, and contingent survivors). As a consequence, there are over 90 Pub-2010 tables to select from.



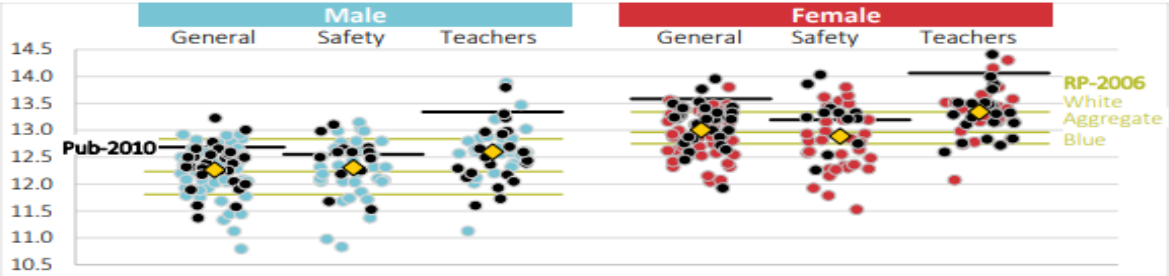
In August 2018, the Society of Actuaries (SOA) reviewed the comprehensive annual financial reports of the majority of large public sector employees’ retirement systems for a review of their mortality assumptions. The SOA report included analysis of certain annuity values under current assumptions and the new Pub-2010 tables. As can be seen in the charts, the majority of public sector plans would have higher annuity values (i.e., plan costs) under Pub-2010.

### Public Plan Mortality Assumption Comparison

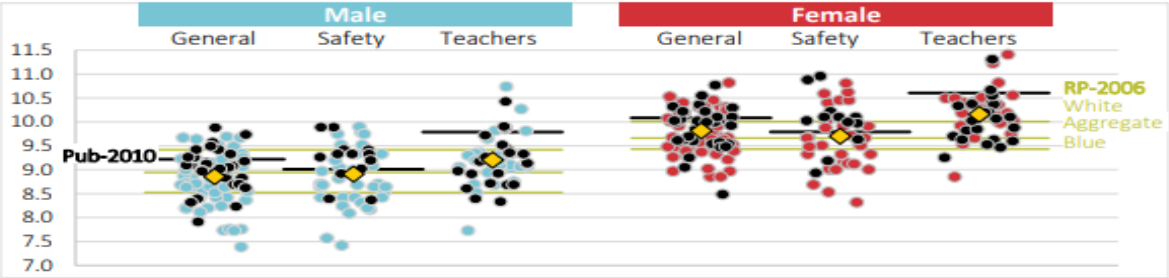
**Figure 1**  
2018 AGE 55 ANNUITY FACTORS WITH PUB-2010 AND RP-2006



**Figure 2**  
2018 AGE 65 ANNUITY FACTORS WITH PUB-2010 AND RP-2006



**Figure 3**  
2018 AGE 75 ANNUITY FACTORS WITH PUB-2010 AND RP-2006



Legend	
Black dots	Plans that use RP-2006 or RP-2014 mortality rates (possibly adjusted) in the base table
Blue/red dots	Plans that use neither RP-2006 nor RP-2014 mortality rates (adjusted or otherwise) in the base table
Yellow diamonds	Average of all plans in the job category, weighted one per plan
Black lines	Pub-2010 Mortality Tables (amount-weighted) generationally projected with Scale MP-2017
Green lines	RP-2006 Mortality Tables (amount-weighted) generationally projected with Scale MP-2017: white collar (top), aggregate (middle) and blue collar (bottom)
Assumptions	Monthly single life annuities beginning in 2018, computed at 7% interest with 2% annual benefit increases

However, another observation is the wide range of outcomes across the datasets included in the analysis. Thus, occupation is not the only factor for variance in life expectancy. The report published alongside the Pub-2010 tables states that income was generally the most significant explanatory variable, even excluding



job category. For this reason Above Median and Below Median versions of the tables were also published. However, even the range between these versions of the tables is quite wide, especially for general employee males. Other factors could be duration of retirement, geographic region, access to health insurance, and definitions of disability. Some of these factors can be analyzed by trying to match these characteristics of the group to the baseline table, but if the dataset is large enough, this process can be analyzed through statistical techniques to scale the table to the experience.

In this analysis, we look at a subset of the tables illustrated in that study: PubG-2010 for healthy general retirees, PubG-2010 for healthy retired teachers, and PubNS-2010 for disabled retirees. In certain cases, the Pub-2010 tables do not have rates below or above certain ages. In cases where rates are absent, we have extended the published tables with cubic splines or exponentials in a manner similar to the way the tables were created.

## Credibility

When choosing an appropriate mortality assumption, actuaries typically use standard mortality tables. If the plan population has sufficient credibility to justify its own mortality table, then the use of such a table also could be appropriate. Factors that may be considered in selecting and/or adjusting a mortality table include the demographics of the covered group, the size of the group, the definition of disability in the plan, the statistical credibility of its experience, and the anticipated rate of future mortality improvement.

We first measured the credibility of the dataset to determine whether standard, unadjusted tables should be used or if client specific data was warranted. We apply a credibility procedure in accordance with ASOP No. 25, Credibility Procedures to determine partial credibility based on the limited fluctuation method to determine appropriate adjustments to the base table to be applied to each gender within each member classification. We utilized approaches described in this paper

<https://www.soa.org/globalassets/assets/files/static-pages/sections/retirement/credibility-resource-pension.pdf> for this analysis. The paper shows that to be +/-5% with 90% confidence requires 1,082 deaths per gender. However, when using a benefit weighted approach to the analysis, even more deaths are required as the variance in the benefit amounts decreases the overall credibility.

During the period, there were 2,093 male deaths and 2,346 female deaths for the Non-Teacher group, indicating they are a highly credible group. For the Teacher group, there were 834 male deaths and 1,217 female deaths, giving them good credibility as well. The following provides the full details with  $p=90\%$  and  $r=5\%$ .

Group	Other Employees		Teachers	
	Male	Female	Male	Female
Actual Deaths	2,180	2,512	834	1,217
Deaths needed for full credibility				
Based on Count	1,082	1,082	1,082	1,082
Based on Annuity Amount	1,709	1,781	1,206	1,238
Z Factor				



Based on Count	100.0%	100.0%	87.8%	100.0%
Based on Annuity Amount	100.0%	100.0%	83.2%	99.1%

## Base Tables

We have compared the data from the study period to variants of the newer PUB(10) mortality tables. We compared the ratio of the actual deaths to the expected deaths—the A/E ratio—tells us whether the assumptions are reasonable.

We use the limited fluctuation credibility procedure to determine the appropriate scaling factor of the base mortality tables for each gender and each member classification on a benefits weighted basis. In each case, the Z-factor (shown above) is computed based on the experience of the group being studied. This Z-factor is a measure of the credibility of the pertinent group.

The Best Fit is the ratio of actual to expected deaths using the base table. The final scale is then determined as the weighted average of the Best Fit and 100% based on the Z-factor. For example, for male Teachers, the Z-factor of 83.2% suggests the data for that group is 83.2% credible. The Best Fit for that group (without credibility) would be to scale the base tables by 113.1%. The final scaler of 110.9% is the credibility-weighted average ( $110.9\% = 83.2\% \times 113.1\% + 16.8\% \times 100\%$ ). Factors for other groups are determined similarly.

Group	Other Employees		Teachers	
	Male	Female	Male	Female
Actual Deaths (\$000 Annuities)	\$55,656	\$41,706	\$37,597	\$47,435
Expected Deaths based on Current Assumptions	\$54,162	\$40,107	\$35,879	\$46,777
A/E Ratio	102.8%	104.0%	104.8%	101.4%
Expected Deaths based on PUB(10) Median Tables by Occupation	\$47,144	\$36,306	\$33,255	\$40,744
A/E Ratio based on Best Fit	118.1%	114.9%	113.1%	116.4%
Multiplier based on LFCT	118.1%	114.9%	110.9%	116.3%
Recommended Multiplier	<b>115.0%</b>	<b>111.0%</b>	<b>108.0%</b>	<b>115.0%</b>
Expected Deaths based on PUB(10) Median Tables by Occupation adjusted by Multiplier	\$54,216	\$40,299	\$35,915	\$46,856
A/E Ratio	102.7%	103.5%	104.7%	101.2%

Our standard approach would be to use the Multiplier based on LFCT, rounded down to the nearest percent. However, as discussed above, because of the pandemic we have not allowed any multipliers to increase from the current assumptions, and this did impact all four groups.





We also examined the results in five-year age groups, checking how well the pattern in the table matched actual experience. Most importantly, we look at life expectancies in the actual data and the tables, looking for a good fit. A summary of the comparison of life expectancies is shown below:

Group	Other Employees		Teachers	
	Male	Female	Male	Female
Life Expectancy of 65 year old retiree in years (current assumption)	19.35	22.04	21.43	23.10
Life Expectancy of 65 year old retiree in years (actual, smoothed)	19.20	21.74	21.18	22.94
Life Expectancy of 65 year old retiree in years (proposed)	19.36	22.02	21.41	23.07
A/E ratio	99.2%	98.7%	98.9%	99.4%

Without Projection, Central Year 2016

As shown, this produces a reasonable match, with the actual being slightly less because of the pandemic. More detail is shown on the tables in Section VII.

### Recommended Mortality Improvement Assumption

We use a fully generational approach to this assumption. Because of this strategy of building in continuous improvement, life expectancies for today's younger active members are expected to be materially longer than those of today's retirees, and this provides substantial stability and dependability on costs and liabilities. We currently use a 1% improvement assumption per year across most ages.

There is an annual report published by the Retirement Plans Experience Committee of the Society of Actuaries to provide commentary on national trends in mortality experience and provide updated projection scales. The initial report was in 2014, with annual updates every year since. In every update, rates of projection were materially decreased, meaning the original MP-2014 table was found to be too conservative. In addition, the amount of change from year to year has been significant. The amount of volatility produced by changing annually to each "most recent" table has been on the same order as the actual investment performance. Thus, we find that the use of the full version of these tables to produce an overly complex, volatile pattern of results that has actually had minimal, if any, predictive power.

After approximately 15 years, all of the versions prior to the 2020 version of the MP tables reflected the same improvement rate at each future calendar year (the ultimate mortality improvement rates) at the 1% per year across most ages we currently use. In order to balance the two objectives of reflecting the most recent data available, while maintaining stability of results from year to year, GRS has been recommending the use of the ultimate mortality improvement rates in the MP tables for all years, which is again approximately 1% per year improvement across most ages.

In the 2020 report the ultimate mortality improvement rates were modified to be higher at some ages and more precise across different age groups based on historical trends. Specifically, the pattern is 1.35% rate for ages 62 and younger, decreasing linearly to 1.10% at age 80, further decreasing linearly to 0.40% at age



95, and then decreasing linearly to 0.00% at age 115 (and thereafter). In general, the net change in overall liabilities if a retirement system was using the ultimate rates of the MP-2019 table to the ultimate rates of the MP-2020 version is minimal. Basically, the rates at individual ages were changed but the overall pattern over a lifetime is not much different.

We find it would be reasonable to use either set of improvement scales, but give preference to the more recently published report all else being equal. Given the material increase in healthcare costs it has required over the last few decades to allow for the rates of improvement that have existed, and the general worsening in morbidity factors in the United States, we find it reasonable to assume the future improvement would be approximate to or less than it has been historically across most ages. The 2020 report provides several pages of rationale and disclosure of the process used to generate the new long-term rates, including comparing to historical trends, and we find the analysis thorough and reasonable. Thus, we are recommending use of the latest MP-2021 scales, but with immediate convergence. Meaning the values in the scale for a given age will be applied to all years.

The following is a table with the life expectancy for a retired member who attains age 65 based on the proposed assumption set, by calendar year. As shown, the life expectancy is expected to increase into the future.

Proposed Mortality Assumption - Life Expectancy for an Age 65 Retiree in Years					
Group	Year of Retirement				
	2023	2028	2033	2038	2043
Other Employees – Male	20.8	21.1	21.5	21.9	22.2
Other Employees - Female	23.4	23.8	24.1	24.4	24.8
Teachers - Male	22.8	23.1	23.5	23.8	24.1
Teachers - Female	24.4	24.8	25.1	25.4	25.7

With Generational Projection

### Post-retirement mortality rates (disabled retirees)

This is a relatively minor assumption, and it has little impact on the liabilities of ERSRI. We are recommending this assumption continue to use the PUB(10) set of tables, using 100% of the disabled tables by occupation.

### Active mortality rates

This is a relatively minor assumption, and it has little impact on the liabilities of ERSRI. We are recommending this assumption continue to use the PUB(10) set of tables, using 100% of the median active employee tables by occupation.

### Disability rates

We analyzed disability separately for males and females, State Employees, Teachers, MERS General and MERS P&F, and ordinary and accidental disability.



We compared the number of actual and expected disabilities by group, taking into account the fact that members with less than five years of service and members eligible for retirement are not eligible for ordinary disability.

For disability, there is often a lag time between when the member leaves active service to when the member is approved for disability. In many cases, this timeframe can span over a valuation cycle, meaning a member is active in year 1, shows as an inactive in year 2, and then a disabled member in year 3. We have used the actual disabled records in the 2022 valuation data for members with dates of disability in the six-year period January 1, 2016 through December 31, 2021 as an approximation of our actual disabilities as the FY22 experience likely doesn't completely include members who are in processing as of June 30, 2022.

For this assumption, an A/E close to, but less than, 100% is preferable. The analysis shows a reasonably close match across the groups, given the relatively small numbers. However, several of the groups either show more disabilities than expected or have an increasing trend. We have made recommendations on a few of the groups, and for those have provided the A/E ratio based on the proposed assumptions. For most groups, the size is too small to give full credibility so in most cases the recommended assumption only partially reflect the recent experience. Although there are detailed tables on each of the groups in Section VII, here are tables showing some summary information:

Group/Type	Actual Number	Expected Number	A/E Ratio	A/E on Proposed Assumption
State/Corr male ordinary	88	72	122%	102%
State/Corr female ordinary	91	76	120%	97%
State/Corr male accidental	15	29	52%	71%
State/Corr female accidental	24	26	92%	
Teacher male ordinary	16	23	70%	
Teacher female ordinary	96	65	148%	104%
Teacher male accidental	1	0	NA	33%
Teacher female accidental	11	7	157%	110%
MERS General male ordinary	21	29	72%	
MERS General female ordinary	16	18	89%	
MERS General male accidental	16	20	80%	
MERS General female accidental	11	9	122%	92%
MERS P&F ordinary	14	6	233%	140%
MERS P&F accidental	53	54	98%	87%
Total disabilities	473	434	109%	94%

In addition, for groups that have historically had ages ranges that were eligible for unreduced retirement, but now are not, the current assumptions add 2% to the probability of ordinary disability in those age ranges to reflect the reality that some members who retired under old eligibility provisions would have qualified for disability, but did not apply because there was no need to do so. We recommend no change to this part of the assumption set.

These changes will have a minor impact on the liabilities and contribution requirements. Details are shown in Section VII.



## Retirement pattern

The current assumptions were estimates of the impact the changes from RIRSA would have on behavior, and had several categories based on cohorts of members becoming eligible to retire. In general, most of the reasons to have the various cohorts has passed as we are now 12 years past the passage of RIRSA. We have made adjustments and simplifications as appropriate. For this analysis, the data was weighted by the potential liability of the member, so that members with more service and higher salaries influenced the results proportionately more. The following is a summary of the data. Details are shown in Section VII.

Group/Type	Actual Number	Expected Number	A/E Ratio	A/E on Proposed Assumption
State Employees	\$6,819	\$6,146	111%	93%
Corrections	710	648	110%	99%
Teacher, at First Eligibility	353	385	92%	
Teacher, after First Eligibility	1,047	1,158	90%	
MERS General	2,243	2,322	97%	88%
MERS P&F	598	569	105%	95%
State Police	40	65	62%	
Judges	5	5	100%	
Total Retirements	\$11,815	\$11,298	105%	92%

\$ in 000s of potential liability

## Termination rates

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Termination rates reflect members who leave for any reason other than death, disability or service retirement. They apply whether the termination is voluntary or involuntary, whether the member is vested or non-vested, and whether the member takes a refund or keeps his/her account balance on deposit and takes a deferred benefit.

We use separate termination rates for males and females and for all groups. The current rates are structured as a function of service. No terminations are assumed once a member becomes eligible for retirement. The current tables were based on ERSRI experience and developed in prior experience studies. For this analysis, we have extended the experience period to ten years as termination patterns tend to be very cyclical with the overall economy. We also weight the data based on the liability of the member.

Group/Type	Actual Liability Turnover	Expected Liability Turnover	A/E Ratio	A/E on Proposed Assumption
State Employees	\$332	\$274	121%	108%
Corrections	47	44	108%	104%
Teachers	477	366	130%	109%
MERS General	151	117	130%	115%
MERS P&F	132	73	181%	148%
Total Termination	\$1,139	\$874	130%	113%

\$ in millions



As shown, similar to trends in peer retirement systems, turnover has increased compared to historical trends. We have moved the turnover assumptions approximately half way to the target range of 105% for the individual groups. Full detail in the tables in Section VII.

### **Spousal age difference**

Currently, we assume that male members are three years older than their spouses and female members are three years younger than their spouses. This is reasonable, based on general census statistics and we are not recommending changing this assumption.

### **Refund of contributions**

We currently assume that members who are vested and terminate in the future will choose the more valuable of a refund or a deferred annuity. This is a bit conservative, since some people do choose a refund when the deferred benefit is worth more, but we are recommending no change in this assumption.

### **Other assumptions**

There are other technical assumptions made in the course of a valuation, such as the timing of terminations and retirements during the year, and the timing of pay increases. We reviewed these and are recommending no changes.

### **Actuarial cost method**

The individual Entry Age Normal cost method (EAN) is the current funding method being used to allocate the actuarial costs of the Fund. Under this method, the normal cost for each member is determined to be the level percentage of payroll which, if contributed from the date of entry to the date of retirement, would accumulate assets sufficient to pay the retirement benefits when due. Use of this method is required by statute. The Entry Age Normal method will generally produce relatively level contribution amounts as a percentage of payroll from year to year, and allocates costs among various generations of taxpayers in a reasonable fashion. It is by far the most commonly used actuarial cost method for large public retirement systems. We continue to believe this is the best funding method for ERSRI and recommend no change.

### **Actuarial Value of Assets**

Actuaries generally recommend using a smoothed actuarial value of assets (AVA), rather than market value (MVA), in order to dampen the fluctuations in measurements such as the required contribution amount and the funded status of the system.

The current method smooths the differences between the expected returns (based on the annual investment return assumption) and actual returns, net of expenses, over a five-year period. For example, if the actual return is 12.00% in one year, then currently 7.00% is reflected immediately in the AVA, and the other 5.00% is recognized in 20% increments over five years, beginning with 20% for the current year.

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continuing to be recognized on their original timeframe. Expected investment income is determined



using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses.

### Amortization period

The unfunded actuarial accrued liability from the 2011 pension reform is being amortized over a closed 25-year period from June 30, 2010. The remaining amortization period is 13 years. New gains and losses will be “laddered” on individual 20 year bases once the period on the large base decreases below 20. We are not recommending any change to this in connection with the current experience study.

Units that are overfunded have their past layers eliminated under the idea that there is no longer an UAAL and thus no longer a need to systematically amortize it, and instead a credit can be given for a 20-year amortization of any surplus. This process actually pushes overfunded units towards 100% funded and will eventually use up all of their surplus. We are recommending a slight adjustment to still give a credit, but only enough so that the proportionate amount of surplus would remain the same from year to year. For example, if a unit is currently 110% funded, the credit would be enough so that the unit would be expected to remain at 110% funded the next year.

### Election Assumptions for the Teacher Survivor Benefit plan

We reviewed the current election and family distribution assumptions for the Teacher Survivor Benefit Plan. The current assumptions were developed in the previous experience study and are tracking well with experience, thus we are not recommending any changes.

	By Attained Age									
	20	25	30	35	40	45	50	55	60	65
Spouse Only	5%	14%	14%	10%	11%	15%	32%	75%	75%	70%
Spouse and 1 Child	5%	12%	20%	17%	22%	23%	18%	0%	0%	0%
Spouse and 2 or More Children	4%	13%	36%	46%	41%	35%	24%	0%	0%	0%
One Child Alone	5%	6%	3%	7%	8%	10%	6%	0%	0%	0%
Two Children Alone	3%	7%	4%	7%	6%	3%	1%	0%	0%	0%
Three or More Children Alone	1%	4%	4%	5%	4%	1%	1%	0%	0%	0%
Dependent Parent Alone	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No Dependents/Refund	77%	44%	19%	8%	8%	13%	18%	25%	25%	30%

## **SECTION IV**

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### **ACTUARIAL IMPACT OF RECOMMENDATIONS**

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## Section IV

### Impact of Proposed Changes to Actuarial Assumptions

Under Rhode Island General Laws, the employer contribution rates are certified annually by the State of Rhode Island Retirement Board. These rates are determined actuarially, based on the plan provisions in effect as of the valuation date, the actuarial assumptions adopted by the Board, and the methodology set forth in the statutes. The Board's current policy is that the contribution rates determined by a given actuarial valuation become effective two years after the valuation date. For example, the rates determined by the June 30, 2023 actuarial valuation will be applicable for the year beginning July 1, 2025 and ending June 30, 2026.

The actuarial cost method and the amortization period are set by statute. Contribution rates and liabilities are computed using the Entry Age Normal actuarial cost method. The employer contribution rate is the sum of two pieces: the employer normal cost rate and the amortization rate. The normal cost rate is determined as a percent of pay. The employer normal cost is the difference between this and the member contribution rate. The amortization rate is determined as a level percent of pay. It is the amount required to amortize the unfunded actuarial accrued liability over a closed period. The amortization rate is adjusted for the two-year deferral in contribution rates. Separate employer contribution rates are determined for State Employees, Teachers, Judges, State Police, and individual MERS units.

#### Effect of the proposed assumptions

We are not recommending the June 30, 2022 valuation be restated, but instead, these recommended assumptions be used in this upcoming June 30, 2023 valuation. Shown below is a table that compares key results from the June 30, 2022 actuarial valuation with these same results recalculated using the recommended actuarial assumptions and methods. As you can see, the assumption changes generally increase the contribution requirements and liabilities.

State Employees			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	7.87%	7.71%	-0.16%
Unfunded actuarial accrued liability	\$2,032 million	\$2,041 million	\$9 million
Funded ratio	58.8%	58.7%	-0.1%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	28.46%	29.26%	0.80%
b. Estimated dollar amount	\$244.5 million	\$246.5 million	\$2.0 million





Teachers			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	7.31%	7.17%	-0.14%
Unfunded actuarial accrued liability	\$2,735 million	\$2,662 million	-\$73 million
Funded ratio	61.5%	62.1%	0.6%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	24.99%	25.02%	0.04%
b. Estimated dollar amount	\$308.5 million	\$303.0 million	-\$5.5 million

SPRBT			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	21.53%	22.00%	0.47%
Unfunded actuarial accrued liability	\$21 million	\$21 million	\$0 million
Funded ratio	90.0%	90.0%	0.0%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	19.65%	20.25%	0.60%
b. Estimated dollar amount	\$5.9 million	\$6.0 million	\$0.1 million

JRBT			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	31.80%	31.62%	-0.18%
Unfunded actuarial accrued liability	-\$4 million	-\$4 million	\$0 million
Funded ratio	104.0%	104.4%	0.4%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	18.20%	17.80%	-0.40%
b. Estimated dollar amount	\$2.4 million	\$2.4 million	\$0.0 million



MERS General			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	9.55%	9.51%	-0.04%
Unfunded actuarial accrued liability	\$174 million	\$171 million	-\$3 million
Funded ratio	87.20%	87.40%	0.2%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	11.24%	11.38%	0.15%
b. Estimated dollar amount	\$34.5 million	\$34.4 million	-\$0.1 million

MERS Police and Fire			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Normal cost	29.04%	28.75%	-0.29%
Unfunded actuarial accrued liability	\$149 million	\$147 million	-\$2 million
Funded ratio	84.0%	84.2%	0.2%
Projected FY 2026 Annual Required Contribution			
a. Percent of payroll	18.64%	18.77%	0.13%
b. Estimated dollar amount	\$28.2 million	\$28.0 million	-\$0.2 million

Teacher Survivor Benefit Plan			
Item	Current Assumptions and Methods	Recommended Assumptions and Methods	Change
Unfunded actuarial accrued liability	-\$176 million	-\$183 million	-\$6 million
Funded ratio	178.1%	183.3%	5.2%



## SECTION V

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### **SUMMARY OF ASSUMPTIONS AND METHODS INCORPORATING THE RECOMMENDED ASSUMPTIONS**

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## Section V

### Summary of Assumptions and Methods Incorporating the Recommended Assumptions

#### I. Valuation Date

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

#### II. Actuarial Cost Method

The actuarial valuation uses the Entry Age actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial accrued liability (UAAL).

1. First, the actuarial present value of future benefits is determined by discounting the projected benefits for each member back to the valuation date using the assumed investment return rate as the discount rate. For active members, the projected benefits are based on the member's age, service, gender and compensation, and based on the actuarial assumptions. The calculations take into account the probability of the member's death, disability, or termination of employment prior to becoming eligible for a retirement benefit, as well as the possibility of the member will remain in service and receive a service retirement benefit. Future salary increases are anticipated. The present value of the expected benefits payable to all active members is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits. Liabilities for future members are not included.
2. The employer contributions required to support the benefits are determined as a level percentage of salary, and consist of a normal contribution and an amortization contribution.
3. The normal contribution is determined using the Entry Age Normal method. Under this method, a calculation is made to determine the rate of contribution which, if applied to the compensation of each individual member during the entire period of anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. The salary-weighted average of these rates is the normal cost rate. This calculation reflects the plan provisions that apply to each individual member.
4. The employer normal cost rate is equal to (i) the normal cost rate, minus (ii) the member contribution rate.
5. The actuarial accrued liability is equal to the present value of all benefits less the present value of future normal costs. The unfunded actuarial accrued liability (UAAL) is then determined as (i) the actuarial accrued liability, minus (ii) the actuarial value of assets.



6. The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. The UAAL was initially being amortized over the remainder of a closed 30-year period from June 30, 1999. In conjunction with The Rhode Island Retirement Security Act of 2011, the amortization period was reset to 25 years as of June 30, 2010. The employer contribution rate determined by this valuation will not be effective until two years after the valuation date. The determination of the contribution rate reflects this deferral. The unfunded actuarial accrued liability (UAAL) and covered payroll are projected forward for two years, and we then determine the amortization charge required to amortize the UAAL over the remaining amortization period from that point. In projecting the UAAL, we increase the UAAL for interest at the assumed rate and we decrease it for the amortization payments. The amortization payments for these two years are determined by subtracting the current employer normal cost from the known contribution rates for these years, based on the two prior actuarial valuations. Contributions are assumed to be made monthly throughout the year.

### III. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continue to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses.

### IV. Actuarial Assumptions

#### A. Economic Assumptions

1. Investment return: 7.00% per year, compounded annually, composed of an assumed 2.50% inflation rate and a 4.50% net real rate of return. This rate represents the assumed return, net of all investment and administrative expenses.



2. Salary increase rate:

For MERS P&F: The sum of (i) a 3.50% wage inflation assumption (composed of a 2.50% price inflation assumption and a 1.00% additional general increase), and (ii) a service-related component as shown below:

MERS P&F		
Years of Service	Service-Related Component	Total Increase
1	10.00%	13.50%
2	9.00	12.50
3	7.00	10.50
4	4.00	7.505
5	2.50	6.00
6	3.00	6.50
7-20	0.50	4.00
21-24	0.25	3.75
9 or more	0.00	3.50

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For State Employees and MERS General: The sum of (i) a 3.00% wage inflation assumption (composed of a 2.50% price inflation assumption and a 0.50% additional general increase), and (ii) a service-related component as shown on next page.

For Teachers: The sum of (i) a 3.00% wage inflation assumption (composed of a 2.50% price inflation assumption and a 0.50% additional general increase), and (ii) a service-related component as shown on next page.

Salary Increase Rates						
Service	State Employees		Teachers		MERS General	
	Service-Related Component	Total Increase	Service-Related Component	Total Increase	Service-Related Component	Total Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	1.00%	4.00%	9.50%	12.50%	4.25%	7.25%
2	2.00%	5.00%	8.50%	11.50%	3.25%	6.25%
3	3.00%	6.00%	5.75%	8.75%	3.00%	6.00%
4	2.75%	5.75%	5.00%	8.00%	2.75%	5.50%
5	2.75%	5.75%	4.50%	7.50%	2.50%	5.50%
6	2.50%	5.50%	4.50%	7.50%	2.25%	5.25%
7	1.25%	4.25%	4.00%	7.00%	1.50%	4.50%
8	1.00%	4.00%	3.75%	6.75%	1.00%	4.00%
9	1.00%	4.00%	3.50%	6.50%	0.75%	3.75%
10	1.00%	4.00%	3.50%	6.50%	0.75%	3.75%
11	1.00%	4.00%	0.00%	3.00%	0.50%	3.50%
12	2.00%	5.00%	0.00%	3.00%	0.50%	3.50%
13	1.25%	4.25%	0.00%	3.00%	0.50%	3.50%
14	1.00%	4.00%	0.00%	3.00%	0.50%	3.50%
15	1.00%	4.00%	0.00%	3.00%	0.50%	3.50%
16	1.00%	4.00%	0.00%	3.00%	0.00%	3.00%
17	0.50%	3.50%	0.00%	3.00%	0.00%	3.00%
18	0.50%	3.50%	0.00%	3.00%	0.00%	3.00%
19	0.50%	3.50%	0.00%	3.00%	0.00%	3.00%
20	0.50%	3.50%	0.00%	3.00%	0.00%	3.00%
21	0.50%	3.50%	0.00%	3.00%	0.00%	3.00%
22	0.25%	3.25%	0.00%	3.00%	0.00%	3.00%
23	0.25%	3.25%	0.00%	3.00%	0.00%	3.00%
24	0.25%	3.25%	0.00%	3.00%	0.00%	3.00%
25 or more	0.00%	3.00%	0.00%	3.00%	0.00%	3.00%



Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period year following the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption. For employees with less than one year of service, the reported rate of pay is used rather than the fiscal year salary paid.

3. Payroll growth rate: In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 2.50% for State Employees, MERS P&F and MERS General and 2.00% for Teachers per year. This increase rate is solely due to the effect of wage inflation on salaries, with no allowance for future membership growth.
4. Post-retirement Benefit Increase: Post-retirement benefit increases are assumed to be 2.15%, per annum, while the plan has a funding level that exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The second such COLA will be applicable in Calendar Year 2021. As of June 30, 2019, it is assumed that the COLAs will be suspended for 8 years due to the current funding level of the plans. The actual COLA will be determined based on the plan's five-year average investment rate of return (return on actuarial assets) minus 5.0% and will range from zero to 4.0%.

B. Demographic Assumptions

1. Post-termination mortality rates (non-disabled)
  - a. Male State Employees, MERS General and MERS P&F: PUB(10) Median Table for Healthy General Employee Males, loaded by 115%, projected with Scale Ultimate MP21.
  - b. Female State Employees, MERS General and MERS P&F: PUB(10) Median Table for Healthy General Employee Females, loaded by 111%, projected with Scale Ultimate MP21.
  - c. Male Teachers: PUB(10) Median Table for Healthy Teacher Males, loaded by 108%, projected with Scale Ultimate MP21.
  - d. Female Teachers: PUB(10) Median Table for Healthy Teacher Females, loaded by 115%, projected with Scale Ultimate MP21.





The following table provides the life expectancy for individuals retiring in future years based on the assumption with full generational projection:

Life Expectancy for an Age 65 Retiree in Years					
Group	Year of Retirement				
	2022	2025	2030	2035	2040
State Employee - Male	20.7	20.9	21.3	21.7	22.0
State Employee - Female	23.4	23.6	23.9	24.2	24.6
Teacher - Male	22.7	22.9	23.3	23.6	23.9
Teacher - Female	24.4	24.6	24.9	25.2	25.5

2. Post-retirement mortality (disabled lives):
  - a. Males: PUB(10) Tables for Disabled Retirees by Occupation for males, projected with Scale Ultimate MP21.
  - b. Females: PUB(10) Tables for Disabled Retirees by Occupation for females, projected with Scale Ultimate MP21.
3. Pre-retirement mortality:
  - a. Males: PUB(10) Tables for Employees by Occupation for males, projected with Scale Ultimate MP21.
  - b. Females: PUB(10) Tables for Employees by Occupation for females, projected with Scale Ultimate MP21.

4. Disability rates: Sample rates are shown below. Ordinary disability rates are not applied to members eligible for retirement. One half the accidental disabilities are assumed to be totally and permanently disabled from any occupation.

Age	Number of Disabilities per 1,000							
	State Ordinary Males	State Accidental Males	State Ordinary Females	State Accidental Females	Teachers Ordinary Males	Teachers Accidental Males	Teachers Ordinary Females	Teachers Accidental Females
25	0.54	0.07	0.45	0.07	0.27	0.03	0.32	0.03
30	0.66	0.09	0.55	0.09	0.33	0.03	0.39	0.03
35	0.90	0.12	0.75	0.12	0.45	0.05	0.53	0.05
40	1.32	0.18	1.10	0.18	0.66	0.07	0.77	0.07
45	2.16	0.29	1.80	0.29	1.08	0.11	1.26	0.11
50	3.66	0.49	3.05	0.49	1.83	0.18	2.14	0.18
55	6.06	0.81	5.05	0.81	3.03	0.30	3.54	0.30
60	8.46	1.13	7.05	1.13	4.23	0.42	4.94	0.42
65	13.86	1.85	11.55	1.85	6.93	0.69	8.09	0.69

Age	MERS General, Ordinary, Males	MERS General, Accidental, Males	MERS General, Ordinary, Females	MERS General, Accidental, Females	MERS P&F, Ordinary, Males and Females	MERS P&F, Accidental, Males and Females
25	0.45	0.14	0.45	0.05	0.34	1.53
30	0.55	0.17	0.55	0.06	0.44	1.98
35	0.75	0.23	0.75	0.08	0.58	2.61
40	1.1	0.33	1.1	0.11	0.88	3.96
45	1.8	0.54	1.8	0.18	1.44	6.48
50	3.05	0.92	3.05	0.31	2.42	10.89
55	5.05	1.52	5.05	0.51	2.42	10.89
60	7.05	2.12	7.05	0.71	2.42	10.89
65	11.55	3.47	11.55	1.16	2.42	10.89

In addition, for General Employees and Teachers that are age 55 with 20 Years of service and not eligible to retire, another 1% is added to the rates above. In addition, if the member is above age 60, another 1% is added to the rates above.

5. Termination rates (for causes other than death, disability, or retirement) are a function of the member's service. Termination rates are not applied to members eligible for retirement. Rates are shown below:

Service	State Employees	Teachers	MERS General	MERS P&F
1	0.168	0.1575	0.175000	0.100000
2	0.106218	0.105	0.118774	0.055650
3	0.084806	0.07875	0.101396	0.043890
4	0.072281	0.068052	0.086148	0.037012
5	0.063394	0.050571	0.072887	0.032131
6	0.056501	0.040169	0.061471	0.028346
7	0.050868	0.03328	0.051757	0.025253
8	0.046107	0.028385	0.043604	0.022637
9	0.041982	0.024731	0.036868	0.020372
10	0.038344	0.0219	0.031408	0.018374
11	0.035089	0.019643	0.027082	0.016586
12	0.032145	0.017804	0.023746	0.014969
13	0.029457	0.016275	0.021259	0.013493
14	0.026984	0.014985	0.019479	0.012135
15	0.024695	0.013881	0.018263	0.010878
16	0.022563	0.012928	0.017470	0.009708
17	0.02057	0.012094	0.016956	0.008613
18	0.018697	0.011361	0.016579	0.007584
19	0.016931	0.01071	0.016198	0.006615
20	0.015262	0.010128	0.015669	0.000000
21	0.013677	0.009606	0.014851	0.000000
22	0.01217	0.009135	0.013602	0.000000
23	0.010733	0.008707	0.011778	0.000000
24	0.00936	0.008316	0.009239	0.000000
25	0.008045	0.007959	0.005841	0.000000

6. Retirement rates (unreduced):

For State Employees (except Correctional Officers) and MERS General: a flat 20% per year retirement probability for members eligible for unreduced retirement. A 25% retirement probability at first eligibility will be only applied if they have reached age 65 or with at least 25 years of service.

For Teachers: a flat 20% per year retirement probability for members under the age of 67 eligible for unreduced retirement, a flat 35% per year retirement probability for members at age 67 or older eligible for unreduced retirement. A 30% retirement probability at first eligibility will be only applied if they have reached age 65 or with at least 25 years of service.

For MERS P&F: Unisex, service based rates are used for police and fire.

Service	Retirement Probabilities
25	13.0%
26	16.0%
27	19.0%
28	20.0%
29	20.0%
30-34	25.0%
35-39	35.0%
40+	100.0%

For Correctional Officers: A set of unisex rates, indexed by service, as shown below.

Corrections	
Service	Ret. Rate
25	10.00%
26	5.00%
27	5.00%
28	5.00%
29	5.00%
30	6.00%
31	7.00%
32	8.00%
33	9.00%
34	10.00%
35	25.00%
36	20.00%
37	20.00%
38	20.00%
39	20.00%
40	100.00%

7. Reduced retirement Members are eligible to retire with reduced benefit five years prior to their normal retirement age. Rates are on the years from normal retirement age, as shown below:

Year from Normal Retirement Age	Ret. Rate
5	2%
4	2%
3	2%
2	3%
1	4%

C. Other Assumptions

1. Valuation payroll (used for determining the amortization contribution rate): Prior aggregate fiscal year payroll projected forward one year using the overall payroll growth rate.
2. Percent married: For State Employees and Teachers, 85% of employees are assumed to be married. For MERS employees (both MERS General and MERS P&F), 80% of employees are assumed to be married.
3. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.
4. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity. The spousal annuity death benefit for vested married participants is valued using a static optional form conversion factor of 0.84 and 0.78 for males and females respectively.
5. For active death benefits, the liability is initially calculated based on the ordinary death benefit provisions, and then a 7.5% load is applied to account for duty related benefits.
6. Percent electing deferred termination benefit: Vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.
7. Recovery from disability: None assumed.



8. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.
9. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at the first age at which unreduced benefits are available.
10. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.
11. Inactive members: Liabilities for inactive members are approximated as a multiple of their member contribution account balances. For non-vested inactive members, the multiple is 1.0. For vested inactive members, the multiple is 8.0 for members with 25 or more years of service, 3.0 for vested inactive members age 45 or older with less than 25 years of service, and 1.0 for other vested inactive members younger than age 45.
12. Decrement timing: For all non-teachers employees (State Employees, MERS General, and MERS P&F), decrements are assumed to occur at the middle of the year. For Teachers the retirement and termination decrements are assumed to occur at the beginning of the year, while death and disability are assumed to occur at the middle of the year.
13. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
14. Decrement relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
15. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
16. Benefit Service: All members are assumed to accrue one year of eligibility service each year.
17. All calculations were performed without regard to the compensation limit in IRC Section 401(a)(17) and the benefit limit under IRC Section 415.

D. Participant Data

Participant data was supplied on electronic files. There are separate files for (i) active and inactive members, and (ii) members and beneficiaries receiving benefits.



The data for active members included name, an identification number, gender, a code indicating whether the member was active or inactive, a code indicating employee type (State Employee, Teacher, MERS General or MERS P&F), date of birth, service, salary, date of last contribution, accumulated member contributions without interest, accrued benefit multiplier as of June 30, 2014, Final Average Compensation as of June 30, 2012, Article 7 Retirement Date, and the Rhode Island Retirement Security Act Retirement Date. For retired members and beneficiaries, the data included name, an identification number, gender, date of birth, date of retirement, amount of benefit, the amount of adjustment after age 62 for anyone electing the Social Security option, a code indicating the option elected and the type of retiree (service retiree, disabled retiree, beneficiary), and if applicable, the joint pensioner's date of birth and gender.

Salary supplied for the current year was based on the earnings for the fiscal year preceding the valuation date. However, for members with less than one year of service, the current rate of salary was used. This salary was adjusted by the salary increase rate for one year.

In defining who was an active member, members with a date of last contribution in the final quarter of the fiscal year were considered active. Otherwise, the member was defined as inactive.

To correct for incomplete and inconsistent data, we first attempted to pulled data from prior valuation files and then made general assumptions to fill in the rest. These modifications had no material impact on the results presented.



## SECTION VI

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### SUMMARY OF DATA AND EXPERIENCE

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**General Employees**  
**POST-RETIREMENT MORTALITY - HEALTHY MALE**  
**Weighted by Annual Benefits in \$000s**

Age (1)	Actual Deaths (2)	Total Benefits (3)	Actual Rate (4)	Assumed Rate		Expected		Actual/Exp	
				Current (5)	Proposed (6)	Current (3) * (5) (7)	Proposed (3) * (6) (8)	Current (2) / (7) (9)	Proposed (2) / (8) (10)
55-59	\$ 324	\$ 97,264	0.0033	0.0053	0.0052	\$ 518	\$ 505	62%	64%
60-64	2,244	242,983	0.0092	0.0076	0.0075	1,857	1,811	121%	124%
65-69	5,511	410,678	0.0134	0.0119	0.0116	4,877	4,782	113%	115%
70-74	7,293	383,564	0.0190	0.0204	0.0201	7,828	7,713	93%	95%
75-79	8,682	232,189	0.0374	0.0360	0.0357	8,365	8,282	104%	105%
80-84	9,578	150,583	0.0636	0.0649	0.0648	9,768	9,761	98%	98%
85-89	11,568	94,200	0.1228	0.1153	0.1169	10,860	11,015	107%	105%
90-94	7,978	41,296	0.1932	0.1916	0.1965	7,910	8,114	101%	98%
95-99	2,378	8,934	0.2661	0.2902	0.2987	2,592	2,668	92%	89%
Totals	\$ 55,555	\$ 1,661,692	0.0334	0.0328	0.0329	\$ 54,577	\$ 54,652	102%	102%
65-74	\$ 12,804	\$ 794,242	0.0161	0.0160	0.0157	\$ 12,705	\$ 12,495	101%	102%
75-84	\$ 18,260	\$ 382,772	0.0477	0.0474	0.0471	\$ 18,133	\$ 18,044	101%	101%
85-94	\$ 19,546	\$ 135,496	0.1443	0.1385	0.1412	\$ 18,771	\$ 19,128	104%	102%



**General Employees**  
**POST-RETIREMENT MORTALITY - HEALTHY FEMALE**  
**Weighted by Annual Benefits in \$000s**

Age	Actual Benefits	Total Benefits	Actual Rate	Assumed Rate		Expected		Actual/Exp	
				Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
55-59	\$ 132	\$ 55,350	0.0024	0.0033	0.0032	\$ 190	\$ 186	69%	71%
60-64	923	229,389	0.0040	0.0047	0.0046	1,127	1,101	82%	84%
65-69	3,449	362,526	0.0095	0.0079	0.0077	2,907	2,851	119%	121%
70-74	4,227	323,024	0.0131	0.0138	0.0136	4,468	4,402	95%	96%
75-79	5,325	228,412	0.0233	0.0245	0.0243	5,581	5,525	95%	96%
80-84	7,654	152,458	0.0502	0.0442	0.0442	6,699	6,698	114%	114%
85-89	8,203	102,070	0.0804	0.0828	0.0840	8,406	8,526	98%	96%
90-94	8,810	55,462	0.1588	0.1484	0.1522	7,961	8,161	111%	108%
95-99	2,984	12,504	0.2386	0.2343	0.2411	2,750	2,833	108%	105%
Totals	\$ 41,706	\$ 1,521,196	0.0274	0.0264	0.0265	\$ 40,089	\$ 40,282	104%	104%
65-74	\$ 7,676	\$ 685,550	0.0112	0.0108	0.0106	\$ 7,375	\$ 7,252	104%	106%
75-84	\$ 12,979	\$ 380,870	0.0341	0.0322	0.0321	\$ 12,280	\$ 12,223	106%	106%
85-94	\$ 17,013	\$ 157,532	0.1080	0.1039	0.1059	\$ 16,366	\$ 16,687	104%	102%

Draft



**TEACHERS**  
**POST-RETIREMENT MORTALITY - HEALTHY MALE**  
**Weighted by Annual Benefits in \$000s**

Age (1)	Actual Deaths (2)	Total Benefits (3)	Actual Rate (4)	Assumed Rate		Expected Benefits		Actual/Expected	
				Current (5)	Proposed (6)	Current (3) * (5) (7)	Proposed (3) * (6) (8)	Current (2) / (7) (9)	Proposed (2) / (8) (10)
55-59	\$ 75	\$ 14,699	0.0051	0.0027	0.0026	\$ 40	\$ 39	189%	194%
60-64	370	112,819	0.0033	0.0044	0.0043	493	481	75%	77%
65-69	2,514	325,722	0.0077	0.0075	0.0073	2,436	2,388	103%	105%
70-74	5,405	396,981	0.0136	0.0139	0.0137	5,510	5,430	98%	100%
75-79	7,257	267,926	0.0271	0.0265	0.0262	7,090	7,020	102%	103%
80-84	8,141	147,411	0.0552	0.0498	0.0498	7,347	7,342	111%	111%
85-89	7,147	77,071	0.0927	0.0935	0.0949	7,209	7,312	99%	98%
90-94	5,092	28,784	0.1769	0.1681	0.1724	4,838	4,962	105%	103%
95-99	1,596	5,008	0.3187	0.2702	0.2782	1,353	1,393	118%	115%
Totals	\$ 37,597	\$ 1,376,422	0.0273	0.0264	0.0264	\$ 36,317	\$ 36,367	104%	103%
65-74	\$ 7,919	\$ 722,703	0.0110	0.0110	0.0108	\$ 7,947	\$ 7,818	100%	101%
75-84	\$ 15,398	\$ 415,337	0.0371	0.0348	0.0346	\$ 14,437	\$ 14,362	107%	107%
85-94	\$ 12,239	\$ 105,855	0.1156	0.1138	0.1160	\$ 12,048	\$ 12,275	102%	100%



**TEACHERS**  
**POST-RETIREMENT MORTALITY - HEALTHY FEMALE**  
**Weighted by Annual Benefits in \$000s**

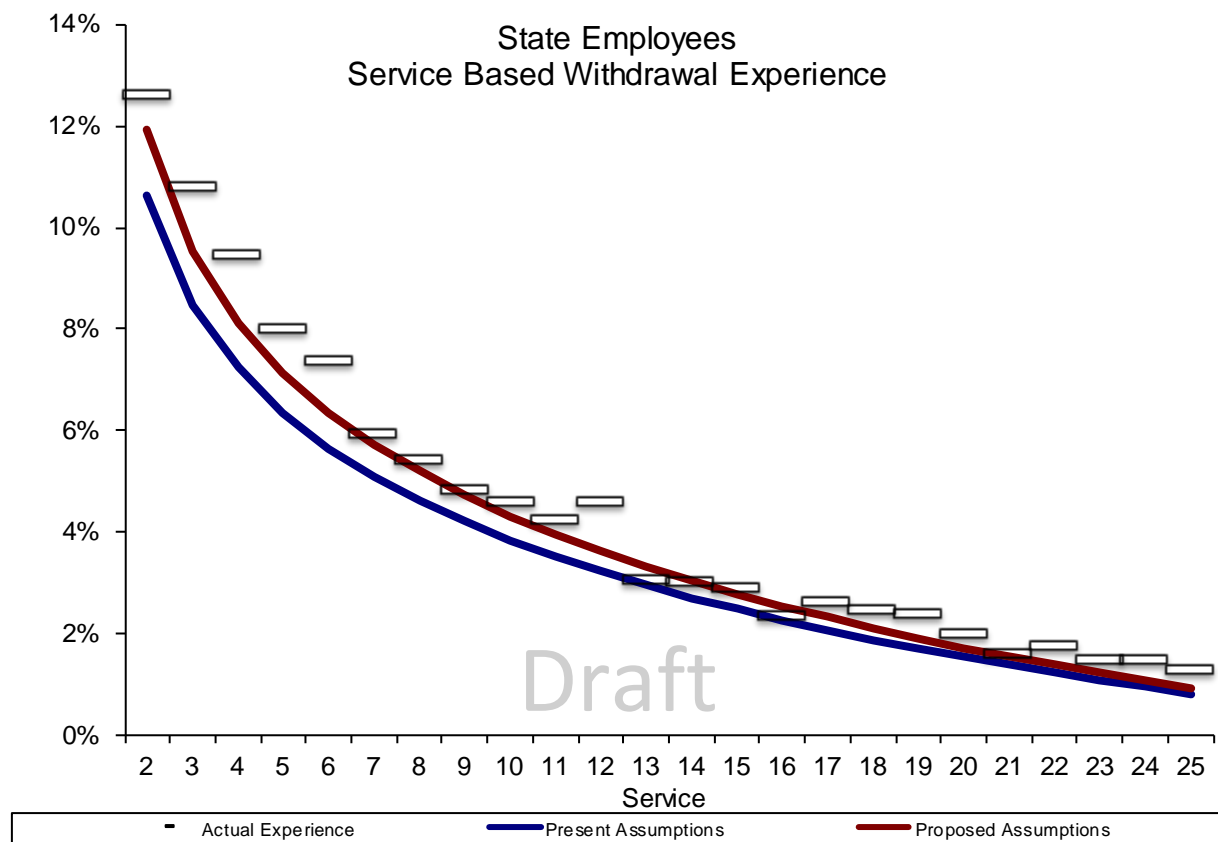
Age	Actual Benefits	Total Benefits	Actual Rate	Assumed Rate		Expected Benefits		Actual/Expected	
				Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
55-59	\$ 157	\$ 50,958	0.0031	0.0024	0.0024	\$ 133	\$ 130	118%	121%
60-64	1,180	360,144	0.0033	0.0036	0.0035	1,391	1,358	85%	87%
65-69	4,178	840,401	0.0050	0.0059	0.0057	5,058	4,960	83%	84%
70-74	6,960	719,401	0.0097	0.0106	0.0104	7,537	7,425	92%	94%
75-79	6,395	343,799	0.0186	0.0204	0.0202	6,889	6,820	93%	94%
80-84	7,728	182,685	0.0423	0.0392	0.0391	7,082	7,081	109%	109%
85-89	9,656	110,999	0.0870	0.0746	0.0757	8,174	8,289	118%	116%
90-94	7,795	53,996	0.1444	0.1389	0.1424	7,227	7,409	108%	105%
95-99	3,386	14,566	0.2324	0.2391	0.2461	3,283	3,381	103%	100%
Totals	\$ 47,435	\$ 2,676,949	0.0177	0.0175	0.0175	\$ 46,773	\$ 46,852	101%	101%
65-74	\$ 11,139	\$ 1,559,802	0.0071	0.0081	0.0079	\$ 12,595	\$ 12,385	88%	90%
75-84	\$ 14,123	\$ 526,484	0.0268	0.0265	0.0264	\$ 13,972	\$ 13,901	101%	102%
85-94	\$ 17,451	\$ 164,995	0.1058	0.0933	0.0951	\$ 15,400	\$ 15,698	113%	111%



**STATE EMPLOYEES**  
**SERVICE BASED WITHDRAWAL EXPERIENCE**  
**Weighted by Liability in \$millions**

Service (1)	Actual Withdrawal (2)	Total Count (3)	Actual Rate (4)	Assumed Rate		Expected Withdrawal		Actual/Expected	
				Current (5)	Proposed (6)	Current (7)	Proposed (8)	Current (2) / (7) (9)	Proposed (2) / (8) (10)
1	\$ 13,297	\$ 106,589	0.124749	0.168000	0.188800	\$ 17,907	\$ 20,124	74%	66%
2	31,153	247,075	0.126089	0.106218	0.119369	26,244	29,493	119%	106%
3	27,989	258,578	0.108240	0.084806	0.095306	21,929	24,644	128%	114%
4	24,495	259,115	0.094535	0.072281	0.081230	18,729	21,048	131%	116%
5	20,186	251,307	0.080326	0.063394	0.071243	15,931	17,904	127%	113%
6	17,945	243,619	0.073660	0.056501	0.063496	13,765	15,469	130%	116%
7	14,805	250,489	0.059103	0.050869	0.057166	12,742	14,320	116%	103%
8	14,587	269,963	0.054032	0.046107	0.051815	12,447	13,988	117%	104%
9	13,499	280,333	0.048152	0.041982	0.047180	11,769	13,226	115%	102%
10	12,938	282,946	0.045725	0.038344	0.043091	10,849	12,192	119%	106%
11	12,579	295,865	0.042515	0.035089	0.039433	10,382	11,667	121%	108%
12	14,437	314,600	0.045889	0.032145	0.036125	10,113	11,365	143%	127%
13	10,037	329,966	0.030419	0.029457	0.033104	9,720	10,923	103%	92%
14	10,531	347,635	0.030294	0.026984	0.030325	9,381	10,542	112%	100%
15	11,054	380,851	0.029025	0.024695	0.027752	9,405	10,570	118%	105%
16	9,252	396,119	0.023357	0.022564	0.025357	8,938	10,044	104%	92%
17	10,484	398,573	0.026304	0.020570	0.023116	8,199	9,213	128%	114%
18	9,434	385,174	0.024493	0.018697	0.021012	7,202	8,093	131%	117%
19	9,207	388,658	0.023688	0.016932	0.019028	6,581	7,395	140%	124%
20	8,264	410,937	0.020109	0.015261	0.017151	6,271	7,048	132%	117%
21	6,913	433,648	0.015941	0.013677	0.015371	5,931	6,665	117%	104%
22	7,658	440,091	0.017401	0.012170	0.013676	5,356	6,019	143%	127%
23	6,886	461,360	0.014924	0.010733	0.012062	4,952	5,565	139%	124%
24	7,507	504,282	0.014887	0.009359	0.010519	4,720	5,304	159%	142%
25	6,921	546,187	0.012671	0.008045	0.009041	4,394	4,938	158%	140%
Totals	\$ 332,056	\$ 8,483,959				\$ 273,854	\$ 307,760	121%	108%



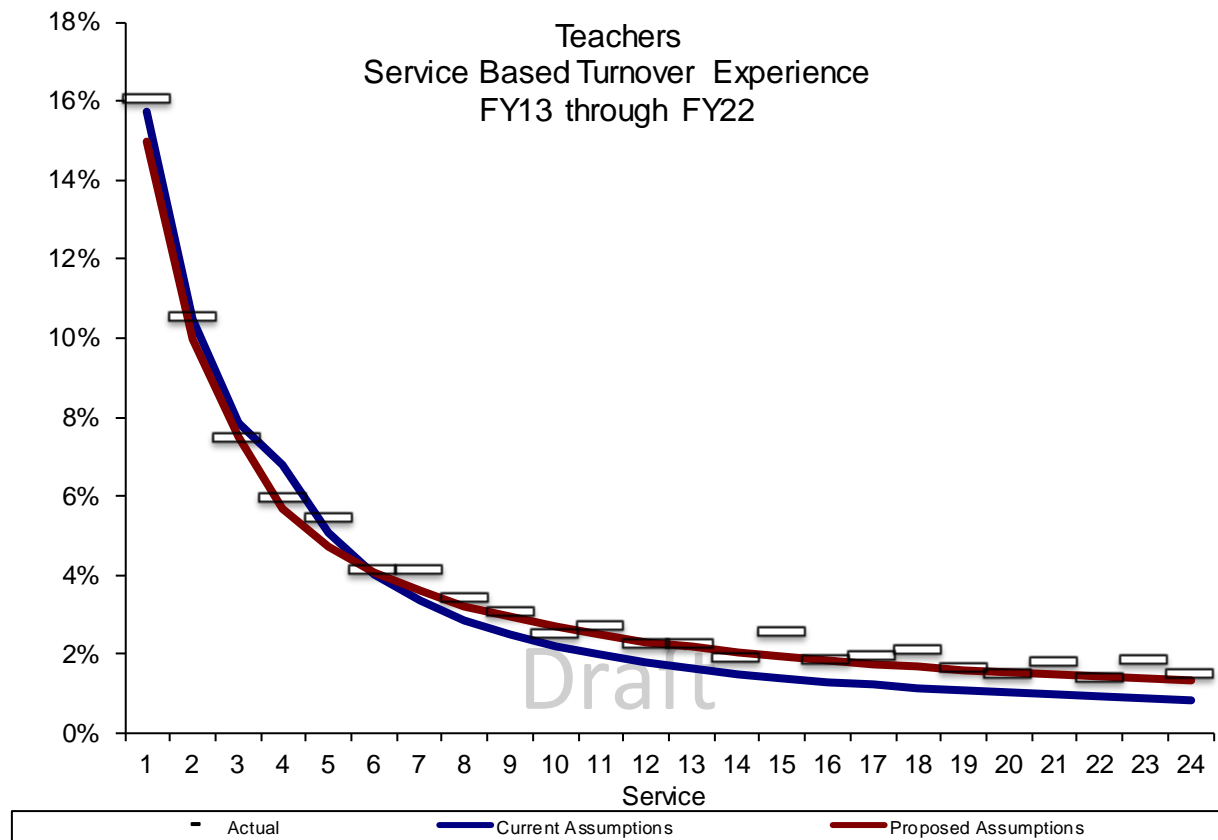




**TEACHERS**  
**SERVICE BASED WITHDRAWAL EXPERIENCE**  
**Weighted by Liability in \$millions**

Service (1)	Actual Withdrawal (2)	Total Count (3)	Actual Rate (4)	Assumed Rate		Expected Withdrawal		Actual/Expected	
				Current (5)	Proposed (6)	Current (7)	Proposed (8)	Current (2) / (7) (9)	Proposed (2) / (8) (10)
1	\$ 46,059	\$ 286,343	0.160851	0.157500	0.150000	\$ 45,099	\$ 42,951	102%	107%
2	28,607	270,417	0.105788	0.105000	0.100000	28,394	27,042	101%	106%
3	21,044	282,190	0.074573	0.078750	0.075000	22,222	21,164	95%	99%
4	17,749	298,385	0.059483	0.068052	0.056841	20,306	19,339	87%	92%
5	17,367	317,753	0.054657	0.050571	0.047326	16,069	18,365	108%	95%
6	14,014	338,064	0.041452	0.040169	0.040747	13,580	15,519	103%	90%
7	15,128	366,791	0.041243	0.033280	0.035903	12,207	13,951	124%	108%
8	13,867	402,151	0.034481	0.028385	0.032175	11,415	13,046	121%	106%
9	13,947	452,814	0.030802	0.024731	0.029209	11,199	12,798	125%	109%
10	13,115	521,081	0.025169	0.021900	0.026789	11,412	15,650	115%	84%
11	16,189	595,481	0.027187	0.019643	0.024773	11,697	16,042	138%	101%
12	16,096	706,831	0.022772	0.017804	0.023065	12,584	17,259	128%	93%
13	18,293	809,946	0.022585	0.016275	0.021598	13,182	18,078	139%	101%
14	16,829	891,806	0.018871	0.014985	0.020323	13,364	18,327	126%	92%
15	25,041	986,030	0.025396	0.013881	0.019204	13,687	18,771	183%	133%
16	19,717	1,069,365	0.018438	0.012928	0.018213	13,825	18,959	143%	104%
17	22,404	1,148,359	0.019509	0.012094	0.017328	13,888	19,047	161%	118%
18	25,596	1,204,880	0.021244	0.011361	0.016534	13,689	18,773	187%	136%
19	20,203	1,224,195	0.016503	0.010710	0.015816	13,111	17,981	154%	112%
20	18,589	1,223,235	0.015196	0.010128	0.015164	12,389	16,991	150%	109%
21	21,512	1,192,589	0.018038	0.009606	0.014568	11,456	15,712	188%	137%
22	16,755	1,216,893	0.013769	0.009135	0.014022	11,116	15,245	151%	110%
23	21,980	1,172,479	0.018746	0.008707	0.013520	10,209	13,999	215%	157%
24	17,264	1,166,170	0.014804	0.008316	0.013056	9,698	13,300	178%	130%
Totals	\$ 477,362	\$ 18,144,248				\$ 365,797	\$ 438,309	130%	109%

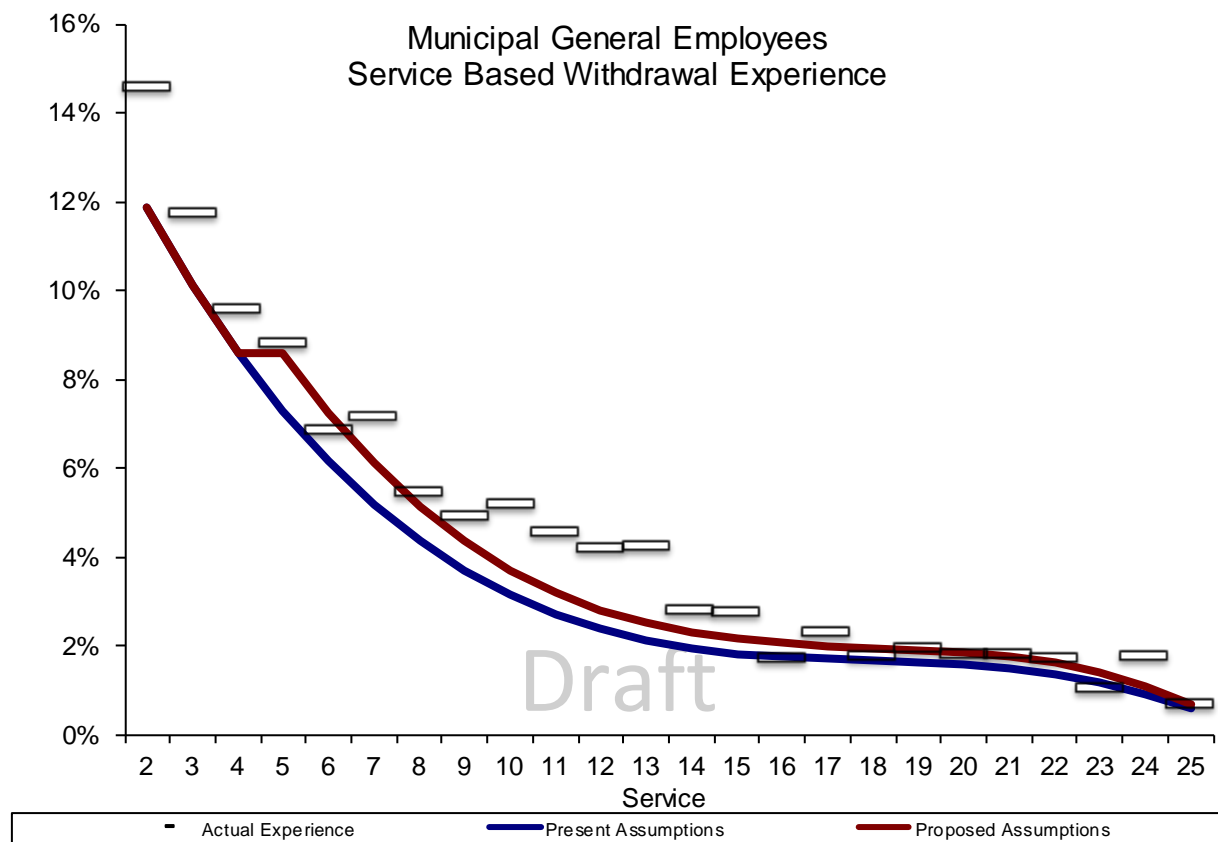




**MERS GENERAL EMPLOYEES**  
**SERVICE BASED WITHDRAWAL EXPERIENCE**  
**Weighted by Liability in \$millions**

Service	Actual Withdrawal	Total Count	Actual Rate	Assumed Rate		Expected Withdrawal		Actual/Expected	
				Current	Proposed	Current	Proposed	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	\$ 5,766	\$ 33,626	0.171471	0.175000	0.175000	\$ 5,884	\$ 5,884	98%	98%
2	13,120	89,727	0.146221	0.118774	0.118774	10,657	10,657	123%	123%
3	10,850	92,230	0.117642	0.101396	0.101396	9,352	9,352	116%	116%
4	8,903	92,703	0.096034	0.086148	0.086148	7,986	7,986	111%	111%
5	8,344	94,299	0.088485	0.072887	0.086007	6,873	8,110	121%	103%
6	6,574	95,502	0.068839	0.061471	0.072536	5,871	6,927	112%	95%
7	6,990	97,522	0.071672	0.051757	0.061073	5,047	5,956	138%	117%
8	5,614	102,677	0.054681	0.043604	0.051453	4,477	5,283	125%	106%
9	5,466	110,942	0.049270	0.036868	0.043504	4,090	4,826	134%	113%
10	6,520	125,621	0.051900	0.031408	0.037061	3,945	4,656	165%	140%
11	6,528	142,448	0.045829	0.027082	0.031957	3,858	4,552	169%	143%
12	6,924	164,761	0.042024	0.023746	0.028020	3,912	4,617	177%	150%
13	8,057	189,439	0.042530	0.021259	0.025086	4,027	4,752	200%	170%
14	5,770	204,471	0.028221	0.019479	0.022985	3,983	4,700	145%	123%
15	6,117	220,076	0.027796	0.018263	0.021550	4,019	4,743	152%	129%
16	4,058	231,600	0.017520	0.017470	0.020615	4,046	4,774	100%	85%
17	5,722	245,170	0.023341	0.016956	0.020008	4,157	4,905	138%	117%
18	4,530	252,748	0.017922	0.016579	0.019563	4,190	4,945	108%	92%
19	4,878	249,903	0.019521	0.016198	0.019114	4,048	4,777	121%	102%
20	4,540	251,431	0.018058	0.015669	0.018489	3,940	4,649	115%	98%
21	4,307	236,725	0.018194	0.014851	0.017524	3,516	4,148	123%	104%
22	3,906	224,953	0.017362	0.013602	0.016050	3,060	3,611	128%	108%
23	2,401	222,734	0.010781	0.011778	0.013898	2,623	3,096	92%	78%
24	4,009	223,955	0.017900	0.009239	0.010902	2,069	2,442	194%	164%
25	1,587	221,273	0.007171	0.005841	0.006892	1,292	1,525	123%	104%
Totals	\$ 151,481	\$ 4,216,534				\$ 116,925	\$ 131,873	130%	115%

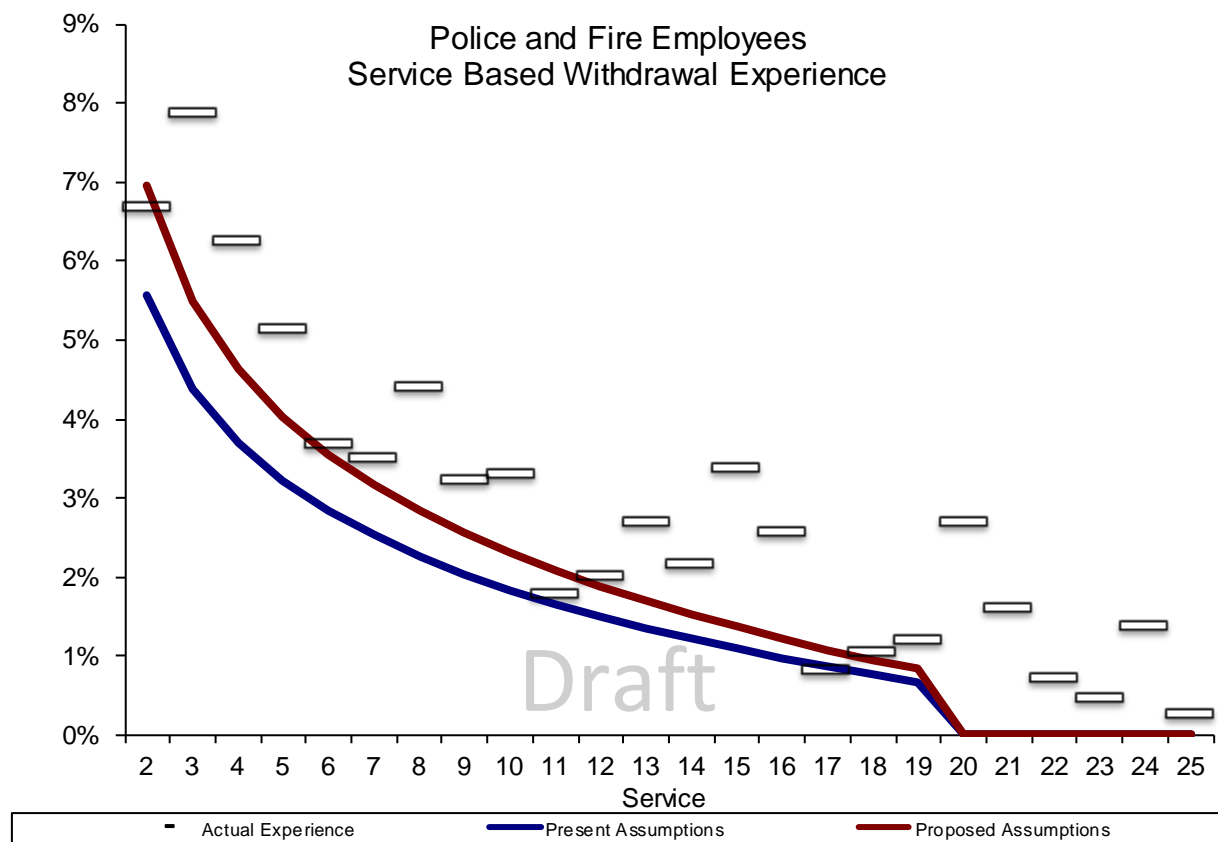




**POLICE AND FIRE**  
**SERVICE BASED WITHDRAWAL EXPERIENCE**  
**Weighted by Liability in \$millions**

Service	Actual Withdrawal	Total Count	Actual Rate	Assumed Rate		Expected Withdrawal		Actual/Expected	
				Current	Proposed	Current	Proposed	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	\$ 7,658	\$ 74,671	0.102560	0.100000	0.100000	\$ 7,467	\$ 7,467	103%	103%
2	12,646	162,645	0.066836	0.055650	0.069563	9,051	11,314	140%	112%
3	12,124	158,103	0.078877	0.043890	0.054863	6,939	8,674	175%	140%
4	10,417	157,690	0.062774	0.037012	0.046265	5,836	7,296	178%	143%
5	7,791	158,826	0.051643	0.032131	0.040164	5,103	6,379	153%	122%
6	5,596	147,309	0.036970	0.028346	0.035433	4,176	5,220	134%	107%
7	5,589	153,722	0.035156	0.025253	0.031566	3,882	4,852	144%	115%
8	6,609	156,236	0.044262	0.022637	0.028296	3,537	4,421	187%	149%
9	5,263	164,192	0.032175	0.020372	0.025465	3,345	4,181	157%	126%
10	6,618	169,290	0.032937	0.018374	0.022968	3,111	3,888	213%	170%
11	3,971	185,640	0.017839	0.016586	0.020733	3,079	3,849	129%	103%
12	3,514	182,991	0.020093	0.014969	0.018711	2,739	3,424	128%	103%
13	5,020	193,035	0.027049	0.013493	0.016866	2,605	3,256	193%	154%
14	4,424	200,668	0.021672	0.012135	0.015169	2,435	3,044	182%	145%
15	7,863	223,682	0.033899	0.010878	0.013598	2,433	3,042	323%	258%
16	5,374	218,458	0.025796	0.009708	0.012135	2,121	2,651	253%	203%
17	1,702	214,951	0.008309	0.008613	0.010766	1,851	2,314	92%	74%
18	2,491	220,719	0.010577	0.007584	0.009480	1,674	2,092	149%	119%
19	2,531	219,721	0.012107	0.006615	0.008269	1,453	1,817	174%	139%
20	6,013	220,631	0.027078	0.000000	0.000000	0	0	0%	0%
21	3,240	209,955	0.016021	0.000000	0.000000	0	0	0%	0%
22	1,471	211,264	0.007223	0.000000	0.000000	0	0	0%	0%
23	947	201,642	0.004834	0.000000	0.000000	0	0	0%	0%
24	2,568	189,582	0.013859	0.000000	0.000000	0	0	0%	0%
25	489	188,086	0.002644	0.000000	0.000000	0	0	0%	0%
Totals	\$ 131,929	\$ 4,583,713				\$ 72,837	\$ 89,181	181%	148%

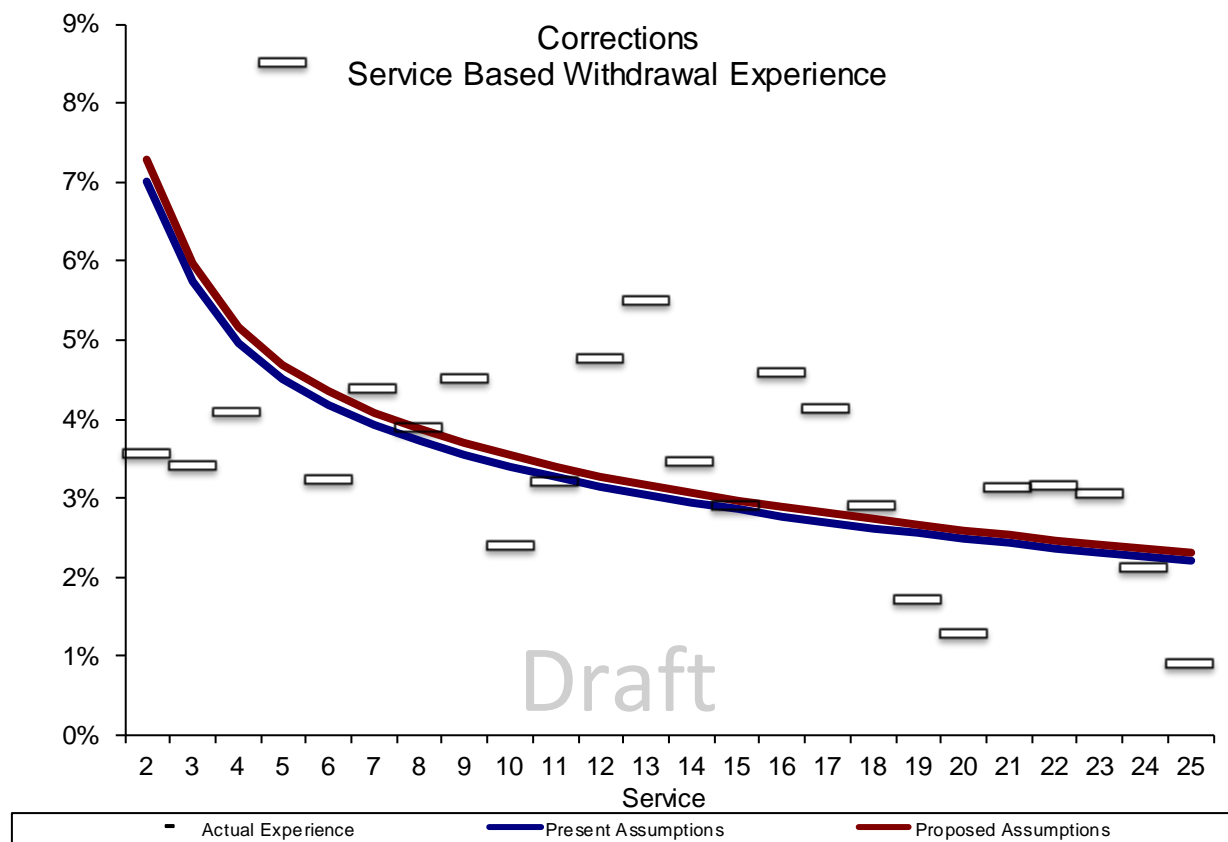




**Correctional Officers**  
**SERVICE BASED WITHDRAWAL EXPERIENCE**  
**Weighted by Liability in \$millions**

Service (1)	Actual Withdrawal (2)	Total Count (3)	Actual Rate (4)	Assumed Rate		Expected Withdrawal		Actual/Expected	
				Current (5)	Proposed (6)	Current (7)	Proposed (8)	Current (2) / (7) (9)	Proposed (2) / (8) (10)
1	\$ 1,403	\$ 11,384	0.123257	0.100000	0.104000	\$ 1,138	\$ 1,184	123%	119%
2	953	26,841	0.035496	0.070000	0.072800	1,879	1,954	51%	49%
3	948	27,743	0.034169	0.057393	0.059689	1,592	1,656	60%	57%
4	1,322	32,348	0.040883	0.049595	0.051579	1,604	1,668	82%	79%
5	2,407	28,305	0.085043	0.045034	0.046835	1,275	1,326	189%	182%
6	990	30,713	0.032245	0.041797	0.043469	1,284	1,335	77%	74%
7	1,625	36,934	0.044005	0.039287	0.040858	1,451	1,509	112%	108%
8	1,670	42,990	0.038854	0.037236	0.038725	1,601	1,665	104%	100%
9	2,076	45,820	0.045299	0.035502	0.036922	1,627	1,692	128%	123%
10	1,093	45,562	0.023984	0.033999	0.035359	1,549	1,611	71%	68%
11	1,606	49,937	0.032151	0.032674	0.033981	1,632	1,697	98%	95%
12	2,436	51,135	0.047643	0.031489	0.032749	1,610	1,675	151%	145%
13	3,367	61,195	0.055024	0.030417	0.031634	1,861	1,936	181%	174%
14	2,130	61,774	0.034482	0.029438	0.030616	1,818	1,891	117%	113%
15	1,899	65,376	0.029049	0.028537	0.029678	1,866	1,940	102%	98%
16	3,109	67,772	0.045872	0.027704	0.028812	1,878	1,953	166%	159%
17	2,814	67,880	0.041452	0.026927	0.028004	1,828	1,901	154%	148%
18	1,722	59,485	0.028949	0.026201	0.027249	1,559	1,621	110%	106%
19	1,042	61,073	0.017060	0.025519	0.026540	1,559	1,621	67%	64%
20	850	65,826	0.012916	0.024876	0.025871	1,637	1,703	52%	50%
21	2,236	71,619	0.031218	0.024268	0.025239	1,738	1,808	129%	124%
22	2,869	90,891	0.031564	0.023691	0.024639	2,153	2,239	133%	128%
23	3,339	109,643	0.030457	0.023142	0.024068	2,537	2,639	132%	127%
24	2,437	115,100	0.021176	0.022619	0.023524	2,603	2,708	94%	90%
25	1,071	117,434	0.009116	0.022119	0.023004	2,598	2,701	41%	40%
Totals	\$ 47,415	\$ 1,444,777				\$ 43,877	\$ 45,632	108%	104%

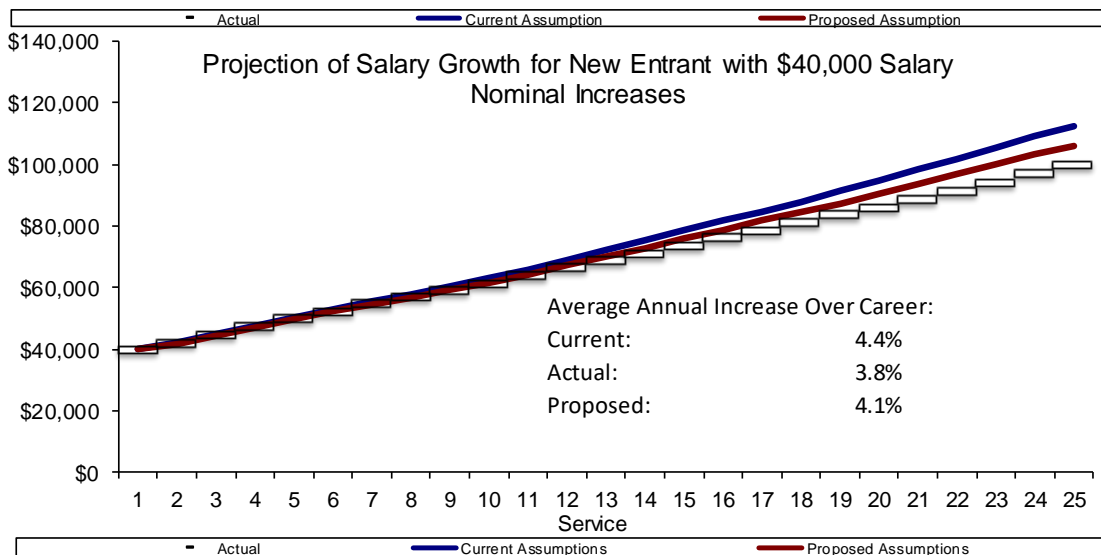
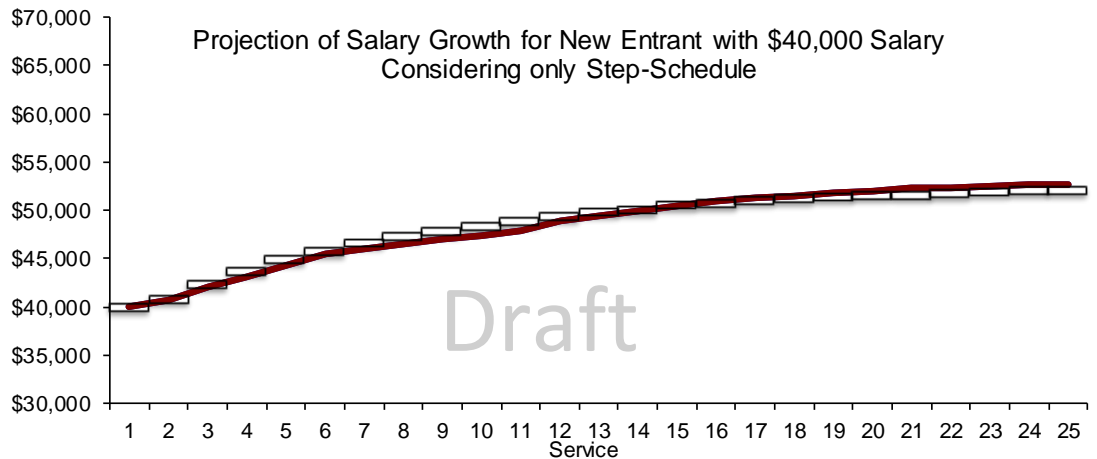






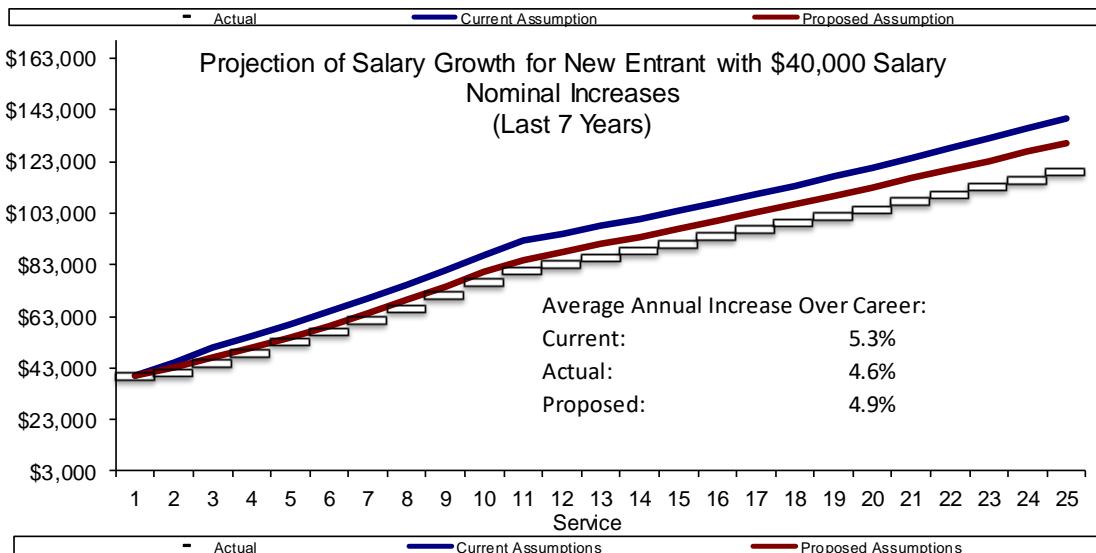
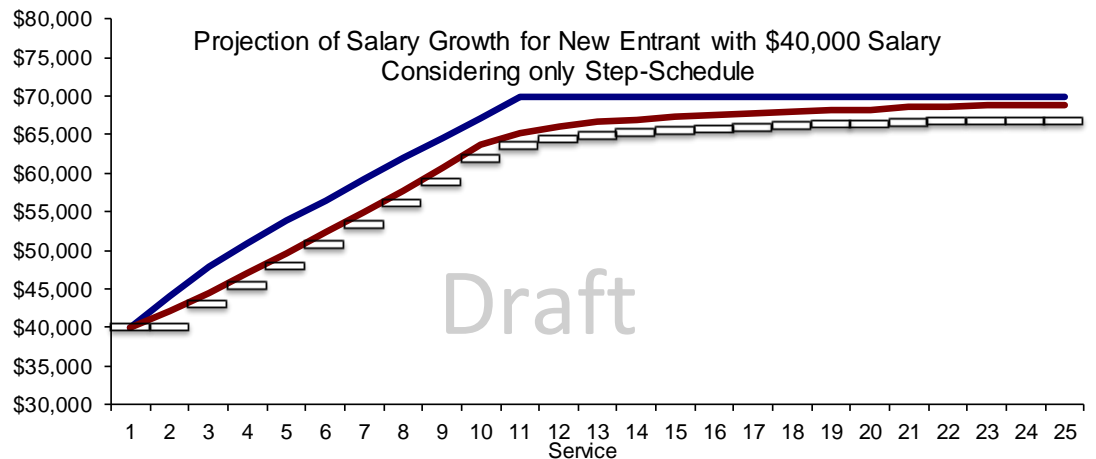
**Salary Scale Assumption  
State Employees**

Year	Average Long Service Increase	CPI	Productivity
2013	0.84%	1.96%	-1.12%
2014	0.76%	1.99%	-1.23%
2015	3.75%	0.17%	3.58%
2016	2.19%	0.83%	1.37%
2017	1.67%	1.73%	-0.06%
2018	1.82%	2.95%	-1.13%
2019	4.12%	1.81%	2.31%
2020	4.79%	0.99%	3.81%
2021	1.65%	5.37%	-3.71%
2022	6.38%	8.52%	-2.14%
Average	2.78%	2.60%	0.18%
Proposed	3.00%	2.50%	0.50%



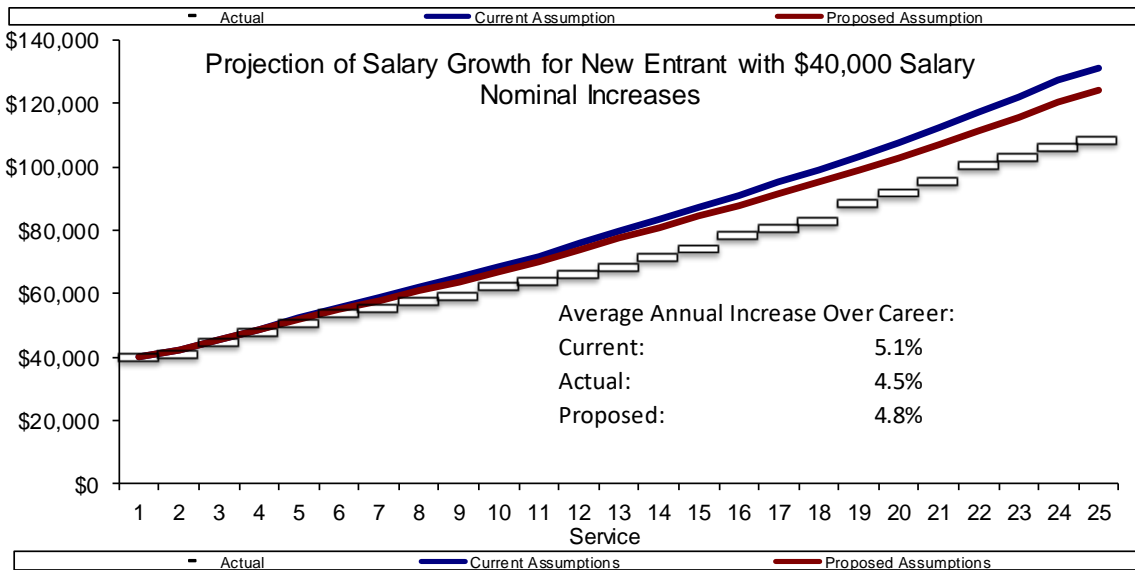
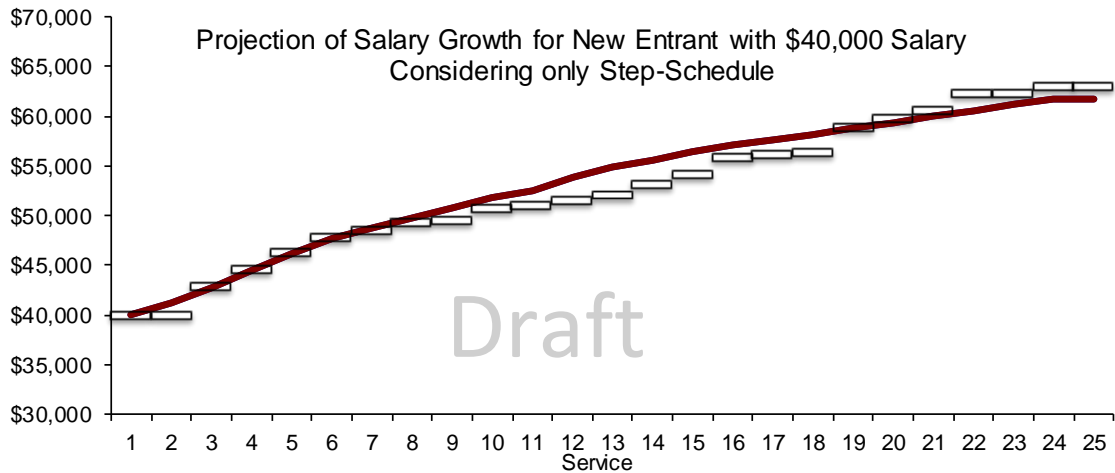
**Salary Scale Assumption  
Teachers**

Year	Average Long Service Increase	CPI	Productivity
2013	-2.38%	1.96%	-4.34%
2014	1.36%	1.99%	-0.64%
2015	1.52%	0.17%	1.35%
2016	3.50%	0.83%	2.67%
2017	2.60%	1.73%	0.88%
2018	2.65%	2.95%	-0.30%
2019	2.45%	1.81%	0.64%
2020	2.13%	0.99%	1.15%
2021	1.78%	5.37%	-3.59%
2022	2.20%	8.52%	-6.33%
Average	1.78%	2.60%	-0.82%
Proposed	3.00%	2.50%	0.50%



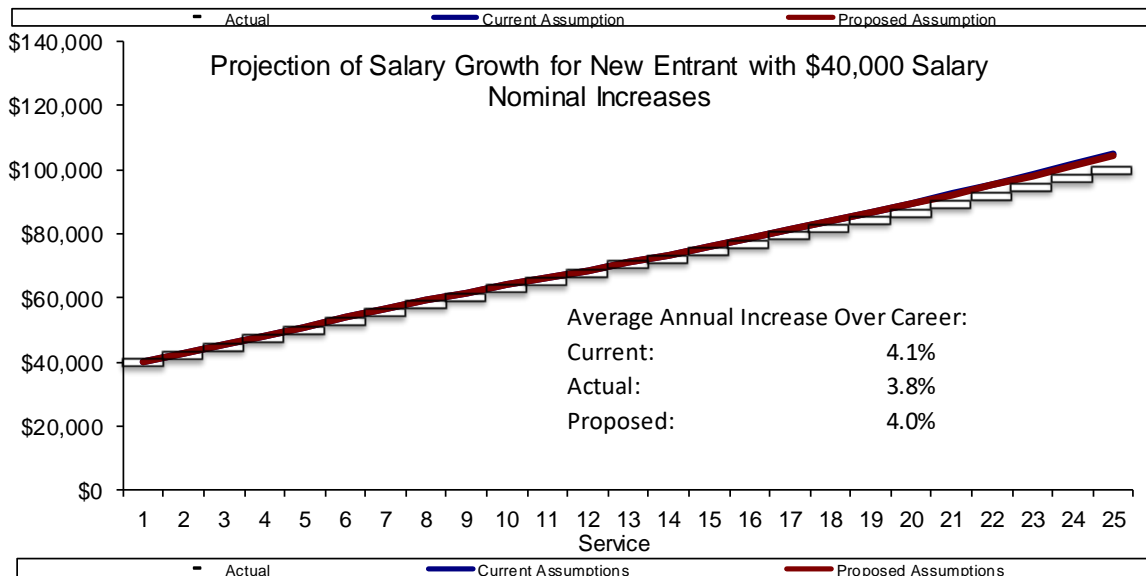
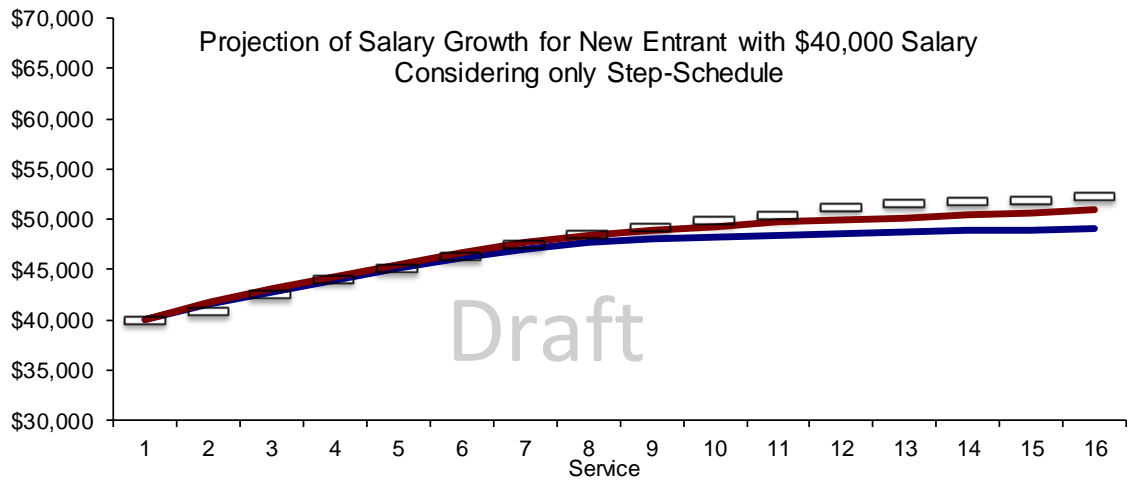
**Salary Scale Assumption  
Corrections**

Year	Average Long Service Increase	CPI	Productivity
2013	-0.61%	1.96%	-2.57%
2014	0.76%	1.99%	-1.23%
2015	0.75%	0.17%	0.58%
2016	0.50%	0.83%	-0.33%
2017	9.17%	1.73%	7.44%
2018	2.62%	2.95%	-0.33%
2019	4.03%	1.81%	2.22%
2020	4.35%	0.99%	3.37%
2021	1.06%	5.37%	-4.31%
2022	1.12%	8.52%	-7.40%
Average	2.34%	2.60%	-0.26%
Proposed	3.00%	2.50%	0.50%



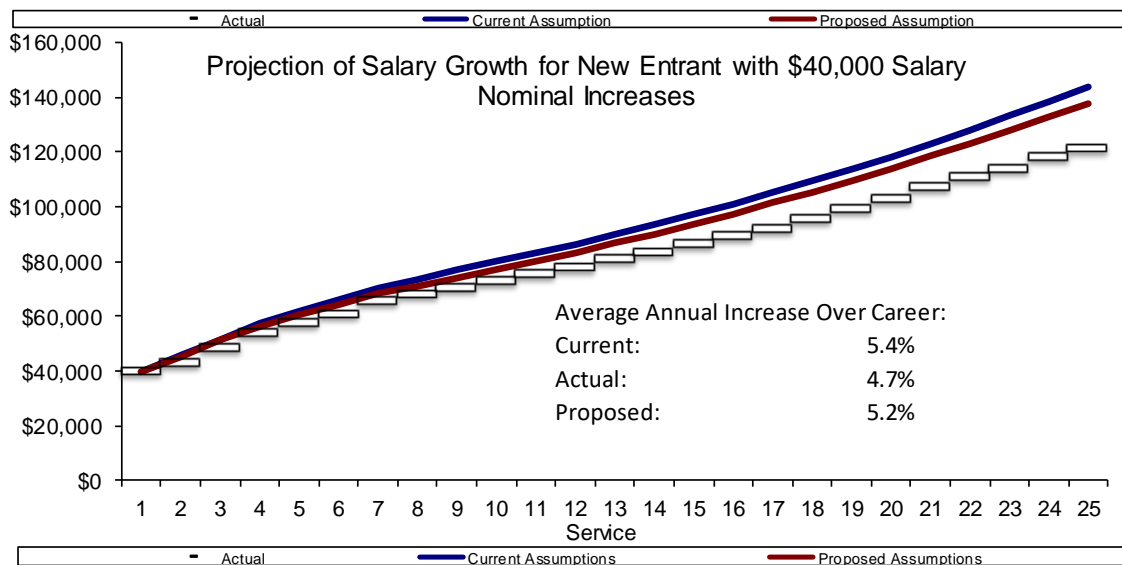
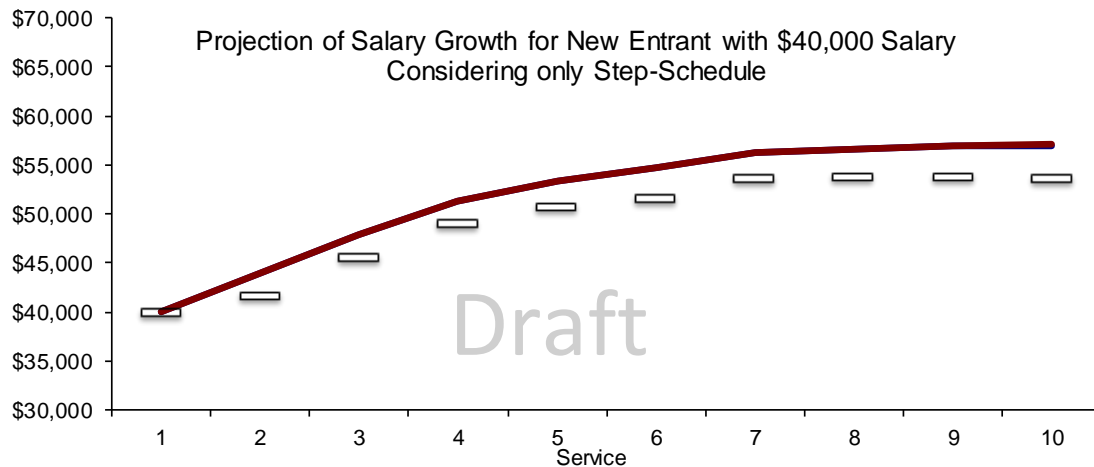
**Salary Scale Assumption  
MERS General**

Year	Average Long Service Increase	CPI	Productivity
2013	2.27%	1.96%	0.31%
2014	1.61%	1.99%	-0.38%
2015	2.42%	0.17%	2.25%
2016	2.06%	0.83%	1.23%
2017	3.86%	1.73%	2.14%
2018	3.00%	2.95%	0.05%
2019	2.67%	1.81%	0.85%
2020	2.92%	0.99%	1.93%
2021	2.74%	5.37%	-2.63%
2022	3.06%	8.52%	-5.47%
Average	2.66%	2.60%	0.05%
Proposed	3.00%	2.50%	0.50%



**Salary Scale Assumption  
MERS Police and Fire**

Year	Average Long Service Increase	CPI	Productivity
2013	3.96%	1.96%	2.00%
2014	2.99%	1.99%	0.99%
2015	2.70%	0.17%	2.53%
2016	4.48%	0.83%	3.65%
2017	3.70%	1.73%	1.97%
2018	3.41%	2.95%	0.46%
2019	3.27%	1.81%	1.45%
2020	4.21%	0.99%	3.22%
2021	3.92%	5.37%	-1.45%
2022	3.05%	8.52%	-5.48%
Average	3.57%	2.60%	0.96%
Proposed	3.50%	2.50%	1.00%



**GENERAL STATE EMPLOYEES  
RETIREMENT EXPERIENCE - AGE BASED  
Weighted by Liability in \$millions**

Age (1)	Actual Retirement (2)	Total Count (3)	Actual Rate (4)	Assumed Rate		Expected Retirement		Actual/Expected	
				Current (5)	Proposed (6)	Current (7)	Proposed (8)	Current (2) / (7) (9)	Proposed (2) / (8) (10)
Under 60	853	5,168	0.165	0.22	0.20	1,145	1,034	74%	83%
60	598	2,796	0.214	0.21	0.20	579	559	103%	107%
61	435	2,739	0.159	0.21	0.20	574	548	76%	79%
62	857	3,432	0.250	0.21	0.25	726	858	118%	100%
63	591	2,771	0.213	0.20	0.25	557	693	106%	85%
64	562	2,219	0.253	0.20	0.25	444	555	127%	101%
65	605	2,441	0.248	0.22	0.30	525	732	115%	83%
66	728	2,189	0.332	0.21	0.30	450	657	162%	111%
67	457	1,556	0.294	0.20	0.30	311	467	147%	98%
68	303	1,124	0.270	0.20	0.30	225	337	135%	90%
69	213	871	0.245	0.20	0.30	174	261	122%	82%
70	231	731	0.316	0.20	0.30	146	219	158%	105%
71	157	527	0.298	0.20	0.30	105	158	149%	99%
72	104	391	0.267	0.20	0.30	78	117	133%	89%
73	69	284	0.244	0.20	0.30	57	85	122%	81%
74	55	234	0.235	0.20	0.30	47	70	117%	78%
Total	6,819	29,472	0.231	0.209	0.249	6,146	7,350	111%	93%



**CORRECTIONAL OFFICERS  
RETIREMENT EXPERIENCE - SERVICE BASED  
Weighted by Liability in \$millions**

Service Year	Actual Retirement	Total Count	Actual Rate	Assumed Rate		Expected Retirement		Actual/Expected	
				Current	Proposed	Current	Proposed	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
25	4	227	0.016	0.050	0.100	23	23	15%	15%
26	53	477	0.111	0.050	0.050	24	24	221%	221%
27	16	563	0.028	0.050	0.060	28	34	57%	47%
28	35	681	0.051	0.050	0.070	34	48	103%	73%
29	50	809	0.061	0.050	0.080	40	65	124%	76%
30	70	839	0.084	0.130	0.090	50	76	140%	92%
31	60	832	0.072	0.130	0.100	58	83	104%	72%
32	84	628	0.134	0.130	0.110	50	69	168%	122%
33	59	477	0.123	0.200	0.120	43	57	137%	103%
34	62	378	0.165	0.200	0.130	38	49	164%	127%
35	44	307	0.143	0.350	0.140	77	43	57%	102%
36	41	300	0.136	0.250	0.150	60	45	68%	91%
37	34	237	0.142	0.250	0.160	47	38	72%	89%
38	29	209	0.141	0.250	0.170	42	36	70%	82%
39	70	170	0.410	0.250	0.180	34	31	205%	225%
Total	710	7,134				648	721	110%	99%



### MERS GENERAL RETIREMENT EXPERIENCE

#### Weighted by Liability in \$millions

Age	Actual Retirement	Total Count	Actual Rate	Assumed Rate		Expected Retirement		Actual/Expected	
				Current	Proposed	Current	Proposed	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Under 60	41	214	0.191	0.200	0.200	43	43	96%	96%
60	87	640	0.136	0.200	0.200	128	128	68%	68%
61	153	1,444	0.106	0.200	0.200	289	289	53%	53%
62	245	1,675	0.146	0.200	0.200	335	335	73%	73%
63	221	1,541	0.143	0.200	0.200	308	308	72%	72%
64	228	1,405	0.162	0.200	0.200	281	281	81%	81%
65	310	1,197	0.259	0.200	0.250	239	299	130%	104%
66	281	924	0.304	0.200	0.250	185	231	152%	122%
67	216	719	0.301	0.200	0.250	144	180	150%	120%
68	137	506	0.270	0.200	0.250	101	126	135%	108%
69	82	401	0.204	0.200	0.250	80	100	102%	82%
70	74	321	0.230	0.200	0.250	64	80	115%	92%
71	67	250	0.266	0.200	0.250	50	63	133%	106%
72	50	167	0.298	0.200	0.250	33	42	149%	119%
73	20	112	0.182	0.200	0.250	22	28	91%	73%
74	31	94	0.332	0.200	0.250	19	24	166%	133%
Total	2,243	11,611	0.193			2,322	2,557	97%	88%





**POLICE AND FIRE OFFICERS**  
**RETIREMENT EXPERIENCE - SERVICE BASED**  
For members who reach 20 years of service  
**Weighted by Liability in \$millions**

Service Year	Actual Retirement	Total Count	Actual Rate	Assumed Rate		Expected Retirement		Actual/Expected	
				Current	Proposed	Current	Proposed	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
25	136	843	0.161	0.130	0.150	110	126	124%	108%
26	104	633	0.163	0.160	0.180	101	114	102%	91%
27	97	507	0.191	0.190	0.210	96	106	100%	91%
28	124	365	0.340	0.200	0.220	73	80	170%	155%
29	38	244	0.156	0.200	0.220	49	54	78%	71%
30	27	148	0.183	0.250	0.270	37	40	73%	68%
31	33	91	0.366	0.250	0.270	23	25	146%	135%
32	16	47	0.344	0.250	0.270	12	13	138%	127%
33	-	15	0.000	0.250	0.270	4	4	0%	0%
34	8	19	0.405	0.250	0.270	5	5	162%	150%
35	-	17	0.000	0.350	0.370	6	6	0%	0%
36	-	12	0.000	0.350	0.370	4	4	0%	0%
37	-	12	0.000	0.350	0.370	4	4	0%	0%
38	-	25	0.000	0.350	0.370	9	9	0%	0%
39	6	19	0.322	0.350	0.370	7	7	92%	87%
40 and more	9	30	0.288	1.000	1.000	30	30	29%	29%
Total	598	3,028				569	629	105%	95%

# Employees' Retirement System of Rhode Island



## 5. Approval of the April 2023 Pensions as Presented by ERSRI

For Vote

Presented by Treasurer James A. Diosa

## NEW RETIREE REPORT - APRIL 2023

NAME	RTMT TYPE	RTMT OPTION	RTMT DATE	PLAN CODE	PLAN	EMPLOYER	AGE	MONTHLY PENSION	ANNUAL PENSION	CREDITED SERVICE
HABERSHAW, JAMES	Service	Option1	02/12/23	ERS	Correctional Officer	DOC	59	\$ 3,044.47	\$ 36,533.64	28.51
PATENAUDE, RICHARD	Disability	Option2	03/13/22	ERS	Correctional Officer	DOC	51	\$ 2,069.11	\$ 24,829.32	20.71
BALLOU, ROBERT	Service	Option1	03/01/23	ERS	State Employee	DEM	63	\$ 3,502.40	\$ 42,028.80	29.86
BENNETT, PHILLIP	Service	Option1	02/28/23	ERS	State Employee	RIC	63	\$ 2,913.79	\$ 34,965.48	38.25
BERARD, KATHLEEN	Service	SRA	02/01/23	ERS	State Employee	RIC	67	\$ 1,124.47	\$ 13,493.64	20.08
BOWEN, DONNA	Service	SRA	03/01/23	ERS	State Employee	URI	65	\$ 944.84	\$ 11,338.08	21.24
BRIGGS, LESLEY	Service	Option1	01/01/23	ERS	State Employee	DLT	62	\$ 1,359.72	\$ 16,316.64	27.16
BURKE, ANITA	Service	SRA	03/01/23	ERS	State Employee	URI	73	\$ 680.26	\$ 8,163.12	16.20
CHATELLE, FRANCIS	Service	SRA	03/01/23	ERS	State Employee	DOT	77	\$ 1,672.96	\$ 20,075.52	18.83
CHEARINO, MARK	Service	SRA	03/25/23	ERS	State Employee	URI	61	\$ 4,783.94	\$ 57,407.28	43.12
CLARK, NANCY	Service	SRA	02/01/23	ERS	State Employee	DOR	75	\$ 692.21	\$ 8,306.52	14.06
CORTES, APOLINAR	Service	SRA	03/01/23	ERS	State Employee	RIC	70	\$ 482.09	\$ 5,785.10	13.02
COTY, DEBRA	Service	Option2	03/01/23	ERS	State Employee	URI	65	\$ 3,147.27	\$ 37,767.24	36.82
CROCE, LAWRENCE	Service	SRA	04/01/23	ERS	State Employee	DOT	60	\$ 2,208.21	\$ 26,498.52	29.07
DELSIGNORE, SILVANA	Service	Option1	03/01/23	ERS	State Employee	URI	67	\$ 420.63	\$ 5,047.56	12.12
DENOYELLE, STEVEN	Service	Option1	01/29/23	ERS	State Employee	DOA	65	\$ 2,860.65	\$ 34,327.80	25.43
DOS SANTOS, SHIRLEY	Service	Option2	02/22/23	ERS	State Employee	DBR	76	\$ 5,042.90	\$ 60,514.80	35.84
ENGELS, FRANCIS	Disability	Option1	10/25/20	ERS	State Employee	DAVIES VOC. HIGH SCHOOL	68	\$ 2,571.83	\$ 30,861.96	8.79
EVANS, THOMAS	Service	SRA	12/27/22	ERS	State Employee	ATTORNEY GENERAL	59	\$ 3,761.61	\$ 45,139.32	28.24
FERNANDES, JOHN	Service	Option1	02/25/23	ERS	State Employee	RIC	62	\$ 1,935.16	\$ 23,221.92	32.23
FERRELLI, LAUREL	Service	SRA	03/01/23	ERS	State Employee	JUDICIAL	65	\$ 5,560.22	\$ 66,722.64	35.56
HAGUE, KATHLEEN	Service	Option1	02/01/23	ERS	State Employee	DBR	65	\$ 1,451.77	\$ 17,421.24	23.67
JOHNSEN, MARK	Service	Option1	02/01/23	ERS	State Employee	LEGISLATIVE	65	\$ 2,210.99	\$ 26,531.88	25.91
KALISH, GEORGE	Disability	SRA	02/14/21	ERS	State Employee	BHDDH	47	\$ 1,709.73	\$ 20,516.76	2.03
LOUZON, CRAIG	Service	Option1	01/28/23	ERS	State Employee	URI	64	\$ 3,286.55	\$ 39,438.60	40.29
MACKIN, JOHN	Service	Option1	03/16/23	ERS	State Employee	CCRI	69	\$ 923.45	\$ 11,081.40	19.58
MANCINI, LORI	Service	SRA	03/01/23	ERS	State Employee	JUDICIAL	59	\$ 3,607.75	\$ 43,293.00	33.81
MANOSH, ROY	Disability	Option1	10/15/22	ERS	State Employee	DPS	53	\$ 1,162.18	\$ 13,946.16	19.90
MARSHALL, ANGELA	Service	SRA	01/28/23	ERS	State Employee	CCRI	65	\$ 3,643.13	\$ 43,717.56	30.37
MIRANDA SR, RUSSELL	Service	SRA	12/31/22	ERS	State Employee	DOR	67	\$ 494.94	\$ 5,939.28	11.18
MOORE, ANTHONY	Service	SRA	02/01/23	ERS	State Employee	RIC	68	\$ 888.04	\$ 10,656.48	20.50
OUELLETTE, DAVID	Service	Option1	03/01/23	ERS	State Employee	BHDDH	63	\$ 2,859.45	\$ 34,313.40	43.20
PAPAZIAN, ROBIN	Service	SRA	03/28/23	ERS	State Employee	DHS	65	\$ 681.52	\$ 8,178.24	16.25
PARKER, EDWARD	Service	Option2	04/01/23	ERS	State Employee	ATTORNEY GENERAL	84	\$ 2,688.52	\$ 32,262.24	20.53
PERREAULT, DONNA	Service	SRA	02/07/23	ERS	State Employee	URI	66	\$ 852.38	\$ 10,228.56	16.97
POTENZA, GERARD	Service	Option1	03/01/23	ERS	State Employee	DOT	66	\$ 499.99	\$ 5,999.88	12.32
RUSSO, JAMES	Service	SRA	03/01/23	ERS	State Employee	LIEUTENANT GOVERNOR'S OFFICE	64	\$ 890.29	\$ 10,683.48	14.61
SCHWARTZ-VANDERHOFF, SHARON	Service	SRA	11/23/22	ERS	State Employee	DOC	61	\$ 3,011.73	\$ 36,140.76	25.31
SHERMAN, LINDA	Service	SRA	03/01/23	ERS	State Employee	DHS	66	\$ 445.11	\$ 5,341.32	10.05
SILIGATO, MARGARET	Service	Option2	01/21/23	ERS	State Employee	URI	69	\$ 2,097.56	\$ 25,170.72	32.40
SQUILLANTE, DAVID	Disability	SRA	01/23/22	ERS	State Employee	DOT	59	\$ 3,271.95	\$ 39,263.40	21.12
STANFORD, GERALYN	Service	SRA	02/01/23	ERS	State Employee	EOHHS	64	\$ 3,597.02	\$ 43,164.24	30.27
TERRANA, BRIAN	Service	SRA	01/22/23	ERS	State Employee	URI	67	\$ 252.72	\$ 3,032.64	7.58
TRAFICANTE, DAVID	Service	Option2	03/01/23	ERS	State Employee	URI	60	\$ 3,237.03	\$ 38,844.36	38.45
WRIGHT, JOHN	Service	Option1	02/01/23	ERS	State Employee	RIHEAA	64	\$ 814.76	\$ 9,777.12	16.98
CALITRI, PAULA	Service	SRA	07/01/22	ERS	Teacher	North Kingstown School Dept.	60	\$ 4,332.00	\$ 51,984.00	32.50
MARTIN, NANCY	Service	SRA	02/01/23	ERS	Teacher	Foster/Glocester Reg. School Dist.	65	\$ 902.37	\$ 10,828.44	11.00
ALEXANDER HALL, KATHERINE	Service	SRA	02/18/23	MERS	General Municipal	EAST GREENWICH-COLA-NC	63	\$ 452.06	\$ 5,424.72	17.08
ALMEIDA, SHARI	Service	SRA	03/01/23	MERS	General Municipal	Town of North Kingstown	60	\$ 1,549.62	\$ 18,595.44	22.95
CARNEVALE, MICHAEL	Service	SRA	11/01/22	MERS	General Municipal	Town of North Providence	70	\$ 968.12	\$ 11,617.44	13.92
DUARTE, GEORGE	Service	Option2	02/01/23	MERS	General Municipal	Town of Bristol EE Highway	70	\$ 3,067.59	\$ 36,811.08	34.56
GARVEY, SUSAN	Service	SRA	01/05/23	MERS	General Municipal	Central Falls School Dist. (NC)	66	\$ 1,365.33	\$ 16,383.96	24.00
GOMES, SHONTELL	Service	Option2	01/01/23	MERS	General Municipal	City of East Providence	62	\$ 1,678.37	\$ 20,140.44	25.51
HANCOCK, LINDA	Service	SRA	08/23/22	MERS	General Municipal	Tiverton Local 2670A	63	\$ 1,900.44	\$ 22,805.28	27.68
JOSHI, ALKA	Service	Option1	02/01/23	MERS	General Municipal	South Kingstown School Dept. (NC)	66	\$ 107.43	\$ 1,289.16	7.08
KLEIN, SARAH	Disability	Option2	04/30/22	MERS	General Municipal	Town of Bristol	60	\$ 4,359.83	\$ 52,317.96	19.98
LUKER, JANE	Service	SRA	04/08/23	MERS	General Municipal	City of Cranston	62	\$ 1,869.72	\$ 22,436.64	24.34
OTTONE, MICHAEL	Service	Option2	02/04/23	MERS	General Municipal	City of East Providence	65	\$ 1,313.03	\$ 15,756.36	21.32
RABBITT, MICHAEL	Service	Option1	12/27/22	MERS	General Municipal	City of Central Falls	58	\$ 639.51	\$ 7,674.12	16.70
TAYLOR, NORMAN	Service	Option1	02/18/23	MERS	General Municipal	Foster/Glocester Reg. School Dist. (NC)	66	\$ 759.74	\$ 9,116.88	16.90
VIENS, DENISE	Service	SRA	12/02/22	MERS	General Municipal	South Kingstown School Dept. (NC)	62	\$ 1,644.29	\$ 19,731.48	32.41
WHITELEY, JANET	Service	Option1	03/03/23	MERS	General Municipal	Town of Johnston	65	\$ 2,354.53	\$ 28,254.36	30.45
BERGEON, THOMAS	Service	SRA	02/25/23	MERS	Police and Fire	Woonsocket Police Dept.	50	\$ 3,512.78	\$ 42,153.36	25.48
LUX, ROBERT	Service	SRA	03/11/23	MERS	Police and Fire	Cranston Fire	57	\$ 5,454.56	\$ 65,454.72	31.09
BROUILLETTE, MICHAEL	Service	SRA	03/08/23	SPRBT	State Police	State Police	53	\$ 6,275.16	\$ 75,301.92	25.59

# Employees' Retirement System of Rhode Island



## 6. Legal Counsel Report

For Report

Presented by Michael P. Robinson

**EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND  
REPORT AS OF MAY 2023  
ON LITIGATED MATTERS FILED BY OR AGAINST ERSRI**

**I. MATTERS WITH PROCEDURAL OR SUBSTANTIVE CHANGES**

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**Robert Bell v. Employees' Retirement System of Rhode Island**

**Workers' Compensation Court; 202200815**

**Change.** Plaintiff, a former Fire Captain with the North Providence Fire Department, appeals MERS' denial of his Application for Accidental Disability Retirement pursuant to R.I. Gen. Laws § 45-21.2-9. MERS has filed a Designation of Record of Administrative Appeal with the Court. A pretrial conference took place on March 7, 2022 at which time a pro forma denial of the appeal was entered, and Mr. Bell thereafter filed a claim for trial. Initial hearings have been conducted. The Court scheduled the matter for trial on September 27, 2022, at which time Mr. Bell appeared and presented testimony. Based upon Mr. Bell's trial testimony, the parties are cooperating on securing updated medical records from a variety of medical care providers. **The continued trial was conducted on April 26, 2023. Post-trial memoranda are due by July 11, 2023.**

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**Rhode Island Troopers Association and James Donnelly-Taylor v. State of Rhode Island, Division of the State Police, James Manni, Colonel of the State Police, Governor Gina Raimondo, Employees' Retirement System of Rhode Island, by and through the General Treasurer, Seth Magaziner, and the Retirement Board**

**Providence County Superior Court; C.A. No. PC-2019-11054**

**Change.** Plaintiffs seek a declaratory judgment and bring an administrative appeal challenging a decision of the Colonel of the Division of State Police concerning disability pension benefits. Plaintiff Donnelly-Taylor's application for a work-related disability pension was denied by the Colonel, and the Plaintiffs seek a declaratory judgment concerning the authority of the Superintendent of the State Police to make determinations on disability applications. Plaintiffs also seek reversal of the Superintendent's decision. On January 9, 2023, Judge McHugh rendered a bench decision: 1) in favor of ERSRI and the Retirement Board, holding that the Superintendent of the State Police has statutory authority to decide state trooper disability pension applications; and 2) holding that the Colonel's decision was arbitrary and capricious. The Court reversed the Colonel's decision and remanded the application to the current Colonel with instructions to immediately process the pension effective as of the date of his application. **The State of Rhode Island, Division of State Police, Colonel Weaver, and Governor McKee have filed a notice of appeal to the Rhode Island Supreme Court. All parties have executed a stipulation dismissing the case as to ERSRI, the Retirement Board and the Rhode Island Troopers Association. This case will be removed from future litigation reports.**

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**The Retirement Board of the Employees' Retirement System of the State of Rhode Island  
v. Paul LaFrance**

**Providence County Superior Court; C.A. No. PC-2016-1524**

**Change.** This is an action to revoke or reduce Mr. LaFrance's pension pursuant to the Public Employee Pension Revocation and Reduction Act. Mr. LaFrance, a former teacher for the Warwick School Department, pled *nolo contendere* to felony charges related to third degree sexual assault of a student. An Answer to the Complaint has been filed, and the parties are engaged in discovery. **Depositions of Mr. LaFrance and his wife, who is asserting a claim to some or all of his pension benefits as an innocent spouse, are scheduled for May 24, 2023.**

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**II. MATTERS WITH NO PROCEDURAL OR SUBSTANTIVE CHANGES**

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**Anganie Williams v. Employees' Retirement System of Rhode Island (ERSRI).**

**Providence Superior Court; C.A. No. PC-2022-06276**

No change. Plaintiff, an employee at the Rhode Island Department of Motor Vehicles, challenges the Retirement Board's denial of her application for an accidental disability pension. The Designation of Administrative Record and an Answer have been filed with the court, and the parties have agreed upon a briefing schedule. Plaintiff and ERSRI have filed their Briefs with the Superior Court.

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**Dawn Eidam v. Employees' Retirement System of Rhode Island (ERSRI).**

**Kent County Superior Court; C.A. No. KC-2022-0659**

No change. Plaintiff, a Community Living Aide with the State of Rhode Island/RICLAS, challenges the Retirement Board's approval of her application for an accidental disability pension at the 50% benefit allowance pursuant to R.I.G.L. §36-10-15(b). The Designation of Administrative Record and an Answer have been filed with the court, along with a stipulated briefing schedule. Plaintiff and ERSRI have filed their Briefs with the Superior Court.

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**Michael Bronson v. Employees' Retirement System of Rhode Island**

**Workers' Compensation Court; 202201111**

No change. Plaintiff, a police officer with the South Kingstown Police Department, appeals MERS' denial of his Application for Accidental Disability Retirement pursuant to R.I. Gen. Laws § 45-21.2-9. MERS has filed a Designation of Record of Administrative Appeal with the Court.

A pretrial conference took place on March 21, 2022 at which time a pro forma denial of the appeal was entered, and Bronson thereafter filed a claim for trial. An initial hearing was conducted on August 19, 2022. The matter was extensively conferenced, and the parties are in the process of attempting to narrow any disputes regarding exhibits to be introduced at trial. Depositions of Plaintiff's medical providers are being scheduled. A status conference is scheduled for June 9, 2023.

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**Helen Reardon v. Employee's Retirement System of Rhode Island**

**Kent County Superior Court; KC-2021-0784**

No change. Plaintiff, a former employee with the Rhode Island Department of Human Services, appeals the denial of her Application for Accidental Disability Retirement pursuant to R.I. Gen. Laws § 36-10-14. ERSRI has filed an Answer and the Designation of Record of Administrative Appeal with the Court. The parties have fully briefed the issues, and the matter has been assigned to Judge Brian Van Couyghen for decision.

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**The Retirement Board of the Employees' Retirement System of the State of Rhode Island v. Shanice In**

**Providence County Superior Court; C.A. No. PC-2020-07704**

No change. This is an action to revoke or reduce Defendant, Shanice In's pension pursuant to the Public Employee Pension Revocation and Reduction Act. Ms. In, a former Clerk for the Bureau of Criminal Identification Department for the State of Rhode Island, pled *nolo contendere* to felony charges related to illegally tampering with records at the Attorney General's BCI Office for the purpose of fraudulently clearing the criminal records of other individuals. Ms. In was served on July 14, 2021. The Court granted ERSRI's application for default for Ms. In's failure to answer the Complaint.

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**Richard P. D'Addario v. Employees' Retirement System of Rhode Island and Rhode Island State Employees' Retirement Board**

**Providence Superior Court; C.A. No. PC-2019-10351**

No change. Plaintiff, a probate judge in the Town of Tiverton, appeals from the Retirement Board's determination that he is not eligible for membership in the Retirement System. The Designation of Record and Answer have been filed with the Court.

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**Retirement Board v. Ambulai Sheku**

**Providence County Superior Court; C.A. No. PC-2017-3146**

No change. This is an action to revoke or reduce Mr. Sheku's pension pursuant to the Public Employee Pension Revocation and Reduction Act. Mr. Sheku, a former employee of the Rhode Island Department of Labor and Training, pled guilty to charges of conspiracy to commit mail fraud, theft of government funds, and accessing a protected computer to commit fraud, all in connection with his public employment. Mr. Sheku has been defaulted for failure to respond to the Complaint.

**Margaret Provoyeur v. Employees' Retirement System of the State of Rhode Island**

**Providence Superior Court; C.A. No. PC-2015-2609**

No change. Plaintiff, a Providence schoolteacher, appeals the denial of her application for an accidental disability pension. On August 24, 2016, Plaintiff filed a motion to remand the matter to the Disability Committee for the consideration of additional evidence. ERSRI filed an objection, and on October 28, 2016, the Superior Court denied the motion to remand.

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**Albert DelMastro, Jr. v. Employees' Retirement System of Rhode Island**

**Providence County Superior Court; C.A. No. PC-2014-1850**

No change. Plaintiff, an electrician with the Community College of Rhode Island, appeals the denial of his application for an accidental disability pension. The Retirement System has filed an Answer and the Designation of Record of Administrative Appeal with the Court.

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**Retirement Board v. Rachel Arruda**

**Providence County Superior Court; C.A. No. PC-2014-6174**

No change. This is an action to revoke or reduce Ms. Arruda's pension pursuant to the Public Employee Pension Revocation and Reduction Act. Ms. Arruda, a former employee of the City of Woonsocket, pled *nolo contendere* to a felony charge related to conversion of funds in connection with her municipal employment. At a hearing on January 29, 2015, Arruda stipulated to the suspension of her pension pending adjudication of the action.

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**The Retirement Board of the Employees' Retirement System of the State of Rhode Island v. Gerard M. Martineau**

**Providence County Superior Court; C.A. No. PC-2015-1268**



No change. This is an action to revoke or reduce Mr. Martineau's pension pursuant to the Public Employee Pension Revocation and Reduction Act. Mr. Martineau, a former elected official of the State of Rhode Island, pled *nolo contendere* to charges of Honest Services Mail Fraud in connection with his public employment. Mr. Martineau was served with the Complaint on April 2, 2015. Mr. Martineau has agreed to voluntarily relinquish any entitlement to a pension or other benefit he might otherwise have been entitled to, and documents necessary to obtain court approval of revocation of his pension have been sent to him for review.

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**Benita Fernandez v. Employee's Retirement System of Rhode Island**

**Providence County Superior Court; C.A. No. PC-2015-5489**

No change. Plaintiff, a Social Caseworker II with DCYF, appeals the denial of her application for an accidental disability pension. The Retirement System has filed an Answer and the Designation of Record of Administrative Appeal with the Court.

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**Employees' Retirement System of Rhode Island v. Thomas McSoley, Marlene A. Palumbo, and Michael E. McSoley.**

**Providence Superior Court; C.A. No. PC-2016-1144**

No change. ERSRI brought suit to recover monies overpaid to a direct deposit account of Thomas McSoley, following his death in 2011. The defendants are believed to be joint account holders with the decedent. ERSRI effectuated service of process, and sought an injunction preventing the defendants from accessing or withdrawing the funds. On March 18, 2016, the parties entered into a Consent Order that restrains the defendants from accessing, withdrawing, encumbering, or otherwise spending or disposing of the funds on account until further order of the Court.

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# Employees' Retirement System of Rhode Island



## 7. Committee Reports

# Employees' Retirement System of Rhode Island



## 7.1. Disability Committee

For Vote

Presented by Dr. Laura Shawhughes

# Employees' Retirement System of Rhode Island



## April 7, 2023 Disability Committee Recommendations

For Vote

Presented by Dr. Laura Shawhughes

**Disability Committee  
Recommendations**

**May 5, 2023**

**Hearing**

**Mark Gray**

**NO RECOMMENDATION**

Juvenile Program Worker, DCYF (estimated service credits, 26 years 0 months 17 days)  
**The Disability Committee voted to uphold its original decision to approve Mr. Gray's application for Accidental Disability at 50%**  
**VOTE: 4-0**

**Council 94  
Local 304**

**Accidental Previously Postponed**

**Kevin Rubino**

**NO RECOMMENDATION**

Custodian, North Providence School Department (estimated service credits, 15 years 0 months 12 days)  
**Accidental Postponed**  
**VOTE: 4-0**

**ACL-CIO  
Local 2435**

1. **Kevin Rubino**

**Custodian, North Providence School Department** (estimated service credits, 15 years 0 months 12 days)  
**Ordinary Approved**  
**VOTE: 4-0**

**ACL-CIO  
Local 2435**

2. **Christopher Rossi**

**Firefighter, Town of West Warwick** (estimated service credits, 10 years 11 months 23 days) **(66 2/3%)**  
\*Application filed with Town of West Warwick prior to asset transfer  
**Approved**  
**VOTE: 4-0**

**IAFF  
Local 1104**

3. **Benjamin Maimoni**

**Firefighter, North Providence Fire Department** (estimated service credits, 15 years 11 months 18 days)  
**Approved**  
**VOTE: 4-0**

**IAFF  
Local 2334**

**Ordinary**

4. **Iliana Knowles**

**Supervisory Clerk, Workers Compensation Court** (estimated service credits, 24 years 8 months 8 days)  
**Approved**  
**VOTE: 4-0**

**Council 94**

- |    |                           |  |  |
|----|---------------------------|--|--|
| 5. | <b>Meredith Andreozzi</b> | <b>Elementary Teacher, Warwick Public School</b><br>(estimated service credits, 24 years 11 months 3 days)<br><b>Approved</b><br><b>VOTE: 4-0</b>              | <b>AFT</b><br><b>Local 915</b>         |
| 6. | <b>Karen Masse</b>        | <b>Institution Attendant Psychiatric, Eleanor Slater Hospital</b> (estimated years of service 22 years 3 months 4 days)<br><b>Approved</b><br><b>VOTE: 4-0</b> | <b>Council 94</b><br><b>Local 1350</b> |
| 7. | <b>Christine Caparco</b>  | <b>Fiscal Clerk, BHDDH ( estimated years of service 20 years 4 months 20 days)</b><br><b>Approved</b><br><b>VOTE: 4-0</b>                                      | <b>Liuna</b><br><b>Local 808</b>       |

**Consideration and Approval of Decisions**

**Approved as written**  
**VOTE: 3-0 Mr. Nota abstained**

- |     |                          |  |                   |
|-----|--------------------------|--|-------------------|
| 8.  | <b>Richard Patenaude</b> | <b>Correctional Officer, Department of Corrections</b> (estimated service credits: 20 years 11 months 18 days)<br><b>The Disability Committee voted to uphold its original decision to deny Mr. Patenaude's Application for accidental Disability Retirement.</b><br><b>VOTE: 5-0</b>  | <b>RIBCO</b>      |
| 9.  | <b>Sean O'Connell</b>    | <b>Deputy Sheriff, Department of Public Safety</b> (estimated service credits, 21 years 9 months 15 days)<br><b>The Committee voted to deny Mr. O'Connell's Request for a Re-hearing</b><br><b>VOTE: 5-0</b>   | <b>Council 94</b> |
| 10. | <b>David Principe</b>    | <b>Correctional Officer, Department of Corrections</b> (estimated service credits: 19 years 10 months 5 days)<br><b>The Disability Committee voted to reverse its original decision and approve Mr. Principe's application for Accidental Disability Retirement at 66 2/3%</b><br><b>VOTE: 4-1</b><br><b>Ms. Cheng voted Nay</b> | <b>RIBCO</b>      |

RESTRICTED PAGE

# Employees' Retirement System of Rhode Island



## 8. Adjournment

For Vote

Presented by Treasurer James A. Diosa



# Employees' Retirement System of Rhode Island



## 9. Appendix

**ERSRI BOARD:**

James A. Diossa  
General Treasurer Chair

John P. Maguire  
Vice Chair

Ernest Almonte

Roger P. Boudreau

Mark A. Carruolo

Joseph Codega

Paul L. Dion

Matthew K. Howard

Claire M. Newell

Raymond J. Pouliot

Jean Rondeau

Laura Shawhughes

James E. Thorsen

Michael J. Twohey

Lisa A. Whiting

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Frank J. Karpinski  
Executive Director

SENT VIA U.S. FIRST CLASS MAIL AND CERTIFIED MAIL RETURN RECEIPT REQUESTED

April 25, 2023

91 7199 9991 7035 4498 0325

David Gosselin, Jr.  
Town Council President  
Town of West Warwick  
1170 Main St.  
West Warwick, RI 02893

RE: Mark Knott - West Warwick Pension Plan

Dear Mr. Gosselin:

This letter serves as notice to the Town Council of West Warwick that at its meeting held on March 15, 2023 the Retirement Board of the Employees' Retirement System of the State of Rhode Island discussed the circumstances surrounding the pension benefit of Mark Knott.

After discussion, board members reluctantly voted to approve Mr. Knott's pension application as they had concerns about his pension eligibility given the critical status of the West Warwick Pension Plan as expressly recognized in the enabling legislation allowing West Warwick to participate in the MERS plan. *See, e.g., R.I.G.L. 45-21.5-1* (adopting enabling legislation "to facilitate the assistance of the municipal employees' retirement system (MERS) of the state of Rhode Island in administering the local West Warwick pension plans" in order to "see the town of West Warwick remain on the path of fiscal health, ... [as] the predictability and sustainability of the pension system is vital to maintaining fiscal health for the town of West Warwick and retirement security for its employees, first responders and retirees...").

To that end, the Retirement Board specifically voted:

*[T]o approve the pension application of Mark Knott, with a corresponding letter to be sent to West Warwick expressing the Board's reluctance to do so in light of concerns highlighted by Mr. Knott's pension eligibility. Given the remedial purposes of the legislation allowing West Warwick to join MERS, the Board wished to express its concerns to West Warwick with regard to the town's perceived lack of transparency and actions that appear to*

*be inconsistent with the goals of the legislation in allowing this pension candidate to become pension eligible while also working full time.*

I trust that this communication will be provided to the Town Council for review in order that the Retirement Board's concerns are effectively memorialized and communicated should the West Warwick Town Council contemplate further similar actions in the future.

Sincerely,



Frank J. Karpinski  
Executive Director

Cc: Mark Knott 91 7199 9991 7035 4498 0417  
Timothy A. Williamson, Esq., Town Solicitor 91 7199 9991 7035 4498 0424  
Retirement Board of the Employees' Retirement System of Rhode Island

# Employees' Retirement System of Rhode Island



## 9.1. Post-Retirement Employment - May 2023 Report

# ERSRI Memorandum

**ERSRI BOARD:**

James A. Diosa  
*General Treasurer Chair*

John P. Maguire  
*Vice Chair*

Ernest Almonte

Roger P. Boudreau

Mark A. Carruolo

Joseph Codega

Paul L. Dion

Matthew K. Howard

Claire M. Newell

Raymond J. Pouliot

Jean Rondeau

Laura Shawhughes

James E. Thorsen

Michael J. Twohey

Lisa A. Whiting

Frank J. Karpinski  
*Executive Director*

Date: May 10, 2023

To: Retirement Board

From: Frank J. Karpinski, Executive Director

Subject: Post Retirement Employment Reports

**Enclosed are the listings of reported retirees working under the various post-retirement employment statutes.**

**For the K-12 schools, registered nurses and municipalities, the column *Number of Days* lists the up-to-date totals of working days provided by the agency(ies) to ERSRI.**

A retired member who returned to work as a substitute teacher is indicated by a *Title/Function* column as *PRSB*.

A retired member who returned to work as an administrator, guidance counselor, or other certified position in a school department, and is working in a vacant position is labeled in the *Title/Function* column as *PRAM*. Certification letters (good faith letters) need to be provided by the agency and forwarded to ERSRI consistent with RIGL §16-16-24.

A retired member who retired from service as a registered nurse may be employed for the purpose of providing professional nursing care and/or services at a state-operated facility in Rhode Island, including employment as a faculty member of a nursing program at a state-operated college or university. That is indicated by a *Title/Function* column as *PRNR*.

Municipal retirees returning to work in a school system are indicated in the *Title/Function* column as *PRMS*. Municipal retirees returning to work for a participating city/town are indicated by a *Title/Function* column as *PRME*.

**For the state colleges/universities (recently included Driver's Education Report, (the column *Earnings* (gross) lists the up-to-date dollar earnings.**

If a retired member is returning to work for the purpose of providing classroom instruction, academic advising of students and/or coaching, that is labeled in *Title/Function* column as *PRIS*.

If a retired member is returning to work for the purpose of providing classroom instruction in driver education courses and/or motorcycle driver education courses, that is labeled in *Title/Function* as *PRDE*.



**TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2022-2023 SCHOOL YEAR**  
**PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 05-04-2023**

First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
FRANK		DEVALL	1021	Bristol Warren Reg. School Dist.	PRAM	138.00	Good faith letter on file--Return from Suspension
ANDY		BARNES	1121	Cumberland School Dept.	PRAM	129.00	Good faith letter on file--Return from Suspension
MICHAEL	C	TRAFICANTE	1111	Cranston School Dept.	PRAM	126.00	Good faith letter on file
FRANK	C	PICCIRILLI	1441	Providence School Dept.	PRSB	124.00	N/A - RIGL 16-16-24.2
LESLIE	R	WALTON	1441	Providence School Dept.	PRSB	122.00	N/A - RIGL 16-16-24.2
CAROL	A	MITOLA	1391	North Smithfield School Dept.	PRAM	111.00	Good faith letter on file
RAFAEL	E	LUNA	1441	Providence School Dept.	PRSB	110.50	N/A - RIGL 16-16-24.2
FRANCIS	A	PALAZZI	1441	Providence School Dept.	PRSB	109.00	N/A - RIGL 16-16-24.2
MICHAEL	J	GERAGHTY	1441	Providence School Dept.	PRSB	107.00	N/A - RIGL 16-16-24.2
LISA	D	MACCHIONI	1441	Providence School Dept.	PRSB	105.00	N/A - RIGL 16-16-24.2
MAUREEN	A	PINKSAW	1441	Providence School Dept.	PRSB	104.00	N/A - RIGL 16-16-24.2
PATRICIA		AMORE	1613	West Warwick School Dept (NC)	PRMS	103.00	Suspended Pension
CARMEN		CONTE-PARENTE	1441	Providence School Dept.	PRSB	103.00	N/A - RIGL 16-16-24.2
JUDITH	A	ANDREOZZI	1441	Providence School Dept.	PRSB	103.00	N/A - RIGL 16-16-24.2
ARLENE		KIBARIAN	1441	Providence School Dept.	PRSB	102.50	N/A - RIGL 16-16-24.2
BEVERLY		BERNIER	1113	Cranston School Dept. (NC)	PRMS	102.50	Suspended Pension
SALLY		GARABEDIAN	1441	Providence School Dept.	PRSB	101.00	N/A - RIGL 16-16-24.2
SANDRA	G	LEWIS	1441	Providence School Dept.	PRSB	100.00	Good faith letter on file
EMILY	M	ELLIS	1441	Providence School Dept.	PRSB	99.00	N/A - RIGL 16-16-24.2
JUAN	A	RODRIGUEZ	1441	Providence School Dept.	PRSB	98.00	Good faith letter on file
LAWRENCE	P	BYRNE	1441	Providence School Dept.	PRSB	97.00	N/A - RIGL 16-16-24.2
STEPHEN	A	IANNOTTI	1441	Providence School Dept.	PRSB	96.00	N/A - RIGL 16-16-24.2
DAVID	M	VALEDOFSKY	1441	Providence School Dept.	PRSB	95.00	N/A - RIGL 16-16-24.2
SUSAN	P	JOHNSON	1281	Johnston School Dept.	PRSB	95.00	N/A - RIGL 16-16-24.2
LINDA		COLVIN	1031	Burrillville School Dept.	PRSB	94.00	N/A - RIGL 16-16-24.2
VIRGINIA	R	DIMASI	1611	West Warwick School Dept.	PRSB	93.50	Good faith letter on file
DONNA		LOMBARDI	1441	Providence School Dept.	PRSB	93.00	N/A - RIGL 16-16-24.2
MICHAEL		TOPAZIO	1001	Barrington Public Schools	PRSB	92.00	N/A - RIGL 16-16-24.2
FRANCES		COLA	1441	Providence School Dept.	PRSB	91.50	N/A - RIGL 16-16-24.2
BRUCE	C	WELLER	1151	East Greenwich School Dept.	PRSB	91.50	N/A - RIGL 16-16-24.2
BERNADETTE	A	BOWEN	1111	Cranston School Dept.	PRSB	91.00	Good faith letter on file
KATHERINE		SIPALA	1371	North Kingstown School Dept.	PRAM	90.00	At limit
TERESA		SANGERMANO	1441	Providence School Dept.	PRSB	89.50	Close to limit
CAROL		LANOIE	1631	Woonsocket School Dept.	PRSB	89.00	Close to limit
SUSAN	A	EMERSON	1611	West Warwick School Dept.	PRSB	89.00	Close to limit
PAMELA	A	KANE	1531	Tiverton School Dept.	PRSB	89.00	Close to limit
SHIRLEY	A	MCBRIDE	1441	Providence School Dept.	PRSB	88.00	Close to limit
KENNETH	L	PECKHAM	1631	Woonsocket School Dept.	PRSB	87.50	Close to limit
LORY	I	FITZGERALD	1441	Providence School Dept.	PRSB	87.00	Close to limit
ROSE	M	CACCHIOTTI	1441	Providence School Dept.	PRSB	87.00	Close to limit
CATHERINE	E	FOX	1281	Johnston School Dept.	PRSB	85.00	Close to limit
ALBERT	R	D'AREZZO JR	1021	Bristol Warren Reg. School Dist.	PRSB	85.00	Accidental Disability-close to limit
LOUIS		TORO	1441	Providence School Dept.	PRSB	84.00	Close to limit
GLADYS		OLAGBEGI-FAKUNLE	1441	Providence School Dept.	PRSB	83.00	Close to limit
LYNNE	I	EDMONDS	1441	Providence School Dept.	PRSB	83.00	Close to limit
CLAUDIA		BARRETT	1441	Providence School Dept.	PRSB	82.00	Close to limit
ZITA		BUTLER	1411	Pawtucket School Dept.	PRSB	82.00	Close to limit
MARY BETH		MCCOMBE	1111	Cranston School Dept.	PRSB	82.00	Close to limit
ROBIN		FRICCHIONE	1421	Portsmouth School Dept.	PRSB	81.00	Close to limit
GISELE	M	HUMBLE	1611	West Warwick School Dept.	PRSB	80.00	Close to limit
DONNA		PERROTTA	1441	Providence School Dept.	PRSB	80.00	Close to limit
LEONARDA	A	URENA	1441	Providence School Dept.	PRSB	80.00	Close to limit
LYDIA	M	MATTERA	1441	Providence School Dept.	PRAM	79.50	
PATRICIA	E	ADAMS	1441	Providence School Dept.	PRSB	79.50	
JOHN	E	LALLI	1371	North Kingstown School Dept.	PRSB	79.00	

**TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2022-2023 SCHOOL YEAR**  
**PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 05-04-2023**

First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
PAMELA	M	ARDIZZONE	1441	Providence School Dept.	PRSB	76.00	
DOROTHY		MURRAY	1031	Burrillville School Dept.	PRAM	75.50	
RALPH	A	MONTELLA	1911	Times2 Academy	PRAM	75.00	
PEARL		HOLLOWAY	1441	Providence School Dept.	PRSB	75.00	
BARBARA		BEAL	1283	Johnston School Dept. (NC)	PRMS	75.00	At limit
SARA		MELIN	1441	Providence School Dept.	PRSB	74.50	
DIANE	L	BRENNAN	1201	Foster/Glocester Reg. School Dist.	PRAM	74.50	
MARIE	F	LUPINO	1111	Cranston School Dept.	PRSB	74.50	
KENNETH	C	PERRY	1441	Providence School Dept.	PRSB	74.00	
ANN-MARIE		D AMBROSIO	1441	Providence School Dept.	PRSB	73.00	
SUSAN	J	CARDENTE	1021	Bristol Warren Reg. School Dist.	PRSB	73.00	
THOMAS	P	MONTAQUILA	1441	Providence School Dept.	PRSB	72.50	
CYNTHIA		O BRIEN	1371	North Kingstown School Dept.	PRSB	72.50	
CAROLYN	J	ROSEMAN	1281	Johnston School Dept.	PRSB	72.50	
CARMEN	M	ROBICHAUD	1441	Providence School Dept.	PRSB	71.00	
JOSE		DAJER	1441	Providence School Dept.	PRSB	71.00	
ROBERT	A	MURRAY	1421	Portsmouth School Dept.	PRSB	71.00	
DEBORAH	A	MANCUSO	1281	Johnston School Dept.	PRSB	71.00	
JOSEPH	R	PIRRAGLIA	1281	Johnston School Dept.	PRSB	71.00	
WANDA	V	MULLEN	1001	Barrington Public Schools	PRSB	71.00	
JOHN		CANNADY	1441	Providence School Dept.	PRSB	70.00	
PATRICIA	J	GEARY	1441	Providence School Dept.	PRSB	69.00	
ANA	M	FEENSTRA	1441	Providence School Dept.	PRSB	68.00	
CAROL	A	ROSA	1421	Portsmouth School Dept.	PRSB	67.50	
MARIE		FERAGNE	1441	Providence School Dept.	PRSB	67.00	
DIANNE	E	PERETTI	1401	Northern Rhode Island Collaborative	PRAM	67.00	
JUDITH		VALENTE	1201	Foster/Glocester Reg. School Dist.	PRAM	67.00	
MAUREEN	H	AVENO	1121	Cumberland School Dept.	PRSB	67.00	
DANIEL		LILLEY	1441	Providence School Dept.	PRSB	66.50	
MARY	B	CULLEN	1441	Providence School Dept.	PRSB	66.50	
ELEANOR		VANHOUE	1631	Woonsocket School Dept.	PRSB	66.00	
ANN		BARRY	1411	Pawtucket School Dept.	PRSB	66.00	
DENISE	M	MORETTI-FOGGO	1613	West Warwick School Dept (NC)	PRMS	65.00	Close to limit
THOMAS		MCGHEE	1441	Providence School Dept.	PRSB	65.00	
CLAUDIA		VIEIRA	1411	Pawtucket School Dept.	PRSB	65.00	
SANDRA	A	SHAW	1001	Barrington Public Schools	PRAM	65.00	
ANTHONY	J	TUTALO	1441	Providence School Dept.	PRSB	64.50	
THERESA	M	CONNOR	1441	Providence School Dept.	PRSB	64.00	
JO-ANN	E	WUNSCHL	1411	Pawtucket School Dept.	PRSB	64.00	
MICHELLE	C	JAQUES	1031	Burrillville School Dept.	PRSB	64.00	
ELIZABETH	L	BOEHMKE	1001	Barrington Public Schools	PRAM	64.00	
STEPHANIE	B	WIRTH	1021	Bristol Warren Reg. School Dist.	PRSB	63.50	
PAMELA	A	ALLEN	1371	North Kingstown School Dept.	PRSB	63.00	
JUDITH	H	SMITH	1271	Jamestown School Dept.	PRSB	63.00	
PATRICIA	A	WILLIAMS	1111	Cranston School Dept.	PRSB	63.00	
MICHAEL		PETRARCA	1191	Foster School Dist.	PRAM	62.50	
MADLYN	C	MCARDLE	1021	Bristol Warren Reg. School Dist.	PRAM	62.00	
ANNE	M	DIAMOND	1441	Providence School Dept.	PRSB	61.50	
LORI		DESIMONE	1381	North Providence School Dept.	PRAM	61.50	
RAYMOND		PANDOZZI	1441	Providence School Dept.	PRSB	61.00	
PAULEEN	M	SLATER	1401	Northern Rhode Island Collaborative	PRAM	61.00	
ANNE	M	BOBOLA	1381	North Providence School Dept.	PRAM	60.50	
CAROL		PIZZUTI	1731	The Greene School	PRAM	60.00	
PAULA	M	CHIODO	1441	Providence School Dept.	PRSB	60.00	
MARYELLEN		PIERCE	1373	North Kingstown School Dept. (NC)	PRMS	59.50	



**TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2022-2023 SCHOOL YEAR**  
**PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 05-04-2023**

First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
CHARLAYNE	R	EKELUND	1111	Cranston School Dept.	PRSB	59.50	
AUDREY	A	KILSEY	1441	Providence School Dept.	PRSB	59.00	
BARBARA		KELLY	1411	Pawtucket School Dept.	PRSB	59.00	
ELGERINE		ROBERTS	1441	Providence School Dept.	PRSB	58.00	
REBECCA	A	FLORI	1441	Providence School Dept.	PRSB	58.00	
WILLIAM	J	PARE	1441	Providence School Dept.	PRSB	58.00	
DEBRA		MILLER	1411	Pawtucket School Dept.	PRSB	57.00	
GEORGIA		FORTUNATO	1401	Northern Rhode Island Collaborative	PRAM	57.00	
STEVEN	B	KENNY	1091	Coventry Public Schools	PRSB	56.50	
ELIZABETH	R	A VANT	1441	Providence School Dept.	PRSB	56.00	
SUSAN	S	ENGLAND	1371	North Kingstown School Dept.	PRSB	56.00	
RICHARD		ZAGRODNY	1631	Woonsocket School Dept.	PRSB	55.50	
DAVID	F	DESJARDINS	1781	South Side Elementary Charter School	PRSB	55.00	
KATHY		DIAS	1441	Providence School Dept.	PRSB	55.00	
PAULA	J	VENTRONE	1441	Providence School Dept.	PRSB	55.00	
VIOLETTE		FALK	1441	Providence School Dept.	PRSB	55.00	
ANTHONY	L	ZAVOTA	1383	North Providence School Dept. (NC)	PRMS	55.00	
DONNA	A	GRECO	1283	Johnston School Dept. (NC)	PRMS	54.50	
CATHERINE	A	LARSH	1621	Westerly School Dept.	PRSB	54.00	
JANICE	E	DEFRANCES	1781	South Side Elementary Charter School	PRAM	53.50	
DONNA	M	CELONE	1021	Bristol Warren Reg. School Dist.	PRSB	53.50	
LISA	A	VINCENT	1441	Providence School Dept.	PRSB	53.00	
SHERRY		MC GAHAN	1391	North Smithfield School Dept.	PRAM	53.00	
DAVID	R	BENTLEY	1273	Jamestown School Dept. (NC)	PRMS	53.00	
JOHN	J	SCANLON	1111	Cranston School Dept.	PRSB	53.00	
MAUREEN	T	BRACEWELL	1441	Providence School Dept.	PRSB	52.00	
FRANCIS		LALIBERTE	1411	Pawtucket School Dept.	PRAM	52.00	
LINDA		KARSULAVITCH	1411	Pawtucket School Dept.	PRAM	52.00	
DIANA	R	PETROSINELLI	1111	Cranston School Dept.	PRSB	52.00	
CINDY	A	NORMAND	1341	New Shoreham School Dist.	PRAM	51.50	
PHYLLIS	R	OELBAUM	1441	Providence School Dept.	PRSB	51.00	
RODOLFO		VARGAS	1441	Providence School Dept.	PRSB	51.00	
FRANCES		LANDRY	1691	Blackstone Academy Charter School, Inc.	PRAM	51.00	
THELMA	E	BURBANK	1411	Pawtucket School Dept.	PRSB	50.50	
MARGUERITE		DELPONTE	1381	North Providence School Dept.	PRAM	50.50	
JAYNE	S	BAILEY	1091	Coventry Public Schools	PRSB	50.50	
TERRENCE	J	MERKEL	1371	North Kingstown School Dept.	PRSB	50.00	
JOHN	P	A'VANT	1111	Cranston School Dept.	PRSB	50.00	
MARIA	J	MANSELLA	1031	Burrillville School Dept.	PRAM	50.00	
ROSEMARY		STEIN	1471	Smithfield School Dept.	PRSB	49.00	
RICHARD	F	KINSLOW	1411	Pawtucket School Dept.	PRAM	49.00	
CAROL	A	BROWN	1151	East Greenwich School Dept.	PRAM	49.00	
LORRAINE	S	MOSCHELLA	1381	North Providence School Dept.	PRAM	48.00	
LORI		MARSHALL	1671	International Charter School	PRAM	48.00	
JAMES	E	HAWORTH	1111	Cranston School Dept.	PRSB	48.00	
ERIC	S	PETTINE	1621	Westerly School Dept.	PRSB	47.00	
MARY		PALUMBO	1491	South Kingstown School Dept.	PRSB	47.00	
RICHARD	D	D'AGOSTINO	1411	Pawtucket School Dept.	PRSB	47.00	
KATHLEEN	M	PERRY	1111	Cranston School Dept.	PRSB	47.00	
PAMELA	L	LAW	1071	Chariho Regional School Dist.	PRSB	47.00	
JOHN	A	ABBATE	1033	Burrillville School Dept. (NC)	PRMS	47.00	
CAROLYN	C	LEPORE	1391	North Smithfield School Dept.	PRAM	46.50	
PAUL	C	MELARAGNO	1391	North Smithfield School Dept.	PRAM	46.50	
FRANCES	D	BEAUPRE	1621	Westerly School Dept.	PRSB	46.00	
SHARON		GRAY	1401	Northern Rhode Island Collaborative	PRAM	46.00	

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First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
PATRICIA		DUBOIS	1211	Glocester School Dist.	PRAM	46.00	
DOUGLAS		FULFORD	1183	Exeter/West Greenwich Reg. Schools (NC)	PRMS	46.00	
ANTHONY		DELSIGNORE	1111	Cranston School Dept.	PRSB	46.00	
GIANNA		ZANNINI	1441	Providence School Dept.	PRSB	45.50	
MARIE	L	CASWELL	1611	West Warwick School Dept.	PRSB	45.00	
PAMELA	S	RESENDES	1441	Providence School Dept.	PRSB	45.00	
LORNA		O'CONNELL	1411	Pawtucket School Dept.	PRSB	45.00	
CLAUDIA	A	JACKVONY	1371	North Kingstown School Dept.	PRSB	45.00	
JUDITH	J	PAOLUCCI	1371	North Kingstown School Dept.	PRAM	45.00	
ANITA	T	LEMONS	1111	Cranston School Dept.	PRSB	45.00	
ROBERT	K	BOUCHARD	1111	Cranston School Dept.	PRSB	45.00	
ELIZABETH	L	MANTELLI	1531	Tiverton School Dept.	PRSB	44.50	
MARILYN	A	LADD	1373	North Kingstown School Dept. (NC)	PRMS	44.50	
RAYMOND	F	DOYLE	1611	West Warwick School Dept.	PRSB	44.40	
DEBORAH	A	LOCKWOOD	1441	Providence School Dept.	PRSB	44.00	
GERALD	A	FOGEL	1441	Providence School Dept.	PRSB	44.00	
LAURIE	A	MAGNETTE	1441	Providence School Dept.	PRSB	44.00	
KAREN	C	PURTILL	1181	Exeter/West Greenwich Reg. Schools	PRSB	44.00	
OLGA		GARIEPY	1631	Woonsocket School Dept.	PRSB	43.50	
CAROL	A	MUNDY	1121	Cumberland School Dept.	PRSB	43.50	
JUDY	P	CAMBIO	1911	Times2 Academy	PRAM	43.00	
ANNE	T	PARISEAU	1441	Providence School Dept.	PRSB	43.00	
CHARLES		MELLO	1021	Bristol Warren Reg. School Dist.	PRSB	43.00	
JEAN	E	BEVERIDGE	1371	North Kingstown School Dept.	PRSB	42.50	
LINDA	A	TERRANOVA	1621	Westerly School Dept.	PRSB	42.00	
DONNA	E	NASSA	1571	Warwick School Dept.	PRSB	42.00	
LAURIE	G	SULLIVAN	1571	Warwick School Dept.	PRSB	42.00	
MARY	E	RATHBUN	1441	Providence School Dept.	PRSB	42.00	
LORI ANN		LUSSIER	1381	North Providence School Dept.	PRAM	42.00	
STEVEN	A	ENRIGHT	1371	North Kingstown School Dept.	PRSB	42.00	
KENNETH	J	MORAN	1121	Cumberland School Dept.	PRSB	42.00	
NANCY	L	GAIEWSKI	1111	Cranston School Dept.	PRSB	42.00	
KATHRYN		RITTER-SMITH	1213	Glocester School Dist. (NC)	PRMS	41.50	
PAMELA	J	YOUNG	1121	Cumberland School Dept.	PRSB	41.50	
EILEEN		AFONSO	1441	Providence School Dept.	PRSB	41.00	
ELIZABETH	A	CLESAS	1441	Providence School Dept.	PRSB	41.00	
DONNA		LANGTON	1411	Pawtucket School Dept.	PRSB	41.00	
ANGELO		NERI	1441	Providence School Dept.	PRSB	40.00	
DEBORAH		BOLTON	1411	Pawtucket School Dept.	PRSB	40.00	
DEBRA		MCCLELLAND	1411	Pawtucket School Dept.	PRSB	40.00	
LORRAINE	L	FUSCO	1411	Pawtucket School Dept.	PRSB	40.00	
MURKJE		DEKOE	1031	Burrillville School Dept.	PRAM	40.00	
EMILY	J	SPINARD	1021	Bristol Warren Reg. School Dist.	PRSB	40.00	
THOMAS	V	STEPKA	1541	Urban Collaborative Schools	PRSB	39.00	
SUSAN		VERRECCHIA	1441	Providence School Dept.	PRSB	39.00	
LAURENCE		HALL	1111	Cranston School Dept.	PRSB	39.00	
EILEEN	A	MULLANEY	1441	Providence School Dept.	PRSB	38.50	
JANE	H	ROBBINS	1371	North Kingstown School Dept.	PRSB	38.50	
BARBARA		RIX	1001	Barrington Public Schools	PRSB	38.50	
ELIZABETH	S	STONER	1001	Barrington Public Schools	PRSB	38.50	
DIANE		ENGELS	1631	Woonsocket School Dept.	PRSB	38.00	
HELEN		SISCO	1471	Smithfield School Dept.	PRSB	38.00	
KATHLEEN	A	CONNELL	1471	Smithfield School Dept.	PRSB	38.00	
KAREN	A	KING	1191	Foster School Dist.	PRSB	38.00	
JOSEPH	D	HURLEY	1381	North Providence School Dept.	PRAM	37.50	

**TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2022-2023 SCHOOL YEAR**  
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First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
CLAUDE	M	WATSKY	1491	South Kingstown School Dept.	PRSB	37.00	
STEVEN		DECURTIS	1471	Smithfield School Dept.	PRSB	37.00	
RAYMOND		PITA	1411	Pawtucket School Dept.	PRSB	37.00	
MAUREEN	A	DEL SESTO	1381	North Providence School Dept.	PRAM	37.00	
JO ANN	M	FEDE	1281	Johnston School Dept.	PRSB	37.00	
MARCIA	A	LINBACK	1123	Cumberland School Dept. (NC)	PRMS	37.00	
CAROL		MORGAN	1331	Narragansett School Dept.	PRAM	36.50	
JOHN	P	A'VANT	1111	Cranston School Dept.	PRAM	36.50	
BRADLEY	W	MORGAN	1633	Woonsocket School Dept. (NC)	PRMS	36.00	
MARY		PAOLINO	1441	Providence School Dept.	PRSB	36.00	
ROUAIDA	J	AGHIA	1441	Providence School Dept.	PRSB	36.00	
SUZANNE	M	SOUZA	1111	Cranston School Dept.	PRSB	36.00	
BEVERLY	N	SMITH	1571	Warwick School Dept.	PRSB	35.50	
YVETTE	Y	LAMBERT	1123	Cumberland School Dept. (NC)	PRMS	35.50	
DIANE	M	DESIMONE	1441	Providence School Dept.	PRSB	35.00	
ROSEMARY HAYES		SANTOS	1441	Providence School Dept.	PRSB	35.00	
RAYMOND	W	DEPOT	1471	Smithfield School Dept.	PRSB	34.00	
ELIZABETH	E	MORRIS	1441	Providence School Dept.	PRSB	34.00	
BRENDA	L	WARNOCK	1411	Pawtucket School Dept.	PRSB	34.00	
LINDA	L	RUDDY	1413	Pawtucket School Dept. (NC)	PRMS	33.50	
MICHELLE		GAUTREAU	1631	Woonsocket School Dept.	PRSB	33.00	
DIANNE	E	PINTO	1571	Warwick School Dept.	PRSB	33.00	
MARY	E	FARGNOLI-LEONE	1571	Warwick School Dept.	PRSB	33.00	
PATRICIA	L	GIARRUSSO	1491	South Kingstown School Dept.	PRSB	33.00	
MARIE	L	HUMPHREY	1111	Cranston School Dept.	PRSB	33.00	
PETER		MOREAU	1301	Lincoln School Dept.	PRSB	32.50	
DEBORAH	R	PETRARCA	1441	Providence School Dept.	PRSB	32.00	
GEORGE		MCFADDEN	1441	Providence School Dept.	PRSB	32.00	
KATHLEEN		CUSHING	1441	Providence School Dept.	PRSB	32.00	
NANCY		SOUZA	1421	Portsmouth School Dept.	PRSB	32.00	
LINDA	M	LOMAX	1411	Pawtucket School Dept.	PRAM	32.00	
BARBARA	S	SELLECHIO	1113	Cranston School Dept. (NC)	PRMS	32.00	
WILLIAM	L	SMITH	1091	Coventry Public Schools	PRAM	32.00	
CLAIRE		LAQUERRE	1631	Woonsocket School Dept.	PRSB	31.00	
MICHAEL		JAMES	1491	South Kingstown School Dept.	PRSB	31.00	
DIANE	B	HENault	1371	North Kingstown School Dept.	PRSB	31.00	
LINDA	D	ACTON	1371	North Kingstown School Dept.	PRSB	31.00	
SUSAN	L	HATCH	1531	Tiverton School Dept.	PRSB	30.50	
CORINNE	B	TATE	1441	Providence School Dept.	PRSB	30.00	
ANN MARIE		MOLLO	1381	North Providence School Dept.	PRAM	30.00	
PETER		SMITH	1611	West Warwick School Dept.	PRSB	29.50	
LINDA MARIE		LE PAGE	1531	Tiverton School Dept.	PRSB	29.50	
ANN		HORGAN	1091	Coventry Public Schools	PRSB	29.50	
CAROLYN	M	PELZMAN	1471	Smithfield School Dept.	PRSB	29.00	
JAMES	M	PARENTE	1471	Smithfield School Dept.	PRSB	29.00	
CATHY	A	FALES	1001	Barrington Public Schools	PRSB	29.00	
NANCY	L	GAGLIARDI	1411	Pawtucket School Dept.	PRSB	28.50	
CANDACE	A	MCCALL	1441	Providence School Dept.	PRSB	28.00	
DEBORAH		STELLMACH	1441	Providence School Dept.	PRSB	28.00	
ANN	C	CAMPBELL	1123	Cumberland School Dept. (NC)	PRMS	28.00	
DEBORAH	C	RUDE	1123	Cumberland School Dept. (NC)	PRMS	28.00	
AGNES	M	SUMMERLY	1441	Providence School Dept.	PRSB	27.50	
ANN		SAN ANTONIO	1441	Providence School Dept.	PRSB	27.50	
CAROL		LAVIN	1491	South Kingstown School Dept.	PRSB	27.00	
KATHLEEN	M	BEEBE	1421	Portsmouth School Dept.	PRSB	27.00	

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First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
FRANCIS	H	CAPASSO	1371	North Kingstown School Dept.	PRSB	26.50	
CECELIA	J	MELLOR	1023	Bristol Warren Reg. School Dist. (NC)	PRMS	26.50	
RUSSELL	D	NOBLE	1001	Barrington Public Schools	PRSB	26.50	
SUSAN	V	MONTI	1441	Providence School Dept.	PRSB	26.00	
AUGUSTO		GOMES	1091	Coventry Public Schools	PRSB	26.00	
SHARON		DUNN	1341	New Shoreham School Dist.	PRAM	25.50	
ROBERT	D	MELVIN	1113	Cranston School Dept. (NC)	PRMS	25.00	
ELIZABETH	M	RUEST	1111	Cranston School Dept.	PRSB	25.00	
RONALD	F	MARA	1441	Providence School Dept.	PRSB	24.50	
KAREN	L	SHEWCOV	1413	Pawtucket School Dept. (NC)	PRMS	24.50	
CYNTHIA	A	WAHL	1611	West Warwick School Dept.	PRSB	24.00	
PERLA		MCGUINNESS	1441	Providence School Dept.	PRSB	24.00	
RALPH		ORLECK	1441	Providence School Dept.	PRSB	24.00	
STEVEN	B	JANELLE	1373	North Kingstown School Dept. (NC)	PRMS	24.00	
DOREEN		RAULINO	1611	West Warwick School Dept.	PRSB	23.50	
LISA		WALSH	1491	South Kingstown School Dept.	PRSB	23.50	
VIRGINIA	E	ELLIOTT	1373	North Kingstown School Dept. (NC)	PRMS	23.50	
ROY	A	COSTA JR	1571	Warwick School Dept.	PRSB	23.00	
JOHN	E	LAWRENCE	1471	Smithfield School Dept.	PRSB	23.00	
LAURENT		DESROSIERS	1301	Lincoln School Dept.	PRSB	23.00	
MARGO	L	WILLIAMS	1571	Warwick School Dept.	PRSB	22.50	
JAMES	E	MURANO	1621	Westerly School Dept.	PRSB	22.00	
CAROLE	M	DONAHUE	1531	Tiverton School Dept.	PRSB	22.00	
CAROL		SCHLINK	1441	Providence School Dept.	PRSB	22.00	
KAREN	L	SEITLER	1371	North Kingstown School Dept.	PRSB	22.00	
JANE	P	DOYLE	1273	Jamestown School Dept. (NC)	PRMS	22.00	
JANE	M	GLASS	1021	Bristol Warren Reg. School Dist.	PRSB	22.00	
SUSAN		MROCZKA	1631	Woonsocket School Dept.	PRSB	21.00	
DEBOURAH	I	PETTERUTI	1571	Warwick School Dept.	PRAM	21.00	
LYDIA	M	MATTERA	1441	Providence School Dept.	PRSB	21.00	
EDWARD	J	KOSTKA	1411	Pawtucket School Dept.	PRSB	21.00	
LORI	A	MILLER	1401	Northern Rhode Island Collaborative	PRAM	21.00	
EDWARD	J	FERRARIO	1371	North Kingstown School Dept.	PRSB	21.00	
DEBORAH	C	RUDE	1121	Cumberland School Dept.	PRSB	21.00	
CHERYL	S	SACHS	1111	Cranston School Dept.	PRSB	21.00	
LINDA	A	BOCK	1283	Johnston School Dept. (NC)	PRMS	20.50	
DOREEN		RAULINO	1441	Providence School Dept.	PRSB	20.00	
KAREN	T	MUIR	1441	Providence School Dept.	PRSB	20.00	
MARCELLA	O	WEINBERG	1441	Providence School Dept.	PRSB	20.00	
ANDY		BARNES	1121	Cumberland School Dept.	PRSB	20.00	
JOYCE		BERNAU	1441	Providence School Dept.	PRSB	19.50	
JOHN L	P	BREGUET	1471	Smithfield School Dept.	PRSB	19.00	
MARY		ASQUITH	1471	Smithfield School Dept.	PRSB	19.00	
ROSINA	J	GUISE	1411	Pawtucket School Dept.	PRSB	19.00	
MARYANNE		GREGORY	1121	Cumberland School Dept.	PRSB	19.00	
ANTHONY		DELSIGNORE	1111	Cranston School Dept.	PRAM	19.00	
SANTIAGO		ALMANZAR	1441	Providence School Dept.	PRSB	18.50	
CHERYL		LARIVIERE	1301	Lincoln School Dept.	PRSB	18.50	
DONNA	H	CARREIRO	1001	Barrington Public Schools	PRAM	18.50	
NETTIE	L	ALEXANDER	1441	Providence School Dept.	PRSB	18.00	
RICHARD		KERSHAW	1201	Foster/Glocester Reg. School Dist.	PRSB	18.00	
DEBRA	L	MORIARTY	1123	Cumberland School Dept. (NC)	PRMS	18.00	
THOMAS		RICHARDSON	1073	Chariho Regional School Dist. (NC)	PRMS	18.00	
GIUSEPPE		DISERIO	1473	Smithfield School Dept. (NC)	PRMS	17.50	
CHRISTOPHER	D	ROBERTSON	1161	East Providence Schools	PRSB	17.50	

Return from Suspension

**TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2022-2023 SCHOOL YEAR**  
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First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
CYNTHIA		AUBIN	1441	Providence School Dept.	PRSB	17.00	
JAMES	C	WILDE	1441	Providence School Dept.	PRSB	17.00	
LAURA		BARRETO	1413	Pawtucket School Dept. (NC)	PRMS	17.00	
JOANNE	C	VINCENT	1111	Cranston School Dept.	PRSB	17.00	
SHEILA		MORGAN	1091	Coventry Public Schools	PRSB	17.00	
DEBORAH	L	RAY	1611	West Warwick School Dept.	PRSB	16.50	
SCOTT	M	NELSON	1343	New Shoreham School Dist. (NC)	PRMS	16.50	
CAROL	R	KEEGAN	1211	Glocester School Dist.	PRSB	16.50	
DENNIS	T	RINALDI	1441	Providence School Dept.	PRSB	16.00	
LISA	J	TUTAJ-HARPIN	1031	Burrillville School Dept.	PRAM	16.00	
KENDRA	L	HAGGERTY	1441	Providence School Dept.	PRSB	15.50	
ROSANNE		BADWAY	1411	Pawtucket School Dept.	PRSB	15.50	
JAMES	H	DILLON	1091	Coventry Public Schools	PRAM	15.50	
THOMAS	R	HINES	1471	Smithfield School Dept.	PRSB	15.00	
ILEANA	R	VALENTIN-SPaulding	1441	Providence School Dept.	PRSB	15.00	
OTELINDA	L	CHARPENTIER	1411	Pawtucket School Dept.	PRSB	15.00	
ANN	C	CAMPBELL	1121	Cumberland School Dept.	PRSB	15.00	
N.DIANE		DAVIS	1023	Bristol Warren Reg. School Dist. (NC)	PRMS	15.00	
ROSEMARY	T	BURNS	1371	North Kingstown School Dept.	PRSB	14.50	
MICHAEL	J	ALLEN	1301	Lincoln School Dept.	PRSB	14.50	
KAREN		TARASKA	1183	Exeter/West Greenwich Reg. Schools (NC)	PRMS	14.50	
BETTY	A	NADROWSKI	1091	Coventry Public Schools	PRSB	14.50	
DEBRA	J	ZEPP	1491	South Kingstown School Dept.	PRAM	14.00	
CAROL	A	ROSA	1421	Portsmouth School Dept.	PRAM	14.00	
MARJORIE	B	COGAR	1421	Portsmouth School Dept.	PRSB	14.00	
CYNTHIA	A	VOSS	1411	Pawtucket School Dept.	PRSB	14.00	
LORI		DESIMONE	1301	Lincoln School Dept.	PRSB	14.00	
SUSAN		MCKEE	1641	Highlander Charter School	PRAM	14.00	
PAULA M	M	SEROWIK	1161	East Providence Schools	PRSB	14.00	
BARBARA		RUGGIERI	1113	Cranston School Dept. (NC)	PRMS	14.00	
SANDRA	M	REGO	1091	Coventry Public Schools	PRSB	14.00	
LINDA	A	BEVILAQUA	1571	Warwick School Dept.	PRSB	13.00	
LISA	A	COURNOYER	1473	Smithfield School Dept. (NC)	PRMS	13.00	
GIL	S	MONTEIRO	1441	Providence School Dept.	PRSB	13.00	
CAROLE	A	REGO	1161	East Providence Schools	PRSB	13.00	
DEBORAH	A	DEION	1621	Westerly School Dept.	PRSB	12.50	
ANNE	M	CROCKER	1121	Cumberland School Dept.	PRSB	12.50	
KATHRYN		MANSFIELD	1631	Woonsocket School Dept.	PRSB	12.00	
SARAH		MORENON	1441	Providence School Dept.	PRSB	12.00	
JOHN		JASIONOWSKI	1413	Pawtucket School Dept. (NC)	PRMS	12.00	
ANNE	D	MANTIA	1113	Cranston School Dept. (NC)	PRMS	12.00	
GERARD	J	NARKIEWICZ	1091	Coventry Public Schools	PRSB	12.00	
SUSAN	G	SQUILLANTE	1091	Coventry Public Schools	PRSB	12.00	
KRISTINE		BELL	1073	Chariho Regional School Dist. (NC)	PRMS	12.00	
JOSEPH	D	HURLEY	1001	Barrington Public Schools	PRSB	12.00	
GAIL	M	PALUMBO	1473	Smithfield School Dept. (NC)	PRMS	11.00	
DEBRA	M	VIAU	1441	Providence School Dept.	PRSB	11.00	
LYNNE	L	TORREY	1421	Portsmouth School Dept.	PRSB	11.00	
ROBERT	A	MITCHELL	1371	North Kingstown School Dept.	PRAM	11.00	
ANTHONY		DELSIGNORE	1113	Cranston School Dept. (NC)	PRMS	11.00	
ROBERTA	A	MILLETTE	1091	Coventry Public Schools	PRSB	11.00	
KURT	R	VAN DEXTER	1731	The Greene School	PRAM	10.50	
MARGARET		MCCABE	1413	Pawtucket School Dept. (NC)	PRMS	10.50	
JANICE	E	ABRAHAM	1091	Coventry Public Schools	PRSB	10.50	
JAMES	H	DILLON	1021	Bristol Warren Reg. School Dist.	PRAM	10.50	

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First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
NANCY	E	PHILLIPS	1631	Woonsocket School Dept.	PRSB	10.00	
PAUL	W	VIGEANT	1731	The Greene School	PRAM	10.00	
PATRICIA	I	RAYCES	1441	Providence School Dept.	PRSB	10.00	
STEVEN	W	COOPER	1413	Pawtucket School Dept. (NC)	PRMS	10.00	
DENISE	E	BRIERLEY	1301	Lincoln School Dept.	PRSB	10.00	
RUSSELL	E	SPENCER	1153	East Greenwich School Dist. (NC)	PRMS	10.00	
DEBRA	L	MORIARTY	1121	Cumberland School Dept.	PRSB	10.00	
SUSAN	T	ROGERS	1073	Chariho Regional School Dist. (NC)	PRMS	10.00	
EMILY		SAFFORD	1007	Barrington COLA NonCertifieds	PRMS	10.00	
JERILYN	M	TAMEO	1611	West Warwick School Dept.	PRSB	9.00	
PETER		SMITH	1441	Providence School Dept.	PRSB	9.00	
VIVIANNE	L	DESIMONE	1441	Providence School Dept.	PRSB	9.00	
JOSEPH		BRAGANCA	1413	Pawtucket School Dept. (NC)	PRMS	9.00	
ELIZABETH		LESPERANCE	1411	Pawtucket School Dept.	PRSB	9.00	
JOHN	E	LALLI	1371	North Kingstown School Dept.	PRAM	9.00	
JOHN	J	WOLF	1371	North Kingstown School Dept.	PRSB	9.00	
JUDITH ANN		ANTONIO	1161	East Providence Schools	PRSB	9.00	
RENE	P	HORENT	1091	Coventry Public Schools	PRSB	9.00	
DEBORAH	L	PACHECO	1021	Bristol Warren Reg. School Dist.	PRSB	9.00	
MICHAEL	F	FRANCOIS	1611	West Warwick School Dept.	PRSB	8.50	
JOYCE	P	FINLEY	1381	North Providence School Dept.	PRAM	8.50	
KATHLEEN	E	MARDO	1121	Cumberland School Dept.	PRSB	8.50	
ANNE	D	MANTIA	1111	Cranston School Dept.	PRAM	8.50	
CHARLES		GRAY JR	1621	Westerly School Dept.	PRSB	8.00	
LYNN	M	NICHOLAS	1531	Tiverton School Dept.	PRSB	8.00	
THOMAS		MEZZANOTTE	1441	Providence School Dept.	PRSB	8.00	
JOHN		JASIONOWSKI	1411	Pawtucket School Dept.	PRAM	8.00	
DONNA	A	DECURTIS	1381	North Providence School Dept.	PRAM	8.00	
DOMENIC	N	MARCONI	1371	North Kingstown School Dept.	PRSB	8.00	
MARY LOU		RIKER	1371	North Kingstown School Dept.	PRSB	8.00	
WILLIAM	L	SMITH	1091	Coventry Public Schools	PRSB	8.00	
ARLENE	T	VACCHELLI	1021	Bristol Warren Reg. School Dist.	PRSB	8.00	
LORI		DESIMONE	1381	North Providence School Dept.	PRSB	7.50	
CLAUDE	M	WATSKY	1331	Narragansett School Dept.	PRSB	7.50	
BARBARA		LANZIRE	1021	Bristol Warren Reg. School Dist.	PRSB	7.50	
ROBERT	J	LECHMAN	1473	Smithfield School Dept. (NC)	PRMS	7.00	
MARY KATE		CORRY	1413	Pawtucket School Dept. (NC)	PRMS	7.00	
DIANE		ENGELS	1381	North Providence School Dept.	PRAM	7.00	
AUDREY	J	HIRSCH	1331	Narragansett School Dept.	PRSB	7.00	
SARAH	S	GOLDBERG	1123	Cumberland School Dept. (NC)	PRMS	7.00	
MARIANNE		CAPOBIANCO	1111	Cranston School Dept.	PRSB	7.00	
LINDA	M	SULLIVAN	1471	Smithfield School Dept.	PRSB	6.50	
STEVEN	W	COOPER	1411	Pawtucket School Dept.	PRAM	6.50	
ROSE MARY		TEIXEIRA	1123	Cumberland School Dept. (NC)	PRMS	6.50	
SARAH	S	GOLDBERG	1121	Cumberland School Dept.	PRSB	6.50	
MARILYN		PELLERIN	1023	Bristol Warren Reg. School Dist. (NC)	PRMS	6.50	
STEPHEN	M	MCCARTY	1491	South Kingstown School Dept.	PRSB	6.00	
JAMES	E	MURANO	1371	North Kingstown School Dept.	PRSB	6.00	
SCOTT	M	NELSON	1341	New Shoreham School Dist.	PRSB	6.00	
CHRISTOPHER		DESROCHERS	1271	Jamestown School Dept.	PRSB	6.00	Accidental Disability
IRENE	B	SULLIVAN	1271	Jamestown School Dept.	PRSB	6.00	
NANCY	P	MCGOVERN	1111	Cranston School Dept.	PRSB	6.00	
ELIZABETH	M	DECOTIS	1121	Cumberland School Dept.	PRSB	5.50	
SHIRLEY		ST. AMAND	1091	Coventry Public Schools	PRSB	5.50	
KRISTINE		BELL	1071	Chariho Regional School Dist.	PRAM	5.50	

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First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
DONNA		DINUCCI	1441	Providence School Dept.	PRSB	5.00	
CHRISTOPHER		DESROCHERS	1331	Narragansett School Dept.	PRSB	5.00	Accidental Disability
DOLORES	E	O'ROURKE	1091	Coventry Public Schools	PRSB	5.00	
SUSAN		MOORE	1091	Coventry Public Schools	PRSB	5.00	
JANICE	I	SILVIA	1023	Bristol Warren Reg. School Dist. (NC)	PRMS	5.00	
CHERYL	L	PALUMBO	1007	Barrington COLA NonCertifieds	PRMS	5.00	
THOMAS	V	STEPKA	1921	Nuestro Mundo Charter School	PRSB	4.50	
TERESA		EAGAN	1341	New Shoreham School Dist.	PRAM	4.50	
DEBBI	A	MICELI	1071	Chariho Regional School Dist.	PRSB	4.50	
PATRICIA	J	BRISSETTE	1001	Barrington Public Schools	PRSB	4.50	
ANN	M	LIGUORI	1621	Westerly School Dept.	PRSB	4.00	
DIANE	B	HENAULT	1421	Portsmouth School Dept.	PRSB	4.00	
JUDITH		GUGEL	1411	Pawtucket School Dept.	PRSB	4.00	
LYNNETTE	L	FLETCHER	1343	New Shoreham School Dist. (NC)	PRMS	4.00	
PAULEEN	M	SLATER	1121	Cumberland School Dept.	PRSB	4.00	
JOHN	J	SCANLON	1111	Cranston School Dept.	PRAM	4.00	
DIANE	H	GALLISON	1021	Bristol Warren Reg. School Dist.	PRSB	4.00	
CHRISTINE	F	EGAN	1571	Warwick School Dept.	PRSB	3.50	
KAREN	E	O DONNELL	1373	North Kingstown School Dept. (NC)	PRMS	3.50	
THOMAS	V	STEPKA	1123	Cumberland School Dept. (NC)	PRMS	3.50	
PATRICIA	A	RYONE	1021	Bristol Warren Reg. School Dist.	PRSB	3.50	
STEVEN		KING	1491	South Kingstown School Dept.	PRSB	3.00	
MICHAEL	T	CAHILL	1413	Pawtucket School Dept. (NC)	PRMS	3.00	
MARY		SMALL	1411	Pawtucket School Dept.	PRSB	3.00	
LORI ANN		LUSSIER	1381	North Providence School Dept.	PRSB	3.00	
CHRISTINE	F	EGAN	1371	North Kingstown School Dept.	PRSB	3.00	
STEVEN	B	JANELLE	1371	North Kingstown School Dept.	PRAM	3.00	
STEVEN	B	JANELLE	1371	North Kingstown School Dept.	PRSB	3.00	
CHARLAYNE	R	EKELUND	1113	Cranston School Dept. (NC)	PRMS	3.00	
KRISTINE		BELL	1071	Chariho Regional School Dist.	PRSB	2.50	
ANGELA	C	HAWKINS	1021	Bristol Warren Reg. School Dist.	PRAM	2.50	
MARIA	G	JONES	1621	Westerly School Dept.	PRSB	2.00	
ANTHONY		FASCIA	1441	Providence School Dept.	PRSB	2.00	
CAROL		VESCERA	1411	Pawtucket School Dept.	PRSB	2.00	
GAIL	K	WEISBERGER	1401	Northern Rhode Island Collaborative	PRAM	2.00	
JUDITH	A	CALABRETTA	1271	Jamestown School Dept.	PRSB	2.00	
SHIRLEY-ANN		HALL	1091	Coventry Public Schools	PRSB	2.00	
SALLY ANN		ANDREOZZI	1073	Chariho Regional School Dist. (NC)	PRMS	2.00	
THOMAS		RICHARDSON	1071	Chariho Regional School Dist.	PRAM	2.00	
MARY LOU		RIKER	1021	Bristol Warren Reg. School Dist.	PRSB	2.00	
MAUREEN	A	NEUBAUER	1007	Barrington COLA NonCertifieds	PRMS	2.00	
DEBORAH	D	MELLION	1631	Woonsocket School Dept.	PRSB	1.50	
SUSAN	B	HARTSON	1441	Providence School Dept.	PRSB	1.50	
QIUPING		XIA	1441	Providence School Dept.	PRSB	1.00	
THOMAS	J	DIPIPPO	1441	Providence School Dept.	PRSB	1.00	
BARBARA		SWIENTON	1341	New Shoreham School Dist.	PRSB	1.00	
SCOTT	M	NELSON	1341	New Shoreham School Dist.	PRAM	1.00	
CHRISTINE	F	EGAN	1151	East Greenwich School Dept.	PRSB	1.00	
CLAUDIA	A	CARR	1121	Cumberland School Dept.	PRSB	1.00	
JAMES	J	KILEY	1091	Coventry Public Schools	PRSB	1.00	
JANICE		MCMAHON	1091	Coventry Public Schools	PRSB	1.00	
MARTHA	J	GALLAGHER	1091	Coventry Public Schools	PRSB	1.00	
MICHELE		SAYERS	1007	Barrington COLA NonCertifieds	PRMS	1.00	

**PRME--RETIRES WORKING MUNICIPALITIES IN 2023 CALENDAR YEAR --REPORT DTD 05-04-2023**

First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
MICHAEL	A	DEMELLO	1015	Bristol Fire Dept.	PRME	70.00	Close to limit
JESSICA		DESROCHERS	1632	City of Woonsocket	PRME	69.00	Close to limit
EMERSON	J	MARVEL	1162	City of East Providence	PRME	65.00	Close to limit
JOAO		PATITA	1610	West Warwick School NC (Legacy)	PRME	59.00	
SCOTT		GOODWIN	1392	Town of North Smithfield	PRME	36.50	
DONALD	L	GAGNON	1632	City of Woonsocket	PRME	31.00	
JEROME	D	MOYNIHAN	1632	City of Woonsocket	PRME	30.00	
CATHERINE	T	OCHS	1610	West Warwick School NC (Legacy)	PRME	29.00	
GREGORY	A	JONES	1125	Cumberland Fire Dist.	PRME	27.00	Accidental Disability
JOHN N	N	BUCCI	1112	City of Cranston	PRME	27.00	
STEVEN	M	IACOBUCCI	1112	City of Cranston	PRME	26.50	
THEODORE	J	PRZYBYLA	1462	Town of Scituate	PRME	26.00	
JOSEPH	D	ANDREOZZI	1386	North Providence Hsg. Auth.	PRME	25.10	
MICHAEL		WILDENHAIN	1412	City of Pawtucket	PRME	25.00	
MICHAEL	D	CASSIDY	1412	City of Pawtucket	PRME	24.50	
ROBERT	F	STROM	1012	Town of Bristol	PRME	24.00	
ARNOLD		VECCHIONE	1286	Johnston Housing Auth.	PRME	22.50	
KENNETH	R	MASON	1112	City of Cranston	PRME	22.50	
RICHARD		ARPIN JR	1122	Town of Cumberland	PRME	21.00	
WAYNE		BARNES	1162	City of East Providence	PRME	21.00	
KAREN	M	ASSELIN	1412	City of Pawtucket	PRME	20.50	
JOHN	J	TOOLAN	1009	Barrington COLA Group	PRME	20.00	
EDWARD	R	FRATELLI	1478	Town of Smithfield (COLA)	PRME	19.50	
LINDA	M	DIPRETE	1112	City of Cranston	PRME	19.50	
LYNN	L	BURKHARDT	1009	Barrington COLA Group	PRME	19.50	
LOUIS	J	CHARELLO	1705	Lincoln Fire Dept	PRME	19.00	
DONNA		PINTO	1412	City of Pawtucket	PRME	18.50	
LOUIS	M	PRATA	1282	Town of Johnston	PRME	18.50	
JEANNE	L	HODGE	1412	City of Pawtucket	PRME	18.00	
NORA		HAWKINS	1116	Cranston Housing Auth.	PRME	18.00	
ROBERTA	A	TURCHETTA	1112	City of Cranston	PRME	18.00	
RONALD	J	WOODS	1032	Town of Burrillville	PRME	18.00	
JOANNE		TOLCHINSKY	1116	Cranston Housing Auth.	PRME	15.50	
ANNA	E	MARINO	1112	City of Cranston	PRME	15.00	
CARL	E	VIEIRA	1372	Town of North Kingstown	PRME	15.00	
PAULINE	S	PAYEUR	1632	City of Woonsocket	PRME	15.00	
RUSSELL	E	SPENCER	1158	EAST GREENWICH-COLA-NC	PRME	15.00	



**PRME--RETIRES WORKING MUNICIPALITIES IN 2023 CALENDAR YEAR --REPORT DTD 05-04-2023**

First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
GAIL		TOPAKIAN	1112	City of Cranston	PRME	14.00	
SALLY	A	INGEGNERI-SIMONE	1282	Town of Johnston	PRME	14.00	
WILLIAM	A	HANLEY II	1352	City of Newport	PRME	14.00	
DEBRA	A	MCDOLE	1412	City of Pawtucket	PRME	13.50	
ROBERT	E	BENSON	1412	City of Pawtucket	PRME	13.50	
LAURIE	S	SIMPSON	1412	City of Pawtucket	PRME	13.00	
DAVID		ARUSSO	1286	Johnston Housing Auth.	PRME	12.50	
GLORIA	J	RADO	1412	City of Pawtucket	PRME	12.00	
DIANE	M	WALSH	1112	City of Cranston	PRME	11.00	
KENNETH	A	BROWN JR	1474	Smithfield Police Dept.	PRME	11.00	
LAURA	A	SILVIA	1009	Barrington COLA Group	PRME	11.00	
LINDA	C	ARCHETTO	1112	City of Cranston	PRME	10.50	
MARY	E	MADONNA	1412	City of Pawtucket	PRME	9.50	
PRUDENCE	M	FALLON	1532	Town of Tiverton	PRME	9.00	
HARRY	N	MCCRAY	1372	Town of North Kingstown	PRME	8.00	
KATHLEEN		SAWKA	1412	City of Pawtucket	PRME	8.00	
EDWARD	A	DAVIDSON	1282	Town of Johnston	PRME	7.50	
CHARLENE	R	GAGNON	1412	City of Pawtucket	PRME	6.50	
THOMAS	E	DUQUETTE	1602	Town of West Greenwich	PRME	6.00	
MICHAEL	J	DELYI	1272	Town of Jamestown	PRME	5.50	
DAVID	M	BEAUCHEMIN	1034	Burrillville Police Dept.	PRME	5.00	
STEPHANIE		SUSI	1282	Town of Johnston	PRME	4.50	
ROBERT		ST ANDRE	1148	Cumberland Rescue	PRME	4.00	
DAVID	E	DESJARLAIS	1154	East Greenwich Police Dept.	PRME	3.50	
DAVID	A	CARPENTER	1392	Town of North Smithfield	PRME	3.00	
DENNIS	J	DE JESUS	1112	City of Cranston	PRME	3.00	
JANET	A	EBERTS	1478	Town of Smithfield (COLA)	PRME	3.00	
JANET	C	RICHARDSON	1009	Barrington COLA Group	PRME	3.00	
DAVID		ARUSSO	1282	Town of Johnston	PRME	2.00	
MARIE	A	FISHER	1116	Cranston Housing Auth.	PRME	2.00	
DAVID	B	HULING	1157	EAST GREENWICH-COLA	PRME	1.00	
JOHN	T	OHARA	1154	East Greenwich Police Dept.	PRME	1.00	
LARETO	P	GUGLIETTA	1034	Burrillville Police Dept.	PRME	1.00	
RICHARD	J	DENICE	1154	East Greenwich Police Dept.	PRME	1.00	
JUDITH		QUATTRUCCI	1162	City of East Providence	PRME	0.50	

**RETIREEES WORKING UNDER 18K AT STATE COLLEGES/UNIVS (EMPLOYER CODE = 2000)**  
**PRIS--State colleges/univs/--Instructor at a state school - Calendar Year 2023--Report dtd -05-04-2023**

First Name	Middle Name	Last Name	Employer Code	Employer	Title/Function	Earnings	Footnote
BRUNA	M	BOYLE	2000	URI	PRIS	\$ 1,251.03	
JO-ANN		PHILLIPS	2000	URI	PRIS	\$ 1,086.21	
WILLIAM	T	BEHRENDJS JR	2000	URI	PRIS	\$ 958.62	
ALFRED	R	CRUDALE	2000	URI	PRIS	\$ 625.52	
MARIE	H	BAGUCHINSKY	2000	URI	PRIS	\$ 625.52	
GARY	C	COMUNALE	2000	URI	PRIS	\$ 543.10	

**RETIREES WORKING UNDER DRIVER'S EDUCATION INSTRUCTION and/or MOTORCYCLE DRIVER EDUCATION COURSES - (EMPLOYER CODE = 2000)**

**PRDE--State colleges/univs/ - Calendar Year 2022--Report dtd -05-04-2023**

<b>First Name</b>	<b>Middle Name</b>	<b>Last Name</b>	<b>Employer Code</b>	<b>Employer</b>	<b>Title/Function</b>	<b>Earnings</b>	<b>Footnote</b>
PETER	V	RIVELLI	2000	CCRI	PRDE	\$ 1,477.77	
LORENZO		TETREAUULT	2000	CCRI	PRDE	\$ 732.78	
PATRICIA	L	DIONNE	2000	CCRI	PRDE	\$ 732.78	
KATHLEEN	D	HUDSON	2000	CCRI	PRDE	\$ 529.23	
KATHLEEN		CRESCENZO	2000	CCRI	PRDE	\$ 244.26	


**RETIRED REGISTERED NURSES WORKING AT A STATE-OPERATED FACILITY IN RI INCLUDING EMPLOYMENT AS A FACULTY MEMBER OF A NURSING  
PROGRAM AT A STATE-OPERATED COLLEGE OR UNIVERSITY--CALENDAR YEAR 2023 (EMPLOYER CODE --2000)--REPORT DTD 05-04-2023**


<b>First Name</b>	<b>Middle Name</b>	<b>Last Name</b>	<b>Employer Code</b>	<b>Employer</b>	<b>Title/Function</b>	<b>Number of Days</b>	<b>Footnote</b>
LINDA		MASSE	2000	BHDDH--Zambarano	PRNR	13.00	
ERIN	M	SCANLON	2000	BHDDH--ESL	PRNR	8.50	


# Employees' Retirement System of Rhode Island




## 9.2. Report of Contributions


		Employees' Retirement System of Rhode Island			
		Report of Received Contributions			
		Period Ending: 4/30/2023			
Organization		Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation
1001	Barrington Public Schools	BIWK	\$ 214,880.55		
1007	Barrington COLA Non-Certified	BIWK	\$ 25,507.88		
1009	Barrington COLA Group	BIWK	\$ 8,954.92		
1012	Town of Bristol	BIWK	\$ 12,565.39		
1014	Bristol Police Department	BIWK	\$ 13,254.04		
1016	Bristol Housing Authority	WKLY	\$ 2,333.43		
1019	Town of Bristol EE Highway	BIWK	\$ 10,699.12		
1021	Bristol Warren Reg. School District	BIWK	\$ 184,537.18		
1023	Bristol Warren Reg. School District (NC)	BIWK	\$ 28,522.18		
1031	Burrillville School Department	BIWK	\$ 113,074.56		
1032	Town of Burrillville	BIWK	\$ 26,096.62		
1033	Burrillville School Department (NC)	BIWK	\$ 14,200.58		
1036	Burrillville Housing Authority	WKLY	\$ 1,161.24		
1052	City of Central Falls	BIWK	\$ 10,664.61		
1054	Central Falls Police	BIWK	\$ 5,261.02		
1056	Central Falls Housing Authority	WKLY	\$ 5,745.47		
1061	Central Falls Collaborative	BIWK	\$ 176,408.12	^	\$7,046.38
1063	Central Falls School District (NC)	BIWK	\$ 28,082.23	^	\$3,592.61
1071	Chariho Regional School District	BIWK	\$ 122,866.48		
1073	Chariho Regional School District (NC)	BIWK	\$ 23,318.35		
1082	Town of Charlestown	BIWK	\$ 11,238.25		
1091	Coventry Public Schools	BIWK	\$ 275,108.26		
1095	Coventry Fire District	BIWK	\$ 3,871.04		
1096	Coventry Housing Authority	BIWK	\$ 3,366.24		
1098	Coventry Lighting District	BIWK	\$ 257.28		
1111	Cranston School Department	BIWK	\$ 771,492.31		
1112	City of Cranston	BIWK	\$ 43,588.72		
1113	Cranston School Department (NC)	BIWK	\$ 68,444.68		
1114	Cranston Police Department	BIWK	\$ 50,035.98	*	
1115	Cranston Fire Department	BIWK	\$ 71,070.36	*	
1116	Cranston Housing Authority	BIWK	\$ 8,138.57		
1121	Cumberland School Department	BIWK	\$ 270,542.23		
1122	Town of Cumberland	BIWK	\$ 26,174.54		
1123	Cumberland School Department (NC)	BIWK	\$ 26,138.73		
1126	Cumberland Housing Authority	WKLY	\$ 2,963.60		
1151	East Greenwich School Department	BIWK	\$ 162,270.77		
1152	Town of East Greenwich	WKLY	\$ 7,324.60		
1153	East Greenwich School District (NC)	BIWK	\$ 2,219.84		
1156	East Greenwich Housing Authority	BIWK	\$ 2,451.34		
1157	East Greenwich - COLA	WKLY	\$ 11,295.90		
1158	East Greenwich - COLA - NC	BIWK	\$ 15,304.54		
1159	East Greenwich Fire District (NC)	WKLY	\$ 199.24		
1161	East Providence School Department	BIWK	\$ 301,931.85		
1162	City of East Providence	BIWK	\$ 50,283.61		
1163	East Providence School Department (NC)	BIWK	\$ 45,695.20		
1166	East Providence Housing Authority	WKLY	\$ 4,366.20		
1181	Exeter/West Greenwich Reg. School Department	BIWK	\$ 61,758.60		

		<b>Employees' Retirement System of Rhode Island</b>			
		<b>Report of Received Contributions</b>			
		<b>Period Ending: 4/30/2023</b>			
Organization		Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation
1183	Exeter/West Greenwich Reg. School Department (NC)	BIWK	\$ 15,358.91		
1191	Foster School District	BIWK	\$ 12,673.84		
1192	Town of Foster	WKLY	\$ 3,810.69		
1193	Foster School District (NC)	BIWK	\$ 2,218.79		
1201	Foster/Glocester Reg. School District	BIWK	\$ 81,412.24		
1203	Foster/Glocester Reg. School District (NC)	BIWK	\$ 10,792.70		
1211	Glocester School District	BIWK	\$ 25,927.28		
1212	Town of Glocester	BIWK	\$ 9,678.69		
1213	Glocester School District (NC)	BIWK	\$ 4,911.77		
1227	Greenville Water District	WKLY	\$ 1,612.76		
1242	Hope Valley-Wyoming Fire District	BIWK	\$ 417.12		
1255	Hopkins Hill Fire Department	BIWK	\$ 4,271.88		
1262	Town of Hopkinton	BIWK	\$ 9,545.73		
1271	Jamestown School Department	BIWK	\$ 21,556.80		
1272	Town of Jamestown	BIWK	\$ 12,866.06		
1273	Jamestown School Department (NC)	BIWK	\$ 6,341.69		
1281	Johnston School Department	BIWK	\$ 207,898.07		
1282	Town of Johnston	BIWK	\$ 19,180.21		
1283	Johnston School Department (NC)	BIWK	\$ 19,276.98		
1286	Johnston Housing Authority	WKLY	\$ 1,789.90		
1293	Limerock Adm. Services	WKLY	\$ 258.08		
1301	Lincoln School Department	BIWK	\$ 205,244.32		
1302	Town of Lincoln	BIWK	\$ 2,518.38		
1303	Lincoln School Department (NC)	BIWK	\$ 1,149.54		
1306	Lincoln Housing Authority	BIWK	\$ 5,157.73		
1311	Little Compton School Department	BIWK	\$ 9,957.03		
1321	Middletown Public Schools	BIWK	\$ 129,688.92		
1322	Town of Middletown	BIWK	\$ 9,865.56		
1323	Middletown Public School Department (NC)	BIWK	\$ 12,838.57		
1331	Narragansett School Department	BIWK	\$ 60,669.45		
1336	Narragansett Housing Authority	MNLY	\$ 1,184.93		
1341	New Shoreham School District	BIWK	\$ 5,289.04		
1342	Town of New Shoreham	BIWK	\$ 5,528.37		
1343	New Shoreham School District (NC)	BIWK	\$ 1,466.38		
1351	Newport School Department	BIWK	\$ 91,187.20		
1352	City of Newport	BIWK	\$ 70,790.22		
1353	Newport School Department (NC)	BIWK	\$ 13,622.28		
1354	City of Newport - Monthly	MNLY	\$ 21.66		
1356	Newport Housing Authority	WKLY	\$ 8,093.32		
1364	Newport Police Department	BIWK	\$ 12,616.26		
1371	North Kingstown School Department	BIWK	\$ 153,119.83		
1372	Town of North Kingstown	BIWK	\$ 32,221.02		
1373	North Kingstown School Department (NC)	BIWK	\$ 26,811.76		
1381	North Providence School Department	BIWK	\$ 62,059.15		
1382	Town of North Providence	BIWK	\$ 12,444.88		
1383	North Providence School Department (NC)	BIWK	\$ 8,807.77		
1386	North Providence Housing Authority	BIWK	\$ 1,685.11		

		<b>Employees' Retirement System of Rhode Island</b>			
		<b>Report of Received Contributions</b>			
		<b>Period Ending: 4/30/2023</b>			
Organization		Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation
1391	North Smithfield School Department	BIWK	\$ 99,999.95		
1392	Town of North Smithfield	BIWK	\$ 9,505.89		
1393	North Smithfield School Department (NC)	BIWK	\$ 9,749.68		
1401	Northern Rhode Island Collaborative	BIWK	\$ 24,520.43		
1403	Northern Rhode Island Collaborative (NC)	BIWK	\$ 10,273.23		
1411	Pawtucket School Department	BIWK	\$ 359,802.33		
1412	City of Pawtucket	WKLY	\$ 62,263.78		
1413	Pawtucket School Department (NC)	BIWK	\$ 42,890.27		
1416	Pawtucket Housing Authority	WKLY	\$ 13,136.30		
1421	Portsmouth School Department	BIWK	\$ 144,102.93		
1441	Providence School Department	BIWK	\$ 707,542.54		
1447	Providence School Department Long Term Subs	WKLY	\$ 3,440.03		



		<b>Employees' Retirement System of Rhode Island</b>			
		<b>Report of Received Contributions</b>			
		<b>Period Ending: 4/30/2023</b>			
Organization		Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation
1448	Providence School Department - 12 Month Bi-Weekly	BIWK	\$ 88,375.96		
1452	Town of Richmond	BIWK	\$ 3,410.39		
1461	Scituate School Department	BIWK	\$ 87,483.60		
1462	Town of Scituate	BIWK	\$ 8,616.05		
1463	Scituate School Department (NC)	BIWK	\$ 8,003.39		
1471	Smithfield School Department	BIWK	\$ 219,232.80		
1473	Smithfield School Department (NC)	BIWK	\$ 26,158.14		
1476	Smithfield Housing Authority	BIWK	\$ 541.80		
1478	Town of Smithfield (COLA)	WKLY	\$ 19,993.86		
1491	South Kingstown School Department	BIWK	\$ 122,481.60		
1492	Town of South Kingstown	BIWK	\$ 37,999.02		
1493	South Kingstown School Department (NC)	BIWK	\$ 20,366.40		
1496	South Kingstown Housing Authority	WKLY	\$ 1,091.30		
1515	Union Fire District	BIWK	\$ 1,915.36		
1531	Tiverton School Department	BIWK	\$ 105,696.56		
1532	Town of Tiverton	BIWK	\$ 6,435.37		
1533	Tiverton School Department (NC)	BIWK	\$ 11,862.88		
1538	Tiverton Local 2670A	BIWK	\$ 5,383.90		
1541	Urban Collaborative Schools	BIWK	\$ 4,545.28		
1562	Town of Warren	BIWK	\$ 17,671.99		
1566	Warren Housing Authority	BIWK	\$ 2,093.20		
1571	Warwick School Department	BIWK	\$ 351,044.23		
1591	West Bay Collaborative	BIWK	\$ 7,288.22		
1602	Town of West Greenwich	WKLY	\$ 9,122.99		
1611	West Warwick School Department	BIWK	\$ 134,473.87		
1612	Town of West Warwick	WKLY	\$ 3,896.86		
1613	West Warwick School Department (NC)	BIWK	\$ 6,765.52		
1616	West Warwick Housing Authority	BIWK	\$ 3,739.20		
1621	Westerly School Department	BIWK	\$ 173,682.56		
1631	Woonsocket School Department	BIWK	\$ 217,210.26		
1632	City of Woonsocket	BIWK	\$ 30,388.65		
1633	Woonsocket School Department (NC)	BIWK	\$ 35,830.51		
1634	Woonsocket Police Department	WKLY	\$ 31,499.62		
1635	Woonsocket Fire Department	BIWK	\$ 32,975.30		
1641	Highlander Charter School	SMON	\$ 22,037.90		
1651	Paul Cuffee School	BIWK	\$ 30,882.00		
1661	Kingston Hill Academy School	BIWK	\$ 23,665.93		
1671	International Charter School	BIWK	\$ 11,823.27		
1681	The Compass School	SMON	\$ 8,492.36		
1691	Blackstone Academy Charter School, Inc.	SMON	\$ 11,484.60		
1701	Beacon Charter School of Woonsocket	SMON	\$ 19,036.18		
1711	The Learning Community Charter School	BIWK	\$ 15,585.18		
1712	Harrisville Fire District - Municipal	WKLY	\$ 1,468.22		
1721	Segue Institute of Learning	BIWK	\$ 6,546.73		
1731	The Greene School	BIWK	\$ 9,382.94		
1741	Trinity Academy	SMON	\$ 3,786.83		
1751	RI Nurses Institute	SMON	\$ 10,451.45		

		<b>Employees' Retirement System of Rhode Island</b>			
		<b>Report of Received Contributions</b>			
		<b>Period Ending: 4/30/2023</b>			
Organization		Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation
1761	The Village Green Virtual Charter School	SMON	\$ 5,644.96		
1771	Nowell Leadership Academy	BIWK	\$ 10,959.30		
1781	South Side Elementary Charter School	BIWK	\$ 5,355.07		
1791	Charette Charter School	SMON	\$ 3,004.22		
1901	Providence Preparatory Charter School	WKLY	\$ 15,961.60		
1911	Times 2 Academy	WKLY	\$ 1,727.12		
1921	Nuestro Mundo Charter School	BIWK	\$ 2,145.48		
2000	State	BIWK	\$ 3,052,750.49		
2300	Narragansett Bay Commission	BIWK	\$ 25,890.12		
			<b>\$11,364,091.27</b>		
<b>Column Definitions:</b>					
<b>Frequency</b> = BIWK = Bi-Weekly; WKLY = Weekly; SMON = Semi-Monthly					
<b>Received Employer/Employee contributions</b> = Contributions received during the reporting period					





Employees' Retirement System of Rhode Island

Employer Aging  
Period Ending: 4/15/23

		Employer	Balance as of	0 - 30 days	30 - 60 days	60 - 90 days	90 + days	
	Organization	Group	4/15/2023	Due under 30	Due over 30	Due over 60		Comments
1021	Bristol/Warren Regional School Department	ERS	1,116.50	-	1,116.50		-	
1061	Cental Falls Collaborative	ERS	-	-	-		-	Last Invoice Loaded 3/8/2023. Working with Eric.
1181	Exeter-West Greenwich Regional School District	ERS	3,267.12	-	-	-	-	
1191	Foster School District	ERS	15,359.77	-	-	-	-	
1211	Glocester School District	ERS	893.27	-	-	-	-	
1281	Johnston School Department	ERS	220,761.57	-	-	-	-	
1351	Newport School Department	ERS	197,207.27	-	-	-	-	
1381	North Providence School Department	ERS	225,163.14	-	-	-		
1401	Northern RI Collaborative	ERS	15,013.03	-	15,013.03	-	-	Last Invoice Loaded 2/11/2023
1421	Portsmouth School Department	ERS	773.41	-	-	-	773.41	
1441	Providence School Department	ERS	115,268.48	-	-	-	-	
1447	Providence School Department Long-Term Substitutes	ERS	3,289.31	-	-	-		
1471	Smithfield School Dept.	ERS	-	-	-	-	-	Last Invoice Loaded 2/25/2023. Working with Eric.
1491	South Kingstown School Department	ERS	207,071.75	-	-			
1541	Urban Collaborative	ERS	14,051.44	-	-	-		
1661	Kingston Hill Academy, Inc.	ERS	10,029.68	-	-	-	-	
1731	The Greene School	ERS	10,049.19	-	-	-	-	
1741	Trinity Academy for the Performing Arts	ERS	12,072.11	-	12,072.11	-		
1921	Nuestro Mundo Charter School	ERS	6,649.64	-	-	-	-	
Grand total			1,058,036.68	0.00	28,201.64	0.00	773.41	
			100.00%	0.00%	2.67%	0.00%	0.07%	



Employees' Retirement System of Rhode Island

Employer Aging  
Period Ending: 4/15/23

		Employer	Balance as of	0 - 30 days	30 - 60 days	60 - 90 days	90 + days	
	Organization	Group	4/15/2023	Due under 30	Due over 30	Due over 60		Comments
1012	Town of Bristol	MERS	35,495.65	-	-	-	-	
1014	Bristol Police Department	MERS	20,089.26	-	-	-	-	
1015	Bristol Fire Department	MERS	1,969.82	-	-	-	-	
1023	Bristol/Warren Regional School Department Non-Certified Employees	MERS	361.18	-	361.18	-	-	
1032	Town of Burrillville	MERS	0.10	-	-	-	-	
1056	Central Falls Housing Authority	MERS	4,107.50	-	-	-	-	
1063	Central Falls School Dist. (NC)	MERS	-	-	-	-	-	Last Invoice Loaded 3/8/2023. Working with Eric.
1073	Chariho Regional School District Non-Certified Employees	MERS	180.97	-	-	-	180.97	
1082	Town of Charlestown	MERS	14.94	-	-	-	14.94	
1095	Coventry Fire Department	MERS	10.00	-	-	10.00	-	
1125	Cumberland Fire Department	MERS	0.09	-	-	-	-	
1126	Cumberland Housing Authority	MERS	1,575.86	-	-	-	-	
1152	Town of East Greenwich	MERS	4,852.04	-	-	-	-	
1154	East Greenwich Police Department	MERS	38,803.91	-	-	-	-	
1155	East Greenwich Fire District	MERS	45,046.85	-	-	-	-	
1157	Town of East Greenwich - COLA	MERS	10,136.44	-	-	-	-	
1159	East Greenwich Fire Department - Administration	MERS	633.28	-	-	-	-	
1163	East Providence School Department Non-Certified Employees	MERS	1,370.12	-	1,370.12	-	-	
1193	Foster School District Non-Certified Employees	MERS	3,113.89	-	-	-	-	
1283	Johnston School Department Non-Certified Employees	MERS	33,615.66	-	-	-	-	
1352	City of Newport	MERS	105,031.65	-	-	-	-	
1353	Newport School Department Non-Certified Employees	MERS	54,006.52	-	-	-	-	
1373	North Kingstown School Department Non-Certified Employees	MERS	52,020.53	-	-	-	-	
1382	Town of North Providence	MERS	19,436.71	-	-	-	-	
1383	North Providence School Department Non-Certified Employees	MERS	11,757.63	-	-	-	-	
1385	North Providence Fire Department	MERS	106,646.72	-	-	-	-	
1403	Northern Rhode Island Collaborative (NC)	MERS	-	-	-	-	-	Last Invoice Loaded 1/28/2023.
1413	Pawtucket School Department Non-Certified Employees	MERS	998.45	-	-	-	-	
1463	Scituate School Dept. (NC)	MERS	14,043.47	14,043.47		-	-	Invoice Just loaded 5/11/2023.
1473	Smithfield School Dept. (NC)	MERS	-	-	-	-	-	Last Invoice Loaded 2/11/2023. Working with Eric.
1492	Town of South Kingstown	MERS	50,559.66	-	-	-	-	
1493	South Kingstown School Department Non-Certified Employees	MERS	27,281.85	-	-	-	-	
1494	South Kingstown Police Department	MERS	67,068.99	-	-	-	-	
1505	South Kingstown EMT	MERS	5,317.67	-	-	-	-	
1562	Town of Warren	MERS	12,416.91	-	-	-	-	
1564	Warren Police Department	MERS	28,771.16	-	-	-	-	
1609	Town of West Warwick - legacy	MERS	14,960.18	-	-	-	-	
1632	City of Woonsocket	MERS	39,808.59	-	-	-	-	

1634	Woonsocket Police Department	MERS	109,055.79	-	-	-	-	
1635	Woonsocket Fire Department	MERS	63,684.38	-	-	-	-	
1705	Lincoln Fire District	MERS	0.01		-	-	-	
Grand total			984,244.43	14,043.47	1,731.30	10.00	195.91	
			100.00%	1.43%	0.18%	0.00%	0.02%	

## Employees' Retirement System of Rhode Island



### 9.3. State Investment Commission (SIC)

# **MONTHLY PERFORMANCE REPORT - (NET)**

## **State of Rhode Island Pension Plan**

**March 31, 2023**

**Kevin Leonard, Partner**

**Douglas W. Moseley, Partner**

**Alexandra Sollers, Sr. Consulting Specialist**



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO



# **SIC MEETING AGENDA AND MINUTES**

NEPC, LLC

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State of Rhode Island  
Office of the General Treasurer

**James A. Diossa**  
General Treasurer

## **RHODE ISLAND STATE INVESTMENT COMMISSION MEETING NOTICE**

The next meeting of the Rhode Island State Investment Commission has been scheduled for Wednesday, April 26<sup>th</sup>, 2023 at 9:00 a.m. **in the Executive Conference Room, Department of Administration, 1 Capitol Hill, Providence; and streamed via Zoom Webinar [dial-in: +1 312 626 6799; Webinar ID: (831 1869 4436); link: (<https://bit.ly/3ZU7Ehd>)].**

### **AGENDA**

- Chairperson Call to Order
- Membership Roll Call
- Approval of Draft Meeting Minutes <sup>1</sup>
  - State Investment Commission Meeting held March 22<sup>nd</sup>, 2023
- Capital Markets Assumptions Discussion <sup>1</sup>
  - Phil Nelson, Kevin Leonard & Matt Maleri, NEPC
- Private Equity Recommendation, CVC Capital Partners IX <sup>1</sup>
  - Saul Ioffe, Investment Staff
  - Tom Lynch, Cliffwater
- Private Real Assets (ex-Real Estate) Recommendation, Stonepeak Opportunities Fund LP <sup>1</sup>
  - Kevin Li, Investment Staff
  - Tom Lynch, Cliffwater
- Defined Contribution and Deferred Compensation RFP, Provider Recommendation <sup>1</sup>
  - Kimberly Shockley, Investment Staff
  - Tiffany Spudich, Capital Cities
- Legal Counsel Report
- Chief Investment Officer Report
- Treasurer's General Comments

<sup>1</sup>Commission members may be asked to vote on this item.

**POSTED ON APRIL 21, 2023**

Anyone wishing to attend this meeting who may have special needs for access or services such as an interpreter, please contact Dana Fatuda at (401) 574-9144 twenty-four hours in advance of the scheduled meeting.



**State Investment Commission  
Monthly Meeting Minutes  
Wednesday, March 22nd, 2023  
9:00 a.m.**

**Executive Conference Room, Department of Administration**

[dial-in: +1 312 626 6799; Webinar ID: (840 8922 9730); link: (<https://bit.ly/3mSyVTD>)]

A Monthly Meeting of the State Investment Commission ("SIC") was called to order at 9:01 AM, Wednesday, March 22<sup>nd</sup>, 2023 in the Executive Conference Room, Department of Administration.

## **I. Roll Call of Members**

The following members were present: Mr. Frank Karpinski, Mr. Michael Costello, Ms. Susan Chung, Mr. Jim Thorsen, Mr. Thomas Fay, Mr. Al Cumplido, and Treasurer James A. Diossa.

Also in attendance: Mr. Brian Newman, Mr. Sean O'Malley, and Mr. Sean Lindsay, Ventas; Mr. Wes Fuller, Mr. James O'Brien, Ms. Jennifer Ciullo, and Mr. Jordan Kabbani, Greystar; Mr. Matthew Maleri & Mr. Kevin Leonard, NEPC; Mr. Thomas Lynch, Cliffwater; Mr. Colin Hill, Ms. Abigail Fischer & Ms. Sarah Christo, Meketa; Mr. Joe Newton, GRS; Mr. Matthew Waters, Adler Pollock & Sheehan, legal counsel; Mr. Eric Baggesen, Chief Investment Officer; and other members of the Treasurer's Staff.

Treasurer Diossa called the meeting to order at 9:01 AM.

## **II. Approval of Minutes**

On a motion by Mr. Jim Thorsen and seconded by Mr. Thomas Fay, it was unanimously **VOTED: to approve the draft meeting minutes of the February 22<sup>nd</sup>, 2023 meeting of the State Investment Commission.**

## **III. Core Real Estate Recommendation, Ventas Life Science and Healthcare Real Estate Fund, L.P.**

Mr. Kevin Li, Senior Investment Analyst, introduced the proposed recommendations for the Rhode Island Employees Retirement Systems Pooled Trust ("ERSRI") and the Rhode Island OPEB System Trust ("OPEB") to make certain commitments to Ventas Life Science and Healthcare Real Estate Fund, L.P. ("VLSHREF"). Mr. Li elaborated on the fund's portfolio fit within the Core Real Estate portfolio as a diversifying strategy that will invest in the niche life sciences property segment to which ERSRI and OPEB currently lack exposure.

Mr. Brian Newman, Ventas, introduced the Ventas organization and team, highlighting the firm's expertise investing in healthcare real estate. Mr. Newman discussed the fund's existing portfolio of properties and noted that the fund is well positioned for a rising interest rate environment since it had secured low fixed rate debt prior to the changes in capital market conditions. Mr. Sean O'Malley, Ventas, provided additional background on Ventas and highlighted the firm's extensive

March 22<sup>nd</sup>, 2023

portfolio of assets within the largest geographic clusters for life science, research and innovation at the corporate and higher education sectors. Mr. O'Malley pointed out the importance of ESG to Ventas and the efforts Ventas takes to analyze environmental impacts of their properties, as well as the high scores the firm has received from GRESB, a global benchmark for real estate manager ESG. Mr. Sean Lindsay, Ventas, provided additional details on Ventas's research process and the unique insights the firm has access to via its proprietary data and extensive experience in the sector. Mr. O'Malley discussed the strong to-date investment performance of the fund, which has outperformed its target return.

Mr. Colin Hill, Meketa, highlighted the role of sector-specialist real estate strategies to complement Rhode Island's diversified fund exposures. Mr. Hill highlighted that there are few investment managers that provide access to the life science property types that Ventas will target, framing the fund as a unique offering relative to peers that primarily fold life science into diversified offerings.

The Board asked questions.

On a motion by Mr. Michael Costello and seconded by Ms. Jim Thorsen, it was unanimously **VOTED: that (A) the Rhode Island Employees Retirement Systems Pooled Trust make a commitment of up to \$25 million to Ventas Life Science and Healthcare Real Estate Fund, L.P., with no more than 50% of the total commitment called in one fiscal quarter; and (B) that the Rhode Island OPEB System Trust make a commitment of up to \$2 million to Ventas Life Science and Healthcare Real Estate Fund, L.P., with no more than 50% of the total commitment called in one fiscal quarter; in each of the foregoing cases (A) and (B), subject to legal and investment staff review.**

#### **IV. Non-Core Real Estate Recommendation, Greystar Equity Partners XI, L.P.**

Mr. Saul Ioffe, Portfolio Manager, Private Assets, introduced the proposed recommendations for the Rhode Island Employees Retirement Systems Pooled Trust ("ERSRI") and the Rhode Island OPEB System Trust ("OPEB") to make commitments to Greystar Equity Partners XI, L.P. Mr. Ioffe highlighted the fit of Greystar Equity Partners XI, L.P. ("GEP XI") within ERSRI's and OPEB's Non-Core Real Estate portfolios as a sector specialist targeting multifamily properties. Mr. Ioffe highlighted that Rhode Island has not committed to a specialist fund in this space since 2014 and that relative to the ODCE index, ERSRI is underweight to the asset class.

Ms. Jennifer Ciullo, Greystar, introduced the presenters from Greystar and framed GEP XI as Greystar's flagship fund that comprises the firm's "best ideas" within the value-add residential real estate space. Mr. Wes Fuller, Greystar, provided background regarding Greystar's portfolio and their success within the rental housing industry. Mr. Fuller highlighted the global footprint and local presence of the Greystar team. Mr. James O'Brien, Portfolio Manager, discussed Greystar's strategy of buying properties at attractive values, improving property management, and implementing capital improvements. Mr. Jordan Kabbani, Senior Director, Strategy & Research, described Greystar's ability to opportunistically pivot into specialized rental markets to create diversification and find value in the portfolio. Mr. Kabbani highlighted Greystar's focus on keeping rents at attainable levels and maintaining stable rent-to-income ratios for their tenants, which has led to stable occupancy with low tenant turnover after a property is acquired.

Mr. Colin Hill, Meketa, highlighted the expertise Greystar brings to the multifamily space as well as the power of the firm's scale in terms of materials purchases, insurance costs, and employee retention. Mr. Hill elaborated on tenant support that Greystar provides to ensure a positive relationship with its tenants.

The Board asked questions.

On a motion by Mr. Michael Costello and seconded by Mr. Jim Thorsen the Board unanimously **VOTED: that (A) the Rhode Island Employees Retirement Systems Pooled Trust make a commitment of up to \$20 million to Greystar Equity Partners XI, L.P.; and (B) that the Rhode Island OPEB System Trust make a commitment of up to \$600,000 to Greystar Equity Partners XI, L.P.; in each of the foregoing cases (A) and (B), subject to legal and investment staff review.**

## **V. Capital Market Assumptions Discussion**

Mr. Matt Maleri, NEPC, summarized the use cases of capital market assumptions and highlighted that the assumptions presented to the SIC will be used during the 2023 asset/liability study. Mr. Maleri compared the forecasted returns in various markets produced by NEPC, Meketa, and Cliffwater. Mr. Phillip Nelson, NEPC, elaborated on the methodology NEPC uses to produce return forecasts for 10-year and 30-year periods and how these outlooks aid the analysis/planning. Mr. Nelson talked about the importance of scenario analysis in capital markets assumptions due to the uncertainty of future outcomes.

Mr. Joe Newton, GRS, introduced the asset-liability model GRS used for its 2022 actuarial valuation of the State Employees plan within ERSRI. Mr. Newton discussed the projected contribution requirements of the State as an employer for the State Employees plan and demonstrated the sensitivity of the contribution to realized investment returns. Mr. Newton elaborated on how the cash flows of the plan should evolve over time given various contribution rate and return scenarios. Mr. Newton concluded by discussing the upcoming experience study that will be conducted in the coming months to examine the actuarial assumptions being used.

Mr. Thomas Lynch, Cliffwater, and Mr. Colin Hill, Meketa, voiced their views that the capital markets assumptions prepared by the group were appropriate for use in the asset allocation review.

The Board asked questions.

## **VI. Legal Counsel Report**

There was no legal counsel report.

## **VII. Chief Investment Officer Report**

There was no Chief Investment Officer report.

## **VIII. Treasurer's General Comments**

March 22<sup>nd</sup>, 2023

Treasurer Diosa asked if there were any further comments or questions and thanked the Board and Staff.

On a motion by Mr. Jim Thorsen and seconded by Mr. Thomas Fay, it was unanimously **VOTED: to adjourn the meeting at 1:21 PM.**

Respectfully submitted,

**James A. Diosa,  
General Treasurer**

DRAFT

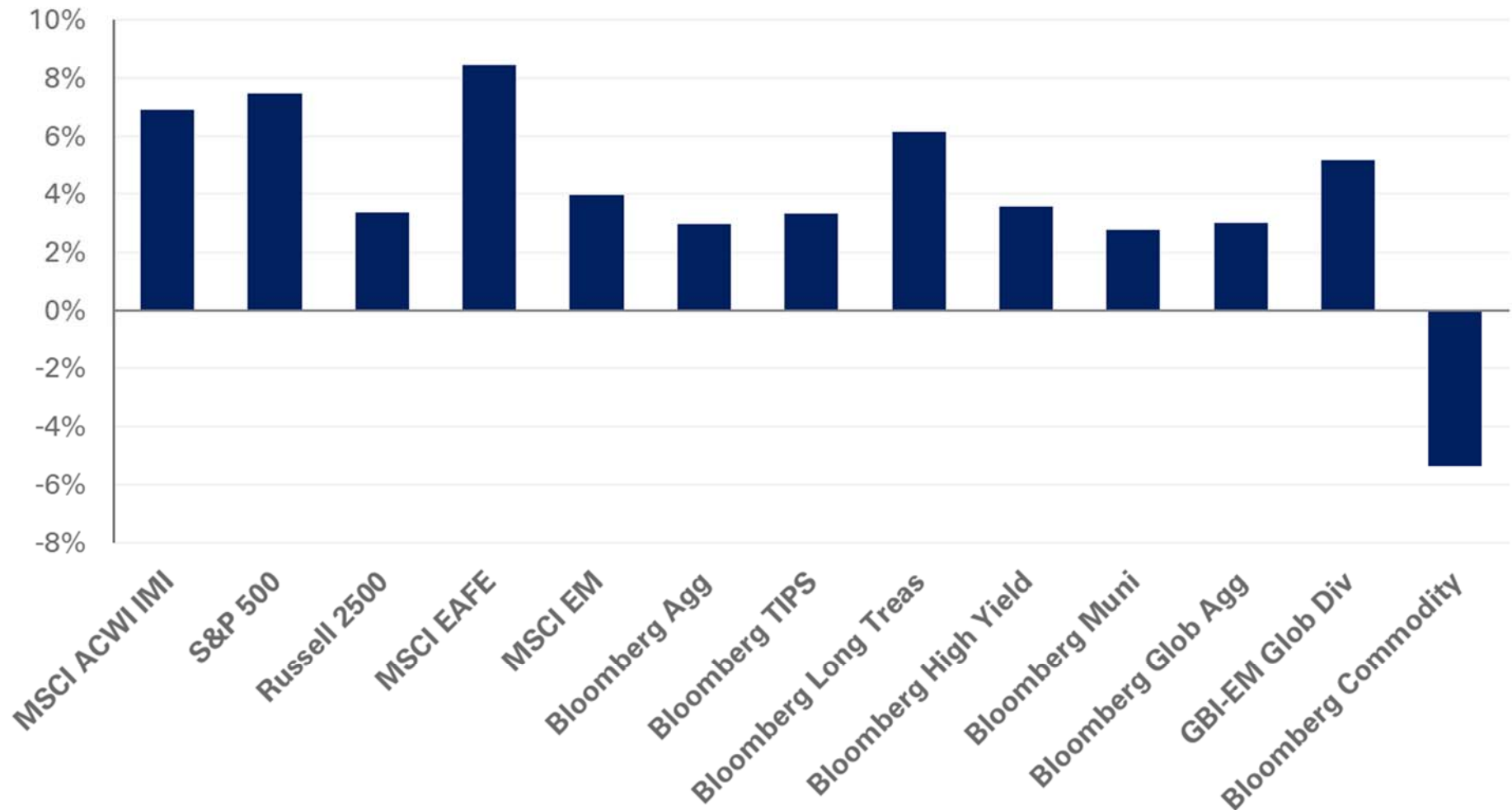
March 22<sup>nd</sup>, 2023



# MARKET OVERVIEW

# GLOBAL ASSETS REBOUNDED DURING Q1

## QUARTERLY TOTAL RETURNS





# REBALANCING OPPORTUNITIES REMAIN LIMITED

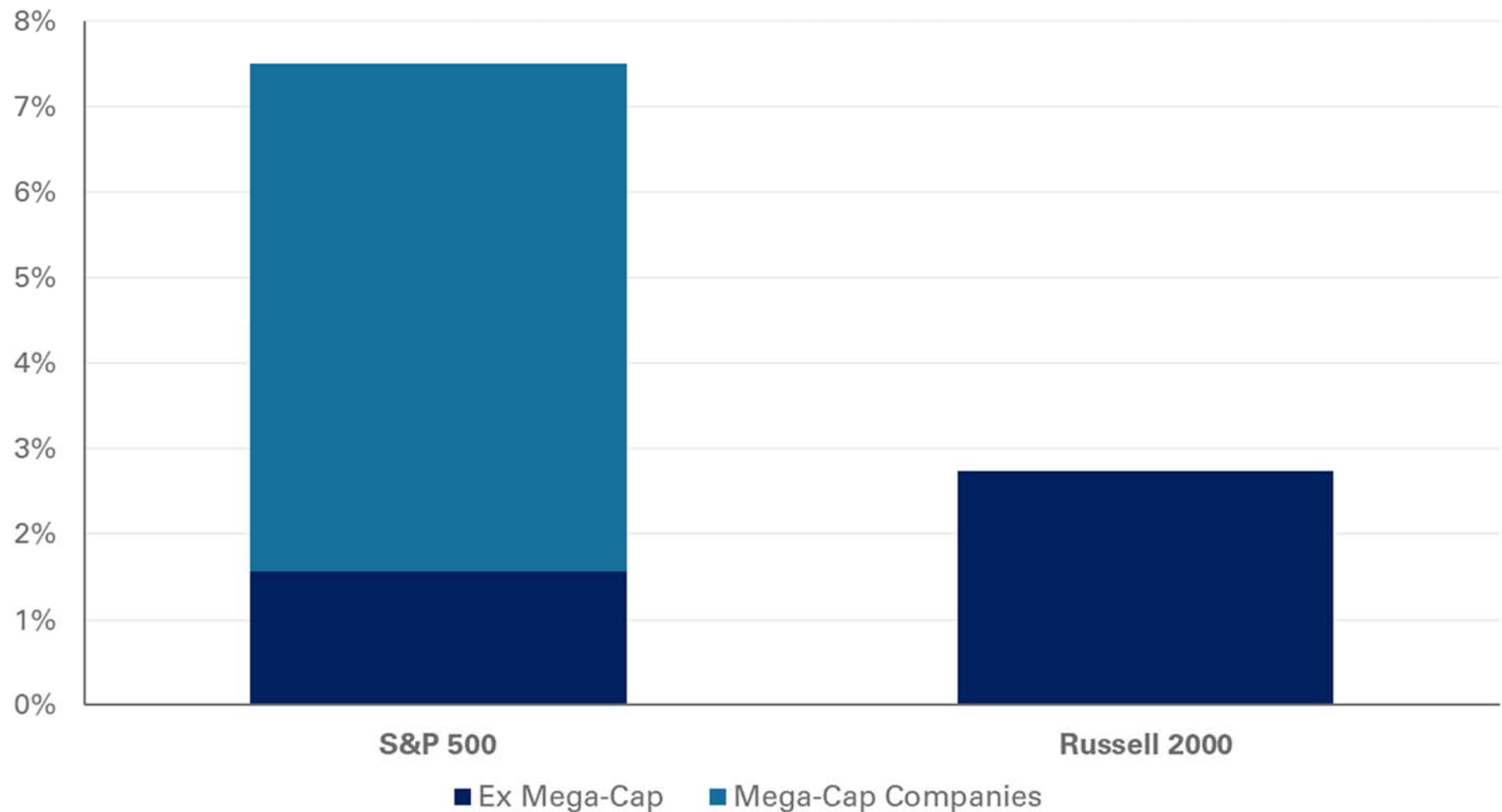
## CUMULATIVE CHANGE IN EQUITY ALLOCATION: 60/40 PORTFOLIO



Each period represent S&P 500 peak-to-trough starting portfolio consist of 60% S&P 500 and 40% Bloomberg U.S. Aggregate Bond  
Source: S&P, Bloomberg, FactSet

# MEGA-CAP COMPANIES SUPPORTED S&P RETURNS

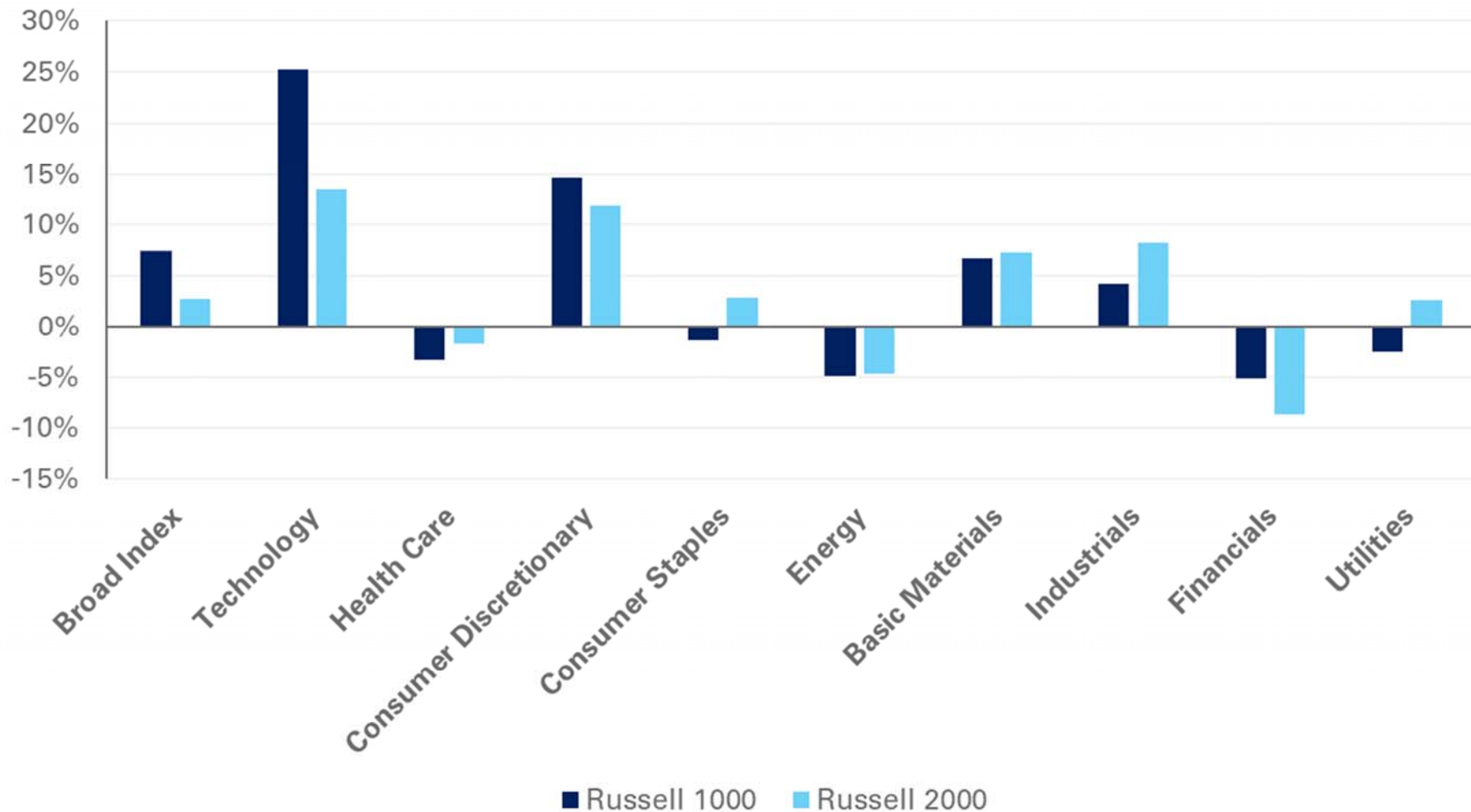
## QUARTERLY CONTRIBUTION TO TOTAL RETURNS



Mega-Cap companies represent Alphabet, Amazon, Apple, Microsoft, Meta Platforms, Tesla, and Nvidia  
Sources: S&P, Russell, FactSet

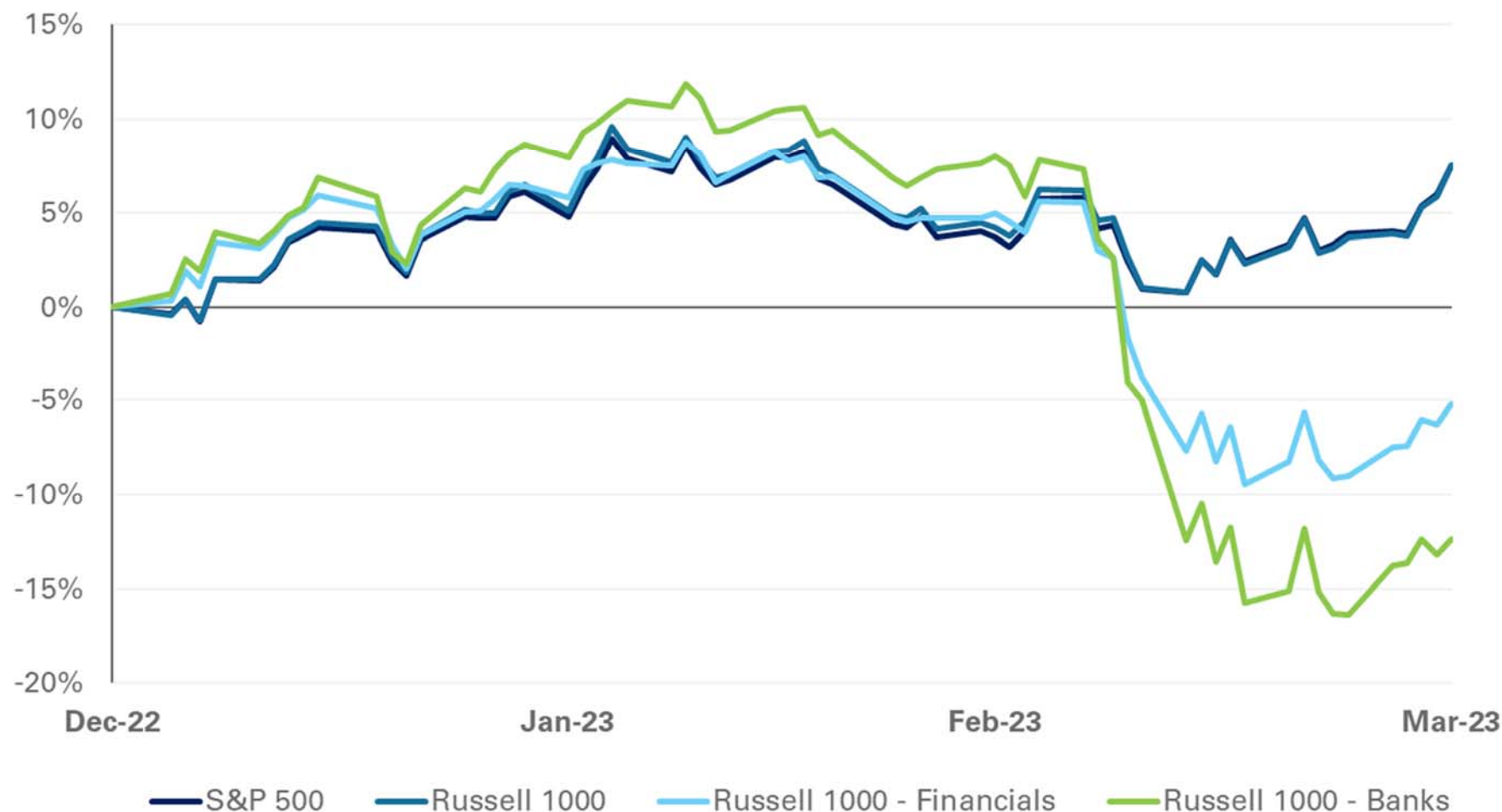
# THE FINANCIAL SECTOR UNDERPERFORMED

## QUARTERLY TOTAL RETURNS



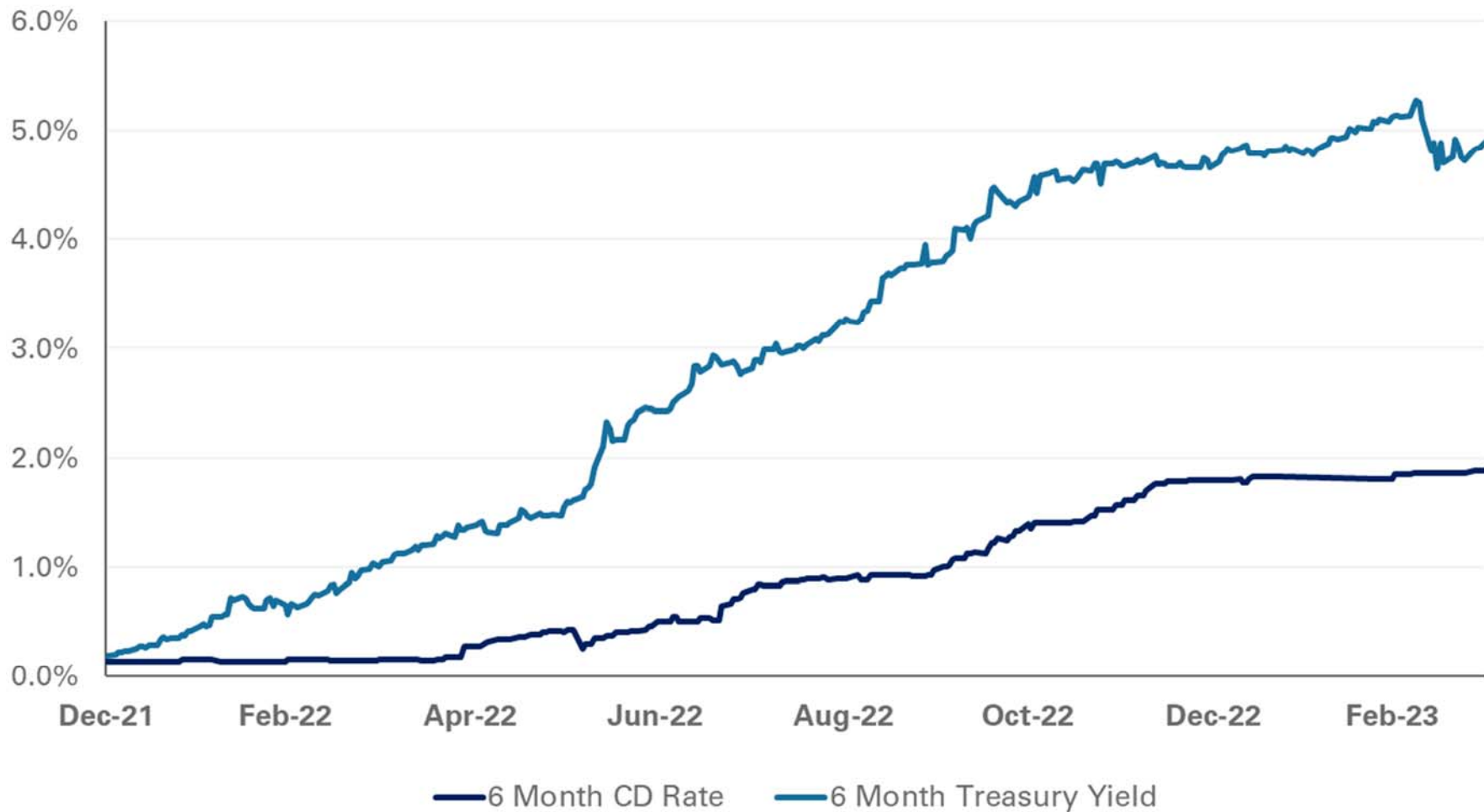
# THE BANKING INDUSTRY CAME UNDER PRESSURE

## CUMULATIVE TOTAL RETURNS



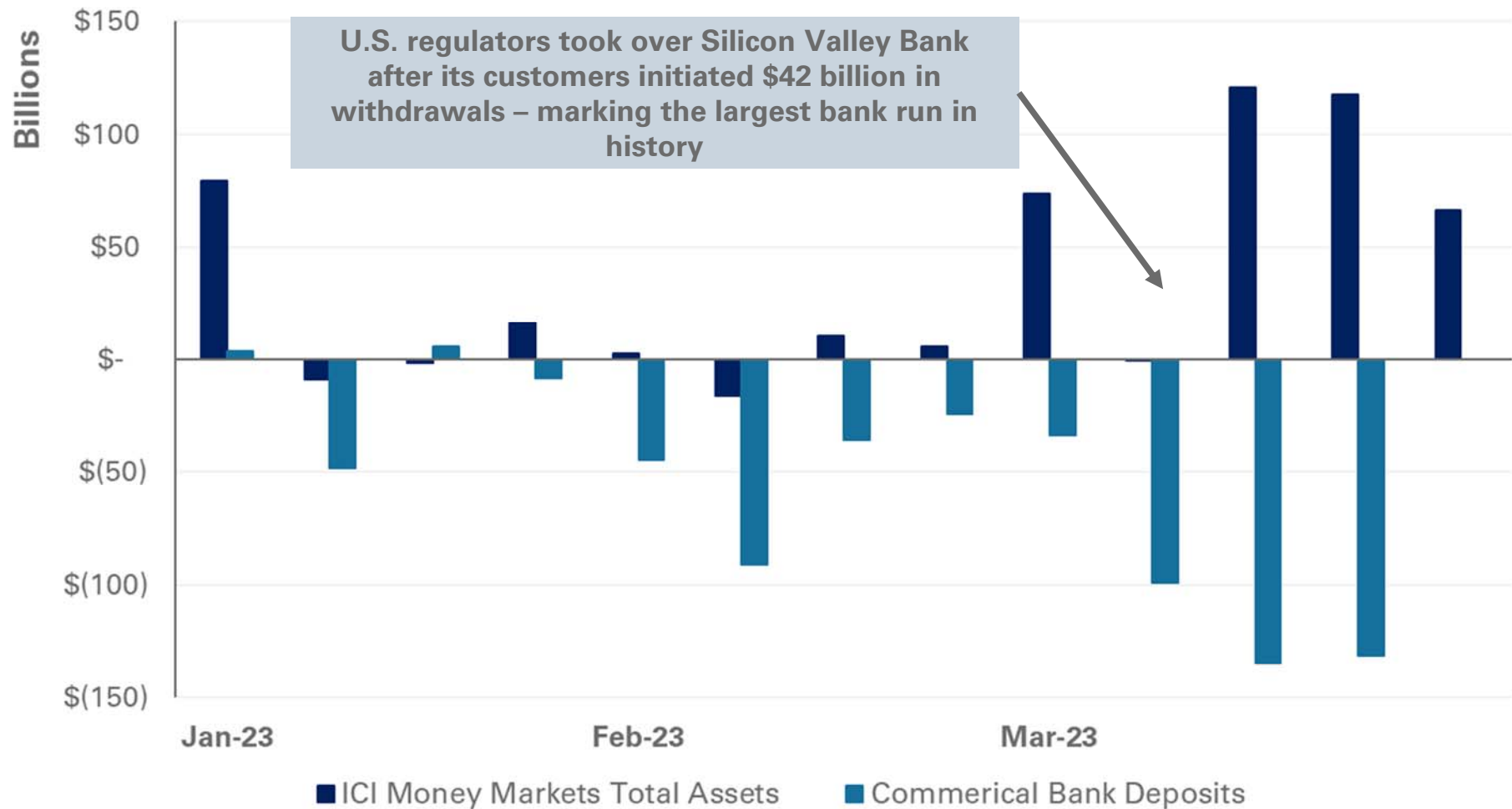
# BANK DEPOSIT RATES ARE BELOW MARKET LEVELS

## 6-MONTH CD RATES VERSUS 6-MONTH TREASURY YIELDS



# MONEY MARKET FUNDS SAW LARGE INFLOWS

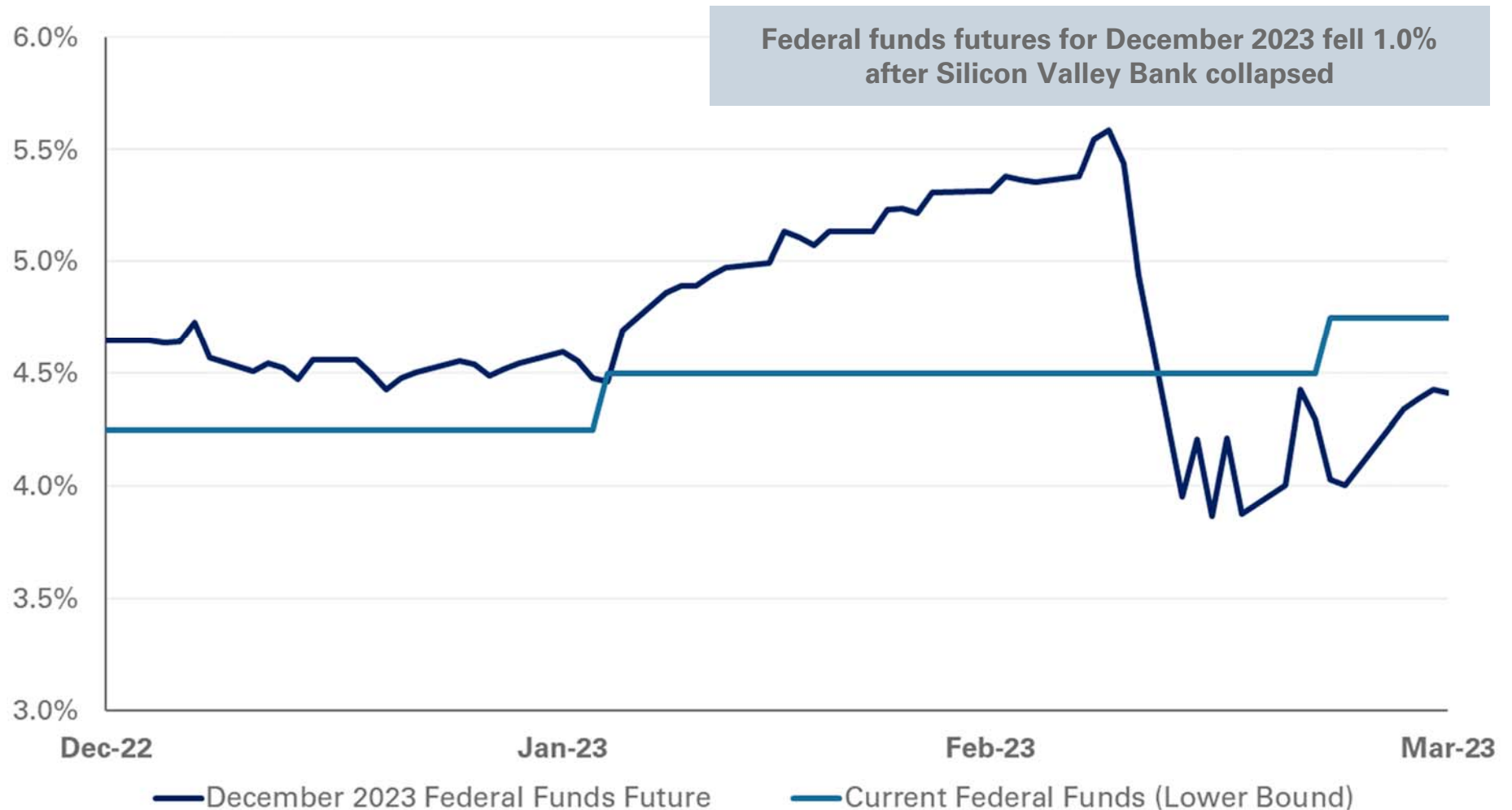
## MONTHLY CHANGE IN ASSETS AND DEPOSITS



Source: ICI, Federal Reserve, FactSet

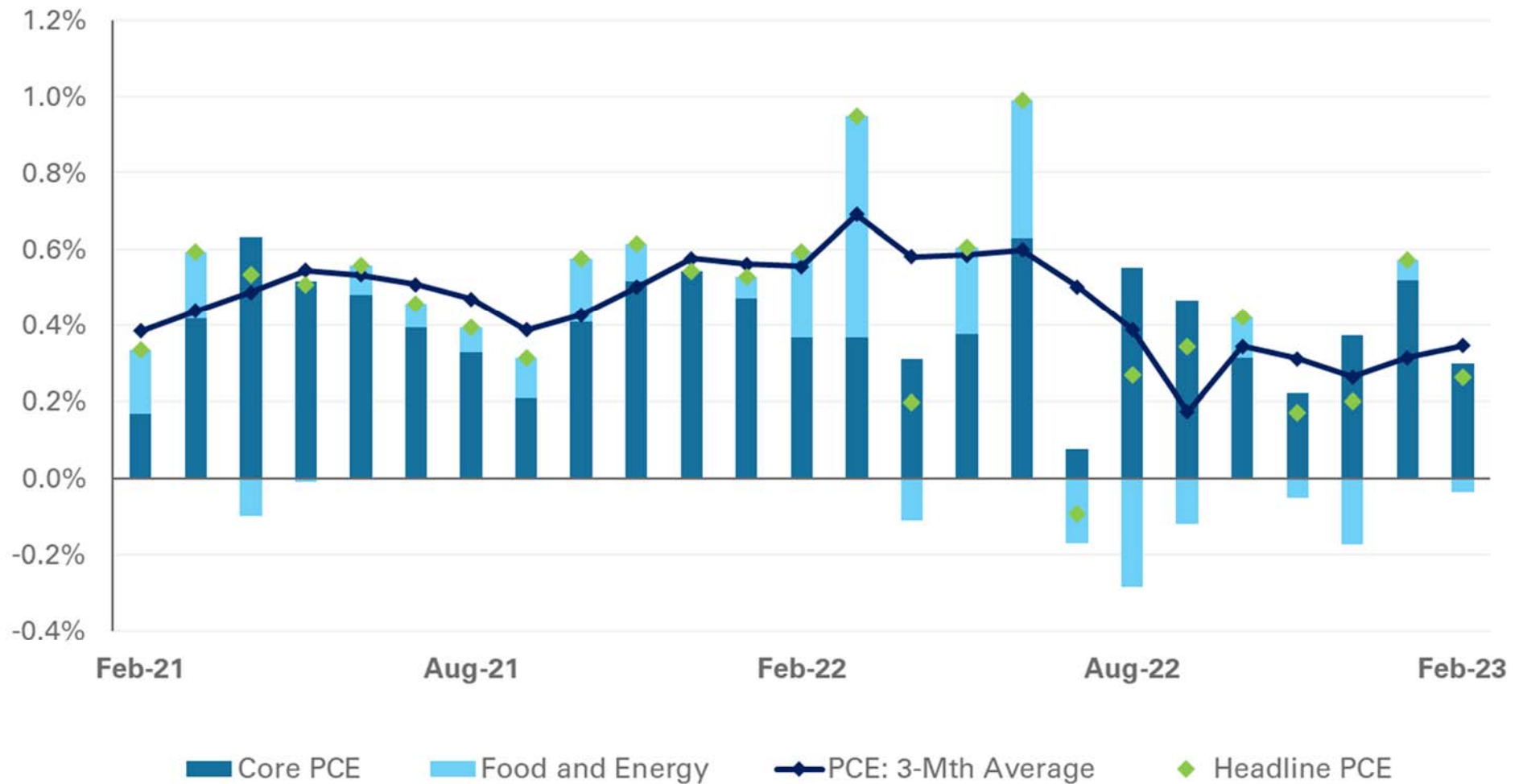
# FUTURE RATE EXPECTATIONS ARE VOLATILE

## DECEMBER 2023 FEDERAL FUNDS FUTURES



# CORE INFLATION REMAINED ELEVATED

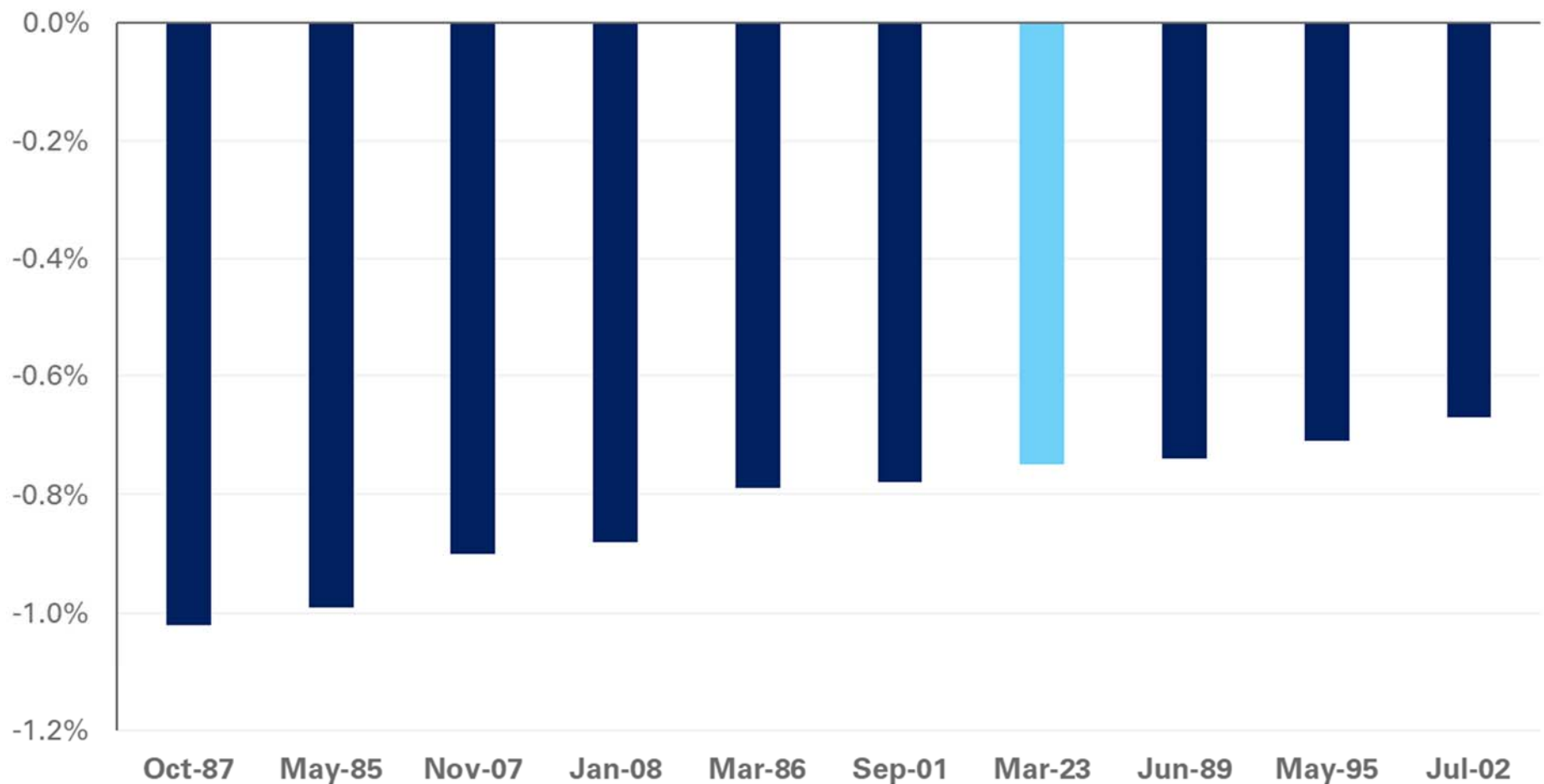
## MONTHLY U.S. PCE PRICE INDEX CHANGES





# THE 2-YEAR TREASURY YIELD FELL DRAMATICALLY

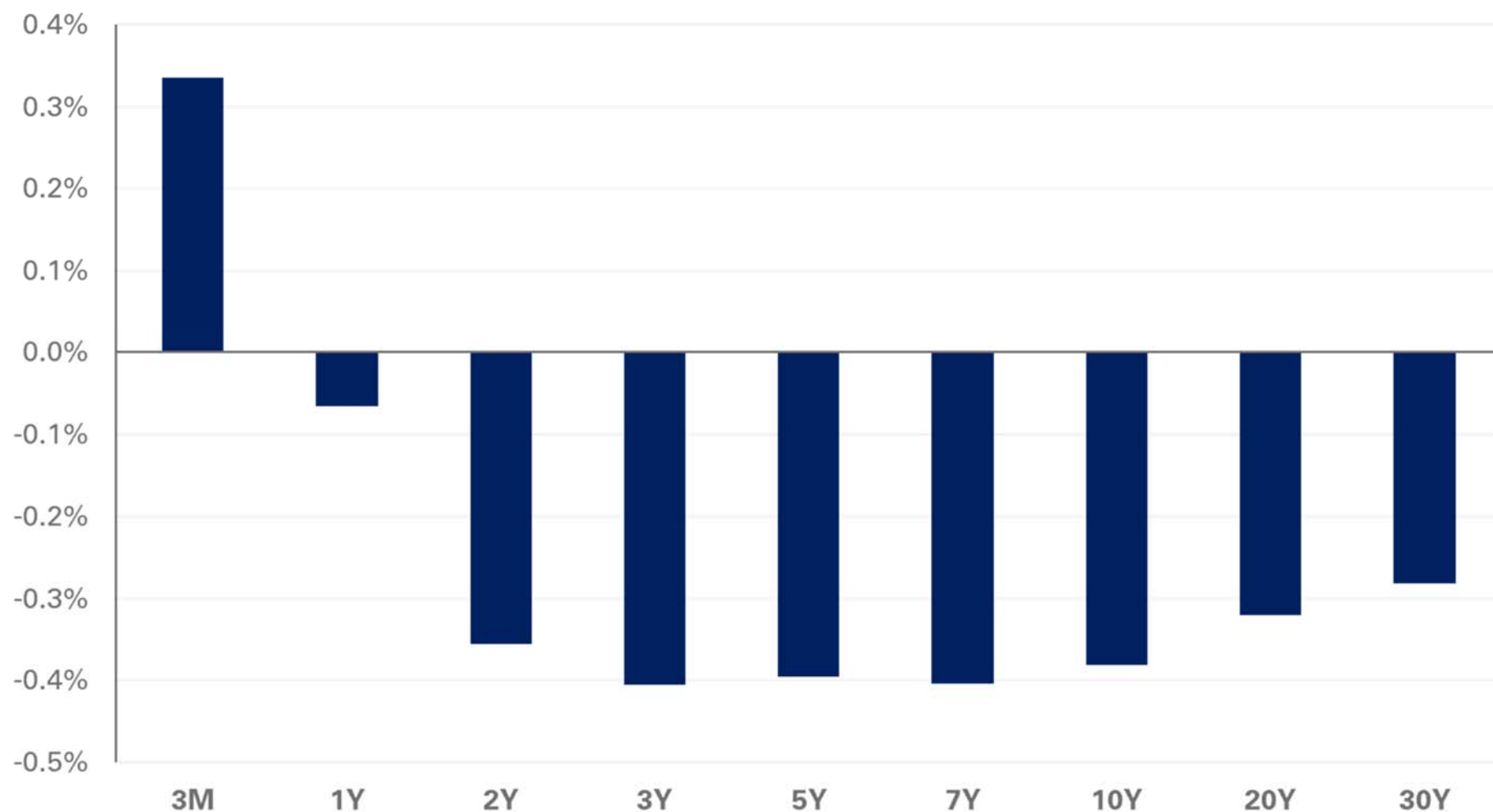
## TOP MONTHLY DECLINES: 2-YEAR TREASURY YIELD



Data calculated since 12/31/1984; There are 11 instances since 1979 where the 2-year treasury experienced monthly declines larger than March 2023.  
Source: FactSet

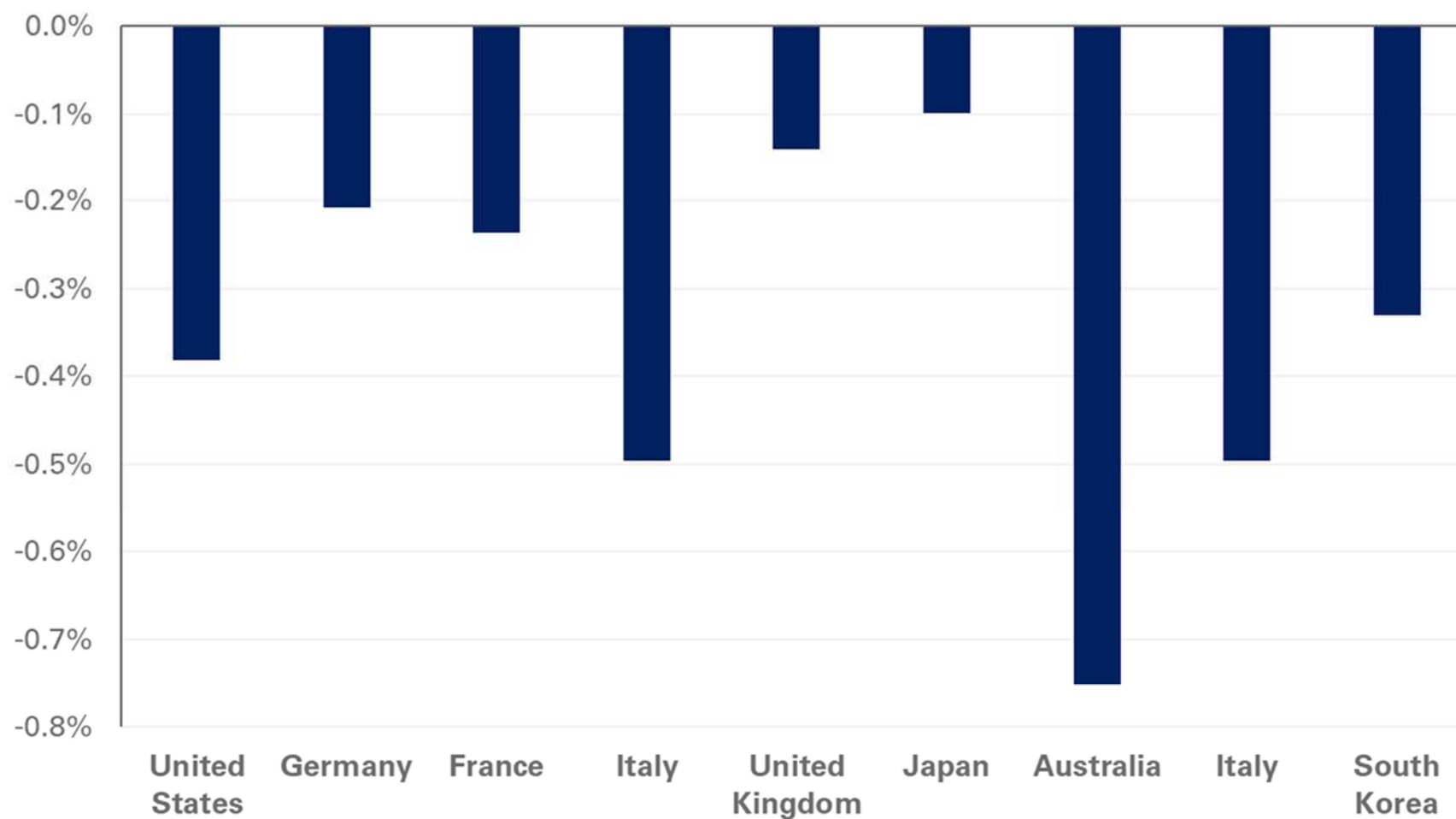
# THE U.S. TREASURY YIELD CURVE SHIFTED LOWER

## QUARTERLY CHANGE IN U.S. TREASURY YIELDS



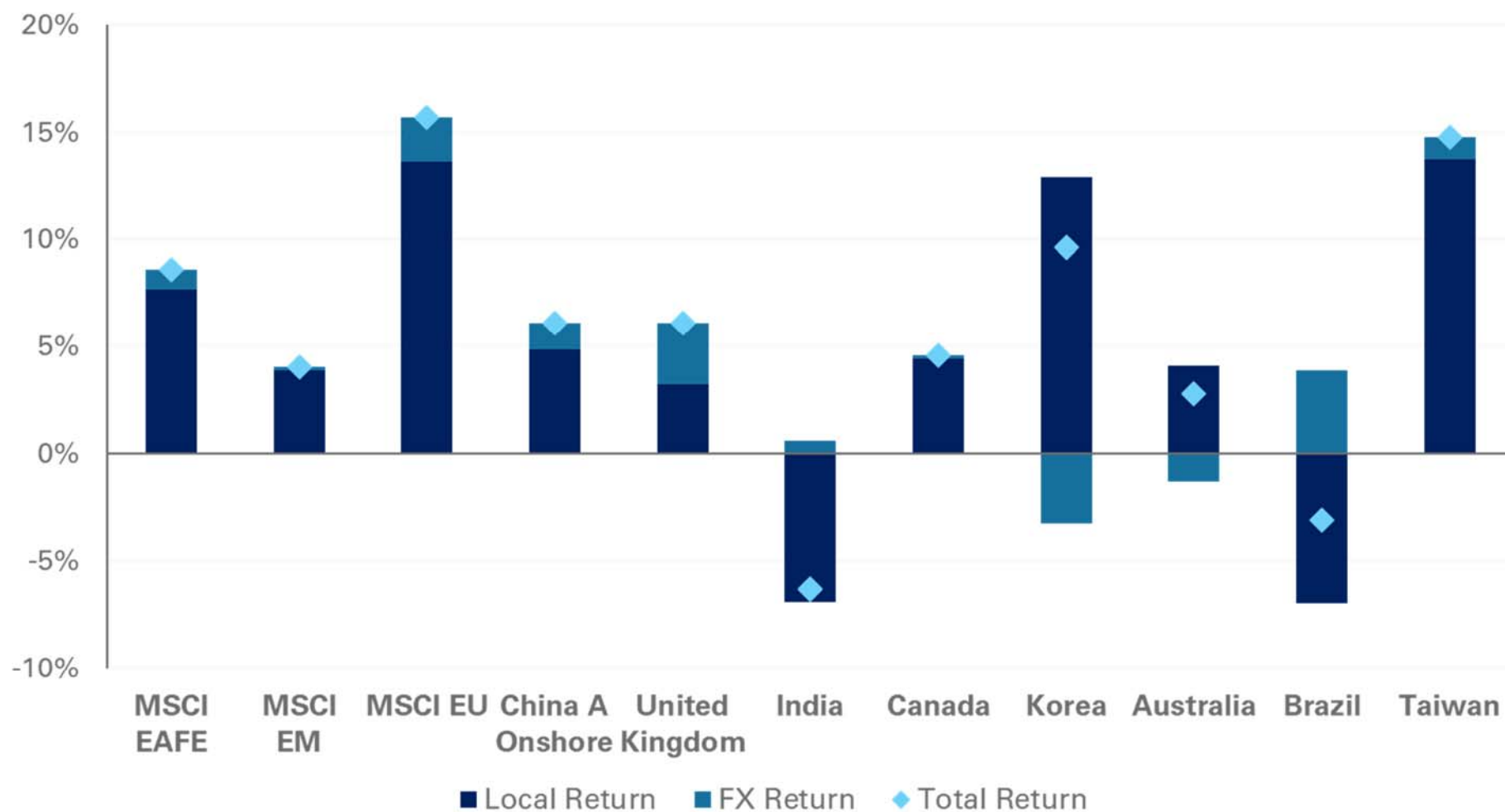
# GLOBAL GOVERNMENT BOND YIELDS DECLINED

## QUARTERLY 10-YEAR GOVERNMENT BOND YIELD CHANGE



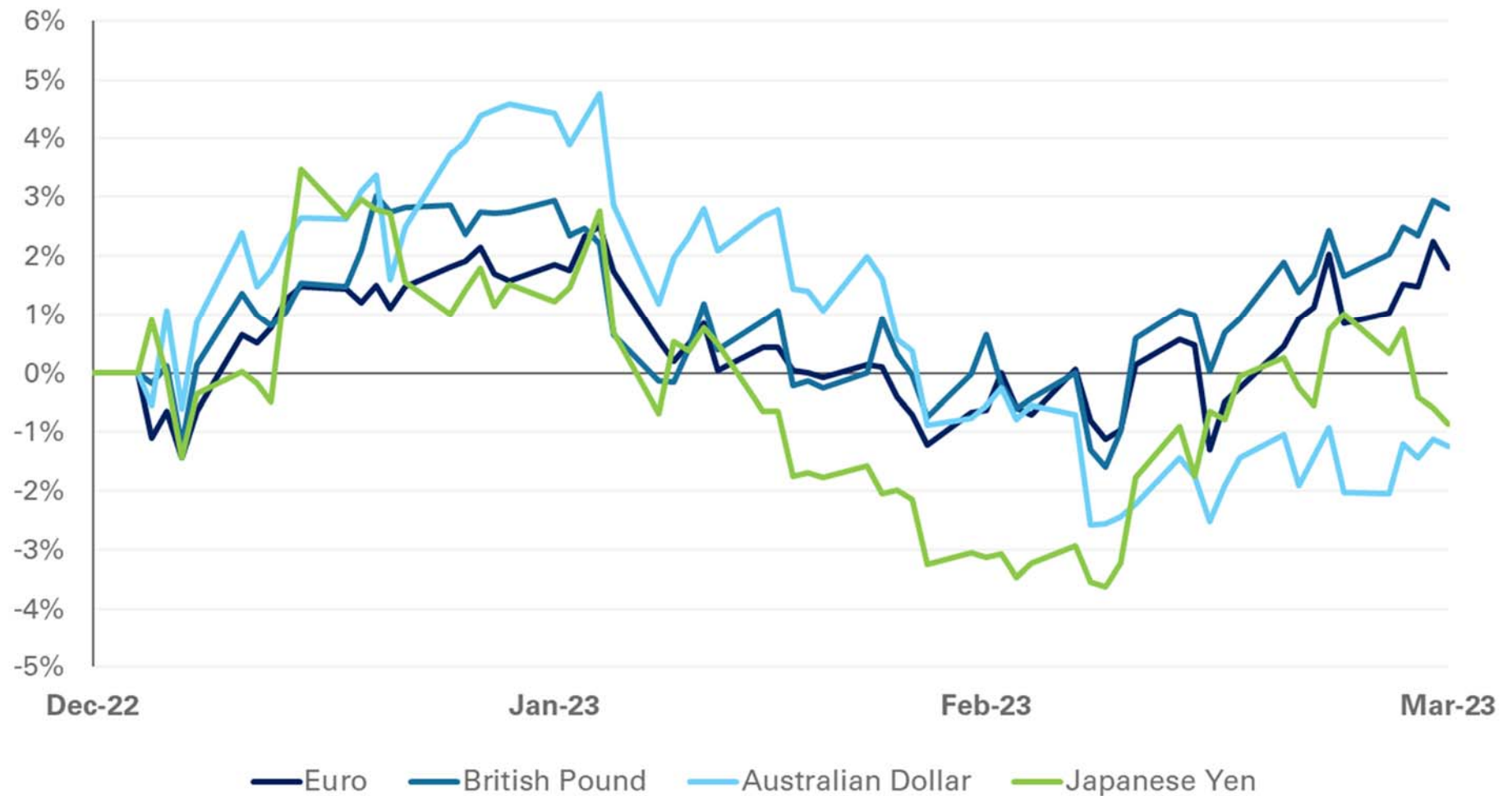
# DOLLAR WEAKNESS SUPPORTED NON-U.S. ASSETS

## QUARTERLY RETURNS

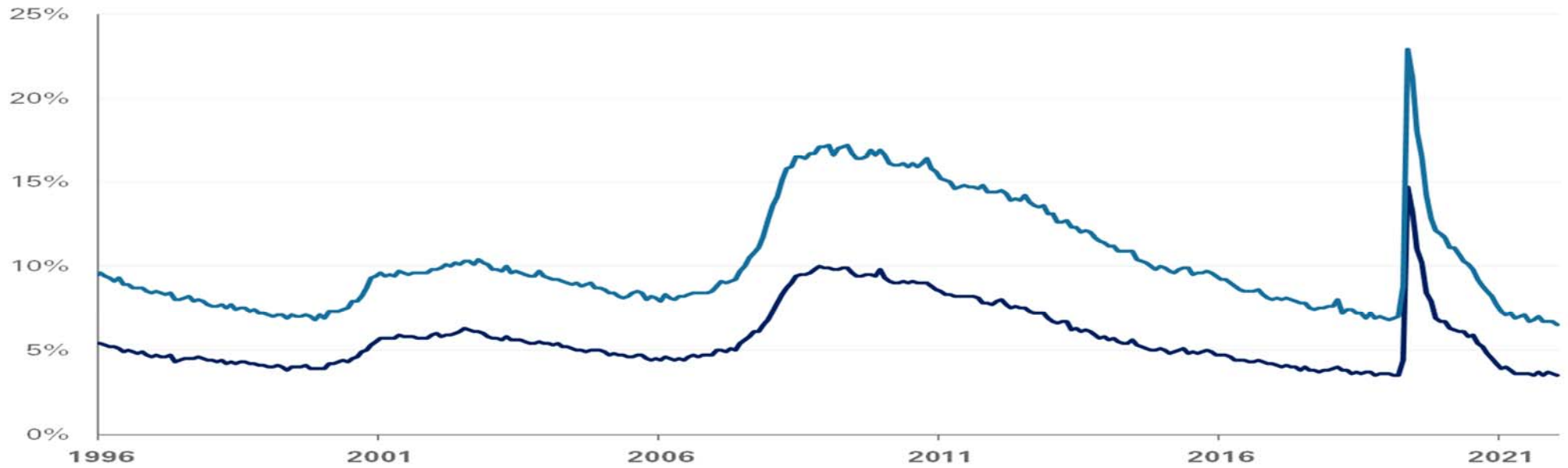


# CURRENCIES HAVE BEEN VOLATILE

CUMULATIVE CURRENT RETURNS RELATIVE TO THE U.S. DOLLAR



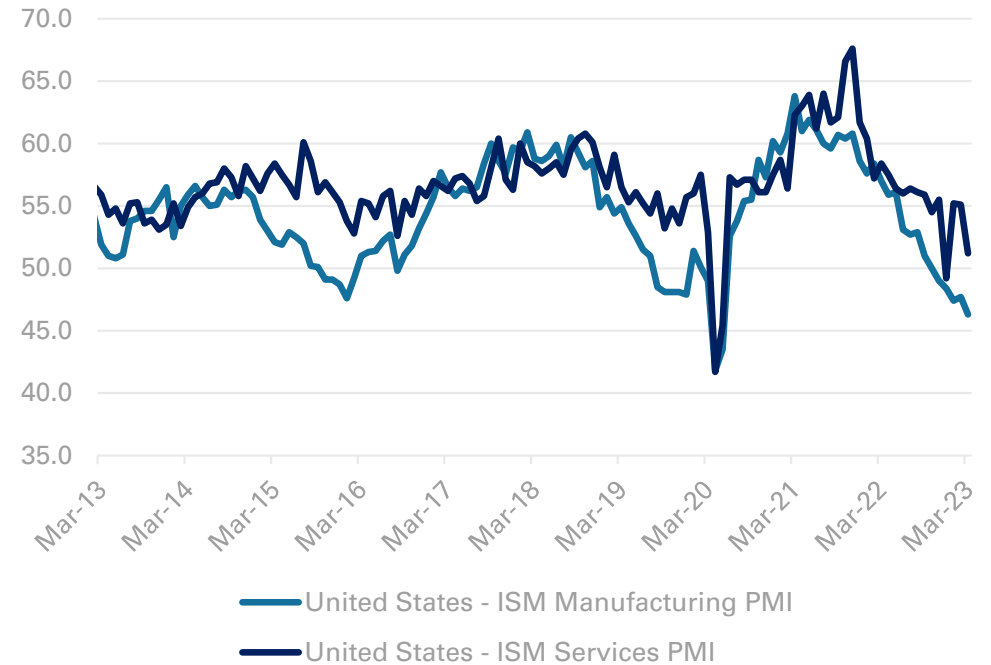
## US EMPLOYMENT RATE



## CONSUMER SENTIMENT

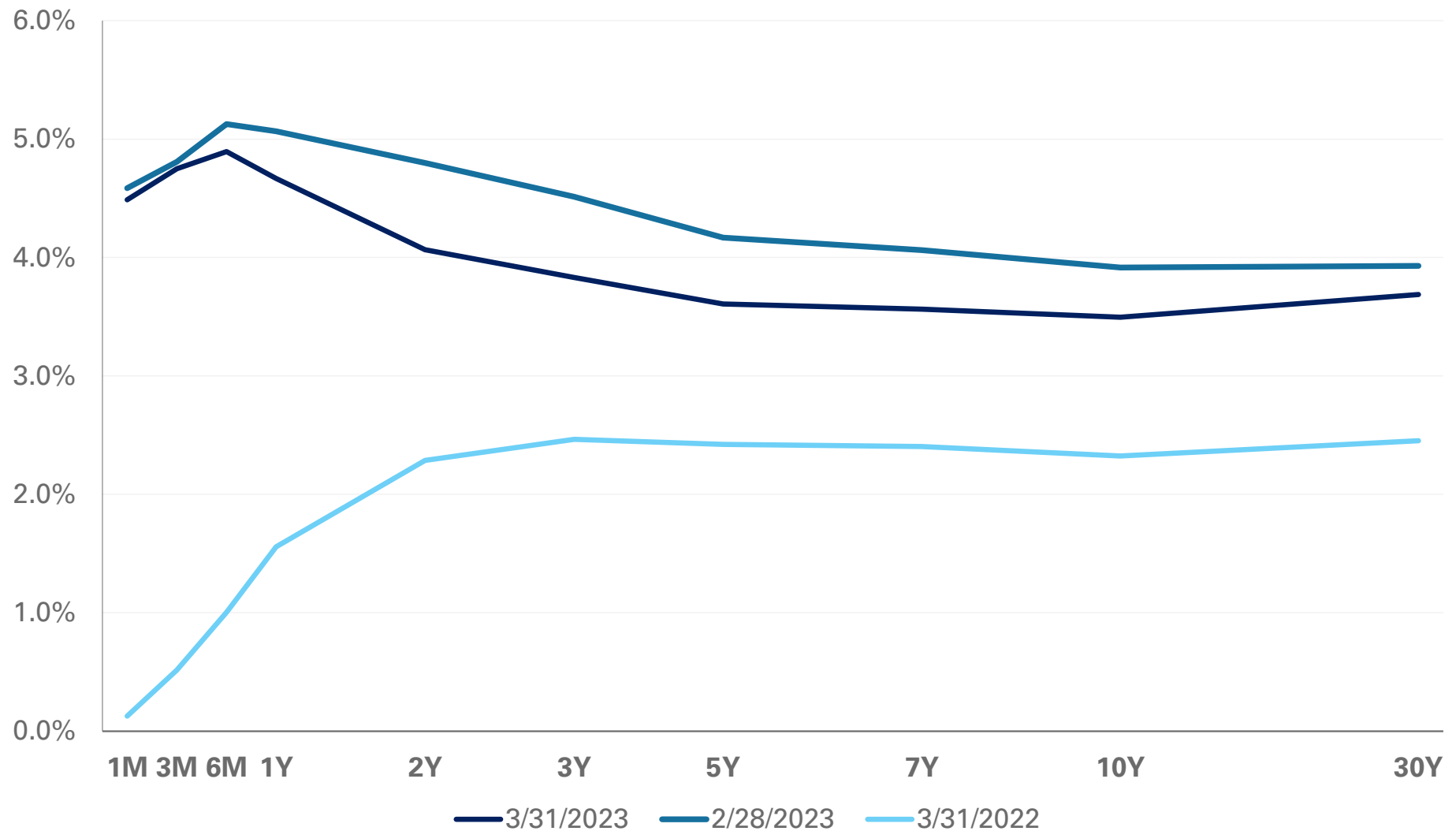


## ISM REPORT OF BUSINESS



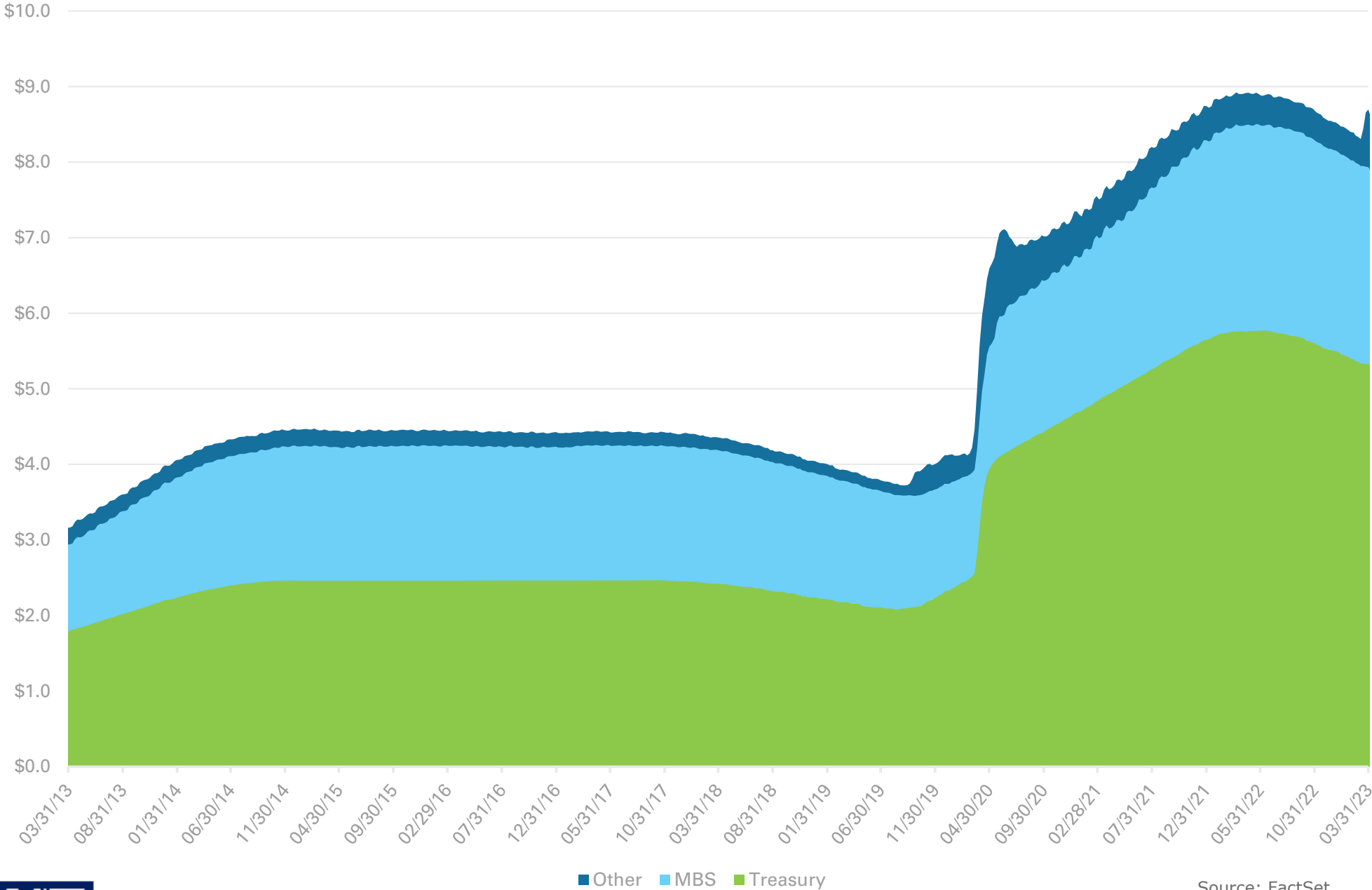
Source: FactSet

# US TREASURY YIELD CURVE



Source: FactSet

# FEDERAL RESERVE: BALANCE SHEET



Source: FactSet



# BENCHMARK TRAILING PERFORMANCE

Equity						
	Mar	YTD	1 YR	3 YR	5 YR	10 YR
Russell 3000	3.1%	7.3%	-7.4%	15.4%	6.9%	8.1%
MSCI US Min. Vol.	3.7%	1.5%	-6.15	8.3%	5.1%	6.7%
MSCI ACWI	3.1%	7.3%	-7.4%	15.4%	6.9%	8.1%
MSCI ACWI ex US	2.4%	6.9%	-5.1%	11.8%	2.5%	4.2%
MSCI ACWI ex US Min. Vol.	3.7%	3.8%	-7.6%	6.4%	2.0%	4.3%
MSCI World	3.1%	7.7%	-7.0%	16.4%	8.0%	8.9%
MSCI EM	3.0%	4.0%	-10.7%	7.8%	-0.9%	2.0%
Credit						
	Mar	YTD	1 YR	3 YR	5 YR	10 YR
BC US Agg	2.5%	3.0%	-4.8%	-2.8%	0.9%	1.4%
BC US HY	1.1%	3.6%	-3.3%	5.9%	3.2%	4.1%
BC Long Treasuries	4.7%	6.2%	-16.0%	-11.3%	-0.4%	1.5%
JPM EMBI Glob Div (EMD Hard Currency)	1.0%	1.9%	-6.9%	0.0%	-0.6%	2.0%
JPM GBI-EM Glob Div (EMD Local Currency)	4.1%	5.2%	-0.7%	0.9%	-2.4%	-1.5%
Real Assets						
	Mar	YTD	1 YR	3 YR	5 YR	10 YR
BBG Commodity	-0.2%	-5.4%	-12.5%	20.8%	5.4%	-1.7%
Alerian Midstream Index	-0.1%	0.8%	-1.2%	34.8%	9.7%	-
FTSE NAREIT Equity REITs	-2.0%	1.6%	-19.6%	10.4%	5.7%	6.0%

# TOTAL FUND OVERVIEW

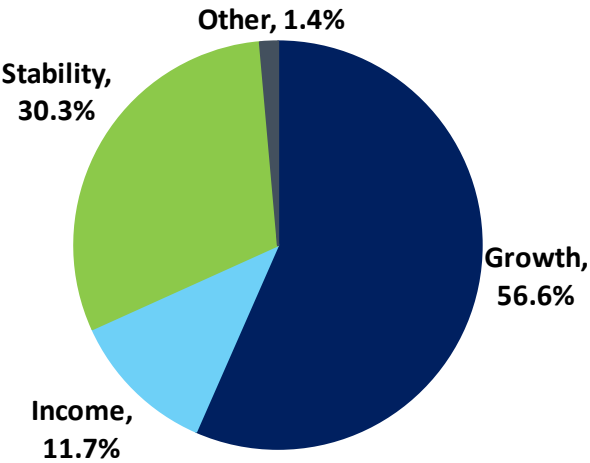
NEPC, LLC

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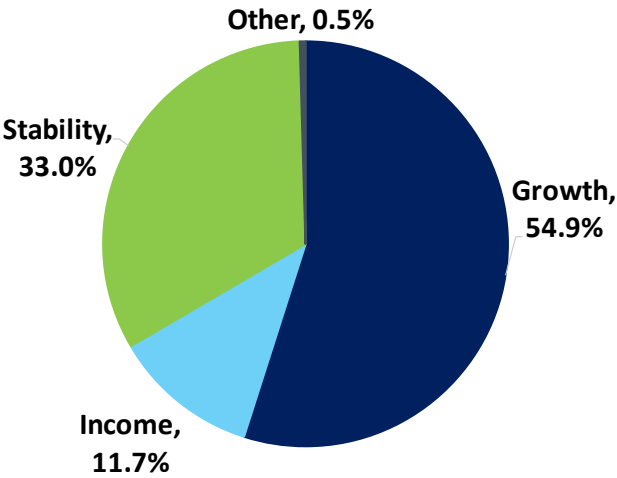
# ASSET ALLOCATION (OVERLAY) VS TARGET

Asset Allocation vs. Target						
	Current Balance	Current Allocation	Current Allocation (w/ Overlay)	Strategic Benchmark Allocation	Difference	Difference (w/ Overlay)
Growth	\$5,806,235,203	56.6%	54.9%	55.0%	1.6%	-0.1%
Income	\$1,196,231,358	11.7%	11.7%	12.0%	-0.3%	-0.3%
Stability	\$3,114,004,649	30.3%	33.0%	33.0%	-2.7%	0.0%
Other	\$145,401,728	1.4%	0.5%	0.0%	1.4%	0.5%

Current Asset Allocation



Current Asset Allocation (w/ Overlay)



# TOTAL FUND ATTRIBUTION ANALYSIS – 1 YEAR

	Policy Weights	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effect	Total Effects
Global Equity	40.00%	-7.56%	-7.44%	-0.12%	-0.03%	-0.22%	-0.01%	-0.28%
Private Growth	15.00%	7.38%	-7.12%	14.50%	2.16%	-0.24%	0.39%	2.30%
Income	12.00%	-0.02%	-2.28%	2.26%	0.03%	-0.01%	0.00%	0.26%
Crisis Protection	10.00%	-5.00%	-4.68%	-0.32%	-0.08%	4.00%	-0.01%	-0.06%
Inflation Protection	8.00%	11.74%	5.89%	5.85%	0.39%	-0.08%	-0.03%	0.28%
Volatility Protection	15.00%	1.27%	-2.34%	3.61%	0.56%	-0.01%	-0.01%	0.53%
Composite Total	100.00%	-1.12%	-4.21%	3.09%	3.28%	-0.52%	0.33%	3.09%
Other*		0.00%						0.00%
State of Rhode Island Total Plan	100.00%	-1.12%						3.09%

\*Other includes short-term cash, overlay, and rebalancing activity.

Note: Plan attribution is a static, return based calculation and the results reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance summary.

**Asset Allocation Effect** - Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and underweighted in a sector that outperforms the benchmark.

**Selection Effect** - Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the security in the portfolio determines the size of the effect -- the larger the security, the larger the effect is, positive or negative.

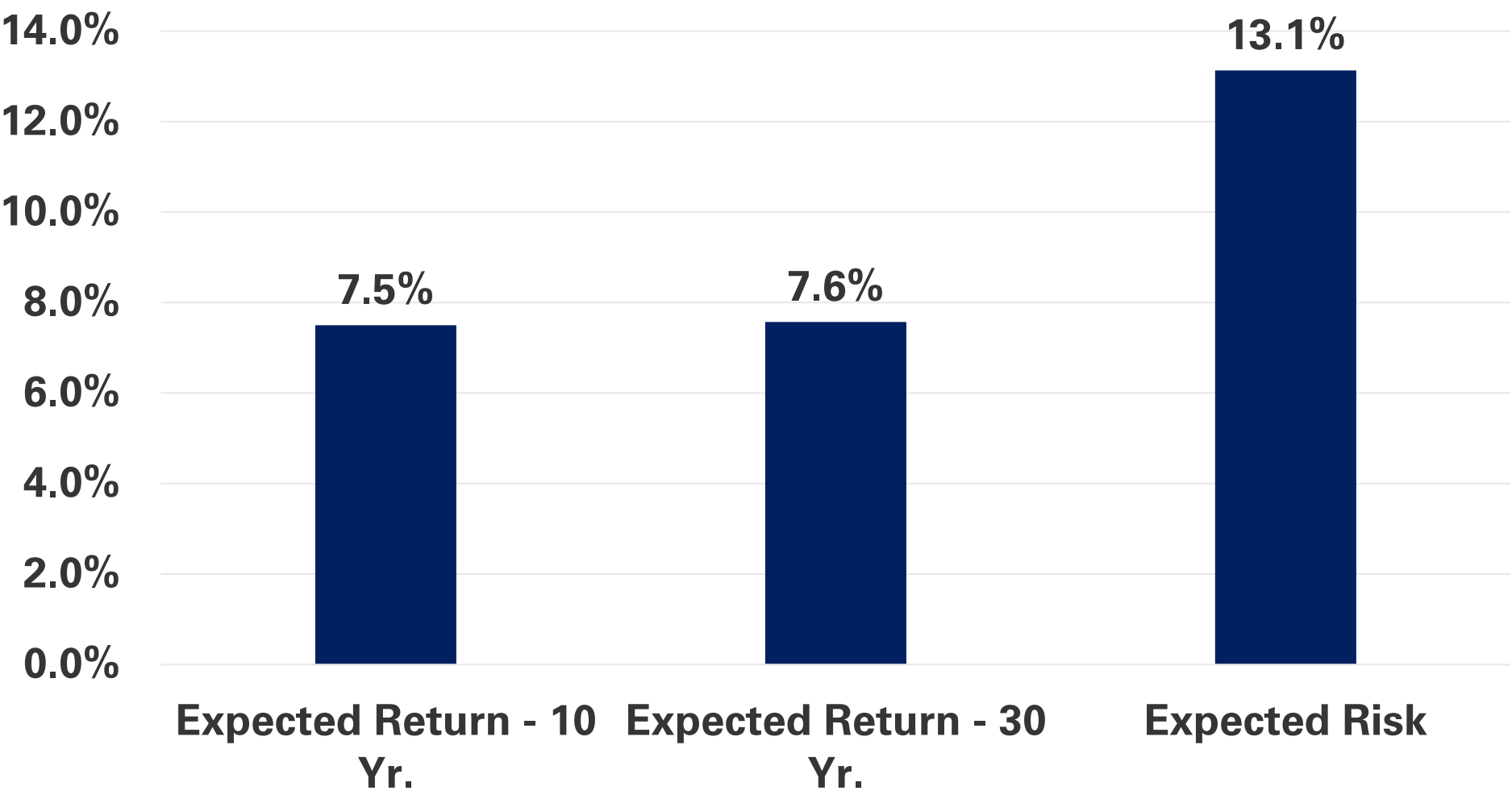
**Interaction Effect** - The interaction effect measures the combined impact of an investment manager's selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with either effect.



# CHANGE IN NEPC ASSET CLASS ASSUMPTIONS

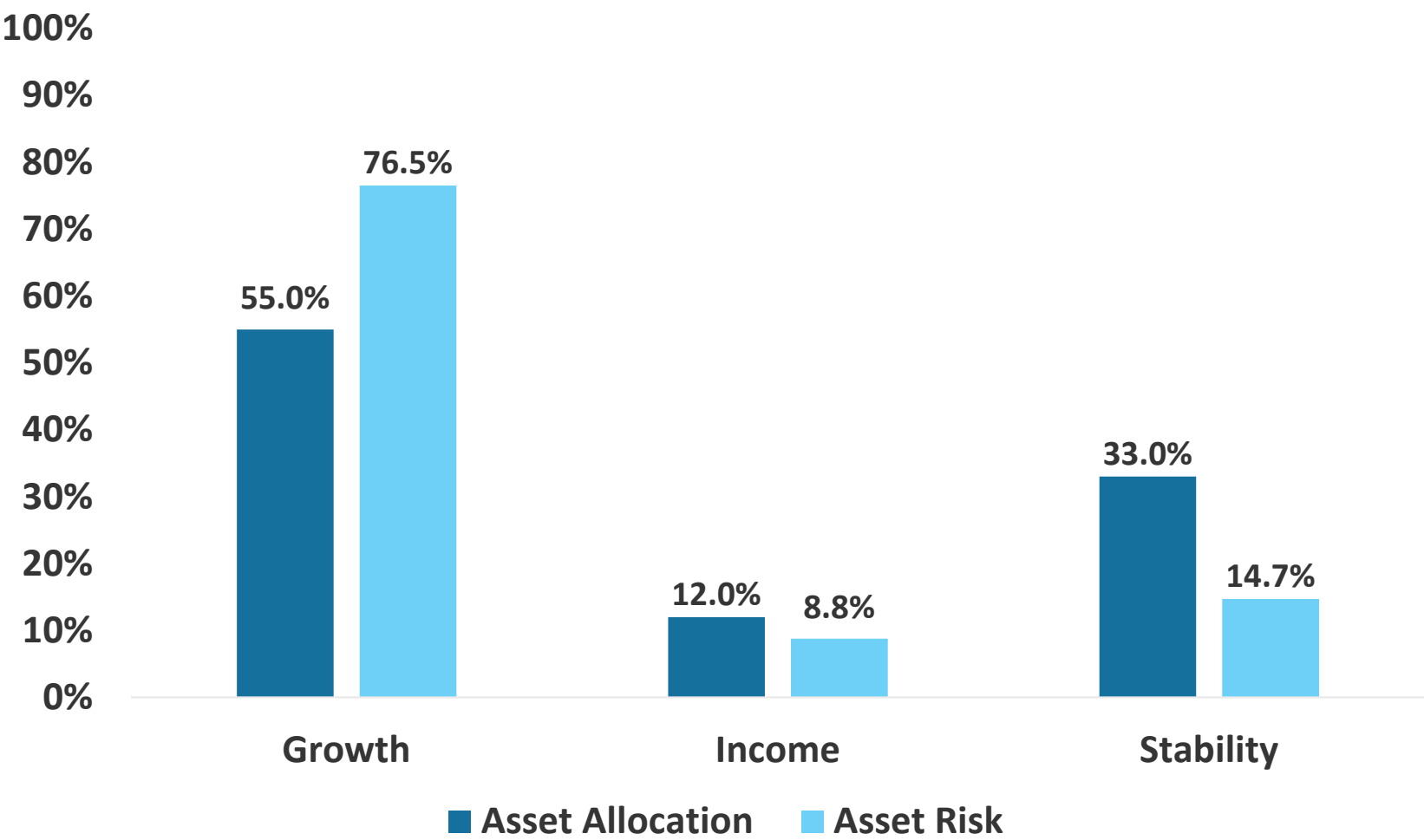
	Asset Class	22-Mar	23-Mar	Difference
Equity	Large Cap Equities	4.7%	4.9%	0.2%
	Int'l Equities (Unhedged)	5.6%	5.0%	-0.6%
	Emerging Int'l Equities	8.5%	9.3%	0.8%
	Private Equity	9.0%	9.2%	0.2%
Fixed Income	Cash	2.4%	3.8%	1.4%
	Core Bonds	3.1%	4.5%	1.4%
	HY Bonds	4.5%	6.9%	2.4%
	IG Corp Credit	5.9%	5.6%	-0.3%
	Private Debt	7.3%	8.6%	1.3%
Other	Core Real Estate	4.5%	4.8%	0.3%

# SIC EXPECTED RISK & RETURN



\*RI's target allocations used with NEPC's most recent asset class assumptions.

# ASSET AND RISK ALLOCATIONS



# State of Rhode Island Pension Plan

## TOTAL FUND PERFORMANCE DETAIL - (NET)

	Allocation			Performance (%)									
	Market Value (\$)	% of Portfolio	Strategic Benchmark Allocation (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	Inception (%)	Inception Date
<b>State of Rhode Island Total Plan</b>	<b>10,267,034,898</b>	<b>100.00</b>	<b>100.00</b>	<b>1.27</b>	<b>3.44</b>	<b>5.39</b>	<b>-1.12</b>	<b>12.26</b>	<b>7.83</b>	<b>7.37</b>	<b>6.33</b>	<b>5.67</b>	<b>Jul-00</b>
Strategic Benchmark Allocation				1.37	3.58	3.72	-4.21	11.22	6.90	6.86	5.89	-	
60% MSCI ACWI (Net) / 40% Bloomberg Aggregate				2.87	5.57	5.89	-6.14	8.02	4.81	5.57	5.04	4.90	
<b>Global Equity</b>	<b>3,891,774,368</b>	<b>37.91</b>	<b>40.00</b>	<b>2.63</b>	<b>6.98</b>	<b>9.74</b>	<b>-7.56</b>	<b>16.00</b>	<b>7.01</b>	<b>8.28</b>	<b>7.00</b>	<b>5.33</b>	<b>Jul-00</b>
MSCI AC World Index (Net)				3.08	7.31	9.75	-7.44	15.36	6.93	8.06	6.02	4.97	
<b>Private Growth</b>	<b>1,914,460,835</b>	<b>18.65</b>	<b>15.00</b>	<b>0.51</b>	<b>1.28</b>	<b>3.90</b>	<b>7.38</b>	<b>22.05</b>	<b>18.96</b>	<b>-</b>	<b>-</b>	<b>18.89</b>	<b>Jul-17</b>
Private Growth Allocation Index				0.51	1.28	3.90	7.38	21.64	16.96	-	-	16.84	
Private Growth Custom Benchmark				0.46	1.13	-6.06	-7.12	14.85	12.89	-	-	13.46	
<b>Income</b>	<b>1,196,231,358</b>	<b>11.65</b>	<b>12.00</b>	<b>0.77</b>	<b>2.83</b>	<b>5.61</b>	<b>-0.02</b>	<b>8.62</b>	<b>3.67</b>	<b>-</b>	<b>-</b>	<b>3.11</b>	<b>Jul-17</b>
Income Allocation Index				1.17	3.64	4.37	-2.28	9.20	3.55	-	-	2.79	
Income Custom Benchmark				1.35	3.80	4.69	-2.28	9.47	4.05	-	-	3.58	
<b>Crisis Protection</b>	<b>889,526,765</b>	<b>8.66</b>	<b>10.00</b>	<b>-1.15</b>	<b>-0.95</b>	<b>-4.66</b>	<b>-5.00</b>	<b>0.31</b>	<b>4.03</b>	<b>-</b>	<b>-</b>	<b>3.80</b>	<b>Jun-17</b>
CPC Custom Benchmark				-0.99	-1.33	-3.59	-4.68	2.16	3.49	-	-	2.71	
<b>Inflation Protection</b>	<b>779,788,388</b>	<b>7.60</b>	<b>8.00</b>	<b>0.53</b>	<b>0.39</b>	<b>4.89</b>	<b>11.74</b>	<b>10.12</b>	<b>8.81</b>	<b>-</b>	<b>-</b>	<b>8.46</b>	<b>Jul-17</b>
Inflation Protection Allocation Index				-2.02	-1.96	-0.10	4.00	8.12	7.00	-	-	6.80	
Inflation Protection Custom Benchmark				-2.06	-2.00	0.34	5.89	9.18	7.35	-	-	7.17	
<b>Volatility Protection</b>	<b>1,444,689,496</b>	<b>14.07</b>	<b>15.00</b>	<b>0.93</b>	<b>2.13</b>	<b>3.00</b>	<b>1.27</b>	<b>4.68</b>	<b>4.63</b>	<b>-</b>	<b>-</b>	<b>4.36</b>	<b>Jul-17</b>
Volatility Protection Custom Benchmark				1.15	2.15	1.87	-2.34	2.52	2.15	-	-	2.12	

March's investment gain/loss for the ERSRI was \$129,139,593.

Last 12 months' investment gain/loss for the ERSRI was -\$121,445,431.

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# TOTAL FUND ATTRIBUTION ANALYSIS – 1 YEAR

	Policy Weights	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effect	Total Effects
Global Equity	40.00%	-7.56%	-7.44%	-0.12%	-0.03%	-0.22%	-0.01%	-0.28%
Private Growth	15.00%	7.38%	-7.12%	14.50%	2.16%	-0.24%	0.39%	2.30%
Income	12.00%	-0.02%	-2.28%	2.26%	0.03%	-0.01%	0.00%	0.26%
Crisis Protection	10.00%	-5.00%	-4.68%	-0.32%	-0.08%	4.00%	-0.01%	-0.06%
Inflation Protection	8.00%	11.74%	5.89%	5.85%	0.39%	-0.08%	-0.03%	0.28%
Volatility Protection	15.00%	1.27%	-2.34%	3.61%	0.56%	-0.01%	-0.01%	0.53%
Composite Total	100.00%	-1.12%	-4.21%	3.09%	3.28%	-0.52%	0.33%	3.09%
Other*		0.00%						0.00%
State of Rhode Island Total Plan	100.00%	-1.12%						3.09%

\*Other includes short-term cash, overlay, and rebalancing activity.

Note: Plan attribution is a static, return based calculation and the results reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance summary.

**Asset Allocation Effect** - Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and underweighted in a sector that outperforms the benchmark.

**Selection Effect** - Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the security in the portfolio determines the size of the effect -- the larger the security, the larger the effect is, positive or negative.

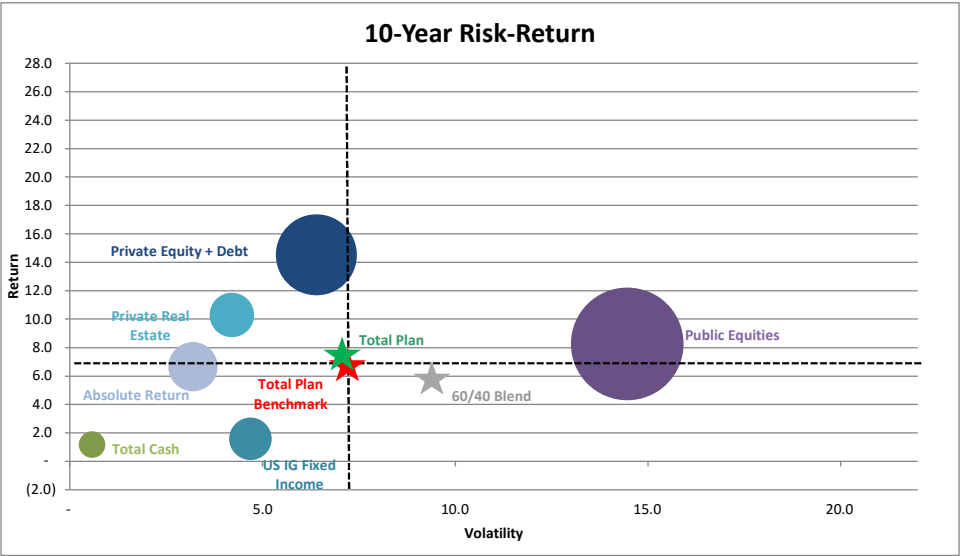
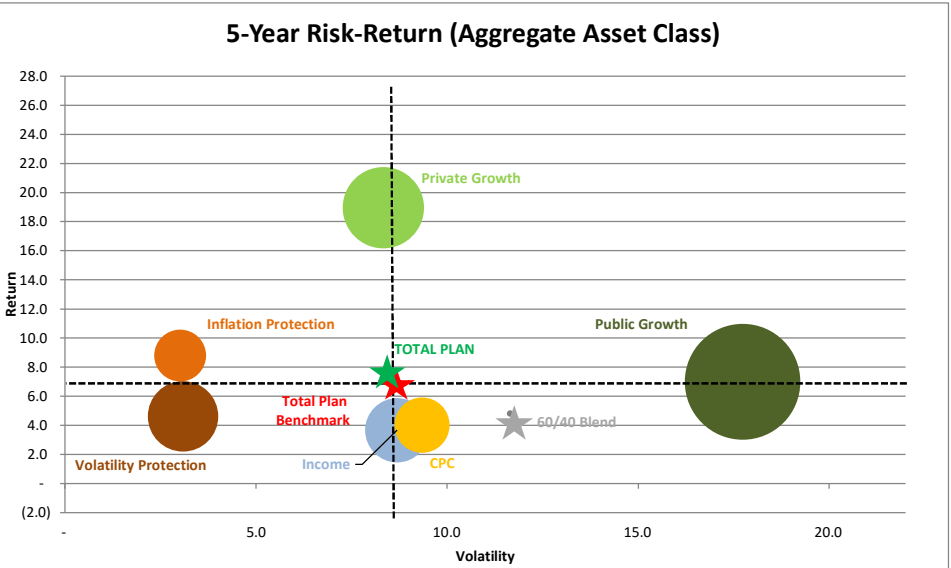
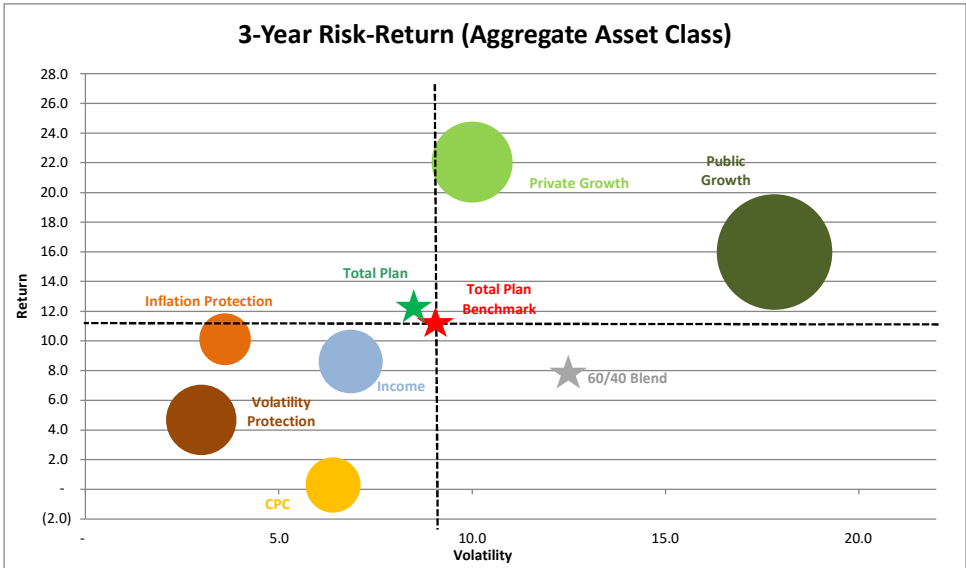
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ERSRI Portfolio

% - as of March 31, 2023

Bubble-Size Scaled based on Current Allocations



# MANAGER PERFORMANCE

NEPC, LLC

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# State of Rhode Island Pension Plan

## TOTAL FUND PERFORMANCE DETAIL - (NET)

	Allocation			Performance (%)									
	Market Value (\$)	% of Portfolio	Strategic Benchmark Allocation (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	Inception (%)	Inception Date
<b>State of Rhode Island Total Plan</b>	<b>10,267,034,898</b>	<b>100.00</b>	<b>100.00</b>	<b>1.27</b>	<b>3.44</b>	<b>5.39</b>	<b>-1.12</b>	<b>12.26</b>	<b>7.83</b>	<b>7.37</b>	<b>6.33</b>	<b>5.67</b>	<b>Jul-00</b>
Strategic Benchmark Allocation				1.37	3.58	3.72	-4.21	11.22	6.90	6.86	5.89	-	
60% MSCI ACWI (Net) / 40% Bloomberg Aggregate				2.87	5.57	5.89	-6.14	8.02	4.81	5.57	5.04	4.90	
<b>Growth</b>	<b>5,806,235,203</b>	<b>56.55</b>	<b>55.00</b>	<b>1.92</b>	<b>5.04</b>	<b>7.74</b>	<b>-3.24</b>	<b>18.37</b>	<b>9.88</b>	<b>-</b>	<b>-</b>	<b>10.56</b>	<b>Jul-17</b>
Growth Allocation Index				1.48	4.39	4.71	-3.96	12.93	7.24	-	-	-	
Growth Composite Benchmark				2.37	5.64	5.43	-7.02	15.75	8.99	-	-	9.74	
<b>Global Equity</b>	<b>3,891,774,368</b>	<b>37.91</b>	<b>40.00</b>	<b>2.63</b>	<b>6.98</b>	<b>9.74</b>	<b>-7.56</b>	<b>16.00</b>	<b>7.01</b>	<b>8.28</b>	<b>7.00</b>	<b>5.33</b>	<b>Jul-00</b>
MSCI AC World Index (Net)				3.08	7.31	9.75	-7.44	15.36	6.93	8.06	6.02	4.97	
SSGA Russell 3000 Index	1,412,237,192	13.76		2.63	7.08	9.63	-8.63	18.58	10.57	11.81	-	12.66	Nov-12
Russell 3000 Index				2.67	7.18	9.75	-8.58	18.48	10.45	11.73	-	12.58	
SSGA MSCI EAFE Index	576,408,511	5.61		2.55	8.54	15.49	-0.99	13.39	3.90	5.33	-	6.47	Sep-12
MSCI EAFE (Net)				2.48	8.47	15.36	-1.38	12.99	3.52	5.00	-	6.14	
SSGA MSCI Canada Index	66,904,491	0.65		0.15	4.52	3.78	-12.38	19.45	7.43	4.77	-	5.05	Sep-12
MSCI Canada (Net)				0.06	4.31	3.15	-13.09	18.50	6.56	4.02	-	4.30	
SSGA Emerging Market Index	427,045,777	4.16		3.02	4.07	0.68	-10.66	7.72	-1.02	1.85	-	2.66	Sep-12
MSCI Emerging Markets (Net)				3.03	3.96	0.84	-10.70	7.83	-0.91	2.00	-	2.82	
SSGA QVM	1,409,168,713	13.73		2.66	7.27	10.87	-7.68	17.39	7.77	-	-	9.89	Oct-15
MSCI World Index (Net)				3.09	7.73	10.93	-7.02	16.40	8.01	-	-	9.79	
<b>Private Growth</b>	<b>1,914,460,835</b>	<b>18.65</b>	<b>15.00</b>	<b>0.51</b>	<b>1.28</b>	<b>3.90</b>	<b>7.38</b>	<b>22.05</b>	<b>18.96</b>	<b>-</b>	<b>-</b>	<b>18.89</b>	<b>Jul-17</b>
Private Growth Allocation Index				0.51	1.28	3.90	7.38	21.64	16.96	-	-	16.84	
Private Growth Custom Benchmark				0.46	1.13	-6.06	-7.12	14.85	12.89	-	-	13.46	
<b>Private Equity</b>	<b>1,689,265,113</b>	<b>16.45</b>	<b>12.50</b>	<b>0.65</b>	<b>1.72</b>	<b>4.77</b>	<b>7.54</b>	<b>24.70</b>	<b>20.40</b>	<b>16.24</b>	<b>12.25</b>	<b>11.03</b>	<b>Feb-89</b>
Private Equity Custom Benchmark				0.65	1.72	-6.55	-8.42	19.00	17.13	15.94	11.85	15.54	
<b>Non-Core Real Estate</b>	<b>225,195,722</b>	<b>2.19</b>	<b>2.50</b>	<b>-0.45</b>	<b>-1.80</b>	<b>-1.95</b>	<b>6.20</b>	<b>12.98</b>	<b>14.62</b>	<b>-</b>	<b>-</b>	<b>14.62</b>	<b>Jul-17</b>
Non-Core Real Estate Custom Benchmark				-0.45	-1.80	-3.75	-0.60	8.45	8.54	-	-	9.60	

# State of Rhode Island Pension Plan

## TOTAL FUND PERFORMANCE DETAIL - (NET)

	Allocation			Performance (%)									
	Market Value (\$)	% of Portfolio	Strategic Benchmark Allocation (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	Inception (%)	Inception Date
<b>Income</b>	<b>1,196,231,358</b>	<b>11.65</b>	<b>12.00</b>	<b>0.77</b>	<b>2.83</b>	<b>5.61</b>	<b>-0.02</b>	<b>8.62</b>	<b>3.67</b>	<b>-</b>	<b>-</b>	<b>3.11</b>	<b>Jul-17</b>
Income Allocation Index				1.17	3.64	4.37	-2.28	9.20	3.55	-	-	2.79	
Income Custom Benchmark				1.35	3.80	4.69	-2.28	9.47	4.05	-	-	3.58	
<b>Equity Options</b>	<b>191,371,558</b>	<b>1.86</b>	<b>2.00</b>	<b>0.00</b>	<b>1.79</b>	<b>3.73</b>	<b>-5.94</b>	<b>11.67</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.97</b>	<b>Feb-20</b>
CBOE S&P 500 PutWrite Index				2.99	6.75	6.32	-3.08	13.72	-	-	-	5.35	
Neuberger Berman US Equity Index Putwrite Fund LLC	191,371,558	1.86		0.00	1.79	3.73	-5.94	11.67	-	-	-	4.97	Feb-20
<b>Liquid Credit</b>	<b>273,550,731</b>	<b>2.66</b>	<b>3.00</b>	<b>0.93</b>	<b>3.47</b>	<b>8.27</b>	<b>-2.50</b>	<b>4.27</b>	<b>2.13</b>	<b>-</b>	<b>-</b>	<b>2.68</b>	<b>May-13</b>
ICE BofAML US High Yield TR*				1.13	3.73	7.19	-3.50	5.28	2.24	-	-	3.15	
PIMCO	92,784,931	0.90		1.14	3.64	10.43	-2.01	4.11	2.27	-	-	2.90	May-13
Loomis Sayles	91,365,018	0.89		1.46	3.47	7.50	-2.13	4.76	-	-	-	1.75	Nov-18
Advent US Balanced	89,431,601	0.87		0.18	3.29	6.92	-	-	-	-	-	6.92	Jul-22
<b>EMD Blended</b>	<b>196,276,679</b>	<b>1.91</b>	<b>2.00</b>	<b>2.86</b>	<b>3.95</b>	<b>8.24</b>	<b>-2.31</b>	<b>0.65</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.65</b>	<b>Apr-20</b>
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified				2.54	3.51	6.90	-3.83	0.46	-	-	-	0.46	
Wellington EMD Fund	196,276,679	1.91		2.86	3.95	8.25	-2.30	0.65	-	-	-	0.65	Apr-20
<b>CLO Mezz/Equity</b>	<b>210,925,201</b>	<b>2.05</b>	<b>2.00</b>	<b>-0.88</b>	<b>3.10</b>	<b>5.61</b>	<b>4.92</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.99</b>	<b>Aug-21</b>
JPM Collateralized Loan Obligation BB Index (CLOIE)				-0.60	3.58	7.41	-0.04	-	-	-	-	1.35	
Neuberger CLO Equity Mezzanine	103,540,563	1.01		-1.78	5.96	6.94	1.96	-	-	-	-	1.46	Jul-21
Sycamore Tree CLO Fund	107,384,638	1.05		0.00	0.02	3.59	6.02	-	-	-	-	4.90	Aug-21
<b>Private Credit</b>	<b>324,103,446</b>	<b>3.16</b>	<b>3.00</b>	<b>0.96</b>	<b>2.16</b>	<b>2.77</b>	<b>6.83</b>	<b>5.95</b>	<b>4.63</b>	<b>-</b>	<b>-</b>	<b>4.92</b>	<b>Jul-17</b>
Private Credit Custom Benchmark				0.96	2.17	-2.45	-1.93	4.09	5.02	-	-	7.36	

# State of Rhode Island Pension Plan

## TOTAL FUND PERFORMANCE DETAIL - (NET)

	Allocation			Performance (%)									
	Market Value (\$)	% of Portfolio	Strategic Benchmark Allocation (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	Inception (%)	Inception Date
<b>Stability</b>	<b>3,114,004,649</b>	<b>30.33</b>	<b>33.00</b>	<b>0.23</b>	<b>0.80</b>	<b>1.15</b>	<b>1.73</b>	<b>4.54</b>	<b>5.50</b>	-	-	<b>5.20</b>	<b>Jul-17</b>
Stability Allocation Index				-0.50	-0.14	-0.30	-1.41	3.58	3.94	-	-	3.68	
Stability Custom Benchmark				-0.28	0.09	-0.05	-0.95	4.11	4.02	-	-	3.82	
<b>Crisis Protection</b>	<b>889,526,765</b>	<b>8.66</b>	<b>10.00</b>	<b>-1.15</b>	<b>-0.95</b>	<b>-4.66</b>	<b>-5.00</b>	<b>0.31</b>	<b>4.03</b>	-	-	<b>3.80</b>	<b>Jun-17</b>
CPC Custom Benchmark				-0.99	-1.33	-3.59	-4.68	2.16	3.49	-	-	2.71	
<b>Treasury Duration</b>	<b>466,535,138</b>	<b>4.54</b>	<b>5.00</b>	<b>4.86</b>	<b>5.80</b>	<b>-5.86</b>	<b>-17.06</b>	<b>-11.89</b>	<b>-0.55</b>	-	-	<b>-0.82</b>	<b>Jun-17</b>
Bloomberg US Treasury Long TR				4.74	6.17	-4.62	-16.00	-11.33	-0.35	-	-	-0.31	
WAMCO Long Duration	466,535,138	4.54		4.86	5.80	-5.86	-17.06	-11.89	-0.51	-	-	-0.84	Jun-17
<b>Systematic Trend</b>	<b>422,991,627</b>	<b>4.12</b>	<b>5.00</b>	<b>-7.02</b>	<b>-7.46</b>	<b>-5.12</b>	<b>5.33</b>	<b>12.21</b>	<b>7.50</b>	-	-	<b>7.28</b>	<b>Jun-17</b>
Credit Suisse Liquid Alt Beta				-6.71	-8.73	-5.45	3.90	14.98	5.72	-	-	4.40	
Aspect Capital	141,402,245	1.38		-8.60	-8.13	-5.61	6.87	9.32	5.84	-	-	5.41	Nov-17
Credit Suisse	138,152,294	1.35		-6.25	-8.08	-3.26	5.96	18.44	8.85	-	-	7.67	Jun-17
Crabel Capital	143,437,088	1.40		-6.15	-6.17	-6.52	3.06	9.16	7.68	-	-	8.15	Jun-17
<b>Inflation Protection</b>	<b>779,788,388</b>	<b>7.60</b>	<b>8.00</b>	<b>0.53</b>	<b>0.39</b>	<b>4.89</b>	<b>11.74</b>	<b>10.12</b>	<b>8.81</b>	-	-	<b>8.46</b>	<b>Jul-17</b>
Inflation Protection Allocation Index				-2.02	-1.96	-0.10	4.00	8.12	7.00	-	-	6.80	
Inflation Protection Custom Benchmark				-2.06	-2.00	0.34	5.89	9.18	7.35	-	-	7.17	
<b>Core Real Estate</b>	<b>379,380,153</b>	<b>3.70</b>	<b>4.00</b>	<b>0.00</b>	<b>-0.41</b>	<b>6.54</b>	<b>19.04</b>	<b>11.51</b>	<b>9.06</b>	-	-	<b>8.85</b>	<b>Jul-17</b>
NFI-ODCE BM 2				-5.17	-5.17	-0.55	6.55	8.97	7.71	-	-	7.59	
<b>Private Real Assets (ex-Real Estate)</b>	<b>400,408,235</b>	<b>3.90</b>	<b>4.00</b>	<b>1.04</b>	<b>1.18</b>	<b>5.01</b>	<b>9.87</b>	<b>12.41</b>	<b>13.06</b>	-	-	<b>11.14</b>	<b>Mar-15</b>
Private Real Assets (ex-Real Estate) Custom BM				1.04	1.18	1.10	5.06	10.06	9.77	-	-	11.10	
SSGA Bloomberg US TIPS		0.00		0.00	-41.77	-43.46	-45.51	-	-	-	-	-21.16	Dec-20
Blmbg. U.S. TIPS				2.89	3.34	0.02	-6.06	-	-	-	-	-1.02	

## State of Rhode Island Pension Plan

# TOTAL FUND PERFORMANCE DETAIL - (NET)

	Allocation			Performance (%)									
	Market Value (\$)	% of Portfolio	Strategic Benchmark Allocation (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	Inception (%)	Inception Date
<b>Volatility Protection</b>	<b>1,444,689,496</b>	<b>14.07</b>	<b>15.00</b>	<b>0.93</b>	<b>2.13</b>	<b>3.00</b>	<b>1.27</b>	<b>4.68</b>	<b>4.63</b>	-	-	<b>4.36</b>	<b>Jul-17</b>
Volatility Protection Custom Benchmark				1.15	2.15	1.87	-2.34	2.52	2.15	-	-	2.12	
<b>Investment Grade Fixed Income (ex-Treasuries)</b>	<b>553,695,749</b>	<b>5.39</b>	<b>6.50</b>	<b>1.88</b>	<b>2.96</b>	<b>-0.01</b>	<b>-5.77</b>	-	-	-	-	<b>-2.66</b>	<b>Jun-20</b>
IG Fixed Income (ex-Treas) BM				2.34	2.99	0.48	-5.13	-	-	-	-	-3.23	
Fidelity Corporate Bonds	279,198,255	2.72		1.80	3.18	1.17	-6.61	-	-	-	-	-2.67	Jun-20
Loomis Securitized Bond	274,497,493	2.67		1.97	2.74	-1.12	-4.93	-	-	-	-	-2.67	Jun-20
<b>Absolute Return</b>	<b>745,576,927</b>	<b>7.26</b>	<b>6.50</b>	<b>0.35</b>	<b>1.70</b>	<b>5.58</b>	<b>7.30</b>	<b>11.49</b>	<b>8.72</b>	-	-	<b>8.51</b>	<b>Jul-17</b>
HFRI Fund of Funds Composite Index				-0.68	0.71	2.09	-1.94	7.17	3.10	-	-	3.51	
<b>Cash</b>	<b>145,401,728</b>	<b>1.42</b>	<b>2.00</b>	<b>0.36</b>	<b>1.23</b>	<b>2.65</b>	<b>2.43</b>	<b>1.36</b>	<b>1.59</b>	-	-	<b>1.53</b>	<b>Feb-17</b>
ICE BofA 0-1 Yr. U.S. Treasury Notes & Bonds				0.59	1.18	2.19	2.08	0.66	1.43	-	-	1.34	
<b>Other</b>	<b>150,563,687</b>	<b>1.47</b>	<b>0.00</b>	<b>1.98</b>	<b>3.67</b>	<b>6.24</b>	<b>0.96</b>	<b>1.02</b>	<b>0.87</b>	<b>0.82</b>	-	<b>0.79</b>	<b>Nov-12</b>
<b>Shott Capital</b>	<b>44,400,221</b>	<b>0.43</b>	<b>0.00</b>	<b>-5.00</b>	<b>14.22</b>	<b>13.30</b>	<b>0.55</b>	<b>12.74</b>	<b>6.45</b>	<b>14.21</b>	<b>12.01</b>	<b>-0.16</b>	<b>Jul-00</b>
<b>Short-Term Cash</b>	<b>68,573,299</b>	<b>0.67</b>	<b>0.00</b>	<b>0.35</b>	<b>0.97</b>	<b>2.31</b>	<b>2.43</b>	<b>0.99</b>	<b>1.92</b>	-	-	<b>1.83</b>	<b>Jul-17</b>
90 Day U.S. Treasury Bill				0.43	1.07	2.40	2.50	0.89	1.41	-	-	1.38	
<b>Russell Overlay Fund</b>	<b>37,590,168</b>	<b>0.37</b>	<b>0.00</b>	<b>0.05</b>	<b>-0.02</b>	<b>0.05</b>	<b>13.10</b>	<b>3.96</b>	<b>2.46</b>	<b>1.22</b>	-	<b>0.80</b>	<b>Sep-08</b>

- Please note returns are provided by BNY Mellon: returns may not match the custodian due to rounding.
- Fiscal Year end is June 30th.
- Local Pension Plan Transition was terminated and is now a hold-back with a market value of 0.
- Russell Overlay returns do not represent returns for the individual account but rather Russell's impact at the total plan level.
- Liquid Credit Benchmark: Prior to July 2021 the benchmark consisted of 50% BofAML US High Yield TR/ 50% CS Lev Loan Index.

# DISCLAIMERS & DISCLOSURES

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A “since inception” return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC’s preferred data source is the plan’s custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.

This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv



# ASSET ALLOCATION

NEPC, LLC

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State of Rhode Island  
Office of the General Treasurer

**James Diosa**  
General Treasurer

State Investment Commission  
State of Rhode Island, State House  
Providence, Rhode Island

This is to certify that the amounts so listed on this page belong to the credit of the Employees' Retirement, Municipal Employees', State Police and Judicial Retirement Systems of the State of Rhode Island at the close of business on March 31<sup>st</sup>, 2023.

\* Cash & Short-Term Investments, as shown, also includes amounts available within specific active-manager mandates, and thus as aggregated will not tie directly to separate cash allocations as reported elsewhere.

\*\* Alternative Investments – comprising the five components as indicated – have varying degrees of liquidity and may not have readily determinable market values. As such, they may be based on appraisals only.

**Employees' Retirement System of Rhode Island  
Composite Reporting Investment Valuation  
March 31, 2023**

Asset Class	Base Market Value
Grand Total	10,260,436,951
CASH EQUIVALENT*	363,069,052
GLOBAL PUBLIC EQUITY	3,872,060,782
EQUITY OPTIONS	0
EMERGING MARKET DEBT	196,276,679
CREDIT	157,669,075
CLOs	208,692,938
PRIVATE EQUITY**	2,013,368,559
REAL ESTATE**	604,575,875
HEDGE FUNDS**	745,576,266
INFRASTRUCTURE**	400,408,235
US TRADITIONAL FIXED	540,670,607
CPC PROGRAM	879,300,239
Plan Allocations	%
	Base Market Value

<b>Grand Total</b>	<b>100.00%</b>	<b>10,260,436,952</b>
STATE EMP RET PLAN	72.36%	7,424,514,838
MUNI EMP RET PLAN	20.41%	2,094,182,914
TEACHER'S SURVIVOR BENEFIT	4.01%	411,522,442
STATE POLICE RET PL	1.93%	198,239,702
JUDICIAL RET PLAN	0.99%	101,343,710
NON-CONT ST POL RET	0.29%	29,790,859
NON-CONTRIB JUD RET	0.01%	842,486

## ERSRI Asset Allocation Tracking

Functional Bucket	Aggregate Asset Class	Aggregate Allocation Weight	Asset Class	(a) Strategic Benchmark Weight/Target Allocation	(b) Actual exposure as of 03/31/23	(b) - (a)
GROWTH	Global Equity	40.0%	US Equity	24.2%	22.9%	-1.3%
			International Developed Equity	11.4%	10.8%	-0.6%
			EM Equity	4.4%	4.2%	-0.2%
	Private Growth	15.0%	Private Equity	12.5%	16.5%	4.0%
			Non-Core Real Estate	2.5%	2.2%	-0.3%
	INCOME	Income	12.0%	Equity Options	2.0%	1.9%
EMD (50/50 Blend)				2.0%	1.9%	-0.1%
Liquid Credit				3.0%	2.7%	-0.3%
Private Credit				3.0%	3.2%	0.2%
CLOs				2.0%	2.1%	0.1%
STABILITY	CPC	10.0%	Treasury Duration	5.0%	4.5%	-0.5%
			Systematic Trend	5.0%	4.1%	-0.9%
	Inflation Protection	8.0%	Core Real Estate	4.0%	3.7%	-0.3%
			Private Real Assets (ex-Real Estate)	4.0%	3.9%	-0.1%
	Volatility Protection	15.0%	Investment Grade Fixed Income (ex-Treasuries)	6.5%	5.4%	-1.1%
			Absolute Return	6.5%	7.3%	0.8%
			Strategic Cash	2.0%	1.4%	-0.6%
OTHER	Short-term Tactical	-	Short-Term Cash	-	0.7%	0.7%
			Russell Overlay	-	0.4%	0.4%
			Distribution Management	-	0.4%	0.4%
TOTAL	Total	100.0%		100.0%	100.0%	0.0%

# PRIVATE EQUITY & PRIVATE CREDIT

NEPC, LLC

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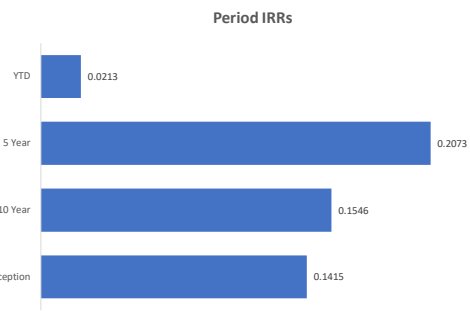
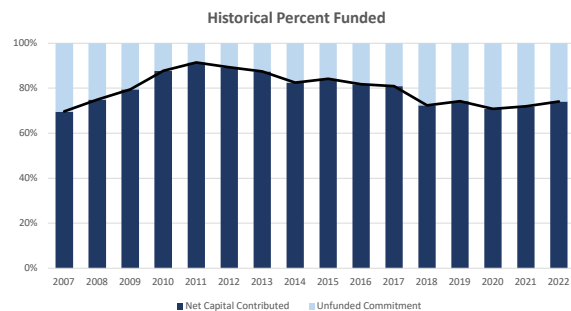
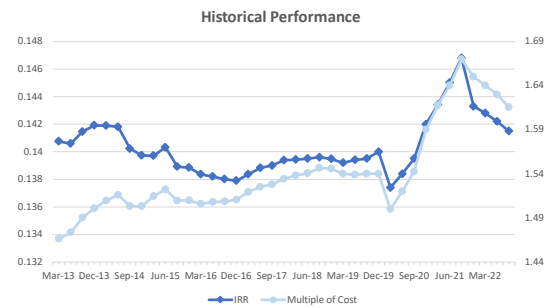
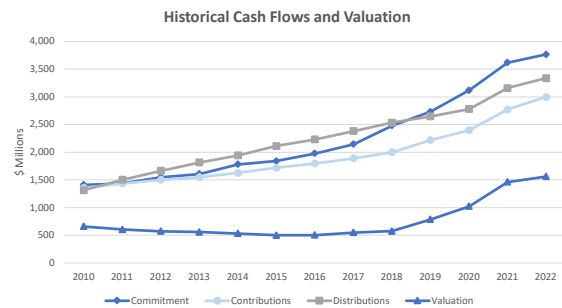
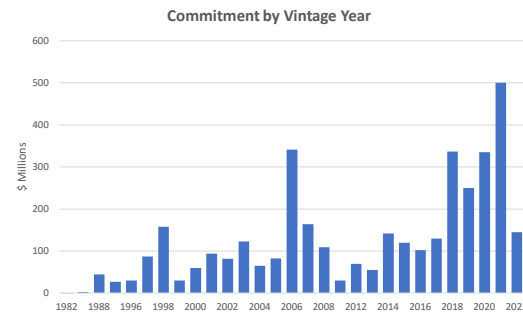
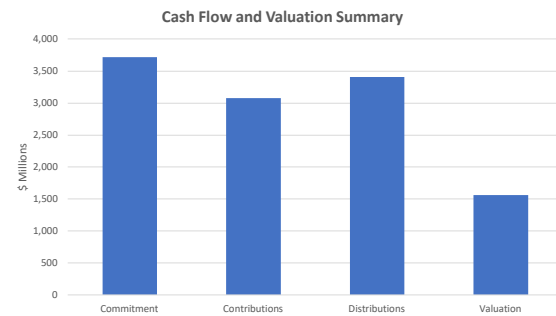
## Portfolio Summary

9/30/2022

All Investments

### Performance Summary

Asset Class	Investment Type	Number of Investments	Commitment	Contributions	Distributions	Valuation	Multiple of Cost	IRR	TWR
Private Equity Funds									
	Buyout Total	124	2,706,726,492	2,269,296,785	2,516,442,151	1,150,771,111	1.62	14.49%	13.77%
	Direct Secondary Total	1	25,000,000	18,124,741	33,397,560	5,674,829	2.16	38.38%	30.12%
	Distressed Debt Total	16	328,000,000	289,699,295	291,251,476	122,780,236	1.43	10.33%	9.71%
	Fund of Funds Total	2	55,000,000	48,874,338	106,787,756	4,209,596	2.27	19.94%	
	Growth Equity Total	2	50,000,000	8,832,008	-	6,773,868	0.77	-36.79%	-226.31%
	Opportunistic Credit Total	1	10,000,000	8,122,993	1,848,580	6,503,173	1.03	3.73%	17.56%
	Secondary Total	4	60,000,000	55,009,798	66,623,521	53,267	1.21	5.52%	-2.16%
	Venture Capital Total	33	468,782,361	378,369,350	393,497,421	263,185,370	1.74	9.05%	7.62%
<b>Total: Private Equity Funds</b>		<b>184</b>	<b>3,718,508,853</b>	<b>3,076,476,326</b>	<b>3,409,848,465</b>	<b>1,559,993,799</b>	<b>1.62</b>	<b>14.15%</b>	<b>12.50%</b>



**Employees' Retirement System of Rhode Island Private Equity Performance - Active Portfolio**  
**9/30/2022**  
**Sorted by Type and Vintage Year**

Current Partnerships	Vintage Year/ Initial Investment	Type	Cumulative Cash Flows (\$)				Cumulative Performance *		
			Amount Committed (in \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Nautic Partners V, L.P.	2000	Buyout	20,000,000	20,334,739	40,623,616	632,739	1,605,282	17.04%	2.08
CVC European Equity Partners III	2001	Buyout	20,000,000	23,760,732	59,551,716	297,277	1,440,406	41.02%	2.57
Parthenon Investors II, L.P.	2001	Buyout	23,960,000	23,409,381	37,994,886	1,821,022	267,946	12.31%	1.63
Leeds Equity Partners IV, L.P.	2003	Buyout	10,000,000	10,209,327	13,390,948	1,099,639	17,737	4.27%	1.31
Nordic Capital Fund V	2003	Buyout	14,615,550	21,398,689	58,883,260	-	48,362	21.04%	2.75
TPG Partners IV, L.P.	2003	Buyout	15,000,000	16,672,684	31,829,124	64,421	31,334	15.36%	1.91
Birch Hill Equity Partners III	2005	Buyout	18,000,000	18,973,636	36,236,586	160,904	142,084	12.28%	1.92
CVC European Equity Partners IV	2005	Buyout	16,500,000	21,302,146	41,386,006	1,873,384	26,482	17.11%	1.94
Providence Equity Partners V	2005	Buyout	25,000,000	31,142,231	36,427,740	2,200,572	114,527	3.05%	1.17
First Reserve Fund XI, L.P.	2006	Buyout	20,000,000	22,125,580	15,632,464	(1)	9,573	-8.63%	0.71
Nordic Capital Fund VI	2006	Buyout	15,000,000	22,447,436	34,287,801	-	43,699	6.89%	1.53
TPG Fund V	2006	Buyout	20,000,000	20,697,887	28,206,248	409,139	59,583	4.81%	1.37
Green Equity Investors V	2007	Buyout	20,000,000	20,422,420	47,576,252	1,731,093	584,882	18.18%	2.36
Kayne Anderson Energy Fund IV, L.P.	2007	Buyout	15,000,000	16,605,519	18,189,171	-	15,273	2.91%	1.10
Nautic Partners VI, L.P.	2007	Buyout	20,000,000	24,245,303	52,563,283	518,351	4,182,510	17.25%	2.34
Providence Equity Partners VI	2007	Buyout	25,000,000	29,906,685	40,670,078	969,749	1,515,997	6.08%	1.41
Trilantic Capital Partners IV L.P.	2007	Buyout	11,098,351	11,656,454	17,666,701	1,679,627	524,362	13.09%	1.56
Bain Capital Fund X, L.P.	2008	Buyout	25,000,000	24,563,642	36,437,996	498,858	2,972,520	9.00%	1.60
CVC European Equity Partners V	2008	Buyout	20,000,000	29,451,077	57,150,680	284,884	879,664	20.27%	2.29
TPG Fund VI	2008	Buyout	10,000,000	14,027,947	18,371,666	332,283	573,228	7.95%	1.35
Advent International GPE VII-C, L.P.	2012	Buyout	20,000,000	19,200,000	30,879,034	800,000	4,136,320	13.68%	1.82
Providence Equity Partners VII	2012	Buyout	25,000,000	38,000,942	52,079,812	1,579,366	22,230,007	22.31%	1.96
EnCap Energy Capital Fund IX, L.P.	2013	Buyout	18,000,000	20,725,817	21,176,601	700,210	7,782,008	9.90%	1.40
Nordic Capital Fund VIII	2013	Buyout	15,000,000	21,531,875	28,681,210	1,016,643	7,708,538	14.65%	1.69
Riverside Capital Appreciation Fund VI	2013	Buyout	20,000,000	20,133,547	26,166,365	2,528,726	5,511,944	12.00%	1.57
Carlyle Asia Partners IV, LP	2014	Buyout	30,000,000	35,622,363	41,220,218	1,900,445	16,124,489	12.47%	1.61
CVC Capital Partners Fund VI	2014	Buyout	15,000,000	21,259,270	19,364,966	1,539,521	17,862,359	14.88%	1.75
Nautic Partners VII, L.P.	2014	Buyout	20,000,000	19,054,252	43,287,355	2,945,748	5,097,825	44.14%	2.54
Riverside Micro-Cap Fund III	2014	Buyout	20,000,000	21,874,016	98,255,269	2,411,698	38,860,107	38.13%	6.27
Baring Asia Private Equity Fund VI, LP	2015	Buyout	15,000,000	16,652,751	15,278,684	1,577,551	16,584,111	17.06%	1.91
Centerbridge Capital Partners III, L.P.	2015	Buyout	25,000,000	32,529,929	28,467,258	2,337,141	26,920,684	19.82%	1.70
EnCap Energy Capital Fund X, L.P.	2015	Buyout	25,000,000	25,447,608	20,813,813	1,309,830	25,122,328	15.69%	1.81
Paine Schwartz Food Chain Fund IV, L.P.	2015	Buyout	30,000,000	26,700,072	14,535,141	7,219,318	24,040,765	9.32%	1.44
Advent International GPE VIII	2016	Buyout	20,000,000	20,000,000	14,608,992	(0)	23,527,660	18.51%	1.91
Nautic Partners VIII	2016	Buyout	20,000,000	19,747,090	20,245,173	2,252,910	14,824,436	46.75%	1.78
Southvest Fund VII, L.P.	2016	Buyout	37,500,000	29,136,330	8,122,596	8,943,991	37,558,468	19.53%	1.57
Tenex Capital Partners II	2016	Buyout	25,000,000	26,169,594	29,955,138	4,743,789	26,507,141	25.60%	2.16
CVC Capital Partners Fund VII, L.P.	2017	Buyout	35,000,000	35,796,539	5,227,125	5,454,032	49,553,183	20.54%	1.53
EnCap Energy Capital Fund XI, L.P.	2017	Buyout	50,000,000	38,078,494	5,933,382	13,230,412	48,865,359	18.79%	1.44
RLH IV	2017	Buyout	40,000,000	33,812,651	16,780,438	6,186,686	25,822,814	11.58%	1.26
Altaris Constellation Partners IV	2018	Buyout	6,000,000	5,811,981	4,209,501	617,854	5,571,291	24.18%	1.68
Altaris Health Partners IV	2018	Buyout	24,000,000	22,676,745	23,955,663	2,983,270	17,372,534	28.95%	1.82
Baring Asia Private Equity Fund VII, LP	2018	Buyout	50,000,000	48,437,866	27,744,052	18,919,580	47,177,121	31.35%	1.55
Carlyle Asia Partners V	2018	Buyout	50,000,000	34,771,796	10,542,228	24,806,984	29,186,583	10.36%	1.14
German Equity Partners V (ECM GEP V)	2018	Buyout	21,500,000	15,313,502	977,887	8,801,700	14,302,361	-0.13%	1.00
Paine Schwartz Food Chain Fund V	2018	Buyout	50,000,000	36,637,217	5,585,952	18,152,427	46,082,146	31.01%	1.41
Siris Partners IV, L.P.	2018	Buyout	50,000,000	40,966,977	5,900,204	12,636,801	56,384,924	20.79%	1.52
Advent International GPE IX	2019	Buyout	30,000,000	26,102,165	2,398,802	3,897,835	37,902,595	34.18%	1.54

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Current Partnerships	Vintage Year/ Initial Investment	Type	Amount Committed (in \$ unless otherwise noted)	Cumulative Cash Flows (\$)			Cumulative Performance *		
				Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Eureka IV	2019	Buyout	20,000,000	5,283,536	919,577	14,714,602	5,473,672	11.11%	1.21
Hastings Equity IV, L.P.	2019	Buyout	25,000,000	19,288,921	11,951,744	5,711,079	17,505,469	21.70%	1.53
Nautic Partners IX, L.P.	2019	Buyout	25,000,000	20,521,246	4,150,419	6,788,817	25,584,222	32.61%	1.45
Riverside Micro-Cap Fund V, L.P.	2019	Buyout	25,000,000	19,170,797	-	5,829,203	28,346,317	22.56%	1.48
Vinci Capital Partners III	2019	Buyout	30,000,000	20,982,671	473,186	9,672,556	25,297,775	13.18%	1.23
Endeavour Capital Fund VIII, L.P.	2020	Buyout	50,000,000	18,957,637	-	31,042,363	19,452,492	3.58%	1.03
Hastings Equity Co-Invest RI, L.P.	2020	Buyout	7,500,000	3,594,096	-	3,905,904	4,416,774	14.81%	1.23
Odyssey Investment Partners Fund VI, LP	2020	Buyout	50,000,000	33,444,744	18,933	16,574,189	43,070,031	21.99%	1.29
Parthenon Investors VI, L.P.	2020	Buyout	45,000,000	14,507,757	-	30,490,808	18,117,227	22.23%	1.25
Pollen Street Capital IV, L.P.	2020	Buyout	40,000,000	20,606,323	-	20,519,716	23,804,183	20.01%	1.16
Riverside Micro Cap Fund IV B, L.P.	2020	Buyout	20,000,000	19,048,773	-	951,227	33,838,447	36.46%	1.78
Thoma Bravo Discover Fund III, L.P.	2020	Buyout	30,000,000	27,733,402	-	2,266,598	29,178,690	5.35%	1.05
Wynnchurch Capital Partners V	2020	Buyout	40,000,000	19,088,151	-	20,911,849	24,876,104	28.51%	1.30
Charlesbank Equity Fund X, L.P.	2021	Buyout	25,000,000	8,526,973	22,666	16,478,829	8,995,397	8.54%	1.06
Charlesbank Fund X Overage	2021	Buyout	10,000,000	5,962,369	4,684	4,042,315	6,526,450	17.99%	1.10
CVC Capital Partners VIII	2021	Buyout	40,000,000	14,200,964	-	26,463,451	14,601,710	N/M	N/M
Nautic Partners X, L.P.	2021	Buyout	50,000,000	13,048,655	-	36,951,345	12,834,796	N/M	N/M
PSP RI Co-Investment Fund, L.P.	2021	Buyout	15,000,000	147,019	-	14,852,981	42,349	N/M	N/M
Riverside Micro-Cap Fund VI, L.P.	2021	Buyout	50,000,000	3,320,975	-	46,679,025	2,989,781	N/M	N/M
Tenex Capital Partners III	2021	Buyout	30,000,000	9,935,245	10,689,230	22,588,996	14,567,321	N/M	N/M
Thoma Bravo Fund XIV, L.P.	2021	Buyout	20,000,000	18,828,847	-	1,171,153	16,543,119	N/M	N/M
Advent International GPE X	2022	Buyout	45,000,000	1,575,000	-	43,425,000	1,307,231	N/M	N/M
Havencrest Healthcare Partners II	2022	Buyout	40,000,000	1,086,879	-	38,913,121	321,150	N/M	N/M
Thoma Bravo XV	2022	Buyout	25,000,000	7,648,035	528	17,351,965	7,549,458	N/M	N/M
Eureka III	2019	Direct Secondary	25,000,000	18,124,741	33,397,560	9,303,844	5,674,829	38.38%	2.16
Industry Ventures Partnership Holdings IV- Secondary	2019	Direct Secondary	10,032,361	7,974,690	2,874,924	2,057,671	20,557,886	61.88%	2.94
GCM Grosvenor Advance Fund	2022	Fund of Funds	10,000,000	3,874,338	38,935	6,209,413	4,209,596	N/M	N/M
Sorenson Capital Partners III, L.P.	2014	Growth Equity	30,000,000	38,240,828	33,971,336	1,669,042	25,493,708	12.02%	1.56
Level Equity Growth Partners IV, L.P.	2018	Growth Equity	17,500,000	16,708,718	14,352,728	1,220,800	25,512,845	52.84%	2.39
Level Equity Opportunities Fund 2018	2018	Growth Equity	15,000,000	11,294,504	10,556,666	3,705,496	18,475,157	62.79%	2.57
Level Equity Growth Partners V	2021	Growth Equity	30,000,000	6,630,737	-	23,369,263	5,187,119	N/M	N/M
Level Equity Opportunities Fund 2021	2021	Growth Equity	20,000,000	2,201,271	-	17,798,719	1,586,749	N/M	N/M
Shamrock Capital Growth Fund V, L.P.	2021	Growth Equity	30,000,000	9,152,386	4,249	20,847,614	7,981,795	N/M	N/M
Centerbridge Capital Partners	2006	Opportunistic Credit	15,000,000	23,764,738	41,758,584	992,471	542,163	19.20%	1.78
MHR Institutional Partners III LP	2006	Opportunistic Credit	20,000,000	20,817,143	25,328,707	3,478,626	3,451,761	5.55%	1.38
WLR Recovery Fund IV	2007	Opportunistic Credit	8,000,000	7,277,318	9,762,080	275,492	7,706	7.29%	1.34
Oaktree European Principal Fund III	2011	Opportunistic Credit	20,000,000	17,686,000	16,229,713	5,247,415	10,131,815	7.04%	1.49
Centerbridge Special Credit Partners II, L.P.	2012	Opportunistic Credit	25,000,000	22,500,000	23,086,545	2,500,000	736,385	1.37%	1.06
Davidson Kempner Long-Term Distressed Opportunities Fund IV LP	2018	Opportunistic Credit	50,000,000	47,425,008	18,709,676	3,428,402	60,064,752	16.80%	1.66
Clearlake Opportunities Partners II, L.P.	2019	Opportunistic Credit	30,000,000	14,199,563	5,228,647	17,488,728	13,239,143	17.66%	1.30
Davidson Kempner Long-Term Distressed Opportunities Fund V LP	2020	Opportunistic Credit	35,000,000	30,761,227	319,523	4,554,405	34,606,511	10.26%	1.14
Clearlake Flagship Plus Partners, L.P.	2021	Opportunistic Credit	10,000,000	8,122,993	1,848,580	3,460,601	6,503,173	1.48%	1.01
Coller International Partners V, L.P.	2006	Secondaries Fund	15,000,000	12,620,912	17,394,636	150,000	53,267	7.45%	1.38
Leapfrog Ventures II, L.P.	2005	Venture Capital	10,000,000	9,815,000	6,811,564	185,000	1,431,650	-3.12%	0.84
Alta Partners VIII	2006	Venture Capital	15,000,000	15,000,000	34,026,008	-	3,977,876	16.53%	2.53
Granite Global Ventures III	2006	Venture Capital	15,000,000	14,625,748	41,675,138	375,000	437,136	18.33%	2.88
Point 406 Ventures I, L.P.	2006	Venture Capital	10,000,000	11,567,207	15,720,501	(0)	2,921,142	6.97%	1.61
Paladin III, L.P.	2008	Venture Capital	10,000,000	13,922,641	28,122,870	154,998	2,842,083	12.90%	2.22

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				Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Industry Ventures Partnership Holdings III	2014	Venture Capital	25,000,000	23,339,744	41,031,909	1,722,958	41,160,401	25.63%	3.52
Industry Ventures Partnership Holdings III-C	2015	Venture Capital	15,000,000	13,667,381	12,264,594	1,332,619	25,770,149	26.79%	2.78
Industry Ventures Partnership Holdings IV	2015	Venture Capital	10,000,000	9,030,000	3,367,669	970,000	20,491,573	28.96%	2.64
Industry Ventures Partnership Holdings V	2019	Venture Capital	30,000,000	25,200,000	752,319	4,800,000	56,981,460	47.59%	2.29
DCVC Bio II, L.P.	2020	Venture Capital	20,000,000	7,700,000	3,044,804	12,300,000	6,841,464	30.23%	1.28
GGV Capital VIII L.P.	2021	Venture Capital	18,000,000	8,820,000	-	9,180,000	10,337,771	N/M	N/M
GGV Capital VIII Plus L.P.	2021	Venture Capital	4,500,000	2,002,500	-	2,497,500	2,111,411	N/M	N/M
GGV Discovery III, L.P.	2021	Venture Capital	7,500,000	3,262,500	-	4,237,500	4,765,139	N/M	N/M
Industry Ventures Partnership Holdings VI	2021	Venture Capital	30,000,000	7,822,318	56,963	22,193,226	8,400,277	N/M	N/M
TCG Crossover Fund I, L.P.	2021	Venture Capital	25,000,000	13,375,000	-	11,625,000	13,482,907	N/M	N/M
The Column Group Opportunity III, L.P.	2022	Venture Capital	12,500,000	599,593	-	11,900,407	535,466	N/M	N/M
The Column Group V, LP	2022	Venture Capital	12,500,000	294,716	-	12,205,284	230,347	N/M	N/M
Other Funds in Aggregate**			55,000,000	58,827,697	59,995,806	2,832,681	14,396,387	N/M	N/M
<b>Total</b>			<b>\$ 2,649,206,262</b>	<b>2,060,303,080</b>	<b>1,875,433,279</b>	<b>838,635,673</b>	<b>1,560,046,718</b>		

\*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private equity where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the "J-Curve", because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSI investment, and were not prepared, reviewed or approved by the General Partners.

\*\*Other funds in aggregate are the total commitments to and amounts drawn and distributed by funds whose confidentiality provisions do not permit the disclosure of their performance data. These funds include Braemar Energy Ventures III, Constellation Ventures III, Thomas, McNerney & Partners and Thomas McNerney & Partners II.



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			Amount Committed (in \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Advent International GPE VII-C, L.P.	2012	Buyout	20,000,000	19,200,000	30,879,034	800,000	4,136,320	13.68%	1.82
Advent International GPE VIII	2016	Buyout	20,000,000	20,000,000	14,608,992	(0)	23,527,660	18.51%	1.91
Advent International GPE IX	2019	Buyout	30,000,000	26,102,165	2,398,802	3,897,835	37,902,595	34.18%	1.54
Advent International GPE X	2022	Buyout	45,000,000	1,575,000	-	43,425,000	1,307,231	N/M	N/M
Altaris Constellation Partners IV	2018	Buyout	6,000,000	5,811,981	4,209,501	617,854	5,571,291	24.18%	1.68
Altaris Health Partners IV	2018	Buyout	24,000,000	22,676,745	23,955,663	2,983,270	17,372,534	28.95%	1.82
Bain Capital Fund X, L.P.	2008	Buyout	25,000,000	24,563,642	36,437,996	498,858	2,972,520	9.00%	1.60
Baring Asia Private Equity Fund VI, LP	2015	Buyout	15,000,000	16,652,751	15,278,684	1,577,551	16,584,111	17.06%	1.91
Baring Asia Private Equity Fund VII, LP	2018	Buyout	50,000,000	48,437,866	27,744,052	18,919,580	47,177,121	31.35%	1.55
Birch Hill Equity Partners III	2005	Buyout	18,000,000	18,973,636	36,236,586	160,904	142,084	12.28%	1.92
Carlyle Asia Partners IV, LP	2014	Buyout	30,000,000	35,622,363	41,220,218	1,900,445	16,124,489	12.47%	1.61
Carlyle Asia Partners V	2018	Buyout	50,000,000	34,771,796	10,542,228	24,806,984	29,186,583	10.36%	1.14
Centerbridge Capital Partners III, L.P.	2015	Buyout	25,000,000	32,529,929	28,467,258	2,337,141	26,920,684	19.82%	1.70
Charlesbank Equity Fund X, L.P.	2021	Buyout	25,000,000	8,526,973	22,666	16,478,829	8,995,397	8.54%	1.06
Charlesbank Fund X Overage	2021	Buyout	10,000,000	5,962,369	4,684	4,042,315	6,526,450	17.99%	1.10
CVC European Equity Partners III	2001	Buyout	20,000,000	23,760,732	59,551,716	297,277	1,440,406	41.02%	2.57
CVC European Equity Partners IV	2005	Buyout	16,500,000	21,302,146	41,386,006	1,873,384	26,482	17.11%	1.94
CVC European Equity Partners V	2008	Buyout	20,000,000	29,451,077	57,150,680	284,884	879,664	20.27%	2.29
CVC Capital Partners Fund VI	2014	Buyout	15,000,000	21,259,270	19,364,966	1,539,521	17,862,359	14.88%	1.75
CVC Capital Partners Fund VII, L.P.	2017	Buyout	35,000,000	35,796,539	5,227,125	5,454,032	49,553,183	20.54%	1.53
CVC Capital Partners VIII	2021	Buyout	40,000,000	14,200,964	-	26,463,451	14,601,710	N/M	N/M
EnCap Energy Capital Fund IX, L.P.	2013	Buyout	18,000,000	20,725,817	21,176,601	700,210	7,782,008	9.90%	1.40
EnCap Energy Capital Fund X, L.P.	2015	Buyout	25,000,000	25,447,608	20,813,813	1,309,830	25,122,328	15.69%	1.81
EnCap Energy Capital Fund XI, L.P.	2017	Buyout	50,000,000	38,078,494	5,933,382	13,230,412	48,865,359	18.79%	1.44
Endeavour Capital Fund VIII, L.P.	2020	Buyout	50,000,000	18,957,637	-	31,042,363	19,452,492	3.58%	1.03
Eureka IV	2019	Buyout	20,000,000	5,283,536	919,577	14,714,602	5,473,672	11.11%	1.21
First Reserve Fund XI, L.P.	2006	Buyout	20,000,000	22,125,580	15,632,464	(1)	9,573	-8.63%	0.71
German Equity Partners V (ECM GEP V)	2018	Buyout	21,500,000	15,313,502	977,887	8,801,700	14,302,361	-0.13%	1.00
Green Equity Investors V	2007	Buyout	20,000,000	20,422,420	47,576,252	1,731,093	584,882	18.18%	2.36
Hastings Equity Co-Invest RI, L.P.	2020	Buyout	7,500,000	3,594,096	-	3,905,904	4,416,774	14.81%	1.23
Hastings Equity IV, L.P.	2019	Buyout	25,000,000	19,288,921	11,951,744	5,711,079	17,505,469	21.70%	1.53
Havencrest Healthcare Partners II	2022	Buyout	40,000,000	1,086,879	-	38,913,121	321,150	N/M	N/M
Kayne Anderson Energy Fund IV, L.P.	2007	Buyout	15,000,000	16,605,519	18,189,171	-	15,273	2.91%	1.10
Leeds Equity Partners IV, L.P.	2003	Buyout	10,000,000	10,209,327	13,390,948	1,099,639	17,737	4.27%	1.31
Nautic Partners V, L.P.	2000	Buyout	20,000,000	20,334,739	40,623,616	632,739	1,605,282	17.04%	2.08
Nautic Partners VI, L.P.	2007	Buyout	20,000,000	24,245,303	52,563,283	518,351	4,182,510	17.25%	2.34
Nautic Partners VII, L.P.	2014	Buyout	20,000,000	19,054,252	43,287,355	2,945,748	5,097,825	44.14%	2.54
Nautic Partners VIII	2016	Buyout	20,000,000	19,747,090	20,245,173	2,252,910	14,824,436	46.75%	1.78
Nautic Partners IX, L.P.	2019	Buyout	25,000,000	20,521,246	4,150,419	6,788,817	25,584,222	32.61%	1.45
Nautic Partners X, L.P.	2021	Buyout	50,000,000	13,048,655	-	36,951,345	12,834,796	N/M	N/M
Nordic Capital Fund V	2003	Buyout	14,615,550	21,398,689	58,883,260	-	48,362	21.04%	2.75
Nordic Capital Fund VI	2006	Buyout	15,000,000	22,447,436	34,287,801	-	43,699	6.89%	1.53
Nordic Capital Fund VIII	2013	Buyout	15,000,000	21,531,875	28,681,210	1,016,643	7,708,538	14.65%	1.69
Odyssey Investment Partners Fund VI, LP	2020	Buyout	50,000,000	33,444,744	18,933	16,574,189	43,070,031	21.99%	1.29
Paine Schwartz Food Chain Fund IV, L.P.	2015	Buyout	30,000,000	26,700,072	14,535,141	7,219,318	24,040,765	9.32%	1.44
Paine Schwartz Food Chain Fund V	2018	Buyout	50,000,000	36,637,217	5,585,952	18,152,427	46,082,146	31.01%	1.41
PSP RI Co-Investment Fund, L.P.	2021	Buyout	15,000,000	147,019	-	14,852,981	42,349	N/M	N/M
Parthenon Investors II, L.P.	2001	Buyout	23,960,000	23,409,381	37,994,886	1,821,022	267,946	12.31%	1.63

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				Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Parthenon Investors VI, L.P.	2020	Buyout	45,000,000	14,507,757	-	30,490,808	18,117,227	22.23%	1.25
Pollen Street Capital IV, L.P.	2020	Buyout	40,000,000	20,606,323	-	20,519,716	23,804,183	20.01%	1.16
Providence Equity Partners V	2005	Buyout	25,000,000	31,142,231	36,427,740	2,200,572	114,527	3.05%	1.17
Providence Equity Partners VI	2007	Buyout	25,000,000	29,906,685	40,670,078	969,749	1,515,997	6.08%	1.41
Providence Equity Partners VII	2012	Buyout	25,000,000	38,000,942	52,079,812	1,579,366	22,230,007	22.31%	1.96
Riverside Capital Appreciation Fund VI	2013	Buyout	20,000,000	20,133,547	26,166,365	2,528,726	5,511,944	12.00%	1.57
Riverside Micro-Cap Fund III	2014	Buyout	20,000,000	21,874,016	98,255,269	2,411,698	38,860,107	38.13%	6.27
Riverside Micro Cap Fund IV B, L.P.	2020	Buyout	20,000,000	19,048,773	-	951,227	33,838,447	36.46%	1.78
Riverside Micro-Cap Fund V, L.P.	2019	Buyout	25,000,000	19,170,797	-	5,829,203	28,346,317	22.56%	1.48
Riverside Micro-Cap Fund VI, L.P.	2021	Buyout	50,000,000	3,320,975	-	46,679,025	2,989,781	N/M	N/M
RLH IV	2017	Buyout	40,000,000	33,812,651	16,780,438	6,186,686	25,822,814	11.58%	1.26
Siris Partners IV, L.P.	2018	Buyout	50,000,000	40,966,977	5,900,204	12,636,801	56,384,924	20.79%	1.52
Southvest Fund VII, L.P.	2016	Buyout	37,500,000	29,136,330	8,122,596	8,943,991	37,558,468	19.53%	1.57
Tenex Capital Partners II	2016	Buyout	25,000,000	26,169,594	29,955,138	4,743,789	26,507,141	25.60%	2.16
Tenex Capital Partners III	2021	Buyout	30,000,000	9,935,245	10,689,230	22,588,996	14,567,321	N/M	N/M
Thoma Bravo Discover Fund III, L.P.	2020	Buyout	30,000,000	27,733,402	-	2,266,598	29,178,690	5.35%	1.05
Thoma Bravo Fund XIV, L.P.	2021	Buyout	20,000,000	18,828,847	-	1,171,153	16,543,119	N/M	N/M
Thoma Bravo XV	2022	Buyout	25,000,000	7,648,035	528	17,351,965	7,549,458	N/M	N/M
TPG Partners IV, L.P.	2003	Buyout	15,000,000	16,672,684	31,829,124	64,421	31,334	15.36%	1.91
TPG Fund V	2006	Buyout	20,000,000	20,697,887	28,206,248	409,139	59,583	4.81%	1.37
TPG Fund VI	2008	Buyout	10,000,000	14,027,947	18,371,666	332,283	573,228	7.95%	1.35
Trilantic Capital Partners IV L.P.	2007	Buyout	11,098,351	11,656,454	17,666,701	1,679,627	524,362	13.09%	1.56
Vinci Capital Partners III	2019	Buyout	30,000,000	20,982,671	473,186	9,672,556	25,297,775	13.18%	1.23
Wynnchurch Capital Partners V	2020	Buyout	40,000,000	19,088,151	-	20,911,849	24,876,104	28.51%	1.30
Eureka III	2019	Direct Secondary	25,000,000	18,124,741	33,397,560	9,303,844	5,674,829	38.38%	2.16
Industry Ventures Partnership Holdings IV- Secondary	2019	Direct Secondary	10,032,361	7,974,690	2,874,924	2,057,671	20,557,886	61.88%	2.94
GCM Grosvenor Advance Fund	2022	Fund of Funds	10,000,000	3,874,338	38,935	6,209,413	4,209,596	N/M	N/M
Level Equity Growth Partners IV, L.P.	2018	Growth Equity	17,500,000	16,708,718	14,352,728	1,220,800	25,512,845	52.84%	2.39
Level Equity Growth Partners V	2021	Growth Equity	30,000,000	6,630,737	-	23,369,263	5,187,119	N/M	N/M
Level Equity Opportunities Fund 2018	2018	Growth Equity	15,000,000	11,294,504	10,556,666	3,705,496	18,475,157	62.79%	2.57
Level Equity Opportunities Fund 2021	2021	Growth Equity	20,000,000	2,201,271	-	17,798,719	1,586,749	N/M	N/M
Shamrock Capital Growth Fund V, L.P.	2021	Growth Equity	30,000,000	9,152,386	4,249	20,847,614	7,981,795	N/M	N/M
Sorenson Capital Partners III, L.P.	2014	Growth Equity	30,000,000	38,240,828	33,971,336	1,669,042	25,493,708	12.02%	1.56
Centerbridge Capital Partners	2006	Opportunistic Credit	15,000,000	23,764,738	41,758,584	992,471	542,163	19.20%	1.78
Centerbridge Special Credit Partners II, L.P.	2012	Opportunistic Credit	25,000,000	22,500,000	23,086,545	2,500,000	736,385	1.37%	1.06
Clearlake Flagship Plus Partners, L.P.	2021	Opportunistic Credit	10,000,000	8,122,993	1,848,580	3,460,601	6,503,173	1.48%	1.01
Clearlake Opportunities Partners II, L.P.	2019	Opportunistic Credit	30,000,000	14,199,563	5,228,647	17,488,728	13,239,143	17.66%	1.30
Davidson Kempner Long-Term Distressed Opportunities Fund IV LP	2018	Opportunistic Credit	50,000,000	47,425,008	18,709,676	3,428,402	60,064,752	16.80%	1.66
Davidson Kempner Long-Term Distressed Opportunities Fund V LP	2020	Opportunistic Credit	35,000,000	30,761,227	319,523	4,554,405	34,606,511	10.26%	1.14
MHR Institutional Partners III LP	2006	Opportunistic Credit	20,000,000	20,817,143	25,328,707	3,478,626	3,451,761	5.55%	1.38
Oaktree European Principal Fund III	2011	Opportunistic Credit	20,000,000	17,686,000	16,229,713	5,247,415	10,131,815	7.04%	1.49
WLR Recovery Fund IV	2007	Opportunistic Credit	8,000,000	7,277,318	9,762,080	275,492	7,706	7.29%	1.34
Coller International Partners V, L.P.	2006	Secondaries Fund	15,000,000	12,620,912	17,394,636	150,000	53,267	7.45%	1.38
Alta Partners VIII	2006	Venture Capital	15,000,000	15,000,000	34,026,008	-	3,977,876	16.53%	2.53
DCVC Bio II, L.P.	2020	Venture Capital	20,000,000	7,700,000	3,044,804	12,300,000	6,841,464	30.23%	1.28
Granite Global Ventures III	2006	Venture Capital	15,000,000	14,625,748	41,675,138	375,000	437,136	18.33%	2.88
GGV Capital VIII L.P.	2021	Venture Capital	18,000,000	8,820,000	-	9,180,000	10,337,771	N/M	N/M
GGV Capital VIII Plus L.P.	2021	Venture Capital	4,500,000	2,002,500	-	2,497,500	2,111,411	N/M	N/M

**Employees' Retirement System of Rhode Island Private Equity Performance - Active Portfolio**  
**9/30/2022**  
**Sorted by Type and Partnership Name**

Current Partnerships	Vintage Year/ Initial Investment	Type	Amount Committed (in \$ unless otherwise noted)	Cumulative Cash Flows (\$)			Cumulative Performance *		
				Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
GGV Discovery III, L.P.	2021	Venture Capital	7,500,000	3,262,500	-	4,237,500	4,765,139	N/M	N/M
Industry Ventures Partnership Holdings III	2014	Venture Capital	25,000,000	23,339,744	41,031,909	1,722,958	41,160,401	25.63%	3.52
Industry Ventures Partnership Holdings III-C	2015	Venture Capital	15,000,000	13,667,381	12,264,594	1,332,619	25,770,149	26.79%	2.78
Industry Ventures Partnership Holdings IV	2015	Venture Capital	10,000,000	9,030,000	3,367,669	970,000	20,491,573	28.96%	2.64
Industry Ventures Partnership Holdings V	2019	Venture Capital	30,000,000	25,200,000	752,319	4,800,000	56,981,460	47.59%	2.29
Industry Ventures Partnership Holdings VI	2021	Venture Capital	30,000,000	7,822,318	56,963	22,193,226	8,400,277	N/M	N/M
Leapfrog Ventures II, L.P.	2005	Venture Capital	10,000,000	9,815,000	6,811,564	185,000	1,431,650	-3.12%	0.84
Paladin III, L.P.	2008	Venture Capital	10,000,000	13,922,641	28,122,870	154,998	2,842,083	12.90%	2.22
Point 406 Ventures I, L.P.	2006	Venture Capital	10,000,000	11,567,207	15,720,501	(0)	2,921,142	6.97%	1.61
TCG Crossover Fund I, L.P.	2021	Venture Capital	25,000,000	13,375,000	-	11,625,000	13,482,907	N/M	N/M
The Column Group Opportunity III, L.P.	2022	Venture Capital	12,500,000	599,593	-	11,900,407	535,466	N/M	N/M
The Column Group V, LP	2022	Venture Capital	12,500,000	294,716	-	12,205,284	230,347	N/M	N/M
Other Funds in Aggregate**			55,000,000	58,827,697	59,995,806	2,832,681	14,396,387	N/M	N/M
<b>Total</b>			<b>\$ 2,649,206,262</b>	<b>2,060,303,080</b>	<b>1,875,433,279</b>	<b>838,635,673</b>	<b>1,560,046,718</b>		

\*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private equity where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the "J-Curve", because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSI investment, and were not prepared, reviewed or approved by the General Partners.

\*\*Other funds in aggregate are the total commitments to and amounts drawn and distributed by funds whose confidentiality provisions do not permit the disclosure of their performance data. These funds include Braemar Energy Ventures III, Constellation Ventures III, Thomas, McNerney & Partners and Thomas McNerney & Partners II.

## Portfolio Summary

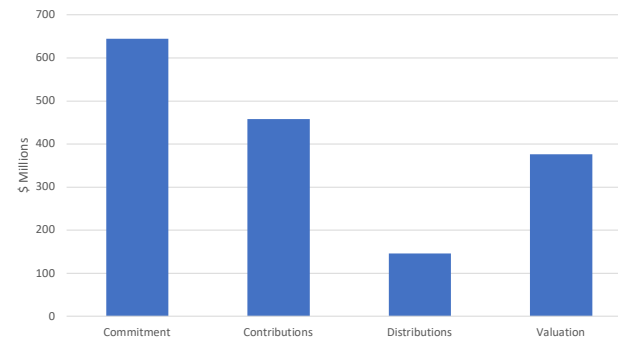
9/30/2022

All Investments

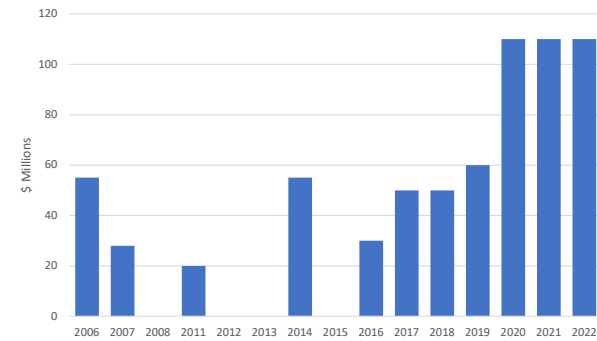
### Performance Summary

Asset Class	Investment Type	Number of Investments	Commitment	Contributions	Distributions	Valuation	Multiple of Cost	IRR	TWR
Total: Private Credit Funds		19	645,000,000	458,188,368	145,962,643	376,568,502	1.14	6.05%	6.31%

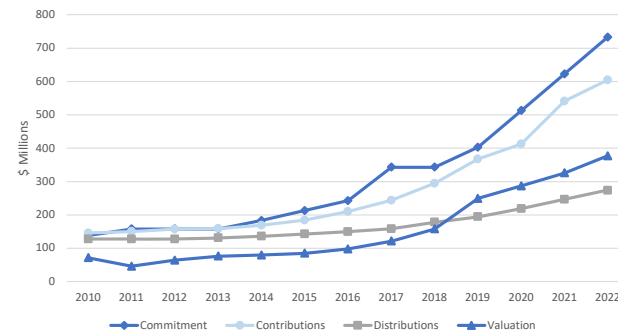
#### Cash Flow and Valuation Summary



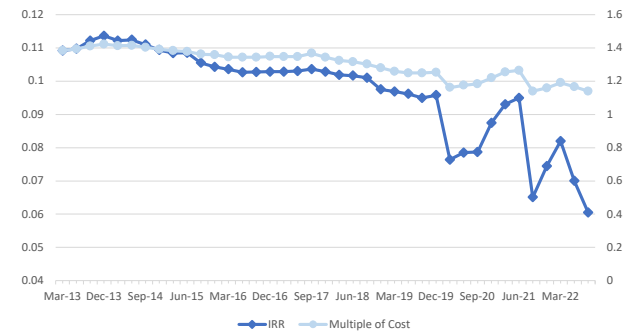
#### Commitment by Vintage Year



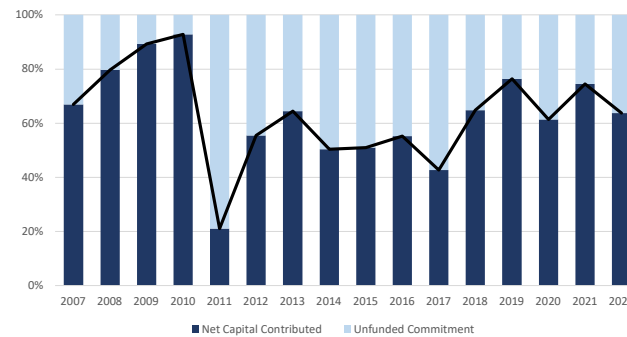
#### Historical Cash Flows and Valuation



#### Historical Performance



#### Historical Percent Funded



#### Period IRRs



**Employees' Retirement System of Rhode Island Private Credit Performance - Active Portfolio**  
**9/30/2022**  
**Sorted by Type and Vintage Year**

Cumulative Cash Flows (\$)

Cumulative Performance \*

Current Partnerships	Vintage Year/ Initial Investment	Type	Amount Committed (in \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
CapitalSpring Investment Partners V	2016	Direct Lending	30,000,000	30,906,230	22,410,080	4,314,887	19,039,503	9.81%	1.34
Owl Rock Capital Corporation	2018	Direct Lending	50,000,000	50,000,000	16,751,405	-	33,721,290	0.29%	1.01
Benefit Street Senior Secured Opportunities Fund II	2019	Direct Lending	40,000,000	24,434,598	2,859,191	16,348,035	25,004,462	11.45%	1.14
CapitalSpring Investment Partners VI, LP	2020	Direct Lending	40,000,000	11,285,206	-	28,528,495	11,174,114	12.42%	1.22
Owl Rock Capital Corporation III	2020	Direct Lending	50,000,000	50,000,000	4,440,369	-	50,460,384	8.08%	1.29
HPS Specialty Loan Fund V	2021	Direct Lending	50,000,000	28,170,165	1,849,468	22,490,156	28,181,380	N/M	N/M
Owl Rock Capital Diversified Holdings LLC	2021	Direct Lending	50,000,000	516,257	-	49,483,743	516,257	N/M	N/M
Deerpath Capital VI, LP	2022	Direct Lending	30,000,000	15,000,000	-	15,000,000	15,214,920	N/M	N/M
Garrison Opportunity Fund IV	2014	Specialty Finance	30,000,000	28,373,532	16,524,223	-	11,040,838	-0.57%	0.97
Virgo Societas Partnership IV	2017	Specialty Finance	50,000,000	60,159,574	9,614,241	12,443	67,824,164	8.14%	1.07
Zephyrus Aviation Partners I, L.P.	2019	Specialty Finance	20,000,000	21,506,755	2,016,583	292,616	23,504,618	6.09%	1.19
Shamrock Capital Content Fund II, L.P.	2020	Specialty Finance	20,000,000	11,620,140	2,945,845	11,325,451	9,387,375	6.20%	1.29
Atalaya Asset Income Fund V LP	2021	Specialty Finance	30,000,000	27,039,021	5,973,326	5,183,535	24,584,376	N/M	N/M
Shamrock CCF II Co-Invest I-A, L.P.	2021	Specialty Finance	10,000,000	4,305,418	1,091,586	5,694,583	4,153,537	N/M	N/M
Virgo Specialty Finance I (Offshore), L.P.	2021	Specialty Finance	20,000,000	13,633,931	-	6,295,319	17,578,551	N/M	N/M
Atalaya Asset Income Fund Evergreen LP	2022	Specialty Finance	50,000,000	25,500,000	274,424	24,500,000	25,458,200	N/M	N/M
Shamrock Capital Content Fund III, L.P.	2022	Specialty Finance	30,000,000	-	-	30,000,000	-	N/M	N/M
Other Funds in Aggregate**			45,000,000	55,737,543	59,211,901	4,296,492	9,724,533		
<b>Total</b>			<b>\$ 645,000,000</b>	<b>458,188,368</b>	<b>145,962,643</b>	<b>223,765,754</b>	<b>376,568,502</b>		

\*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private equity where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the "J-Curve", because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

\*\*Other funds in aggregate are the total commitments to and amounts drawn and distributed by funds whose confidentiality provisions do not permit the disclosure of their performance data. These funds include Summit Credit Partners I and Summit Credit Partners II.

**Employees' Retirement System of Rhode Island Private Credit Performance - Active Portfolio**  
**9/30/2022**  
**Sorted by Type and Partnership Name**

Current Partnerships	Vintage Year/ Initial Investment	Type	Amount Committed (in \$ unless otherwise noted)	Cumulative Cash Flows (\$)			Cumulative Performance *		
				Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Benefit Street Senior Secured Opportunities Fund II	2019	Direct Lending	40,000,000	24,434,598	2,859,191	16,348,035	25,004,462	11.45%	1.14
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CapitalSpring Investment Partners VI, LP	2020	Direct Lending	40,000,000	11,285,206	-	28,528,495	11,174,114	12.42%	1.22
Deerpath Capital VI, LP	2022	Direct Lending	30,000,000	15,000,000	-	15,000,000	15,214,920	N/M	N/M
HPS Specialty Loan Fund V	2021	Direct Lending	50,000,000	28,170,165	1,849,468	22,490,156	28,181,380	N/M	N/M
Owl Rock Capital Corporation	2018	Direct Lending	50,000,000	50,000,000	16,751,405	-	33,721,290	0.29%	1.01
Owl Rock Capital Corporation III	2020	Direct Lending	50,000,000	50,000,000	4,440,369	-	50,460,384	8.08%	1.29
Owl Rock Capital Diversified Holdings LLC	2021	Direct Lending	50,000,000	516,257	-	49,483,743	516,257	N/M	N/M
Atalaya Asset Income Fund Evergreen LP	2022	Specialty Finance	50,000,000	25,500,000	274,424	24,500,000	25,458,200	N/M	N/M
Atalaya Asset Income Fund V LP	2021	Specialty Finance	30,000,000	27,039,021	5,973,326	5,183,535	24,584,376	N/M	N/M
Garrison Opportunity Fund IV	2014	Specialty Finance	30,000,000	28,373,532	16,524,223	-	11,040,838	-0.57%	0.97
Shamrock Capital Content Fund II, L.P.	2020	Specialty Finance	20,000,000	11,620,140	2,945,845	11,325,451	9,387,375	6.20%	1.29
Shamrock Capital Content Fund III, L.P.	2022	Specialty Finance	30,000,000	-	-	30,000,000	-	N/M	N/M
Shamrock CCF II Co-Invest I-A, L.P.	2021	Specialty Finance	10,000,000	4,305,418	1,091,586	5,694,583	4,153,537	N/M	N/M
Virgo Societas Partnership IV	2017	Specialty Finance	50,000,000	60,159,574	9,614,241	12,443	67,824,164	8.14%	1.07
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Zephyrus Aviation Partners I, L.P.	2019	Specialty Finance	20,000,000	21,506,755	2,016,583	292,616	23,504,618	6.09%	1.19
Other Funds in Aggregate**			45,000,000	55,737,543	59,211,901	4,296,492	9,724,533		
<b>Total</b>			<b>\$ 645,000,000</b>	<b>458,188,368</b>	<b>145,962,643</b>	<b>223,765,754</b>	<b>376,568,502</b>		

# **CRISIS PROTECTION CLASS**

NEPC, LLC

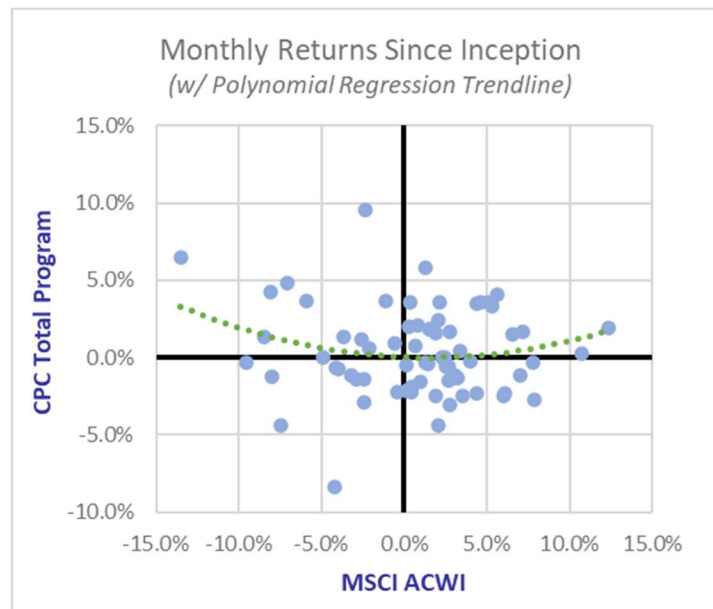
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## Employees' Retirement System of Rhode Island - Crisis Protection Class Performance (3/31/2023)

CPC Returns				
CPC Program, March 31, 2023, %				
Account Name	MTD Return	Annualized Return (Since Inception)	Annualized Std. Dev (March '23)	Annualized Std. Dev (Since Inception)
Total CPC Program	-1.15	3.79	8.70	10.06
CPC Trend	-7.02	7.28	22.33	15.30
CPC Long Duration	4.86	-0.83	19.46	14.40

Return Correlation (Since Inception)					
	Total CPC Program	CPC Trend	CPC Long Duration	Total Plan Benchmark	60/40 Blend
Total CPC Program	1.00	0.74	0.55	0.02	-0.03
CPC Trend		1.00	-0.15	-0.05	-0.20
CPC Long Duration			1.00	0.11	0.21
Total Plan Benchmark				1.00	0.96
60/40 Blend					1.00

MSCI ACWI Downside Analysis (Since Inception)					
	Total CPC Program	CPC Trend	CPC Long Duration	Total Plan Benchmark	60/40 Blend
Percent Months Positive when MSCI ACWI is Negative	52.1739%	69.5652%	43.4783%	8.6957%	4.3478%
Downside Capture	-13.7902%	-29.6951%	5.2664%	47.4458%	70.4140%





# **ABSOLUTE RETURN**

NEPC, LLC

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## Employees' Retirement System of the State of Rhode Island

Absolute Return Portfolio  
Portfolio Performance Summary  
Estimated as of March 31, 2023



Fund	Market Value	Actual %	Mar	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep	Std Dev	LTD Beta	Sharpe Ratio	Incep Date
Absolute Return Portfolio														
Aristeia Partners, L.P.	75,942,142	10.2%	0.54%	2.61%	2.61%	4.04%	4.11%	-	-	5.16%	4.65%	-0.03	0.73	Jan-21
Capula Global Relative Value Fund Ltd.	86,192,894	11.6%	0.08%	1.76%	1.76%	8.19%	10.20%	6.16%	6.46%	6.12%	1.82%	-0.03	2.70	Dec-11
Davidson Kempner Institutional Partners, L.P.	99,436,543	13.3%	-0.74%	1.12%	1.12%	3.35%	0.43%	8.15%	4.56%	5.36%	3.78%	0.16	1.10	Nov-11
DE Shaw Composite Fund LLC	170,993,716	22.9%	-0.40%	1.15%	1.15%	7.88%	14.12%	21.21%	16.45%	14.60%	4.14%	0.03	3.02	Nov-11
Elliott Associates, L.P.	162,706,465	21.8%	1.20%	2.01%	2.01%	2.55%	2.55%	11.28%	8.75%	9.13%	3.44%	0.03	2.19	Nov-11
Graham Absolute Return Trading Ltd.	72,518,652	9.7%	-2.26%	-0.12%	-0.12%	4.39%	9.97%	15.05%	7.17%	4.74%	7.45%	0.10	0.51	Jan-12
Viking Global Equities, LP	77,335,653	10.4%	2.74%	3.68%	3.68%	9.29%	9.88%	7.37%	8.17%	9.22%	8.21%	0.30	0.98	Dec-11
Absolute Return Portfolio - Total	745,126,065	99.9%	0.18%	1.68%	1.68%	5.55%	7.32%	11.64%	8.66%	7.20%	3.13%	0.12	1.87	Nov-11
HFRI Fund of Funds Composite Index			0.14%	1.57%	1.57%	2.96%	-1.10%	7.47%	3.27%	3.49%	4.79%		0.51	Nov-11
MSCI AC World Index Free - Net			3.08%	7.31%	7.31%	9.75%	-7.44%	15.36%	6.93%	8.73%	14.18%		0.59	Nov-11
ML 3-month T-Bills			0.43%	1.07%	1.07%	2.40%	2.50%	0.89%	1.41%	0.77%	0.31%		-	Nov-11
25% MSCI ACWI, 75% Barclays Aggregate			2.68%	4.05%	4.05%	2.42%	-5.26%	1.69%	2.63%	3.55%	5.38%		0.47	Nov-11
Liquidating Portfolio														
Luxor Capital Partners, LP - Liquidating SPV	450,202	0.1%	-0.25%	-0.74%	-0.74%	-12.32%	-12.30%	-11.87%	-13.27%	-7.07%	17.44%	-0.03	-0.42	Jul-16
Liquidating/Redeeming - Total	450,202	0.1%	-0.25%	-0.74%	-0.74%	-12.32%	-12.30%	-19.55%	-16.89%	-7.73%	11.97%	0.01	-0.69	Nov-11
Total Absolute Return Portfolio	745,576,267	100.0%	0.18%	1.68%	1.68%	5.53%	7.31%	11.60%	8.62%	6.77%	3.05%	0.11	1.79	Nov-11
HFRI Fund of Funds Composite Index			0.14%	1.57%	1.57%	2.96%	-1.10%	7.47%	3.27%	3.49%	4.79%		-	Nov-11
Market Indices														
Libor3Month			0.43%	1.21%	1.21%	3.20%	3.64%	1.38%	1.73%	1.10%	0.33%		-	Nov-11
Bloomberg US Aggregate Bond Index			2.54%	2.96%	2.96%	-0.09%	-4.78%	-2.77%	0.91%	1.64%	4.15%		0.15	Nov-11
Bloomberg US High Yield Bond Index			1.07%	3.57%	3.57%	7.19%	-3.34%	5.91%	3.21%	5.23%	7.23%		0.59	Nov-11
S&P 500 TR			3.67%	7.50%	7.50%	9.98%	-7.73%	18.60%	11.19%	13.17%	14.29%		0.86	Nov-11
MSCI EAFE - Net			2.48%	8.47%	8.47%	15.36%	-1.38%	12.99%	3.52%	5.75%	15.00%		0.38	Nov-11
MSCI EMF (Emerging Markets Free) - Net			3.03%	3.95%	3.95%	0.84%	-10.70%	7.83%	-0.91%	2.37%	17.07%		0.16	Nov-11

\*LTD Beta is calculated with Holding Level Returns. The market benchmark is MSCI AC World Index Free - Net Index

Most recent month returns are based on manager estimates; prior months use final market values.

Hedge Fund Research, Inc. ("HFR") is the source and owner of the HFR data contained or reflected in this report. The HFR indices included in this report are revised by HFR for up to three months following their initial release. The revisions are reflected in the trailing period returns.

This report reflects information only through the date hereof. Our due diligence and reporting rely upon the accuracy and completeness of financial information (which may or may not be audited by the fund manager) and other information publicly available or provided to us by the fund manager, its professional staff, and references we have contacted and other third parties. We have not conducted an independent verification of the information provided other than as described in this report. Our conclusions do not reflect an audit of the investment nor should they be construed as providing legal advice. Past performance does not guarantee future performance. The information contained herein is confidential commercial or financial information, the disclosure of which would cause substantial competitive harm to you, Cliffwater LLC, or the person or entity from whom the information was obtained, and may not be disclosed except as required by applicable law.

# Employees' Retirement System of the State of Rhode Island

Absolute Return Portfolio  
Fund Level Performance Report  
Estimated as of March 31, 2023



Fund						Trailing Returns			Calendar Year Returns					5 Yr	ITD Beta to	Sharpe Ratio			Start Date
	QTD	YTD	Mar	Feb	Jan	1 Year	3 Year	5 Year	2022	2021	2020	2019	2018	Std Dev	MSCI ACWI <sup>1</sup>	3 yr	5 yr	Incep.	
Absolute Return																			
Aristeia Partners, L.P.	2.60%	2.60%	0.54%	0.83%	1.21%	4.13%	12.32%	9.15%	8.17%	21.96%	6.15%	6.82%	5.06%	5.10%	0.10	1.82	1.38	1.14	Aug-97
Capula Global Relative Value Fund Ltd.	2.01%	2.01%	0.16%	1.00%	0.84%	11.06%	6.53%	6.68%	1.70%	6.07%	7.98%	4.63%	3.79%	1.80%	-0.03	2.67	2.79	1.90	Oct-05
Davidson Kempner Institutional Partners, L.P.	1.12%	1.12%	-0.74%	0.22%	1.65%	0.43%	7.86%	4.22%	6.49%	7.18%	6.70%	1.81%	6.11%	5.28%	0.16	1.59	0.48	1.26	Mar-96
DE Shaw Composite Fund LLC	1.15%	1.15%	-0.40%	1.31%	0.24%	14.12%	21.17%	16.45%	19.80%	19.97%	10.99%	11.38%	10.41%	4.16%	0.03	4.50	3.17	1.87	Mar-01
Elliott Associates, L.P.	2.01%	2.01%	1.20%	0.10%	0.70%	2.48%	11.30%	8.57%	15.14%	12.63%	6.53%	2.91%	8.80%	3.26%	0.04	2.72	1.91	1.93	Jan-90
Graham Absolute Return Trading Ltd.	-0.12%	-0.12%	-2.26%	1.83%	0.35%	9.38%	14.35%	6.59%	4.71%	0.33%	9.54%	2.36%	-7.01%	9.09%	0.11	1.62	0.56	0.84	Jan-05
Viking Global Equities, LP	3.64%	3.64%	2.70%	-0.01%	0.92%	8.17%	6.79%	8.50%	-4.42%	27.81%	17.94%	4.64%	13.01%	9.36%	0.29	0.58	0.74	1.26	Oct-99
Liquidating Portfolio																			
Luxor Capital Partners, LP	-0.74%	-0.74%	-0.25%	-0.25%	-0.25%	-12.30%	-11.87%	-13.27%	4.35%	-33.84%	-22.83%	1.19%	54.38%	16.48%	0.06	-0.77	-0.88	0.38	Apr-02
Benchmark																			
HFRI Fund of Funds Composite Index	1.57%	1.57%	0.14%	-0.59%	2.03%	-1.10%	7.47%	3.27%	6.17%	10.88%	8.39%	-4.02%	7.77%	6.16%					Aug-90
HFRI Fund Weighted Composite Index	1.18%	1.18%	-0.81%	-0.64%	2.66%	-2.06%	10.55%	4.69%	10.16%	11.83%	10.45%	-4.75%	8.59%	7.73%					Aug-90
Market Indices																			
3 Month Libor - BOM	1.21%	1.21%	0.43%	0.37%	0.40%	3.64%	1.38%	1.73%	0.16%	0.60%	2.29%	2.36%	1.29%	0.42%					Aug-87
Bloomberg Aggregate Bond Index	2.96%	2.96%	2.54%	-2.59%	3.08%	-4.78%	-2.77%	0.91%	-1.54%	7.51%	8.73%	0.02%	3.55%	5.46%					Aug-76
Bloomberg US High Yield Bond Index	3.57%	3.57%	1.07%	-1.29%	3.81%	-3.34%	5.91%	3.21%	5.28%	7.11%	14.30%	-2.08%	7.50%	9.26%					Feb-84
S&P 500 (TR)	7.50%	7.50%	3.67%	-2.44%	6.28%	-7.73%	18.60%	11.19%	28.71%	18.40%	31.49%	-4.38%	21.83%	18.64%					Jan-89
MSCI EAFE - Net - USD	8.47%	8.47%	2.48%	-2.09%	8.10%	-1.38%	12.99%	3.52%	11.26%	7.82%	22.01%	-13.79%	25.03%	17.64%					Jul-70
MSCI EMF (EMERGING MARKETS FREE) - Net - USD	3.95%	3.95%	3.03%	-6.49%	7.90%	-10.70%	7.83%	-0.91%	-2.54%	18.31%	18.44%	-14.58%	37.28%	18.94%					Jul-88

\*LTD Beta is calculated with Fund Level Returns. The market benchmark is MSCI AC World Index Free - Net Index

Note: The above is manager composite history.

1. The inception date for this calculation is equivalent to the inception date of ERSRI's initial investment into the relevant fund.

# REAL ESTATE

NEPC, LLC

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# PORTFOLIO SUMMARY

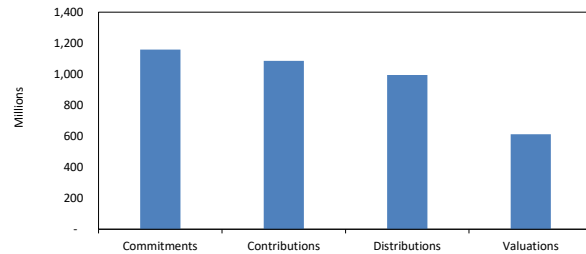
9/30/2022

All Portfolio Investments - Real Estate <sup>(1)</sup>

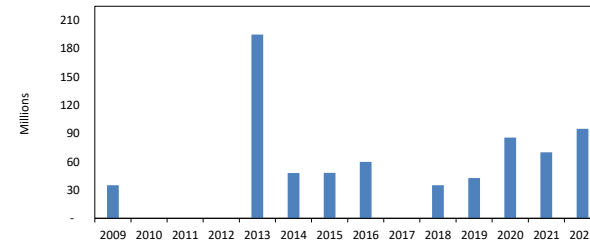
## Performance Summary

Asset Class	Investment Type	number of Investments <sup>(4)</sup>	Commitment	Contributions <sup>(2), (3)</sup>	Distributions <sup>(3)</sup>	Adjusted Valuation	Multiple of Cost	IRR	TWR
Real Estate Funds	Core	9	490,573,660	538,929,290	559,375,914	389,762,866	1.8x	6.0%	6.2%
	Non-Core	30	667,918,464	546,766,581	435,546,416	223,419,445	1.2x	3.9%	5.3%
<b>Total: Real Estate Funds</b>		<b>39</b>	<b>1,158,492,124</b>	<b>1,085,695,871</b>	<b>994,922,330</b>	<b>613,182,311</b>	<b>1.5x</b>	<b>5.5%</b>	<b>5.7%</b>
<b>Total:</b>		<b>39</b>	<b>1,158,492,124</b>	<b>1,085,695,871</b>	<b>994,922,330</b>	<b>613,182,311</b>	<b>1.5x</b>	<b>5.5%</b>	<b>5.7%</b>

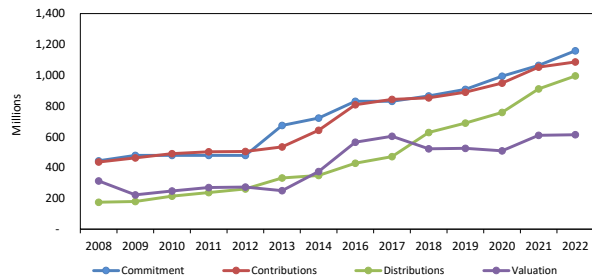
## Cash Flow and Valuation Summary



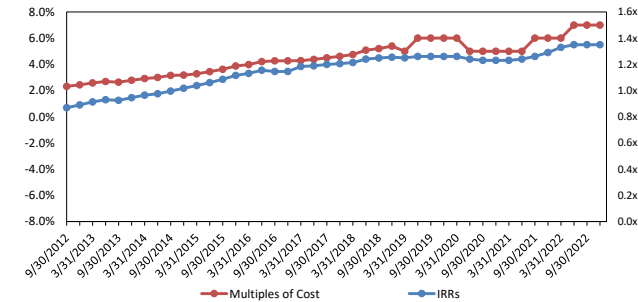
## Commitment by Vintage Year



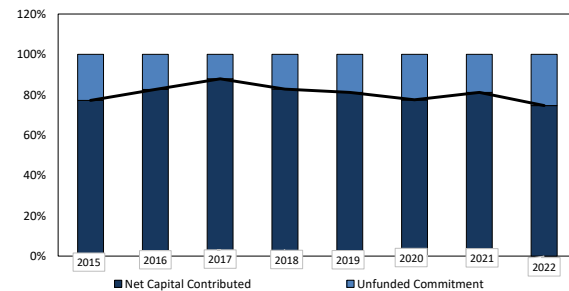
## Historical Cash Flows and Valuation



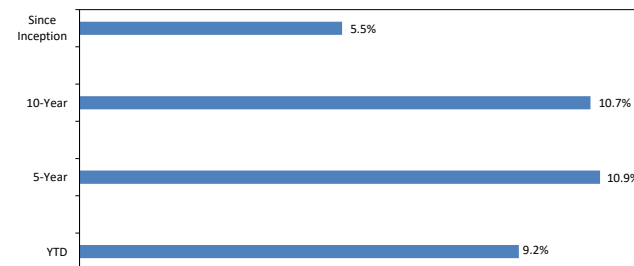
## Historical Performance



## Historical Percent Funded



## Period IRRs <sup>(5)</sup>



<sup>(1)</sup> Investment information listed as of March 31, 1989 through September 30, 2022 and includes those investments which have been liquidated.

<sup>(2)</sup> Contributions are based on cash activity and are higher than commitments primarily due to reinvestments and contributions for management fees in some of the core open-end funds.

<sup>(3)</sup> Contributions and Distributions each include activity in the amount of \$33.5 million related to a simultaneous sale and purchase of shares in a core open-end fund.

<sup>(4)</sup> As of September 30, 2022 there are four core funds and seventeen non-core funds. As of September 30, 2022, AEW Essential Housing Fund, Crow Holdings Realty Partners X and Raith Real Estate Fund III have not called capital.

<sup>(5)</sup> The YTD IRR presented is an unannualized percentage.

**Employees' Retirement System of Rhode Island Real Estate Performance**  
**9/30/2022**

Sorted by Type and Name

Current Partnerships	Vintage Year/Initial Investment	Type	Amount Committed (In \$ unless otherwise noted)	Cumulative Cash Flows (\$)			Valuation (\$)	Cumulative Performance*	
				Amount Drawn	Amount Distributed	Amount Unfunded		Net IRR (%)	Net Multiple of Investment
AEW Core Property Trust	2010	Core	69,873,660	103,330,317	70,218,554	-	136,938,557	10.75	2.01
Heitman America Real Estate Trust	2014	Core	85,000,000	95,941,292	26,403,723	-	139,064,489	10.13	1.73
Morgan Stanley Prime Property Fund	2005	Core	60,700,000	67,030,175	37,045,713	-	113,759,820	8.07	2.25
Crow Holdings Realty Partners IX	2021	Non-Core	40,000,000	34,478,395	10,826,453	7,583,808	32,381,400	35.39	1.25
Crow Holdings Retail Fund	2015	Non-Core	24,000,000	23,286,035	10,659,076	2,113,228	22,621,814	7.48	1.43
Exeter Industrial Value Fund III	2014	Non-Core	30,000,000	30,266,965	63,855,189	900,546	1,391,457	30.35	2.22
Exeter Industrial Value Fund V	2020	Non-Core	25,000,000	17,500,000	-	7,500,000	27,602,517	40.27	1.58
GEM Realty Fund V	2013	Non-Core	50,000,000	44,191,138	36,429,419	8,875,677	17,705,246	4.73	1.23
GEM Realty Fund VI	2017	Non-Core	20,000,000	15,500,000	10,292,500	7,281,204	10,117,242	17.09	1.32
GEM Realty Fund VII	2022	Non-Core	25,000,000	750,000	-	24,250,000	117,394	n/a	n/a
IC Berkeley Partners IV	2016	Non-Core	30,000,000	31,646,058	49,786,080	64,754	372,552	17.57	1.58
IC Berkeley Partners V	2020	Non-Core	35,000,000	19,377,908	2,455,500	17,084,461	22,704,537	24.45	1.30
IPI Partners II	2021	Non-Core	30,000,000	14,084,601	220,011	16,169,089	13,391,653	-4.34	0.97
Linchris Capital Opportunity Fund II	2018	Non-Core	17,657,647	15,805,152	3,428,830	2,462,287	23,607,237	28.23	1.78
Lone Star Real Estate Fund IV	2015	Non-Core	24,260,817	19,445,848	19,779,410	4,814,969	6,773,096	11.71	1.37
Raith Real Estate II	2018	Non-Core	35,000,000	36,710,656	28,415,220	13,515,794	24,963,153	48.03	1.45
TriCon Capital Fund VII	2005	Non-Core	15,000,000	17,490,511	5,027,671	428,467	306,833	-14.66	0.31
Waterton Fund XII	2014	Non-Core	35,000,000	37,061,355	45,657,267	-	19,363,314	13.72	1.75
<b>Total</b>			<b>\$ 651,492,124</b>	<b>623,896,406</b>	<b>420,500,616</b>	<b>113,044,284</b>	<b>613,182,311</b>		

\*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private real estate where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the "J-Curve", because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

**Employees' Retirement System of Rhode Island Real Estate Performance**  
**9/30/2022**

Sorted by Type and Vintage

Cumulative Cash Flows (\$)

Cumulative Performance\*

Current Partnerships	Vintage Year/Initial Investment	Type	Amount Committed (In \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Morgan Stanley Prime Property Fund	2005	Core	60,700,000	67,030,175	37,045,713	-	113,759,820	8.07	2.25
AEW Core Property Trust	2010	Core	69,873,660	103,330,317	70,218,554	-	136,938,557	10.75	2.01
Heitman America Real Estate Trust	2014	Core	85,000,000	95,941,292	26,403,723	-	139,064,489	10.13	1.73
TriCon Capital Fund VII	2005	Non-Core	15,000,000	17,490,511	5,027,671	428,467	306,833	-14.66	0.31
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Crow Holdings Retail Fund	2015	Non-Core	24,000,000	23,286,035	10,659,076	2,113,228	22,621,814	7.48	1.43
Lone Star Real Estate Fund IV	2015	Non-Core	24,260,817	19,445,848	19,779,410	4,814,969	6,773,096	11.71	1.37
IC Berkeley Partners IV	2016	Non-Core	30,000,000	31,646,058	49,786,080	64,754	372,552	17.57	1.58
GEM Realty Fund VI	2017	Non-Core	20,000,000	15,500,000	10,292,500	7,281,204	10,117,242	17.09	1.32
Raith Real Estate II	2018	Non-Core	35,000,000	36,710,656	28,415,220	13,515,794	24,963,153	48.03	1.45
Linchris Capital Opportunity Fund II	2018	Non-Core	17,657,647	15,805,152	3,428,830	2,462,287	23,607,237	28.23	1.78
Exeter Industrial Value Fund V	2020	Non-Core	25,000,000	17,500,000	-	7,500,000	27,602,517	40.27	1.58
IC Berkeley Partners V	2020	Non-Core	35,000,000	19,377,908	2,455,500	17,084,461	22,704,537	24.45	1.30
IPI Partners II	2021	Non-Core	30,000,000	14,084,601	220,011	16,169,089	13,391,653	-4.34	0.97
Crow Holdings Realty Partners IX	2021	Non-Core	40,000,000	34,478,395	10,826,453	7,583,808	32,381,400	35.39	1.25
GEM Realty Fund VII	2022	Non-Core	25,000,000	750,000	-	24,250,000	117,394	n/a	n/a
<b>Total</b>			<b>\$ 651,492,124</b>	<b>623,896,406</b>	<b>420,500,616</b>	<b>113,044,284</b>	<b>613,182,311</b>		

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# **PRIVATE REAL ASSETS (EX-REAL ESTATE)**

NEPC, LLC

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## Portfolio Summary

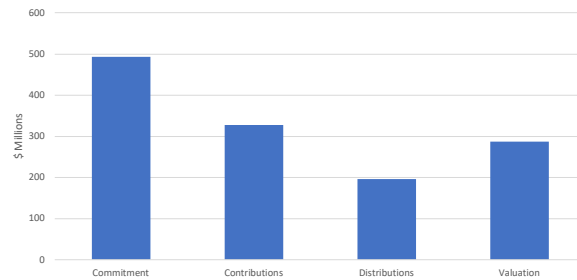
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All Investments

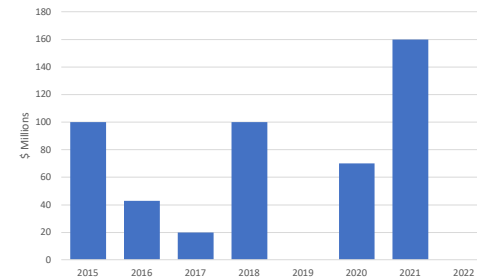
### Performance Summary

Asset Class	Investment Type	Commitment	Contributions	Distributions	Valuation	Multiple of Cost	IRR
Infrastructure Funds							
	Homestead Capital USA Farmland Fund III, L.P.	\$25,000,000.00	\$16,490,000.16	\$456,752.00	17,321,072	1.08	5.88%
	IFM Global Infrastructure Fund	\$50,032,901.81	\$50,032,901.81	\$26,235,222.14	68,783,034	1.90	11.06%
	ISQ GIF III Co-Investment Fund, L.P.	\$10,000,000.00	\$641,481.00	\$0.00	602,884	N/M	N/M
	ISQ Global Infrastructure Fund (UST), L.P.	\$50,000,000.00	\$81,810,014.00	\$71,748,951.00	48,508,004	1.47	15.25%
	ISQ Global Infrastructure Fund II (UST), L.P.	\$40,000,000.00	\$40,364,233.01	\$8,744,127.00	44,827,399	1.33	13.74%
	ISQ Global Infrastructure Fund III (UST), L.P.	\$50,000,000.00	\$5,419,712.00	\$0.00	4,901,188	N/M	N/M
	KKR Diversified Core Infrastructure Fund L.P.	\$100,000,000.00	\$39,980,884.00	\$0.00	60,019,116	N/M	N/M
	Star America Infrastructure Fund II, LP	\$20,000,000.00	\$7,108,602.87	\$1,700,210.97	5,584,155	1.02	1.17%
	Stonepeak Infrastructure Fund II - Master Co- Investment Partners LP	\$20,000,000.00	\$19,648,520.00	\$12,482,066.00	20,528,955	1.68	17.52%
	Stonepeak Infrastructure Fund II Cayman (G AIV) LP	\$43,000,000.00	\$54,362,121.00	\$65,337,443.00	13,971,698	1.46	13.61%
	Stonepeak Infrastructure Fund III LP	\$35,000,000.00	\$33,449,705.00	\$9,482,496.00	42,754,082	1.56	19.80%
	Stonepeak Infrastructure Fund IV LP	\$50,000,000.00	\$18,738,748.00	\$385,559.00	19,421,793	1.06	8.21%
<b>Total: Infrastructure Funds</b>		<b>493,032,902</b>	<b>368,046,923</b>	<b>196,572,827</b>	<b>347,223,380</b>	<b>1.47</b>	<b>13.30%</b>

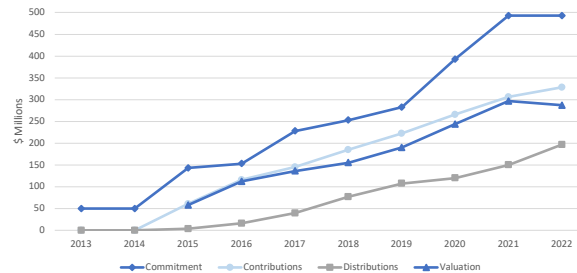
Cash Flow and Valuation Summary



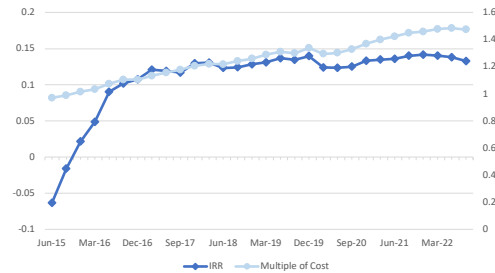
Commitment by Vintage Year



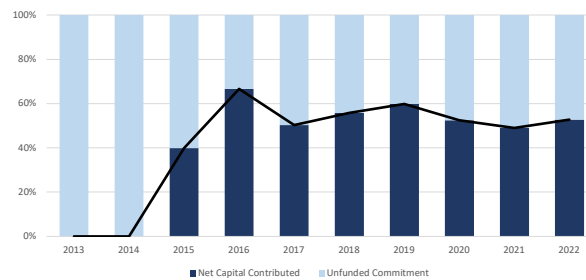
Historical Cash Flows and Valuation



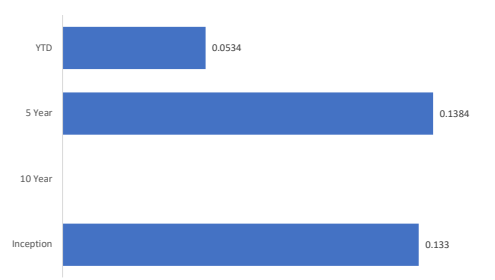
Historical Performance



Historical Percent Funded



Period IRRs



**Employees' Retirement System of Rhode Island Private Infrastructure Performance - Active Portfolio**  
**9/30/2022**

Sorted by Type and Vintage Year

Current Partnerships	Vintage Year/ Initial Investment	Type	Amount Committed (in \$ unless otherwise noted)	Cumulative Cash Flows (\$)			Cumulative Performance *		
				Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
IFM Global Infrastructure Fund	2015	Core	50,032,902	50,032,902	26,235,222	-	68,783,034	11.06%	1.90
KKR Diversified Core Infrastructure Fund L.P.	2021	Core	100,000,000	39,980,884	-	60,019,116	40,772,909	N/M	N/M
ISQ Global Infrastructure Fund I	2015	Value-Add	50,000,000	81,810,014	71,748,951	3,751,579	48,508,004	15.25%	1.47
Homestead Capital USA Farmland Fund III, L.P.	2018	Value-Add	25,000,000	16,490,000	456,752	8,506,462	17,321,072	5.88%	1.08
ISQ Global Infrastructure Fund II	2018	Value-Add	40,000,000	40,364,233	8,744,127	7,797,388	44,827,399	13.74%	1.33
ISQ Global Infrastructure Fund III	2021	Value-Add	50,000,000	5,419,712	-	44,574,242	4,901,188	N/M	N/M
ISQ Global Infrastructure Fund III - Co-Invest	2021	Value-Add	10,000,000	641,481	-	9,397,864	602,884	N/M	N/M
Stonepeak Infrastructure Partners Fund II	2016	Opportunistic	43,000,000	54,362,121	65,337,443	6,417,767	13,971,698	13.61%	1.46
Stonepeak Infrastructure Partners Fund II - Master Co-Investment Partners LP	2017	Opportunistic	20,000,000	19,648,520	12,482,066	852,423	20,528,955	17.52%	1.68
Stonepeak Infrastructure Partners Fund III	2018	Opportunistic	35,000,000	33,449,705	9,482,496	6,475,370	42,754,082	19.80%	1.56
Star America Infrastructure Fund II, LP	2020	Opportunistic	20,000,000	7,108,603	1,700,211	13,859,668	5,584,155	1.17%	1.02
Stonepeak Infrastructure Fund IV LP	2020	Opportunistic	50,000,000	18,738,748	385,559	31,505,303	19,421,793	8.21%	1.06
<b>Total</b>			<b>493,032,902</b>	<b>368,046,923</b>	<b>196,572,827</b>	<b>193,157,182</b>	<b>327,977,174</b>		

\*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private equity where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the "J-Curve", because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

**Employees' Retirement System of Rhode Island Private Infrastructure Performance - Active Portfolio**  
**9/30/2022**

Sorted by Type and Partnership Name

Current Partnerships	Vintage Year/ Initial Investment	Type	Amount Committed (in \$ unless otherwise noted)	Cumulative Cash Flows (\$)			Cumulative Performance *		
				Amount Drawn	Amount Distributed	Amount Unfunded (\$)	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
IFM Global Infrastructure Fund	2015	Core	50,032,902	50,032,902	26,235,222	-	68,783,034	11.06%	1.90
KKR Diversified Core Infrastructure Fund L.P.	2021	Core	100,000,000	39,980,884	-	60,019,116	40,772,909	N/M	N/M
Homestead Capital USA Farmland Fund III, L.P.	2018	Value-Add	25,000,000	16,490,000	456,752	8,506,462	17,321,072	5.88%	1.08
ISQ Global Infrastructure Fund I	2015	Value-Add	50,000,000	81,810,014	71,748,951	3,751,579	48,508,004	15.25%	1.47
ISQ Global Infrastructure Fund II	2018	Value-Add	40,000,000	40,364,233	8,744,127	7,797,388	44,827,399	13.74%	1.33
ISQ Global Infrastructure Fund III	2021	Value-Add	50,000,000	5,419,712	-	44,574,242	4,901,188	N/M	N/M
ISQ Global Infrastructure Fund III - Co-Invest	2021	Value-Add	10,000,000	641,481	-	9,397,864	602,884	N/M	N/M
Star America Infrastructure Fund II, LP	2020	Opportunistic	20,000,000	7,108,603	1,700,211	13,859,668	5,584,155	1.17%	1.02
Stonepeak Infrastructure Fund IV LP	2020	Opportunistic	50,000,000	18,738,748	385,559	31,505,303	19,421,793	8.21%	1.06
Stonepeak Infrastructure Partners Fund II	2016	Opportunistic	43,000,000	54,362,121	65,337,443	6,417,767	13,971,698	13.61%	1.46
Stonepeak Infrastructure Partners Fund II - Master Co-Investment Partners LP	2017	Opportunistic	20,000,000	19,648,520	12,482,066	852,423	20,528,955	17.52%	1.68
Stonepeak Infrastructure Partners Fund III	2018	Opportunistic	35,000,000	33,449,705	9,482,496	6,475,370	42,754,082	19.80%	1.56
<b>Total</b>			<b>493,032,902</b>	<b>368,046,923</b>	<b>196,572,827</b>	<b>193,157,182</b>	<b>327,977,174</b>		

\*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private equity where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the "J-Curve", because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

# CASH FLOW

NEPC, LLC

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# CASH FLOW ANALYSIS - INCOME & EXPENSES

## Employees Retirement System

Fiscal Year 2023	Fiscal Year To Date	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023
MEMBER BENEFITS	641,644,253	71,156,505	71,287,820.38	71,372,705.71	71,475,911.86	71,367,689.56	71,266,793.57	71,250,146.22	71,230,279.31	71,236,401.04			
ADMINISTRATIVE EXP**	790,864	-	91,908.26	106,057.71	\$68,221.47	64,077.05	64,601.45	69,777.95	326,220.22	***			
INVESTMENT EXP	61,652,996	13,523,261	18,608,777.95	760,646.46	2,682,098.83	12,143,808.86	3,176,556.28	3,009,897.77	(55,827.99)	7,803,776.23			
GROSS OUTFLOW	704,088,113	84,679,767	89,988,506.59	72,239,409.88	74,226,232.16	83,575,575.47	74,507,951.30	74,329,821.94	71,500,671.54	79,040,177.27	-	-	-
CONTRIBUTIONS	461,575,483	59,446,933	28,726,005.00	50,056,449.00	48,681,096.00	53,661,769.00	42,574,082.00	61,231,866.00	55,935,739.00	61,261,544.00			
OTHER INCOME*	90,483,545	5,719,327	21,398,587.67	(705,772.19)	12,858,229.95	20,471,558.20	4,145,466.35	14,944,889.37	2,015,797.35	9,635,461.47			
TOTAL INCOME	552,059,028	65,166,260	50,124,592.67	49,350,676.81	61,539,325.95	74,133,327.20	46,719,548.35	76,176,755.37	57,951,536.35	70,897,005.47	-	-	-
NET OUTFLOW (INFLOW)	152,029,084	19,513,506	39,863,913.92	22,888,733.07	12,686,906.21	9,442,248.27	27,788,402.95	(1,846,933.43)	13,549,135.19	8,143,171.80	-	-	-

## Municipal Employees Retirement System

Fiscal Year 2023	Fiscal Year To Date	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023
MEMBER BENEFITS	99,329,912	9,950,716	11,012,787.40	11,066,644.63	11,149,855.16	11,186,759.62	11,188,079.25	11,216,390.74	11,249,076.12	11,309,602.43			
ADMINISTRATIVE EXP**	210,945	-	24,404.81	28,199.69	18,160.46	17,080.36	17,258.32	18,649.51	87,192.31	***			
INVESTMENT EXP	16,359,534	3,585,240	4,921,865.33	201,982.16	712,104.16	3,225,416.16	845,582.77	801,402.61	(14,888.60)	2,080,828.94			
GROSS OUTFLOW	115,900,391	13,535,956	15,959,057.54	11,296,826.48	11,880,119.78	14,429,256.14	12,050,920.34	12,036,442.86	11,321,379.83	13,390,431.37	-	-	-
CONTRIBUTIONS	74,408,208	7,821,365	7,471,051.00	8,164,630.00	7,985,554.00	9,162,298.00	7,659,667.00	9,196,469.00	7,878,361.00	9,068,813.00			
OTHER INCOME*	24,029,291	1,516,288	5,659,746.85	(187,410.93)	3,413,893.01	5,437,280.61	1,103,501.66	3,979,162.63	537,592.22	2,569,236.28			
TOTAL INCOME	98,437,499	9,337,653	13,130,797.85	7,977,219.07	11,399,447.01	14,599,578.61	8,763,168.66	13,175,631.63	8,415,953.22	11,638,049.28	-	-	-
NET OUTFLOW (INFLOW)	17,462,892	4,198,303	2,828,259.69	3,319,607.41	480,672.77	(170,322.47)	3,287,751.68	(1,139,188.77)	2,905,426.61	1,752,382.09	-	-	-

## State Police

Fiscal Year 2023	Fiscal Year To Date	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023
MEMBER BENEFITS	6,583,839	670,094	727,072.84	727,072.84	727,072.84	727,072.84	727,072.84	727,072.84	773,123.73	778,184.99			
ADMINISTRATIVE EXP**	22,316	-	2,282.92	2,642.59	\$2,018.58	1,892.72	1,901.86	2,045.49	9,532.18	***			
INVESTMENT EXP	1,759,788	376,090	515,497.43	22,622.62	79,438.53	358,479.58	93,531.20	88,300.49	(1,632.86)	227,461.49			
GROSS OUTFLOW	8,365,944	1,046,183	1,244,853.19	752,338.05	808,529.95	1,087,445.14	822,505.90	817,418.82	781,023.05	1,005,646.48	-	-	-
CONTRIBUTIONS	4,002,678	943,664	567,051.84	981,823.84	711,406.84	763,631.84	659,610.84	(596,222.16)	(712,136.27)	683,847.99			
OTHER INCOME*	2,616,296	159,058	592,780.76	(20,990.48)	380,835.85	604,310.96	122,060.03	438,433.61	58,956.70	280,850.29			
TOTAL INCOME	6,618,974	1,102,722	1,159,832.60	960,833.36	1,092,242.69	1,367,942.80	781,670.87	(157,788.55)	(653,179.57)	964,698.28	-	-	-
NET OUTFLOW (INFLOW)	1,746,970	(56,538)	85,020.59	(208,495.31)	(283,712.74)	(280,497.66)	40,835.03	975,207.37	1,434,202.62	40,948.20	-	-	-

\*includes income from Real Estate Investments, Private Equity, and Cash Accounts

\*\* Administrative expenses are reported with a one month lag; July admin expenses will be reported in August.

# CASH FLOW ANALYSIS - INCOME & EXPENSES

## Judicial

### Fiscal Year 2023

Fiscal Year To Date	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023
MEMBER BENEFITS	3,808,792	398,612	391,997.12	393,530.79	430,261.95	430,261.95	441,032.21	441,032.21	441,032.21	441,032.21		
ADMINISTRATIVE EXP**	10,250	-	1,359.12	1,175.37	882.65	830.99	841.18	908.92	4,251.53	***		
INVESTMENT EXP	794,173	173,448	238,579.89	9,808.47	34,608.94	156,779.26	41,144.99	39,060.65	(725.62)	101,468.02		
GROSS OUTFLOW	4,613,215	572,060	631,936.13	404,514.63	465,753.54	587,872.20	483,018.38	481,001.78	444,558.12	542,500.23	-	-
CONTRIBUTIONS	3,649,072	471,342	342,706.12	607,466.79	495,611.95	318,007.95	305,480.21	317,585.21	314,618.21	476,254.21		
OTHER INCOME*	1,167,939	73,356	274,347.24	(9,101.03)	165,918.24	264,292.48	53,695.14	193,945.77	26,201.15	125,284.28		
TOTAL INCOME	4,817,011	544,697	617,053.36	598,365.76	661,530.19	582,300.43	359,175.35	511,530.98	340,819.36	601,538.49	-	-
NET OUTFLOW (INFLOW)	(203,796)	27,363	14,882.77	(193,851.13)	(195,776.65)	5,571.77	123,843.03	(30,529.20)	103,738.76	(59,038.26)	-	-

## Retirement Systems Total

### Fiscal Year 2023

Fiscal Year To Date	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023
MEMBER BENEFITS	751,366,796	82,175,927	83,419,677.74	83,559,953.97	83,783,101.81	83,711,783.97	83,622,977.87	83,634,642.01	83,693,511.37	83,765,220.67	-	-
ADMINISTRATIVE EXP**	1,034,376	-	119,955.11	138,075.36	89,283.16	83,881.12	84,602.81	91,381.87	427,196.24	***	-	-
INVESTMENT EXP	80,566,491	17,658,040	24,284,720.60	995,059.71	3,508,250.46	15,884,483.86	4,156,815.24	3,938,661.52	(73,075.07)	10,213,534.68	-	-
GROSS OUTFLOW	832,967,663	99,833,967	107,824,353.45	84,693,089.04	87,380,635.43	99,680,148.95	87,864,395.92	87,664,685.40	84,047,632.54	93,978,755.35	-	-
CONTRIBUTIONS	543,635,442	68,683,303	37,106,813.96	59,810,369.63	57,873,668.79	63,905,706.79	51,198,840.05	70,149,698.05	63,416,581.94	71,490,459.20	-	-
OTHER INCOME*	118,297,071	7,468,029	27,925,462.52	(923,274.63)	16,818,877.05	26,777,442.25	5,424,723.18	19,556,431.38	2,638,547.42	12,610,832.32	-	-
TOTAL INCOME	661,932,512	76,151,333	65,032,276.48	58,887,095.00	74,692,545.84	90,683,149.04	56,623,563.23	89,706,129.43	66,055,129.36	84,101,291.52	-	-
NET OUTFLOW (INFLOW)	171,035,150	23,682,634	42,792,076.97	25,805,994.04	12,688,089.59	8,996,999.91	31,240,832.69	(2,041,444.03)	17,992,503.18	9,877,463.83	-	-

\*Includes income from Real Estate Investments, Private Equity, and Cash Accounts

\*\* Administrative expenses are reported with a one month lag; July admin expenses will be reported in August.

\*\*\* Data unavailable at the time this report was prepared

FISCAL YEAR 2023 ERSRI Pooled Trust		UNAUDITED INVESTMENT MANAGER FEES, PROFESSIONAL FEES & OPERATING EXPENSES ESTIMATED ACCRUAL BASIS*											
	Jul-2022	Aug-2022	Sep-2022	Oct-2022	Nov-2022	Dec-2022	Jan-2023	Feb-2023	Mar-2023	Apr-2023	May-2023	Jun-2023	FYTD TOTAL
<b>PUBLIC GROWTH</b>													
SSGA Russell 3000	14,540	15,030	14,061	13,925	14,851	14,785	14,827	14,825	14,522	-	-	-	131,366
SSGA QVM Tilt	65,979	67,073	62,703	62,121	66,728	67,293	67,780	69,260	69,545	-	-	-	598,479
SSGA MSCI World Ex USA	9,627	9,630	8,967	8,770	9,487	9,942	10,324	10,606	10,601	-	-	-	87,955
SSGA MSCI EM	24,250	24,679	23,277	21,499	22,714	24,102	24,891	25,016	24,546	-	-	-	214,974
	<b>114,395</b>	<b>116,411</b>	<b>109,008</b>	<b>106,315</b>	<b>113,779</b>	<b>116,121</b>	<b>117,822</b>	<b>119,706</b>	<b>119,215</b>				<b>1,032,773</b>
<b>PRIVATE GROWTH</b>													
Private Equity**	11,244,807	12,901,903	990,699	2,159,107	5,070,321	3,788,397	1,796,524	4,310,027	7,143,732	-	-	-	49,405,518
Private Equity**	10,939,105	12,595,449	1,263,523	2,151,819	3,832,801	3,926,532	202,418	3,957,145	6,549,611	-	-	-	45,418,404
Opportunistic Private Credit**	305,702	306,454	(272,824)	7,288	1,237,520	(138,135)	1,594,106	352,882	594,121	-	-	-	3,987,114
Non-Core Real Estate**	2,842,368	1,280,807	(138,718)	-	(70,218)	(201,181)	(110,211)	8,492	2,303,874	-	-	-	5,915,213
	<b>14,087,175</b>	<b>14,182,710</b>	<b>851,981</b>	<b>2,159,107</b>	<b>5,000,103</b>	<b>3,587,216</b>	<b>1,686,313</b>	<b>4,318,519</b>	<b>9,447,606</b>				<b>55,320,731</b>
<b>INCOME</b>													
Loomis Sayles - Liquid Credit	21,461	20,803	19,155	18,990	19,424	19,004	18,717	18,904	18,898	-	-	-	175,357
PIMCO	41,148	40,249	37,125	37,021	38,145	37,254	36,661	37,121	37,098	-	-	-	341,822
Neuberger Berman - Equity Options	72,780	73,378	72,297	71,722	67,844	64,048	60,018	56,149	55,817	-	-	-	594,053
Wellington Management	40,086	40,559	39,356	38,022	39,432	41,138	42,301	42,543	41,364	-	-	-	364,801
Neuberger Berman - CLOs	40,071	40,970	40,729	39,856	40,655	41,576	42,892	43,878	43,533	-	-	-	374,160
Sycamore Tree CLO Fund**	-	-	-	-	268,365	634,366	-	-	-	-	-	-	902,731
Advent US Convertibles	21,801	41,665	38,338	37,789	39,214	37,912	37,086	37,670	37,229	-	-	-	328,705
Private Credit**	411,850	422,516	228,246	-	1,381,305	223,583	197,820	718,507	1,064,835	-	-	-	4,648,662
	<b>649,197</b>	<b>680,140</b>	<b>475,246</b>	<b>243,401</b>	<b>1,894,385</b>	<b>1,098,882</b>	<b>435,496</b>	<b>954,772</b>	<b>1,298,773</b>				<b>7,730,291</b>
<b>CRISIS PROTECTION</b>													
Systematic Trend Followers	515,565	197,503	309,061	398,793	224,695	405,190	232,518	145,101	325,888	-	-	-	2,754,313
WAMCO	19,426	18,509	17,554	17,169	17,851	17,494	17,019	17,095	17,090	-	-	-	159,208
	<b>534,992</b>	<b>216,012</b>	<b>326,615</b>	<b>415,963</b>	<b>242,546</b>	<b>422,684</b>	<b>249,538</b>	<b>162,195</b>	<b>342,978</b>				<b>2,913,521</b>
<b>INFLATION PROTECTION</b>													
SSGA TIPS	2,364	2,379	1,982	1,365	688	127	0	0	0	-	-	-	8,905
Core Real Estate**	616,249	193,516	339,675	303,493	344,911	-	427,213	-	-	-	-	-	2,225,057
Private Infrastructure**	1,538,006	1,655,725	169,738	169,175	884,422	-	425,002	-	926,252	-	-	-	5,768,321
	<b>2,156,619</b>	<b>1,851,620</b>	<b>511,395</b>	<b>474,033</b>	<b>1,230,021</b>	<b>127</b>	<b>852,215</b>	<b>0</b>	<b>926,252</b>				<b>8,002,282</b>
<b>STABILITY</b>													
Fidelity	44,419	44,472	41,471	38,904	39,624	40,570	41,433	41,716	41,509	-	-	-	374,119
Loomis - IG Securitized	55,309	55,217	51,449	47,930	48,212	48,977	49,691	49,890	49,839	-	-	-	456,514
Absolute Return	2,490,761	3,606,154	3,369,873	1,766,926	1,737,596	2,013,428	1,374,750	1,717,902	1,665,487	-	-	-	19,742,876
Payden & Rygel	11,369	11,393	11,404	11,414	11,448	9,621	9,300	10,847	10,885	-	-	-	97,682
	<b>2,601,858</b>	<b>3,717,236</b>	<b>3,474,198</b>	<b>1,865,174</b>	<b>1,836,880</b>	<b>2,112,596</b>	<b>1,475,174</b>	<b>1,820,356</b>	<b>1,767,720</b>				<b>20,671,191</b>
<b>OTHER</b>													
Hamilton Lane	-	-	-	-	-	-	-	-	-	-	-	-	-
Russell Overlay	19,823	19,823	19,823	19,823	19,823	19,823	19,823	19,823	-	-	-	-	158,582
	<b>19,823</b>	<b>19,823</b>	<b>19,823</b>	<b>19,823</b>	<b>19,823</b>	<b>19,823</b>	<b>19,823</b>	<b>19,823</b>					<b>158,582</b>
<b>SUB TOTAL-INV MGMT FEES</b>	<b>20,164,058</b>	<b>20,783,953</b>	<b>5,768,265</b>	<b>5,283,816</b>	<b>10,337,536</b>	<b>7,357,449</b>	<b>4,836,380</b>	<b>7,395,372</b>	<b>13,902,544</b>	-	-	-	<b>95,829,372</b>
<b>PROFESSIONAL FEES</b>													
Legal	7,691	7,128	6,469	5,250	3,675	3,570	10,365	9,722	14,792				68,662
BNY Mellon - Custodial	42,213	42,213	42,213	42,213	42,213	42,213	42,213	42,213	42,213				379,913
Cliffwater	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500				337,500
Meketa General	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250				56,250
Meketa Real Estate	10,781	10,781	10,781	10,781	10,781	10,781	10,781	10,781	10,781				97,031
NEPC	32,917	32,917	32,917	32,917	32,917	32,917	32,917	32,917	32,917				296,250
	<b>137,352</b>	<b>136,788</b>	<b>136,129</b>	<b>134,910</b>	<b>133,335</b>	<b>133,230</b>	<b>140,025</b>	<b>139,382</b>	<b>144,453</b>	-	-	-	<b>1,235,606</b>
<b>TOTAL:</b>	<b>20,301,410</b>	<b>20,920,741</b>	<b>5,904,394</b>	<b>5,418,727</b>	<b>10,470,871</b>	<b>7,490,679</b>	<b>4,976,405</b>	<b>7,534,754</b>	<b>14,046,997</b>	-	-	-	<b>97,064,978</b>

\* Fees and expenses provided as a best-efforts estimate. As such, care should be taken when comparing these figures to data included in audit financial statements.

\*\* Fees and expenses provided on an actual (not accrual) basis as paid. Accrual basis fees may include future adjustment. As such, care should be taken when comparing these figures to data included in audit financial statements.

# SHORT-TERM INVESTMENTS

NEPC, LLC

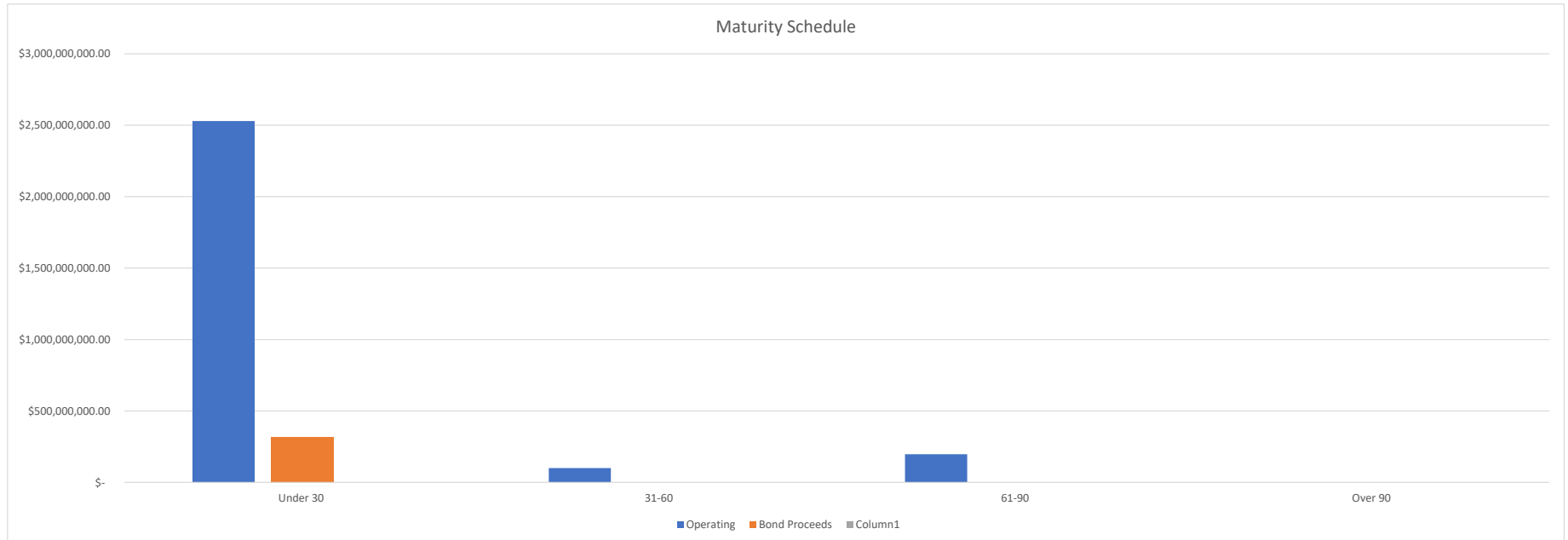
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**State of Rhode Island  
Office of the General Treasurer  
Short Term Investments**

**Short-Term Investment Maturity ScheduleRI SIC Guideline Compliance Report**

**Investments as of:**  
Investments as of: 3/31/2023



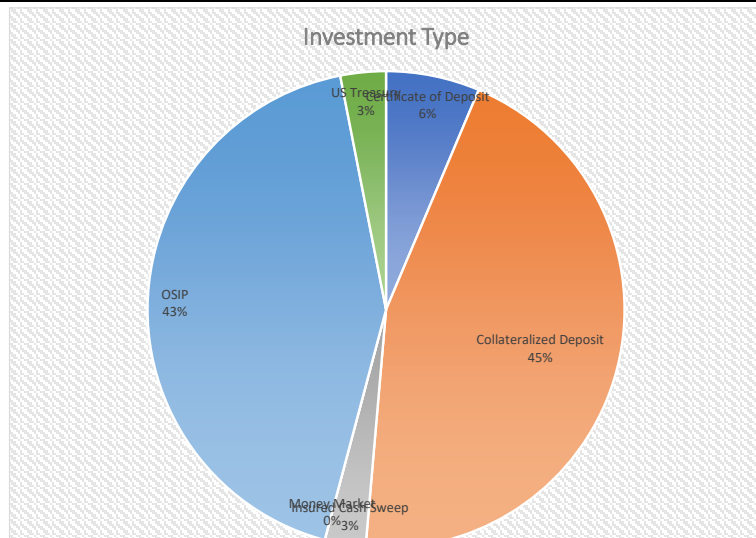
Action (All)  
Enter Date (All)

Fund Group	Bank	Values	Maturity Date	Account Type	Certificate of Deposit	Collateralized Deposit	Insured Cash Sweep	Money Market	OSIP	US Treasury	Grand Total
<b>Bond Proceeds</b>		Sum							\$ 318,996,974.19		\$ 318,996,974.19
		Percentage			0.00%	0.00%	0.00%	0.00%	10.14%	0.00%	10.14%
<b>Operating</b>		Sum			\$	10,512,907.46					\$ 10,512,907.46
		Percentage			0.00%	0.33%	0.00%	0.00%	0.00%	0.00%	0.33%
	<b>Bank RI</b>	Sum			\$	7,574,548.40					\$ 7,574,548.40
		Percentage			0.00%	0.24%	0.00%	0.00%	0.00%	0.00%	0.24%
	<b>BankNewport BankLocal</b>	Sum			\$	5,136,133.69					\$ 5,136,133.69
		Percentage			0.00%	0.16%	0.00%	0.00%	0.00%	0.00%	0.16%
	<b>BCSB BankLocal</b>	Sum			\$	43,198,464.04					\$ 43,198,464.04
		Percentage			0.00%	1.37%	0.00%	0.00%	0.00%	0.00%	1.37%
	<b>Centreville</b>	Sum			\$						\$
		Percentage									
	<b>Centreville BankLocal</b>	Sum					\$ 3,634,739.27				\$ 3,634,739.27
		Percentage			0.00%	0.00%	0.12%	0.00%	0.00%	0.00%	0.12%
	<b>Citizens</b>	Sum			\$	165,947,744.54	\$ -				\$ 165,947,744.54
		Percentage			0.00%	5.27%	0.00%	0.00%	0.00%	0.00%	5.27%
	<b>Customers</b>	Sum			\$	100,016,300.34					\$ 100,016,300.34

Operating	Customers	Percentage		0.00%	3.18%	0.00%	0.00%	0.00%	0.00%	0.00%	3.18%	
	Fidelity MMKT	Sum				\$	-			\$	-	
		Percentage		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	Freedom BankLocal	Sum			\$	5,137,331.96				\$	5,137,331.96	
		Percentage		0.00%	0.00%	0.16%	0.00%	0.00%	0.00%	0.00%	0.16%	
	Navigant BankLocal	Sum		\$	6,481,396.89					\$	6,481,396.89	
		Percentage		0.00%	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	
	OSIP	Sum						\$	1,027,140,087.79	\$	1,027,140,087.79	
		Percentage		0.00%	0.00%	0.00%	0.00%	32.64%	0.00%	0.00%	32.64%	
	People BankLocal	Sum		\$	2,727,115.25					\$	2,727,115.25	
		Percentage		0.00%	0.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.09%	
	Santander	Sum		\$	319,362,373.23					\$	319,362,373.23	
		Percentage		0.00%	10.15%	0.00%	0.00%	0.00%	0.00%	0.00%	10.15%	
	TD Bank	Sum		\$	413,972,621.09					\$	413,972,621.09	
		Percentage		0.00%	13.15%	0.00%	0.00%	0.00%	0.00%	0.00%	13.15%	
	Washington Trust	Sum			\$	75,562,912.58				\$	75,562,912.58	
		Percentage		0.00%	0.00%	2.40%	0.00%	0.00%	0.00%	0.00%	2.40%	
	Websters	Sum		\$	36,769,419.43					\$	36,769,419.43	
		Percentage		0.00%	1.17%	0.00%	0.00%	0.00%	0.00%	0.00%	1.17%	
	WT Comm BankLocal	Sum			\$	2,972,361.14				\$	2,972,361.14	
		Percentage		0.00%	0.00%	0.09%	0.00%	0.00%	0.00%	0.00%	0.09%	
	GSFS Govt Fund - Cap	Sum				\$	-			\$	-	
		Percentage		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	GSFS Govt Fund - Prefere	Sum				\$	-			\$	-	
		Percentage		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	GSFS Govt Fund - Select	Sum				\$	-			\$	-	
		Percentage		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	GSFS Govt Fund - Instituti	Sum				\$	-			\$	-	
		Percentage		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	Washington Trust - FNIR	Sum		\$	204,213,232.80					\$	204,213,232.80	
		Percentage		0.00%	6.49%	0.00%	0.00%	0.00%	0.00%	0.00%	6.49%	
	BNY Mellon 4/20/23	Sum	4/20/2023						\$	98,118,416.67	\$	98,118,416.67
			(blank)						\$	(98,118,416.67)	\$	(98,118,416.67)
		Percentage	4/20/2023		0.00%	0.00%	0.00%	0.00%	0.00%	3.12%	3.12%	
			(blank)		0.00%	0.00%	0.00%	0.00%	0.00%	-3.12%	-3.12%	
	Websters - FNIR	Sum		\$	473,403.77					\$	473,403.77	
		Percentage		0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	
	TD Bank 5/11/23	Sum	5/11/2023	\$	100,000,000.00					\$	100,000,000.00	
		Percentage	5/11/2023		3.18%	0.00%	0.00%	0.00%	0.00%	0.00%	3.18%	
	TD Bank 2/13/23	Sum	2/13/2023	\$	-					\$	-	
		Percentage	2/13/2023		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	TD Bank 3/6/23	Sum	3/6/2023	\$	-					\$	-	
		Percentage	3/6/2023		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	TD Bank 6/8/23	Sum	6/8/2023	\$	100,000,000.00					\$	100,000,000.00	
		Percentage	6/8/2023		3.18%	0.00%	0.00%	0.00%	0.00%	0.00%	3.18%	
	BNY Mellon 3/23/23	Sum	3/23/2023						\$	-	\$	-
		Percentage	3/23/2023		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	BNY Mellon 6/15/23	Sum	6/15/2023						\$	96,966,667.00	\$	96,966,667.00
		Percentage	6/15/2023		0.00%	0.00%	0.00%	0.00%	0.00%	3.08%	3.08%	
	TD Bank 12/30/22	Sum	12/30/2022	\$	-					\$	-	
		Percentage	12/30/2022		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	TD Bank 1/15/23	Sum	1/15/2023	\$	-					\$	-	
		Percentage	1/15/2023		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	TD Bank 2/21/23	Sum	2/21/2023	\$	-					\$	-	
		Percentage	2/21/2023		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	Westerly Community Cret	Sum	(blank)	\$	175,261.44					\$	175,261.44	
		Percentage	(blank)		0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	
	Santander - FNIR	Sum	(blank)	\$	100,025,479.45					\$	100,025,479.45	
		Percentage	(blank)		0.00%	3.18%	0.00%	0.00%	0.00%	0.00%	3.18%	

Total Sum	\$	200,000,000.00	\$	1,416,586,401.82	\$	87,307,344.95	\$	-	\$	1,346,137,061.98	\$	96,966,667.00	\$	3,146,997,475.75
Total Percentage		6.36%		45.01%		2.77%		0.00%		42.78%		3.08%		100.00%

**Issuer Credit Rating**  
**March 31, 2023**

[illegible]

<b>Moody's Short-Term Debt Ratings:</b>	<b>S&amp;P Short -Term Credit Ratings:</b>
<b>P-1</b> - Prime-1 have a superior ability for repayment of sr. S-T debt	<b>A-1</b> - Highest rated, strong capacity to meet obligations
<b>P-2</b> - Prime-1 have a strong ability for repayment of sr. S-T debt	<b>A-2</b> - Somewhat more susceptible to adverse effects of changes in fin. conditions; satisfactory
<b>P-3</b> - Prime-1 have acceptable ability for repayment of sr. S-T debt	<b>A-3</b> - Exhibits adequate protection parameters
<b>NP</b> - Not Prime	<b>B</b> - Significant speculative characteristics, faces major ongoing uncertainties
	<b>C</b> - Vulnerable to non-payment
	<b>D</b> - Payment default
	Modifiers: + or - show relative standing within the category.
<b>Moody's Issuer Rating Symbols:</b>	<b>S&amp;P Outlook Definitions:</b>
<b>Aaa</b> - Offer exceptional financial security (high-grade)	<b>Positive</b> - A rating may be raised
<b>Aa</b> - Offer excellent financial security (high-grade)	<b>Negative</b> - A rating may be lowered
<b>A</b> - Offer good financial security	<b>Stable</b> - A rating is not likely to change
<b>Baa</b> - Offer adequate financial security	<b>Developing</b> - May be raised or lowered
<b>Ba</b> - Offer questionable financial security	<b>NM</b> - Not meaningful
<b>B</b> - Offer poor financial security	
<b>Caa</b> - Offer very poor financial security	
<b>Ca</b> - Offer extremely poor financial security	
<b>C</b> - Lowest rated class, usually in default	
<b>Moody's Long-Term Debt Ratings:</b>	<b>S&amp;P Long-Term Debt Ratings:</b>

<b>Aaa</b> - Best Quality	<b>AAA</b> - Highest rating, extremely strong
<b>Aa</b> - High Quality	<b>AA</b> - Differs slightly from highest rating, very strong
<b>A</b> - Possess many favorable investment attributes	<b>A</b> - More susceptible to adverse effects of change in economic condition, strong
<b>Baa</b> - Medium-grade obligations	<b>BBB</b> - Exhibits adequate protection parameters
<b>Ba</b> - Possess speculative elements	<b>BB, B,</b> - Have significant speculative characteristics. BB least speculative
<b>B</b> - Generally lack characteristics of desirable investments	<b>CCC, CC, C</b> - C highest degree
<b>Caa</b> - Poor standing	<b>D</b> - Payment default
<b>Ca</b> - Speculative in a high degree	Modifiers: + or - show relative standing within the category.
<b>C</b> - Lowest rated class of bonds	
<b>Modifiers:</b>	<b>VERIBANC Ratings:</b>
<b>1</b> - Higher end of letter rating category	<b>GREEN</b> The institution's equity exceeds a modest percentage of its assets and had positive net income during the most recent reporting period.
<b>2</b> - Mid-range of letter rating category	<b>YELLOW</b> The institution's equity is at a minimal percentage of its assets or it incurred a net loss during the most recent reporting period.
<b>3</b> - Lower end of letter rating category	<b>RED</b> The institution's equity is less than a minimal percentage of its assets or it incurred a significant net loss during the most recent reporting period (or both).
	<b>BB</b> Blue Ribbon Bank
	Modifiers: ***-Very Strong, **-Strong, *-Moderate, No Stars-Poor

# DEFINED CONTRIBUTION PLAN

NEPC, LLC

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# State of Rhode Island

As of March 31, 2023



401(a) Quarterly Performance Summary

# State of Rhode Island

## 401(a) Performance Summary

As of 3/31/2023

Morningstar Ranking/Number of Funds in Category displays the Funds actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Past performance does not guarantee future results. Morningstar Percentile Rankings are the Fund's total return rank relative to all the funds in the same Morningstar category, where 1 is the highest percentile rank and 100 is the lowest percentile rank.

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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%ile ER	Rev Share	Recent Returns		Annualized Total Returns														Inception Date
									3 Mo	YTD	1 Yr	Category Rank	%ile	3 Yr	Category Rank	%ile	5 Yr	Category Rank	%ile	10 Yr	Category Rank	%ile	SI		

### STABLE VALUE

Stable Value/Guaranteed																								
TIAA Stable Value <sup>1</sup> (DC Retirement Plan)		Crediting Rate as of 4/1/2023 = 2.70 %						0.00	0.66	0.66	2.31			2.28			2.26			2.08			2.06	3/31/2012
TIAA Stable Value <sup>1</sup> (FICA Alternative Plan)		Crediting Rate as of 4/1/2023 = 2.30 %						0.00	0.56	0.56	2.17			2.24			2.25			-			2.18	11/30/2013

### FIXED INCOME

Intermediate Core Bond																								
State Street US Bond Index Securities XIV <sup>4</sup>	US Fund Intermediate Core Bond	28.33	40,344	0.02	0.02		0.00	3.13	3.13	(4.80)	38	(2.76)	68	0.94	33	1.38	29	1.93	6/30/2011					
Bloomberg US Agg Bond TR USD								2.96	2.96	(4.78)		(2.77)		0.91		1.36								
Intermediate Core Bond Median				0.52				3.10	3.10	(5.18)		(2.13)		0.80		1.24								
Intermediate Core Bond Number of Funds						451					439		423		413		372							
Inflation-Protected Bond																								
PIMCO Real Return Instl	PRRIX	US Fund Inflation-Protected Bond	4.25	9,931	0.47	0.47	44	0.00	3.00	3.00	(6.38)	132	69	2.19	99	49	2.93	53	25	1.33	48	46	5.23	1/29/1997
Bloomberg US Treasury US TIPS TR USD									3.34	3.34	(6.06)			1.75		2.94		1.49						
Inflation-Protected Bond Median					0.56				3.08	3.08	(6.07)			2.18		2.67		1.22						
Inflation-Protected Bond Number of Funds						201							200		195		193		180					



# State of Rhode Island

## 401(a) Performance Summary

As of 3/31/2023

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Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%ile ER	Rev Share	Recent Returns		Annualized Total Returns														Inception Date
									3 Mo	YTD	1 Yr	Category Rank	%ile	3 Yr	Category Rank	%ile	5 Yr	Category Rank	%ile	10 Yr	Category Rank	%ile	SI		
EQUITY																									
Large Cap Blend																									
State Street S&P 500 Index Securities (Lending Series CI) II <sup>5</sup>		US Fund Large Blend	26.00	163,373	0.01	0.01		0.00	7.49	7.49	(7.74)		51	18.58		30	11.15		21	12.14		14	14.28	5/31/1996	
S&P 500 TR USD									7.50	7.50	(7.73)			18.60			11.19			12.24					
Vanguard FTSE Social Index Institutional <sup>3, 4</sup>	VFTNX	US Fund Large Blend	7.33	14,265	0.12	0.12	5	0.00	9.83	9.83	(10.02)	1221	88	17.69	692	61	11.21	157	18	12.76	26	4	9.24	1/14/2003	
FTSE4Good US Select TR USD									9.87	9.87	(9.94)			17.81			11.32			12.88					
Russell 3000 TR USD									7.18	7.18	(8.58)			18.48			10.45			11.73					
Large Blend Median						0.78			6.47	6.47	(7.66)			17.89			9.98			11.14					
Large Blend Number of Funds							1,207						1,173			1,138			1,099			983			
Mid-Cap Blend																									
State Street Small Mid Cp Index Securities Series II <sup>5</sup>		US Fund Mid-Cap Blend	25.67	31,501	0.02	0.02		0.00	5.92	5.92	(13.15)		93	17.91		72	6.54		66	9.25		49	6.48	6/17/2019	
Russell Small Cap Complete TR USD									5.88	5.88	(13.25)			17.86			6.50			9.19					
Mid-Cap Blend Median						0.96			3.76	3.76	(7.02)		43	19.21		28	7.10		19	8.99		17			
Mid-Cap Blend Number of Funds							360						353			343			326			265			
Foreign Large Blend																									
State Street Global All Cap Equity Ex-U.S. Idx Securities II <sup>4, 5</sup>		US Fund Foreign Large Blend	13.00	25,848	0.06	0.05		0.00	6.91	6.91	(4.73)		82	12.85		48	2.64		57	4.60		55	5.59	5/13/2014	
MSCI ACWI Ex USA IMI NR USD									6.56	6.56	(5.84)			12.20			2.35			4.28					
Foreign Large Blend Median						0.92			7.96	7.96	(2.18)			12.84			2.87			4.69					
Foreign Large Blend Number of Funds							693						677			652			621			518			

# State of Rhode Island

## 401(a) Performance Summary

As of 3/31/2023

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Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%ile ER	Rev Share	Recent Returns		Annualized Total Returns														Inception Date
									3 Mo	YTD	1 Yr	Category Rank	%ile	3 Yr	Category Rank	%ile	5 Yr	Category Rank	%ile	10 Yr	Category Rank	%ile	SI		
ALLOCATION																									
Target-Date																									
Vanguard Target Retirement Inc Trust Plus <sup>6</sup>		US Fund Target-Date Retirement	10.17	23,185	0.06	0.06		0.00	4.26	4.26	(4.46)		35	3.88		50	3.32		28	3.87		28	4.40	8/15/2011	
Vanguard Target Retirement Income Composite									4.13	4.13	(4.45)			4.06			3.53			4.03					
Target-Date Retirement Median						0.59			3.74	3.74	(5.04)			3.88			2.84			3.45					
Target-Date Retirement Number of Funds							157						157			154			136			111			
Vanguard Target Retirement 2020 Trust Plus <sup>6</sup>		US Fund Target-Date 2020	10.17	32,854	0.06	0.06		0.00	4.81	4.81	(5.20)		26	6.95		49	4.38		33	5.86		16	6.69	8/15/2011	
Vanguard Target Retirement 2020 Composite									4.67	4.67	(5.12)			7.17			4.66			6.06					
Target-Date 2020 Median						0.55			4.38	4.38	(5.73)			6.97			4.15			5.42					
Target-Date 2020 Number of Funds							146						146			139			129			81			
Vanguard Target Retirement 2025 Trust Plus <sup>6</sup>		US Fund Target-Date 2025	10.17	70,029	0.06	0.06		0.00	5.32	5.32	(5.76)		40	8.44		35	4.90		26	6.48		12	7.34	8/15/2011	
Vanguard Target Retirement 2025 Composite									5.21	5.21	(5.68)			8.68			5.21			6.68					
Target-Date 2025 Median						0.59			4.80	4.80	(6.00)			7.80			4.38			5.63					
Target-Date 2025 Number of Funds							215						215			205			184			144			
Vanguard Target Retirement 2030 Trust Plus <sup>6</sup>		US Fund Target-Date 2030	10.17	84,906	0.06	0.06		0.00	5.67	5.67	(6.11)		38	9.77		45	5.32		32	7.00		20	7.91	8/15/2011	
Vanguard Target Retirement 2030 Composite									5.59	5.59	(6.00)			10.04			5.64			7.21					
Target-Date 2030 Median						0.60			5.22	5.22	(6.43)			9.61			4.95			6.36					
Target-Date 2030 Number of Funds							218						217			205			181			131			
Vanguard Target Retirement 2035 Trust Plus <sup>6</sup>		US Fund Target-Date 2035	10.17	85,346	0.06	0.06		0.00	5.95	5.95	(6.28)		30	11.23		53	5.79		37	7.55		19	8.51	8/15/2011	
Vanguard Target Retirement 2035 Composite									5.87	5.87	(6.21)			11.48			6.11			7.76					
Target-Date 2035 Median						0.61			5.64	5.64	(6.77)			11.46			5.48			6.92					
Target-Date 2035 Number of Funds							214						208			198			178			138			
Vanguard Target Retirement 2040 Trust Plus <sup>6</sup>		US Fund Target-Date 2040	10.17	76,693	0.06	0.06		0.00	6.23	6.23	(6.47)		30	12.67		57	6.23		34	8.02		20	8.97	8/15/2011	
Vanguard Target Retirement 2040 Composite									6.16	6.16	(6.43)			12.93			6.55			8.25					
Target-Date 2040 Median						0.64			5.91	5.91	(6.99)			12.93			5.87			7.42					
Target-Date 2040 Number of Funds							212						212			199			181			131			

# State of Rhode Island

## 401(a) Performance Summary

As of 3/31/2023

Morningstar Ranking/Number of Funds in Category displays the Funds actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Past performance does not guarantee future results. Morningstar Percentile Rankings are the Fund's total return rank relative to all the funds in the same Morningstar category, where 1 is the highest percentile rank and 100 is the lowest percentile rank.

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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%ile ER	Rev Share	Recent Returns		Annualized Total Returns												Inception Date	
									3 Mo	YTD	1 Yr	Category Rank	%ile	3 Yr	Category Rank	%ile	5 Yr	Category Rank	%ile	10 Yr	Category Rank	%ile		SI
ALLOCATION																								
Target-Date																								
Vanguard Target Retirement 2045 Trust Plus <sup>6</sup>		US Fund Target-Date 2045	10.17	73,986	0.06	0.06		0.00	6.50	6.50	(6.65)		34	14.12		42	6.67		27	8.32		18	9.23	8/15/2011
Vanguard Target Retirement 2045 Composite									6.44	6.44	(6.67)			14.38			7.01			8.56				
Target-Date 2045 Median						0.62			6.18	6.18	(7.07)			13.87			6.17			7.65				
Target-Date 2045 Number of Funds							208						208			198			178			138		
Vanguard Target Retirement 2050 Trust Plus <sup>6</sup>		US Fund Target-Date 2050	10.17	63,702	0.06	0.06		0.00	6.64	6.64	(6.67)		31	14.25		44	6.75		25	8.35		15	9.27	8/15/2011
Vanguard Target Retirement 2050 Composite									6.58	6.58	(6.71)			14.51			7.08			8.59				
Target-Date 2050 Median						0.63			6.31	6.31	(7.16)			14.09			6.21			7.78				
Target-Date 2050 Number of Funds							209						209			199			181			131		
Vanguard Target Retirement 2055 Trust Plus <sup>6</sup>		US Fund Target-Date 2055	10.17	43,789	0.06	0.06		0.00	6.64	6.64	(6.66)		32	14.25		54	6.75		29	8.34		15	9.42	11/30/2011
Vanguard Target Retirement 2055 Composite									6.58	6.58	(6.71)			14.51			7.08			8.59				
Target-Date 2055 Median						0.64			6.35	6.35	(7.13)			14.25			6.26			7.90				
Target-Date 2055 Number of Funds							208						208			198			178			113		
Vanguard Target Retirement 2060 Trust Plus <sup>6</sup>		US Fund Target-Date 2060	10.17	22,201	0.06	0.06		0.00	6.64	6.64	(6.64)		31	14.28		58	6.77		31	8.37		1	8.73	3/23/2012
Vanguard Target Retirement 2060 Composite									6.58	6.58	(6.71)			14.51			7.08			8.59				
Target-Date 2060 Median						0.64			6.38	6.38	(7.17)			14.35			6.30			7.80				
Target-Date 2060 Number of Funds							208						208			193			168					
Vanguard Target Retirement 2065 Trust Plus <sup>6</sup>		US Fund Target-Date 2065+	5.75	5,911	0.06	0.06		0.00	6.66	6.66	(6.60)		17	14.28		63	6.78		50				8.13	7/24/2017
Vanguard Target Retirement 2065 Composite									6.58	6.58	(6.71)			14.51			7.08							
Target-Date 2065+ Median						0.64			6.38	6.38	(7.33)			14.45			6.62							
Target-Date 2065+ Number of Funds							200						157			68			9					
Vanguard Target Retirement 2070 Trust Plus <sup>6</sup>		US Fund Target-Date 2065+	1.00	85	0.06	0.06		0.00	6.65	6.65												(5.35)	4/6/2022	
Vanguard Target Retirement 2070 Composite									6.58	6.58														
Target-Date 2065+ Median						0.64			6.38	6.38														
Target-Date 2065+ Number of Funds							200																	

Source: Morningstar, TIAA & Vanguard

% -ile --> Percentile Ranking in Morningstar Category.

Note: Rankings shown are calculated by Morningstar. Rankings for expense ratio is calculated by TIAA and may differ based on calculation methods.

Morningstar peer rankings include fractional weights for all share classes. Morningstar peer rankings also include ETFs. Depending on the category, this may cause some variances with the category median illustrated in this report since most ETFs are index based options that can include more volatile and less mainstream indices.

SI = Since Inception Annualized Total Return; Incep. Date = Since Inception Date (SI return is calculated from this date).

1. TIAA Stable Value is not an investment for purposes of federal securities law s; it is a guaranteed insurance contract. Therefore, unlike a variable annuity or mutual fund, TIAA Stable Value does not include an identifiable expense ratio. The contract provides a guaranteed minimum rate of interest of between 1% and 3% (before deductions for contract fees). Contract Fees are described in the annuity contract and are collected on a daily basis by way of a reduction to the Declared Rate. Payment obligations and the fulfillment of the guarantees provided for in the contract in the accumulation phase are supported by the assets held in the separate account. If the assets in the separate account are insufficient to meet these obligations, the shortfall is supported by the General Account of TIAA and is therefore subject to TIAA's claims-paying ability. Past interest rates are not indicative of future interest rates. The TIAA Stable Value Inception Date represents the date that the plan's TIAA Stable Value record was initiated on TIAA's recordkeeping system which may be earlier than the date of first deposit to the contract.
2. Calvert Social Index through December 16, 2005; FTSE4Good US Select Index thereafter.
3. Investor share migrated to Admiral share 08/1/2019.
4. Performance shown for periods prior to the inception date reflects the performance of an older share class of the fund/account or underlying fund. Total returns have not been restated to reflect any expense differential between any of the classes. Had the expense differential been reflected, total returns for the fund may have been higher or lower. Category ranks are not available for periods prior to the inception of the fund. Percentile rankings are not shown for State Street Global All Cap Equity Ex-U.S. Index Securities II because Morningstar does not provide a longer history for the product.
5. This Fund is a collective investment trust and is not FDIC insured, nor is it an obligation or deposit of, or guaranteed by State Street Corporation, SSGA or its affiliates.
6. This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants. This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

You cannot invest directly in an index.

Accumulations in mutual funds not managed by TIAA-CREF may be subject to administrative charges. These charges are subject to change. Please review current documents related to your plan.

The expense ratio paid by an investor is the net expense ratio as stated in the prospectus. The net expense ratio reflects total annual fund operating expenses excluding interest expense. If interest expense was included, returns would have been lower. For definitions please visit [www.tiaa.org/public/assetmanagement](http://www.tiaa.org/public/assetmanagement).

Vanguard Index Information available at <http://www.vanguard.com>.

Investing in non-investment grade securities presents special risks, including significantly higher interest-rate and credit risk.

Small-cap and mid-cap stocks may have limited marketability and may be subject to more abrupt or erratic market movements than large-cap stocks.

The risks associated with foreign investments are often magnified in emerging markets where there is greater potential for political, currency, and economic volatility.

Funds that invest in fixed-income securities are not guaranteed and are subject to interest-rate, inflation and credit risks.

Funds that invest in foreign securities are subject to special risks, including currency fluctuation and political and economic instability.

Real estate securities are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.

Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. TIAA Stable Value is a guaranteed insurance contract and not an investment for Federal Securities Law purposes.

Target Date Funds share the risks associated with the types of securities held by each of the underlying funds in which they invest. In addition to the fees and expenses associated with the Target Date Funds, there is exposure to the fees and expenses associated with the underlying mutual funds as well.

The principal value of a target date fund isn't guaranteed at any time, including at the target date, and will fluctuate with market changes. The target date represents an approximate date when investors may plan to begin withdrawing from the fund. However, you are not required to withdraw the funds at the target date.

**Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.**

Morningstar Ranking/Number of Funds in Category displays the Fund's actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Morningstar Percentile Rankings are the Fund's total return rank relative to all funds in the same Morningstar category, where 1 is the highest percentile and 100 is the lowest percentile.

## **Prospectus Gross Expense Ratio**

The percentage of fund assets used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

--The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.

--Often referred to as the Annual Operating Expense, the Prospectus Gross Expense Ratio is collected annually from a fund's prospectus.

## **Prospectus Net Expense Ratio**

The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

--The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.

--Net reimbursements, the Prospectus Net Expense Ratio is collected annually from a fund's prospectus.

--TIAA, unless noted, does not charge additional fees for record keeping a fund. 12b-1, revenue share and admin fees are all included in the Prospectus fees. -- Prospectus Net Expense Ratio % - ile rank is the percentile rank for the fund. The better the expense ratio (lower) the lower the ranking out of 100.

By communicating the information contained in this material, TIAA is not providing impartial investment advice or giving advice in a fiduciary capacity regarding any investment by, or other transaction of, the plan(s). TIAA is acting solely in a sales capacity with respect to an arms-length sale, purchase, loan, exchange or other transaction related to the investment of securities or other investment property.

# State of Rhode Island - Plan Balance Summary

401(a)/414(h)(2)

State of Rhode Island Defined Contribution Retirement Plan

As of 3/31/2023

<i>Investment Name</i>	<i>Asset Class</i>		<i>Asset Balance</i>	<i>% Assets</i>
State Street S&P 500 Index Securities (Lending Series CI) II	Equities	\$	63,375,997	3.86%
State Street Small Mid Cp Index Securities Series II	Equities	\$	39,038,912	2.38%
TIAA Stable Value	Guaranteed	\$	30,704,287	1.87%
State Street Global All Cap Equity Ex-U.S. Idx Securities II	Equities	\$	24,395,034	1.48%
Vanguard FTSE Social Index Institutional	Equities	\$	11,610,014	0.71%
State Street US Bond Index Securities XIV	Fixed Income	\$	11,276,515	0.69%
PIMCO Real Return Institutional	Fixed Income	\$	10,337,008	0.63%
<b>Vanguard Target Retirement Trust Plus Subtotal</b>		<b>\$</b>	<b>1,452,931,690</b>	<b>88.40%</b>
Vanguard Target Retirement Income Trust Plus	Multi-Asset	\$	46,008,059	2.80%
Vanguard Target Retirement 2020 Trust Plus	Multi-Asset	\$	110,356,550	6.71%
Vanguard Target Retirement 2025 Trust Plus	Multi-Asset	\$	182,999,922	11.13%
Vanguard Target Retirement 2030 Trust Plus	Multi-Asset	\$	226,404,813	13.77%
Vanguard Target Retirement 2035 Trust Plus	Multi-Asset	\$	271,745,418	16.53%
Vanguard Target Retirement 2040 Trust Plus	Multi-Asset	\$	226,819,904	13.80%
Vanguard Target Retirement 2045 Trust Plus	Multi-Asset	\$	180,534,699	10.98%
Vanguard Target Retirement 2050 Trust Plus	Multi-Asset	\$	117,986,641	7.18%
Vanguard Target Retirement 2055 Trust Plus	Multi-Asset	\$	61,766,008	3.76%
Vanguard Target Retirement 2060 Trust Plus	Multi-Asset	\$	24,202,133	1.47%
Vanguard Target Retirement 2065 Trust Plus	Multi-Asset	\$	3,994,066	0.24%
Vanguard Target Retirement 2070 Trust Plus	Multi-Asset	\$	113,477	0.01%
<b>Defined Contribution Retirement Plan Total</b>		<b>\$</b>	<b>1,643,669,458</b>	

# State of Rhode Island - Plan Balance Summary

401(a)

Rhode Island FICA 406403 Alternative Retirement Income Security Program

As of 3/31/2023

Investment Name	Asset Class	Asset Balance	% Assets
TIAA Stable Value	Guaranteed	\$ 4,530	0.11%
<b>Vanguard Target Retirement Trust Plus Subtotal</b>		<b>\$ 4,030,101</b>	<b>99.89%</b>
Vanguard Target Retirement Income Trust Plus	Multi-Asset	\$ 22,310	0.55%
Vanguard Target Retirement 2020 Trust Plus	Multi-Asset	\$ 1,462,895	36.26%
Vanguard Target Retirement 2025 Trust Plus	Multi-Asset	\$ 208,736	5.17%
Vanguard Target Retirement 2030 Trust Plus	Multi-Asset	\$ 262,130	6.50%
Vanguard Target Retirement 2035 Trust Plus	Multi-Asset	\$ 163,976	4.06%
Vanguard Target Retirement 2040 Trust Plus	Multi-Asset	\$ 160,951	3.99%
Vanguard Target Retirement 2045 Trust Plus	Multi-Asset	\$ 148,265	3.67%
Vanguard Target Retirement 2050 Trust Plus	Multi-Asset	\$ 203,681	5.05%
Vanguard Target Retirement 2055 Trust Plus	Multi-Asset	\$ 310,424	7.69%
Vanguard Target Retirement 2060 Trust Plus	Multi-Asset	\$ 654,396	16.22%
Vanguard Target Retirement 2065 Trust Plus	Multi-Asset	\$ 375,838	9.32%
Vanguard Target Retirement 2070 Trust Plus	Multi-Asset	\$ 56,500	1.40%
<b>FICA Alternative Retirement Income Security Program Total</b>		<b>\$ 4,034,631</b>	



# Disclosures

This material is for informational or educational purposes only and does not constitute fiduciary investment advice under ERISA, a securities recommendation under all securities laws, or an insurance product recommendation under state insurance laws or regulations. This material does not take into account any specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on the investor's own objectives and circumstances.

TIAA is providing educational services concerning plan menu construction and the plan sponsor's fiduciary duties under its plan. It is not providing investment advice and is not a plan fiduciary with respect to the education and information presented herein. Note also that TIAA cannot and does not provide legal advice and that we recommend that you seek such advice from your own legal advisors.

TIAA reported performance may differ from Morningstar source returns for the same option over the same time period. We would expect an occasional one to two basis point difference. Morningstar Direct calculates returns by one share owned by hypothetical investor over the requested time period. The return for one year is calculated using the same formula as one month. TIAA calculates returns by \$1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns would include dividends and capital gains, if applicable.

**Investment products may be subject to market and other risk factors. See the applicable product literature or visit [tiaa.org](https://tiaa.org) for details. You should consider the investment objectives, risks, charges and expenses carefully before investing. Go to [tiaa.org](https://tiaa.org) or call 877-518-9161 for product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.**

TIAA-CREF Individual & Institutional Services, LLC, Member FINRA, distributes securities products. Annuity contracts and certificates are issued by Teachers Insurance and Annuity Association of America (TIAA) and College Retirement Equities Fund (CREF), New York, NY. Each is solely responsible for its own financial condition and contractual obligations.

## TIAA.org

XPP-2845800CO-Q0323P

# 457 PLANS

NEPC, LLC

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### State of Rhode Island Total Assets 457 Plans

Plan Provider	6/30/2022	9/30/2022	12/31/2022	3/31/2023
Fidelity	\$ 173,788,675.74	\$ 164,811,750.90	\$ 175,469,548.65	\$ 186,627,895.80
Voya	\$211,252,872.69	\$202,871,839.15	\$215,643,567.36	\$218,106,489.43
TIAA	\$ 49,544,061.00	\$ 48,702,561.00	\$ 52,036,065.00	\$ 55,565,301.00
<b>Total</b>	<b>\$ 434,585,609.43</b>	<b>\$ 416,386,151.05</b>	<b>\$ 443,149,181.01</b>	<b>\$ 460,299,686.23</b>



# State of Rhode Island

As of March 31, 2023



457(b) Quarterly Performance Summary

# State of Rhode Island

## 457(b) Performance Summary

As of 3/31/2023

Morningstar Ranking/Number of Funds in Category displays the Funds actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Past performance does not guarantee future results. Morningstar Percentile Rankings are the Fund's total return rank relative to all the funds in the same Morningstar category, where 1 is the highest percentile rank and 100 is the lowest percentile rank.

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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%ile ER	Rev Share	Recent Returns		Annualized Total Returns														Inception Date
									3 Mo	YTD	1 Yr	Category Rank	%ile	3 Yr	Category Rank	%ile	5 Yr	Category Rank	%ile	10 Yr	Category Rank	%ile	SI		

### GUARANTEED

Guaranteed																								
TIAA Traditional Annuity Retirement Choice Plus <sup>6</sup>		Crediting Rate as of 4/1/2023 = 5.50 %						0.15	0.92	0.92	3.62			3.20			3.24			3.38			3.59	6/1/2006

### FIXED INCOME

Intermediate Core Bond																								
State Street US Bond Index Securities XIV <sup>5, 7</sup>		US Fund Intermediate Core Bond	28.33	40,344	0.02	0.02		0.00	3.13	3.13	(4.80)	38	(2.76)		68	0.94		33	1.38		29	1.93	6/30/2011	
Bloomberg US Agg Bond TR USD									2.96	2.96	(4.78)		(2.77)			0.91			1.36					
Intermediate Core Bond Median					0.52				3.10	3.10	(5.18)		(2.13)			0.80			1.24					
Intermediate Core Bond Number of Funds						451						439			423			413			372			
Intermediate Core-Plus Bond																								
PIMCO Total Return Instl	PITRX	US Fund Intermediate Core-Plus Bd	8.58	55,607	0.46	0.46	34	0.00	2.92	2.92	(5.75)	333	64	(2.25)	454	84	0.86	276	58	1.34	214	65	6.31	5/11/1987
Bloomberg US Agg Bond TR USD									2.96	2.96	(4.78)			(2.77)			0.91			1.36				
Intermediate Core-Plus Bond Median					0.65				3.17	3.17	(5.66)			(1.16)			0.92			1.51				
Intermediate Core-Plus Bond Number of Funds						612						592			552			533			471			
Inflation-Protected Bond																								
American Century Inflation-Adjs Bond R6 <sup>5</sup>	AIADX	US Fund Inflation-Protected Bond	21.42	3,021	0.21	0.21	18	0.00	3.71	3.71	(6.45)	138	71	2.35	87	45	2.76	82	45	1.17		62	2.56	7/28/2017
Bloomberg US Treasury US TIPS TR USD									3.34	3.34	(6.06)			1.75			2.94			1.49				
Inflation-Protected Bond Median					0.56				3.08	3.08	(6.07)			2.18			2.67			1.22				
Inflation-Protected Bond Number of Funds						201						200			195			193			180			

# State of Rhode Island

## 457(b) Performance Summary

As of 3/31/2023

Morningstar Ranking/Number of Funds in Category displays the Funds actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Past performance does not guarantee future results. Morningstar Percentile Rankings are the Fund's total return rank relative to all the funds in the same Morningstar category, where 1 is the highest percentile rank and 100 is the lowest percentile rank.

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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%ile ER	Rev Share	Recent Returns		Annualized Total Returns														Inception Date
									3 Mo	YTD	1 Yr	Category Rank	%ile	3 Yr	Category Rank	%ile	5 Yr	Category Rank	%ile	10 Yr	Category Rank	%ile	SI		
EQUITY																									
Large Cap Blend																									
State Street S&P 500 Index Securities (Lending Series CI) II <sup>7</sup> S&P 500 TR USD		US Fund Large Blend	26.00	163,373	0.01	0.01		0.00	7.49	7.49	(7.74)		51	18.58		30	11.15		21	12.14		14	14.28	5/31/1996	
Vanguard FTSE Social Index Institutional <sup>4,5</sup> FTSE4Good US Select TR USD	VFTNX	US Fund Large Blend	7.33	14,265	0.12	0.12	5	0.00	9.83	9.83	(10.02)	1221	88	17.69	692	61	11.21	157	18	12.76	26	4	9.24	1/14/2003	
Russell 3000 TR USD									7.18	7.18	(8.58)			18.48			10.45			11.73					
Large Blend Median						0.78			6.47	6.47	(7.66)			17.89			9.98			11.14					
Large Blend Number of Funds							1,207						1,173			1,138			1,099			983			
Mid-Cap Blend																									
Vanguard Mid Cap Index Institutional CRSP US Mid Cap TR USD	VMCIX	US Fund Mid-Cap Blend	24.92	141,397	0.04	0.04	2	0.00	3.87	3.87	(9.86)	306	81	18.73	226	66	8.14	84	26	10.19	24	16	9.63	5/21/1998	
Mid-Cap Blend Median						0.96			3.76	3.76	(7.02)			19.21			7.10			8.99					
Mid-Cap Blend Number of Funds							360						353			343			326			265			
Small Blend																									
Vanguard Small Cap Index Institutional CRSP US Small Cap TR USD	VSCIX	US Fund Small Blend	7.00	117,232	0.04	0.04	1	0.00	3.74	3.74	(9.32)	383	66	19.68	338	64	6.77	135	30	9.20	74	20	8.60	7/7/1997	
Small Blend Median						1.00			2.95	2.95	(8.47)			20.42			5.62			8.16					
Small Blend Number of Funds							563						557			549			537			465			
Foreign Large Blend																									
State Street Global All Cap Equity Ex-U.S. Idx Securities II <sup>5,7</sup> MSCI ACWI Ex USA IMI NR USD		US Fund Foreign Large Blend	13.00	25,848	0.06	0.05		0.00	6.91	6.91	(4.73)		82	12.85		48	2.64		57	4.60		55	5.59	5/13/2014	
Foreign Large Blend Median						0.92			6.56	6.56	(5.84)			12.20			2.35			4.28					
Foreign Large Blend Number of Funds							693		7.96	7.96	(2.18)			12.84			2.87			4.69					
Foreign Large Growth																									
American Funds Europacific Growth R6 MSCI ACWI Ex USA NR USD	REGRX	US Fund Foreign Large Growth	21.83	139,887	0.46	0.46	14	0.00	9.87	9.87	(3.26)	125	28	12.13	92	31	3.25	181	59	5.99	73	36	7.84	5/1/2009	
Foreign Large Growth Median						0.99			6.87	6.87	(5.07)			11.80			2.47			4.17					
Foreign Large Growth Number of Funds							429		9.85	9.85	(4.89)			11.02			3.38			5.50			321		

# State of Rhode Island

## 457(b) Performance Summary

As of 3/31/2023

Morningstar Ranking/Number of Funds in Category displays the Funds actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Past performance does not guarantee future results. Morningstar Percentile Rankings are the Fund's total return rank relative to all the funds in the same Morningstar category, where 1 is the highest percentile rank and 100 is the lowest percentile rank.

The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares or accumulation units, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted below. For performance current to the most recent month-end, visit the TIAA Website at [www.tiaa.org](http://www.tiaa.org), or call 877-518-9161.

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%ile ER	Rev Share	Recent Returns		Annualized Total Returns														Inception Date
									3 Mo	YTD	1 Yr	Category Rank	%ile	3 Yr	Category Rank	%ile	5 Yr	Category Rank	%ile	10 Yr	Category Rank	%ile	SI		

### ALLOCATION

Target-Date																								
Vanguard Target Retirement Inc Trust Plus <sup>8</sup>		US Fund Target-Date Retirement	10.17	23,185	0.06	0.06		0.00	4.26	4.26	(4.46)		35	3.88		50	3.32		28	3.87		28	4.40	8/15/2011
Vanguard Target Retirement Income Composite									4.13	4.13	(4.45)			4.06			3.53			4.03				
Target-Date Retirement Median						0.59			3.74	3.74	(5.04)			3.88			2.84			3.45				
Target-Date Retirement Number of Funds							157						157			154			136			111		
Vanguard Target Retirement 2020 Trust Plus <sup>8</sup>		US Fund Target-Date 2020	10.17	32,854	0.06	0.06		0.00	4.81	4.81	(5.20)		26	6.95		49	4.38		33	5.86		16	6.69	8/15/2011
Vanguard Target Retirement 2020 Composite									4.67	4.67	(5.12)			7.17			4.66			6.06				
Target-Date 2020 Median						0.55			4.38	4.38	(5.73)			6.97			4.15			5.42				
Target-Date 2020 Number of Funds							146						146			139			129			81		
Vanguard Target Retirement 2025 Trust Plus <sup>8</sup>		US Fund Target-Date 2025	10.17	70,029	0.06	0.06		0.00	5.32	5.32	(5.76)		40	8.44		35	4.90		26	6.48		12	7.34	8/15/2011
Vanguard Target Retirement 2025 Composite									5.21	5.21	(5.68)			8.68			5.21			6.68				
Target-Date 2025 Median						0.59			4.80	4.80	(6.00)			7.80			4.38			5.63				
Target-Date 2025 Number of Funds							215						215			205			184			144		
Vanguard Target Retirement 2030 Trust Plus <sup>8</sup>		US Fund Target-Date 2030	10.17	84,906	0.06	0.06		0.00	5.67	5.67	(6.11)		38	9.77		45	5.32		32	7.00		20	7.91	8/15/2011
Vanguard Target Retirement 2030 Composite									5.59	5.59	(6.00)			10.04			5.64			7.21				
Target-Date 2030 Median						0.60			5.22	5.22	(6.43)			9.61			4.95			6.36				
Target-Date 2030 Number of Funds							218						217			205			181			131		
Vanguard Target Retirement 2035 Trust Plus <sup>8</sup>		US Fund Target-Date 2035	10.17	85,346	0.06	0.06		0.00	5.95	5.95	(6.28)		30	11.23		53	5.79		37	7.55		19	8.51	8/15/2011
Vanguard Target Retirement 2035 Composite									5.87	5.87	(6.21)			11.48			6.11			7.76				
Target-Date 2035 Median						0.61			5.64	5.64	(6.77)			11.46			5.48			6.92				
Target-Date 2035 Number of Funds							214						208			198			178			138		
Vanguard Target Retirement 2040 Trust Plus <sup>8</sup>		US Fund Target-Date 2040	10.17	76,693	0.06	0.06		0.00	6.23	6.23	(6.47)		30	12.67		57	6.23		34	8.02		20	8.97	8/15/2011
Vanguard Target Retirement 2040 Composite									6.16	6.16	(6.43)			12.93			6.55			8.25				
Target-Date 2040 Median						0.64			5.91	5.91	(6.99)			12.93			5.87			7.42				
Target-Date 2040 Number of Funds							212						212			199			181			131		

# State of Rhode Island

## 457(b) Performance Summary

As of 3/31/2023

Morningstar Ranking/Number of Funds in Category displays the Funds actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Past performance does not guarantee future results. Morningstar Percentile Rankings are the Fund's total return rank relative to all the funds in the same Morningstar category, where 1 is the highest percentile rank and 100 is the lowest percentile rank.

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Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%ile ER	Rev Share	Recent Returns		Annualized Total Returns												Inception Date	
									3 Mo	YTD	1 Yr	Category Rank	%ile	3 Yr	Category Rank	%ile	5 Yr	Category Rank	%ile	10 Yr	Category Rank	%ile		SI

### ALLOCATION

Target-Date																				
Vanguard Target Retirement 2045 Trust Plus <sup>8</sup>		US Fund Target-Date 2045	10.17	73,986	0.06	0.06		0.00	6.50	6.50	(6.65)	34	14.12	42	6.67	27	8.32	18	9.23	8/15/2011
Vanguard Target Retirement 2045 Composite									6.44	6.44	(6.67)		14.38		7.01		8.56			
Target-Date 2045 Median						0.62			6.18	6.18	(7.07)		13.87		6.17		7.65			
Target-Date 2045 Number of Funds							208					208		198		178		138		
Vanguard Target Retirement 2050 Trust Plus <sup>8</sup>		US Fund Target-Date 2050	10.17	63,702	0.06	0.06		0.00	6.64	6.64	(6.67)	31	14.25	44	6.75	25	8.35	15	9.27	8/15/2011
Vanguard Target Retirement 2050 Composite									6.58	6.58	(6.71)		14.51		7.08		8.59			
Target-Date 2050 Median						0.63			6.31	6.31	(7.16)		14.09		6.21		7.78			
Target-Date 2050 Number of Funds							209					209		199		181		131		
Vanguard Target Retirement 2055 Trust Plus <sup>8</sup>		US Fund Target-Date 2055	10.17	43,789	0.06	0.06		0.00	6.64	6.64	(6.66)	32	14.25	54	6.75	29	8.34	15	9.42	11/30/2011
Vanguard Target Retirement 2055 Composite									6.58	6.58	(6.71)		14.51		7.08		8.59			
Target-Date 2055 Median						0.64			6.35	6.35	(7.13)		14.25		6.26		7.90			
Target-Date 2055 Number of Funds							208					208		198		178		113		
Vanguard Target Retirement 2060 Trust Plus <sup>8</sup>		US Fund Target-Date 2060	10.17	22,201	0.06	0.06		0.00	6.64	6.64	(6.64)	31	14.28	58	6.77	31	8.37	1	8.73	3/23/2012
Vanguard Target Retirement 2060 Composite									6.58	6.58	(6.71)		14.51		7.08		8.59			
Target-Date 2060+ Median						0.64			6.38	6.38	(7.17)		14.35		6.30		7.80			
Target-Date 2060+ Number of Funds							208					208		193		168				
Vanguard Target Retirement 2065 Trust Plus <sup>8</sup>		US Fund Target-Date 2065+	5.75	5,911	0.06	0.06		0.00	6.66	6.66	(6.60)	17	14.28	63	6.78	50			8.13	7/24/2017
Vanguard Target Retirement 2065 Composite									6.58	6.58	(6.71)		14.51		7.08					
Target-Date 2065+ Median						0.64			6.38	6.38	(7.33)		14.45		6.62					
Target-Date 2065+ Number of Funds							200					157		68		9				
Vanguard Target Retirement 2070 Trust Plus <sup>8</sup>		US Fund Target-Date 2065+	1.00	85	0.06	0.06		0.00	6.65	6.65								(5.35)	4/6/2022	
Vanguard Target Retirement 2070 Composite									6.58	6.58										
Target-Date 2065+ Median						0.64			6.38	6.38										
Target-Date 2065+ Number of Funds							200													

Source: Morningstar, TIAA & Vanguard



# State of Rhode Island

## 457(b) Performance Summary

As of 3/31/2023

% -ile --> Percentile Ranking in Morningstar Category.

Note: Rankings shown are calculated by Morningstar.

Morningstar peer rankings include fractional weights for all share classes. Morningstar peer rankings also include ETFs. Depending on the category, this may cause some variances with the category median illustrated in this report since most ETFs are index based options that can include more volatile and less mainstream indices.

SI = Since Inception Annualized Total Return; Incep. Date = Since Inception Date (SI return is calculated from this date).

1. Calvert Social Index through December 16, 2005; FTSE4Good US Select Index thereafter.
2. S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter.
3. Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter.
4. Investor share migrated to Admiral share 08/1/2019.
5. Performance shown for periods prior to the inception date reflects the performance of an older share class of the fund/account or underlying fund. Total returns have not been restated to reflect any expense differential between any of the classes. Had the expense differential been reflected, total returns for the fund may have been higher or lower. Category ranks are not available for periods prior to the inception of the fund. Percentile rankings are not shown for State Street Global All Cap Equity Ex-U.S. Index Securities II because Morningstar does not provide a longer history for the product.
6. It is important to remember that the TIAA Traditional Annuity is not an investment for purposes of federal securities laws; it is a guaranteed insurance contract. Therefore, unlike a variable annuity or mutual fund, the TIAA Traditional Annuity does not include an identifiable expense ratio.
7. This Fund is a collective investment trust and is not FDIC insured, nor is it an obligation or deposit of, or guaranteed by State Street Corporation, SSGA or its affiliates.
8. This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants. This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

You cannot invest directly in an index.

Accumulations in mutual funds not managed by TIAA-CREF may be subject to administrative charges. These charges are subject to change. Please review current documents related to your plan.

The expense ratio paid by an investor is the net expense ratio as stated in the prospectus. The net expense ratio reflects total annual fund operating expenses excluding interest expense. If interest expense was included, returns would have been lower. For definitions please visit [www.tiaa.org/public/assetmanagement](http://www.tiaa.org/public/assetmanagement).

Vanguard Index Information available at <http://www.vanguard.com>.

Investing in non-investment grade securities presents special risks, including significantly higher interest-rate and credit risk.

Small-cap and mid-cap stocks may have limited marketability and may be subject to more abrupt or erratic market movements than large-cap stocks.

The risks associated with foreign investments are often magnified in emerging markets where there is greater potential for political, currency, and economic volatility.

Funds that invest in fixed-income securities are not guaranteed and are subject to interest-rate, inflation and credit risks.

Funds that invest in foreign securities are subject to special risks, including currency fluctuation and political and economic instability.

Real estate securities are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.

Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. TIAA Traditional is a guaranteed insurance contract and not an investment for Federal Securities Law purposes.

Target Date Funds share the risks associated with the types of securities held by each of the underlying funds in which they invest. In addition to the fees and expenses associated with the Target Date Funds, there is exposure to the fees and expenses associated with the underlying mutual funds as well.

The principal value of a target date fund isn't guaranteed at any time, including at the target date, and will fluctuate with market changes. The target date represents an approximate date when investors may plan to begin withdrawing from the fund. However, you are not required to withdraw the funds at the target date.

**Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.**

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## **Prospectus Gross Expense Ratio**

The percentage of fund assets used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

--The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.

--Often referred to as the Annual Operating Expense, the Prospectus Gross Expense Ratio is collected annually from a fund's prospectus.

## **Prospectus Net Expense Ratio**

The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

--The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.

--Net reimbursements, the Prospectus Net Expense Ratio is collected annually from a fund's prospectus.

--TIAA, unless noted, does not charge additional fees for record keeping a fund. 12b-1, revenue share and admin fees are all included in the Prospectus fees. -- Prospectus Net Expense Ratio % - ile rank is the percentile rank for the fund. The better the expense ratio (lower) the lower the ranking out of 100.

By communicating the information contained in this material, TIAA is not providing impartial investment advice or giving advice in a fiduciary capacity regarding any investment by, or other transaction of, the plan(s). TIAA is acting solely in a sales capacity with respect to an arms-length sale, purchase, loan, exchange or other transaction related to the investment of securities or other investment property.

# State of Rhode Island - Plan Balance Summary

457(b)

State of Rhode Island 457(b) Deferred Compensation Plan

As of 3/31/2023

<i>Investment Name</i>	<i>Asset Class</i>		<i>Asset Balance</i>	<i>% Assets</i>
TIAA Traditional Annuity (Retirement Choice Plus)	Guaranteed	\$	14,157,447	25.48%
State Street S&P 500 Index Securities (Lending Series CI) II	Equities	\$	13,413,549	24.14%
Vanguard Mid-Cap Index Institutional	Equities	\$	6,309,100	11.35%
Vanguard Small-Cap Index Institutional	Equities	\$	3,624,870	6.52%
American EuroPacific Growth R6	Equities	\$	2,218,691	3.99%
Vanguard FTSE Social Index Institutional	Equities	\$	1,348,922	2.43%
State Street US Bond Index Securities XIV	Fixed Income	\$	824,553	1.48%
American Century Inflation Adjusted Bond R6	Fixed Income	\$	777,723	1.40%
PIMCO Total Return Institutional	Fixed Income	\$	759,796	1.37%
State Street Global All Cap Equity Ex-U.S. Idx Securities II	Equities	\$	727,761	1.31%
Self-Directed Brokerage	Brokerage	\$	48,087	0.09%
<b>Vanguard Target Retirement Trust Plus Subtotal</b>		<b>\$</b>	<b>11,354,803</b>	<b>20.44%</b>
Vanguard Target Retirement Income Trust Plus	Multi-Asset	\$	797,987	1.44%
Vanguard Target Retirement 2020 Trust Plus	Multi-Asset	\$	843,094	1.52%
Vanguard Target Retirement 2025 Trust Plus	Multi-Asset	\$	1,820,353	3.28%
Vanguard Target Retirement 2030 Trust Plus	Multi-Asset	\$	3,350,889	6.03%
Vanguard Target Retirement 2035 Trust Plus	Multi-Asset	\$	1,470,970	2.65%
Vanguard Target Retirement 2040 Trust Plus	Multi-Asset	\$	653,283	1.18%
Vanguard Target Retirement 2045 Trust Plus	Multi-Asset	\$	844,655	1.52%
Vanguard Target Retirement 2050 Trust Plus	Multi-Asset	\$	693,652	1.25%
Vanguard Target Retirement 2055 Trust Plus	Multi-Asset	\$	547,769	0.99%
Vanguard Target Retirement 2060 Trust Plus	Multi-Asset	\$	293,544	0.53%
Vanguard Target Retirement 2065 Trust Plus	Multi-Asset	\$	38,608	0.07%
Vanguard Target Retirement 2070 Trust Plus	Multi-Asset	\$	-	0.00%
<b>457(b) Deferred Compensation Plan Total</b>		<b>\$</b>	<b>55,565,301</b>	

# Disclosures

This material is for informational or educational purposes only and does not constitute fiduciary investment advice under ERISA, a securities recommendation under all securities laws, or an insurance product recommendation under state insurance laws or regulations. This material does not take into account any specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on the investor's own objectives and circumstances.

TIAA is providing educational services concerning plan menu construction and the plan sponsor's fiduciary duties under its plan. It is not providing investment advice and is not a plan fiduciary with respect to the education and information presented herein. Note also that TIAA cannot and does not provide legal advice and that we recommend that you seek such advice from your own legal advisors.

TIAA reported performance may differ from Morningstar source returns for the same option over the same time period. We would expect an occasional one to two basis point difference. Morningstar Direct calculates returns by one share owned by hypothetical investor over the requested time period. The return for one year is calculated using the same formula as one month. TIAA calculates returns by \$1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns would include dividends and capital gains, if applicable.

**Investment products may be subject to market and other risk factors. See the applicable product literature or visit [tiaa.org](https://tiaa.org) for details. You should consider the investment objectives, risks, charges and expenses carefully before investing. Go to [tiaa.org](https://tiaa.org) or call 877-518-9161 for product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.**

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## TIAA.org

XPP-2845801CO-Q0323P

# Monthly Plan Performance Update

STATE OF RHODE ISLAND - STATE OF RI (35835)

*Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate, so you may have a gain or loss when shares are sold. Current performance may be higher or lower than that quoted. Visit your Fidelity website for the most recent month-end performance.*

Name	Cumulative Total Returns				Average Annual Total Returns				
	As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr
DOW JONES INDUSTRIAL AVERAGE	03/31/2023	2.08	0.93	0.93	03/31/2023	-1.98	17.31	9.01	11.15
BLOOMBERG US AGGREGATE BOND INDEX	03/31/2023	2.54	2.96	2.96	03/31/2023	-4.78	-2.77	0.91	1.36
NASDAQ COMPOSITE INDEX	03/31/2023	6.78	17.05	17.05	03/31/2023	-13.28	17.56	12.60	15.30
RUSSELL 2000 INDEX	03/31/2023	-4.78	2.74	2.74	03/31/2023	-11.61	17.51	4.71	8.04
S&P 500 INDEX	03/31/2023	3.67	7.50	7.50	03/31/2023	-7.73	18.60	11.19	12.24

Investment Name	Cumulative Total Returns				Average Annual Total Returns					Fees			
	As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr	Life	Short Term Trading	Expense Ratio	Inception Date
<b>Stock Investments</b>													
<b>Large Cap</b>													
FID CONTRAFUND K6	03/31/2023	5.48	11.02	11.02	03/31/2023	-10.23	15.06	10.34	--	11.76	--	0.45% on 03/01/2023	05/25/2017
FID LARGE CAP STOCK	03/31/2023	0.91	6.55	6.55	03/31/2023	-1.99	21.47	10.56	11.51	8.93	--	0.54% on 06/29/2022	06/22/1995
INVS DIVRS DIVD R5	03/31/2023	-0.56	-0.10	-0.10	03/31/2023	-4.11	15.92	7.28	8.40	7.74	--	0.53% on 02/28/2023	12/31/2001
SS S&P 500 INDEX II	03/31/2023	3.67	7.49	7.49	03/31/2023	-7.74	18.58	11.15	12.14	8.97	--	0.01% on 12/31/2022	02/28/1996
VAN FTSE SOC IDX ADM	03/31/2023	4.20	9.83	9.83	03/31/2023	-10.04	17.66	11.19	12.74	5.98	--	0.14% on 12/21/2022	01/14/2003
<b>Mid-Cap</b>													
FID LOW PRICED STK K	03/31/2023	-1.58	1.15	1.15	03/31/2023	-2.42	21.79	8.10	9.64	12.89	--	0.74% on 09/29/2022	12/27/1989
SS RSL SMMDCP IDX II	03/31/2023	-2.77	5.92	5.92	03/31/2023	-13.15	17.92	6.54	9.25	8.12	--	0.02% on 03/31/2023	08/31/1997
<b>International</b>													
AF EUROPAC GROWTH R6	03/31/2023	4.66	9.87	9.87	03/31/2023	-3.26	12.13	3.25	5.99	10.03	--	0.46% on 06/01/2022	04/16/1984
SS GACEQ EXUS IDX II	03/31/2023	2.45	6.91	6.91	03/31/2023	-4.73	12.85	2.64	4.60	4.54	--	0.06% on 12/31/2022	04/05/2010

## Blended Investments\*

### Others

FID FREEDOM 2005	03/31/2023	2.17	3.73	3.73	03/31/2023	-4.48	3.56	2.76	3.85	4.39	--	0.47% on 05/28/2022	11/06/2003
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Investment Name	Cumulative Total Returns				Average Annual Total Returns					Fees			
	As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr	Life	Short Term Trading	Expense Ratio	Inception Date
FID FREEDOM 2010	03/31/2023	2.31	4.24	4.24	03/31/2023	-5.00	4.99	3.30	4.58	5.91	--	0.49% on 05/28/2022	10/17/1996
FID FREEDOM 2015	03/31/2023	2.37	4.76	4.76	03/31/2023	-5.65	6.41	3.77	5.16	5.41	--	0.54% on 05/28/2022	11/06/2003
FID FREEDOM 2020	03/31/2023	2.52	5.33	5.33	03/31/2023	-6.35	7.71	4.22	5.65	6.36	--	0.58% on 05/28/2022	10/17/1996
FID FREEDOM 2025	03/31/2023	2.57	5.63	5.63	03/31/2023	-6.54	8.83	4.62	6.23	6.08	--	0.62% on 05/28/2022	11/06/2003
FID FREEDOM 2030	03/31/2023	2.51	5.88	5.88	03/31/2023	-6.46	10.48	5.18	6.98	6.69	--	0.66% on 05/28/2022	10/17/1996
FID FREEDOM 2035	03/31/2023	2.53	6.44	6.44	03/31/2023	-6.56	13.22	6.05	7.83	6.83	--	0.71% on 05/28/2022	11/06/2003
FID FREEDOM 2040	03/31/2023	2.48	6.97	6.97	03/31/2023	-6.69	14.89	6.61	8.16	4.73	--	0.75% on 05/28/2022	09/06/2000
FID FREEDOM 2045	03/31/2023	2.44	7.05	7.05	03/31/2023	-6.61	14.96	6.63	8.20	6.33	--	0.75% on 05/28/2022	06/01/2006
FID FREEDOM 2050	03/31/2023	2.50	7.07	7.07	03/31/2023	-6.59	14.96	6.63	8.22	6.22	--	0.75% on 05/28/2022	06/01/2006
FID FREEDOM 2055	03/31/2023	2.48	7.10	7.10	03/31/2023	-6.60	14.98	6.64	8.26	7.86	--	0.75% on 05/28/2022	06/01/2011
FID FREEDOM 2060	03/31/2023	2.43	6.99	6.99	03/31/2023	-6.66	14.93	6.63	--	7.52	--	0.75% on 05/28/2022	08/05/2014
FID FREEDOM 2065	03/31/2023	2.47	7.05	7.05	03/31/2023	-6.64	14.93	--	--	7.50	--	0.75% on 05/28/2022	06/28/2019
FID FREEDOM INCOME	03/31/2023	2.18	3.62	3.62	03/31/2023	-4.18	2.70	2.45	3.09	4.36	--	0.47% on 05/28/2022	10/17/1996

## Bond Investments

### Stable Value

TRP STABLE VALUE A	03/31/2023	0.19	0.52	0.52	03/31/2023	1.85	1.84	1.97	1.94	4.44	--	0.30% on 09/30/2021	09/12/1988
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### Income

PIM TOTAL RETURN A	03/31/2023	1.96	2.83	2.83	03/31/2023	-6.07	-2.58	0.52	0.98	5.89	--	0.80% on 08/01/2022	05/11/1987
SS US BOND INDX XIV	03/31/2023	2.54	3.13	3.13	03/31/2023	-4.80	-2.76	0.94	1.38	4.17	--	0.02% on 12/31/2022	10/01/1997

## Other Investments

### Others

BROKERAGELINK	--	--	--	--	--	--	--	--	--	--	--	--	--
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Expense Ratio is the total annual fund operating expense ratio from the fund's most recent prospectus. For non-Fidelity fund of funds listed, the ratio shown may solely reflect the total operating expense ratio of the fund, or may be a combined ratio reflecting both the total operating expense ratio of the fund and the total operating expense ratios of the underlying funds in which it was invested. Please consult the fund's prospectus for more detail on a particular fund's expense ratio.

Total returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Cumulative total returns are reported as of the period indicated. Life of Fund figures are reported as of the inception date to the period indicated.

The management company may be temporarily reimbursing a portion of the fund's expenses. Absent such reimbursement, returns and yields would have been lower. A fund's expense limitation may be terminated at any time.

**For any Government or U.S. Treasury Money Market funds listed:** *You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.* Fidelity's government and U.S. Treasury money market funds will not impose a fee upon the sale of your shares, nor temporarily suspend your ability to sell shares if the fund's weekly liquid assets fall below 30% of its total assets because of market conditions or other factors.

**For any Retail (Non Government or U.S. Treasury) Money Market Funds listed:** *You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.*

**For any Institutional Money Market Funds listed:** *You could lose money by investing in a money market fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.*

A money market fund's current yield reflects the current earnings of the fund, while the total return refers to a specific past holding period.

Performance of an index is not illustrative of any particular investment and an investment cannot be made directly in an index.

Generally, among asset classes stocks are more volatile than bonds or short-term instruments and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Although the bond market is also volatile, lower-quality debt securities including leveraged loans generally offer higher yields compared to investment grade securities, but also involve greater risk of default or price changes. Foreign markets can be more volatile than U.S. markets due to increased risks of adverse issuer, political, market or economic developments, all of which are magnified in emerging markets.

**Before investing, consider the funds' investment objectives, risks, charges, and expenses. Contact Fidelity for a prospectus or, if available, a summary prospectus containing this information. Read it carefully.**

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# STATE OF RHODE ISLAND

Balance by Fund

Data As Of: 03/31/23

DC Plan Number	DC Plan Short Name	Fund Code	Fund Name	Fund Ticker Symbol	Fund Type	Fund Distinct Count By Participant	Market Value	Asset Percentage
35835	STATE OF RI	338	FID LARGE CAP STOCK	FLCSX	DOMESTIC EQUITY	440	\$10,156,373	5.4%
35835	STATE OF RI	369	FID FREEDOM INCOME	FFPAX	LIFECYCLE	41	\$982,268	0.5%
35835	STATE OF RI	371	FID FREEDOM 2010	FFPCX	LIFECYCLE	63	\$2,195,252	1.2%
35835	STATE OF RI	372	FID FREEDOM 2020	FFFDX	LIFECYCLE	167	\$12,442,857	6.7%
35835	STATE OF RI	373	FID FREEDOM 2030	FFFX	LIFECYCLE	264	\$17,792,652	9.5%
35835	STATE OF RI	718	FID FREEDOM 2040	FFFFX	LIFECYCLE	89	\$2,770,697	1.5%
35835	STATE OF RI	1312	FID FREEDOM 2005	FFVX	LIFECYCLE	11	\$651,141	0.3%
35835	STATE OF RI	1313	FID FREEDOM 2015	FFVFX	LIFECYCLE	41	\$1,854,703	1.0%
35835	STATE OF RI	1314	FID FREEDOM 2025	FFTWN	LIFECYCLE	109	\$5,417,380	2.9%
35835	STATE OF RI	1315	FID FREEDOM 2035	FFTHX	LIFECYCLE	114	\$3,876,126	2.1%
35835	STATE OF RI	1617	FID FREEDOM 2045	FFFGX	LIFECYCLE	88	\$2,276,171	1.2%
35835	STATE OF RI	1618	FID FREEDOM 2050	FFFHX	LIFECYCLE	105	\$848,173	0.5%
35835	STATE OF RI	2095	FID LOW PRICED STK K	FLPKX	DOMESTIC EQUITY	316	\$10,339,346	5.5%
35835	STATE OF RI	2331	FID FREEDOM 2055	FDEEX	LIFECYCLE	90	\$1,780,257	1.0%
35835	STATE OF RI	2708	FID FREEDOM 2060	FDKVN	LIFECYCLE	60	\$390,938	0.2%
35835	STATE OF RI	2946	FID CONTRAFUND K6	FLCNX	DOMESTIC EQUITY	734	\$38,764,602	20.8%
35835	STATE OF RI	3415	FID FREEDOM 2065	FFSFX	LIFECYCLE	14	\$20,403	0.0%
35835	STATE OF RI	BLNK	BROKERAGELINK		OTHER	129	\$18,810,129	10.1%
35835	STATE OF RI	OE9Q	VAN FTSE SOC IDX ADM	VFTAX	DOMESTIC EQUITY	97	\$1,833,242	1.0%
35835	STATE OF RI	OGMU	TRP STABLE VALUE A		STABLE VALUE	439	\$10,729,773	5.7%
35835	STATE OF RI	OKTK	INV'S DIVRS DIVD R5	DDFIX	DOMESTIC EQUITY	103	\$2,649,878	1.4%
35835	STATE OF RI	OLLN	FEM TOTAL RETURN A	PTTAX	BOND	206	\$5,155,426	2.8%
35835	STATE OF RI	OMF4	SS GACEQ EXUS IDX II		INTERNATIONAL EQUITY	292	\$3,122,501	1.7%
35835	STATE OF RI	OMF5	SS RSL SMDMCP IDX II		DOMESTIC EQUITY	352	\$3,994,627	2.1%
35835	STATE OF RI	OMF6	SS S&P 500 INDEX II		DOMESTIC EQUITY	540	\$18,913,371	10.1%
35835	STATE OF RI	OMF7	SS US BOND INDX XIV		BOND	286	\$4,605,389	2.5%
35835	STATE OF RI	OUBE	AF EUROPAC GROWTH R6	RERGX	INTERNATIONAL EQUITY	396	\$4,254,219	2.3%
						5,586	\$186,627,895.85	100.0%

# PERFORMANCE UPDATE

## Voya Retirement Insurance and Annuity Company

State of RI 457b

**Average Annual Total Returns as of: 03/31/2023** (shown in percentages)

Variable annuities and mutual funds offered through a retirement plan are intended as long-term investments designed for retirement purposes. Money distributed from a 403(b) plan, 401(a)(k) plan, or a 457 plan will be taxed as ordinary income in the year the money is distributed. Early withdrawals from a 403(b) plan and a 401(a)(k) plan, if taken prior to age 59 1/2, will be subject to the IRS 10% premature distribution penalty tax, unless an exception applies. This IRS premature distribution penalty tax does not apply to 457 plans. Account values fluctuate with market conditions, and when surrendered the principal may be worth more or less than the original amount invested.

**The performance data quoted represents past performance. Past performance does not guarantee future results. For month-end performance which may be lower or higher than the performance data shown please call 800-232-5422. Investment return and principal value of an investment will fluctuate so that, when sold, an investment may be worth more or less than the original cost.**

The below investment options are in Separate Account D. Please note that the figures do not include an adjustment for the Voya Administrative Fund Fee (where applicable) and the deduction of the Daily Asset Charge from the Separate Account (if applicable), or other applicable contract charges. If these fees and charges were included, performance would be less favorable.

The returns assume reinvestment of all dividends (ordinary income and capital gains) and are net of management fees and other fund operating expenses.

**You should consider the investment objectives, risks and charges, and expenses of the funds carefully before investing. The prospectus contains this and other information. Anyone who wishes to obtain a free copy of the fund prospectuses may call their Voya representative or the number above. Please read the prospectus carefully before investing.**

Returns less than one year are not annualized. Fund Inception Date is the date of inception for the underlying fund, and is the date used in calculating the periodic returns. This date may also precede the portfolio's inclusion in the product.

Investment Options	Fund Benchmark ID (BM)	1-Mo Fund	BM	3-Mo Fund	BM	YTD Fund	BM	1-Yr Fund	BM	3-Yr Fund	BM	5-Yr Fund	BM	10-Yr Fund	BM	Incept	Fund Inception Date	Gross Fund Exp %*	Net Fund Exp %*
<b>Stability of Principal</b>																			
<i><b>Stability of Principal</b></i>																			
Voya Fixed Account - 457/401 II A (16)(17)	MFR	0.11	0.36	0.32	1.02	0.32	1.02	1.07	2.40	1.06	0.81	1.24	1.12	1.53	0.99				
<b>Bonds</b>																			
<i><b>High Yield Bond</b></i>																			
PGIM High Yield Fund - Class Z	BCUSH1IC	1.17	1.02	3.02	3.57	3.02	3.57	-4.52	-3.34	6.00	5.91	3.31	3.06	4.29	4.03	03/01/1996		0.51	0.51
<i><b>Inflation-Protected Bond</b></i>																			



Investment Options	Fund Benchmark ID (BM)	1-Mo		3-Mo		YTD		1-Yr		3-Yr		5-Yr		10-Yr		Incept	Fund Inception Date	Gross Fund Exp %*	Net Fund Exp %*
		Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM				
PIMCO Real Return Fund - Institutional Class	LBUSTIPS	2.65	2.89	3.00	3.34	3.00	3.34	-6.39	-6.06	2.19	1.75	2.94	2.94	1.33	1.49		01/29/1997	0.47	0.47
<b>Intermediate Core Bond</b>																			
State Street U.S. Bond Index SL Series Fund - Class XIV CIT	LEHM	2.54	2.54	3.13	2.96	3.13	2.96	-4.80	-4.78	-2.76	-2.77	0.94	0.91	1.38	1.36		06/30/2011	0.02	0.02
<b>Intermediate Core-Plus Bond</b>																			
Voya Intermediate Bond Fund - Class I (1)(2)	LEHM	2.18	2.54	3.22	2.96	3.22	2.96	-5.51	-4.78	-1.26	-2.77	1.04	0.91	1.92	1.36		12/15/1998	0.35	0.35
<b>Asset Allocation</b>																			
<b>Lifecycle</b>																			
Voya Solution 2025 Portfolio - Initial Class (3)(4)	SPT2025	2.59	1.96	5.43	4.72	5.43	4.72	-6.89	-4.41	8.77	8.75	4.42	4.91	5.91	6.12		04/29/2005	0.83	0.72
Voya Solution 2030 Portfolio - Initial Class (3)(5)	SPT2030	2.56	2.00	5.93	5.18	5.93	5.18	-6.92	-4.82	10.49	10.46	4.97	5.43	6.74	6.72		10/03/2011	0.95	0.72
Voya Solution 2035 Portfolio - Initial Class (3)(6)	SP2035	2.72	2.04	6.43	5.68	6.43	5.68	-7.17	-5.40	11.96	12.27	5.20	5.99	6.94	7.31		04/29/2005	0.92	0.73
Voya Solution 2040 Portfolio - Initial Class (3)(7)	SPT2040	2.68	2.08	6.90	6.08	6.90	6.08	-7.41	-5.68	13.59	13.59	5.83	6.42	7.70	7.74		10/03/2011	1.03	0.73
Voya Solution 2045 Portfolio - Initial Class (3)(8)	SP2045	2.66	2.06	6.92	6.33	6.92	6.33	-7.47	-5.78	14.60	14.39	5.92	6.66	7.67	8.01		04/29/2005	0.96	0.75
Voya Solution 2050 Portfolio - Initial Class (3)(9)	SPT2050	2.75	2.03	7.18	6.40	7.18	6.40	-7.32	-5.87	14.61	14.78	5.88	6.78	7.85	8.22		10/03/2011	1.10	0.76
Voya Solution 2055 Portfolio - Initial Class (3)(10)	SPT2055	2.81	2.01	7.17	6.42	7.17	6.42	-7.33	-5.85	14.87	14.98	5.90	6.83	7.72	8.34		03/08/2010	1.06	0.78
Voya Solution 2060 Portfolio - Initial Class (3)(11)	SPT2060	2.72	2.05	7.25	6.46	7.25	6.46	-7.35	-5.85	14.79	14.98	5.82	6.87			6.74	02/09/2015	1.21	0.78
Voya Solution 2065 Portfolio - Initial Class (12)	SPT2065	2.69	2.03	7.17	6.41	7.17	6.41	-7.42	-5.88							6.83	07/29/2020	1.56	0.78
Voya Solution Income Portfolio - Initial Class (3)(13)	SPTREIN	2.45	1.95	4.59	3.85	4.59	3.85	-5.72	-3.38	5.12	4.18	3.43	3.27	4.10	3.70		04/29/2005	0.77	0.68
<b>Balanced</b>																			
<b>Allocation--50% to 70% Equity</b>																			
VY® T. Rowe Price Capital Appreciation Portfolio - Inst	SPXLBGC	3.28	2.20	6.40	4.50	6.40	4.50	-3.45	-4.11	14.29	11.93	10.46	8.48	10.80	8.60		01/24/1989	0.64	0.64
<b>Large Cap Value/Blend</b>																			
<b>Large Blend</b>																			
Vanguard® FTSE Social Index Fund - Admiral™ Shares	FTSE4GUSS	4.20	4.23	9.83	9.87	9.83	9.87	-10.04	-9.94	17.66	17.81	11.19	11.32	12.74	12.88		05/31/2000	0.14	0.14
Voya Growth and Income Portfolio - Class I	SPXRE	2.87	3.67	8.41	7.50	8.41	7.50	-6.00	-7.73	21.12	18.61	11.89	11.19	11.57	12.24		12/31/1979	0.66	0.66
Voya U.S. Stock Index Portfolio - Institutional Class	SPXRE	3.61	3.67	7.41	7.50	7.41	7.50	-8.00	-7.73	18.29	18.61	10.89	11.19	11.94	12.24		05/03/2004	0.27	0.27
<b>Large Value</b>																			
BlackRock Equity Dividend Fund - Institutional Shares (14)	RS1000V	-1.49	-0.46	1.20	1.01	1.20	1.01	-4.58	-5.91	17.11	17.93	8.12	7.50	9.38	9.13		11/29/1988	0.68	0.68
<b>Large Cap Growth</b>																			
<b>Large Growth</b>																			
Voya Large Cap Growth Portfolio - Institutional Class (15)	RS1000G	7.18	6.84	11.74	14.37	11.74	14.37	-14.72	-10.90	12.35	18.57	9.41	13.66	12.03	14.59		05/03/2004	0.70	0.67
<b>Small/Mid/Specialty</b>																			
<b>Mid-Cap Blend</b>																			
Boston Trust Walden SMID Cap CIT - CIT	RS2500	-1.29	-3.75	2.13	3.39	2.13	3.39	-4.76	-10.39							7.63	12/16/2020	0.60	0.60
State Street Russell Small Mid Cap Index SL Fund - Class II	RSMCC	-2.77	-2.78	5.92	5.88	5.92	5.88	-13.15	-13.25	17.91	17.86	6.51	6.50	9.15	9.19		08/29/1997	0.02	0.02

See Performance Introduction Page for Important Information

Investment Options	Fund Benchmark ID (BM)	1-Mo Fund	1-Mo BM	3-Mo Fund	3-Mo BM	YTD Fund	YTD BM	1-Yr Fund	1-Yr BM	3-Yr Fund	3-Yr BM	5-Yr Fund	5-Yr BM	10-Yr Fund	10-Yr BM	Incept	Fund Inception Date	Gross Fund Exp %*	Net Fund Exp %*
<b>Mid-Cap Growth</b>																			
Principal MidCap Fund - Class R-6	RSMID	0.37	-1.53	5.60	4.06	5.60	4.06	-8.16	-8.78	16.54	19.20	10.11	8.05	11.66	10.05		12/06/2000	0.59	0.59
<b>Global / International</b>																			
<b>Foreign Large Blend</b>																			
State Street Global All Cap Eq Ex-U.S. Ind SL Srs F - II CIT	MSCAEUIGU	2.45	2.23	6.91	6.70	6.91	6.70	-4.73	-5.34	12.85	12.72	2.64	2.84	4.60	4.76		04/30/2010	0.06	0.05
<b>Foreign Large Growth</b>																			
American Funds EuroPacific Growth Fund® - Class R-4	MSCIXUS	4.64	2.44	9.78	6.87	9.78	6.87	-3.59	-5.07	11.75	11.80	2.89	2.47	5.62	4.16		04/16/1984	0.81	0.81

The risks of investing in small company stocks may include relatively low trading volumes, a greater degree of change in earnings and greater short-term volatility.

Foreign investing involves special risks such as currency fluctuation and public disclosure, as well as economic and political risks.

Some of the Funds invest in securities guaranteed by the U.S. Government as to the timely payment of principal and interest; however, shares of the Funds are not insured nor guaranteed.

High yielding fixed-income securities generally are subject to greater market fluctuations and risks of loss of income and principal than are investments in lower yielding fixed-income securities.

Sector funds may involve greater-than average risk and are often more volatile than funds holding a diversified portfolio of stocks in many industries. Examples include: banking, biotechnology, chemicals, energy, environmental services, natural resources, precious metals, technology, telecommunications, and utilities.

\*The Gross Expense Ratios shown do not reflect temporary fee or expense waivers that may be in effect for a fund. The Net Expense Ratios reflect any applicable temporary fee or expense waivers. The performance of a fund with a temporary fee or expense waiver would have been lower if the gross fund fees/expenses listed had been reflected.

PERFORMANCE UPDATE

Voya Retirement Insurance and Annuity Company

State of RI 457b

Separate Account D

Average Annual Total Returns as of: 03/31/2023 (shown in percentages)

Variable annuities and funding agreements are long-term investment vehicles designed for retirement purposes which allow you to allocate contributions among variable investment options that have the potential to grow tax-deferred with an option to receive a stream of income at a later date.

The performance data quoted represents past performance. Past performance does not guarantee future results. For month-end performance which may be lower or higher than the performance data shown please call 800-232-5422. Investment return and principal value of an investment will fluctuate so that, when sold, an investment may be worth more or less than the original cost.

These numbers reflect total Separate Account charges, ranging from 0.09% to 0.44% on an annual basis. They also assume reinvestment of all dividends (ordinary income and capital gains) and are net of management fees and other fund operating expenses. See "Additional Notes" section for charges by investment option.

The Daily Asset Charge ("DAC"), if applicable, is assessed against all amounts invested in the investment options under the contract and is expressed as an annual percentage. If a DAC is not applicable, there may be an annual asset-based fee deducted from your account for recordkeeping and administrative services provided to your employer's Plan. This fee may be waived, reduced, or eliminated in certain circumstances. If applicable, a pro-rata portion of the asset-based fee is calculated and deducted quarterly from all investment options, or from the mutual fund assets only, depending upon your employer's Plan. It will appear on your statements as a flat dollar amount deducted from all applicable investment options.

Depending upon the type of contract in which you participate, you have either received disclosure booklets for the separate account and/or fund prospectuses. You should consider the investment objectives, risks and charges, and expenses of the variable product and its underlying fund options carefully before investing. The disclosure booklet contains this and other information. Anyone who wishes to obtain a free copy of the separate account disclosure booklet and/or fund prospectuses may call their Voya representative or the number above. Please read the separate account disclosure booklet and/or the fund prospectuses carefully before investing.

Returns less than one year are not annualized. Fund Inception Date is the date of inception for the underlying fund, and is the date used in calculating the periodic returns. This date may also precede the portfolio's inclusion in the product.

Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date
Stability of Principal									
Stability of Principal									
Voya Fixed Account - 457/401 II A (16)(17)	0.11	0.32	0.32	1.07	1.06	1.24	1.53		
This fund is not part of the product's separate account.									
Bonds									
High Yield Bond									

Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date
PGIM High Yield Fund - Class Z	1.15	2.96	2.96	-4.69	5.79	3.12	4.09		03/01/1996
<b><i>Inflation-Protected Bond</i></b>									
PIMCO Real Return Fund - Institutional Class	2.61	2.89	2.89	-6.80	1.74	2.48	0.88		01/29/1997
<b><i>Intermediate Core Bond</i></b>									
State Street U.S. Bond Index SL Series Fund - Class XIV CIT	2.50	3.02	3.02	-5.22	-3.18	0.49	0.93		06/30/2011
<b><i>Intermediate Core-Plus Bond</i></b>									
Voya Intermediate Bond Fund - Class I (1)(2)	2.15	3.15	3.15	-5.76	-1.52	0.77	1.65		12/15/1998
<b>Asset Allocation</b>									
<b><i>Lifecycle</i></b>									
Voya Solution 2025 Portfolio - Initial Class (3)(4)	2.58	5.40	5.40	-7.00	8.64	4.29	5.78		04/29/2005
Voya Solution 2030 Portfolio - Initial Class (3)(5)	2.55	5.90	5.90	-7.03	10.35	4.84	6.61		10/03/2011
Voya Solution 2035 Portfolio - Initial Class (3)(6)	2.71	6.40	6.40	-7.28	11.83	5.07	6.81		04/29/2005
Voya Solution 2040 Portfolio - Initial Class (3)(7)	2.67	6.87	6.87	-7.52	13.45	5.70	7.57		10/03/2011
Voya Solution 2045 Portfolio - Initial Class (3)(8)	2.65	6.89	6.89	-7.58	14.46	5.79	7.54		04/29/2005
Voya Solution 2050 Portfolio - Initial Class (3)(9)	2.74	7.15	7.15	-7.44	14.47	5.75	7.73		10/03/2011
Voya Solution 2055 Portfolio - Initial Class (3)(10)	2.80	7.14	7.14	-7.44	14.73	5.78	7.60		03/08/2010
Voya Solution 2060 Portfolio - Initial Class (3)(11)	2.71	7.22	7.22	-7.46	14.66	5.69		6.62	02/09/2015
Voya Solution 2065 Portfolio - Initial Class (12)	2.68	7.15	7.15	-7.50				6.73	07/29/2020
Voya Solution Income Portfolio - Initial Class (3)(13)	2.44	4.56	4.56	-5.84	5.00	3.31	3.98		04/29/2005
<b>Balanced</b>									
<b><i>Allocation--50% to 70% Equity</i></b>									
VY® T. Rowe Price Capital Appreciation Portfolio - Inst	3.27	6.36	6.36	-3.61	14.11	10.29	10.62		01/24/1989
<b>Large Cap Value/Blend</b>									
<b><i>Large Blend</i></b>									
Vanguard® FTSE Social Index Fund - Admiral™ Shares	4.16	9.71	9.71	-10.44	17.14	10.71	12.25		05/31/2000
Voya Growth and Income Portfolio - Class I	2.85	8.37	8.37	-6.13	20.95	11.73	11.41		12/31/1979
Voya U.S. Stock Index Portfolio - Institutional Class	3.59	7.37	7.37	-8.15	18.10	10.72	11.76		05/03/2004
<b><i>Large Value</i></b>									
BlackRock Equity Dividend Fund - Institutional Shares (14)	-1.51	1.16	1.16	-4.76	16.89	7.92	9.18		11/29/1988
<b>Large Cap Growth</b>									
<b><i>Large Growth</i></b>									
Voya Large Cap Growth Portfolio - Institutional Class (15)	7.17	11.70	11.70	-14.83	12.20	9.25	11.88		05/03/2004
<b>Small/Mid/Specialty</b>									
<b><i>Mid-Cap Blend</i></b>									
Boston Trust Walden SMID Cap CIT - CIT	-1.29	2.11	2.11	-4.84				7.54	12/16/2020

Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date
State Street Russell Small Mid Cap Index SL Fund - Class II	-2.81	5.80	5.80	-13.53	17.39	6.04	8.67		08/29/1997
<b>Mid-Cap Growth</b>									
Principal MidCap Fund - Class R-6	0.33	5.49	5.49	-8.56	16.03	9.63	11.17		12/06/2000
<b>Global / International</b>									
<b>Foreign Large Blend</b>									
State Street Global All Cap Eq Ex-U.S. Ind SL Srs F - II CIT	2.42	6.79	6.79	-5.15	12.36	2.18	4.14		04/30/2010
<b>Foreign Large Growth</b>									
American Funds EuroPacific Growth Fund® - Class R-4	4.63	9.76	9.76	-3.68	11.65	2.80	5.53		04/16/1984

The risks of investing in small company stocks may include relatively low trading volumes, a greater degree of change in earnings and greater short-term volatility.

Foreign investing involves special risks such as currency fluctuation and public disclosure, as well as economic and political risks.

Some of the Funds invest in securities guaranteed by the U.S. Government as to the timely payment of principal and interest; however, shares of the Funds are not insured nor guaranteed.

High yielding fixed-income securities generally are subject to greater market fluctuations and risks of loss of income and principal than are investments in lower yielding fixed-income securities.

Sector funds may involve greater-than average risk and are often more volatile than funds holding a diversified portfolio of stocks in many industries. Examples include: banking, biotechnology, chemicals, energy, environmental services, natural resources, precious metals, technology, telecommunications, and utilities.

#### Additional Notes

For a performance report reflecting the charges or more information regarding product expenses, please contact your Voya Representative.

(1)Voya Intermediate Bond Fund - Class I: The adviser is contractually obligated to limit expenses to 0.50% through August 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Fund's board.

(2)Voya Intermediate Bond Fund - Class I has identical investment objectives and policies, the same portfolio manager, and invests in the same holdings as Class A. The performance information above is based upon the Class A performance, excluding sales charges, and has not been adjusted by the fee differences between classes.

(3)There is no guarantee that any investment option will achieve its stated objective. Principal value fluctuates and there is no guarantee of value at any time, including the target date. The "target date" is the approximate date when you plan to start withdrawing your money. When your target date is reached, you may have more or less than the original amount invested. For each target date Portfolio, until the day prior to its Target Date, the Portfolio will seek to provide total returns consistent with an asset allocation targeted for an investor who is retiring in approximately each Portfolio's designation Target Year. Prior to choosing a Target Date Portfolio, investors are strongly encouraged to review and understand the Portfolio's objectives and its composition of stocks and bonds, and how the asset allocation will change over time as the target date nears. No two investors are alike and one should not assume that just because they intend to retire in the year corresponding to the Target Date that that specific Portfolio is appropriate and suitable to their risk tolerance. It is recommended that an investor consider carefully the possibility of capital loss in each of the target date Portfolios, the likelihood and magnitude of which will be dependent upon the Portfolio's asset allocation. On the Target Date, the portfolio will seek to provide a combination of total return and stability of principal.

The Voya Solution / Target Date Portfolios<sup>SM</sup> are actively managed and the asset allocation adjusted over time. The portfolios may merge with or change to other portfolios over time. Refer to the prospectus for more information about the specific risks of investing in the various asset classes included in the The Voya Solution / Target Date Portfolios<sup>SM</sup>.

**Additional Notes**

Stocks are more volatile than bonds, and portfolios with a higher concentration of stocks are more likely to experience greater fluctuations in value than portfolios with a higher concentration in bonds. Foreign stocks and small and midcap stocks may be more volatile than large cap stocks. Investing in bonds also entails credit risk and interest rate risk. Generally investors with longer timeframes can consider assuming more risk in their investment portfolio.

(4)Voya Solution 2025 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80% for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.

(5)Voya Solution 2030 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80% for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.

(6)Voya Solution 2035 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80% for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.

(7)Voya Solution 2040 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80% for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.

(8)Voya Solution 2045 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80%, for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.

(9)Voya Solution 2050 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80% for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.

(10)Voya Solution 2055 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80% for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.

(11)Voya Solution 2060 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80% for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.

(12)Voya Solution 2065 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80% for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.



**Additional Notes**

(13)Voya Solution Income Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I shares through May 1, 2022. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. In addition, the adviser is contractually obligated to further limit expenses to 0.80% for Class I shares through May 1, 2022. The limitations do not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. Termination or modification of these obligations requires approval by the Portfolio's board.

(14)BlackRock Equity Dividend Fund - Institutional Shares: As described in the "Management of the Fund" section of the Fund's prospectus beginning on page 39, BlackRock has contractually agreed to waive the management fee with respect to any portion of the Fund's assets estimated to be attributable to investments in other equity and fixed-income mutual funds and exchange-traded funds managed by BlackRock or its affiliates that have a contractual management fee, through August 31, 2021. In addition, BlackRock has contractually agreed to waive its management fees by the amount of investment advisory fees the Fund pays to BlackRock indirectly through its investment in money market funds managed by BlackRock or its affiliates, through August 31, 2021. The contractual agreements may be terminated upon 90 days' notice by a majority of the non-interested trustees of the Fund or by a vote of a majority of the outstanding voting securities of the Fund. The Total Annual Fund Operating Expenses do not correlate to the ratios of expenses to average net assets given in the Fund's most recent annual report which do not include Acquired Fund Fees and Expenses.

(15)Voya Large Cap Growth Portfolio - Institutional Class: The adviser is contractually obligated to limit expenses to 0.67% for Class I shares through May 1, 2022. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. Termination or modification of this obligation requires approval by the Portfolio's board.

These numbers reflect the fund's investment advisory fees, other fund expenses, and the annual deduction from the Separate Account as stated below:

American Funds EuroPacific Grw R4, Boston Trust Walden SMID Cap CIT, Voya Solution 2065 Portfolio I: 0.09%

Voya Growth and Income Port I, Voya Large Cap Growth Port Inst: 0.14%

VY TRowePrice Captl Apprec Pt Inst, Voya U.S. Stock Index Port Inst: 0.16%

BlackRock Equity Dividend Fund Inst, PGIM High Yield Fund Z: 0.19%

Voya Intermediate Bond Fund I: 0.27%

PIMCO Real Return Fund Inst, Principal MidCap Fund R6, St Str Gl A Cp Eq Ex US In SL S F II, St Str Russell Sm/Md Cp Ind SL Fd II, St Str US Bond Index SL Fd XIV, Vanguard FTSE Social Index Fund Adm: 0.44%

All Other funds: 0.12%

(16)The current rate for the Voya Fixed Account - 457/401 II A MC 945, Fund 4573 is 1.30%, expressed as an annual effective yield. The current rate may change and be higher or lower than the previously identified rate but is guaranteed not to be less than 1.00%. VRIAC will not apply a decrease to the current rate following a rate change initiated solely by us prior to the last day of the three-month period measured from the first day of the month in which such change was effective. Note: The current rate for an initial investment in the fixed account previously identified may be in effect for less than a full three-month period.

(17)The Investment Option is neither a mutual fund nor part of a Separate Account. The returns listed do not include the impact of contract charges. Please refer to the contract or disclosure book to determine which Fixed Interest Options are available for your specific plan. The Investment Option is offered through Voya Retirement Insurance and Annuity Company.

The returns do not reflect the impact of a Deferred Surrender Charge. If included, performance would be less favorable.

Not all investments options are available under all contracts; please check your disclosure booklet for options available under your plan.

<b>Benchmark Id</b>	<b>Benchmark Description</b>
BCUSH1IC	Bloomberg US HY 1% Issuer Cap TR Index - description is not available.
FTSE4GUSS	FTSE 4Good US Select Index measures the performance of companies that meet globally recognized corporate responsibility standards, and to facilitate investment in those companies.
LBUSTIPS	Bloomberg US Treasury US TIPS TR Index measures the performance of rulesbased, market value-weighted inflation-protected securities issued by the U.S. Treasury. It is a subset of the Global Inflation-Linked Index (Series-L).
LEHM	Bloomberg US Agg Bond TR Index measures the performance of investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS. It rolls up into other Barclays flagship indices, such as the multi-currency Global Aggregate Index and the U.S.

**Benchmark Id**

**Benchmark Description**

Universal Index, which includes high yield and emerging markets debt.

MFR	iMoney All Taxable Retail (Net) Index is comprised of returns which are based upon historical average 30-day compound yields on a universe of taxable money market funds. The data for the universe, which includes approximately 980 funds, is compiled by iMoneynet, Inc. Goal of Voya Fixed Account - 457/401 is to outperform the MFR by 150 - 200 basis points over 3 - 5 year time periods.
MSCAEUIGU	MSCI ACWI Ex USA IMI GR - description is not available.
MSCIXUS	MSCI ACWI (All Country World Index) ex USA Index measures the performance of the large and mid-cap segment of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.
RS1000G	Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity securities. It includes the Russell 1000 index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted.
RS1000V	Russell 1000 Value Index measures the performance of the large-cap value segment of the U.S. equity securities. It includes the Russell 1000 index companies with lower price-to-book ratios and lower expected growth values. It is market-capitalization weighted.
RS2500	Russell 2500 Index measures the performance of the small to mid-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 index includes approximately 2500 of the smallest securities based on the combination of their market cap and current index membership.
RSMCC	Russell Small Cap Completeness index measures the performance of the Russell 3000 Index companies excluding S&P 500 constituents. The Russell Small Cap Completeness Index is constructed to provide a comprehensive and unbiased barometer of the extended broad market beyond the S&P 500 exposure. The Index and is completely reconstituted annually to ensure new and growing equities are reflected.
RSMID	Russell Mid-Cap Index measures the performance of the mid-cap segment of the U.S. equity universe. It is a subset of Russell 1000 index and includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The index represents approximately 31% of the total market capitalization of the Russell 1000 companies.
SP2035	S&P Target Date 2035 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2035, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SP2045	S&P Target Date 2045 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2045, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2025	S&P Target Date 2025 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2025, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2030	S&P Target Date 2030 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2030, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2040	S&P Target Date 2040 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2040, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.

See Performance Introduction Page for Important Information

<b>Benchmark Id</b>	<b>Benchmark Description</b>
SPT2050	S&P Target Date 2050 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2050, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2055	S&P Target Date 2055+ Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2055, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2060	S&P Target Date 2060 TR USD - description is not available.
SPT2065	S&P Target Date 2065 TR USD - description is not available.
SPTREIN	S&P Target Date Retirement Income Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPXLBGC	S&P 500 60% / BBg Capital Corp/Gov Bond Index 40% consists of a mix of 60% of an unmanaged stock index (The Standard & Poor's 500) and 40% of an unmanaged bond index (BBg Capital Gov't Corp. Bond Index).
SPXRE	S&P 500 Index measures the performance of 500 widely held stocks in U.S. equity market. Standard and Poor's chooses member companies for the index based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid 1989, this composition has been more flexible and the number of issues in each sector has varied. The index is market capitalization-weighted.

Plan Balance By Investment - 3/31/2023					
Fund Name	Fund Number	Asset Class	Balance	YTD Contributions	Percent
Voya Solution 2025 Portfolio I	790	Asset Allocation	\$1,803,492.53	\$38,299.46	0.83%
Voya Solution 2030 Port I	6753	Asset Allocation	\$482,887.88	\$39,273.48	0.22%
Voya Solution 2035 Portfolio I	761	Asset Allocation	\$2,139,262.38	\$80,081.24	0.98%
Voya Solution 2040 Port I	6756	Asset Allocation	\$196,521.82	\$22,846.35	0.09%
Voya Solution 2045 Portfolio I	764	Asset Allocation	\$2,230,951.87	\$72,768.49	1.02%
Voya Solution 2050 Port I	6759	Asset Allocation	\$284,678.82	\$28,534.82	0.13%
Voya Solution 2055 Portfolio I	1166	Asset Allocation	\$1,187,604.07	\$51,072.94	0.54%
Voya Solution 2060 Port I	3290	Asset Allocation	\$320,599.99	\$36,607.30	0.15%
Voya Solution 2065 Port I	E479	Asset Allocation	\$80,547.56	\$6,950.05	0.04%
Voya Solution Income Prt I	767	Asset Allocation	\$221,049.11	\$3,903.81	0.10%
VY TRowePrice Captl Apprec Pt Inst	1257	Balanced	\$14,407,322.07	\$129,584.14	6.61%
PGIM High Yield Fund Z	2482	Bonds	\$620,955.42	\$5,631.21	0.28%
PIMCO Real Return Fund Ins	2695	Bonds	\$928,496.72	\$13,027.51	0.43%
SStr US Bond Index SL Fd XIV	C925	Bonds	\$758,564.86	\$15,436.28	0.35%
Voya Intermediate Bond Fund I	238	Bonds	\$7,972,462.03	\$189,286.04	3.66%
American Funds EuroPacific Grw R4	573	Global / International	\$7,381,144.75	\$126,794.94	3.38%
S St Gl Al Cp Eq xUS I SL S II	D937	Global / International	\$4,390,712.98	\$60,683.27	2.01%
Voya Growth and Income Port I	1	Large Cap Blend	\$33,402,998.83	\$218,518.13	15.31%
Voya Large Cap Growth Port Inst	742	Large Cap Growth	\$14,386,125.54	\$208,062.70	6.60%
BlackRock Equity Dividend Fund Inst	8518	Large Cap Value/Blend	\$5,243,279.82	\$75,772.60	2.40%
Vangrd FTSE Social Ind Fd Adm	D591	Large Cap Value/Blend	\$788,050.34	\$18,235.71	0.36%
Voya U.S. Stock Index Port Inst	829	Large Cap Value/Blend	\$18,087,624.74	\$187,302.64	8.29%
Boston Trst Walden SMID Cp CIT	F905	Small/Mid/Specialty	\$8,209,693.93	\$42,043.27	3.76%
Principal MidCap Fd R6	C906	Small/Mid/Specialty	\$12,460,317.68	\$115,615.39	5.71%
SStr Russ SM Cp Ind SL Fd II	QF52	Small/Mid/Specialty	\$3,757,709.18	\$88,706.25	1.72%
Voya Small Company Portfolio I	42	Small/Mid/Specialty	\$0.00	\$57,169.04	0.01%
Voya Fixed Account - 457/401	43	Stability of Principal	\$57,193,968.51	\$0.00	26.22%
Voya Fixed Account - 457/401 II A	4573	Stability of Principal	\$19,143,522.75	\$635,914.22	8.78%
Voya Long-Term GAA (4560)	4560	Stability of Principal	\$25,943.25	\$0.00	0.02%
		<b>TOTAL</b>	<b>\$218,106,489.43</b>	<b>\$2,568,121.28</b>	

# OPEB TRUST

NEPC, LLC

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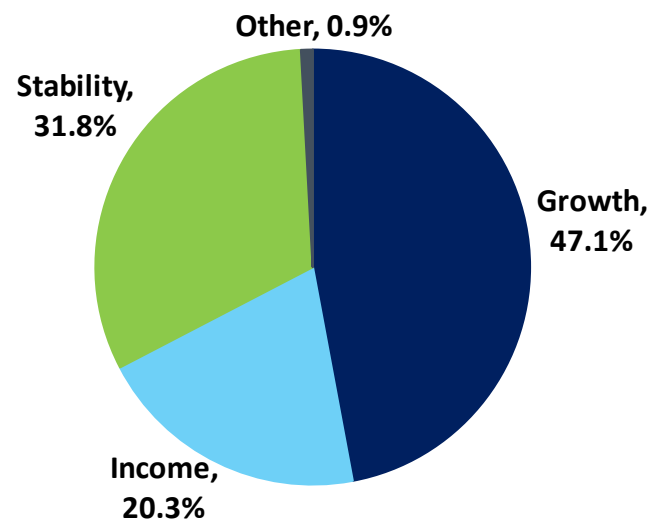
# TOTAL FUND OVERVIEW

PROPRIETARY & CONFIDENTIAL

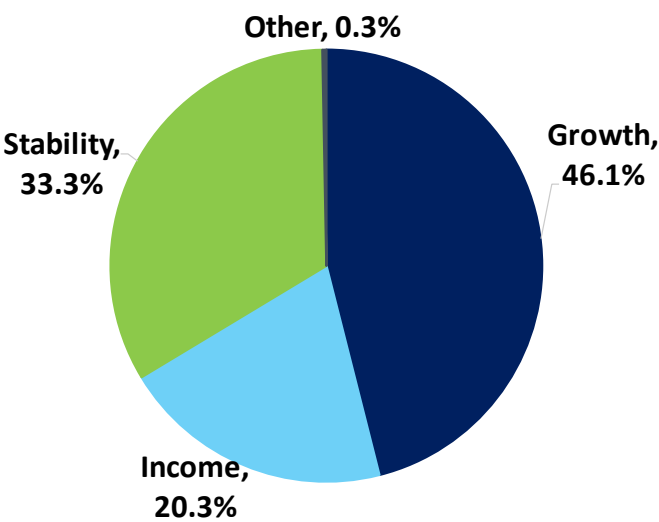
# ASSET ALLOCATION (OVERLAY) VS TARGET

Asset Allocation vs. Target						
	Current Balance	Current Allocation	Current Allocation (w/ Overlay)	Strategic Benchmark Allocation	Difference	Difference (w/ Overlay)
<div></div> Growth	\$257,373,022	47.1%	46.1%	45.0%	2.1%	1.1%
<div></div> Income	\$111,089,472	20.3%	20.3%	21.0%	-0.7%	-0.7%
<div></div> Stability	\$173,790,713	31.8%	33.3%	34.0%	-2.2%	-0.7%
<div></div> Other	\$4,679,469	0.9%	0.3%	0.0%	0.9%	0.3%

Current Asset Allocation



Current Asset Allocation (w/ Overlay)





# MANAGER PERFORMANCE

PROPRIETARY & CONFIDENTIAL



# TOTAL FUND PERFORMANCE DETAIL - (NET)

	Allocation		Performance (%)								
	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total OPEB</b>	<b>553,299,306</b>	<b>100.00</b>	<b>2.39</b>	<b>4.77</b>	<b>7.60</b>	<b>-5.62</b>	<b>11.27</b>	<b>7.95</b>	<b>8.59</b>	<b>8.56</b>	<b>May-11</b>
<i>OPEB Custom Blend</i>			2.09	4.36	5.04	-7.78	10.43	7.53	8.41	7.96	
<b>OPEB Public Growth</b>	<b>254,532,647</b>	<b>46.00</b>	<b>3.10</b>	<b>7.40</b>	-	-	-	-	-	<b>7.40</b>	<b>Jan-23</b>
<i>MSCI AC World Index</i>			3.15	7.44	-	-	-	-	-	7.44	
<b>OPEB Private Growth</b>	<b>2,840,375</b>	<b>0.51</b>	<b>1.02</b>	<b>1.02</b>	-	-	-	-	-	<b>1.02</b>	<b>Jan-23</b>
<i>OPEB Private Growth BM</i>			0.88	0.88	-	-	-	-	-	0.88	
<b>OPEB Total Income</b>	<b>111,089,472</b>	<b>20.08</b>	<b>0.81</b>	<b>1.90</b>	-	-	-	-	-	<b>1.90</b>	<b>Jan-23</b>
<i>OPEB Total Income BM</i>			1.70	3.90	-	-	-	-	-	3.90	
<b>OPEB Tot Inflation Protection</b>	<b>10,000,000</b>	<b>1.81</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	<b>0.00</b>	<b>Jan-23</b>
<i>OPEB Inflation Protecton BM</i>			-2.58	-2.58	-	-	-	-	-	-2.58	
<b>OPEB Total Volatility</b>	<b>168,470,182</b>	<b>30.45</b>	<b>2.54</b>	<b>3.15</b>	-	-	-	-	-	<b>3.15</b>	<b>Jan-23</b>
<i>Blmbg. U.S. Aggregate Index</i>			2.54	2.96	-	-	-	-	-	2.96	

- Fiscal Year ends June 30th.

# TOTAL FUND PERFORMANCE DETAIL - (NET)

	Allocation		Performance (%)								
	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total OPEB</b>	<b>553,299,306</b>	<b>100.00</b>	<b>2.39</b>	<b>4.77</b>	<b>7.60</b>	<b>-5.62</b>	<b>11.27</b>	<b>7.95</b>	<b>8.59</b>	<b>8.56</b>	<b>May-11</b>
<i>OPEB Custom Blend</i>			2.09	4.36	5.04	-7.78	10.43	7.53	8.41	7.96	
<b>OPEB Total Growth</b>	<b>257,373,022</b>	<b>46.52</b>	<b>3.07</b>	<b>7.34</b>	-	-	-	-	-	<b>7.34</b>	<b>Jan-23</b>
<i>OPEB Total Growth BM</i>			2.84	6.60	-	-	-	-	-	6.60	
<b>OPEB Public Growth</b>	<b>254,532,647</b>	<b>46.00</b>	<b>3.10</b>	<b>7.40</b>	-	-	-	-	-	<b>7.40</b>	<b>Jan-23</b>
<i>MSCI AC World Index</i>			3.15	7.44	-	-	-	-	-	7.44	
OPEB SSGA MSCI ACWI ex Russia	254,532,647	46.00	3.10	7.40	-	-	-	-	-	11.23	Nov-22
<i>MSCI AC World Index</i>			3.15	7.44	-	-	-	-	-	11.31	
<b>OPEB Private Growth</b>	<b>2,840,375</b>	<b>0.51</b>	<b>1.02</b>	<b>1.02</b>	-	-	-	-	-	<b>1.02</b>	<b>Jan-23</b>
<i>OPEB Private Growth BM</i>			0.88	0.88	-	-	-	-	-	0.88	
<b>OPEB Total Income</b>	<b>111,089,472</b>	<b>20.08</b>	<b>0.81</b>	<b>1.90</b>	-	-	-	-	-	<b>1.90</b>	<b>Jan-23</b>
<i>OPEB Total Income BM</i>			1.70	3.90	-	-	-	-	-	3.90	
OPEB Liquid Credit	68,249,576	12.34	1.10	3.64	-	-	-	-	-	4.98	Nov-22
<i>ICE BofA U.S. High Yield Non-Distressed Index</i>			1.44	3.54	-	-	-	-	-	4.85	
OPEB Private Credit	2,417,095	0.44	2.28	2.28	-	-	-	-	-	2.28	Oct-22
<i>Cambridge Assoc Sen Debt 1Qlag</i>			2.28	2.28	-	-	-	-	-	-0.22	
OPEB NB Index Fund	20,057,537	3.63	0.00	-3.05	-	-	-	-	-	-3.05	Dec-22
<i>CBOE PutWrite Index</i>			2.99	6.75	-	-	-	-	-	6.29	

# TOTAL FUND PERFORMANCE DETAIL - (NET)

	Allocation		Performance (%)								
	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>OPEB CLO Aggregate</b>	<b>20,365,264</b>	<b>3.68</b>	<b>0.45</b>	<b>1.74</b>	-	-	-	-	-	<b>-2.01</b>	<b>Dec-22</b>
<i>JPM Collateralized Loan Obligation BB Index (CLOIE)</i>			-0.60	3.58	-	-	-	-	-	4.97	
OPEB Sycamore Tree CLO Fund	10,051,216	1.82	0.00	0.00	-	-	-	-	-	-6.18	Dec-22
OPEB Neuberger CLO Total	10,314,047	1.86	0.89	3.50	-	-	-	-	-	3.11	Dec-22
<b>OPEB Tot Inflation Protection</b>	<b>10,000,000</b>	<b>1.81</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	<b>0.00</b>	<b>Jan-23</b>
<i>OPEB Inflation Protection BM</i>			-2.58	-2.58	-	-	-	-	-	-2.58	
OPEB Core Real Estate	10,000,000	1.81	0.00	0.00	-	-	-	-	-	0.00	Sep-22
<b>OPEB Total Volatility</b>	<b>168,470,182</b>	<b>30.45</b>	<b>2.54</b>	<b>3.15</b>	-	-	-	-	-	<b>3.15</b>	<b>Jan-23</b>
<i>Blmbg. U.S. Aggregate Index</i>			2.54	2.96	-	-	-	-	-	2.96	
<b>OPEB Total Stability</b>	<b>178,470,182</b>	<b>32.26</b>	<b>2.40</b>	<b>2.97</b>	-	-	-	-	-	<b>2.97</b>	<b>Jan-23</b>
<i>OPEB Total Stability BM</i>			1.33	1.66	-	-	-	-	-	1.66	
RI OPEB SSGA Bloomberg Barclay	168,470,182	30.45	2.54	3.15	-0.11	-4.81	-	-	-	-4.64	Nov-20
<i>Blmbg. U.S. Aggregate Index</i>			2.54	2.96	-0.09	-4.78	-	-	-	-4.63	
OPEB Operating Cash	4,679,469	0.85	-0.90	1.07	-	-	-	-	-	1.54	Sep-22
OPEB Russell Overlay	1,687,161	0.30	13.81	12.47	-	-	-	-	-	12.47	Jan-23

- Fiscal Year ends June 30th.
- Please note returns are provided by BNY Mellon: returns may not match the custodian due to rounding
- Fiscal Year end is June 30th
- The SSgA S&P 500 Index has a \$30.92 value as of 3/31/23.
- Russell Overlay returns do not represent returns for the individual account but rather Russell's impact at the total plan level
- Liquid Credit Benchmark: Prior to July 2021 the benchmark consisted of 50% BofAML US High Yield TR/ 50% CS Lev Loan Index

# DISCLAIMERS & DISCLOSURES

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A “since inception” return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC’s preferred data source is the plan’s custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.

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Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv



# Employees' Retirement System of Rhode Island



## 9.4. Retirement Application Processing Report

# Pension Application Processing Report as of 4/30/2023

## For Month of February 23

	Teachers	State Employees	Municipal Employees	Totals
<b>Total Outstanding</b>				
Less than 0	22	16	8	46
0-30 Days	2	11	3	16
30-60 Days	4	8	10	22
60-90 Days	-	2	-	2
90-120 Days	1	1	1	3
120 + Days	2	6	2	10
<b>Total</b>	<b>31</b>	<b>44</b>	<b>24</b>	<b>99</b>

## For Month of March 23

	Teachers	State Employees	Municipal Employees	Totals
<b>Total Outstanding</b>				
Less than 0	24	9	16	49
0-30 Days	1	18	5	24
30-60 Days	-	7	3	10
60-90 Days	1	3	2	6
90-120 Days	-	1	1	2
120 + Days	1	7	2	10
<b>Total</b>	<b>27</b>	<b>45</b>	<b>29</b>	<b>101</b>

## For Month of April 23

	Teachers	State Employees	Municipal Employees	Totals
<b>Total Outstanding</b>				
Less than 0	64	14	21	99
0-30 Days	-	11	9	20
30-60 Days	2	7	5	14
60-90 Days	-	2	-	2
90-120 Days	-	1	1	2
120 + Days	1	5	4	10
<b>Total</b>	<b>67</b>	<b>40</b>	<b>40</b>	<b>147</b>

Total Processed	Teachers	State Employees	Municipal Employees	Totals
April 22	13	28	22	63
May 22	14	21	28	63
June 22	11	29	19	59
July 22	81	13	17	111
August 22	67	34	61	162
September 22	40	25	15	80
October 22	45	43	46	134
November 22	12	10	29	51
December 22	13	14	14	41
Janaury 23	7	29	17	53
February 23	24	48	31	103
March 23	14	21	28	63
April 23	2	46	17	65
<b>Total (rolling year)</b>	<b>330</b>	<b>333</b>	<b>322</b>	<b>985</b>
<b>Total (since 07/01/03)</b>	<b>8,053</b>	<b>9,507</b>	<b>5,238</b>	<b>22,798</b>

## Fiscal Year Totals

FY 2004 Total	689	665	199	1,553
FY 2005 Total	534	574	256	1,364
FY 2006 Total	493	507	221	1,221
FY 2007 Total	462	464	239	1,165
FY 2008 Total	409	659	195	1,263
FY 2009 Total	565	1,368	303	2,236
FY 2010 Total	562	283	263	1,108
FY 2011 Total	325	261	302	888
FY 2012 Total	458	346	292	1,096
FY 2013 Total	369	334	276	979
FY 2014 Total	266	311	209	786
FY 2015 Total	271	375	192	838
FY 2016 Total	301	345	262	908
FY 2017 Total	311	378	239	928
FY 2018 Total	300	570	269	1,139
FY 2019 Total	308	324	313	945
FY 2020 Total	349	405	281	1,035
FY 2021 Total	396	588	316	1,300
FY 2022 Total	380	467	336	1,183
FY 2023 Total	305	283	275	863